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THE RURAL NEW-YORKER

A JOURNAL FOR THE SUBURBAN AND COUNTRY HOME

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Pomological.

A GRAND OLD APPLE TREE.

HERE we show, at Fig. 1, what is thought to be the largest apple tree in this country, if not in the world. It stands in the dooryard of Mr. Delos Hotchkiss, Marion, Conn. Its dimensions are truly gigantic.

The circumference, one foot from the ground, and above all enlargement of the roots, is 13 feet eight inches. The girth of the largest single limb is six feet eight inches. The top limbs reach a hight of 60 feet, and the spread of the limbs is 100 feet, or six rods.

Mr. Hotchkiss has known the tree for more than 70 years, having owned it 50 years. In a recent letter he says: "The old tree bore on alternate parts until 1876, when it bore all over and has continued to do so ever since. This year it was completely loaded with apples. It bears a medium-sized winter apple—a good keeper. The crops vary from 80 to 85 bushels one year to 30 or 40 the next." It must have produced thousands of bushels during its long life of 180 years. Of the eight large branches five bear one year and three next. There is something almost human about these noble old giants. The "old tree" has done its work well; has earned its fame, and we take pleasure in showing it to our readers. We are indebted to Hon. Marshall P. Wilder for its photograph.

TRUE STORY OF MEECH'S PROLIFIC QUINCE.

IN the RURAL of Nov. 7th, reference is made to the decision of the fruit judges at the Fair at Mt. Holly, N. J., to the effect that Meech's Prolific Quince is identical with the Champion. The truth, briefly told, is this: About 20 years ago, one Chauncy Paul came here and started a nursery, bringing with him cuttings from Springfield, Ohio, from which the quince now known as Meech's Prolific was propagated. About that time a Mr. Moore, of this place, obtained two trees of Mr. Paul, from which he has propagated perhaps a dozen others, which are now in full bearing. The Rev. W. W. Meech, some years after that time, observed the wonderful fruitfulness of this variety, and commenced the propagation of it, obtaining cuttings from Mr. Moore's trees, and from those of a half dozen other persons here, who have the quince in cultivation. In assuming the possibility that this and the Champion are identical, we encounter the following difficulties:

1st. The cuttings of Meech's Prolific Quince were brought here, and cut from old trees in Ohio 20 years ago, while the Champion is of recent origin, reaching back not much over ten years. [It is plainly *not* the Champion.—EDS.]

2d. The Champion, grown here upon the same ground as Meech's Prolific, is very subject to blight, and is a shy bearer; indeed, it is universally worthless here, while Meech's is vigorous, hardy, and the most profuse bearer of all quinces.

3d. Meech's assumed its beautiful golden hue on October 15, this year, while the Champion was quite green on November 1.

Whether the Rev. W. W. Meech was justified in affixing his name to a quince which was in general cultivation in Vineland, N. J., some years before his advent here, is a question, but in any view of the case, the wonderful merits of the quince will never be questioned by those who have seen it in fruit. JOHN WILLCOX.

Vineland, N. J.

MEECH'S QUINCE.

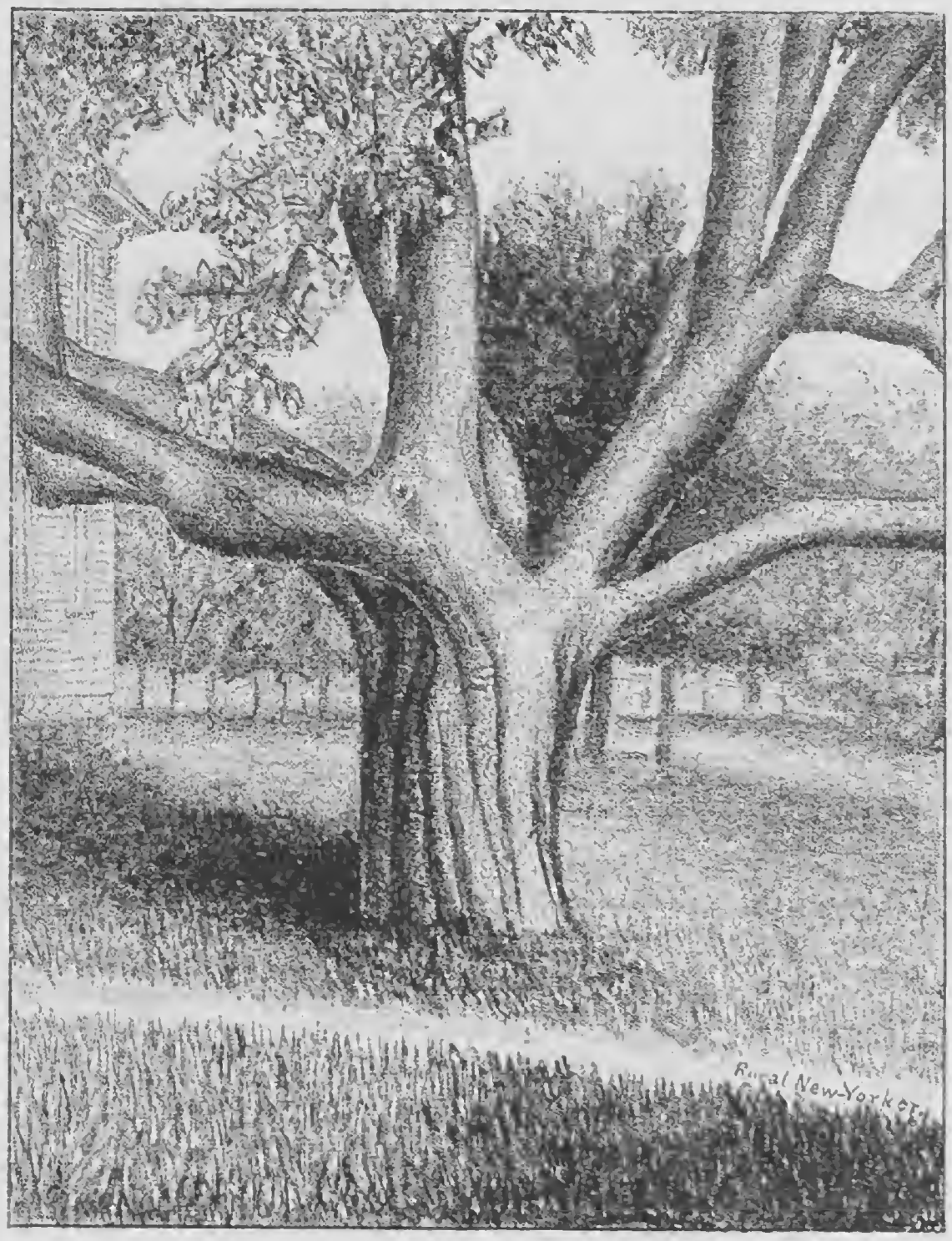
ALMOST everything in the shape of a quince that is not known to be Angers, or Champion is called Orange Quince. This race of Orange Quinces has sprung from numerous seedlings, and there are numerous types of it all over the country, that vary in shape, size, quality, and dates of ripening. I have given this matter the closest attention, and find in my travels that the Orange Quince is divided into many strains, coming from different sources. Quinces have sprung up in gardens, have been planted, propagated, and called Orange Quince, for the reason that they resembled that quince more closely than any other variety. In many cases these are not Orange Quinces, but seedlings that vary considerably. I do not doubt but that Meech's Quince is one of these variations of the Orange Quince, of an improved type. This idea is not original with me. There is a gentleman in Western New York, who has discovered a valuable strain of the Orange Quince, has propagated from it, and has secured what might be considered a new variety, and still, he cannot trace it to any source, as it has been under cultivation for many years under the name of Orange Quince. The shape referred to is round and entirely different from the common type of Orange Quince. The fruit is also larger, and less gritty, and of better quality. The fact is, that the quince has not received the attention it should have received, and is one of our neglected fruits. Mr. Downing told me that he had examined specimens of Meech's Quince and had no doubt that it was a new variety. While I have no positive information on the subject, I have reason for believing Meech's Quince to be an improved type of the Orange.

CHARLES A. GREEN.

THE NEW PEAR DR. REEDER.

OUR only specimen was purchased in the Spring of 1876, and it bears this year for the first time, quite abundantly. The tree in its growth, at its present age, resembles Clapp's Favorite. The variety originated in New York State, though with whom we do not know. The fruit is of medium size at its best, though always averaging larger than the Seckel. It is in shape much like the latter, roundish, pyriform—sometimes obovate. The skin is russeted on a yellow ground, and the flesh is sweet, tender, juicy with a peculiar musky, aromatic flavor. It began to ripen Oct. 25th.

The pear may never prove of the first value for market; but it is certainly one of the best of its season. The stem is slender and an inch and a quarter long, slightly sunk. The calyx is open in a shallow basin. Fig. 3 (page 3) shows an excellent portrait of the pear with a cross-section at Fig. 4.



A GRAND OLD APPLE TREE. From a photograph. Fig. 1.

RURALISMS

FLORISTS employ various devices for preserving cut flowers, the chief being refrigerators and ice chests. These, though somewhat expensive, answer the purpose in a satisfactory manner for preserving flowers on the premises. I am not aware, however, that any equally good method is in use for the preservation of flowers while in *transitu*; for example, in sending flowers from Boston to New York, or between any two given points, especially in warm weather. It has just at this moment occurred to me that I know of something that will probably answer this purpose. I am a devoted follower of good old Izaak Walton, and a member of the brotherhood of anglers. All of us who "go a-fishing" desire to bring our fish home in a fresh and sweet condition on a hot Summer's day; and this until lately, we have not been able to do without recourse to troublesome methods, the best of which are far from satisfactory. An inventive genius about a year ago offered the angling fraternity a basket which answers the purpose in an acceptable manner. We put our lunch, etc., in it when we go out, and bring our fish home fresh when we return.

* * *

This basket, though light and easily carried, is made upon the principle of an ice chest, and it has seemed to me that it would be an excellent thing for the transportation of delicate flowers, and also for keeping them at home in a small way. It is, at all events, worthy of examination by those interested in the preservation and transportation of flowers. The basket is now made in three sizes, to suit the angler, but could be made of any size. It can probably be seen at the principal fishing tackle dealers in most of our large cities. It is called a "refrigerator basket."

* * *

Fish-culture, in the not distant future, will, no doubt, occupy the attention of a good many farmers favorably located for the purpose. Some have already made a beginning, but not always wisely. I think I can see the time when leading agricultural papers will have a column headed "Fish-culture."

* * *

I have lately neglected to say anything about our native trees and shrubs, though I have been among them all the time. There are plenty of good ones left. I would just now mention Prunus maritima as being worthy of a place on the lawn, where I have more than once placed it. Its common name is Beach Plum, so called because it is usually found on the beach. It is common along the seashore, where it grows in the sand, and reaches a hight of from three to six feet. Its exposure subjects it to many casualties, and in consequence it often presents anything but a symmetrical appearance; yet I have seen not a few specimens, especially on the south beach of Staten Island, that were all that could be desired in this respect. At all events, I know you can make it pretty much what you please under cultivation. It flowers in May, and is quite as handsome, at that time, as many of our best spiræas. The flowers are white, and appear in umbels, which almost cover the plant under favorable conditions. The fruit is small, nearly round, and of a purple color. It is sometimes eaten. Begin with a small plant, not more than twelve to eighteen inches high, and you can then make it either a shrub or a dwarf tree, to suit your taste, with comparatively little trouble. It is a plant peculiarly adapted for sandy soils, and yet will

not object to one with some body and richness.

* * *

The Editor very properly advises a correspondent to use lime on his muck. I do not know whether he has any preference, but I always use shell lime in preference to stone lime, if I can get it. Stone lime sometimes contains a sufficient quantity of magnesia to be hurtful; but as this is not often the case, nobody should be deterred from using stone lime when the other can not be had. Still, I think shell lime is always to be preferred for agricultural purposes. I am about to use it largely on muck, as I have many times before.

* * *

The Editor advises the ladies to go slow in silk business. This is sound advice in two directions. The ladies do not seem to remember that raising silk worms is a matter that has already been thoroughly tried in this country, and in every instance (except in California) with disastrous failure. Even the Cheney Brothers, the largest and oldest silk manufacturers in the country, have tried it and given it up, as did their fathers before them. Mr. Van Nest and many others tried it years ago largely and systematically, and grew poor on the results. It is well, too, to remember the multicaulis fever, which made so many sick unto death (financially).

* * *

A good many years ago I was present when Mr. Rush Cheney was trying to get some native cocoons into condition for reeling. Having failed in many ways, he tried boiling in a strong lye: but still the silk would only come away in short pieces, which were injured in the fiber and made useless. The glue in those cocoons beat Russian glue out of sight. There is none of this trouble with cocoons imported from China, Japan, Italy, or even California. There are several reasons why raising silk worms can not be profitably pursued in this country, at least at the North. I have raised cocoons in a small way for amusement, and there is something very interesting and even fascinating about it; but inasmuch as everybody thus far has failed to make it profitable, it is not too much to ask the ladies, in the kindliest manner, to ponder the subject seriously before going into silk-raising as a business for profit. I really wish the field were entirely open to them; but, other obstacles removed, they can not hope to compete successfully with foreign cheap labor. HORTICOLA.

Sheep Husbandry.

Notes from the Rural's W. N. Y. Farm

FEEDING LAMBS.

SORTING THE LAMBS,

when putting them into winter-quarters, is an important operation that should by no means be neglected, nor should it be very long delayed. It would be folly to put them up promiscuously, the weak with the strong, or the smaller young ones with those older and larger. When in good health, there is nothing more impatient, at feeding time, than a lot of lambs, and if the younger be with the older or the weak with the stronger, they will be overrun and crowded away from the trough, and if a large number be together the feeder must be active, and look out well, or he will be taken off his feet in the rush they will make to get at the trough first.

Anywhere from 18 to 25 will do in a pen, the number depending upon its size; but we have found about 20 the best number, and they should be selected "all of a size," and as they must be seen several times daily, for several months, and as every owner will take better care of anything in which he takes a pride, and as they will look so much better, we recommend selecting those of about the same grade of wool for each pen, and if some have black faces and others not, by all means put the black faces by themselves and the same with the white. Very soon after penning, the lambs become accustomed to each other, familiar as it were, and feed quietly together. It is therefore best that they be sorted and bunched, as they are to be fed, as soon as possible after being placed in the barns, and after being so placed there should be as little changing from pen to pen as possible, and absolutely none except in case of sickness or where one for any reason fails to thrive, in which case it should be removed at once.

THE LAMBS SHOULD BE SHORN

as soon as they have become thoroughly familiar with their quarters, and accustomed to the change of food. If we fairly demonstrated the necessity of shearing in the case of ewes for winter lamb-raising, every reason then given, is greatly intensified in the case of the lambs, and that it will pay, and pay largely, we have demonstrated by six years' experience, with never a failure. A good lamb carries a fleece of from five to eight pounds of wool, and, as we have shown in the case of the ewes, to get the largest growth for the feed consumed, they must be kept in a uniform temperature of from 55 degrees to 65 degrees, and this heavy fleece often causes them to be too warm and to perspire very freely; it also makes them bulky and able to get about in the pens less easily; and where one happens to be lying down, the others are liable to stand on its wool, thus pulling so severely as often to make sore and inflamed places under the skin, and again, all the ticks on any flock at "shearing time" will be found on the lambs, and by shearing them, 99-100 of these pests will be removed with the fleece, the few remaining can be more easily killed. Few people are aware how many ticks a lot of lambs that have not been treated with an insecticide, are carrying; and a dozen ticks on each lamb are enough to eat and worry it to a point that is fatal to any profit in feeding. Thousands of lambs die annually of the so-called "gruh-in-the-head," where the real cause is an abundance of sheep ticks. This is no guesswork, as we have made repeated examinations. We once sheared a flock in which was one "little runt" weighing less than 20 pounds, that carried, by actual count, over 2,000 ticks, and when shorn and freed from these, it made a fine lamb, weighing, in Spring, when sold, over 75 pounds, whereas if left unshorn, and with the ticks, it would have perished long before Candlemas Day—"eaten up alive." So it is not only humane but profitable to shear the lambs. We usually commence to shear in December, the time depending much on when we get the fall work all out of the way, and we finish shearing as soon as convenient. When shearing, and for a few days afterward, of course, the barns must be kept a little closer and warmer than at other times, and then be gradually cooled by ventilation till at the end of a week there will be no further danger of their taking cold.

TREATMENT AFTER SHEARING.

It is also a good plan, a few days after shearing, to give them a good carding and brushing, treating them at the same time with a mixture composed of lard, or lard oil two parts, raw linseed oil one part, kerosene (or, better, crude petroleum) two parts, the whole colored with burnt umber and well mixed. It should be used as hot as it can be borne by the hands, and can be applied with a sponge, cloth or brush and well rubbed into the wool and skin. This may seem to be a disagreeable thing to do, but if two persons dress themselves in old clothes and have two dishes of the mixture and a kerosene stove in a convenient place to heat one dish as they are using from the other, the operation can be very rapidly performed and it will kill every remaining tick, cure any eruption or skin-disease with which the animals may be troubled, and stimulate the wool to an even, rapid growth, and, withal, it gives the whole flock a uniform, nice color, which alone would be worth the trouble.

JOTTINGS.

It will be remembered that when we were raising the new barn, the neighbors thought it was so large it would never be filled. But on a farm on which stock is largely winter fed and much food rich in nitrogen and phosphates is brought and consumed, and the manure is judiciously applied, it is very difficult to have barns large enough to hold all that is grown. The result has been we have our barns full to overflowing, and two stacks of straw out-of-doors, which, though looking like pigmies beside a barn 90 feet long and on a nine-foot basement and with 20-foot posts, are each large enough to fill a barn 30x40-feet with 16-foot posts.

We are always sorry indeed to be obliged to put straw in stacks. Good straw, well saved, for feeding to fattening stock, which eat largely of oil meal, cotton-seed meal, bran, etc., is worth half as much as clover hay, and is a very necessary component of feed, and it is impossible to put it into stack without a great loss even in the best of years; but in a Fall like this, it is worth no more than half as much as if well housed. It pays to build straw barns even!

WHAT ABOUT THOSE POLAR SHEEP.

Lieutenant Greeley in an address at Pittsfield, Mass., says that during his long arctic explorations he passed through a district of country in which were numerous droves of wild sheep. They had large heads with horns like cattle; their tails resembled that of the horse. Their fleeces were of the finest and thickest wool equaling, if not surpassing, that of the Merino. Now if these sheep are a reality, why would it not pay some enterprising citizen, or the Department of Agriculture to make an effort to introduce, and if possible acclimatize them. If they can live and thus thrive in that inhospitable country, there may be great possibilities in breeding them pure, or crossing with our domestic sheep. Who knows?

Dairy Husbandry.

IOWA STATE DAIRYMEN'S CONVENTION.

(RURAL SPECIAL REPORTS.)

Slim attendance; slight interest among dairymen; burdens and pleasures of woman's life on the farm; leisure hours on the farm; food adulteration; corn fodder for milk; better farming needed; profit and loss in dairying; book-keeping on the farm.

THE twelfth annual convention of the Iowa State Dairymen's Association opened in Belvidere on the afternoon of December 9, and continued until the afternoon of the 11th. The attendance at the day sessions was quite moderate, and mainly composed of people from a distance who had something to advertise. The evening attendance was larger, owing to the presence of the citizens of Belvidere. This does not speak well for the interest which the dairymen of the State feel in advancing the welfare of their own calling, which seems at present to demand their special attention. The admission was free, so there could be no excuse on the score of poverty, unless the dairymen are too poor to pay railroad fare, which was reduced to one-half for this occasion. Those attending the sessions were sufficiently attentive, and earnestly participated in the discussions. The President, in his opening address, reviewed the situation, using hopeful language and calling for united effort to suppress counterfeit dairy goods and to improve the quality of dairy products while reducing the cost of manufacture.

Mr. J. C. Lambert pointed out the many burdens and pleasures of woman's life on the farm, and how by careful attention these burdens may be lightened and the home life made pleasanter and more beautiful. It is not all drudgery that brings the best reward. There must be planning and system for lightening the labors of the household, and to give time for recreation and reading. It is not always the hardest worker that does the most work. The brain and muscle that have proper rest and recuperation are much more effective than those that are always kept in a jaded condition. There is sometimes real economy in rest.

Prof. C. E. Mann showed how the leisure hours on the farm could be spent pleasantly and profitably, making a general survey of the whole and picking up or bringing up the little odds and ends here and there, much as an artist puts the finishing touches to his work and thereby produces a master-piece. It is not necessary for one to spend his leisure hours in idleness in order to secure the best results to body and mind. A little gentle exercise and clear, calm thought are much more recuperative and beneficial.

Dr. Joseph Tefft enumerated many articles of food and their mode of adulteration, in these degenerate and grasping times, and expressed the opinion that the increase of insanity in the United States is largely due to the effects produced by the adulteration of food. A man may be poisoned and yet no immediate symptoms may appear; but from the constant eating of poisonous ingredients their effect becomes cumulative, and the man in the end as surely dies from poisoning as if he at once took a dose sufficient to produce death. He thought we ought to have some sort of effective legislation to suppress counterfeiting and fraud in the manufacture and sale of all kinds of human food. It is much more injurious to assail a man's health than to assail his pocket.

Prof. W. A. Henry, of the Wisconsin University Farm, has found corn-fodder a very valuable article, when fed in conjunction with some more nitrogenous food, in the production of milk. His corn-fodder was well cured in the "stout," and then cut very fine by running through a powerful cutter. There is about one-third waste in feeding corn-stalks whole. When cut fine, they are all eaten. The Professor is making experiments with fodder-corn, both cured and ensilaged, and expects it to prove a valuable feed in both forms.

Mr. T. D. Curtis called for a halt in exhaustive farming, the cultivation of less acres and an increase instead of a diminution in the productiveness of the soil. Our public lands are nearly all taken up, and the time is not far distant when we shall have a greater home demand for food and raw material than we shall be able to supply by our present methods of farming. He pointed out the enormous wastes from not saving the corn-stalks and straw on the Western farms, and from the lack of shelter for farm machinery and live-stock; also from the unscientific methods of feeding.

Mr. W. R. Hostettler finds that profit and loss in dairying depend upon the greater or less amount of skill and judgment manifested by the dairyman. Careless, slip-shod management can never make dairying profitable, and even the neglect of any essential must materially injure the product and depreciate its value. From the most general management to the minutest detail, everything must be done in proper time and in a thorough manner.

Mr. E. L. Lawrence was of the opinion that bookkeeping on the farm is but another name for systematic and efficient farming. He had not found the farm account books peddled by agents as satisfactory as a pocket memorandum book for the entry of every item, of whatever character, to be posted at the earliest convenience under its appropriate head in a common ledger. The agent's farm account book is based more on theory than practice, and is too complicated, or runs too much into small details, for the use of the ordinary farmer. T. D. C.

DAIRY NOTES.

T. D. CURTIS.

ADVANTAGES AND DISADVANTAGES OF ASSOCIATED DAIRYING.

WHILE associated dairying has its advantages—among which the educational are not the least—it also has its disadvantages. It is difficult to make patrons conform to the necessary rules and regulations to secure uniformity of product of the highest quality. Dairies, farms, feed, care and the quality of milk differ so much, that it is next to an impossibility, to say the least, to secure justice among the patrons. The poor milk counts for just as much, pound for pound, in making dividends, as the good milk. Then, owing to the impossibility of controlling all the conditions in producing and handling the milk delivered at the factory, neither butter nor cheese of as good quality can be made there as can be turned out by the private dairyman who understands his business and has everything under his immediate supervision. Hence, I am no surprised to see it announced that a majority of the premiums awarded at the dairy exhibit made in conjunction with the late Chicago Fat Stock Show, were awarded to private dairymen.

FUEL CHEAPER THAN FOOD FOR HEATING.

Dairymen who are studying economy will find fuel cheaper than food for heating purposes. It is better to have warm stables, even if artificial heat has to be resorted to for the purpose of keeping the temperature above 40 degrees, Fah., than to put extra feed into cows, every cold snap, to keep them from shrinking in their yield of milk, because more of the food goes to sustain the proper amount of animal heat. It is always a great waste to burn food for heating purposes, and in no way can it be done so wastefully as in the animal system. Not only is the consumption great, but the animal organism is over-taxed and deranged by compelling the animal to eat an extra amount of food to keep warm. But where there is exposure to cold, extra food must be consumed or the tissues of the animal are drawn upon for fuel. This causes decline in flesh and makes too heavy a draft on the vital forces. It is therefore economical, as well as humane, to keep cows in a warm stable, where they will not stand humped up and shivering.

VENTILATION IN THE STABLE.

See that your stables are properly ventilated as well as warm. Impure air is inimical to the health of all animals—as much so to the bovine race as to man. Besides, nothing will so soon give a "cowy" flavor to milk, or the smell of the stable, as the breathing of an atmosphere reeking with the exhalations from the bodies of the cows and from their droppings. Ventilate, but avoid direct drafts.

CLEANLINESS IN MILKING.

Do not let filth drop into your milk-pail on the supposition that the strainer will take it out. Much of it will dissolve, contaminating the milk and injuring its flavor. Now that cold weather makes it necessary to keep cows mostly in the stable, it is all the more important to pay attention to the subject of cleanliness.

SPECKS IN YOUR BUTTER, EH?

Why do you set your milk in an atmosphere so dry that the surface of the cream becomes tough and wrinkled? How do you expect the hard lumps are going to be churned? If all the cream is kept limpid, where do you suppose white specks could come from? Are they not unchurned lumps of cream?

MILK AN ABSORBENT OF ODORS.

The kitchen is not the fittest place in the house for setting milk. It may be warm on the rack, or on the shelf next to the ceiling. But do you not know that foul air, when warm, rises and that cream has a strong affinity for odors? If the milk is cooler than the atmosphere in the room, the temperature having gone down during the night when the fire was low or out, it will surely take in the kitchen odors. These are not improved if there is smoking in the kitchen—as there often is. How can good-flavored butter be made of

cream raised in this way? One of the main reasons why winter butter is inferior to summer is because all the operations of making are carried on in an atmosphere loaded with impurities. In the Summer, there is better ventilation, and no one thinks of setting milk in the kitchen. It is much better, if no other room is to be had, to make use of some of the modern devices for raising cream with the milk shut in from all possible contact with the air in the room. Then churn in the sweetest place in the house, even if it is the parlor.

You can easily see that the big cow needs more food than the smaller one. So does the cow giving milk want more food than the dry one standing by her side. Yet you feed all alike, great and small, the workers and the idlers. This is all wrong. Use a little common sense, and feed each individual cow according to her needs. This will also be economy.

Be sure that your cows have a fair amount of succulent food and all the salt they want, and it will do very much to obviate difficulty in churning. Proper attention to temperatures will also help. Do not freeze and thaw your cream, but keep it at an even temperature of about 60 degrees, and churn at that temperature.

The Swineherd.

PIG DIET.

COL. F. D. CURTIS.

Grass the foundation; necessity of cooling with heating food; overfeeding; a little and often; oats for pigs.

THE foundation for pig growth should be grass, as it should be the foundation for the growth of all stock. It is the cheapest food given to us and the most natural for domestic animals. Pigs when only three weeks old will begin to eat grass, and they will *live* on it when three months old. When they have the range of tender grass or clover, they may safely be fed on any kind of other food. They will stand corn in abundance, having the grass as an antidote and additional food. The grass is cooling and life-inspiring, and a complete food. Give me a farm of grass; grass in abundance, above all other things. Cooling and relaxing foods must be given to young pigs along with the heating and constipating foods, or there will be trouble. This is no mere theory, for a whole litter of dead pigs are the silent evidence. Their first trouble is scours—the first, and often the last trouble with young pigs. If they pass this ordeal, which is the result of dyspepsia—yes, hogs too, have it and sometimes get rid of the cause by vomiting, a human expedient—then the next thing is either constipation or dysentery. Inflammations of the stomach, liver, kidneys and bowels are diseases consequent upon feeding pigs too rich food, or food in such a condensed form, as corn.

The most trouble in caring for young pigs is, that they get too much food into the stomach at one time. This is wrong when it is concentrated, as the mass is indigestible, and it is deleterious when thin and bulky, for then it produces a distended and unnatural size in the stomach and puts the pig out of shape. Pigs will stand a great deal more nutritious or rich food if it is given to them in small quantities and every two hours. They have naturally a strong and quick digestion, when it is not clogged or over-crowded. The way to keep up their stamina is to feed little and often, and always in a *clean trough*, and to give them the run of a pasture. The earth is an appetizer—the fresh, clean earth, and not a mire hole—and pigs sick all the way through, will often get well if allowed to dig in it and live on it. I do not think there is any single grain equal for young pigs to oats fed dry, the pigs being allowed to eat all they want in connection with their mother's milk. It is a waste of time and toil to pay for grinding the grain, for to do this is simply amusement for the little fellows, which become adepts at the business of grinding, swallowing the "meats" and spitting out the hulls at the sides of their mouths and looking wise and happy at the same time.

Horseman.

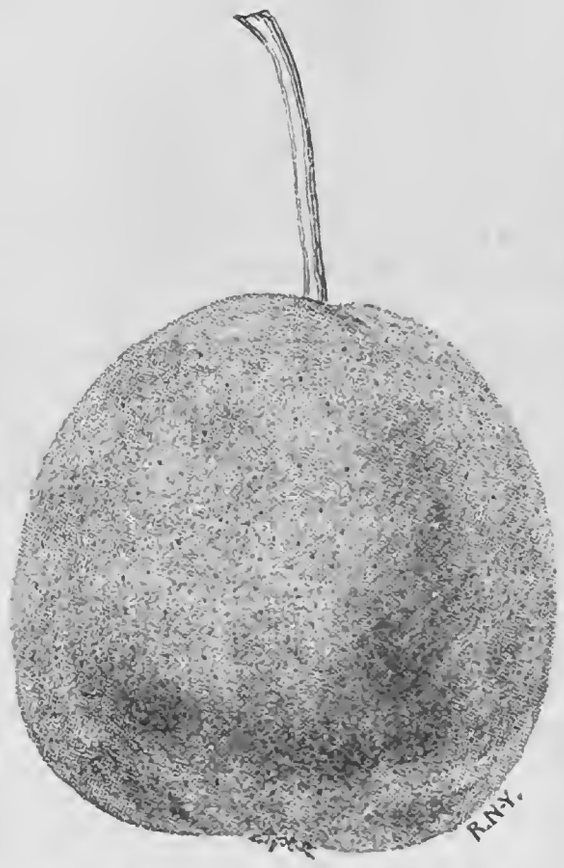
SHOULD WE SHOE OUR HORSES?

J. SINCLAIR.

Need of a school of farriery; the object of shoeing; the best shoe; putting it on; unshod horses unfit for hard roads.

THIS is really the question discussed by the Rev. J. G. Wood, in the interesting book entitled "Horse and Man," which has just been published in London. The book extends to 338 pages and of these 197 are occupied with an explanation of the anatomy of the hoof of the horse and of the prevalent methods of dealing with it. In view of the importance of the hoof, the space devoted to the consideration of that subject is not so disproportionate as might at first sight appear. The old adage "no foot, no horse," is becoming more and more verified as the breeding of this faithful servant of man becomes better understood. It is certainly a most remarkable circumstance that all the trouble of the breeder should be imperiled by handing over the animal to an untrained class of artisians who are allowed to work their will on the hoof. There is no more pressing need of the present day than the establishment of schools of farriery in which the men who are to be entrusted with the adaptation of the horse's hoof to modern needs and requirements may be taught the anatomy of this marvelous piece of mechanism, and how it can best be fitted for uses to which it was not originally designed.

With regard to shoes and shoeing, the object of the shoe is to benefit the horse by protecting the hoofs against the hard, artificial roads of civilized countries. It is always assumed that such protection is neccesary because, although the horse might do very well without these appendages in its native pastures, it must need shoes when it is brought under such different conditions, and has to traverse stone-paved roads, when it carries a rider, or draws a vehicle. Mr. Wood does not concede the accuracy of this assumption; but for argument's sake he passes in review the various systems of shoeing, that have been or are in use—such as the Japanese which consists of shoes made of straw and worn like sandals, and the "parfleche" shoes employed in North America. Then he comes to the multitudinous variety of iron shoes nearly every one of which he, as I think correctly, con-



NEW PEAR DR. REEDER. Fig. 3. (See p. 1.)

demns, his censure of the use of calks being particularly well deserved.

If the horse must have a shoe (which Mr. Wood denies) he believes the Charlier sort complies most nearly with the condition of interfering least with the natural growth and action of the hoof, it being extremely narrow and very light, while its essential excellence lies in the fact that it is not nailed upon the hoof, but is counter-sunk into the horn so as to be flush with the natural edge. He considers that a quarter shoe is all that is required. It should be four inches in length and one-eighth of an inch in thickness.

"A little art," he says, "is required in attaching this shoe. Round the edges of the hoof a groove is cut, and into the groove the shoe is sunk. The groove should be fully as deep as the thickness of the shoe, and even should it be a little deeper, no harm will be done.

There is no difficulty in cutting the groove, as in all places where the Charlier shoe is sold a special knife is supplied. This knife is a variation of the ordinary draw knife, and is furnished with a movable guide by which the dimensions of the groove are regulated. The guide can be set to any point, and fastened by a screw so that even the most careless operator can hardly make a mistake."

The hoof must be fitted to receive the shoe, and I am not quite sure that the process is so simple as Mr. Wood endeavors to make out. Still, the danger is undoubtedly less than by fixing on clumsy iron shoes with long nails, and the Charlier pattern has its great recommendation in not interfering with the various functions of the organ.

The author advances some half-dozen cases in which horses have been successfully used without shoes, but even as to these, there is not sufficient proof to establish his contention, because the animal may have possessed unusually good hoofs. But he leaves us without a single bit of evidence as to the successful use of unshod horses in the city busses, in drays and in agricultural work.

There can be no doubt that the existing methods of shoeing, and the people to whom that delicate operation is entrusted, stand in need of improvements. In drawing attention to this latter circumstance, Mr. Wood has rendered a public service, but he has not rescued the advocacy of unshod horses from the region of the "fads."

London, England.

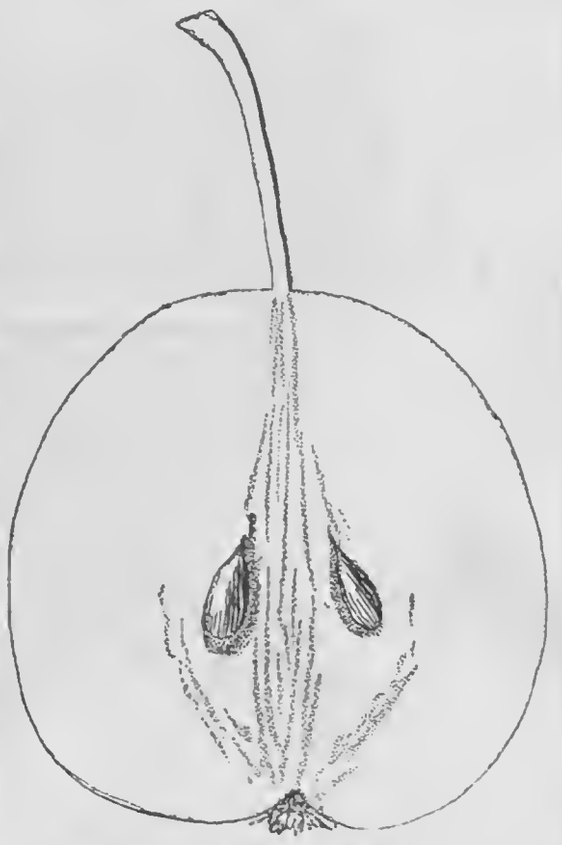
Farm Economy.

WINTER CATTLE FEEDING IN THE WEST.—NO. 4.

A correction; shiftlessness in Western farming an undesirable inheritance; higher farming alone generally profitable; nine savings by sheltering stock; convincing figures.

IN No. 3 of this series I say: "Winter feeding of cattle is bound to decrease until the relative values of winter and summer-fed beef grow wider apart, and summer beef increases in value in accordance with the decreased per cent. of winter-fed cattle." I should have said, in place of "summer beef increases," "winter beef increases."

Having pointed out, as I believe, a method within the reach of Kansas farmers, by means of which they can do better than sell their corn for 30 cents a bushel, or at least better than the common method in vogue, I will now exercise my prerogative and advocate a system which my questioner assures us is beyond the reach of his neighbors. Basing my



NEW PEAR DR. REEDER Fig. 4. (See p. 1.)

observations upon experience of a decided sort and upon wide observation, I most emphatically dissent from the view that lack of capital need confine men, as a rule, to a vicious system of farming; and, furthermore, I as strongly dissent from the quite prevalent opinion that waste and unthrift in farming are unavoidable at the West. I have no contest upon the probable necessities of pioneer farming here, but believe that the views now held on this point by Western farmers are in the nature of an undesirable inheritance that should be shaken off.

I am not content with the reluctant admission that high farming may pay. The truth is that a higher type of farming is the only kind that will pay the great bulk of our farmers. By dint of the highest genius in farm mechanism, and cheap transportation, we have by spoliative farming controlled the markets of Europe. We are now facing a new order of events, and our genius must be turned from mere mechanical farming into the deeper problems of the farm that in their relations all center towards higher products. I believe that I can give a young man of our great West no better advice than to throw off every tradition or habit that binds him to waste and soil robbery, and lay broad and deep a conserving system of farming whose yearly steps shall be up the ladder of greater fertility, growing more and more intensive with accumulating means, until the pleasures and profits of constructive farming have passed, as an inheritance, to the children. The West will make its way in farming in the future against the world, through better farming. Thorough knowledge of modern agricultural thought, and common sense, will make reenperative farming pay from the start in the West, and will swell in volume year by year. No more capital is needed for good than for poor farming; but a strong purpose and a good head are essential, and a few years of patience. The rich only can afford a low type of farming.

Humanity says shelter will pay. Shelter for 100 cattle and 100 hogs will cost, say, $3,000, or $250 a year in interest, repairs and insurance. I do not allow full rate of interest, as a farm with a barn on it is scarcely taxed any more than one without, and the net value of the money only is to be charged.

Shelter makes a ninefold saving, to wit: in food, growth, manure and earlier maturity, as well as in the amount of food leached from the stack, wasted in the stack when eaten, and injured in the stack by rains, and also in the poaching of fields by cattle pasturing, and by opportunity to combine and handle all of the foods of the farm to the best advantage. Will not all these savings pay on 200 cattle and hogs $250 yearly, and the extra cost of care? Beyond a doubt they will.

In the following estimate, I have made my figures within the truth, or less strong than they can be safely made. While I do not give the data upon which I make my figures, I wish it distinctly understood that all of the more important estimates are based upon experimental data obtained either by myself or by others.

Saved 4 pounds of hay daily for 140 days for 100 cattle; hay $6 a ton	$168 00
" 1.17 pounds corn " " " hogs, corn 28c. a bushel	82 00
" On 5 per cent. death rate of hogs	25 00
" " 1 " " " cattle	30 00
" " quality and early marketing by constant winter growth	100 00
" " that would be leached from a stack by rains	115 00
" " 20 per cent. (estimated) that would be trampled under foot when eaten from the stack	180 00
" " 32 acres of corn fodder and straw on a 160 acre farm, by housing, will keep 20 steers more than if eaten off in the field	240 00
" " 400 tons of manure (liquids and solids) at 50 cents. This manure will be the most profitable saving of all.	200 00
Total savings (excluding some minor savings to balance any possible over-estimation)	1,140 00
SHELTER, DR.	
Extra cost of housing 150 tons of hay	$50 00
" " " 48 tons of straw and corn fodder	80 00
" care of stock	100 00
Drawing out manure	100 00
Total cost	330 00
Net gain	810 00

It will be seen that I would house cattle, save all of the straw and corn fodder, and use the manure systematically. We have but touched the possibilities of over-farming.

Ag'l. College, Columbia, Mo.

PROFIT IN FEEDING WESTERN STEERS.

I CERTAINLY must protest against the rough handling given to us Western farmers and cattle feeders by Professor Sanborn.

In the RURAL of Dec. 5th he figures up the loss on a steer by winter feeding. I will take his own figures and prove there is a fair profit, for these hard times. Before he made up his account he said that corn was worth, in his county, only 20 cents a bushel; but in his account he figures it in at 30 cents; now there would be a saving of $9. Again he charges $5 for one ton of hay. I never knew a feeder who fed more than one-third of a ton per steer in 100 days, and some, instead of hay, feed straw which otherwise would go to waste: $3 must be deducted on this account. Then again, he figures interest and risk on shoates. Pshaw! Just as if every farmer does not have his own shoates, and wouldn't the risk be there if he did not feed? So drop 60 cents here. And, finally, he charges $1.50 for care, sales and delivery, just as though it would not cost five times as much to haul that 20-cent corn 8 or 10 miles to market as it costs to feed it, and drive the steers to market. In his table he figures a loss of $1.48.

Difference of 10 cents per bushel on 50 bushels of corn	$5 00
" on " " hay	3 00
Risk and interest on shoates	0 60
Care, sales and delivery	1 50
	$10 10
Less	1 48
Clear gain per steer	$8 67

Woodbine, Ia. W. H. DE C.

The Vineyard.

GRAPES, PICTURES AND PEARS.

G. W. CAMPBELL.

Pictures to represent possibilities, not realities; an exceptional specimen; an excellent error; clusters on old larger than those on young vines; examples; the miserable Kieffer, and wretched Comet-Lawson.

IN noticing the 18th Report of the Ohio State Horticultural Society, the RURAL fears most people will be disappointed who plant the Empire State Grape, expecting it to equal the illustration. The remark is doubtless just as applied to "most people," and I may say

also, as applied to most illustrations of new fruits, as given by their originators or introducers. It is, however, generally understood, I think, that these illustrations represent what can be grown by extra care, rather than what may be expected under neglect, or ordinary treatment. [This is a very unsatisfactory practice and one which we think not to the advantage of the propagator. It is much better to have a man happily disappointed. EDS.] And, although the illustration of the Empire State certainly represents fruit much larger than the variety will produce under average treatment, I have reason to believe it has been, and can be grown to equal it. In the autumn of 1884, I received a cane about 18 inches long, bearing four consecutive clusters of the Empire State, which was exhibited at the Ohio State Fair. The two inside clusters were each, very nearly, if not quite, equal to the illustration; the other two about one-fourth to one-third less. I do not hesitate to say that these were the handsomest four clusters of grapes I ever saw, of any variety, growing upon one shoot; and all the oldest and most experienced grape-growers of Ohio, who saw them, said the same. This it was that induced me to publish the illustration in question. I had fruit upon the young vines the past Fall, but the clusters ran not one-fourth the size of those in that picture: and instead of being as has been claimed, "as early as Hartford," it was not earlier than Concord. In other respects, it was very satisfactory, foliage healthy, growth very vigorous, ripening its wood perfectly:—and it would not surprise me, if I were able, next Autumn, to send you clusters, "equal to the illustration."

I have sometimes thought the RURAL'S illustrations were hardly just to some varieties, as young and undeveloped plants in their first or even second year's bearing rarely produce as large or as fine fruits as older ones. But the error, if any, is a safe one, and certainly more satisfactory in the end than overdrawn exaggerations upon the other extreme. When the Pocklington was first introduced, I thought the pictures monstrous exaggerations; but I saw afterwards, at the meeting of the American Pomological Society at Boston, and have seen several times since, specimens larger than those in the pictures. [Those clusters were evidently grown on vines that had been in some way manipulated.-EDS.] And the Duchess also: the first and second years I fruited it, the clusters were so small as to be almost insignificant. But the same season, Mr. Caywood exhibited, at Philadelphia, specimen clusters over a pound in weight and larger than those in the pictures which had been published illustrating it, and since my own vines have grown older and more fully developed, I have grown clusters nearly as large.

The colored illustration of the Niagara Grape, I should say was rather below than above the average size of what may be expected, under good cultivation, and for this its introducers deserve commendation.

I am really glad to see the stand the RURAL has taken as to the Kieffer Pear; and it would have saved a world of loss and disappointment and perhaps a great deal of profanity, if all horticultural editors and teachers had taken the same course. Instead of being "blight-proof," as claimed, it has blighted here more than any variety I ever planted, and the tree has proven, under our severe Winters, no hardier than the peach. I had a few trees, but blight and cold finished them all up last Winter, and since tasting the fruit on several occasions, I am not sorry they are all dead. I never desire to plant another tree or taste another Kieffer. And now comes the Comet-Lawson, with the recommendation that it is handsome in appearance and will sell. Can its introducers name a poorer pear, unless it be the Kieffer or Le Conte, or one more worthless, except in appearance? It may *sell*, but I think not *twice* to the same customer.

Delaware, O.

Horticultural.

STRAWBERRY TESTS.

THE report of the proceedings of the American Pomological Society in the RURAL was very good, and has doubtless called out considerable discussion on the different varieties of fruits, if fruit growers generally feel as much interested in it as I do. The time allowed for discussion of each kind of fruit was, however, necessarily too short to do justice to the subjects. One matter of surprise to many was the evidence that the old Wilson Strawberry must go to make room for better kinds. This is a great small fruit region, and it has been a common remark among extensive strawberry growers that if the Wilson could have as good a chance as the new kinds, it would pay as well; but the past season has been death to it, as the crop was very heavy here, and prices ran low, and very few Wilson growers claim any profit, owing to the fact that the foliage rusted in many cases, and where the crop was good the prices hardly paid expenses: while the growers of Crescent and Sharpless all made some money, and in one case a field of Sharpless is said to have netted $500 per acre. The berries sold from $1.75 to $2.75 per case of 16 quarts, while Crescents sold from 90 cents to $1.75 per case, and the expenses in either case were as follows: Picking, 24 cents; crates, 12 cents; freight to Chicago, five cents (last year, two cents), making the total expenses 41 cents per case for berries laid down in Chicago, while thousands of cases of Wilsons sold for 25 to 40 cents.

Two years ago I started an experiment on the theory that the Wilson would respond to high culture as well as any, and prepared a small plot nine rods long and two wide, by manuring heavily and by giving it a dressing of 500 pounds per acre of superphosphate. I set two rows of Sharpless, two of Crescent, one each of Manchester, James Vick and Wilson, and cultivated well until Winter, keeping off all runners. Then, late in Winter, when the ground was frozen deep, I mulched with straw from the barnyard, which contained some manure, and left it on until the berries were all picked. I gave my wife the fruit on this patch, and she furnished the house with all our family could eat (eight persons), and canned all we needed, and realized, in cash, after paying for crates and picking, $23.00. The following is the result of the test of varieties.

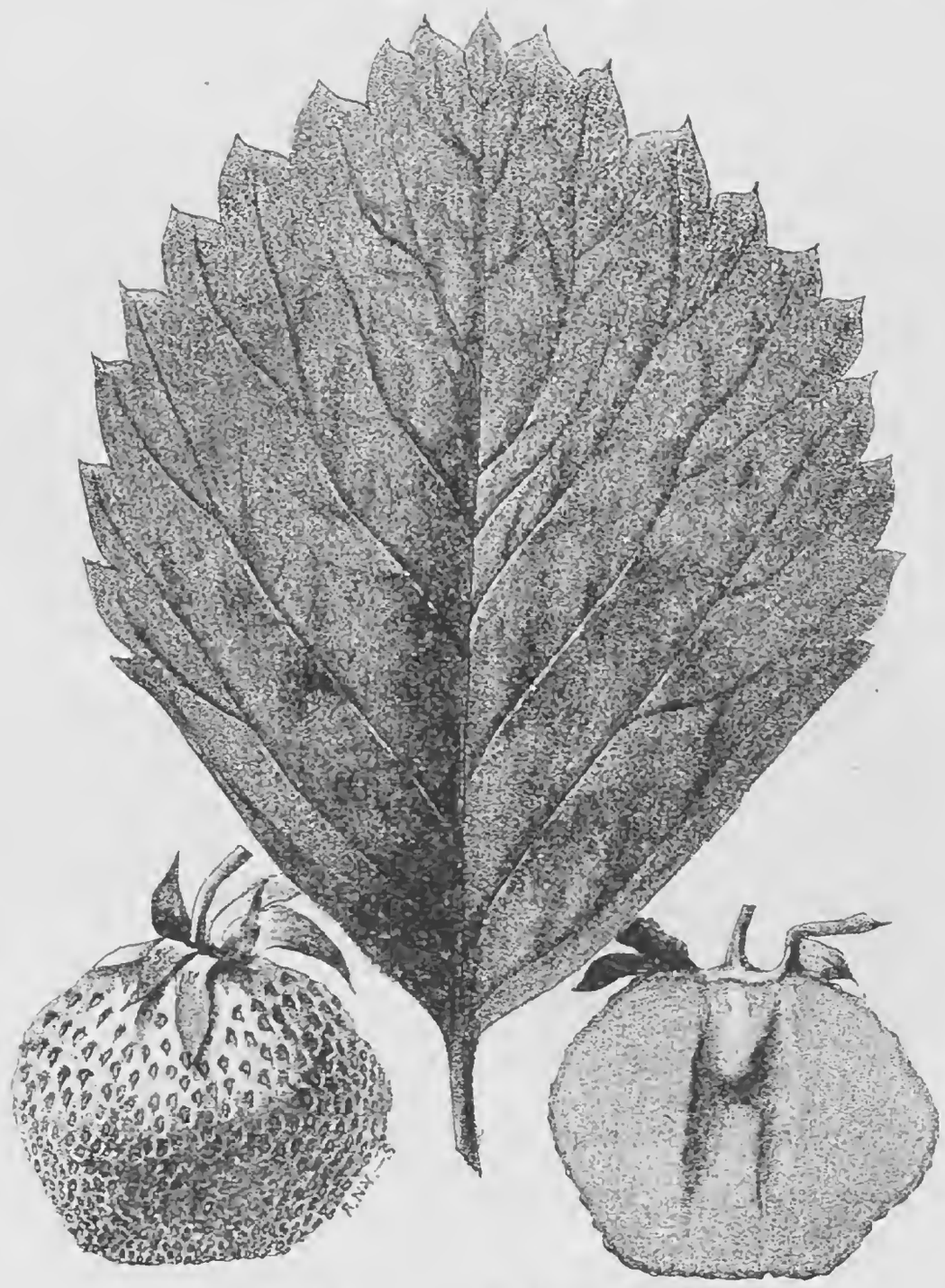
Sharpless, Crescent and James Vick kept perfect foliage; Manchester and Wilson rusted. Crescent yielded the heaviest; Sharpless was second; James Vick third; Manchester fourth; Wilson fifth. In fact, Wilson was hardly worth picking. Sharpless sold for the highest price; Manchester was second, and Crescent and Vick next. My experience and observation sum up about as follows: I would plant Crescent for early and Sharpless for late; but I think it best to caution new beginners that the Sharpless has two serious defects—one is that the blossom is very tender and will kill with a light frost, even before it has opened; the other is that it is very liable to rot on the under side, if it lies on the ground. I remedy both faults by mulching, the mulch being placed on the ground when it is frozen. This holds the frost in the ground and holds the plant back until it generally escapes the frost. The same mulch keeps the berries off the ground and prevents rot. I hope we may find the Parry a match for the Crescent, and the Jewell a match for the Sharpless.

Benton Harbor, Mich. R. M.

ALLEY'S NO. 9 STRAWBERRY.

WE have not as yet this new berry at the Rural Grounds. Our accompanying illustration (see Fig. 2) was drawn from specimens sent to this office by the originator. Mr. E. Williams kindly furnishes us the following remarks:

"Mr. Alley, a mechanic residing at Hilton, a mile or two beyond Irvington, N. J., has a large number of seedling strawberries of his own on trial. His No. 9 he considers his most promising kind. This is a very strong and vigorous grower, very large, late and productive. At the time of our visit (June 23), the berries were just coloring. Mr. Alley uses the Champion as the mother plant, and Sharpless and Great American for the fathers, and depends on nature to do the crossing. The No. 9 is an acid berry of the Champion type. He grows the Champion because he likes an acid berry and finds plenty of customers to take all he can grow. His garden is about a quarter of an acre and is full of fruit in every available space. He has other seedlings, I think, quite as promising."



ALLEY'S No. 9 STRAWBERRY. Fig. 2.

HOW TO FENCE A GARDEN SO THAT IT CAN BE PLOWED AND CULTIVATED WITH A TEAM.

IN the early Spring-time, the average farmer prepares for the year's campaign. About the first thing he thinks of is the construction and planting of a garden. In considering the garden problem, nine out of ten farmers reason thus: "I can't raise poultry and a garden without the intervention of a picket fence. I can't plow a little patch surrounded by a fence, and I'll be shot before I'll dig it over with a spade; I prefer eggs and spring chickens to garden 'sass.'" This conclusion is a very foolish one, but it is the most popular because easiest arrived at. am satisfied that, if the problem of plowing a garden can be satisfactorily solved, a garden will grace every farm, and the farmer's wife, who now tastes fresh garden sass only when a compassionate neighbor presents her with a handful, will fairly revel in crisp and delicious vegetables of her own raising. Here is my solution of the problem:—

Fig. 6 shows how a garden of any size

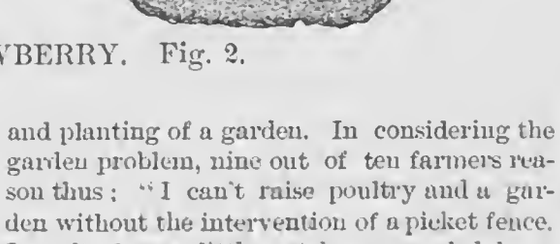


Fig. 6.

should be laid out, *i. e.* oblong. The fences on either side are stationary, while those at the ends are movable. The movable fence is shown in figures 7 and 8. The panels are twelve feet long, and made of four-inch fencing and lath, and are so light that one man can handle them with ease. The crossed laths

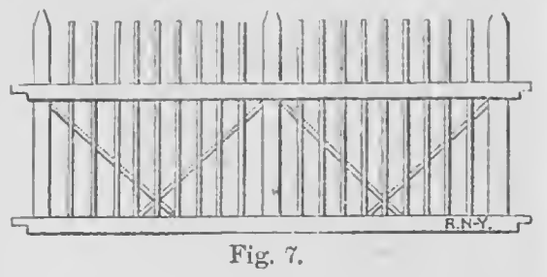


Fig. 7.

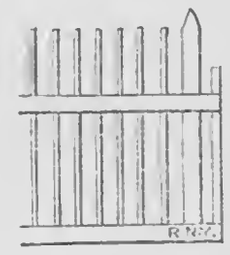


Fig. 8.

Fig. 9.

are placed there to stiffen the panel. The standard is shown in figure 9. It is made of four-inch fencing, and is very light. The ends of each panel fit snugly side by side in the notches in the upper and lower cross-pieces. To keep poultry out of the garden, the angle of the standard is set inside: to keep them in the garden, it must be set outside, or they will climb up it and fly out.

When plowing, cultivating or manuring, move the end fences aside, drive the team straight through, and turn on the outside of the garden. When done, replace the fence. Figure 8 shows how the ends of the side fences are arranged to receive the ends of the movable panels; they fit into the space between the post and outer strips. A person can move the fences, plow, or cultivate the garden—and put it in tip-top order—and reset the fences, while the man with the spade is wondering how long it will take him to dig one corner over.

Now is the time to select the garden spot and manure it heavily. It is also a good time to build the side fences and make the movable panels. "PICKET."

Christian Co., Ill.

FIRE FOR THE CABBAGE MOTH.

Some of our people keep their cabbages free from worms by building small boufires in the cabbage patch about sunset, and letting them burn until dark. The small, white moths that lay the eggs from which the worms come are attracted by the light and burnt. H. G. F.

Farm Topics.

EXPERIENCE ON A RUN DOWN FARM.

CHARLES A. GREEN.

Old-fashioned fire-places; first night on the run-down farm; sights and thoughts on the way; a desolate farm-house; a cheerless night.

MY wife and children having gone to the city on a visit, I am seated this chilly October evening before the old-fashioned fire-place of our run-down farm. I doubt if there are many such fire-places in existence. It was built 40 years ago, entirely of great rocks hewn with skill, furnishing a smooth surface which has not been defaced by the many fires that have blazed upon them. At one side, and entirely separate from the fire-place, was built an old-fashioned brick oven, in which has been baked bread enough to provide for an army. Such was the kitchen fire-place of the early fathers, who have long since gone to that "bourne whence no traveler returns." When we took possession, here sat two huge and-irons capable of receiving a four-foot stick of wood, and overhead hung a monstrous crane, which had borne the breakfasts and dinners of many now sleeping beneath the church-yard turf. As the sticks of beech and maple snap and glow, filling the room with a cheerful light, and warming the chilly air, I recall the first night I spent in this abode.

It was before my family had moved to the farm, and this house was deserted. We were then living at Rochester. Having kissed my babies good bye, I started for the cars that passed near the farm. The sky was bright, and the streets were lively with pedestrians. Bands of music were playing in front of the theatres, dashing equipages were treading the fashionable avenues, and everything wore a bright holiday aspect. The car in which I rode was occupied by a merry party returning homeward, all discussing the afternoon's amusement—or some other plan of enjoyment.

After a short ride, I left the car and started on foot for the farm. Meanwhile dark clouds had arisen in the west, the wind was rising, and there were threatenings of an approaching storm. I saw, as I passed along, a farmer plowing a large field by the wayside. How slowly the team dragged the plow along! How wearily the farmer followed the plow! Thought I

to myself, what an endless job this man has on his hands. It appeared to me that it would require a year to plow the field. Can one who has made a thousand dollars in a day be satisfied with such slow, dreary, unintelleetual work as this? There was a time when I was contented to hold a plow from sunrise to sunset; but that was many years ago, and I had almost forgotten how slowly the plow moved through the soil. Another man was "dragging" in the same field, clouds of dust enveloping him as he plodded on slowly and monotonously through the yielding soil. When a boy I harrowed many fields like this, unmindful of the dust or the wearisome march.

In order to hasten my journey, I struek across lots through a piece of timber. The autumn leaves had fallen, and my tread disturbed the partridge and rabbits by the way. Coming to a clearing, I discovered a man with a long-handled hoe, hauling black mud out of a ditch. His hands were knotty and callused, his face stained with smoke, but his efforts were well directed and pushed with great vigor. I asked if he owned the clearing. He replied that he had purchased it three years before. I noticed that stumps and fallen logs were burning in different parts of the field, apparently receiving his attention, and I inquired if he had been at this work of clearing up all Summer. He replied that this was the third year he had been at work clearing this tract, the whole of which did not embrace over 20 aeres, and could not have been worth more than the labor he had expended upon it, as much of it was low and undrained. A slow way of making money, thought I to myself, as I marehed along.

I had visited our farm only once before, and then only hastily. I arrived at the farmhouse at dusk, and as the doors were not bolted, I entered uuhindered through the baek way. If there is one thing more desolate than another, it is an empty farm-house on a run-down farm. The plastering was torn from the walls, glass was often missing from the windows, the paint was scratched and soiled on the wainscotting. The only ornaments the rooms contained were an old broken chair and table in advanced stages of dilapidation. I hastily built a fire in this same fire-place, which soon beamed forth merrily, and did much to dispel the loneliness of my surroundings. This done, I looked out of the window upon the garden, which was in keeping with the general desolation; the bare arms of tall weeds swayed in the wind, half dead trees were straggling about in every direction, striving to keep up with the fences in their crooked rambles; ancient grape-vines as large as my arm were hanging without support, and everywhere as far as I could see, there was a general break up of order, and a reign of confusion and abandonment. Having nothing to read, or otherwise amuse myself, and being exceedingly tired, I hastened to my cot, which had been sent on in advance. I did not know a soul in the vicinity, and had no idea whether I might not be located among a lot of horse thieves, or worse. The question arose in my mind as the midnight darkness came upon me, whether in case I was surrounded by such a class I might not be disturbed in my slumbers by a demand for my money, or my life. As the night progressed, the October winds howled and whistled around the corners of the house, rattling the crazy blinds and throwing out the old hats and other temporary barricades that had been placed in the broken windows. I remember placing a boot-jack against one broken glass, and thrusting a pillow in another, the night being quite cold, and the blast exceedingly uninviting. As the embers on the fire-place grew dim, I discovered that I was not alone in the house as I had supposed, for one after another numerous enormous rats made their appearance dancing in the most convivial manner, now over the floor, and now over the bed in close contact with my nose.

Thought I to myself, here's an experience! Here I am, a boy who has spent 12 years of his life behind the cashier's desk of a commercial house in the city, handling greenbacks daily by the barrel, now transplanted to this dreary, desolate, tangled, stumpy, rocky, undrained, untilled, run-down farm. Of course, every one will prophesy failure, and a hasty return to the city. Will their predictions be true? Will these hands that have grown white and soft endure the blistering of the hoe and pruning knife? Will the wife and children accustomed to the luxuries of the city, be contented in such a desolate place?

For myself I had no fears, for I had been born and bred a farmer. Had it been otherwise my success would have been exceedingly doubtful. But as it was, I had a good understanding of all I was about to undertake, and knew it was not a holiday undertaking, but a hand to hand struggle with the elements. It is natural to seek positions of ease, and to shrink from such tasks as I was about to undertake, and yet, positions of ease are not for our good. We would choose to be sheltered like some weak tree in the midst of the forest. How much better that we should stand alone, exposed to the blasts on the hill-top, that we may send our roots deep into the soil, and accumulate knotty arms that the tempests cannot break down.

As I lay looking into the dying embers, the wind died away gradually, the rats, seeming to have satisfied their curiosity concerning me, had scampered away, and when next I regained consciousness the morning sun was beaming in upon me from the windows.

What Others Say.

HYDROPHOBIA.—The recent "mad-dog" excitement has called out a multitude of articles on hydrophobia and its treatment. It is well that the public should be educated in this matter. Hydrophobia is the most horrible disease imaginable. Statistics show that it is far more prevalent than has been supposed. When we consider the damage a single rabid animal can work in a community, there is grave reason for apprehension. The experiments of M. Pasteur may lead to a practical and satisfactory treatment of the disease: yet it will be years, in any event, before this treatment can be made general. In many instances the disease develops in so short a time, that a journey for treatment, as is now necessary, would be impossible. Prevention is far better than any possible treatment. The history of the disease in England and in Europe will show that the number of sufferers has always been rapidly diminished whenever the people became nervous and consequently took better care of dogs. The disease is always communicated to man by dogs, and hence the only means of stamping it out seems plain. Prompt and decisive measures are needed, particularly in the large cities. Every homeless and wandering dog should be killed at once. All dogs running at large, should be securely muzzled. Every license should have, printed plainly upon it, the symptoms of rabies in simple and easily understood language. The owner of every licensed mad dog should be held to be guilty of a crime. It is thought that many persons are frightened into the disease. People generally believe there is no cure for it, and immediately after the bite, give up in despair, leaving the mind in just the condition to aggravate the trouble. The truth of the matter is that hydrophobia does not always develop from the bite of a rabid dog, and that with prompt treatment and strong will power, the disease may be warded off in a majority of cases. The most dangerous wounds are those inflicted upon the hands, face or other exposed portions of the person. A bite through the clothing is rarely dangerous. Dr. Alfred Jewell, a distinguished English veterinary surgeon, in a recent lecture on this subject, said a wound inflicted by a rabid dog should be immediately washed with cold water; placing the part under a tap and allowing a free stream of this fluid to run on it is best. The wound afterwards (provided the person has no sores on the lips or tongue) should be well sucked, and caustic should afterwards be applied. Suction alone should never be depended on. There is a difference of opinion among medical men as to which is the best cautery. Some recommend one kind and others another. Nitrate of silver is very effectual for superficial wounds or scratches, but for a deep puncture the free application of nitric acid is best, as it is more penetrating than the former caustic. It would be dangerous to persons with decayed teeth to draw the virus into the mouth. "Mad-stones" so frequently used in some sections, are of no use in determining the disease. If a friend is bitten, carry out the instructions noted above at once, and keep the patient impressed with the idea that his wound is not dangerous, and that he will recover.

THE SPARROW A PEST EVEN IN ENGLAND.—Miss Eleanor Ormerod, in speaking of the sparrow, says that the yearly increase of this national agricultural pest, and the consequent loss on grain crops, taken in connection with its avoidance of insects and its driving away of those birds that do feed on them, require prompt measures and steady treatment to rid the nation of the nuisance. And yet many are found who argue that the little Englishman is not a pest on our shores!

A GOOD TEST OF MILCH COWS.—Our Scotch cousins, as we learn from Bell's Messenger, have very level heads in many particulars. For instance, last August there was a trial of cows at Edinburgh, which had many features that could be followed on this side of the water. The prize for the best cow was not given to the animal giving the largest quantity of milk, nor to the one giving milk of the best quality; but the two milkings were weighed and the quantity of milk set down, a certain number of points being allowed. The total solids were then ascertained, and two points for every one per cent. were allowed. The time since calving in days was then given, for which 1-10th per cent. was allowed. These points were then totaled, and if the fat had failed to reach a certain standard, a deduction was made, which told against the cow. Thus, for example; take one of the prize cows she had calved 123 days, and received 80.56 points, as follows:—

	lbs.	points.
Weight of milk in 24 hours	32	32
Total solids	13·76	13·76
Butter fat	5·23	
3 per cent. is the fat standard		
Add or deduct 1) per cent. for every 1 per cent. above or below—consequently add		22·55
Time since calving	123 days.	
Add one point for every 10 days		12·3
Total		80.56

This seems a very fair way of testing an animal, only some account should be taken of how much and how rich food the cow eats.

THE LATEST AND BRIEFEST.

SPEAKING of the rude forms of butter-making practiced in some countries, Dr. Davenport states that in Brazil they fill a hide with milk, and it is tightly closed and then lustily shaken by an athletic native at either end, or it is dragged about upon the ground after a galloping horse until the butter comes. In Chili, the filled hide is placed upon a donkey's back, and he is trotted about until the butter comes. In Morocco, a filled goatskin is rolled about and kneeded by women until the same effect is produced .....

W. H. YEOMANS tried planting sunflowers, so that they might be used as bean poles. He says he will never try it again. It may pay to raise sunflowers for seed—we have seen them raised in the West for fuel—but no plant can serve two purposes without slighting one .....

A NUMBER of papers are discussing the question of soaking corn for feeding to stock. The general verdict seems to be that it will pay where a few head of stock are kept. Where one does business enough to warrant him in purchasing a corn mill, or where the regular mill is handy, soaking corn will probably be voted "too much bother." The smaller farmer, living at a distance from a mill, will find it profitable .....

THE Planter's Journal urges Southern farmers to sow more oats. At the Gulf coast, a crop can be harvested in June and be followed by a crop of peas with excellent results .....

A CORRESPONDENT of the Western Rural succeeds in keeping his flock of sheep in good health. By no means the least important of his appliances he counts a Winchester rifle, two good shot guns and a bottle of strychnine. The sheep live, but there is a frightful mortality among dogs at times .....

DR. HOSKINS says: "There are a good many men whose labor cannot be used to profit. They are called 'cheap hands,' but they are the dearest help a man can have" .....

A WRITER in the Philadelphia Ledger says that the correct name for hard times is "whisky and tobacco." .....

THE Gregg, as first reported by the RURAL, is *not* a hardy raspberry. But it is large, though of poorish quality .....

THE Cuthbert is, by general consent, the best of the red raspberries. It was first disseminated by the R. N.-Y in its free seed and plant distribution .....

THE white Ann Arbor Grape drops from the stem .....

Everywhere.

TRANSCONTINENTAL LETTERS.—XLVII.

ALASKAN SERIES.

MARY WAGER-FISHER.

Prince of Wales Island; Scowl's; Tongas; native missionaries; back to British Columbia; news of Grant's death; close of the Alaskan cruise; return to Seattle.

THE following morning—July 24—dawned clear and warm, with the ship at anchor off the coast of Prince of Wales Island in the Kassan Bay. Here were also lying the Pinta and the United States Survey ship, the Patterson, which we had met in Ward's Cove, on the upward cruise. Captain Nichols, commanding officer on the Pinta, told me that strawberries grew farther north, from Glacier Bay, up to Clickhat, and that at the latter place the Alpine berry is also found. But none of the many persons with whom I talked, had ever seen in any part of Alaska blackberries or raspberries growing in a wild state, such as grow in most parts of the United States. This officer also told me that the Prince of Wales Island is 180 miles long and 60 wide, in the extremest length and width: that it abounds in minerals—has gold, silver, copper, marble and good bituminous coal; how much, of course, is not yet known.

As the steamship was to lie at anchor at this point for the day—another fishing station—the captain took us all off in boats, drawn by a steam launch from the Patterson, to a point five or six miles away, called Scowl's House, where we found a charming picnic ground, and spent the day, hampers of provision having been brought from the ship in care of a number of waiters who spread the tables on the thick moss in the woods, where I found, for the first time, an orchid, growing in abundance, but past its first bloom and without leaves. About six miles further on was Scowl's Village, a Hyda settlement, which we were very desirous of visiting, but the captain deemed it too far away. Scowl was the Hyda chief who died last year, and whose imperial brother, blind Paul Jones, we had seen in Wrangell, in June. Whether the house near the picnic ground had been built by Scowl, was a matter of dispute. It is an uncommonly fine Indian house, large, well furnished, with modern kitchen furniture, and the four inside posts are carved in the finest totem style, while in front of the house rises a tall totem 50 feet high, perhaps, a very fine one. The top is crowned with the figure of a man with a hat on his head and with his hands resting on the shoulders of two other men below him, which indicates that the founder of the pole owned two slaves, according to the interpretation given to us by an Indian. The house was locked and quite unoccupied.

On our way back from the picnic, the party received an invitation to visit the Patterson, and spent some little time in peering about into the cozy quarters of this beautifully fitted up vessel. Senator Miller of California, with his wife and daughter, had been guests on the "Patterson" for some days, having left the "Ancon" on her upward cruise, and rejoined her at this point. Lieutenant Clover in command of the Patterson, is the fiancé of Miss Miller. That evening we again were in motion and next morning, early, stopped in Naha Bay to take on a passenger, and in the afternoon reached Tongas where we went on shore for two or three hours—having touched at this point in going up, in the nigh to take on a Custom House officer. The day was perfectly clear and "blazing hot" in the sun, and the one white woman we saw here was clad in a white gown trimmed with embroidery. Tongas consists of two or three houses, prettily located on a terrace above a very rocky beach, and considerably removed is an Indian settlement, with a population varying between three and four hundred in Winter: but with a few exceptions the Indians at this time were all away hunting and fishing. I noticed a number of well kept gardens here, the potatoes and peas being particularly fine, and in one I saw growing for the first time the cultivated red raspberry looking perfectly at home. It was a tiresome tramp along a narrow path beaten through bog and bush, to the Indian ranch, where we found quite a number of totem poles which the Indians seemed to be utilizing for monuments to the dead, nailing upon them legends, and even clothing. On the front of one house was an inscription in English to the memory of Ebbitts, chief of the Tongas tribe, who died last year at the age of 100 years. We were pleasantly entertained for a little time in the house of native missionaries, the woman having been trained in Mrs. McFarland's school at Wrangell. She told me that in Winter she had a school of 45 pupils, and that she was paid $500 a year by a Board of Missions. Both she and her husband were neat and well mannered, and both spoke English readily. They had a baby that lay quietly in a hammock. Around all the Indian houses are wolfish-looking dogs in abundance, but I rarely heard one bark, and I never had any cause for feeling in the least afraid of them.

Tongas was the last Alaskan port, and that evening we sailed on into the waters of British Columbia, passing through Queen Charlotte's Sound in the night, and next morning we were in the quiet water of Graham Reach, with its beautiful scenery. It was Sunday, and there were priests on board, both Protestant and Catholic; but the captain did not favor having any religious service, because of the diversity of sects among the passengers. We had a Sunday dinner and ice cream for one of the extras—made, presumably, of condensed milk, but quite good. On the following day we passed the Seymour Narrows about noon, and from morn until night we sailed as in the northward cruise, amid most enchanting scenes of mountains and isles. As the perfect evening came on, we reached Departure Bay, and the atmosphere was obscured by the smoke from forest fires. The ship halted only

long enough for the Captain to go on shore for a telegram from Portland, conveying instructions as to coaling, and the only words he said upon his return were: "Grant is dead," and the ship sped on her way toward Victoria, past Nanaimo, the red light of the setting sun shining on the pretty town through the smoky twilight with peculiar and striking effect.

The news of Gen. Grant's death reminded us of the fact that for nearly two months we had been without recent news of anything or anybody, without newspapers and beyond the reach of telegrams, and, all in all, it had been extremely enjoyable, although now that we were so near our native land, we had some apprehensions when thinking of what might have happened. Next morning we awoke in Victoria, hot and enveloped in smoke, and we regretted not having tarried longer in the pure, fresh air of Alaska. We remained in port here until nearly noon, when we steamed across the Strait to Port Townsend. All sailing craft were becalmed, as hardly a breath of air was stirring to cause a ripple, and in the haze they looked like ghosts of barks suspended in mid air.

At Port Townsend, we left the Ancon and our Alaskan cruise was ended. We had sailed June 6, and it was now the evening of July 28, and our cruise had covered about 2,500 miles of travel, the most enjoyable and charming water travel, unquestionably, in the whole world. It had been like one long picnic amid the grandest scenes, without the fatigue of cars, attended by no mishaps, and delightful from beginning to end. But after all I have written of our seeings, I am only too confident that the only way to form any just idea of Alaska is to go and see it for yourself! In a somewhat late number of the Coast Pilot 150 pages are filled with a list of the books, pamphlets, etc., that have been written in various languages concerning Alaska, and still so little is generally known of it. The best work on the flora of the country is by a Frenchman.

After an hour's wait at Port Townsend we went on board the Olympian for Seattle, and stopped on the way at Ports Ludlow and Gamble—towns on Puget Sound, which I had not hitherto seen—both the sites of large sawmills, and both very prettily located, with attractive well kept houses, which reminded me of small New England villages. At Ludlow I counted 25 houses—there were probably more — and Gamble is still larger. We had a very good dinner on board the steamer, and reached Seattle a little after eleven in the evening. It was quite like getting home, so many were the familiar faces we met, and so full of genial welcome the greetings we received.

SPECIAL SEED REPORTS.

Alabama.

CAMDEN, Wilcox Co., Dec. 10.—This county is about 100 miles north of the Gulf of Mexico, and is a good agricultural district. All farm, garden and orchard products do well; but as there are no fast freight facilities, nothing is raised for market, except cotton; that brings spot cash at any time. Crops were about an average. Health, good. Labor, cheap (negro). Very little meat, hogs having nearly all died the past Summer from cholera. Z. S. C.

Canada.

BEVERLY, Ont.—From the Rural seeds of 1884, I raised some of the finest tomatoes I ever ate, The D.—M. Wheat was nearly all winter-killed. I harvested about one pint and sowed it again this Fall. I thrashed twenty-six pounds of beautiful, large, white grain from the rye, and sowed it on one-half acre this Fall. I planted the corn and it ripened about three pecks of nice large ears. The flowers were extremely fine. The poppies in particular attracted much attention. X.

PICTON, Ont.—The Rural Beans were vigorous growers, prolific bearers and nice for use as shelled, but worthless as string beans. The King Humbert Tomatoes were perfectly worthless, although ripening perfectly. The round, smooth kind was very good, but not so good as Livingston's Favorite. Both kinds of peas failed on account of mildew, but I think if they could be made to succeed, they would be grand, for they had enormous pods. The Garden Treasures did not amount to anything, all failing to germinate. C. M. Y.

STIRLING, Ont.—I am much pleased with the Thousand-fold Rye. I had nearly half a bushel. I have sown it again, and it looks fine. I I think it worth the price of the paper. The peas did well, but the Market Garden is the most productive. The Johnson Grass never came up. The corn produces too much stalk, and is too late; the beans are not as good as what we have. The flowers are lovely. Success to the Rural! G. M.

Colorado.

MONTROSE, Montrose Co., Dec. 14.—The third crop raised in the Uncompahgre Valley has proven, beyond all doubt, that in the Ute Reservation there lies one of the finest farming districts in the United States. Almost every variety of small grain and grasses has been fully tested this season, and all have fully repaid the labor bestowed upon them. Corn has been raised in paying quantities wherever it was planted, while all vegetables have done well. At an impromptu fair lately held here, Eastern people who chanced to be present were heard to exclaim that they would not have believed it possible to produce such vegetables, had they not seen them. Potatoes weighing five or six pounds were not uncommon. One farmer produced 40 potatoes which weighed 108 pounds! The Prince of Wales and Carter's Stratagem Peas were planted side by side; all came up splendidly and both were so fine that I cannot decide which was the best. I saved one quart of each for seed, and we used the rest for the table. Each continued to bear until October 10, when they succumbed to the frost. Each grew about 24 to 28 inches high, and continued blooming and bearing without intermission, retaining their enormous well filled pods to the very last. The 50 crosses of corn failed to ripen. I had four other varieties, all of which glazed before frost, but not a single ear of the Rural corn matured. Every one of the Flageolet Beans came up and attained a hight of about six to eight feet; were very prolific, but I am at a loss to know what to do with them. As string beans, I found them worthless, and they are too small for shell beans. The tomatoes were small, but very smooth, solid and of fine flavor. The Johnson Grass was very slow in coming up, but finally it appeared and grew five to six feet high. I am afraid the seed did not fully mature before it was killed by the frost. I cut all the heads off, however, and will plant them another year. I hope it will stand the Winters here, as I am sure it will be a valuable crop. I. G. B.

Illinois.

CASTLETON, Stark Co., Dec. 16.—The Rural mixed corn has proved too late for this part of the world. The peas have done well, especially Cleveland's Rural New-Yorker. The tomatoes are splendid. The Johnson Grass has not yet made its appearance. A. W.

Kansas.

CLAY CENTER, Dec. 23, 1885.—The Rural seeds did very well. I saved all the peas and beans for seed. I had some very fine ears from the corn, which I saved for seed. Wheat here almost a total failure; the growing crop looks well. Corn will average about 35 bushels; oats, 40. Long life to the RURAL!

S. W. M.

Maryland.

WESTOVER, Somerset Co., Dec. 14.—Since the first of December, we have had much rain and some very cold spells. The ground at times has been frozen an inch deep, and our rivers, which are to some extent salt, have been covered from shore to shore with a thin coating of ice where they are a full mile in width. Truckers have finished plowing their land; but more or less land for corn or oats will be plowed during the Winter. It is very seldom that frost interferes with winter plowing with us; but on most of our soils, it is often too wet. Merchandise and farm products are hard to move, and prices are low. Corn, 40 cents; wheat, 90 cents to 98 cents; oats, 30 cents; pork, dressed, 4 cents to 6 cents; eggs, 23 cents; butter, 25 to 30 cents. Very little good butter is made in this section, and strictly choice finds a very ready market at a fair price. S. C. S.

Michigan.

ONEKAMA, Dec. 6, 1885.—Both varieties of peas, as well as the beans, did well. I saved all for seed. The Johnson Grass grew about two feet high and seeded. I expect to see it again in the Spring. Some of the corn is too late so far north. The Garden Treasures gave us a variety of flowers all Summer. W. K.

New Jersey.

TRENTON, Mercer Co.—The Prince of Wales Peas were very fine, vigorous, handsome growers, pods unusually long and well-filled. The Flageolet Beans were exceptionally fine. I have kept all the peas and beans for seed. The 50 crosses of corn developed some ears perfect in all respects except length. This will perhaps come with continued planting in this locality. I expect to exhibit some of it at the next meeting of State horticultural and agricultural societies. The flowers were fine. F. D.

New York.

HORNELLSVILLE, Steuben Co., Dec. 10.—Farmers are harvesting fodder, tightening barns, and banking cellars. Hay a light crop, and of about average quality; price high for all grades, ranging from $12 to $18, in bulk. Corn fodder good and raised in large quantities by stockmen, owing to an early indication of failure in old meadows. Winter wheat is badly winter-killed, and in some cases injured by weevil and Hessian fly; hence crop light, but quality generally good. Spring wheat, especially White Russian, a very large yield, but acreage limited. Oats, acreage full; growth light and short; fairly filled, but grain small. The crop on whole districts was destroyed by hail after heading. Barley earlier than oats, hence better in all points; acreage, average. Corn good; yield and acreage full. Potatoes very large acreage; yield of early crop light, that of late the heaviest for years, but they have decayed badly. In many sections from one-third to one-half is unfit at digging, and they continue to decay when dug. Dealers refuse to handle them at any price except in limited quantities, hence many are stored by farmers. Queens, Snowflakes and Late Rose have rotted worst. The Rural Blush, White Star, White Elephant, Burbank, and Adirondack are most in favor for general culture, being freest from rot and blight. The present stand of winter-wheat is looking good, the Fall having been favorable for growth, and it is well covered with snow enough to prevent frost killing. Apples very plentiful and correspondingly cheap. But little is done in Fall plowing because there were too many potatoes to dig and market between rain storms. All kinds of stock are going into winter-quarters in fine condition. Milk stock in fair demand; beef and store cattle low. Sheep are abundant and there are scarcely any sales for store stock, and the market is only a little better for mutton grades. C. J. P.

Pennsylvania.

MURRAYSVILLE, Westmoreland Co.—We harvested five pounds seven ounces of the Diehl-Mediterranean Wheat from about 100 stalks the hens left me. The Thousand-fold Rye produced seven pounds nine ounces, and was well thought of by all who saw it. The Stratagem Peas did not come up well, but they bore large pods. I had a pint for seed. The Flageolet Bean was very productive. I have about four quarts. Sorghum Halapense did not come up very well; only a few seed ripened. The King Humbert Tomato was very productive, but those sent in '83 were much better. The cross-bred corn produced heavy stalks 11 to 12 feet high, but did not turn out good. One stalk of white flint had six ears, which, laid end to end, measured three feet eight-and-a-half inches. The Garden Treasures were treasures indeed. Thousands of bushels of apples sold around here for 10 cents to 12 cents per bushel; other things in proportion. E. J. L.

THE FARMER'S CLUB

ANSWERS TO CORRESPONDENTS.

[Every query must be accompanied by the name and address of the writer to insure attention. Before asking a question, please see if it is not answered in our advertising columns. Ask only a few questions at one time.]

FERTILIZER QUERIES.

H. C. S., Lebanon, Pa.—1. What is the difference in effect of using upon small fruits, between a ton of ground bone and a ton of dissolved bone, supposing each to cost the same? 2. What is gained or lost by using the dissolved bone? 3. What effect has the sulphuric acid, used in dissolving the bones, on the growth of the crop? 4. How much less actual fertilizing matter has a ton of dissolved bones, if any?

ANS.—1. Much depends upon how fine the bone has been ground and upon the condition of the soil to which it is applied. The bone could be reduced sufficiently fine so that the plant would be enabled, by the aid of its living organism and the assistance of the soil, to take up and use what it needs for growth. But if of the fineness of mustard seed up to the size of grains of corn, the plant could get but little nutriment from it until it had rotted or decayed in the soil. In some soils also there is more humus than in others, the acid of which would aid in rapidly decomposing the bone. 2. By using dissolved bone, greater solubility and quicker action are gained. About half the manurial elements are lost, or, in other words, replaced by other and non-manurial substances. 3. Probably none, or, at most, one scarcely appreciable. 4. As nearly as may be one-half. In making the best grades of dissolved bone, to 1,000 pounds of bone are added 800 pounds of sulphuric acid and 400 pounds of water, but in the process of dissolving about 200 pounds of water evaporate, leaving one ton, so that where a ton of bone contains about 50 per cent. of tricalcic or three-lime phosphate of lime, containing about 25 per cent. of phosphoric acid, but in an insoluble form, and hence unavailable as plant food, the dissolved bone contains only 12 per cent. of phosphoric acid in a soluble form, and 25 per cent. of gypsum or sulphate of lime, formed by a union of the lime that was united with the phosphoric acid in the bone, but which was wrenched from that union by its greater affinity for the sulphuric acid.

KEEPING SHEEP WITHIN MOVABLE HURDLES.

C. L. Y., Orient, N. Y.—1. How are sheep kept in hurdles upon green crops as in England? 2. Would not the Rural Branching Sorghum, in connection with oats and peas, be good for so keeping sheep? 3. How many ewes with their lambs could I keep and fatten per acre, our market being in July and August?

ANS.—1. The hurdles are simply movable fences, made after various forms and in pannels, so that they can be easily moved. It is not easy to describe any of the fences used without drawings; but any convenient form of our numerous portable fences may be used. A small part of the field is fenced off, and into this the sheep are turned, and when the grass has been well eaten down the hurdles are moved so as to inclose another part, and so on, inclosing a new piece every time the old one is eaten down. 2. Peas and oats are sometimes used; the Branching Sorghum would get too high and coarse before the field was eaten down. In England most of the hurdle feeding is done in the Fall, and rape, colza and turnips are much used. 3. For spring hurdle feeding no crop would be superior to Red Clover, and possibly winter rye for very early use. We could not guess how many could be fed without knowing what crop was to be fed, and how rich the land is, in fact, all the data. It would also make a great difference whether grain was fed, how much and of what kind. There is a way of feeding in which about six sheep and lambs are confined in a movable pen 16 feet long and five feet wide, and so made that the sheep can put their heads through the sides to eat. The pen is moved twice daily close up to the grass or crop to be eaten off; the sheep reaching through, eating everything clean as far as they can reach, when the pen is again moved to the uneaten food. When so fed off and with seasonable rains, the clover will grow so rapidly as to be ready for again feeding over in about three weeks, and many more sheep may be kept per acre.

DEEP PLOWING; TREATMENT OF AN ORCHARD.

W. W. F., Waterville, Ohio.—1. My land is a sandy loam running from a black, sandy loam with a clay subsoil within from six to 12 inches of the surface and quite level, to light, sand on the surface and a golden yellow subsoil from 6 to 12 inches below. It was originally quite fertile, especially the lower lands, and is never wet except in the lowest places, and yet it is never very dry even in the driest time. I use considerable manure and grow small fruits; how deep should it be plowed? 2. I planted an orchard of pears and cherries five years ago in alternate rows, and a year later I planted currants among them. The trees made a large growth for the first two or three years, but since then they have not done as well, though they grow fairly. They are headed low and it is quite difficult to cultivate; how shall I manage this piece to the best advantage?

ANS.—1. It is difficult and unsafe to give specific directions, on such scanty data. It is only safe to say, in a general way, never change from shallow to deep plowing suddenly. It is entirely safe to plow each year a quarter or half inch deeper than the year before, using sufficient manure to keep up the quality of the soil. In most localities a deep soil is better than one less deep, but this is not always the case. When the soil is too sandy and overlying a clay subsoil, it nearly always improves the soil to work a little clay up into the soil, doing it gradually. We should say try plowing small plots at different depths, and watch the result. 2. Under no circumstances should you seed to grass; but you have not mentioned how far the trees are apart, and without knowing this, we cannot advise as to the course to pursue. But don't forget that you have virtually three crops growing on the land at one time, and unless you feed high some of them must suffer. The orchard should have potash, phosphoric acid and nitrogen, particularly the former two, and put on any manure that gives them in the most available form for the least money. We should say imperatively either keep it well cultivated or remove a part of the plants or trees; and the easiest way to keep it clean, is to *keep it clean*—not half way.

ABOUT STRAWBERRIES.

A. W. W., Salisbury.—1. What is the best kind of manure for strawberries, and when and how should it be applied? 2. I grew strawberries for four years in succession on a piece of ground, and then planted it to corn and again re-set the strawberries; but they have never done well since; what is the trouble? 3. Wilson Strawberries do not succeed here now; Crescents do the best of any; is there any thing better?

ANS.—1. Well rotted barn-yard manure made from grain-fed cattle is first-rate for most soils. All sandy soils are greatly benefited by an application of hard-wood ashes, or

potash in some form. Muriate of potash is good where ashes cannot be got in abundance. Strawberries also need bone dust or superphosphate on such land. We think the land is deficient in potash and probably phosphoric acid, and would recommend 400 pounds of bone flour or 600 pounds of a good brand of superphosphate and 40 bushels of unleached hardwood ashes per acre, and 10 to 20 loads of good barn-yard manure. We think strawberries would then grow again better than ever. 2. Crescent Seedling is a very good berry, and very profitable in many places. We advise trying the Jewell in a small way. If you send us three or four subscribers you will get 24, or 32 plants. It does well on sandy land, and the ground for it may be rich.

FERTILIZING AN ORCHARD; WAR ON THE CUT-WORM.

C. B. W., Douglas, Mich.—1. Is salt or lime beneficial to a peach orchard; if so, how much, and how should it be applied? 2. Can salt or lime be used in a peach orchard to destroy cut-worms, and, if so, how much? My orchard is from one to eight years old, on hemlock, sandy land, with a clay subsoil, a little rolling and well drained. The cut-worms are so very thick that they sometimes destroy trees three years old.

ANS.—1. Very likely lime would be beneficial on such land, and a moderate amount of salt would do no harm; but we should much prefer to apply a liberal amount of deciduous wood ashes and bone dust. The ashes could be bought in the hard-wood districts of Northern Michigan for from five to six cents per bushel, and they contain about three pounds of potash to the bushel. The bone dust can be bought in Chicago and freighted across the lake. Try these in varying quantities and also try them in connection with lime and salt, marking the plots, and making memoranda of the applications, and watch the results. A single year will give much light. If the ashes cannot be obtained, kainit or muriate of potash may be substituted to give the needed potash. With either of these, especially the kainit, no salt would be used, as a large share of this is in the kainit. 2. It is not possible to use enough salt (lime would do no good) to kill the cut-worms without also killing the trees. We suppose the climbing cut-worm is meant, and we suggest the extermination of these by spraying the trees, just at night, with a solution of Paris-green or London-purple, using care to cover all the lower buds and leaves, as these are first eaten. We also suggest the spreading of sheets under the trees after dark (as they work entirely in the night) and the jarring of the worms off the trees upon the sheets where they can be easily caught and killed. The sheets should be used the same as for the curculio.

ABOUT ASHES.

G. R., Colfax, W. T.—1. Have ashes from a burnt straw-stack sufficient manurial value to pay for the trouble of applying them to small fruits? 2. Are Lombardy Poplar, Cottonwood, Balm-of-Gilead, Willow and Box Elder classed with hard-wood trees? 3. What are the relative values of ashes from the above and other deciduous trees?

ANS.—1. If saved and applied without wetting, they certainly have. 2. We think the Box Elder is; the others are not. 3. We often speak of hard-wood ashes when we should say that of deciduous trees. The White or Swamp Elm is by no means a hard wood, and still it makes ashes of the highest value, containing more potash than almost any other. We think the varieties of woods mentioned make but comparatively few ashes, and these, though not rich in potash, are worth using where handy.

ROOTS FOR MILK.

C. L., Chatham, N. J.—I notice you quote in the RURAL from Sir J. B. Lawes wherein he speaks very disparagingly of roots, and especially of mangels, as a food for milk-producing cows. Now I have always noticed a gain of milk whenever I have fed turnips, and I had been led to believe Dr. Lawes was an advocate of roots as a valuable portion of stock food? I would like to know what you think of them, as I was expecting to plant them largely next season, but don't care to do so if they are worthless?

ANS—We should not advise any one to use turnips, mangels, or any other root, as the bulk of a cow's feed, and that is just the position which, we understand, Dr. Lawes occupies. At the same time, the cows should have a daily ration of some succulent food to produce the best results in giving milk. No doubt carrots are the best roots for cow feeding for milk or butter; but mangels are nearly as good, and it does not cost one-third as much to raise and put them in a pit or cellar.

MALT SPROUTS AS FOOD.

W. H. W., Crawford, Ind.—What are "malt sprouts" worth as cattle food?

ANS.—Malt sprouts, which are the growing germs broken off, in drying, from the sprouted barley that is malted, have a very high feeding value, chemically, containing 22.95 per cent. of albuminoids, 1.79 per cent. of fat, and 48.6 per cent. of carbohydrates. This makes them worth about two-thirds as much as new-process oil meal. But in our experience, stock do not relish them nearly as well, and although they can be bought for one-half the price of the new-process meal, we much prefer the latter; still the sprouts are good to mix with corn meal and bran, or to feed with straw or Timothy hay.

FEED FOR MILCH COWS.

J. H. W., Richards, Ohio.—1. Which is best for milch cows, rye, buckwheat or wheat bran? 2. Should it be fed dry or wet? 3. What is the name of a reliable New York cattle merchant?

ANS.—1. They are all good foods mixed with corn meal and oil meal. There is considerable difference of opinion as to their comparative values. We think, however, that they range in the order of buckwheat, wheat and rye, with not very much difference. 2. If fed to animals having plenty of roots, silage or other succulent food, it may well be fed dry; but if fed with dry hay and straw, we should by all means want it wet up, and it would be much better if mixed with hot water in the morning for night feeding, and at night for morning feeding. 3. Hunne & Mullen; J F. Sadler & Co.; Newton & Gillet; M. Goldsmith; D. Waisel, and Hallenbeck & Davis are all good men. A letter addressed to any of them at the stock yard will reach them.

FEED FOR MILK.

W. B. T., Round Knob, N. C.—1. I am keeping cows for milk, and can get peas, meal and wheat bran; how much of each ought I to feed each cow at a time, when fed twice daily? 2. Would it not be better to cook the peas?

ANS.—1. We cannot give a very good answer without knowing the price of each, and just whether real peas are meant or cow-peas, which are not peas at all. We would say, in a general way, mix the three ingredients in equal parts by weight, which will give as much bulk of bran as of both the others, and then feed enough to keep the cows up in flesh or gaining a little. No one can say how much any given cow should have; even her attendant should be constantly on the watch so as to give the exact quantity. 2. The peas would be much better if ground; but if it is not convenient to grind them, they will be improved by cooking, but after cooking they must not be allowed to become sour before they are eaten.

Miscellaneous.

B. C. W., Rahway, N. J.—1. Are the skins of boiled potatoes harmful to fowls? 2. I have built a hen house four feet high at the rear, and six feet high at the front, the rooms being 6x7 feet each. For ventilation, I have put into each room in one corner, a box 4x6 inches inside, running from near the ground inside, up through and out at the top; will that afford sufficient ventilation for 10 fowls? 3. Will a cement floor covered with dirt be bad for the fowls?

ANS.—1. There is no better winter food for fowls than warm, boiled potatoes, and the skins will not do the least harm. Feed them daily. 2. The rooms are large enough for that number of fowls, and your system of ventilation is simply perfect for Winter; for Summer, the tube should have an opening near the roof. It is a serious mistake often made to have the ventilator for winter use open from the upper part of the room. When running to the bottom and opening near it, as in your case, the bad air is taken out without much heat. 3. No floor could be better; only change the dirt often, say once a week or month at furthest.

E. A. Aberdeen, Dak.—1. What proportion of barley can I use with one part of oil meal and three parts of bran? No corn is raised here, and barley is worth from thirty-five to fifty cents. 2. What is the best way to kill wild mustard? Pulling is rather hard work. 3. At what season is it best to emasculate pigs?

ANS.—1. You can use almost any proportion you please, but how much to mix in profitably, depends upon the relative prices. Barley meal is a good feed of itself; but it would be improved by a mixture of bran and oil meal. Without knowing the prices, we should say, add at least four parts of barley meal to the others. 2. If the land could be plowed when the mustard is in full bloom, it would do very much towards clearing the fields, where very much filled; but, after all, there is no way to get it out and keep it out, except by use of the fingers in pulling it. 3. We think the pigs should be castrated when about three or four weeks old, unless in very cold weather, when they are obliged to be out in the cold and storms. In that case, let them run till warm weather in Spring; it is hardly advisable to keep pigs without providing them with warm sleeping quarters at least.

W. A. C., Wyoming, Iowa.—Is the Kilborne or Canada Iron-clad Peach all that is claimed for it, and will it stand the Winters of Iowa?

ANS.—The "House Peach," later called the "Kilborne," or Canada Iron-clad, was raised by Mr. J. S. House, of Beamsville, Canada, and by him given to Mr. Kilborne, of that place, and by them both, buds were given away to the neighbors. In all respects it is like the Hale's Early, except it may be a little longer from the stem to the blossom end. It is no hardier or more prolific in bearing than the Hale, and you could just as reasonably expect it to withstand the Iowa climate as the Hale or other peaches of that class. Mr. House says it was a seedling of a seedling, the parentage of which he did not know.

"Subscriber," South Bend, Ind.—1. What is the best time to prune grape-vines? 2. What does the RURAL think of mulching small fruits, grapes and shrubbery for winter protection? 3. Should grape-vines be laid down and covered?

ANS.—1. We prune our vines as soon as the leaves fall? 2. There is no doubt that strawberries are benefited by mulching. We say this from a long experience, during which we have tried both ways, *i. e.*, mulching and not mulching. We approve of mulching the soil around trees and shrubbery. 3. Unless the grape-vines are tender, we should not go to the trouble of laying them.

T. C. Atkinson, Wis.—I received some pumpkin seed from a friend in Vt., the pumpkins were of a good size, very warty and of a green color when ripe; not very thick-meated but of fine grain and good quality. One plant bore fruit of a dark-green color, round shape, smooth surface, but a little ribbed near the stem, and hard-shelled; very fine-grained, with lumps in the flesh, and of good quality; what kind were they?

ANS.—From the description, and without seeing them or the seeds, we should say they were either some variety of squash or a cross between the same and a pumpkin.

R. J. L., Hannibal, N. Y.—What is the best method of keeping parsnips over Winter?

ANS.—If not wanted until Spring, the best method is to allow them to remain in the ground, as freezing does them no harm. If wanted for use during the Winter, they should be dug and put in a cold cellar or buried; in either case they should be mixed with dirt and kept very near the freezing point. They grow with very little heat and become pithy and unfit for eating or feeding.

S. C. S., Westorer, Md.—Are certain kinds of deciduous and evergreen trees injuriously affected by salt air, or by being planted near salt water streams or bodies of salt water, and if so, what varieties are most affected?

ANS.—We are not aware that any trees are harmed by salt air. The strong winds and sandy soil near the coast are often harmful to trees.

S. H., Hartley, Del.—To what family do the numerous persimmons growing hereabouts belong, and would they do as stocks for choice persimmon cions?

ANS.—Persimmons belong to the natural order Ebenaceæ or Ebonads. The generic name is Diospyros. They may serve as stocks for any variety of persimmons.

W. A. E., Sterling, Kans.—How are walnuts prepared for planting, and how early in the Spring should they be put in?

ANS.—As early in the Spring as the soil can be worked. The walnuts must be kept from becoming dry. They may be kept in the cellar, or buried in sand, a layer of sand and one of nuts; better the latter, and keep them where they will freeze.

Subscriber, Muncie, Ind.—What is the best book on the cultivation of lilies?

ANS.—Notes on Lilies, by Dr. Wallace, of Colchester, England. It may be had of Hallock & Thorp, Queens, N. Y., or of most prominent seedsmen.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING SATURDAY, DECEMBER 26, 1885.

H. I.—W. R. S.—A. J. C.—W. B. J.—C. M. H.—A. W. R.—J. N. M.—J. M. H., thanks for suggestions.—A. B. C., thanks, accepted.—G. A. S.—P. H.—E. W. S.—D. J. McM.—P. H. F.—J. W. S.—S. R. J.—P. H.—J. B.—H. D. E.—L. H. B. Jr.—S. D. N.—B. W. H.—H. E. A., thanks.—J. S.—H. N. F.—J. W., thanks—T. D. C.—L. J. T., thanks. C. J. B.—T. J. D.—C. L. H.—C. L.—D. M. R.—G. C. B.—G. J. W.—O. H. A.—C. A. G.—W. F. B.—C. E. P., thanks for Solanum ciliatum seeds.—A. L. J.—A. B. C—A. B. A.—C. V. R.—A. W.—C. E. P.—F. D. C.—J. S., thanks.—W. A. W.—J. H. F.—W. W. H.—E. W. G.—T. M.—L. E. B.—T. M.—S. W. W.—V. L.—J. N. M.—W. A. E.—Silex.—J. T. E., thanks.—H. G. F.—W. G. W.—Z. S. C.—W. K. H., thanks.—P. H. J.—H. J. B.—S H.—C. M. H.—S. C. S.—W. H. D. C., thanks.—R. B. H.—M. E. D. F.—S. C. S.—W. K. H.—Z. S. C., thanks.—L. H. H.—A. C. H.—J. R.—E. J. L.—J. P. S.—C. H. C.—B. E.—W. F. W.—R. J. L.—D. O. B.—W. B. T.—R. V.—E. F. B.—E. A.—A. S. B.—E. W. H.—A. F. W.—D. B.—E. W. J.—W. P. A.—T. J. D., we fully concur with you regarding Horticola.—E. J. B.—H. H.—J. O. W.—E. K. R.—F. F.—T. C.—J. R. B.—J. D. F.—J. T.—G. W. B.—C. F.—F. S. E. S.—R. P., Mch.—G. A.—L. L.—B. P. W. H.—B. F. L.—W. W.—W. F. S.

Miscellaneous Advertising.

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THE
RURAL NEW-YORKER,
A National Journal for Country and Suburban Homes

Conducted by
E. S. CARMAN, Editor.
J. S. WOODWARD, Associate.

Address
THE RURAL NEW-YORKER,
No. 34 PARK ROW, New York.

SATURDAY, JANUARY 2, 1886.

WE beg so say, with many thanks to the friends who have aided the work, that we have now all the copy needed for our Potato Special, to be dated January 16.

AT this date, the Golden Pinus Massoniana is the showiest plant at the Rural Grounds. It is as golden as a sun ray. This charming pine has, we dare say, a golden future.

Prof. W. W. TRACY, the superintendent of D. M. Ferry & Co.'s experiment grounds (Detroit Mich.), writes, under date of December 17. "The 60 samples of potatoes planted on our trial grounds, essentially by the Rural's trench-mulch system, yielded at the rate of from 200 to 800 bushels per acre."

As a matter of pleasure rather than profit we recommend our friends next season to try raising tomatoes trained to poles. Let the poles, 12 feet high, be set securely in the soil. As the tomato plant grows, pinch out all lateral shoots, confining it to a single stem and securing it loosely by loops to the poles as needed. By Autumn the plant will have reached the top of the pole, bearing an amount of fine fruit, which will surprise those who have not tried this simple way of raising the tomato.

UNDER date of December 2, Sir J. B. Lawes writes us: "When I saw the answers to your various questions" (reference is made to the RURAL'S Fertilizer Special.—Eds. R. N.-Y.), "I was very glad that I did not add to the confusion by sending you an article. The action of manures in your country appears to be governed by chance. Here, as a rule, they act more regularly, and in cases, where they fail, it is generally possible to find out the reason for the failure."

A NOTE FROM SIR J. B. LAWES.—EDS. RURAL NEW-YORKER: I shall have much pleasure in complying with your request that I should occasionally contribute articles to your paper during the coming year. I never write merely for the sake of writing, but because I have something to say which I think may be of some service to those engaged in agriculture.

Rothamsted, Eng., Dec. 10.

ALL who subscribe for the RURAL, and of course, our regular subscribers, are entitled to the RURAL'S Free Seed Distribution upon *application*. Others need not apply. A two-cent stamp should accompany the simple request "Send Seeds." We trust that those who do not care enough for the seeds to plant and give them good care and report to the RURAL how they succeed, will not apply. Our stock is necessarily limited, and the seeds are too valuable to be thrown away. The object of these seed distributions is to enable our subscribers to test in a small way the latest and most promising novelties without incurring any expense.

A POINT of pomological lore that can not be learned from any source but observation, is the behavior of special sorts of fruit in any given locality. They are so nice in their requirements, and differ in these so greatly, that a sort which attains high excellence and abundant fruitage in a section of soil or exposure, may be quite inferior and unremunerative in places near-by. This is becoming generally known, and already we find not only plantations of sorts of fruits, but of other crops, as onions, celery, etc., clustering around any spot on which they have shown themselves at their best. Those who test new varieties in any locality do a most useful public service, and intending planters should study well all growths and yields in their vicinity, and be guided by their own observations in selecting.

MEECH'S (?) PROLIFIC QUINCE.

MR. MEECH has issued a pamphlet entitled a "*Reply to an attack on the Meech's Prolific Quince by the Rural New-Yorker Nov.* 7, 1885." The attack referred to is the following, which appeared in the RURAL of the above date:

"The judges on fruit at the Mt. Holly Fair (N. J.) after a close and careful comparison of the Champion and the so-called Meech's Prolific Quince, were of the *unanimous* opinion that there was not the least difference whatever between them. The putting out of an old variety under a new name cannot be too quickly censured; and it seems now to be clearly settled that this is an instance in point."

We should think that the attack was made by the judges of the Mt. Holly Fair rather than by the R. N.-Y. Little need be said in reply. The question is this: Is Meech's Prolific a distinct variety? If so, is it a seedling produced by Mr. Meech? We would not, knowingly, do Mr. Meech or anybody else any unjustice whatever. Did you raise this quince from seed, Mr. Meech? If you did not, why do you give it a name which implies that you did? If you did not, who did? Let us settle this first.

The pamphlet further on says that the R. N.-Y., a few year ago, decided that the Champion was identical with the Angers. This is a mistake on Mr. Meech's part. We were *informed* that such was a fact by an experienced quince grower, and when it was found to be otherwise, the correction was promptly made in these columns. The only "positive" statement we have made in regard to the Champion is that it "bears early, but that it is too late for the Rural Ex. Grounds."

A WORD TO STRANGER FRIENDS.

WE are now sending thousands of copies of the RURAL NEW-YORKER each week to those who have asked to see it that they may become acquainted with it. We have been told by our contemporaries that only dead beats and those who wished to get something for nothing would apply. This we believe to be a slander on those who follow the most honest and honorable calling man ever pursued. We believe that all who have sent for it have done so in the utmost good faith, and with the intention, if satisfactory, of becoming subscribers. We find many in full sympathy with its honest, practical course, and we believe a large proportion will at least try it for a year.

We ask all who do like it and who become subscribers, to mention the fact when sending their subscriptions, as we wish to preserve such a list to be able to refute, by positive proof, the slanderous imputation upon those who sustain and feed the nation. We also ask all those who are pleased with it and think it worthy of the patronage of progressive farmers, to assist in extending its circulation by organizing clubs in their neighborhoods. Please send to us for posters and premium lists, and as many specimen copies as you think you can profitably use. We know that the longer you read the RURAL the better it will please you.

Dear stranger friends, we cordially invite you to join our ranks and help the RURAL NEW-YORKER on to a success worthy of its ability and honest purposes.

THE REGISTRATION BURDEN.

IT seems as though the thorough-bred stock breeders' associations are losing sight of the main objects to be secured by registration, and are cutting their own throats by charging such outrageous fees for registry. Each seems determined to excel the others in the amount fixed, as though the chief end and aim of the association, was to make money out of the registration and we fear the result will be only disastrous to the best interests of the best breeds. The central leading idea of registration as it seems to us, is to provide some means whereby a purchaser may be able to trace an animal back to its ancestry and be reasonably sure of its purity. It is well known that no thoroughbred animal is worth its hundreds or thousands of dollars as a mere meat, milk or butter producer. Its chief value comes from the power of imparting one or more of those qualities to its offspring, and to do this it must be pure-bred, and the registry is for the purpose of showing this purity.

The members of these associations largely breed such animals for sale, and if such sales are to be made only to the members, they will be very limited indeed, and the business would soon be overdone and unprofitable. The more such stock can be scattered among cattle men for crossing purposes, the more money there will be in it. Few farmers and men of ordinary means will buy thoroughbred stock and breed it in a small way, when they are compelled to pay from $25 to $100 for the registry of its progeny and no matter how good, without such registry they cannot sell it for more than its value for beef or butter production.

Such a course is at once unwise, arbitrary and unjust, while it is no barrier to improper or dishonest registration. Let the fee be placed at the lowest point paying expenses; watch the applicants with vigilance, and then make your money out of the excellence of the breed and the sale of stock! Don't let us have an onerous registration monopoly, on top, of all the rest!

SHALL FRAUD RULE THE LAND?

IT seems to us that there is a broad ground of self-interest on which the farmers who make, and the consumers, who desire to use genuine butter should stand together. The attitude assumed by the "bogus butter" makers at Chicago, shows clearly that they care nothing for law or public opinion; that they are united and have determined to use any amount of money in the courts, if necessary, in the defence of their unhallowed deception and fraud. They boldly declared that they made an article much better than large amounts of genuine butter, and that they were not going to be deprived of the privilege of selling it in any market they chose, and under any name they cared to adopt, saying, in so many words, "The makers of pure butter have no patent on the English language, and we have a right to brand our product as we please."

Now, conceding their claim that oleomargarine, when properly made, is not unwholesome and that it may be superior to poor butter, it is still true that nine-tenths of the stuff is not so "properly made," and that one pound in one hundred is never sold under its true name. The very act of offering and selling it as butter is a fraud, and robs both the farmers and consumers, the former by competition with genuine butter, thus reducing its price, and by creating a distrust of all butter and consequently reducing consumption; the latter by charging them two or three prices for an inferior article. The compelling of the manufacturers to put it into distinctive packages, branded with its true name, does not offer a cure to the evil, because nine-tenths of it is removed from the package before sale, and when so removed it is difficult to distinguish it from genuine butter.

We urge national legislation in this matter. Let us have a law appointing inspectors who shall have supervision of the manufactories, and let the makers be compelled to give it a uniform and distinctive color, and then let the manufacturers have the markets all to themselves. If they really can make an article superior to butter, they should be able to create a demand for it even when easily known by its appearance, and certainly the people whom they teach to prefer it, should be protected from being imposed upon by the substitution of poor butter. There is, then, no injustice in compelling it to be so colored as to be easily known, and this offers an easy solution of the difficulty. Let us then unite, both farmers and consumers, in agitating the matter and demanding of Congress immediate action. Let us have a distinct oleomargarine color, and we suggest a pale green as the most appropriate.

THE RURAL'S
Special Contributors
For 1886.

With a Revised List of the Subjects to be Considered.

(ENGLAND.)

SIR J. B. LAWES.
Subjects not as yet decided upon.

PROFESSOR J. P. SHELDON.
Dairy and Stock Notes.

JAMES SINCLAIR.
General English Farm Notes.

(UNITED STATES.)

PROFESSOR G. E. MORROW, ILLINOIS.

1. A series of short articles on The Principles of Breeding and Improvement of Animals, with Descriptions of Breeds and their Adaptations.
2. Notes on Live Stock in general.

GEN. CASSIUS M. CLAY, KENTUCKY.
How Live Stock may be Improved.

GEN. W. H. NOBLE, CONNECTICUT.
Rural Adornments and Comforts.

PROF. THOMAS MEEHAN, PENNS'A.
The Relation which Water bears to Successful Culture.

MAJOR HENRY E. ALVORD, Houghton Farm, NEW YORK.

1. A Noteworthy Change in Public Opinion regarding the Bureau of Animal Industry.
2. The Prospective Increase in the Factory System of Dairying, as the Result of Competition from Substitutes for Butter.

C. A. GREEN, NEW YORK.
Improving a Run-down Farm. (Continued.

WILLIAM FALCONER, LONG ISLAND, NEW YORK.

1. The Flower Garden.
2. Ornamental Trees and Shrubs.
3. The Window Garden.
4. The Greenhouse.
5. The Vegetable Garden.

PRES. T. T. LYON, MICHIGAN.
Horticultural Matters viewed from an Amateur's stand-point.

F. L. KILBORNE, B. V. S., WASHINGTON.
Veterinary Topics for the Farmer's Consideration.

T. H. HOSKINS, M. D., VERMONT.

1. Vegetable growing: especially the Testing and Improvement of Varieties.
2. Artificial Fertilizers. Which are the Best and Cheapest for the Crops Grown.
3. Fruit Culture—especially for the Cold North.

DR. C. V. RILEY, WASHINGTON.

1. Bees rs Fruit.
2. Mildew on Grape-vines.
3. The Best Remedies against Scale Insects.
4. Special Insects of Interest.

DR. W. J. BEAL, MICHIGAN.
The Structure of a Blade of Grass in two or three articles.

PROF. R. C. CARPENTER, MICHIGAN.

1. House Drainage as Applying to Farm Houses.
2. Water Supply for Farm Houses.

PETER B. MEAD, NEW YORK.
Horticultural Notes under a *nom de plume*.

PARKER EARLE, ILLINOIS.

1. Matters Pertaining to Distant Markets.
2. Better Distribution of Fruit Products.

P. M. AUGUR, CONNECTICUT.
High Fertilization and Culture as Affecting the Growth and Fruitage of Plants on the Basis of Economy.

PROF. A. J. COOK, MICHIGAN.

1. New Points of Value in Bee-keeping.
2. Principles in Stock Breeding and in Stock Feeding.
3. New Injurious Insects and New Remedies.

PROF. I. P. ROBERTS, NEW YORK.
Recuperative Agriculture, more especially adapted to the South.

PETER HENDERSON, NEW JERSEY.
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The Comparative Value of the Newer Roses.

HON. F. D. COBURN, KANSAS.
A series of articles on Matters connected with Beef Cattle, and Beef Making.

Prof. W. W. TRACY, MICHIGAN.
A series of articles on the Testing, Introducing, naming and describing of Varieties of Vegetables.

PROF. E. M. SHELTON, Kansas.
Subjects not yet decided upon.

IN GENERAL
we may say that all of the RURAL'S regular contributors will continue with us during the year.

BREVITIES.

THE best grape vine? That is a question.

THE best strawberry: Jewell (?)

THE best wheat: Diehl-Mediterranean (?)

THE best oats: White Australian (?)

TRY the Earhart Everbearing Black-cap.

TRY the Golden Queen Raspberry.

TRY the Alaska Pea for the earliest.

PLANT a tree of the Frederick Clapp Pear.

PLANT a tree of the Prunus Pissardii if you admire purple leaves during the entire Summer.

YOUNG people—let botany be one of your studies for the new year.

PROF. J. L. BUDD, of the Iowa Agricultural College writes: "The RURAL is doing a grand work."

SUBSCRIBE for the R. N.-Y. if you are a progressive farmer and are not "penny-wise and pound foolish."

MONEY sent in letters for subscriptions to the RURAL NEW-YORKER is at the sender's risk. Our terms are invariably $2.00 a year in advance.

PROF. J. W. SANBORN, of the Missouri Agricultural College, under date of December 14, says; "The RURAL for energy and breadth holds a very high place in my estimation, and is worthy of your pride."

THE price of Cole's Improved Garden Plow complete with scuffles is $5.80 instead of $5.00, as stated in our premium list. Notwithstanding the difference in price is against us, we shall continue to send it for five subscribers, as announced.

IT is often said that to be well gloved and well shod are two prime conditions of dress. Similarly it may be said of a dwelling, that to have a neat front yard, and neat, smooth roadway are two indispensables to its good appearance. But we often see this truth overlooked even by people who have gone to great expense with the house itself. All good effect is spoiled by a habit of letting litter lie about the yard, or throwing it into the street where it is a nuisance, and a public notification of the character of the people living in the house.

The Herdsman.

A FINE HEIFER.

THE animal shown at Fig. 10 is said, by the London Live Stock Journal, to be one of the best living representatives of the Hereford breed, being almost perfect in every point. She is two years old and is owned by Mr. H. W. Taylor, England. She has been remarkably successful in the show yard, having taken many first prizes, notably one at Monmouth, where she won the champion prize as the best cow or heifer on exhibition.

Indust'l Societies.

CONVENTION OF THE ILLINOIS STATE HORTICULTURAL SOCIETY.

(RURAL SPECIAL REPORT.)

THE Illinois State Horticultural Society held its thirtieth annual meeting on Dec. 8th, 9th and 10th, and in point of interest, attendance and display, it was one of the most important of the association's gatherings. The following varieties of vegetables were recommended by the association for Illinois farmers: spinach, lettuce, radish, onions, beets, peas, beans, cabbage, parsnips, turnips, Irish and sweet potatoes, squash, cucumbers, melons, sweet corn, asparagus and rhubarb.

Dr. H. Shroeder, of Bloomington, introduced and recommended the planting of willow. He showed that the product of an acre would be from four to eight tons, which would sell for $25 to $30 per ton.

In view of the failures of the past 10 years, the association decided that the best 10 varieties of apple trees, out of a total of 1,000 trees, are as follows: Red Astrachan, 25; Stanard, 10; Maiden's Blush, 10; Ramsdell's Sweet, 10; Jonathan, 20; Rome Beauty, 20; Winesap, 10; Minkler, 20; Ben Davis, 475; Willow Twig, 400. It was decided to be unprofitable to raise more than two crops of strawberries from one planting. The fruit display of the association was the finest ever made, there being over 300 varieties of apples. It was the general opinion that the exhibit far surpassed those of New Orleans and the Illinois State Fair.

The next annual meeting of the association will be held at Jacksonville. "SUBSCRIBER."

The Poultry Yard.

HEN ROOST.

WE show, at Fig. 5, a design for a handy hen roost, for which we have to thank our friend, Lynn D. Wood, of Elden, N. Y. This

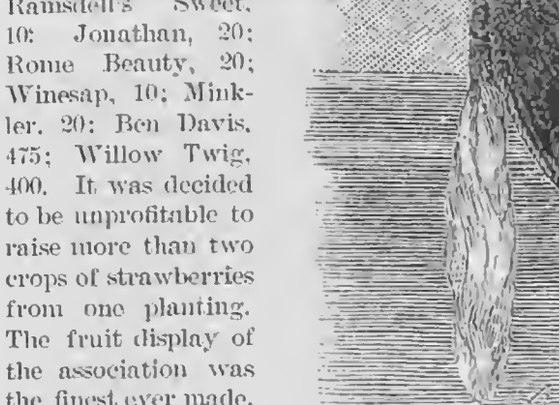


Fig. 5.

roost is very simple and can be constructed at little or no expense. For cleanliness, which is of the utmost importance in poultry keeping, and for handiness in clearing away the droppings, it will be hard to beat. The end boards are sawed out in the shape represented at the bottom of the figure. The roosts are round, with the ends hewed to fit into the notches. The boards at the lower end are nailed fast to the side-pieces; but the bottom boards are simply placed on cleats so that they can be removed at will and cleaned. The roosts, too, can be easily taken out and cleaned. The whole arrangement can be set up on posts, as shown in the illustration, or fastened to the walls.

The Post Office Department has received information of a supposed swindle by New York law sharks operating through a local attorney in West Virginia upon a considerable number of people who are heirs of an Englishman named Drake. The operators are representing to these heirs, some seven hundred in all, as reported, that there is a vast estate in England in the name of their progenitor, Drake, waiting distribution, and that certain litigation is necessary before the distribution can be accomplished. The litigation, of course, is somewhat costly, and the heirs must foot the bill, but this it is held out to them, is but a mere trifle when compared with the vast benefit to accrue to them upon the successful issue of the suit, which issue is a certainty. The last assessment issued for this purpose was for $16 each for adults of the present generation, and for children or sub-heirs in proportion to their rights under the law of descent. The local attorney, through whom the enterprise is being operated, lives in Ritchie County, and he has succeeded in working up the Drake relationship into a state of infatuation over the early prospects of great wealth. It is thought the case will come under the statute prescribing a penalty for using the United States mails for fraudulent purposes. The Drake kindred are said to live principally in Ritchie, Kanawha, Clay, Roan and Calhoun Counties.

A Southern paper has reached this office which contains the advertisement of an uncommonly gifted physician. It is stated that "From a strictly scientific knowledge of the structure of man, He tells the Disease at a Glance, Without asking any Questions, Looking at the Tongue of Feeling the Pulse." It is further stated—in order that the climax should not be left without a nice, becoming cap—that "No examination is necessary—no information from the Patient—no previous knowledge of the Case. Every ache, pain and disagreeable feeling pointed out and described fully, clearly explicitly and better than the patients can themselves." It is unnecessary to say that this is the sort of a doctor for whom the world has anxiously been waiting. He ought to have a great career before him—if he doesn't die prematurely of modesty. Of course he is a fraud. Have nothing to do with such charlatans, who are quite numerous in country places.

TO SEVERAL INQUIRERS: We have received favorable reports of B. V. Head, Vienna, Va. ..... The Bohemian Oats swindle has been frequently exposed in this place during the last five or six years ..... The chemical compound in most, if not in all, of the hand grenade extinguishers is but little, if any, better than a strong solution of salt and water. Their efficacy for extinguishing fires depends entirely upon the coolness and accuracy of the person using them, and a person possessing the same presence of mind and good judgment, would in most cases put out a fire as quickly and as effectually with water, or whatever might be at hand suitable for the purpose, as with a hand grenade ..... Emil Bassett, *alias* Theodore Lenk, *alias* Pemberton, Ayer & Co., of 29 and 31 Chatam Street, this city, is a swindler. Marsh & Basset Watch Company is another *alias* of the fellow, who also operates under the name of the Norman Electric Lamp Company. ... The Moore's New Process of butter making is a humbug . .... Again we say no one should buy land in Florida until he has inspected it in person, or got a trustworthy friend to do so. There are a great many swindling concerns offering land for sale there: some of them we have exposed already, and we are investigating others! But it is slow work .....The American Bureau of Geneological Inquiry of New Haven, Conn., is a humbug .....We do not advise anybody to deal with any concern that offers goods at half price for 30 days or any other period. One concern is widely advertising an "organetta" for $2.25 for 30 days, after which purchasers must pay $5! Humbug!

For Women.

CONDUCTED BY MISS RAY CLARK.

AN UNSATISFACTORY VISIT.

MAY MAPLE.

I WAS just putting the vegetables into the kettles for dinner, when I espied some little folks, one, two, three, passing the window. One was a little toddler, carried in the arms of an elder brother, so I knew their mamma was not far away, and most likely their papa had gone to the barn; and so it proved.

They all received a cordial welcome, for they were old time friends. "But how about the dinner?" I hear some nervous Martha inquire. "An addition of five make such a difference in one's previous calculations. One always wants to treat their honored guests to the best the house affords, and that may be nothing rich or rare.

Very true. But at our house "the best" does not mean a great display of tempting dishes. Our guests share with us of our "daily rations," except on state occasions. And so, in the present case, there was merely an addition in quantity of what we were about to cook before the arrival of our friends. And while the vegetables and meat were cooking we visited. For very soon we had the little folks settled with a box of toys (which we keep for the especial benefit of the children who visit us), and L—— had come into the kitchen saying she came for a visit and she hoped I would not put myself to any unnecessary trouble on their account.

When I told her that I prized her society too highly to spend the whole of the day in getting up a royal feast for stomachs alone, she laughed and said that reminded her of an incident in her life that she too well remembered. "And it happened," said she, "when we were pioneers in this northern region.

"You remember," she continued, "where Mrs. S—— used to live when they first moved into the county. It must have been about four miles from our place, and I had never been accustomed to long walks. But one morning I started out for a visit, with her. I reached my destination about eleven o'clock, feeling a good deal tired and not a little hungry."

"Mrs. S—— seemed overjoyed to see me, and we sat and chatted without interruption for, perhaps half an hour, and then the duties of hostess seemed to rush in upon her mind like a great tidal wave. So she excused herself, and began preparations for *dinner* as I supposed. Vegetables and meat were soon prepared, the tea kettle filled, and all were set on the back part of the stove, to await further proceedings. Then a pie was manufactured; also two kinds of cake, cookies and biscuit. The stove oven was small, admitting but two small tins at a time. When her baking, boiling and frying were all done, it was nearly three o'clock; in addition to all these, three or four kinds of sauce were placed upon the table; each kind being brought from the cellar, which was reached by means of a ladder, and through a heavy trap door that was opened and closed for each successive article. At last everything was smoking upon the table, and I flattered myself that my empty stomach would soon be comforted, and Mrs. S—— would be obliged to sit down for a few minutes at least. She was about to place the chairs, when she declared she could not stomach to eat while her floor was in such a plight. So she swept and washed the floor, and changed her dress, before having the meal served. As it was Autumn when I made my visit you can imagine what a pleasant time I had returning home through the woods after dark.

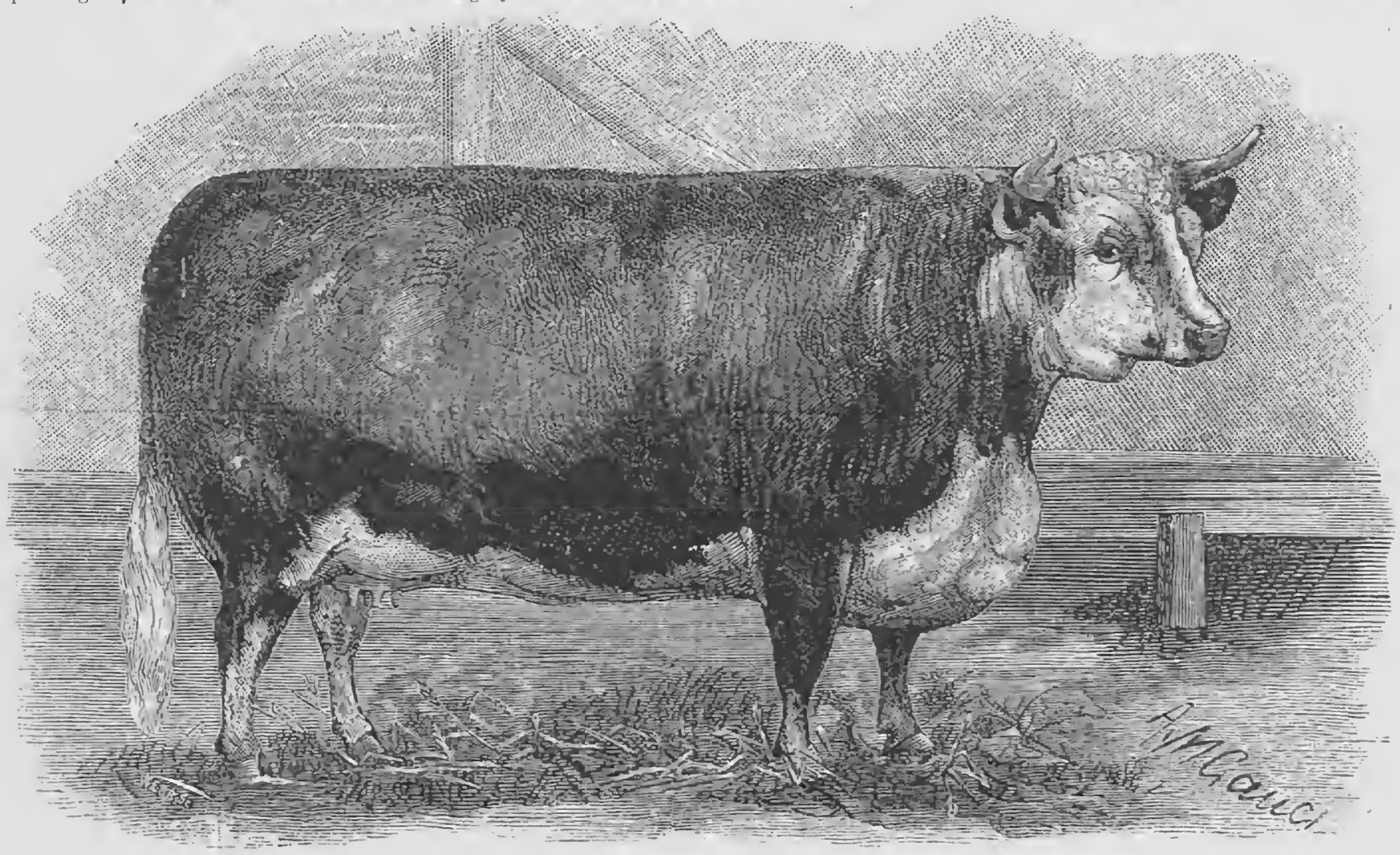
"I was bitterly disappointed; I wanted to have a good visit with her intellectually. For she was well read and possessed splendi conversational powers, which she used to good advantage when away from home. But that day her whole mind was engaged in exhibiting her ability as cook and housekeeper.

"That was a visit that gave no pleasure to myself as guest, and I am sure the tired, overworked hostess would much rather I had remained at home."

What nonsense! and yet who has not passed through the same experience? And who has not relished the simple fare of bread and butter with a cup of tea or coffee, and perhaps a sip of sauce, with a chatty friend, and at the same time been refreshed, entertained and instructed.

Why spend the whole time of your visitor's stay in getting up a great feast, when you have good reason for believing they have an abundance, at home, of the good things of earth?

Farmers can live, and should set an every-day table good enough for any chance friend who may come, no matter what his calling may be, and when a farmer's wife must spend a whole day to get up a meal for a single guest, on an ordinary occasion, it certainly looks as though good living was for company and not for the family.



HEREFORD VANITY 7th. (Re-engraved from the London Live Stock Journal.) Fig. 10.

THREE NEW YEAR'S DAYS.

ANNIE L. JACK.

"I'LL never come back till I'm rich enough to buy out Squire Watson." The speaker was a lad of 18, and he had his hand on the latch of the kitchen door, while saying good-bye to his mother and younger sister. A fierce hatred of farm life had possessed him for years, and he was at last about to be emancipated, for Dickson Lawton & Co. had sent word from the far off city to select them a clerk, and the Sunday-school superintendent, to whom the letter came, gave George Bushnell the first chance, and he could not give up the long coveted opportunity. So a neighbor had engaged to work the farm on shares, and everything was arranged for his going, only it did seem too bad that he had to say good-bye on New Year's Day, in order to reach his destination in time for work the day after, and Mrs. Bushnell's face paled, and her heart sank at the thought of the long, winter evenings on the lonely farm without George'

cheerful face and his helpful presence. True, she had "Nora" and the neighbors were kind, but what can take the place in a poor widow's heart of her first born, her only son? And yet it seemed flying in the face of Providence to think of refusing, for the salary was good, with prospects of a rise, and the farm was stony and hard to till. Besides George had always been fond of study, and fretted because he could not make any progress at home. Once his discontent was known so far as to reach the minister's ears, but the advice and consolation he received from that source was not likely to encourage him, "Bind the book to the handle of your plow, and study while you work and while you eat." This was all very well in theory, but was wasted advice as far as George was concerned. For a plow is a ticklish thing on stony land, and when the lad came in at night, after seeing his horses were comfortable and doing the out door chores, besides bringing in wood and water, he was generally too tired and sleepy to study, and even resented the idea. And so he must go out into the world that was so wide and so full of dangers, and leave her to depend on strangers, to fight for bread for herself and Nora, who was trying to fit herself for a position as teacher, by dint of hard study in the academy two miles away. The sleigh came to the door, the last trembling good-bye was said, and he was gone, while with tearful gaze she watched the last glimpse of his tall and rather ungainly figure till all vanished in the dim distance. And the flakes of snow began to fall silently and cover up even the track of the sleigh, while Nora drew near the fire, and tried to make the most of the remaining hours of the old year tide.

Oh! these children, how they become at once our solace or our care, and fill the mother heart with fears and many a deep, dumb pain. You are over the nest now, birdling, and singing a song of freedom as the sleigh-bells, and the car whistle and the church bells mingle this eventful night.

A year passes by, the spring blossoms, the summer's heat, the autumn rain, and once more the snows of a New England Winter. Mrs. Bushnell had spent the Thanksgiving in solitude with her young daughter only for company, but she set about her preparations for the New Year in the hope that George would come to share it with them. He had sent them money, not much, of course, but enough to prove his thoughtful love and remembrance; yet she thought she noticed an eager desire for acquiring wealth, a craving for position at all hazards that filled her with alarm. But there was no want of faith in her careful preparations, no lack of hope in the burnishing and polishing of her little best things, and the goose was nearly stuffed when Nora came in from school bearing in her hand a letter. "From George, surely he is coming?" she asked, dismayed; but it read as follows:

"Dear Mother and Sister: I am sorry to say I shall not be at home for New Year's dinner. Squire Watson and his daughter Minnie are in town and have invited me to dine with them on New Year's Day. They are expecting some other guests and I think it will be as well to stay and get acquainted with some people of good social standing, so that I may have a few friends. I inclose you a little cash as a Christmas gift. I wish it could be more, for my own sake and yours. Wishing you a happy New Year I remain

Your affectionate son, GEORGE."

Poor Mrs. Bushnell sat down and cried bitterly; but Nora, with tears in her own eyes, said plaintively: "You have *me*, mother," and they talked each other into becoming reconciled. And on New Year's Day they invited lame David Nelson and poor Widow Dobbs with her two children, and tried to enjoy the goose and other extras that furnished the feast. And softly in the twilight David and Nora sang till the mother's heart grew tender and hopeful with the soothing words. It was so sweet to know that

"Only a little while
Of walking with weary feet
Patiently over the thorny way
That leads to the golden street.
Suffer if it's God's will,
And work for Him while we may:
From Calvary's cross to Zion's crown
Is only a little way,"

and in the far-off city, flushed with the new excitement of being in the company of those socially his superiors, smiled upon by a pretty girl, who always smiled on young men, from habit and a love of conquest, George spent the first evening of the New Year. He tried to make himself believe that his mother would be pleased and proud that he remained, for Squire Watson was the richest man in their country village, owning a great deal of property, and spending his Winters in the city with his pretty daughter, who meeting George in the store where he was employed one day, had renewed the acquaintance in a spirit of coquettish caprice. He thought he had done his duty by the mother and sister at home. "A *man* must look out for himself," he said, and his thoughts that evening were of the wildest, most visionary dreaming, so much so that he did not remember Christmas or notice the chiming of the bells, announcing the birth of another year. He was not trying to serve "God and mammon," but was content to try mammon, for the glitter of wealth, the longing for a life of ease above the petty struggles and savings he had seen all his life, took possession of him, and he could think of nothing else. For to him the Christ Child had lost its meaning, he scorned the very thought of a "manger" and after the brilliant lights were out in the mansion that had entertained him, this memorable evening his thoughts as he returned to his third-class boarding house were how to obtain such wealth as Squire Watson seemed to possess.

To Mrs. Bushnell living at the quiet farm, it seemed like a fairy story to read the letters that came from George of his doings in the city. Parties and concerts, dinners and receptions followed in quick succession, then a pause, and in the Spring came the news of Minnie Watson's marriage to a wealthy stock broker. George did not make many comments; he seemed quite engrossed with his business, and in a small way engaged in speculations that proved successful. Then in the early Autumn came news of Mr. Watson that was very disquieting to his old neighbors. Stories of alarm and fears of trouble were rife in the country, and at last as the new year was approaching again, there was certain word that he had been arrested for forgery, and all his estate was under the hammer. There was not much of joy in Mrs. Bushnell's heart when the evening came round that seemed always of necessity one of special preparation. It was true that Nora had passed her examination with honor, and was still to be near her and teach in the district school, but her heart yearned for her boy of whom she had not heard for a long while. The evening closed in with drift and snow, but the next day was clear and cold, and early in the morning, lame David came over to be their guest for the day. It was a very sad face that bent over the preparations that morning, and she sent Nora into the little parlor to talk to David, and sing some Christmas hymns, while she tried to keep her mind employed with the words so comforting and soothing while her hands were busy. She had faith in George; he would not fall, though blinded by the glamour and glitter of the rush for wealth. And as she sat down to sort over the cranberries, a click of the latch caused her to look up, and there he stood, pale and careworn, but with his honest eyes looking into hers. "Oh my boy!" was all she could say, as she clasped him in her patient, motherly arms, and he answered, "I have come back to finish my New Year's Day, mother, and am richer than Squire Watson, though I have not a dollar." It is needless to repeat the story of his awaking. The shock that came to him when his patron's dishonorable dealings were made public, the revulsion of feeling, that caused him to long for his old home and for the steady, honest, simple life he had left, and the faithful, patient mother, "I am going to stay now," he said, "for I believe there is wealth on the farm if only I can work it intelligently. And meeting men who look down on farmers, I find they are not often as well read or as thoughtful as country people are, only there is a polish that attracts and dazzles one, and the city press and public that sneer at 'country bumpkins' are to blame for the false sentiment that sends thousands of young men to the city." All this and much more George said in snatches that morning, and afterward to his young companions; but it was of little consequence to his happy mother, so long as she had him with her and heard his reassuring words of his remembrance and longing for her and for his home. Brave mother, the reward has come of patient endurance and kindly charity, while all unconscious of the arrival, the singing continued in the inner room and the voices chimed sweet and clear as the forerunner of a jubilee.

"Good tidings of great joy
To all people do I bring,
Unto you is born a Saviour
Who is Christ the Lord and King!
Gospel bells! how they ring
Over land and over sea!
Gospel bells, freely bring
Blessed news for you and me."

"NOTHING BUT LEAVES."

It seems very sad to see a lone woman left in middle life with "no resources," as we commonly use the term, and obliged to eke out a support by her hard labor, or to "eat the begrudged bit and drink the begrudged cup" in some home where she should be welcome. But even such a life has its compensations and rifts in the clouds. Hard work itself brings deep, sweet sleep, and there are little children in most homes whose love can be won by a wise, loving woman. Books and papers are a resource, also, for leisure hours.

But I know a woman growing old who has means enough to procure the comforts of life, but whose existence is wretched because she has no resources except money. Her mind has been left a blank. Fancy work filled up the years that should have been given to self-improvement, the love of kindred was never won; children were too much trouble about the house, to be much encouraged in their visits. She depended wholly upon father and mother to decide for her in any matter of importance in life, and now that both are gone she is like a shipwrecked voyager at sea in an oarless boat. She can scarcely decide the smallest matter, but worries and distresses herself over the merest trifle, asking advice of all and yet unable to decide which council to follow, making herself nearly distracted by her indecision. Though a woman of nearly 50, she needs a steady guiding hand as much as she did at 10.

She had good, natural capacities, but she left them all to run to waste. "She never could bear to read," said her niece, and now when time hangs heavy on her hands she has none of the rich enjoyment she might find in such occupation. The joys of benevolence she has never known, so the blessings of the poor and needy does not gladden her pathway. Her worrisome ways strike terror to the heart of every household where she decides to visit for a week, or two. Even where they have the kindest of wishes and sincerest of pity for her loneliness. One cannot but wonder what will she be at 60 if nature keeps her alive when she finds life such a burden now.

Whatever resources for old age we may lack let us not fail to lay up abundant stores of head and heart riches. OLIVE.

Domestic Economy

CONDUCTED BY EMILY MAPLE.

KITCHEN TALKS.

ANNIE L. JACK.

There was a council meeting in the kitchen to discuss Christmas, and the ways and means of accomplishing what we desired.

"I wonder what is best to give"—

"Books," interrupted the Student.

"Man cannot live by books alone," said the Amateur Cook."

"Neither can he by mince pie alone," said the Artist, who had taken the easel to a sunny kitchen window and was busily engaged painting a little winter scene therefrom. It was only a tree laden with snow, where some hungry sparrows hopped and twittered about; but there was sunshine on the grass, and weeds that glittered with frost. There was a golden sheen everywhere, that our artist could not fully depict. But the pause that followed was eloquent, as the brush worked industriously, and the rolling-pin came down heavily on the baking board.

"That gives me an idea," she said.

"Hold it fast, dear," responded the Idler from the depth of an arm-chair; "it is an event of unusual interest." The "Cook" gave a glance of withering scorn and continued.

"You know that fruit we put up that we did not need, just because it was going to waste—strawberries, raspberries and cherries! Why not give that away to some people who have none, as well as pen-wipers, or slipper cases."

"Oh don't," said the Epicure. "We can eat it all."

"Greedy boy!" said the generous Cook, her cheeks blushing with the kindly impulse, "but you know we do not need it all, and I believe in giving sometimes in unusual ways. Don't you remember how pleased Mr. Bagot was last year when we sent him a nice box of celery packed in sand? I believe in trying to give just things for Christmas, that people need, and not for show. Why one year I got four things all alike, and another year three, when one was quite sufficient. Now if anyone gave you three or four jars of fruit, you could eat them by degrees"—

"I only need a gold mine," said the Idler.

"Then you would be too idle to work it," retorted the Student.

"Come, children," I interrupted, "be considerate of each other's feelings. I think our "Cook" has the proper estimate of gifts, and I indorse all she says. There is a great deal of useless giving just for the form of the thing, and it has become an extravagance in many ways. But find out if possible what your friend lacks, and try to supply a need. Christmas is the time when we are free to bring our frankincense and myrrh, and offer them at the shrine of friendship in memory of the Christ child. I remember once a kind housekeeper who could make neither slippers nor dressing-gowns, but she cooked a turkey, made some pies and cookies, and other dainties and left the basket at the minister's door on Christmas eve, running away before they had time to answer the knock. I am sure he appreciated it, having a delicate wife whose hands were full. So give what is most suitable to the receiver, whether it be fruit, or any other product of your home industry, children."

(The above article came too late for timely publication.—E. M.)

LITTLE ECONOMIES.

The question of how to make every dollar go the farthest is an important one in the majority of households. For each family like the Vanderbilts, Goulds, Astors and others of like riches, who possess the means for gratifying every wish, there are thousands upon thousands who can scarcely make both ends meet. In such homes the art of making the most of little things, of utilizing the odds and ends, of planning so that 25 cents, carefully spent, will go as far as 50 cents thoughtlessly expended, will make a great difference in the comfort and prosperity of the family.

While making a visit not long since I took down a few jottings in planning and economizing, which I thought very suggestive. Said my hostess: "For the first few years of our married life, it was a difficult matter to do more than just come around even at the end of the year. It seemed so hard not to have any spending money; not to be able to take any reading matter or to spend money for anything but just the bare necessities of life! I set my wits to work to see if I could not manage to save a little in different ways, so as to have a little margin after the necessaries were bought. And as small as the results are in each item, they make quite a difference on the whole. For instance, I used to consume an eight-cent bar of soap in doing my week's washing. I now use Babbitt's washing compound in connection with the soap, and the cost is reduced to half what it formerly was. I put the clothes to soak over-night in warm water, in which has been dissolved one heaping tablespoonful of the compound, according to the directions. This soaking greatly facilitates the washing, and at the same time less soap is required.

"Every white apron that I own is made of the back parts of my undergarments. The fronts always wear out first, and the aprons made from the backs last quite a long while for afternoon wear. On the other hand, my morning aprons are made of heavy gingham and extend to the bottom of my dress and far in the back, so that my dress is thoroughly protected.

"My husband likes meat at least once a day. We cannot afford sirloin roasts and expensive

Miscellaneous Advertising.

The country is flooded with highly chemicalled and very dangerous soaps, the result of the fierce competition among soap makers, and the average housekeeper can not determine which is the safest to use. Prof. Schaeffer, of Cornell University, says, "My analysis "shows the Ivory "Soap to be a remarkably good article, and "by actual trial in my "house it has proven "itself to be an excellent laundry soap."

Free of charge. A full size cake of Ivory Soap will be sent to any one who can not get it of their grocer, if six two-cent stamps, to pay postage, are sent to Procter & Gamble, Cincinnati. Please mention this paper.

steak, and what is worse than a tough piece of cheap meat? But I can now cook cheap meat so that I am not ashamed to place it before the most fastidious epicure. I get from three to five pounds of meat, costing from six to eight cents a pound. Such pieces come from the neck and legs. This meat is always cooked on baking or ironing days, so that extra fire is not required for it. I put it on directly after breakfast, in an iron kettle, in about two inches of water. It must commence boiling immediately and boil fast all during the forenoon, as the meat is mostly cooked by steam. The water should be kept at a depth of about two inches, and occasionally the meat should be turned over. As noon approaches, I let all the water boil out of the kettle and let the meat brown on one side. When that side is nicely browned I put in one cup of water and allow it to boil out, then turn the meat to let the other side brown. I watch it carefully to see that it does not burn. When it has browned a nice, rich color, I put in water enough for gravy. Water and flour are then smoothly mixed and the gravy is thickened. The meat remains in the kettle while the gravy is being made. Cheap meat cooked in this way is both tender and delicious. The amount I cook is sufficient for two dinners.

"You have just spoken of the cozy appearance of my sitting-room. The most of its furnishings are the works of our hands. John made the frame to that lounge, in the evenings, while I did the work of upholstering. That large easy chair was an old frame of a chair that I painted and varnished, then upholstered and covered with that heavy, dark cretonne. These rugs that you so admire were hooked from old clothes and rags that I dyed."

The articles referred to were not only comfortable, but really handsome; and yet the cost was comparatively trifling. In purchasing goods it is always an economy to get a good article. It costs more to buy first-class articles in shoes and dry goods, but oftentimes they will wear twice as long as those of a cheaper and inferior grade. To buy good cloth is a saving not only in money, but still more in labor. I have known of persons who made two garments of cheap material that would last no longer than one made of good cloth.

NELLIE BURNS.

SOME NICE QUILTS.

At a recent loan exhibition which I attended, the display of quilts was much spoken of. There were 25 of various kinds in one alcove. As the long winter evenings, with their leisure and lamp light, are approaching, perhaps a description of a few will be acceptable.

By virtue of seniority, the first mention is claimed by a quilt labeled "Made in 1790." It was of very fine white linen, with an elaborate center-piece and border. The center was a cornucopia filled with flowers and leaves, and the border was a grape-vine design. The outline of every leaf and flower was done in the finest back-stitching. The lining was of linen of very open texture, and through this the pattern was stuffed with cotton, so that the flowers showed in bold relief. The quilt was bordered with a knit or netted linen fringe.

Of richer materials, but not more beautiful than this, was a Japanese quilt prepared by the ladies of an eastern congregation as a present for their pastor's wife on occasion of the couple's silver wedding. The blocks were 12 inches square, and each was made according to the fancy of its donor. The only point of similarity was a triangular patch in one corner of each block, which was fastened down on two sides, the diagonal being closely buttonholed. This patch was of dark satin or velvet, placed on a square of light color, being fastened in with it. On raising the loose edge of this patch, one could see the name of the giver on the light material beneath. This gave it the value of an autograph quilt to its recipient, without the outré effect produced by the bad writing and occasional blots that disfigure so many album quilts. The center block was of plain, old gold satin, on which was a sketch of the church, which was rather ornate in style, done in etching silks by an artistic parishioner. This was especially appropriate, as the silver wedding of the pastor was also the 25th anniversary of his settlement over that congregation. The quilt was lined with crimson satin and edged with heavy cord in black and gold. There were other elegant quilts of Japanese or crazy designs, but this was the most interesting. I saw on some of the most elaborate, a feature that I would criticize. This was the introduction of bits of delicate lace and bows of bright ribbon in place of embroidery. Such fragile material as lace seemed out of place with the heavier materials, and the ribbon bows looked as if they would drop off sooner or later.

A cloth quilt comes next on our list. It was made entirely of blocks of fine black cloth in the figured styles now so much worn by men. Each block was four by seven inches in size, and was ornamented by an embroidered figure—a flower, a stork, an owl or a fish, and many other things, quaint and pretty. The blocks were separated by black dress binding, stitched on both edges and ornamented with fancy stitching in bright silks. Such a quilt is nice to spread over the back of a lounge, and is not so easily soiled as a silk one.

A plainer, and perhaps more useful quilt was made of scraps of worsted dress goods. Pieces of the best dresses of several generations of one family were there, and it was quite pleasant to note the differences of designs and textures. The fancy stitching on this was done with zephyr yarns.

A lovely bed comfort was of cheese cloth tacked with light blue Germantown yarn and losely button-holed around the edge with the same. It had in it three pounds of cotton and was very soft and warm.

A splendid bed covering for our Western winters, where a temperature of thirty degrees below zero is not unusual, was made of two old merino dresses, a brown and a garnet, set together in alternate stripes. It was lined with an old blanket (with its holes and thin places neatly darned, then colored light-brown with Diamond Dye), and filled with three pounds of wool batting. Such comforts are very warm and seem much lighter than those made with cotton though they may weigh the same.

DOMESTIC RECIPES.

AN EXCELLENT FRUIT CAKE.

Two pounds of sugar, two pounds of butter, one-half pound of lard, one pound of eggs, two pounds of raisins, two pounds of currants, one pound of mixed peel, two teaspoonfuls of allspice, one teaspoonful of cinnamon, one teaspoonful of cloves, one teaspoonful of ginger, one nutmeg, one teacupful of milk, three pounds of flour, four teaspoonfuls of baking powder. Mix until very stiff and bake in a steady heat for four hours. If you wish to keep this cake for a long time, use a cupful of water in the place of the milk.

PLUM PUDDING.

One pound of chopped suet, one pound of raisins (stoned), one-and-one-half pound of currants, one-half pound of candied peel, one pound of bread crumbs, one pound of flour, one pound of sugar, six eggs, one nutmeg, and other spices to suit the taste, a small glass of ale. Boil in a pudding mold six or eight hours. Serve with cream sauce.

S. M. TAPLIN.

NEAPOLITAN CAKE.

Black: Take one cup of butter, two of brown sugar, one of molasses, one of strong coffee, four-and-a-half of sifted flour, four eggs, two teaspoonfuls of soda, two of cinnamon, two of cloves, one of mace, one pound of raisins, one of currants, and a quarter of a pound of citron.

White: One cup of butter, four of white sugar, two of sweet milk, two of corn starch mixed with four-and-a-half of sifted flour, whites of eight eggs, two tablespoonfuls of baking powder, one-half teaspoonful of extract of bitter almonds. Bake the cakes in round jelly pans with straight edges; the loaves should one-and-a-half inch thick after baking. When the cake is cold, each black loaf should be spread with a thick coating of lemon and sugar made as follows:—The white of one egg, thoroughly beaten, the grated rind of two, and the juice of three lemons, powdered sugar enough to make a thick frosting; lay a white loaf on each black one and frost as you would any other cake. This cake is most delicious.

EMMA GRIGSON.

BROWN BREAD.

Every one who eats of my brown bread says it is excellent. I made four loaves for our last church social, and there was not half enough of it. The ingredients are: half cup of molasses, one-third of a cup of lard or butter, three cups of sour milk, one teaspoonful of soda. Add brown flour to make it just as stiff as can be stirred with a spoon. Dissolve the soda in hot water and stir it in the last thing. Try it if you want something good. MRS. W. F. B.

CAKES FOR LITTLE FOLKS.

Break two eggs in a teacup and fill it up with sweet cream; add one cupful white sugar and two teaspoonfuls of baking powder sifted with two cups of flour. Flavor to taste, beat well and bake in patty tins. In the center of each put a small china doll, cover the cakes when baked with chocolate or white icing. The dollies will be "raised" in various positions, and will make fun for the little folks, and the little folks' remarks will make fun for the big folks.

MARY MANN.

QUICK PROOF.

The quick proof mentioned in RURAL of Dec. 19 is good two weeks or more, and may be made of wheat canaille if fresh meal is not convenient.

"B."

Miscellaneous Advertising.

Take it during the spring and summer months. The peculiar taint of scrofula lurks in the constitutions of multitudes of men, but can be expelled by the use of Ayer's Sarsaparilla. M. J. Conway, 337 Hicks st., Brooklyn, N. Y., writes: "Two years ago I was examined, at the Long Island Hospital, in this city, and my case was declared to be Salt Rheum. Large scales covered my legs, and were constantly dropping off; my eyes, also, were badly affected. My only relief was in warm salt water baths. I was unable to remain in a warm room, and could only sleep under very light bed-clothes, as the heat increased the burning and itching. The use of

This Month is the time to take Ayer's Sarsaparilla. A. F. Willard, Rogers' building, Boston, Mass., says: "I know of no remedy of equal efficacy with Ayer's Sarsaparilla in cases of debility, and as a spring medicine." Rich'd H. Lawrence, M. D., Baltimore, Md., writes: "It affords me pleasure to testify to the success which Ayer's Sarsaparilla has had in the treatment of cutaneous and other diseases, arising from a vitiated condition of the blood. Were it necessary, I might give you the names of fifty individuals who have been cured of long-standing complaints, by the use of Ayer's Sarsaparilla. It is a specific for the most obstinate cases. Ayer's Sar-

Ayer's Sar saparilla gave me great relief. The itching abated, and I continued to improve until the cure was complete."

saparilla is, without exception, the best blood purifier and prophylactic with which I am acquainted."

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1. **The Widow Bedott Papers.** This is the book over which your grandmothers laughed till they cried, and it is just as funny to-day as it ever was.
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4. **The Lady of the Lake.** By Sir Walter Scott. "The Lady of the Lake" is a romance in verse, and of all the works of Scott none is more beautiful than this.
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6. **The Standard Letter Writer** for Ladies and Gentlemen, a complete guide in correspondence, giving plain directions for the composition of letters of every kind, with innumerable forms and examples.
7. **Winter Evening Recreations,** a large collection of Acting Charades, Tableaux, Games, Puzzles, etc., for social gatherings, private theatricals, and evenings at home; illustrated.
8. **Dialogues, Recitations and Readings,** a large and choice collection for school exhibitions and public and private entertainments.
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10. **The Home Cook Book and Family Physician,** containing hundreds of excellent cooking recipes and hints to housekeepers, also telling how to cure all common ailments by simple home remedy.
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19. **The Mystery of the Holly Tree.** A Novel. By the author of "Dora Thorne."
20. **Shadows on the Snow.** A Novel. By B. L. Farjeon, author of "Bread-and-Cheese-and-Kisses," etc.
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22. **The Frozen Deep.** A Novel. By Wilkie Collins, author of "The Woman in White," etc.
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39. **The Laurel Bush.** A Novel. By Miss Mulock, author of "John Halifax, Gentleman," etc.
40. **Amos Barton.** A Novel. By George Eliot, author of "Adam Bede," "The Mill on the Floss," etc.

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News of the Week.

HOME NEWS.

SATURDAY, Dec. 26, 1885.

THERE has just been a socialistic scare in San Francisco, where a Socialistic Revolutionary Association has been detected in a plot to assassinate a score or so of the leading citizens, without distinction of party, Senator Leland Stranford and Governor George Stoneman heading the list. It was proposed to shoot down Chinamen, and burn their quarters. Four of the blood-thirsty miscreants, mainly foreigners, have been arrested. The extremes of social conditions are no where greater than in California, and the sight of wealth easily and rapidly acquired, tends to make poverty reckless and desperate. .. A very wholesome reaction is setting in nearly everywhere against skating rinks. They have been the cause of a great number of deplorable scandals, and have brought shame and sorrow into many families. In several places prohibitory licenses have been imposed on them, and public condemnation is setting strongly against them. . Senator Edmunds has introduced an anti-Mormon bill into Congress, so stringent that, if it passes, polygamy is sure to be wiped out..... There is a regular hydrophobia scare in many towns in different parts of the country, and unmuzzled dogs are being kill in the streets on all sides. The four children bitten by a mad dog at Newark, N. J.,and who were sent to Paris to be treated by M. Pasteur, arrived there safely last Monday and were at once put under treatment. According to the latest accounts, they are doing well. Several others who have been bitten by rabid dogs have also started for Paris, to which dog-bitten people are flocking from all parts of the world.....Capt. Eads's Tehuantepec ship railway scheme has received a great impetus from the recent action of the Mexican Congress in enlarging the concession to the railway,and guaranteeing it $1,250,000 a year for 15 years, on condition that some other country guarantees twice as much for the same period..... ....A great deal of dissatisfaction has been aroused by the action of Land Commissioner Sparks with regard to settlement on the public domain, and a multitude of petitions against his confirmation have been sent to the Senators and Representatives in Congress..... ... The recommendations of Postmaster-General Vilas for supplemental legislation to suppress the lottery lawlessness has resulted in the introduction of a bill into Congress by Senator Wilson, of Iowa, "to prohibit the mailing of newspapers and other publications containing lottery advertisements, and providing a penalty for violation of the same."..... The silver men in Congress are preparing for a vigorous fight in behalf of the "unlimited coinage" of silver. They say that restriction would benefit the moneyed classes at the expense of the debtor classes and the poor generally by increasing the value, and therefore the purchasing power of gold. With money more abundant, higher prices, it is said, would be the rule.....The Grant Monument Fund has reached a grand total of $111,228. The daily additions aggregate, on an average, about $20 .....The small-pox plague has nearly disappeared from Montreal, the deaths now not being over two a day. It is still pretty fatal in the surrounding country, however. .. ..A telegram from St. Paul, Minn., last Wednesday, says that for two weeks the weather in the Northwest was more like Spring than Winter. Snow had disappeared, and a light warm rain was falling—the third time rain has fallen in December since 1870. At date the Mississippi had been opened, having been closed with ice since Thanksgiving,..... ....A company of the 8th United States cavalry, under Lieut. Fountain, were ambushed by hostiles with disastrous results near White House, N. M., Saturday. In the fight that ensued Surgeon Maddox and Privates Collins, Gibson, Hulton and McMillan were killed. Lieut. Cahill and Coporal McFarland were slightly wounded. The Indians numbered 21. After the fight they headed in the direction of Clifton. This is the same band with which Lieut. Fountain had a fight on the 9th. No Indians are reported killed..... The New England Congressmen are reported to be a unit in favor of excluding Canadian fish. The New England fishermen have had the whip-handle the past Summer, but they may find by another year that they will be shut out of Canadian fishing grounds. They cannot afford to look only upon one side of this question. . ....Jacksonville, Fla., had a $450,000 fire some days ago. The fire broke out in Hubbard's warehouses on the dock, spread to the Abel block, in which were the Herald newspaper, Hazzen's billiard parlors, Kurtz brothers and several others. The buildings in the rear of McConkie's, Hubbard's and Abell's blocks on the wharf, with their contents, were destroyed. The total insurance is estimated at $350,000..... Representative Morrison, speaking of the movement in South Dakota, says: "The present Congress will certainly not consent to a division of one-half as a State. The admission of the entire Territory to the Union may be possible."..... During the present session of Congress, 728 bills and joint resolutions have been introduced in the Senate and 71, which originated in the House, have been passed. Twelve hundred and forty-seven executive messages, containing about 1500 nominations, have been sent by the President to the Senate, which referred them to the proper committees; two treaties, one relating to the boundry line between this county and Mexico, and the other providing for the settlement of the claims of certain American citizens against Venezeula, have been sent to the Senate for ratification.

Over-worked Business Men.

As a restorer of exhausted nerve force, it has been largely shown during the past thirteen years that the Compound Treatment of Drs. Starkey and Palen, 1529 Arch Street, Philadelphia, Pa., is the most prompt and efficient agent yet discovered. Its use by over-worked business and professional men would save many hundreds of lives every year, and give to thousands more the ability to work without the weariness, exhaustion, and peril which now attended them. A pamphlet containing full particulars in regard to the nature and action of this remarkable Treatment, will be mailed free. Write for it.—*Adv.*

AGRICULTURAL NEWS.

SATURDAY, Dec. 26, 1885.

THE NEW YORK STATE AGRICULTURAL SOCIETY.—The annual meeting of this society has been called at the society's rooms at Albany, on Wednesday, January 20, 1886, at noon. No programme is announced, and we suppose the only business of importance will be the ratification, by the handful present, of the slate that will no doubt be prepared beforehand all ready for the farce. The time was when these annual meetings were a power; when they meant a show of fruit, grains and vegetables, rivaling even that of the State fair; when the farmers gathered until the Agricultural Hall would not hold them, and when two or three sessions were devoted to essays and discussions, full of interest and instruction, equaling a veritable Western farmers' institute. But times have changed since then. Sadly changed! Either the farmers are losing all interest in their business, or the society is slowly but surely drifting away from them. Whatever is wrong it is time it should be righted.

PENNSYLVANIA HORTICULTURAL ASSOCIATION.—The annual meeting of the Pennsylvania State Horticulatural Association will be held at Reading, Pa., commencing Wednesday January 20. A good list of subjects for consideration has been prepared, a lively time is expected and all who come are guaranteed a cordial welcome to Reading. E. B. Engle, of Waynesboro, is the Secretary. Write him for programmes and full particulars. We know he will like to hear from you.

THE VERMONT DAIRYMEN will assemble in the annual winter meeting of their association at Bellows Falls, January 19, 20, and 21. The Secretary, O. M. Tinkham, of North Pomfret, will give information and be glad to receive subjects for consideration. He also urges the farmers to come for a good time and prepared to talk as well as to hear.

All should go!

Artificial eggs are the latest sensation, will artificial spring chickens be the next? ..... Contagious pleuro-pneumonia has broken out among a large herd of cattle near West Willow, Lancaster, Co., Pa. The worst cases have been killed by order of the State Veterinarian, and the others have been quarantined..... Under pressure from the Havre Chamber of Commerce M. Dantresme, the Minister of Commerce, has promised that a bill to abolish prohibitive duties on American preserved meats will be introduced in the Chamber of Deputies after the New Year's vacation. The president of the Paris Chamber of Commerce joined with the Havre delegates in an interview with the Minister, in demanding urgency for the measure in order to give to the American trade its former facilities. On the other hand, the agricultural group in the French Chamber of Deputies have resolved to oppose the importation of American salt meats "in the interest alike of sanitation and of French husbandry." . ... The New York Fertilizer and Chemical Exchange is the name of a new institution in this city, the object of which is to promote social intercourse among its members and especially to introduce a free interchange of opinion upon all subjects of general interest to the trade .. .. First Comptroller Durham has disallowed an item of $1,800 in the accounts of Norman J. Colman, Commissioner of Agriculture, on the ground that that amount was used in the purchase of seeds and labor and illegally charged to the appropriation for "Laboratory." This case is exactly similar to that of Commissioner Loring, Mr. Colman's immediate predecessor in office, whose accounts for purchases made in the same way were also disallowed. The explanation given by Commissioner Colman is that the seeds were purchased in his absence and without his knowledge by General Carmen, then chief clerk of the Department. The Comptroller, however, says the Commissioner is alone responsible under the law .... Farmers and others at Barrington, only about 16 miles distant from Chicago (and in the same county), have suffered of late to such an extent from prairie wolves that a bounty of $5 a head for each wolf slain is prayed for. The animals are reported to be bold and savage....Assistant State Dairy Commissioner M. A. Perry, of New York, is making things lively in Buffalo for grocers and other dealers in dairy products, who are charged with selling watered milk, oleomargarine for butter, and adulterated cheese. Over 200 cases of the sale of impure milk and 40 cases where bogus butter was alleged to have been sold are reported, and over 50 warrants have been issued for the arrest of dealers who are alleged to have sold bogus butter or adulterated milk. ....

An entirely new product, obtained from the distillation of petroleum, has been perfected by a chemist of Titusville, Pa., which he calls the Oriental potato bug powder. It is non-poisonous, harmless to man or animals, but the most destructive agent to insect life ever discovered ..... . Germany devotes 9,000,000 acres to the cultivation of the potato, the yield last year being 23,000,000 tons. Not only is the tuber largely used for food and in manufactures, but heavy exportations are made to other parts of Europe and to America.

The oleomargarine manufacturers met the other day at Philadelphia and formed a combination for the purpose of opposing a united front to all legislation hostile to their interests and to subscribe liberally toward the cost of contesting all laws restricting or hampering the sale of bogus dairy products .... The Maryland State Grange has just held its 13th annual session in Baltimore. It has, of course, long ceased to have political influence, and in fact, never in that State exercised much positive force. It was organized in 1873, and in 1876 arrived at its greatest growth. There were then 150 granges with a membership of 5,921. At present there are but 69 local organizations supported by 2,085 members. It is practically held together by the Commission Agency of the State Grange, by which members participate in the profits of all produce and mercantile transactions. This is a successful institution, and it is the intention to extend its scope. In 1884 the business transactions of this agency amounted to $362,000. It now has a surplus of $20,000. It is claimed that the price of fertilizers has been reduced 25 per cent. This agency does not undersell other houses, but at the end of the year divides the profits proportionately. Its influence socially and educationally is regarded as beneficial....

THE LARGEST CABBAGE GROWERS IN THE WORLD use and recommend Tillinghast's Puget Sound Cabbage Seeds. The disseminator of this renowned brand of seeds, in order to introdnce them into every county in the Union, has organized a Seed and Plant Growers' Association. One reliable party in each town is being enrolled as special agent, and is supplied with seeds in trade-marked packages, and also instruction books which will enable any one to grow cabbage plants successfully anywhere. Parties desiring seeds or plants, will, upon application, be furnished with the addresses of agents nearest them from whom they may be obtained.

This association thus furnishes one man in each town—the appointed agent—a good cash paying business in selling seeds and growing and supplying plants. There are still many excellent localities unoccuped, and any one so situated as to act as agent for this association should address, for particulars in regard to it, Isaac F Tillinghast, La Plume, Pa.—*Adv.*

Crops & Markets.

SATURDAY, Dec. 26, 1885

BRITISH dispatches say the average price of wheat in 187 towns in England and Wales last week was, 30s. 5d. per quarter, or 98⅜ cents a bushel. This is precisely the same as the lowest price touched at any time last year, namely, in the week ending Nov. 29, and last year's average was the lowest for more than a century. In England the average during the first half of this year was 33s. 1d. a quarter against 37s. 8d. last year, or $1.02¾ a bushel against $1.28 last year. Since the middle of the year the price has steadily declined, every month falling below the average for the corresponding month last year. Here, on the contrary, according to the last report of the Department of Agriculture, prices for wheat have this year been everywhere higher than last year; and for much of the time they have been higher at the seaboard than in England. The exports from this country have so far been too small to seriously affect prices in England; it is the heavy importations from India and Russia that have depressed the market. The amount of wheat raised in Russia is not large compared with that of some other grains; but as rye bread is used almost exclusively by the "common" people, a large proportion of that raised is exported.

According to the American Consul at St. Petersburgh the proportion of cereals cultivated in the Empire is as follows: Assuming 100 as representing the total production and export, the different varieties participate as follows: production: rye, 38·33 per cent.; oats, 31 per cent.; wheat, 12.67 per cent.; barley, 7 per cent.; other cereals, 11 per cent. Exports: Rye, 25.73 per cent.; oats, 17.22 per cent.; wheat, 39.97 per cent.; barley, 6.63 per cent.; other cereals, 10.45 per cent. The recent changes in the tariff of Germany and France have also lowered prices in Great Britian. Previously these countries imported a great deal of grain; but increase of import duties of late, has stimulated home production and greatly checked importation, so that the wheat, marketed in those countries formerly, is now thrown on the markets of Great Britian which lays no duties on cereal imports. Probably the chief cause of low prices, however, is the great depression of all industries in the United Kingdom. Poverty lessens consumption, and makes people have recourse to the cheapest kind of food, and hence the demand is less than usual while the supply is greater.

The importation of wheat and of flour as wheat into the United Kingdom for three months ended November 28 last amounted to 35,746,888 bushels, against 35,127,768 bushels during a like period in 1884, and as compared with 41,225,736 bushels for the quarter ending December 1, 1883.

The price of corn has fallen in sympathy with wheat, and also because the visible supply has increased. It is now 1,382,000 bushels. Oats have been only moderately well sustained. The decrease in the visible supply was 77,480 bushels as per the New York, and 90,288 bushels as per the Chicago report. There has been also a better demand for oats from abroad. The speculation in this grain has been light.

The visible-supply report in this city shows 612,236 bushels of wheat increase during the week, about 200,000 more than indicated by the Chicago report. In addition to this, cables from London and Liverpool show less disposition to buy than heretofore, and report larger stocks of wheat than at a like date last year. While the United Kingdom is ordering from India, Russia and Australia for future delivery, and ignoring our grain, it is observed that British imports during three months past have been slightly in excess of the like period in 1884, including flour as wheat.

Until early in the week the winter wheat belt was covered with snow, but then a thaw set in, and by Wednesday the snow disapeared nearly everywhere, leaving the wheat bare. A multitude of reports from every winter wheat State as far south as Tennessee, go to show that in Tennessee and Kentucky, the outlook is good, providing there is a covering of snow in the Winter; in Kansas and Missouri, seeding was late and dry weather caused a slow growth. In Southern Illinois, the great winter wheat region, the acreage is reported considerably smaller than usual. In Michigan the Hessian fly is troublesome.

The Michigan crop report for December 1 shows the condition of wheat in the southern four tiers of counties to be 94, and in the northern counties 96, compared with 100 as representing an average of years in vitality and growth. One year ago, the southern counties averaged 104, the northern counties 103. Condition of live stock one per cent. below an average. Reports from elevators in regard to quantity of wheat marketed indicate a total this season of 7,748,870 bushels, or 3,345,445 more than in 1884 for four months ending December 1. The report contains an article by Erwin F. Smith, of the University of Michigan, on the causes and nature of the potato rot, prevalent in that State.

Owing to the excellent quality of last year's Michigan wheat crop, large quantities have been sold for seed to other sections. In that State as well as in Indiana and Ohio, the ground is

Miscellaneous Advertising.

When Baby was sick, we gave her Castoria,
When she was a Child, she cried for Castoria,
When she became Miss, she clung to Castoria,
When she had Children, she gave them Castoria,

bare and the crop looks well. Owing to the low prices of flour and the comparatively high price of wheat, and the greater popularity of Spring wheat flour, small mills in the Winter wheat section are shutting down, and the big ones are not in much better condition. The general impression among millers, railroad men, etc., at the West, is that farmers have marketed a larger proportion of their crops this year than at the same date last year.

The movement of new corn in Nebraska, Kansas, Iowa and Illinois is unusually small, as the late fine weather has favored the gathering of virtually the entire crop. It is thought that the scant receipts at the principal points are due to the great number of cattle and hog feeders who are loading up corn for winter and spring use at from three cents to four cents a bushel higher than the figures offered by dealers. There is a growing impression that the corn crop has been overestimated in quantity and quality.

According to the report of the Chicago Board of Trade last Tuesday, the following was the number of bushels of grain "in sight" in the United States and Canada on Saturday December 12, together with the increase or decrease the preceding week:

Wheat	58,388,469	Inc. 407,313
Corn	5,215,643	Inc. 710,246
Oats	2,440,064	Dec. 90,283
Rye	749,157	Inc. 10,247
Barley	2,197,384	Dec. 165,000

At the same time last year the visible supply was 42,000,000 bushels. The amount of flour in the hands of the dealers this year is also much larger than last.

At Philadelphia there has been very little activity in any branch of the trade. Wheat 1c. lower than last week under pressure to realize by speculative holders and continued lack of foreign demand. Corn is 1c. higher for December delivery. At St. Louis, Mo., all grains have declined and are unsettled. At St. Paul, Minn., wheat prices have at no time during the week fluctuated over 1c. during market hours, and the close shows a total variation of less than 2c., this being an advance over last week. The large dealers of the Northwest are now interested in holding the market steady, and are succeeding remarkably well so far. Stocks at Minneapolis are 6,350,113, at St. Paul, 1,232,009, and at Duluth, 5,016,068. The increase over last week at the three points is more than 1,000,000 bushels. It would have been larger but for the steady running of the mills. Deliveries in general are reported light: 13 flour mills have been running during the week, making an output of 96,000 barrels.

Prices of creamery butter have advanced, and the markets for prime goods are very strong. The receipts amount to 1,255,671 packages, against 1,227,701 packages for the same time last year.

	Dec. 23, '85.	Dec. 22, '84.	Dec. 23, '84.
Creamery, new choice to fancy	31@38c.	27@29c.	32@36c.
State, new dairy fancy	25@29c.	23@25c.	24@27c.

There has been an improved demand for the export trade for fancy colored cheese, and prices have advanced. The receipts amount to 1,817,017 packages, against 2,147,855 packages for the same date last year.

	Dec. 23.	Dec. 24, '84.
Choice fancy State creamery,	9¼@10¾c.	12¾@12¾cs.,

The speculative market for hog products has been downward during most of the week. This was due to free receipts of hogs at the chief packing points, slight interest on the part of packers and others, the declines in prices of grains, to the embarrassment of a large English provision house, and a light export demand with no special reason for thinking an early revival in the shipping demand probable. Barreled pork ranges about $1 below the rate at a like date in 1884, lard about one-half cent per pound lower. It is thought prices will be stiffer towards the middle of January.

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MARKETS BY TELEGRAPH.

SATURDAY, Dec. 26, 1885.

CHICAGO.—Compared with prices two weeks ago, regular wheat is 2⅝c. lower; No. 2 Spring, 3⅜c. lower. Corn, 5¼c. lower. Oats, ⅞c. lower. Pork, 20c. higher.

CHICAGO.—Flour quiet and unchanged. Wheat active; sales ranged: December, 81⅝@81¾c.; January, 83⅛ to 81¾c.; February, 83⅞ to 84⅛c.; May, 89⅜ to 90⅝c.; No. 2 Spring, 83⅝c.; No. 3 Spring, 66 to 70c. CORN—Quiet; Cash, 36½c.; Year, 36⅝ to 37½c.; January, 36¼ to 36⅝c; May, 39⅛ to 39⅝c. OATS—Dull; sales ranged; Cash, 28c; December, 27⅛ to 27¾c; May, 30¾ to 31c. RYE—Steady. No. 2, 59½c. BARLEY—No 2, 65 to 66c. PORK—Steady: Cash, $9 10 to $9 75; December, $9 00 to $9 10; January, $9 75 to $9 85; February, $9 85 to $9 95. LARD—Steady; sales ranged: Cash, $5 92½ to $5 95; December, $5 92½ to $5 95; January, $5 95 to $6 07½; February, $6 00 to $6 02½ Shoulders, $3 75 to $3 80; Short rib sides, $4 75 to $4 80; Short Clear Sides, $5 20 to $5 25.

Compared with cash prices two weeks ago, wheat, is 1½c. lower; corn, 1½c. lower; oats, 1⅜c. lower.

ST. LOUIS—No. 2 Red, Cash, 92⅛ to 92⅝c.; December, 92¼c.; January, 93c.; May $1 00⅛. Corn quiet; Cash, 32⅛ to 32½c.; Oats dull; No. 2 Mixed, Cash, 26⅞ to 27c.; December, 27c.; May, 31c. Rye steady at 58½c. Barley steady at 50 to 80c. Eggs steady at 16 to 16½c. Flax Seed steady at $1 08. Pork, $9 50. Bulk Meats—Long Clear, $4 85; Short Rib, $4 85 to $4 90; Short Clear, $5 00. Lard firm at $5 80 to $5 85. Receipts—Flour, 2,000 bbls.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, December 26, 1885.

STATE OF THE MARKET.—Compared with cash prices last week, flour is unchanged; "regular" wheat 1¾c. lower; corn unchanged; oats 1c. lower; pork unchanged.

FLOUR, MEAL AND FEED. FLOUR—Quotations: Fine at $2.25@$3.20; Superfine, $3 00@$3 45; Extra No. 2, $3 30@$3 75; Good to Fancy Extra State, $3 75@$4 40; Good to Choice Extra Western, $4 00@$5 65; Common to Fair Extra Ohio, $3 30@$3 75; Good, $3 80@$4 20; Good to Choice, $4 25@$5 50; Common Extra Minnesota, $3 30@$3 65; Clear, $4 10@$4 50; Rye Mixture, $4 00@$4 35; Straight, $4 50@$5 00; Patent, $4 50@$5 65; Bakers' Extra, $4 10@$5 75; St. Louis Common to Fair Extra, $3 30@$3 80; Fair to Good, $3 85@$4 75; Good to Very Choice, $4 80@$5 20; Patent Winter Wheat Extra, $3 30@$5 60; City Mill Extra for West Indies, $4 75@$4 85; South America, $4 90@$5 00. SOUTHERN FLOUR—Common to Good Extra at $3 30@$3 90; Good to Choice do., $4 00@$5 50. RYE FLOUR—Superfine, $3 25@$3 60. BUCKWHEAT FLOUR, $1 85@$2 05. CORN MEAL—Yellow Western, $2 80@$3 15; Brandywine, $3 10@$3 15. FEED—Fine, 90 lb. average at 77½@80c.; 80 lb. average at 80@82½c.; middlings at 85@90c., and sharps at $1 00@$1 05. Rye feed at $16 50@$17 00.

GRAIN.—WHEAT.—Ungraded Red, 96½c.; No 2 Red, 92c.; No. 3 Red, 87c.; No. 2 Red for December, 90½@90¾c.; do. for January, 90½@91¾c.; do. for February, 91¾@92¾c.; do. for March, 93¾@94½c.; do. for April, 95⅜@96¼c.; do. for May, 97¼@97¾c.; for June, 98@99c. RYE—62½@65c. for Western, and 65½@67c. for State. CORN—Rejected at 30½c.; Ungraded, 41@49c.; No. 3 Mixed, 41½@41¾c.; and 42c. for early January, and 44c. for February; Steamer Mixed, 45½@45¼c.; In Elevator, 46¾c.; afloat, 45¾@45½c. for December, and 45¾c. Steamer Yellow, 45½@45¾c.; No. 2, 48¾@49c.; Steamer White, 45¾c.; Ungraded White, 41@42c.; No 2 Mixed for December, 48¾c.; do. for January, 48@48¼c.; do. for February, 47¾@48c.; do. for March, 47¾@47¾c.; do. for May, 47¼@47¾c. OATS—No. 3 Mixed at 32½c.; No. 2, 33½@33¾c.; No. 1 nominal at 34c.; No. 3 White, 37½c. spot, and 37c. to arrive; No. 2, 38¾@38½c.; No. 1, quoted at 41c.; Mixed Western, 31@35c.; White, do., 37@42c.; White State, 38c., No. 2 Mixed for January, 33½@33¾c. do. for February, 34½@34¾c., do. for May, 36¾@36¾c.

BEANS.—Quoted: Marrows at $1 80@$1 85; mediums at $1.75; pea at $1 70; red kidney at $2 15@$2 20 for choice; white do. at $2 for choice.

PEAS.—Green are quoted at $1 15@$1 20.

PROVISIONS.—PORK.—Mess quoted at $9 87½@$10 87½; $10 25@$11 00 for Family Mess; $12 00@$13 00 for Clear Back; and $8 50@$9 25 for Extra Prime. BEEF.—City Extra India Mess, $17 00@$20 00; Extra Ess. bbls., $10; Packet, $11 00@$12 00 in bbls.; Family Mess, $12 00@$13. BEEF HAMS.—Quoted at $16 50@$16 75. CUT MEATS.—Pickled Bellies, 10 and 12 lb average, 4¾c.; Pickled Hams, 8¼@8½c; Pickled Shoulders, 4½c; Pickled Shoulders quoted 4¾c; Smoked do., 5½@5¾c.; Pickled Hams, 8¾@9¼c.; Smoked do., 9¾@10c. MIDDLES—Long Clear in New York quoted 5¾c. for Western delivery. Long Clear, 4.90c.; Short Clear, 5.15c' DRESSED HOGS.—City Heavy to Light, 4½@4¾c.; Pigs, 5c. LARD.—December, 6.20@6.31c.; January, 6.28@6.31c; February, 6.35 at 6.37c.; March, 6.42@6.44c.; April, 6.50c.; May, 6.56@6.57c.; June, 6.62c.; City Steam, 6.30@6.25c.; Refined Continent quoted at 6.60c, and South American, 7.00c.

BUTTER—Western Creamery, 30@30c.; Eigin do., 37@38c.; State Dairy half firkin tubs, 27@28c.; Western Factory, 11@18c.; Imitation Creamery, 18@28c.; Western Dairy, 12@22c.

CHEESE—State, 7@10c.; Night Skims, 5¾@5¾c.; Western flat, 7@9c.

EGGS—State, 27@27c.; Western, 25@26½c.; Canadian, 2@2c.; Limed State, 19½@20c.; do. Western, 19@19½c.; do. Canada, 19@19½c.

LIVE POULTRY.—Spring chickens at 7c., fowls, Jersey, State and Pennsylvania, per lb, at 9c.; do. Western, per lb, at 8@9c.; turkeys, per lb, at 8@10c.; ducks, western, per pair, at 60@75c.; geese, western, per pair, at $1.25@$1.50; pigeons, per pair, at 25@30c.

DRESSED POULTRY—Turkeys, 12@13c. for Philadelphia 12@13c per lb for Jersey, and 11@13c. per lb for western; chickens, Philadelphia large, at 12@13c. per lb; do. small at 11@12c.; fowls, Philadelphia, prime, at 9@10c.; do. Jersey at 8@10c.; State and western at 8c.; squabs, white, per doz., at $3; do. dark, per doz. at $2.

GAME—Quail, per doz., at $1 50; partridges, State and Pennsylvania, choice, per pair, at 95@90c.; do. Ohio and Michigan, prime, per pair, at 70@75c.; do. Minnesota and eastern, per pair, 40@50c.; grouse, prime, dry, per pair, at 90c.@$1; do. inferior at 40@50c.; wild ducks, canvas, per pair, at $2 75@$3; do., red-head, per pair, at 75c.@$1; do. mallard, western, per pair, at 60@70c.; do., teal, blue wing, at 40@50c.; do. common, per pair, at 20@25c.; venison, short saddles, choice, per lb, at 14@16c; do. whole deer, at 10@12c.; rabbits, per pair, at 40@45c; hares, eastern, per pair, at 40@45c.

COTTON—The quotations, according to the American classification, are as follows:

	Uplands.	New Orleans and Gulf.	Texas.
Ordinary	6¾	6 13-16	6 13-16
Strict Ordinary	7 1-16	7¼	7¼
Good Ordinary	8	8 3-16	8 3-16
Strict Good Ordinary	8 7-16	8⅜	8⅜
Low Middling	8 13-16	9	9
Strict Low Middling	9 1-16	9¼	9¼
Middling	9¼	9 7-16	9 7-16
Good Middling	9⅜	9 13-16	9 13-16
Strict Good Middling	9⅝	10 1-16	10 1-16
Middling Fair	10¼	10 7-16	10 7-16
Fair	10⅞	11 1-16	11 1-16

STAINED.

Good Ordinary	6 7-16	Low Middling	7 15-16
Strict Good Ordinary	7¼	Middling	8 11-16

FRESH FRUITS—San Blas cocoanuts at $10. Apples—Baldwin, per bbl., at $1 75@$2 00. Grapes—Catawba at 6c. per lb, in baskets; Isabella at 4c. per lb. Cranberries—Cape Cod, choice, per bbl., $5.50; do. fancy, $6@$6 50; good to prime, per bbl., $4 50@$5 25; do. light colored, per bbl. at $4 00@$4 50; do. choise, per crate, at $1 50@$1 62. Florida oranges—Choice at $3 00@$3 50; do. inferior at $1 75@$2. Florida lemons at $3 25@$3 75.

DRIED FRUITS—Quoted: Apples—Fancy evaporated, 7½c.; new, choice at 7c.; fancy North Carolina sliced, new, at 4@4½c.; choice do. at 3½@3¾c.; choice Tennessee quarters at 2@2½c.; State quarters at 3½@3¾c.; North Carolina quarters at 3¾c. Peaches—Peeled North Carolina, choice, at 10@11c.; fancy at 12@13c.; extra fancy at 13@14c.; Georgia, choice, new, at 10@11c.; do. prime at 9½c.; unpeeled halves at 3@3¾c.; unpeeled quarters at 3c.; Delaware evaporated, peeled, at 24@26c. Choice pitted cherries at 10½@11c. Evaporated raspberries at 19c.; sun-dried do. at 11c. Blackberries—Prime at 8@8¼c. Whortleberries at 7½c.

PEANUTS.—Quotations at 4½@4¾c. for best hand-picked, and 3@3½c. for farmers' grades.

HAY AND STRAW—Quotations are for: Choice timothy hay at 90 cents; good at 85c.; medium at 80c.; shipping at 75@80c; clover mixed at 75@80c.; No. 1 rye straw at 90c short rye straw at 65@70c, oat straw at 50@55c.

SEED—Clover is lifeless; quoted nominally at 9@9½c. as to grade. Timothy is dull; quoted at $1 90@$2. Linseed nominal. Flax seed quoted at $1 80, delivered.

SUGAR—Centrifugal at 6⅛c; Muscavado at 5¼c.; Cut Loaf and Crushed, 7¼@7¾c; Cubes, 6¾@7c; Powdered, 6¾@7¼c; Granulated, 6¾c; Mould "A," 6¾c; Confectioners' "A," 6¼c; White Extra "C," 5½@5¾c; Extra "C," 5¼@5¾c. and Yellow, 5⅜@5½c.

TALLOW—Prime City quoted 5c. bid.

VEGETABLES—Potatoes—L. Island Rose, bulk, per bbl., $2 00@$2 25; New York Rose at $2 00@$2 25; Jersey Rose at $1 50@$1 75; Burbank, State, $1 75@$2. Prolific and Goodrich, per bbl., at $1 75@$2. Sweet potatoes, Virginia, at $1 50@$1 75 per bbl. Cabbages, per 100, at $3@$5. Onions—Yellow per bbl., at $2 75@$3; do. red, per bbl., at $2 50@$3. Turnips,—Russia, per bbl., at 50@75c. Marrow squash, per bbl., at 50c.; Hubbard squash, per bbl., at 75c. Cauliflower, per bbl., at $1 50@$2 50.

LIVE STOCK MARKET.

NEW YORK, SATURDAY, December 26, 1885.

BEEVES—Illinois steers, 1,133 lb, average, at $4 45; do. 1,115 lb, at $4 40; do. 1,227 lb, at $5; do. 1,233 lb, at $5; Missouri do., 1,110 lb, at $4 55; do., 1,064 lb, at $4 65, do. 1,149 lb, at $4 90; do., 1,300 lb at $5; do. 1,102 lb, at $4 75; do. 1,331 lb, at $5 25; do. 1,242 lb, at $5; Pennsylvania do. 1,569 lb, at $6; do, 1,590 lb, at $5 25; do. 1,533 lb, at $5 70; Virginia do., 1,403 lb, at $5 75; cows, 993 lb, at $3, and do., 1,046 lb, at $2 95.

CALVES—152 lb. at 8c.; do. 147 lb. at 4½c., and grassers, 250 lb., at 2½c.

SHEEP AND LAMBS—Canada lambs, 80 lb. average, at 6½c. per lb.; do. 77 lb., 6¼c.; Kentucky sheep, 96 lb., at $3 per 100 lb.; do. 93 lb., at $3 10; do., 127 lb., at $4; Pennsylvania do., 102 lb., at $4 40, and Canada do., 112 lb., at $4 05.

HOGS—Nominally dull and weaker at $3 75@$4 per 100 lb.

Miscellaneous Advertising.

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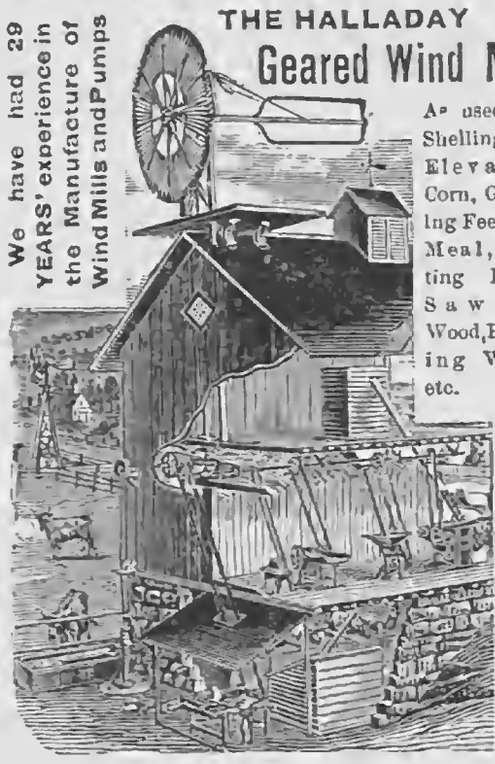

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It has never been surpassed as an increaser of pork and general system tonic. Aiding digestion, stimulating the biliary organs, preventing torpor and engorgement of the liver, and regulating the bowels, it removes and prevents the formation of disease germs, and preserves to the well bred hog his natural constitution. Where it has been fed to such animals in the prescribed quantities, and other directions faithfully observed, it has proved a thorough preventive against swine disease.

AS AN EVIDENCE OF FAITH

in my remedy I make the following offer:

I will insure herds of swine of not less than one hundred in number against disease, at a small fee per head, provided they are fed my remedy under my direction, and prove upon examination prior to contract that they are in a healthy condition, and are neither in-bred, close-bred nor the progeny of such.

1. I will forfeit $100.00 to any breeder whose offer to examine for insurance I decline, provided he forwards remittance to cover my expenses to and from location of hogs, or I fail to prove to the satisfaction of any disinterested party, that failure to respond to invitation is caused by prior engagement or by matters of at least equal importance.

2. I will forfeit $500.00 if I decline upon examination to insure such herds, if my judgment as to their condition of health is overborne by the result of an examination made by at least two properly qualified and graduated veterinary surgeons.

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Dr. Jos. Haas—Dear Sir: About a year ago our herd here numbered about 2,700 head. Disease broke out, and no remedy we had would arrest the trouble. Our losses were heavy and we had to give up feeding entirely for about two months. We then heard of your remedy and bought a trial lot, and began feeding again. We have used it constantly ever since. We have since April last received about 5,000 head of hogs into our herd and have not had a single death from swine disease. This is our experience. Our opinion is that the remedy has prevented disease, and we would not think of being without it. As an aid in fattening pork, we believe it to be good. On this point, however, we have not made an actual test, *as we would not risk feeding a pen of hogs without the Remedy.*

Yours very truly, WHITE & CO.

[N. B.—White & Co., since writing the above letter, have purchased $4.50 worth of the remedy.]

The remedy can be procured of all Druggists, or from my laboratory. Prices, $2.50, $1.25 and 50 cts. per package. 25 lb. cans, $12.50.

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For the Young.

THE NEW YEAR.

ANOTHER year has gone—and Father Time
Has placed within his dusty desk with care
Another manuscript; and prose and rhyme,
Both good and bad are sadly mingled there.
And now we take another sheet as pure
As is an angel's wing, and grasp our pen
To write the New Year's tangled record, sure
That all our writing will confront us when
The wing of years shall blow the dust away,
And from Time's pigeon hole the Master's hand
Shall take our manuscripts all stained and gray,
And read them so that all may understand.
Then let us write with patience through the years,
Lest all our work be blotted out with tears.

[UNCLE MARK.

THE NEW LEAF.

THE first of the year is always quite an eventful time with most of us. We are generally advised to "turn over a new leaf"—to take a new start, and try to make the new year better in every way than the old. This is good advice and I feel sure that all the Cousins, yes, and their fathers and mothers too, are thinking about the way they would like to have their "new leaf" read. Now it seems to me that we should turn this leaf over very carefully. We don't want to tear it out by any means, and we don't the edges soiled, or the corners turned down. There are plenty of things that we would like to have taken away—no doubt about that, but I am going to believe that they are comparatively few by the side of the good things that we would gladly have remain. Now, before we turn this leaf over let us take a good look at it, and even have it fixed so that we can turn it back, if we like, for study. I believe my boys and girls have tried pretty hard to do what is right. If they have been naughty at times, I know pretty well how sorry they have been afterwards, and I hope that will be punishment enough for them. We are all going to try and make 1886 just a little the best year we have ever known. Suppose we each promise to hunt out 12 ways in which we can please mother, 12 in which we can please father and 12 more for each brother and sister. Did you ever think that in this way we can make over 100,000 happy hours? We can all do it I know.

"Time is up" on the bean reports and next week I shall give the names of the winners. They seem to be pretty well scattered about the country. Uncle Mark is sorry he can't give prizes to all those who tried so hard.

Are you going to keep a diary this year? I think it would be a good plan. It is pretty easy to write up the first few days, but after that, unless we are careful, the work grows a little tiresome. I should say, begin with a very few lines at first, and spend a few minutes every night in thinking over what you have done through the day. In this way you can think up many things that will be useful some time.

NEW COUSINS.

OUR family is growing. May Gardner lives in Massachusetts. She writes about a cat named Sambo and a great dog named Bravo. They have a pet pony named Kitty that will follow them about for an apple. I saw a horse the other day which would do all sorts of tricks for a piece of a potato.

GRACIE C. UFFORD lives in Ohio. She has a pet sheep with twin lambs. Her little calf is called Mollie Garfield. She has a little kitten, too.

MARY M. BORK raised some seedling potatoes which were very nice. Besides these, she raised onions, beans, cabbage and lettuce. She has 17 chickens and sold six last year.

GUY O. HAMMOND comes all the way from Colorado. He raised 30 chickens last year, but the skunks caught most of them. His papa raised 32 pigs.

NANNIE DOTSON lives in Indiana. She lives on a farm of 80 acres. Her mother has been sick for five weeks and Nannie has been doing all the work. How glad she must be to think she can do much.

LETTERS FROM THE COUSINS.

DEAR UNCLE MARK: The frost killed my Lima beans before they got ripe; they were loaded with green beans. We had some very pretty flowers from the RURAL Garden Treasures, many of which we did not know the names of. In my last letter to you, I said some time I would tell you about the hens we keep; I will do so now. A year ago last Summer, we had 20 well-bred Plymouth Rocks, from one to three years old, which laid 1,945 eggs from March 1st to Nov. 1st, and they had but ordinary care. This season we kept 18 of last year's chickens, which laid in the same period of time, 1,645 eggs. Last June, Papa sent and got a setting of Wyandotte eggs and one of brown Leghorns. We got a pair of Leghorn chicks from the eggs, and eight Wyandottes, five of which were pullets, so you see we will have a variety for next year.

Your niece, MINNIE CRAIG.

Lapeer Co., Mich.

[The hens ought to have a premium I think. We shall want to know how the new ones do. U. M.]

DEAR UNCLE MARK: I took very good care of the Lima beans. I had 19, but we had an early frost here. As they did not ripen, I did not get any. I raised a nice little patch of pop-corn, and had some flowers. I hope Uncle Mark will not forget to tell us about his Mustang, for I love to hear stories. I go to school every day. There are not very many scholars there now, but there will be more when the winter term opens. We have a nice teacher; she teaches us to sing every morning. I have quite a distance to go. As it is so muddy, Pa has promised to let me ride one of our horses to school every day. She is quite small, so she will be nice. As there is a stable right by the school-house, she will have a nice place to stay during the day. I hope that Uncle Mark and the Cousins all had a nice Thanksgiving. Although it was so muddy we could not go to church, I had a very good time at home. We had all the pumpkin pie we could eat.

Windham, Ohio. ANNIE A. DAVIS.

[I shall surely tell the story. I am glad you are learning to sing.—U. M.]

DEAR UNCLE MARK: I am a girl 13 years old and wish to join the Y. H. C. Well, I will tell you how many turkeys we raised this year. We raised 60, and they look so nice. We have everything to make a home happy. Flowers and birds. We have 11 birds, and we have a bay window full of nice flowers. In the summer-time we have a large, round flower-bed full of Petunias. The brighter the sun the nicer they look. Uncle Mark, I would like to have you see our flowers; they are so nice; we have a Calla lily in bloom now. I can do all kinds of house work. We have a little rat dog; she is a little pet; when I go to hunt the eggs she takes hold of the bottom of my dress and follows me around. Ma and I put out a big row of strawberries; they are all alive. We had lots of pears this year, and not very many apples. My Pa has taken the RURAL two years. It has been snowing all day. Your niece,

Alexander, Ohio. ADA MOUNT.

[There must be plenty of music in your house. I am glad you have such a happy home.—UNCLE MARK.]

DEAR UNCLE MARK: We take the RURAL, and to say we like it, does not express our admiration for it. I am a farmer boy. Now you can better guess why it is that I want all the possible information poured in from all the ends of the earth. In view of what our fathers, grand and great-grandfathers have suffered from ignorance in farming, we are determined not to be cheated out of our precious rights, if perseverance fails not. After the pages have been written about our farming facilities, all is not told. We have vast water power for various machinery as well. For instance, my father owns one of the finest mill sites in the State, yet it has not been utilized in years. He offers it for sale, but I am more inclined to hold on and find a way some day, when I skip out of my teens, to make this wasting water turn a wheel that shall count units, tens, hundreds, thousands. I intended to have a chat with the Cousins, but I am such a new comer, and so backward in introducing myself, that you will please permit me to make my bow and retire, hoping to come again.

Jamison, Ala. KELLETT CAMPBELL.

[I am glad you came to see us. What a fine chance you will have some day to build up your State. There are hundreds of ways in which you can utilize that water power, at dairying, grinding grain, running a cotton gin, and still avoid the great noise and dust of a factory. Don't think there is nothing to be done in life but to make money, however. Build up a good character for the first thing. I am sure you will do that.—U. M.]

DEAR UNCLE MARK: I received the beans and let Mamma have them to plant. She planted them in May. They grew nicely, but the season was not long enough for them to ripen. I was very sorry. We have a white calf; we call her daisy. She was almost frozen to death when Papa found her. We brought her in the house. She staid in the house a week before the weather got warm enough for her to go to the barn. Her ears were frozen so that half of them came off; but it is a nice big calf now. My sister has a large white cat; his name is Pearl. He got to catching chickens this Summer. She wouldn't have him killed, so she kept him chained up like a watch dog until the chickens got big so he would not catch them. When she turned him loose he weighed 12 pounds. After we let him loose we saw him with seven rats in a very short time, and one day we saw him with four mice. Don't you think he is a noble cat? We have a little maltese kitten; his name is Frank. We have a large black dog; his name is Rover. Sometimes he goes with me to school; one day he stayed all day. We have two horses, their names are Frank and Fannie. I like Frank the best for I can ride on his back. If any one gets on Fannie's back she will kick up and try to throw them off. HENRIETTA CARRIER.

Sullivan Co.

[What a shame it was that Daisy suffered so. I hope you take the best care of her. That is surely a noble cat. He earns his own living—that is more than some men can say. No wonder you like Frank best. We all like good nature.—UNCLE MARK.]

DEAR UNCLE MARK: I would like to belong to the Y. H. C. We have been interested in the new Croton aqueduct all Summer, as we live about a mile from a shaft. They have been using a 500 horse-power engine and now they are putting in another of the same size. The shafts are from one to two miles apart, and worked out like a mine in both directions until they meet, This shaft is number 17, about 93 feet deep; they have thrown out a small mountain of broken rock. Brother Fred and I went down in the shaft on the elevator one day. We saw the men at work by the electric light. They use steam drills from two to eight feet long. The rocks are blasted by dynamite exploded by electricity, and they work night and day. Sometimes it is wet down in the shaft. The workmen take turns, ten hours in the wet, and 11 hours in the dry. They use about ten tons of coal a day. I will try to write again, but school takes most of my time. Yours truly,

WILLIE E. BENJAMIN.

Westchester Co., N. Y.

[Hope you will write again, Willie. I wish we could all go to see the work.

UNCLE MARK.]

DEAR UNCLE MARK: I am 12 years old. Two years ago this Fall pa said after the wheat was sown he would get me a paper. He sent and got the RURAL NEW-YORKER. I like to read the letters from the Cousins. I would like to join the Y. H. C. I planted all the seeds. Thinking this letter is getting too long I will close. Your nephew,

JOHN W. WORTHINGTON.

[Don't be afraid of writing too much, John. Uncle Sam will take much more than that for the same money. I am glad you can join us. —UNCLE MARK.]

DEAR UNCLE MARK: I should like to be one of the Cousins. I had a garden last Summer. I had two sun flowers, some beans, some potatoes and some radishes. I earned 75 cents last Spring making strawberry boxes for papa. I am nine years old to-day. I should like some of your Garden Treasures when they are ready. Your nephew, SHIRLEY WEEKS

Lyons, Wis.

[You will soon be quite a business man Shirley. I am glad you want to join —U. M.

DEAR UNCLE MARK: We are two little sisters. We enjoy reading the letters from the Cousins, and we would like to join the Y. H. C. Papa planted the Garden Treasures you sent him last Spring, but the woodchucks ate all the peas and beans when they first came up. The Rural Corn grew nicely, but none of the ears got ripe. We have for pets two kittens and four canary birds. We have picked up a good many bushels of apples this Fall, also walnuts and chestnuts, which we expect to enjoy next Winter. We would like to have you come and help us eat them. Well we must close for fear this will be too long

CARRIE & NELLIE CONVERSE.

Otsego Co., N. Y.

[Those woodchucks deserve to be killed. I wish I could come.—UNLCE MARK.]

Miscellaneous Advertising.

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We doubt if there is, or can be, a specific remedy for rheumatism; but thousands who have suffered its pains have been greatly benefited by Hood's Sarsaparilla. If you have failed to find relief, try this great remedy. It corrects the acidity of the blood which is the cause of the disease, and builds up the whole system.

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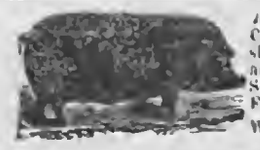

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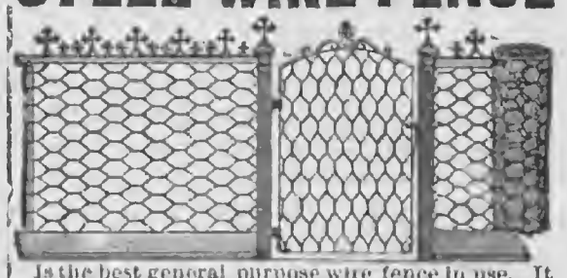

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PERSONALS.

BLAINE is interested in a new bonanza just struck near Leadville. Ex-Senators Chaffee and Tabor are associated with him.

AT a charity fair in Berlin the Crown Princess of Germany has been selling sausages at $35 apiece and sponge cake at $1 a slice.

CONGRESS has granted a pension of $5,000 a year to Mrs. Grant, and the President signed the bill so that the measure became a law before Christmas Day.

The late Marshal Serrano, of Spain, during his political career saw 84 changes of Ministry in that country, 40 rebellions and 12 changes in the head of the State.

POPE LEO is said to have an income of $1,500,000 annually, and it is stated on the authority of Monsignor Capel that the Pope's personal expenses are limited to $2.50 a day.

PRINCESS LOUISE and the Marquis of Lorne are preparing for Good Words an article on the Canadian Pacific Railway, the Princess contributing the pictures and Lord Lorne the letter press.

SENATOR HAWLEY, of Connecticut, has just paid $10, balance of a bill for his schooling, sent up from North Carolina the other day by his old schoolmaster, Mr. James Patterson, of Lumberton.

GENERAL SHERMAN remarked recently to an interviewer: "Now, look here, there's been enough written and said about General Grant to give him his proper place in history. You might as well question the greatness of Washington."

WHEN the King of the New Zealand Maoris was in England he promised to work for temperance reform among his people. He seems to have kept his word, for it is now announced that more than 11,000 of his subjects wear the blue ribbon of teetotalism.

"THE dramatic incident of my life," said Robert Garrett the other day, "was the sudden death of Vanderbilt in my presence. I shall never forget it. It came like a fearful dream, and so swift was the change from life to death that it could scarcely be realized."

MR. BERGH is opposed to inoculation for hydrophobia. He thinks a better, surer remedy than M. Pasteur's virus is vapor baths. He knows of cases in which the patient has had the poison sweated out of him be this means.

MISS MAY ENDICOTT, the only daughter of the War Minister, is very English in appearance. She drives in a drag with a London coachman in the front seat, and wears a close-fitting suit of blue flannel, with cap to match, and poses *a la* Langtry. She has a brilliant color in cheeks and lip, and resembles, only she is fairer, the famous Jersey beauty.

MR. E. A. WALKER, the statistician of the New York Produce Exchange for more than 16 years, will leave the Exchange on the first of February and will be succeeded by Mr. J. C. Brown, who has been connected with the Bank Department at Washington, and who will work for $3,000 a year, $1,000 less than his predecessor got. Much discontent in the Exchange.

JOAQUIN MILLER is spending the Winter in Washington, engaged in literary work. He has an intense hatred of dogs. A visitor who recently called upon him was accompanied by a large English mastiff. "Take that beast out!" exclaimed Miller, furiously. "There was but one nation (the Greeks) that knew how to properly treat a dog, and they put him at the gates of hell."

DURING the last year Messrs. Armour & Co., of Chicago and Kansas City, killed a little over 1,100,000 hogs and 300,000 cattle. They have on their pay-roll at the stock-yards 4,000 men, and during the winter season frequently exceed that number. Their capacity for slaughtering hogs at their packing-house in Chicago alone is 12,000 per day, their usual run being about 5,000 hogs per day.

LORD TOLLERNACHE, now in his 80th year, is the model English landlord. His estate of 46,000 acres in Cheshire has been cut up into farms averaging 200 acres each, because he thinks a family couldn't do well on a smaller holding. He has built or rebuilt from 50 to 60 farm houses at a cost of $740,000, each costing $14,000, and in addition he has built 200 cottages for laborers. During all the recent agricultural distress he has had neither a vacant farm nor a tenant in arrears.

Miscellaneous Advertising.

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that pan out richly, are not so abundant as in the early California days, but those who write to Hallett & Co., Portland, Maine, will, by return mail, receive, free, full information about work which they can do, and live at home, that will pay them from $5 to $25 per day, and upwards. Either sex, young or old. Capital not required; you are started in business free. Those who start at once are absolutely sure of snug little fortunes.

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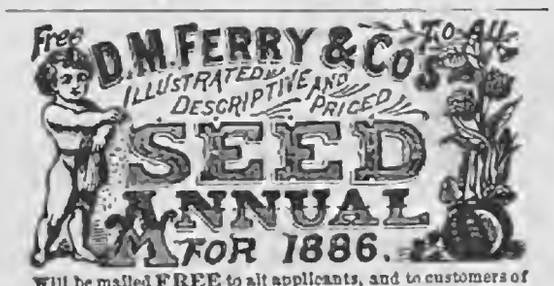

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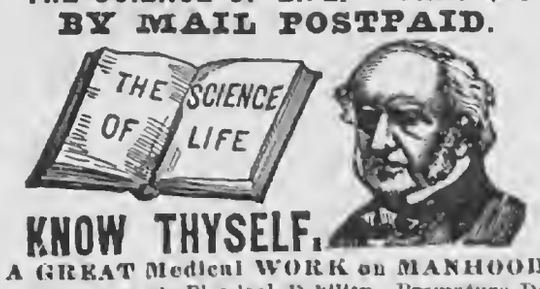

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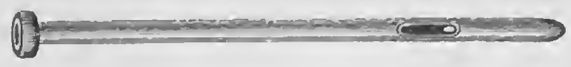

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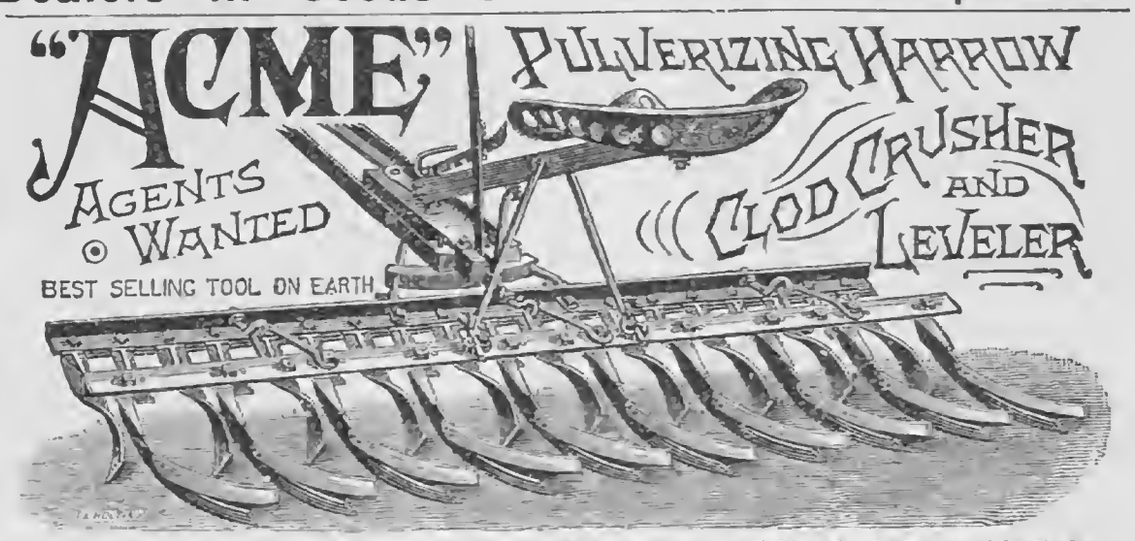

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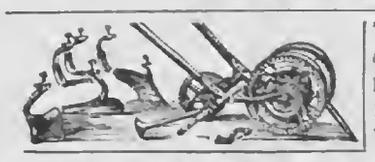

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Humorous.

"So the missis is to be married, eh?" said the gardener to the cook. "Yis; and in illigant stoyle, too. She's goin' fer to have a dhress thray yarruds long, and four pall-bearers ter kerry it.'

A GENTLEMAN bought a newspaper, and tendered in payment a piece of 40 sous. The newspaper woman; "I haven't the change; you can pay me as you pass along to-morrow." The gentleman: "But suppose I should be killed to-day?" The newspaper woman: "Oh, it wouldn't be a very great loss."

A SIMPLE-HEARTED and truly devout country preacher, who had tasted but few of the drinks of the world, took dinner with a high-toned family, where a glass of milk punch was quietly set down by each plate. In silence and happiness, the new Vicar of Wakefield quaffed his goblet, and then added: "Madam, you should daily thank God for such a good cow."

"Do I love George," mused Clara, softly, "or is it simply a sister's affection that I feel for ——" Just then Bobby rushed noislessly into the room and interrupted her sweet meditations. "Get out of here, you little brat!" she shouted, and seizing him by the arm she shot him through the door. "Ah no," she sighed-as she resumed her interrupted train of thought, "my love for George is not a sister's love. It is something sweeter, purer, higher and holier."

"I WANT a lawn mower," said a citizen yesterday, as he stepped into a hardware store, "Any special kind you prefer?" inquired the dealer. "No; I don't know much about lawn mowers myself, but I want the noisiest one that's made. I've got a darned mean neighbor, whose children worry the life out of me with their whooping and yelling every night till ten o'clock. I want a mower that can discount the tannery whistle, and I'll whoop it up every morning from four o'clock till breakfast, and wake up the rats. When night comes they will be sleepy enough to go to bed at a decent hour." A machine was picked out. "Never mind the oil-can," said the citizen, as the merchant began to tie one to the handle. "I ain't going to use any oil. Noise is what I'm after."

JOHNNY DID NOT GET A CHRISTMAS SLED.

Miscellaneous Advertising.

SILVER CREEK, N. Y., Feb. 6, 1880.
GENTS—I have been very low, and have tried everything, to no advantage. I heard your Hop Bitters recommended by so many, I concluded to give them a trial. I did, and now am around, and constantly improving, and am nearly as strong as ever.
WILLIAM H. WELLER.
MONROE, MICH., Sept. 25, 1975.
SIRS—I have been taking Hop Bitters for inflammation of kidneys and bladder. It has done for me what four doctors failed to do. The effect of Hop Bitters seemed like magic to me. W. L. CARTER.

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GOOD NEWS TO LADIES.
Greatest inducements ever offered. Now's your time to get up orders for our celebrated Teas and Coffees, and secure a beautiful Gold Band or Moss Rose China Tea Set, or Handsome Decorated Gold Band Moss Rose Dinner Set, or Gold Band Moss Decorated Toilet Set. For full particulars address
THE GREAT AMERICAN TEA CO.,
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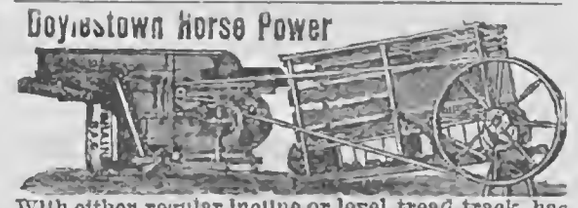
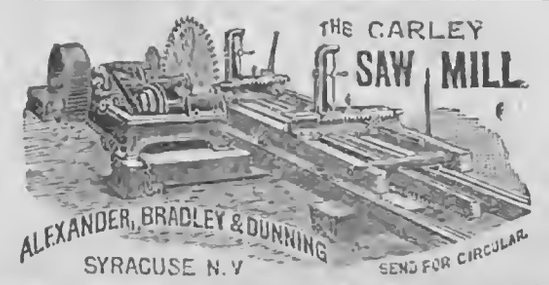
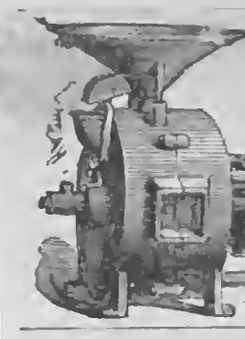

With either regular incline or level tread track, has the simplest and most efficient governor made. The Doylestown Junior Thresher and Cleaner has no superior. For Illustrated Catalogue address sole manufacturer, DANIEL HULSHIZER, Doylestown, Bucks Co., Pa.

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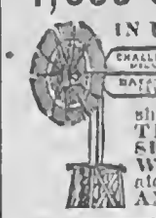

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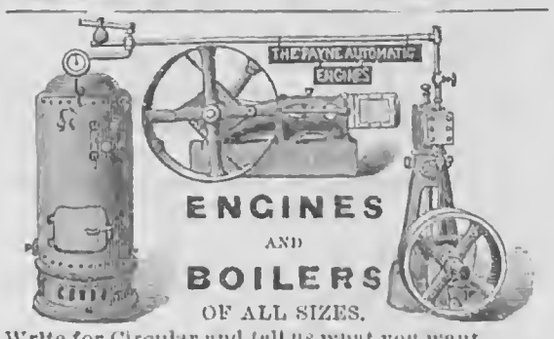

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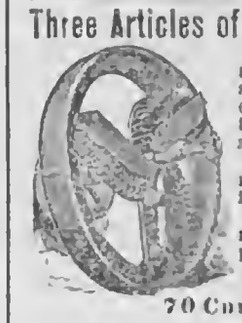
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Cows and Heifers Bred to best Netherland and Aaggie Bulls.
The average Records of a Herd are the true test of its merit.
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MILK RECORDS,
Five Cows have averaged over 19,000 lbs. in a year. Ten Cows have averaged over 18,000 lbs. in a year. Three Cows have averaged over 20,000 lbs. in a year.
We know of about 30 Cows that have made yearly records exceeding 16,000 lbs., and 14 of them are now in our Herd and have averaged over 17,500 lbs.
Twenty-five have averaged over 16,000 lbs. in a year. Sixty-three, the entire number in the Herd that have made yearly records, including fourteen 3-year olds and twenty-one 2-year olds, have averaged 12,785 lbs. 5 ozs. in a year.
BUTTER RECORDS.
Five Cows have averaged 20 lbs. 7 ozs. in a week. Nine Cows have averaged 19 lbs. ½ oz. in a week. Fifteen Cows have averaged 17 lbs. 6 ozs. in a week. Six 3-year olds have averaged 14 lbs. 3 ozs. in a week. Eleven 3-year olds (the entire number tested) have averaged 13 lbs. 2 ozs. in a week. Six 2-year olds have averaged 12 lbs. 1⅓ ozs. in a week. Fifteen 2 year olds (entire number tested) have averaged 10 lbs. 8 8-10 ozs. in a week. The entire original imported Netherland Family of six cows (two being but three years old) have averaged 17⅔ lbs. in a week. This is the Herd from which to get foundation stock. Prices low for quality of Stock.
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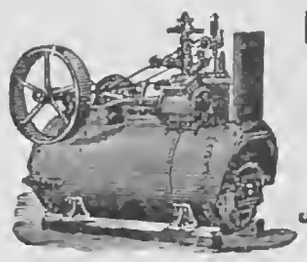
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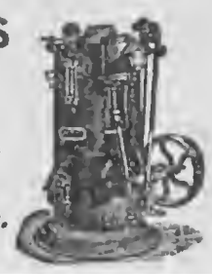

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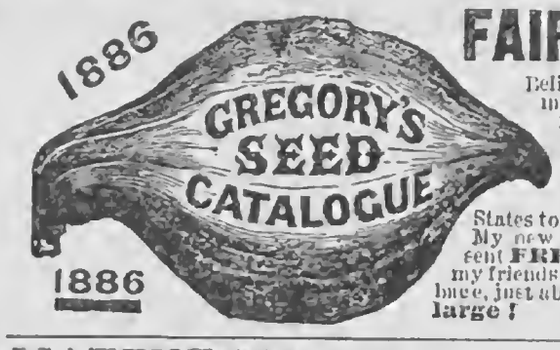

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Believing that if a man has dealt squarely with his fellowmen his patrons are his best advertisers, I invite all to make inquiry of the character of my seeds among over a million of Farmers, Gardeners and Planters who have used them during the past thirty years. Raising a large portion of the seed sold, (few seedsmen raise the seed they sell) I was the first seedsman in the United States to warrant (as per catalogue) their purity and freshness. My new Vegetable and Flower Seed Catalogue for 1886 will be sent FREE to all who write for it. Among an immense variety, my friends will find in it (and in none other) a new drumhead Cabbage, just about as early as Henderson's, but nearly twice as large! James J. H. Gregory, Marblehead, Mass.

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THE RURAL NEW-YORKER

A JOURNAL FOR THE SUBURBAN AND COUNTRY HOME.

VOL. XLV. No. 1876. NEW YORK, JANUARY 9, 1886. PRICE FIVE CENTS. $2.00 PER YEAR.

Entered according to Act of Congress, in the year 1886, by the Rural New-Yorker in the office of the Librarian of Congress at Washington.

The Herdsman.

JERSEY BULL, DUKE OF KENESAW NO. 11959.

IN Fig. 11 is shown the Jersey Bull Duke of Kenesaw, the property of Mr. J. I. Chamberlain, Marietta, Georgia, and generally considered the finest bull of the breed in that State. His sire was the Earl of Logan 6,179, and his dam Maggie of the Grange 8323. He was dropped January 17, 1883, and weighed 11,130 pounds on August 3. Jerseys are very popular at the South, where quite a large number have been introduced, especially into Kentucky, Georgia, Mississippi and Texas. The genial climate of that section suits them admirably, being not unlike that of their native island, especially in the northern tier of States.

A COW THAT PAID.

ON October 15, 1884, I purchased one of the most promising of 16 cows. She had a fine Flanders escutcheon of the first order, a square and well-spread udder, and large milk veins. The only objection to her was that she was too small, weighing only 900 pounds on December 4, 1885. She had been giving milk since March 1884, as I understood, and from October 15, 1884, to April 8, 1885, when dry, she gave 2,150 pounds, that sold for $22. May 14, 1885, she dropped a calf, which I sold for $1.50, as she had been bred to a poor bull. From May 14 to October 15, 1885, she gave 4,024 pounds of milk, that sold for $21.37. This was a total of 6,174 pounds of milk for one year, that sold for $42.87. Add to this the value of the skim milk, 4,040 pounds, at, say, 20 cents per 100, and we have the total value of her milk to be $52.71. Suppose, now, that at the end of the first year I had sold her to the butcher for 2½ cents per pound, or $22.50, I would have remaining, after paying interest at eight per cent., $28.21, with which to pay for feed and labor. Now, it costs not more than $16 per year to feed such a cow, and there remain $12.21 to pay the labor of milking. In addition, we have also the value of the manure, which in Iowa is no small item.

The problem is quite different when considering her milk yield for five years and distributing the loss by selling for beef to each year. This would amount to only $5.22 per year, and leave a net profit of about $23.59 after deducting all expenses that have occurred.

There are many cows in this and other localities weighing 1,000 pounds and selling for $30 to $25, that will not give over 4,500 pounds of milk per year. They require just the same attention and feed and barn room as a good cow, and figures will show that they are not the cows that pay for three or five years.

Jesup, Iowa. J. N. MUNCEY.

Sheep Husbandry.

Notes from the Rural's W. N. Y. Farm

DOWN MERINO *vs.* MERINO DOWN.

WE suspend the consideration of the regular division of our subject this week, to notice a criticism made by the Michigan Farmer on our remark that, "all things considered, the Down Merino was the ideal lamb for winter feeding," in which our respected contemporary says that "the Down sheep puts its fat on the outside next the skin," and that "while every one admires a fat carcass of mutton, but few want to buy it," and that a "cross-bred Merino-Down will give a more salable carcass than even a pure-bred Down." That the writer of these quotations has had no experience in feeding or marketing lambs, and that he is so anxious to show his smartness as to do so at the exposure of his ignorance, is shown by the utter falsity of each of the statements we quote. It is a fact that long-wool sheep do put their fat on the surface, both inside and outside, in excessive abundance, while their meat does not contain enough to give the beautiful marbling so much sought; and that the lean in their carcasses is in unduly small proportion. But the Downs, and particularly the South Downs, are everywhere the ideal of a perfect mutton sheep, and unless excessively fattened, the fat is finely mixed through, and with the lean in the most perfect proportions, beautifully marbling the same, and while the carcass is nicely coated with fat, it is never so in excessive proportions. This is the unanimous testimony of every author on sheep husbandry, and is shown by every Christmas market in this country.

That people do admire fat mutton and buy it as well, is proven by the fact that in New York and every other market, the fat carcasses always sell first, and at a price several cents per pound higher than the lean. Even the very fat carcasses of long-wool sheep sell for an extra price over the lean ones. It may be, and no doubt is, a fact that such meat is not so profitable for the consumer, and that a larger proportion of it is thrown away; but what care we who produce the meat, what becomes of it after it passes out of our hands and we have the money for it? We feed lambs for the profit, and a difference of two or more cents per pound makes a great difference in our profits, and so long as those people with abundance of money prefer it, and are willing to pay for it, we say, let them have it; even if it were a fact that the Downs were *all fat*. But this last proposition is the most mischievous of all, and will work utter failure and loss to any who read and may be induced to follow it. While we advocated the Down-Merino cross as the best for producing feeding lambs, we did not claim for such, the production of a grade of meat superior to the pure Down. Such would not be the case, as no better mutton can be produced, or desired than that grown inside of a *pure Down skin*. It was other considerations, as then stated, that led us to recommend that cross as the "ideal lamb."

But a Down-Merino and a Merino-Down are very distinct crosses and produce very different results. While the use of the Down male on the Merino female (a Down-Merino cross) would give a quick-growing, large-bodied, short-legged, hardy, heavy-fleeced and long-wooled lamb, having a mother that will give more and better milk for her size and for the food consumed than any other; the use of a Merino male on a Down female (a Merino-Down cross) would give a lamb with directly the opposite characteristics, and the mother will be found a comparatively indifferent milker, more inclined to grow and fatten herself than to force the lamb to do so. We have tried both these crosses, and know from personal experience the worthlessness of the latter. As poor as we regard full-blood Merino lambs for winter feeding, we should much prefer them to those bred by such a cross, and our friendly contemporary, if it really regards the success of its readers, should hasten to correct its statements, and advise them under no circumstances, to ever make a "Merino-Down cross."

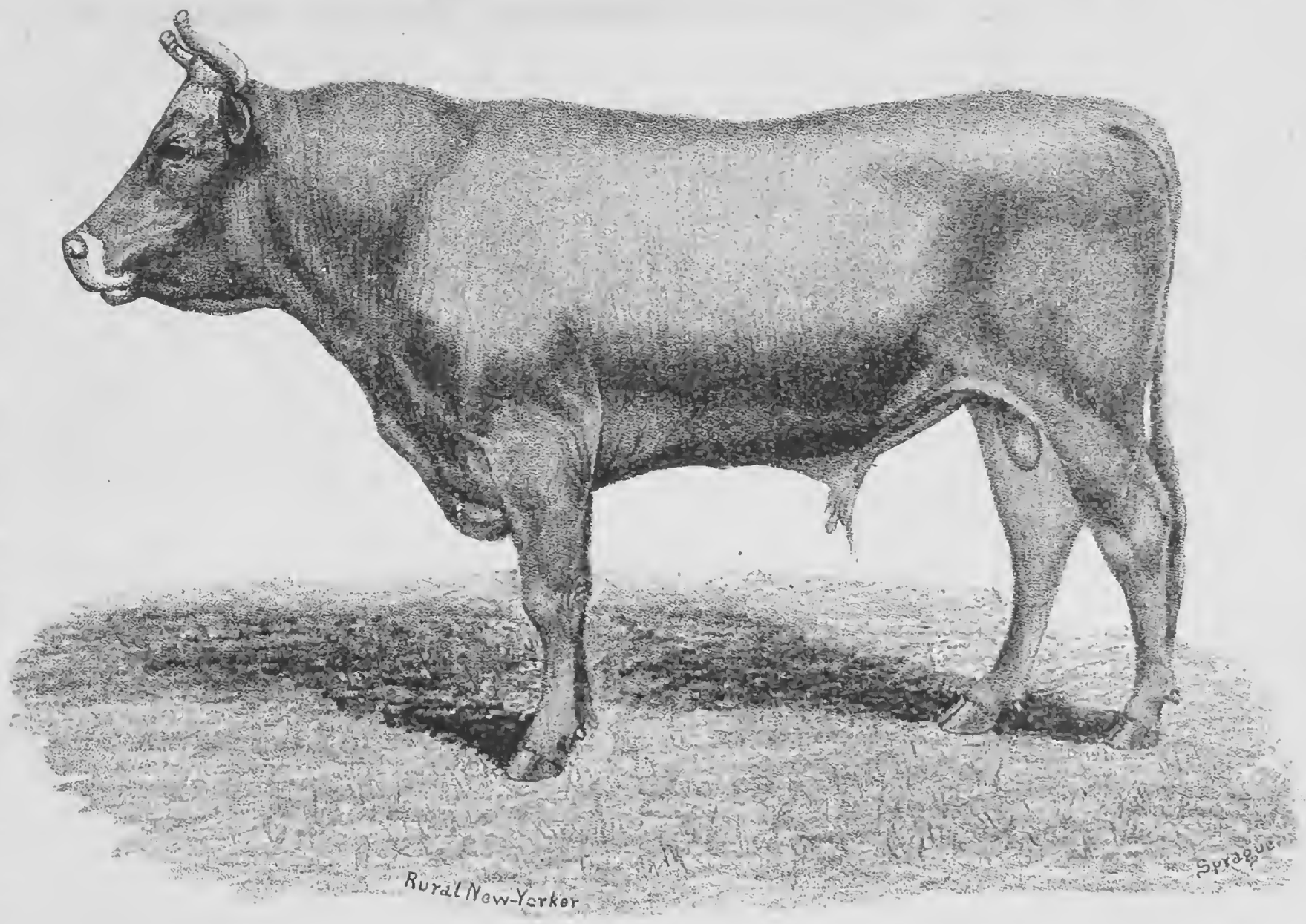
JOTTINGS.

We had a field of corn planted with purchased seed, which for some reason did not come up well, and as a consequence, the frost caught it before it was fully ripe. We fed these stalks with the soft corn to the cows, and feed what we would with them, there was a taste to the butter, which we could recognize and which we did not like, and since we changed to good clover hay, and mangels in place of the corn-stalks, there is a marked change in the butter.

We are satisfied that there is no better food for the production of gilt-edged butter than mangels or carrots and plenty of bran, oil meal and corn meal with early-cut, well cured clover hay. You can almost smell the fragrance and taste the nectar of the clover blossoms.

Our sheep were never doing better. The lambs are now dropping lively and some of the older ones are ready for the market as soon as we think it best to send them.

Oil meal is cheaper this Winter than we ever knew it before, and we wonder our farmers do not feed every pound of it, keeping it at home to fertilize our farms instead of letting hundreds of tons every week go abroad to enrich the farmers and the fields of Great Britain.



JERSEY BULL, DUKE OF KENESAW, 11959. Fig. 11.

Dairy Husbandry.

SALT AND SALTING BUTTER.—NO. 3.

Faulty method of salting; the proper way; treatment of the salt.

T. D. CURTIS.

IN previous articles we have spoken of the

desirable qualities and pointed out the objectionable features of salt for dairy purposes, referring also to the evils of carelessness in handling, whereby dirt and foul odors are imparted to it. We now come directly to the operations of salting dairy products. The usual method has been to take butter out of the churn, place it upon the worker, give it a thorough cutting, rolling and rubbing to get out the butter-milk, then to sprinkle on the salt and to proceed as soon and as rapidly as possible with the work of grinding it into the butter. After the strength of the operator was exhausted, the butter was set aside for 24 hours for the salt to dissolve, and then the butter was given another working to get out the surplus brine! If the salt happened to be fine, even-grained and freely dissolving, a large proportion of it was run away in the brine, and then it was charged with lacking the requisite strength, or accused of dissolving too easily and wasting! The butter—well, the butter was made into grease, which might be tolerably palatable, if immediately consumed, but quickly parted with its volatile flavoring oils, or had them converted into offensive compounds by uniting with the gases of the atmosphere! And even now there are those stupid enough to talk about the waste of salt by its dissolving too quickly, when in fact this is a most desirable quality. But there are those who know better, and dairymen who practice a more desirable method of salting their butter. Since the adoption of the practice of not gathering the butter in the churn, but leaving it in a granular condition—some say as fine as wheat, and others as fine as mustard seed—the problem of getting out the butter-milk and salting the butter has been much simplified.

The butter is now generally washed in the churn by pouring in cold water—which should be as low as 55 degrees, if not 50—agitating the churn a little and then drawing off the water. This process is repeated until the water runs clear, and if one washing is in weak brine it will greatly aid in freeing the butter from caseous matter. After washing, let the water drain off sufficiently, which it will generally do in half an hour or so, sprinkle on the salt and stir it in gently with a ladle or by gently turning the churn. At the temperature of 55° or below, the butter will not pack, so the salt—especially if it freely dissolves and becomes brine—can easily be worked into the butter in a very few minutes. There is no grinding, crushing lever-moving over the butter, but sweet brine, aided by the stirring and capillary attraction, penetrating all through the mass, and covering every particle, however minute. As soon as the salt is dissolved, the butter is evenly salted as no amount of lever working could do it with undissolved salt, or with the butter gathered into a solid mass. Butter so salted into the granular condition may be at once taken from the churn, and packed directly in the tub, the packing pressing it together in a close body. Or it may be taken on to a worker, and gently, very gently, pressed together and then packed. No second working is required, and it is already as evenly salted as it ever can be, and a second working is even more disastrous to the texture than the first working. After the butter has once settled together and become "set," as it were, like mortar, working it rapidly deteriorates it and makes it oily, which injures the keeping quality, and hastens the time when it gets "off flavor."

The foregoing is feasible in small dairies, In large dairies and factories, it might be difficult to salt in the churn or stir in the salt as directed. But the process of churning and washing may be the same in all cases. Where there is a large amount of butter—well cooled down, of course—it may be scooped out of the churn and placed on the working table, there spread as evenly as possible, and the required amount of salt sprinkled on. Then take a rake—a smooth, common hay-rake is good enough—wet it first in hot, then in cold water, and proceed to rake in the salt by beginning at one edge, and carefully drawing a small amount of the granules toward you just a little. Then reach out and take a little more, thus proceeding until the whole mass has been gone over. Next, begin on another side and repeat the operation, continuing the stirring until the work is done. It will not be a difficult task to decide when the salt is all dissolved and sparkling in the form of brine on every particle of butter. The work is now completed and the butter is ready for the tub. It is a matter of little consequence whether it is first pressed together and then packed, or the pressing together is done as the packing goes on. If first pressed together, let it be carefully done without working. In this way, perfect grain and even salting are secured; and if the rest of the work is perfectly done, perfect butter is the result.

Too much attention cannot be given to every operation in butter making, and salting is one of the most important.

NEW YORK STATE DAIRYMEN'S ASSOCIATION.

Composition of milk; puzzling experiments at the New York Experiment Station; influence of soil on milk; milk a perfect food for infants only; evils of unclean stables; stable floors; need of pure-bred bulls; influence of food upon milk; skim cheese; work of the Dairy Department; dairy management.

[RURAL SPECIAL REPORT.]

THIS association met in annual convention, at Jamestown, on the 15th, and closed its sessions on the afternoon of the 17th of December. After the preliminaries, Prof. J. T. Edwards read a paper on the composition of milk. It is a mixture of liquid and solid compounds, extremely sensitive to outside influences. Only about one-half of one per cent. of the mineral portion of it is derived from the soil. The rest is elaborated from the atmosphere through the plant food of the cow and her own organism. It used to be considered a product of vital chemistry, but its constituents are so well known now, that the chemist can produce a very close imitation of it. During the siege of Paris by the Germans, artificial milk was produced for the use of infants. It was composed of 87 parts of water, four parts of olive oil or horse fat, four parts of sugar, four parts of egg albumen or gelatine, one half part of common salt, and one half part of carbonate of soda. This sustained the lives of the little ones fed on it. This is more than can be said of some of the milk sold in our cities. Immature corn-stalks the Professor considered very objectionable feed for milch cows. He had noted that bowel complaints and mortality among infants prevail at the season when dairymen are soiling with sowed corn. Immature corn-stalks are bad, whether fed green, cured, or ensilaged. They do not digest well, and produce a feverish product.

Dr. E. L. Sturtevant said he knew less about milk than he formerly supposed he did. Four years of experiment, at the Station, with contradictory results, only point the way for further investigation, without reaching any definite conclusions. He has found that bacteria, one way and another, play very important parts in the conduct of milk. He had fed putrid food without any apparent results, and had been greatly perplexed with milk produced from sound food and under what were supposed the best conditions. But examination showed there were bacteria floating in the atmosphere of the stable, and these were traced to some decaying matter that had escaped observation. He found the same results in the milk product, from feeding four pounds of corn-meal per day with hay, that he did from feeding 40 pounds of turnips with hay, but in the latter case more hay was consumed. He has found that artificial digestion of foods corresponds very closely with the costly German experiments in feeding, and hopes soon to furnish the farmers reliable feed tables indicating the value of different foods. But there is great variation in animals; and the same feed and care do not always produce like results with the same animal. One cow will drink 150 pounds of water daily, while another cow, standing by her side and treated in the same manner, will drink only 40 pounds. He did not say whether there was any correspondence between the flow of milk and the amount of water drank. Dairymen should test every cow. He had no doubt that all the profits of many herds came from a few of the herd, the rest reducing instead of increasing the profits. He had found milk testing chemically six per cent. of fat, that would not yield more than two or three per cent. of butter, while milk showing only four per cent. of fat, would churn four and a half per cent. of butter. The water and albuminuous matter made up the excess of weight.

Prof. L. B. Arnold commented upon the fact of milk containing only one-half of one per cent. of minerals, as indicated by Prof. Edwards. Yet the soil has wonderful influence on the quality of the feed it grows, and hence, on the quality and flavor of the milk resulting. But small as the amount of mineral matter is, it is very essential, to make milk a perfect food. It is not a perfect food, however, for any except the young, and for them but for a short period. It is not suited to adults as an exclusive diet, for it does not contain enough of the respiratory or heat-producing elements, while it has an excess of nitrogenous matter not needed for tissue-building, and of minerals not needed for bone-building. This excess soon clogs the system or breaks down the organs exercised in throwing them off as superfluous material. Skim-milk is still worse for elderly people, because deprived of its fats. The butter fats are equaled by no others in aiding digestion. The volatile oils which they contain are very penetrating, and help wonderfully to break up and dissolve the solids—especially the caseous ones. Milking cows in ill-ventilated stables is not only favorable to the introduction of bacteria into the milk, but to the absorption of bad odors. These are introduced, not so much by being absorbed by the milk, as by being breathed by the cows, thus going into general circulation and tainting all their fluids, milk included. Fifteen minutes in the stable, inhaling the odors, are sufficient time in which to impart their smell and flavor to the milk. He had known milk tainted and flavored with onions by the cows feeding in the pasture by the side of an onion patch. In ventilating a stable, it should be so done that the air will come first to the cow's head and pass out at the rear of her, instead of coming in, as is usual, through an open window behind her, carrying along with it the odors of her droppings to be inhaled at every breath.

Prof. I. P. Roberts recommended concrete—one part of Portland cement to two of sand—for the floors of farm buildings. But he would have the cows stand on wood, as more comfortable; and to prevent the planks from rotting, he would imbed them in an inch or two of cheap salt. The floor of the dairy house at Cornell University slopes from all sides to a sewer pipe which receives and runs off all the liquids. Wood cannot be kept clean enough for the floor of a dairy house.

Hon. Willis P. Hazzard recommended dairymen to purchase blooded bulls for use in grading up their herds. In no case should a grade bull be relied on, as he may grade down instead of up. Be sure that the bull is of a good milking family, and has good points.

Prof. G. C. Caldwell discussed the influence of food upon milk, He said, anything held in solution in the blood may be carried into the milk, though it appears probable that milk is the immediate product of the tissues of the milk glands which are broken down and assume a liquid form. The blood, however, may be no more watery, on watery food, than on dry food. But insufficient food thins the blood and also reduces the quality of the milk. Some diseases have a similar effect. In late trials, it was shown that the relative proportions of the fats and albuminoids may be changed by food. By feeding palm-nut oil, there was an increase of the fats, but none of the caseine. The same feed and care do not always produce the same result. It is safe to increase the food as long as there is any corresponding increase in the amount and quality of the milk yielded. Good silage, fed in a proper manner with other food, will not injure the milk. Chemists are experimenting on the effects alkaloids have on milk; and though they have still much to find out, they will always be valuable aids to the dairymen. Aromatic grass might be used to flavor milk, but the result might not always be favorable to them. Sweet clover is not relishable by cows and it affects the milk badly. Grown in mass, cut early and properly cured it is more nutritious, and might have a more favorable effect on the milk product.

B. D. Gilbert said the manufacture of skim cheese had hurt the reputation of our goods, and fine goods are now sought in Canada by foreign buyers. But Canada cheese last season was made too dry, and over-salted. There was an increase in home production during the past season, but retail dealers should be content with smaller profits than they are wont to demand.

Prof. Arnold said the lack of home consumption, was owing to the poor quality of the cheese put upon the retail market. He was in favor of a State appropriation to employ a competent cheese-maker to travel over the State and instruct the cheese-makers, as has been done in Canada and in some of the European countries.

Dairy Commissioner Brown rehearsed the work of his department. The duty has devolved upon him to ascertain just what statutes are in force since the decision of the Supreme Court in the case of Marx *vs.* The People, and how far they have been modified by that decision. He now has over 200 cases on his hands, and new ones are constantly arising. This State has over $200,000,000 invested in dairying, and the annual production is not less than $60,000,000, and he thinks so large an industry is entitled to its share of legislative care. Some might think the appropriation of $50,000 large. So it is; but if it were $120,000 he could do more effective work, and the share of the tax which would be paid by a farmer owning a $5,000 farm would be only 20 cents—the equivalent of a pound of butter, or of two pounds of cheese, or of two 10-cent cigars.

Major Henry E. Alvord protested against our exhaustive system of farming, which gives us a little present gain at the expense of our ability to produce more wealth. He considers stock-raising and dairy farming the best for the farm and the farmer. We should improve our stock as well as our farming. We ought to bequeath to posterity something better than exhausted farms and worn-out tools.

Jessie Owen gets 250 to 278 pounds of butter per year from a cow. He has grade Jerseys. He thinks an acre of corn-stalks worth as much as an acre of hay. He cuts and cures the corn-stalks as soon as the ear is formed. His grass is cut early, and cured as little as possible and have it keep. He gets better results from winter milk than from summer. His stables are kept at 45°. Spring water is given the cows once a day. He raises 10 calves a year from his best cows. They suck only a few times, and then they are fed skim-milk. At the end of a month, he gradually drops off on the milk and feeds hay and ground feed. The calves are seldom troubled with scouring. His cows are fed oats and corn ground together in equal proportion. Of this meal, they are given, mixed with bran, eight quarts a day He sets his milk in a dry cellar the year round. In Winter it is heated to 60° or 65°.

The election of officers resulted in the choice of Hon. Harris Lewis, Frankfort, for President: Maj. Henry E. Alvord, Houghton Farm, first vice-President; and Hon. Josiah Shull, Ilion, Secretary and Treasurer.

The Poultry Yard.

PROFITS DERIVED FROM EARLY CHICKS.

Losses of chicks; necessity of warmth; gain in weight of different breeds; results of an experiment; when to market.

P. H. JACOBS.

THESE depend upon the markets and the locations of the poultry farm. Experiments have shown conclusively that up to the weight of three pounds, the cost of production is five cents per pound. But this may be increased if the chicks are not properly brooded. When a brood of chicks are hatched by a hen, early in the season, she will be successful with them in proportion to the care given her. If allowed to carry her brood wherever she prefers, and a sudden change in the weather occurs, such as cold winds or rain, the chances will be that she may lose some of them; but if she is kept in a dry, warm location, well sheltered, and the chicks are fed regularly, the loss will be small. The same rule applies to raising chicks in brooders. The loss of chicks among those under brooders is apparently greater than with hens; but it is well known that a hen hatching out 10 chicks will be fortunate if she raises eight of them. The same proportion among the brooder chicks allows a loss of 20 out of every 100, which, though seemingly large, is less than the usual loss with hens.

Young chicks grow very rapidly when kept warm, and that is the secret of success—*keep them always warm.* They require feeding very often at first, for the reason that there is a rapid formation of feathers, and consequently the food should be highly nitrogenous (meat, milk and eggs), while the ground grain should contain largely of phosphates (wheat and oats), though corn meal may also be given moderately, as it produces warmth. The practice of feeding chicks on corn meal is well enough in the Spring, when the hen can carry them about, and assist to procure other food for them, but in the brooders a variety must be supplied. Although it may be a repetition, it is safe to claim that the bowel complaints are due to colds contracted through insufficiency of heat in the brooders (from 90 to 100 degrees being required), and as crowding, disease, and debility are caused thereby, too much care in that respect cannot be exercised.

Up to the age of three months, the average gain of each chick per week, in a selected brood for experiment, was four ounces; but they were specially fed in order to attain the greatest possible gain in the shortest time, gaining more, of course, as they advanced in age than during the first week, they weighing two pounds each when nine weeks old, and three-and-one-fourth pounds each when 13 weeks old, no deduction, however, being made for weight at the time they were hatched. While the average farmer may not be equally successful, yet the experiment demonstrates what *can* be done. The average weights are about one-and-a-half pound at eight weeks of age, and two-and-a-quarter pounds when they are three months old.

Contrary to expectation, it was found that chicks from all the breeds made nearly the same ratio of growth up to the age of four weeks. That is, chicks of the Leghorn breed, when weighed in lots of ten, were as heavy as Brahmas of the same age and number, but after they arrived at the age of four weeks, the chicks of the large breeds gradually increased faster. On weighing Brahmas and Leghorns, in lots of ten, when eight weeks old, the Brahmas weighed 17 pounds and the Leghorns 14. Ten Plymouth Rocks, of the same age, weighed 14 pounds, or the same as the Leghorns. All the chicks had been fed alike, being in one brooder. The above applies to pure breeds only. Crosses of the Plymouth Rock and

Brahma have done better, as also crosses of the Houdan and Brahma, they being the chicks that attained two pounds each when nine weeks old. For market purposes the best results are obtained when Plymouth Rock, Wyandotte, or Houdan cocks are mated with large hens of the Asiatic breeds.

The great obstacle to obtaining the highest prices is, that chicks of certain weights must reach the market at a particular period. If too soon, they will sell for but very little, and if too late, the same difficulty occurs. Just what that time may be cannot be stated, as something depends upon the severity of the Winter. For instance, about the first of February, there is a demand for small chicks of less than three-quarters of a pound each. Should they reach the market too soon, they will get there ahead of the demand, and as each succeeding week a heavier chick is preferred, if the three-quarter pound chicks arrive in market when the demand is for those weighing a pound each, the heavier ones may sell for 75 cents each, and the lighter ones at only 25 cents; but should the pound chicks arrive when the demand is for smaller weights, the spectacle will be presented of a half-pound chick selling for double as much as those that are heavier. The greatest demand is usually when asparagus is in the market, but those who make a specialty of raising young chicks should keep themselves well informed regarding not only the prices, but also the weights in demand. Should the chicks be hatched so late as to be behind the size wanted, they cannot recover such disadvantage. Hence the value of incubators, which afford the poultryman opportunities of hatching at any time desired.

Rural Topics.

Experiment Grounds of the Rural New-Yorker.

TO DESTROY THE PEA WEEVIL.

We have been discouraged from trying to raise new varieties of peas by cross-breeding, for the reason that nearly every pea becomes so badly weevil-eaten as to be nearly worthless. Last Summer, we treated all of our peas saved for seed to bisulphide of carbon. A few drops were put upon cotton and the cotton placed in covered tomato cans which contained the seed peas. Up to this time (Jan. 1), after a careful examination we do not find any weevil holes.

A few weeks ago, we received 34 bushels of the Alaska Pea from Cape Vincent, New York. These were measured out into 20,000 envelopes for our seed distribution, and but *one* weevil was seen. Were they treated in the same way, or were they grown in Canada where no weevils are seen? Bisulphide of carbon is not costly, and an ounce bottle, we should think, would suffice for a dozen bushels of peas.

FORSYTHIA OR GOLDEN BELL.

The Golden Bell, considering that it is of comparatively recent introduction, is very well known. This is because it is a beautiful shrub—beautiful in flower, beautiful in foliage and one easily raised from cuttings. It was sent to England from China by Mr. Forsyth in 1845, and a few years later was catalogued by the nurserymen of this country. Its switch-like branches remind one of willow shrubs, and its flowers of the Dog-tooth Violet. It begins to bloom here from the middle to the 21st of April before the leaf-buds unfold, wreathing the stems as if with yellow stars. The flowers last until about the middle of May, when the bright-green, sturdy foliage is fully developed. In late Fall the leaves change to a dark purple, and they do not fall until early Winter. We have referred to it before, but still it may not be generally known that this shrub is well adapted to being confined to a single stem, when, in two or three years, it forms a very pretty little tree, resembling, in general appearance, an oleander. The suckers must, of course, be removed and the branches cut back as needed.

Within a few years another Forsythia has been introduced—Forsythia Fortunei—which by some has been considered the same as the F. viridissima. Last year we compared them carefully, and find that they are really different in many respects. The leaves of Viridissima are more lanceolate. The petals of the flowers of Fortunei are a little longer and a third to almost a half broader, and of a lighter shade of yellow and a trifle thicker. The tube of the flower is also longer, while the calyx is a third longer. The orange stripes in the throat of Viridissima are of a deeper color, and the pistil longer in every flower than the two stamens; while the two stamens in Fortunei are invariably longer than the pistil. The limb of the corolla in Viridissima is obscurely veined, while that of the other is distinctly veined. The main branches of Fortunei do not have so many secondary branches; the flowers are mostly four at each node, two on either side; while in Viridissima there are usually but two at each node. As, however, Viridissima sends out so many secondary branches, the flowers seem to be more in clusters at a little distance. We observed, also that they were more drooping. Much of this

FORSYTHIA FORTUNEI. From Nature. Fig. 12.

may be seen by a comparison of the two cuts, which are drawn from our own specimens (Figs. 12 and 13). Both shrubs are quite hardy here; but how much further north they would prove so we are not prepared to state. Perhaps some of our readers of the Northwest, as also in Canada, will kindly advise us.

It needs only to be added that these Golden Bells are the showiest of all shrubs of the early season in which they bloom, and well merit a place in every garden. They are catalogued by all nurserymen at from 25 to 50 cents each.

BLANCHING CELERY IN THE CELLAR.

We are now (Dec. 23) using celery which has been blanched in a large packing-box in the cellar. A small quantity of soil was first placed in the bottom, and the plants set upright upon this as closely together as they could well be packed. This was done Nov. 25, at which time the celery in the garden had merely been "handled." It is splendidly blanched, and as tender as any celery we have ever eaten. The variety is Carter's Ivory, a half-dwarf kind.

FORSYTHIA VIRIDISSIMA. From Nature. Fig. 13.

Farm Topics.

STORING THIN ICE.

The mildness of the weather during the first of the winter months has doubtless awakened apprehensions of a deficiency of ice next Summer in the minds of many to whom ice has become a farm necessity. Perhaps it may not be known to some that ice four inches thick can be economically stored and kept all Summer. My house, 10x10x10 feet, and almost entirely above ground, has kept ice through the last two Summers, at a cost of $10 each season for filling, not counting the labor of my own team and driver. The ice was four inches thick and was hauled two miles, and the house was filled in a day and a half.

The plan is not original with myself, but common to the farmers of Ocean County, New Jersey, where the mild Winters sometimes fail to make even four inches of ice.

In filling with thin ice, we take it in irregular cakes from the water, as large as may be conveniently handled, and throw it into our wagons. Having spread nearly two feet of sawdust in the bottom of the ice-house, we throw the ice into the house, and break it down as fast as possible by striking with the flat side of an axe all the projecting points of ice, so as to leave no very large cavities, though there are many small ones everywhere. We fill from wall to wall, and in this careless way, disregarding all attempts to place it in layers, we fill as near the rafters as we can put it in. We now leave the doors open for about two weeks for the ice to settle a foot or two; then we apply three feet of sawdust—much more than where it is packed in courses, for as it melts away from the walls we run the sawdust down near the walls, to preserve the ice from wasting. This we do twice a week; if the weather is very mild, for several weeks; and then about once a week during all the Summer we tramp it down around the walls of the house. This method doubtless requires much more ice, but I judge less labor. It is only commended to those who are unable to get thick ice because of the usual mildness of the climate, or the exceptional mildness of a Winter like this.

C. E. L.

Ocean Co., N. J.

Farm Economy.

A HANDY CORN-HUSKING BENCH.

To husk corn all day, standing or kneeling, is among the hardest works of the farm, and if one uses a stool to sit upon, or sits on a bundle of corn-stalks, the legs are so much in the way that fast work cannot be done. It takes but little lumber or time to construct a stool like that shown at Fig. 14. It is made by procuring two pieces 1⅛x2½ inches, and nine feet long of any light, strong wood. On the side in the middle of each, fasten a piece of one-inch board eight inches wide and five feet long, across these, four inches from each end, fasten a piece of 1⅛x2½, four feet long, and on these fasten five pieces of light wood ¾ x4 inches wide and five feet long. Across the side-pieces six inches from each end, fasten an inch board eight inches wide and four feet long for a seat. To each side, 10 inches from each end, fasten a piece of tough wood 2½ inches square and 10½ inches long for a leg, halving it on to the side piece and bolting through with a ¼-inch bolt. Crosswise under the side-pieces fasten to the legs a board of strong wood 1x6 inches, which should be notched on the upper edge so as to go snugly between the side-pieces. It will be 10 inches from the seat at each end to the corn platform. To use it, tip it up against the shock, and by taking hold of the band and pulling down, the bench will be tipped up, carrying the shock with it. Two huskers can now take hold of the ends of the side pieces, which should be nicely rounded, and carry the shock where desired. They can then sit down each on a comfortable seat and husk the shock much sooner and easier than they could kneeling on the damp, cold ground. Such a corn rack will pay for itself every week, if not every day.

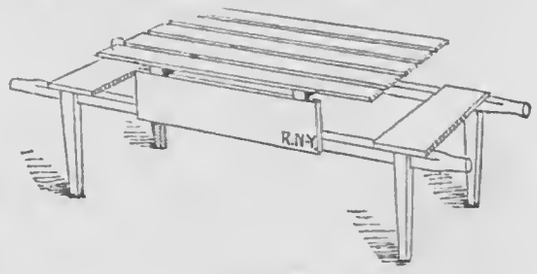


Fig. 14.

A CONVENIENT MANURE SKID.

Here is my plan of loading manure with a hay fork:—A grapling hay fork is fixed to one of the beams in the basement, and the wagon is

food. It is far better to feed a certain quantity to three cows and produce 600 pounds of butter, than to feed the same amount to four cows and only get 500 pounds, as is often done. Keep the young cattle growing without check from the time they are started as calves until they are ready for the shambles or the dairy. To do so is less expensive than if they start again after they have once been stunted. The same rule applies, also, with all young stock.

Use plenty of bedding for all farm stock, saving for this purpose everything that can be obtained. Stock are more comfortable and the manure heap is augmented. If muck can be obtained, compost it with the barnyard manure.

Feed hens well with a variety of mixed feeds and keep them supplied with plenty of material for shells, as powdered clam and oyster shells, burnt bones, etc. Provide also plenty of fresh water daily. If they are kept in confinement, spade or plow up a small portion of the yard every few days, and give them a chance to work in the soil. It is more healthful for them, and they pick up a great many insects, etc. If the fowls are kept confined, throw all weeds pulled from the garden in their yard. It is surprising how much green feed they will eat. Clear the hen-roosts from lice by scorching them with a flame from a cloth saturated with kerosene oil and sprinkled with sulphur.

Give all farm stock shelter from the cold storms of Autumn. Feed milch cows sparingly, and they will yield sparingly.

Remove all unnecessary fences and so gain in area of land cultivated and also in the convenience in working the same.

Provide yourself with some kind of shelter for wood, and keep at all times supplied with sufficient fuel, and thus save fully one-third in quantity of fuel required, besides saving many times that amount in good nature of your wife and family.

Clear up all decaying vegetation, and add to the compost heap and thus turn it to some account, and at the same time prevent one leading cause of malaria.

Concentrate your forces. It is better and at the same time more profitable to grow 150 bushels of ears on one acre of corn than to work over two acres for the same amount, and the same in proportion with other farm crops.

Keep fruit trees properly trimmed from the beginning of their growth, and so secure the desired form, and save cutting large limbs. In manuring the orchard, manuring a small strip just about the body of the tree will not meet the requirements, especially if trees are large. The whole surface should be equally enriched.

If maple sugar is made on the farm, have everything in readiness to begin operations when sugar weather arrives. One day's time lost on every 100 trees is no inconsiderable loss. Keep every thing pertaining to the "sugar camp" scrupulously clean. A small amount of impurities in the sap becomes so concentrated when boiled down to sugar, as seriously to affect both color and quality.

In preparing any kind of farm produce for market, remember it is the first-class article which brings the greatest profit. Better sell one barrel of prime fruit for $3, and keep the half barrel of inferior at home, and use or feed it out, than to pay the cost of sending all to market, receiving only the same amount for the whole.

Keep all your promises, especially if you are a poor man. A poor man cannot afford to have his credit impaired by failure to meet his promises. Finally, follow the advice of the RURAL, and avoid running in debt, and so become successful, prosperous and happy.

Horticultural.

A NOTE FROM PETER HENDERSON.

I THINK you are all wrong about the flavor of the White Plume Celery. I'll engage to let you taste six different kinds, including White Plume, and if you will, thrice in succession, be able to tell "which is which," I'll agree to make a present of a five years' subscription to the RURAL to any friend you may designate; for the fact is, with the exception of the Red and the Sandringham, there is no perceptible difference in the flavor of any celery; it is its condition that affects the flavor, not the variety.

THE LINCOLN BLACKBERRY.

IN the RURAL of Dec. 19th it is said that the above blackberry originated on the grounds of President Lincoln. This is an error for it originated on my fruit farm two miles northwest of Springfield, Ill.: 11 years ago it fruited for the first time. I have fruited it for 11 years without a failure. The very hard Winter of '83—'84 killed all blackberries in this part of the State, except Lincoln and Snyder. The former came through and bore a full crop of fine fruit, while Snyder only bore a partial crop. W. H. LIGHTFOOT.

A COLLEGE EDUCATION.—A young man, 18 years old, earning $6 a week, with poor parents, writes to the N. Y. Sun for advice. He has worked ever since he was 14 years old, sees small chance of getting a better place, and thinks if he could get a good education at some college, he might do better. The Sun wisely states that the college means an entire change of life in every way. Instead of earning money, the boy must become a charge on his parents for the next six or eight years. Even at his present salary he would earn during that time over $1,800. He must give that up and run in debt for the cost of his education. It would take him two years to prepare himself for entering college. If he graduated at 24 years, he would have hard work to earn $300 the first year after graduating. The ordinary college education fits no one for special employment. It is simply a foundation. Long years of special study are required, to build upon it. Even after the profession has been gained, there are long years of struggle with poverty. The Sun doubtless had in mind a city boy. These statements may rub the vanity of the average boy, but they are absolutely true. In these days of "influence" and "name" the poor college graduate, with no weapon but his education, is like a man fighting against an army with a lump of iron. He must forge, sharpen and polish his weapon alone. There is no harder work in the world, but there is none which, if faithfully endured, brings out a truer manhood. It is easier for the country boy to obtain an education. The agricultural colleges of the West are filled, for the most part, with boys who pay a large proportion of their own expenses. By teaching during the long winter vacations, by working on the college farms, and doing other work that may be presented, a boy can work his way through college. The majority of boys do not have the heart to work through. Not over 25 per cent. of the boys who enter the freshman class with no resources beyond their own labor, ever graduate. They become discouraged, or else discover that the "education" involves too much work, too much responsibility and too much privation. The boy that starts in with the idea that the moment he obtains his degree, the world will open its doors to him, will be sadly disappointed. The world always looks with a little distrust upon the "fresh" college graduate. It is only after a year or so of hard rubbing against the world that he can "pass." The successful agricultural colleges of the West offer by far the best chance for the poor boy. He can find plenty of time for study, and the hours, which at literary colleges are devoted to exercise in games or walking, he can make profitable on the farm. At the end of his college course he can easily make $300 and his board per year, and gradually work his way up into a sure and profitable business.

SHORT AND FRESH.

ROBERT DOUGLAS believes the White Pine to be the most valuable timber tree for Iowa, Minnesota, Dakota, Wisconsin, Canada, and the New England States. The Scotch Pine is one of the most rapid growers of all hardy evergreens while young. It makes a fine windbreak for orchards and buildings.....

MR. DOUGLAS says that the American White Spruce is far preferable to the Norway for the West, as it endures the hot, dry winds in Summer, and never browns in Winter. As an ornamental tree for the East, we much prefer the White to the Norway Spruce . . ..

MR. DOUGLAS characterizes (no doubt justly) the Wild Black Cherry as one of the most rapid growers of all our valuable Northern hard-wood forest trees, making lumber almost equal in value to the Black Walnut. It grows freely on any dry land, even if too poor for agricultural purposes. It is of upright growth, and very easily transplanted .....

PETER HENDERSON mentions, in the Garden, that, during his recent visit to England, nothing surprised him so much as the growing of tomatoes. In one establishment, there were in running feet, two-and-a-half miles of greenhouses all filled with tomatoes; These must have cost not less than $100,000. The tomatoes were then selling at six pence sterling per pound, or about $6 per bushel. Here is a chance for our growers to send tomatoes to England in cold storage. But we want better-keeping tomatoes ....

O. S. BLISS expresses the opinion in the N. Y. Tribune, that if the public knew enough to select the best poultry and keep them, the occupation of some folks would be soon gone: 99 per cent. of the people who buy fowls and eggs at fancy prices are disappointed .....

IT may be well for our new readers to bear in mind that the Potato Special of the R. N.-Y. will be dated the 16th instant. Everybody who lives in the country ought to raise potatoes—therefore everybody ought to read the Potato Special ....

ONE of the delights of country life in the Winter, is derived from having plenty of evergreen trees about the country home.... .....

MR. STEWART says that lambs will make twice the growth in Winter they would otherwise do, if they are given a very little ground feed, or a small quantity of rye or oats, once a day. Good clover hay is the best staple food for them. A few chopped turnips or beets or a chopped cabbage will be very grateful and useful to them..... ....

DR. HOSKINS says that a man's farm is a volume, every acre of which is a page bearing the marks of his character, indicating the degree of mental and moral culture to which he has attained .....

THOSE interested in poultry should read the R. N.-Y. during this year .....

A WRITER in the American Florist thinks that the Bride is destined to become the most popular white rose ever known .....

THE New York Experiment Station has succeeded in raising cabbages from leaf cuttings, the same as begonias and a few others may be propagated ....

ANOTHER interesting experiment made was that of growing cabbages from green (unripe) seed. The seed sprouted before ripe seed, and the heads were earlier and larger. .....

THE New York Experiment Station finds Buhach (Pyrethrum) powder, applied through bellows almost "instantaneons" death to the cabbage worm. The RURAL was the first journal to use Buhach in this way. But we have never known it to kill them immediately. From four to ten hours are required. Our later subscribers may be interested to know that we ascertained last year that this insecticide will kill rose bugs.. .....

SEVERAL of our agents while visiting New York have at our suggestion examined the RURAL'S Avery Sewing-Machine. They all report that it is by far the simplest, lightest-running, nearest to noiseless, and, altogether, the best machine they have ever seen. It is constructed upon an entirely new principle and must not be confounded with the *old* machines offered by other journals. The retail price is $60. We give it for 40 subscribers, pay the freight, and guarantee it to please....

A WRITER in the Maine Farmer says that a blush of shame yet burns on his brow as he thinks how many more comforts he could have provided for his dear lost ones had he done without tobacco; how many hours of needless labor he could have saved his gentle wife if he had not cared so much for tobacco. It is the same with many of us to-day. .....

MR. HIRAM SMITH, of Sheboygan Falls, Wis., on a farm of 200 acres, feeds 65 cows, six horses and 36 head of calves and yearlings. Every ounce of feed that is bought is paid for in money that comes from pork made from skimmed milk. Every one of the cows earns $75 per annum. The U. S. Dairyman in noting these facts, says that the man who keeps cows cantering over about five acres or more of land to get a skimped livelihood may wonder how it is done; but it is easy enough, if one knows how, and there is no necromancy about it, either. The vital items are, the half-soiling process; some grain food, fed in a warm barn every day; eleven months' milking of each cow in the year; a utilization of all the manure; the raising of half an acre of corn to each cow; and a command of the best market that a steady production of a good article of butter, every day in the year, gives one who can meet the wants of steady customers. . ..

THE English sparrow surely seems to be doomed. The Farm and Home contains an article showing how to cook the little wretch so that it will be quite palatable. The birds are stewed, roasted or jugged. In the latter process, they are boiled and then placed in a sort of pickle. They are said to be really excellent. They ought to be, for they live on the "fat of the land." ....

THE U. S. Dairyman thinks that a man will not develop himself into much of a dairyman so long as he milks his cows in a yard, feeds them little or no grain, and lets half of the value of the manure be washed into the creek, instead of being saved and carted to where it would do the most good ... .

AT the recent Illinois Horticultural Meeting, the drift of opinion was that the farmer's garden, planted in rows clear across the patch, cultivated so far as possible by horse-power, and given as good cultivation as the best farmers give their corn fields—a half acre in vegetables would supply half the living of the average family, and add largely to the health of the members .....

EXPERIENCE has taught most English farmers to keep the silage out of the stables where the cows are kept, and to require men who handle the product to wash their hands before milking. Most of the tainted milk seems to be spoiled by direct contact with the silage...

COMMISSIONER COLMAN wants an appropriation for the purpose of developing the agricultural capabilities of Alaska, and to determine what breeds of cattle, etc. will do well there. Mrs. Wager-Fisher's letters published in the RURAL show the utter impossibility of stock-raising in Alaska. Better apply the work and money nearer home. Oleomargarine is on top yet .....

Everywhere.

TRANSCONTINENTAL LETTERS.

XLVIII.

MARY WAGER-FISHER.

Weather and fruits in Western Washington Ter.; the White River Valley; good farm houses and farming; a well ordered boat.

A FEW days after our return to Seattle (Washington T'y.), there was a fall of rain accompanied by thunder and lightning equal to an ordinary Eastern thunder storm. I mention this, as I think I have at some time stated that thunder and lightning are almost unknown on this coast. They are rare, it is true; but they do occur. Old residents said that the duration of warm weather this season was longer than ever before experienced, and for several weeks there was quite a display of summer clothing. Certain fruits were in great abundance, particularly plums and blackberries. I measured some plums, an amber-colored variety; one was eight inches in circumference one way, and 7½ the other—delicious as large. Very fine peaches are raised on the shores of Lake Washington, just back of the town, and also in other localities; but while the trees bear profusely, there is some difficulty in raising this fruit, as the trees are very short-lived. Strawberries and blackberries often bear a second crop in October.

I wish to correct a statement, or opinion, rather, of the RURAL, as expressed in the issue of July 18, page 484, concerning the "Evergreen Blackberry." My attention was first attracted to this blackberry a year ago, as I saw it growing over a trellis. I thought it extremely ornamental, and it was still in fruit, the month being October, and its yield, I was afterward told, was 100 quarts in one season. Not far from the first of October of the present year I saw another "Evergreen Blackberry" vine which was equally a marvel. The one vine of three or four years' growth had yielded during the present season 120 quarts of berries. As the plant had grown, a part of the branches had been trained along the side of the dwelling-house and up on the roof, while the other part had turned off in an opposite direction on a trellis and up in trees. From end to end it measured, probably, 40 feet. Its habit is very like that of the most robust climbing roses, and it is altogether unlike any variety of blackberry that I have seen growing in the East. The fruit is good, similar to the Lawton in flavor, and it fruits at a season when other berries are out of market. Its botanical name, as I have heard it given here, is Rubus fruticosus. The leaves are very pretty, and the white petals of the flower are three-fingered, or trifid at the end. None of the canes that I saw were as "large as a man's arm," but some of them were probably an inch or more in diameter, and the plant had received no special cultivation. I have been unable to learn anything definite as to its origin, although various stories are told as to its antecedents. That it is generally hardy, is claimed for it; but it is quite likely that it attains to more remarkable proportions in the rich, new soil of Puget Sound than it would in many other regions. The vine which I saw and which yielded 120 quarts, is on a farm about three miles north of Seattle, and the owner of it, so far as I know, has no interest in it beyond finding a market for the berries.

The smoke which obscured not only the Puget Sound region but all this northwest coast excepting Alaska, where the forests are too damp to burn, lasted for six weeks or more, and the clearers of land called it a good "burn." These fires will probably continue for a similar period for a quarter of a century to come, or until the forests have been sufficiently cleared for agricultural purposes. The smoke is unpleasant to many persons—I was not annoyed by it. When united with fog, it is a regular London atmosphere; but when the rain came and cleared the air, it was like waking up in a new world. So it came about that, instead of leaving the Territory for Oregon and California the 1st of September, we were detained

driven directly under it. At one side of the wagon is placed a shield or apron, up which the manure slides. Mine is made of 2x4 stuff and two-inch plank bolted together. A front view is given at Fig. 15, and a side view at Fig. 16. Three like Fig. 16 are made the hight of the

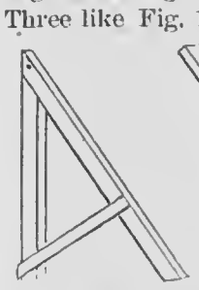


Fig. 15.

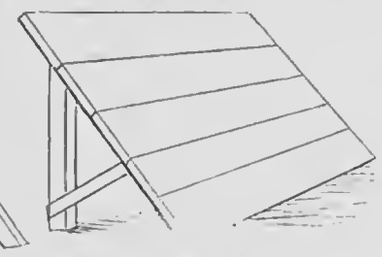


Fig. 16.

wagon and the planks are as long as the wagon. The ground pulley is then attached and the horses hitched to the rope. Two small forkfuls generally fill the wagon with straw manure. R. E. D.

Catherine, N. Y.

WAGON BOX SEAT ELEVATORS.

THE wagon-box seat elevators shown at Fig. 17, are so made that they can be taken off in

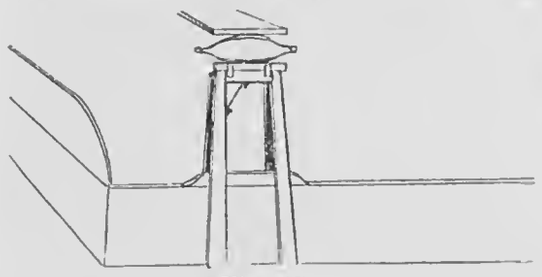


Fig. 17.

an instant and clapped on to a sleigh-box. I find the device just the thing when drawing apple barrels, bags of grain, corn, wood. The seat is up out of the way, and I seldom have to move it to load or unload. A person can make them in three or four hours. Eight strips of ash from two to three feet long, one-and-one-half inch wide at the top and two inches at the bottom, half an inch thick, one piece two feet or so long, and as thick as the wagon-box and another of the same length two inches wide and a little thicker than the wagon-box, so as to make the cleats clamp tightly on the box. Eight 2½x⅝ inch bolts; one brace.

F. D. R.

PRESERVING SHINGLES.

THE RURAL inquires "what is the best way to preserve shingles?" I think an application of crude petroleum or W. Va. lubricating oil is as good as any, and is inexpensive. Seven years ago I coated one shingle roof and the weather boarding of nearly all my out-buildings with these oils. I like the W. Va. oil the best, as it has more body than the petroleum and stays nearer the surface. It is easily applied with a large paint brush in warm weather; in cold weather it will have to be warmed. The objection to oiling is the dark color, especially on the parts not much exposed to the sun. It is also apt to loosen the nails in buildings that are not firm in the frame-work.

Rockland Farm, Md. A. L. C.

The Apiarian.

SIXTEENTH SESSION, NORTH AMERICAN BEE-KEEPERS' ASSOCIATION.

A fine attendance; importance of bee-keeping; bees and fruits; the Bee-keepers' Union; widening the honey markets; comb honey; foundations.

(RURAL SPECIAL REPORT.)

THE attendance at the Detroit meeting of this society was unprecedentedly large. Among those in attendance were the most successful and distinguished bee-keepers of the United States and Canada. The venerable L. L. Langstroth, the father of American apiculture, who honored the meeting with his presence, remarked that this was the greatest assembly of the kind ever held on this continent. Such apiarists as L. C. Root, President of the society, G. M. Doolittle, W. E. Clark and Mr. Barber, of New York; D. A. Jones, and Messrs. Hall, Emigh and Pettet, of Canada; Newman and Dadant of Illinois; Muth, A. J. Root, Dr. Mason, Newman and Boardman, of Ohio; Heddon, Hutchinson and Cook, of Michigan, were present to consider the many important questions vital to apiculture. The "blizzard" had the effect of keeping most of the apiarists of the South at home, which was greatly regretted. The annual meeting for 1886, upon request of the State Association of Indiana, will be held earlier, some time next Autumn, at Indianapolis. H. D. Cutting, of Clinton, Mich., was elected President for 1886; Frank E. Dougherty, of Indianapolis, Secretary; Mrs. Robins, of Indiana, Corresponding Secretary, and Chas. F. Muth, of Cincinnati, Treasurer.

Owing to the great loss of bees last Winter, the reports of honey the past season showed a small product. The year has been generally favorable, though in some States, as California, which last year gave an enormous crop, the product for the present year was very light. Considerable uneasiness was shown as to prices. Though the crop is so small, yet the prices are unprecedentedly low. The opinion seemed to be that the general depression in business was the principal cause. Large dealers who were present thought the tendency of the market was upward. The Venerable L. L. Langstroth gave an interesting account of the invention of the movable comb hive which has revolutionized bee culture

Pres. Willetts, of the State Agricultural College, welcomed the society to Michigan. He showed the importance of the bee-keeping industry, which produced millions of wealth each year, which, without bees and bee-keepers, would be lost. He commented upon the excellence of honey and the fact that it could not be produced except by the bee. He showed that Michigan, in apiculture and its fruits, ranked among the first States. In commenting upon the recent suits at law between fruit growers and bee-keepers, he spoke both as a lawyer and law-maker. He said the courts looked kindly upon this pursuit, because of its usefulness and age. Bees existed before courts or statutes. They have the strong right of prior possession. Science showed that bees did not attack sound fruit, and he added that between honey and wine he felt no hesitation in pronouncing in favor of honey. Pres. Root, of New York, in responding, said that no State stood higher than Michigan as a producer of honey, and that no State, perhaps, ranked so high in the influence exerted to extend practical and scientific apiculture.

Mr. Newman said the Bee-keepers' Union is an organization acting under a constitution, which has for its object the defence of bee keepers in suits of law, where, upon thorough investigation, the complaint is unjust. In the sheep and bee suit in Wisconsin we have gained a signal victory. We are prepared to carry the case decided against the bees in California to the higher courts. Here the fruit growers are acting against their own interests in trying to drive away the bees and apiarists. Prof. Cook stated that it was not bees *versus* fruits, it was bees and fruits *versus* ignorance. A committee of five was appointed, who reported in favor of a union of the Bee-keepers' Union and the North American Association. Owing to some opposition the whole matter was laid on the table.

Mr. L. C. Root, in his annual address as President, referred to the importance of our industry. In the economy of Nature, bees are a necessity. Bees effect full fertilization of flowers, hence seed time and harvest depend upon them. They also give wealth to the nation—create it. Low prices are the result of hard times. We can aid by working to increase the demand for honey. No one should ship honey to the large markets till the maximum consumption had been secured at or near home. This would keep the supply below the demand in our great marts, which really fix prices for the whole country. Mr. Muth said the uses of honey were constantly increasing and there was no real cause for discouragement. All kinds of business were now depressed. Mr. Jones said we were now far better off than the farmers. Our capital was far less, our proceeds greater. Mr. Pettet said we are stimulating too many to go into the business. There is too great a tendency to paint our industry in too glowing colors.

G. M. Doolittle, in a paper on comb honey, said there were four requisites to success. 1. We must have good queens. These cost something, but are worth the cost. 2. We must have full colonies at the time of harvest. A few strong colonies are far better than many weak ones. 3. The apiarist must be skillful. Any bee-keeper can raise extracted honey but wisdom and experience are absolutely necessary to secure large returns of comb honey. Lastly, a good hive is indispensable to the best results.

Mr. Hutchinson said he succeeded best when he used full sheets of foundation—not mere starters—in the sections. Mr. Boardman hives new colonies on starters, and as they make comb, he cuts it out and fills sections with it. If the combs were laid on grass 48 hours, the sun would kill eggs and whiten the combs.

Mr. Hall thought Mr. Boardman's plan awkward. Full sheets of foundation were by far the best. He preferred thick foundation so that bees would have enough wax to complete combs. Said the fish bone was no trouble to consumers, only to the bee keepers. Hutchinson used only five frames at dawn of honey harvest, then he got more comb honey. Hall preferred large hives so as to have plenty of good honey for winter food for the bees. Emigh, a very successful bee-keeper of Ontario, said we must have full sheets of foundation. We get far nicer honey. Doolittle thinks that foundation does not pay in his locality. Taylor, Michigan, said that the foundation causes sections to be better filled and more securely fastened, and so the combs are stronger, but not because it is thicker or less delicate. For shipping alone he should use full sheets, if for nothing else. Mr. Muth said that foundation gives strength, but it is better to use thin foundation, not thicker than eleven feet to the pound. Mr. Walker uses full sheets when honey comes slow, and always in outside sections. This secured more speedy capping. He also found it a great advantage to invert all the sections. We should always be ready to put sections on the hive in time; delay often causes loss.

A. J. C.

(To be continued.)

Entomological.

THE ARSENITES.

PROF. A. J. COOK.

THE surprise expressed by Prof. Budd, in a late RURAL, that I did not recommend the use of common white arsenic, arsenious acid, as an insecticide, at the late meeting of the North American Pomological Society, is a worthy text for a brief article on the subject.

Years ago, when the arsenites were first used to fight insects, we tried here at the College all the arsenites now used, including white arsenic, and found them all efficient in the destruction of all our vegetable-eating insect pests; but after much earnest, thoughtful consideration it was deemed unwise and unsafe to recommend white arsenic for common use as a specific against our noxious insects. A very little investigation will show that nearly, if not quite, all actual cases of poisoning by use of the arsenites have come through want of caution—usually reasonable caution. The only case which has come under my personal observation was when a barrel or tub of flour and Paris-green was left in a pasture field adjoining a field of potatoes. The careless farmer, as he came in the morning to apply the balance of the poison, found he had lost not only his poison, but some of his best cattle. He has since been richer in experience if not in Paris-green and cattle. Now, had these cattle been people, the green color would have saved them. The same would be true in case of London-purple. In all our advice and recommendations for the public, we must consider the peculiarities of people, and must not act as if all persons were cautious. We must also remember how terribly poisonous these arsenites are, and how awfully and irretrievably sad it is for a person to become the victim of their improper use, even though carelessness was at the root of the disaster.

In nearly every case where people have died from arsenical poisons, it has been through mistaking them for something else. How easy such mistakes with arsenic! Like soda, flour, etc., it is a white powder, and in case careless hands have left it in the pantry, what is to prevent a fatal mistake? Not so with London-purple or Paris-green; their peculiar color, especially that of the latter, would prove the very best skull and cross-bones, as it could never be omitted. In cases where accidents are so terrible, no pains should be spared to prevent even exceptional risks. Thus it is that I have always refused to recommend common arsenic, and always protested against recommending it. I agree with Prof. Budd, that the danger of killing stock by their feeding on herbage under fruit trees treated with the arsenites, is slight indeed, if the poison is rightly attenuated; but the greater danger, as referred to above, resulting from carelessness, makes it, I think, unwise and improper either to use or recommend arsenic as an insecticide.

Again, I fear the Editor's report of what I had said may mislead, although I am sure he did not mean it should. While I said the danger of stock eating grass under trees which had been sprayed with arsenites, immediately after the spraying, was not as great as many supposed, I urged most vehemently against such cropping of the grass by stock till after a heavy rain. I showed how little of the arsenite was put on to an entire tree—no more than an even teaspoonful—and how but a very small fraction of that fell to the ground, and that after careful investigation, even with a microscope, I could find so little poison on the grass that I fed such grass to my horse. Yet I said such might not always be the case. Carelessness might put more on the tree; accident might cause more to fall to the ground; and as the article is so deadly poisonous, and the result in case of poisoning so serious, no one should ever permit cattle or other stock to feed on the grass in an orchard for several days after the poison was applied. And I wish to emphasize the caution.

Ag'l. Coll., Lansing, Mich.

Floricultural.

SOLANUM CILIATUM.

[Mr. Parnell generously contributes a considerable quantity of the seeds of this plant to our Free Seed Distribution.—EDS.]

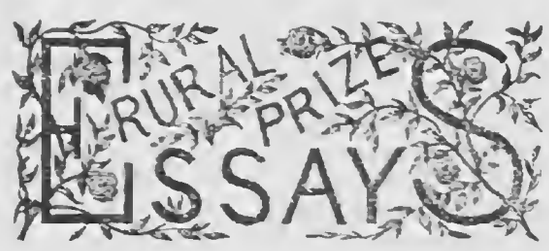
I CONSIDER this to be the most handsome and attractive of the solanums, and it is very valuable for decorative purposes during the Winter in the window garden, greenhouse, or any situation where an average temperature of 55 degrees is maintained, and it also forms a very pretty plant in the mixed flower border during the summer months. It may be described as being a tender perennial of spreading habit, growing from 12 to 18 inches in hight, the stems and foliage being well covered with numerous straight, very sharp prickles. In shape the leaves are oblong and irregularly lobed and of a bright green color. The flowers are small and not at all showy, and are succeeded by the fruit which at first is of a greenish color, marked with dark green lines. As it ripens, it gradually becomes scarlet, and in this condition remains on the plant for 15 months. The fruit or berries are about an inch and a half in diameter, globular in shape, and when fully ripe of a bright scarlet red color, and in this condition very attractive.

It is a plant easily grown. The seed should be sown as early in the season as possible, and as soon as the young plants are strong enough to be handled, they should be transferred into three-inch pots, and when these are well filled with roots, the plants should be shifted into four-inch pots, and just before they are plunged outside (which should be done about the end of May), they should be transferred into six-inch pots. The pots should be plunged in a sunny situation, and during the Summer they should be turned occasionally to prevent the plants from rooting outside. Water should be thoroughly and freely given, and on the approach of cold weather, the plants should be taken up and brought inside.

As soon as the weather becomes settled, these young plants can be planted out in a deep, well enriched border, and grown carefully during the summer months, and taken up carefully and potted early in September. This is the best plan for the experienced plant cultivator; but amateurs had better adopt the former method. In potting, be sure to give good drainage, and use a compost composed of two-thirds of well rotted sods and one-third of well decayed manure.

Occasionally outside the plant is attacked by the potato flea in such numbers as to severely injure its foliage. As a preventive, dust it occasionally with insect powder, soot, or tobacco dust, and as it shows a tendency to grow rather straggling, it should be supported by a neat stake, to which the young shoots should be tied from time to time, as circumstances may require. CHAS. E. PARNELL.

Dec. 21st.



SHORT PITHY PARAGRAPHS.

E. J. BROWNELL.

KEEP ahead of your work during the whole season. Work is so much more pleasant in this way than to have it dragging two or three weeks behind. In order to accomplish this, make plans in advance for the season's work, and, so far as possible, work according to these plans. Then, during leisure time in Winter see that all farm and garden tools are ready for use when the busy season arrives. Keep all farm tools and implements under shelter when not in actual use. So far as possible keep all noxious weeds from ripening seed. Remember that one hour's work in garden or field when weeds first start, is worth one-half day's work later.

If possible, have the kitchen garden so arranged as to use horse culture in both fruit and vegetables, and thus save largely in time or labor. Pack garden vegetables, such as beets, carrots, turnips, etc., in boxes or barrels of sand in the cellar for winter use and so preserve them as fresh as when taken from the ground. Also put in a few parsnips in this way to use during the Winter.

Evergreen boughs make a good mulch for the strawberry bed, and are free from foul weeds.

Economize in feeding stock by utilizing everything grown upon the farm or garden that is suitable for food, but remember that it is not economy to see how much stock can actually be kept alive on a given amount of

until the middle of October, as I wished to visit the White River Valley in clear weather, and go up the river by boat, as from the deck of the steamer one can see the whole valley spread out on either side. This river takes its rise in the Cascade Mountains, in the neighborhood of Mount Rainier, and the water, when low, receives a whitish tint from running over chalk hills.. It is a very sinuous stream and navigable for about 45 miles. The lower part of the river still bears its Indian name, Duwamish, and empties into the beautiful bay upon which Seattle is built, at a short distance from the city. When I went up the river on the first of October, the water was so low that we steamed along at a snail's pace, running on sand-bars and stopping at intervals to pull out snags or to mend the boat's broken rudder. However, the weather was fine and the scenery charming, the soft, varying foliage of the river and valley—alder, maple and cottonwood—being in striking contrast to the stiff stateliness of the fir and cedar on the bluffs of the Sound. The banks of the river were heavily fringed with willow, swamp dog-wood, bearing numbers of white berries (Cornus Californica), wild roses loaded with scarlet seed pods, and nodding stalks of snowdrop, which the natives called "hardhack."

I was impressed anew with the great beauty of the cottonwood, and I am not sure but that it is the most beautiful forest tree in the United States. The leaves of the vine maple (Acer circinatum) were scarlet—a red of a peculiar and striking brilliancy, and much of the foliage of the great maples (Acer macrophyllum) was turning yellow. This maple, in habit resembles the oak in the distance, grows sometimes to a diameter of four to five feet, and a hundred feet high, while the leaves are from ten to twelve inches across. This valley increases in width as we ascend the river and is very level, the width varying from a quarter of a mile to three or four miles, and forms undoubtedly the finest farming land in the Puget Sound Basin. The captain of the steamer told me that above the head of navigation the up-land is excellent, particularly for sheep pasturage, and that the trail to Mount Rainier up the White River is the best route for tourists. He had camped at the foot of the mountain, been on its glaciers and regarded it as the most delightful camping ground he knew of—bears, mountain goats, deer and other wild game abundant. The captain's wife was on board—she said she often went on the river trip for a rest, as they lived on a range up the river. She had in her arms her thirteenth child—all 13 alive and well, and she still a young woman. She said that at one time half a dozen of them were sick with diphtheria and at another time as many were in bed with measles. She seemed as fond of number 13 as if it were her first-born, and she knitted stockings for her youngsters while she sung the baby to sleep with Methodist hymns. The captain was the mildest commander of a boat I ever met.

The navigation was exceedingly perplexing, but there was no display of profanity or impatience. Orders to the men were given without repetition and in a quiet tone. When a meal was ready, the boat was tied up and all hands ate. The boat was tied up at night as well, so that we were nearly 30 hours reaching the head of navigation. The railroad that connects Seattle and Tacoma follows this river in a general way. The first settlers in this valley went up the river in canoes. There is a good wagon road on each side of the stream leading to the Sound, which is a delightful drive. It is a great hop-growing region and we met many canoes full of Indians and their camping outfits leaving the scene of their hop picking—the season being over, although some fields were unpicked, the low price of hops not justifying the expense of harvesting the entire crop. The hop houses with conical roofs and tall chimneys gave a peculiar architectural effect to the valley, while the farm houses and the farming were decidedly the best and the best kept I have seen on this coast north of California.

RURAL SPECIAL REPORTS.

Arkansas.

BEEBE, White Co.—There is no better country for stock raising than this; Winter mild, supply of good running water bountiful, and grasses nutritious. Yearling calves command from three to four dollars per head. These are usually bought up in the mountainous districts where such a thing as raising stock for the market is unknown. Another industry which would bring large returns to the owner, is the sheep industry. There is no healthier place for sheep, especially among the foot-hills of the Boston Mountains. No feeding is required during the Winter, and sheep get very fat during the Summer feeding on Japan Clover, which thrives here well. Our markets for wool, mutton, and beef cattle are as good as can be found in the Union. Our staple productions are cotton, corn, wheat, oats, rye, barley, vegetables and all the different kinds of fruits. Strawberry culture is an important industry in our section, and many are engaged in it. An acre often yields $300 net returns. Under the Local Option Act of some eight years ago, our people have routed out every saloon in this county. G. W. W.

Canada.

DARTMOUTH, Nova Scotia.—Nearly all the Rural Corn came up and grew well, but it was almost too late for the climate. Although we had the finest and warmest Summer for years, only two or three ears ripened. Of the Stratagem Peas, 20 came up out of 50 seeds planted, and several of them failed during Summer; none were very vigorous. I have saved all that were good. Prince of Wales, about the same report as Stratagem. A larger portion of them came up, but more failed to grow, and both peas and pods were smaller. Johnson Grass failed to come up. Of Flageolet Beans I harvested about three pints; increase, 40-fold; quality good, not extra. I had a very fine lot of tomato plants and fruit from a sowing of about a quarter of seeds sent, and owing to the fine Summer, nearly all of them ripened. King Humbert was in great variety of form and size. From the Garden Treasures packet we had a large variety of flowers. H. E.

Connecticut.

LONG HILL, Fairfield Co., Dec. 21.—The Rural Corn did not ripen—season too short. Stratagem Pea, finest I ever saw, very large, prolific, and of excellent quality. Could not say as much for the Prince of Wales Pea. Johnson Grass was a failure. Tomatoes not as good as Acmes. Flageolet Beans great yield, early and of good quality, but rather small. The Garden Treasures were just splendid. Last season was a poor one with us on account of having no rain in June. G. M. B.

Dakota.

ABERDEEN, Brown Co., Dec. 20.—The Rural Blush Potatoes are the finest we have seen. They are now selling at 40 to 50 cents a bushel. Wheat yielded from 15 to 25 bushels per acre. Price from 63 up to 74 cents. Oat yield from 35 bushels upward. Barley from 25 to 40 bushels. Flax from 7 to 15 bushels; price from 81 to 95 cents. Farm hands, $1.50 to $2.00.

E. A.

DE VOE, Faulk Co., Dec. 16.—The climate here is much more favorable for health than that of Illinois, for we have no malaria and a physician would go hungry if he depended on his patients' fees for his bread and butter. We have now been here 13 months and we have seen no worse storm than we had seen many times in Illinois. Last May and June we had three hail-storms that destroyed our garden and we had some glass broken once, but we seemed to be on the outer side of the storms, for only a few miles from us a great deal of damage was done to the grain crops. As we have no wind-break yet, we feel the full force of the wind when it blows, and it seems sometimes as though it would take our house. I think when our little trees grow we shall see a great difference in the force of the wind. In coldest weather the thermometer goes down to 40 degrees below zero. It is so very still here that it does not seem as cold as it did in Illinois when it was only 15 degrees below. We had very poor success with all the RURAL seed as well as with those we brought with us, on account of insects, frosts in May and June, and then early in September every green thing was scorched so badly by frost that our sorghum, corn, buckwheat, melons, squashes and tomatoes were all killed. I think plants dwarf here very much, for my pinks and pansies did not grow nearly as tall as in Illinois. The White Elephant and Blush Potatoes did well and we esteem them very highly. We have but little rain here in the Summer, at least so people told us when we came here; but last Summer it rained more or less up to September 10, and, since then we have had no rain to delay work, neither do we get snow enough to give us good sleighing MRS. J. T.

Florida.

MANATEE, Manatee Co.—No one should come to Florida with a view to tropical fruit culture. There are great risks and uncertainties attending such an enterprise. During a residence of 20 years in the southern portion of the State, though not in the extreme south, I have learned that owing to the occasional severity of the Winters, it is folly to undertake the cultivation of the lemon, lime, guava, pineapple, banana, cocoanut, mango, Alligator Pear, or any other tropical fruits, and even the orange, though more hardy, is frequently badly injured by heavy frosts as far south as the 27th parallel. The lands of the State have been gobbled up by a horde of hungry speculators, who have no use for them except as a winter resort, and who do not hesitate by every manner of misrepresentation to delude settlers. I am a Northern man and all my interests are here and I want to see the State settled up with good people; but knowing as I do from observation and experience the risks attending fruit culture, and reading the assurance that "vegetation is unhurt by cold," that "ice is never seen," and everything is green and flourishing the year round, and the tendency of such reports to mislead parties into making ruinous investments and great sacrifices, I have determined to say this much towards an exposure of Florida land frauds.

J. F. B.

Idaho.

HORSE-SHOE BEND, Boise Co., Dec. 21.—The 50 different crosses of the best kinds of corn were planted as soon as the ground was warm; a soil rich, sandy loam. The corn was truly a crossed lot:—from one to six ears to a stalk; stalks from six to 13 feet high. The short stalks matured their ears; the tall ones did not. I selected the earliest short-stalk corn for seed. Carter's Stratagem Pea is not early, but it is the most prolific I have ever grown. One pea yielded 76 pods, with three to eight peas in a pod. Saved all the seed. Sorghum halapense did not head out. For a dry climate, it will prove good. Our dry season lasted 101 days, and in all that time there was not rain enough to lay the dust. The Sorghum halapense lived and grew all Summer without artificial watering. The chickens got at it a few times, which prevented its heading. I shall try it another year. The Bicolor Tomato bears and grows well, and is desirable in every way. The King Humbert Tomato is a good bearer, intermediate in size, pear-shaped, not very good for eating, but excellent for preserving. The Prince of Wales Pea did not do as well as the Stratagem. The pods remained green much longer than other peas. The new variety of the Green Flageolet Bean is a persistent bearer and a great feeder. The season has been a poor one for beans. The Flageolet passed through better than many others. We did not succeed well with the Garden Treasures. I'm sure we did not treat them with proper care. The Thousand-fold Rye yielded well. It is better than any rye I am acquainted with. The Diehl-Mediterranean Wheat attracted much attention. The stools are strong and capable of carrying a good weight in a strong wind without falling. I believe it will be the coming wheat for our locality. I planted all the new seed; it is looking well. A. L. R.

Michigan.

COURTLAND, Kent Co., Dec. 24.—From the packets of Diehl-Mediterranean Wheat I had 13 pounds of very nice grain, very large kernels, very large heads. I think it will be an excellent kind. Of the Thousand-fold Rye, too, I had 30 pounds. It was very large and white—the best I have ever seen. I have sown both wheat and rye again. The 50 crosses of corn got ripe and sound. I had one bushel of ears of splendid corn. The peas and beans did very well. I have enough for seed of the Blush Potatoes. One hill had 52 tubers which weighed 9 pounds 14 ounces. The Garden Treasures were treasures indeed. L. R.

Missouri.

WATKINS, Dane Co., Dec. 16.—This is an average county, 25 miles square. It has been organized since 1841. It has 13 post offices and five churches in the county town: Greenfield, owned by the Methodists, Cumberland Presbyterians, Presbyterians, Campbellites and Baptists. There are 75 districts, which have four to six months' school each year. Our jail is empty about half the time. Serious crimes are extremely rare. Settlers are about four to the square mile outside of the towns. Land ranges all the way from $10 to $75 per acre. The average crop of wheat is 15 bushels. Corn, in a moderately good season, makes 40 to 50 bushels per acre. Grasses all grow near by.

D. J. M CM.

Nebraska.

NELIGH, Antelope Co.—Some pieces of corn, usually on fall plowing, have turned out very well—about 55 bushels—while that on spring plowing was 25 to 30 bushels. Quite a large lot of sorghum in this section was wasted, on account of neglect till after frost. More land was plowed this Fall than usual, as crops are heavier on fall plowing. Many farmers are going largely into stock-raising near here. Potatoes are almost a failure, on account of a dry spell in August, and corn was light on account of wet weather in September.

A. F.

New Jersey.

HARBOURTON, Mercer Co., Dec. 21.—Late in the Fall of 1884 I drilled in half a bushel of Diehl-Mediterranean Wheat in half an acre of ground, drilling 150 pounds of Mapes' A Brand with it. The Winter and Spring of 1884-5 were very unfavorable for wheat, and as my half bushel was sown very late, it had a hard time, but I got about five bushels of clean, nice, plump grain. The Flageolet Beans came up nicely and set quite full, but the beans were much smaller than the seed I planted, and white or whitish, instead of being green like the seed. The Rural Corn turned out mostly Blount's Prolific. Present prices are as follows: wheat, $1 per bushel; corn, 40 to 44 cents; potatoes, 50 to 60 cents; oats, 35 cents for 30 pounds; apples, 50 per bushel; butter, 30 cents per pound; eggs, 55 cents per score; good Timothy hay, $20 per ton; rye straw, $20 per ton. H. J. B.

WESTFIELD, Union Co., Dec. 21.—The Rural Beans came up and grew well and were prolific. We ate some and found them good, but not so good as the Limas. Most of the corn came up and grew well. I cut some of the yellow flint and early dent on September 8th, and the other sorts as they ripened. All got ripe. The peas of both kinds grew well, but owing to dry weather they did not fill so well. I raised 90 tomato plants, some very fine. The Garden Treasures did not do well—too dry just after they were planted. C. R. W.

New York.

JOHNSON'S, Orange Co., Dec. 20.—Orange butter and Goshen butter used to be familiar names in the market reports; but these names have passed away and linger only in the memory of the "oldest inhabitant." The reason for this is simple—the butter makers, upon the advent of railroads, became milk producers and sent their product to New York. This used to be a profitable business; but in later years, with the extension of railroads and the aid of refrigerator cars, milk is shipped great distances and the market is flooded, causing prices to rule low nearly the entire year, so that there is little profit in the "milk business" now, and producers are on the "ragged edge" as they see but little prospect ahead of any permanent improvement in prices. Owing to the great scarcity of milk just now, the farmers get four cents a quart, which is an outside figure and will be maintained but a short time, as this price generally brings a flood of milk, and prices begin to drop till two cents are reached, a figure discouraging to farmers who are badly in debt or have heavy rents to pay. The hay crop was very short, and mows looked very open in the beginning of Winter, but large areas of drilled corn were planted to "piece out," the hay crop. The corn crop was fair, a good deal of it extra good. The oat crop was light on account of dry weather. The wheat crop was almost a failure, having been winter-killed, but the fall sowing got a good growth and goes into winter-quarters in good shape. A good many farmers in this immediate vicinity are also engaged in the culture of small fruits to quite a large extent, and find it profitable, as prices generally rule high in the local markets. We have a farmers' club, known as the "Westtown Farm and Garden Club," whose proceedings are largely printed by three county papers. A great deal of interest is manifested in these meetings, both of a business and social nature. Once a year, for three years, there has been a strawberry reunion supper when the products of the club are exhibited, especially strawberries; and in the Fall, for two years, there has also been a harvest-home supper. The social part is what contributes so largely to its success. The business meetings are held once each month, when the moon is full, at the houses of different members, and are largely attended. The club was originated by the Rev. J. B. Fisher of Westtown, who also is the President. Much good is already noticeable as the results of his efforts. M. H. C. G.

Pennsylvania.

BADEN, Beaver Co., Dec. 22.—Wheat was a poor crop; corn a good one; oats ditto; potatoes a light crop; apples a big one, although this is an "off" year for this section; hay a light crop. Prices are as follows: Wheat about 90 cents; corn 50 cents; oats 35 cents; hay $15 to $20 per ton; potatoes 70 cents; apples $1 per barrel. Several apple buyers are picking up all the apples they can get at 75 cents per barrel. One said he had bought over 10,000 barrels in this country so there must be a sale for them somewhere, although the farmers are told that the apples can hardly be sold for any price. There is considerable excitement here now about natural gas. Several large wells and some small ones have been struck. About 30 or 40 wells are being sunk, and a great many others are in contemplation. Some of my neighbors laugh at me for paying $2 per year for a farmers' paper when one can be had for much less. I tell them that one number of the RURAL NEW-YORKER is worth a wagon-load of such trash, for the one number is sure to contain something useful, while the more of the trash a man reads the more he will be misled. But such papers as the RURAL will win at last. Farmers are getting more intelligent every year, and the cheap papers and their cheap readers will get scarcer as time goes on. F. W. S.

WATTSBURG, Erie Co.—The past has been a poor season for farmers and dairymen, as crops were rather light and prices low. This being a poor wheat country, my Diehl-Mediterranean yielded only eighteen bushels per acre. I think it a very good kind, though it seems more inclined to rust than some other sorts; it makes an excellent quality of flour. Spring wheat could not be got in early and is

a light crop. White Russian seems to do the best of any. Oats a light crop; the Welcome so far as tried, seems to yield well; but it smuts worse than other kinds. Potatoes half a crop on account of poor season and rot. Dakota Red yielded most and rotted least. The White Elephant yielded about the same as the Late Rose, but rotted worse. The Rural Corn did very well, nearly all ripened. I have not fairly tested the quality of the Carter's Stratagem and Prince of Wales Peas; but think the latter a promising variety.

W. T. M.

Utah.

ASHLEY, Uintah Co., Dec. 14.—The Johnson Grass came up finely and grew to the hight of five feet. We got a pint of seed, and if it stands the Winter we will sow the seed in the Spring. We got good returns from the Flageolet Beans, also from the peas. The tomatoes set well, but did not get ripe before the frost caught them. Most of the 50 varieties of corn were too late: but some got ripe, and I expect to plant all next year. J. S.

Wisconsin.

REEVE, Langlade Co., Dec. 20.—The Rural Peas were splendid. I think the Prince of Wales the best. The Garden Treasures were fine; my wife and granddaughter obtained a great deal of pleasure from them. The corn is too large for this country. Some stalks were 10 feet high when frost caught them. Some had a few nubbins. B. F. L.

THE FARMER'S CLUB

ANSWERS TO CORRESPONDENTS.

[Every query must be accompanied by the name and address of the writer to insure attention. Before asking a question, please see if it is not answered in our advertising columns. Ask only a few questions at one time.]

PEA-FOWLS; PEKIN DUCKS; FRUITS FOR NEBRASKA.

R. I. E., Worden, Neb.—1. How often do pea-fowls hatch? What are their habits? Are they easily raised? 2. Who has bronze turkeys for sale? 3. What sort of ducks are the White Pekin and where did they originate? 4. What sort of apples are best adapted to Northern Nebraska? 5. Would pears and plums do well here? 6. What sort of plum is a blue and a white variety, the fruit of which grows in clusters along the limbs?

ANS.—1. Pea-hens lay from 12 to 20 eggs and raise only one brood a year. In a domesticated state they agree well with all turkeys, but not always with other poultry. It is necessary to protect them from cold in our northern Winters. Barley is the food commonly given to them, and to this may be added millet and other grains and leguminous vegetables. The females are apt to neglect their eggs and young, hence, in hatching, the services of a hen turkey are generally required. For young pea-fowls, the best food consists of "ant-eggs," barley-meal paste, mixed with sweet curd and hard-boiled eggs chopped fine. The young do not attain their full plumage until the third year. They are about as hard to raise as turkeys, to which they bear a strong resemblance in habits. 2. R. Vanderhoven, Rahway, N. J.; Jas. D. Cass, Beloit, Wis.; J. W. Janney, Waynesboro, Ohio.. 3. The Pekins are a Chinese breed of duck. They mature early, often laying when five months old, are white in color, with yellow bills and legs. They often attain a weight of ten pounds each. They will sometimes weigh five pounds when ten weeks old. They are easily kept, and require no water except a trough or tub for bathing purposes. 4. Write to Prof. J. L. Budd for the Russian varieties which he has. The Wealthy, Oldenburg and Tetofsky have been often recommended for that latitude, but last Winter destroyed nearly all. 5. The native plums do best; in fact, there are no others that can be recommended for that climate at present. DeSoto, Forest, Garden, Kirke's are the best of these. Archangel, Bloodgood and Flemish Beauty are the only pears we would dare mention, and these we would not recommend. There are some of the Russian sorts that may do better. 6. The Damsons, both blue and yellow, grow as you mention.

PRESERVING POSTS, ETC.

J. D. F., Salem, W. T.—1. What can I apply to wood to render it more durable as fence posts, as the pine and fir which we are compelled to use will decay in about two years? 2. Can I make a good barbed wire fence with posts 30 feet apart? Will the Mammoth Clover flourish on drier soils than the Medium Red?

ANS.—1. If the posts are cut and split, or even peeled, and allowed to thoroughly season, much will be added to their durability. If, after they are seasoned, they are saturated with gas tar, their durability will be greatly increased. Where many are used, or where a neighborhood combines, it will pay to procure a vat or tank made of sheet iron, as large as desired and deep enough to come up higher than the post would go in the ground; this tank should have a wide flange around the top, made on a slant upward, so that the tar will not run over and take fire. The tank is placed on an arch or temporary furnace, the posts are stood in it so as nearly to fill it; a few gallons of tar are added, and a slow fire is made. Enough tar should be used so that it will boil up and fill the tank and saturate the post for the whole length intended to go in the ground. 2. This distance will do well, except where it is desired to fence against hogs, in which case two strips, 1½ and two inches, can be put between each pair of posts, and the strands be stapled to them. 3. The Mammoth Clover makes a stronger growth and will do rather better on the drier soils, as its roots run somewhat deeper.

COTTON-SEED MEAL, BONE DUST AND GUANO.

J. F., Gonzales, Tex.—What would be the comparative value of cotton-seed as against a compound of three parts of bone dust and one of guano? Our only available manures are Post Oak ashes as gathered from the houses, and the above.

ANS.—One ton of cotton-seed would contain about 280 pounds of oil, which has very little manural value, being mostly carbon and hydrogen. It also contains about 920 pounds of hulls, which are composed mostly of vegetable fiber, with about 46 pounds of ash, of which 26 pounds are potash, and 90 pounds are phosphoric acid. It also contains 800 pounds of meal, containing 56 pounds of nitrogen, 23 pounds of phosphoric acid and 12 pounds of potash. The ton, then, contains 56 pounds of nitrogen, 113 pounds of phosphoric acid, and 38 pounds of potash, and is worth, at present prices, somewhat over $20. One ton of the mixture would contain 1,500 pounds of bone, with 375 pounds of phosphoric acid and 45 pounds of nitrogen. The 500 pounds of guano would contain about 35 pounds of nitrogen, 75 pounds of phosphoric acid and about 15 pounds of potash, so that a ton would contain 80 pounds of nitrogen, 450 pounds of phosphoric acid, 15 pounds of potash, and be worth $41. But the bone of the mixture would not be in a form to benefit the crop as quickly as the seed, and it would be deficient in potash. By comparing the above valuations with prices, a good idea of which to buy can be obtained.

INSECT INJURING GRAPE-VINES.

Subscriber (address mislaid) sends specimens of a vine injured by an insect and asks what it is.

ANS.—The gum has exuded, much as it does from a cherry or peach tree that has been similarly injured, and rests as a large mass about the tunnel, concealing the perforation. In every case the insect has disappeared, so we are unable to state what particular insect did the mischief. The tunnel is about the diameter of a common match, and extends at right angles to the surface, reaching to the pith, where it ends. The insect may be Sinoxylon basilare, Say., a beetle which sometimes bores into grape-vines, as well as into apple and peach twigs. We do not think such small, short tunnels can be a very serious injury to the vines, though they might become so, if sufficiently numerous. In case it were practical, the remedy would be to cut and burn the twigs while the insect was at work; but we fear this will not be practicable.

ABOUT PEA CULTURE.

E. C. B., Wilmington, Vt.—1. What is the best method of raising peas by the acre? 2. Which are the best kinds? 3. Is it necessary to sow some other grain with them to hold them up?

ANS.—1. Peas may be sown on grass sod turned down in the Fall or Spring and well fitted just before sowing, and unless quite rich, it should have a liberal dressing of manure cultivated and harrowed into the surface soil, or they may follow potatoes or corn the year before. Where chemical manures are used, phosphatic and potash manures have the greatest effect. They do best sown with a drill, and from two-and-one-half to four bushels per acre should be used, according to the kind and the richness of the soil. 2. The little Canadian Pea is much used for field culture; so also is the Black-eyed Marrowfat. 3. Where the ground is smooth and rolled after sowing, there is no necessity of sowing other grain to hold them up; but where oats are sown with them, and they are cut as soon as ripe and well cured, the fodder is worth as much as a crop of Timothy hay. Will our Canadian friends tell us how they raise peas?

OIL-MEAL.

M. H. L., Salem, Mass.—1. Is there a difference between cotton-seed meal and the new process oil-meal the RURAL so often mentions? 2. If so, which is the more desirable as a food for milch cows?

ANS.—1. Yes, one is the residuum of the cotton-seed oil mills of the South, and contains a large per cent of free oil (often as much as 17 per cent.); the other is the residuum of those mills making oil from flaxseed by a new process, in which instead of being extracted by pressure as in the old process, it is floated out with a solvent which is afterwards driven off by heat. This contains only about two to three per cent. of free oil. 2. We greatly prefer the new-process for use where the milk is used for making butter, as so much oil as is contained in cotton-seed meal or even old-process oil meal is almost certain to give the butter a disagreeable, oily taste. Very many of the mills in the West now making linseed oil, use the new-process, so there should be no trouble in obtaining it. If you write to the Detroit Linseed Oil Works, they will tell you where it can be had and quote you prices.

LIME.

A. A. (address mislaid.)—1. Can the stone commonly used for hydraulic cement be so burned as to be used as quick lime for making mortar? 2. Can quick lime be used for any other purpose than for mason's use?

ANS.—1. No, the stone from which hydraulic cement is made contains magnesia, or is what is called magnesia limestone, and hardens quite rapidly when mixed. Ordinary quick lime is made from carbonate of lime. By burning, the carbonic acid is driven off, and by the addition of moisture it slakes or crumbles to dust. Magnesian limestone needs to be ground to reduce it to powder. 2. Yes, it is used for fertilizing and various other purposes.

Miscellaneous.

J. R., Columbus, Ohio.—1. Where can I get good spring wheat for seed? I wish to try it here on clay soil, as our winter wheat freezes out badly? 2. Will it do to plow in the Fall, just before freezing up, for oats and corn, the ground to be well pulverized in Spring by going over it three times with the Acme Harrow? 3. Is the little book "Tillage is Manure" published by Nash Bros. reliable? 4. Where can I get the best yielding oats and what is the price of the seed?

ANS.—1. Of any large dealer in seeds. Probably of Livington's Sons at Columbus. Certainly of Ferry & Co., Detroit, or of H. Sibley & Co., Chicago. We could not advise as to the best kind for your locality, climate and soil. If they have not been raised in your neighborhood, try several in a small way. 2. Such fitting of the soil would be capital for oats; but we would always prefer spring plowing for corn. 3. It is a very good little book and will pay for a careful reading. Few of us understand the importance of thorough tillage both in fitting the soil before seeding and in tending the crop. We don't quite believe that tillage can take the place of manure, though it will aid the soil to do its best for the fertility it contains. 4. Of the same parties that have the Spring wheat. The prices we could not give. The Welcome or White Australian is a good, heavy, early oat but not a large yielder. The American Triumph and White Russian are larger-growing and better yielders, but later.

J. S. P., Brockport, N. Y.—1. Where can I get J. J. H. Gregory's work on fertilizers? 2. What other good works are there on the same subject?

ANS.—1. Of Mr. Gregory, Marblehead, Mass. It is mentioned in his catalogue among a list of other works on agricultural matters. Harris's Talks on Manures, $1.75; Harlan's Farming with Green Manures, Johnson's How Crops Feed and How Crops Grow, $2 each, are good works on the subject. All can be got through the nearest book dealer or the American News Company, this city.

H. C. B., Poteau, Ark.—My farm is on a river much given to overflow and with a rapid current; it is much damaged by washing; how can I protect the banks except by a levee, and that is expensive?

ANS.—With so rapid a current we doubt whether a levee would stand against the wash. We suggest the planting of a thick row of cotton wood or willows close along the bank; if if they once get root-hold nothing could move them.

P. T. M.—What is the address of the Agricultural College, of Nebraska?

ANS.—Lincoln, Neb.

E. K. T., Burlingame, Kans.—The specimen sent is a common intestinal tape-worm—Echinorgnchus gigas.

J. B. McG.—Dog powers for churning are made by the Vermont Farm Machine Co., Bellows Falls, Vt.

DISCUSSION.

WEANING CALVES.

J. M. S., QUINCY, ILL.—In the Farmer's Club, page 859, D. H. P., Auburn, N. Y., recommends that the calf should be taken from the mother when only 12 hours old. All my experience contradicts his assertion that when the calf is taken from the mother when 12 hours old it will learn to drink more readily than if allowed to remain with the mother until three days old. Since I was nine years of age, it has been my work to wean the calves on rather a large stock farm, and I have weaned several hundreds. For the first few years I adopted his plan of teaching the calf to drink when 12 hours old and had much trouble. I then became convinced that it was better to allow the calf to suck the mother until it was several days old, and since doing this I have not experienced one per cent. of the trouble in teaching the calf to drink, that I had before. D. P. H. says that if the calf be taught to drink when 12 hours old, there will be no sore teats and no bellowing by either cow or calf. As to the bellowing, his assertion is *prima facie* incorrect; and if the matter is properly managed, the calf can be allowed to suck the mother for a week and yet there will be no sore teats, and no more bellowing than if it is taken from the mother at 12 hours of age. My plan is this: As soon as the calf has filled its stomach, it is put in a stall or inclosure separated from that of the mother by a rail or board partition in which there are cracks. This allows the mother to see the calf and to nose and lick it when it comes up to the partition, and neither shows any uneasiness. Every six or eight hours the calf is turned in with the cow and allowed its fill, when it is returned to its inclosure, and the mother's udder is drawn clear and the teats wiped dry. When this is done the teats do not become sore and the swelling of the udder is more rapidly reduced; for allowing her calf to suck puts the cow in a good humor and she will give down all her milk readily, permitting you to draw the udder cleaner than if the calf has not been allowed to suck. When the calf is four or five days old it has become strong and accustomed to its surroundings, and if allowed to become quite thirsty it will, in a great majority of cases, *drink* milk from a bucket without any hesitation and without your giving it your finger to suck. Never give the calf your finger if it can be avoided. If the calf refuses to drink, back it into a corner and while you hold it with your left hand, dip your right hand into the milk and insert the middle finger into the calf's mouth. The calf will suck your finger, then lower your hand into the milk and the calf will suck it up by sucking your finger. As soon as it sucks nicely, withdraw your finger. This is rarely necessary when the calf is allowed to suck the cow until it is a week old, and nearly always necessary when the calf is only a day old. When the calf has learned to drink, separate it altogether from the cow. Instead of their bawling more, they will bawl less than if the calf is taken from the cow when only 12 hours old; for the mother's solicitude for the calf and the calf's attachment to the cow weaken with time. Many a cow that is "almost distracted" if separated from the calf when it is only a day old, will go off and apparently never think of it if the calf is a week old; and the concern of the calf diminishes as rapidly with time.

BLACKBERRIES.

A., OCEAN COUNTY, New Jersey.—In a late RURAL you give a very full list of 20 sorts or more, I believe, with the opinions of many cultivators of them, from different parts of the country. This is highly useful information to your readers, and after this they can more understandingly select such sorts as may prove best for each particular soil and climate. I have tried various kinds for years past on a light, gravelly soil, but none prove nearly equal to the Kittatinny. This is a vigorous grower with me, hardy and an abundant bearer of the largest sized berries, and if allowed to perfectly ripen before being picked, they are sweet and luscious. But in this stage they are a little too soft for shipping any distance, so that those buying them in the market cannot judge as to their real goodness, for they have to be picked a few days before fully ripened, in order to bear transportation well. But this is the case with all sorts of berries, plums, peaches and most other kinds of fruits.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING SATURDAY, JANUARY 2, 1886.

W. H. L.—R. P. McA.—G. W. W.—C. E. L.—L. J. T.—G. C. W., thanks.—W. J. B.—J. T., thanks.—W. D. S.—W. J. P.—J. B.—J. M. S.—C. W. G.—F. W. W.—H. H. C. C. E. P., many thanks.—J. F. B., thanks.—J. E. G.—P. H. S.—M. A. G.—W. W. T.—J. T.—W. B. N.—I. R. M.—N. D.—S. J. S.—A. L. C., thanks.—T. D. C.—T. B.—J. D. H.—E. A. S.—S. S. B.—W. S. P.—M. G.—I. M.—T. W.—A. J. C.—J. B.—A. C. M.—D. J. McM.—D. J. B.—M. A. E.—C. M.—C. B. H.—T. H. S.—E. J. B., 100 late.—Clare.—W. S.—T. B. T.—W. J.—A. M.—H. T. P.—J. C. S.—G. C. C.—E. McM.—L. R.—W. P.—A. C. C.—L. C.—J. L. B.—W. C. W.—H. Z. R.—E. W. B.—J. J. T.—A. M. T.—G. W. H.—J. T. K.—W. A. J.—C. B. H.—A. J. C.—G. C. W.—F. D. C.—W. I. C.—F. W. W.—L. J. T.—J. M. S.—J. T.—J. T.—F. S.—W. J. B.—C. W. G.—B. F. J.—W. W. T.—T. B.—F. G.—C. C.—A. C. G.—W. E. D.—L. H. R.—G. C. C.—S. F.—N. D.—P. H. S.—H. S.—W. F. H.—A. F.—W. O.—G. W. H

THE
RURAL NEW-YORKER.
A National Journal for Country and Suburban Homes

Conducted by
E. S. CARMAN, Editor.
J. S. WOODWARD, Associate.

Address
THE RURAL NEW-YORKER,
No. 34 PARK ROW, NEW YORK.

SATURDAY, JANUARY 9, 1886.

SOME 20 articles have been selected for the second Potato Special of the RURAL, which will be published about Feb. 15.

ALL perishable plants or tubers which our friends desire us to test, should be sent to the Rural New-Yorker, River Edge, Bergen Co., New Jersey, not to this office. The name and address of the sender should be written on the package.

THE Potato Special will be dated the 16th instant as promised. We have worked better than we knew, having received contributions enough to fill two papers. We extend our thanks to all.

No one should fail to look carefully over the list of presents, which we shall distribute next May-Day. An opportunity to get so much value for so little effort, doesn't often occur. Some people will get them for so few subscribers and so little effort as to surprise even themselves.

WE have articles enough (thanks to many friends) to fill at least TWO Potato Specials. The first will appear next week with a four-page supplement. The second, in time to be serviceable for planting the next crop. Perhaps this will please our readers better than to devote our pages two weeks in succession to this subject.

THE Jewell Strawberry received very high praise at the meeting of the New Jersey Horticultural Society held at Trenton last week. It was conceded by all to be the most promising berry now being introduced, and was put upon the list for extended trial without a dissenting vote. This only corroborates what we have said of it. We really want every one of our present subscribers to try it. This they can do at no expense beyond a few moments' work, as we shall be most happy to send eight plants, direct from the originator, P. M. Augur, to any old subscriber who procures us a new one. You can thus benefit yourselves and us at the same time. Isn't this worth an effort?

WE shall soon begin to notice the catalogues of seeds, implements, etc. for 1886, sent to this office by the leading firms of the country. As usual, we advise our readers to send for them, compare them, make inquiries as to the firms sending them out, to the end that they may purchase goods of the best quality, and at the lowest cost. Our several farms and the experience of many years in testing all kinds of plants, seeds and implements, whether new or old, should enable us to aid our friends in making their selections; and this, as has been our custom, we shall endeavor to do, by calling attention in a thoroughly impartial way to the notable features of the catalogues received.

WE have so often advised our friends to go slow in disposing of their flocks of sheep, because of the low prices of both meat and wool, that we have sometimes feared they might think we were trying to bore them. But those who have heeded our advice and tenaciously held on, weeding out the flocks, and in every way improving those kept, are in fair way to be thankful that they have done so. The wool market is getting stronger, and prices are better, and we are quite sure that the price of mutton will be higher before Spring. Meantime every sheep owner should strive in every way to improve his flock, both in fleece and carcass. There is not the least danger of their getting them too good.

IN England, where horse shows are numerous and well attended, there is a growing tendency to exclude over-fed and extremely fat animals from competition. This seems like a good move. Too many judges, at shows of this character, are influenced by a fat, sleek appearance, and frequently overlook finer points in less well-rounded animals. It is the duty of the breeder of animals for a fat stock show, to cover his beasts with all the tallow and meat they can carry. The prize animals are seldom used as breeders, and it is doubtful if, as individual animals, setting aside the prizes they obtain, they pay for the care bestowed upon them. They serve to show what can be done by forcing, and they enhance the value of the breeding stock of the owner. It is different with draft horses. Those exhibited at show rings are to be used chiefly for breeding purposes, and fat, over-fed animals are notoriously poor breeders. An extra quantity of soft fat is out of place in a working animal. We would as soon think of a fat man trying to win a running match. We hope the tendency to breed fat and awkward horses will be done away with.

A CONSIDERABLE number of the cattle kings who had illegally fenced in large tracts of the public domain, have removed the obnoxious fences in compliance with the President's proclamation of last August. Others have failed to do so: while a few have not only refused to remove the illegal fences already up, but have actually added to them. A number of arrests of recalcitrants have been made in New Mexico, Colorado and Wyoming, and a number of warrants have been issued for others in Kansas and Nebraska. There is, on the side of the authorities, a resolute determination to deal promptly and vigorously in this matter. The public land is for the public, not for cattle kings or syndicates, native or foreign, or for railroad corporations, or any other land-grabbers. All efforts to preserve the lands for their legitimate purpose, or to restore them to it, should be heartily approved by the public press, especially by the agricultural part of it, for the agriculturists of the nation are the chief gainers thereby. Of course, it is the bounden duty of the government officials to enforce the law in this matter: nevertheless, their hands are strengthened and their hearts encouraged by public approbation of their action.

IN addition to the manufacturers and dealers of bogus dairy products, the assailants of these concoctions are beginning to find other opponents in the raisers of hogs and beef cattle, as the growth of butterine and oleomargarine is thought to enhance the value of these animals by the greater demand created for portions of hog and beef products. At the recent Fat Stock Show at Chicago, the exhibitors of bogus butter, in their successful attempt to obtain permission to exhibit their goods, received no little support from that section of cattle and hog exhibitors who had little or no interest in dairying, and we notice that at several recent meetings of live-stock men, resolutions have been passed commending the action of the State Board of Agriculture in admitting the concoctions. If the exhibition of them tended to advance the interests of fat stock, why were they not shown in the fat-stock department, instead of in the department devoted to dairy interests, which they confessedly injure? But even the hog and beef cattle raisers, like all other honest men, must join with us in denouncing every effort to sell oleomargarine and butterine as genuine butter by manufacturers or wholesale or retail dealers. We demand that artificial butter shall stand on its own merits, and to prevent error and fraud, that it shall have a distinctive color.

THE value of a really independent paper, one conducted by honorable, upright men, and backed up by capital enough to render its editorial opinions free from bias by the advertising department, may be inferred from revelations just made by a Senate investigating committee with regard to the hidden sources of certain manifestations of the "power of the press" in this State. During the last session of the Legislature there was a remarkable agreement of opinion among a large number of the journals of the interior, belonging to both parties, regarding the unadvisability of legislation hostile to the interests of the gas companies.

It turns out that the editorial outpourings of no fewer than 37 newspapers in country places were inspired by a single mind. Four articles, two for Republican and two for Democratic papers, were prepared by a writer in the employment of the consolidated gas companies, and the insertion of the articles as editorials was procured by an advertising agent! Among flagrantly extortionate monopolies, the gas companies hold a foremost place. How dangerous to the public welfare the corrupting power of such unscrupulous corporations. East, West, North and South, with those who make and those who should execute the laws, and even with those who should impartially, honestly and fearlessly criticise both and hold them strictly to their duty.

WE WANT

a large number of sketches for 1886 from our readers, for which we propose to pay our regular price for such matter, as the illustrations *appear* in these columns. It matters not how rudely the sketches are drawn, if only our artist can understand them and the descriptions which accompany them. The sketches desired are those of *any* contrivance whatever which will save labor or promote economy or comfort, whether for man or beast. For the farm, garden, orchard; for the barn, stable, shed, corn-crib, carriage house, tool-house, granary; for the pig-pen, poultry yard, poultry house, chicken coop; for the sheep, cattle, swine; for the house, kitchen, laundry; for wells, pumps, well-houses, ice-houses, we want sketches for illustrations. We want sketches and plans of farm houses, dairy houses, and all sorts of farm buildings; of every sort of tool or implement used in country life; of anything, in short, which may help in any way the farmer, the farmer's wife or children, and all who work the soil either for pleasure or profit. Go to your neighbors and see if they cannot help you; see if they have nothing upon their premises which you would like, and which you think would be worthy of being illustrated in the RURAL NEW-YORKER. We do not ask or expect artistic sketches or good writing. We only ask for legible writing and for sketches which may readily be understood. Photographs of any of the above will be acceptable.

LAND COMMISSIONER SPARKS.

A GREAT deal of discontent exists all through the far Western States and Territories at the course of Land Commissioner Sparks in regard to land entries. The chief charges against him may be briefly summarized thus: He has announced that 75 per cent. of all the entries are fraudulent; and consequently that 75 per. cent. of those making them are rogues, without any proof. He has suspended action on 40,000 entries until their legality shall be decided, thus bringing a vast amount of distress on a large body of settlers who can raise no money for the improvement of their land or for supplies while their titles are in doubt. He has changed the rules relating to public entries, so that a horde of his agents may rob the settlers by threats of prosecution. He has sought to set aside by his rulings the settled land policy of the nation, by declaring null entries under settlement laws, which for 25 years have been considered good evidence of title and upon which the authorities of States and Territories have taxed lands so entered. He has vilified former officials as rogues from party rancor. In addition to ignorance of the land-laws and their administration, he has an ungovernable temper and a vicious tongue. A charge of fraud he considers a proof of fraud, and an assertion in the matter he at once proclaims a fact. Some of his decisions have been so oppressive to frontier industries, that they have been overruled or modified by the Department of the Interior.

The Commissioner maintains that the clamor against him, which is loudly heard in all the public-land States and Territories, comes from greedy and dishonest land agents, money lenders and land-grabbers of all kinds and their henchmen in the office, the counting-room, the farm and the press: and that honest settlers silently approve of his course, while the dishonest make all the uproar. There has been a vast amount of dishonesty in Western land occupation. A great deal of what the Commissioner says is undoubtedly true; but the complaints are too numerous, wide-spread and unpartizan to permit the supposition that his course has always, or even generally, been judicious or just. A more prudent Commissioner could easily be selected; a more unpopular one could hardly be found.

THE RURAL'S Special Contributors For 1886.

With a Revised List of the Subjects to be Considered.

(ENGLAND.)

SIR J. B. LAWES.
Subjects not as yet decided upon.

PROFESSOR J. P. SHELDON.
Dairy and Stock Notes.

JAMES SINCLAIR.
General English Farm Notes.

(UNITED STATES.)

PROFESSOR G. E. MORROW, ILLINOIS.
1. A series of short articles on The Principles of Breeding and Improvement of Animals, with Descriptions of Breeds and their Adaptations.
2. Notes on Live Stock in general.

GEN. CASSIUS M. CLAY, KENTUCKY.
How Live Stock may be Improved.

GEN. W. H. NOBLE, CONNECTICUT.
Rural Adornments and Comforts.

PROF. THOMAS MEEHAN, PENNS'A.
The Relation which Water bears to Successful Culture.

MAJOR HENRY E. ALVORD, Houghton Farm, NEW YORK.
1. A Noteworthy Change in Public Opinion regarding the Bureau of Animal Industry.
2. The Prospective Increase in the Factory System of Dairying, as the Result of Competition from Substitutes for Butter.

C. A. GREEN, NEW YORK.
Improving a Run-down Farm. (Continued.

WILLIAM FALCONER, LONG ISLAND, NEW YORK.
1. The Flower Garden.
2. Ornamental Trees and Shrubs.
3. The Window Garden.
4. The Greenhouse.
5. The Vegetable Garden.

PRES. T. T. LYON, MICHIGAN.
Horticultural Matters viewed from an Amateur's stand-point.

F. L. KILBORNE, B. V. S., WASHINGTON.
Veterinary Topics for the Farmer's Consideration.

T. H. HOSKINS, M. D., VERMONT.
1. Vegetable growing: especially the Testing and Improvement of Varieties.
2. Artificial Fertilizers. Which are the Best and Cheapest for the Crops Grown.
3. Fruit Culture—especially for the Cold North.

DR. C. V. RILEY, WASHINGTON.
1. Bees *vs* Fruit.
2. Mildew on Grape-vines.
3. The Best Remedies against Scale Insects.
4. Special Insects of Interest.

DR. W. J. BEAL, MICHIGAN.
The Structure of a Blade of Grass in two or three articles.

PROF. R. C. CARPENTER, MICHIGAN.
1. House Drainage as Applying to Farm Houses.
2. Water Supply for Farm Houses.

PETER B. MEAD, NEW YORK.
Horticultural Notes under a *nom de plume*.

PARKER EARLE, ILLINOIS.
1. Matters Pertaining to Distant Markets.
2. Better Distribution of Fruit Products.

P. M. AUGUR, CONNECTICUT.
High Fertilization and Culture as Affecting the Growth and Fruitage of Plants on the Basis of Economy.

PROF. A. J. COOK, MICHIGAN.
1. New Points of Value in Bee-keeping.
2. Principles in Stock Breeding and in Stock Feeding.
3. New Injurious Insects and New Remedies.

PROF. I. P. ROBERTS, NEW YORK.
Recuperative Agriculture, more especially adapted to the South.

PETER HENDERSON, NEW JERSEY.
Potatoes—Large or Small Sets.

JOHN THORPE, NEW YORK.
Seedling Chrysanthemums, Pinks, etc.

JAMES TAPLIN, NEW JERSEY.
The Comparative Value of the Newer Roses.

HON. F. D. COBURN, KANSAS.
A series of articles on Matters connected with Beef Cattle, and Beef Making.

Prof. W. W. TRACY, MICHIGAN.
A series of articles on the Testing, Introducing, naming and describing of Varieties of Vegetables.

PROF. E. M. SHELTON, Kansas.
Subjects not yet decided upon.

IN GENERAL

we may say that all of the RURAL'S regular contributors will continue with us during the year.

BREVITIES.

THIS year we shall probably be unable to supply back numbers for any length of time.

IN the last Congress, out of 360 members only six were farmers, while 264 were lawyers and 27 bankers. Certain bald statements are too suggestive for comment. Without a lawyer or a banker, this country would flourish; without the farmer it would perish. Only six men to represent the twenty millions the effects of whose labors bring prosperity or adversity to every class and industry in the land!

MR. PUTNAM from Cambridge, Vt., writes, speaking of our new potatoes: "We must remember that what will do well on one soil will not do well on others. If that was the case with the seedling potato I sent you, I am anxious to know the truth, as I am convinced you can neither be bought nor sold, and will tell the truth and nothing but the truth."

SOME one suggests that when whitewashing is going on, it may serve for several uses besides those of whitening walls and preserving wood. In the cellar, it will not only increase the light by its reflections, but will check mold, especially if some copperas or sulphur is added. Some posts, stones, tree trunks, etc., if coated with it, show even in darkness, and serve as guides. With sulphur added, the lime wash is probably the best of all applications to the tree trunks in the orchard.

Pomological.

BEURRE FOUQUERAY PEAR.

THIS is a new variety of pear which has just been put on the market in France. It was originated by M. Fouqueray-Gauton, a well-known horticulturist of Sonzay, in the Department Indre-et-Loire, who has originated several other excellent varieties. This first fruited in 1880, and since then it has become very popular in that section owing to the beauty and high quality of the fruit.

The *Revue Horticole*, from which our illustration, Fig. 18, has been re-engraved, says the tree is a very strong grower, with upright, stout and long branches. Leaves large, tough and a bright green; petiole strong and of medium length. Fruit large, from nine to eleven inches in circumference, and from three-and-three-fourths to four-and-one-half in length; stem short, strong, in a rather shallow cavity, the margin of which is somewhat uneven; calyx large, and regular; skin smooth, fine, a trifle yellowish on the side exposed to the sun; often reddish, especially in trees grown espalier fashion. Flesh white, mellow, very rich; juice abundant and sweet, with a very agreeable perfume.

The Swineherd.

PIG DIET.

COL. F. D. CURTIS.

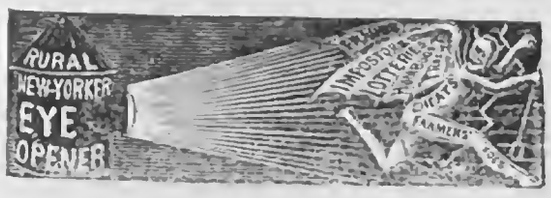
Barley and wheat as feed; wheat middlings; bran; pasture; food and manure; need of individual attention.

MR. A. C. CLARK, a model breeder and the originator and perfector of the so-called Cheshire hogs, told me a long time ago that the best food for sows when suckling pigs, was barley, ground entire, and mixed with milk or whey. Wheat is also excellent, and in these times a farmer can afford to save some to feed to his young pigs, especially when first taken from the mother. Probably there is no kind of grain which will come nearer to supplying the full ingredients of the milk. It must be fed carefully and but a little at a time. I should say a half gill would be ample for four hours' feeding with a gradual increase, as the animals show an inclination to eat and that it agrees with them.

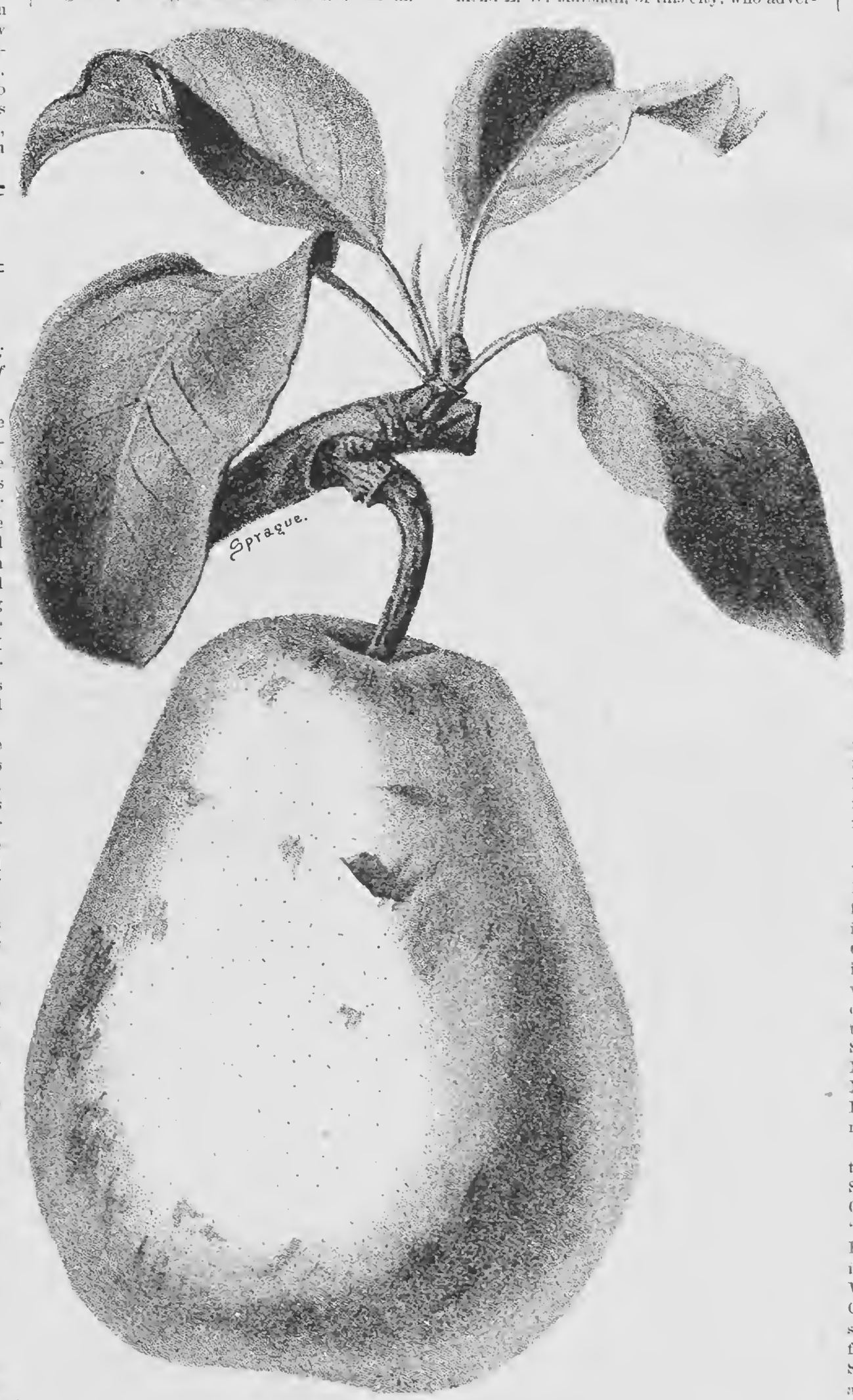
Wheat middlings are good, according to the quality. All bran, however, finely ground, is not just the thing. The farmer can, however, make it stronger and better suited to the wants of the pig by adding a pinch of corn meal or some coarse wheat flour. I should feed whole oats as a supplementary food to chink in and supply what the others lack. I am speaking of a no-milk diet.

When the pigs get older, and the time comes to crowd them more, or to fill up the muscles and tissues with fat and to make them grow, I mix wheat middlings and corn meal (two and one), and feed liberally of the mixture three times a day. They have the run of a good pasture and a few apples. The pigs do well, and have a uniform appetite, which is an indication of health. The old hogs certainly fatten very fast on this compound, and the best of it is, the meat will be more healthful than where the hogs have been stuffed on clear corn. They make twice as much manure, and the chemists tell us the pay for the middlings all comes back in the manure. Of course, we don't get in the manure all the food they eat; but what they do make is worth per pound all the middlings cost, weight for weight.

I wish some of the experimental farmers would tell us just how much is returned out of the middlings fed, in gain and in excrement—the per cent. of the amount eaten. Prof. Sanborn is the man to do this, as he is one of the most pains-taking and the most practical of all the professors. A considerable share in the thrift of pigs will arise from the owners watching things, to see how everything works. Changes must be made from time to time in food and surroundings, and *each* pig should be looked after individually; a general look won't do.



THE Seneca Chief and Red Line wheat swindles are of precisely the same stripe as the Bohemian oats fraud. They have been started recently in several counties in Ohio, Indiana and Michigan, and perhaps in other States also. The lot of the farmer who invests in them will certainly be like that of the dupes who invested in Bohemian oats. In Logan County, Ohio, alone, farmers are reported to be $200,000 out of pocket by the latter fraud, which is still worked vigorously. Many of the officers of the various associations made quite large fortunes out of the fraud. Although we have explained the *modus operandi* several times, we repeat it once more for the benefit of our host of new subscribers: A sleek, glib-tongued agent urges the farmer to buy a certain number of bushels of oats at $10 per bushel. The farmer very naturally objects to pay such a preposterous price. "You won't have to pay a cent down" says the sharper. "Just take 20 bushels and give me your note for $200. Out of the first crop we will buy 40 bushels at the same price, and give you a bond to that effect, and the note will not be presented till the bond is lifted." The prospect of thus doubling his money is often irresistible to the farmer, who signs the blank note presented to him, receiving, in return, a bond signed by the agent of the association. In all



BEURRE FOUQUERAY PEAR. Fig. 18.

cases the note given is negotiable, and is readily discounted by "note shavers," and having passed into "innocent hands" it must be paid. The agent, however, seldom complies with the bond by buying double the quantity of the farmer. This is occasionally done to gull more simpletons, or because oats are required to carry on the fraud. Just as in the grave-yard insurance swindles, a number of people of good standing in various sections have been tempted to engage as officers of the various associations. We have before us those of the Western New York, and the Northwestern Central Ohio Associations and the Bohemian Oat and Cereal Company, of Kenton, Ohio. There are a dozen other companies in Northwestern Ohio alone, besides a large number of others in most of the Western States. We very earnestly urge upon our readers to have absolutely nothing to do with such associations either as swindlers or dupes.

J. Coy, Hoosick Falls, N. Y., is evidently a cool sharper. He claims to be a partner in two large drug stores to open on January 15, one at Dallas and the other at San Antonio, Texas, and he advertises for help, and writes, to an applicant in this city, for a deposit to the amount of $200 to $500 as security for a situation worth $75 a month. It is a common trick of sharpers in cities to obtain a deposit from greenhorns as security in a situation and then to clear out; but this is the first occasion of which we have ever heard where the fellow had the assurance to ask that the cash should be forwarded to him.

TO SEVERAL INQUIRERS. — Pulvermacher's galvanic belts and bands are as good as any we know of; but, like other advertisers, the concern is very likely to exaggerate the merits of what it has to sell. . . . We do not recommend E. W. Marshall, of this city, who advertises, both in the press and through the mails, employment for women in making worsted work and laces, the materials for which, together with an "outfit," the workers must first purchase from the concern, which offers to buy at a fair figure the manufactured goods. Judging from the advertisements, one would imagine the firm a large and highly important one; but it really occupies only a small hall room on Sixth Avenue. The stock on hand would be dear at $100. It makes a very large profit on the materials and outfits it sells, and pays very little for the work done. When we called to investigate, two women who had brought goods were bitterly upbraiding the young man who "runs" the concern for having swindled them. There are several other concerns of the same stripe in this city, and Sixth Avenue is a favorite location for them. . . . We have had several complaints that F. M. Lupton, of this city, has not forwarded books for which he received money. He says he is a trifle behindhand, as he cannot get the works ready fast enough; but that he will satisfy all claims before long. . . . We do not recommend the Renner M'f'g. Co., Philadelphia, Pa. . . We do not recommend the Home M'f'g. Company, of Boston. It offers to send 100 pictures and materials for coloring 500, with brushes, etc., for $1, and to pay $2 per 100 for the colored pictures. We have exposed several humbugs of this sort both in Boston, Philadelphia, Cincinnati and Chicago. We have received a multitude of complaints of such concerns, which make big profits in selling outfits, and always make an excuse for failing to carry out their engagements. The investment at first asked is so small, that many in need of home employment send on the amount; but in most cases more money is then demanded for other articles "necessary to success." A few pictures may be bought back at low prices, to be sold at high figures to fresh applicants, and then come complaints and refusals to purchase.

Miscellaneous.

WESTERN NEW YORK HORTICULTURAL SOCIETY.

WE are in receipt of the programme of this oldest of horticultural societies. The meeting will be held on Wednesday and Thursday, January 27 and 28, at Rochester. The list of subjects for discussion contains many of great importance to the horticulturists and, in fact, to all fruit eaters as well. Several essays have been promised, and all that can attend may be sure of a feast. The Secretary, P. C. Reynolds, Rochester, N. Y., will send the programme.

Literary.

MAGAZINES.

OVERLAND MONTHLY for January promises to be a number of special interest. "For Money," a new novel of California life, by Miss Helen Lake, will commence with this issue; "Golden Graves," a Christmas story, by Leonard Kip, a story of the mines, at Lower Bar; "An Autumn Ramble in Washington Territory," "Mr. Grigg's Christmas," by Kate Heath, a sketch full of love and pathos; Hon. A. A. Sargent, will write again of the "Chinee Problem;" these with other stories, also poems, book reviews, etc., all combine to make this a grand number.

HARPER'S MAGAZINE.—This number opens with a very interesting paper by Mrs. Lucy C. Lillie, entitled "Winter in Devonshire," and is followed by "East Angels," Part XIII, which is one of the best of novels. "Domestic and Court Customs," S. G. W. Benjamin, has 16 illustrations. "A Lampful of Oil" is a well written article about the first discovery of coal oil, and presents many facts of interest on the subject; is also fully illustrated. "Indian Summer," Part VII. W. D. Howells. "The Militia and the Army," Maj. Gen'l. Geo. B. McClellan. These, with Editor's Easy Chair; Editor's Drawer; make up the contents. It is richly illustrated.

THE CENTURY has for a frontispiece a portrait of Guiseppe Verdi. "The city of Teherân," S. G. W. Benjamin, is concluded. "The Crickets in the Field," Anthony Moorehead; "The Bostonians," Henry James; "Feathered Forms of Other Days," R. W. Shufeldt; "Typical Dogs—Pointers," John S. Wise and John W. Munson (a finely illustrated article); "The Cloverfield's Carriage," Frank R. Stockton, a story of Southern life; "Spiritual Preaching for Our Times," Edward Hungerford; "The Second Battle of Bull Run," Gen. John Pope; are some of the contents of this unusually brilliant number. There also are poems, the "Open Letters," "Bric a Brac," and "Topics of the Time."

For Women.

CONDUCTED BY MISS RAY CLARK.

A WOMAN'S TRIP TO LONG PEAK.

(*Continued.*)

AFTER about a mile of this steepest of riding, they turned to a little spring which trickled down the mountain-side, and halted. Here they unsaddled their horses, and left them to feed on the grass growing around the little rivulet.

The climbing was now to be on foot. Before them and on either side as far as one could see, stretched the Boulder Field. This is accurately named, for not a bit of soil of any kind can be seen on it—nothing but immense boulders piled in magnificent confusion. After a mile

of monotonous walking over this relatively level surface, they reached the Keyhole, just below which is the spot where the unfortunate Miss Welton met death. There is a wooden slab erected, bearing these words:—"Here Carrie J. Welton laid to rest, and died alone, Sept. 23d, 1884." A more desolate spot is inconceivable. Nothing but a solitary extent of reddish rocks can be seen in any direction, while through the Keyhole rush the winds, which have collected and gathered force on the other side of the mountain.

After passing through the Keyhole, which was done with caution on account of the gale blowing through there, they climbed along a narrow path, which led around one side of the mountain. During the night, it had snowed on the Peak, and the sun had not yet shone out enough to melt the ice on the rocks on that part of the ascent known as the Slide. Here they had great difficulty in climbing, as the rocks were so smooth as to afford scarcely any foothold, and in addition to this disadvantage, were covered with a thin sheet of ice. Add to these conditions the certainty that if a mis-step was made, it would occasion almost sure destruction, it will be seen that caution and skill were necessary. Moreover, it was very cold, and though all wore heavy winter flannels, their hands and feet which were kept wet, suffered exceedingly. At length by means of twisting their rubber circulars together, and helping each other along, the worst place was passed.

During this time the fog which had been quite thick when they started lifted at intervals, delighting the eye with the most enchanting views. After passing the "Narrows" we reach the "Last Scratch," as it is called, which at first sight looks like smooth rock with no chance for ascent. But there is a very diminutive creek which flows down it, fed by the snows above, and in the bed of this the party climbed.

The summit was reached just at noon. From this hight, 14,271 feet, the cities of Denver, Greeley, Cheyenne, and Fort Collins, are visable on a clear day. The atmosphere was now somewhat hazy, so that the towns could not be distinguished. North, Middle, and Estes Parks can be seen. We (for I was one of this party) looked down on inferior mountains, on the sides of which we saw several small lakes which looked wonderfully blue to our admiring gaze. Along the side of one was a huge snowbank, while another was covered with large blocks of floating ice.

The stillness was intense. We felt that we had actually left the world beneath us. We saw no signs of life around us save an attennated mosquito, which seemed to flutter forlornly about in hopeless search for some unlucky victim. On the verge of the Boulder Field we saw a solitary mountain quail, which was relentlessly pursued with stones by two members of the braver sex, but to the great delight of three members of the party the poor bird escaped. We found several varieties of flowers for a long distance in our ascent; in fact as long as there was soil enough to afford the most meager support.

We had barely finished our lunch when we were warned, by the ominous sound of thunder, of an approaching storm, and considering that "prudence is the better part of valor," we hastily prepared to descend. We paused long enough, however, for a short game of snowball.

Before we had gone half of the distance to the Keyhole the storm overtook us. We waited a little while under cover of a projecting ledge, and the hail then turned to snow, and finally cleared. When we reached our horses it was raining, but the weather became fine again in a short time, and we made good speed down the trail, reaching our boarding place at dusk.

The ladies of the party all expressed surprise at the absence of the great fatigue we had expected to experience. Two of us joined a large circle of ladies and gentlemen around a big bonfire that evening, where we enjoyed some enthusiastic singing.

That the two who were "used up" were both gentlemen was a fact which was a cause of secret gratification to one of the company, who is a rather open admirer of her own sex.

The most delightful of times will come to an end and the common fate followed our devoted company of four, and with many longing, backward looks we took our way to the plains, vowing to return next Summer. So may it be! F. J. WHITAKER.

HOW I PREVENTED THE STRIKE.

M. W. W.

THE largest part of the Winship Mills is owned by my husband's brother in company with a cousin of ours, but Carl is considered one of the firm; he has been a stock-holder since our marriage, three years ago. Though having less to do with them, he is quite a favorite with "the hands," while cousin John continually gets their ill-will. John is a just man, not generous; there are many such in business and elsewhere.

The mills are up the river, about four miles from the city where we all have our homes. Hendric and his family live in an elegant way in a large beautiful new house; John keeps bachelor's hall, is not a social man. Aunt Mary has managed his home to his satisfaction many years. Carl and I live on the old homestead, inhabitated by the Winships several generations back.

Available water-power along the river was utilized by Carl's father and several mills sprung up in his time which have been enlarged and new ones built by "the boys," who have succeeded in their manufacturies well and honorably. It has ever been a rule to pay fair prices for trustworthy workmen, and such have been secured, though largely foreigners, most of them Irish—a stubborn, ignorant class of people as found in manufacturing villages.

Some rebellious ones had been stirring up strife, and had asked for increase of wages, which Cousin John refused with little patience, giving no explanation of the low state of business and the impossibility to increase pay now.

This petition was made about a week before New Years. Hendric and his family were off for the holidays, not to return for several days, when James, our man-of-all-work, a staunch Catholic, who had been in the family many years, generally respected for promptness and faithfulness, appeared at the library door in a great state of perturbation, hat in hand—a sorry looking Irishman, in truth;

"Well, James, what is it? No serious trouble has come to you, I hope? Anything about Mr. Winship, James?" My husband was off taking orders and would not return till Saturday: this was Wednesday.

"Faith, marm, 'tis no good I am telling ye'es, but 'tis not of Misther Winship. Me boys been hearin' it in school, and one of the min himself has but jest notified me o' the same, or I should niver be here a tellin' ye. A number of 'em axked a lift to their wages and since has hinfluenced all to quit work on Saturday, and I be's free to spoke it. Some be that sorry Misther Carl is in it: they's can hardly do it." James delivered himself of this speech with more or less difficulty, gesticulating with head and hands; yet giving up the intelligence seemed to relieve him, for by the time he finished, his scared, red face had lost its look of trouble entirely.

"Are you sure, James, there is a settled determination to stop work on Saturday?"

"Sartin sure, as I am standing on my two feet." Very substantial feet they were too.

"Can you promise me, James, you will let no one know I am told of this?"

"By the Virgin and all Saints, I promise to keep quiet."

After our "Friday" had left, I was in great perplexity. I knew wages could not be increased one cent and have the business pay at all. For all the hundred families to leave and as many new ones to be installed, would be a tremendous loss, too. Cousin John had said "No," and he would never "go back on his word to these people." Before Carl's return, the men would have idled about a day, the mills would have been still as long. I revolved it over in mind all Wednesday night, and Thursday morning ordered the carriage ready at an early hour. I took James into my confidence, for I must tell my plan to assure myself it was a good one. He was full of praises, but I felt doubtful in the extreme.

Fortunately the janitor could work for me and in the afternoon of Thursday I commissioned James to drive to the village, up the river, and leave in every house and all conspicuous places this notice:

"Every woman is urged to go to the hall immediately after supper. Mrs. Carl Winship wishes to see you. Come right as you are, dressed for work, and bring the children if you like. Do not fail to come, one and all."

Not having addressed the public ear since school-girl days, I should have dreaded the ordeal under ordinary circumstances, but this audience and the occasion now was exceedingly peculiar. Imagine an audience of ignorant women, some of them very untidy, dirty looking, unable to speak English with any degree of accuracy, a lot of children clinging to them, others somewhat older racing about the room, while a few men were straggling about the doors. I entered and commenced talking at once, to draw attention and to waste no time in this place. This is the substance of my speech:

"My good women, I think it is my privilege to know every one of you, and before I leave this room let me shake hands with all. To-morrow will be New Year's Day and I have been thinking it is probably true that you do not feel able to get up a fine dinner to-morrow, so soon after Christmas, your great holiday, and I have ordered a man to bring some chickens here. James, will you help bring them in now? I want to give each family a nice chicken. I wish it was a turkey, but I can not afford that, for our business is not paying much over expenses, which are heavy. You know, my good women, we get very small prices for the nice flannel you work on, only 75 cents a yard, and just think of all the cost of it! The machinery to be kept in repair, and the price of wool and then all the help. What we pay to our men and women is so much that the profits are exceedingly small, as Mr. Carl could tell you far better than I can. But here are the chickens. Now each one of you who has a family come up and leave me your name and James will give you a chicken, and if you know of any woman who is not here, she can send her husband to our place to-morrow morning, no matter how early, and I will take the name and give him the chicken. Now I'll take your names in order to remember you. I expect this year, coming in to-morrow, to call upon all the families in this village, and if I can help you or your children in any little ways I intend to do it, and you must call upon me for this. To-morrow will be a nice time for you to make calls upon each other. You know New Year's Day is the day, for receiving calls, by the ladies, who live in the cities, and why not do so here? Now, if you all have a chicken, I expect you are in a hurry to be off to your homes and I will not keep you. Good-by, good-night, "a Happy New Year."

Well! the men all worked on Saturday. After the manner of old Latin fables, *Hæc fabula docet*, "the wife is a power in the home," checking rash purposes, also employers wives do not know their privilege in the families of the employed till they have some experimental knowledge similar to this of mine.

CRITICISM.

THE best critics are those who praise more than they censure. If this be true of literature, it is equally true of business and social life. Many employers lose faithful service because they never praise when everything is well done, but always censure when anything goes wrong. No sensible person objects to a merited rebuke, but they often long for a word of commendation. I once heard a little girl say: "Mother never seems to see when I do the kitchen work extra nice, but she always scolds if I leave anything undone."

How many employers, mothers and teachers work upon this principle, unconscious of the fact that they might use pearls as well as sharp arrows and the result would be servants, children and pupils equally as well trained, while a bond of esteem or love would be molding a close connection which might be very serviceable some time.

When a new-comer into a neighborhood persistently finds fault with the customs of society she is shutting the door of future usefulness and friendship. If we do see foibles in the manners of the place, why needlessly dwell upon them? There is surely something to commend. Then allude to it pleasantly and if there is any custom very uncongenial overcome it by example; such as Sabbath visiting, "big" surprises, etc. One can commend the sociability of the people and by often inviting a half a dozen friends—congenial people—to dinner or tea during the week, they will soon observe the greater pleasure to be derived from smaller parties, especially if they enjoy a wide range of conversation. By never inviting neighbors in on Sunday and never returning calls on that day the custom of your household will soon become known and it will be received far more pleasantly than if you had leveled a volley of fault-finding against *their* way.

Better to over-estimate the good at times than form the habit of dwelling always on the bad qualities of people, churches and communities. "Charity thinketh no evil."

EMMA C. STOUT.

Domestic Economy

CONDUCTED BY EMILY MAPLE.

MRS. HIGHTON'S DIARY.

ANNIE L. JACK.

My friend, Mrs. Highton, has been home for a short visit. She lives now in one of the fashionable city streets, and her face has grown pale and thin since she left her father's house, our nearest neighbor. She was a dear little girl as Dolly Dawson, and thought quite perfect by her father and mother, when young Mr. Highton came from the city and won her away. An only daughter too. I remember poor Mrs. Dawson coming to me the morning she left and she said—"I feel like the ancient arrow maker," and I mentally went over the lines I knew had touched her heart:

"Thus it is our daughters leave us,
Those we love, and those who love us,
Just as they have learned to help us.
When we are old and lean upon them,
Comes a youth with flaunting feathers,
With his flute of reeds—a stranger,
Wanders piping through the village,
Beckons to the fairest maiden;
And she follows where he leads her,
Leaving all things for the stranger."

"Yes it is hard," I said, "but if she loves him, and he is the right man, all will be well." It is a piece of sophistry, I fear, for love alone does not make rough paths smooth for tender feet, and Dolly Dawson, at the end of two years, when she returned to her old home, would never be known for our fair village maiden, light-hearted and happy.

Before she returned to the city I had a long talk with her on household experiences, and she placed in my hands her diary of one year, to use as I saw fit. "For I think," she said, "there may be some useful experiences in it to guide others." "Happy? Yes, I am; but I would give a great deal for my free and health-giving country life." And this is how it happened that I have obtained this thin manuscript book in which are some new recipes and some practical hints, that may be read with interest by readers of our columns during the coming year. Some things I must leave out, but I confess I am quite pleased with the result of our young untried girl's experience, amid all her failures.

"Jan. 1st.

"Edgar has gone out to make calls. I do wish he could take me with him. But it is my duty to stay at home and 'receive.' I do not like the custom while he is away, and am homesick for my dear old shabby home. There all was so comfortable and cheerful, and not so much was said about duty. It seems to be one of Edgar's favorite words, and he uses it and 'promptly'

Miscellaneous Advertising.

Free of charge. A full size cake of Ivory Soap will be sent to any one who can not get it of their grocer, if six two-cent stamps, to pay postage, are sent to Procter & Gamble, Cincinnati. Please mention this paper.

on all occasions. City people, many of them, seem so formal—their 'Happy new year' has no warmth to it, they come and go in a hurry as if it was part of their daily business. One thing they did was to praise my cake, and I think sincerely, and one gentleman said it was so seldom they had home-made cake that he must take a second slice. I am glad mother taught me to make good cake, for Edgar's taste is so fastidious, and it is no use trying to get a servant to do fancy cooking; it is far better for the mistress to do it herself, then she has no one to find fault with, and it saves a world of trouble."

CAREFULNESS.

ZENA CLAYBOURNE.

A LITTLE episode at home to-day suggests the importance of being too careful rather than a little careless in regard to what we take for food or medicine. We three girls were alone, and indulging ourselves in a lunch, which saved getting up a dinner. Alice has a depraved appetite for cold potatoes cut up in bits with butter, salt, pepper and vinegar. She said "Girls, what ails that vinegar?" Now we have been quite proud of our beautiful dark, wine-colored vinegar, and this was light-yellowish with a red sediment in the bottom of the bottle. Dorcas pleaded guilty to having put in some molasses very much diluted; but we hardly thought that could produce such effect. Alice had her potatoes carefully prepared. She took the vinegar bottle and poured out the usual quantity. Wherever the fluid touched the potatoes, they turned as green as grass. She half screamed "Just look at those potatoes!" Still we wondered and watched her while she poured a little into a teaspoon and tasted. But that ended our lunch. She started up aghast, holding her mouth and exclaiming "Get something—some water, egg, mustard—anything." What a scene! Dorcas snatched the water pail, which was empty, of course, and I flew down cellar for an egg, which she swallowed raw, and then brought warm water from the teakettle. She drank a quart, and in answer to my eager question "What is it?" said "Washing fluid." I seized the Handy Book and read, potash, muriate of ammonia, salts of Tartar, and sent Dorcas, who came flying in with a pail of water, for Dr. Hall's Journal of Health. The only thing we could find appropriate under poisons was muriatic acid, for which warm, sweet milk was recommended—also chalk. Dorcas brought chalk from the barn and pulverized it, while I spilled half a new package of cinnamon looking for mustard, and Alice kept drinking warm, sweet milk and making wry faces.

However, after vomiting a little, she felt better, we became more calm, and she explained how she had asked John to hand out to her the white jug, because it was heavy, and then being called away, had left him to fill the bottle, and he must have taken the wrong jug.

Alice had a pretty sore mouth and throat, but we have thankful hearts, and shall never forget the lesson.

HOUSEKEEPER'S MUTUAL HELP CLUB.

GLADDYS WAYNE.

"A SOFT answer turneth away wrath, but grevious words stir up anger," repeated a dear little four-year-old, in charming babyish fashion, at our Sunday lessons. This is but one of many instances where forbearance and kindliness and charity are portrayed in all their divine beauty, as enjoined upon us. Oh, let us engrave these gems of spiritual truth on our hearts and so assimulate them with our thoughts and affections that our whole lives may be imbued with the spirit of a love divine.

As members of one great sisterhood, whose common joys and sorrows should bind us together in tenderest sympathy; we should entertain for one another naught but kindly sentiments. Differing as we do in mind and person, it cannot be expected that all should think or see alike; but we may avoid all unkind or ungenerous expressions of our various opinions, and in forbearance, in kindness and love seek to benefit each other.

It pains us to see any "root of bitterness springing up" to mar our department of the paper. Dear "Justice" and "A. C. C.," let us all clasp hands in a circle where the electric thrill of sympathy, "peace and good will" shall have unbroken sway.

Let us remember that "circumstances alter cases." And circumstances are often beyond our control. A rule that holds good for one, or in one place, often proves impracticable for others in different sections. Even with us in the East, country market prices greatly vary at different places, and what is easily attainable in one town may be exceedingly difficult to obtain in adjoining towns or in different parts of the same town. And we, East or West, to whom meat or other markets are inaccessible or beyond our means, must contrive to dispense with such articles in the degree that seems necessary. If eggs and butter fail to bring good prices and butcher's supplies are high, only those not affected by such circumstances feel justified in a constant patronage of the butcher. We who are making our way must make "one hand wash the other" in our household arrangement. We think it good economy to make use of the eggs, milk, cream and butter in the family rather than sell at losing prices to meet a regular butcher bill. If there is a surplus, of course one must take the going price, wherever sold.

In our own family, we do not use much pork, especially in Summer, and at that season fresh meat is seldom seen; but the "speckled beauties" of our mountain streams, and the delicious sweet cream and milk furnished by our one cow, make up in no small degree for the absence of butchers and their supplies. Eggs are never plentiful with us, so I have learned to bake with but few, thinking it better to save most of them to eat; and like "Anou" in regard to apples, when I find a cake, pie or pudding recipe that calls for five, six or a dozen eggs, I seldom finish reading, but look for something adapted to my means. As "Justice" very justly says, all methods of cooking are not alike adapted to all sections. Perhaps in future "Helps" we may be able to benefit the Western as well as Eastern sisters.

A WEEK'S WORK AT MRS. HOMESPUN'S.

MONDAY.

AT seven o'clock, breakfast being over, the active housekeeper introduced the wash-bench into the kitchen and began work at the weekly washing. The clothes basket was first overhauled, and everything sorted to be at hand when its turn came; the white clothes were put soaking in one tub, while the flannels and calicoes were rubbed out in another. As fast as a colored garment was finished, it was plunged into a pail of cold water and the stockings and knit underwear were scalded and wrung out as soon as they were cool enough to be put through the wringer without damage to it. They were immediately hung out by the ready assistant (the grown-up young lady of the house), for it was one of the kitchen rules that no one actively engaged at the wash-tub should go out-of-doors to hang up any of the clean clothes.

Such was the power of head and hand work, with the help of a passable washing machine, that by ten o'clock everything was swinging on the line: the tubs had been returned to the cellar that they might not get too dry, the floor wiped up, and Mrs. Homespun in a clean apron was leaning back in a cushioned rocker, feeling if tired, quite contented, for her work had been accomplished to her satisfaction. In the meantime the young housekeeper had not been idle; she had washed the milk pails and pans; the breakfast dishes and made the beds; filled the lamps and lanterns needed for use at milking time, and with soft paper polished the lamp chimneys, and had set them all in a shining row on the shelf, in their accustomed place. Potatoes had been prepared for dinner, and cabbage chopped for cold-slaw, as no extras in the shape of pies or puddings were prepared on Monday on account of the burden of the forenoon's work, and the tidy dinner table as the family gathered around it seemed to lack nothing.

After dinner, while the young housekeeper washed the dishes, Mrs. H. made a cream cake to bake for supper, putting in the oven at the same time a tin full of sweet apples. "It always seems shiftless," she remarked as she closed the oven door, "to be baking in the afternoon, any day but Monday. I do all such work in the fore part of the day, and let the stove rest in the afternoon."

Then she brought out a basket of carpet rags and began work sewing them, while she watched the fire and her cake. The young lady brought out a paste-board box of cuttings from the newspapers, short pieces of poetry and prose; and spreading out her materials on the table, began to work at a scrap-book, which she was making for a Christmas present to some of her friends.

Quiet reigned, until the clock striking four, Mrs. Homespun, putting in the basket a large ball of carpet rags she had just finished winding, rose to prepare supper for the hungry school boys, whose coming might be expected in the course of an hour, while the daughter repaired to the clothes line to see the condition of things there. An hour and a half more saw all the kitchen work finished and the family in the cosy sitting-room, some reading the weekly papers, the school boys preparing lessons for the next day, and Mrs. H. darning mittens for them.

IRENE.

NOTE. ERIN was the writers name of the article "Some nice quilts" which appeared in last week's RURAL, page 11. E. M.

Miscellaneous Advertising.

Debility

Languor, and Loss of Appetite, are cured by the use of Ayer's Sarsaparilla. It removes that terrible sense of *Constant Weariness*, from which so many suffer, gives tone and vigor to the stomach, and restores health and strength more surely and speedily than any other medicine.

Three years ago I suffered from Debility and Loss of Appetite, the result of Liver Disease. After having tried various remedies, and consulted several physicians, without benefit, I was induced to take Ayer's Sarsaparilla. The first bottle produced a marked change, and the second and third accomplished so much that I felt like a new man. I have, since that time, taken about one bottle every year, and had no recurrence of the trouble.—William E. Way, East Lempster, N. H.

Ayer's Sarsaparilla,

Prepared by Dr. J. C. Ayer & Co., Lowell, Mass. Sold by all Druggists. Price $1; six bottles, $5.

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DEAFNESS its Causes and Cure, by one who was deaf 25 years. Treated by most of the noted specialists of the day with no benefit. *Cured himself* in three months, and since then hundreds of others by same process. A plain, simple and successful home treatment. Address T. S. PAGE, 125 East 26th St., New York City.

THE

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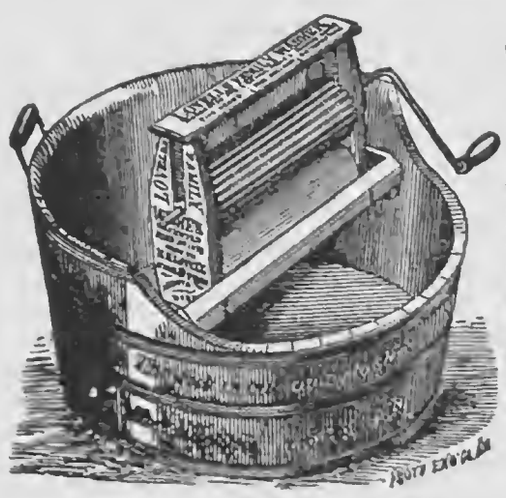

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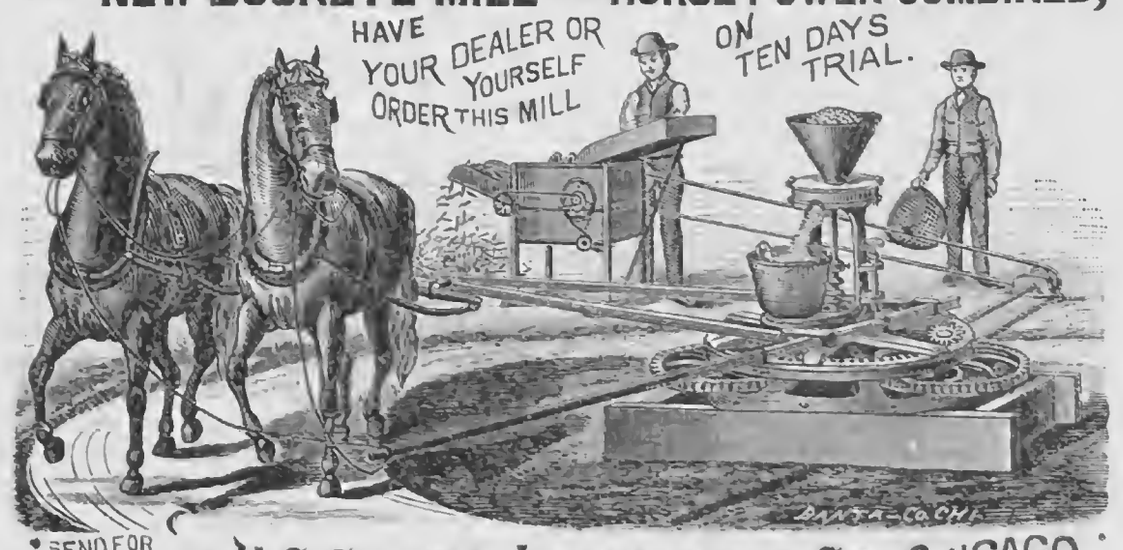

SEND FOR CATALOGUE TO H. C. STAVER IMPLEMENT CO., CHICAGO, ILL'S.

News of the Week.

HOME NEWS.

SATURDAY, Jan. 2, 1886.

As the revenue receipts have been light during the month and the pension payments heavy, the public debt has increased about $2,000,000 . ... The total length of main lines of railroads, not including second tracks, sidings or renewals, laid in the United States during 1885, has been 3,113 miles—about 700 miles less than in 1884, and less than in any year since 1878. The new track laid this year is distributed as follows: New England, four lines, 13.5 miles; Eastern and Middle States, 26 lines, 281.9 miles; Middle and Western States, 32 lines, 464 miles; Southern States, 44 lines, 727.4 miles; Missouri belt, 21 lines, 542.5 miles; Kansas belt, 24 lines, 828.6 miles; Colorado belt, two lines, 14 miles; Pacific belt, 14 lines, 240.9 miles. Total in 34 of the 47 States and Territories, 166 lines, 3,112.8 miles.....The Newark dog-bitten children have been successfully treated by Pasteur and are to start for home to-morrow. Pasteur says that carbolic acid is much better than hot iron for cauterizing dog bites. ...Over 9,000 Chinamen are now employed by the 241 cigar-makers of San Francisco; but the anti-Chinese agitation has induced five of the chief employers to agree to employ Union workmen, and 200 men left Boston Monday to take the places of the Celestials. When they got to Chicago, however, it turned out that the agent who engaged them had disappeared, and they were left "stranded." It is expected that white men will soon fill all the manufacturies .. . Owing to the falling off on exports of agricultural products, to pay for goods we have bought in Europe, gold had to be exported last week, the first time within 10 years. At the same time last year the excess of exports was over $49,000,000.....There has been a world of disorder and fighting among Polish Catholics at Detroit, because an objectionable change of priests was made by the Bishop ..... Great distress has been caused by the stoppage of several collieries in Pennsylvania, because the companies have combined to limit the output, so as to raise or keep up prices. The men have been working on "starvation wages" so that they could lay nothing aside, and rioting is expected ..... At other collieries the men are out on a strike for "living wages," and much bitterness exists against the "scabs" who take their places, many of whom have been severely beaten, and all of whom are guarded by police or private detectives. The Knights of Labor are sending supplies to the famishing people. Much wretchedness and desperation in nearly all the Pennsylvania coal mining regions .....The State Auditor and Attorney General of Illinois are investigating several co-operative insurance companies. They appear to have no means of keeping their promises to pay certain sums upon the death of members. The number of such societies has increased enormously of late, and there is no doubt a vast amount of swindling in the management of many of them ....We are very sorry to learn that the mammoth seed house of D. M. Ferry & Co., of Detroit, Mich., was burned yesterday morning. The flames started in the packing department at 9 A. M., and by 10 the Ferry Block was all in flames. The Ferry building was erected six years ago, and occupied half of the square, being one of the largest in the city. In the burnt building 400 people were usually employed, besides 400 more on the firm's mammoth farm outside the city. Had the fire not occurred on a holiday, the loss of life must have been heavy. D. M. Ferry's stock alone is estimated to have been worth from $1,000,000 to $1,200,000, and the building was worth $250,000—total insurance, $460,000. The loss on the other burnt buildings will foot up the aggregate to at least $1,500,000. All are at a loss to account for the fire, though incendiarism is suspected, as there were no fires in that part of the building where the flames were first seen..... Three deaths from trichinosis during the week, two in this city, where thirty-two people have been more or less severely affected by it from eating badly cooked pork at a family reunion, and one near Cleveland Ohio, where a family of four are affected from eating chips of raw ham. Several other cases are reported here and there; but we have noticed no more deaths . ... There is a movement to give each of the nine Justices of the Supreme Court of the United States a Private Secretary at Government expense. Each Secretary would have to be a stenographer, and would probably command $2,000 per annum ..... The Georgia Prohibitionists are scoring victory every time. First they passed a local prohibition law in the legislature. Then they carried Atlanta and Fulton County by over 200 majority, after having carried three-fourths of all the counties in the State. The liquor men then tried to stop the official count before the United States Court, and failed. Then they tried it before the State Court, and failed again. The count has now been completed and the result has been declared, while the liquor men are beginning to fight in another shape . . In North Carolina the Prohibitionists are organizing for political action, and they are contemplating the same move in Georgia. ... ...U. S. Consul-General Mueller reports that Germany dreads American hogs, wheat and imports generally, but still more the importation of American ideas, and thus explains the present feeling in Germany against our country Of the $275,000,000 of deposits in the Massachusetts savings banks, over $252,000,000 are in sums less than $300 each. .... The Connecticut legislature has appropriated $5,000 for a statue to the memory of Nathan Hale. ..... Orange riots have again broken out in Conception Bay, Newfoundland. At Harbor Grace an Orange mob began the rioting, and more trouble is expected .....At a meeting of ex-soldiers at Terre Haute, Ind., last Wednesday, resolutions were adopted demanding the passage of laws granting pensions at the rate of $8 per month to all surviving soldiers, sailors and marines who served 60 days or more in the war of the rebellion. A bill will be brought into Congress to this effect .. ... At Salt Lake City Judge Zane has condemned Brigham Young Hampton to a year's imprisonment for conspiring with disreputable women to entrap prominent Gentiles. The Mormons are finding the laws pretty hard against them generally.. A new comet has been discovered by Professor Brooks of Phelps N. Y., ... A mass-meeting of all trades is to be held in Philadelphia next month to agitate for a new eight-hour law..... It is confidently said that many more people have been killed by Indians in Arizona and New Mexico than have been reported. A bill has been introduced into Congress providing for the enrollment of a regiment of frontiersmen especially to put an end to Apache outrages in both these Territories, as the persistent pursuit by the regular troops has hitherto been unsuccessful..... The N. O. Exposition Company has sued two directors of the Great Eastern Steamship for obtaining $10,000 by falsely representing that she was ready for sea. She was to be an attraction and a hotel at the Exposition last Winter, it will be remembered.....The managers of the New Orleans exhibition deny that there is a financial crisis going on there. The receipts are not what were anticipated, the travel from the North being small, but the exhibition is in no danger of bankruptcy..... Chicago is first in the field as a bidder for the international exhibition in 1892, upon the 400th anniversary of the discovery of America. A bill pledging government support has already been drawn, and the advocates of the scheme base their claim to this premeditated honor upon the ground that Chicago is the "typical American city." .....Col. Platt B. Walker, editor of the North-western Lumberman, says that of necessity there must be a shortage of from 15 to 20 per cent in the log-cut of his section this Winter, owing to the warm weather, many of the men, owing to the absence of snow, are going away in disgust.... . The written opinion of Judge Powers, of Utah, who recently refused to naturalize a Mormon on the ground that he was not fit for citizenship, adds another gun to the battery playing upon the stronghold of Saints .....The Fitz John Porter bill will be put through the House as soon as possible after the holidays . .. ..The bills contracted by the United States Fish commission will be paid without challenge. The First Auditor stopped the accounts for examination, but after a careful overhauling the First Comptroller of the Treasury has approved Prof. Baird's accounts without "alteration or modification."..... By the latest estimate made by a man who is vouched for by the N. Y. Graphic, the late Vanderbilt's wealth is put at $305,000,000. A count of the securities in the vault of the Lincoln bank of this city, will it is said, prove this point. .....The Boston chamber of commerce has unanimously adopted an expression of opinion favoring reciprocity with Canada. It asks to have this matter considered with the President's recommendation regarding a commission to consider the fisheries question. . ...The Western Union Telegraph Company is reported to be anxious to have the Government purchase its plant for postal telegraph purposes, as comprehended by Senator Cullom's Bill. It is stated that should the Government buy up the telegraph company's property for the purpose named, the latter could build new lines with improved appliances at much less cost, and become a successful competitor with the former.

Coughs.—BROWN'S BRONCHIAL TROCHES are used with advantage to alleviate Coughs, Sore Throat, and Bronchial Affections. *Sold only in boxes.—Adv.*

AGRICULTURAL NEWS.

SATURDAY, Jan. 2, 1886.

DAVID MILES, a large stock breeder, of Milford, Mass., was gored to death by a pet Holstein bull in his barn, Dec. 17 The Sixth National Agricultural Convention, under the auspices of the American Agricultural Association, will be held in New York Feb. 3—5. .

The following are the officers of the new Fertilizer and Chemical Exchange of this city:—C. V. Mapes, President; John Kehoe, William H. Bowker and William H. Reed, Vice-Presidents; George B. Forrester, Treasurer, and John T. Williams, H. J. Braker, R. G. Kirkland and A. S. Malconson, Directors .. .. Holland sent us during the past year $250,000 worth of flowering bulbs .... Glanders in an unusually fatal form is attacking horses in Elmira, N. Y. The annual meeting of the New Jersey Horticultural Society was concluded Wednesday afternoon, when the following officers were elected: President, A. W. Pierson, of Vineland; recording secretary, E. Williams, of Montclair; corresponding secretary, T. C. Lovett, of Little Silver; and treasurer, C. L. Jones, of Newark ... ... The milk producers of Orange County, New York, have been again discussing the feasibility of establishing a Farmers' Milk Exchange in this city, so as to be independent of the milk dealers. Such associations have for some time been operating successfully at Boston and Springfield, Mass. ... The Association of Missouri Wool Growers propose to hold a grand National Sheep shearing at St. Louis, Mo., on April 7th and 8th, 1886. The St. Louis Cotton Exchange guarantees $1,500 in cash premiums. This should be an interesting occasion to all who are within its reach . The report of the Registrar shows that the value of the crops in Ireland this year increased $8,471,115 as compared with 1884, and that it was $1,419,820 above the average for the preceding 10 years..

A syndicate of Eastern capitalists are preparing to turn the water-power at Harper's Ferry, W. Va., to account, and expect to turn the place into a second Pittsburg .. Small pox has disappeared as an epidemic in Montreal and the U. S. quarantine has been raised. Besides the loss of millions of trade, owing to people keeping away from the place through dread of contagion, the epidemic cost the city $118,000 in actual outlay, and another large sum will be needed to meet the remaining engagements entered into .... During last year, bees in Ohio gathered 1,731,095 pounds of honey, estimated to be worth $276,975, while fowls produced 33,602,321 dozen of eggs, valued at $4,890,348. The value of the eggs was nearly equal to that of the wool produced in the State . The greatest "cabbage patch" in the country is said to be one in the vicinity of Chicago, which contains 190 acres, all devoted to the cabbage culture, producing in favorable years 1,100 000 heads ..... Last year there were grown in Kansas 116,511 acres of sorghum .. ... The grocers of New York are said to make profits aggregating about $4,212,000 a year on bogus butter . ... Potatoes are advancing steadily in the East, and bid fair to be pretty high before the next crop is marketed..... ....The average home price of wheat in all parts of the country for the last five years has been 95c. For the ten years previous the home price was $1.05. The present average is 78c. .. .. Stocks of grain in store in New York on December 26; Wheat, 9,518,325 bushels; corn, 1,089,127 bushels; oats, 1,223, 454 bushels; barley, 188,282 bushels; rye, 144,471 bushels ..... . .The wool imported last year was in volume about 17 per cent. as compared with the home production. In 1880 it was 20 per cent.; in 1881, 18 per cent.; in 1882, 14 2 per cent.; in 1883, 20.6 per cent..... ... An experiment was lately made at the Michigan Agricultural College Farm to see how much hay equal lots of Merino and Southdown sheep would eat up clean. The result showed about an equal consumption, although the South Downs averaged nearly 50 pounds heavier than the other sheep.....

Holland takes the lead in the manufacture of butterine. There are now about 45 manufactories in that country, the majority of which are in North Brabant, where the farms are small, and can only maintain one or two cows. Consequently, as these farmers can only make a small quantity of butter, apt to spoil before it can be collected or sent to market, they are the more willing to make contracts with the manufactures of butterine. The consumption is chiefly in England. Export in 1883 amounted to 40,000 tons, valued at 4,350,000 florins ..... .The next London wool sales will open on Tuesday, January 19, with about 230,000 bales on sale ..... In 1812 wool sold for $2.50 per pound .....There is an unmistakable and general feeling all along the line in foreign markets to advance the price of wool.

CABBAGE SEEDS.—In answer to several inquiries, Tillinghast's Puget Sound Cabbage Seeds seem to have a very high reputation wherever they have been used. Persons desiring home testimony in any State in the Union, will be referred to disinterested growers who have tested them, by dropping a postal to Isaac F. Tillinghast, La Plume, Pa.—*Adv.*

Crops & Markets.

SATURDAY, Jan. 2, 1886.

Our Consul-General at London reports that the depression in wheat cultivation in Great Britain has never been greater, the area under the crop this year being 7½ per cent. less than last year. The farmers of Yorkshire have recently formed a co-operative society to buy goods at the lowest figures wholesale, and to sell their produce directly to customers without the aid of middlemen. Agriculture in Scotland, too, is in a bad condition, many farms being deserted and degenerating into a wild state, like the abandoned farms on the hills of New England. This state of things is said to be all due to foreign competition. The Consul advises American farmers to grow more oats and barley for export, because on these there will be no competition from India and little from other places.

The Mark Lane express of last Monday says that in spite of the cold, damp foggy weather the growing British grain crops were healthy, and says a curious feature of the market is the ability of holders of English wheat to undersell foreign wheat. Quotations are 30s 2d per quarter—against 31s 5d last year. American grains are 1½c a bushel lower. The relative importance of the United States in supplying the United Kingdom with wheat at the present time may be inferred from the following record of receipts of breadstuffs at London for the week ending Christmas day. They comprised 221,680 bushels of wheat from India, 150,584 bushels from Russia (Black Sea ports), 47,816 bushels from Germany, 17,120 bushels from New Zealand, 7,992 bushels from United States Atlantic ports, and eight bushels from Arabia, altogether 454,200 bushels. The new national representatives in France are reported to favor still higher import duties on foreign grain, "as prices during the last six months have remained exceedingly low."

Prices of wheat everywhere have been higher during the week, owing first to rumors that Russia and Austria were vigorously preparing for war in the Spring over the Balkan troubles. Then came the report of the decline in the visible supply in the United States and Canada, east of the Rockies. The New York Produce Exchange puts this at 330,140 bushels, the Chicago Board of Trade says it is only 67,495 bushels. Later a decline occurred, owing to London cables telling of heavy stocks, dullness in trade and folly of shipping at higher figures than 85 cents per bushel in New York. Here exports are nominal. At San Francisco they have been, since July 1, only 5,85,000 bushels against 12,447,000 bushels in the latter half of 1884.

A telegram from Washington, on Thursday, says: "The estimates of the Department of Agriculture for the principal cereals are in round millions as follows: Corn, 1,936,000,000; wheat, 357,000,000; oats, 629,000,000. The area of corn is 73,000,000 acres; of wheat, 34,000,000; of oats, 23,000,000. The value of corn averages nearly 33 cents per bushel, and makes an aggregate of $635,000,000, $5,000,000 less than the value of the last crop. The decrease in the product of wheat is 30 per cent., and only 16 per cent in valuation, which is $275,000,000. The valuation of oats is $180,000,000. The reduction in wheat is mostly in the valleys of the Ohio and in California. The production of all cereals is 53 bushels to each inhabitant, and the aggregate volume is larger than in any former year.

Amount of grain in sight in the United States and Canada on Saturday, December 26, and the amount of increase or decrease from the preceding week: Wheat, 58,320,974 bushels, decrease 67,595 bushel; corn, 7,084,880 increase 1,819,237 bushels; oats, 2,580,818 bushels, increase 140,754 bushels; rye, 807,028 bushels, increase, 57,871 bushels; barley, 2,243,176 bushels, increase, 45,792 bushels. The amount in store in Chicago elevators at same time was: Wheat, 14,459,855 bushels; corn, 1,921,998 bushels; oats, 252,453 bushels; rye, 200,377 bushels; barley, 223,220 bushels.

Wheat holds its own bravely in the North-

Miscellaneous Advertising.

When Baby was sick, we gave her Castoria,
When she was a Child, she cried for Castoria,
When she became Miss, she clung to Castoria,
When she had Children, she gave them Castoria.

west, having advanced to 90¾ cents for No. 1 Hard. The talk, too, is bullish. The stock at Minneapolis and St. Paul decreased 100,000 bushels; that at Duluth increased over 200,000 bushels. Stock on hand in the bill places 12,680,000 bushels. Deliveries of wheat in country districts light owing chiefly, as in all the West, to bad roads due to rain and melted snow. A good deal of wheat is held for better prices.

There is a reported increase in the visible supply of corn; but the exports have been unusually heavy; due, it is said, to shippers having contracted for room and being compelled to make purchases to fill their contracts. Prices have become stiffer. Deliveries have been fairly free; and the quality of the grain has been quite good. Oats, too, have been fairly firm in spite of an increase of 89,304 bushels in the visible supply according to Chicago, or of 140,754 bushels according to New York.

In the winter wheat belt, no snow on the ground and little frost has been the rule the past week. Farmers were harrowing wheat land in Dakota, and plowing corn land in Kansas. The wheat is subject to slight freezings and thawings. Last Wednesday the report of an approaching "cold wave" from the Far Northwest sent up prices of wheat, as a severe frost would be very disastrous to next year's crop in the present bare condition of the ground.

The demand for fancy creamery butter has not been as active as it was last week. For selected Elgin (Ill.) creamery, former prices were obtained; but the market was easy on all other grades. No improvement in the outlook for cheese. Small export demand for either.

Cattle, particularly fat beeves, are lower now than for several years, owing, first, to the increase of cattle raising not only on the ranges, but also on Eastern and Western farms; and, second, to the extraordinary abundance and cheapness of mutton.

Holders of wool are confident of better figures. Until recently, the greater demand for low or medium grades caused fine sorts to be neglected; but now prices of these are going up, as there is a growing belief that there will not be "enough to go round." On the whole, the past has been a fair year for the wool trade. During the first six months, prices were low, but for the last six months, they have been steadily rising, especially for low, low medium and medium kinds.

Thirteen to fifteen mills are in operation at Minneapolis and the output ranges from 13,000 to 18,000 barrels a day. Except in case of the very largest, the mills take turns running, the same set not continuing two weeks at a time. Millers are confident there will be an improvmedt in the flour markets soon.

The Cincinnati Price Current of Thursday says the total number of hogs packed in the West last week was 255,000, compared with 390,000 for the corresponding week last year. The total from November [opening of the winter packing season] to date was 4,030,000 hogs, against 3,665,000 last year. The movement at the principal points since November 1 is thus summarized:

Chicago	1,630,000	Indianapolis	195,000
Kansas City	400,000	Louisville	115,000
Cincinnati	250,000	Cedar Rapids	115,000
St. Louis	235,000	Cleveland	42,000
Milwaukee	217,000	St. Joseph, Mo	79,000

A cablegram on Thursday gives the prices of American apples at Liverpool as follows: Greenings, $2.21 to $2.70; Spitz, $2.70 to $3.19; Baldwins, $2.70 to $3.37; Newtown Pippins, $2.95 to $6.04; Golden Russets, $2.95 to $3.90.

According to the American Grocer there has been a heavy decrease in the tomato pack of 1885, as compared with that of 1884, the total pack this year being 1,434,006 cases of two dozen tins each, against 2,021,177 cases in 1884, and 2,943,579 cases in 1883.

	Cases, two dozen tins each. 1885.	1884.
Maryland, Virginia and Pennsylvania	408,212	507,020
New Jersey	352,650	520,582
New York	102,700	75,400
Iowa	85,325	80,175
California	69,117	174,800
Indiana	68,400	91,000
Delaware	63,117	77,900
Missouri	64,500	65,000
Ohio	63,000	75,500
Kansas and Nebraska	53,120	89,450
Canada	30,106	112,000
Michigan	26,800	38,000
Massachusetts	24,264	59,500
Connecticut	12,933	8,200
Illinois	9,762	37,600
Totals	1,434,006	2,021,117

The decrease is attributed to the fact that through the cost of packing has been cheaper, it has been at the expense of quality; and the competition for other canned vegetables has been greater. Stocks on hands are light and prices are likely to advance.

The Tobacco Association of Lynchburg, Va., has issued a circular announcing sales during the month of December of 5,461,260 pounds of tobacco, the largest sales for the same month for years.

The following figures are furnished by a large tobacco export firm of this city: "The total visible supply of American tobacco in this country and Europe on January 1, 1886, was 158,945 hogsheads, as compared with 111,646 hogsheads at the same date last year. The stock in New York on January 1 was 30,405 hogsheads, as compared with 19,630 hogsheads the same date last year. The export from New York during the past year amounted to 131,316 hogsheads, as compared with 85,958 hogsheads exported in 1884. The receipts at New York this year amounted to $143,991 hogsheads, as against 108,000 hogsheads received in 1884." The trade in seed leaf tobacco has everywhere been dull during the week.

MARKETS BY TELEGRAPH.

SATURDAY, January, 2, 1885.

CHICAGO.—Compared with prices a weeks ago, regular wheat is ¾c. higher; No. 2 Spring, 1c. higher. Corn, ⅞c. lower. Oats, ⅜c. lower. Pork, 27½c. higher.

WHEAT.—Active; sales ranged: December, 84@84¼c; January, 84⅛@85⅛c; February, 84⅝@85⅛c.; May, 90⅜@91⅛c.; No. 2 Spring, 84⅜c.; No. 3 Spring, 67@71c. CORN—Firm and quiet; Cash, 36⅝c.; Year, 36⅛@36⅜c.; January, 36⅝@36⅝c; May, 39⅝@40⅛c. OATS—Firm; sales ranged: Cash, 27⅝c; December, 27⅝@27⅝c; May, 31⅛@31⅝c. RYE—Dull; No. 2, 58¼c. BARLEY—No 2, 62@62½c. PORK—Firm; Cash, $9 87½@9 87½; December, $9 20@9 40; January, $9 80@$9 90; February, $9 90@10 00. LARD—Steady; Cash, $5 95@6 00; December, $5 97½@$6 00; January, $5 97½@$6 00; February, $9 05@$9 07½. BULKMEATS—Shoulders, $3 70@3 75; Short rib sides, $4 85@4 90; Short Clear sides, $5 10@$5 15. CATTLE—Market strong; Shipping steers, $3 50@5 75; stockers and feeders, $2 40@4 10; cows, bulls and mixed, $1 50@3 90; bulk, $2 70@3 00. SHEEP—Market strong; Natives, $2@4 35; Western, $2 30@3 60; lambs, $4 00@5 25; Texans, $2 00@3 00. HOGS—Market steady; Rough and mixed, $3 40@3 70; packing and shipping, $3 70@4 00; light, $3 45@3 90; skips, $2 70@3 40.

BOSTON—GRAIN—CORN—Steamer Yellow, at 49½@50c; steamer mixed at 48½@49c; no grade at 47@48c. per bushel. OATS have been in moderate demand. We quote No. 1 white and barley at 48@44c; No. 2 white at 39½@40c; No. 3 white at 37@39c, per bushel. Small sales of RYE at 67@70c, per bushel. BRAN is selling at $16 50 for Spring and $17 00@17 50 for Winter; fine feed and middlings at $18 00@22 00, and cotton seed meal at $26 00 on spot and $24 50 per ton to arrive. HAY AND STRAW—Hay is firm at $19 00@20 00 per ton for choice and fancy, $17@18 for fair to good, $16@18 for fine, and $13@15 for poor and damaged. Western choice $16@17 do fair to good $14@15. Rye straw is held at $19@20 for choice, and $12@14 for common to good. Swale hay at $11@12; Oat straw at $9@10 per ton. PRODUCE—BUTTER—Northern creamery, choice to extra, 28@28c; good to choice summer, 17@22c; western creamery, 27@35c, for choice to extra; northern creamery, 22@23c, for Vermont extra; 18@20c, choice, and 12@16c, for fair to good; Western dairy, 18@20c, for choice, and 10@15c, for fair to good; imitation creamery at 15@24c, for good to extra; ladle-packed, at 17@20c, for choice. CHEESE—New York choice to extra, 8½@10c, and common to good, 5@8c; Vermont choice to extra, 8½@9¼c, and common, 5@7c; Western common to extra, at 4@9¼c. Sage, extra, 11@12c, good to choice, 8@10c; EGGS—Cape and near-by, per dozen, 30c; Eastern extras, 28c, do, firsts, 25@26c; Northern, fresh, 26@27c; Western fresh, 23@24c; Provincial, 25@26c. BEANS—Choice Northern hand-picked pea, at $1 75@1 80, per bushel; do, do, New York, $1 65@1 70; do, do, screened $1 35@1 60; medium choice, $1 65@1 70; do, screened, $1 40@1 60; Yellow Eyes, improved, at $1 65@1 70; do, choice flats, $1 55@1 60; Red Kidneys, $1 80@2 00. Canada peas, 95c@$1 00 per bushel for common to choice. Green peas, Northern, at 90c@$1 00; do, Western, $1 20@1 25. Potatoes range at 45@70c, per bushel, as to quality.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, January 2, 1886.

STATE OF THE MARKET.—Compared with cash prices last week, flour is unchanged; "regular" wheat ½c. to ¾c. higher; corn 1c. to 1¼c. higher; oats ⅜c. higher; marrow beans 10c. lower; mediums 5c. lower; pork unchanged; lard 6c. higher; poultry 2c. to 2½c. lower butter, cheese and eggs unchanged; cotton 1-16c. lower; fruits unchanged; vegetables steady. More poultry than market men could well handle. Fancy grades of butter and cheese are active, inferior grades are a trifle slow. Good fresh eggs are in active demand, and hard to obtain. Fruits and vegetables are plenty.

FLOUR, MEAL AND FEED. FLOUR—Quotations: Fine at $2 25@$3 20; Superfine, $3 00@$3 45; Extra No. 2, $3 30@$3 75; Good to Fancy Extra State, $3 75@$4 40; Good to Choice Extra Western, $4 00@$5 65; Common to Fair Extra Ohio, $3 30@$3 75; Good, $3 80@$4 30; Good to Choice, $1 25@$5 50; Common Extra Minnesota, $3 30@$3 65; Clear, $1 10@$1 50; Rye Mixture, $4 00@$4 35; Straight, $4 50@$5 00; Patent, $1 50@$5 65; Bakers' Extra, $4 10@$4 75; St. Louis Common to Fair Extra, $3 30@$3 80; Fair to Good, $3 85@$4 75; Good to Very Choice, $4 80@$5 50; Patent Winter Wheat Extra, $3 30@$5 60; City Mill Extra for West Indies, $4 75@$4 80; South America, $4 85@5 00. SOUTHERN FLOUR—Common to Good Extra at $3 50@$3 90; Good to Choice do., $4 00@$5 50. RYE FLOUR—Superfine, $3 25@$3 45. BUCKWHEAT FLOUR, $1 75@$2 05. CORN MEAL—Yellow Western, $2 80@$3 15; Brandywine, at $3 15. FEED—For 60 lb. average at 77½@80c.; 80 lb. average at 80@82½c.; middlings at 85@95c., and sharps at $1 00@$1 05. Rye feed at $16 50@$17 00.

GRAIN.—WHEAT.—Ungraded Winter Red, 86@95¼c.; No 2 Chicago, 93c.; No. 3 Red, 88c. and No. 2 Red, 92¾c. No. 2 Red for December, 1886, $1.06; do. for January, 90⅝@91⅜c.; do. for February, 92⅛@93c.; do. for March, 93⅞@94⅜c.; do. for April, 95⅝@96⅛c.; do. for May, 97⅜@98⅛c.; for June, 98⅝@99c. RYE—Western, 64@65c.; State, 65@67c. BARLEY—Ungraded Canada, 82@84c. CORN—Rejected at 42@42½c.; Ungraded, 49@49½c.; No. 3, 43½@44⅛c.; Steamer Mixed, 45½@46½c. Steamer Yellow, 46@47c.; No. 2, 49¼c.; No 2 Mixed for December, 49@50c.; do. for January, 48⅛@48⅝c.; do. for February, 48⅛@49c.; do. for March, 48⅝@49c.; do. for May, 48⅞@48⅞c. OATS—No. 3 Mixed at 31c.; No. 2, 31⅛@31⅜c.; No. 1 nominal at 35c.; No. 3 White, 38⅛@38⅛c. No. 2 do 39½@39⅞c.; No. 1 nominal quoted at 41c.; Mixed Western, 35@36c.; White, do., 37@43⅛c.; White State, 37½@38⅛c.; No. 2 Mixed for January, 34⅜@35½c. do. for February, 35⅛@36c.

BEANS.—Quoted: Marrows at $1 70@$1 75; mediums at $1 60@1.65; pea at $1 60@1 65; red kidney at $2 15 for choice; white do. at $2 for choice.

PEAS.—Green are quoted at $1 15@$1 20.

PROVISIONS.—PORK.—Mess quoted at $9 87½@$10 50 $10 25@$11 00 for Family Mess; $12 00@$13 00 for Clear Back; and $8 50@$9 25 for Extra Prime. BEEF.—City Extra India Mess, $17 00@$20 00; Extra Mess, bbls., $10; Packet, $11 00@$12 00 in bbls.; Family Mess, $12 00@$13. BEEF HAMS.—Quoted at $16 50@$16 75. CUT MEATS.—Pickled at Hams, 8½c; Pickled Shoulders, at 4¾@5c; Smoked Shoulders quoted at 5½@5¾c.; Pickled Hams, at 8¼@8½c.; Smoked do., at 9½@10c. MIDDLES—Long Clear in New York quoted 5¾c. for Western delivery. Long Clear, 4.90c.; Short Clear, 5.20c. DRESSED HOGS.—City Heavy to Light, at 4½@5½c.; Pigs, 5½c. LARD.—Western steam spot, at 6.37½c; contract grade at 6.35c; January, 6.35@6.37c; February, 6.37@6.40c.; March, 6.47@6.48c.; April, at 6.51@6.52c.; May, at 6.59@6.66c.; City Steam, at 6.30@6.35c.; Refined Continent at 6.65c, and South American, 7.00c.

BUTTER—Western Creamery, 30@32c.; Elgin do., 33c.; State Dairy half firkin tubs, 27@28c.; Western Factory, 11@18c.; Imitation Creamery, 18@22c.; Western Dairy, 12@22c.

CHEESE—State, 7½@10¼c.; Night Skims, 5¾@7c. Western flat, 7@9½c.

EGGS—State, 25½@26c.; Western, 24@25½c.; Canadian, 18@22c.; Limed State, 19½@20c.; do. Western, 19@19½c.; do. Canada, 19@19½c.

LIVE POULTRY.—Spring chickens 5@6c., fowls, Jersey, State and Pennsylvania, per lb, at 7c.; do. Western, per lb, at 6@7c.; turkeys, per lb, at 7@8c.; ducks, western, per pair, at 60@75c.; geese, western, per pair, at $1,37@$1.75; pigeons, per pair, at 30@35c.

DRESSED POULTRY—Turkeys, 10@11c. for Philadelphia 10@11c per lb for Jersey, and 8@9c. per lb for western; chickens, Philadelphia large, at 11@12c. per lb; do. small at 10@11c.; fowls, Philadelphia, prime, at 9c.; do. Jersey at 9c.; State and western at 7@8c.

GAME—Quail, per doz., $1@1 25; partridges, State and Pennsylvania, choice, per pair, at 80@90c.; do. Ohio and Michigan, prime, per pair, at 65@70c.; do. Minnesota and eastern, per pair, 40@50c.; grouse, prime, dry, per pair, at 90c.@$1; do. inferior at 40@50c.; wild ducks, canvas, per pair, at $2 75@$3; do., red-head, per pair, at 75c.@$1; do. mallard, western, per pair, at 60@70c.; do., teal, blue wing, 40@50c.; Venison, short saddles, choice, per lb, at 14@16c; do. whole deer, at 10@12c.; rabbits, per pair, at 25@30c; hares, eastern, per pair, at 25@30c.

COTTON—The quotations, according to the American classification, are as follows:

	Uplands.	New Orleans. and Gulf.	Texas.
Ordinary	6 9-16	6¾	6¾
Strict Ordinary	7	7 3-16	7 3-16
Good Ordinary	7 15-16	8⅛	8⅛
Strict Good Ordinary	8⅜	8 9-16	8 9-16
Low Middling	8¾	8 15-16	8 15-16
Strict Low Middling	9	9 3-16	9 3-16
Middling	9 3-16	9⅜	9⅜
Good Middling	9 9-16	9¾	9¾
Strict Good Middling	9 13-16	10	10
Middling Fair	10 3-16	10⅜	10⅜
Fair	10 13-16	11	11

STAINED.

Good Ordinary	6⅛	Low Middling	7⅞
Strict Good Ordinary	7 1-16	Middling	8⅝

FRESH FRUITS—Quotations are: San Blas cocoanuts at $37 50@40 00. Apples—Baldwin, per bbl., at $1 75; Greening, per bbl. at $1 75@2 00. Grapes—Catawba at 6c. per lb. in baskets; Isabella at 4c. per lb. Cranberries—Cape Cod, choice, per bbl., $5.50; do. fancy, $6@$6 50; good to prime, per bbl., $4 50@$5 25; do. light colored, per bbl. at $4 00@$4 50,; do. choice, per crate, at $1 75@$2 00; do, fair to good, per crate, at $1 50@$1 62. Florida oranges—Fancy at $2 75@$3; Choice at $2 25@2 50; do. inferior at $1 75@$2. Florida lemons at $3 25@$3 75 for choice and $2 50@$3 for fair.

DRIED FRUITS—Quoted: Apples—Fancy evaporated, 7½@7¾c; new, choice, 7c; fancy North Carolina sliced, new, at 4@4½c.; choice do. at 3¼@3½c.; choice Tennessee quarters at 2@2½c.; State quarters at 3½@3¾c.; North Carolina quarters at 2¾c. Peaches—Peeled North Carolina, choice, at 10@11c.; fancy at 12@13c.; extra fancy at 13@14c.; Georgia, choice, new, at 10@11c.; do. prime at 9½c.; unpeeled halves at 3@3½c.; unpeeled quarters at 3c.; Delaware evaporated, peeled, at 24@26c. Choice pitted cherries at 10½@11c. Evaporated raspberries at 18c; sun-dried do. 16@17c. Blackberries—Prime at 8@8¼c. Whortleberries at 7½c.

PEANUTS.—Quotations at 4⅜@4½c. for best hand-picked, and 3@3½c. for farmers' grades.

HAY AND STRAW—Quotations are for: Choice timothy hay at 90 cents; good at 85c.; medium at 80c.; shipping at 75@80c; clover mixed at 75@80c.; No. 1 rye straw at 90c short rye straw at 65@70c, oat straw at 50@55c.

SEED—Clover at 9@9½c. as to grade. Timothy is quiet; quoted at $1 90@$2 00. Linseed nominal. Flax seed quotedut $1 30.

SUGAR—English Islandat 5¾c; Cubes, 7c; Powdered, 7@7¼c: Granulated, 6 13-16@6⅞c; Mould "A," 6⅞@6 15-16c; Confectioners' "A," 6 11-16@6¾c; White Extra "C," 5⅞c; Extra "C," 5½@5¾c.; Yellow, 5@5½c.

TALLOW—Prime City quoted 5c. bid.

VEGETABLES—Potatoes—Long Island Rose, bulk, per bbl., $2 00@$2 25; New York Rose, $2 00@$2 25; Eastern and Nova Scotia Rose at $2 00@2 25; Burbank, State, at $1 75@$2 00; eastern and Nova Scotia, per bbl, $2@2 25; Hebron, do, do, do, per bbl. at $2 00@2 25. Prolific and Goodrich, per bbl., at $1 75@$2. Sweet potatoes, Virginia, at $2 25@$2 50 per bbl. Cabbages, per 100, at $4@$5. Onions—Yellow, per bbl., at $2 75@$3; do. red, per bbl., at $2 50@$3. Turnips,—Russia, per bbl., at 50@75c. Marrow squash, per bbl., at 50c.; Hubbard squash, per bbl., at 75c. Cauliflower, per bbl., at $1 50@$3 50.

LIVE STOCK MARKET.

NEW YORK, SATURDAY, January 2, 1886.

BEEVES—Total receipts for the week 5,761 head against 5,901 for the same time last week. Ohio steers, 1,813 lb, at $6 40; do, 1,635 lb, at $6 90; do. 1,536 lb, $6 50; extra Durham heifer, 1,750 lb, at $6 25; bulls, 1,910 lb, at $4 25; State steers, 1,378 lb, at $5 32; do. 1,215 lb, $5 30; oxen, 1,595 lb, at $5 25; cows, 923 lb, at $3 80; Chicago steers, 1,285 lb, at $5 45; do., 1,244 lb, at $5 30; Buffalo do, 1,324 lb, $5 15; do. 1,292 lb, at $5 45; Pittsburg steers, 1,093 lb, at $4 55; do. 1,250 lb, at $5; Pennsylvania do., 1,271 lb, at $5 12½; oxen, 1,557 lb, at $6; Indiana steers, 1,274 lb, at $5 60; do, 1,237 lb, $5.

CALVES—Grassers, 250 lb. at 2¾c.; do. 259 lb. at 3c.; veals, 195 lb. at 8¼c; do, 172 lb, at 8c; do. 105 lb, 7½c.

SHEEP AND LAMBS—Canada lambs, 94 lb. at 7¼c; do. 97 lb, at 7¾c; Western sheep, 97 lb, 5¾c; do. do, and lambs, mixed, 87 lb, 5½c.; Jersey ewes, 124 lb, at $4 70; do, 118 lb, at 4¾c; Kentucky ewes, 101 lb, at 4¾c; Michigan sheep, 85 lb, at 5c; Western lambs, 61 lb, 6½c; Kentucky do, 73 lb, at 6¾c; State lambs, 76 lb, 7¼c.

HOGS—Feeling very firm and nominally 10@15c. higher. Dealers quote $4 25@4 50, and pigs would probably sell at considerably higher prices.

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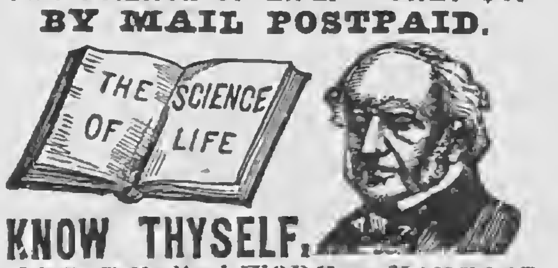

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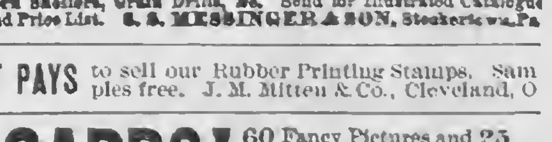

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For the Young.

I HAVE received several bean reports during the past week. I expected to announce the names of the winners this week, but several of the Cousins are behind with their counting, so I will wait just one week more. Remember now, this is the last chance.

OF course, we all had a nice time through the holidays. I say "of course," because I know that our "good times" are always the product of our own thoughts and deeds. Did it ever occur to you that we can raise a crop of "good times" just as we can raise a crop of beans? Sometimes we get angry or naughty, and thus lose all the results of our good intentions, just as Jack Frost cut off so many of the beans. The point for us all to remember is that we make our own good times, and that every five minutes spent in anger spoils an hour of enjoyment.

UNCLE MARK saw a queer looking Santa Claus last week. His costume was made up on the spur of the moment. He had a red towel about his head, a scarf tied over his face, and a blanket over his shoulders. He came limping in, as if he was dreadfully lame. There was one little boy who was pretty well frightened when Santa Claus came up to shake hands with him. But when the old man began to take the presents, and hand them about, the little fellow felt better. He stood up and said: "I'm much obliged to you, old Santa Claus, and I'm sorry you are lame.' It may be that some of our older Cousins are a little too wise to believe in Santa Claus. I hope they will not forget him however. We want to believe in him as long as we can.

WE have had no snow thus far in New York. Uncle Mark would like to see a real old-fashioned snow storm. Very likely we shall have it yet. I have no doubt many of the cousins are "snow bound" even now. Up around the great lakes the snow is piled in great drifts, and people are glad to stay at home. Then it is that books and papers and nuts and fruit are most serviceable. A thick coating of snow is good for the ground. It helps the wheat, even if it does close up the roads and choke up the valleys. Once in a great while they have quite a heavy snow storm in warm countries. It is such an unusual thing that people drop all kinds of work to enjoy it. Grown men go out to snowball or bury one another in the snow. Many people gather the snow in bottles and preserve the water as a curiosity. In such countries the snow goes almost as fast as it comes, as the ground is very soft and muddy.

HERE we have a sad accident, and one often witnessed in the city. One man has lost his hat, and the other stands a good chance of losing his umbrella. It pays to keep one's eyes open and to mind where we are going.

I HOPE the boys are carding the cow this Winter. Some people try to tell me that t does not pay to card cattle, but I know better. I have tried it myself and know that a cow will do better and look better for a good brushing every morning. I am sure it does a cow just as much good to have her hide well rubbed, as it does a boy to have his face washed and his hair combed. On large farms, where a great many cattle are kept, it may be impossible to card them all, though I do think it would pay, but where there is but one "family cow," there is no excuse for letting her go uncarded. Here is a chance for the boys to do some work that will surely count.

NEW COUSINS.

WILLIE E. SMITH lives in Oregon. There has been no frost there yet. Willie goes three miles to school. The pets are a dog and two birds.

FRANK M. HIMFREY lives on an Iowa farm. He has nine pigs which he is raising for one-half profits. His colt weighs 1,130 pounds. He set out 75 strawberry plants, which are doing well. He means to put in an acre of potatoes this year. The Dunmore and Early Ohio are the best varieties.

MYRTLE A. THOMPSON writes from a Dakota farm of 320 acres. They have beautiful wild flowers there. Myrtle has a little brother.

CHARLIE A. FITCH has a big dog named Carlo. They have four cows, a calf and 75 c ickens. It is pretty cold where he lives, and the wind is strong.

EMMA MOHR lives in Pennsylvania. The peas were splendid, and the beans were the best they ever ate. The corn was a failure, the tomatoes did well, but the Garden Treasures did not come up.

EMILY COCKERAM lives in Wisconsin. There is plenty of snow there I expect. Emily's father and mother came from England 33 years ago, and have lived where they are now for 25 years. The wheat and rye were good, the peas splendid, but the corn was a little late. Emily and her sister had nearly 1,000 cabbages for hoeing the garden. They sold them for three to six cents per head.

CALIFORNIA FLOWERS.

DEAR UNCLE MARK: I promised to tell you of the wild flowers that grow in the Sierra Nevada mountains in our part of the State. The flower that first makes its appearance is called snowdrop (although it is not a bulbous plant), so thick in some places as to carpet the ground. Next, the buttercup, a bright yellow flower; soon after, the cream cup, a pale yellow flower. Before these flowers are gone such a lot of beauties come that I cannot describe them all. We have two varieties of Nemophila—a pale blue and a white one with a bright purple spot on the margin of each petal. The Shooting Star is common to many countries, and they grow in abundance here. Three kinds of Lupins, one pale red, the other two blue, one being very small and the other quite large. Larkspurs, blue and pink, the last growing four feet high. A scarlet pink called Indian pink. Cleome, Collinsia and Godetia grow nicely. California Poppy, with its orange-colored, cup-shaped flower, and there is another poppy growing in the shade—a brick red with a shining black spot at base of each petal, very showy. A pale yellow wallflower grows from three to five feet high. A very pretty purple flower, looks like a Cedronella, but the leaves are not fragrant; it remains in bloom over a month. There are a host of others that I know no name for. Of vines we have several—wild Morning Glories with creamy white blossoms. One called Devil's Cucumber grows almost as fast as the fabled bean stalk. It has small, white, star-shaped flowers, followed by a long, oval fruit about five inches long, covered with spines—very curious looking. When ripe the lower part of the pods burst open and the seeds, which are very hard, fall out. The pods turn from green to white and are so hard they lay on the ground for months. A tiny vine, with pale yellow flowers not larger than a pin-head, is very pretty. —Clematis I think it must be. Graveolens, with pale yellow flowers, grow in a perfect swamp along the streams. Of bulbous flowers the first is a pink flower, the blossom almost a globe, with three sepals at right angles to the stem. Peep inside the globe and it is covered with short hairs. The purple grass nut-flower, with its honeyish fragrance, comes next. A pale purple flower, which we call Wild Amaryllis, from its leaves resembling that plant, grows from one to two feet high. On the end of a stem a dozen wax-like flowers radiate in a circle. It remains in bloom a long time, fading to almost white. A similar flower, blue in color, comes later, but is not so long-lived. A pink climbing hyacinth also grows here. Soap-root, with its white flowers, and a variety of tulip, with white satin petals spotted and flecked with brown, yellow and purple.

Of large flowering shrubs, the first to bloom is Manzanita, with pink fragrant flowers. Laurel with yellow blossoms. Red-bud next, and a small tree, with yellow flowers, about two inches in diameter. I never could find any one who had any name for it. Another unnamed has flowers in clusters, each flower very small, white in color, so very sweet-scented as to make a person feel faint in a thicket of it. The sage brush, with its purple bloom, makes the whole mountain lovely. Up near the big trees, where we went in July, we found a shrub called Azalea. It bears flowers in large bunches; was a pinkish white. There also we found Columbines of various kinds. A lily, shaped like a single Tiger, only much smaller and nearly the same color, a deep red flower looking like a paint brush, and oh! such beds of ferns. There are many more things I should like to tell of, but if Uncle Mark finds a place for all our letters, I will surely have to stop. We are back in the valley home, but expect to spend part of next Summer in the mountains. Perhaps I may then find something more that will interest the cousins. Till then, good bye.

Lemore, Cal. LILLIE WILSON.

[Thank you for your letter. How beautiful the mountains must be! Write again by all means.—UNCLE MARK.]

LETTERS FROM THE COUSINS.

DEAR UNCLE MARK: Will you allow an insignificant little country cousin to join the Y. H. C.? You are such a happy band, I half believe you will. I never saw a copy of the RURAL until a few weeks ago when my brother took advantage of your liberal offer and sent for it five weeks free, thinking that he would subscribe. I think every family in our country should take the RURAL and every other good paper they possibly can the coming year, for our hogs in this country have nearly all fallen a victim to cholera, and I fear that 'twill be advisable to have our minds drawn from the dining table as much as possible. I wonder if the Cousins like fancy work. I will give directions for a nice shawl and perhaps some one may like to try it. Take a square of cashmere and button hole the edges after hemming, and work a border of split zephyr. I have one that I think beautiful and I caught the hem down with a fancy stitch, and bordered with shaded zephyr. You can make a handsome one at a trifling cost. I wish Uncle Mark and all the Cousins would come down in the Spring and eat strawberries with me, we have very fine ones and a great quantity of them. We have a flour barrel filled with very rich soil and several rows of holes bored all round in every stave, and a strawberry plant in every hole and a few planted on top. This is a very pretty and a nice way to grow them as the berries cannot touch the soil. Well Uncle Mark I'll venture to say that your young hunter in the RURAL of December 19th appears to be kind of lazy and for that reason I should think he cared nothing for the Y. H. C. nor any thing else except to keep from work. How far do I miss guessing right.

Brooks Co., Ga. A COUNTRY NIECE.

[I don't like to have people call themselves "insignificant." We must all believe we are worth more than that. I wish we could come and help eat the strawberries. That seems like a novel way of raising them. Write again.—UNCLE MARK.]

DEAR UNCLE MARK: I have been slow about writing to the Club, for I had such poor success with the beans you sent me. Please accept my thanks for them. I planted them all carefully, and 19 out of the 22 came up and grew nicely, with a fair show of beans, until the grass-hoppers came. They ate the tender, little beans, and only left me 42, which I have saved for spring planting. They are my favorite of the bean family. The grass-hoppers were the largest I ever saw; one could scarcely walk for them, they were so numerous. They took possession of our four acres of oats, and damaged the corn and many other things for us. We are having very pleasant weather now; it was quite cold last week, the ground is covered with snow. I have not made my fortune yet. I had a pig to fatten, but as pork was so low, only two-and-one-half cents per pound, I concluded to keep him over. I gathered about three bushels of hickory-nuts; they were plenty here. I sold two bushels at 50 cents per bushel. My brother Frank and myself can have all the ground we can clear for corn; we expect to have about two acres ready for spring planting. We have about 28 acres of wood land. We do not have very much time to give to the work now, as we have a mile to walk every morning and evening to and from school. We have been neither tardy nor absent in the nine weeks we have been going. We all continue to like the good, old RURAL; feel as if it was a friend; I have never tried getting up a club since my failure last year. Your nephew,

Grant Co., Ind. HERBERT LENFESTEY.

[The grass-hoppers and Jack Frost will have much to answer for. I think you did well to keep the pig. Fortunes are not made in a year. I hope you will have a good piece of land for next year.—U. M.]

Miscellaneous Advertising.

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PERSONALS.

CHARLES FELTON, of California, is the richest man in the National House of Representatives. He is worth $15,000,000.

NOT only is the Princess Louise not coming to Canada next Summer, but it is said she never expects to cross the ocean again.

THE Marquis of Lorne has been appointed honorary commissioner for Canada at the Indian and colonial exhibition, and also President of the Canadian Commission.

MDE. BARRIOS, widow of the late President of Guatemala, is staying this Winter in New Orleans, and she has excellent staying qualities in a fortune of more than $8,000,000.

BOOTH, known as the "General" of the Salvation Army, in England, thinks he will need fully £30,000 to carry on the campaign in the coming year, but he declines to publish a report of the expenses of this year.

THE rival revivalists, Sam Jones and Sam Small, amuse their leisure by a competitive count of their converts, and both deplore that they were unable to materially or spiritually increase their census by their recent evangelical efforts in St. Louis,

SIR AMBROSE SHEA has been appointed Governor of Newfoundland, being the first native and Catholic Governor since the days of Cabot. He has issued a proclamation forbidding an Orange procession in Harbor Grace and other parts of Conception Bay.

LAST Tuesday was the 76th birthday of the "Grand Old Man," William Ewart Gladstone, who was born in Liverpool on Dec. 29, 1809. Over 400 letters of congratulation reached him, besides a multitude of telegrams.

THE Justices of the United States Supreme Court are highly indignant at current intimations that they are hard drinkers. It is emphatically denied that they "keep a black bottle" in a closet in the cloak room, or that any of them is in the habit of drinking in the court room, or that there is a sideboard there.

DORA and Elaine Goodale, the sisters who some years ago achieved deserved notoriety as the "child poets of Sky Farm," have let their historical farm in Berkshire, Mass., for ordinary, base boarding-house purposes, and Elaine is out on the plains doing missionary work in the interest of Indian civilization.

THE Hon. David Davis is said to have prepared a volume of memoirs to be published after his death, in which appears a list of the "wolves and lambs" he discovered in Congress while President of the Senate. The wolves are those whom he knew to be for sale, and the lambs are the honest ones.

THERE are five Senators of foreign birth. Beck is Scotch; Jones, of Nevada, is English, Fair, Sewell and Jones, of Florida, are of Irish birth. There are 12 Representatives of foreign birth—five from Ireland, one each from England, Scotland, Germany, Norway, Hungary. Two others are of Bavarian birth.

HERE is a startling list of the distinguished men who have died during the year 1885. There is but one King, Alfonso XII of Spain. The most prominent in the list are the military commanders. First of all among the soldiers of our own country comes Gen. Grant, the commander of the greatest army that has ever yet been assembled, and then follow Gens. McClellan, McDowell, Sackett and McQuade. Among the European Generals were Prince Frederick Charles of Prussia, generally regarded as the ablest general in Germany after Von Moltke, and Gen. Stewart, who lost his life in the recent campaign in the Soudan, as did Gen. Gordon, the hero of Khartoum, and Col. Burnaby. Next comes Gen. Manteufel, a prominent figure during the Franco-Prussian war, and afterward Governor of Alsace and Lorraine. Among the men who have held political honors are found the Hon. Thomas A. Hendricks, Vice-President of the United States; Reuben E. Fenton, Senator Frelinghuysen, Senator Sharon, Malcolm Hay, E. K. Apgar, Robert Toombs and President Barrios, of Guatemala. The clergy lost Cardinal McCloskey, Dr. Tyng and Dr. S. Irenæus Prime. Literature lost Victor Hugo, Edmond About, Richard Grant White and Lord Houghton. Among the musicians are Dr. Leopold Damrosch and Franz Abt. The world of commerce will miss William H. Vanderbilt, Sir Moses Montofiore, Commodore Garrison, H. B. Claflin and F. Winston. The stage was deprived of John McCullough and the bar of Emory Storrs and Myra Clark Gaines.

Miscellaneous Advertising.

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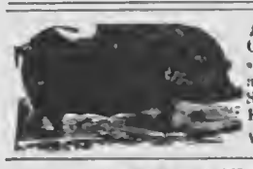

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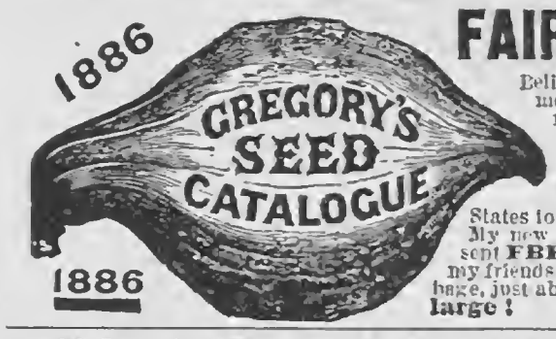

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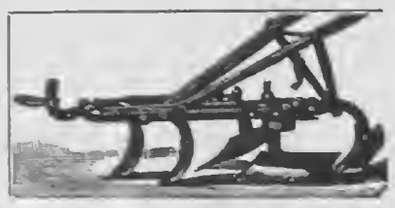

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THARE is menny a slip 'tween a cup and a lip, but not half as menny as thare ought tew be.

THERE are numerous individuals who look upon the thing they hain't got, as the only thing worth having.

CURIOSITY is the germ of almost all enterprise; men dig for woodchucks more for curiosity than they do for woodchucks.

IT should be remembered to the everlasting credit of Nebuchadnezzar that though he cast Shadrach, Meshach, and Abednego into the fiery furnace, he did not ask them: "Well, is this hot enough for you?"

LADY TO SMALL BOY. "Then you have never had educational advantages?" Boy scratches his head and says: "No, mum; not that I knows of. But I've had airy-sipilas. If what you said is worse nor that, I don't wanter ketch it."

NURSE (to nervous young husband).—Oi congratulate ye, sorr. It's a foine bouncing babby. Nervous young husband (very anxious that his first-born shall be a boy).—Of course, it's a fine baby, but er—am I a father or a mother?

A DENTIST at Triangle, N. Y., once received an order for a block of teeth as follows: "My mouth is three inches acrost, five-eighths inches through the jaw; sum humocky on the edge; shaped like a horse-shoe, toe forward. If you want me to be more particklar I shall have to come thar. Yours truly——."

AN Irishman who was sleeping all night with a negro, had his face blackened by a practical joker. Starting off in a hurry in the morning, he caught sight of himself in a mirror; puzzled he stopped and gazed, and finally exclaimed: "Begorra, they've woke the wrong man!"

BOSTON girl (to Uncle James, a farmer.)—"Do you like living on a farm, Uncle James?" Uncle James.—"Yes, I like it very much." Boston Girl.—"I suppose it is nice enough in the glad summer time, but to go out into the cold and snow to gather winter apples and harvest winter wheat, I imagine might be anything but pleasant."

A SELF-EVIDENT FACT.

Horseman—"Look here! Why don't you drive that animal away? Can't you see my horse is afraid of a donkey?"

Farmer Jones—"Of course I can. Ain't he trying to throw *you* off?"

Miscellaneous Advertising.

HAYESVILLE, OHIO, Feb. 11, 1880.
I am very glad to say I have tried Hop Bitters, and never took anything that did me as much good. I only took two bottles and I would not take $100 for the good they did me. I recommend them to my patients, and get the best results from their use.
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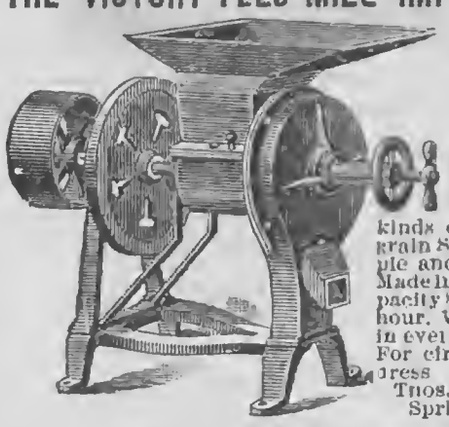
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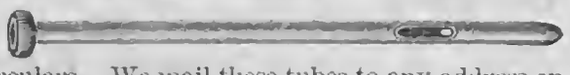
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Subjects the soil to the action of a Steel Crusher and Leveler, and to the Cutting, Lifting, Turning Process of Double Gangs of Cast Steel Coulters. Immense cutting power. Crushing, Leveling and Pulverizing performed at the same time. Entire absence of Spikes or Spring Teeth avoids pulling up rubbish. Only Harrow that cuts over the entire surface of the ground. Sizes, 3 to 15 ft. wide. With and without Sulky attachment. We deliver free at Distributing Depots.
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Send for circulars, giving latest prices and improvements.

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Stands at the head of all wire and picket machines for making fence in the field, being the most complete, simple, speedy and easily operated, and having the most perfect tension device. It will weave in any kind of pickets from one to six inches wide, easily twisting a No. 8 wire, and making a fence that no stock will break down at a cost of sixty cents a rod complete. Works up or down hill or on a level equally well, keeping pickets perpendicular. Light and easily handled. A boy can work it. Every farmer can afford to own one. Write for circular and price.
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Wayne, Du Page Co., Illinois,
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Percheron Horses valued at $3,500,000, which includes about
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Whose purity of blood is established by pedigrees recorded in the Percheron Stud Book of France, the only Stud Book ever published in that country,
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140
Imported Brood Mares
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Old enough for Service.
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Two years old and younger.
Recognizing the principle accepted by all intelligent breeders that, however well bred animals may be said to be, if their pedigrees are not recorded, they should be valued only as grades, I will sell all imported stock at grade prices when I cannot furnish with the animal sold, pedigree verified by the original French certificate of its number and record in the Percheron Stud Book of France. 100-page Illustrated Catalogue sent free. Wayne, Ills., is 35 miles west of Chicago, on the Chicago & North-Western Ry

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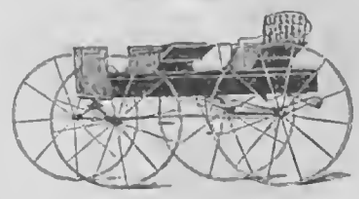
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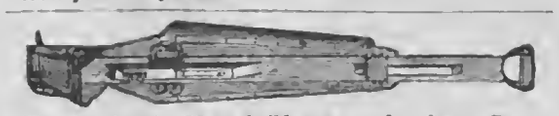
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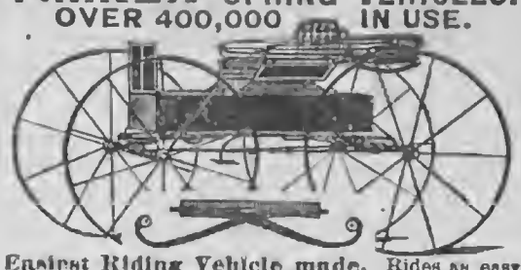
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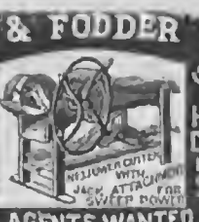
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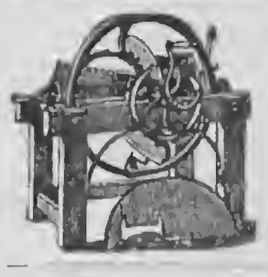
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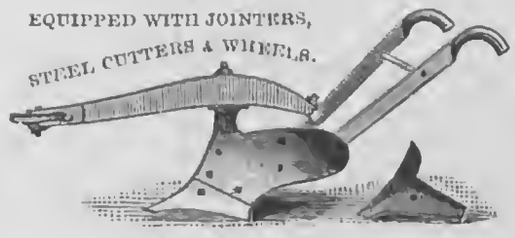
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THE RURAL NEW-YORKER

A JOURNAL FOR THE SUBURBAN AND COUNTRY HOME

VOL. XLV. No. 1877. NEW YORK, JANUARY 16, 1886. PRICE FIVE CENTS. $2.00 PER YEAR.

Entered according to Act of Congress, in the year 1886, by the Rural New-Yorker in the office of the Librarian of Congress at Washington.

Potato SPECIAL!

1. BEST VARIETIES in many sections. Earliness, quality, keeping qualities, etc., etc. The most profitable potato all things considered.
2. RULES FOR SELECTING "SEED." When selected. How treated?
3. SOIL. What preferred as regards location and character? Sod? Fallow? How prepared? Implements used?
4. HOW PLANTED? Implements? How many eyes? Whole potatoes? Rows how far apart? How deep? How far apart in row? How covered? When planted?
5. WHAT FERTILIZERS USED? Farm manure *vs.* chemical fertilizers as regards convenience and profit? How applied? On surface, plowed under, in hill, etc., etc.? Any influence of particular fertilizers as regards size, shape, color, etc.: of tubers?
6. FLAT CULTIVATION *vs.* hilling. Which best with you? What cultivation is given during the season?
7. HOW TO AVOID BLIGHT, rot, wire worm, scab, etc., etc.
8. DIGGING. Methods and implements. Sorted in field or storehouse. How long in field after digging? Use of small potatoes? Dug when ripe or left longer in ground?
9. MARKETING. When to sell. How packed? When to hold over? How to store for winter use?
10. THE IDEAL POTATO. What do we most need as regards size, shape, color and season? Views as to the improvement of the potato.
11. AVERAGE YIELD? Profit per acre? Climatic advantages necessary? Is the market improving or not? How to fight insect enemies?

CONTRIBUTIONS FROM

Dr. W. J. Beal, Pres. T. T. Lyon (Mich.); Prof. E. W. Steward (N. Y.); Peter Henderson (N. Y.); Dr. G. C. Caldwell (N. Y.); Prof. W. W. Tracy (Mich.); B. F. Johnson (Ills.); Waldo F. Brown (O.); W. B. Jones (Ga.); Dr. T. H. Hoskins (Vt.); Sec. W. I. Chamberlain O.); Major H. E. Alvord (N. Y.); T. V. Munson (Tex.); F. Grundy (Ills.); John M. Stahl (Ills.); Rev. L. J. Templin (Col.); H. H. Wing (Neb.); Thos. Barret (Ills.); Prof. J W. Sanborn (Mo.); A. C. Glidden, Sec. C. W. Garfield (Mich.); Director Dr. E. Lewis Sturtevant, Jonathan Talcott, Col. F. D. Curtis, E. S. Goff, W. W. Hawley, C. A. Green, and many others.

[Concluded later.]

Experiment Grounds of the Rural New-Yorker.

STABLE MANURE *vs.* FERTILIZERS FOR POTATOES. TESTS OF NEW VARIETIES CONTINUED.

MANURE *vs.* FERTILIZERS.

ON no other crop have we had such telling results from the use of chemical fertilizers as compared with farm manure as upon potatoes, and this has been the case during the past eight years without any exception that we now recall. This seems to have been the experience of many other farmers. Upon oats and corn, and vegetables of various kinds, fertilizers have occasionally failed to increase the crop, while farm manures in contiguous plots have produced marked effects. The experiment which we now have to record is no exception, though all the conditions seemed favorable to a decided and impartial test.

The land (a sandy loam) had never received any chemical fertilizers, and for 15 years at least, no manure of any kind. Two plots were measured off one-tenth of an acre each, that is 132x33 feet. The first received three tons of stable manure, or at the rate of 30 tons to the acre in October. The seed potatoes (Great Eastern) were cut to two eyes each and planted April 22, in drills two-and-a-half feet apart and 14 inches apart in the drills. Both plots were cultivated once and hoed twice, the soil being kept level without any hilling up about the plants. The yield was 24 bushels and three pecks, or at the rate of 247.50 bushels to the acre, of which 80 per cent. were marketable.

The second plot received, instead of the stable manure, 200 pounds of the Mapes' Potato fertilizer, or at the rate of one ton to the acre, the seed pieces, distance of planting and treatment being just the same as with the first plot. The yield was 27½ bushels, or at the rate of 275 bushels to the acre, of which 90 per cent. were marketable. The potatoes were smoother and brighter and less injured by wire-worms than those of the manured plot.

The cost of the manure delivered was three dollars per ton, or nine dollars for the plot. The cost of the potato fertilizer was $48 per ton, or $4.80 for the plot. The guaranteed analysis of the latter was, ammonia 4.50 to 5 per cent.; phosphoric acid 8 to 10 per cent.; potash 6 to 8 per cent.; magnesia, lime, soda, etc., forming the rest.

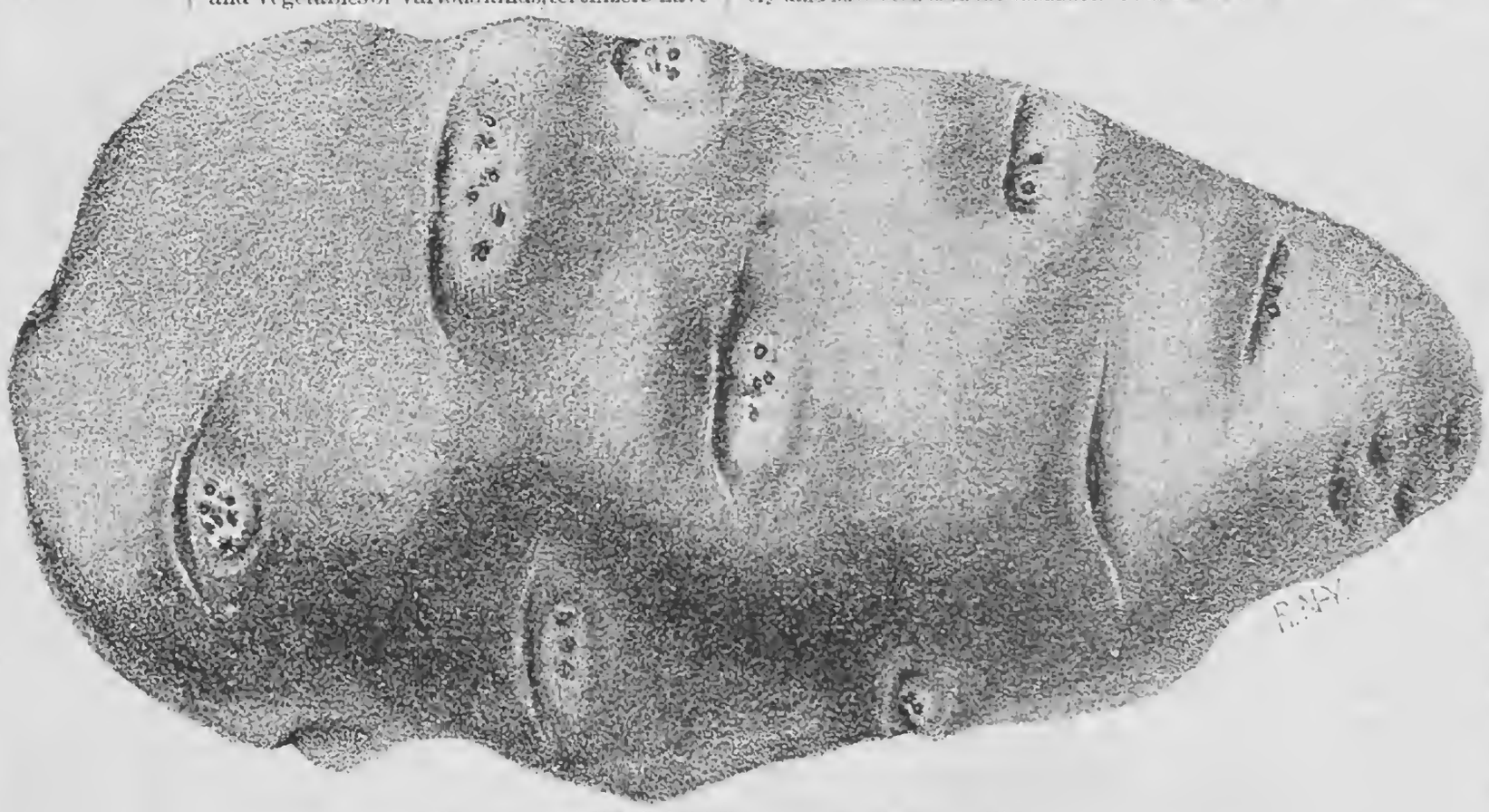
The season was unfavorable throughout.

If potatoes were again raised on the same plots next year without fertilizer or manure, no doubt the manured plot would outyield the fertilized plot, because if for no other reason, the nitrogen of the latter being soluble, has passed through the soil, while the farm manure will yield nitrogen for years to come.

TESTS OF NEW POTATOES CONTINUED

SOIL, CULTURE, ETC.

SUBSCRIBERS should understand that these tests are made in a rich, moist, garden soil. The crop never suffers seriously either from drought or too much wet, as the land is well drained. Not only has farm manure been liberally supplied, but fertilizers of every kind have been used in abundance. Potatoes have been raised on this plot for six consecutive years Trenches are dug one foot wide and six inches deep, and three feet apart. Two inches of soil are raked back in the trenches, and the seed pieces (two strong eyes each) are placed one foot apart. Two inches of soil are then raked over them, and the fertilizer is strewn evenly at the rate of about 1,000 pounds to the acre. The rest of the soil is then returned to the trenches as loosely as possible. The cultivation is then effected by hand cultivators, and hilling up is studiously avoided.



EMPIRE STATE POTATO. From Nature. Fig. 21.

EMPIRE STATE.—Received from W. Atlee Burpee & Co. of Philadelphia, Pa., who claim for it that "it is the most prolific main-crop potato ever produced." It originated with E. L. Coy of Washington Co., N. Y., who was the originator of the Beauty of Hebron."

It is further described as follows: "Skin white and smooth, eyes shallow, flesh pure, snowy-white and floury, peculiarly rich and delicate in flavor. Vines rank, tubers close together in the hill. It stands drought on account of its deeply penetrating roots."

He planted six pieces of this on April 15. The yield was ten pounds, or at the rate of 484 bushels to the acre. The best five weighed five pounds two ounces. Some hills yielded very large potatoes, others were nearly failures from some cause. We should look for a large yield of this potato in a favorable season. There were twenty-eight tubers, of which seventeen were of marketable size. Skin nearly white, eyes numerous, not deep; cylindrical, rather long. The tubers so varied in form and size that our illustration may not be typical. Eaten Dec. 2. Flesh nearly white, quite dry and mealy and somewhat nutty in flavor. See Fig. 21.

ROSE'S NEW PURPLE BLUSH—an unfortunate name since we already have the Rural Blush. Mr. A. Rose (Penn Yan, N. Y.) writes: "It is a seedling from the Blue Mercer."

We planted eight pieces April 20, which matured August 13. The yield was 13 pounds, or at the rate of 536.25 bushels per acre. There were 82 tubers, 50 of which were marketable. The best five weighed two pounds 12 ounces. The shape is, as shown in our careful illustration from nature, oblong-flattened, often smaller at one end. The skin is light buff splashed with purple. Very few eyes. Eaten October 26. Flesh nearly white, quality fair, but not so mealy as Early Rose. See Fig. 23.

DICTATOR (Rand) from Thorburn & Co., 15 John Street, N. Y. Planted April 15, six large pieces, each, as usual, having two eyes The yield was 16¼ pounds, or at the rate of of 665.60 bushels to the acre. There were 56 tubers, of which 41 were marketable. The best five weighed three pounds, nine ounces. Buff-white skin, roundish-oblong, generally somewhat flattened. Eyes medium. Good, solid-looking tubers. It is a late variety. Eaten December 29. Flesh dull white and not dry or mealy as grown in moist soil. This is always the case with potatoes of the Peachblow class as we take this to be. See illustration, Fig. 22.

PERFECT PEACHBLOW.—From W. H. Rand, Shelbourne, Vt. Planted April 20; seven pieces (two fair-sized tubers). They were beautiful, smoot hand russeted. Mr. Rand writes that "they are from seed of the old White Peachblow. So far they have given great promise."

The yield was 6¾ pounds, or at the rate of 233.55 bushels to the acre. Skin yellowish-white, smooth, often splashed with pink, Few eyes. There were 85 tubers, of which but 10 were of marketable size. Shape round-oblong.

CARMAN was received from O. H. Alexander of Charlotte, Vermont, who says that it is a cross of Beauty of Hebron on Early Vermont, two years old. Seven pieces were planted April 21. The yield was nine and one-quarter pounds, or at the rate of 319.78 bushels per acre. The best five weighed two pounds two ounces. There were thirty-five tubers, of which twenty-nine were of marketable size. There were very few small, none very large. Skin, flesh-colored; few eyes. Shape, oblong, flattened. Shapely and smooth. Late. Eaten, Dec. 7. Flesh white. It is not as mealy as some, but quite dry and fine-grained. See Fig. 24.

CULTURE OF THE POTATO.

T. H. HOSKINS, M. D.

I WILL briefly reply to the queries you send me. The best varieties with me are Beauty of Hebron, Pearl of Savoy and Snowflake. I grow some Alpha as an extra-early for home use, but it is not productive. Pearl of Savoy is the best early market potato I have had. Snowflake is not very productive, but the quality is best for a winter potato. I have grown last season a quantity of a Snowflake

seedling, produced by Mr. Macomber of Grand Isle, Vt., called the Pecan, which seems to have all the merits of its parent, with productiveness added.

My rule for selecting seed is to take well ripened, well-formed, medium-sized tubers. These I cut into pieces of two eyes each, and plant in drills, the sets ten inches apart. The drills are made from 2½ to 3½ feet asunder, according to the variety. My soil is one of the best for potatoes, a rich, deep sandy loam, ("hard-wood land"). For potatoes I plow deep, eight or nine inches, and plant about five or six inches deep. The drills are made with a Share's horse hoe with the teeth removed and the wings closed. The potatoes when planted in an open field, are covered by harrowing across the rows, and the ground is again harrowed as the earliest shoots begin to break the surface. I plant as soon as the ground is fit. As to manures, I never use dung the same season, but use a good superphosphate, sown on the furrow at the rate of about 500 pounds per acre, sowing at the same time from 15 to 25 bushels of unleached ashes. Often I use ground bone in the same quantity, in place of the superphosphate. After the fertilizer is sown, the ground is well harrowed. This, with the subsequent opening and closing of the drills, distributes the fertilizer very evenly and completely. I never plant potatoes on sod, but usually after corn. My objection to dung for potatoes is that it causes scab and predisposes to rot. With my system I never have been troubled with rot, and the potatoes show but little scab. I do not notice any other effect of manure or fertilizer upon the tubers. It will be seen by the above that I practice deep planting and flat culture and have done so for 20 years. The digging is harder, but the crop pays half a dozen times over for the extra labor. The cultivation during the season is working with a horse hoe two or three times, and pulling all weeds in the rows. Digging is done with common hoes, and the potatoes are sorted in the field. They are not left on the ground over-night; small potatoes are fed to stock. Occasionally they have been drawn to the starch factory, but not unless they fetch over 25 cents a bushel. I always dig my potatoes for the Winter as soon as the tops are all dead. They are stored in a dark cellar, in barrels. As regards marketing, I sell as many of my potatoes early as I can; and when the price drops below 75 cents the rest are left in the ground, and are mostly sold the next Spring for seed. I believe potatoes always keep best in barrels, stored in a dark, dry, frost-proof cellar.

As regards the "Ideal Potato," I should say that a well-grown Snowflake comes as near to it as possible in shape, color and quality. But there is nothing practically to object to in the Beauty of Hebron, Early Vermont, Pearl of Savoy, or even in the Early Rose, if the latter would ripen clear to the end. I have abandoned all late varieties as relatively unprofitable, though some of them are of fine quality. But I do not like bug-fighting longer than it is necessary, and in this section rust is very apt to strike late kinds before the tubers are matured.

The average yield of potatoes in Northern Vermont is probably not far from 160 bushels per acre. But to make so low a yield, a large number who rarely grow less than 250 to 300 bushels, have to be averaged with a greater number who are satisfied with a big crop of weeds and 80 to 100 bushels of potatoes to the acre. Exceptionally good crops of 400 bushels and upwards are not uncommon with good farmers, or even with poor ones on newly cleared land. The profit varies, but is greatest on the large crops. The average is not far from $20 per acre over expenses. Insects are fought with Paris-green. Prices have averaged about the same here for twenty years.

Orleans Co., Vt.

POTATOES—LARGE OR SMALL SETS.

PETER HENDERSON.

It is something not very easily understood why there should be so much difference of opinion as to what kinds of potatoes should be used for seed, whether they should be large or small, whether cut in single eyes or in halves. Now, although I have not had much practice in the cultivation of potatoes, a large experience in everything connected with horticulture leads me to believe that as good results cannot be got from cutting potatoes to single eyes, unless indeed a large portion of the nutritious substance of the potato is left attached. Experiments made with beans, peas, and other seeds that have been attacked by the weevil or other insects, where the whole or portions of the pabulum of the seed is entirely eaten out, have shown conclusively, by frequent and careful trials, that when the pabulum of the seed is entirely eaten out, the seed germ, though left sound, will not start at all, and that when the pabulum is partially destroyed, it will start feebly and make a weak plant. This is just as true of the tuber of the potato as of the seed of the pea or bean. Nature provides this substance for the germ or bud to feed on until it is able to take care of itself; and if you rob it of this substance the result will be disappointment, less or more. It has often been the custom when new potatoes were introduced, to cut them up into single eyes, in the hope of producing a larger crop from the costly seed; but I doubt very much if any additional weight of crop can be gained, and undoubtedly the vitality of the roots will be weakened for future crops, if wanted for that purpose, which with new potatoes is generally the case.

I was one of the first purchasers of the Early Rose Potato when it was introduced, paying $2.00, I think, for a single tuber weighing five ounces. In April I cut this five-ounce potato into two pieces in such a way that the surface should present the greatest number of eyes. The pieces were then placed on a shelf and kept there until they were dry enough so that the cut part had partly healed over. They were then placed on six inches of soil in a two-foot hot-bed, where the temperature, in the soil of hot-bed, shown by the thermometer, averaged from 80 to 85 degrees. The shoots soon began to start from the eyes, and as soon as they got to be three or four inches in length, they were cut off about a quarter of an inch from the surface of the potato, or far enough from the surface not to injure the dormant eyes that were yet to start. The cuttings were then placed in what are called two-and-a quarter inch flower-pots and placed in the same hot-bed and shaded and watered until rooted in the usual way. As the season advanced, shoots in great number were thrown up by the potato, which in turn were cut off, and placed in the flower-pots and submitted to the rooting process. As the first shoots grew to a length of five or six inches, the tops were cut off from these and used as cuttings, so that by the first of June this small potato of five ounces had given me about 150 plants, every one of which was equal to a set made from a tuber, for it must be remembered that the pots in which these cuttings were placed were now filled with roots. They were planted out about the 10th of June, and the crop when dug weighed exactly 450 pounds, or an increase of about 1,800-fold.

There probably would be no practical value in this practice unless with new varieties, and it is not claimed that there is any advantage in the practice when the potatoes are sold at ordinary rates; but when they are sold at the rate of even 25 cents per pound, I think that it will pay to adopt this plan. For instance, one pound of potatoes when so grown will easily produce 500 plants, making 500 hills, which with ordinary culture will give three pounds per hill, or 1,500 pounds. The manner of rooting the cuttings is not difficult, and can be done in any common hot-bed. An ordinary hot-bed sash 3x6 feet will hold 300 plants in 2¼-inch pots. These as they grow, furnish other cuttings from the tops as above described. Without resorting to hot-bed propagation at all, the potato crop may be doubled or trebled in quantity by ta kingslips from the plants planted in the open ground in June, and planting them out at once in the open field, if there is a continuance of rainy weather for a few days. The moderate thinning out of the shoots from the regular plants will do no injury to the plants. The growing of potatoes by placing the slips in hot-beds is not new, although there is but little doubt that this method has been suggested from the practice of gardeners propagating dahlias and other plants of that kind. But there is no doubt that it will be new to many of your readers, though the principles involved have been long known to practical gardeners.

Jersey City Hights, N. J.

THE POTATO SCAB.

MANY CAUSES AND PREVENTIVES GIVEN.

DR. G. C. CALDWELL.

There is a disease of the potato called, in Germany, by two or three names, which may be translated as *scab*, which is caused by a fungus parasite—Rhizoctonia solani. It appears first as small, roundish, black or brown spots, which reach about the size of a small pea. Then the skin of the potato cracks around or across these spots, and there follows, underneath them a rapid thickening of the layer of cork cells that, ordinarily, in uniform thickness all over the potato, forms the healthy skins. Still later, if the conditions are favorable, the potato rots under the scabs and finally throughout; but when dug and stored in a dry place this decay is checked, and there is only a black or brown cavity separated by a rough layer of corky matter from the starchy tissue underneath. The disease is stated to appear in wet soils, or such as are over-rich in nitrogen compounds, or alkali (potash). By better drainage and avoiding the use of fresh stable manure it disappears. That this is one of the kinds of scab met in this country is probably true. The observation so commonly made here that too much fresh stable manure, chip manure, rotting wood, or any other decaying vegetable matter, favors the occurrence of the disease, gives some support to this probability.

Dr. Hexamer, in an April number of the New York Tribune for 1880, described the scab as "rough spots at first, which afterwards become raised like blisters, and later collapse, leaving irregular holes or pits in the substance of the tuber." Whether this is the same disease as that described above, one can hardly say; but if he is correct as to the cause, "mites, minute animals which have not yet been thoroughly studied," the two accounts will not tally. Mr. Worthington Smith, in a recent little book on Diseases of Field and Garden Crops, describes the scab and the cracking of the potato together as due to a mechanical cause, and as having no connection with any fungus, except such as may make an attack on the more delicate parts of the tubers after they have been thus exposed, and insects or worms may also then assist in the ruin. He gives no explanation of the way in which this mechanical injury comes about, except to say that "continued drought, or possibly sudden and excessive moisture will cause one form of scab." He also says that "lime rubbish, builder's refuse, or some other irritating or corrosive substance in the soil is said to cause scab and cracking"—and that when the crop on only a part of the field is scabby, the irritating substance can usually be found in the soil. The disease, according to him, begins very early, and, whether scab or cracking, appears first as rounded spots or minute, open pustules.

Many who have given their opinions on the subject believe very firmly that some kind of a scab is caused by the attack of worms. When so careful an observer as the Editor of the RURAL insists that wire-worms were the cause of a bad case of scab in his Experimental Grounds, one must believe: but it cannot be the kind of scab described by the German authorities or by Dr. Hexamer. No gnawing of worms could leave such a result as they describe, unless an imitation of it should come from an attempt of he potato to heal over the wounds made by th animals. The mere presence of any number of wire-worms or any other animals in the ground with the potatoes, is not sufficient evidence that they cause the scab; but that is all the evidence which most of those who hold this opinion give us. The Editor of the RURAL would not accept such evidence, and it must be presumed that he saw more than this, or he would not be so positive. Moreover, scab occurs where there are no wire-worms. Two correspondents of the RURAL have borne testimony to this effect in the course of the past year, the potatoes being badly scabbed where not a single wire-worm was seen, nor, says one of these writers, a worm of any kind except angle-worms. It is plain that we have not reached the root of this scab business, or else there are many causes and different kinds of scab. [There seems very little doubt about it.—Eds.] No one of the causes assigned seems to cover all cases; certainly there are many instances recorded in which the trouble cannot be traced to worms, and others in which it apparently cannot be attributed to parasitic fungi.

Even more numerous than the causes are the preventives, which is usually the case where the cause is not well understood. Many are quite confident that the use of commercial fertilizers, instead of stable manure, is a rep-preventive. Others avoid the scab by putting tobacco stems in the hill; another would not grow potatoes twice on the same ground; but still another affirms that such a course will not secure freedom from the disease. Coal ashes scattered on the hills are recommended by another; salt is another preventive, and another would not raise potatoes on a peat soil. After giving to each of these and of other prescriptions the weight that they would appear to merit, it seems that one would stand the best chance of getting a sound crop of potatoes by planting, in a well-drained soil that had not been recently manured with stable manure, and dressing the crop with a complete commercial fertilizer, one containing nitrogen compounds, phosphate and potash salts. As to the fitness of the scabbed potatoes for food, concerning which inquiry is sometimes made, there seems to be no definite information. Of course, one would not relish the potato if the decay, beginning around the scab, had plainly made much progress, and should be unchecked when the crop is dug and stored; but if, as is sometimes the case, the substance of the potato is still apparently sound and in good condition throughout, there would appear to be no good reason why it should be rejected for food.

THE "IDEAL" POTATO.

PROF. WILL. W. TRACY, (Supt. D. M. Ferry & Co.'s Trial Grounds.)

I am asked to describe the ideal potato, a request it is as impossible to comply with, as to describe in a few words and to the satisfaction of all men the ideal wife, and many people seem to think that an ideal potato is not only possible, but that a seedsman should offer none but these ideal sorts, and that he is little better than a robber if he sells any sort that does not prove all that each and every purchaser hoped it would. The unreasonableness of this popular notion may be seen by looking at a few facts. I certainly am speaking within bounds when I say that there are now in cultivation at least 500 distinct varieties. I am somewhat familiar with originators of new sorts, and have within the past five years talked or corresponded with the producers of at least 500 varieties of vegetables, and am certain that with an exception not exceeding five per cent., each not only believes, but has good evidence for believing that, under the conditions he had grown it, compared with the varieties he was familiar with and judged by his standard, his sort was better than any other, and all were honest in their believing that the introduction of their particular varieties would be a real benefit, and that ultimately they would come into general, if not universal use. Now it is fair to conclude that potato growers are equally honest, and that each of the 475 varieties was believed by somebody to be worthy of universal cultivation; yet the number of varieties actually in general cultivation does not reach 25, and I think that nine-tenths of all the potatoes produced are included in five, or at most, ten sorts.

The same thing is seen in individual cases. Five years ago, a seedsman received from a careful grower a dozen new varieties for trial. They were carefully compared with each other and the best of the old sorts. One seemed to be very superior in quality and in quantity of merchantable potatoes. The next season, the trial gave the same result. And a careful inspection of it, as grown in large fields with simply good culture and by the side of those of the most productive sorts known, seemed to indicate that it was one of the best and most profitable sorts ever produced, and accordingly the stock was purchased, and the variety extensively advertised and sold, and it proved a failure, many a man condemning the seedsman as an imposter and cheat for selling it to him. It is true that many reported it all that was claimed, and the seedsman received some strong recommendations of the variety; but with the majority of growers, it was a profitless sort. Now, did the seedsman err in his judgment of this variety?

I asked a man living at the West, and who is a good cultivator, a careful observer, and has had as many as 600 varieties in cultivation at once, which three varieties he considered the most profitable, taking quality into consideration, and he replied, if he was to cultivate them and had suitable soil, he would take first a sort which the originator never could get a seedsman to advertise; second, the sort we have been describing, and, third, a very similar variety introduced by an Eastern seedsmen, and which has proved equally unpopular. I asked an extensive grower at the East, which variety he would use if he were to attempt to produce the largest possible quantity of table potatoes from an acre of his best land, and he selected this sort.

Why, then, was this potato, which comes so near being the ideal of these experimental growers, a failure? Because, first, it needed for its best development a peculiar soil, and did not come to perfection in any other. Second, in order to get a full crop, it needed rich soil and the best of culture, and how improbable it is that a new sort will receive the best of culture from the average planter may be judged from the fact that even in the most favorable localities, the average yield does not equal 150 bushels to the acre, and when the RURAL reports a yield on its trial grounds, at the rate of from 300 to 1,000 bushels per acre, its contemporaries with uplifted hands, cry "My! What a whopper!"

Now, if I am to rely upon my own observations, instead of on the theory that a potato, being a cutting, cannot improve or deteriorate by selection or cutting, I should say that the potato is greatly modified in quantity of yield and quality of product by conditions of soil culture and by the season. A variety may do remarkably well one season, or under certain conditions, and be almost worthless another season or under different conditions, and *the different varieties vary greatly in their susceptibility to such modifications* and to get the best possible result we must not only have a variety which is good, but which will respond most readily to the most favorable conditions; but such a variety will almost invariably be subjected to corresponding deterioration, if it has to contend with unfavorable conditions; so the ideal potato of experts in different locations or circumstances would not be the same, and would be sure to be different from the ideal potato for general culture.

THE POTATO.

E. S. GOFF.

SELECTION OF SEED.

THE indications based on two seasons' experiments are decidedly in favor of selecting seed tubers from the most productive hills. For the past two seasons, we have selected the best and the poorest hills from a row of ten different varieties. In the Spring we have planted four short rows of each of the ten varieties, putting in the first the single eye cuttings of the largest tuber from the most productive hill; in the second, those of the smallest tuber of the same; in the third those of the largest tuber of the least productive hill; and in the fourth those of the smallest tuber from the same. The yield, calculated per eye, shows the largest tuber from the most productive hill yielded most; the smallest tuber from the same yielded second; the largest tuber from the least productive hill yielded third, and the smallest from the same yielded least. It will be observed that in these cases the yield is not in proportion to the size of the cuttings, as the cuttings, in the second row, were decidedly smaller than those in third, and were little, if any, larger than those in the fourth.

This theory of the selection of seed has, I believe, been combated by some writers whose opinions are worthy of respect. These gentlemen take the ground that improvement by selection is impossible in plants propagated by cuttings. I think it has not been proved that vigor may not be increased by continued selection of cuttings from the most vigorous plants. But argument is unnecessary. The results of continued experiments in this direction will be worth far more than opinions.

We have tried the past season selecting potatoes in this manner on a rather large scale, and find it not very expensive. The workmen were instructed to separate the yield of each hill, and as the tubers lay drying a man passed over the rows with a basket and picked up every strikingly productive hill. I do not see, however, how this method could be practiced where potatoes are dug by machinery.

WHOLE *versus* CUT TUBERS FOR SEED.

THE results of numerous experiments in this direction may be summed up briefly: as a rule, the more potato we have planted the larger has been the yield. Large tubers have yielded more than small ones. Large cuttings have yielded more than single eyes. When it is remembered that usually but a single eye develops, it appears that practically the chief difference between whole and cut tubers is in the amount of potato used. The question as to how small the cuttings may be safely made, appears to depend upon circumstances that the potato grower cannot foresee. In 1883, when abundant rains fell during the month after planting, small sections containing the terminal cluster of eyes, gave yields fully equal to those of decidedly larger single-eye sections from other portions of the tuber. In 1885, however, when the planting was followed by a month of comparative drought, the result was quite different. The small, terminal sections yielded decidedly less than the other larger ones.

The precise office of the tuber or section planted, beyond furnishing the bud and aiding this to start in its development, is not clear. From an experiment carried on in the greenhouse, it was shown that the plant is capable of consuming nearly or quite the whole substance of the seed tuber, and that this consumption continued until the tops commenced to die. From another experiment in the garden the indications were that the plants received no benefit from the seed after they had grown to the hight of four to six inches.

HOW TO AVOID THE POTATO ROT.

The past season our varieties of potatoes rotted in relation to their lateness of maturing. The early varieties, though none were entirely without decay, rotted decidedly less than the later ones, while the latest and most vigorous-growing varieties rotted most of all. Whether this is because the more vigorous foliage of the later varieties is more favorable to the growth of the fungus, or because the fungus has a longer time to act, I do not know. The practical suggestion, however, is to plant potatoes early to avoid the rot. The disease seldom secures much foothold until late in Summer.

The high-hilling system as preventive of rot, from which so much is hoped in England, has not, so far as I know, been tested in this country during seasons of rot.

FIGHTING INSECT ENEMIES.

Last season the potato beetles appeared in unusual numbers. To avoid injury to the young plants, we resorted to the primitive mode of hand-picking. We carried on this work thoroughly, and were little troubled from the larvæ. Although this is an expensive method, it appears to be a very sure one. Many are of the opinion that Paris-green does little benefit when applied before the first brood of larvæ hatches. It was found that this poison, mixed with plaster, at the rate of one part to 100, killed about 50 per cent. of the beetles. For the larvæ, one part of Paris-green thoroughly mixed with 150 parts, by weight, of land plaster, dusted over the foliage, has proved entirely efficacious.

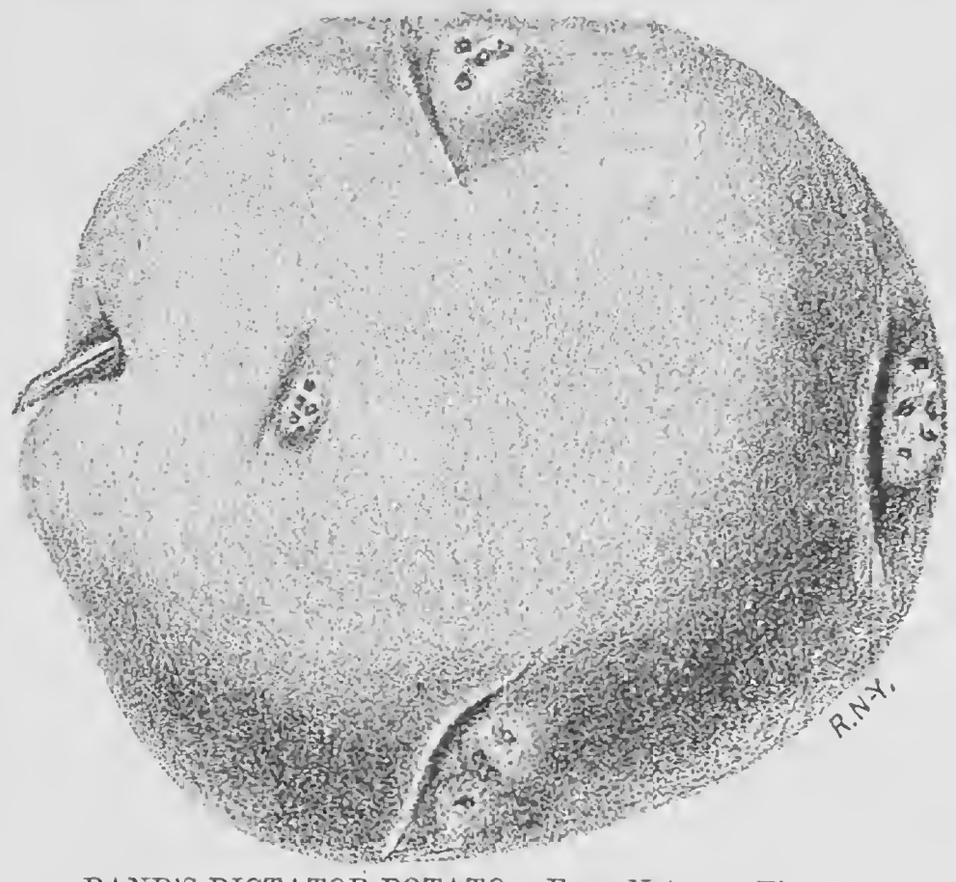
Geneva, N. Y., Exp. Station.

RED STREAK IN THE LATE ROSE POTATO.

DR. W. J. BEAL.

A PROMINENT man of Grand Rapids, Mich., asks, "To what extent does the 'red streak' exist in your locality, and what is the loss incident to such defect? Is the seed running out? If not, what in your opinion is the cause?"

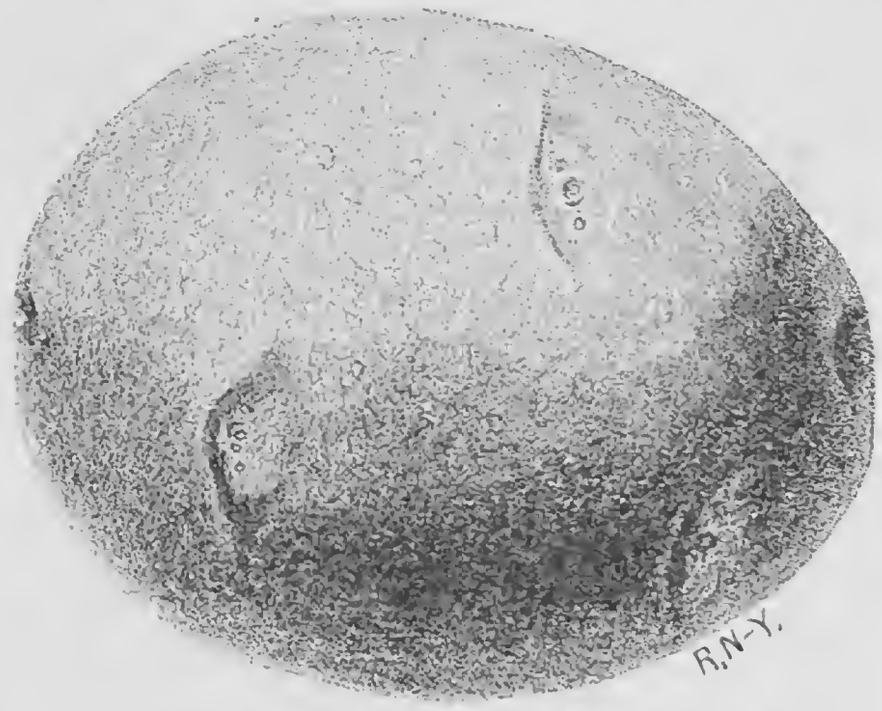
I have made some inquiry and studied the subject somewhat, and find the "red streak" pervades the Late Rose in this part of the State also, rendering them unsalable. When boiled, they crack open before done, and come to pieces a good deal; but the streaks still show and other places look yellow and soggy. The taste is not bad. On splitting a fresh tuber, not far from the margin, in an irregular line, is the outline or outside of a reddish streak. Inside of this, throughout some tubers, we find more of less red. At the eyes, the streak extends to the surface. This marginal line of red is along what would be the outside of the pith of the potato—for a potato is a real stem and has a part representing pith, another faintly representing the wood, and one the bark, including a corky layer outside.



RAND'S DICTATOR POTATO. From Nature. Fig. 22.

Potatoes are more or less decayed this year. The last of Summer and Autumn was wet and cold.

On magnifying a thin slice of a "red streak," 500 diameters, we find that some of the cells contain granular particles of a reddish-brown color. These contain less starch than some of the others, and some of the starch grains are more or less decomposed. Bacteria were also seen in large numbers, indicating incipient decay in several specimens examined, although to the unaided eye there was no sign of rotting.



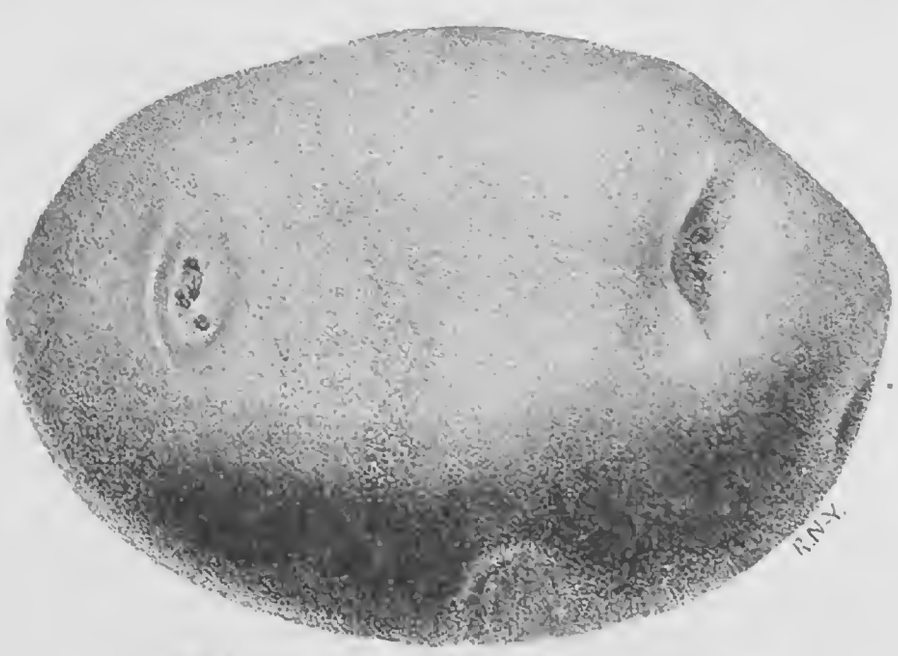
ROSE'S PURPLE BLUSH POTATO. From Nature. Fig. 23.

What is the matter? The reply might be "The Rose-red has struck in." The old Mercer or Neshannock had faint purple streaks inside. The old Merino had red streaks more or less apparent, especially toward the last of its career. I have just been looking over some small, wild potatoes from Colorado, (Solanum Jamesii), and find a sharp purple streak inside the skin. The inside or main bulk of the tuber is white. The corky layer is very thick. In time this tuber might become larger, whiter and good to eat, and after a while the purple might "strike in" and the potato go out of use.

This has been a bad year in Michigan for potatoes, and they show their faults, which have been increasing by bad treatment, for some years.

Some years ago I tested over 350 sorts of potatoes for several years, and with our treatment, which was about as good as the average, many of them dwindled and became worthless, some failing entirely to produce a single tuber. Most likely, with plenty of potash and vegetable mold on the Rural Farm, you might hold them up to the standard, or even improve them. I should say this Late Rose was on the decline, and must be replaced by others. If some one has some good, nice edible tubers—and no others are fit to plant—he may yet raise the Late Rose, but its day must come sooner or later.

Ag'l. Col., Lansing, Mich.



CARMAN POTATO. From Nature. Fig. 24.

VALUE OF POTATOES AS STOCK FOOD

PROF. E. W. STEWART.

THE potato has long been used as a food for our domestic animals, and especially in years of great crops, when their use as human food furnishes but a partial market. English farmers have used them as food for various animals. They are relished by horses, cattle and sheep in the raw state; but it is not safe to feed them in this way, except in very limited quantity. In the raw state, they are not well digested, and produce a laxative condition of the bowels, and for this reason a few quarts are beneficial to the horse medicinally, and the same for working oxen and cows; but if fed in as large a quantity as one-half bushel per day to milch cows, the quantity and quality of the milk will be reduced.

To the pig, they are not nutritious in the raw condition, and are not relished except two or three at a time. But when boiled or steamed, the pig eats them greedily and thrives upon them.

Curwen, in 1801, was the first to test the value of potatoes for English work horses by steaming them, and to show the extent to which he used them, he fed 420 short tons in a season. He used them in lieu of hay, and at first fed the steamed potatoes alone, but he found the horses had trouble in masticating them—probably they adhered to the jaws in their soft, sticky condition. He then mixed in a small proportion of cut straw, and this removed the difficulty and promoted digestion. It gave bulk and porousness to the food in the stomach. He found, in fact, that seven pounds of cut straw were necessary to prevent flatulent colic. His daily ration was 21 pounds steamed potatoes, seven pounds of straw and eight pounds of oats; and this furnished a full, healthy ration for heavy farm horses. He rated potatoes as worth $9.60 per gross ton, which is equal to 25.8 cents per bushel, as food for farm horses. This is somewhat higher than they are rated here as food for stock.

Diseased potatoes are sometimes fed to stock, and when the disease has not affected more than the skin, this may safely be done with the proper treatment. If the potatoes are well washed and thoroughly cooked or steamed, the disease is arrested, and the germs are killed. If these cooked tubers are now placed in an air-tight cistern or silo, and compressed into a solid mass, and covered so as to exclude the air, the food will keep unchanged for months. In this way, the feeding value of potatoes might be saved on a large scale, when the disease proceeds slowly, but often it has gone too far before the tubers can be dug.

There never has been any doubt expressed by those who have experimented in feeding potatoes, as to the benefit of cooking them, or of the necessity of cooking them for pigs. And there is a point here worthy of consideration. Why should the cooking of the potato be more beneficial than the cooking of turnips, beets, carrots, etc? Or why should it be deemed essential with the potato, and not with these other roots? Is it because of the much larger percentage of starch in the potato? I think this the probable reason. Starch, as is well known, will not dissolve in cold water, and it is found that it does not fully dissolve without heating to 162 degrees or higher. When it dissolves it doubles in bulk. This renders it less dense or concentrated, and therefore more easily acted upon by the digesting fluid. This may explain why horses easily digest potatoes after they have been cooked, but not before.

In this view, we may suppose that the experiment of Dr. Sturtevant at the New York Experiment Station may be quite reliable, and yet not decide the question as to the value of cooking food for stock. His experiment related only to the albuminoid matter, leaving unconsidered the much larger class of non-albuminoid elements of food. There may be a small loss in the albuminoid elements, and a much larger gain in carbohydrates or heat and fat-producing elements. When it is proved

hat cooking renders food less valuable for animals, it will establish the same fact as applied to the food of man. But there are degrees in cooking, and much that is called cooking is not worthy of that designation, and yet the most sweeeping inferences are drawn as if the whole question were settled.

Let us now consider the comparative value of potatoes as cattle food. Analysis gives the potato 2.1 per cent. of digestible, muscle-forming matter; 21.8 heat, or fat-producing food, and 0.2 per cent. of fat. This, when figured by the German standard of value, gives twenty-nine cents per 100 pounds, seventy-five pounds being water. When corn is figured at $1.11 per 100 pounds, it is on the same basis as 100 pounds of potatoes at twenty-nine cents. This makes 100 pounds of corn nearly equal to 400 pounds of potatoes. But in feeding pigs, it would be much better to feed fifty pounds of corn meal with 200 pounds of cooked potatoes than to feed all corn meal. The bulk of the potatoes would divide the corn meal, and render it more porous in the stomach, and thus more digestible. But neither the corn meal nor the potatoes have a sufficient proportion of muscle or bone-producing food to grow young pigs, and should be fed with bran, oats, barley, peas or linseed meal. Potatoes are well-adapted to fattening well-grown shotes. And from this discussion it will be seen that about once in three or four years, the market is so overstocked with potatoes as to make them economical food for horses, dairy cows, sheep or pigs, as they often sell at fifteen cents per bushel.

For cows they may be mixed with bran, and when only a few quarts are fed per day, they may be sliced up and fed raw. In such small quantity they have a healthy action upon the stomach, and the same may be said if given to horses, in doses of four pounds per day to each horse. They will give them a better appetite for other food.

Erie Co., N. Y.

A POTATO TRIAL AND EXHIBIT.

BY THE EXPERIMENT DEPARTMENT OF HOUGHTON FARM.

THE best method of cutting pototoes for planting has been long disputed and a variety of conflicting opinions have been made public.

In 1884 it was decided to try and contribute something to the knowledge of this subject, by making comparative plantings at Houghton Farm and instead of reporting the result in figures, exhibiting at various fairs, the potatoes themselves, just as grown, with such marks and explanations as would enable everyone to judge for himself as to the facts.

Accordingly, at the New York State Fair of 1884, the well known potato grower, Mr. N. F. Pierson, of Seneca Castle, Ontario County, was engaged to make up a collection of a few pounds each from 100 to 150 varieties successfully grown by him, to include a number belonging to all the established classes or families of potatoes. Mr. Pierson kept the seed through the Winter very successfully and sent the collection to Houghton Farm in the Spring of 1885. As received on the first of May, the potatoes were in excellent condition and represented 130 varieties divided as follows: eight new early varieties, 32 approved early varieties, 24 new late varieties and 60 approved late varieties.

The place selected for planting was part of an old garden, cropped for two or three years with onions and cucumbers for seed. The soil was similar to the black soil so well-known in the onion-growing districts of Orange County It was not first-rate potato ground, but was convenient for the purpose and well protected from interference and accidents, which was an important point. The land, after being put in a good mechanical condition, received a moderate and very even dressing of muriate of potash and phosphatic lime, harrowed in.

The land was carefully laid out in squares, a space nine feet square being allowed for every variety. It was decided to plant the potatoes in three different ways as to form of seed, and with three hills in each way, to guard against accident. This gave nine hills of every variety, and the whole field was planted three feet apart both ways. A large stake marked with the number of the lot, was set at the middle of every square. It would have been difficult to find anywhere, a piece of land more uniform in every respect throughout its area, and less liable to affect single hills of potatoes from local causes.

The potatoes were planted on the 20th of May (the ground not being suitable earlier), and as I selected and cut all the seed, while my principal assistant, Mr. Emery, planted every hill, I am certain that in this part of the work, all were treated exactly alike, and there was no possibility of error. The squares of different varieties were so placed, that the hills of like seedings formed rows across the field, and the different kinds were planted in the same order, as that in which they were exhibited at the Fairs. The earliest varieties were together at the left and so on to the right, where the latest varieties were placed. Of every variety, three hills were planted with one fair whole potato, about the size of a hen's egg; three others had in each hill one good-sized piece of a good-sized potato, the piece having three or four eyes on it; and the three remaining hills were planted each with one eye upon a rather small piece cut from a good-sized potato. It is needless to add that throughout the growing season the hills of the whole lot, were treated exactly alike; no operation was performed which would affect the produce of one hill that was not applied to all the hills, the same day. The usual culture of field potatoes was followed, but very little hilling was done.

The season was extremely unfavorable for the crop. During the months of June and July, the rainfall was less than four inches, instead of from 10 to 12 inches for the same months in several previous years. At the time therefore, when the young plants most needed water to make their growth, they got none, but were, instead, subjected to most intense dry heat. It soon became apparent that this would tell disastrously upon the productiveness of the crop, but as all varieties and the different ways of seeding fared alike, it was felt that the experiment might be profitably completed. The early varieties naturally suffered most, and this was apparent to every one who saw the exhibit. Abundant rains in August were of great benefit to the late varities, and these were mostly in vigorous growth when it became necessary to dig them for the Fairs. All were dug between the first and the twelfth of September. At this time, one of the early kinds (the Bermuda Pink Blossom, an imported potato) was still green and growing, and of the 88 late kinds, 50 were ripe, while 38 were more or less immature.

The harvesting was carefully supervised by Mr. Emery, one hill at a time, and everything half an inch in diameter was saved. The total product of every hill, when dry and clean, (but not washed), was weighed, all the tubers counted, the number merchantable counted, and then the whole put away in a stout paper bag plainly marked, all the facts being carefully recorded.

Exhibits of the products from these plantings were made during the Autumn at the New York State Fair, Albany, the Orange County Fair, Newburgh, N. Y., the Deerfield Valley Fair, Charlemont, Massachusetts, the Hampshire, Franklin and Hampden Counties Fair, Northampton, Massachusetts, and at the Virginia State Fair, Richmond. The method of display at all these places was substantially the same. On the exhibit table the potatoes were arranged in three rows according to the different methods of cutting and planting the seed. One-hundred-and-twenty-eight (128) varieties were shown, and the whole product of the three hills of every variety, that of each hill in a small wooden tray by itself. There were thus 384 trays in all. The back row of 128 were from the whole potato as seed, the middle row from the usual cutting and the front row from the single eye planted. Every hill or tray was plainly marked with the name of the variety and the method of seed planting. Examined from left to right, every row showed the effects of the same way of cutting upon different varieties. From back to front, in sets of three, the same variety in different ways. As a whole, the potatoes were inferior in quality, although in several cases, single hills produced from three to five pounds. But that was immaterial, the exhibit was not intended as a *show*, but as *an object lesson*, giving at a glance the results of these three ways of planting. Large cards accompanying the exhibit, gave the average results in figures. These may be condensed as follows;

Average of 128 varieties of potatoes. Method of Seed Cutting.	Whole number of potatoes per hill.	Number of Merchantable potatoes per hill.	Average weight per hill. Oz.	Average weight of the tubers. Oz.	Computed product per acre. Bushels.	Area required for 100 bushels. Square rods.
Whole potato (back row)....	23	9¼	48	2.1	316	51
Usual cutting (middle row)..	13	6½	33	2.5	215	74
Single eye (front row)...	10	5½	28	2.8	185	86

One set of these figures may be deceptive; although it appears that the average weight of the potatoes in the front row (single eye planting), was the greatest, the number of large potatoes was greater in the back row, and the largest potatoes were there also. Therefore in every way of viewing it, so far as this one trial is concerned, the planting of the fair-sized whole potatoes was the most satisfactory in result. And this was not the result with a single kind, but the average of 128 different kinds, treated exactly alike in every respect except the form or cutting of the seed.

HENRY E. ALVORD, Manager.

POTATO GROWING IN OHIO.

W. I. CHAMBERLAIN.

SOIL.—It is not wise to attempt to grow potatoes in quantity unless the soil is well adapted to their culture. The best soil, on the whole, is a rich sandy, or gravelly loam, verging enough toward a clayey loam to retain fertilizers without leaching; but sandy or gravelly enough so that heavy rains will not remain stagnant or keep the soil saturated long after the rain stops. This retards growth while the tubers are forming, or rots them after they are nearly grown. Rich, clayey loams, thoroughly tile-drained, are next best. Soil that is too sandy is not rich enough and will not retain applied manures well. Black muck soils are apt to give overgrowth of tops and not so good a quality of tubers. Be sure that your soil is right before you embark largely in potato growing.

LOCATION.—High land, not subject to early frost, is essential if you wish to raise the late varieties, like the old Peachblow, or the Peerless, or the Victory, though the last two are earlier than the first. Gravelly, second or first bottom will do for early varieties, planted late, but is too much subject to frost to risk the late varieties or the very early planting of any variety.

PREPARATION.—If there are reasons for fall-plowing, by all means plow again in the Spring, and see that the soil is worked fine and six or eight inches deep. If fall-plowed, cultivate thoroughly and deep before plowing in Spring, and then, after plowing, cultivate down with the cultivator, or Acme, or Randall, or Thomas harrow, weighted till you *meet the top cultivation* that was plowed under. This plan will work, if you have an unplowed corn or potato field, cultivate deep before plowing in Spring, and turn this four inches of fine earth, with the plow, right down where the roots can luxuriate in it all summer long. If the weather is dry, it may give success instead of failure.

MANURES.—Do not apply fresh or unrotted manure in the Spring. If well rotted, and you have a Kemp manure spreader, and want the very best results, apply half on the surface, and thoroughly cultivate it in; then plow under, apply the other half, and cultivate that in most thoroughly. Then there will be no lumps of manure to cause scab, or great unevenness in size of the tubers, and the roots will find fertility *all through* the soil. If you have no manure spreader, and want to use your manure green for fear of waste in rotting it (and it takes skill and care to rot manure without waste), then plow your green manure under the year before, and raise some rank feeding crop, like corn or Hungarian grass or millet, on it, and use the ground for potatoes *the next year*. *Do not fuss* to manure in the hill if you live in, or west of Ohio. The practice is too fussy and expensive, and that is not the place for manure. Even commercial fertilizers should be applied broadcast (600 to 800 pounds per acre), or at least not in direct contact with the seed or young tubers, in any considerable quantity.

HILL OR DRILL.—Drill planting gives more potatoes per acre. The Rose varieties may be planted in rows, 32 inches apart, and single eyes or two eyes to the set, a foot apart in the rows, provided the soil is very rich and well tilled. More bushing and spreading top-growers, like the Peachblow, need more room.

DEPTH depends on soil and season. My best success has been secured at about three inches, deep enough so that you can cultivate and weed broadcast with the Thomas harrow till the tops are six inches high, and shallow enough so that the seed may feel the warm sun and start the growth early.

HILLING UP.—I favor a moderate ridge along the drill rows, especially on heavy soil. The potatoes are dug more easily. But too much hilling is not good; and if the land inclines to wash in heavy rains, the rows should, if possible, be *across*, and not up and down, the slope; and the soil should be kept flat and well tilled between these slight ridges so that the rains may soak down readily to the growing tubers.

VARIETIES. — Since the Colorado potato beetles have been so numerous, it has seemed to be more profitable, in Ohio at least, to raise the early-maturing varieties even for the main crop. You don't have to fight the bug so long, and the yield is as good and the tubers are about as good keepers. Years ago the early varieties did not yield so well, but the introduction of the Rose family has been a great boon to potato growers. In form and quality they are all that can be desired, and most of the seedlings of this family are prolific bearers. The RURAL never did a better thing than in introducing the Beauty of Hebron. It is more prolific than the Early Rose, and of excellent quality. On the whole, four of the most satisfactory sorts are the Beauty, the Burbank Clark's No. 1, and Mammoth Prolific. The Snowflake is a choice potato, but it will not yield like the Beauty of Hebron.

SELECTING AND CUTTING SEED.—I believe that pedigree and selection pay in potatoes as well as elsewhere. I would select fair, smooth, well shaped, medium-sized potatoes for seed. If the soil is rich and well tilled, and moist at planting and kept well tilled, the seed may be cut to one eye, provided an equal portion of the potato, as nearly as may be, is left with each eye. From the eye end of the potato all the eyes should be cut out but one, and all the "meat" be left on that.

HANDLING AND MARKETING.—Until the tubers are thoroughly ripe, so that the skins will not slip at all, the use of square wooden bushel boxes is a great help in marketing; and it pays to keep them in the field all through the season to facilitate the handling. Where large quantities are grown and marketed, 100 of these boxes, each with a wooden cover for shade and rain protection, are almost indispensable. In picking up, the boxes can, with good yield, be each filled almost without moving, and a wagon can at any time be drawn along the row and loaded in a few moments. The crop is, however, at best so heavy, so hard to handle, so susceptible to loss from frost, rot and shrinkage, that it is wise to market directly from the field when that is possible, and crops are fairly remunerative.

PROFITS. — When the soil is adapted and skill, business energy and sagacity are used, potato growing as a specialty pays good profits. But there must be either a chance to purchase stable manure cheap, or else the farm must be large enough to raise clover and other crops in rotation and produce considerable manure, and have the same field in potatoes not oftener than twice in six years, or there is liability to soil exhaustion. The history of potato growing in Ohio for 40 years justifies this statement.

Columbus, Ohio.

WHERE WE MUST LOOK FOR IMPROVEMENT.

DR. E. LEWIS STURTEVANT.

SUCH views as I have to express on the improvement of the potato must be considered rather as tentative than as conclusive, as they must be put to test before any claims can be made. We seem to have attained to the limit of progress in certain directions. So far as size, shape and quality are concerned, varieties can be named which we can scarcely expect to have excelled. Improvement, therefore, it seems to me, must come from two directions. First, in securing increased prolificacy; this we have reason to believe can be accomplished by using for seed, year after year, tubers from the most prolific hills of the preceding crop. Two years' trial of this course has showed marked gain. The next improvement to be considered is hardiness and the power of resisting rot; we may obtain this as well perhaps as different flavors from originating new varieties, through crossing of the wild potatoes and careful selections from different regions. There seems to be some hope in England that such results may be obtained through the use of Solanum maglia, as this potato has the property of bearing its tubers at a great depth below the ground, and presumably below the influence of access of rot spores. I have been unable as yet to obtain any seed of these wild species. If our Government, however, should send to South America and obtain tubers from the wild species and wild varieties found there, and should distribute these tubers among careful men in various portions of this country, I think, in the course of time, some very valuable results might come from it.

The ideal potato, in my view, should be of medium size, of fine shape, white color, without sunken eyes, and of early maturity, or in other words, quick-growing. It should be hardy, rot-resisting, should grow its tubers closely together in the hill, and should be prolific.

Geneva, N. Y.

POTATO NOTES.

JONATHAN TALCOTT.

IN regard to the culture of the potato, there seems to be no royal road to the most complete success, that can be adopted by all cultivators on all soils. In my experiments, success is sometimes attained when and where least expected.

Early in the present century, when my ancestors first settled on the farm on which I now reside, when the land was newly cleared of its heavy growth of timber, crops of four or five hundred bushels per acre were common, without any special care or attention, and if the farmer got his potatoes planted before the Fourth of July, and especially if planted in June, they were thought to be put in quite

early, as such a thing as a failure in the potato crop in this section was then unknown. Now all is changed; the soil is not in its virgin richness, it is also more compact from continued cultivation. All the small roots of the forest have gone to decay and the soil is in consequence much less aërated. Insect enemies are more numerous, and the result is a much smaller crop of inferior potatoes than used to reward the labors of our ancestors.

Some portions of the farm seem better adapted to the growth of potatoes than others, although no perceptible difference can be discovered in soil or situation. Some of the best crops ever grown by the writer have been grown on drained land, that, previous to drainage, was so wet as to be wholly unfit for cultivation, probably from the fact that the soil, when drained, was made dry and comparatively new, as when the land was originally "chopped off" its timber, it was found after cutting the timber into logging lengths for burning, that it was too wet for cultivation and thus left, and a growth of brush, such as would grow in wet soils, grew up, and in that state I found it, and then used the first tile ever laid in this country, so far as I know.

At other times I have raised large crops on what I considered good land well prepared; also on what was thought to be poor land poorly prepared. Crops of this kind were raised in 1870, on both kinds of soil, which received both kinds of fitting; both were planted the last of May, after all other spring planting was done, and both pieces were planted with small, shriveled seed of Early Rose Potatoes. One piece was ground that had grown a crop of corn the year previous, manured and fitted for cabbage. This piece was very mellow. The other was on the sod where a tile drain had been put in late in the Fall before, in a meadow, which was intended to be plowed for potatoes that Spring; but it was not done, and, as a last resort, the ditch was plowed in the Spring and a few furrows were plowed on each side of the ditch, and three or four rows of potatoes were planted lengthwise on the drain, some 40 rods in length. The soil, a compact clay, was so lumpy that it was with difficulty that the potatoes could be covered with sufficient earth to hide them from sight. Then a few loads of wet straw were drawn and put on the hills, and nothing further was done (except to pull a few weeds that grew in them) till they were dug. Both pieces yielded about alike—between three and four hundred bushels to the acre. The great secret in the success was copious rains when the tubers were setting; while all early planted potatoes suffered from drought when the tubers were forming on my farm. In these experiments, during all the time of their growth, everything seemed favorable. On the piece well fitted I expected good results; on the other I did not, but they seemed to thrive equally well, judging by their yield.

The past season a piece of ground was fitted by manuring with rotten manure from the barn-yard, and plowed in the Fall of 1884, refitted the past Spring, and a portion manured with green manure, and a large crop was confidently looked for, but the result did not meet anticipations. A large crop grew, but the largest share rotted and was left in the field. That portion manured with fresh manure last Spring was the freest from disease.

The Beauty of Hebron is the best tested early potato with me, and the White Star for a later one, for yield and profitable culture. The Thorburn Potato promises well—not a rotten one in the crop. They are longer with me than the RURAL represents them to be in the engraving in a late number. I had great hopes of the Empire State, but, alas! they were blasted: we found the largest half of an extra good crop rotten at digging time. Had our crop all been dug the last of August, and stored in a cool cellar, I have no doubt we should have saved them all from rot; but, of course, the tubers were not then fully grown or matured, but they would have been much better than rotten ones later in the season.

The Beauty of Hebron, White Star, and the Thorburn Potato, are good models in my estimation, in color, size, form, etc., for a market potato; while Dakota Red, and Wall's Orange are neither handsome in form or color, nor of quality good enough for table purposes, as grown on my farm. Dakota Red will yield abundantly; but the tubers are rough and unsightly for the table; while Wall's Orange has never yielded half a crop with me, and will be wholly discarded in the future.

So far as my experience goes, not one new sort in a dozen, is worth having as a gift, much less when we have to buy them at enormous prices. The greatest "sell" that I was ever caught in, was in the case of Wall's Orange at $1 for a quarter of a pound. However valuable it may be in some localities, it is of no value to me.

To sum up the peculiar features of potato culture; a farmer must know by actual trial on his own grounds what varieties succeed best, in order to attain the best results in potato culture; also, if possible, at what season he had best plant his crop to have a plentiful rainfall, to benefit at the time of setting the tubers; also the fields best adapted to the growth of potatoes; then he must act accordingly. In a series of years a farmer, acting on such general principles, will be more likely to be successful, than one who plants such sorts as he may have on hand, and at such times as best suit his convenience, without regard to the quality of the seed, or its adaptedness to his soil, as it is now a well established fact that a variety that succeeds well in some localities, is comparatively worthless in others.

Rome, N. Y.

THE PAST SEASON'S EXPERIENCE.

WM. W. HAWLEY.

SOIL, hard-pan and clay, that had been cleared of timber upwards of 60 years and cropped nearly every season; it has not been clovered in seven, or manured in ten years; I gave $10 per acre for the use of it the past season. Cultivation, trench, flat culture, 200 pounds Mapes Special Potato Phosphate per acre in top of drill. I grew 100 varieties, of which I have 655 bushels of sound tubers; about one-third are small and not marketable. Vick's Extra Early proved the earliest by 10 days; the Rural Blush, the latest; Well's Jumbo, the most productive, 47 pounds merchantable from one tuber; the Early Ohio, least productive. The Hawley is a seedling of my own, three years from the seed-ball, a cross of the Burbank and Beauty of Hebron. Potatoes suffered badly from rot in this section; mine were the least affected that I have seen this season. I think phosphate saved them; I threw out about 10 bushels. My neighbors tell me that the tubers left in the ground late in the season are the ones the wire-worms work on; mine were not infected. This is fast becoming a great potato country. Arkport, a small place near here, handles 10,000 bushels per day in the shipping season, which lasts about eight weeks. White Star, Albany Seedling and Burbank sell the best; the buyers pay 55 cents for 62 pounds; while the White Elephant, Beauty of Hebron, Early Rose, Queen of the Valley and other reddish potatoes are 50 cents for 62 pounds.

Hornellsville, N. Y.

CLEAN TILLAGE FOR POTATOES.

H. IVES.

WITH us, the potato has come to be a favorite special as well as profitable crop. It has gone through a process of development. Years ago it was considered worthy of only a "patch" of an acre or so. A few coarse varieties were planted without effort to keep them separate, and nothing used in their cultivation but an old-fashioned hoe, from the planting of the seed to the digging of the crop. The market was confined to the shoemaker, the blacksmith or the storekeeper, who each took a few bushels in "trade." Now, the potato is considered one of the most important and profitable crops on the farm. The best fields are assigned to its culture, expensive varieties selected for planting, suitable tools obtained, often at considerable expense, and the greatest care spent in tillage. In fact, the potato is considered in many parts of the country, to-day, the best paying cash crop that the farm produces.

Experience has taught the cultivator who aims to produce a profitable crop of potatoes, that with proper tools and horse power he can do much better work than when obliged to depend entirely upon hand labor. It has been proved, also, that by thorough preparation of the seed-bed, and by working the crop often and well through the season, with tools suited to the different stages of the work, all hand-work, except that required in dropping the "seed" and in picking up the tubers, may be dispensed with. By means of horse power the work can be done cheaper, better and more easily than under the old system of hand labor.

Farmers believe, as a rule, that the potato needs to be planted three or four inches deep, so they need a special marker. Then, as the seed is covered deeper than most others, a special tool must be provided for this purpose. After planting, the vines are so long in coming up, that the weeds will occupy the hill and crowd the vines out unless prompt cultivation is given at this critical time. If the weeds can be destroyed just before the vines appear above the ground, the rightful owner of the hill can develop before another stock of weeds can grow. Thus it will be seen that this work must be done at once in order to insure clean culture for the rest of the season. It is a light job and easily accomplished, but requires immediate attention.

For this cultivation a light smoothing harrow is excellent. Many farmers use a plank scraper drawn by one horse and brushing down the ridges of two rows at once. Any tool that will insure a slight stirring or movement of all the surface earth of the hill, will fully accomplish the desired object. If the "seed" has been planted less than three inches deep, it will answer just as well to run a shovel-plow through the rows, so as to throw an inch or two of fresh earth over the hills. This can be done even when the plants are one or two inches above ground. This latter plan has been practised about here very successfully whenever thoroughly performed. Where any portion of the row is left uncovered, a cluster of weeds will be sure to grow, unless removed by some other means. If this first work is done in a thorough manner, the ordinary horse-work of alternate cultivating and shovel-plowing, if done every week or so through the growing season, will insure good tillage and clean culture for the crop without any hand hoeing or weed pulling. Not only this, but such thorough and frequent tillage will keep the spaces between the rows as clean as a summer-fallow, and will be most favorable to the growth and full development of the potato plant. The rapid and rank growth of the vines will destroy any weed growth in the hills. I know 18 and 20-acre fields cultivated in this way, that do not produce an armful of weeds, while the work is done as well as by hand work, and the cost is less than one-half. Under the old system it was all one man could do to hoe half an acre in a day. Last year in thoroughly cultivating an eleven-acre field, I spent a little more than half a day of man and horse, or six days for the whole field.

Various machines for digging potatoes have been invented. A few of them do fairly well, digging from three to five acres per day. Better ones will doubtless be made in time. The object to be gained by such a machine is twofold: the hard and heavy part of the work is performed much faster and cheaper than by hand labor, and the tubers are freer from pricks and markings. Then again, the act of running a machine through the soil in digging, produces a good fall working, freeing the land of all growth of weeds, leaving it it good condition for succeeding tillage and cropping.

Batavia, N. Y.

POTATO CULTURE.

PROF. J. W. SANBORN.

QUALITY.

THOSE farm products that are consumed more as luxuries than as necessaries, and which derive their value from their capacity to minister to the desires of the palate, should be cultivated with reference to quality as a central purpose, and be sold upon the basis of quality so far as possible. A large, urban population and great incomes pay well for skill in refining our farm products.

Potatoes may be classed with the luxuries, for as a source of food they are relatively quite costly. Our tastes demand a medium-sized, light-colored, smooth and mealy, or starchy potato. This standard can be easily controlled. The starchy potato is a product of light or sandy loam soils, and even here may be injured by the system of fertilization. An excess of rank yard manure very rich in nitrogen, or large applications of wood ashes in the hill, will give rough, watery potatoes. Nitrogenous manures, in whatever form applied, will deepen the green of potato vines, and if used in large amounts will give a watery potato. The color of the vine will, however, vary with each grade of fertilizer used, potash salts giving a light-colored vine.

The three farms that have been under my care have all been heavy clay-loams, and two of them were so heavy and moist as to be by nature unfitted to produce the very best potato. A heavy use of rank yard manure only aggravated the evil, and gave, in a wet, hot season, a scabby, watery potato just good enough to arouse the indignation of the hog. Chemical fertilization has given better potatoes on such soil than yard manure by a very decided difference, potash salts playing a very important part. In the use of these salts, I have had to meet the old notion that sulphate of potash gives a better potato than muriate of potash. I have seen no decisive evidence of this fact, and now I buy the muriate of potash because of its greater economy. Several experimenters have lately tested the influence of the form of potash salts, and have not reported any marked difference in the results of the use of either. That potash salts have a very direct relation to the organization of starch in the plant is well known.

In securing a good potato that will stand above the average, from a clayey soil, I have found that a clover stubble gives a most admirable basis, filled with roots that would weigh, with their stubble, two to three tons or more per acre. The soil on sowing is laid up very light and accessible to air. This seed-bed, if plowed deep, opens up a fine area for the rather deep roots of the potato, and gives a mellow soil for the tuber to nestle in. The roots in their decay, furnish all the nitrogen the potato needs, but not in excessive amounts at any one time, increasing with the rising sun and the expanding roots of the potato. Upon this ground superphosphate, or some source of phosphoric acid and ashes or muriate of potash are sown broadcast. I must confess to the use of about one-third of the fertilizers applied in the drill. This use of chemicals is not quite in accord with the teachings of some: yet for corn when it was all used in the drill in large amounts, as good results were received. Potatoes handled as above and well tilled to restrain the weeds and their sickly shade, will give a good potato even on such non-typical soils as I have alluded to. A big yield is secured also.

Selection of the potato will doubtless have a marked influence on the quality of the product. The form, color and density of the potato are to be taken prominently into consideration. No one wants deep-eyed potatoes, or rough ones, and all desire a good-sized eating potato. Efficient selection of the potato can be best secured in the field when the tubers are dug, for the type of the vine and the average character of the hill are then under observation. Dr. Sturtevant has illustrated the advantage of such selection by experimental tests at the New York Experiment Station, showing that the yield was thus increased, and whenever quantity is involved by selection, generally, quality is likewise at stake. For quality we select medium-sized potatoes in preference to large ones. Foreign trials have shown that dense potatoes, used for seed, determine a dense product as the result. This matter of selection of the potato with reference to quality has not received much attention, and hence emphatic data are not plentiful. It is a field that may well be entered.

In my use of chemicals I have found that nitrogenous fertilizers have but little influence on the growth of the potato, for the soil used; that chemicals are profitable for potato growth, and that whole medium and large potatoes give much larger crops than small ones, and single eyes. The results were stated for 7 years of consecutive trials, and 10 years of observation, and leave me without a doubt that the use of single eyes and of small potatoes for seed is a pernicious practice.

Missouri.

MICHIGAN POTATO GROWING.

A. C. GLIDDEN.

BUT little attention has been paid to potato growing, as a rule, by the farmers of our State. The Grand Traverse region, from its earliest settlement, has had an enviable reputation for the quality of its potatoes; but they were, and are still, grown with little regard to correct ideas of culture, as practiced in the older States, as illustrated and explained in the RURAL. The average farmer of the older portions of our State aims to grow only sufficient for home use, or, if the season should be unusually propitious and favorable for their growth, he may attempt to supply the local demands. Potato growing for the general markets is left to those localities where soil and transportation facilities both unite to make their culture a profitable and safe venture. There are several such localities in this State, and their soil is invariably a sandy loam made rich by clover and manure. Farms that have been worked for 50 years, if kept in good condition through rotation, with clover as a frequent crop, seem best adapted to growing a crop free from scab or rust and rot, and of that solid texture which stands up under transportation and storage.

In St. Joseph County, in this State, in the vicinity of Moorpark, Parkville and Flowerfield lies the largest potato-growing region of the State. Here is also the largest peppermint district of the United States, these two crops being the chief or staple ones grown by its farmers. From five to forty acres of potatoes per farm are here grown, and their experience has demonstrated what for them and their soil are the best methods. The basis of every crop is a good clover sod, on which is spread every available load of barn-yard manure, which is plowed under. The potato crop is followed usually with oats the next year, and seeded with clover, to go into potatoes again at the end of two years from seeding. This rotation frees the land of weeds, and makes the cultivation less expensive. The sod is turned to a moderate depth early in Spring and thoroughly prepared. The outcome of the crop is largely due to this cultivation before planting. It seems quite essential that the soil should be thoroughly fined, so

that the seed-pieces may start vigorously, and the roots be able to sustain the plant, when the starch food of the seed potato is exhausted. Here is believed to be the true secret of success. If the soil is lumpy, raw, as when freshly turned, the rootlets find little sustenance to sustain the young plant. A feeble plant insures a small yield with few marketable potatoes. After a thorough preparation, the ground is marked out from three feet to three feet two inches apart each way. The three feet two inches are to allow more latitude for working the crop with a two-horse cultivator. The question as to the amount of seed per hill has been largely discussed and many experiments have been made to determine the matter. One of the largest growers informs me that he cuts his potatoes in pieces of nearly uniform size, having from one to two eyes on a piece, and puts but one piece in a hill. One eye is sufficient if the piece is large enough, as small pieces with many eyes make poor seed. One eye will often make two or more stalks. If the sets which form on the roots of one vigorous stalk, all make large potatoes, the yield of marketable potatoes will be much larger than a numerous progeny of equal bulk. Soil of a given quality will grow about so much bulk of tuber. If an attempt is made to induce a large yield by too large a quantity of seed, the result must be many small potatoes. In other words, if eight potatoes are grown to the hill, none of which are under four ounces in weight, every potato will be marketable, while if 16 are formed in the same hill many of these must be too small for table. In a field marked three feet each way, eight potatoes to the hill, of only four ounces in weight each, will give a yield of 161 bushels of marketable potatoes to the acre. This is a moderate estimate when it is considered that a potato of four ounces, is about as small as will answer for market or table.

The potatoes used for seed are of moderate size, small potatoes giving too small a bulk to the eye to be profitable or suitable for seed. The Burbank is now the standard relied upon for market. It is of good shape and color; its season of growth about the right length to perfect the crop, and give time for the harvest and marketing before frosty weather begins, and, above all, it stands up better under storage and shipment than most other sorts. Early Rose is liable to be streaked with red through the flesh, and shippers and consumers are very chary about handling stock that may rot down on their hands.

The crop ranges from 125 to 200 bushels per acre, and for the past 10 years has been the best paying crop grown on the farms. The crop this year has brought about 34 cents net, where the grower has shipped or consigned on his own account, which, for the labor required to produce, is as good as any of the farm crops have done. It does not pay to attempt to grow potatoes following corn, or on stubble ground, unless the soil is exceptionally good. They need the first and best nourishment which a well-prepared soil can furnish. This is a fact which half the farmers in almost every agricultural community need to learn. The family potato patch is usually the last location to be decided upon in the annual planning for the farm crops, and it usually occupies some neglected corner, foul with weeds, and is ill-fitted for the seed. Many farmers still believe that it injures the crop to stir the ground after sets are formed. This is one of the many delusions which have no excuse for existence, except that dignity which age imparts. This loyalty to ancestral ideas often prevents us from destroying the autumnal crop of weeds; and from giving that stirring of the ground, which keeps it fresh and lively. Such a state is very essential to perfect and mature a crop, when the hot sun and rank weeds are likely to rob the soil of every vestige of moisture, and ruin the crop prematurely. Every principle which is applicable to the successful growth of large fields of potatoes, applies with equal force to the family patch; but to the large growers we must look for advancement in the ways and means of successful potato growing.

Paw Paw, Mich.

CULTURE OF IRISH POTATOES.—HOW BEST YIELDS ARE SECURED.

B. F. JOHNSON.

THE best varieties for Central Illinois are at present confined to two; the Early Ohio and Late Peachblow. In my experience the Burbank, the Chicago Market, the White Star, and a dozen others, are none of them either early or late, and none of them better than second-rate. The Early Rose was the earliest and best for ten years or more, then followed the Late Rose; but now the first has degenerated to the eye, and is of the shape of a man's finger, and the Late has been merged into other kinds till its distinctive features have been lost. The Peachblow is fast going where all varieties go, and will disappear from cultivation in a few years. The two varieties named are the most profitable for cultivation, because they yield large crops of good table potatoes, which consumers have come to know and appreciate.

The best soil is a Timothy, or Blue Grass sod, broken in the Autumn. The next best is common black soil corn land, reinforced by old stable manure and coal and wood ashes. I have grown potatoes on the same land for years, and the crops have increased rather than diminished in quality and quantity, though varying, of course, with the season—heavy crops in cool, moist Summers, light, in hot and dry. The implements used are, for small patches, the plow, the cultivator, and the hoe; for large, common corn crop tools.

They are commonly planted in rows from three to three-and-a-half feet apart, one piece of one or two eyes, being dropped every 15 to 18 inches. Time of planting from the middle of April to middle of May. Some practice cutting the seed in March, allowing the raw surface "to heal," then the sets to sprout, and plant after sprouting, taking care, in handling, not to break the sprouts. The preferable tubers for seed are found to be those of good size, cut to not more than three, nor less than two eyes to the set.

The common fertilizer is barn-yard manure, a very few only using fertilizers, and these the potash in preference to the phosphate. Potash fertilizer seems to increase size, favors good form, deepens color, enlarges yield and hightens quality, by producing a large relative amount of starch.

Hilling up is almost universally practiced, because it is difficult to subdue the weeds in any other way; besides, it assists in carrying off the heavy rains from the hills, on the occasions, not infrequent, when three or four inches fall in as many hours.

Blight or mildew (Peronospora) appears more or less on the vines every year, but there has been no general or widespread potato rot since 1865—a Summer remarkable for its excessive rain, heat and humidity. To be sure we occasionally hear of potato rot; but it is confined to narrow areas, where low, moist land and heavy green manuring have been the exciting causes. It is a common experience where crops have been grown year after year on the same land, and the Colorado Beetle has been fought for several seasons with Paris-green, that rot rarely makes its appearance in the tubers, though the presence of more or less mildew on the vines is usual.

It is my belief that copper in the soil, derived from the previous liberal use of Paris-green to kill the potato beetle, destroys the germs that cause the potato rot; in the same way, a one-per-cent. solution of sulphate of copper in water (four pounds to the 50 gallons) has been found effective to arrest the progress of mildew on the foliage and to prevent the rot of the fruit in the wine districts of Continental Europe.

Last year I had a small patch of Early Ohios exposed to conditions of soil and weather thought to favor mildew and rot both, but there was absolutely none of the latter, and only enough of the former to be able to say it was there. The land is common, deep, black soil 25 years in cultivation, and at least a dozen crops of potatoes had been grown on it, and four previously in succession. Previous to the crops of the last two years, the land had been treated to fully four inches of strawy stable manure spread over the surface and plowed in. A potash and phosphate fertilizer had been applied the year before and a pint of ashes given each hill. The piece was planted about the middle of April, with Early Ohio. The stand proved good and the growth was favorable. About the middle of July the weather became tropical, the rains were excessive, the thunder storms nearly continuous and the heat night and day was fearful. This lasted for more than two weeks and potato rot was much talked of and feared. And yet, under all these adverse conditions I never raised better potatoes. They were sound, smooth and large, solid, well colored and starchy, and the total crop was remarkable for the limited number of small potatoes. This exemption from rot I attribute largely to the amount of copper in the soil, the previous dozen crops or more having been treated to at least three dustings of Paris-green extended in plaster, each Summer. I conclude the soil of this piece for the first foot down from the surface, contains at least the fourth of an ounce of the salt of copper, and possibly twice as much.

I dwell on this point because I think a preventive of potato mildew and rot and grape mildew and rot is to be found in sprinkling foliage and fruit with a one-per-cent. solution of sulphate of copper (bluestone) in water early in June, and again once or twice during the growing season. I am quite confident too, potato rot will not be found to be common where Paris-green has been used for two or three years in succession, and also that the treatment of the vines of a given crop with Paris-green two or three times in the growing season will prove a preventive to a measurable extent.

I have given so much space to mildew and rot, I have little space for other sides of the subject. As to harvesting, for small patches, the spading fork is used, and for large, a potato plow of which there are several forms. After 25 years' experience, I am in favor of leaving potatoes in the ground to the latest safe hour, say the first week in November, and this even for those maturing early in July. The average yield for the country is not above 100 bushels, though in favorable years 200 bushels are sometimes made. For an early potato, the Early Ohio comes very near the ideal of a perfect potato; and for a late one, the Jersey Peachblow, if it could get a new lease of life, and bring its eyes to the surface like the Rose.

Champaign, Ills.

POTATOES.

T. B. TERRY.

WHAT improvement there has been in potato planting since I first began farming; 16 years ago! Then we marked out with a plow, dropped four times as much seed as was necessary, and did it by hand. The covering also was done by hand; with a hoe, at first, although we soon learned to cover by horse-power. There was a good deal of hard work connected with potato culture in those days; but now one can avoid most of this. Where the growing of potatoes is made a specialty, they can be raised for half the price per bushel that it cost 15 years ago, if one is fully supplied with all the labor-saving tools and equipments.

Last year, and the year before, I sat on my Aspinwall planter and put in my entire crop (24 acres one year, and 18 the other), without any help, at the rate of an acre in two hours. The seed was cut to one eye, and put in the hopper, after which the machine did all the work of opening a furrow, dropping the seed and covering, while passing over the ground once. It fails to drop once in 30 or 40 times, and a little oftener drops two eyes instead of one; but where the seed is drilled in, an eye once in about 12 inches, the loss from failure to drop is very slight. The dropping of two eyes instead of one, is a slight loss of seed, but hardly worth speaking about. The marking out and covering are perfect. The rows can be made almost perfectly straight, which is of great importance when you come to use cultivator and horse hoe, as you can run close to the plants, on both sides at once, instead of having to go through twice, as we did years ago.

Of course, when seed is cut to one eye, the tubers should be of fair size; and they should have been so wintered as to be in good condition, with no eyes any more than just started. (If you break off the first sprout, the next one will be weaker.) Then the soil should be fertile, and the seed-bed finely pulverized, and the planting done as soon as possible after the seed is cut. Treated in this way, one eye dropped once in 12 or 13 inches in drill, gives better results, with me, than two or three. The crop is of more uniform marketable size, and whenever I have experimented, the rows planted with one eye sets have yielded the most dollars to the acre, although not the most tubers in number; but we want to raise dollars, not little potatoes for the pigs. When many acres are planted, the saving of seed is quite an important matter. With me it takes about eight bushels of good-sized potatoes to plant an acre. The drills are made 32 inches apart, for such varieties as we raise, Beauty of Hebron, Clark's No. 1, etc.

We like to have them close enough so the ground will be entirely covered and shaded from the sun during the last part of their growth. The depth of planting must, of course, be governed by the depth of the soil, whether drained or not, whether it is very dry or moist, etc., etc. Our rule is to plant about half as deep as we plow. Our drained potato land has been plowed deeper and deeper, gradually, until the plow often runs now between nine and ten inches deep. Then we plant about 4½ inches below the surface, and then do not hill up much. With us the greatest enemy of the crop has been drought, and a deep, mellow soil with the seed planted moderately deep and the surface kept constantly stirred after planting, helps us very much in warding off the attacks of this enemy.

If we plant at different times, we never can tell beforehand, to a certainty, which piece will yield best, as the weather has so much to do with the result. Some years early planting pays best, and again, late planting comes out ahead. After long experience, I prefer to take the chances of early planting; that is, of planting as soon as the ground is dry enough to be worked without injury. Once or twice I have missed it by so doing; but, then, again, I have cleared over $100 an acre. One thing do by all means: when you have decided on a course, stick to it through thick and thin. Do not change. If you lost by early planting last year, "look for your money where you lost it." If you plant late next year, you may change just in time to lose again. It is but little use for us in Northern Ohio to try to get potatoes ready for the early market, when they bring a high price, as our markets, as a general rule, are filled with potatoes from the South long before we can get any ready to dig. Ten years ago we used to get a large price for the first dug, but we can seldom do so now.

This planting by machinery has more advantages than one would think of at first. When potatoes are grown largely, of course it is money that would have to be paid for extra help to do the dropping. You do not have to run after help. You are quite independent. In a catching time you can rush in a large quantity in a day. The machine never gets the back-ache. It makes your house more of a home and less of a boarding house, by enabling you to get along without extra hired help for your family to wait on. For this last reason alone I would pay the interest on the cost of planter. The farmer's home should be made as pleasant, and the good wife saved as much labor as possible.

Summit Co., Ohio

POTATOES.

ONLY the early kinds of potatoes are certain to yield a crop in this section. Our Summers are too dry and hot for the late kinds, though they do well about once in five years. I have tried several kinds, and have finally settled on Early Ohio and Beauty of Hebron as the best yielders, best keepers and best in quality. Of the two, Early Ohio yields somewhat the larger crop, but is the most liable to rot. We have grown some large crops of both kinds on corn land that was manured with fine farm-yard manure the previous Autumn. Large crops are also grown on clover sod, but a large percentage of the tubers will be scabby. We plant in furrows two to three inches deep, as early in the Spring as the land can be properly worked, and cover with two or three inches of soil. Harrow just before the plants appear, cultivate two or three times with a corn cultivator, working the earth toward the plants, and hoe once or twice. Kill beetles with London-purple in water.

The potatoes are allowed to remain in the ground until cool weather sets in, unless we have a wet Fall. In that case we are obliged to dig them to prevent a second growth. They are stored in a cool, dry place until Winter, when they are placed in a cellar or pits. In cellars the bins should not be over six inches deep. Pits are best 15 to 25 inches wide, six inches deep, and as long as needed. They must be in a dry location. Potatoes in pits are covered with about four inches of straw and 12 to 15 inches of earth.

When stored as above indicated, we have lost very few by rot. I know of no way of entirely preventing scab. It seems to be caused by worms supplemented by a fungus. Potato beetles have done but little injury the past five or six years. They are easily kept in subjection by the use of arsenites if promptly applied.

FRED GRUNDY.

Christian Co., Ills.

MR. ALFRED ROSE'S VIEWS.

MY mode of culture for potatoes is in substance, as follows: For the best results, a rich, sandy-loam soil is needed with a clover sod, turned under, ten inches in the Fall, with ten cords of rotted stable manure spread evenly on each acre. In the Spring it is plowed as deep as possible and harrowed deeply and thoroughly both ways; rows are marked three feet apart for large-growing vines; for small vines, 34 inches apart. Trenches are then opened with a one-horse plow, eight inches deep, going through twice with the plow in each row. Then I pass through with a hoe and grade the trenches to about 6½ inches deep. It is now ready for planting, except manuring in the trenches at the time of planting. The best early potatoes for the table are, first, Rocky Mountain Rose, Early Sunrise and Early Electric and with me those are ripe for the table from the first to the tenth of July. Second come Early Vanguard, Early Ohio and Early Prolific and Rose's Beauty of Beauties.

As for seed for planting, my choice is the size of a hen's egg or four tubers to the pound, and all should be of fine shape, and be selected when first dug, put in barrels and stored in the cellar. Ill-shaped tubers never should be planted, for often "like begets like." My seed is cut to single eyes with a concave and curved knife. If too many eyes are

on the seed ends to suit me, I do not use them. If I wish two stalks to the hill, and a full stand with no hills missing, for a large yield per acre, my seed is cut four to five weeks before planting, dusted well with plaster, spread on boards in my cellar and stirred over often, to keep from heating. When ready to plant, I discard all that are not sprouted. This gives me a full stand and much earlier potatoes. When cut to two eyes and planted, there will be many hills with only one stalk, owing to one of the buds getting the start and keeping the other dormant, and this may shorten the crop (planting as I do), fully 50 bushels to the acre.

The ground and seed are now in fine condition for planting. If two stalks are required, I drop two pieces with one eye each, 10 to 12 inches apart in the trench, the difference being due to tall and short-growing varieties. If a large variety, sometimes I only drop pieces with one eye nine to ten inches apart. The sets are now covered with a hoe, two inches deep, and the remainder of the trench is eft open, and for an extra yield, I now scatter in the trenches 500 to 600 pounds of Mapes' potato manure, or Stockbridge's, etc., all mixed with plaster, cultivating and filling up the trench as the vines grow. My rule is after this to cultivate and hoe three times each, and cultivate each time twice in the row. After this I cultivate and hill up with a hiller. By this mode of culture I have grown 417 bushels on one-half acre, and last season, with my new seedlings, I did much better. The profit in growing potatoes is in the yield, as it costs about $40 to grow 125 bushels on one acre. If sold at 50 cents per bushel, the profit would be $22.50. With a cost of $80 per acre and a common yield of 500 bushels to the acre, sale at 50 cents per bushel would give a profit of $170 per acre, and the cost per bushel would be 16 cents.

The cause of blight is principally in the weather—hot streaks of air and wind after heavy rains—and it shows itself mostly in certain stages of the vine growth, from the 20th of July to the latter part of August. Hot thunder storms followed by strong, hot, sultry winds, and too much warm rain are the causes of the rot also. Last season I had two rows of potatoes 25 rods long, between my grape rows. One day the vines were all green and beautiful, no signs of blight; then followed a heavy thunder shower; next day but one all were blighted, the leaves being nearly all black. Six rods from these, some of the same variety, both planted the same day, the rows of the same length and running parallel, were not injured in the least. So I think hot streaks of wind are one cause of blight. Another is a rank growth of vines covering all the ground, and then when there is a heavy warm rain, the steam from the ground, passing up through the vines, blights them and also rots the potatoes. For this, and to avoid sun-burnt potatoes, I like hilling up, and then the tubers are, with me, much easier to dig. As a matter of fact, in this section last season, in the case of all shallow-planted potatoes, the tubers nearest the surface nearly all rotted, especially the large ones. To avoid the scab caused by the Thousand-legged Wire-worm, I have used kainit—600 pounds to the acre—broadcasted in the Fall on scabby potato ground with good success, as the following season there was scarcely a scabby potato to be found; but, salt and sulphur mixed and put in the hill will be a preventive of scab also.

Twenty years since I had a field of Quack Grass, and it was chock-full of the long wire-worms then in sod. I made a fertilizer of unleached ashes, salt and lime: before slaking the lime, I put on it 20 pounds of sulphur and slaked them together with boiling water: then mixed all well together, using a large handful of the mixture to each hill, of all but one row. In this row at digging time, the tubers were eaten through and through, and the wire-worms were then in the tubers. Where the mixture was in the hills, the tubers were all smooth, clean and handsome. I have made and used a fertilizer for potatoes by taking, say, 100 pounds of bone dust, one sack of coarse salt and 50 pounds of muriate of potash, all well mixed together, applying the same in the trenches. For top-dressing also, this is one of the best. Stable manure comes first, then Mapes and the one noticed here, to be used in trenches in connection with stable manure in the manner before stated.

My potatoes are dug with forks, as I like this mode best. One man can and does dig and pick up 80 bushels in one day, if the yield is good. In picking, the small ones are sorted from the others, and the latter are put in piles of 40 to 100 bushels each, covered and shingled over with potato stalks, with the roots evenly up, with air holes for the gas to escape while they are sweating. They are left here five to eight weeks; then sorted again closely, then put in the cellar on a sandy loam bottom, sprinkled with lime as each load is put in. They are put in bins of 200 to 300 bushels each, each five feet deep and five feet wide. They are then kept in the dark, and none has ever rotted, all being sound in the Spring.

In marketing potatoes for the table, I first consult the RURAL NEW-YORKER, and read the evidence from its patrons. If from the evidence, I find there is generally throughout the country a large crop, I should say, sell in the Fall, and save the shrinkage, which is more than many are aware of. My rule is to lift the potatoes as soon as ripe, and before the vines are quite dead. The tubers are now clean and will dry quickly, and keep better, the risk of rot will be less, and the lady of the house will like them better. Small potatoes are boiled and fed to chickens.

My ideal potato for the table is one that weighs six ounces or three tubers to the pound, as in tubers of this size, the grain is finer and the flavor more delicate than in one of the same variety weighing one to one-and-a-half pound. Color of skin yellowish-white and russeted; or the skin may be of a rose color; but both must have pure white flesh of a fine grain and delicate flavor; eyes flat on the surface; shape of tuber, oblong or oval to oblong.

To improve a worn-out variety of potato, first sort out the small tubers of the genuine shape of the original; cut off one-third of the seed end, this is not to be used. Cut the stem end to single eyes, and plant the same. Do the same with its product the following season. This will certainly improve the potato up to its original standard. The disposition of some varieties is to grow too large if planted the old way. Such I plant closer until I find the size I wish.

Seven years since, a friend sent me a wild potato. I planted it—then the size of a large pea—the growth was one small tuber of the same size. I planted this the second season, and grew one tuber, the size of a large pear. From this time on, the product grew in size, and the sixth season I had nine tubers, and last season I grew nearly two bushels, all of good size, a quarter to one pound each, smooth and handsome.

Proper climatic conditions are very essential for growing good potatoes. They should have an even temperature of about 85 degrees, with no hot flashes of wind in certain stages of growth: also rain sufficient at times to keep the soil moist. In some of our hottest, dry seasons, I have noticed that the yield of potatoes growing on a hill sloping to the north, was much better than from those on land sloping south. I have also often found, while digging, tubers with color and eyes the opposite of those planted. I have also cut all the eyes out of a White Star Potato and inserted a one-eye piece from a red potato, and it grew white-skinned potatoes with pink eyes; and the following season the same. The average yield of potatoes in this section is 125 to 150 bushels to the acre. Some of our best growers get from 300 to 400 bushels to the acre, and many farmers about here last season lost all their potatoes by the rot—whole fields of five to twenty acres each. The market for good potatoes is improving materially, and will no doubt continue to do so.

For the potato bug I first mix 10 pounds of Paris-green with 1,000 pounds of fine plaster, thoroughly through and through. As soon as the young beetles appear, with a fine sieve duster I dust the vines lightly with the mixture and again when a new batch appears. This kills all at once.

For the squash grub borer I dissolve two ounces of saltpeter in 1½ gallon of water, and use it freely around the stems and roots, commencing soon after the plants are up, using it at intervals of four or five days: this saves the vine from the borer. For the streaked bug I use soot blown with bellows on both sides of the leaves and around the stem, when moist with dew or rain; I also use the same on cabbage plants, for the turnip fly. This is a sure remedy for both. For the cabbage worm I use finely-ground black pepper and finely-ground salt mixed (also some plaster to increase the bulk). This is dusted on with a fine wire sifter when the dew is on, and it kills the worms at once, and will kill the currant worm.

Yates Co., N. Y.

POTATOES AS A FIELD CROP.

WALDO F. BROWN.

I HAVE always liked to grow potatoes because of the possibilities of the crop; for while, even in seasons like that just past, when the price goes down to from 30 to 40 cents a bushel, the crop will pay better than corn, in years when prices and yield are both good, they are a very profitable crop. From the last census of the United States I find that for the last ten years the crop in the entire country averaged 87 bushels to the acre, and that the average cash value per acre of the crop for the ten years was $47.68. The highest average cash value per acre was $58.83, and the lowest, $41.14. The lowest average price per bushel during the ten years was 39 cents, when the average per acre reached 111 bushels, and the highest price 91 cents, when the average dropped to 57 bushels per acre. During the same period the average value of the wheat crop of the United States was $12.82, and of the corn $11.20, so it is seen that potatoes brought nearly four times as much per acre as wheat, and more than four times as much as corn. It is difficult to recommend varieties so that the recommendation can be of any value to the readers of a paper with so wide a circulation as the RURAL; for climate, soil, and the demands of the local market must all be considered; but two things the intelligent potato grower must do; first, plant only tested varieties for the main crop, and, second, be continually testing new varieties to find what is best for him.

I have not found any one variety better than all others: but all of the following have been profitable on my land: Early Rose, Early Sunrise, Early Ohio, Rural Blush, Wall's Orange, Victor, Burbank, Conqueror, Beauty of Hebron, and White Elephant. For two years past I have also found the White Peachblow very profitable, although for many years most growers have discarded it. For the main crop, I select for seed medium-sized tubers, and reject all that are misshapen or defective in any way. I like to have the seed run nearly the size of a hen's egg, and do not use small seed, unless potatoes are very scarce and high-priced. I always select my seed at the time of digging, for when the potatoes are freshly dug they are bright, and it is easy to detect any admixture. I prefer keeping the seed potatoes in pits, as they neither sprout nor wilt when wintered in this way, which they are likely to do in the cellar. I consider it of great importance that the seed at the time of planting should be sound and plump.

To insure a profitable crop, there are three points in the soil which are essential: 1st, it must be well drained; 2d, it should be rich, and, 3d, it ought to be clean. A profitable crop can be grown on land full of foul weeds, but it will be with great labor and vexation. The crop also may be profitable on only moderately rich land, if the cultivation is extra thorough; but if it is a soil that becomes saturated with water, neither manure nor extra cultivation will count for anything in a wet season. A clover sod gives a good—probably the best—seed-bed. The preparation of the soil should be thorough. I doubt if one farmer in ten puts as much labor on his potato land before planting as would be profitable. What implements to use depends somewhat on the soil and the season; but the surface should be made fine by use of drag or roller, and it should be thoroughly mellowed at least six inches deep, by the use of a harrow, that will cut down like the "Disk" or Acme harrows. I have for several years used the Disk harrow, and find it does the work to perfection. For the early crop I prefer to plow in the Fall in lands about 16 feet wide, with the dead furrows running with the slope of the land. We clean out all the loose earth from these furrows and use them as surface drains to carry off the water. Land left in this shape will pulverize finely in the Spring, and can be planted early.

I have always planted by hand and expect to continue to do so, as I think it can be done better than by machinery, and as the covering is done by horse power, it is not expensive, and unless one is very largely in the business, it will not pay to invest the money and be at the trouble of storing a machine for one or two days' work in a year. I never plant whole potatoes, but cut seed of the size named above into from four to six pieces, so as to have not less than two eyes to a piece, and plant one in a hill. The distance apart should vary with varieties. The early kinds, which make a small growth of top, may be planted with the rows 2½ feet apart and the hills 15 inches, which will give nearly 14,000 hills to the acre, while some of the rank-growing kinds should be planted three by two feet, which gives 7,260 hills per acre. I always plant deep and lay off the ground with a long, narrow shovel-plow or bull-tongue, which runs as deep as the land is plowed, and leaves plenty of loose earth in the bottom of the furrow; and I make it a rule that the dropper must step on each piece of the seed, to press it down into the bottom of the furrow. We cover with the horse, and the condition of the soil determines what implement to use—sometimes a heavy plank drag with two horses, drawn across the rows, with which two or three acres an hour can be covered; sometimes the two-horse harrow, and again, the corn cultivator; but always some implement with the horse and by which rapid and good work can be done.

In a large majority of cases, and with most varieties, early planting will give the best

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Miscellaneous Advertising.

Hood's Sarsaparilla

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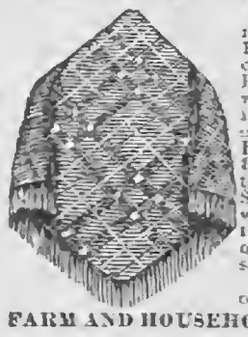

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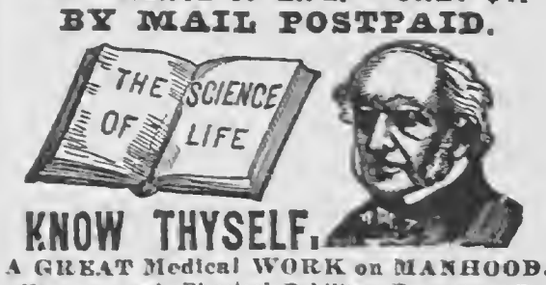

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THE
RURAL NEW-YORKER.
A National Journal for Country and Suburban Homes

Conducted by
E. S. CARMAN, Editor.
J. B. WOODWARD, Associate.

Address
THE RURAL NEW-YORKER,
No. 34 PARK ROW, New York.

SATURDAY, JANUARY 16, 1886.

POTATO SPECIAL THIS WEEK—20 PAGES.

WE cannot in these days afford to plant potatoes with deep eyes, either for home use or market.

THE Domestic Economy Department of the RURAL this week contributes its appropriate share of potato information.

NOTE.

A VERY annoying blunder occured in last week's RURAL. Page 21 should have been page 20 and *vice versa*, and should be read accordingly.

THE promised Potato Special is before our readers. The second Potato Special will appear as announced. There is one grave objection to Specials, viz., that they put everything else behind.

OUR reports of tests of new varieties of potatoes will continue until planting time. We are now reporting the trials of the eighth year, during which we have tested the new potatoes of those years, varying in number from 50 to 125.

THE Century for January contains an account of the RURAL's hybrid rye-wheat plants from the pen of Charles Barnard. The article neglects to state whether these hybrid plants are growing in the Eastern or Western Hemisphere, or in the moon, or where the hybridization was effected.

DURING the past six years we have grown 480 different varieties of potatoes at the Rural Grounds, many of which have been illustrated in these columns (from nature), and most of which have been reported upon as to yield, shape and quality. We give an epitome of these reports on page 45.

OUR subscribers are respectfully solicited to renew as soon as, or before their subscriptions expire, since, owing to the fact that our calls for specimen copies are far greater than in any preceding year, we can not supply back numbers later than the first of February, probably.

THROUGH inadvertance in a previous announcement, we mentioned the Baltimore Herald as one of the papers of our Special Clubbing Arrangement. This was an error. It is the weekly edition of the Morning Herald with which we club. Letters for specimen copies should be addressed "Morning Herald, Baltimore, Md."

TWO years ago the RURAL effected hybridization between the so-called Strawberry Tomato (Alkekengi) and the potato—the latter being the female parent. The seed was sown in the house last February, and produced one plant which was set in the garden in late May. It grew thriftily, resembled the potato in stems and leaves, but bore neither tomatoes above ground nor the faintest indication of a tuber beneath

WE beg to say that the illustrations of new potatoes presented in these columns are really portraits of the average or typical size and shape of the variety illustrated. The specimens are selected with a view to show the prevailing characteristics. The illustrations of the average catalogue are *not* true portraits, and most of them will answer as well for one kind as for another. Faithful illustrations in rural books or periodicals are as rare as they are valuable.

WE have at this time, at the Rural Grounds, potatoes some of which are all purple, some streaked, some white or buff, all grown from the same tuber three years ago. The original tuber was half purple, half buff or white. The purple eyes, and white eyes, were planted separately, and selections made from year to year according to color. The originators of new varieties should commence with a single tuber and propagate from it and not select several from the same hill, if they would grow varieties uniform in every way.

LET us say to all that the RURAL of November 14th, 1885, gives a full, illustrated description of our Free Seed Distribution, together with a full list of the $3,300 worth of presents to be sent to subscribers (and to them only) who secure clubs for the RURAL NEW-YORKER. This Number is sent to ALL who apply for specimens, and it should be not only read, but carefully preserved.

As our older readers are aware, potatoes have been raised from seed at the Rural Grounds for a number of years. Until the past season, however, it has not appeared that any of them were better than the best of those already in the market. We have now a variety that promises to meet our hopes. The tubers average large. The skin is white, smooth and the eyes few and superficial. The quality is certainly of the best, if we may judge from the few tubers eaten. The yield in our garden soil was at the rate of 700 bushels to the acre. It will probably prove to be a rather late potato. Of the hundreds of new potatoes tested at the Rural Grounds, there is scarcely one that combines all the excellencies of a perfect potato, viz., form, quality, productiveness and keeping properties.

OUR Broadway contemporary speaks of another new quince which is to be called after its associate editor, the "Fuller"—not because it originated with him, but merely because the person on whose farm it *did* originate, gave him cuttings which he propagated and now proposes to sell, the original tree having been destroyed by mechanics while erecting a building. It is to be hoped that Associate-Editor Fuller will reconsider this. An originator, without question, has a full right to bestow upon his new plant any name he may choose; but for anyone to hitch his own name to a new fruit with the originating of which he had nothing in the world to do except in an accidental way, gives one of those distinctions from which all fair-minded pomologists would shrink. The Meech's Prolific Quince offers another example in which a puerile vanity has been permitted to override a sense of justice and honor.

REFERRING to Dr. Caldwell's article in this number, it may be said that the cause of what is called "scab" at the Rural Grounds has generally been the wire-worm (Iulus). While digging our potatoes as they matured last season, every scabby tuber was examined. Many hills were dug during various stages of growth. In a few cases the "blister" often referred to by RURAL correspondents, was noticed. This kind of scab may be caused by a fungus. It is very plain that scab has for its origin more than one cause. To repel the wire-worm we have tried all sorts of chemical fertilizers, separately and together, as well as lime, salt, coal and wood ashes, but none proved *wholly* effectual. Flowers of sulphur, dusted about the seed pieces, was used last season. The tubers so raised were entirely free from scab. Several years ago we raised potatoes on a plot upon which a goodly quantity of leaves had been spaded under. The outer portions were a net-work of scab, and wire-worms of every size were found about them and embedded in the corrosions by thousands.

IT is well known to the older readers of the RURAL NEW-YORKER that the plot upon which our immense yields of potatoes have been produced, is well supplied with every kind of plant food which the potato needs, and that in abundance. This plot rarely suffers from drought—the great enemy of the potato—and, being well drained, it cannot suffer from too much water. For six or seven successive years we have raised potatoes upon it, and the average yield has increased each year. From 60 to 80 different new varieties are raised every season. As many of them are inferior in productiveness, the yield is proportionately reduced. Were we to select the most productive kinds suited to the soil and climate, we have no doubt we could raise at the rate of 800 bushels to the acre upon this carefully prepared plot. Whether it *pays* to prepare land in this way is a question we have not been able to decide.

IT is a lamentable fact that farmers' homes, as a class, are almost destitute of small fruits, while nothing so conduces to health and pleasure as their abundant and daily use. We feel earnestly the need of their more extended use. In no way can we do our readers a greater favor than by encouraging them in the growth and daily use of all kinds. It was with this end in view that we made arrangements with the originators, which make it possible for us to place seven or eight of the best kinds within the reach of all, without expense, save the needed exertion in placing the RURAL before their friends. We want every RURAL subscriber to avail himself of these offers, and we want all to care for the plants so that a single year will give them a plantation that will furnish an abundance for years. Look over the list on the next page, friends, and resolve to have not one kind only, but several. Any of these lots purchased and the freight charges paid, will cost you nearly, or quite, as much as the price of the RURAL, while we send them free of charge and guarantee them true; and yet how many will neglect to profit by this offer, and next Summer sincerely regret it!

STRANGER FRIENDS.

THOUSANDS of you are receiving this Number of the RURAL NEW-YORKER for examination, and we wish to call your attention to the complete manner in which we treat the specialty of potatoes and potato growing, and the character of the contributors and their articles. The RURAL is the only paper which enters this field of Special Numbers, and during the year it will take up from six to ten subjects and treat them in an equally exhaustive manner. Do you not see that the RURAL is occupying a broader and higher field in agricultural teaching, and is doing more to give the farmer a thorough knowledge of his business, which must lead to a better and more profitable system of farming, than any other journal, and is it not your duty, as well as your privilege, to support it in its noble mission by becoming one of its subscribers? We shall welcome you among its "grand army" of progressive readers.

POTATOES.

THE time was, long ago, when the potato was regarded as a luxury to be eaten only on grand occasions and by the rich. It is now a part of the daily food of the American people, and greatly to their health as well as enjoyment. Although it contains but a comparatively small nutrient value when compared with some other products, yet its constituents are in such proportion, and its use has such a salutary dietetic effect, that there is not an article so commonly used, but could be more easily dispensed with, and whose place it would be harder to fill. So that though thousands of our readers many never plant a potato, all are deeply interested in their growth and abundant supply at moderate prices, and should therefore not fail to read this Number, in which is contained more accurate knowledge on the potato and its culture, than is together in the same space, and in so plain and understandable a form, anywhere else in any language.

And yet the subject is not by any means exhausted. We have much more on this topic in such a valuable form, that it should not be lost to the world and we shall give it in another Potato Number, some time in February. No one should think, when through reading this Number, that he knows all about potato growing, for we assure our friends that some of the best points have been reserved for the subsequent Number. Wisdom always dictates the "keeping some of the best wine to the end of the feast."

AWAY WITH THE STUFF.

THE oleomargarine men are engaged in one of the most profitable branches of manufacture ever started in any country, viz: the conversion of the low-priced fats and grease of pork, beef and mutton, into what sells for, and takes the place of, the much more expensive and higher-priced article, "butter." Not only this; but they often use the lowest-priced and most filthy fats of dead and diseased animals, and of the spoiled carcasses of the market stalls; such refuse as has heretofore been used only for soap making; and such stuff even as the more conscientious makers of this very necessary commodity, like Frank Siddalls, Proctor & Gamble, and Williams Bros., will not use for this purpose, these fellows, by the aid of chemistry, convert into a counterfeit substitute for an article of every-day use by both rich and poor.

To this no one would object, were they to put it up, brand it with its true name, and sell it for just what it is. If the manufacturers can make an article which is preferable to poor butter, or even to the best gilt-edged butter, and people can be found whose tastes will induce them to buy and use such a product, we can only say good words for such an industry, and wish those engaged in it success, and we care not at what price they sell it.

If farmers are so indifferent that they will not so study their business as to be able to keep cows and make butter that will compete, in quality and price, with any compound of dead fats and chemicals; then let them go to the wall, and let their pastures be used for grazing sheep, goats and *asses* (themselves in such a case). But when this stuff, no matter how good it may be, is put up to imitate butter, and is sold as such, and at a price which, though extremely profitable to the oleo makers, is ruinous to butter makers, it is fraudulent, and we protest in behalf of the dairy interest and the consumers, and of every tiller of the soil. But these fellows, like all persons engaged in a fraudulent and illegitimate, but highly profitable business, care not a fig for the protest of anybody, so long as by using a part or the whole of their dishonorable profits, they can buy or control the courts or lawmakers, in their interests. At a meeting lately held, they contributed freely in money, and passed very strong resolutions, and assumed a bold and defiant attitude. They are either "whistling to keep their courage up," or they mean fight, and fight to the end; in either case, honest people everywhere, those in every branch of agriculture as much as the dairymen, and those in the cities who depend upon the farmers for their food supply, should unite in demanding of both the State and National Legislatures the most stringent laws against this fraud, and then demand of the courts that the laws shall be construed in favor of the protection of the people in their food supply, rather than in the interest of human sharks, who would rob the consumers and ruin the producers of honest butter.

It is much more honorable when asked for "bread" to give a "stone," than when asked for butter to give a vile concoction of the garbage house.

BREVITIES.

THE true seeds of potatoes will germinate if three years old.

ONLY regular subscribers need appy for our seed distribution. A stamp must be sent with every application.

ACCORDING to the experiments made by the Messrs. Sutton, of England, it is thought that Solanum Maglia, and not S. tuberosum, should have the credit of being the original parent of our cultivated potatoes.

THE experienced potato grower, Alfred Rose, writes us that the way to secure large yields is not to have the soil over-rich in manure, but just rich enough to grow good-sized tubers, and not all vines with a few small tubers.

WHETHER it is is better to dig potatoes as soon as they are matured, or to leave them in the ground until late in the Fall, depends upon the season. If dry, leaving them in the ground may do no harm; if wet, they will certainly sustain injuries which would have been avoided by an early digging.

THE RURAL NEW-YORKER has introduced, through its Free Seed Distributions, the Beauty of Hebron, White Elephant and Rural Blush. The Beauty of Hebron is now generally prized as one of our best early potatoes; the White Elephant as one of the best late. The Rural Blush is also late, of excellent quality and in most places an immense yielder. Its one fault is that it straggles somewhat.

IT does me good to read the RURAL, and I shall continue to read it until I become blind with age, if it continues to live the life it is now leading—an enemy to fraud, and a friend to a higher, nobler agriculture. I wish I had 20 copies of the issue for Dec. 19th. I would mark the article "Where shall we aim, at the head or the belly?" and send them to my friends. R. P. MCANLY.
Walnut Cove, N. C

IT is a good time now to sow potato seeds. Sow them as you would tomato seeds. When three to four inches high, prick them out and plant in three-inch pots, one plant to a pot. As soon as there is no danger of frost, or about May 20th for this climate, the plants, with the soil and roots intact, may be planted in holes prepared for them in rich, mellow soil of the garden. Tubers will form by Fall all the way from the size of a pea to that of a hen's egg, or sometimes even larger.

THE Ag. Ed. of the Vermont Watchman in, what seems to us, a frank, impartial review of farm journals, has this to say of the RURAL NEW-YORKER: "We have for several year regarded it as clearly the foremost agricultural paper in the world. In the abundance and excellence of its illustrations, in the integrity, ability and industry of its editors, and in the quality of its contributed matter, it outranks all competitors. It has a large capital behind it, which is spent lavishly to make it what it is, an honor to agricultural journalism. It pays its contributors well, and exacts their best work. A writer, however able, who will not give that, had better send his matter to other papers."

POTATO SPECIAL.

CONTINUED FROM PAGE 45.

SEEDLING POTATOES.

THE RURAL has frequently urged its readers to experiment with seedling potatoes, grown from the seed-ball or real potato fruit. We are no less anxious to urge upon our readers the importance of the work at the present time. New varieties of potatoes are absolutely necessary from time to time. All varieties, after a time, degenerate or "run out." Thousands of dollars have been spent by farmers for new potato "seed," that might just as well have been kept at home. We fail to see why farmers cannot produce new and valuable varieties for their own using. Then, again, the work will lead to further experimental work, which cannot fail to be beneficial.

There is no great skill required in producing seedling potatoes. As before stated, the potato ball, corresponding to the tomato, is the real fruit, the tuber being simply an enlarged, underground stem. In producing seedlings the ball is kept until it begins to wither, when the flesh is washed away from the seeds and the latter are preserved dry, as other seeds, are kept. The potato fruit is much less common now than it was some years ago. This is not surprising when we consider the fact that potatoes have been cultivated for the tubers alone, and no dependence has been placed upon the real seed for continuing the species. There seems to be no good reason why each reader of the RURAL should not devote a small space each year to seedling potatoes, thus supplying himself with strong tubers for planting, and possibly producing a seedling that will sell for a fine price.

Potato balls should be taken from the best and strongest tubers. "Like produces like," and if we wish to develop extra seedlings we naturally select seed from those tubers noted for quality, good shape and keeping. Most farmers understand how surely animals stamp their good and bad qualities upon their offspring. Why does not the same rule hold true of plant life? If there are any potato balls produced in your township, our advice is to procure them and experiment. We take it for granted that most of our readers have no greenhouse in which to start the seeds. That fact should not deter them from experimenting. With well-drained flower pots filled with mellow garden soil, satisfactory results can be obtained. Press the soil firmly into the pot. Sow the seeds half-an-inch apart, covering with one-eighth inch of soil, pressing soil lightly upon them. Place the pots in pans of water so deep that the water comes nearly to the surface of the soil, and let them remain until the surface soil becomes damp. Place the pots before a sunny window and cover each with glass. They will need no more water until the seeds germinate—about a week or ten days. Remove the glasses when most of the seeds have sprouted. It will be well to raise the glass gradually, first an eighth-of-an-inch, then a quarter, and then remove it entirely. The great reason for watering the seeds in this way is that the soil is not washed away. The early part of March will be soon enough to plant. The plants will then be large enough to transplant to little pots by early April. The little plants should be "pricked out" and planted one, two or three in each thumb-pot. By April 20 many of the leaves will be found of the shape and size shown at Fig. 19, while the plants will average four inches high. The great point now will be to see that these seedlings do not receive a check from over or insufficient watering, from too much or too little heat.

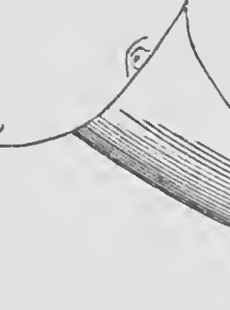

Fig. 19.

When all danger of frost is over, the little vines may be transplanted to a warm, well-prepared plot. They may be set in little holes dug with a trowel, one foot apart in drills three feet apart. The little balls of earth clinging to the roots of the plants should be thumped out of the pots and placed firmly in the holes. Thereafter, their treatment will be the same as potatoes planted from eyes.

Fig. 20 shows the exact size of a number of tubers raised from seeds at the Rural Grounds in this way. This illustration is taken from an old number of the RURAL. In the Spring following the digging, these seedlings can be planted, the smaller ones whole and the larger ones cut into two pieces. The tubers will vary as to size, quality, shape, etc., and a year or so of careful cultivating will be necessary to properly sort them.

* * *

A MELLOW soil, a moist soil well drained; plenty of potash, nitrogen, phosphoric acid, lime, and possibly magnesia, sulphur and salt, for mechanical effect, or for an effect not understood. Give the seed pieces enough flesh to support them until the shoots can be supported by their own roots. Plant them in depth according to the soil, whether inclining to clay or sand, from three inches to five inches. The distance of the hills or drills and of the pieces in them, should be regulated by the vigor and size of the varieties planted. Rank-growing varieties, the same as tall-growing corn, will not yield well if planted too closely together. Hilling-up on well-drained land never increases the crop. The fibrous roots extend from hill to hill, from row to row, and the soil should not be taken from them to heap it up about the stems where it is not needed. In hill culture, where the tubers crowd each other out of the ground, hilling-up is necessary only to protect the potatoes from air and light. Broadcast manuring is better than manuring in the hill, for the reason that it is the fibrous roots that need the food—*not* the tubers which are fed by the fibrous roots. Kill the potato beetles before they have injured the foliage. *Any* injury to the foliage will impair the vigor of the plant, and less vigor in the plant means less crop.

BE careful not to plant frost-bitten seed potatoes.

* * *

AVOID plowing potato land when it is not dry enough to crumble as it is plowed.

* * *

IT is a good plan for late potatoes, to sow blood, nitrate of soda or sulphate of ammonia, not until the sprouts show themselves above ground.

* * *

CULTIVATE shallow if you would avoid the worst effects of dry weather.

* * *

WE find that there are 673 potatoes of average size in a barrel. If the potato pieces are planted in drills one foot apart, the drills being three feet apart, 14,520 will be required for an acre, or about 4⅓ barrels, if we make five pieces of each potato.

* * *

WHERE are the old favorite potatoes of 50 years ago?

* * *

THE RURAL'S experiments with 32 different kinds of fertilizers upon a worn-out soil show that the potatoes need a complete fertilizer *i. e.*, potash, phosphoric acid and nitrogen, with most of the first.

* * *

THE result of 70 analyses of the tuber, by various chemists, embracing a great many varieties and modes of culture, are summed up in the following table:

	Minimum.	Maximum.	Average
Water	68.29	82.88	75.77
Nitrogenous substance	0.50	3.60	1.70
Crude fat	0.05	0.80	0.16
Non-nitrogenous extractive substances (starch, sugar, etc.)	12.05	26.57	20.56
Fiber	0.27	1.40	0.75
Ash	0.42	1.46	0.97

As the result of 53 analyses of the ash of the tuber, we have the following:

	Minimum.	Maximum.	Average.
Potash	43.97	73.61	60.87
Soda	0.00	16.93	2.62
Lime	0.51	6.23	2.57
Magnesia	1.32	13.58	4.69
Ferric oxide	0.04	7.18	1.18
Phosphoric acid	8.39	27.14	17.33
Sulphuric acid	0.44	14.89	6.49
Silica	0.00	8.11	2.17
Chlorine	0.85	10.75	3.11

TUBERS FROM SEED THE FIRST YEAR. (Showing various shapes and sizes.) Fig. 20.

Six analyses of the tops give the following average results: Potash, 21.78; soda, 2.31; lime, 32.65; magnesia, 16.51; ferric oxide, 2.86; phosphoric acid, 7.89; sulphuric acid, 6.32; silica, 4.32; chlorine, 5.78. Potash and phosphoric acid are therefore the predominating ingredients of the ash of the tuber, and soda and silica are evidently quite unessential since they may be entirely absent; soda may also be entirely wanting in the tops.

* * *

From these figures it may be estimated that in a crop of 150 bushels weighing 9,000 pounds, and 600 pounds of tops, we should remove, of the three most valuable ingredients of plant-food, the quantities per acre given in the following table, omitting fractions. For the purpose of comparison, we give also the quantities of these three substances gathered by a crop of wheat, 25 bushels, and straw, 2,500 pounds; and of Indian corn, 50 bushels, stover 4,500 pounds, and cobs 600 pounds.

	Nitrogen.	Phos. Acid.	Potash.
Potatoes: tubers	26	15	53
tops	—	4	11
Total	26	19	64
Wheat: grain	30	13	8
straw	12	6	17
Total	42	19	25
Indian corn: grain	48	20	12
stover	22	23	41
cobs	2	—	4
Total	72	43	57

* * *

From these figures it appears that to produce the potato crop, potash is required in larger proportion than either nitrogen or phosphoric acid, and that more is required for this crop than for either wheat or corn, notwithstanding that the latter is such a gross feeder. When we come to consider the comparative exhaustion of the soil by the two crops, remembering that of the corn crop, only the grain with 12 pounds of potash, is liable to leave the farm, while of the potato crop the tubers, with 53 pounds of potash from every acre, are usually exported, the usefulness of potash manures in potato culture would appear to be very plainly indicated. To the quantity of nitrogen gathered by the potato crop, as given in the table, something must be added for the tops, with reference to which we find no determinations of this element. Making due allowance for this, the best manure for the potato would seem to be a complete one as we have said; that is, one containing all three of these substances—nitrogen, phosphoric acid and potash, with a large proportion of the last. Make a note of this Rural readers.

* * *

Add potash salts to farm manures if you would increase the yield.

* * *

Sulphate of potash has given, in many cases, larger crops than muriate of potash.

* * *

Salt on potatoes, according to Prof. G. C. Caldwell, may increase the crop somewhat, but it impairs the quality by diminishing the quantity of starch.

* * *

Whether potatoes deteriorate or grow less in yield depends upon the congeniality of the soil, situation and culture.

* * *

It depends also upon the selection of "seed." We are fully satisfied that the yield may be maintained, if not increased, by selecting seed potatoes from the most prolific hills.

* * *

Dr. Hoskins prefers potatoes to either beets or turnips for stock-feeding.

* * *

The best potato soil is a sandy loam or one that is midway between a light and a heavy soil. There is no better way of preserving moisture than by keeping the surface soil mellow.

* * *

Lime has often been recommended as a preventive of potato rot. The N. Y. Experiment Station does not find it so. The Director filled two barrels with sound White Star potatoes, in the Fall of 1883, in one of which he sprinkled air-slaked lime, as the tubers were put in, in sufficient quantity to whiten them. On April 3d the potatoes in both barrels were examined. The one treated with the lime contained 68 decayed tubers, while the other contained but 52. It thus appears that in this experiment the lime exerted no beneficial influence.

DR. LAWES' POTATO EXPERIMENTS.

The following table shows the average yield of potatoes for five years at Rothamsted, England, with farm manure, with different chemical fertilizers and without either fertilizers or manure:

Average of 5 Seasons, 1876, '77, '78, '79 and 1880.

		Tons.	cwts	Tons.	cwts	Tons.	cwts	Tons	
	Unmanured	1	18	0	6¼	0	2¼	2	6½
	Farmyard Manure (14 tons)	3	19¾	0	7⅝	0	6⅝	4	13⅝
3	Farmyard Manure (14 tons), and 3½ cwts. Superphosphate (1)	4	9½	0	8	0	8¾	5	6¼
	Farmyard Manure (14 tons), 3½ cwts. Superphosphate, and 550 lbs. Nitrate of Soda	5	8	0	7	0	19½	6	14½
	400 lbs. Ammonia-salts (2)	1	19½	0	7⅛	0	3½	2	10⅛
	550 lbs. Nitrate of Soda	2	11⅞	0	6⅞	0	5¼	3	4
7	400 lbs. Ammonia-salts, 3½ cwts. Superphos., 80 lbs. Sulph. Potash, 100 lbs. Sulph. Soda, 100 lbs. Sulph. Mag	5	14¼	0	8¼	0	14¾	6	17¼
8	550 lbs. Nitrate of Soda, 3½ cwts. Superphos., 300 lbs. Sulph. Potass, 100 lbs. Sulph. Soda, 100 lbs. Sulph. Mag	5	19⅞	0	7⅜	0	19⅛	7	6¾
9	3½ cwts. Superphosphate	3	0¾	0	8	0	4⅝	3	13⅜
10	3½ cwts. Superphosphate, 300 lbs. Sulphate Potash, 100 lbs. Sulphate Magnesia, 100 lbs. Sulphate Soda, 100 lbs.	8	4½	0	6½	0	4⅞	3	15⅞

NEW POTATOES IN NEBRASKA.

H. H. WING.

We have had occasion to test some of the new varieties of potatoes the past season, and below are given the results. The potatoes were planted in the peculiar fine loam soil of this region and received no manure of any kind. The rows were three and a half feet apart, and the single eyes were dropped one foot apart in the rows.

VARIETY.	Rank in comparison with 81 varieties grown side by side.	Yield of merchantable potatoes per acre. Bushels.	Per cent. unmerchantable.	Total yield per acre. Bushels.
EARLY VARIETIES.				
Queen of the Roses	12	266.7	11.5	301.2
Early Howard	13	261.2	5.6	276.8
Hall's Early Peachblow	17	246.4	17.4	298.2
Early Maine	20	234.6	10.4	262.
Lee's Favorite	26	218.6	15.7	259.3
Vanguard	7	216.4	17.2	261.6
Pearl of Savoy	9	211.8	14.	246.3
Vick's Extra Early	77	72.6	51.7	150.4
LATE VARIETIES.				
Cloud's White Chief	1	401.	16.5	430.6
Chief	2	366.1	11.7	414.9
State of Maine		297.8	19.4	369.6
Empire State		297.3	34.4	452.8
Dakota Red	14	259.2	24.1	341.6
Home Comfort	18	246.3	17.4	298.2
Columnis Superb	22	231.	22.2	296.9
Peerless Peachblow	28	212.4	17.3	256.8
Seneca Red Jacket	32	195.8	20.9	247.7
Cayuga	40	164.7	28.	228.7
Iroquois	56	126.1	29.7	179.3
Tremont	67	79.	37.	153.9

We have made the following notes in regard to the shape, size and freedom from scabbiness of the various varieties. While we have had very little rot nearly all of the varieties have been more or less affected with scab.

Queen of the Roses, slightly blushed, long, rather knobby, eyes shallow, very little scab.

Early Howard, white, long oval, regular, eyes shallow, very little scab.

Hall's Early Peachblow., white, splashed with pink, round oval, somewhat knobby, eyes rather deep, quite scabby.

Early Maine, slightly blushed, long oval, very regular, slightly scabby.

Lee's Favorite, white, oval, regular, eyes rather deep, some scabby.

Vanguard, slightly blushed, long oval, very regular, rather deep eyes, quite scabby.

Pearl of Savoy. slightly blushed, round oval, mostly regular, slightly scabby.

Vicks Extra Early, white, round oval, small regular, eyes shallow, slightly scabby.

Cloud's White Chief. white, round oval, large, somewhat knobby, eyes shallow, considerable scab.

Chief, white, long, nearly regular, eyes rather deep, quite scabby.

State of Maine, white, long oval, large, somewhat knobby, eyes shallow, somewhat scabby.

Empire State, white, long oval, somewhat knobby, eyes rather deep, somewhat scabby.

Dakota Red, red, long oval, very knobby, eyes rather deep, somewhat scabby.

House Comfort, pinkish, long, nearly regular, eyes shallow, scabby.

Columnis Superb, white, long, somewhat knobby, eyes rather deep, very little scab.

Peerless Peachblow, red, oval, very knobby, skin rough, eyes shallow, no scab.

Seneca Red Jacket, white, long oval, nearly regular, eyes shallow, some scabby.

Cayuga, white, long oval, nearly regular, eyes shallow, no scab.

Iroquois, white, oval, regular, eyes shallow, very little scab.

Tremont, white, round oval, regular, medium size, eyes shallow, very little scab.

Ind. Co., Univ'ty, Neb.

POTATO CULTURE IN GEORGIA.

W. B. JONES.

The potato does not find the extended, prolonged use here, that it does in more northern latitudes. [In 1884, 9,175 acres in Georgia were planted to potatoes, producing 614,725 bushels valued at $639,314.—Eds.]

For early market and quick maturity we plant Philip and Early Rose in February or early March. Later varieties, as Peachblow or Goodrich are planted later and saved longer for domestic purposes. Our soil is light with little clay at surface and needs to be filled with humus, serving both as a mulch and a manure. Stubble deeply plowed does well, with ashes or potash compost.

In February the soil is well broken, and laid off in furrows three feet apart, and bedded out into three-feet beds. The potatoes are held in ashes for a few days after being cut, and then dropped in single pieces, one foot apart. The eyes are placed upwards, and small potatoes planted whole. A compost of humus, kainit or ashes and acid phosphate, or of rotted cotton-seed and decayed matter is sprinkled liberally over the "seed" so as to nearly fill the furrow. The soil is turned back from either side by double-shovel, hoe or turning plow. Before the plants appear, a harrow is run over the field to loosen the soil and remove excess of dirt thrown over the potato to protect it during coldest weather. The after cultivation is with the ordinary horse hoe or cultivator running between the rows or beds, gradually raising beds to the plants. If the seed-pieces are planted deep, level culture succeeds as well as bed system, but here we must plant early and deep for the warm suns of May and June would soon destroy the vines. This brings a summer crop and, if not marketed, difficult to keep, and even to ship any distance in crates or barrels, as heat and moisture soon destroy the tubers.

In gathering, we plow them out with a turning plow and pick by hand. Seed saved from this crop must be kept in dry sand, under a house, in a cool place.

The second crop may be planted in August, and soil leveled after dropping in deep furrow, mulch with a thick coating of straw or leaves. This crop is a precarious one, but keeps well during Winter and furnishes seed, dug in November, for next planting. Any distance from market, the potato is not profitable to handle, unless the earliest June and July crops are taken. We can grow them easily, and seemingly sound and healthy, but the keeping is difficult. The seed degenerates with us, and most growers buy their seed, each year, of Northern producers. The potato would be a boon and a profitable crop but for the summer heat and moisture which frequently destroy the tubers even in cool places.

POTATOES IN TEXAS.

T. V. MUNSON.

1. *Best Varieties for this Section.*

Ans.—Early Ohio, all things considered, though Early Rose is much planted.

2. *How and when selected, and how treated for seed.*

Ans.—For early crop grown chiefly for shipping to Northern market in May and June, as "new potatoes," seed from the North (Kansas, Nebraska, Iowa or Minnesota) proves best, if pure and well grown and medium to large in size. Cut lengthwise into four pieces each, early in February, placed in shallow boxes, dusted with lime or ashes, kept in a warm cellar till March, or when the eyes have started, half an inch.

3, 4, 5. *Soil, location, preparation, planting, etc.*

Ans.—A well-drained, sandy loam, having an eastern or southern slope, heavily manured with well-rotted, fine, stable manure and ashes; 25 tons or more of manure and one of ashes to the acre, well plowed in, and fined with an Acme harrow; then laid off with light furrows, three feet apart, running north and south. Then commercial fertilizers, rich in soda, potash and phosphorus, sown lightly along the furrow, and the cut potatoes (prepared as stated above) dropped in the furrow one foot apart. Then a light furrow is turned back upon the pieces of potato to the depth of three or four inches, and then half an inch of fine, well-rotted manure should be scattered over the row in a strip 18 inches wide, in order to keep the surface soft and loose at all times, as the tuber is an under-ground stem, and the least binding nature of the soil cramps the growth, on the same principle that onions make small or large bulbs, according to the softness of the surface soil.

6. *Culture, etc.*

As soon after planting as the first rain, when settled enough for the soil to crumble, or in absence of rain, when the potato sprouts are within an inch of surface on an average, draw a steel tooth rake over; for the field culture, a light, fine tooth harrow, lengthwise over the rows, so as to loosen the crust, mix the surface manure with surface soil, and destroy the young weeds. This leaves the ground level, and it should be kept so, by using thereafter a Planet Horse Cultivator or other such implement which will stir the soil evenly, and leave it level. The row itself should be kept clean and loose, but *never hilled*, as the nearer the tubers are kept to the surface, but still covered, the finer the growth and richer the quality of tuber. Very deep culture after the plants are up, should be avoided, as the deep-feeding roots of the vines will be broken and growth stopped for a time. A crust should never be allowed to form after hard, beating rains. That is the chief object of the surface belt of manure last put on. If the potato is hilled much, growth of the first-formed tubers stops, and new ones are thrown out higher up the stem, near the surface where there is less pressure, and more air and warmth. After the soil begins to rise and crack with the growth of the tubers, cultivation should cease, as any cutting of the roots now checks growth for a time, and when it starts again, the potato is liable to become knotty. The same effect is produced only more suddenly and effectually, by the cutting of the tops in part or whole. Hence insects—potato bugs—should never be allowed to infest the vines and eat the leaves. Abundant remedies are well known in Paris-green, or London-purple.

Blight, rot, etc., come from extremes of temperature or moisture, which are best obviated by having a porous, well drained soil.

8. 9. *Digging, Marketing, etc.*

As soon as the vines have ceased growing and show a slight yellowing of the leaves, and the tubers begin to assume a whitish appearance, and the skin begins to cling a little on the most mature potatoes, it is full time for the market man in the South to have his crop out and on its way northward, or to the market stalls.

A plow, or several of the improved diggers render effective service in skillful hands.

As soon as the potatoes are thrown upon the surface with the digger, pickers should follow in two gangs, the first with the baskets taking only the whole, sound marketable potatoes, carrying them directly to the packing-house, or shed, out of the sun, as an Irish potato, heated through in the direct Southern sun, will quickly sour and rot. In the early season when prices are high, one-third bushel boxes, as for peaches, should be used for shipping cases. Later, larger boxes or ventilated barrels can be used. The early crop will not keep here beyond three weeks or a month with best care, in dry, cool shade. The small potatoes are gathered by themselves, put away in a well ventilated barn, or open shed in shallow layers, for a week or so, and at the first rainfall in July, the ground being properly prepared, are planted whole (if cut they usually rot, but sometimes, if weather is right, will come up much sooner than the whole potato) and will come up in course of three weeks or a month, and, if Fall is favorable, will make a nice crop for Winter use and will keep well. But this product should not again be used as seed.

Denison, Texas.

NOTES ON THE POTATO.

CHAS. A. GREEN.

The Early Ohio has given us good results as an early potato. White Star, Mammoth Pearl, Beauty of Hebron, and Dakota Red are favorites for later. All these and other varieties have rotted to such an extent as to render the crop scarcely worth digging, with the exception of the Dakota Red, which has proved almost entirely rot-proof. We find that the Dakota Red has defied the rot in other sections of Western New York. One farmer had sixteen acres and secured a big yield. It is a large red potato, with eyes too deeply sunken, and quality medium, and it is a vigorous grower and a great yielder.

[It does not yield heavily at the Rural Grounds.]

Last June we planted some hop roots that were left in the packing house, and in the row a few straggling potato vines appeared. The potatoes were not hoed and received no attention, we supposing them to be some chance seedlings of a worthless variety that happened to spring up. Late in the Fall our foreman saw a large tuber protruding from the hill, which induced him to dig and see what the hill produced. He brought into the office a bushel basket nearly half full of monstrous specimens. I cannot remember when I have

seen so many such large potatoes taken from a single hill. Considering the rot affecting other varieties, and considering the many valuable features of the Dakota Red, I consider it the most promising variety for our section for a late potato.

We find that a friable soil, not inclined to harden, is the most desirable for the potato. The soil should be deep, well drained, and in good heart. The best results, in this section, are secured by applying manure freely on a clover sod early in the Spring. The clover is permitted to grow up through the manure until about June first, then all is turned under deeply, and the soil pulverized in the most thorough manner; then a dressing of from three to five hundred pounds of phosphate per acre is applied. The ground is then marked three feet apart each way and the seed dropped. As much of the potato as possible, and from one to two eyes are planted in each hill. We have practiced different methods of planting, and have succeeded by plowing furrows, dropping the seed, and covering with a plow, ut where planted in hills as indicated above, we conclude that the hoe is the best implement for making the hill and for covering. We have found that too deep planting is disastrous, especially if the season proves wet. When planting late, the potatoes may be planted deeper than if planted earlier.

The object in planting late is that the potato comes up in a short time, and makes a rapid growth, and the soil, not being subjected to heavy storms, is not compact, and remains loose throughout the season with proper culture. The potato cannot develop to its best state unless the soil is loose and friable to a considerable depth. This friable condition of any but sandy soil cannot be maintained except by late planting, and by the loosening furnished by the clover sod. On sandy soil such treatment may not be necessary. Our soil is clay mixed with sand with a tendency to harden. We have applied Bradley's fertilizer in the hill at the rate of a large spoonful per hill on rich soil, and the results were satisfactory, providing the potatoes were not permitted to come in contact with the fertilizer. The potatoes were not affected by growing in close contact with the fertilizer, and yet, I do not consider this method of applying the fertilizer the best, as the roots of the potatoes soon get far beyond reach of it when dropped in the hill.

We hoe the potatoes as soon as they appear above the ground, and before the weeds have attained sufficient size to impede the hoe to any extent. At this stage a few brushes of the hoe do the work completely. In less than a week after the potatoes have pushed up several inches, a shovel-plow will cover up any weeds that have appeared since. Soon after, the cultivator is set to work leveling down the ground. My theory has been that level culture is the best method, but having practiced it enthusiastically for several years, and having each year been beaten in yield by an Irish laborer upon our place, whose potato patch was adjacent to mine, my confidence in level culture is somewhat shaken. The Irishman's method of ridging with a shovel-plow proved more disastrous to the weeds with less labor. I am not prepared to say positively that hill-culture gives the best yields, but desire to get further light on the subject. It is a fact that a broad-winged shovel plow will cover up and destroy more weeds at much less expense than any other method. Since I have experimented with the shovel-plow, I have followed it immediately with the cultivator, loosening the ground to a considerable depth. This I deem of vital importance, if not done too late in the season, so as to disturb the roots.

We have found no better method of preparing the soil for strawberries and other small fruits that require freedom from weeds, than by thoroughly enriching the soil and planting early, to early varieties of potatoes. The potato crop can be dug in August, or the first of September. After having received thorough culture, the ground may be cultivated thereafter. This gives thistles, Quack Grass and other weeds little chance for securing a foothold, and rings the death knell of the weeds, if pursued with energy. The ground can be planted to strawberries in the Fall, or, if not free from weeds, cultivation can be continued at frequent intervals until Winter approaches, and the ground be planted the following Spring.

The past two seasons we have dug our potatoes with a strong shovel-plow with broad wings, to which we attached two horses, and applied a heavy weight in the shape of a stone. This made the plow run deep. The horses walked between the rows, and the shovel-plow passed under the row of potatoes, throwing up and exhibiting to sight nearly the whole crop, and destroying scarcely any. The potatoes were immediately picked, and after the whole field was secured in this manner, and the vines collected, we cultivated with a two-horse cultivator and picked over again, and then harrowed and picked over again, if any were found upon the surface. We found that this was an easy way to harvest the potatoes, and the soil was thoroughly cultivated by the process.

We are not troubled to any serious extent with insects. Usually one application of Paris-green at the time when the young beetles begin to be destructive, is sufficient. If a rain occurs after applying the Paris-green, we are obliged to give a second application.

Rochester, N. Y.

VERMONT POTATO NOTES.

1st. The most profitable potatoes, all things considered, in this section, are the Snowflake and Landreth's Garfield. Buyers for Boston market will pay from five to ten cents more per bushel in the Fall for them, than for any variety you can mention.

2d. We always select good-sized potatoes for planting when we have them. If the tuber is quite large we cut it into four pieces, and put one piece in a hill. If the potato is about the size of a hen's egg, I should prefer to drop one in a hill, providing I did not plant in drills.

5th. We use farm manure, soil clay loam; plant in hills 2½ by 2½ feet, cultivate both ways.

6th. Flat cultivation will not do here. We cultivate and hoe twice during the season.

8th. Potatoes should be sorted and picked up as soon as they are dug; it is well, of course, to let them dry off first, and they should be dug as soon as they are ripe, and not be left in the ground.

9th. The best time for farmers to sell is in the Fall by all means.

11. Average yield in this section is about 200 bushels to the acre. O. H. ALEXANDER.

HISTORY OF THE POTATO.

REV. L. J. TEMPLIN.

THE early history of the potato is involved in obscurity. It has been supposed that the plant was first found by Europeans in Virginia, and that Sir Walter Raleigh carried it thence to England in the year 1586. Raleigh never visited Virginia. He only furnished ships and means to aid in planting a colony there. The most probable theory to my mind is, that Sir Francis Drake, returning from explorations in the Pacific Ocean, coasted along the western shores of South America, one of the native habitats of the potato, and while in that region procured some of the tubers which he carried with him to England. On his homeward voyage, he touched on the shores of Virginia, and took off the discouraged colonists and conveyed them back to the mother country. If this is correct, then this introduction probably occurred as early as 1565, this being the date of Drake's return from the West. The potato was doubtless known to Europeans at an earlier date, as Columbus, during one of his voyages, found a root cultivated on the island of Cuba, that was used for food by the natives, and this was no doubt the potato.

Early European voyagers and travelers found the potato growing in the Andean forests and along the Pacific coasts on both sides of the equator, through several degrees of latitude. It was also found in cultivation, the natives testifying that it had been in cultivation as an article of diet from time immemorial. Spanish and Portuguese adventurers probably introduced the potato into those countries at a very early day, whence it probably made its way into Italy. It is quite certain that it was cultivated in Spain as early as 1550. The time of its introduction into Ireland, where it has become so important as an article of food that a general failure of the crop results in a famine, is in dispute, some claiming that it was from Spain by a sea captain in 1565, others that it was procured from Raleigh in England.

Germany received the potato in 1710. The Government gave great encouragement to its culture, even using compulsory means, in some instances, to promote its cultivation. Its importance in Germany as an article of diet is second only to what it is in Ireland. In France, where the potato was introduced at the beginning of the 18th century, it had to fight its way to popularity against great opposition. The National College of Physicians pronounced it poisonous. The Catholic priests pronounced it an evil root because it was not mentioned in the Bible.

Through the address of a courtier King Louis XIV was interested in the plant, and it was introduced into the royal gardens. The example of the sovereign was followed by the nobles and thus it soon became popular.

It seems strange to us that a plant that has so many qualities to commend it should have required 250 years to make its way to general popularity, but such is the case; and it was not till the beginning of the present century that it came to be appreciated as its merits deserve.

Canon City, Col.

ILLINOIS POTATO NOTES.

THE early varieties now in highest favor in this section are the Early Ohio, Early Vermont, and Early Rose, standing in the order named. The Beauty of Hebron is highly spoken of by those who have grown it, but neither the time nor the extent of its being grown here justifies its unqualified recommendation. The Early Ohio matures earlier, yields more, is of better quality, and keeps better than any other variety grown here. But from my experience with other varieties, I would say that it would not do so well in other localities. Late potatoes are not extensively grown. Our Summers are too dry and warm. The late potatoes almost stop growth during the latter half of June, and during July and August, and if they do not start again in September the yield is very light; while should they make a second growth, very frequently they fail to mature before frost, and as a result are of poor quality.

Potatoes require a loose, lively, light soil. Hence we avoid clay and select a soil with a good percentage of sand and humus. For late potatoes we prefer a northern slope; for early potatoes a southern slope. Sod, if well rotted, is much better than fallow. The sod should be plowed in the Fall, and re-plowed, or cut up with a pulverizing harrow, in the Spring. I prefer the latter. Harrow the ground until it is thoroughly fined, but do not roll or drag it.

The only fertilizer that I have ever used, or have known anyone else to use in this section, is barn-yard or stable manure. It should be thoroughly rotted. Potatoes will stand heavy manuring. Of the varieties grown here, Early Rose should be manured the heaviest, and Peachblow the lightest. If the ground were fallow, I would use manure liberally; and though a heavy sod, I would yet manure. In either case I spread the manure on the surface after plowing, and harrow it in.

I find that the man who can store potatoes conveniently and keep them properly, nearly always makes money by holding them till February or March. If you have a cellar that is thoroughly ventilated, cool, and dark, put the potatoes in it at once, though they are harvested in July, being careful to put them in bins raised from the floor, and not more than a foot deep in the bins. If you cannot observe every one of these points, put the potatoes in some airy (but as dark as possible) out-building. Moisture and light are the two agents most destructive of potatoes. Potatoes may be stored in boxes or barrels, raised from the floor; but I prefer shallow bins. This, of course, applies to storing in cellars. I have always succeeded in keeping potatoes well in pits.

Early potatoes are a decidedly profitably crop with us. The average yield is nearly two hundred bushels to the acre. I have raised about four hundred bushels per acre. But my late potatoes oftener proved unprofitable than profitable; and this is the common experience. The average spring price, for the last 20 years has been fully 50 cents per bushel.

Quincy, Ill. JOHN M. STAHL.

MAGNUM BONUM AND RURAL BLUSH.

I HAVE tried or grown thirty-five varieties of potatoes. Magnum Bonum, White Elephant and Rural Blush yield the best. Early Mayflower, Early Telephone and White Elephant are the best flavored. I planted a small plot of ground in the garden to Magnum Bonum and Rural Blush; the Magnum Bonum yielded at the rate of 1,202 2-15 bushels per acre, the Blush yielded 1,030 bushels per acre. I put hen manure and wood ashes quite heavily on the ground, plowed the ground six inches deep, and raked it fine. I planted the potatoes one foot apart each way, and gave them two hoeings only, and left the ground level; planted one small piece in each hill; I think a fungus produces scab; the worst scabby potatoes I ever raised were on ground that had no wire-worms in it.

Onarga, Ill. H. H. CLARK.

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IDEAL FOUNTAIN PEN.

Every one who has any writing to do should have one of these delightful pens. It is not only worth its weight in gold, but is indispensable to every man who has occasion to write. For full description write to the Ideal Fountain Pen Co., 155 Broadway N. Y., for a circular. For a club of four subscribers we will give a No. 2, with a No. 5 pen, worth $4. For a club of five we will give a No. 2, with a gold-banded holder, or a No. 3, with No. 6 pen, either worth $5.

Either of these pens will be sent in a substantial case, prepaid in registered letter, and warranted to fit your hand, or be exchanged for one that does. You may step in and ask your pen dealer to show one, and get his price for it, and thus see that the best way is to secure it by getting up a club for the RURAL.

Please do not get the idea that this is a cheap stylographic pen or the penograph, or any other of the inferior pens. It is not, but a first-class gold pen with a hard rubber fountain holder, and one which we have used with so much satisfaction that, after trying all the others, we would not part with it for any price. Farmers, Clergymen, Boys, Girls, School-teachers, Everybody, here is a chance we wish you to embrace, for we know its value. No more useful or appropriate present can be found for a friend, and you can earn one with little effort. We should have calls for 500 at least. We know it will please all.

For Three New Subscribers.

You may select an Enterprise Meat Chopper No. 10, or two Knives, or a Knife and Pair of Shears, or a Pruning Knife, or a Pair of Folding Scissors, or a Pruning Saw, or a Wilson Whiffletree, or any one of the following books: Home Studies in Nature, Wallace's Ben Hur, Boots and Saddles, The Man Wonderful, Beecher's Life Thoughts The Rose, Successful Men, Talks to Farmers.

The best sewing machine in the world, working upon an entirely new principle, will be given to agents for 40 subscribers—freight paid. Lowest retail price, $60. We guarantee it in every way. It must not be classed with the low-priced sewing machines offered by other Journals. It is worth $60. See Premium List, which will be sent to all applicants.

What You Can Get.

By sending One new Subscriber.

List 1.—Any PRESENT subscribers who will send us ONE NEW one, may select any one of the following: 12 plants of the Marlboro Raspberry, or 12 plants of the Rancocas Raspberry, or six plants of Golden Queen Raspberry, or eight plants of the Jewell Strawberry, or three plants of the Earhart Everbearing Black-cap Raspberry, or one Poughkeepsie Red, or one Ulster Prolific Grape Vine, or a combination Saw Set, or a beautiful Silver-Plated Butter Knife, or either "Needle Work" or Knitting and Crochet," by Jennie June, or any book of the "One Syllable Series." See REGULAR Premium List.

Twelve subscribers will entitle the sender to a Lewis Force Pump, or a Universal Scale.

Five New Subscribers.

Will entitle the sender to a Cole Plow, or a Keystone Washer, or a Syrup Pitcher, or a half-dozen teaspoons or forks, or a game bag.

Six New Subscribers.

Will entitle the sender to the Field Force Pump, $6, and worth to any fruit grower or any house-holder, twice the money, or an Accordeon, or a Perfect Milk Pail, or Keystone Wringer. See regular Premium List for full descriptions.

What You Can Get for Eight New Subscribers.

Eight subscribers entitle the sender to a Shepherd Lawn Tennis Racket, or a violin with a bow and case complete, or an Eclipse Post hole digger.

Ten subscribers will entitle the sender to Nature's Serial Story by E. P. Roe, or a combined anvil and vise, or an Accordeon.

What You can get for Four New Subscribers.

A No. 2 Ideal Fountain Pen and Holder, with filler and case; warranted to fit the hand and please, or a No. 22 Enterprise Meat Chopper, or an Emmerson Cross-cut Saw, or any of E. P. Roe's Works, or a Farm Bell worth $5. or a Wheeden Toy Engine.

The Enterprise Meat-Chopper.

Every family should have one. Size No. 10 *will thoroughly cut one pound in a minute. The meat is chopped—not mashed. The machine is simple and durable. The price is* $4.00, *and we give it for three subscribers. The RURAL sells nothing except the R. N. Y. The No.* 22 *cuts two pounds per minute. Price* 4.00, *Given for four subscribers. This is the size you should have. Address The Enterprise M'f'g Co., cor. 3rd and Dauphin Streets, Philadelphia, Pa., for circulars.*

Thirty-two subscribers will entitle the sender to a Sun Type writer.

THE BEAUTIFUL POSTERS

OF THE RURAL NEW-YORKER WILL GLADLY BE MAILED WITHOUT CHARGE TO ALL WHO APPLY FOR THEM.

7. Fifty subscribers entitle the sender to a Syracuse Sulky Plow complete, with extras, and freight paid, if not amounting to over $2.50.

8. Fifty-seven entitle to $57 Mystic Range.

OUR ONLY TERMS.—Yearly subscription postpaid (52 weeks), $2.00; half yearly (26 weeks), $1.10. Payment invariably with the subscription. This Premium List holds good until July 1st, 1886.

FOR TWO NEW SUBSCRIBERS.

Any one sending two New subscribers, may select any three of the plants for one subscriber or a Niagara Grape Vine, or a Louderback's Combination Tool, or a Needle Hay Knife, or a Pearl Rug Maker, or a Dust-pan, or a Pair of Shears, or a Knife, or a Shot Flask, or a Watch Charm, or a Harmonica, or a Premium Drill, or "Stop Thief" Scale, or any one of the following books: American Political Ideas, Uncle Tom's Cabin, Fruit Culture, Talks Afield, How to Paint, Low Cost Houses, Comforting Thoughts, Highways of Literature, Boy's Useful Pastimes, What Girls can Do: Simple Ailments of Horses.

THE SEED DISTRIBUTION

of the RURAL NEW-YORKER is sent to all REGULAR subscribers who APPLY INCLOSING A STAMP. It is sent ONLY to REGULAR subscribers.

Eighty subscribers will entitle the sender to a Lady's gold Chatelaine Watch, or Pieper breech-loading shot gun, or a Bradley Mower.

These premiums are given by the Publishers *for procuring* subscribers, *not to* subscribers.

6. Forty subscribers entitle the sender to a No. 4 Avery Sewing Machine (see premium list), delivered, freight paid. For descriptive list, address the Company, 812 Broadway, N.Y.

THE Irish boil the potato "with a bone in it;" that is, they boil the tuber so as to leave a small, hard spot in the middle. Most people prefer to boil the flavor out of the tuber.....

POTATOES IN NEW COUNTRIES.—Old settlers tell marvelous stories of the prices obtained for potatoes in the days of the mining excitements in California and Colorado. The miners, living almost entirely upon salt meat and flour, were seriously troubled with land scurvy. Potatoes were found to be a corrective, and often sold for enormous prices. Many farmers made more at digging potatoes than the miners made at digging gold. In most new countries at the present time, potatoes are found to be a very profitable crop. In the great wheat-growing regions of the West, where most farmers rush into the cultivation of the staple grain, a few acres of potatoes always find ready sale at good prices. The same is true of the corn-growing countries, or even in the "cotton belt." It is the "odd" crop—the one not generally raised by the neighbors, that brings the most money. In the forests of Northern Michigan are found hundreds of small farmers who cultivate a few rough acres, that they have hacked out of the forest. These find the potato a most profitable crop. The tubers are sold for use in the lumber camps, where, on a ration composed for the most part of bread, pork, beans and potatoes, men perform the roughest and hardest labor known.

SEND IN YOUR SUBSCRIPTIONS.

Address the RURAL NEW-YORKER, 34 PARK ROW, NEW YORK.

A SPECIAL OFFER.

WE WANT EVERY RURAL FAMILY to raise a supply of small fruits, and to induce them to set a plot *this Spring*, we make this special offer to any present subscribers for 1886. For *one new* subscriber you may select:

Twelve Marlboro Raspberry Plants; or,
Twelve Rancocas Raspberry Plants; or,
Six Golden Queen Raspberry plants; or,
Three Earhart Ever-bearing Black-cap Raspberry Plants: or,
Eight Jewell Strawberry Plants; or,
One Poughkeepsie Red Grape-vine; or,
One Ulster Prolific Grape-vine.

For *two new* subscribers you may select any three of the above lots, or a two-year-old Niagara Grape-vine.

For *three new* ones you may select any three of the first seven lots and a two-year-old Niagara Grape-vine.

BETTER YET.

For *four new* subscribers, you may select *five* of the first seven lots, and in addition we will make you a special present of an extra nice two-year-old Niagara Grape-vine. The Niagaras, in every case, will be direct from the Company, and under seal. The other plants will be direct from the originators, and guaranteed genuine, and delivered free of charge. Any person not already a subscriber, can take advantage of any of these offers by adding his own subscription to the numbers herein specified.

To purchase these plants and pay freights on them, would cost more than we charge for the RURAL, with the plants included.

For instance:

Five lots of plants and freight included,	$10.00
The extra Niagara vine and freight,	2.50
Amounting for plants and freight,	$12.50
The five copies of RURAL,	$10.00
Making	$22.50

All of which we send for the $10.00; beside the free seeds to such as ask for them.

By a judicious selection of plants, and good care in growing and propagating them, in a single season you could supply the whole club with each sort. It is respectfully submitted whether these offers are not very liberal?

POTATO SPECIAL.

(*Continued from page 39.*)

results. The exceptions are when a June drought occurs (which is not common), and with the Peachblow variety which does best planted about the first of June. As we cannot foretell a drought, I plant all varieties but the last named early—in April if the weather permits. I grow the larger part of the crop with no manure except sod; I have never used commercial fertilizer with the crop, but I prefer well-rotted stable manure applied after the land is plowed and well mixed in by harrowing.

For my earliest planting, where there is danger of freezing, I fill the furrow with partly rotted manure after the seed is dropped, and put an inch or two of earth above. it. I think there is no crop which gives better returns for manure than potatoes. I find on our upland clay soils, that moderate hilling is better than flat culture, as there is less danger of the land becoming compacted by heavy rains; but on sandy, loose soil I should cultivate as level as possible. The first cultivation is with a harrow which fines and levels the surface and kills all the weeds that are starting; this should be done before the potatoes are up so as to be seen in the rows. If rains form a crust and start the weeds, a second, or possibly a third harrowing may be necessary, for the cultivation should be such as will keep down the weeds and keep the surface level until the plants are four inches high. At this stage we use a small bar or turning plow, running as closely to the row as possible and about four inches deep, turning the earth away from the plants. This stirs thoroughly all the soil except a strip four or five inches wide right in the row, and it cracks and mellows that. Within a week or less, according to the weather, we run through the rows with a cultivator, leveling the ground and bringing the earth back to the plants, and we cultivate often enough to keep them clean and the earth mellow until they fall and cover the ground, by which time we have them hilled about four inches. After they fall we go through with hoes, if necessary, and take out any weeds that start. Most farmers do nothing more after the vines fall, and as a consequence enough weeds grow to obstruct digging, and to seed the land for years to come. Usually less than a day's work to the acre will keep the crop clean, and if it took twice that time, it would pay.

It is now more that 20 years since blight or potato rot has prevailed to any great extent in my locality, and the only enemy which we consider worth noticing is the beetle. Nine years out of ten I use no remedy for it, but depend on such soil and cultivation as will give a thrifty plant, and find that the bugs do not harm the crop. In ordinary seasons I do not think it is reduced in yield one per cent. by the Colorado Beetle. The exception is when a dry and unfavorable Spring gives a plant of reduced vitality, and then we find it necessary to use Paris-green. I prefer to apply it in solution, as I think it more economical and effectual than in powder. I have been troubled with scab only on a few varieties, and these I have discarded.

I practice hand digging, unless the price of potatoes is very low, for I have never tried a machine for digging, that would not leave enough covered up to pay for digging if potatoes were worth 50 cents or more a bushel. We use both the fork, spade and potato hook, some preferring one, some the other. We always assort as we pick up: our plan is to first gather up all the marketable potatoes and as we do this, the rest are thrown into piles ten feet apart in every third row. This saves going over all the ground a second time. If possible, the potatoes should be taken at once to where they are to be kept, as every handling adds to their cost. As soon as picked up, pour them into sacks, filling them only half full; the sacks then will not need to be tied to load them on the wagon, and one man handles them with ease, and with a man in the wagon and two on the ground 40 bushels can be loaded or unloaded in less than five minutes. If your potatoes must be left in the field awhile, build a board shanty for them. Lay a smooth floor so that the scoop-shovel can be used when you come to rehandle them. I estimate that less than 1,000 feet of lumber will make a shed that will hold 1,000 bushels. If they are put in piles or into a shed with an earth floor, it will cost two cents a bushel to pick them up by hand, while to fill them into sacks with a scoop-shovel will not cost more than a quarter of a cent. If the assorting has been done in the field, after the large potatoes have been picked up, I go over the piles and make my selection for seed, and what are left are taken to the barn cellar, unless I can sell them to the bakers. If I can get 15 cents or more a bushel for them, I always sell.

The most profitable way to feed them is once a day to the cattle, giving from four to six quarts to each. I find they increase the flow of milk and keep the stomach and bowels in good condition. I think they are more valuable fed in small quantities in this way as a condiment, than when fed in large amounts.

I prefer to pit my seed potatoes, and also such as I intend to keep for a spring market. Select a piece of land that slopes so as to carry off all surplus water, remove the earth eight or ten inches deep and four feet wide, and throw it at the sides to be used in covering. Then pour your potatoes in a ridge with the sides sloping at an angle of 45 degrees, set up corn fodder against the sides nearly a foot thick—straw will answer, but I prefer fodder—above this put 18 inches of soil, and then, before the cold weather, cover the outsides with coarse manure, straw or fodder. I usually build a fodder stack over the pit, and in the Spring, find the cattle eat it well when taken to the barn-yard. Whatever material you use, be sure the potatoes are protected so as to endure any degree of cold. Great losses occur every year from carelessness in this respect. There is no farm product which it is so difficult to tell when the best time is to market: but as the time to sell in Spring is very short until new potatoes are in the market, and the potatoes shrink in weight, and deteriorate in quality, every day after Spring opens, it is wise to sell the bulk of the crop in the Fall, if a fair price can be had. I always sell the bulk of the crop if I can get from 45 to 50 cents a bushel.

I have never known a farmer to engage in potato growing and stick to it, who did not make money; and if he is thorough in the preparation of the soil and cultivation of the crop, he will find the seasons of short crops his years of greatest profit; for in these years the poor, slovenly farmer will fail entirely and the increased price will make the crop, though smaller than usual, bring the most money. I find it easier to grow 100 bushels of merchantable potatoes to the acre than 50 bushels of corn, and think a bushel to the square rod fairly within reach of the good farmers, and here in Ohio, it is rarely that potatoes sell as low as corn, and they are often double the price. I think the best rotation for potatoes is to follow with wheat and sow clover with the wheat, and then if the land is in good condition, and the clover not pastured at all in the Fall, it may be put in potatoes again the next year; but if allowed to stand in clover a year, I would not pasture closely, as a heavy growth of clover to shade the land and kill out the weeds, is desirable. If stable manure is used with the potatoes, a very heavy crop of wheat can usually be grown, and there will be a growth of clover in the Fall, that will insure a big potato crop without manure.

In early varieties of potatoes it seems as though our experimenters had nearly reached perfection; but in my judgment we need more varieties of late potatoes with the good points of the Peachblow and the fine table qualities of the best early kinds. The Peachblow is superior to any variety I ever grew in withstanding drought and in growing a profitable yield on thin, worn soil. On our loamy clay, which withstands drought well, I have never known this variety killed by dry weather; but it remains green until the fall rains, no matter how late they are in coming, and then the crop makes very quickly and 100 bushels to the acre can be grown without manure on land that would not pay for cultivating if planted in the quick-maturing varieties. Another advantage of varieties which, like the Peachblow, may be planted in June, is that a heavy growth of rye or clover can be made and turned under before planting time, which not only furnishes plant food, but also keeps the land loose and moist through drought. We need more late varieties because a drought which greatly injures the early crop, is invariably followed by rains which will insure a good yield to a late maturing one, and I suggest the Peachblow as one of the parents of new late varieties.

Butler Co., Ohio.

THE RURAL'S POTATO TESTS.

THE results of the RURAL'S tests of new potatoes are given below in a condensed form for the benefit of those who are seeking to compare new varieties. Our older readers will understand the condition of soil, cultivation and fertility under which these tests are made. To our newer readers we may say, in brief, that the soil on which these tests are made is a moist, mellow loam, a little inclined to clay. Concentrated potato fertilizers are used at the rate of 1,200 pounds to the acre. The tubers are planted in trenches five inches deep and covered, first, with an inch of soil and then with the fertilizer, after which the trench is filled up with earth to the surface. The surface is never hilled up, but kept as level as possible. Cultivation is done with wheel cultivators and hoes.

WALL'S ORANGE.—Oblong, sometimes roundish-oblong, always flattened; skin buff, splashed with purple; purple eyes; yield, rate of 506.66 bushels; quality fair.

EARLY OHIO.—Seven to ten days earlier than Early Rose and its equal in quality; rate of 300 bushels.

EARLY SUNRISE.—Oblong; white skin, sometimes pinkish, with superficial eyes. dug Aug. 19; rate of 250.33 bushels; flesh white; excellent—dry and mealy.

QUEEN OF THE VALLEY.—Skin white, mottled; eyes not deep; dug Sept. 3; rate of 556.60 bushels; flesh white; fairly dry and mealy.

AMERICAN GIANT.—Flesh nearly white; shape variable; rate of 484 bushels; dry and mealy—as good as Early Rose.

PARSON'S PROLIFIC.—Roundish; rather irregular; eyes superficial; white skin; dug Sept. 27; rate of 537.75.

BROWNELL'S BEST.—Rather long, roundish; white skin, russeted; flesh white; rate of 684.42 bushels; dug August 28; dry and mealy; vines not vigorous.

NEW CONQUEROR.—Roundish-flat; rate of 414.75 bushels; dug August 28; tasteless; quiet dry and mealy.

ST. PATRICK.—Long; flesh white; rate of 524.33 bushels; dug Sept. 3: tasteless; not so mealy as some.

WHITE STAR.—Uniform, smooth; white; rate of 556.60 bushels; dry, mealy, tasteless; dug Sept. 3.

BURBANK'S SPORT.—Uniformly good shape; white skin; eyes superficial; rate of 429 bushels; dug Sept. 3; not quite dry or mealy.

BROOK'S SEEDLING.—Somewhat irregular; skin pinkish; flesh yellowish; rate of 566.50 bushels; dug Sept 18; quality best.

WONDER.—Roundish; flattened; russet-like skin; purplish about eyes; white flesh; rate of 205 bushels; not tested.

CHAUTAUQUA BEAUTY.—Long, tapering to one end; many eyes, not sunken; skin white, pink about eyes, slight purplish line under skin; rate of 206 bushels; best quality.

FAULTLESS.—Uniform; close together; skin buff and red; rate of 414.70 bushels; floury, dry, mealy and good.

WYSOR'S PEACHBLOW—White skin; yellow flesh often splashed with red; rate of 403.33 bushels; quality excellent.

MAMMOTH PEARL—Roundish, flat; light skin; rate of 514.21 bushels; "watery."

BELLE.—Skin buff and rose-colored; rate of 436.92 bushels.

MATCHLESS.—Roundish, flattened, smooth; white skin; rate of 411.44 bushels; quality best.

WAVERLY.—Shape of Beauty of Hebron; few eyes on surface; pinkish skin; rate of 326.70 bushels; dry and mealy.

INDIANA.—Oblong; deep purple, with buff streaks and blotches; rate of 473 bushels.

ROSE'S NEW SEEDLING.—Eyes superficial; oblong; regular; rate of 373.04 bushels; white, mealy, excellent.

FLORENCE.—Roundish, small; white skin; eyes not sunken; rate of 221.83 bushels; rather soggy.

EARLY HOUSEHOLD.—Fine shape; white skin; rate of 346.90 bushels; good quality.

PALISADE.—Long and tapering; white skin; rosy in some places; eyes on surface; rate of 161.33 bushels; quality excellent.

HAYNES' SEEDLING.—Buff skin, running to pink in places; rate of 393.21 bushels.

EL PASO.—Roundish; close in hill; skin buff; eyes rather deep; intermediate; rate of 438.60 bushels; early in season; flesh white and mealy. Later, yellowish white; not mealy.

JORDAN'S PROLIFIC.—Intermediate; skin light; numerous, not deep eyes; rate of 432.50 bushels; very good.

WINSLOW SEEDLING.—Skin rosy; eyes not deep; rate of 584.83 bushels; in shape and quality like Early Rose; later in maturing.

EARLY GEM.—Shape of Early Rose; early; rate of 695.75 bushels; best quality.

ARUNDEL ROSE.—Rose skin; eyes as in Early Rose; quite late; rate of 580.80 bushels, white flesh; mealy; mild flavor.

DAKOTA RED.—Oblong; irregular; flattened; skin, rose-pink or light purple; prominent eyes; rate of 314.60 bushels; flesh dark; not best.

MAYFLOWER.—Smooth and shapely; twice as long as wide; nearly white; eyes on surface; rate of 544.50 bushels; mealy and dry; flesh nearly white.

CRAWFORD'S EARLY.—Not uniform; early as Early Rose; white; rate of 383.17 bushels; dry and mealy.

PRIDE OF THE WEST.—Round and solid; white; rate of 382.30 bushels; dry and mealy. Same on heavy soil.—Intermediate; light buff skin; few eyes, not deep; rate of 760.46 bushels.

DUNMORE.—In clayey soil—roundish-oblong flattened; skin white; eyes not deep; rate of 532.40 bushels; flesh white; not quite dry or mealy.

JEWEL.—Roundish, flattened; skin white; eyes not deep; rate of 539.44 bushels; rather dry and mealy—heavy soil.

VERMONT CHAMPION.—Intermediate; oblong; slightly smaller at one end; white flesh; few eyes on surface; rate of 292.38 bushels; fine quality; good keeper.

NORTH STAR.—Roundish-flattened; large eyes; buff skin, splashed with purple; rate of 720.50 bushels; not very dry; quality very good.

LADY-FINGER.—Long and cylindrical; tapering at either end; eyes so set as to give a surface of little hills and valleys; skin buff-white; rate of 336 bushels; flesh yellow and inferior.

VICK'S EXTRA EARLY.—Roundish, oval flattened; skin white, smooth; often russeted; eyes nearly upon the surface; form and appearance perfect; dug July 20; rate of 370.55 bushels.

PEARL OF SAVOY.—Uniform in size and shape; skin, color of Early Rose; eyes not prominent; dug July 29; rate of 699 bushels.

JONES' PRIZE-TAKER.—Like Early Rose, with whiter skin; quite early; flesh, yellowish-white; quality, best.

WEST'S SEEDLING.—Smooth and shapely; eyes not deep; light buff skin; quite early; full-grained and breaking, but not quite dry.

HELTZEL SEEDLING.—*White*; shape of Early Rose; straggling in hill; early; flesh dark, not dry.

SAME.—*Red*; long-round, rather deep; many eyes; light purple skin, with streaks of buff; quite early; later than white; dark flesh; dry, nutty.

LADY FRANKLIN.—Late; oblong; not much flattened; eyes not deep; rate of 450.38 bushels; flesh not quite white; splendid keeper.

MERCER.—Flat-oblong; purple, with deep purple eye; rate of 484 bushels; flesh yellowish; excellent.

HODGMAN'S SEEDLING.—Skin white; eyes not very deep set; angular and somewhat flattened; rate of 1,361.25 bushels; yellowish-white flesh; not very dry or mealy.

GREEN MOUNTAIN.—Short and chunky, flattened and not very regular; skin nearly white; eyes depressed; rate of 1,391.50 bushels; flesh nearly white; coarse, dry and mealy; dug August 27.

EARLY MAINE.—Color of Early Rose, sometimes a deeper pink about the eyes; cylindrical—egg-shaped; rate of 616 bushels; dug August 19; flesh nearly white; mealy and good.

TREMONT.—Round-oblong—sometimes flattened; few eyes on surface; dug August 8; rate of 617.10: white flesh; quality fine.

UNDERWOOD No. 34.—Flesh nearly white;

eyes not deep—few; rate of 907.50; dug August 23; neither dry nor mealy on most soils.

SEEDLING.—From H. B. Williams; skin buff, inclined to pink; few eyes, not deep; white flesh; rate of 726 bushels; dug August 19: quite mealy.

CARNIVAL.—Irregular; skin mottled; buff and pink; flesh nearly white; quality fair.

SEEDLING OF EARLY OHIO.—Dark skin; from W. H. Cook; color of Early Ohio; flesh nearly white; rate of 564.66 bushels; dug August 4; quality not very dry.

SAME.—Light skin; oblong-cylindrical; rate of 561 bushels; flesh nearly white; dry and mealy.

MONTREAL.—Irregular shape: buff skin; eyes rather deep; large average size: dug Sept. 3; rate of 1,189.84 bushels; flesh nearly white; dry and very good.

ALEXANDER'S EARLY EXTRA.—Roundish-flattened; eyes few and prominent; rate of 544.50 bushels; dug August 15; not dry.

LATE HOOSIER.—Cylindrical; skin buff-pinkish about eyes, which are deep; flesh white; rate of 860.42 bushels; dug September 17; strong vines; fair quality.

POTENTATE.—Roundish-flattened—hollow at ends; few eyes, not deep; skin like Beauty of Hebron; white flesh; rate of 645.32 bushels; dug August 4; mealy and good.

BONANZA.—Quite shapely; eyes a little deep; skin rosy; rate of 786.50 bushels; dug August 18; quality fair.

GUELPH.—Roundish or oblong; eyes not deep; skin buff-white; rate of 421.67 bushels; dug August 22; quality fair.

HALTON.—Round cylindrical; eyes rather deeply sunken—though variable: skin pinkish; often russeted; rate of 524.33 bushels; flesh yellowish; dry and good.

CREAM OF THE FIELD.—Irregular cylindrical; often prongy: buff skin; eyes rather sunken; flesh yellowish; rate of 1,075.55; dug September 3; late intermediate; excellent.

STALWART.—Oblong, often tapering; buff-white skin, often russeted; eyes not deep.

NORTH STAR.—Skin buff, streaked and banded with purple; eyes rather deep; irregular, large at one end; flesh white; rate of 453.75; dug August 19; quite mealy.

BOUCK'S SEEDLING.—Oblong, somewhat egg-shaped; skin and flesh white; eyes on surface; late intermediate; mealy and good.

HOME COMFORT.—Irregular and ill-shapen; skin pink; eyes prominent and depressed, making surface hilly; rate of 968 bushels; dug Sept. 8; flesh yellowish; sweet and mealy.

SUPERLATIVE.—Irregular; eyes not prominent; buff and white skin; flesh nearly white with dark spots when cooked; rate of 872.25 bushels; dug Sept. 8; not dry or mealy.

Continued on Supplement, page 41.

For Women.

CONDUCTED BY MISS RAY CLARK.

A LAWYER'S SOLILOQUY.

I HAVE sat in my office all day,
And thought, and studied and planned;
I have rents and accounts I must pay,
And I've nothing to pay with on hand.

The lawyers having plenty to do,
And money at interest beside,
Are the ones where the clients all go,
When e'er a good case they 'll have tried.

I have always been honest and pure,
And never have championed the base,
And candidly hoped I'd secure,
My share of the business at least.

It is something I can't understand,
That my honesty all do commend,
While business they'll keep from my hand,
And to some trickster's office they'll send.

I have a wife and four children to feed,
And to clothe as becometh our station,
Many things we actually need,
While the future gives no consolation.

A small house I now own it is true,
But 'tis mortgaged for a thousand or more,
Our furniture—'tis simply not new,
And we owe several bills at the store.

I have waited and struggled and worked,
And hoped a good practice to gain,
While my efforts dame fortune has mocked,
And has duped me again, and again.

Now, had I my talents employed
At farming, mechanics, or trade,
And my foolish ambition destroyed,
A home for my family I'd made.

The money for study expended,
For library, clothing and board,
And getting admitted and started,
Would buy a farm fit for a lord.

I am sorry I did as I did,
My life I believe I have wasted,
On a farm I wish I had staid,
Where want we ne'er would have tasted.

C. L. N.

THE NEW YEAR.

THE practice of making good resolutions at the beginning of a new year is often ridiculed because the resolutions are too often forgotten before six weeks of the year have passed. But the practice is not a bad one.

Every one has a greater or less number of good resolves that enter his or her heart from time to time and only wait some good opportunity to be put into practice. The first of the New Year, if set apart as a time to think of good resolutions, will see these crystalizing into practical results. None will be made poorer by making a new effort in some wise direction. Not only may the overcoming of faults be put on a list of changes for the new year, but branching out into some new department of study or work ought to be included.

There are always obstacles in the way of a new venture of any sort, often many unexpected and trying ones, but these once overcome, the tide turns, and circumstances become helpful where at first they hindered. Expect opposition, discouraging times, and even partial failures, and prepare to meet them all with an unflinching, persistent determination to reach final success.

Does this sound like too much earnestness to put into New Year's resolves? If faults are to be overcome, the fight may last all the year; but what of it if victory crowns its close? I once heard the story of a woman's conflict with her temper, and it has encouraged me so often I will tell it briefly. She was a neat, careful housewife and her husband and children gave her occasion for scolding every day, by carelessly leaving scattered about hats, boots, books and numberless other things, and she never failed to scold them sharply. One day her husband retorted that "she was growing to be as great a scold as Aunt Lizzie Rixon," a woman whose scolding tongue made her the dread of half the country round. Without one word she went to her room and locked herself in, and all day long looked over her shortcomings, at first angrily and bitterly, then so despairingly that she almost wished to die. But at last a little grim hope led her to resolve to conquer her temper, and as an aid and a reminder she promised herself she would never reprove the children in a voice above an undertone.

She adhered to her resolve, and was often reproached and grieved to see how surprised the children looked when she gently gave them a word of reproof. Sometimes it took all the patience she could muster to see her husband throw his hat on the floor, his coat on one chair and his bundles on another, when he came in from business, and to leave them there, for the mere act of removing them would be done, she knew, in a spirit of reproof, if she allowed herself to touch them before her indignation subsided. And so she fought, and conquered her temper, and, in time, succeeded in training her boys and girls to adopt her own neat ways, and "papa's things" were always picked up by some of the little folks, and it became their pleasant task to meet him at the door and help him dispose of coat, hat and bundles.

What fault is most troublesome to yourself and your friends? Measure its strength now, and begin your fight with it for the New Year.

If it has long been an unexpressed wish that more time could be given to music, reading or study plan for it now. Begin with easy music and small volumes, simply written, and advance to larger tasks as the smaller ones are finished.

It may be in a family of girls, one has long intended to learn dress-making, that she may lessen the expenses, and also to fit herself to earn her own livelihood, if that should ever become necessary. Do this the coming year, if it seems a wise thing after further thought.

Dreams may be have been indulged of changing the plain, dingy, second-story room into a bright, attractive place, by the use of a little money, more time, and considerable "mother wit." Let those dreams become realities during the coming year.

Keeping accurate account of household expenses, cannot be begun at a better time than on the first of January—or personal expenses, both are of profit and interest. Many things can be commenced with the New Year. Each one can best determine what these are; but let there be something in each life to make the years, as they come and go, better and brighter. ALICE BROWN.

CONCERNING WINTER EVENINGS.

MUCH has been written of late on the subject of self-culture, home study and private courses of reading, and yet, notwithstanding, the whole is considered in general as a mere theory, and when the boy or girl leaves school, they shut up their books, content never to open them again. Men and women read, it is true, more or less. The majority find time to peruse the weekly paper, and occasionally a "good story," or a spicy magazine article. This is the ordinary literary pastime of many an intelligent farmer and farmer's wife, and even of many young people, whose long, winter evenings drag heavily on their hands, unless entertained by a chance caller, or some similar diversion. What shall we do with our winter evenings? This is an important question, and one to which various answers are given. Some young people manage to spend the majority of them among their friends, or at some place of amusement, while the remainder are passed in a very unsatisfactory manner at home. Lawful pleasure and enjoyment is a necessary part of human life, yet pleasure-seeking is by no means the end and aim of our existence, and when in such a position, we at once perceive the evil results, by that restless discontent that takes possession of us the moment our fund of pleasure is exhausted, and by the eagerness with which we look forward to another opportunity to gratify our inclination. If we only appreciated the value of these precious hours frittered away in senseless gaiety, realized that they were portions of the brief space of existence allotted to each of us, and that every hour is an opportunity presented but once in a lifetime for raising ourselves to a higher and nobler plane of existence. I say if we realized aright this fact, how much of regret might be spared us in after years. I do not desire to be considered as an enemy to lawful amusements, or as waging an indiscriminate warfare against innocent social pleasures, but only against the abuse of certain forms of either, against a tendency to make pleasure and amusement the chief business of the winter season.

But this is only incidental; our question is, how can these evenings, and spare hours in general be profitably employed? First let us see what they amount to in the aggregate. Counting four evenings per week, and three hours each evening for, let us say, 18 weeks, we find this is together equivalent to 216 hours. This at least can be considered a fair estimate of leisure hours at the disposal of most young people who are fortunate enough to have a comfortable country home, how much valuable information might be acquired every Winter by devoting this time to mental improvement! You may have had an excellent education in earlier years, yet there is much to learn, and the way is made all the easier by your previous habits of study. Or perhaps your education may have been defective; all the more reason then to retrieve what is not yet hopelessly lost. Never let the idea that you have education enough for a farmer or a farmer's wife keep you back from every possible endeavor to cultivate your mental powers. Remember that your occupation is not yourself, that labor with the hands does not degrade the man or woman, but that the benefits of a liberal culture will come to you as a farmer or mechanic, or housewife as much as though you occupied a higher position in the estimation of men. Again, do not allow your circumstances to influence you greatly in this matter. Knowledge is knowledge however acquired. A regular course of instruction under competent teachers is valuable, and yet very much may be gained by your own unaided efforts and diligence. What cannot the 216 hours rightly used accomplish in this direction? This may be answered from experience, if you care to make the trial. And here a little caution is necessary. Do not attempt too much. Concentrate your efforts largely in one direction. Much valuable time is lost by reading without order or system. Choose some subject which you desire to learn. Master first an outline of the subject, then you are prepared to branch out into details. Cultivate the habit of attention. Do not be afraid to *study*, and even memorize important points. Do not let reading take the place of study, but rather the opposite. This is the safest at first. Valuable works in history and science may now be purchased at a price which leaves no excuse for ignorance.

These hints and suggestions have been hastily thrown together as a result of wide observation and experience, and I trust that they may be useful to some reader of the RURAL. We have only to appreciate the value of our opportunities, in order to realize the duty of improving them. HOLLY DEAN.

Domestic Economy

CONDUCTED BY EMILY MAPLE.

NOTES.

THE results of the average cook are such as to make one wonder if a well-boiled potato is a thing purely ideal.

As potatoes are a standard article of food on most tables, try to serve them in as many palatable ways as possible.

Put potatoes on to boil in *hot* water. When done, drain off every particle of water, place on the side of the range for a few moments with the cover a little to one side to allow of the escape of steam, replace cover, shake or toss gently and serve at once.

As the best part of the potato lies nearest the skin, it is imperative that the peel taken off should be thin.

SOUPS.

NO. I.

I HAVE no exact measurements for this soup, as it is sometimes intended for a small family, and sometimes for a large one, but I find the following rules a sufficient guide. Measure into the pot one teacupful of boiling water for each member of the family, and another cupful to allow for escape in steam, etc. In this cook one medium-sized potato for each cup of water. Pare the potatoes and cut them in thick slices or squares. When they are tender, add flour enough for thickening, first stirring it into scorched butter, adding only enough flour to the butter to make it batter-like; if too thick, it will float in lumps in the soup. A heaping tablespoon of butter is enough for three pints of soup. Add a slice or two of well browned toast broken up fine; season with pepper and salt, and serve hot.

A. B.

NO. II.

Boil three or four thin slices of salt pork in two quarts of water for half an hour. Have peeled six or eight good-sized potatoes, cut in three or four pieces. Boil these with the pork until they begin to fall in pieces. Then thicken with a couple of tablespoonfuls of flour and butter well rubbed together. Stir well and when it boils up, the soup is ready. Salt, pepper and butter may be used for seasoning, according to the taste. The pork should be boiled half-an-hour before the potatoes are put in, and any scum that rises must be removed. AUNT RACHEL.

NO. III.

One pound of salt pork, one dozen large potatoes, two onions, seasoning, a spoonful of butter, a cup of new milk, one egg, three quarts of water. Boil the pork in the water one and a half hour. The boiling should be moderate and water must be added from time to time to supply that which has evaporated. Take out the pork, add the potatoes after peeling and slicing and the onions minced, and boil gently for an hour. Stir often. Add the butter, a dash of pepper, beat the egg and stir into the milk and add by degrees to the soup. Boil up and serve. MRS. E. F.

NO. IV.

To four quarts of water add six large potatoes chopped fine, two minced onions, two pieces of celery cut into bits, and a half teacup of rice. Boil slowly, stirring to prevent burning, one hour. Just before taking from the fire, add a lump of butter the size of an egg, worked smooth in a spoonful of flour and a cup of thin sweet cream. Season and serve with bits of toast. COOK.

NO. V.

Three pints of strong stock (the water in which you have boiled two pounds of cheap beef, mutton or veal), an onion, 12 good-sized potatoes, two spoonfuls of rice, one quart of cold water, two spoonfuls of butter, seasoning. Peel and slice the potatoes, cover with boiling water and cook ten minutes. Turn off this water, cover with the quart of cold water, add the onion minced and cook until the potatoes boil to pieces. Pass with the water through a colander into the stock, cook gently half an hour, add butter, the seasoning and rice, which should have been boiled tender in a very little water. Simmer five minutes longer and serve. MRS. ECONOMY.

MASHED POTATOES.

ONE dozen good-sized potatoes washed, and pared as thin as possible, thus leaving all the starch which is near the surface; cut in two, put into a kettle of boiling water and cover closely;

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cook till they can be easily pierced with a fork, which should be in about 20 minutes. Drain and place the kettle upon the stove to keep hot, and remove the cover to dry off the steam. Then sprinkle some salt over the potatoes, unless the salt has been put into the boiling water, and break them thoroughly with a fork. Add a half teacupful of sweet cream, or rich milk, and beat all together till the mass is as smooth as butter and as white as milk. Put it into a hot dish, shaping it into a nice pyramid and send to the table. To be eaten with butter or cream gravy. Very nice. MAY MAPLE.

NO. II.

When I want extra-nice mashed potatoes, I mash and season as usual, then break in two eggs, beat till light and puffy, then put in a white earthen baking dish, and bake in the oven till they are nicely browned on top. Serve in the dish they are baked in.

AUNT EM.

NO. III.

Mash as usual, heap upon a greased pie-tin, strew thickly with dry bread-crumbs, and then with small bits of butter and brown upon the upper grate of the oven. Slip carefully onto a hot, flat dish. KATE C.

NO. IV.

Mash, season, make into a cone shaped mass, cover with the whipped whites of two or three eggs (according to the quantity of potato), and brown delicately. The whites should be as stiff as for cake. A. E. M.

STEWED POTATOES.

CUT cold, boiled or baked potatoes into small pieces, add two or three hard boiled eggs which have also been cut into bits, a large spoonful of butter, salt, a pinch of Cayenne, and a large cup of milk. Heat through, careful in stirring to keep the pieces whole.

NO. II.

CUT cold boiled potatoes into dices, add a large lump of butter, salt and milk. Cook gently on back of range for twenty minutes.

COUNTRY GIRL.

OLD-FASHIONED FRIED POTATOES.

WASH, pare and slice very thin a dozen potatoes, more or less, according to the quantity desired, put them into a dish of cold water and let them stand a few minutes, or while you get the spider over the fire, with three or four spoonfuls of meat dripping. When hot, put in the potatoes, sprinkle with salt and pepper, cover closely and let them cook over a steady fire, stirring occasionally, that they may not burn, but brown evenly throughout; when tender, send them to the table. If well cooked, they are delicious though rather rich for dyspeptics.

MAY MAPLE.

FRIED POTATOES.

Peel the potatoes and slice thin, dropping them into cold water to prevent them from turning black. Have your skillet on the stove with a good bit of lard in it; when it is really hot, put in your potatoes, adding salt and pepper; cover closely, and put them where they will not burn. Let them cook thus about 15 minutes; then remove the cover, and let them cook faster, stirring well from the bottom very often with a knife. They should be a nice brown all through, and if rightly done will not be greasy.

I often cut the potatoes in small pieces, steam them, adding salt when I put them in the steamer, and after dishing them up, pour drawn butter over them, and turn them over with a fork; it makes a change in the taste which is agreeable. AUNT EM.

SLICED FRIED POTATOES.

Peel the potatoes and slice them in rather thin slices. Pour cold water over them, and let them stand an hour or more. Pour them into a colander to drain. Have ready on the stove the dish in which they are to be cooked, with two or three large tablespoonfuls of melted butter.

For a large family where quite a quantity is required, a long dripping-pan will be found convenient to cook them in. When the butter is hot, pour in the potatoes, and let them cook slowly on the top of the stove; sprinkle a little salt over them, and turn them often with a knife. As the grease is absorbed, add more that they may not burn fast to the pan. Let them cook until brown and tender—an hour is little enough time; for they need slow cooking to attain their best flavor. If but a small quantity is needed, the slices may be cooked singly in a dish, turning them when needed; but for a large dish, this would be too tedious. If butter is not available, lard that has been fried from salt pork will do; but butter gives the most satisfactory results. There is a sweetness about potatoes cooked in this way, which recommends them to every lover of this vegetable. AUNT RACHEL.

SALADS.

NO. I.

CHOP cold boiled potatoes fine with enough raw onion to season nicely. Make the following dressing to pour over, then set aside until time to serve. Rub very smooth the yelks of two hard-boiled eggs, add a teaspoonful of mustard, one of salt, the yelks of two raw eggs, a teaspoonful of sugar and a dash of Cayenne. To this mixture add sweet oil poured in by very small quantities beating all the time as long as the mixture thickens, then add vinegar little by little until as thin as desired. This dressing is very nice for cabbage.

NO. II.

Slice thin, cold boiled potatoes, put a layer in a salad dish. Cover with thin slices of hard-boiled egg, and strew with bits of pickled onion. When you have enough thus prepared, pour over a dressing made in the proportion of one tablespoonful of vinegar to three of salad oil (melted butter will do) one spoonful of salt to half the quantity of pepper and a teaspoonful of made mustard. Mix the salt, pepper, mustard and oil together, then add the vinegar very slowly, stirring fast.

MRS. B. WILSON.

PIES.

NO. I.

A coffee cup of grated raw potato, one quart of sweet milk, three beaten eggs, one large cup of sugar, a pinch of salt, cinnamon or nutmeg. Put the milk on to boil before grating the potato. As soon as the milk boils, stir in the grated potato. When cool, add the beaten eggs, then the sugar and seasoning. Bake with only an under-crust. This will be filling enough for two small pies. A. E. M.

NO. II.

One pound of warm mashed potatoes rubbed through a colander, two scant cups of white sugar, one-fourth pound of butter, six eggs, the whites and yelks beaten separately, juice of a small lemon, nutmeg or cinnamon. Cream the butter and sugar, add the potato, then the lemon juice, the yelks, seasoning, and, last, the whites. Bake without upper crust. Sufficient for two pies. Eat cold. Nicest eaten the same day as baked.

MARY B.

NO. III.

Ingredients for one pie: One cup of warm, not hot, mashed potatoes, one cup of sweet milk, two beaten eggs, one-half cup of sugar, a pinch of salt, nutmeg, cinnamon or lemon. Mix potato and milk to a smooth mass free from lumps, add eggs, sugar and seasoning. Pour into a pie-tin lined with pastry. Bake in a moderate oven. MRS. E. A.

DIFFERENT WAYS OF COOKING.

POTATO CAKES.

Take cold mashed potatoes, mix two beaten eggs with them, season if necessary, flour the hands and make into oblong cakes. Fry in beef-drippings and butter. Turn carefully when browned on the under side. "A."

POTATOES AND BEETS.

An excellent cook told me not long since that she boiled blood beets until they were tender, mashed them fine and mixed them with freshly boiled potatoes, and when seasoned with salt, pepper and butter, found them an agreeable change from the usual way of preparing both. AUNT RACHEL.

POTATOES WITH CHEESE SAUCE.

Boil 12 good-sized potatoes, mash, add seasoning, milk and butter. Make a cup of drawn butter (milk, butter and a very little corn-starch as thickening, with pepper and salt), into it stir two beaten eggs, and two spoonfuls of dry grated cheese. Put a round layer of potato into a pie-tin, cover with a thin layer of the drawn-butter sauce, cover this in turn with the potato, and so on until you have a mound, cover with the sauce, strew thickly with grated cheese, and brown in a quick oven. MRS. D.

POTATOES IN CASES.

SELECT large potatoes of equal size; when done, take from the oven and cut off a small piece from the top of each, scoop the inside out carefully with the aid of a small spoon; season liberally with butter, pepper and salt, and return with the spoon to the skins, allowing the mashed potato to protrude about an inch above the skin. When enough skins are filled, use a fork to make rough the potato that projects, and set in the oven to color the tops. These have the appearance of baked potatoes burst open.

POTATOES BAKED WITH MEAT.

PARE potatoes of same size, put them in the same pan in which roast-beef or poultry is baking. Every time the meat is basted, the potatoes should be basted also. Serve them around the beef. MRS. C.

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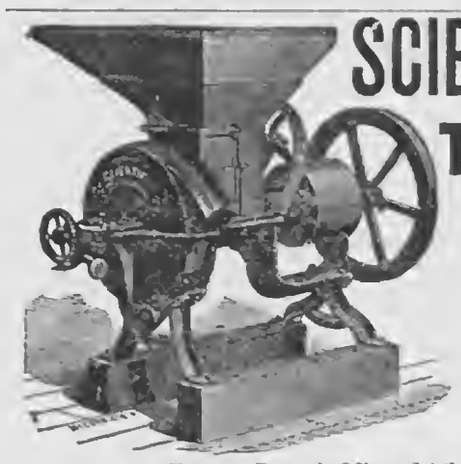

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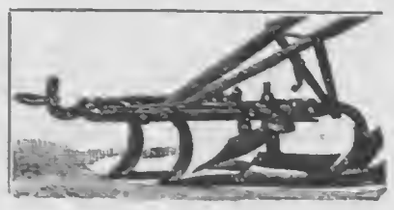

News of the Week.

HOME NEWS.

SATURDAY, Jan. 9, 1886.

THERE were 60 convictions for unlawful cohabitation under the Edmunds law in Utah last year. . The President has finally determined to appoint a successor to Judge Advocate-General Swaim, suspended. Swaim's case will probably be left with the courts for future action.. .. .A blizzard raged in the Northwest from Saturday to Monday —being especially severe in Kansas, Nebraska, Iowa, Colorado, Minnesota and New Mexico. Snow fell in large quantities, and was badly drifted; and railroad business was much interrupted in consequence. In Pennsylvania during the same period there were disasterous floods—the loss to lumbermen in one section alone being estimated at $3,000,000 ... ... The total earnings of the Northern Pacific Railway for the year 1885 were nearly $11,500,000. This is a decrease of about $1,200,000 as compared with 1884.. .The resumption of work in the iron collieries at Pittsburgh brings out the statement that the strikers lost nearly $2,000,000 in wages, and the operators have suffered to a large amount by the prolonged suspension.. . . .A vein of petroleum has been discovered at Park Hill, Ontario, 175 feet below the surface Small-pox has almost entirely disappeared from Montreal, though it is still playing havoc in some of the neighboring villages. In L'Assumption, a village 70 miles from Montreal, 60 cases are reported, and an "alarming outbreak" is reported from Ballyduff, Ontario. There are a considerable number of cases in and about Quebec. also . There are still reports of a threatened outbreak among the Black-feet and Blood Indians of the Northwest, who are greatly enraged at the recent hanging of some of their race, who were guilty of special atrocities during Riel's last rebellion. The Crees and Stonies are also said to be highly discontented, although at present working quietly. The "whites" of Manitoba are much displeased at these belligerent reports, as they tend to check immigration, which is earnestly desired in that Province, and accordingly they declare that there is no likelihood of further trouble in the Northwest .... In this city last year there were 35,696 deaths, 30,030 births and 11,716 marriages, as against, in the preceding year, 35,054 deaths, 30,527 births and 11,805 marriages. Thus the death list increased 662, and the number of births fell off 497, due possibly to the sudden cessation of foreign immigration.. ..... Ex-Senator Jonas, of Louisana, who was lately appointed Collector of the Port at New Orleans, is considered an "offensive partisan" on account of having used his office to secure his own re-election to the U. S. Senate. The Civil Service Commission is to investigate the matter, and meanwhile Jonas will not be "confirmed" by the Senate ... The New York Daily Commercial Bulletin of Jan. 5, estimates the fire losses in the United States and Canada during December at $9,200,000 and the aggregate loss during 1885 at $94,200,000, or $16,000,000 less than the previous year.. ... Forty-seven million bushels of grain were shipped from New York to foreign countries last year, and not one bushel of them in an American bottom. In 1884 there were two small shipments under the flag of the United States. Last year not one. Of the 1,192 vessels which carried this immense quantity of freight across the ocean in 1885, more than half were British. In round numbers, 44,000,000 bushels went in steamships and 3,000,000 in ships under sail . With regard to the commotion against Land Commissioner Sparks, Special Agent Webster Eaton, after examining a portion of the Duluth and St. Cloud districts, reported that 4,300 homestead entries had been made, all requiring five years' residence by actual settlers, and yet there were not 100 actual settlers living by farming on the soil in the whole region. The latest addition to the Canadian colony of American bankers and trustees is Judge Yates, of Peoria, Ill., a gray-haired old citizen and lawyer, who was put in charge of the unsettled estates and the funds of the widows and orphans of the community. He has contrived to steal about $250,000, most of which he has spent as he went along. When the storm was about to burst the venerable rascal slipt off to Canada between two days .. Secretary Whitney expects to see at least $10,000,000 voted for the increase of the Navy .... Prof. Greener, of Washington, Secretary of the New York Grant Monument Fund, thinks that half a million dollars will be raised for a memorial. He cuts down half on the original project. President Cleveland has just given $100. The Fund now amounts to $113,870 .....John Sherman has been renominated for the United States Senatorship by the Republican caucus of Ohio, without a dissenting voice. This insures his re-election . Chicago is to have a crematory. That one lately erected on Staten Island, near this city, is kept pretty busy..

It is rumored in Washington that the President is likely to supersede Gen. Crook in command of the Department of Arizona. The people there have been very much discontented at his manner of conducting the war against the Indians. Sheridan still continues his friend, however .... The President has refused to give official countenance to the "American Exhibition" in London. All along this has been a strictly private speculation, got up for profit by a few adventurers in the name of the American people. Many prominent Englishmen believed in their misrepresentations, however, and lent their names to the scheme. We have persistently refused to speak of it, though we have received "any number" of circulars, etc., about it ..... President Cleveland has made changes in only 643 out of over 4,000 offices filled by Presidential appointment, and of the 49,500 postmasters, only 7,000 have been changed ..... Dr. Alexander B. Mott, of New York, and other Americans, have organized and secured incorporation papers for the "American Institute of Hydrophobia," for humanitarian purposes only. The Pasteur system is to be practiced, and reliance is placed on public benevolence for most of the means to support the institute.....

For a full illustrated Description of our Free Seed Distribution for 1886, examine the Nov 14 issue. Preserve it for future reference It is sent to all applicants for specimen copies.

AGRICULTURAL NEWS.

SATURDAY, Jan. 9, 1886.

IN St. Paul, Minn., a company of Eastern capitalists is about to organize for the purpose of erecting elevators along the lines of railroads in North Dakota, which will be conducted on an entirely new plan. The company proposes to furnish to each farmer a separate bin in which to store wheat, and in this way, when he is ready to sell, he can always get the wheat which he delivered. It is also proposed to lend money at seven per cent. interest, to be secured by wheat in store... .. The legitimate outcome of the Chicago dressed beef industry comes in the moving of the packing-houses farther West into the heart of the cattle-raising region. If dressed beef can be shipped 1,000 miles in refrigerator cars, it can 2,000, and Hough & Dustin, of Lincoln, Ill., will build a monster packing-house on the Northern Pacific at Miles City, Mont. They will put up 10,000 tons of ice this Winter, and their establishment will be able to kill and pack 200 beeves a day .. . . Last Thursday Speaker Carlisle appointed the various committees of the House of Representatives for the current session of Congress. These have to investigate and report upon all legislation connected with the subjects embraced within the scope of their respective lines of supervision. Whenever a bill or resolution is introduced into the House, it is at once "referred" to the committee in charge of the subject to which it relates. The Chairman in charge of the Committee (his name always comes first) is by far the most important personage connected with it, as he can easily pigeon-hole any measure which may have been "referred" to his committee, if he is opposed to it, or push any measure he may favor. The Committee on Agriculture will have charge of all legislation relating directly to the agricultural interests of the country. It is composed as follows: Democrats—Hatch, Missouri; Aiken, South Carolina; Green, North Carolina; Winans, Michigan; Frederick, Iowa; Davidson, Alabama; Stahlnecker, New York; Morgan, Mississippi; Glass, Tennessee. Republicans — White, Minnesota; Funston, Kansas; Price, Wisconsin; Hires, New Jersery; Pierce, Rhode Island; Swinburne, New York; Gifford, Dakota. As the House is Democratic, of course, the majority of each Committee is Democratic, and so is the Chairman. Here is the Committee on Public Lands: Democrats—Cobb, Indiana; Henley, California; Van Eaton, Mississippi; Foran, Ohio; Laffoon, Kentucky; Stevens, Missouri; Landis, Illinois; McRae, Arkansas; Strait, Minnesota. Republicans—Anderson, Kansas; Payson, Illinois; Stephenson, Wisconsin; Jackson, Pennsylvania; Voorhees, Washington, Territory . ... The Tobacco Growers' Association at its convention at Buffalo last Wednesday, agreed to these three propositions: First—To ask Congress to levy a proper duty upon a whole bale of tobacco, not exempting any portion thereof. Second—To cause the duty on unstemmed tobacco to be fixed at $1.50, and stemmed $2. Third—That the standard of taxation shall be upon wrappers .. ..

The Indiana State Board of Agriculture has several branches of more or less importance to the farmers, which will hold their annual meetings at Indianapolis in the Agricultural Rooms. The Indiana Jersey Cattle breeders will hold their annual meeting January 19th. The Indiana Bee-keepers' Association will hold its meeting January 20th and 21st. The Indiana Short-horn breeders will hold their meeting January 26th and 27th. The swine breeders will hold theirs on the 28th, as will also the Indiana wool growers. Indiana farmers should make a note of the dates of these meetings, and make it a point to be present. The Fifth Ensilage Congress will assemble at the Grand Central Hotel, New York, on Wednesday, July 20th, at 10 o'clock A.M. The opening address will be by Mr. Geo. G. Smith, of St. Albans, Vt.—J. G. BROWN, Sec'y, 55 Beekman St., N. Y. .....

THE THORBURN POTATO.

This is, no doubt, the most valuable acquisition in the potato line ever offered. Messrs J. M. Thorburn & Co., of 15 John St., New York, now offer it for sale for the first time. They also send us a circular describing its merits, also giving the names of the distinguished growers from many sections who have passed judgment upon its value, by a trial of single tubers the past season. We advise our readers to send to the above-named firm for a circular. —*Adv.*

Crops & Markets.

SATURDAY, Jan. 9, 1886.

According to latest reports potatoes continued to rot to a greater extent than usual in most parts of the country as long as they could be examined. Were it not for the rot, the crop of 1885 would have been an exceptionally large one, and prices must have been low. Now it is likely that prices in Spring will be high in most places, but whether they will be high enough to compensate for shrinkage, rot and general deterioration, time will tell in each case. There is no general rule applicable to all cases. Returns will range from "very remunerative" to a "sad loss." The following was the average price per bushel on December 1, last according to private advices just received from the Department of Agriculture: Maine, 42 cents per bushel; New Hampshire, 44 cents; Vermont, 35 cents; Massachusetts, 67 cents; Rhode Island, 56 cents; Connecticut, 55 cents; New York, 45 cents; New Jersey, 54 cents; Pennsylvania, 47 cents; Delaware, 55 cents; Maryland, 49 cents; Virginia, 51 cents; North Carolina, 57 cents; South Carolina, 75 cents; Georgia, 94 cents; Florida, $1.27; Alabama, 97 cents; Mississippi, 76 cents; Louisiana, 84 cents; Texas, $1.00; Arkansas, 66 cents; Tennessee, 46 cents; West Virginia, 43 cents; Kentucky, 42 cents; Ohio, 39 cents; Michigan, 34 cents; Indiana, 36 cents; Illinois, 42 cents; Wisconsin, 47 cents; Minnesota, 40 cents; Iowa, 41 cents; Missouri, 39 cents; Kansas, 58 cents; Nebraska, 34 cents; California, 63 cents; Oregon, 36 cents; Nevada, 70 cents; Colorado, 61 cents; Dakota, 42 cents; Montana, 47 cents; New Mexico, 90 cents; Utah, 32 cents; Washington, 36 cents.

In 1884 the average price of the entire crop of potatoes was 40 cents per bushel. The lowest price was 25 cents in Michigan. The average in New York was 39 cents; in Ohio, 42 cents; in Indiana, 35 cents; in Illinois, 34 cents; in Iowa, 28; in Nebraska, 29 cents; in Kansas, 48 cents. The average price was two cents per bushel lower than in 1883, though the crop was not so large. In 1883 we had the largest crop ever grown in the United States. There was only a small advance in area over that of the previous year; but the yield went up from 78 to 91 bushels per acre, making a product of 208,164,425 bushels, or 38,000,000 bushels in excess of the previous crop. The average yield per acre for a series of years, according to the report of the Department of Agriculture, was 84 bushels. Owing to the abundant crop in 1883, the average price fell to 42 cents per bushel, from 57 cents in 1882. The last crop aggregated 190,263,068 bushels grown on 2,216,800 acres, and valued at $72,302,480. The crop, was, therefore, nearly 18,000,000 bushels less than that of 1883. Since the latter year, the consumption of potatoes has increased with the increase of our population. The loss from disease this year will be considerably more during the Winter than it was in 1883, and for both these reasons prices henceforth must be better than they were two years ago, when they averaged 42 cents per bushel.

AN immense business is done annually in New York City in handling potatoes, both for seed and home consumption. The great potato region of the State, north of Albany and west to Rochester, or beyond, finds an outlet for its product here. Add to this the thousands of bushels produced on Long Island and in New Jersey, and the product foots far up into the millions of bushels. The tubers are brought from the great potato fields of Northern New York in canal boats. These are securely lined with straw, with the hatches battened down. When shipped in this way after November, the tubers can be kept in the boats until wanted. Within a few years potato cars have come into use. These are lined so as to preserve an even temperature, and in some cases contain an arrangement for heating when necessary. In these cars potatoes are shipped in good condition from Northern Maine to New York. In fact, the recent improvements in shipping potatoes have about revolutionized the potato business. Large quantities are brought from Nova Scotia and adjoining Provinces. These arrive in good condition in small sailing vessels, and find good sale both as eating potatoes and seed. It is estimated that over 300,000 bushels have been received this year. The old Mercer, Beauty of Hebron and Prolific comprise the bulk of these imported potatoes.

Prices range from 25 to 30 cents higher at this market, as compared with prices last year. The quality is very inferior in every way. There are complaints from all consumers. Potatoes turn out soggy and heavy. This is due principally to the prevalence of rot during the past season, caused, generally, by the moist, hot weather. Some sections report a loss of at least 50 per cent. from this cause, while the potatoes saved seem, in many cases, somewhat affected. There is not so much trouble from scab, as heretofore. Many potatoes pricked or injured by careless digging injure the sale.

There is a good demand for Early Rose, from Maine, for seed, at $2.25 to $2.50 per barrel. The same sort from near at hand sell for less to be used for seed. Beauty of Hebron commands the same price, with less demand. Burbank is much the same. For domestic purposes, the Snowflake is decidedly the most popular, closely followed by Beauty of Hebron. For good keeping qualities, the Burbank is considered unsurpassed. Probably a dozen different sorts are sold under one or two names, in fact, to most potato buyers they are much the same.

Most large dealers prefer to buy about two or three weeks after the potatoes are dug —when the "sweating" process is done. They prefer to buy in bulk and do their own storing. Potatoes are sold to retail dealers in barrels. Most consumers buy them in small quantities, by the peck or half bushel. In this way they are compelled to pay tremendous prices. With some system of storage by which they could buy a barrel at a time, the price could be much reduced.

The potato business at this point is not equal in profit to the business of ten years ago. Too many have gone into it, and the improved transportation facilities have carried much of the business to other places.

The market for seed potatoes to be used at the South has heretofore been a valuable item, but much of this has now gone to Boston, Providence or Portland—nearer the fields where the seed potatoes are produced.

WHILE the Louisiana orange crop is larger than last year, the rust is worse, and this, it is believed, will probably about equalize the valuation of the two crops.

The California wheat crop is now estimated at 20,000,000 bushels, or from 5,000,000 to 8,000,000 bushels less than any former estimate.

Heavy snow storm in the Northwest last Sunday, became a rain storm as it traveled eastward. Little or no injury reported to the wheat crop. Roads all over the West very bad in the latter part of December; movement of corn and hogs therefore considerably checked. In Nebraska, farmers are getting from three to five cents a bushel more for corn on the car than they could get for it as shelled corn. It is to be held over for summer shipment. No snow and little frost yet south of the Ohio.

At Minneapolis, the flour production last week was 93,050 barrels, averaging 16,342 daily, against 77,200 barrels the preceding week and 107,460 barrels for the corresponding period of 1885. The list of mills running number 11, representing a daily capacity of about 15,500 barrels. The mills running are storing flour quite freely, and should the present state of affairs continue, it may become necessary to stop part of them. The exports of flour from Minneapolis for December were 98,000 barrels, against 138,800 barrels for November. The corrected figures for the year ending December 31, show the Minneapolis flour and grain trade for 1885 as follows: Receipts—Wheat, 33,500,000 bushels; flour, 21,468 barrels; mill stuff, 4,131 tons. Shipments—

Miscellaneous Advertising.

When Baby was sick, we gave her Castoria,
When she was a Child, she cried for Castoria,
When she became Miss, she clung to Castoria,
When she had Children, she gave them Castoria,

Wheat, 4,944,240 bushels; flour, 4,949,931 barrels; mill stuff, 144,252 tons. Following are the figures for 1884; Receipts—Wheat, 29,322,720 bushels; flour, 102,152 barrels; mill stuff, 5,253 tons. Shipments—Wheat, 4,586,960 bushels; flour, 5,317,672 barrels; mill stuff, 140,959 tons. Wheat now in store—Minneapolis, 1,216,751 bushels; Duluth, 5,364,966; St. Paul, 6,200,000. Receipts last week—Wheat, 55,440 bushels; flour, 54,530 barrels. Business very dull now.

BUY the Boss Zinc and Leather Ankle Boots. (Others become worthless soon as wet.) The zinc lined bowl keeps the boot in shape and place in wet weather, and lasts a lifetime. Sold by Harness Makers on 60 days trial. M'f'd by DEXTER CURTIS, Madison, Wis.—*Adv.*

A Cough, Cold, or Sore Throat should not be neglected. BROWN'S BRONCHIAL TROCHES are a simple remedy, and give prompt relief. 25 cts. a box.—*Adv.*

MARKETS BY TELEGRAPH.

SATURDAY, January, 9, 1885.

CHICAGO.—Compared with prices a week ago, regular wheat is 2¼c. lower; No. 2 Spring, 3½c. lower. Corn, 3¼c. lower. Oats, ⅝c. higher. Pork, 87½c. higher. Cattle, higher. Hogs, from 15c. to 20c. higher. Sheep, from 20c. to 25c. higher.

WHEAT.—Higher; sales ranged: January, 81¾@82⅜c; February, at 82@82⅝c.; May, at 87⅝@88⅝c.; No. 2 spring, at 81¼c.; No. 3 Spring, at 68@69c. CORN—Steady and quiet: Cash, 36⅜c.; January, 36⅜@36⅝c; February, 36⅜@36⅝c. May, 39⅜@39⅞c. OATS—Steady; sales ranged: Cash, 28⅜c; January, 28⅜@28⅝c; May, 31⅜@31⅝c. RYE—Steady; No. 2, 58c. BARLEY—No 2, 63@64c. PORK—Quiet: Cash, $10 25@10 30; January, $10 27½@10 30; February, $10 27½@10 32½; May, at $10 55@$10 65. LARD—Steady; Cash, $6 07½@6 10; December, $6 07½@$6 10; January, $6 07½@$6 10; February, $6 07½@$6 10. BULKMEATS—Shoulders, $3 70@3 75; Short rib sides, $5 10@5 12; Short Clear sides, $5 45@$5 45. CATTLE—Market strong; Shipping steers, $3 70@5 75; stockers and feeders, $2 75@4 25; cows, bulls and mixed, $1 75@4 00; bulk, $2 75@3 75. SHEEP—Market strong; Natives, $2 20@4 90; Western, $2 90@4 00; lambs, $4 00@5 50; Texans, $2 00@3 20. HOGS—Market steady; Rough and mixed, $3 75@3 85; packing and shipping, $3 85@4 20; light, $3 50@3 95; skips, $2 50@3 40.

ST. LOUIS—Wheat active. No. 2 Red, Cash, 90¼ to 90⅝c.; January, 90¾c.; February, 91⅞c.; May 97⅝c.; Corn dull; Cash, 33⅜@33⅝c., January, 33⅜@33⅝c.; February, 34⅛c.; May, 36⅝c. Oats dull; No. 2 Mixed, Cash, 29⅛@29⅝c.; January, 28⅛c., May, 31½c. Rye steady at 58c. Barley weak at 59@75c. Eggs steady at 16½@17c. Flax seed steady at $1 06. Pork, $10 40. Bulk meats—Long Clear, $5 10; Short Rib, $5 15@$5 20; Short Clear, $5 35. Lard firm at $5 95@$6 00. Cattle—Market active, Fair to Choice Native Shipping Steers, $4 00@$5 30; Native Butcher Steers, $3 40@$4 40; Cows and Heifers, $2 40@$3 60; Stockers and Feeders, $2 50@$4 00.

BOSTON—GRAIN—CORN—Quiet; Steamer Yellow, at 49½c; steamer mixed at 48½c; no grade at 46@47c. per bushel. OATS—We quote No. 1 white and barley at 43@44c; No. 2 white at 40c; No. 3 do. at 39c, per bushel. Small sales of RYE at 67@70c, per bushel. BRAN is steady at $16 50 for Spring and $17 00@17 50 for Winter; fine feed and middlings at $18 00@22 00, and cotton seed meal at $25 00 on spot and $23 00 per ton to arrive. HAY AND STRAW—Hay is firm at $19 00@20 00 per ton for choice and fancy, $17@18 for fair to good, $16@18 for fine, and $13@15 for poor and damaged. Western choice $16@17 do fair to good $14@15. Rye straw is held at $19@20 for choice, and $12@14 for common to good. Swale hay at $11@12; Oat straw at $9@10 per ton. PRODUCE—BUTTER—Northern creamery, choice to extra, 23@28c; good to choice summer, 17@22c; western creamery, 24@26c, for choice to extra; northern dairy, 22@23c, for Vermont extra; 18@20c, choice, and 12@16c, for fair to good; Western dairy, 18@20c, for choice, and 10@15c, for fair to good; imitation creamery at 15@25c, for good to extra; ladle-packed, at 17@20c, for choice. CHEESE—New York choice to extra, 9@10c. and common to good, 5@8c; Vermont choice to extra, 8½@9½c, and common, 5@7c; Western common to extra, at 4@9½c. Sage, extra, 11@12c, good to choice, 8@10c; EGGS—Cape and near-by, per dozen, 29c; Eastern extras, 27@28c, do, firsts, 25@26c; Northern, fresh, 26@27c; Western fresh, 23@24c; Provincial, 25@26c. BEANS—Choice Northern hand-picked pea, at $1 70@1 75 per bushel; do, do, New York, $1 60; do, do, screened $1 30@1 50; medium choice, 1 65; do, screened, $1 30@1 50; Yellow Eyes, improved, at $1 60@1 65; do, choice flats, $1 55@1 60; Red Kidneys, $1 80@2 00, Canada peas, 85c@$1 00 per bushel for common to choice. Green peas, Northern, at 90c@$1 00; do, Western, $1 20@1 25. Potatoes range at 45@50c. per bushel, as to quality.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, January 9, 1886.

STATE OF THE MARKET.—Compared with cash prices last week, flour is from 10 to 15c. lower; "regular" wheat, 1½c. lower; corn 1c. lower; oats 1c. higher; beans, 5c. to 10c. lower; pork, 12½c. higher; lard ¼c. higher; butter, a shade lower; cheese, steady; eggs, 1c to 1½c. lower; poultry 2c. higher; cotton, unchanged; fruit, unchanged; vegetables, steady.

FLOUR, FEED AND MEAL. FLOUR—Quotations: Fine at $2.15@$3.10; Superfine, $3 00@$3 35; Extra No. 2, $3 25@$3 60; Good to Fancy Extra State, $3 70@4 40; Good to Choice Extra Western, $4 00@$5 00; Common to Fair Extra Ohio, $3 25@$3 75. Good, $3 80@$4 20; Good to Choice, $4 30@$5 30; Common Extra Minnesota, $3 25@$3 65; Clear, $4 10@$4 50; Rye Mixture, $4 00@$4 35; Straight, $4 50@$5 00; Patent, $4 50@$5 60; Bakers' Extra, $4 10@$4 75; St. Louis Common to Fair Extra, $3 25@$3 80; Fair to Good, $3 85@$4 75; Good to Very Choice, $4 80@$5 50; Patent Winter Wheat Extra, $4 25@$5 50; City Mill Extra for West Indies, $4 75@$4 90; South America, $4 90@5 00. SOUTHERN FLOUR—Common to Good Extra at $3 50@$3 90; Good to Choice do., $4 00@5 40. RYE FLOUR—Superfine, $3 25@3 35, latter for choice. BUCKWHEAT FLOUR, at $1 95@$2 10, mainly at $2 00@2 10. CORN MEAL—Yellow Western, at $2 81@$3 15; and Brandywine, at $3 05@3 15. FEED For 60 lb. average at 77@82½c.; 80 lb. average at 75@80c.; middlings at 75@90c., and sharps at $1 00@$1 10. Rye feed at $16 50@$17 00.

GRAIN.—WHEAT.—Ungraded Winter Red, 86@89c.; No 1 Northern $1 00; No. 2 Red, 90⅝c.; No. 2 Red for January, 89⅝@90⅝c.; do. for February, 90⅝@91⅛c.; do. for March, 93⅛@93⅞c.; do. for April, 94@94⅞c.; do. for May, 95⅝@96⅛c.; for June, 96⅝@97⅛c.; do. for August, 98⅝@98⅞c. RYE—Western, 60@62c.; State, 63@65c. BARLEY—No 2 Two-rowed State at 70c. CORN—Ungraded Mixed at 44@49c.; No. 3, 45½@45⅝c.; Steamer Mixed, 47c.; Steamer Yellow, 48c.; No. 2, 49⅛@49⅛c.; Steamer white, 47⅝c.; No 2 Mixed for January, 49⅛@49⅝c.; do. for February, 48⅝@49⅛c.; do. for March, 48⅝@48⅞c.; do, for April, 48⅝c.; do. for May, 48⅝@48⅝c. OATS—No. 3 Mixed at 35c.; No. 2, 35⅝@35⅞c.; No. 1 nominal at 36c.; No. 3 White, 38@39½c.; No. 2 do. 40@40⅛c.; No. 1 nominal quoted at 42c.; Mixed Western, 31½@37c.; White, do., 38@43c., White State, 40@43c.; No. 2 Mixed for January, 35⅝c. do. for February, 36⅝c.; do. for May, 37c.

BEANS.—Quoted: Marrows at $1 65@$1 70; mediums at $1 50 pea at $1 50; red kidney at $1 90@2 00 for choice; turtle soup at $2 25; white kidney at $1 90@2 00 for choice.

PEAS.—Green are quoted at $1 15.

PROVISIONS.—PORK.—Mess quoted at $10 00@$10 50 $10 25@$11 00 for Family Mess; $12 00@$13 00 for Clear Back; and $8 50@$9 25 for Extra Prime. BEEF.—City Extra India Mess, $17 00@$20 00; Extra Mess, bbls., $10; Packet, $11 00@$12 00 in bbls.; Family Mess, $12 00@$13. BEEF HAMS.—Quoted at $16 50@$16 75. CUT MEATS.—Pickled Bellies, 12 lb, average, 5c; Pickled Shoulders, at 4⅝@5c; smoked do., at 5⅛@5⅛c.; Pickled Hams, at 8⅛@8⅝c.; smoked do., at 9⅛@10c. MIDDLES—Long Clear in New York quoted 5⅛c. for Western delivery. Long Clear, 5.15c.; Short Clear, 5.30c. DRESSED HOGS.—City Heavy to Light, at 5⅛@5⅝c.; Pigs, 5⅞c. LARD.—Western steam spot, at 6.37@6.45c; January, 6.40c; February, 6.42@6.44c.; March, 6.45@6.49c.; April, at 6.54@6.56c.; May, at 6.62c.; City Steam, in light demand, at 6.30@6.35c.; Refined Continent at 6.70c, and South American, 7.00c.

BUTTER—Western Creamery, 28@32c.; Elgin do., 33@35c.; State Dairy half firkin tubs, 18@25c.; Welsh tubs, 15@23c.; Western Factory, 12@20c.; Imitation Creamery, 18@25c.; Western Dairy, 12@22c.

CHEESE—State, 7½@10¼c.; Night Skims, 5¾@7c. Western flat, 7@9½c.

EGGS—State, 24c.; Western, 23@23½c.; Canadian, 17@20c.; Limed State, 19@19½c.; do. Western, 19c.; do. Canada, 19c.

LIVE POULTRY.—Spring chickens, 8c., fowls, Jersey, State and Pennsylvania, per lb, 10@11c.; do. Western, per lb, at 10c.; turkeys, per lb, at 9@10c.; ducks, western, per pair, at 60@80c.; geese, western, per pair, at $1.00@$1.50; pigeons, per pair, at 30@35c.

DRESSED POULTRY—Turkeys, 12@14c. for Philadelphia 13@14c per lb for Jersey, and 9@11c. per lb for western; chickens, Philadelphia large, at 16c. per lb; do. small at 14@16c.; fowls, Philadelphia, prime, 11@12c; do. Jersey at 11@12c.; State and western at 9@10c.

GAME—Quail, ℔ doz., $1 50@1 75; partridges, State and Pennsylvania, choice, per pair, at 75@85c.; do. Ohio and Michigan, prime, per pair, at 65@75c.; do. Minnesota and eastern, per pair, 40@50c.; grouse, prime, dry, per pair, at 85@90c.; do. inferior at 30@40c.; wild ducks, canvas, per pair, at $2 50@$3; do., red-head, per pair, at 75c.@$1; do. mallard, western, per pair, at 30@60c.; do., teal, blue wing, 30@50c.; rabbits, per pair, at 25@30c; hares, eastern, per pair, at 25c.

COTTON—The quotations, according to the American classification, are as follows:

	Uplands.	New Orleans. and Gulf.	Texas.
Ordinary	6 9-16	6¾	6¾
Strict Ordinary	7	7 3-16	7 3-16
Good Ordinary	7 15-16	8⅛	8⅛
Strict Good Ordinary	8⅜	8 9-16	8 9-16
Low Middling	8¾	8 15-16	8 15-16
Strict Low Middling	9	9 3-16	9 3-16
Middling	9 3-16	9⅜	9⅜
Good Middling	9 9-16	9¾	9¾
Strict Good Middling	9 13-16	10	10
Middling Fair	10 3-16	10⅜	10⅜
Fair	10 13-16	11	11

STAINED.

Good Ordinary	6⅜	Low Middling	7⅜
Strict Good Ordinary	7 1-16	Middling	8⅝

FRESH FRUITS—Quotations are: San Blas cocoanuts at $37 50@40 00. Apples—Baldwin, per bbl., at $1 75; Greening, per bbl, at $1 75@2 00. Grapes—Catawba at 6c. per lb, in baskets; Isabella at 3½c. per lb. Cranberries—Cape Cod, choice, per bbl., $7 50; do. fancy, $6@$6 50; good to prime, per bbl., $1 50@$5 25; do. light colored, per bbl. at $4 00@$4 50.; do. choice, per crate, at $1 75@$2 00; do, fair to good, per crate, at $1 50@$1 62. Florida oranges—Fancy at $3 25; Choice at $2 50@3 00; do. inferior at $1 75@$2. Florida lemons at $3 25@$3 75 for choice and $2 50@3 for fair.

DRIED FRUITS—Quoted: Apples—Fancy evaporated, 7½@7¾c; new, choice, 7c; fancy North Carolina sliced, new, at 4@4½c.; choice do. at 3¾@3⅞c.; choice Tennessee quarters at 2@2¼c.; State quarters at 3⅛@3⅜c.; North Carolina quarters at 2¾c. Peaches—Peeled North Carolina, choice, at 10@11c.; fancy at 12@13c.; extra fancy at 13@14c.; Georgia, choice, new, at 10@11c.; do. prime at 9½c.; unpeeled halves at 3@3¼c.; unpeeled quarters at 3c.; Delaware evaporated, peeled, at 24@26c. Choice pitted cherries at 10½@11c. Evaporated raspberries at 15c; sun-dried do. 10@11c. Blackberries—Prime at 8@8½c. Whortleberries at 7½c.

PEANUTS.—Quotations at 4½@4¾c. for best hand-picked, and 3@3½c. for farmers' grades.

HAY AND STRAW—Quotations are for: Choice timothy hay at 90 cents; good at 85c.; medium at 80c.; shipping at 75c; clover mixed at 70@75c.; No. 1 rye straw at 90c short rye straw at 65@70c. oat straw at 50c.

SEED—Clover at 9@9½c. as to grade. Timothy is quiet; quoted at $1 90@$2 00. Linseed nominal. Flax seed quoted at $1 30 delivered.

SUGAR—Fair Refining, 5⅛c; 96 test Centrifugal, 6⅛c; sales, 141 hhds, and 3,420 bags Centrifugal, 6⅛c; Cut loaf, 7 8-16@7⅛c; Cubes, 6 15-16c; Powdered, 6⅞@7⅛c; Granulated, at 6 13-16c; Mould "A," 6⅝@6⅞c; Confectioners' "A," 6 11-16c; Standard "A," 6⅝@6 7-16c. Off "A," 6c; White Extra "C," 5⅞c; Extra "C," 5⅝@5⅞c; "C," 5¼@5⅝c; Yellow, 5@5⅛c.

TALLOW—Prime City quoted at 4⅞c.

VEGETABLES—Potatoes—Long, Island Rose, bulk, per bbl., $2 00@$2 25; New York Rose, $1 75@$2 00; Eastern and Nova Scotia Rose at $2 00@2 25; Burbank, State, at $1 75@$2 00; eastern and Nova Scotia, per bbl, $2@2 25; Hebron, do, do, do, per bbl, at $2 00@2 25. Prolific and Goodrich, per bbl., at $1 75@$2. Sweet potatoes, Virginia, at $2 25@$2 50 per bbl. Cabbages, per 100, at $4@$5. Onions—Yellow, per bbl., at $2 75@$3; do. red, per bbl., at $2 50@$3. Turnips,—Russia, per bbl., at 50@62c. Marrow squash, per bbl., at 75c.; Hubbard squash, per bbl., at 50@75c. Cauliflower, per bbl., at $1 50@$3 50.

LIVE STOCK MARKET.

NEW YORK, SATURDAY, January 9, 1886.

TOTAL receipts for six days, 8,850, against 8,225 head last week. Shipments for the week 1,461 live cattle; 1,320 quarters of beef; 50 live sheep and 618 carcasses of mutton. Animals are generally heavy with a good many coarse and rough looking steers. Quite a range in price is noticed. Some very poor old cows sell as low as $1.50, while choice, high grade steers reach $6@$6.25. One bunch of 18 Kentucky steers, averaging 1,318 lb sold at $5.45. A small bunch of steers from Chicago averaging 1,317 lb, brought $5.80; these were extra choice grade Short horns of good shape and uniform color. Another bunch of 10 Pennsylvania steers averaging 1,420 lb, brought $6.15, while some Ohio steers 200 lb heavier, but of poorer shape, brought the same price. State oxen, fine shape and color, weighing 1,875 lb sold easily at $5.55. One bunch of oor cows averaging 936 pounds, brought only $2.40. The majority of animals offered ranged from 1,000 to 1,300 lb, with prices from $4.00 to $5.15.

CALVES are few in number. General average at about 290 pounds. Fed calves bring 3¾@4½c.

SHEEP AND LAMBS.—Receipts for six days 33,895 head against 28,407 last week. One bunch of 213 State sheep averaging 82 pounds reached 5c: another of 223 Michigan sheep averaging 78 pounds sold for 4½c. Good Pennsylvania and State lambs, averaging 65 pounds sold for 6¾c.

HOGS.—Receipts for six days 38,816 head against 23,216 head last week. Market steady at $4.30@4 40.

PRODUCE COMMISSION HOUSE
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S. H. & E. H. FROST,
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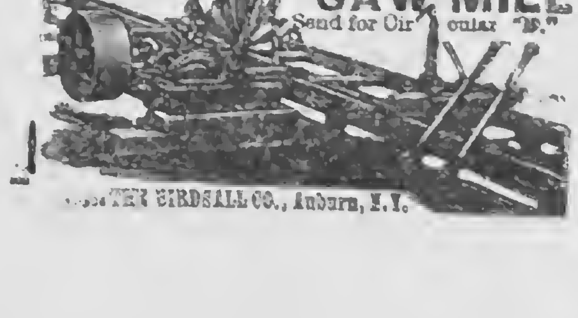
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Pelican Bone Fertilizer, } from bone

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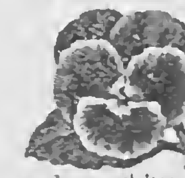
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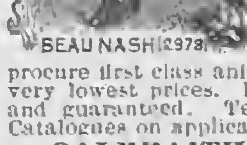
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AS AN EVIDENCE OF FAITH

in my remedy I make the following offer:

I will insure herds of swine of not less than one hundred in number against disease, at a small fee per head, provided they are fed my remedy under my direction and prove upon examination prior to contract that they are in a healthy condition, and are neither in-bred, close-bred nor the progeny of such.

1. I will forfeit $100.00 to any breeder whose offer to examine for insurance I decline, provided he forwards remittance to cover my expenses to and from location of hogs, or I fail to prove to the satisfaction of any disinterested party, that failure to respond to invitation is caused by prior engagement or by matters of at least equal importance.

2. I will forfeit $500.00 if I decline upon examination to insure such herds, if my judgment as to their condition of health is overborne by the result of an examination made by at least two properly qualified and graduated veterinary surgeons.

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GIBSONTON P. O., PA., Feb. 2, 1885.

Dr. Jos. Haas—Dear Sir: About a year ago our herd here numbered about 2,700 head. Disease broke out, and no remedy we had would arrest the trouble. Our losses were heavy and we had to give up feeding entirely for about two months. We then heard of your remedy and bought a trial lot, and began feeding again. We have used it constantly ever since. We have since April last received about 5,000 head of hogs into our herd and have not had a single death from swine disease. This is our experience. Our opinion is that the remedy has prevented disease, and we would not think of being without it. As an aid in fattening pork, we believe it to be good. On this point, however, we have not made an actual test, *as we would not risk feeding a pen of hogs without the Remedy.*

Yours very truly, WHITE & CO.

[N. B.—White & Co., since writing the above letter, have purchased $450 worth of the remedy.]

The remedy can be procured of all Druggists, or from my laboratory. Prices, $2.50, $1.25 and 50 cts. per package. 25 lb. cans, $12.50.

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Member of Indiana State Veterinary Med. Associat'n
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Subjects the soil to the action of a Steel Crusher and Leveler, and to the Cutting, Lifting, Turning Process of Double Gangs of Cast Steel Coulters. Immense cutting power. Crushing, Leveling and Pulverizing performed at the same time. Entire absence of Spikes or Spring Teeth avoids pulling up rubbish. Only Harrow that cuts over the entire surface of the ground. Sizes, 3 to 15 ft. wide. With and without Sulky attachment. We deliver free at Distributing Depots.

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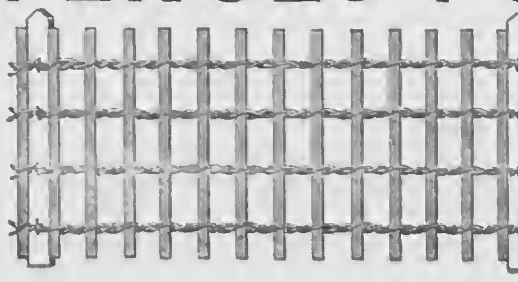
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Prettiest, Cheapest, and Most Durable. Can be made any size on our Standard Fence-Making Machine. Any farmer having 250 rods of fence to build can make a machine pay for itself. Owners of machine can then make from **$10** to **$25** a day selling fence to his neighbors and have a manufacturing business at home. Exclusive territory free. Agents that sell machines make from **$50** to **$100** a week. Illus. catalogue, terms, &c., free. **STANDARD MFG. CO. Cincinnati, O.**

For the Young.

THE BEAN PRIZES.

UNCLE MARK has waited patiently for the reports, and as he said last week, "time is up." A great many of the Cousins worked for the prizes and Uncle Mark is only sorry that they cannot all have some reward beyond the feeling that they have done their best. Many of the beans were killed by the frost, and the chickens captured many more. It was hardly a fair trial, in some respects, between Cousins in the far North and those in the South, for the latter had no hard frosts to contend with. It may be that next time we can get something that will make a more even trial. Now for the names of the winners—that, I suppose is the most important of all.

In Class No. 1, for the largest number from one bean, the first prize, a pair of club skates is won by Neal Eckerson, Marlboro, N. Y.

The second prize, a folding pocket microscope, is won by Judson W. Griblin, Virgil, Kansas.

In Class No. 2, for the largest number of beans from 15 beans.

Frank W. Elliot, Stone's Prairie, Ill., wins the first prize, a copy of "Little Men." The second prize, a microscope, goes to Coy Chamberlain, Marietta, Ga.

There was not a single pod reported containing seven beans.

In Class No. 4 for the largest number of pods containing six beans, the first prize, a beautiful autograph album, is won by C. Eugene Griblin, Virgil, Kans. The second prize, a microscope, is won by Lon Hall, Glen Cove, L. I.

In Class No. 6 for the largest number of pods on one vine, the first prize, a handsome knife, is won by Tullula Herron, Caldwell, Texas. The second prize goes to her sister, Mollie Herron.

Uncle Mark wishes to thank all the Cousins for the good work they have done in this contest, as well as their fathers and mothers who have superintended the counting. Those of us who have missed this time musn't feel badly about it, we shall have another chance someday, and then we may do better.

I think we had better call this our Bean *Special*. I have had some very good notes sent in with the reports, and I think we can learn something from them about bean culture.

The largest number of beans reported from one bean was 657; the largest number from 15 beans 13,801; the largest number of pods containing six beans 35; the largest number of pods on one vine 260. Jack Frost must have spoiled at least 100 chances, and the chickens, cut-worms, wood-chucks, rabbits, the wind, and even the cows seem to have had a spite against us. I don't think any of these prizes were lost through inattention or carelessness. I hope not, I am sure.

NEAL ECKERSON describes the culture his beans received, as follows: "After the ground was plowed and harrowed, furrows were opened five feet apart. Then barn-yard manure was put in the furrows the whole length of the rows and the manure covered with a plow, the ridges raked down and the poles set about four feet apart. Then a low hill was made around each pole and the beans planted one to each hill. They were kept well cultivated and had a top-dressing of ashes and plaster.

JUDSON W. GRIBLIN: They were the first Lima bean I ever saw, and all I knew about them was what I learned from the good RURAL. Kansas is not a bean-growing State, and I received them late (I do not remember the date, for I lost my book in which I kept an account of growth, etc., of my garden produce). As soon as I found out you were going to send them, I put a lot of ashes on the ground, which had previously been manured and plowed. I then spaded it and got it in fine condition, but by the time the beans came it was hard, so I did it all over again and planted as you directed. But I shall put them farther apart next time, they made such a rank growth. Every bean came up. They wanted to run all over and I had to keep busy making each one stay on its own pole, and nipping the ends off. The vines were full of blossoms and small pods when the frost came. The chicks and kittens seemed to know those beans were extra choice, and they took delight in climbing and flying up in the vines. I wish some of the Southern cousins would send me some cotton seeds, as I feel anxious to see it grow. I will in return send something.

Greenwood Co., Kan.

FRANK W. ELLIOT: I received 20 beans and planted them May 9. I first set the poles seven feet above the ground and two feet down. Then I hoed up small flat hills. I did not use any manure, as the ground was very rich garden soil. The beans all came up and I hoed them well. When they reached the tops of the poles, I picked out 15 of the finest of them for the prize.

COY CHAMBERLAIN: I have gathered 5,875, and Carl has gathered 3,465. We only tried for the fifteen hills, as we forgot to keep them separate two or three times when we first began to pick; so we had to give up trying for any of the other prizes. I don't know why I got so many more than Carl, unless it was because I hoed mine more than he did his; then, I planted mine a few days before he did, and they were in a more sunny place, and one of his vines was not much account; he never got but a few beans off it. Pa says its all owing to the cultivation, and it will be a good lessson for us, and show us what good, careful cultivation will do. The first beans I picked off from my vines was July 22nd, and Carl the 24th; and the last we picked was November 9; we picked and counted them as carefully as we could, but I don't suppose we got them all. Every time we picked them we would put down the number and the day of the month. We would have had quite a pile of them now if we had not eaten so many—they were just delicious. Ma says, the best she ever tasted.

LOU HALL.—I planted the beans you sent me on May 23; one bean in a hill, three by four feet apart, on good garden soil. Manured with good barnyard manure plowed in, and after Papa had made the soil fine by harrowing and raking, he made the hills and put in the poles. I used two handfuls of active phosphate in a hill well mixed with the soil. I received and planted 24 beans; 19 came up, and one dried up, or was eaten off by Mr. Cut Worm; but I stopped their fun by putting paper bands around them.

TULLULA AND MOLLIE HERRON:—We prepared a moderately rich plot by broadcasting and plowing under two bushels each of ashes and cow manure, after which the ground was thoroughly pulverized and leveled. A further addition of eight bushels of freshly-rotted cotton seed was hoed in broadcast, when the beans began to run. On May 7 the beans were planted 1½ inches deep, eyes down. On the 13th of May they were up. June 1 they began to run, when we gave them support. June 17, first bloom; Aug. 6, first ripe pod. They were cultivated, first time with shovel-plow, afterwards with hoes once a week until they bloomed, when they shaded the ground. They were planted three feet by two. They were pinched back as directed, but we think it won't do here. It makes them too late in bearing. It flooded through the latter part of May. June was very dry. July had light showers through the month; but on September 10 came the rain which made the beans. October 28 we had light frost, doing very little harm. On Nov. 7 came the killing frost, which found the vines very full of nearly grown beans.

LETTERS FROM THE COUSINS.

DEAR UNCLE MARK: I don't know as you want the Cousins to report on potatoes or not. I will send in my report anyway. First I will tell you what kind of ground we used and how we prepare it. First we plow up a two-year-old strawberry patch immediately after all of the salable fruit is picked; plant to corn and get a good crop; after this is gathered we fall-plow. In the following Spring we plow again and harrow thoroughly. Then lay off with a single horse plow and come back in the same furrow to loosen the soil in the bottom but not throw it out. We generally grow from two to three hundred bushels to the acre. For varieties we have White Elephant; Blush; White Star; Early Ohio; Dakota Red; Magnum Bonum; Wall's Orange; Granger; Early Sunrise; Early Harvest; Early Illinois and American Giant. White Elephant, White Star and American Giant are all long white potatoes. Blush we like better than any other, yet the Early Ohio is the standard early potato with most farmers around here. Dakota Red is not a good potato; it is wet and soggy when cooked, with us. Magnum Bonum keeps better than any other I know of, and is a good eating potato. Wall's Orange is of very good quality but rots more than some others. Granger is somewhat like White Elephant. Early Illinois and Early Sunrise are good, but Early Harvest rots too badly with us.

Your nephew,

Madison Co., Ill. WM. JACKSON JR.

[Many thanks for the report. It is a good one. Of course I want *all* the Cousins to report at any time they can.—UNCLE MARK.

DEAR COUSINS: The little girl that stays here wants me to write you a letter, so I have been trying to think of something new to write about. To-day it occurred to me to send the following; it is no made up story, but true, every word. I will write it just as I saw it. I was one day walking through what was then termed the Norris Orchard in company with a little boy about four years old. Suddenly the little fellow stopped and picked up a young dead robin that lay in the path. A few steps on he picked up another; before getting to the end of the orchard he had collected six of them. What could it mean; such a slaughter of the little birds; I was never more puzzled in my life, I could scarcely sleep that night for thinking about it. The next day, however, the mystery was explained. I had occasion to pass the same way; as I entered the orchard I noticed the little bird parents were hopping and fluttering from tree to tree in the most frantic way, uttering such pitiful cries, as if their little hearts were completely broken. I looked on a few rods ahead and there with a long pole in his hand stood old Norris, as he was called. He was thrashing and twisting the pole about amongst the branches of a big apple tree, while a gun stood leaning against the tree. I stepped back a few paces unobserved and watched him. In the course of a few minutes a nest full of young robins fell at his feet. He dropped the pole and commenced to mash the little peeping things with the heel of his big shoe. I was thunder struck; I walked up to him and asked what he meant by such cruel and wicked actions as these, and got for answer that birds were no good, they ate his peas and he was bound to kill every young one that was hatched on his place. I found I couldn't reason with him, so I turned and hurried from the spot. Now, dear Cousin what have you got to say to my story? I think I hear the boys say, "What a cruel man, I do not want to be like him. I will never rob another nest or shoot another bird while I live;" and the little girl, I know her well enough, for I was once a little girl myself, she will ask her Mamma to please not put the bird's wings in that lovely new hat of hers, or if it is already there she will ask her to please change it and put something else in its place. Am I not right? MARY WALEY.

Gales Ferry.

[I am sure you are right, and I will venture to say that farmer Norris felt the loss of these little bird-workers that he killed. The birds help us more than we know, and it is not only wicked but foolish to kill them.—UNCLE MARK.

UNCLE MARK: I received the beans which you so kindly sent. What particular kind are they? Many pods were on the vines when frost came. Beans are easily digested, and strengthen the body more than any other vegetable. The nutriment greatly resembles that of meat, so that it supplies the place of animal food to a great extent. The potato cannot do this. "Both experience and chemical analysis tend to prove that legumes [beans, peas, etc.] are the most nourishing part of the vegetable kingdom," says a noted German agriculturist. Peas are like beans, but they are not so sure a crop. If my letter goes into the waste basket, I can console myself with the fact that that is the place where it belongs. Rabbits are very plenty here. A great many are killed, but there are plenty yet. A neighbor is trying a food steamer. He thinks it a good thing. Crops were poor last Summer in this vicinity. Cause, too much rain.

JOSEPH JONES.

Prescott, Kan.,

[Challenger Lima Beans. You must not be too sure about the destination of your letters. Beans make an excellent food. It would be well if they could be eaten more frequently than they are.—U. M.]

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PATENTS THOS. P. SIMPSON, Washington, D. C. No pay asked for patent until obtained. Write for 'Inventors' Guide.

HOME STUDY. Book-keeping, Business Forms, Penmanship, Shorthand etc thoroughly taught by mail. Low rates Circulars free. BRYANT & STRATTON'S, Buffalo, N. Y.

Cards Free Sample Book of beautiful Cards, Novelties, Jewelry, etc. Send 2c. stamp for postage. STAR PUBLISHING CO., Birmingham, Conn.

WORK FOR ALL. $30 a week and expenses paid. Outfit worth $5, and particulars free. P. O. VICKERY, Augusta, Maine.

CARDS! 60 Fancy Pictures and 25 Elegant Cards in Gilt Edge, Silk Fringe, Hidden Name, &c, 1 Songster, 1 $50 Prize Puzzle, and 8 Parlor Games all for 10 cts. Game of Authors, 10c. IVY CARD CO., Clintonville, Ct.

300 FOR 10c. GAMES, Puzzles, Parlor Magic, Conundrums, Songs, Album Quotations, Embroidery Designs, and pack of Name Cards, Gilt Edge, Silk Fringe, Hidden Name. TODD CARD CO., Clintonville, Ct.

GOLD MEDAL, PARIS, 1878.
BAKER'S
Breakfast Cocoa.

Warranted *absolutely pure Cocoa*, from which the excess of Oil has been removed. It has *three times the strength* of Cocoa mixed with Starch, Arrowroot or Sugar, and is therefore far more economical, *costing less than one cent a cup*. It is delicious, nourishing, strengthening, easily digested, and admirably adapted for invalids as well as for persons in health.
Sold by Grocers everywhere.
W. BAKER & CO., Dorchester, Mass.

W, R & CO'S IMPROVED BUTTER COLOR
IF YOU REALLY WISH to use the very best Butter Color ever made; one that never turns rancid, always gives a bright natural color, and will not color the buttermilk, ask for Wells, Richardson & Co's., and take no other. Sold everywhere.
MORE OF IT USED than of all other makes combined. Send for our valuable circulars.
WELLS, RICHARDSON & CO., Burlington, Vt.

HUMPHREYS'
Homeopathic Veterinary Specifics for
HORSES, CATTLE, SHEEP, DOGS, HOGS, POULTRY.
Used by U. S. Governm't.
Chart on Rollers, and Book Sent Free.
Humphreys' Med. Co., 109 Fulton St., N. Y.

BEST TRUSS EVER USED!!

Improved Elastic Truss. Worn night and day. Positively cures Rupture. Sent by mail everywhere. Write for full descriptive circulars to the
NEW YORK ELASTIC TRUSS CO.,
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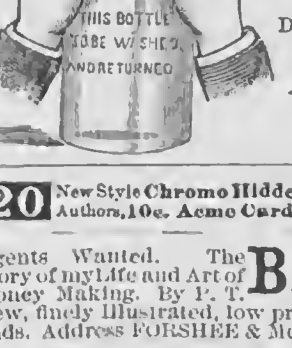
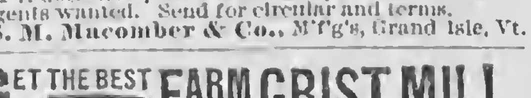
PURE MILK.
WARREN MILK BOTTLES
Patented March 23d, 1880.



Adapted for the Delivery of Milk in all Cities and Towns.
A Long Needed Want at last Supplied.
DESCRIPTIVE CIRCULARS ON APPLICATION.
A. V. WHITEMAN, R. N.
72 Murray St., NEW YORK.

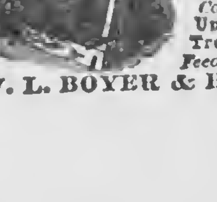
20 New Style Chromo Hidden Name Cards, 10c. Game Authors, 10c. Acme Card Factory, Clintonville, Ct.

Agents Wanted. The Story of my Life and Art of Money Making. By P. T. BARNUM New, finely illustrated, low priced. Selling by thousands. Address FORSHEE & McMAKIN, Cincinnati, O.



Macomber's Hand Planter, *for Corn, Beans, and Beet Seed.* The best in the world. Money refunded if it does not prove satisfactory, after a fair trial. Agents wanted. Send for circular and terms.
S. M. Macomber & Co., M'f'g's, Grand Isle, Vt.

GET THE BEST FARM GRIST MILL



With *Cast-Steel Grinding parts, Steel Cob Crusher*, and Sieve for Meal. They take LESS POWER, do More Work, and are *more durable* than any other mill. *Send for Descriptive Catalogue.* Also man'f'rs of the Union Horse Power, with Level Tread. *Threshers and Cleaners, Feed Cutters, Circular Saws, etc.*
W. L. BOYER & BRO., Philadelphia, Pa.

PERSONALS.

THE boy Emperor of China is to be married in February.

EX-PRESIDENT Arthur is said to have an income of $100,000.

OF the eight candidates on the Presidential tickets of 1860, only Hannibal Hamlin survives.

THE health of ex-Vice President Wheeler, who has not been well for some time, is now better than it has been for several years.

THE ex-King regent of Portugal left his German-American widow—a Boston-born woman, by the way—a fortune of $4,000,000.

THE late Professor Edwin D. Sanborn, who was a distinguished and well-loved instructor at Dartmouth College, married a sister of Daniel Webster. Miss Kate Sanborn is one of his daughters.

MARSHAL BAZAINE is said to be living in Madrid in actual want. His wife has left him, taking her fortune with her, and the ex-Empress Eugenie will not even answer his begging letters.

GEN. LORD WOLSELEY'S appearance is decidedly effeminate, and when he speaks he accompanies each remark with a nervous shake of the head. He is disposed to be sociable, but is not a favorite with the "rank and file."

EX-UNITED STATES TREASURER SPINNER, whose signature on national bank notes mystified thousands of persons years ago, is now in Pablo Beach, Fla., in the enjoyment of exceptional health. He has passed his eightieth year.

SEVEN editors are members of the present House of Representatives. They are Boutelle, of Maine; Barksdale, of Mississippi; Haynes, of New Hampshire; Pulitzer and Merriam, of New York, and Scranton and Swope, of Pennsylvania.

RUMORS of Pope Leo's illness are confirmed. He is now admitted to be suffering from a dangerous affection of the bladder, and his appetite is very bad, and he often leaves his dinner almost untouched. Lately, too, after inviting guests to his table, he has several times been compelled to send them away before dinner was served.

MR. WHITNEY, the well known New-Yorker, who is now in Mr. Cleveland's Cabinet, is making changes in the Frelinghuysen house at Washington, that will cost at least $40,000. Mrs. Whitney is already very popular in Washington, as she was last Winter in New York, on account of her generous hospitality.

ROSCOE CONKLING has declined an invitation extended by the Grand Army post and prominent Hartford citizens to give an address in that city on General Grant. He says he has promptly declined all invitations to deliver lectures or addresses since his retirement from public and political life.

GEN. JUBAL A. EARLY is described as a venerable-appearing man, his long, white beard reaching to his waist and his bent figure indicating the rapid advance of extreme old age. He still draws a fat yearly income for lending his name as an attraction to lure greenhorns to invest in that monstrous swindle, the Louisiana Lottery.

GEORGE W. PECK, the "Bad Boy" humorist, is about 45 years of age, of good hight, and weighs about 160 pounds. He has light hair, wears a moustache and goatee, which is trimmed close. He was a cavalry officer in the Union Army, and has cleared $100,000 out of his "Bad Boy."

CLAUS SPRECKELS, "The Sugar King of the New World," as he likes to call himself, is said to derive an income of $5,000,000 from his sugar plantations in the Sandwich Islands. In his domain he wields the most autocratic power of any monopolist in the world. His home at Honolulu is like the dream of Sybarite. His wants are served an army of negroes.

M. JULES GREVY, who has been re-elected President of the French Republic, is a very quiet man and one of simple habits. He rises each morning at eight o'clock, sips his coffee or chocolate in his bedroom, and then, at about nine, begins to read his letters and papers. At 10 o'clock he goes down to his study and receives ministers, ambassadors, and other visitors, who come and go usually until midday. Then he rests for an hour, and perhaps helps his little granddaughter feed the ducks in the garden. At four o'clock he is usually found playing chess or discussing art and politics with his guests. He drives out afterward with his daughter, Madame Wilson, and on returning to the Elysée reads official documents and signs decrees until seven.

Miscellaneous Advertising

MONEY MAKERS

don't let golden opportunities pass unimproved; there are times in the lives of men when more money can be made rapidly and easily, than otherwise can be earned by years of labor. Write Hallett & Co., Portland, Maine, who will send you, free, full particulars about work that you can do, and live at home, at a profit of at least from $5 to $25 daily. Some have made over $50 in a single day. All is new. You are started free. Capital not required. Either sex; all ages.—*Adv.*

Trees, Seeds and Plants.

SEEDS, SEEDS, SEEDS

To our friends who have not already received it, we are ready to mail our New Catalogue of High Class Seeds for 1886.

J. M. THORBURN & Co., 15 JOHN ST. NEW YORK.

HALF A MILLION GARDENS

ARE ANNUALLY SUPPLIED WITH

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SEEDS EVERYTHING FOR THE GARDEN **PLANTS**

Our Seed Warehouses, the largest in New York, are fitted up with every appliance for the prompt and careful filling of orders.

Our Green-house Establishment at Jersey City is the most extensive in America. Annual Sales, 2½ Million Plants.

Our Catalogue for 1886, of 140 pages, containing colored plates, descriptions and illustrations of the NEWEST, BEST and RAREST SEEDS and PLANTS, will be mailed on receipt of 6 cts. (in stamps) to cover postage.

PETER HENDERSON & CO. 35 & 37 Cortlandt St., NEW YORK.

BURPEE'S SEEDS, FARM ANNUAL FOR 1886

Will be sent FREE to all who write for it. It is a Handsome Book of 128 Pages, with hundreds of new illustrations, two Colored Plates, and tells all about the Best Garden, Farm and Flower Seeds. Bulbs, Plants, Thoroughbred Stock and Fancy Poultry. It is the only complete catalogue of the kind published, and describes RARE NOVELTIES in VEGETABLES and FLOWERS, which cannot be obtained elsewhere. Send address on a postal to

W. ATLEE BURPEE & CO., PHILADELPHIA, PA.

FRUIT AND ORNAMENTAL TREES

SMALL FRUITS, BULBS, SHRUBS AND ROSES.

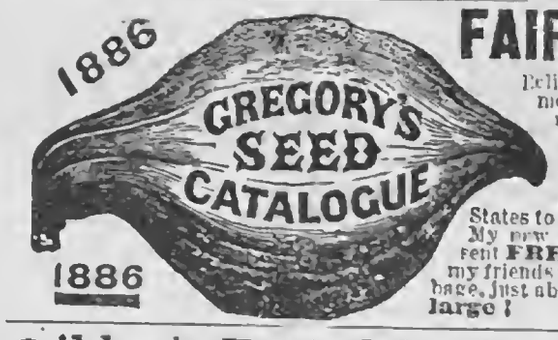
Special attention is called to our remarkably Fine Stock of

STANDARD AND DWARF PEARS

ALSO **GRAPE VINES** Including such kinds as Niagara, Jessica, Empire State, Willis, Frances B. Hayes, etc.

Prices reduced to suit the times. Correspondence solicited. Catalogue Free. 30th Year. 600 Acres. 21 Greenhouses. Immense Stock. **THE STORRS & HARRISON CO.** PAINESVILLE, Lake Co. Ohio.

GRAPE VINES Niagara, Empire State, and all the best varieties. Low prices for first-class stock. Jewell, Parry, May King, etc. STRAWBERRIES (several varieties $2 for 1000). New and Old RASPBERRIES, BLACKBERRIES, &c. Plants by mail a specialty. Descriptive Catalogue, with colored plates, Free; contains $1, $2, $3 and $5 collections, and instructions for planting. JOEL HORNER & SON, Merchantville, N. J.



FAIR AND SQUARE DEALING.

Believing that if a man has dealt squarely with his fellowmen his patrons are his best advertisers, I invite all to make inquiry of the character of my seeds among over a million of Farmers, Gardeners and Planters who have used them during the past thirty years. Raising a large portion of the seed sold, (few seedsmen raise the seed they sell) I was the first seedsman in the United States to warrant (as per catalogue) their purity and freshness. My new Vegetable and Flower Seed Catalogue for 1886 will be sent FREE to all who write for it. Among an immense variety, my friends will find in it (and in none other) a new drumhead Cabbage, just about as early as Henderson's, but nearly twice as large! James J. H. Gregory, Marblehead, Mass.

Sibley's Tested Seeds

Catalogue free on application. Send for it.
Hiram Sibley & Co.,
ROCHESTER, N. Y., AND CHICAGO, ILL.

APPLE SEEDLINGS.

Two years, extra choice, $3 per thousand.
Smiths, Powell & Lamb,
Syracuse, N. Y.

MOORE'S EARLY GRAPE.

We have reserved a limited quantity of well ripened wood of Moore's Early Grape which we can offer by the 1,000 eyes and upwards at a reasonable price. Orders must reach us soon to receive attention.
JOHN B. MOORE & SON,
CONCORD, MASS.

SMALL FRUIT & VEGETABLE PLANTS. Free Catalogue, full of useful information, contains 25 special offers, by mail. Be sure to send for this Catalogue before ordering plants.
C. BOGGS, Moorton, Del.

BIG BERRIES and lots of them can be grown if *you follow our method.* Free Catalogue describes all varieties. Also Eurhart Black-cap Rasp. A valuable novelty. *3 full crops each season.* Fruits from June to Nov. Hale Bros., *So. Glastonbury, Conn.*

MAULE'S SEEDS GARDEN

CANNOT BE SURPASSED.

New Seed Catalogue for 1886. *Free to all.* Best published. Over 75,000 copies already mailed.
☞ YOU OUGHT TO HAVE IT. ☜
Send your address at once on a postal card for a copy to
Wm. Henry Maule, 705 Filbert Street, Philadelphia, Pa.

"The Chase Nurseries"

Want Agents to solicit orders for a full line of fruit and ornamental stock. A GOOD OPENING FOR HONEST, ENERGETIC MEN. The business easily learned. Full instructions given. New England applicants address us at Boston, Mass.; York State and West, at Geneva, N. Y., Penn., N. J., Del., Md. and South, at Phila. State age. R. G. CHASE & CO.

POTATOES! Second crop. One barrel worth two of Northern seed. *All* that grow round potatoes should have my catalogue. *Free* with testimonials. J. W. Hall, Marion Station, Md.

Will be mailed FREE to all applicants, and to customers of last year without ordering it. It contains about 180 pages, 600 illustrations, prices, accurate descriptions and valuable directions for planting all varieties of VEGETABLE and FLOWER SEEDS, BULBS, etc. Invaluable to all, especially to Market Gardeners. Send for it.
D. M. FERRY & CO., Detroit, Michigan.

Cabbage Seed &c.

Long Island Cabbage Seed is the very best.
FRANCIS BRILL, Seed-Grower,
Riverhead, Long Island, N. Y.

Marlboro Raspberry, *Ulster Prolific and Poughkeepsie Red Grapes.* Send for description and price to A. J. CAYWOOD & SON, Marlboro, N. Y.

APPLE SEEDLINGS AND ROOT GRAFTS

of Apple, Pear, Plum and Cherry at LOW RATES. Send for prices and samples. Address,
BLOOMINGTON (Phoenix) NURSERY
Estab'd 1852. BLOOMINGTON, ILL.

CAULIFLOWERS AND HOW TO GROW THEM.

A new work with plain, practical and explicit directions in MINUTE DETAIL, for the cultivation and management of the crop. It will tell you which are the reliable varieties—How to prepare the soil—How to fertilize and what to use—How to sow the seed and grow the plants—How to protect them from insects—How to plant and cultivate—How to manage the crop—How to market the crop. By FRANCIS BRILL, of Riverhead, L. I., which is the centre of the famous Long Island Cauliflower District. It is a complete expose of our methods of cauliflower culture. Useful also to the cabbage grower. Price by mail, postpaid, 20 cents. Sold by FRANCIS BRILL, Riverhead, L. I., N. Y., and all dealers in Horticultural books. Prospectus free.

Reliable SEEDS

Our CATALOGUE of above for 1886 will be sent to all applicants on receipt of address.
R. H. ALLEN COMPANY,
P. O. Box 876. 189 & 191 Water St.,
New York City.
Special New Varieties of Potatoes.

BULBS AND PLANTS

FOR SPRING PLANTING.

Gladioli, Dahlias, Iris, etc., etc. Grown on the famous bulb farms of ANT. ROOZEN & SON, Overveen (Holland).

For Catalogue address the Sole Agents,
DEVEER & BOOMKAMP,
19 Broadway, New York.

HIGH BRED Seed potatoes one Brand worth two of Northern Seed. All that grow Irish potatoes should have my catalogue free with Testimonials. J. W. Hall, Marion Station, Md.

359 VARIETIES OF FRUIT TREES, VINES, PLANTS, ETC.

Apple, Pear, Peach, Cherry, Plum, Quince, Strawberry, Raspberry, Blackberry, Currants, Grapes, Gooseberries, &c. Send for Catalogue
J. S. COLLINS, Moorestown, N. J.

SEEDS FREE

Annual of all kinds of Seeds, Bulbs, Tools, &c. Contains prices, descriptions, planting directions, illustrations. Colored plates, &c. PRICES LOW. SEEDS RELIABLE. Livingston's Sons, Columbus, O. Originators of Acme, Paragon, Perfection, Favorite and BEAUTY for 8c. Pkt. 2 CTS.

SEEDS Large Garden Guide FREE to all. You should have it. Best varieties, all tested, at low prices
COLE & BRO., Seedsmen, Pella, Iowa.

Real Estate.

FOR SALE.
THE WELL-KNOWN AND HISTORICAL
"TEMPLE FARM."
500 Acres on Salt Water.
Chesapeake Bay, mouth of York River, adjoining York Town and Monument, near Fort Monroe, Old Point Comfort. Price very low, and on long time. Write for full description. Address
B. W. FORD, Richmond, Va.

WE SELL FARMS And all kinds Country Real Estate Everywhere. Catalogue FREE.
Phillips & Wells, Tribune Building, N. Y.

Virginia Farms.—Mild Climate. Cheap Homes. Send for circular. A. O. BLISS, Centralia, Va.

WILL YOU BUY A FARM, Mill, Hotel Stock, Goods, or Land anywhere, or Sell or Exchange, write *Hotchkin's Farm Agency and Traders' Exchange, Binghamton, N. Y.* Mention this paper. Lists free

VIRGINIA FARMS & MILLS For Sale & Exchange. FREE Catalogue.
R. B. CHAFFIN & CO., Richmond, Va.

Highly Improved Farm
FOR SALE.
Of about 100 Acres, in the noted Grape Region of Chautauqua County, within corporate limits of village of 4,000 inhabitants. Buildings insured for $5,000. Price $13,500. Address Box 473, Westfield, N. Y.

THE LINE SELECTED BY THE U. S. GOV'T TO CARRY THE FAST MAIL.

Burlington Route
C. B. & Q. R. R.

It is the only line with its own track from
CHICAGO TO DENVER,
Either by way of Omaha, Pacific Junc., St. Joseph, Atchison or Kansas City.
It connects in Union Depots with through trains from NEW YORK, PHILADELPHIA, BOSTON and all Eastern points. It is the principal line to
SAN FRANCISCO, PORTLAND & CITY OF MEXICO
It traverses all of the six great States of ILLINOIS, IOWA, MISSOURI, NEBRASKA, KANSAS, COLORADO with branch lines to all their important cities and towns.
From CHICAGO, PEORIA or ST. LOUIS, it runs every day in the year from one to three elegantly equipped through trains over its own tracks between
Chicago and Denver,
Chicago and Omaha,
Chicago and Council Bluffs,
Chicago and St. Joseph,
Chicago and Atchison,
Chicago and Kansas City,
Chicago and Topeka,
Chicago and Cedar Rapids,
Chicago and Sioux City,
Peoria and Council Bluffs,
Peoria and Kansas City,
St. Louis and Omaha,
St. Louis and St. Paul,
Kansas City and Denver,
Kansas City and St. Paul,
Kansas City and Omaha,
For all points in Northwest, West and Southwest.
Its equipment is complete and first class in every particular, and at all important points Interlocking Switches and Signals are used, thus insuring comfort and safety.
For Tickets, Rates, General Information, etc., regarding the Burlington Route, call on any Ticket Agent in the United States or Canada, or address
T. J. POTTER 1st V.P. & GEN. MGR., CHICAGO.
HENRY B. STONE, ASST. GEN. MGR., CHICAGO.
PERCEVAL LOWELL, GEN. PASS. AGT., CHICAGO.

ONLY regular subscribers need apply for our Free Seed Distribution. All must inclose a stamp in their applications.

Humorous.

"GOOD gracious," said the hen, when she discovered the porcelain egg in her nest, "I shall be a bricklayer next."

STOCKTON teacher to boy in grammar class—"John, correct the following sentence: "'I are very cold.'" John, as he wipes the perspiration from his forehead with his shirt sleeve—"It are durned hot."

A LITTLE girl, walking one day with her mother in a graveyard, and reading one after another the praises of those who slept beneath the turf, said: "Mamma, I wonder where they bury all the sinners."

AT an "old maids' auction" at a New England church fair recently, a large number were bid off at prices ranging from 29 to 40 cents. The cause of this boom in ruling rates is not stated.

"WHAT are the natural products of Kentucky?" asked the teacher. "Tobacker!" yelled little Sammy. "What else?" "Whiskey!" yelled Tommy. "What else?" "Kurnels!" yelled Johnnie.

Miscellaneous Advertising.

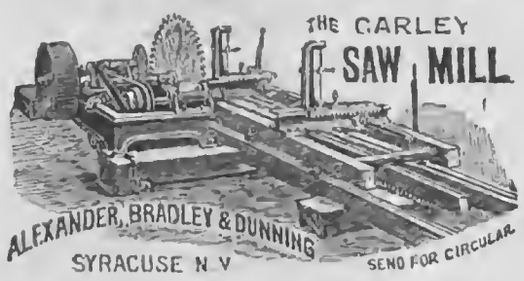
HAYESVILLE, OHIO, Feb. 11, 1880.
I am very glad to say I have tried Hop Bitters, and never took anything that did me as much good. I only took two bottles and I would not take $100 for the good they did me. I recommend them to my patients, and get the best results from their use.
C. B. MERCER, M. D.

EASILY PROVEN,—It is easily proven that malarial fevers, constipation, torpidity of the liver and kidneys, general debility, nervousness, and neuralgic ailments yield readily to this great disease conquerer, Hop Bitters. It repairs the ravages of disease by converting the food into rich blood, and it gives new life and vigor to the aged and infirm always.

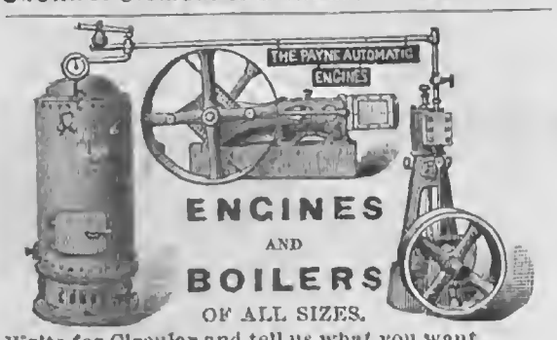
LEGS & ARMS,
(ARTIFICIAL)
WITH RUBBER HANDS AND FEET.
The Most Natural, Comfortable & Durable,
Thousands in Daily Use.
New Patents & Important Improvements.
U. S. Gov't Manufacturer.
Ill. Pamphlet of 160 Pages SENT FREE.
A. A. MARKS,
701 Broadway, New York City.

THE GREAT AMERICAN TEA COMPANY

GOOD NEWS TO LADIES.
Greatest inducements ever offered. Now's your time to get up orders for our celebrated Teas and Coffees, and secure a beautiful Gold Band or Moss Rose China Tea Set, or Handsome Decorated Gold Band Moss Rose Dinner Set, or Gold Band Moss Decorated Toilet Set. For full particulars address
THE GREAT AMERICAN TEA CO.,
P. O. Box 289 31 and 33 Vesey St., New York.



SPAIN'S CHURNS. Star Churns, Rapid Ice Cream Freezers, Improved Tree Tubs, all made of CEDAR. Send for illustrated circular and prices. Clement & Dunbar, Philadelphia, Pa.



ENGINES AND BOILERS OF ALL SIZES.
Write for Circular and tell us what you want.
E. W. PAYNE & SON, Drawer 100, ELMIRA, N.Y.
or address our New York Office,
Eastern Agents, HILL, CLARKE & Co., Boston, Mass.
Our patented Vertical Boiler will not prime. No danger of burning flues.

TELEPHONES SOLD.

Don't pay exorbitant rental fees to the Bell Telephone Monopoly to use their Telephones on lines less than two miles in length. A few months' rental buys a first-class Telephone that is no infringement, and works splendid on lines for private use on any kind of wire, and works good in stormy weather. It makes homes pleasant; annihilates time; prevents burglaries; saves many steps, and is just what every business man and farmer should have to connect stores, houses, depots, factories, colleges, etc., etc. The only practicable and reliable Telephone that is sold outright and warranted to work.
Chance for agents. No previous experience required. Circulars free. WM. L. NORTON, Buffalo, N. Y.

Grind your own Bone, Meal, Oyster Shells, GRAHAM Flour and Corn in the SO-HAND MILL (F. Wilson's Patent). 100 per cent. more made in keeping poultry. Also POWER MILLS and FARM FEED MILLS. Circulars and Testimonials sent on application. WILSON BROS., Easton, Pa.

SMALL'S CALF FEEDER

This NEW article is appreciated and approved by all progressive Farmers and Stock Raisers. The calf sucks its food slowly, in a *perfectly natural* way, thriving as well as when fed on its own mother. Circulars free. SMALL & MATTHEWS, 21 South Market Street, BOSTON, MASS.

Use the best Zinc and Leather Interfering Boots and Collar Pads. They are the best.

(From the RURAL NEW-YORKER, Dec. 19, 1885.)

BARN-YARD MANURE vs. FERTILIZERS.

Our good friend, Dr. W. S. Combs, of Freehold, New Jersey, reports an experience in the use of barn-yard manure on potatoes, which we cannot quite explain. He writes: "On one part of the field I put all my yard manure—150 to 175 good two-horse loads. This part of the field has also had occasional applications of barn-yard manure during the last ten years. The manure was spread last Fall and plowed in this past Spring. After plowing, the whole field was treated alike, MAPES' POTATO MANURE being applied at the rate of 1,500 pounds per acre, in three applications. The total yield for the 20 acres was 6,545 bushels, or an average of 327 1-4 per acre. The average on the part having no yard manure was 385 bushels. The largest yield of a single acre was 409 bushels."

While this was a splendid yield over the whole field, the difference against the use of barn-yard manure was more than 60 bushels. What could have made the difference? Was it the season, the soil, or was there a surfeit of manure? The soil was a clay loam and this field, when we saw it in August, was the finest sight we ever witnessed.

REMARKABLE HISTORY OF THE ABOVE FIELD.

With the exception of a small part of the field above referred to, where occasional applications of barn-yard manure had been made, this field had been fertilized *exclusively* with THE MAPES' MANURES since 1880. The field was formerly the "poorest on the farm."

The last three crops were as follows:

1883. POTATOES, with 1,000 pounds of the Mapes Potato Manure, per acre, yield, 4,915 BUSHELS, "Mammoth Pearl," on 20 acres. One acre yielded 355 BUSHELS. One acre received an extra application of the fertilizer when the plants were five inches high. This increased the average yield 115 bushels on the average yield of 240 bushels per acre.

1883. FALL WHEAT. ("Martin Amber," "Rogers Red" and "Fultz") Sown *without any manure or fertilizer*, relying on the lasting effect of previous dressing of the Mapes Potato Manure. Yield 710 BUSHELS of wheat on the 20 acres, being an average of over 35 bushels per acre.

Dr. Combs adds:

THIS FIELD FORMERLY POOREST ON THE FARM.

This field, before the use of the Mapes Manures, was one of the poorest on the farm; a yield of 20 bushels of wheat per acre had rarely been reached, and never exceeded. The old system with stable manure had failed to bring it up beyond 20 bushels of wheat per acre under favorable conditions.

The condition of the field to-day may be easily seen by the yield of wheat. The field will be plowed this Fall and put again into potatoes with Mapes Manure next year.

YIELD FROM ONE ACRE OF THE ABOVE FIELD, 41 BUSHELS WHEAT (WITHOUT RAKINGS).

One acre of this piece, "Martin Amber" (beardless), yielded 41 bushels, *without the rakings*. As an experiment in thin seeding, less than one bushel was sown, and this by drill. The product of grain of this acre sold for $100 for seed. Heads were three to five inches long, averaging four inches.

1885. This field was again planted with Potatoes, with 1,500 pounds per acre of the Mapes Manure, as also described by the RURAL. Yield—average, 327 1-4 bushels per acre from 20 acres. 385 bushels per acre from the Mapes Potato Manure alone. Largest yield, 409 bushels from single acre.

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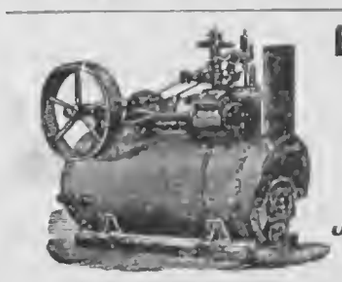

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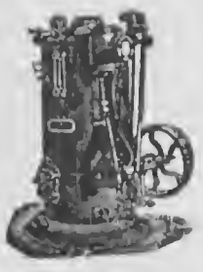

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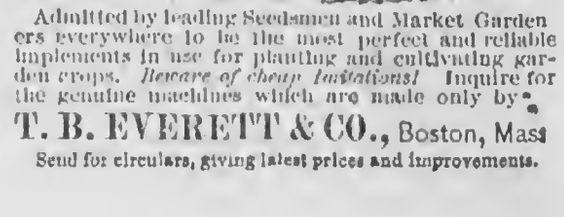

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THE RURAL NEW-YORKER

A JOURNAL FOR THE SUBURBAN AND COUNTRY HOME

VOL. XLV. No. 1878. NEW YORK, JANUARY 23, 1886. PRICE FIVE CENTS. $2.00 PER YEAR.

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The Vineyard.

THE EATON GRAPE.

THIS grape, shown at Fig. 25, was received from J. B. Moore & Sons, Concord, Mass. The cluster weighed one pound. The leaf was 13¼ inches in extreme diameter, and 10 inches in length; thick, leathery, and the under-side thickly covered with a heavy brownish-yellow down more so than Moore's Early. Bunch, very broad, compact, double-shouldered; berries very large, some as much as one inch in diameter, round, jet-black, covered with a heavy blue bloom; adheres firmly to the stem. Seeds from one to four, quite large. Skin thin, quite tough, so that it would carry well to market, but with no bad taste when eaten close. Pulp quite large, tender and separating freely from the seeds, dissolves easily in the mouth. The pulp is surrounded with a large amount of a very agreeable juice, which, though not as rich as that of the Concord, has much less of the native odor, and is, withal, very agreeable. While the berries of this grape are fully as large as those of Moore's Early, and the clusters as large as those of the Concord or Worden, the berries have little of that hard, unyielding pulp that characterizes most large grapes. We speak of this grape solely from an examination of a single cluster and a single leaf; but we have a single vine for growth and comparison upon our own grounds, and if it sustains its present promise, it must prove a very desirable acquisition to the hardy black grapes.

EXPERIENCE IN BAGGING GRAPES.

I HAVE had considerable experience in bagging grapes for the last five years. In contrasting the bagged fruit with that exposed to the air, it has been observed by all my family that the bagged fruit has much more delicate skin and superior flavor. It is invariably a little later. To those who have been unsuccessful in this method of protecting grapes, the following suggestions may be of service.

In localities where the rot is very prevalent, it is important to do the work very early, as soon as the berry is plainly formed. If the weather is dry and fine during this early stage of growth and the bunches are protected before warm, damp weather, success is almost certain. Before commencing bagging where the fruit has rotted badly, a thorough cleaning up is very useful. Where one has only a few vines for family use, it will repay not only to prune rather closely and burn all the wood which is removed, but also to wash the remaining canes with a rather strong alkaline wash. If to this is added the farther labor of scraping away the surface soil and covering with fresh loam, so many sources of infection will have been removed that it will be easy to secure good fruit for the coming season. My neighbors, who did not bag, and who shared my grapes the past season, will testify that my Concords were delicious from the first of August to the first of November, and our climate is very productive of grape rot.

M. T. EARLE.

Cobden, Ills.

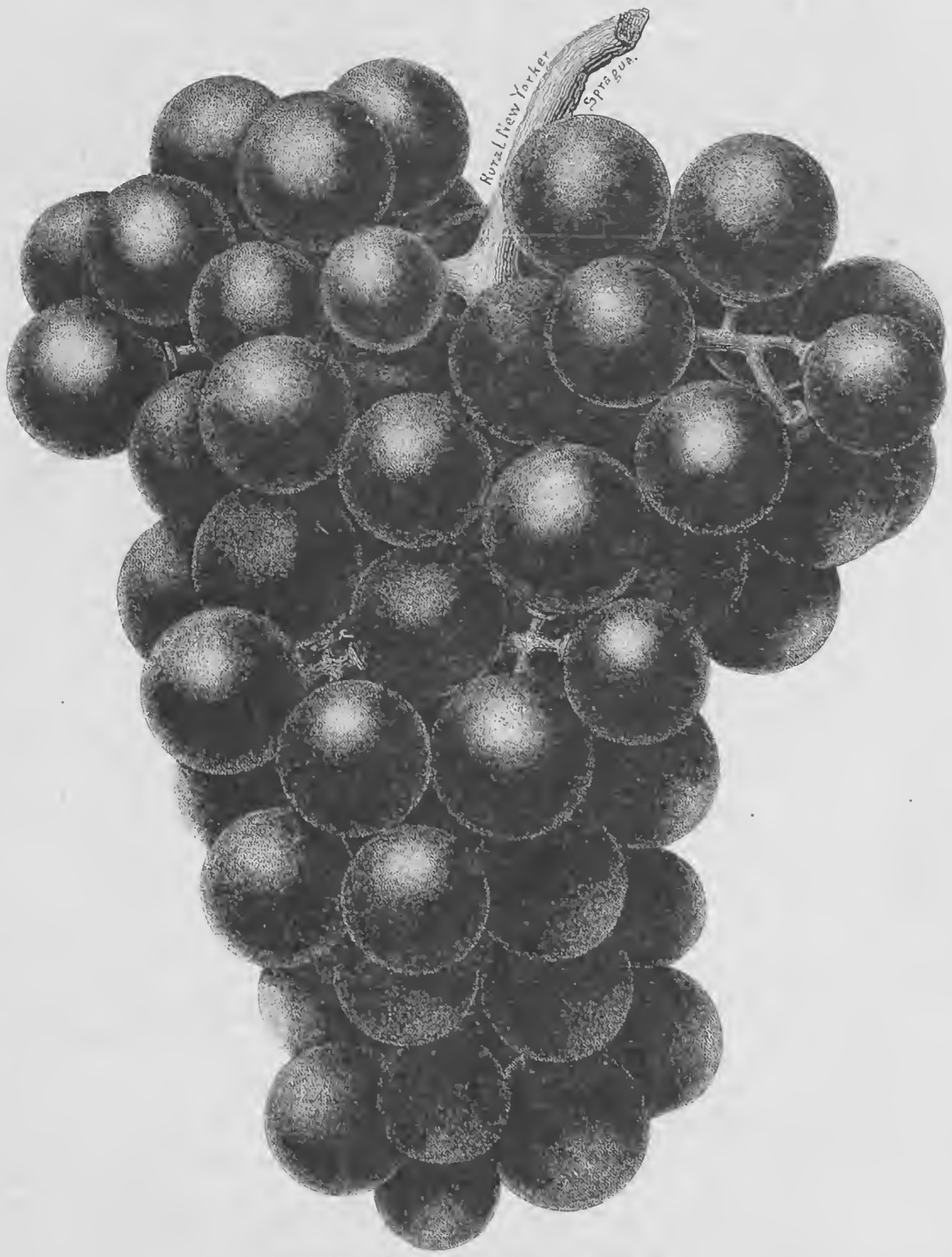
Sheep Husbandry.

Notes from the Rural's W. N. Y. Farm

FEEDING LAMBS.

WHAT FORAGE TO USE

for lamb feeding, is a question of prime importance to the feeder. While lambs are good eaters and not dainty, they are quite largely influenced by the forage which constitutes the bulk of their feed. Although they may be wintered, after a fashion, on corn fodder, meadow hay and other such foods, yet to do their best, there is a necessity for them to have something with a much larger proportion of albuminoids, or those elements from which the muscle or lean meat and the wool are so largely produced; and this is much more important when we attempt to feed a lot of lambs that have been shorn, and which we wish to force into the production of a second fleece of wool. We have tried millet, peas and oats sown together and cut early, and Hungarian Grass as well as corn fodder and other forages, but have never found anything to take the place of, or equal to clover hay. We have also examined the reports of many feeding experiments in England, Germany and in this country, and in all, it is clearly shown that clover hay is by all odds the best of all fodder crops as a sheep food, and doubly true is this as a lamb food. We have also found, by our own experience, that there is a difference of nearly or quite one-half in the value of clover cut early and late. While cut at once when only in full bloom, or a little before, will be eaten almost clean, that cut later or when half or more of the heads have matured, will be stripped of its leaves, heads and more tender branches, while the main stalks will be entirely rejected. Although the bulk of their fodder should consist of clover hay, yet when highly grained, and with foods rich in albuminoids, the lambs will readily eat a portion of coarser stuffs, such as corn-stalks or straw or meadow hay, though we have found their craving for a variety fully and easily satisfied with good, clean, barn-housed straw. Our advice, then, to the lamb feeder would be to provide an abundance of clover hay; by all means to cut it early, certainly as soon as in full "color;" to cure it in the cock, and for an addition to this, in the way of variety, to feed straw; and it will pay any one to have a barn large enough so that his straw can be housed.



EATON GRAPE. From Nature. Fig. 25.

JOTTINGS.

OUR good friend, J. A. Saxton, of Canton, Ohio, writes us calling attention to the desirability of giving barns greater hight. He says "With the present facilities for getting hay and grain or straw into the upper parts of barns, it is very poor economy to build them with 18 or 20-foot posts when you can add 50 per cent to their capacity, at an extra cost of not over 10 per cent., by making the posts 27 to 30 feet high. It is the lower part of the mow that is the most valuable for storing produce, and when the posts are lengthened it is equivalent to adding so much at the bottom of the barn all round. A barn 50x40, with 18-feet posts, has a capacity of 36,000 cubic feet, while the same barn, with 28-foot posts, would have a capacity of 56,000 feet, and could not cost one-tenth additional.

The new barn on the Western New York Farm has the same defect, and by your Jottings in the Jan. 2d RURAL, I should judge you have found it out. How much more would it have cost if you had built it with 28 or 30-foot posts instead of 20?

Some years ago I built a barn 50x80 feet, with 24-foot posts, and two years ago I had to build another 40x75, and I made the posts 28 feet, and neither is too high."

Our friend is quite right in calling attention to this matter. As a rule, barns are built much too low. It is a fact that a barn with 24-foot posts, while having only about 50 per cent. more room than one with posts 16 feet, will hold nearly twice as much grain or other produce. This is owing to the much closer packing of the lower part of the mow, by reason of the weight of the upper portion. But the hight should depend to a great extent upon the shape of the roof. Our new barn is 50 feet wide, and has a gambrel roof with the lower section of the rafters nearly perpendicular, so that the ridge of the barn is over 50 feet above the floor, and this is quite as high as we think it profitable to work a horse fork, and certainly as high as we care to put the straw when thrashing. But were we to build, with the ordinary double roof, we should certainly not make the posts less than 30 feet, and even higher would be preferable. Every one planning to build a barn next season should consider this matter now.

We are just through cleaning the sheep pens

the first time over. The manure has been drawn and spread on the ground to be used next Summer for corn and roots.

From numerous experiments we are fully satisfied that two loads of manure spread now on a clover sod to be used for corn next Summer, will produce as good results in the crop as will four loads applied just as the ground is to be plowed for planting.

There are many reasons in favor of drawing and spreading manure as fast as made; we have more time than in the Spring: a day now when men can be had at low wages, is made to save a day then of higher wages; a team can draw now, when the ground is frozen, two or three times as much as on the soft or muddy fields then. The manure being evenly spread while containing all its richness, fresh from the stables, much more evenly distributes this plant food, and it is a fact that a better result always follows the winter application.

Farm Topics.

STOCK-FEEDING IN THE WEST. No. 5.

PROF. J. W. SANBORN.

Improved farming in the West demanded; great value of corn fodder; need of rotation of crops; advantages of it; lessons of 10 years' experiments; straw and corn fodder in combination; examples; colossal wastes in the West; recapitulation.

ALTHOUGH I may have, in years before, written in fragments for the RURAL something of the following views, it is appropriate to complete a scheme of stock-feeding in the West with a method of handling the farm and the fodder. These remarks will be quite general.

In the consummation of a more profitable system of stock-feeding, the method of farming pursued here will have to undergo a radical change. I am often told by my friends that the system of conservation of straw and corn fodder, which I have advocated here in season and out of season, is adapted only to the small, pains-taking farmers of the East. What are small farmers? Let us see. The farms of Vermont, a well-settled State, average 137 acres each, while those of Missouri average 129 acres, and those of Kansas 157 acres. Our bigness in farming is bigness in single crops and not in area tilled. A distribution of crops on the farm by a six years' rotation will immensely change our views regarding our ability to save our wasting corn-fodder and straw. The nutrition of an acre of well-preserved fodder-corn is but little short of that of the corn grown upon that acre, and the neglect of this involves a waste of nearly as much as is saved under our system of farming. Under rotations, the 100-acre field of corn, whose fodder goes to waste from supposed or real want of time to handle it, may all be easily saved when 16⅔ acres of corn, 16⅔ acres of oats for hay or grain, 16⅔ acres of clover, 16⅔ acres of wheat, and 33 1-3 acres of Timothy are grown. The labor under such a system of farming is distributed throughout the year, and leaves no pressure at any point of the year's work. Under such a system, the corn-fodder can be easily put into little shocks of 24 to 30 hills in September, when going out of the dough state, and can be quickly husked, and by the 20th of October, all of the fodder may be stowed in its green-colored condition away in the barn, where an acre of it is better than the wintering of a steer, in lieu of the 10 acres needed per steer under the present primitive plan.

The question asked by my Kansas correspondent regarding the disposition of surplus corn will then have disappeared, for no surplus corn will be on hand, but rather the contrary. It will also settle the question of winter feeding to use up the corn which now, as before stated, is not so profitable as summer feeding or rather making beef on grass.

Again, we have to note other advantages: to wit: The greatly increased crops, through rotations, that inevitably follow such a system. It also affords opportunity to give better tillage and to perform all work much better, thus securing a higher standard of farming. Again, it gives as much labor in Winter in barn feeding of stock, etc., as is required in Summer by a judicious system of rotations. This uniform need of labor brings the cottage house for the laborer, removes his burdens from the farmer's wife, and converts a vagrant farm laborer into a householder on the farm and into a party interested in the farm.

By this system we shall not reduce the number of cattle that the farm will carry, but shall double the capacity of the farm for stock, and increase the profits per animal.

The barn, noted in No. 4, opens up the opportunity for food combinations, as well as for food conservation. Most readers of the RURAL know that for ten years I have been engaged in testing food rations, and particularly food combinations, to ascertain the economy of such combinations, and the ratio of carbohydrates to albuminoids needed. The outcome of this work has led me to place great value upon straw and corn fodder when rightly fed, and no value upon them when wrongly handled. Their observed inadequacy as foods arises from the small amount eaten, and does not closely cover their nutritive value. When put into a food combination wherein enough is eaten, a pound of stover or of corn fodder often, with me, becomes the equivalent of a pound of Timothy. In other words, many average trials with clover and oat straw fed together, have given as good result as Timothy hay.

Eleven tests of "roughness," and three pounds of various nitrogenous foods furnishing 1.18 pound of digestible albuminoids, 7.71 pounds of digestible carbohydrates, and .37 pound of digestible fats per day, gave .88 pound of growth per steer.

Five tests for five years with Timothy hay furnishing one pound of digestible albuminoids, 11.8 pounds of digestible carbohydrates and .30 pound of digestible fats daily, gave an average growth of .80 pound daily.

These figures, the answers of steers in careful tests, are well worthy of our stockmen's study, and I may well suggest again the question: "Is our colossal waste of fodders necessary and is it profitable?" In the West more fodder is wasted than is consumed, and upon food wasted more cattle could be kept than are now kept in the West.

Finally, the positions taken in these brief papers are as follows:

First, that the hog should disappear, and the spring shote should go to market in the Fall, being fed on mixed foods and cut grass, corn being a less prominent food and shipstuff a more prominent one. Second, that grass beef should supplant winter-fed beef; third, that shelter is profitable and indispensable to the best farming and feeding; fourth, that manuring is now demanded very generally; fifth, that rotation is of pronounced importance in profitable stock feeding; sixth, that food combinations in which our "roughness" should be fed, will cheapen the cost of our beef.

Columbia, Mo.

[REMARKS.—We cannot too strongly indorse the position taken by Prof. Sanborn in the foregoing papers, and which he so clearly puts in the paragraph above. The sooner the farmers and stock-growers of the West learn these truths and come to farm accordingly, the more money they will make.—EDS.]

TURNIPS AS A "CATCH" CROP.

I LIKE what was said by the RURAL in regard to using turnips as a "catch" crop, or for supplementing the corn, bean and potato crops. I sow them at the last cultivation of these crops, and have usually a fine yield. I pull the largest and best, feed off the balance; in Spring plow in what may be left and the droppings of the animals while eating off the crop grown. I have practiced this for years, and find much profit in it. A. S. B.

Grand Rapids, Mich.

Dairy Husbandry.

DAIRY NOTES.

T. D. CURTIS.

BAD VENTILATION OF STABLES.

IT is a singular fact that in nine-tenths of the cases, the fresh air is let into the stable at the rear of the cows, instead of in front of them. The result is that the cold air drops down behind the cows, in its way to their heads, and sweeps along with it the odors from the smoking droppings, added to the constant exhalations from the cows' bodies, for them to inhale at every breath. Some have even argued that this is the correct way of introducing pure air because animals turn their tails to a beating storm! They forget that the animal seeks to protect its eyes, and to avoid a strong current which interferes with breathing, while its head is still in the midst of plenty of fresh air. The cases of a cow in a storm and a cow in a stable are not the same. Any animal closely confined will instinctively turn its face to the light and its nose to the fresh air. Usually there is some upward draft in front of the cows, but often there is none, while few make a free use of absorbents or deodorizers. On entering, the air is loaded with offensive effluvia and almost suffocating. And then the dairyman wonders why his milk tastes and smells of the stable!

No amount of careful milking and handling of the milk will prevent this mishap under such circumstances. The odors and flavors which have been inhaled by the cows have mingled with their blood and poisoned their bodies, and the milk secreted from the blood is loaded with these odors and flavors before it is drawn. See that ventilation is perfect.

HEADS TO THE CENTER OR TO THE WALL?

Which is the more convenient, to turn your cows' heads to the wall and feed at the sides, letting the droppings gather in a passage-way between them in the rear, to be taken out on a sled or cart driven through, or to have the cows face together, so that all are fed from a single passage-way, while the droppings are scattered along the two sides, occupying twice the space needed? Or do you want to shovel them out through the window-holes in piles against both sides of the stable, to stand until they are drawn out in the Spring, when you are in a hurry with your work, or be left all Summer rotting and leaching, while your crops suffer for lack of them? Would it not be better to put the cows' heads to the walls, giving them the benefit of fresh air, with proper ventilation from their rear up through the roof of the barn? Wouldn't it make the cows healthier and the product sweeter? Then would it not be better to have the droppings all together behind and between the two rows of cows, and haul them out at least once a day, either spreading them "where they will do the most good," or piling them on your manure heap, under the manure shed to rot?

CLEANLINESS VS. FILTHINESS.

Gov. Seymour once said, before the American Dairymen's Association, that "cleanliness is a comparative term," and he requested the speakers to be exact in stating what was necessary to be done to secure cleanliness. This was a good idea. But I have observed that while everybody has some idea of cleanliness, there are some who appear to have no idea of filthiness! To them everything is clean. These are the ones that make a good share of the store butter, so much of which has gone into the market as grease. They keep their cows in the reeking atmosphere of a dirty stable, milk in a slovenly way, and never half clean anything that is used about the dairy. But how can they be reached and instructed? They think they are cleanly, and it will not do to tell them they are filthy. The cream-gathering or almost any system that will prescribe exact rules for managing the cows and handling the milk is a blessing to such dairymen and the community. This class of dairymen do not attend dairy conventions or read agricultural papers, yet they are a numerous class and need enlightening.

WHY DON'T THE CREAM CHURN?

I have just received a communication from a correspondent in East Saginaw, Michigan, asking why it takes three to six hours to churn his cream. I confess I don't know. The puzzle to me is why the butter comes at all, if it takes so long. Sometimes no butter can be churned from cream. Dr. Sturtevant mentions an instance where the cows had gone farrow a long time. Two cases of cream that could not be made to yield up its butter to the persuasions of the churn were mentioned at the convention of the Iowa State Dairymen's Association in 1884. Nobody was able to explain the reason why. It was a condition that came on suddenly, without any apparent cause. My correspondent's trouble came suddenly on the 28th of November last, just after the churning had been done in 15 to 20 minutes. The temperature of the cream was 60 to 64 degrees. He wants to know if it is in the food, which is "some oats, carrots, barley-meal, corn-stalks, and millet for hay." At the time of writing, 18 churnings had acted in this way. The cream is probably viscous and ropy, though he says nothing of its appearance. But if the butter refuses to separate in two or three hours, why should it separate at the end of five or six, if there is no change of condition but what the churn produces? Perhaps some of the readers of the RURAL NEW-YORKER can explain the matter. I confess, with Dr. Sturtevant, that I am every day puzzled with unexpected results, and "feel I do not know so much about dairying as I used to think I did."

A GOOD DAIRY.

John Allen, of Lyndonville, Vermont, says, through the Manchester Mirror, that his dairy herd has for years averaged "300 pounds of butter per cow or a little better." There are other such herds in the country, and there is still profit in such dairies, notwithstanding low prices. The marvel is that so many dairymen are content with 150 pounds of butter per cow, when it is possible to double the yield without materially increasing the expense. Many cows are kept at a loss. Is not here a hint as to one of the best ways of cheapening production?

EFFECT OF BUTTER STANDING IN BRINE.

Mrs. Mina Holmes says, in her essay which commanded the prize at the last Minnesota State Dairymen's Convention as the best treatise on butter making, that when granulated butter is washed with brine it must not be allowed to stand long in the brine as it will make the butter greasy and shiny. This is an important fact to know, since washing in brine is a recent practice and not as well understood as it may be. As over-working gives butter a similar appearance, perhaps the effect of soaking in brine is sometimes wrongly attributed to this. It is generally supposed that no unfavorable results could follow letting butter stand in brine any length of time. Butter makers will please pay careful attention to this point, and give the result of their observations to the public.

TOO BIG AN ESTIMATE.

Some one figures the creamery and cheese factory as saving nine-tenths of the labor. This is too steep. The gathering of cream and carrying of milk are evidently overlooked. These are quite a tax on the producer of milk, especially in the case of the cheese factory, and the greater the distance the greater the tax. When all is figured in, the dairyman does not make a saving of 90 per cent. in the manufacture of his milk into cheese.

ADVANTAGE OF BUTTER DAIRYING.

There is a marked advantage in butter dairying in the fact that it enables the farmer to consume on the farm what is produced on it, thus returning to the soil what is taken from it, while sending off a product that is drawn almost entirely from the atmosphere—butter being highly carbonaceous. Beef and cheese draw largely on the phosphates and nitrates—two substances quite difficult to supply, while fruits and grains draw still more heavily on the minerals and nitrogenous elements. True, the latter, like the carbon, comes from the atmosphere, but it is vastly more difficult to capture and utilize. Hence there is a profit in butter dairying that is not secured by any other line of farming to the same extent—the constant enrichment of the soil and increased productiveness.

HOLD YOUR GRIP.

Don't be in a hurry to throw up dairying because of low prices. It pays now as well as any other branch of farming. But weed out your stock. Make a careful test of every cow, and keep none that does not pay a profit. Get a male with a good pedigree, if you do not have one already, and breed from these selected cows. This will put you in the best possible condition to meet present and future contingencies.

DEVICE FOR SALTING BUTTER.

OUR friend, D. L. Roberts, of Royalton, N. Y., sends us a sketch of the device shown at Fig. 29, which he finds a great help in accurate

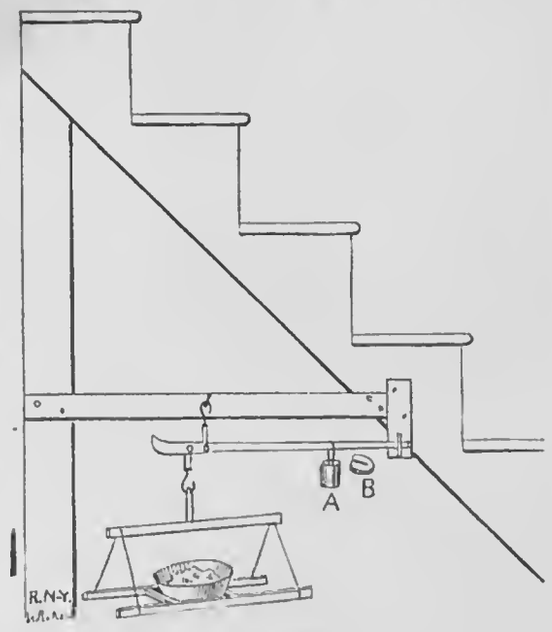


Fig. 29.

salting. An ordinary steelyard is hung under the stairs, in the manner shown. A staple fits over the outer end of it so that it can play up and down one inch. The rack upon which the butter bowl rests is made of two cleats, 20 inches long, with two cross-pieces ten inches long, forming a square of about ten inches. This rack is fastened by means of wires to another cleat of the same length, as shown in the illustration. This cleat is, in turn, fastened to the hook in the steelyard. In arranging for an even salting of butter, Mr. Roberts states that he first placed the empty butter bowl in the rack and balanced it with a small bag of nails hung at A. As he wished to use 1¼ ounce of salt to the pound of butter, he set the poise at eight pounds ten ounces, and balanced the bowl by pouring grain into it. Then he placed the poise back to eight pounds, and placed on it a small piece of lead, B, just large enough to balance the steelyard. This was fixed with a knife so that it would slip over the poise. In salting, the butter is first weighed and then the piece of lead is placed on the poise and salt sprinkled on the butter until the beam of the steelyard comes up. In this way the proportion of salt is the same, every time. The arrangement has been in use over two years and has never varied.

The Swineherd.

PIG DIET.

COL. F. D. CURTIS.

Evils of a clear corn diet; need of mixed feed; examples; need of warm sleeping quarters; preparing corn for feed; corn-and-cob meal.

I HAVE spoken of the injurious effects of a clear corn diet when pigs were shut in pens for fattening, and that it caused a feverish and irritated, if not an inflammatory condition of the stomach and bowels. There is no doubt of this, and the fact that hogs have been fed and fattened in this manner for a long time, or will be, does not affect the truth of the statement. The condition of pigs and their fitness for food can be improved by simply giving them less corn and some green grass, clover or corn-stalks. This kind of feeding makes the food more complete and more healthful. The pigs will show their wisdom by eating this kind of food with a decided relish. In cold weather vegetables or fruits can take the place of the other succulent foods. A chance to help themselves to grass or fruit will save the labor of securing it for them, and this system should always be followed where it is possible.

A lot of 10 old sows were managed in this way. They were put into a field where there was a rank growth of grass following a mowing, and they fed on this grass and filled their stomachs. It would have cost about twice as much to have filled up these hungry sows and fattened them without the grass. Anyway, in a few days they ate 30 bushels of apples costing $3, together with a considerable amount of meal, and they were not satisfied either. This was before they could be turned into the grass. A lot of spring pigs, which had been kept in a pasture and had eaten it down so close that there was but little to be obtained, when turned into a fresh and luxuriant pasture, required but very little food other than the grass.

It helps, with all of this succulent food, to provide a warm and dry place for the pigs to sleep in. Those fed in this way will not stand the exposure that pigs will when fed on corn, because the corn produces fat and this is an element of heat—fat is heat in a practical sense.

It is both sensible and profitable to get the corn ground in the ear when it is dry enough, and to mix the meal with water 12 hours before feeding, or 24 in hot weather. It is then in a more digestible form and more of it will be turned into flesh than if fed whole or dry. When there are a great many hogs and no conveniences for mixing, of course it cannot be done, but this does not upset the argument.

The cob helps to fill the place of some other coarser food, and it aids in the digestion. Experiments carefully conducted by Prof. Shelton, Kansas Agricultural Farm, have demonstrated that hogs gain faster with the cob in the meal. It may be set down as a standard rule that there is five per cent. of nutriment in the cobs and ten per cent of digestible benefit, so that where they can be ground with the corn, cobs will always pay.

The Herdsman.

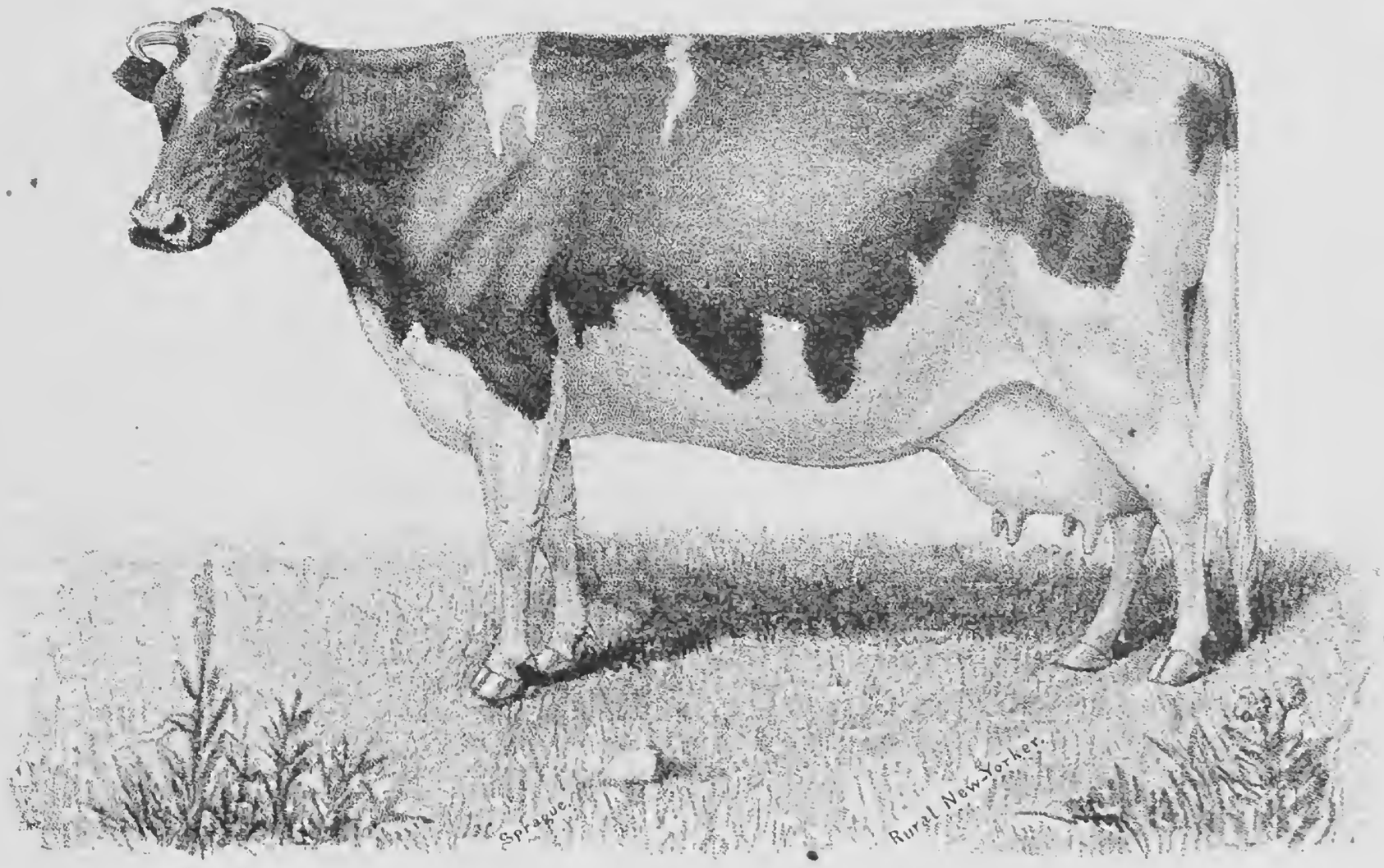
A PROFITABLE CALF.

I WAS very much interested in the article headed "Baby Beef," in a late RURAL, giving the weight and price per pound at which the pure-bred, roan, Short-horn steer Cleveland, sold at the late show in Chicago. I have had a nine-months-old calf killed, a grade Short-horn crossed with the Ayrshire, which, with no extra care, weighed a little over 300 pounds. I could not sell it at any of the markets in two neighboring towns, but pieced it out among my neighbors, with the exception of one quarter kept at home. All pronounced it very firm, sweet, juicy and tender, without any veal flavor. Neither was it tough like beef. Skim-milk calves can be bought for $7 to $10 per head. Those classed as yearlings being one year to one-and-a-half year sell at from $8 to $12. My calf was fed the extra milk from one cow after supplying a family of five throughout the whole time, from March until Thanksgiving, with the addition of a little bran and corn meal during the last two months. I think more profit was realized by feeding the sour milk to the calf than by using it in any other way. Full value of calf at the price at which it was sold, $25. H. L. C.

Charlton, Mass.

BEXJE.

WE show at Fig. 36 an excellent portrait of a Holland cow. This animal, Bexje (No. 1328 N. H. B.) No. 6340 H. H. B., is a fine specimen of her breed. She has all the marks of a milk-producing animal—large udder, small head and neck and a most decided "wedge shape." She has a milk record of 93½ pounds in one day. She was imported by her present owners, Messrs. B. B. Lord & Son, Sinclairville, N. Y. While there has been no "boom" in Holland cattle, they have been gaining ground steadily in public favor.



HOLLAND COW, BEXJE. Fig. 36.

The Poultry Yard.

RAISING INCUBATOR CHICKS.

P. H. JACOBS.

Chicks in the brooder; importance of heat; a successful brooder house; discription thereof; feed of young chicks; marketing; cost of chicks per pound.

As soon as the chick is hatched, it should become thoroughly dry before it is removed to the brooder. From the time of hatching to the age of ten weeks, the chicks must at no time be chilled, for while this may not be fatal, it induces cold on the bowels, and prevents rapid growth. It will do no harm for the chicks to run out in the open air, provided they return to a warm brooder. One of the greatest difficulties to contend with is that of impressing upon the operator the importance of keeping the heat in the brooder at a temperature of 90 degrees at all times. An incubator should never become too warm, or a brooder too cold. Should the chicks become slightly chilled and seek the brooder, they will trample on each other in the endeavor to become warm, and the heaviest loss occurs from such cause. A rule for guidance is to observe the chicks in the brooder. If they spread out and separate, keeping near the edges, the heat is sufficient, but if they crowd, more heat should be provided.

The most successful brooder house used in this section (Hammonton, N. J.,) is that of the Misses Anna and Emma Pressey, who hatched several thousand chicks last season. Figure 34 shows the brooder house, the brooder being placed in the left back corner, so that the lamp can be drawn out from the outside. The floor of the house is one foot off the ground, with an opening three feet square in which is placed the brooder. It has a slanting platform in front for the chicks to run up or down to and from the brooder to the ground. A wire cloth screen, or slat frame, is used at night over the front of the brooder house for protection. This little shed and brooder are placed in the center of a yard twenty feet square, facing the south, and are all that is required for the accommodation of 100 small chicks, or 50 larger ones.

The illustration shows only the shed used in this climate, and it may be made warmer for colder latitudes by extending the sides to ten feet, and of the same shape as the finished half, allowing the roof to extend over the open part, which is seemingly half finished, as at Fig. 34.

The brooder (see Fig. 35) is a box one foot

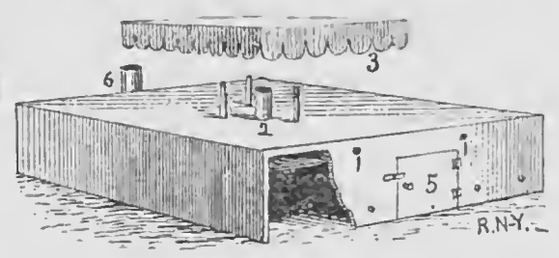


Fig. 35.

deep and one yard square, made of wood. One inch below the wooden floor is a sheet-iron floor one yard square, which, of course, leaves a space of one inch between the wooden floor on top and the iron one below. Two holes enter at the front (1, 1), between the two floors. Into these holes the cold air passes, coming out at

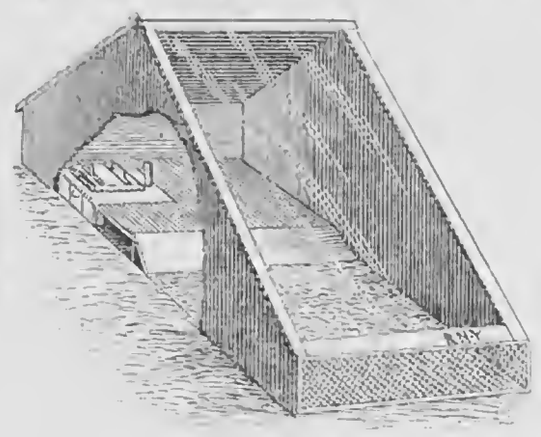


Fig. 34.

the tube (2) on top, which is 2½ inches high. The tube extends through the top floor only. The lamp, or small oil stove, is placed under the iron (or second) floor, the smoke escaping at the chimney (6), which is at the rear. The air from the tube (2) strikes the under side of the covering (3), which is raised to show the tubes, and diffuses itself over the chicks. This brooder has no sides or corners, and the chicks, if crowded, are pushed out, and can re-enter on another side. The advantage is that the heat is pure warmed air, constantly pouring in, thus serving as ventilation. When in the brooder house, the brooder is let into a square opening, bringing its top floor on a level with the floor of the brooder house. The covering is three inches from the floor of the brooder.

The first food of the chicks is hard-boiled eggs, chopped fine. The second day, bread soaked in milk is given, with the chopped eggs, and this continues for three or four days. After that time, cooked ground oats and meal, made as bread, and crumbled, are excellent. Chopped onions, lettuce, cabbage, and meat are given three times a week. As soon as they can pick up small grains, they are given a variety of any kind of food they will eat, being provided also with fresh water, sand, fine gravel, ground bone, pounded shells, etc.

They are marketed in January, when they usually weigh three-quarters of a pound each. April, however, is the best for prices, the demand then being for sizes not exceeding one-and-one-quarter pound. The Misses Pressey have 14 brooding-houses, and expect to raise 6,000 chicks this season, finding it very profitable. They have also a fattening-house, in which the chicks are kept for a week or ten days before they are marketed. They are killed and marketed in the dressed condition and sold by commission merchants in New York and Philadelphia. Young chicks cannot conveniently be marketed alive in Winter, as exposure would prove fatal, unless the season is very mild. The breeds used are mostly common hens, with Langshan and Plymouth Rock cocks. No eggs are hatched under hens, incubators being used altogether, and though a large number of hens are kept, the ladies also buy eggs from their neighbors.

The cost of each chick, per pound, for feed is five cents; but including *all* expenses, such as eggs for hatching, oil, rent of buildings, interest, labor, etc., the cost is a fraction less than ten cents per pound. The prices obtained were 65 cents per pound for the early chicks, which decreased to 15 cents as the minimum, the average being 35 cents per pound.

There are several poultry farms in Hammonton, and nearly all who raise chicks are familiar with incubators, and visitors come from all sections, no secret of the business being withheld. While other locations may not be as favorable as this, yet the fact that chicks may be raised with profit in large numbers without the aid of hens has been here practically demonstrated.

A NOVEL HEN COOP AND NEST.

THE hen coop and nest shown at Figs. 32–33 can be easily made, and might be of use in cases where a good many hens are in the habit of laying in the same nest. It is so arranged that only one hen can enter it at a time. It is made of a rectangular box, such as a soap box, open at one end. A hole is bored in each side near the top of this opening, and a broom stick is set in so as to revolve easily. Pieces of wire, such as clothes line wire, are twisted

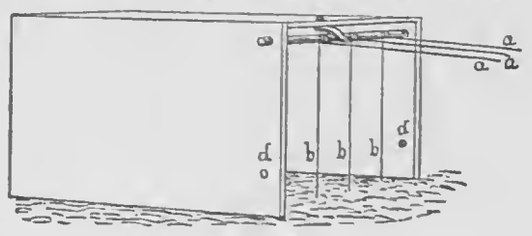


Fig. 32.

round the stick with the ends projecting at right angles to each other. Being light, the wires do not prevent a fowl from attempting to enter the box, and in doing so she pushes the wires, *b* (as shown in Fig. 32), inward and upward. A low partition, *c*, (Fig. 33) is placed across the middle of the box, in passing over which the hen is sure to lift the wires to the required hight; a nail driven in the side of the box will serve to limit the upward movement. While

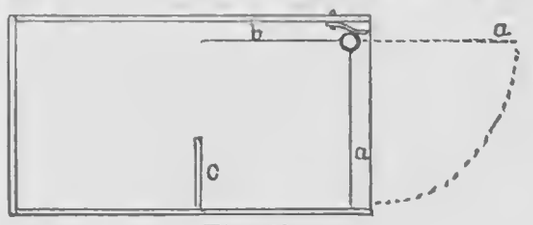


Fig. 33.

in this position a fowl attempting to enter is prevented by the wires, *a*. The hen within, in passing out pushes the wires out so that they resume the original position shown in Fig. 32. A spring of any simple construction is placed at the top of the box and bears upon the stick with friction enough to make it retain any position it is placed in. If it is desired to use it as a coop, a piece of wire is passed through the

holes *d* at bottom of the box, passing in front of the first wire, behind the second, in front of the third, and out at the other side of the box.

Farm Economy.

A REVOLVING STALK RAKE.

In the Winter the farmer may profitably spend some of his spare time in repairing his tools, or in making necessary implements. Among the earliest farm operations is the raking and burning of last year's corn-stalks; in preparing the ground for another crop. A good heavy rake is needed. Although many persons use a common hay-rake or a harrow, neither is as good as a special rake.

Figs. 26 and 27 show a "revolving" stalk-rake which does good work, and may be handled by any boy old enough to drive a team. Take a piece of wood (Fig. 26., A) five inches square and 12 feet long. Bore 16 two-inch holes

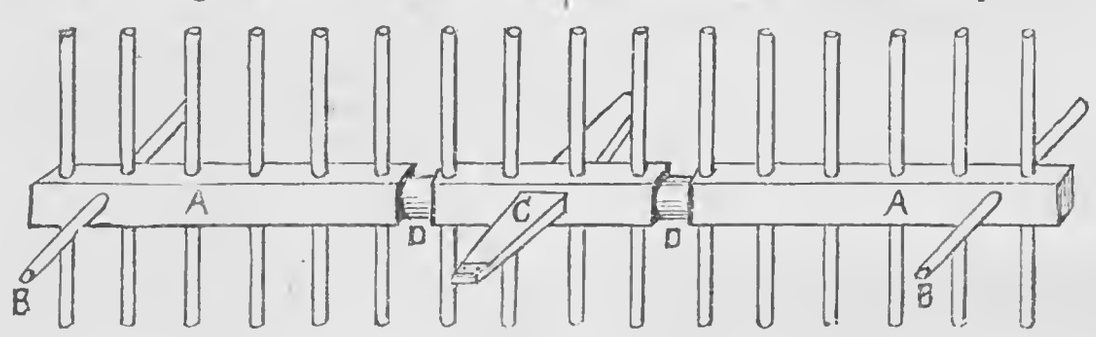


Fig. 26.

through it, making the center of the first hole four-and-a-half inches from the end. The other holes must be nine inches from center to center. This will make the center of the last hole just four-and-one-half inches from the other end. These holes are for the teeth, which should be made of good, tough wood, such as oak or hickory, perfectly dry. They should be two inches in diameter and 45 inches long. This leaves 20 inches as the length of the teeth on each side of A. Nine inches from each end of A, a round piece, two inches in diameter

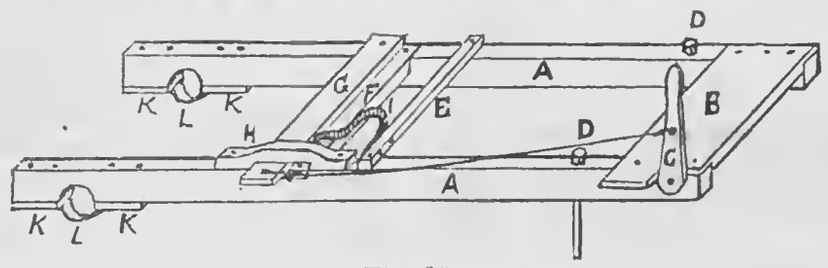


Fig. 27.

and 49 inches long, is put through it at right angles to the teeth. These pieces, B, B, extend 22 inches on each side of A. C is a piece 49 inches long, and five inches wide at the center, for a space of five inches, which is to go through A. It then tapers off to three inches wide at each end. It is two inches thick and must be made of good, tough wood, as it is to rest on the frame, Fig 27, and keep the rake from turning. The teeth and the pieces B, B, and C, should be firmly fastened in the piece A. C is exactly in the center of A. In the center of the space between the sixth and seventh teeth counting from each end, the piece A should be cut round, four-and-one-half inches in diameter, and for a length of four inches.

Fig. 27 shows the frame which connects the rake to the wagon, and on which is placed the apparatus for "emptying" it. The pieces A, A, are four inches square and 90 inches long. Near one end of each piece a kind of "boxing" 4½ inches in diameter, is made in which the parts O, O, of Fig. 26, may revolve. K, K, are small pieces of board one inch thick nailed to the piece A, in order to cut away less of the piece by the "boxing". The center of this boxing should be nine inches from the end of the piece A, and half an inch below it, that is, on a line drawn through the centers of the boards K, K. L is a piece of iron bent so as to form the remaining part of the circle and extending about six inches on each side, so that it may be bolted to the piece A, as shown in the cut. The pieces A, A, should be 40 inches apart from outside to outside. B is two inches thick, 12 inches wide and of the form shown in the engraving. It forms a seat for the driver. F is two inches thick and six inches wide. It must be sunk into the pieces A, A, until it is "flush", or even with them. Its back edge must be just far enough from the "boxings" to allow the piece C of Fig. 26 to pass, a little over 24½ inches from their centers. G is one inch thick, four inches wide, and about 43 inches long. It is fastened at one end only, with its back edge one inch nearer the "boxings" than that of the piece F. A guard, H is placed across the other end of it, which leaves it free to be drawn forward about three inches. H is a curved spring, one end of which rests against G, while the other end is fastened to a piece, E, placed across the frame. C is a lever 18 inches long, from the center of which a cord extends back to the piece G. D, D, are heavy iron bolts put through the frame 17 inches from the front end.

In using the rake, it is connected with a wagon, the bolts, D, D, being hung over the hind part of the wagon. C of Fig. 26 rests on G of Fig. 27, and thus prevents the rake from turning until the driver by means of the lever at his side, draws the piece G forward far enough to allow it to pass. A small piece of iron may be put at each end of C, Fig. 26, and also on the piece G (Fig. 27), where that piece rests. This prevents it from wearing so rapidly.

S. P. SHULL.

A HANDY SCRAPER.

Mr. Joseph Todd, of North Madison, Ind., writes us that he finds the scraper shown at Fig. 30 a very handy implement. It is made from a worn-out cross-cut saw, with a broken fork handle for the handle. The blade is 12x5 inches. A hole is made in it, through which the tang of a broken fork is driven into the handle and fastened. The blade is secured to the shank by riveting while hot, or by a thread and nut. The teeth are good to get manure from grass or to loosen hard cakes on the floor of the stable. Such a tool for use about a stable or pig pen is almost invaluable. It costs but little and is easily made.

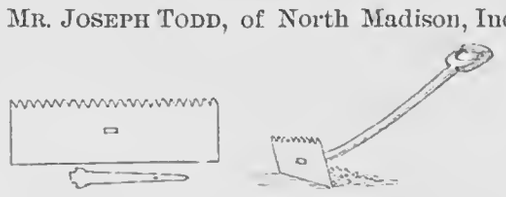


Fig. 30.

Pomological.

A NOTE FROM PRES. LYON.

FALSE PRETENSE IN HORTICULTURE.

Brother Collins is so delightfully candid in his advocacy of the principle of false pretense in marketing fruits, as applied to the Lawson (Comet) Pear, that I am impelled to turn the matter inside out, and look at it from different standpoints.

But first, in self-defence, I may be indulged in the statement that Mr. Collins, in person, presented specimens of this pear before the committee of the American Pomological Society, at Grand Rapids, Michigan, on the 10th of September last. The specimens were apparently in perfect condition; not at all decayed; and I cannot recall any statement to the effect that they had essentially suffered in quality from having been kept. On testing, the quality was so utterly indifferent that a very moderate taste sufficed.

I had no previous personal acquaintance with the variety, and knowing that the Sterling is usually marketed, in Michigan, as early as the end of August; and ought, in New Jersey, to be from one to two weeks earlier, I felt warranted in the supposition that they cannot greatly differ in season.

Mr. Collins does not venture a word in favor of his pear, so far as quality is concerned; but puts it (as he always does the Kieffer), forward, strictly upon its beauty, saying, "It did not concern me what was done with the pears, whether they were sold for their good looks or good quality." So say a great many fruit-growers who grow and sell worthless fruit, which, by its beauty, begets the expectation of quality in the mind of the innocent and ignorant buyer. So says the man who deliberately puts up his fruit in wine quarts and sells as dry quarts, or in peck baskets that turn out but six quarts, or in "flour barrels" that measure out half a bushel short. So also says the man who puts fine specimens on the top and bottom of his packages, while the center is made up of refuse. All these processes operate upon the horse jockey's principle—"Your eyes are your chap;" and are addressed to that frailty so common with human nature—the endeavor to buy cheap, with the vain hope of getting more than one's money's worth.

I am aware that it is often difficult to draw the line that shall separate honesty and fraud; and that even an honest man may, perchance, become so far befogged by self-interest as, unconsciously, to step over the line. Still, as between the man who sells beautiful fruit, knowing it will be overrated in quality, and him who ekes out his packages with refuse, I can see no difference save in degree, since all aim to lead the buyer to hope to secure more in his purchase than can possibly be realized.

The beauty of this fruit will doubtless sell it for a time to those who know nothing of its quality; but it will be folly to hope that the same buyers will continue to call for it, or that it can, if extensively grown, ever be recognized as a favorite in the market.

HOW CAME "COMET" PEARS IN THE MARKET?

Noticing the article of my friend Collins, in the Rural New-Yorker of December 26, as to the "Comet" (?) Pear, I would ask him one question: "How is it the "Comet" has borne from year to year and sold at from $4.00 to $8.00 per bushel," when *he* cannot have a tree in bearing? I was on Mr. Caywood's grounds three years ago last Fall, and he then had one oldish tree and a *few* young trees in bearing, certainly not enough to bear *over* six to eight or ten bushels of fruit. He tried to sell me the stock and control of that sort, claiming that *not a cion or tree had gone out of his hands.* I understood the next year he sold his "right" to Collins, which makes it but two years last Fall since he got any young trees. How is it my friend Collins has had such remarkable success in marketing the fruit as $4.00 to $8.00 per bushel? As I said, Mr. Caywood tried to sell me the stock; but I certainly saw nothing in the fruit but its bright color to recommend it. In flavor it was almost third-rate in comparison with such sorts as Bartlett or Seckel. A. M. PURDY.

Palmyra, N. Y.

PEACH TREE BOX.

Mr. R. P. McNalley sends us the sketch shown at Fig. 31. This simple little device is said to prevent the depredations of the peachborer. It has stood the test of several years' trial. It is simply a box of four pieces of plank, about 15 inches long, of wood that will not easily decay. It is made around the tree and sunk an inch or two into the ground. Thus the moth, from which the borer is produced, is unable to pass under. The side of the box should not be more than two or three inches wider than the trunk of the tree. As the trees grow the boxes can be replaced by larger ones. The spider that is almost sure to spin its web at the top of the box provides ample protection where the box is small.

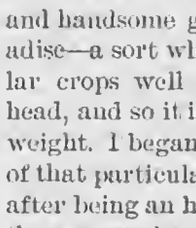


Fig. 31.

THE SWEET PARADISE.

Apples are considered to be more nourishing than potatoes, which require other food with them to render them satisfying to bodily needs. Apples are medicinal too; a noted physician used to say that he used no medicine himself but apples and abstinence, whenever he felt out of sorts. Sweet apples are more nutritive and more grateful to a tender stomach than sour, and comparatively few know how excellent many sorts are, cut, sliced and baked. Baking imparts a much richer flavor than stewing. Some years ago I planted an avenue line with that exceptionally erect and handsome grower, the Winter Sweet Paradise—a sort which carries its heavy and regular crops well in the interior of its stately head, and so it is not bent out of shape by the weight. I began to think I had too much fruit of that particular sort, but find them so good, after being an hour in the oven, that I value them more than ever, and I can readily sell any superabundance in this region of mines and works. G.

Tyrone, Pa.

Horticultural.

RASPBERRY-BLACKBERRY HYBRID.

Mr. Wm. Saunders, of Canada, during a brief call at this office, spoke of hybrids which he had effected between the raspberry and blackberry. We find in late English papers a new "pure black raspberry" offered, which purports to be such a cross. It is called the "Glenfield." It will be seen by the cut (Fig. 28), that it is larger than any black-cap, though smaller than the average blackberry. The advertisement reads: "By crossing a blackberry with a raspberry, a fruit partaking of the

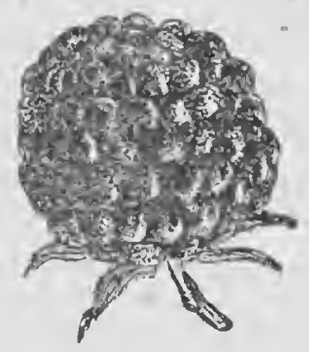


Fig. 28.

shape, flavor and habit of the raspberry (with just a perceptible and unusually pleasant taste of the blackberry)—with the glossy black color and hardy character of the last-mentioned—has been obtained; while as regards productiveness, etc., it will vie with the very best raspberry yet known." This seems not, as yet, to have been alluded to by American journals.

The Apiarian.

SIXTEENTH SESSION OF THE NORTH AMERICAN BEE-KEEPERS' ASSOCIATION.

(RURAL SPECIAL REPORT).

Continued from page 25.

Increased demand for honey; extracted and comb honey; Winter bee feed; when to extract; fumigating; our honey markets; honey packages; honey plants; shipping bees; buying bees.

In continuation, Mr. Walker said he had found it was more difficult to sell 500 pounds of honey is 1868 than 35,000 pounds in 1885. He sells more to the 1,500 people of his town to-day than was sold in all St. Louis 20 years ago. With less labor at least twice as much extracted honey can be secured, and four times as many colonies can be cared for as when we work for comb honey. The cry of over-production is not well founded. We find no trouble in disposing of our immense crop of extracted honey. Let every bee-keeper see to it that all the markets are supplied—not a fifth now even know what extracted honey is.

Dr. Mason, of Toledo, Ohio, after a faithful trial of both, is loud in favor of extracted honey. He only extracts from the brood chamber. Dr. Whiting, Michigan, said, "Tier up, and you will secure at least double the quantity of extracted honey." Mr. Dadant wishes at least 12 Langstroth frames for brood chamber, and extracts from half stories above, using one, two or three, as the harvest requires. Unless we give much room we are likely to be annoyed by swarming.

C. F. Muth uses double-story Langstroth hives. He has secured 193 pounds per colony on the roof of his store in Cincinnati. He urged all to keep honey enough for winter stores, and not to feed sirup. Mr. Pettit, of Canada, agreed with Mr. Muth that there was loss in feeding sirup. If we feed honey for Winter, that eases the market by just so much. Several present thought it paid well to feed sirup for winter stores. It was thought that sirup was as safe or safer and cheaper than the honey.

Mr. Root says we must plan to work less, and even though we make less honey we shall receive more money. Many manipulate too much for the best profit. Feed no sirup, and permit the bees to do their own spreading of brood. Never so crowd the bees as to cause enforced idleness. No good bee-keeper ever permits his bees to hang in idle clusters outside the hive. Mr. R. uses 10 to 16 combs in the brood chamber, and extracts from the upper story. The queen sometimes goes above to lay, but this does little harm. He has a six by twelve inch ventilator in the center of the bottom board, which was very useful in hot weather. Mr. Pettit said no honey should be extracted till capped. It should always be cured in the hive. Prof. Cook said we save much time by extracting before the honey is capped. The honey, if kept in warm, dry rooms, in open vessels, would be just as good. He had repeatedly given such honey ripened out of the hive, also that ripened in the hive, and that drained from first-class comb honey, to people to test, and they rarely decided against the first, if it was well ripened. Mr. Hotterman, of Canada, would have honey ripe before extracting; would extract when the honey was about one-third capped. He found clover and thistle honey ripened much quicker than basswood honey. Honey, both comb and extracted, should always be kept in warm, dry rooms. Mr. Broadman said the cap was air-tight, so how could it injure comb to be kept in damp rooms. Prof. Cook said the caps were not air-tight; even comb honey

would evaporate and thicken with age, which it could not do if the cells were impervious. Comb honey would also absorb moisture and become thinner in a damp place. Crystallization is not due to evaporation, but to a law, and is hastened by cold, and is often attended by expansion, not contraction. Crystallization also varies. Some honey is quick to granulate, others slow, and some does not crystallize even in our coldest Winters.

Mr. Hall said unless honey had some pollen in it, there would be no trouble from moths. He fumigated by putting sulphur on a very hot iron. If coals were used they must be wholly charred so as to emit no smoke. Sulphur fumes alone could never injure the taste of honey, and would only color the propolis or pollen. Mr. Newman, Ohio, said even comb honey was improved in quality by allowing it to remain on the hive for a time; although it would be darkened a little, it would be enough better to pay.

Mr. C. F. Muth then presented a paper on our markets. The low price of honey is due, not to over-production, but to general depression. There is not a surplus of honey, nor is there less consumption. Times are hard and people will not pay large prices. There is no speculation. All trade is dull. Extracted honey has become a staple article in the market. Adulteration, which is rarely, if ever practiced by bee-keepers, is carried on by dealers, and is doing much to injure the markets. The pork packers of Cincinnati are now taking large quantities of extracted honey. They found the New Orleans molasses too uncertain, often lacking sweetness. Honey is a most excellent substitute for cane sugar.

We can quicken the market by insisting that dealers shall stop adulteration, and by practicing care and neatness. Have no dirt about the apiary. Use only new, clean barrels. Charred barrels injure honey. Whisky barrels are very bad. Honey in one-pound sections sells best though there is a demand in some places for two-pound sections. Mr. Heddon said he could get just as much honey in one-half pound sections, and could get three cents more per pound for it. The sections must have full sheets of foundation so as to go to market without injury. Mr. Manum of Vermont, shipped this year to Boston, and sold 11 tons of one-pound sections while two tons of two-pound sections were being sold. He said the one-pound would sell best, and if all would use this size the sections could be procured cheaper. They could then be had for $2.50 per 1,000, while now they cost $4.00.

T. G. Newman, Illinois, urged the planting of honey plants; a succession of honey plants the year around was very desirable. Alsike and Sweet Clover were both highly praised. Mr. Newman, of Ohio, had furnished bass-wood trees to all in his village, and to farmers close by who would plant and care for them. He found he had done very wisely. Others had found it paid well to furnish Alsike Clover seed to farmers.

Mr. Hayhurst, Kansas City, showed that shipping bees by the pound was very profitable both to buyer and seller. He always sent a queen along, gave good ventilation, fed with good candy, and sent several packages in a single crate. The bees should not be allowed to gorge themselves with honey just before being caged. Four ounces of good candy each day per pound of bees, are enough. A pound of bees with a queen could be sold in May for $3—not for less. These will make a good colony before the season ends. With care, even a half pound of bees will make a good colony. He sold to an Iowa man, last Spring, 11 one-pound packages of bees with queens. They were put on to three frames each, fed a little, and gave him 400 pounds of comb honey besides enough to winter the bees.

Mr. A. I. Root said buying bees by the pound was a good way to start an apairy, and to restock after winter losses. Mr. Hetherington had secured five good colonies in a single season from a single pound of bees with a good queen.

What Others Say.

THE POTATO OF THE FUTURE.—Prof. Lemmon proposes to create the potato of the future by using the original species, selecting those found on the mountains and plateaus of the Southwest. He selected Solanum tuberosum and Solanum Jamesii as most promising. The first slightly resembles some varieties in cultivation. It is ascending in habit, about two feet high, or less, with mostly simple stems, lanceolate-oblong leaflets; large purple flowers, followed almost surely by abundant bolls of seed. The tubers are produced upon long, slim white stolons, and are depressed oval in shape, from one-half to one inch in diameter, and of a purplish color when first exposed to the light. Solanum Jamesii is usually smaller, with prostrate branching stems, larger and narrower leaflets (the minute interposed ones being fewer), a less number of flowers to the umbel, which is white and more deeply incised into lobes. The stolons are usually much shorter, and the tubers are smaller, nearly round, and when first dug are of a beautiful snowy white. Both species were found growing side by side in Southern Arizona. They had even pushed their way into the few gardens in that region, as though friendly to cultivation, and inviting attention. These wildings were sent about the country for trial. Many cultivators pronounce them utterly worthless as potatoes, while others find the size somewhat increased by cultivation, and a few are of the opinion that these little wildings will yet prove the means of producing some of the earliest and best of potatoes.

POTATO EXPERIMENTS.—Mr. Edmund Hersey gave, before the Mass. State Board of Agriculture, the results of numerous experiments. Small "seed"—the product of small potatoes planted from year to year, gave better results than large potatoes cut to an average of two eyes. The seed ends gave a larger crop than the stem ends. Potatoes from Nova Scotia used as "seed" were 50 per cent. more productive than home-grown tubers. The speaker would not have the farmers take his experiments as a guide for themselves, as the character of different soils and climates greatly affects all crops. It was to discover a principle rather than to formulate a rule that he had worked. If land be very poor, small cut pieces must fail, as the plant will starve before it is strong enough to draw sufficient nourishment from the soil, while in a very rich soil, planting whole large potatoes may be wasteful. Hilling is advisable on wet land, level culture on dry. The cause of scab is a conundrum. Two years' work showed that scabby seed caused scabby crops, but the third season the reverse was shown. An overdose of nitrate of soda brought potatoes entirely free from scab. The permanent shape of potatoes cannot be changed by selection. Permanent changes must come through the crossing of plants in the blossom. The crop may be greatly affected by using sound or unsound tubers. Potatoes for planting should not be exhausted by growing sprouts in Spring to be rubbed off by handling. Large crops are possible only on land that is fertile and well cultivated.

STARCH IN THE POTATO.—The English Farm and Home says the potato is the most prominent among starch foods. The boiling breaks up the starch granules and makes the little nitrogenous material more soluble. Potatoes cooked in their skins retain more of the potash salt and to this extent are more valuable as food. Potatoes that cut soap-like have become waxy, some of the starch having been rendered gummy before the granules were broken up. One reason why the Irish prefer potatoes boiled in their skins is that the system thus gets its demand for potash salts, which are furnished sufficiently to others by salads, fruits and other vegetables. Potatoes while essential as a part of a mixed diet, are not nearly so valuable for food as many imagine. Two-and-one-half pounds of potatoes have only the nitrogen of three-quarters of a pound of bread, and the carbon of one pound. Potatoes to be as cheap per pound as bread should cost less than one-third as much. It is especially so with laborers who require strong nitrogenous food. In a comparison of nitrogen, one pound of oat-meal is worth six pounds of potatoes. For those inclined to eat too much flesh they serve for dilution as in the stew.

THE POTATO IN THE SOUTH.—The Farmer's Journal notes the fact that one merchant in Sumner County, Tennessee has handled 4,000 barrels of Tennessee raised Irish potatoes the present season, second crop. He paid out among farmers over $9,000. The potatoes were shipped to Kentucky where they are preferred to any other for spring planting. The variety was the Early Rose. The Southern papers have long advocated the growing of the potato as a profitable crop for their section. At present the poorer classes of people eat very few potatoes. The effects of an exclusive "hog and hominy" diet are plainly visible throughout the South, in a race of sallow-faced dyspepties who worship the frying pan. The introduction of the potato among the poorer people at the South would be an inestimable boon. The crop is hard to save in such a moist climate, yet it is thought that it could be secured in as good condition as the ordinary sweet potato. In 1884 the Gulf States with 13 per cent. of our total population, produced only 3,066,465 bushels of potatoes or 1½ per cent. of the total crop. December 1st the price per bushel in these States averaged 96 cents, against 53 cents as the average of the whole country. For years it has been said that beef and butter never could be produced in paying quantities at the South. Events have proved the folly of this assertion. The potato culture of the future may tell the same story. All that is needed is a better system of storage.

POTATOES AS FOOD.—Prof. Atwater, in his admirable lecture on the Chemistry of Foods, gives some suggestive figures as to the nutritive values of potatoes. The average composition of the tuber is given as 75.5 per cent. water, .2 protein or flesh-forming material, .2 fat, 20.7 carbohydrates, .8 woody fiber and .1 mineral matter. It is far below beans and peas in nutritive value, but superior to turnips, sweet potatoes, cabbage, carrots, etc., etc. As to digestibility, experiments in Germany show that the percentage of dry food in potatoes lost as excrement was 9⅛, of beef 5; of eggs, 5¼; of rice, 4; of cabbage, 15; of bread 5½ and of milk 8 to 10. With potatoes at 50 cents per bushel and other foods at corresponding prices it was found that 25 cents would purchase, in pounds.

Potatoes.	Protein. .59	Fats. .06	Carbohydrates. 6.06
Beans	1.16	.11	2.69
Wheat bread	.49	.11	3.03
Salt cod	.57	.01	.....
Pork (salted)	.04	1.19	.....
Beef (round)	.29	.11	.....
Cheese (skimmed)	1.20	.21	.28

The average ration for an ordinary man is given as .26 pound protein, .12 pound fat and 1.10 pound carbohydrates. The average cost of a pound of protein in potatoes at 50 cents per bushel is 14 cents; in beans 14 cents, oat meal 15, corn meal 12, salt cod 38, mackerel 80, ham 48, corned beef 56. These figures show that potatoes are a cheap and serviceable food, but they are by no means a "perfect food," and will be most valuable when used in combination with other foods richer in protein. Prof. Atwater calls attention to the fact that in every section where the people confine themselves to one kind of food, as rice in China, the potato in some portions of Ireland and Germany, and pork and corn meal in some parts of the South, they are, as a rule, ill-nourished, and suffer physically, intellectually and morally. The evil results following an exclusive use of the potato as food are remedied, in some cases, by the use of milk eaten with them, or by the eating of beans fish or oatmeal, all rich in protein.

MARL.—Prof. Kedzie, of the Michigan Agricultural College, has issued a bulletin on "Marl," in which he says that the value of marl depends almost entirely upon the amount of lime it contains. A good way to form a fair estimate of this is to use a solution of one pound of muriatic acid to one quart of rain water; pour a cupful of this over a tablespoonful of the supposed marl; if it effervesces, it is marl; if not, probably it is a clay; and its value depends upon the proportion that is soluble. A very simple way to distinguish between marl and clay is to place a lump in a glass of water; if marl, it will crumble down into a diffuse mass; if clay, it will remain unchanged. He says: "When marl is applied to the soil it destroys the acid condition, decomposes the sulphate of iron which is sometimes present to an injurious degree, and affords the alkaline condition in soils so necessary for nitrification and the preparation of plant food. Its application will be particularly beneficial to soils that are light and sandy, containing a fair supply of vegetable matter; on soils that run to moss and Bunch Grass and on those so open and porous as to prevent fruitfulness. It is also very beneficial on soils having an excess of vegetable matter, such as cleared "cat-holes" and muck beds. To secure the full benefit of marl, it should be near the surface; in fact, it should be finely pulverized and mixed with the surface soil. A good method of securing the necessary fineness is to throw it to the surface and expose it to the action of the frost." He has found it paid to mix a small proportion of salt with the marl—say, eight to ten per cent. on heavy clays. On sands entirely destitute of humus he thinks it would do little or no good. The dose of marl he would recommend is from 30 to 100 bushels per acre, and there is no danger of injury to the land by an "overdose," as it is mild in form and has none of the burning properties of lime.

SAMPLES AND COMMENTS.

S. C. PATTEE would sooner pay $1.50 for good corn meal than 15 cents a bushel for potatoes for feeding purposes. Straw and potatoes are not suitable to be fed together, because they both contain an excess of carbonaceous matter. He would substitute cotton-seed meal for potatoes every time, because the cotton-seed meal contains an excess of albuminous or flesh-forming matter, and should always be fed with something which contains an excess of heat-forming elements.

A CORRESPONDENT of the Midland Farmer, as an experiment, planted the sprouts that broke off the seed potatoes. They mostly grew in some places too thickly and had to be thinned out, but they made a crop of rather small potatoes. This shows that in scarcity of seed, or with new varieties, much may be done to save seed. These had no coaxing or special care, but were treated like the general crop. The vines were all the season more delicate and spindling than from the sets, but their growth is among the "easy possibilities."

IN the culture of the wild potato by the Indian squaw, the tubers are neither planted nor cultivated. They are simply dug. The largest only are put in the basket, while the smaller ones, or those too deep or too far from the hill are alone left to perpetuate the species, and small potatoes on long stems are the legitimate result of such culture.

THE red color of the mangels—and red is only a concentrated yellow—is found to impart a high yellow color to the butter of cows fed upon them

MR. MEECH owns up that his Meech's Prolific Quince is somebody else's Prolific Quince

AGAIN we advise those intending to plant pear trees, to order one or more of the Frederick Clapp.

THE Weekly Press guards its readers against tree butchers now commencing to travel about the Country. In many cases they do far more harm than good.

KEEP the farm animals happy, is the good advice of the Times

THE same journal remarks that experience has shown that a permanent laborer with his family comfortably lodged in a cottage on the farm, and with a small garden for his own use to work in his spare time, is worth far more to his employer, as compared with a transient workman, than the use of the house and the land comes to.

MR. THERON E. PLATT writes to the Homestead that, after careful microscopic examination, he is convinced that scab in potatoes is caused by fungus growth, and not by attacks of worms and insects.

THE practice of cutting the tubers for seed planting is condemned in the report of the California Academy of Science, as tending to the ultimate degeneration of the plant. Though the potato continues to give fair crops after such treatment, it only proves what great natural vigor and power of resistance this wonderful plant possesses, and what Christian forbearance it displays when thus vilely assasinated decade after decade.

THE original habitat of the potato has been discovered as being in two regions equi-distant from the equator, north and south. It is thought that the northern species of Arizona and New Mexico should be expected to give us a better, stronger tuber, than the long-cultivated foreigner, from the low sea-coast of Chili.

IN his paper on the Indigenous Potatoes of North America, read at the meeting of the Horticultural Society, at New Orleans, Prof. J. G. Lemmon stated that the common potato had been nearly blotted out of existence from our fields and gardens once, and, under present modes of treatment, it is believed, it may be at any time destroyed. The potato is America's best gift to mankind, being next to wheat in rank among the plants in the whole world. It can be said to grow wherever man can live. It is pre-eminently the poor man' bread. On several occasions it has averted famine over wide regions of the earth. Certain districts have been able to sustain twice the population they could have done without the potato.

SEND for the catalogues advertised and look them over carefully, now that farm work is less pressing than at other seasons

COULD you not spade up that bare place in front of your house and plant a few roses next Spring? Or you might sow seeds of petunias, portulaca, zinnias, pinks, or, better still, the RURAL'S Garden Treasures

DON'T you like to see a honeysuckle running over the wood-shed or smoke-house.

WE have already begun to mail our seed distribution

IF one-half of what we have heard regarding the everbearing qualities of the Earhart Raspberry be true, it is the most desirable black-cap known.

THE Michigan Tradesman has been investigating the losses caused by the "red streak" in Late Rose potatoes, noticed by Prof. Beal last week. It is said that the defect has killed the shipping demand for the Late

Rose in Michigan, thus rendering it neeessary to consume the crop at home. In localities where the local demand is small, the only course left for the farmer to pursue is to feed his crop to his stock, and this is being done in hundreds of instances. The loss to the shippers and growers of the State will undoubtedly exceed $100,000. ....

PROF. WAGNER publishes analyses in support of his conclusion that steamed potatoes are far more nutritious than boiled ones. In the process of boiling, the vegetables give up considerable portions of nutritious salts, while they also take up more water than when steamed, and become proportionately weaker.

A SINGULAR sort of manure for potato fields has been introduced on a Pomerian model farm. Hitherto herrings and potatoes have been known as a palatable dish in family households. The manager of the farm in question has hit upon the idea of blending them from the start, by planting his seed potatoes with a herring placed in every heap, and with so decided a success as to cause him to increase the area thus planted from 20 acres last year to 60 in the present one. The expense he calculates at about nine marks ($2.25) per acre, which is cheaper than the cost of any other kind of manure, and amply repays the outlay. Of course, it can only be employed near the sea coast .....

THE Western Rural advises farmers to feed potatoes occasionally. The small refuse potatoes will do the sheep, and especially the breeding ewes a great deal of good. There is no use that can be made of small potatoes that will do as well as for the feeder. Cut them up and sprinkle meal over them. The object to be gained is principally to furnish moisture, and where grain is being fed, to furnish bulk. The potato is highly valuable for furnishing bulk to ourselves. In fact, that is the greatest value it has as an article of food .....

A WRITER in the Country Gentleman, who witnessed the horrible effects of the potato rot in Ireland in 1847, says that the black, putrid vines covered the soil; the earth was filled with rotten tubers, and the stench was almost overpowering, even to those who had been used to the wards of a large hospital and to the odors of a dissecting room. Dead corpses lay on the roadsides, wretched cabins became the vaults in which whole families lay dead and decomposing; dead mothers were to be seen as they had sat on the roadside, nursing their infants, which still hung upon the cold breast. There is no danger of our witnessing such a spectacle in our own country, yet a total destruction of the potato crop throughout New England would produce untold suffering.....

IN the book, "How the Farm Pays," Mr. Crozier says he would rather feed potatoes to cattle than to sell them for less than 40 cents per bushel. Both Mr. Crozier and Mr. Henderson oppose the practice of cutting potatoes to single eyes. Mr. Crozier finds the best success where large potatoes are cut straight through, from top to butt in two pieces....

Everywhere.

RURAL SPECIAL REPORTS.

California.

CARPENTERIA, Santa Barbara Co., Dec. 29.—The winter season never commenced more favorably in California for the farmer. About the middle of November we had a very fine rain for seven or eight days, which gave us over 10 inches of water, and during December enough more to make 12 inches up to date. The weather has been warm, so grain and grass have a fine start. Most of our crops were light on account of dry weather during the growing season. Prices low, but we have plenty of the good things of life and no reason to complain. Some of the apple trees are in full bloom and many bushels of apples are still on the ground and trees. O. N. C.

Illinois.

ANNA, Union Co. — The Thousand-fold Rye and Diehl-Mediterranean Wheat almost all froze last Winter, but I gathered about one dozen heads of rye and enough wheat to yield about half a pint of grain. The crossed corn did not succeed. Carter's Stratagem Pea did fairly well. J. M. F.

SHELBYVILLE, Shelby Co.—Some of the Rural peas were the largest I ever saw. The beans were nice but rather small. Corn excellent. Saved seeds from all to plant. The Garden Treasures were an extra-nice mixture and did well. I rather think we shall have to give up Sorghum halapense, as it failed to show itself. VAN D.

Indiana.

MEXICO, Miami Co., January 5.—We are having a very mild, open Winter. Stock of all kinds in prime condition; health good. Growing wheat looking well. Market lower than at any time since thrashing. Wheat 85 cents; corn of good quality, 30 cents. N. B.

Kansas.

ELK FALLS, Elk Co.—We have taken the "RURAL" two years and think it the best agricultural paper we have ever seen. We were visited in the Spring by a terrible flood, which destroyed all the crops in the valleys, to say nothing of property washed away and stock drowned. Further on in the season a destructive hailstorm passed over a part of our locality; and, lastly, the web-worm came to complete the destruction, so that Winter finds us importing corn from other localities to feed stock, which is at such a low price, that many farmers will be broken. M. E. N.

FLORENCE, Marion Co., January 1.—We had the finest Fall I ever saw—very pleasant and warm. We had about two weeks of winter weather, and six or seven inches of snow in the fore part of December. Snow all gone now. Weather fine; roads good. Crops of all kinds were good; but prices are very low. Cattle, about three cents per pound; hogs, three cents to three-and-one-half cents; corn, 35 cents; oats, 20 cents; hay, $2.00 per ton, in stack; butter, 20 cents; eggs, 20 cents; potatoes, $1.00; apples, $1.00 to $1.50. The Rural seeds did well, except the beans. J. J. A.

FORT SCOTT, Bourbon Co., Dec. 29.—We are having an old-fashioned Winter in Kansas—warm and pleasant. But little rain since October, and farmers secured their corn in good order. Corn, 30 cents per bushel, oats, 20 cents; wheat, 90 cents. Business good; money a little tight on account of low prices of stock; good steers, 3½ cents; hogs, 3½ cents; fat sheep, three cents; potatoes, 40 cents to 60 cents; apples, 40 cents to 60 cents; butter, 30 cents; eggs, 20 cents.

Maryland.

EASTON, Talbot Co.—We had a very favorable season for seeding wheat; area seeded up to the average, and the crop looks well. Relying upon the good judgment and candid statements of the RURAL, several farmers of Talbot were encouraged to try the Diehl-Mediterranean Wheat. It proved hardy, vigorous, ripened "on time," and yielded more than Fultz grown on the same farms. I seeded none but the Diehl-Mediterranean, and know of others who did likewise. I expect to follow the advice of the RURAL, and select heads from the field. My wheat is now in a very robust condition. I used a drill tooth attachment, which works on the principle of a sled runner, covering the grain at a uniform depth with fine soil, and the plants all appeared at the same time. Mine was corn ground, plowed and dressed by the Aeme harrow, and drilled two ways. The fallow-like appearance of my field, I attribute to the regular track of the drill teeth, the shallow and complete covering of the seed, which could not have been done on freshly plowed corn ground, with the drill teeth jumping and delving from "none" to several inches deep. This improvement or "reform," I might call it, will greatly increase the yield of wheat together with the new hardy variety above mentioned. I have many things to thank the RURAL for, among which are the Beauty of Hebron and Blush Potatoes, together with several valuable varieties of garden seeds.

"Y."

Massachusetts.

BECHERTOWN, Hampshire Co—The cross-bred corn grew to all sizes, both stalks and ears; some flint, some dent, some early and some late. I have saved a very handsome string of it for seed. The peas, beans and tomatoes did well and are mostly saved for seed. Garden Treasures were very pretty and much admired. E. R.

WESTFIELD, Hampden Co.—Last Summer I tested the Rural method of planting potatoes with level cultivation with good results, having raised Rural Blush Potatoes at the rate of 500 bushels per acre. The yield was twice as great as I had ever grown on the same land by the old method of planting and cultivation. Land a light sandy loam. The potatoes were very fine and free from scab. From observation in previous years, I believe that scab is caused by the potato slug. I notice that where the slug is allowed to eat off the leaves in the latter part of the season, the vines die prematurely. J. L. S.

Michigan.

CALKINSVILLE, Isabella Co.—The Rural corn grew all right, but was too late. Some of the stalks had six ears set, but it would require 150 days from planting to mature. The Prince of Wales Pea did well; saved all for seed. The Rural New-Yorker Pea of two years ago is the earliest and most prolific of any I have ever tried. The Horsford Market Garden is better flavored. The Flageolet Beans are very prolific and whiter than the seed sent me. In flavor they are not as good as Lima. Winter wheat is looking very well, but has a small top. Farmers could not sow early on account of wet weather at seeding time. The Diehl-Mediterranean Wheat did very well last year; I had nearly one peck and took extra care to put it away from the hens; but the mice ate half of it. I sowed the balance and it is looking splendid. The tomatoes grew finely, but were of poor flavor and rotted badly. Times are very hard. Everything farmers have to sell is low. Wheat, 80 cents; oats, 30 cents; hay, $8.00 to $10.00 per ton; potatoes, 25 cents per bushel, about half grown here rotted. R. M.

BATH, Clinton Co.—The White Elephant Potato is a big cropper and in good demand; price from 25 to 30 cents a bushel. My Surprise Wheat can't be beat; it takes the lead of anything here. I sowed all I had last Fall—about nine bushels. Cleveland's Rural New-Yorker Pea is good. The Black Champion Oats are too late. Of the Rural corn for 1884 some yellow dent was early and good; some wanted 12 months to mature in. The Garden Treasures were not very interesting.

W. C.

SCHOOLCRAFT Co.—The Rural seeds did very well, except the mixed corn, which grew too large to mature. Prince of Wales Pea very fine; also the Johnson Grass. T. C.

SUNFIELD, Eaton Co.—The Rural mixed corn was too late for this section. The beans, peas, tomatoes and Garden Treasures were tip-top. W. S.

SOUTH LYON, Oakland Co.—Wheat, 86 cents; corn, 40 cents; oats, 35 cents; potatoes, 30 cents; clover seed, $5; butter, 15 cents; eggs, 20 cents; live hogs, $3.25; poultry low. Beans dull, at about $1. Wheat went into Winter looking bad. Farm stock, except good horses, are lower than for several years. H.

Minnesota.

GROVE LAKE, Pope Co., Jan. 4.—My Blush potatoes did well. I now have 75 bushels. The Rural wheat and rye were winter-killed. This is a spring wheat county. The corn and oats were too late. Mixed corn ditto, but the beans and peas did very well. The Garden Treasures were very nice. I raised 32 bushels of the Saskatchewan Wheat to the acre.

D. S.

Montana.

FRIDLEY, Gallatin Co.—I have resided here nearly three years, and find the climate and everything else agrees with me. The people East have always been ignorant of the climate and soil of Montana, especially of the Yellowstone, Gallatin, Jefferson and Madison Valleys. We beat the world here on wheat, oats and barley. Gallatin County, this year, will average over 40 bushels of wheat to the acre. I have seen some fields that ran over 60. The past season has been grand for all kinds of crops. Corn is not considered a safe crop, but the past season it would have done well as we had no frost from May 1 until September 10. I raised plenty in the garden for home use and had splendid tomatoes. Wild raspberries, wild currants and gooseberries grow here in abundance; so do wild strawberries. But the farmers here have heretofore given very little attention to gardening, as their dollars were in cattle and horse raising, which has been a very profitable business, and a first-class lazy man can attend to a large herd. All he has to do is round up in Spring and Fall, and brand and select out such as may be wanted for sale or use. The surrounding ranges feed them with the fine Bunch and Rye Grasses that grow bountifully. One party near me has 1,500 head of horses and mules on the range. Another party has two or three thousand head of cattle. Almost every one has some. B. P.

Nebraska.

CRETE, Saline Co.—My mixed Corn did finely. Corn as a general thing was good. I had 150 acres which averaged 50 bushels per acre. My Blush Potatoes did splendidly. I never saw better. The RURAL Tomatoes did well. Corn is not nearly all gathered, and is cheap—18 cents. Clover and Timothy do well here—quite extensive crops. M. B. N.

SYRACUSE, Otoe Co.—Some of the Rural corn was early; some late; all got ripe; but it is too small for a field crop. The peas were nice. Most of the tomatoes were small. The The King Humbert was very fine-flavored—the best I ever ate. D. E. S.

New York.

HOWELL'S, Orange Co.—The Diehl-Mediterranean Wheat is something remarkable; the heads beat anything I ever saw. It wintered out badly, but what there was is fine. It was the finest wheat shown at our county fair, and there was a good exhibition of other varieties. The King Humbert Tomato is not worth raising; it would take about a thousand of them to fill a peck measure. Corn this season is good. The cross-bred corn was of all varieties and sizes. I counted four ears on some stalks; some ripened early, and some did not ripen at all. The Thousand-fold Rye is no better than, if as good as, the rye raised in this section; it wintered out badly, and what was left, both straw and heads, proved to be short. Flageolet Beans tough and stringy; of little use for the table. The Peas were excellent; the hens preferred them to all others. H. B.

VOLNEY, Oswego Co., Jan. 6.—The past Summer was cold and wet. Grass and oats pretty good crops. Corn light and not matured. Potatoes rotted badly; some fields not worth digging—worth 40 to 50 cents per bushel. Butter 16 to 18 cents per pound. Eggs 20 cents per dozen. Winter quite open, only a few days' sleighing in December. Snow falling again this morning. H. C. H.

Ohio.

ATWATER, Portage Co., Dec. 28.—From the RURAL'S Diehl-Mediterraneon Wheat I got about three quarts, which I sowed this Fall and it is looking quite well. The corn is, most of it, too late for us. Crops the past season were about an average. Owing to the wet, cold Fall, corn did not ripen well, so much of it is soft. Apples were plentiful at from 75 cents to $1.20 per barrel. Wheat now brings 90 cents. O. M.

BELLEFONTAINE, Logan Co.—The Rural corn ripened from September 1st to October 1st, but the grain and ears were almost all too small, though this was partly made up by the number of ears, ranging from two to five. The Prince of Wales Peas were very fine and productive. The Stratagem did not do so well, being late. The beans were almost a failure, although grown with the peas. The Rural corn of 1884 tried this year, ripened early and was fine—only a little too flinty. The Market Garden are A No. 1, very productive and extra in quality. M.

WAYNESVILLE, Warren Co.—The Rural Corn ripened but it is too small for this locality; will not yield anything like the Leaming. The peas mildewed badly. The tomatoes were very fine. The beans are not as good as some we have; The Cleveland Rural New-Yorker Pea is best with us. J. L. S.

Pennsylvania.

CLARK, Mercer Co., January 2.—We had a very wet Autumn and the fields and roads were so soft much of the time that farmers were greatly hindered with their work, and considerable corn is yet in the fields. The hay crop was about an average. Oats good. Wheat very poor. Potatoes rotted badly, which left a light crop. Price 40 cents per bushel. Corn, only an average crop, 25 cents per bushel. Beef, plenty and cheap—five to seven cents per pound by the quarter. Pork plenty, about five cents per pound. Butter, 20 cents; eggs, about the same. An average crop of wheat sown; looking well. N. L.

GOSHEN, Lancaster Co., January 1.—The Rural peas and beans did nicely. The corn did not amount to much. The Garden Treasures were splendid, there being many varieties of flowers we had never seen. N. H.

SCOTTSVILLE, Wyoming Co.—The past season was one of the worst for a number of years. Corn about half a crop and worth 50 cents per bushel. Oats, 40 cents; wheat, $1; potatoes, 40 cents; hay, $13 per ton. Cattle plenty and very cheap—can't be sold at any price Rural corn too late for this section; other seeds did well. Tried a small plat of potatoes on RURAL plan and raised twice as much as I did by the old way. J. G. F.

MUNCY, Lycoming Co.—The Stratagem and Prince of Wales Peas were very fine, we have saved all for seed. The Flageolet Beans were very nice. The Garden Treasures came up well, but the cold rains killed many of them.

J. R. B.

Rhode Island.

GLOUCESTER, Providence Co.—The Rural corn all came up well, but the "farmer's friend" pulled up every spear. Peas did very well. Tomatoes all killed by frost about September 1st. The beans promised a large yield, but a woodchuck ate off all the leaves, and the beans ripened before they were grown. The Johnson Grass grew about five feet high, but one spear was seven feet nine inches in the main head, being the only one that matured. Blush and White Elephant Potatoes were very nice and gave a good yield. The Beauty of Hebron, Pearl of Savoy, King of the Earlies and Early Rose were so badly affected with scab that out of 60 bushels I only got eight bushels smooth enough for market. Many of them were covered with blotches or scab so thickly that not a spot of the skin was to be seen, and where they were left on the ground, in a week they had all perished, leaving nothing but a little dry, hard lump. All of these potatoes were planted in the same field; the two first kinds were smooth and handsome, yielding 114 bushels. "L."

Tennessee.

RICEVILLE, McMinn Co.—Our wheat crop was not more than a quarter of an average. I sowed one bushel each of the Mediterranean and Landreth's White Wheats; they stood the Winter all right, while other kinds were more or less winter-killed or frozen out entirely. The mixed corn is not of much account, ex-

cept for early table use, the larger dent varieties yielding better. The peas and beans did well. Corn is worth 40 cents; wheat 90c. to $1; oats, 25 cents; hogs, 3¼c. per pound; cattle, 1½ to 3c; butter, 15c.; eggs, 17c.; other things low. About the usual area sown to wheat; looks well. W. C. D.

Vermont.

BAKERFIELD, Franklin Co., Jan. 2.—The past year was rather cool for some crops, especially corn, squash, cucumbers, etc., but our corn was a fair crop. The vine crops were rather poor; but the potato, oats and wheat crops were good. Produce is selling very low. Butter, 15c. to 18c.; potatoes, 35c.; oats, 1c. a pound; pork, 5½c.; beef, 5c.; apples, $1.50 per barrel; hay, $12; old cows, from $5 to $10. The Rural corn did not ripen. The R. N.-Y. peas are two weeks earlier than any grown around here. Flageolet beans are truly wonderful. N. O. S.

Wisconsin.

FRANKLIN, Milwaukee Co., Dec. 31.—The Rural Union Corn (1884) is a very remarkable variety; it is the best corn I have ever seen; very large kernels. Everybody who sees it must have an ear, so I have put it away and do not show it. The Dichl-Mediterranean Wheat stood the Winter very well, when my other wheat, within a rod of it, was all winter-killed; yield one quart. The Thousand-fold Rye was splendid; yield three quarts. The Welcome oats I lost by breachy stock. The Garden Treasures gave good satisfaction—but that is the women's department in my household. R. B.

THE FARMER'S CLUB

ANSWERS TO CORRESPONDENTS.

[Every query must be accompanied by the name and address of the writer to insure attention. Before asking a question, please see if it is not answered in our advertising columns. Ask only a few questions at one time.]

SWINE PLAGUE, HOG CHOLERA.

J. K., Beattie, Kans.—What will stop the cough in my hogs? They will lie in piles and shiver as though freezing, and when driven off, they will cough very hard. They lose appetite, and die in two or three weeks. On opening them, I find the greater part of the lungs decayed in some, while the lungs of others are badly congested.

ANSWERED BY F. L. KILBORNE.

Your hogs are evidently dying of swine plague, and that form of the disease in which the lungs are the seat of extensive lesions. The lung-worms—Strongylus paradoxus—are generally considered to be harmless to swine, while their absence in some cases would show that they were not the cause of death in the present case, and only incidental when they do occur. It would be well to examine the interior of the large intestines, especially the cœcum or blind pouch, and about the ileo-cœcal valve, where the small intestines join the large, and if ulceration is found, or in recent acute cases only deep reddening of the mucous membrane, the disease is swine-plague. Treatment of the sick animals is very unsatisfactory, as well as unprofitable, except perhaps in the case of very valuable breeding stock. They remain so long unthrifty, usually from several months to a year or more, that it is better to kill all diseased animals at once, and direct the attention to preventive measures to check the further spreading of the disease. Separate the healthy from the sick, and remove them at least several rods away to windward, if possible. Feed twice daily in the food of each animal one year old and older, 20 drops of sulphuric acid and one-half dram of sulphate of iron. Pigs three months old may receive one-eighth, and those six months old, one-fourth of this amount. If treatment of the sick animals is desirable, they may receive the same dose. Watch the healthy animals daily, and remove any showing the first signs of illness. Any pen not yet infected, and all new arrivals, should be very carefully guarded, so that dogs, rats, fowls, or other small animals cannot pass from the sick to the healthy. If possible, have a special attendant to care for the healthy animals; otherwise always care for the healthy first and the sick last, and then do not go near the healthy again until necessary to feed. Give special attention to the hygienic surroundings of the animals: the pen should be clean and comfortable; the food wholesome. It is better not to allow the animals the run of a yard, because of the difficulty of disinfecting it. All dead animals and their products should be deeply buried or burned. Disinfect all infected pens as well as everything else with which the sick animals have come in contact, with a two-per-cent. solution of sulphuric acid, one-half pint of the strong acid to each three gallons of water.

BEANS, OATS AND BARLEY; PEAS.

J. C. S., York, Pa.—1. What kind of beans are most profitable for field culture, and what is the average yield per acre? 2. Would you recommend oats or barley as the most profitable crop? 3. What is an average yield of peas grown as a field crop?

ANS.—1. There are five varieties of beans that are grown as field crops—the Medium, the Pea or Navy, the Marrow and the Red and White Kidneys. There is more fluctuation in the price of Red Kidneys than in that of any other, and when grown at such a time as to strike the market at the top, there is plenty of money in a crop of them. The same is true, to a limited extent, of the White Kidney, and to a still less extent of the Marrow. The Medium is the great staple bean of the markets, and has the most uniform sale, and we think it is, all things considered, the best bean to tie to as a field bean. Its yield varies much with the soil and season, and will run from 10 up to 40 bushels under the most favorable circumstances. Contrary to the opinion that any land is rich enough for beans, they respond always to manure and rich land. 2. Whether we would grow oats or barley, would depend upon soil and markets. A light, sandy soil that, made rich, would grow 75 or 80 bushels of oats per acre, probably would not grow 20 bushels of barley, and that of light weight; while a heavy clay loam, well enriched, will grow almost as many bushels of barley as of oats (a great many more pounds). We have raised on the Western N. Y. Farm over 73 bushels of Manshury Barley per acre. The safe way is to try an acre or two; you would then know just which your land was adapted to. 3. From 12 to 40 or more, the yield depending upon the soil, its richness, and much on the season.

GYPSUM.

N. L. H., Flora Vista, N. M.—I am desirous of gardening here, and manure is hard to get, but we have an abundance of white gypsum—a compact, earthy substance—and I would like to ask; 1. Is this class of gypsum of as much value as a fertilizer as manure? 2. Should it be mixed with the soil or used on the surface? 3. In what quantities can it be used? 4. Is not such gypsum a valuable article of commerce, and how much is it worth in Eastern markets?

ANS.—1. We are half inclined to doubt its being gypsum at all. We have seen large quantities of a similar substance in Southern New Mexico, which was a sort of marl. If so, it is worth more as a manure than gypsum. But gypsum is not worth a tithe as much for manurial purposes as stable manure. It only pays on certain soils and certain crops, and no one can tell whether it will pay or not except by actual trial. 2. Gypsum pays best used as a top-dressing and applied when the crop is in active growth. 3. It is usually applied at the rate of about 100 pounds per acre, which pays about as well as more. 4. Gypsum is used quite largely in the East, and is worth from $3 to $8 per ton ground ready for use. The gypsum here is found in the rock form, sometimes in large boulders and at others in compact ledges. It is broken up and ground to a very fine powder, in mills similar to grain-grinding mills.

EARLESS CORN-STALKS.

A. F., 114 E. 52d st., New York city.—Why do many stalks of corn which grow rank and strong and of full hight have tassels but no ears?

ANS.—There is no mystery in this. Corn, like many plants, has its male and female blossoms on separate parts and sometimes on separate plants. The ear is made up of a cob on which are arranged the female blossoms, one for each kernel, and the silk is the pistil, which must receive the impregnating influence of the pollen in order to have the grain develop. The pollen is borne on the tassel, which contains the male flowers from which it is shed. In all fields some stalks bear only tassels and no show of ears whatever, being male plants, called by the farmers "suckers," and unless cut out, or at least unless the tassel is cut off before shedding the pollen, the tendency is for these to increase. The best way to raise seed corn is to select a part of the field and from this, as soon as the tassels appear and before they shed their pollen, cut the tassels, not only from the male plants but from every plant that has not two or more well developed embryo ears. In this way the male parent of every kernel selected as seed for the next crop, will be a two-ear-bearing stalk. And, as like begets like, this has an effect on the succeeding crops.

TREATMENT OF A PEACH ORCHARD.

J. T. K., Hickory?—1. Should a five-year-old peach orchard be cultivated every year? 2. How should the trees be trimmed and when? 3. Would it be well to top-dress the orchard with stable manure? 4. Is soft soap a good wash for the trees?

ANS.—1. No matter how old the orchard is, the land on which it stands should be cultivated every year. 2. After the trees are five years old or more, the principal trimming they need is to cut out broken and dead branches, keep the top in shape, and, if too thick, thin out moderately. 3. Yes and also apply plenty of wood ashes, and if light land, bone dust. 4. Yes; but not so good as if it were made of caustic soda and water.

"HOOKS" IN A HORSE.

J. O. L., Monteithville, Va.—Is it likely that the eyes of a two-year-old colt will be permanently injured by "hooks" removed a year ago?

ANS.—"Hooks" is an inflammation of the haw, or membrana nictitans, which passes over the eye from the inner corner to clear it from foreign matter. This membrane sometimes becomes swollen and the lacrymal duct is obstructed, causing severe tenderness in the eye, and sometimes sympathetic fever. It should never be "removed," as the cutting of it ont deprives the horse of a necessary organ. In the present case any injury to the eye now may be due to the "removal" of the haw a year ago. Give an animal troubled with "hooks" one pound of Epsom salts, and apply to the diseased part, with a camel's-hair pencil, the following solution: one dram of sugar of lead and ten grains of morphia in half a pint of water. Protect the eye from strong light and use the lotion freely.

EXTRACTING HONEY.

V. K. (address mislaid).—How is honey extracted from the comb?

ANS.—By means of an extractor, which is a round, deep tin cylinder like a barrel, inside of which an axle is placed, upon which rests a rack or frame to hold four or more combs. By means of gearing, the rack is rapidly revolved and the honey thrown from the comb by centrifugal force. Prof. Cook states that the principle which makes the machine effective was suggested to the original maker, a German, by noticing that a piece of comb which was twirled by his boy at the end of a string was emptied of its honey.

Miscellaneous.

J. C., Oil City, Pa.—Can bones be ground to fit them for fertilizing purposes, fresh as they come from the butcher shops? If so, can they be better fitted in any other way?

ANS.—Bones in this condition contain much oil and some meat, and these make them very difficult to grind, and while the lean meat and muscles have considerable fertilizing properties, the fat and oil are of no use whatever. It is customary to steam the bones and thus extract the fat, after which they are dried and afterward ground. If to be used fresh, they may be broken quite fine and reduced with ashes or manure.

R. R., Herman, Minn.—1. Should night-soil and wood ashes be mixed as a fertilizer? 2. Are ashes a good fertilizer for potatoes?

ANS.—1 Never, except they are also mixed with plenty of muck or loam, as the potash of the ashes would set free the ammonia of the night-soil; this is arrested and held by the soil. 2. Ashes, bone dust and salt are all good fertilizers for asparagus; so also is plenty of barnyard manure; put it over the surface of the beds in the Fall, and fork it in in the Spring.

T. M., Raymond, Dak.—I have a mule that is lame in the hind leg. From all I can make out, the whirlbone is partly displaced. I have been using liniments and latterly cantharides and turpentine, but the ailment does not seem to improve. It has been so for two or three months. Can anything be done for it?

ANS.—Any displacement should have been replaced as soon as possible after the injury. Now it would probably be impossible to do so without a surgical operation, and perhaps not even then. The only hope is to consult a competent veterinary surgeon if possible.

F. B. M., New York.—1. How much capital would be needed for starting in poultry raising as a business? 2. What are good works on the subject?

ANS.—1. We would not advise anybody to invest heavily in poultry raising at the outset. The business is very risky for a novice. Better begin in a small way, and as your experience increases, increase the business. 2. Lewis' Practical Poultry Book, $1.50; Wright's Illustrated Poultry Book, $17.50; Wright's Practical Poultry-Keeper, $1.50, and Tegetmeir's Poultry Book, $9, are all good, and can be had through the American News Company.

C. D. C., Black Mingo, S. C.—I have a hermaphrodite hog which I claim to be the only living hog of that sort; am I right?

ANS.—Moustrosities are probably more common among swine than among any of the other domestic animals, so that hermaphrodite animals should not be very uncommon. We have seen a number of monstrosities of pigs of various forms, but have never had our attention called to a hermaphrodite pig.

C. B. H., Hobart, N. Y.—Is there such a thing as passing electricity through milk to separate the butter and save the labor of churning?

ANS.—We have seen such an announcement, but have no knowledge of its being made practical. For the present at least we guess you will have to turn or swing the churn either by hand or some other power.

S. W. G., Westchester, Ind.—Where can I get red Bush Alpine Strawberries?

ANS.—You will not find it easy to get them—at any rate in quantity. Ellwanger & Barry, of Rochester, N. Y., usually keep a few on hand to oblige customers, as do also Hovey & Co., of Boston, Mass. The running Alpines are much easier to get, both red and white.

J. A. S., Howenstine, O.—Where can I get the Imperial Egg Food?

ANS.—From J. M. McCullough's Sons, Cincinnati, O.; the Plant Feed Co., St. Louis, or F. C. Sturtevant, Hartford, Conn.

R. S. C., Harman's, Md., wants information about the Hoffman Seedling Strawberry, which, he says, is grown around Charleston, S. C. Who can furnish the information through the RURAL?

DISCUSSION.

N. I. S., WEST SPRINGFIELD, MASS.—I run a large cider mill, and find the talk in the papers about the value of apple jelly, comes from men who know more about writing up the jelly than they do about making it. It is very difficult to make a good apple jelly at a profit. The cost of making exceeds the price at which it is sold. In the open-pan evaporation of the cider from unassorted apples of different flavors, either sour or sweet, there is a great difference in the product, to the sight as well as to the taste.

C., FLUSHING, L. I.—Is not the Live Stock Indicator, page 847, in error in stating that at the public sales the past year the average price of Herefords as $343.14, and of Shorthorns only $92.31? In the reports that I have seen of these sales the prices averaged only a little higher for Herefords than for Shorthorns, while in England the case has been reversed. A great boom was run up by the breeders of Herefords from about 1880 to 1884, but since that time the price has fallen rapidly, so that in England, particularly, they may now be bought for little above butcher's prices for fat cattle. C.

R. N.-Y.—The Indicator referred to the sales in the West, mostly in Kansas and Missouri.

THE ROSTIEZER PEAR.

A. B. A., FLUSHING, LONG ISLAND, N. Y.—Mr. Parnell, page 845, says that although this pear is one of our finest summer pears, and quite indispensable for home use, he does not think it would be of any value for market purposes, on account of its small size. The case is quite the contrary where I am situated, for it is the only sort I can sell at any profit. Ripening so much earlier than nearly every other kind, it comes into market before them, and is eagerly purchased by the people of the village near me. It ripens here about the middle of July, just as raspberries and blackberries begin to fall off, and before peaches and summer apples are fit for eating. Thus there is no other fruit of consequence to rival it, and it sells at a good price. Later on, pears are so abundant they pay no profit, except in a very scarce year. The clusters on my trees are so numerous that I pick, or rather cut off, two-thirds of the fruit as soon as the pears get to be about a half-inch in diameter; even when they come to ripen, I generally think too many have been left; for in a very strong wind the branches are loaded so heavily they occasionally break, and thus mar the shape of the tree. The trees are very hardy, grow thriftily, and bear abundantly in a poor sandy or light gravelly soil, requiring to do this only a little stable manure spread around them each Autumn.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING SATURDAY, January 23, 1886.

F. S. N.—G. A. D. C.—A. H. Griesa, please send your address to R. N.-Y., River Edge, Bergen Co., N. J.—J. A. S.—A. W. R.—W. S. B.—M. E. N., thanks.—J. J. A.—J. W. R.—G. J. S.—Mark S., thanks.—S. B.—R. M.—E. H.—F. H.—J. L.—J. R.—J. S. S.—W. C. D.—P. H. J.—F. D.—S. H.—J. P. R.—G. A. D.—B. P.—J. W. S.—P. O. M.—A. M. P.—M. W.—F. B. B.—I. H.—H. E. K.—W. S. S.—J. O. B.—E. C. B.—A. V. V.—A. R.—E. H.—G. E. C.—V. T.—J. C. O.—H. S.—J. M. F.—F. H. P.—T. B. T.—W. P. K.—E. G. M.—E. J. B.—Treble.—J. J. F.—G. W. R.—P. T.—P. M, J.—S. J.—P. M. G.—W. F.—M. D.—C. G. R.—W. J. Paine, thanks.—J. E.—L. M. S.—A. S. B.—A. F. H.—F. F.—G. W. T.—F. G. W.—J. A. S.—H. S. L.—J. C. C.—D. C. M.—R. W. S.—A. H. B.—S. A. S.—J. C.—A. F.—N. L. H.—H. C. B.—M. H. McG.—J. R.—W. W. T.—R. R.—J. C. S.—J. E. G. P. M. A.—S. H. O. N. C.—J. T. B.—V. W. C.—J. S. B.—L. C.—W. W. C—O. S.—A. J. M.—W. M.—C. H. R.—T. M. C.—C. N. B.—A. B.—J. B.—A. B. S.—G. E. C.—J. D. T.—J. V. H. N.—A. M. T.—E. S.—T. C. B.—C. P. C.—R. K. P.—J. B.—C. B.—C. L.—J. D.—J. L.—C. M. H.—J. M. S.—E. D. B.—O. S. R.—C. H. W.—R. M.—T. A. H.—E. A. S., thanks.—B. W. S.—H. H.—C. N.—F. R.—S. F., thanks.—J. M.—C. S.—G. K. H.—J. L. B.—F. F. G.—J. T.—V. and C. D. B.—A. B. E.—W. J. C.—S. S. C.—J. S.—J. T.—A. J. Mc D.—T. D. C.—J. E. G.—J. H. G.—T. T. L.—E. Z. B.—W. W. L.—V. McG.—T. D. C.—T. B. B., we will use if we can.—P. K.—S. H. T.—A. F.—C. H'—E. L. B.—A. L. B' A. M. C.—G. H. C.—E. F. Y.—L. E. S.—A. C.—W. D. H.

THE
RURAL NEW-YORKER.
A National Journal for Country and Suburban Home

Conducted by
E. S. CARMAN, Editor.
J. S. WOODWARD, Associate.

Address
THE RURAL NEW-YORKER,
No. 34 Park Row, New York.

SATURDAY, JANUARY 23, 1886.

Subscribers of the RURAL *need never take the trouble to write us to "stop" the paper. It is invariably discontinued at the expiration of the subscription term, except by oversight, in which case it is our loss.*

READ the catalogue notices on page 61.

WE will gladly send our new posters to all who apply.

IF the number on your address label is 1878, your subscription expires with this number; if 1879, next week; 1880, in two weeks, etc.

THOSE who would like to have a glimmer of Spring in their sitting-rooms should cut sprays of such hardy plants as the Japan Quince, Forsythia (Golden Bell), cherry, etc., and put them in water. They will bloom in a few weeks.

ALL who subscribe for the RURAL NEW-YORKER are entitled to its Free Seed Distribution on application. No others need apply, for the reason that our supply of seeds is necessarily limited. Enclose a two-cent stamp, please. We are obliged to pay on the present packet four cents.

THE thermometer at the Rural Grounds at 7 A.M. the 13th instant was 12 below zero. As there is scarcely any snow on the ground, this will prove a test Winter as to the hardiness of many of the newer grapes, raspberries, blackberries, shrubs and trees.

WE presume that some of the RURAL's readers, as well as others, have gone a little crazy over the chrysanthemum. We shall attempt to aggravate this pardonable disorder by presenting some engravings from nature of a few of the latest and best novelties of this showy flower, with articles from experienced growers.

AGAIN, friends of the RURAL, we must ask you not to feel slighted that many of your questions have not been answered. Indeed, they *have* been answered, but we can not, without neglecting other departments, find space for them. We trust that all questions and answers will appear in due time. As a matter of fact, if the RURAL were twice as large as it is, we should still find it difficult to publish all the contributions received, well worthy of publication.

WE earnestly solicit our subscribers, in renewing, to write their names, post offices, counties and States *plainly*. Our new posters and specimen copies will be sent promply to all who apply, without charge, and with our best thanks for the interest so shown. We beg to remind our readers that *now* is the time to secure clubs. A kindly word from good people as to the merits of the RURAL must always have its effect. We prize the opinion of conscientious men.

As between the Spanish and Japan Chestnut, for the climate of Chicago and New York, extending south and a little north, do not fail to select the latter. The nuts are not quite so large and the average is fewer to a burr, but the quality is better and the tree is *hardier*. Probably the seed will be offered for sale by some of our seedsmen, in which event we shall promptly notify our readers. The Japan Chestnut fruits in a few years from seed, and, whether for ornament or fruit, is worthy of a place on every farm.

THE Stratagem and Pride of the Market Peas (both "English, you know"), were introduced at about the same time. Both were tested at the Rural Grounds, and the Stratagem was deemed the more valuable of the two, and, accordingly, placed in the Rural's last Free Seed Distribution. It is now rated in catalogues as the best main-crop pea in cultivation. Some catalogues are now announcing the Pride of the Market as a novelty. But those of our friends who have the Stratagem need not care for the Pride of the Market.

ALL who subscribe for the RURAL, and of course, our regular subscribers, are entitled to the RURAL's Free Seed Distribution upon *application*. Others need not apply. A two-cent stamp should accompany the simple request "Send Seeds." We trust that those who do not care enough for the seeds to plant and give them good care and report to the RURAL how they succeed, will not apply. Our stock is necessarily limited, and the seeds are too valuable to be thrown away. The object of these seed distributions is to enable our subscribers to test in a small way the latest and most promising novelties without incurring any expense.

LET us once more advise those of our readers who are intending to plant evergreen trees next Spring, *not* to select the Balsam Fir. It is among the brightest, showiest trees of the nursery, and, when small, always well clothed with its deep green foliage. But it will disappoint you, friends, as it grows older. It is beautiful and promising in youth, but gaunt and unsightly as it grows older. One plants in the expectation of having, in 15 years, shapely trees that are a joy to look at. But the Balsam Fir, as a rule, is so far from ornamental at that age, that it is better to utilize it as firewood.

A CONSIDERABLE time ago, the RURAL bought a package of Hammond's Slug Shot, and, at the request of a subscriber, sent it to the N.Y. Ex. Station to be analyzed. The Chemist of the station in its last report says: "The indications are, that it is no more nor less than London-purple, mixed with a very large proportion of gas or slaked lime."

Mr. Hammond is now sending a postal card to seedsmen with the sworn statement that "at no time has either London-purple, slaked lime, or gas lime entered into its composition." If the Chemist of the station made the statement without a careful examination of the Slug Shot, he is certainly a careless and inefficient officer. If Mr. Hammond has sworn falsely, the public should know it at once.

THE NEXT POTATO SPECIAL.

THE Second Potato Special of the RURAL NEW-YORKER, to be published before March, will have articles from the following contributors: Prof. I. P. Roberts, Farm Manager, Cornell University, N. Y.; F. W. Wilson, Wilson's Nurseries, Chatham, Ont.; Peter M. Gideon, Minn.; Prof. L. H. Bailey, Mich. Ag. College; Frank Ford, Ohio; Col. F. D. Curtis, N. Y.; Thos. Barrett, Ills.; E. J. Brownell, N. Y.; E. Z. Butcher, Kansas; C. Harris, O.; E. G. Mumford, N. Y.; E. Horner, Colorado; A. W. Russell, O.; C. Calkins, Colorado; Prof. A. J. Cook, Ag. Coll., Mich.; A. Van Valkenburgh, N. Y.; F. H. Plummer, Maine; Geo. H. Colvin, Pa.; Pres. T. T. Lyon, Mich.; Lewis S. Ely, Iowa, and others if space permit.

PRIZES.

TEN DOLLARS

for the largest Bird Cantaloupe from the Seed of the RURAL's present Free Seed Distribution.

TEN DOLLARS

for the largest Watermelon.

TEN DOLLARS

for the longest ear of the Angel of Midnight Corn containing the greatest number of kernels.

TEN DOLLARS

for 10 of the heaviest pods from the Alaska Pea.

The Prizes will be awarded October 1st, 1886. All competitors will be required to advise us as to the weight or size of their peas, melon, or corn by postal card. Those who take the prizes will then be required to send the peas, corn, or melons by express at the RURAL's expense.

A RIGHTEOUS ACT.

SECRETARY LAMAR deserves the thanks of the country for the decision just made, which accords with the wishes of the RURAL, as expressed some time since on this page. He consents to have suit brought, in the name of the Government and at its expense, to vacate the Bell telephone patents. Of course this decides nothing, but it will fully test the claims made, and which, we believe, are well founded, that these patents were obtained by fraud and are, therefore, invalid. If so decided, this much used and almost indispensable convenience will become public property, and competition will furnish it so cheap as to enable everyone to enjoy its use. There is no doubt but that the Bell Company has already taken from the people more than one hundred millions of their hard-earned money. Now, if it shall be shown that there is no validity in these patents, will it not be a fact that the people have been swindled out of this money? And is not some blame to be attached to the Patent Office for allowing the patents on insufficient evidence?

ORIGINAL ENGRAVINGS.

IT is very plain to us that a large proportion of readers do not appreciate the cost of illustrating a journal; that is, of course, with *original* illustrations. Second-hand illustrations, such as we see "going the rounds," may be bought for a song, really costing less, in most cases, than the type-setting required to fill the same space. Not only has the RURAL to pay its artists and engravers, but the specimens to be drawn and engraved have to be procured often at a considerable cost in time and thought. Besides, most of the plants, whether grain, fruits, shrubs, trees or flowers, are first grown and tested at the Rural Grounds, as our older readers are fully aware.

During 1885 we presented, in all, 600 engravings, of which not less than 450 were drawn and engraved for this journal, while the others were reproductions of the best illustrations to be found in our foreign exchanges, in which latter case we have merely had to pay the cost of re-engraving. But the entire cost probably adds between three and four thousand dollars annually to the expenses of conducting the R. N.-Y.

These cuts, after they have appeared in our columns, are practically valueless. It is true we could sell many of them for one-tenth of their cost, and this, in exceptional instances, we have done—only, however, to see them "going the rounds" as *original* engravings in other papers, which, in this way, appropriate, at a nominal expense, the credit which fully belongs solely to the R. N.-Y.

NOVELTIES.

MANY writers advise farmers not to test novelties. "It will be time and money thrown away." Our own advice is to test them in a small way—cautiously, so to speak—but *test* them. If one kind of potato will yield on your land but 100 bushels to the acre, while another will yield 200, would it not pay you to test 25 varieties in a small way to find this out? If one kind of corn will yield but 25 bushels of shelled corn, while another will yield 50, would it not pay you to plant a dozen different kinds in small plots to find this out? And so with wheat, oats, roots, grapes, raspberries, strawberries, etc., etc. Perhaps 90 per cent. of the so-called "novelties" are no better than old kinds. Our claim is that it *pays* every gardener, fruit-grower, florist or farmer to select what seems to be the most *promising* of the novelties, and to test them in small plots, taking the chances of thus securing improved varieties which will pay for themselves and the trouble and expense of raising them.

We have perhaps 50 or more different raspberries growing at the Rural Grounds. Were we to raise them for *profit*, all but about five different kinds would be destroyed. We have a dozen or more different kinds of blackberries. These would be reduced to two or three. We have perhaps 75 different kinds of grapes. These would be cut down to half-a-dozen. And we should carry out the same ratio of rejection among our wheats, oats and vegetables. Now how are we thus enabled to select the plants best adapted to our soil and climate? The answer is, by testing novelties beside the best of the standard kinds.

It appears to us that the advice not to test new plants or seeds comes from those who either have had an exceptional experience, or none at all.

A BOARD OF AGRICULTURE.

NEW YORK'S PRESSING NEED.

NEW YORK is emphatically the "Empire State," with a total length of over 400 and a total breadth of over 300 miles. She has a greater diversity of scenery, a greater variety of soils and climates, and produces in abundance a greater number of "agricultural" products than any other State, and yet, with these advantages, she does comparatively nothing to develop these resources, or to instruct her soil tillers.

With the best dairy soils and climate, and the richest grasses and purest water in the world, she allows the cheese of Canada and the butter of Illinois, Iowa and Wisconsin to outsell in her own markets the productions of her own farms, simply because these sections have, and she has not, afforded the dairymen the facilities for obtaining the requisite knowledge to enable them to make first-class goods.

With her grain fields starving and yielding annually diminished crops for want of manure, she allows millions of pounds of feeding stuffs, rich in both animal and plant food, and thousands of half-fattened cattle and sheep to be sent to the sea-board cities and the Old World markets, passing directly by the doors of thousands of her empty barns rotting idly down, solely because her farmers lack the knowledge of the conditions necessary to enable them to profitably finish fattening these animals on those foods in such a way as to leave a profit of at least the plant food, to be used upon their impoverished fields. There is not another State in the Union that has not done more for its farmers, and scarcely another, however small, that has not a live and efficient Board of Agriculture, constantly looking after the improvement of its agricultural methods and resources; and a score of States, notably Michigan and Ohio, are now each holding a series of Farmers' Institutes especially for the education of their farmers. Surely, the great State of New York, with its quarter of a million farms and a half million farmers, should take a foremost part in fostering the interest of that class the products of whose labors feed the people and enrich the State, without detracting from any other interests.

WE ought to have a live Board of Agriculture, whose business it should be to increase the productiveness of our farms by instructing our farmers in the newer and better methods of soil culture, dairying and stock feeding. And each Winter there should be held, under the direct auspices of this Board, not less than 30 Farmers' Institutes in the 60 counties of the State. And in these Institutes the farmers of each section should be instructed in the particular branch of farming adapted to their section, by experts who have proved their competency by a success in that particular branch. In this way the butter and cheese makers of the dairy districts will be kept in the front rank of progressive dairymen; the potato, fruit and grain growers of these respective regions will be taught how to produce the largest crops, and in every part such men as have made a success of winter stock-feeding, should be called upon to show New York farmers how to make meat, money and manure at one and the same time.

We hope that every paper in the State which is friendly to the farmer's interests will make it a point to urge this matter; and that those members of the Legislature who would do something to advance the solid interests of the State, will see to it that a bill is presented and speedily passed establishing this much-needed institution.

While money is being wasted by the million in piling up a needless conglomeration of stone, brick, mortar and iron, under the pretense of building a "capitol," let us have a few dollars appropriated to establish and maintain a Board of Agriculture, which shall do something to instruct the farmers how to grow better crops, enrich their fields and better manage their farms, thus aiding the best interests of the whole State.

BREVITIES.

OUR friends should look over the advertisements and send for the catalogues therein announced.

MONEY sent in letters for subscriptions to the RURAL NEW-YORKER is at the sender's risk. Our terms are invariably $2.00 a year in advance.

WE wish that the RURAL's Avery Sewing Machine might be in the home of every one of our subscribers. We look upon it as the most valuable premium we have ever offered for so low a number of subscribers. We do not hesitate to commend it as the best machine manufactured.

A COMMON way of building grape arbors in Connecticut, is to bolt an upright post to a slab set in the ground, with cross-bars in the usual way. We have noticed arbors that have evidently been in place for years, yet showed no signs of decay or of breaking down. As a matter of course, arbors can only be built in this way where suitable stone can be obtained for the foundation. The method of construction is very simple: the slabs are bored near the surface of the ground and again near the top, and the upright posts are attached by bolts either keyed or screwed fast. An arbor properly built in this way would last a life-time.

Indust'l Societies.

NOTES FROM THE WINTER MEETING OF THE CONNECTICUT BOARD OF AGRICULTURE.

(RURAL SPECIAL REPORT.)

Bran and "fine feed;" saving and keeping fruits; Connecticut game laws; Canadian milk and cattle feeding experiments; grasses for permanent pastures; hints as to cattle feed; milk for cities; agricultural fairs; experiments with fertilizers.

THE nutritive and manurial value of wheat bran was discussed by Dr. Jenkins. The husk of spring wheat is brittle, rich in gluten and difficult to separate, just the opposite of winter wheat, but the bran of the latter is the richest, containing about five per cent. less digestible matter than fine feed. New-process bran contains one per cent. more phosphate and three per cent. more protein than old-process. Bran is cheaper at $18 per ton than middlings or fine feed at $20, and contains 48 pounds of nitrogen per ton. Twelve tons of bran contain 576 pounds of nitrogen, 340 pounds of phosphoric acid and 760 pounds of potash—as much as is contained in three tons of dried fish—to say nothing of its value as feed—an important consideration. It requires considerable faith in chemistry to believe coarse bran, as commonly sold, contains more nutriment than the finer grades.

Saving and keeping fruits was the topic treated by pomologist Augur. He advocated giving the best, plenty of it, and of the best keeping varieties. Half the battle is to have well-grown specimens free from insect blemishes, to gather early and carefully, avoiding bruising, discarding interior samples and feeding them to stock. Cold storage should be more extensively employed. Evaporating will be found profitable. Apple jelly is a profitable product and, with canning now so popular, we can have these healthy products of the soil on our tables, in some shape, the year round, much to our health and profit.

The game laws of Connecticut were shown by Mr. Kelly to be enacted in favor of irresponsible sportsmen and pot-hunters, and the New York markets are largely benefited by receiving the game that rightly belongs to the farmers of Connecticut. He pleaded earnestly for the birds, and denounced, in well-merited terms, the wholesale robbery of the nests under the plea of making cabinet collections of no benefit to any body. The crow came under this ban; as it is guilty of destroying more eggs and young of robbins than all its good works can atone for.

What the cattle have said relative to food for 10 years past, was an interesting topic treated by Prof. Brown, of Ontario, Canada. The figures from his experiments represent the average of tests during a series of years not from one cow, but from three, four and more. It will be noticed that while the Hollands are noted generally for their yield of milk, it the lowest in quality. [Numerous other experiments in the United States show much more favorable results as regards the quality of Holland milk.—EDS.]

Another curious feature shown is that the Jersey stands not only at the head of the list for butter, but for cheese also. [Tests in other places have given very different results also.—Eds].

Breeds.	Per cent. of butter in 100 lbs. of milk.	Per cent. of butter from 100 lbs cream	Per cent of cheese from 100 lbs. milk.	Chemical analysis of milk. Total. Fats.	solid.
Jersey	5.1	55.	15.6	6.62	11.65
Ayrshire	4.5	43.5	12.9	5.72	13.53
Short-horn	4.1	41.6	11.	4.99	13.99
Short-horn grade	3.7	46.3	11.9	4.03	12.38
Devon	4.3	48.5	11.9	4.13	12.15
Aberdeen-Angus	3.5	38.	10.1	2.87	11.57
Guernsey	2.5	41.5	11.7	3.60	11.80
Holstein	2.3	34.5	10.9	3.73	11.88
Galloway	2.3	31.	11.7	4.58	14.28

The accuracy of these tables will doubtless be questioned. The lecturer himself was surprised; but he could not explain them away. They were the facts, and must stand till displaced by other facts deduced in like manner. It required three acres to maintain one cow in pasture for the season. One acre represents 1,300 pounds of milk on pasture, against 900 pounds per acre this side the line. His mixture of grasses for permanent pasture is:

Meadow Fescue	6 lbs.	Meadow Foxtail	1 lbs.
Red Top	2 "	Orchard Grass	3 "
Kentucky Blue Grass	2 "	Timothy	1 "
Italian Rye Grass	1 "	or English Rye	1 "
Yellow Oat Grass	2 "	White Clover	3 "
Lucerne	5 "	Red "	1 "
Alsike	2 "		
Yellow Clover	1 "	Total	36 lbs.

On a farm of 400 acres he has 20 acres in roots—sweeds or rutabagas mostly—and expects a yield of 22 tons per acre. After four years' trial of ensilage, he had abandoned it on account of its objectionable effects on the milk. He avoids fine ground feed; coarse or cracked grain is better. Oil cake is fed cracked to the size of hickory nuts, or larger. He thinks cattle masticate it better in that condition, and more thoroughly incorporate it with saliva and coarser food. He feeds cattle for beef about six months, and prefers two-year-olds—not profitable to feed longer.

Prof. Brewer, treating of the milk question for towns and cities, urged absolute cleanliness and the prevention of any foul odors or impurities being absorbed by the milk, and thus conveyed to the human system. Skimmed milk is by no means innutritious or unwholesome; but it should be sold for what it is. Connecticut has no law on the subject.

A paper on agricultural fairs took the ground that if the fat woman and other sideshows, as well as horse racing were necessary to induce people to visit the fair where they might perchance see and receive instruction from contact with other things, have them by all means. If fine music is needed to draw people to church, when they are there the ministers have the material to hammer and mold into such shape as they please. The State of Connecticut contributed about $7,500 and the people $45,000 for the support of the fairs, and the benefit, if any, must be educational. In defence of horse racing and such attractions, a Danbury fair manager stated that at their cattle show the first day they sold 800 tickets. The cattle were then taken away, and the next day came the horse trotting, etc., with a sale of 16,000. This was necessary to make the money to pay the premiums awarded on the cattle. The entry fees for trotting sometimes pay the premiums; hence there was no loss to the society: while cattle and agricultural exhibits were admitted free. One exhibitor was charged $15 for his vegetable display, because he wished to have it where it could be seen. The manager replied it was his own fault; had he been content to go with others of his class, it would have cost him nothing. The situation assigned for this class of exhibits was said to be an obscure, out-of-the-way place totally unfit for the purpose, and the attendants at the horse trotting were not farmers; but jockeys, sports, dudes, and their fast lady friends from the towns and cities all over the State and beyond. From developments I judge Connecticut is fully up to the standard in the management of *modern* agricultural fairs.

Mr. Fairchild detailed his experiments with fertilizers and believed in getting his chemicals and mixing them himself, though he saves this labor by applying each ingredient directly to the soil, trusting to cultivation to do the mixing. He found that without potash he could get no crops at all. Phosphoric acid, nitrogen and potash were the chief elements necessary, the latter especially. A farmer ought to know enough of his business to know what he wants better than the merchant does; but a great many farmers ask the merchant what they need, and the latter of course recommends the particular brand he is interested in. The farmer should know and demand what he wants regardless of the merchant's advice.

Mr. Bartholomew found on his soil that phosphoric acid was the absolutely essential element he needed, except with potatoes; he could dispense with this crop but not for corn. There are those who want prescriptions for their soils, as they have neither time nor inclination to experiment: but both speakers urged them to conduct experiments themselves; they would find it useful, instructive, interesting and profitable; and in no other way could they arrive at satisfactory conclusions.

The concluding paper was addressed to the young folks of the farm by Mrs. Slosson. Its title "Open Your Eyes" was an appeal to young folks to observe more keenly the more common and every-day objects around them, for in them lie hidden and unnoticed a storehouse of useful knowledge and beauty. The grasses, weeds, flowers and bushes of fields and meadows afford abundant means for study and observation. The method of treating the subject was quite as applicable and interesting to the older and mature minds of those present, as to those for whom it was prepared, and ought to be quite as beneficial. E. W.

THE NEW YORK FERTILIZER AND CHEMICAL EXCHANGE is the name of a new organization among the manufacturers and dealers in fertilizers and fertilizer materials. The object of this organization is to promote sociability among its members, and a free consultation on all points which will secure uniformity and a high grade in the fertilizers put upon the market. Many of the extensive manufacturers and the leading dealers have already become members. The first meeting of the association was held in New York early in December, and the following board of officers was elected: C. V. Mapes, President; John Kehoe, Wm. H. Bowker, and Wm. H. Reed, vice-presidents; Geo. B. Forrester, Treasurer, and John T. Williams, H. J. Baker, R. G. Kirkland and A. S. Malcomson, Directors. This seems to be a move in the right direction, as the members of this association will be quite likely to make their brands of fertilizer of a uniform grade, and they will each have a direct interest in seeing that the inferior grades are kept out of the market. In this way, we can see how this association can be of real benefit to the farmers as well as to themselves. It is hoped that all the leading manufacturers will become members, and that the farmers may be able to get just what they buy. If there is one thing in which they have been cheated more than in anything else, it has been in the quality of the fertilizer which they have bought.

PENNSYLVANIA STATE BOARD OF AGRICULTURE.—The annual meeting of the Pennsylvania State Board of Agriculture will be held at Harrisburg, Pa., on Wednesday and Thursday, January 27th and 28th, 1886. The very important matter of fences and their relations to the farm and farmer, will be fully discussed. It will be a very important and interesting meeting, and all who can, should attend. Further information will be furnished by Thos. J. Edge, Sec'y., Harrisburg, Pa.

WISCONSIN DAIRYMEN'S ASSOCIATION.—The 14th annual meeting of the above associa will be held at Richland Center, Wis., for three days, commencing Tuesday January 26, at 10 o'clock A. M. A very rich and varied programme has been prepared by the Sec'y., our friend D. W. Curtis, of Ft. Atkinson, Wis., who will gladly furnish a printed circular of the meeting. Every butter and cheese maker of Wisconsin should be in attendance. It is time to wake up the dairy interest and crush the bogus butter business.

WESTERN NEW YORK HORTICULTURAL SOCIETY.—No one within reasonable access should forget the meeting of the Western New York Horticultural Society, which will convene at Rochester on Wednesday January 27th, at 10 o'clock A. M. Rochester is emphatically the "Flower" (Flour) City. She furnishes this society a hospitable welcome and the finest hall imaginable in which to meet, and Western New York has many able and live horticulturists who are always on hand. The programme is a fine one, and all who attend will have a good time.

Miscellaneous.

CATALOGUES, ETC., RECEIVED.

JAS. M. THORBURN & Co., 15 John St., New York.—Annual descriptive catalogue (100 pages) of seeds for the vegetable and flower garden; for the lawn, farm and nursery. This firm was established in 1802, and we know of no other firm enjoying a better reputation. The catalogue is a plain unembellished statement of the seeds offered, with simple directions as to their cultivation. The lists of tree and shrub seeds (both deciduous and evergreen), as to numbers and selections, are unequaled. There are many new varieties of seeds offered, among which may be mentioned the Bird Cantaloupe, new beans, sweet corn, peas, potatoes and tomatoes. Chryanthemum seeds saved from the best Chinese and Japanese plants are catalogued among the flower novelties. The list of miscellaneous seeds should be examined. The catalogue will be sent to all who apply to the above firm mentioning the R. N.-Y.

W. ATLEE BURPEE & Co., Philadelphia, Pa.—This is certainly an enterprising firm, and it has sent out many novelties of real merit of late years. The catalogue (128 pages) is profusely illustrated with several colored plates and wood cuts of all sorts of plants as well as of farm animals. Among specialties we find the Pipe-stem or Top-over Corn, Burpee's Empire State Potato, Emerald Gem Muskmelon, Turner Hybrid Tomato, Giant Pera Cucumber, many different kinds of new beans, peas, cabbages, onions and celery; new hardy gladioli, chrysanthemum seeds, new pansies, etc., etc. In the stock department we find Chester White, Berkshire, Small Yorkshire, Jersey Red and Poland China pigs; Langshans, Wyandottes, Plymouth Rock fowls; several breeds of sheep, dogs, etc., etc. The catalogue is well worth examination. Sent free to our readers.

PETER HENDERSON & Co., 35 and 37 Cortlandt Street, N. Y.—A beautiful catalogue of 138 pages, illustrated with hundreds of woodcuts and three colored plates, one of a new asparagus, a new lettuce and a new cucumber; another of the roses Bennett, American Beauty, Ball of Snow and Sunset, and the third of the Eclipse Beet. There are too many specialties to notice here. We need only mention a new "Self-husking" Corn, the "Volga" Watermelon; the Perfect Peachblow, Charter-oak, Empire State and Pearl of Savoy Potatoes; the Mikado Tomato and Tree Tomato of Jamaica, Henderson's new Rose Celery, new Chrysanthemums, new strains of Verbenas, etc. The catalogue must be examined to be appreciated. Send three two-cent stamps, and mention the RURAL.

D. LANDRETH & SONS, Phila., Pa.—An illustrated catalogue of 100 pages. Though not the showiest, it is still one of the best published in America, and by one of the oldest houses. We find in this potato seeds (true seeds from the ball or fruit) offered. We have repeatedly advised our readers to raise their own seedling potatoes. Now is the time to sow them in pots or boxes. The lists of all kinds of vegetable, flower, grain, root and grass seeds are full and carefully selected. The Landreths grow most of their own seeds. Catalogue free to our subscribers.

S. L. ALLEN & Co., 127 and 129 Catherine St., Philadelphia, Pa.—An illustrated catalogue of garden and farm implements made by this firm, among which we find the Planet Jr. Seed Drills of several sizes, the Planet Jr. Combined Seed Drills, Wheel Hoes, Cultivators and Plow, the Planet Jr. Single and Double-hand Wheel Hoes and Cultivators, the Fire-fly Garden Plow; also the Planet Jr. Horse Hoes, Cultivators and Coverers. These are fine implements for the use of the gardener or farmer. We have had them in use on the Rural Grounds and Rural Farms, and find them most useful for every kind of crop cultivation. Send for this catalogue and see what they make.

ANT. ROOZEN & SON, Overveen, Holland.—Deveer & Boomkamp, agents for U. S. and Canada, 19 Broadway, N. Y. An illustrated catalogue of gladioli, dahlias, ranunculuses, anemones, irises, cannas, begonias, gloxinias, amarylis and other Dutch bulbs. There are special collections offered at most reasonable prices. All duties are paid and the prices include packing and all expenses for freight, etc., to New York and Toronto, Canada. The firm is entirely trustworthy. Catalogue free. Address the U. S. agents, as above.

HOTCHKIN CARRIAGE WORKS, Syracuse, N. Y.—An illustrated catalogue of all styles of wagons, carriages, buggies and sleighs made by this firm. It embraces extension-top carriages; side-bar Brewster, Timken, end-spring and side-spring buggies; eliptic, platform, half-platform and three-spring wagons; sleighs, cutters; in short, all things that are wanted that are light and nice. We advise all wanting anything in this line to send for this catalogue and see styles and prices.

WILLIAM HENRY MAULE, 1711 Filbert St., Philadelphia, Pa.—This catalogue is full of remarkable illustrations and stirring announcements, from which it is rather bewildering to attempt to specialize. It would seem that about everything announced is a specialty or novelty better than any other of its class. Mr. Maule has erected and lately occupied one of the handsomest seed warehouses in the country, where he hopes to hear from all his friends. The catalogue will be mailed free to all who apply as above.

HIRAM SIBLEY & Co., Rochester, N. Y.—A carefully condensed and abridged catalogue (70 pages) of every kind of seed for the farm or garden, with a number of valuable tables for the assistance of the farmer or gardener. Among oats it offers the Schoenen, White Australian, Probsteier and Black Tartarian. The list of clovers, grasses and millets is full and well selected. Seeds of hardy shrubs and trees, as well as bulbs and various plants are also catalogued. Sent free to RURAL readers upon application to the above firm.

JACKSON IRON WORKS, No. 315 East 28th Street, N. Y.—This is an illustrated catalogue of every fixture and device that can be thought of for use either in or about a stable or cattle farm or to ornament the outside. It is the most complete list of such fixtures we have ever seen, and should be consulted by everybody who wishes to have things handy. It has also several fine designs for stables and carriage houses. A splendid catalogue.

DUTCH-FRIESIAN HERD BOOK.—We have received from the Secretary, S. Hoxie, Whitestown, N. Y., the fourth and last volume of this herd book, as this society is now merged into the Holstein-Freisian Association, which event is very pleasantly announced in the preface by the secretary. It contains registry of some 300 males and 600 females.

AMERICAN DUROC-JERSEYS.—The first volume of the American Duroc-Jersey Record, containing the constitution and by-laws of the society, the history of the Duroc-Jerseys, and a register of 2,000 head of these swine. Chas. H. Holmes, Sec., Springfield, Ill.

MT. VERNON LINSEED OIL Co., Mt. Vernon, Ohio.—A circular setting forth the value of linseed meal as a food for farm stock. We hope to see the day when every pound of this rich food will be fed at home instead of being exported. Our fields need the manure made therefrom.

ALEXANDER BRADLEY & DUNNING, Syracuse, N. Y.—An illustrated catalogue of tur-

bine water wheels, circular saw-mills, improved head blocks, etc., etc., giving directions for setting, balancing, etc., water wheels and machinery, containing important tables for the practical mill man.

DR. JOS. HAAS, Indianapolis, Ind.—Hogology, or information concerning swine—a little book of some 60 pages, which contains much useful information. Of the value of the remedies recommended, we know nothing personally, so all we can say is, read the book and judge for yourself.

PUCK'S ANNUAL.—A handsome and very funny book of some 100 pages and 200 comic original illustrations. Price 25 cents. Send to the publishers, Keppler & Schwarzmann, New York.

H. S. GILBERT & Co., Chambersburg, Pa.—Catalogue of force and lift pumps, specially designed to show the Gilbert pumps.

A. M. SMITH, St. Catherines, Ont., Canada.—A catalogue of small fruit plants, grape-vines, fruit and ornamental trees, etc. Free.

GEORGE S. JOSSELYN, Fredonia, N. Y.—Catalogue of currants, raspberries, blackberries and grapes. Free.

For Women.

CONDUCTED BY MISS RAY CLARK.

THE BRAMY RUSETER.

"PHILENY," sez Jeremier one mornin' at brekfust as he buttered his flap-jack on both sides and then put on two big spoonfuls of strained honey, "Phileny," ses he, "I believe our poletry is gittin' kinder run out, and I've ben a thinkin' of gittin another ruseter."

"Well, sez I, as I swallered my baked pertater dry, (I am obleged to ekonomize to offset his extravagance) it might be a good idee, pervided you made a good selection of breeds."

"Breeds," ses Jeremier sarcastically, "they don't use that word madam in speakin' of poletry. That word applies only to cattle. I've ben a kinder rmmin' over in my mind the good pints of the different birds I've seen, and I've kinder settled on the Blue Meshannock."

"The Blue Meshannock! why good land, Jeremier, that's the name of a pertater. Father used to raise 'em as long ago as when I was a girl!"

"Taint no seeh thing, Phileny, I guess I know what I'm a talkin' about. I mean them big, glossy, black fellers, with blue legs, we see to the fair last Fall."

"Why them's Black Spanyards. We don't want them. Their meet would be as dark as your boot when 'twas cooked, and pretty nigh as tough. I'm in favor of the Buff Coaches."

It allers riles Jeremier to correct him and he jerked back from the table spiteful, and ses he, "It don't make much difference to us whether the meet is black or white, you are so blamed stingy you won't never cook any."

"That's a falsehood, Jeremier, sez I, and you know it! I allers cook 'em Thanksgiven' and Fourth of July, and your birthdays and lots of other times, and you eat the most on 'em too. Come to think it over, I don't know as we want to change. Ourn is good enough."

"Well madam, sez he, I've made up my mind to change, and I'm a goin' right off today and get one, and it don't make no difference whether its called a Blue Pertater or a Buff Street car, if it only suits me."

"You was in a terrible pucker yesterday to get your oats in, ses I, and here yon are trapesin' off ruseter huntin' this nice mornin."

"Madam, sez he, who's a runnin' this ere plantation, you or me? 'cause if you be you can jest hitch them horses up and go to plowin' yourself. The interests of my poletry yard require me to go in search of a ruseter, and I'm a goin' till I find one if I take the week fur it."

"Go," I replied, a wavin' my hand theatrickly, "go, but there's a big storm a brewin', and when it comes and catches you behind your naybors, don't be a whinin' around 'bout Providence bein' allus against you."

And he went, and he stayed, and he never showed his face agin till arter sun-down, then he come back with sunthin under his arm that looked like half ostrich and half camel, for it had the humpedest back, and the longest neck and legs I ever see outside of a managery.

"There, Phileny," sez he, a settin' of it down on the door step, "I reckon I've got sunthin' now as is sunthin'.

"That's a pure-blooded, double-strained pettigreed, White Bramy, that is. No sham 'bout him; guess old Jones 'll own up beat this time. He allers thinks he has the best of ev'rything in the hen line. This feller shows his blood, he does."

"I should say 'twas a five storied, mansard-roofed grain elevator," sed I. "He'll eat all you can raise on the farm and then swaller the buildin's."

"Yes, that's you egsactly, Phileny, alles grudgin' things what they want to eat, mebby you' better run this institootion awhile. Guess you'd find it took some one with a head on 'em," and he picked up the ruseter and carried him off to the poletry house, and never spoke to me agin that evenin'.

"'Bout the middle of the night I woke up, and good land! The rain was jest a pourin'. Rattlety-bang went the blinds, and loose clapboards, clickety-clack went the doors and winders. I knew Jeremier was awake 'cause he want a snorin'. I knew he wouldn't say nothin' for fear I'd hint at the oats, so I laughed in my night-gown sleeve and was silent as the tome.

When we got up in the mornin' everything and everywhere was flooded over, and still it was pourin'.

"I dunno but we shall have to build an ark," sed Jeremier, tryin' to be unusually pleasant to keep my mind off the neglected plowin'.

"I don't think it will be necessary," sed I dryly, "we can get aboard the Bramy."

The poletry was all astir in spite of the rain and in less than half an hour that Bramy had laid out the two ruseters, picked the tom tmrky blind and bare, drove every hen off to the naybors, and was making a desert off the old gander. Jeremier had to tie him up in the wood-shed with the clothes-line. As we were eatin' brekfast we heard a loud cock-el-doodle-doo on the porch and there he stood with about two yards of rope hangin' to his one foot, he had broke it in two.

"How knowin' he is," said Jeremier.

"He is indeed," said I, "he seems to say here am I and here is the rain, but how about the oats?"

"Would'nt you like to have some churnin' done this mornin'? I can do it aswell as not, Phileny."

"Yes, there's a four gallon crock of cream down suller, you can bring it up if you're a mind to," I replied quickly for he don't often offer to do seeh things.

He brought up the cream, and stepped out on the porch where we allers churn in warm weather, but the floor was wet and slippery. Up went one foot, he spun 'round on the other half a minute tryin' to get his balance, then down he went ker squash. The crock flew out of his hands onto the stone steps and smashed, and the cream—well you can just imagine it. He got up slowly, rubbin' his hip and groanin' and I sez, sez I, "I've heerd tell of rotary churns but I never see one work before. That's about the quickest churnin' I ever see done."

"I'm glad of it," sez Jeremier, "when a man's fool enough to offer to do women's work sunthin' orter happen."

I turned and went into the kitchen, and there was the Bramy on top of my work-table a gobblin' up the bread sponge. I shooed at him and he lifted up one foot and set it down in a bowl of warm pork fat. Lifted the other and put it in a tall glass dish, then he hopped off and strided across the floor' leavin' the print of his foot in grease all the way. The glass dish rolled off into an iron pot and smashed, and the grease bowl tipped over and the contents ran all over the table and off onto the floor. I flirted my dish-cloth at the ruseter and he grabbed it and swallered it quicker'n litenin'.

Well, it rained steady three days and nights. Nothin' a growin', and that ruseter eatin' all the time like a second Jumbo. He found a nest of young ducks a hatchin' and swallered 'em, hide, feathers and shells, eat the bottoms out of two swill-pails, pecked chunks out of the calves' ears, and begun on some old phosphate bags. Then it cleared up, and he went for the currant and gooseberry bushes, and left nothin' but the stubs. In course of time, Jeremier planted his airly pertaters—some new-fangled ones that he paid a big price for. The next mornin' he cum in with a long face. "Them pertaters is up Phileny," sez he. "Up," sez I; "whatever do you mean Jeremier?"

"Up, and down too, I guess, for I belive in my soul that Bramy has eat 'em," he answered.

One day, along come old Jones, and he yelled out, "Say, Stebbins, what's that creetur on stilts out in your gardin' eatin' up your lima bean poles? I thought it must be a giraffe got away from the circus."

Well, we got tired chasing after him, trying to keep him out of mischief, so we shut him up and fed him two quarts of corn and oats three times a day. And we went to work and planted our garding, and got along finely. We are amazin' fond of cabbage, and Jeremier laid off a big patch of ground, and made it rich and fine. Then he was gone a whole day after plants. He found some extra nice ones, and we both worked half a day a setting of 'em out. I watered 'em night and mornin' for two weeks, and they were growing finely. We felt so encouraged, we decided to rest from our labors for a day, and go to the lake with some of the naybors. We went and had a lovely time. As we rode home, we conversed lovingly of our prospects, and spoke particularly of our promising cabbage patch and our young chickens, for we had 30 little yellow things just hatched.

As we drove into the yard, we saw the Bramy a standin' by the coops, and the two hens inside were squawkin' terribly. We ran out there, and, believe it or not, that old cannibal had eat up every last chicken and was a pickin' the feathers of the hens and swallerin' of em'. He had got the door of his pen open somehow, and let himself out. Jeremier caught him and bound him hand and foot, so to speak, and cast him back into his dungeon, and said, "Lay there you old heathen."

I took the sprinkler and went out to the cabbage patch. Could I believe my eyes? Not a green leaf was there. No, nor even a root. I called Jeremier, and he looked and he said, "that blamed ruseter." We went down to the garding. There was nothing there but the ground and the bean-poles. I looked at Jeremier agin' and he said, sez he, "that old glutton of a Bramy." Nothin' more; not a word. If there had been any chance of layin' of it onto me he'd have talked 40 nots to the honr. But I s'pose he's like all men about that. By good luck a chicken peddler stopped the next mornin' and wanted to know if we had any airly chickens. "Yes," said Jeremier, and took him out and showed him the ruester.

"Do you call that an airly chicken?" said the man.

"Yes," sez Jeremier, "early and late, both. Come, make me an offer."

The man hefted him, said he would make a good frame to a sailin' boat, turned bottom side up, and offered forty cents. "*Forty cents!*" cried Jeremier. "Why, man alive! he cost me three dollars."

"Can't help that," said the man. "He's so old his teeth are all gone. He'll be tniffer n' tripe. I shall hev to sell him to some boardin' house keeper at half price."

"Is that the very best you'll do?" said Jeremier, sadly..

"That's the very best I can do, and I don't want him at no price," replied he.

"Take him, he's yourn," says Jeremier. So they put the ruseter in the coop and let his head stick out through the slats on top, and the man drove off, and we shed not a tear.

"Phileny," sez Jeremier, sez he, "I'll get you a nice dress if you'll never, so long as we two live together, alood, by word, look, or act, to that blamed ruseter."

I promise, Jeremier," sez I, "and here's my hand on't."

And I never have.

PHILENY STEBBINS.

LEAVE THE WORK.

MAY MAPLE.

"DON'T take work when you go for an afternoon visit," said a friend, not long ago. And the suggestion was a good one.

Sure enough! Why should farmers' wives and daughters pin themselves to work, from early morn till late at night, at home and abroad? Why not make a friendly visit now and then and allow the tired hands and more weary feet to rest from their labors, and give the mind something fresh to muse upon by allowing the eyes to wander through fresh scenes, to look upon, possibly, fairer flowers and new prospects? Our village sisters think nothing of spending a part of every day in what appears to us perfect idleness. They have not performed half of the alloted tasks of those of us who live in the rural districts. Yet you will frequently find them resting from the duties they have performed and believe they have earned that rest. Are they possessed of real estate or bank stock? No! There are but few of them who can lay claim to the roof that covers them. They are for the most part dependent on their husbands for their support, and not unfrequently they purchase bread, pies and cake to save themselves the labor of making them. They toil not beyond a mere health-giving exercise, and when they go for a visit, be it for a whole day, no work disturbs the repose of their dainty fingers. They rest.

We may not approve of so much, to us, wasted time; but for the most part farmers' wives go to the other extreme and deem it a sin if a single moment is passed in idleness. Farmers, themselves, have their restful visits. You can see them sitting on the fence, hours at a time, talking over farm topics, politics, gossipping and cracking jokes, with great gusto. When the fence gets tired, they slip down and take a stroll about the farm, learning of each one something for pleasure or profit. They do not carry their work with them; but when the other side of the household sets out for a gossipping visit there must always be a bundle of work taken, and not unusually, a bundle of humanity to tote or cart as well; and yet the great cry is for rest. What hinders? Custom, fashion, Mrs. Grundy—call it what you please. The fact is, we are all willing to make slaves of ourselves; and the more machinery we have the more we task ourselves. Custom says we must cook so many vegetables, various cakes, cookies, pies and puddings; put up a great variety of canned fruits, preserves and pickles. We all faithfully follow her command. She says, "Clean house much or little three hundred and sixty-five times in the year." We yield willing obedience. Fashion orders us to dress in purple and fine linen every day, and silks, satins and velvets every other day—Sundays in particular—with the adjuncts of costly jewelry and expensive frizzes. Our purses are limited; the bottoms are easily reached. but to show our willing spirits we add to our already heavy burdens by raising chickens, ducks and turkeys for market. We pursuade the head of the family to go into the dairy business, well knowing that the work of taking care of the milk and butter will add so much more to our household duties. Then Mrs. Grundy exhibits fabulous gowns that are covered with trimmings, and what the machine cannot do the hands must. What wonder, then, that there is never a minute to spare, to chat with a neighbor, without doing some work! Our great grandmothers taught that Satan always finds something for idle hands to do. But there is a vast difference between the idleness to which our grandmothers referred and that of my friend. Therefore, we reiterate her sentiments, and say leave the work at home when you make an afternoon visit.

Domestic Economy

CONDUCTED BY EMILY MAPLE.

KITCHEN TALKS.

ANNIE L. JACK.

"THEY might allow something to good management," I said to the girls the other day in a "kitchen talk." Our conversation was of a remark passed by a neighbor, who said to me, "Your boys help you a great deal, and your girls work hard to keep such a house in order, yet you always seem to have time to spare for your chosen pursuits. It must be that the boys help the girls a great deal." I did not object to the boys having the credit, for I have taught them that it is more honorable to help than to louf round and see their sisters doing everything for them, and that it is only an exchange of work if they light fires, or sweep the kitchen, to give their sisters time to darn socks and mend torn jackets. It is a good education for them to sew on their own buttons and peel the potatoes in an emergency. But in the matter of housekeeping management, I think too little stress is laid upon *routine*. "Oh, I can't do my housework by the clock!" is an expression often used by irregular people in talking on this subject. But it is just as easy to take work in rotation and to keep to the routine as to leave the lamps till night to be trimmed, and the up-stairs work the same. Children take readily to

Miscellaneous Advertising.

Medical men are much interested in discovering the various sources of disease as, whether from foul air, impure water, infected food, and possibly soap made of fat from diseased cattle.

Hence I subjected various samples of "IVORY" Soap to a rigid microscopical examination.

I find it to be free from any forms of animalcular or vegetable germ life.

I therefore cordially commend the Ivory Soap for its unsurpassed detergent properties and purity.

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Prof. Chemistry and Toxicology, in Bellevue Hospital Medica' College, and Prof. Chemistry and Physics in College of the City of New York.

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clockwork; the round of the hands interests them, and, while learning lessons of regularity, they enjoy seeing how the time goes. If they know their duties must be performed at a certain time, they will, more than likely, watch and perform them, and a few chidings for neglect or forgetfulness will soon cause them to be on the alert and ready. I do not think it a merit for any housekeeper to be always among the kitchen work, forever cooking and cleaning up. Sufficient for the day is the work thereof, and some time must be given for recreation, or else lines of care will form on the brow, once so smooth, and there will be weariness of body and mind for lack of change. I know it is hard for mothers whose hands are full and whose babies are cross to keep to regular rules; but even in this case it is best to make the attempt. "Learn young, learn fair," is a very good motto, and though there is a difference in the nature of children in regard to order and neatness, a great deal can be taught by steady precept and example. But, bless me! it is nearly dinner time, and I I have spent the morning all in theorizing.

HOW TO MAKE THE MOST OF ONE CHICKEN.

THE following I think a novel way of useing a fowl and making much of it, and likewise rather original. First select a yellow-skinned fowl weighing about four pounds; after a good singeing wash well in cold water, and put over in a kettle with plenty of water; let it boil; throw away this water as it removes any taste of feathers; then return to the fire and cover with cold water and boil slowly until tender. Season well with salt and pepper. Next, take up and joint and pick out all the best meat, both dark and light, and cut in pieces one or two inches square (or long), cut the liver and heart also in pieces the size of dice, mix well with dark and light meat, and place in a deep stone or earthen dish and pour from the kettle enough of the top of the broth to completely cover the meat. Set away for future use.

Return all that remains, bones, skin and all, to the remainder of the broth, and boil until the bones are perfectly clean. Now strain through a colander, and pick out the bones; next chop all you have, skin, gizzard and meat very fine—the finer the better. If onion is not distasteful, slice one small one and add two or three cloves, and boil in the broth a few minutes: then skim out and add the chopped chicken, and boil only a few minutes. It is ready to use, either with a little thickening poured over thick slices of toasted bread, or as a soup which cannot be excelled. A pound of bread cut very thin and toasted a nice brown to crumb, is nice in place of vegetables or cracker. This amount will serve six hearty persons. Now for the choice bits:—Say, the third day after, the soup (in cool weather), make pies or turnovers. Warm the chicken and drain through a colander, leaving the broth in the kettle for gravy. Next take three pints of unsifted flour (about two pounds). Sift twice or thrice through a fine sieve with your baking powder (I use Horsford's and believe it the best); add salt and three tablespoonfuls of pulverized sugar. Wet with sweet milk: make a dough just stiff enough to handle. Roll the dough thin and spread over it one-fourth pound shortening—butter is best and and should be soft—then sprinkle with flour and roll up. Cut up in pieces as for biscuit, roll about one-half an inch thick, and you will have a circle the size of a saucer. Wet the edge half way around, lay on pieces of chicken to cover half the size, turn over the empty half and pinch the edges firmly together. Butter a dripping pan, lay on the turnovers so that the seam will be at the top, and be careful to lay them sufficiently apart to give each room to rise, for rise they will if they are good. With a sharp-pointed knife make a small hole in the top of each, and partly insert a piece of butter. Bake in a hot oven as long as large biscuit. Serve *very hot*, with plenty of chicken gravy, which is made with a small piece of butter and flour added to the broth.

Now what have these two dinners cost? With mashed potatoes, not over 90 cents, all told. And very likely a very good breakfast or small dinner yet remains. The cold turnovers cut in rounds one inch thick and steamed are very nice.

I have also used veal in the same manner, and it does well, at about half the price of chicken. SUBSCRIBER.

Conn. Valley.

HOME-MADE WEATHER STRIPS.

MY kitchen doors had become so badly warped that they did not hit the jamb at the top. The following home-made device proved effectual in keeping out the cold. I took a half-inch basswood board and ripped out pieces five-eights of an inch in width and planed them to three-eights by one-half inch. These strips were cut to fit the doors. Take the leg of an old rubber boot, cut strips five-eights of an inch wide, beginning at the top and cutting around the leg. The seam at the back of the leg should be trimmed off with the shears. Tack the rubber, felt side next the wood, to the three-eighths-side of the strip, with the edges projecting. Then lay the strip, rubber-side down, upon the bench and trim off the edges with the small blade of a pocket-knife. Shut the door before nailing the pieces to the jamb. Use lath nails. If you have not a rip-saw, strips may be cut by nailing a straight-edged board to the half-inch basswood strip and then cutting out the pieces with a sharp knife. Smaller strips can be used and put on with brads. I beveled the edges of the strip opposite to the rubber with a smooth plane. SUBSCRIBER.

A FEW THINGS WORTH KNOWING.

Two or three months ago, I read the advertisement of a "Lamp Stove," and as I needed such an article, I sent for one, and it is indeed worth having. It holds one quart of oil, and will burn about 10 hours. All through the cold days of Fall, and indeed up to within three weeks, it kept my sewing-room very comfortable, there being no other way of heating it; it also warms the bath-room sufficiently for bathing purposes, and on very cold nights, I shall leave it in there to prevent the freezing of the pipes. In case of sickness, it would be a great convenience, saving many steps, as it will boil a quart of water in five minutes, and gives a powerful light as well as heat. It is only $1.50.

Here is a recipe for a liniment for rheumatism and neuralgia, which was sent me by a friend last Fall, and I can only say it acted like a charm, relieving me of much acute agony. I have given it to others, and they, too, say it is excellent.

LINIMENT RECIPE.

Spirits of wine, one quart; laudanum, two ounces; oil of amber, one ounce; oil of pennyroyal, one ounce; spirits of hartshorn, one ounce. Mix, and shake well before using. Keep in a dark place tightly corked.

If one has a black silk or cashmere dress to clean, she will find that sponging it with cold coffee and ammonia will do the cleaning well; it will also clean black coats, pants, etc.

For nice colored woolen dress goods which are to be washed, use soap bark. Pour boiling water over it (about two quarts to a cupful), let it soak over-night; pour off the clean liquid into your tub, add hot water, put in your goods, and keep them in quick motion for about 10 or 15 minutes, squeeze them from the suds into clear, hot water, rinse them well in this, and hang up to dry without wringing. Iron carefully on the wrong side as soon as dry enough. AUNT EM.

DOMESTIC RECIPES.

VARIOUS WAYS FOR COOKING LIVER.

CUT in slices half an inch thick, put into a dish and pour on boiling water; let it stand a few minutes, then drain and roll the pieces in flour and put in the spider, which should contain a few spoonfuls of hot meat drippings or melted butter. Fry till a nice brown over a brisk fire, turning frequently to prevent burning. When cooked, add salt and pepper to taste.

Beef liver is improved by scattering crumbs of butter over the slices after taking it from the spider; when this is done, the platter should be set in the oven or heater, till the butter is melted.

When liver has been frozen and then thawed I find it very difficult to cut into nice slices. To remedy the difficulty, I put the lobes into a kettle of boiling water and let it cook about 20 minutes, then it can be cut and fried as above. Or when cold it may be chopped fine and seasoned with pepper, salt and a sprinkling of sage; pack into sacks, scald in the pot liquor and hang up to drain. To be cut off in thin slices and eaten cold. Many "old folks at home" like it best this last way, as it reminds them of their old pioneer days when "liver-wust" was considered a great treat.

MAY MAPLE.

SOFT GRAHAM BREAD.

Two cups of buttermilk, two teaspoonfuls of soda, one teaspoonful of salt, one tablespoonful of molasses; stir as thick with Graham flour as can be stirred with a spoon. Butter hot pans and bake at once.

TO PREVENT INFANTS' SORE MOUTHS.

Wash the mouth thoroughly every morning for a month with cold water. This rule, faithfully followed, will prove a sure preventive of babies' sore mouths. MRS. S. B. E.

"GEM" SQUASH FRITTERS.

Pare and grate three squashes, beat two eggs very light, add one cup of sweet milk, two cups of flour, two teaspoonfuls of baking powder (in the flour), a little salt and pepper. Fry in butter and lard on a griddle.

A. S. DYER.

Miscellaneous Advertising.

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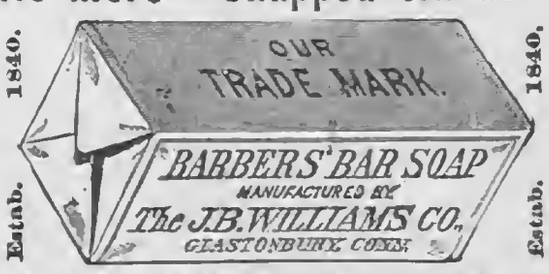

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This has been our 65c. Knife, but for a while we will sell at 50c., post paid by mail, or 5 for $2. Blades are file tested and warranted. Pruning Knife, 75c. Stock Knife, $1. 3-inch Steel Shears, 75 cts. Gents' fine 3 blade Knife, $1. Boys' 1 blade, 25 cts.; Ladies' 2 blade, pearl, 50c. Send for 48 page free list, also "How To Use a Razor."

Maher & Grosh,
75 S Street,
TOLEDO, O.

News of the Week.

HOME NEWS.

SATURDAY, Jan. 16, 1886.

THE Chicagoans will have their monument to Gen. Grant erected on Lincoln Park. The committee on designs are now at work, and have arches, statues, towers and terraces to select from.....Last week there were 36 deaths from small-pox in Montreal—a large increase over the number the previous week. A part of the town has been flooded during the week, entailing widespread loss and suffering. The water froze as it rose, while the mercury was from 20 to 28 degrees below zero. Horses and cattle froze to death in their stables. All the factories on the canal and low-lying parts of the city were forced to stop. The loss by the stoppage is estimated at $500,000 a day. Terrible suffering among the poor, "whose houses are often masses of ice."..... The four Newark (N. J.) children who were bitten by "what was supposed to be a mad dog," and were treated in Paris by Pasteur, are home again "cured." It is not yet known for certain that the dog was mad. Two other children who were bitten by the same animal and stayed at home, are still in excellent health, and as hydrophobia does not sometimes develop for several years, there can yet be no certainty that the visitors to Paris are "cured."..... The Canadian Pacific Railway's claim against the Government for transportation services in the recent rebellion is $700,000.....Senator Ingalls, of Kansas, has offered a resolution for the continued coinage of silver till the aggregate reaches $500,000,000. The Silver Question is getting to be sectional in its nature, the West and South generally in favor of unlimited coinage, the East generally against it. The creditor class (the capitalists) seek to contract or prevent any large expansion of the currency; the debtor class and the non-wealthy generally favor the expansion of the currency, or "cheap" money.....M. De Lesseps, having failed to raise more money by subscription to build the Panama Canal, or to induce the French Government to permit a national lottery for the purpose, the French Government has decided to send out an "expert" engineer to examine the work already done and that still undone, and M. De Lesseps is about to invite experts from Germany, England and the United States to join in the investigation. If the results are favorable, the French Government will lend enough money to complete the work; if not, the enterprise will be permitted to collapse. De Lesseps professes to be quite sanguine of steaming through the finished canal in 1888. American "experts" say the thing is sure to be a colossal failure..... The directors of the New Orleans exhibition have been for some weeks denying that they were financially embarrassed, but the worst is now public property, a resolution having been introduced in the city council authorizing the purchase of the property for $125,000. The city already owns the ground on which the buildings stand. The managers say that they will surrender the property of the exhibition for the amount indicated, and if the city refuses to accept the offer the enterprise will have to be abandoned. Over nine months ago we prophesied that the enterprise must eventually prove a failure.....It is said that the Indians in the Canadian Northwest are preparing for an outbreak in the Spring to avenge he death of Riel. The traders on our side of the line are reported to be supplying them with large quantities of ammunition.... ...There is another colored exodus reported from the Carolinas, Alabama, and south Atlantic States. The destination of the negroes ranges from Georgia to California. The migrations of former years, which threatened to be serious, were in the main failures, and this may also prove so. At present, however, it has quite a serious aspect for those in need of farm labor in the south Atlantic States.... ....It is expected that Henry Villard will soon once more become the leader of the Northern Pacific forces. His health is much improved, and the other day, after the settlement of his accounts with the Oregon Railway and Navigation Company, the trustees paid all his indebtedness and deeded to his wife the palace he was building in this city at the time of his collapse, and which they had completed, together with other property, which she at once transferred to another for $168,750..... James Keene, the whilom "cornerer" of grain and gigantic speculator generally, swore in court here the other day that he was now without means, and supported by his wife's fortune, which she received from him 10 years ago. He says he no longer speculates; but with regard to this there are a great many "doubting Thomases."..... The Edmunds anti-Mormon bill passed the Senate the other day with only seven votes against it. It is now before the House, with a strong probability that it will pass without any alteration or trouble. If it becomes a law the property of the Church goes into the hands of 14 trustees, and the corporation will be compelled to show all its books and accounts. No money is to be allowed for "missionary" purposes, and it is hard to see how Mormonism can continue to exist under its stringent provisions. Polygamy is the only feature warred against.....President Cleveland and General Sheridan emphatically deny that General Crook has been removed in compliance with the clamor from Arizona. He is to have all the troops he wants to exterminate Geronimo's band and restore quiet. The bad Indians originally numbered 42 warriors and 94 women and children, and their wanderings have covered 80,000 square miles, 50,000 of them in Mexico. Six weeks ago 11 "bucks" had been killed and 34 women captured. Only 10 warriors were north of the line. The settling up of the country has greatly increased the number of victims. Sheridan says Crook is doing all that can be done, as the country is so mountainous and rough as to afford inaccessible refuges to the "hostiles".....A "large and substantial" ice-bridge at Niagara.....John Sherman elected U. S. Senator by the Ohio Senate and House, Wednesday. It required 74 votes to elect. Sherman received 84, and Allen C. Thurman 62.....The Grant Monument Fund has reached a grand total of $114,116..... ....."Death from exposure" was the verdict recently rendered by a Helena (M. T.) jury on the body of a horse thief who had been hanged by vigilantes.....The mild weather preceding the opening of the year was very conducive to the health and strength of game birds, which are unusually abundant, at least throughout New England.....

Those who have used the Boss ZINC and LEATHER COLLAR PADS and ANKLE BOOTS say they are the best and cheapest, because most durable. They will last a life time. Sold by Harness makers on 60 days' trial. DEXTER CURTIS, Madison, Wis.—*Adv.*

AGRICULTURAL NEWS.

SATURDAY, Jan. 16, 1886.

LAND Commissioner Sparks last Thursday, rendered a decision on the claim of the Northern Pacific Railroad to a grant of land between a point on the Columbia River near Portland, Oregon, and Tacoma on Puget Sound, Washington Territory. He holds that no such grant was made to the company. The decision affects the odd number of sections of land 80 miles in width for a distance of 105 miles, aggregating some 2,500,000 acres, estimated to be worth $25,000,000. The claim of the railroad to these lands has long been disputed by settlers, large numbers of whom are in occupation, claiming the right to enter under the public laws. It must be said for Sparks that he is as resolutely opposed to illegal land grabbing by corporations, syndicates, and cattle kings, as to what he considers illegal appropriation of the public domain by bogus settlers under the Homestead and Preëmption Laws. .....A private bill has been introduced in the Belgian Chamber of Deputies providing for an increase in duties imposed upon cattle imported into Belgium. The Government has notified the Chamber that it will oppose the measure.....The Chief of the Bureau of Statistics reports that the total values of the exports of breadstuffs from the United States during the month of December, 1885, and for the six and twelve months ending December 31, 1885, as compared with similar exports during the corresponding periods of the preceding year, were as follows: December, 1885, $10,117,242; 1884, $14,361,542; six months ending December 31, 1885, $52,908,732; 1884, $79,700,507; twelve months ending December 31,1885,$129,757,260; 1884, $147,81,3403.....The President of the California Fruit-growers' Union believes that with the earlier seasons on the Pacific Coast and the quality of native fruit, California may expect a growing market for its fruit in the Eastern States. The grape-growers of California will be content with two cents per pound for grapes, and if it were not for the grasping middle-men in New York, California fruit could be sold at five cents per pound—which is what our Eastern grapes bring..... The New York Fanciers' Club will hold its fourth annual exhibition of poultry, pigeons, pets and non-sporting dogs, at Madison Square Garden, in New York City, during the week commencing February 3d. There will also be on exhibition a full line of incubators, brooders, coops, etc. A large number of entries have already been made, and the liveliest and largest show ever held is expected. Entries close January 2d. Charles R. Hoskins, Secretary, 62 Cortland St., N. Y.....Genuine hog cholera has been found in 1,595 hogs on the four Western counties of Massachusetts. The Cattle Commissioners attribute it to the use of infected Western pork the refuse of which, from city boarding-houses and hotels, was fed to swine.

For Coughs and Throat Disorders use BROWN'S BRONCHIAL TROCHES. "Have never changed my mind respecting them, except I think better of that which I began thinking well of." *Rev. Henry Ward Beecher.* Sold only in boxes.—*Adv.*

Crops & Markets.

SATURDAY, Jan. 16, 1886.

The English wheat market shows no sign of hardening. There have been a few more purchases of American grain there within the week, owing to the decline in quotations here, and an inference has been made that with a further decline on this side we could dispose of still more of our surplus. Certain it is that the United Kingdom continues independent of the United States as yet, so far as her breadsupplies are concerned. Nearly all her supplies are now drawn from Russia, India, Australia and New Zealand, with smaller quantities from Egypt and Chili.

The price of wheat in the United States has fallen. This is due in a great part to a fuller comprehension of the enormous supplies in sight at the leading markets on both sides of the Atlantic. The slight gain in exports, due to the decline, did not serve to stiffen prices, as quotations in England fell, apparently through fear that America was about to unload its surplus wheat at figures to meet the British market. The decreased deliveries at Western primary markets on account of snow and storm, and the decline of about 700,000 bushels in the weekly visible supply, failed to sustain the market. There is an expectation that prices will rally somewhat, but no one expects them to go as high as they were a short time ago.

During the week wheat has been falling rapidly at Minneapolis—the regulator of prices for the great Northwest—so that figures have been lower than for a long time. No. 1 Hard sold yesterday afternoon at 85½ cents, a fall of four cents during the week and mostly in the last few days. This was partly due to a speculative movement; but, back of this, there is a panicky feeling about future wheat. There is less confidence in permanent high prices for wheat than there has been since the crop was harvested. This distrust is due to the obstinancy with which the "visible supply" remains at a high figure and the persistent refusal of foreign countries to take our surplus wheat at our present figures. Country deliveries, owing to stormy weather, have been very light receipts at Minneapolis during the week, only 477,000 bushels. The mills are maintaining the rate of production which they have followed, the output for the week being 84,000 barrels. Shipments were 60,000 barrels. There is a prospect of larger production next week, though there is no prospect of greater activity in flour. The Pioneer Press estimates on inquiries addressed to elevator and warehouse men in the Northwest, that there were marketed in Minnesota and Dakota during 1884, in round numbers, 47,000,000 bushels of wheat. It puts the amount now in store in country elevators at 9,385,000 bushels, and concludes that there is not more than 6,000,000 bushels in farmers' hands. This would leave the total yet to be received at the primary markets about 15,000,000 bushels.

At Philadelphia, wheat has ruled dull and unsettled with a general decline in prices in sympathy with the break in other markets. Futures are 1½ cent lower, while cash and January are only three-fourths cent lower than at the close of last week. Flour has shared the dullness in wheat, but has been steadily held at unchanged prices; in fact, millers in some cases have ordered stocks held for higher rates. Corn has declined 1¼ cent. Stocks are light, and there is a good inquiry to complete old contracts for export. At St. Louis breadstuffs receipts and shipments are unusually light. Wheat has been badly depressed and is unsettled. Other grains are weak with light transactions. Flour is very dull and unchanged. At Milwaukee, wheat is unsettled and lower, but closed steadier. The increase on passage to Europe and the light demand there, demoralized values, May selling down to 84¼ cents, but rallying sharply to 85⅞ cents under liberal purchases from short dealers and a reported increase in export demand East. Receipts are light since the cold weather, averaging less than 10,000 bushels daily. Shipments are light, and the demand from millers is moderate. The flour market is dull but firmer. At close there was some export demand.

Late advices from the Pacific Coast report that there were on January 1, 1886, about 10,000,000 bushels of wheat there available for export.

Reports to the American Rural Home, of Rochester, N. Y., from over 5,000 correspondents in all parts of the country, indicate that the snow-storm, despite the recent intense cold, has protected the wheat from all harm. In 1885 the corn crop turned out inferior to that of 1884. There is general complaint throughout the Northwest of light, chaffy, dry and moldy corn. The wheat consumption in the future can be increased only by the ability to sell it at what are called "starvation" prices, because of the foreign competition. In general, the correspondents say that there is nothing warranting high prices in 1886 except the total failure of the crop now in the ground.

The last report of the Department of Agriculture puts the corn crop at nearly 2,000,000,000 bushels—the largest ever raised; but as we have frequently said of late, in this Department, a multitude of reports from the West go to throw doubt on this estimate.

Indian corn continued moderately steady during the greater portion of the week, but was finally overcome by the downward career of wheat, and prices went off in spite of the decline in the visible supply of over 1,000,000 bushels within the week. Indian corn is the only cereal in the export of which there has been any material increase. This is due to its low price here and the absence of competition in the foreign markets.

Oats followed Indian corn quite closely in the speculative market, opening firm and sustaining a moderate advance when the decline of about 700,000 bushels was announced in the visible supply. Later, however, it reacted and became dull and heavy at fractionally lower figures. It is a trifle strange that in the face of the largest crop ever grown here, the price of oats should remain so high. It went up steadily until three weeks ago, and has suffered very little decline since then.

Wheat flour has been lower and in less demand than previously. Prices are off some five to 12 cents per barrel. Inquiry is quite limited, and exports from this port still remain low. With an advance in flour, wheat, too, would step higher. But at present prices for flour, millers can't afford to advance prices of wheat to any considerable extent.

The Australian harvest is over. Ninety thousand tons of wheat will be available for export, say 30,000,000 bushels.

The hog products speculative markets advanced rather beyond expectations during the early portion of the week. This was variously explained, in the absence of any marked increase in export purchases, as due to speculative buying of lard in view of anticipated buying in the near future by foreigners, where stocks are said to be relatively light.

At Philadelphia there has been little doing in hog products except in small lots to fill jobbing orders. Prices show no important change. Butter of fancy quality is scarce and wanted, but undergrade goods are plentiful and dull. Eggs advanced 7c. per dozen on speculative holding, influenced by the cold weather and snow blockades, but 3 to 4c. of this advance have since been lost, and the market closes dull and unsettled. Fruits and vegetables are generally dull, owing to unfavorable weather conditions, but prices are steady. Provisions at St. Louis are in limited sale, with buyers and sellers apart. The hog market has been oversupplied by the arrival of delayed trains, while hogs are weak at small declines. At Dubuque (Iowa) provisions generally are without change in prices. Pork is looking up a little. Produce receipts are liberal. Railroads are shipping considerable pork from Davenport (Iowa) south, and lard to Baltimore and to New York, this movement being earlier in the season than usual. The Milwaukee hog movement is light, and the quality falling off. The market is dropping. Products are dull.

The total exports of cattle, hogs, beef, pork, and dairy products from the United States during the two calendar years last past, as reported by the Bureau of Statistics, were as follows:

	1885.	1884.
Cattle, number	135,732	133,106
Hogs, number	62,572	33,217
Beef, canned	3,974,640	3,290,350
Beef, fresh, pounds	109,070,477	117,108,801
Beef, other, pounds	76,514,856	87,461,749
Tallow, pounds	43,540,175	52,960,282
Bacon, pounds	367,654,320	308,657,564
Ham, pounds	54,188,086	45,171,738
Pork, pounds	77,716,472	51,478,322
Lard, pounds	205,492,178	228,853,516
Butter, pounds	19,327,811	21,303,492
Cheese, pounds	90,346,235	109,219,991
Totals (values)	$93,713,028	$96,449,142

A telegram from Jacksonville, Fla., says: "Despatches from all parts of the State confirm the belief that the cold wave carried frost to almost the extreme southern end of the peninsula, and there is little doubt that substantially the entire orange crop remaining on the trees is frozen and spoiled. The precise effect upon the orange trees cannot be determined until the warm weather sets in. Probably every tree in the State will lose it leaves, and the belief of the best observers is that most of the young trees are killed. It is estimated that 500,000 boxes of oranges, worth $1,000,000, were destroyed by the freeze."

Miscellaneous Advertising.

When Baby was sick, we gave her Castoria,
When she was a Child, she cried for Castoria,
When she became Miss, she clung to Castoria,
When she had Children, she gave them Castoria.

MARKETS BY TELEGRAPH.

SATURDAY, January 16, 1885.

CHICAGO.—Compared with prices a week ago, "regular" wheat is 3¼c. lower; No. 2 Chicago Spring, 2¼c. lower. Corn, 1¼c. lower. Oats ¼c. lower. Rye, steady. Barley, steady. Pork, 15c. higher. Cattle, from 10c. to 25c. lower. Sheep, from 20c. to 50c. lower. Hogs, 5c. lower.

WHEAT, active; sales ranged: January, 78⅞@79½c; February, at 78⅝@79¼c.; May, at 84⅝@85⅜c.; No. 2 Spring, at 79¼c.; No. 3 Spring, at 70¼c. CORN—Steady and quiet; Cash, 36⅞c.; January, 36¼@36¼c; February, 36⅝@36⅞c. May, 39½@39⅝c. OATS—Steady; sales ranged: Cash, 28⅛c; January, 28¼@28⅜c; May, 31¾@31¼c. RYE—Dull; No. 2, 58c. BARLEY.—No 2, 63 @65c. PORK—Active; Cash, $10 40@10 45; January, $10 40 10 45; February, $10 32½@10 42½; May, at $10 50@$10 72½. LARD—Firm; sales ranged; Cash, $6 07½@6 10; January, $6 07½@$6 10; February, $6 07½@$6 10; May, $6 25@6 27½. BULKMEATS—Shoulders, $3 95@4 00; Short rib sides, $5 12½ @5 15; Short Clear sides, $5 45@$5 50. CATTLE Market steady; Shipping steers, $3 50@5 35; stockers and feeders, $2 90@4 35; cows, bulls and mixed, $1 80@3 90; bulk, $2 50@3 25. HOGS—Rough and mixed, $3 30@3 60; packing and shipping, $3 80@4 05; light, $3 35@3 80; skips, $2 50@3 25. SHEEP—Market firm; Natives, $2 00@ 5 00; Western, $3 00@3 50; lambs, $3 90@5 60; Texans, $2 00@3 25.

ST. LOUIS.—Compared with cash prices a weeks ago, No. 2 Red wheat is 2¼c. lower. Corn, unchanged. Oats, ¼c. lower. Rye, 1c. lower. Pork, 10c. higher. Cattle, steady for stockers and feeders; and 15c. to 40c. for other grades.

Wheat easy. No. 2 Red, Cash, 88@91c.; January, 88c.; February, 89½c.; May 94¼c.. Corn dull; Cash, 33½@33¾c.; January, 33¼@34¼c.; February, 33¾c.; May, 36¾c. Oats dull; No. 2 Mixed, Cash, 29@ 29½c.; January, 28¼c., May, 31¾c. Rye steady at 55c. Barley dull at 50@78c. Eggs steady at 17½@18c. Flax Seed steady at $1 06. Pork, $10 50. Bulk Meats —Long Clear, $5 10; Short Rib, $5 20@$5 25; Short Clear, $5 35. Lard firm at $5 95@$6 10. Cattle—Market quiet, Fair to Choice Native Shipping Steers, $4 75@$5 00; Native Butcher Steers, $3 25@$4 00; Cows and Heifers, $2 00@$3 60; Stockers and Feeders, $2 50@3 90. Hogs.—Light, $3 40@3 70; packing, $3 65@3 80, heavy, $3 85@4 00. SHEEP—Receipts, 1,500; shipments, 400; market active and prices a shade easier at $2 50@4 50.

BOSTON—GRAIN—CORN—In fair demand, with sales of Steamer Yellow, at 50c; steamer mixed at 49@49½c; and no grade at 49@49½c. per bushel. OATS—Have been fair demand. Sales of No. 2 white at 40½c; No. 3 white are held at 39½c, and barley oats range at 43@45c, per bushel as to quality. Small sales of RYE at 67@70c, per bushel. BRAN is steady at $16 50 for Spring and $17 00@17 50 for Winter; fine feed and middlings at $18 00@21 00, and cotton seed meal at $25 00 on spot and $23 00 per ton to arrive. HAY AND STRAW—Hay is firm at $19 00@20 00 per ton for choice and fancy, $17@18 for fair to good, $16@18 for fine, and $13@15 for poor and damaged. Western choice $16@17 do fair to good $14@15. Rye straw is held at $19@20 for choice, and $12@14 for common to good. Swale hay, $11@12; Oat straw, $9@10 per ton. PROPUCE—The various articles under this head continue to command fair prices. BUTTER—Northern creamery, choice to extra 23@24c; good to choice summer, 17@22c; western creamery, 21@23c, for choice to extra; northern dairy, 22@23c, for Vermont extra; 18@20c, choice, and 12@16c, for fair to good; Western dairy, 18@21c, for choice, and 10@ 15c, for fair to good; Imitation creamery at 15@22c, for good to extra; ladle-packed, at 17@19c, for choice. CHEESE—New York choice to extra, 9@10½c, and common to good, 8@8c; Vermont choice to extra, 8½@9c, and common, 5@7c; Western common to extra, at 4@8¾c. Sage, extra, 11@12c, good to choice, 8@10c. EGGS—Cape and near-by, per dozen, 28@29c; Eastern extras, at 27c; do, firsts, at 25c; Northern, fresh, at 26c; Western fresh, 23@24c; Provincial, 24@26c. BEANS—Choice Northern hand-picked pea, at $1 60@1 75 per bushel; do, do, New York, $1 50@1 60; do, do, screened $1 25@1 35; medium choice, 1 50@1 55; do, screened, $1 25@1 40; Yellow Eyes, improved, at $1 55@1 60; do, choice flats, $1 10@1 55; Red Kidneys, $1 80@2 00. Canada peas, 85@$1 00 per bushel for common to choice. Green peas, Northern, at 90c@$1 00; do, Western, $1 20 @1 25. Potatoes range at 55@70c, per bushel, as to quality.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, January 16, 1885.

STATE OF THE MARKET.—Compared with cash prices last week, flour is a shade lower; wheat from ¼c. to 1c. lower; corn 1½c. higher; beans 10c. higher; pork, steady; lard, 1c. lower; butter and cheese a shade higher; eggs, 1c. higher for best; poultry 1½c. to 2c. higher; cotton, ¼c. higher; fruit, unchanged; potatoes steady. The grain market contains unsettled, prices raising and falling from day to day. The poultry market shows an improvement. There are heavy shipments, but the cold weather renders keeping easier. The market is steadily advancing on best grades of butter and cheese. Fresh eggs are in active demand and hard to obtain.

FLOUR, FEED AND MEAL. FLOUR—Quotations; Fine at $2.15@$3.00; Superfine, $2 90@$3 35; Extra No. 2, $3 20@ $3 70; Good to Fancy Extra State, $3 65@4 25; Good to Choice Extra Western, $4 00@$5 50; Common to Fair Extra Ohio, $3 25@$3 75, Good, $3 85@$4 20; Good to Choice, $4 25@$5 50; Common Extra Minnesota, $3 25@ $3 65; Clear, $4 10@$4 50; Rye Mixture, $4 00@$4 35; Straight, $4 30@$5 00; Patent, $4 75@$5 50; Bakers' Extra, $4 00@$4 75; St. Louis Common to Fair Extra, $3 25@ $3 80; Fair to Good, $3 85@$4 75; Good to Very Choice, $4 80@$5 00; Patent Winter Wheat Extra, $4 25@$5 05; City Mill Extra for West Indies, $4 70@$4 95; South American, $4 90@5 00. SOUTHERN FLOUR—Common to Good Extra at $3 10@$3 85; Good to Choice do., $3 90@ 5 40. RYE FLOUR—Superfine, $3 25@3 50; Choice at $3 55. BUCKWHEAT FLOUR, at $1 90@$2 15, mainly at $2 00@ 2 10. CORN MEAL—Yellow Western, at $2 80@$3 15; and Brandywine, at $3 00@3 15. FEED—Bran ranges from 80c to 87½c; from track and mill; for 60 ℔. average at 75@82½c.; 80 ℔. average at 75@82½c.; middlings at 75@90c., and sharps at 85½c@$1 05. Rye feed at $16 00@$17 00.

GRAIN.—WHEAT.—No. 2 Chicago and Milwaukee, 90c; Red Canada, 88c; Red Southern, 92c; No. Northern 98½c; Ungraded Winter Red, 80@88c.; No 3 Red, 86½c; No. 2 Red, 90½c.; No. 2 Red for January, 89½ @89½c.; do. for February, 89½@90½c.; do. for March, 90⅝@91⅜c.; do. for April, 92½@93⅝c.; do. for May, 93½@94½c.; do, for June, 94⅝@95⅝c. RYE—Western, 60@62c.; State, 63@66c. CORN—Rejected at 46c; Ungraded Mixed at 45@49c.; No. 3, 46½@47c.; Steamer Mixed, 47¼@47½c.; Steamer Yellow, 48c.; No. 2, 50½c; No 2 Mixed for January, 49½@50½c.; do. for February, 48⅝@49c.; do. for March, 48⅝@48⅞c.; do, for April, 48½c.; do. for May, 48⅝@48⅞c. OATS—No. 3 Mixed at 36c.; No. 2, 36¼@36¾c.; No. 3 White, 39¼@39½c.; No. 2 do, 43½c; No. 1 nominal quoted at 46c.; Mixed Western, 36¾@38½c.; White, do., 38@46c., White State, 41@45c.; No. 2 Mixed for January, 36½c. do. for February, 36½c., do. for May, 37½c.

BEANS.—Quoted: Marrows at $1 75@$1 80; mediums at $1 50@1 55; pea at $1 50; red kidney at $2 00 for choice; turtle soup at $2 25; white kidney at $1 90@2 00 for choice.

PEAS.—Green are quoted at $1 15.

PROVISIONS.—PORK.—Mess quoted at $10 00@$10 50 $11 00@$11 50 for Family Mess; $12 00@$13 00 for Clear Back; and $8 50@$9 25 for Extra Prime. BEEF.—City Extra India Mess, $17 50@$18 00; Extra Mess, bbls., $10; Packet, $11 00@$12 00 in bbls.; Family Mess, $12 00@$13. BEEF HAMS.—Quoted at $16 50@$16 75. CUT MEATS.—Pickled Bellies, 10 ℔, average, 5½c; do, 12 ℔, average, at 5½c; Pickled Shoulders, at 4½c; do, do, at 4⅝ @5c; Smoked shoulders, at 5½c.; Pickled Hams, at 8¾@8½c.; Smoked do., at 9½@10c. MIDDLES—Long Clear in New York quoted 5½c. for Western delivery, Long Clear, 5.30c.; Short Clear, 5.30c. DRESSED HOGS.—City Heavy to Light, at 5½@5¾c.; Pigs, 6c. LARD.—Western steam spot, at 6.35c; contract grade, 6.42½@ 6.45c; January, at 6.11@6.12c; February, at 6.12@6.14c.; March, at 6.48@6.49c.; April, at 6.53@6.54c.; May, at 6.57@6.60c.; June at 6.63c; August, at 6.75@6.80c; City Steam, 6.32½@6.35c.; Refined Continent at 6.70c. and South American, 7.05c.

BUTTER—Eastern Creamery, 23@31c; Western Creamery, 18@33c., Elgin do., 32@33c.; State Dairy half-firkin tubs, 18@26c.; Western Factory, 11@18c.; Imitation Creamery, 18@26c.; Western Dairy, 12@21c.

CHEESE—State, 7@10¼c.; Night Skims, 5½@7c. Western flat, 7@9½c.

EGGS—State, 28@29c.; Western, 28@28½c.; Southern, 27½@29c.; Limed State, 21c.; do. Western, 20@21c.

LIVE POULTRY.—Spring chickens, 10c., fowls, Jersey State and Pennsylvania, per ℔, at 11c.; do. Western, per ℔, at 11c.; Turkeys, per ℔, at 10@11c.; ducks, western per pair, at 60@80c.; geese, western, per pair, at $1.00@ $1.50; pigeons, per pair, at 40c.

DRESSED POULTRY—Turkeys, 14@15c. for Philadelphia 14@13c per ℔ for Jersey, and 10@12c per ℔ for western; chickens, Philadelphia large, 1 @16c. per ℔; do. small at 13@14c.; Jersey scalded at 14c; do, State at 12@13c; fowls, Philadelphia, prime, 12@13c; do. Jersey at 12@13c.; State and western at 10@11c. Ducks, Philadelphia, at 14@16c; do. Jersey, at 14@15c; do, western, at 13@14c. Geese, Philadelphia, at 13@14c; do. Jersey, at 12@13c; do, western, at 10@11c.

GAME—Quail, ⅞ doz., $1 50@1 75; partridges, State and Pennsylvania, choice, per pair, at 75@85c.; do. Ohio and Michigan, prime, per pair, at 65@75c.; do. Minnesota and eastern, per pair, 40@50c.; grouse, prime, dry, per pair, at 85@90c.; do. inferior at 30@40c.; wild ducks, canvas, per pair, at $2 50@$3; do., red-head, per pair, at 75c.@$1; do, mallard, western, per pair, at 20@40c.; do., teal, blue wing, 30@50c.; rabbits, per pair, at 30@35c; hares, eastern, per pair, at 25@30c.

COTTON—The quotations, according to the American classification, are as follows:

	New Orleans. Uplands.	and Gulf.	Texas.
Ordinary	6 11-16	6⅞	6¾
Strict Ordinary	7⅛	7 5-16	7 5-16
Good Ordinary	8 1-16	8¼	8¼
Strict Good Ordinary	8⅛	8 11-16	8 11-16
Low Middling	8⅞	9 1-16	9 1-16
Strict Low Middling	9⅛	9 5-16	9 5-16
Middling	9 5-16	9½	9½
Good Middling	9 11-16	9⅝	9⅝
Strict Good Middling	9 15-16	10⅛	10⅛
Middling Fair	10 5-16	10½	10½
Fair	10 15-16	11⅛	11⅛

STAINED.

Good Ordinary	6¼
Strict Good Ordinary	7 3-16
Low Middling	7
Middling	8¼

FRESH FRUITS—Quotations are: San Blas cocoanuts at $37 50@40 00; Baracoa cocoanuts at $29 00@$30 00. Apples—Baldwin, per bbl., at $1 75@2 00; Greening, per bbl. at $2 00@2 25; Spy, at $1 50@2 00; King, at $2 00@2 50. Grapes—Catawba at 6@7c. per ℔, in baskets; Isabella, at 3½c. per ℔. Cranberries —Cape Cod, choice, per bbl., $1.50; do. fancy, $5 00; good to prime, per bbl., $4 00@$4 50; do. light colored, per bbl. at $4 00@$4 50.; do. choice, per crate, at $1 25 @$1 50; do, fair to good, per crate, at 75c,@ $1 12. Florida oranges—Fancy at $3 75; Choice at $2 50@3 00; do. inferior at $1 75@$2. Florida lemons at $3 25@$3 75 for choice and $2 50@3 for fair.

DRIED FRUITS—Quoted: Apples—Fancy evaporated, 7½@7¾c; new, choice, 7c; fancy North Carolina sliced, new, at 4@4½c.; choice do. at 3½@3¾c.; choice Tennessee quarters at 2@2½c.; State quarters at 3½@3¾c.; North Carolina quarters at 2½@2⅝c. Peaches—Peeled North Carolina, choice, 10@11c.; fancy, 12@13c.; extra fancy at 13@14c.; Georgia, choice, new, at 10@11c.; do. prime, 9@9½c.; unpeeled halves, 2½@3c.; unpeeled quarters at 2½@3c.; Delaware evaporated, peeled, 24@ 26c. Choice pitted cherries at 10@11½c. Evaporated raspberries at 17@18c; sun-dried do. 15@17c. Blackberries—Prime at 8@8½c. Whortleberries at 7c.

HAY AND STRAW—Quotations are for: Choice timothy hay at 90 cents; good at 85c.; medium at 80c.; shipping at 75c; clover mixed at 70@75c.; No. 1 rye straw at 90@95c short rye straw at 65@70c, oat straw at 45@50c.

SEED—Clover is slow, yet hold firmly; quotations are nominal at 10@10½c. as to grade. Timothy is quiet; quoted at $1 90@$2 00. Linseed nominal.

VEGETABLES—Potatoes—Long Island Rose, bulk, per bbl., $2 00@$2 25; New York Rose, $1 75@$2 00; Eastern and Nova Scotia Rose at $2 00@2 25; Burbank, State, at $1 75@$2 00; eastern and Nova Scotia, per bbl, $2@2 25; Hebron, do, do, do, per bbl. at $2 00@2 25. Prolific and Goodrich, per bbl., at $1 75@$2. Sweet potatoes, Virginia, at $2 25@$2 50 per bbl. Cabbages, per 100, at $4@ $5.00; State at $2 50@4 00. Onions—Yellow, per bbl., at $3@$3 50; do. red, per bbl., $3 50@3 75. Turnips,—Russia, per bbl., at 50@62c. Marrow squash, per bbl., at 50c.; Hubbard squash, per bbl., at 50@75c. Norfolk spinach, per bbl., at $1@$1 50.

LIVE STOCK MARKET.

NEW YORK, SATURDAY, January 16, 1885.

BEEVES—Total receipts for the week 10,389 head against 8,853 for the same time last week. The cattle market is generally duller about this season owing to the immense quantities of poultry shipped in from all quarters. Considerable poor stock is offered, mostly large bony steers and inferior cows. First-class grade steers of good shape and condition are in fine demand and fair prices, the choicest reaching $6@$6.10 per 100 pounds. Stock of good shape, with heavy hind quarters and thick flank will be sold to better advantage than larger animals with the meat development on the fore quarter and nerk. Whenever the beef market becomes dull, the poorer grades suffer most. Butchers are always ready to buy prime animals at good prices. Prices generally range from $4.25 to $5.40 for common to good steers, with a few choice lots above $6 and some inferior cows and bulls as low as $3. One bunch of corn fed Colorado steers averaging 1,301 pounds sold at $5.15, while another bunch of ordinary grass-fed cattle averaging only 130 pounds less, brought only $4.75½. Best Pennsylvania stable-fed steers averaging 1,450 pounds brought $6, while a poorer lot averaging 1,295 brought but $5. Short-horn grade steers from Ohio, in fine condition, averaging 1,820 lbs., brought $5.10, and found easy sale. The highest price paid for cows was $3.60 for a small bunch averaging 1,118 pounds. Most cows and bulls sold below $3.25.

CALVES—Grassers, 300 ℔, at 3c.; 350 ℔, at 3½c. Fed calves, 462 ℔, 4½c; yearlings, 606 ℔, at 2⅝c; two-year-old, 813 ℔, at 2½c.

SHEEP AND LAMBS.—Indiana lambs, 83 ℔, 6c; Indiana sheep, 96 ℔, at 5c; Kentucky do., 125 ℔, at $5 10; Ohio lambs, 73 ℔, at 6¾c, State sheep, 81 ℔, at 4½c; Michigan do, 82 ℔, at 4½c; Canada lambs, 87 ℔, at 7c.

HOGS. Receipts for six days 47,670 head against 38,816 head last week. Ohio hogs, 159 ℔ average, at 91 35 per 100 ℔.

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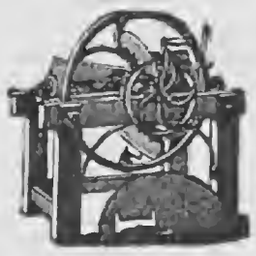

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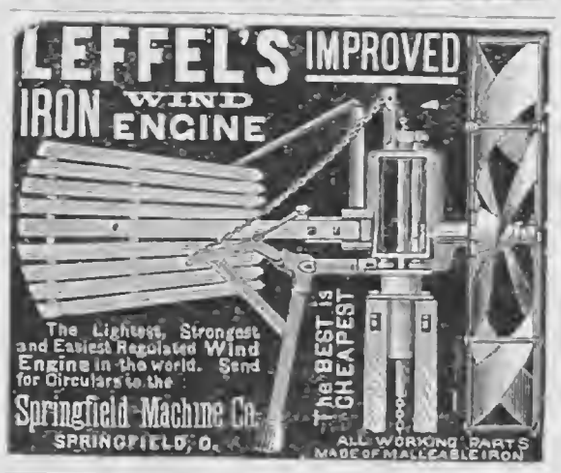

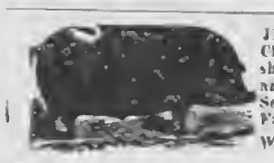

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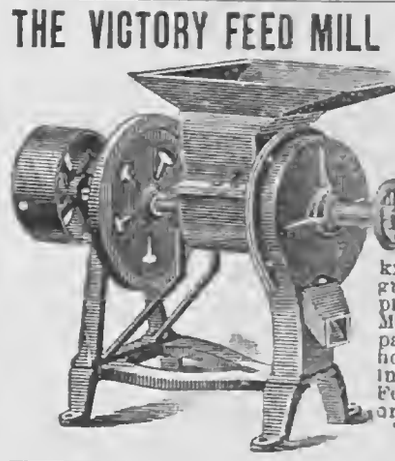

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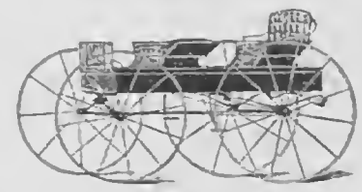

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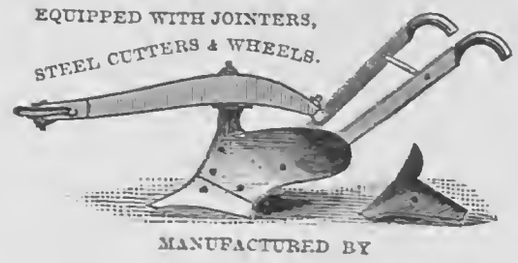

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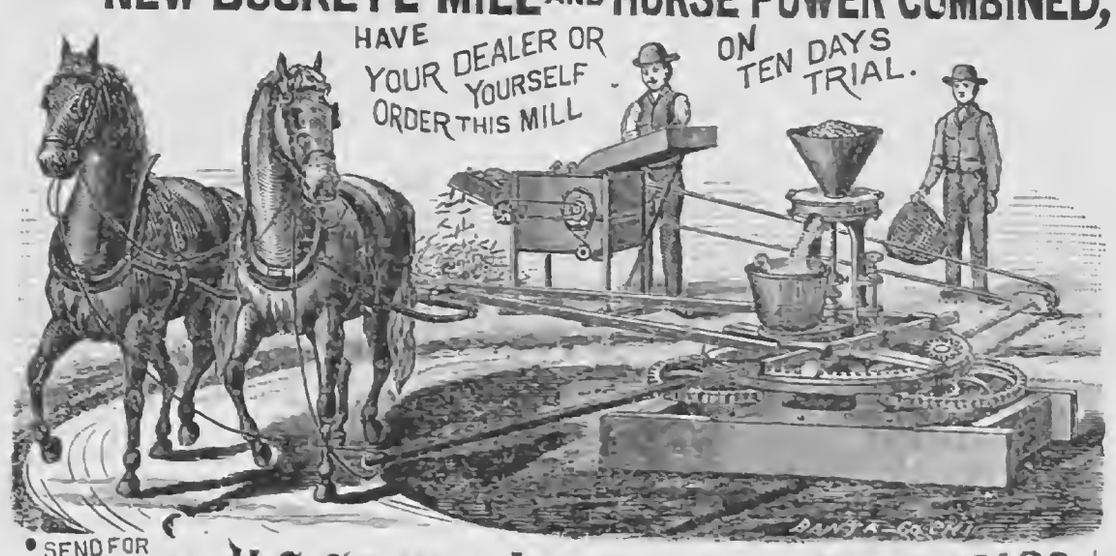

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For the Young.

THE SNOW STORM.

DULL lay the earth and barren
In the December cold,
Scarred was its face and broken,
Weary and dim and old.
Over the rustling forest
Slow sank the sun from sight,
Out crawled the blind old shadows,
Led by the fiends of night.
Over the gloomy graveyard,
Where the rude mounds appear,
Crept the dark shadows, driving
Backward the light in fear.
Sad as an old man dying,
Nothing could comfort bring
Save the warm breath of Summer
Or the low laugh of Spring.

But through the night the snowflakes
Tenderly found their way,
Laying a spotless mantle
Over the earth so gray.
Weak, for a child's breath killed them,
Blown in its careless mirth;
Strong, for they took the sorrow
Out of the face of earth.
Silently, softly falling,
Soft as an angel's plume,
Hiding the dismal horror,
Hiding the staring tomb;
Over the dreary churchyard
Throwing a mantle warm,
Where the tired hearts lay sleeping
After life's weary storm.
Hiding the marks of sorrow
Under its spotless white,
Brightening all the future,
Filling the world with light.

So when we doubt and wonder,
Dropping our burden down,
Weary at Fate's hard questions,
Weary at Fortune's frown,
When at the soul's dimmed windows
Beckon the ghostly fears,
Pointing to hopes all broken,
Hid in the graves of years;
Then from the mighty record,
Such as the angel's know,
All of our good deeds flutter
Soft as the falling snow;
All of the kind words spoken,
Smiles, and the friendly hand,
All of our self-denials
Hasten at God's command.
Hiding the years all broken,
Drifting at Trouble's door,
Teaching a deeper patience
Than we could know before.

UNCLE MARK.

UNCLE MARK has had his snow storm at last. It came hard enough when it once started. The papers tell us that it started down in Texas, and came sweeping up over the country, and was lost at last out on the ocean. Most of our great storms start in the West and travel towards the sea. Text books tell us that wind is "air in motion." Most of us found that to be very true last week. You all know that hot air will rise. Suppose a great mass of air, covering miles of ground, to become heated. Up it goes, and the colder air all about it rushes in to fill the vacant place. Then this mass goes tearing and twisting about, growing stronger and stronger as it goes, doing all the damage it can till it slips off into the ocean and wastes itself. This last storm did a great deal of damage. Trains were delayed, vessels were wrecked, and people were frozen to death in some States. I hope the Cousins were all safe and warm, where the wind could not find them.

A snow storm always makes lively work. In the country, we have to see that everything is under shelter, for if the snow once covers tools up, they will not be seen again till Spring. After the storm is over, we have to dig out the paths. I used to have to do that when I was a boy. I remember one great drift so high that we cut a tunnel through it. One day, during a snow-ball battle, some of the boys tried to use it for a fort. They went inside to make snow-balls, and the rest of us broke in the top and buried them up. It generally pays when snow-balls are flying about, to keep out in the open field where we can see what is going on. When we get behind a snow fort, we think we are all right, and so forget to be careful; the first we know we are hit pretty hard. It is about the same with everything else. It is only by keeping our eyes open that we are able to keep out of the way of things that would do us harm. The moment we begin to say that we are safe and can't be hit, we are in danger from a stray shot.

A snow storm in the city changes life entirely. The wind comes sweeping down the narrow streets wi' hardly a chance to escape. The snow piles up over the door steps in great drifts. This makes work for the poor people. Men and boys go about with shovels to clear away the snow. They generally get 25 cents for clearing away the space in front of a house. Oftentimes the people give them more. The cold weather makes sad suffering in the places where these poor people live. Many of these poor little fellows that shiver all night in a cold attic, would be glad enough of a home in the country where they could be near a good fire and have plenty of fruit and nuts to eat. Don't think of coming to the city boys, you are well off where you are.

I saw some news boys eating their dinner the other day. They were ragged little fellows, without any overcoats or mittens. They had to jump about and dance to keep their feet warm, and blow on their hands to thaw out their fingers. They stood up in front of a counter to eat. What did they have? This was about the bill of fare: A plate of baked beans, two pieces of bread, a cup of coffee and a doughnut. That cost them 10 cents, and I guess any one of them could have eaten three times as much. They have to sell 10 papers to earn enough to pay for that dinner, and many of them had no home to go to when their work was done. This will be a good thing for the Cousins to remember when they think they are having a pretty hard time.

LETTERS FROM THE COUSINS.

WE can have a long letter this week, introducing a great many new Cousins. The new year has brought a great many.

BERTHA HADLY lives in Thorntown, Indiana. She does not see many letters from her State. The Indiana Cousins should remember this. Bertha would like to have some of the Cousins write to her. She has a canary named Bobby which sings almost all the time.

TOMMY STEVENS took some Gem Squashes to the fair at Trenton, N. J., and took the second premium—well done! He is going to try and get the first next year. The fair was a good one, with no betting and horse racing. That is the kind of a fair we all like to attend.

RETTA M. AVERY lives at Lebanon, Mo. She gives Uncle Mark a very kind invitation to call on her. She likes to live in the country. Her Mamma has lots of nice plants, including 16 varieties of cacti.

MARY B. WILSON lives at Hays City, Kansas, with her brother. She can milk, and help feed the chickens. She planted the Garden Treasures last year and had some very pretty flowers.

VIOLA MAYHEW lives two miles from town. She has a pet kid and a colt. The geese make lots of noise. I expect they wake people up in the morning.

ROBERT M. COLT has little time for writing, for he has to walk a mile to school and take care of the school-house and fire. Mental arithmetic is his favorite study. He raised five bushels of pop-corn.

MANLY AND DARWIN LAWRENCE raised 150 chickens, doing all the work without help. They had for their share every fifth chicken, and got $7.50 for what they sold. I like to see boys have a chance to work that way. They gathered 2,880 eggs. They have made in all $12. Pretty good, boys. The new house is nearly done. They have bought a carpet for their room and their Mamma has made it. Next year they want to make enough to get some furniture. That is a good way to spend the money, I think.

EMORY C. SPENCE reports wheat very poor, oats pretty good, rye good, buckwheat a larger crop than usual, no peaches and a large crop of apples. The White Elephant and Rural Blush potatoes were both very good.

NANNIE L. PECK lives in California. She has been reading the letters in a copy of the RURAL she found at her grandmother's house. Did any of our Northern Cousins ever think what Christmas in California must be like?

SADIE E. STEIGLEDER wants to hear from Aunt Beth again. I am sure we all say the same. Sadie has two brothers who have bought a farm in Virginia. If she moves down there she will have to tell us all about the country.

WILBER F. SAXTON wants me to be sure and wish all the Cousins "Happy New Year." Wilber's father caught a flying squirrel. I wish we could see it. Wilber has bound the RURALS for 1884. How many Cousins can say the same.

MABEL DARLINGTON had a battle with the grass-hoppers for the possession of her beans. The grass-hoppers beat. Her Papa says he has found one thing that the "hoppers" will not eat, and that is the vine of a pumpkin. They would probable eat pumpkin pie though. Mabel won a prize for good attendance at school.

OLIVIA B. SELL writes that the cut-worms thought everything of the tomatoes. The Johnson Grass did not come up. The peas were very nice.

ANNIE L. BRYAN lives in Maryland. They have a molasses mill on the farm. They raised some peanuts and some chufus—the latter they do not like very well. They had a very large crop of turnips.

ANNA MASON writes a very nice letter. She lives in Western New York. She has a canary, two cats and three little chickens. The latter will fly up in her lap and eat out of her hand. Where she lives they have been drilling for water, and have an artesian well 314 feet deep which flows 75 barrels an hour. We would all like to know more about that. One of the neighbors who is 73 years old, has pieced a quilt containing nearly 4,000 pieces.

LOUISA SCHOENFELD says that her Mamma tells her that she never heard that story about the black cat and the baby that was in the RURAL some time ago. Her Mamma was brought up in Germany too. Louisa can make good bread, though she is only 11 years old. I am glad she can help her Mamma. Her brother, John, takes care of the horse and cow and cleans the hen house every Saturday. He is going to have a piece of land next year. I suppose he will raise quite a crop.

KATIE JACK would much rather live in the country where she can have a good garden, than to live in the city or town. When she has her farm she says she shall consider the RURAL as necessary as the garden hoe. A great many people do not use either as they should.

CHRISTIANA E. ANDERSON lives in a very wild place on Puget Sound, eight miles from British Columbia. In clear weather they can see two mountains that are covered with snow all the year round. They have very little school there.

R. B. DE FREEST has a black goat named Billy that will draw him around. I hope Billy is better natured than some other goats I have known. The dog is named Frisk and the cats are Bessie, Snow, Beauty and Tab. If you have a piece of land next year, I hope you will work it well. I think the beans and onions would make a good crop.

OBIE FREGEMBA lives in Carbondale, Kansas. He raised some potatoes, onions and turnips. His father gave him a pig which he sold this Fall. It weighed 275 pounds.

ORA E. EVANS builds the fires at the school house. He raised a great many cabbages, but they were so plenty that there was no sale for them, so he buried them. One head was so large that a half-bushel basket would not go over it. That *was* a cabbage, wasn't it?

DEAR UNCLE MARK: I am a little girl 13 years old, and would like to join the Y. H. C. We live on a fruit farm two miles from South Haven. We are right in sight of Lake Michigan. I go down to the lake sometimes and gather pebbles and make sand houses. We can hear the lake roar very plainly. There was a young man living here who was working on a vessel on the lake. He was almost home from his last trip, when in some way he fell off from the boat and was drowned. It was very sad. I sometimes go down to the lighthouse and see the lamps lit. We have two kittens. One is named Mollie and the other Tabby. We have two horses, one cow, two canaries and a great many chickens. Papa has been building a new hen-house. We have a great many flowers. Papa is in partnership with another man in a greenhouse.

Your loving neice, INEZ MERRILL.

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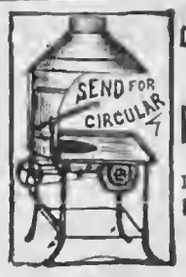
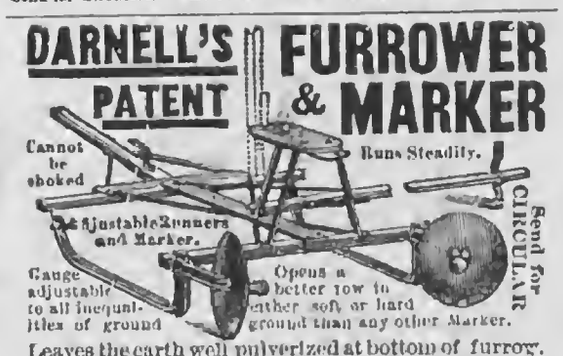
For Sale, by the car load. Leached or unleached. Also Bone and Potash Fertilizers. Analysis guaranteed. Write to CHAS. STEVENS, Napanee, Ont., Can.

HOME STUDY. Book-keeping, Business Forms, Penmanship, Shorthand etc. Thoroughly taught by mail. Low rates. Circulars free. BRYANT & STRATTON'S, Buffalo, N. Y.



Blacksmithing ON THE FARM
Save Time and Money by using HOLT'S CELEBRATED
FORGE and KIT of TOOLS
For $20.
Larger Size $25. Single Forge $10.
Blacksmiths' Tools, Hand Drills, &c.
HOLT M'F'G CO.
52 Central Way, Cleveland, O.

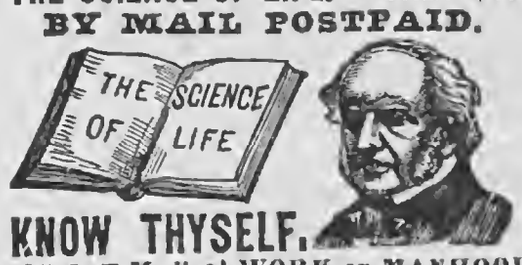
Send for Circulars. E. J. KNOWLTON, Ann Arbor, Mich.



Leaves the earth well pulverized at bottom of furrow. Marks any width from 2½ to 5 feet, and from a mere mark to 8 inches deep.
"Take pleasure in recommending it. It does the business; is well made and will last for years." *J. S. Collins, Moorestown, N. J.*
"It far exceeds my expectations. If the real merits of this cheap implement were known to potato growers alone, the sales would be immense." *E. L. Coy, Pres. Wash. Co. (N. Y.) Agr. Society*
H. W. DOUGHTEN Manufact'r, Mooreatown, Burlington Co., N. J.

Dyspepsia
Does not get well of itself; it requires careful, persistent attention and a remedy that will assist nature to throw off the causes and tone up the digestive organs till they perform their duties willingly. Among the agonies experienced by the dyspeptic, are distress before or after eating, loss of appetite, irregularities of the bowels, wind or gas and pain in the stomach, heart-burn, sour stomach, etc., causing mental depression, nervous irritability and sleeplessness. If you are discouraged be of good cheer and try Hood's Sarsaparilla. It has cured hundreds; it will cure you.
Hood's Sarsaparilla
Sold by all druggists. $1; six for $5. Made only by C. I. HOOD & CO., Lowell, Mass.
100 Doses One Dollar

THE SCIENCE OF LIFE. ONLY $1.
BY MAIL POSTPAID.



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A GREAT Medical WORK on MANHOOD.
Nervous and Physical Debility, Premature Decline in man. A book for every man, young, middle aged and old. It contains 125 prescriptions for all acute and chronic diseases, each one of which is invaluable. So found by the author, whose experience for 23 years in such has probably never before fell to the lot of any physician. 300 pages, bound in beautiful French muslin, embossed covers, full gilt, guaranteed to be a finer work in every sense—mechanical, literary and professional than any other work sold in this country for $2.50, or the money will be refunded in every instance. Price only $1.00 by mail, postpaid. Illustrated sample 6 cents. Send now. Gold medal awarded the author by the National Medical Association, to the officers of which he refers.
The Science of Life should be read by the young for instruction, and by the afflicted for relief. It will benefit all.—*London Lancet.*
There is no member of society to whom The Science of Life will not be useful, whether youth, parent, guardian, instructor or clergyman.—*Argonaut.*
Address the Peabody Medical Institute, or Dr. W. H. Parker, No. 4 Bulfinch Street, Boston, Mass., who may be consulted on all diseases requiring skill and experience. Chronic and obstinate diseases that have baffled the skill of all other physicians a specialty. Such treated successfully without an instance of failure.
HEAL THYSELF
Mention this paper.

IF YOU WANT TO KNOW
1,001 Important things you never knew or thought of about the human body and its curious organs.
How life is perpetuated, health saved, disease induced
How to avoid pitfalls of ignorance and indiscretion,
How to apply Home Cure to all forms of disease,
How to cure Croup, Old Eyes, Rupture, Phimosis, etc.,
How to mate, be happy in marriage & have prize babies
SEND FOR OUR FREE RED, WHITE BLUE PAMPHLETS
Murray Hill Pub. Co., 129 E. 28th St., New York.

THE MAN
WHO MAKES
5 Ton Wagon Scales,
Iron Levers, Steel Bearings, Brass Tare Beam and Beam Box, for
$60 and
JONES he pays the freight—for free Price List mention this paper and address JONES OF BINGHAMTON, Binghamton, N. Y.

DEAFNESS Its Causes and Cure, by one who was deaf 20 years. Treated by most of the noted specialists of the day with no benefit. *Cured himself* in three months, and since then hundreds of others by same process. A plain, simple and successful home treatment. Address T. S. PAGE, 126 East 26th St., New York City.

RED INK POWDERS, 2 for 25c. (postal note). Makes 16 ozs. Sells for 10c. oz. J. E. RUE, JR., Littleton, N. C.

HOW TO BE UP IN BUSINESS TOPICS. **GAT PAYNE'S**
Business Letter Writer and Book of Commercial Forms, being the most Complete and Cheapest Book ever published. Containing 200 pages, bound in boards, cloth back price 50 cents. Sent postpaid, on receipt of price
EXCELSIOR PUBLISHING HOUSE, 29 & 31 Beekman Street, New York, N. Y.

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CENTRIFUGAL-GOVERNOR
WINDMILL
Is the best working and most powerful Wind-Engine in the world, because it is the only one which unites the most perfect form of wind-wheel with the most perfect method of regulation. Geared Mills a specialty.
For Descriptive Circulars apply to
THE DANA WINDMILL CO., FAIRHAVEN, MASS., U. S. A.

50 Hidden Name, etc. Perfumed Cards & Prize 10c. CLINTON BROS, Clintonville, Conn.

50 Chromo or 25 Hidden name Cards, name on, 10c Samples & terms, 4c. Crown Ptg. Co. Northford, Ct

INVENTORS and MAN'F'RS. Send for large pamphlet containing U. S. PATENT Office Rules for obtaining Patents. F. B. BROCK, Atty., Washington, D. C

DYSPEPSIA Its Nature, Causes, Prevention, and Cure. By JOHN H. McALVIN, Lowell, Mass. 14 years Tax Collector. Sent free to any address.

50 CARDS, Hidden Name, etc. 1 pretty Ring, outfit and present, all 10c. 6 lots 50c. O. A. Brainard, Higganum, Ct.

PILES. Instant relief. Final cure in 10 days. and never returns. No purge, no salve no suppository Sufferers will learn of a simple remedy. Free. by addressing C. J. MASON. 78 Nassau St., N. Y.

Cards Free Sample Book of beautiful Cards, Novelties, Jewelry, etc. Send 2c. stamp for postage. STAR PUBLISHING CO., Birmingham, Conn.

WORK FOR ALL. $30 a week and expenses paid. Outfit worth $5, and particulars free. P. O. VICKERY, Augusta, Maine.

CARDS! 60 Fancy Pictures and 25 Elegant Cards in Gilt Edge, Silk Fringe, Hidden Name, &c, 1 Songster, 1 $50 Prize Puzzle, and 8 Parlor Games, all for 10 cts. Game of Authors, 10c. IVY CARD CO., Clintonville, Ct.

300 FOR 10c. GAMES, Puzzles, Parlor Magic, Conundrums, Songs, Album Quotations, Embroidery Designs, and pack of Name Cards, Gilt Edge, Silk Fringe, Hidden Name. TODD CARD CO., Clintonville, Ct.

PERSONALS.

SENATOR BECK'S son George is getting rich on his Wyoming ranch.

ADMIRAL D. D. PORTER is seriously ill at his residence in Washington.

MR. JAY GOULD is now on his Southern trip. It is not likely that he will go beyond Panama, although he had planned at first to visit Rio Janeiro.

THE will of J. B. Lippincott, the Philadelphia publisher, leaves to his children property amounting to over $2,000,000. The publishing business is to be continued by his sons.

WILLIAM H. GUION, Jr., who became the head of the Guion line of steamers in this country on the retirement of his uncle about two years ago, died at New York last week, aged 38 years.

JOHN LIVINGSTONE, who claims to be a brother of the African explorer, died in the Albany penitentiary a short time ago at the age of 80, a victim of typhus. He was well educated and had no vicious habits, but was a professional tramp.

PRESIDENT GREVY celebrated his re-election by giving the boys in the national schools a holiday, and the Conservative papers charge him with trying to "make himself solid" with the rising generation of voters, with a view to getting a third term!

MR. PARNELL is a bachelor and lives the simplest sort of life—in lodgings, as a rule, taking his meals at a hotel. His habits are so quiet that he and his sister Anna were guests at the same hotel for weeks without knowing that they were under one roof.

THE man who holds Lamar's seat as United States Senator from Mississippi, is Gen. Walthall, "a tall, thin, ruddy-faced man with long, iron-gray hair, which curls into a half-roll as it kisses his old-fashioned, Henry Clay collar." He is a great friend of Jefferson Davis.

M. PASTEUR thinks that some of his disciples are going a little too fast. He advises them to wait awhile before they take definite steps to apply his method of treatment on a large scale to cases of hydrophobia. He will not be able to furnish specific data himself until March.

THIS is the way in which a Western paper gives the news: "In the Solferino Mine, Nevadaville, Col., a loose rock knocked A. Warren out of the bucket. A piece of jaw bone was found at the 1,200-foot level and a piece of skull and a coat at the 1,300-foot level. These comprised his recoverable effects."

AT this moment it takes 22 policemen in relays to watch Lord Kenmare's mansion at Killarney against the hostility of his tenants. Each policeman, by the time all is told, costs nearly £100 a year, so that the Government (that is, the taxpayers of Great Britain and Ireland) are at this moment paying £2,000 a year for the protection of Lord Kenmare's mansion.

WE are glad to learn that C. C. Georgeson, our old young friend on the RURAL editorial staff, and later Professor of Agriculture in the Texas State Agricultural College, has been appointed Professor of Agriculture and Horticulture at the Imperial Agricultural College, Tokio, Japan—salary $255 per month. His engagement is for three years. May success go with him wherever he may go!

Miscellaneous Advertising.

Watch this Space NEXT WEEK!

New Reversible Harrow.
A Perfect Smoothing and Scotch Harrow Combined.
Thoroughly Tested and Warranted.
Send for Illustrated Pamphlet to
THOMAS HARROW CO., Geneva, N. Y.

Farmers say that we have the best Hay Carriers ever made. Our
LITTLE GIANT HAY LOADER
is the greatest labor saving invention of the times. New Principle. Don't miss it. Illustrated circulars, showing how we can sell cheaper than any one, sent free. Address
OBORN BROS., Box 414, Marion, O.
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Buy the Best. THE EUREKA

Awarded FIRST Premium and Gold Medal at World's Fair New Orleans, over 12 leading Wind Mills. The EUREKA, after a trial lasting 4 mos. was pronounced the best over all and to-day stands at the head of all competitors. Sizes, 10 to 18 ft. diameter of wheel, either for Pumping or Power Mills. *Perfect in all parts and warranted.* Estimates on application. Also Mfrs. of the Adams Direct Draft Barn Floor Horse Power. *Live Agents Wanted.* Address Mfrs.,
SMITH & WOODWARD, Kalamazoo, Mich.

Trees, Seeds and Plants.

SEEDS, SEEDS, SEEDS
To our friends who have not alreadv received it, we are readv to mail our New Catalogue of High Class Seeds for 1886.
J. M. THORBURN & Co., 15 JOHN ST. NEW YORK.

BURPEE'S SEEDS,
FARM ANNUAL FOR 1886
Will be sent FREE to all who write for it. It is a Handsome Book of 128 Pages, with hundreds of new illustrations, two Colored Plates, and tells all about the Best Garden, Farm and Flower Bulbs, Plants, Thoroughbred Stock and Fancy Poultry. It is the only complete catalogue of the kind published, and describes RARE NOVELTIES in VEGETABLES and FLOWERS, of real value, which can not be obtained elsewhere. Send address on a postal to
W. ATLEE BURPEE & CO., PHILADELPHIA, PA.

FRUIT AND ORNAMENTAL TREES
SMALL FRUITS, BULBS, SHRUBS AND ROSES.
Special attention is called to our remarkably Fine Stock of
STANDARD AND DWARF PEARS
ALSO **GRAPE VINES** Including such kinds as Niagara, Jessica, Empire State, Willis, Frances B. Hayes, etc.
Prices reduced to suit the times. Correspondence solicited. Catalogue Free. 30th Year. 600 Acres. 21 Greenhouses. Immense Stock.
THE STORRS & HARRISON CO. PAINESVILLE, Lake Co. Ohio.

GRAPE VINES Niagara, Empire State, and all the best varieties. Low prices for first-class stock. Jewell, Parry, May King, etc. STRAWBERRIES (several varieties $2 for 1000). New and Old RASPBERRIES, BLACKBERRIES, &c. Plants by mail a specialty. Descriptive Catalogue, with colored plates, Free; contains $1, $2, $3 and $5 collections, and instructions for planting. JOEL HORNER & SON, Merchantville, N. J.

FAIR AND SQUARE DEALING.
Believing that if a man has dealt squarely with his fellowmen his patrons are his best advertisers, I invite all to make inquiry of the character of my seeds among over a million of Farmers, Gardeners and Planters who have used them during the past thirty years. Raising a large portion of the seed sold, (few seedsmen raise the seed they sell) I was the first seedsman in the United States to warrant (as per catalogue) their purity and freshness. My new Vegetable and Flower Seed Catalogue for 1886 will be sent FREE to all who write for it. Among an immense variety, my friends will find in it (and in none other) a new drumhead Cabbage, just about as early as Henderson's, but nearly twice as large! James J. H. Gregory, Marblehead, Mass.

FAY CURRANT HEADQUARTERS GRAPES BEST STOCK IN THE World.
Niagara, Empire State and all the other best Grape Vines, new and old. Vines wintered in Mammoth stone cellars with roots in fine sand. Trees and Small Fruit Plants. By mail, express or freight. Lowest prices ever known for Dealers, Agents, Planters and Everybody. In every respect a Model and First-class Establishment. Accurate naming and highest grading. Free Illustrated Catalogue. Please write me before you buy.
GEO. S. JOSSELYN, Fredonia, N. Y.

GRAPE VINES Also other SMALL FRUITS, and all old and new varieties GRAPES. Extra Quality. Warranted true. Cheap by mail. Low rates to dealers. Illustrated Catalogue FREE!
Headquarters and General Agent for *New White Grapes*—Empire State and No Niagaras genuine without seal: N. W. G. C.
NIAGARA Special Terms to Agents. T. S. HUBBARD FREDONIA New York.

Sibley's Tested Seeds
Catalogue free on application. Send for it.
Hiram Sibley & Co., ROCHESTER, N. Y., AND CHICAGO, ILL.

APPLE SEEDLINGS.
Two years, extra choice, $3 per thousand.
Smiths, Powell & Lamb, Syracuse, N. Y.

Will be mailed FREE to all applicants, and to customers of last year without ordering it. It contains about 130 pages, 600 illustrations, prices, accurate descriptions and valuable directions for planting all varieties of VEGETABLE and FLOWER SEEDS, BULBS, etc. Invaluable to all, especially to Market Gardeners. Send for it.
D. M. FERRY & CO., Detroit, Michigan.

Cabbage Seed &c.
Long Island Cabbage Seed is the very best.
FRANCIS BRILL, Seed-Grower, Riverhead, Long Island, N. Y.

Marlboro Raspberry, *Ulster Prolific and Poughkeepsie Red Grapes.* Send for description and price to A. J. CAYWOOD & SON, Marlboro, N. Y.

SEEDS Free Annual of all kinds of Seeds, Bulbs, Tools, &c. Contains prices, descriptions, planting directions, illustrations. Colored plates, &c. PRICES LOW. SEEDS RELIABLE. Livingston's Sons, Columbus, O. Originators of Acme, Paragon, Perfection, Favorite and BEAUTY for '86, Price 25 CTS.

STRAWBERRIES How to grow them. Send Free! E. L. PUTNEY, Brentwood, N. Y.

NORTHERN-GROWN
SEED POTATOES AND SEED GRAIN.
Send for price list, free. Address S. PROGNER, Herman, Grant Co., Minn.

SEEDS Large Garden Guide FREE to all. You should have it. Best varieties, all tested, at low prices.
COLE & BRO., Seedsmen, Pella, Iowa.

WONDERFUL NEW IRON-CLAD PLUM
MARIANA
FRUITS, ORNAMENTALS, EVERGREENS, ROOT GRAFTS, CIONS.—*EVERYTHING.*
STARK NURSERIES 52d Year. 300 Acres LOUISIANA, Missouri.

SOUND GARDEN SEEDS
Small Fruit Plants, Potatoes
Shipping facilities unsurpassed. Stock Superior. Prices Low. It will pay YOU to send for our Free Catalogue before ordering Seeds or Plants.
FRANK FORD & SONS, Ravenna, Ohio.

TREES AND PLANTS.
LOOK, ORCHARDIST and SMALL FRUIT GROWERS, at our new price list for *Fruit Growers only.* Mailed FREE to readers of this paper. Address
WILEY & CO., Cayuga, Cayuga Co., N. Y.
(Successors to H. S. WILEY, original introducer of SHIPPERS' PRIDE PLUM.)

BUIST'S GARDEN SEEDS
ESTABLISHED 1828
Our Seeds are grown on our own farms from selected Seed stocks and GUARANTEED TO GIVE SATISFACTION, or money returned. Special Cash Prizes offered for 1886. See Buist's Garden Guide with prices, mailed on application. Address,
ROBERT BUIST, Jr., Seed Grower. PHILADELPHIA.

SPRING 1886
EVERYBODY WHO PLANTS A FARM OR GARDEN EXPECTS GENEROUS CROPS
DON'T BUY YOUR SEEDS UNTIL YOU CONSULT US
SEND YOUR ADDRESS FOR OUR NEW ARTISTIC CATALOGUES
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ROSES
Our Great Specialty is growing and distributing ROSES. We have all the latest novelties and finest standard sorts, in different sizes and prices to suit all wants. Over 450 *choicest varieties* to choose from. We send strong Pot Roses safely by mail to all Post Offices, purchaser's choice of varieties, all labeled,
3 TO 12 PLANTS $1. $8 to $15 per Hundred, according to value. Two year Roses by express. Our New Guide, 78 pages, elegantly illustrated. Free. Address THE DINGEE & CONARD CO., Rose Growers, West Grove, Chester Co. Pa.

NURSERYMEN. TREE DEALERS, LARGE PLANTERS,
Don't place your orders for Evergreens and Forest Trees until you have consulted my prices. On many things I charge only ¼ the prices charged by others. I WILL NOT BE UNDERSOLD. Large stock. Big assortment. Price Lists FREE.
GEO. PINNEY, Evergreens, Door Co., Wisconsin.

POTATOES from selected seed, eight kinds. Northern seed best. Small Fruit Plants, extra quality; big bargains. DUNCAN J. CAMPBELL, Caledonia, N. Y. Box 190.

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WE SELL FARMS And all kinds Country Real Estate Everywhere. Catalogue FREE.
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Virginia Farms.—Mild Climate. Cheap Homes. Send for Circular. A. O. BLISS, Centralia, Va.

VIRGINIA FARMS & MILLS For Sale & Exchange. FREE Catalogue.
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Highly Improved Farm FOR SALE.
Of about 100 Acres, in the noted Grape Region of Chautauqua County, within corporate limits of village of 4,000 Inhabitants. Buildings insured for $5,000. Price $13,500. Address Box 473, Westfield, N. Y.

FLORIDA.
The New Town of CLERMONT, Sumter Co.
Highest land in the State; perfectly healthy; in the beautiful clear-water lake region, below the frost line. First-class Orange and Early Vegetable Land. Railroad now building. For particulars, address
Wm. A. House, Pres., Clermont Improvement Co., Clermont, Sumter Co., Florida.

For Sale.—300 Improved Grain and Stock Farms in Southern Indiana. Healthy climate; good soil; churches, schools, railroads. $10 to $30 per acre. Catalogue free. Address A. SHEPHERD & Co., North Vernon, Ind.

FARMS Hotels, Stores, Mills, Business Chances. Country Seats or Lands for *Sale* or *Exchange*. Inclose stamp for Lists. W. S. Hotchkin, Real Estate and Traders' Exchange, Binghamton, N. Y.

FOR SALE AT FISHKILL, NEW YORK. A Farm situated one-half mile from Fishkill Village and one-quarter mile from Brinkerhoff Station, on the N. Y. & New England Railway. The farm contains 200 acres of most excellent land; farm house, good out-buildings and a fine apple orchard in full bearing. There is also a beautiful building site commanding an extensive view of the Fishkill Valley and Mountains. Apply to R. V. W. DU BOIS, 120 Broadway, New York.

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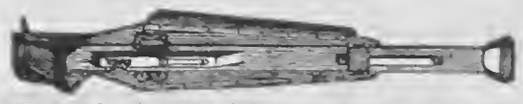
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S. M. Macomber & Co., M'f'g's, Grand Isle, Vt.

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Hand Cultivator, Wheel Hoe,
SINGLE OR COMBINED.
Admitted by leading Seedsmen and Market Gardeners everywhere to be the most perfect and reliable implements in use for planting and cultivating garden crops. *Beware of cheap Imitations!* Inquire for the genuine machines which are made only by
T. B. EVERETT & CO., Boston, Mass
Send for circulars, giving latest prices and improvements.

JACKSON ARCHITECTURAL IRON WORKS.
Iron Work of all kinds for Buildings.
Office 315 EAST 28TH STREET, NEW YORK.
STABLE FITTINGS A SPECIALTY.

Humorous.

A GENTLEMAN talking the other day to a bright little five-year-old boy, asked him, "Do you ever fight at home?" "Oh, yes," said the boy. "Well, who do you fight with?" "Oh, my sister." "Well, who whips?" "Oh, mamma whips."

LITTLE Emma came running into the parlor, where her mother was entertaining young Mr. Dudder until Miss Mary would complete her toilet and come down stairs, and cried, "Oh, mamma! Johnny is dot Mary's teef, and won't give 'em to her."

LITTLE boy (at the front door)—"Is the doctor in? Cause if he is, I want to see him right away." Servant—"He's not in." Little boy—"Well, just as soon as he gets home you tell him to come over to our house and take that baby off he left there last week. Its in the way."

MRS. SMITH (talking to Mrs. Brown about one of the latter's visitors who always remained longer than she's wanted)—"Dear me, Mrs. Brown, and you've got Miss McCall visiting you again. How slim she's looking. Don't you admire her waist?" Mrs. Brown (shortly)—"Weel, I micht admire it if her stays were'na sae lang."

A PASTEUR-AL SKETCH.

Mike, with a foot badly swollen from the bite of his dog, applies to the doctor for advice, leading the offending brute.

Dr.: "Well, Michael, hydrophobia is so very prevalent just now, I think it well that you should be vaccinated, using virus from the brain of a rabbit."

Mike: "Shure, Dochther, its not hydreophobies o'im afther fearin', but the sphalpeen was just afther aitin' a yard of sthore sausage, and its the Thriconeesis wurrums that o'im feared 'll be crawlin' troo me fut."

Miscellaneous Advertising.

It seems impossible that a remedy made of such common, simple plants as Hops, Buchu, Mandrake, Dandelion, etc., should make so many and such great cures as Hop Bitters do; but when old and young, rich and poor, pastor and doctor, lawyer and editor, all testify to having been cured by them, you must believe and try them yourself, and doubt no longer.

GENTLEMEN—Your Hop Bitters have been of great value to me. I was laid up with typhoid fever for over two months, and could get no relief until I tried your Hop Bitters. To those suffering with debility or any one in feeble health, I cordially recommend them.

J. C. STOETZEL, 693 Fulton Street, Chicago, Ill.

THE ASPINWALL POTATO PLANTER.

It Marks! It Furrows! It Drops! It Covers! It Distributes Fertilizer!

Send for Circular to

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THREE RIVERS, MICH.

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GOOD NEWS TO LADIES.

Greatest inducements ever offered. Now's your time to get up orders for our celebrated Teas and Coffees, and secure a beautiful Gold Band or Moss Rose China Tea Set, or Handsome Decorated Gold Band Moss Rose Dinner Set, or Gold Band Moss Decorated Toilet Set. For full particulars address

THE GREAT AMERICAN TEA CO.,
P. O. Box 289. 31 and 33 Vesey St., New York.

CIDER MAKERS Should send for our New FREE 1885 Catalogue, mailed FREE
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UNEQUALLED IN

Tone Touch Workmanship and Durability.

WILLIAM KNABE & CO.

Nos. 204 and 206 West Baltimore Street, Baltimore.
No. 112 Fifth Avenue, New York.

THE Original **$200 Saw Mill**

1500 to 4000 FEET of lumber can be cut in a day. Built in a first-class manner. The Best Mill made. Many hundreds of these in use, giving universal satisfaction. We have the best Mills of larger sizes, Portable and Stationary. Send for circular R

LANE & BODLEY CO.,
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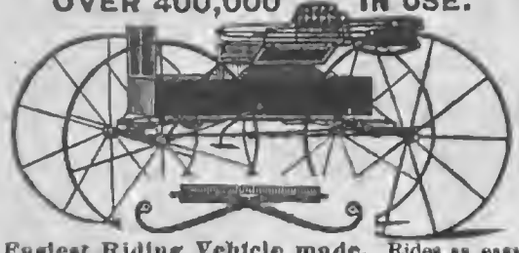
TIMKEN SPRING VEHICLES.
OVER 400,000 IN USE.



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DAIRY THERMOMETERS!

All Glass. Easily kept clean. Tells you when to Churn, Scald, etc. SENT BY MAIL FOR **50c.**

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HOOSIER AUGER TILE MILL.

Mills on hand.

Prompt delivery.

FOR PRICES AND CIRCULARS, ADDRESS
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Steam Engines.

AUTOMATIC AND PLAIN SLIDE VALVE, Stationary, Portable and Traction. Cheapest and best for all purposes. Simple, strong and durable. No Farquhar boiler ever exploded. Saw Mills, Threshing Machines and Agricultural Implements and machinery generally. Send for Illus'd Catalogue
A. B. Farquhar,
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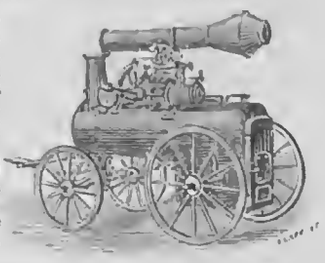

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M. W. DUNHAM

Wayne, Du Page Co., Illinois,

HAS IMPORTED FROM FRANCE

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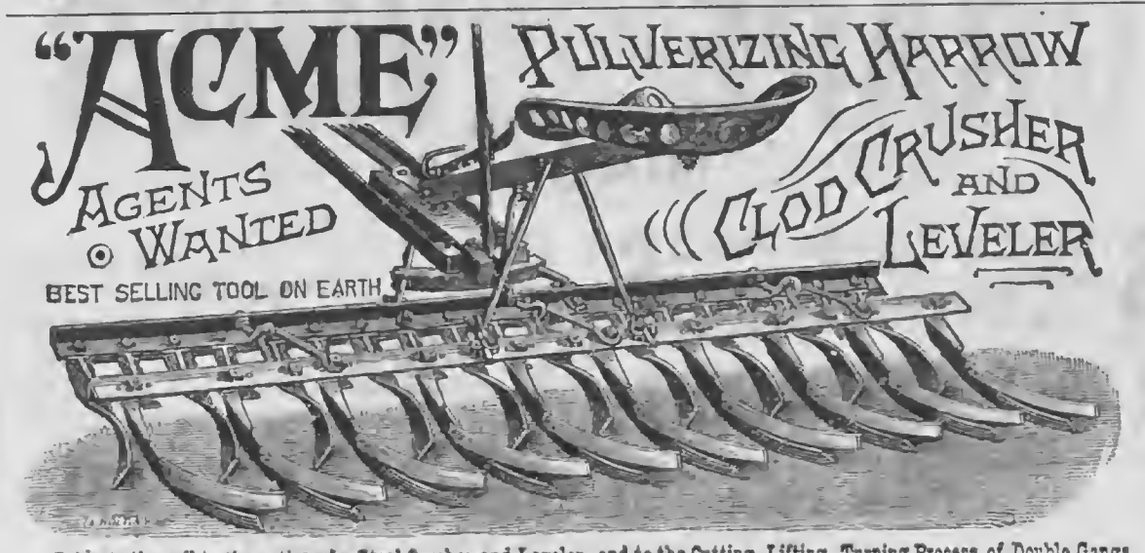

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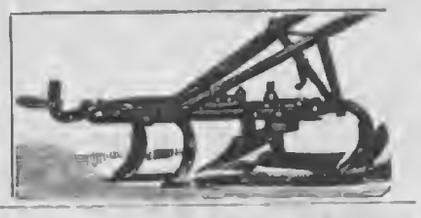

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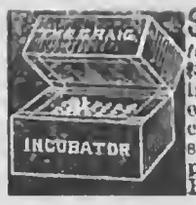

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THE RURAL NEW-YORKER

A JOURNAL FOR THE SUBURBAN AND COUNTRY HOME

VOL. XLV. No. 1879. NEW YORK, JANUARY 30, 1886. PRICE FIVE CENTS. $2.00 PER YEAR.

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Floricultural.

PROGRESSIVE HORTICULTURE.

CHRYSANTHEMUMS.

JOHN THORPE.

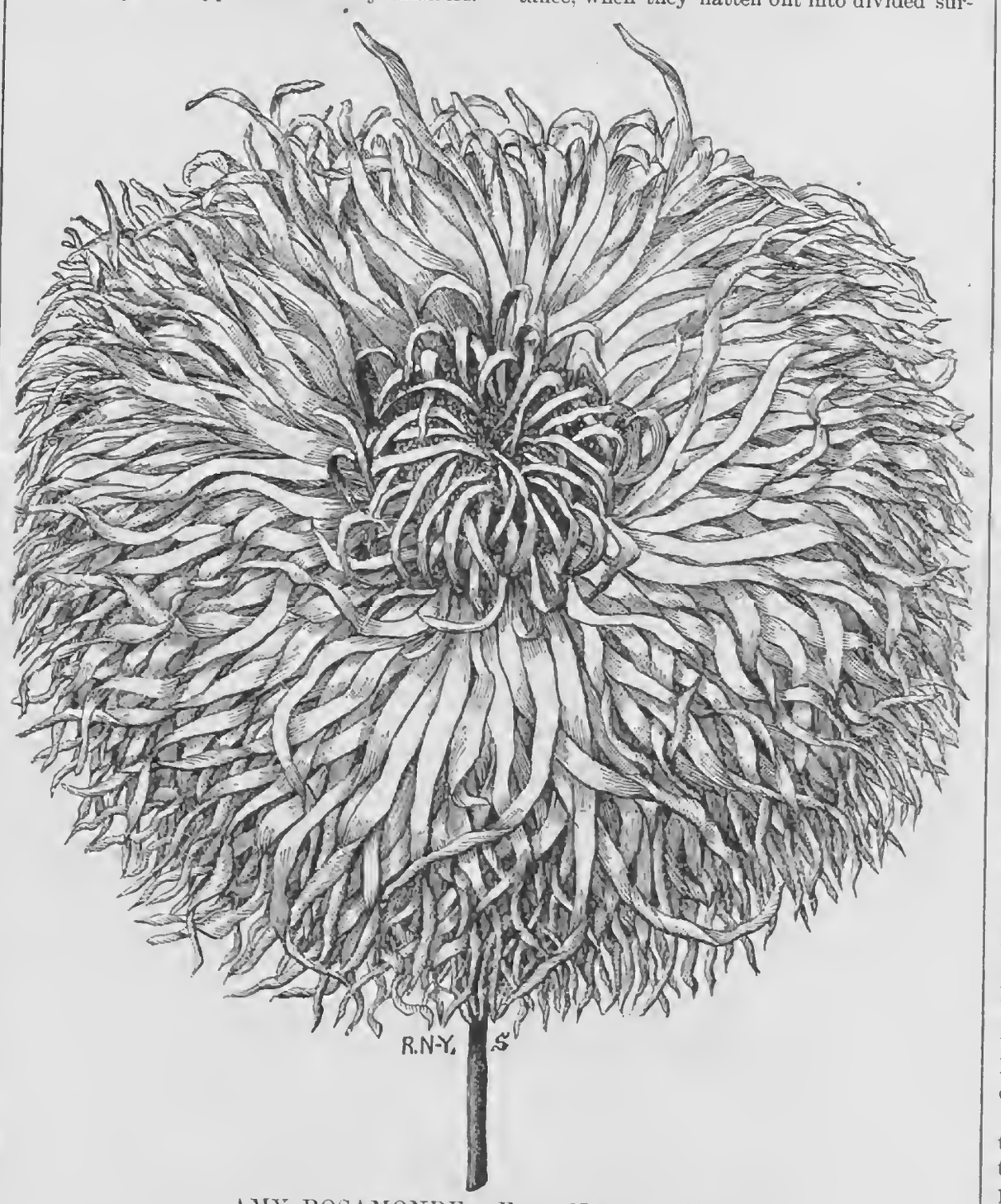
AS to what can be done by intelligent and persistent application of well directed efforts in the production of new and handsome varieties of flowers from a very limited groundwork, we have only to compare the different classes of pelargoniums, Chinese Primulas, the Tuberous-rooted Bolivian Begonia and the chrysanthemums, with varieties of 20 years since. The pelargonium, known as the Scarlet Geranium or Fish Geranium, had flowers at that time defective in nearly all properties: loose and thin separated petals with colors very limited, small trusses of flowers, and straggling habits of growth. The Chinese Primroses were of only two shades of color—a very indefinite lilac and a white, tinged with green and pink. The flowers at the very largest were not more than three-fourths of an inch in diameter. Compare these with the brilliant carmines, crimson-purples, the superb whites, to say nothing of the various striped flowers two inches across, with elegant serrated edges. Then the begonias are really beyond the most enthusiastic hybridizer's imaginations, bounding to the fore, as they have in 15 years, from two straggling species with loosely formed flowers, to those of to-day having flowers double and single, many of which are fully six inches in diameter, of nearly all shades of red, yellow and white. As to the chrysanthemum, it has become so revolutionized, erratic and changed that one is wont to exclaim, "What next?" Some new forms appear each season and are interesting not always developing in one season, but growing into marked characteristics after one or two generations. At first these forms will appear in one or two colors; after gaining a foothold they will gradually take on the whole range of colors as found in the older forms, grouping together as a family, having in many cases a distinct likeness to each other in habit, shape of leaf, and greater or less prolificness in throwing up growth, as well as in time of flowering. Some of the most interesting new types are truthfully illustrated in the accompaning drawings.

It may be well, however, to say something about the colors and other traits of these progressive varieties. As to tracing up their ancestors to be able to find out whether any special kinds are Japanese, Chinese or Indian, it would be useless, as I am convinced peculiar characteristics of these species have long since been obliterated, and all we have now is one grand family related as are the Saxons, Celts, Normans and Americans; but no distinct race.

Amy Rosamonde (Fig. 37) is a very distinct flower; its peculiar flat petals for a fourth of their length give an almost unbroken surface of coloring, after which they curl into innumerable shapes, drooping gracefully to the stem, a few petals remaining stiffly incurved to the center. It is of a peculiar brassy yellow color, and rather late in flowering.

Lilie Burgess (Fig. 38, p. 70) is opposite to the preceding, and quite new: the petals have a thick texture of a pure rose pink, incurving very regularly to the disc, which is composed of tubular florets having small petals known as "anemone-flowered," instead of the ordinary florets of the species. There is another type having small anemone flower discs where the petals recurve their whole length.

Frank K. Wilcox (Fig. 39) resembles very much some of the best forms of African marigolds; is of a rich golden amber color, very prolific and persistent. It is a persistently flowering variety and a type that has many admirers.



AMY ROSAMONDE. From Nature. Fig. 37.

Pitti-Sing (Fig. 40, p. 70) is a very interesting and distinct kind. It can be readily seen how peculiar are its petals; tubular for nearly their whole length; the first being the longest, after which each whorl gets shorter until some actually fail to get out of their disc. The tubes are silvery pink; whilst the lobes are claret crimson. Of this type the first appeared in 1884; the past year no less than 10 colors having the same peculiarities, have been added.

The flowers shown at Figs. 41 and 42 (p. 71) are seedlings not named and perhaps the most remarkable among the numerous types. Fig. 41 has petals tubular for a quarter of their distance, when they flatten out into divided surfaces of various lengths, some of the petals having three divisions over an inch deep and spreading fully three-quarters of an inch. Fig. 42 has the same division of the petals of their extremities, but the bases are flat and strap-like. Many colors have appeared in these two types; but as yet no very dark or pure yellow. It may be justly considered that these two types will become very popular after further development.

East Hinsdale, N. Y.

FRANK WILCOX. From Nature. Fig. 39.

MR. ALLEN'S CHRYSANTHEMUMS.

WILLIAM FALCONER.

MR. ALLEN is an amateur living at Woodbridge, N. J. At the chrysanthemum exhibition of the New York Horticultural Society last November, he showed some of the finest flowers I ever saw either in this or any other country. He writes me as follows: "He who would have chrysanthemums in his garden, must have chrysanthemums in his heart."

HIS GARDEN.—"I have no glass-house," he says. "All my plants were raised in the open ground, not so much because I thought it the best way, but from sheer necessity, to save labor and expense. The soil at my place is heavy clay of the most intractable kind, so that when a very dry season comes, you can crack a hickory nut on it. I have mitigated it all I could with wood and coal ashes. I lift and put my roots in the cellar in the Winter."

SPRING TREATMENT AND PLANTING.—"In May I take the roots out of my cellar and divide them. I take the shoots coming up from the roots. Mine were planted about two feet apart, and I grew few shoots to a plant."

SUMMER CARE.—"I give them all the gardening skill I happen to possess, and watch them with loving care from the moment they leave the ground till the blooms appear. I keep the wind from beating them, the bugs from eating them, and the neighbors' hens from scratching them up.

STAKING is important. I am very careful to stake them well, for nothing so injures them as being beaten about by the wind, as the buds are easily whipped off by a heavy blow."

WATERING.—A dry season does them great injury, and my plants suffered much in this respect during the Summer, and I had to carry water from my well to keep them from perishing.

MANURING.—"Like other plants, they need to be well nourished. I use any good manure I can get. I do not see that it makes much difference what kind I use."

AUTUMN CARE.—"I protect the buds from the hot sun of early Autumn, which is apt to do them much harm. Sometimes I take paper and fasten it over them and sometimes stretch muslin above them, all of which is very troublesome."

TO GET LARGE FLOWERS.—"I keep them from over-blooming by disbudding more or less according to the vitality. In fact, being an ardent lover of these and other flowers, I give them the most zealous attention from the beginning to the end, and never neglect anything that will tend to their growth and development."

CARE WHILE IN BLOOM.—"I had a light frame-work of wood made like the skeleton of of a small house, over my plants, and stretched on it unbleached muslin. I am free to say, however, that I'll not do this again, as the anxiety is too much, for if a very cold spell should come, as it nearly always does, the flowers are about ruined. This happened to me and I made up my mind that if I could not have glass next year I would not touch chrysanthemums."

MUSLIN COVERING FOR CHRYSANTHEMUMS.

I GROW an enormous quantity of chrysanthemums, and bloom the whole of them out-of-doors, partly in beds and blocks in warm sheltered places, for garden decoration's sake, and partly under a muslin covering as described by Mr. Allen for yielding cut-flowers

Last Fall I had 500 plants under the muslin covering and was extremely well pleased with the result. They began to bloom as early as the earliest in any part of the garden and my last gathering from them was on the first of December. By that time most of the

plants had done blooming, and only a few of the latest varieties would justify me in keeping them longer, even in a green-house. The muslin was sewn i_to large sheets, one for each side and to meet past the ends, and one for the roof and to overlap a little. In fine weather I removed the muslin, and replaced it at night and, in the event of rain, high wind or frost, kept it on in the day time. A few degrees of frost for a brief time will not materially hurt chrysanthemum flowers. The muslin will not exclude a severe frost, especially if accompanied by wind. The cloth, in tight sheets throws off the rain pretty well But wind is hard against it, It often is a difficult matter to save the muslin from being blown off or torn off by winds, and as we well know, November is not the calmest month in the year.

THE CHRYSANTHEMUM AND ITS CULTURE.

C. E. PARNELL.

I DO not know of any class of plants that are so easily grown or require so little care as the chrysanthemum, and I often wish I was in a position to insist that every lover of plants should have at least a few dozen chrysanthemums. As generally cultivated, this plant is not very handsome for pot use; for, as a rule, it is planted in the mixed border and left to take care of itself, and when the time of flowering arrives it is found to be ill-shaped or else partially broken, certainly well enough to supply cut flowers, but not at all adapted for decoration or exhibition purposes, or for use as a pot plant.

Now if we would obtain nice specimens we must give them a proper place in which to grow and develop during the summer season, and I insist on their being given a properly prepared border of their own. Let this be prepared by digging trenches to the depth of at least two feet (if deeper so much the better) and at the same time working in, thoroughly a good supply of well decomposed stable manure. Do not be afraid of using too much manure, as the ground can scarcely be too rich. The border being properly prepared, the next consideration is the planting of the young plants, which should be done about the first of May. They should be planted in rows, about three feet apart each way, and in order to prevent them from being broken off by the wind, a stout stake should be placed by each to which it should be loosely tied as soon as it is large enough. About the first of June the plants should have the center shoot or shoots pinched out in order to induce them to branch freely and in a few weeks there will be from six to eight strong shoots, which also must be pinched back as soon as they are about four or five inches in length, and this pinching back must be continued whenever necessary until the first week in August, when all the shoots must be left to grow.

During the summer season the plants must be loosely tied to stout stakes in order to prevent them from being broken off by the wind, and at all times they should be well cultivated and kept clean and free from weeds. In dry weather they should be frequently and thoroughly watered. Never permit them to suffer in the least for water. About the middle of September they should be carefully taken up and potted, using pots proportionate to the size of the plants. Drain them well and use a compost composed of one part of well decayed manure and two parts of well decayed sods. When first potted, water thoroughly and place in a shady situation for a few days or until they have taken hold of the soil, after which they can be fully exposed to the sun until there is danger of frost, when they should be brought inside, but do not give them any more fire heat than is sufficient to keep out frost. After they have been potted, keep them well supplied with water, even if it has to be given three or four times a day, and it is well to give them, two or three times a week, some liquid manure water (guano water being the best), and it should be given in the proportion of an ounce of guano to three gallons of water.

After the plants have ceased flowering, they can be removed to any cool position, such as a cellar where some light can be admitted, and where they can be kept in a dormant state until about the first of April, when they can be brought into a light, warm situation and started into growth, and just as soon as the shoots are of sufficient length, cuttings should be taken. These, if placed in sand in any warm situation, will root in a short time, when they should be potted off into three-inch pots and carefully grown until the weather has become settled, when they can be planted out in the chrysanthemum border.

Some attempt to carry over the old plants for another season's bloom, but, as a general rule, I do not advise the attempt, as young plants are so easily obtained, and they prove to be of better habit and more vigorous growth, to say nothing of their far superior flowers.

The only insects to which chrysanthemums are subject, are the Black Aphides, and these can be easily removed by dusting the plants with tobacco dust; and if, as occasionally happens, the common white mildew attacks them during wet weather, it can easily be exterminated by dusting them with sulphur while they are wet with dew.

There are so many varieties in cultivation, that it is very difficult to make a selection of the most desirable; but as a guide to those who contemplate cultivating the chrysanthemum for the first time, I enumerate a few of the most distinct:

Twelve Japanese: Julius Scharff, Mrs. Wm. Barr, Elaine, Fantasee, Grandiflorum, Katakana, La Frizure, M Castel, Juvena, Riche Bouquet, The Sultan, and Triomphe de la Rue de Chatelets.

Twelve Chinese: Virginalis, Temple of Soloman, Prince of Wales, King of Crimsons, L'Africaine, Golden Beverly, Dr. Sharpe, President Wilder, Refulgens, Faust, Felicity, and Lady Talfourd.

Twelve Pompone: Bob, Fimbriata, Mdlle Marthe, Lucree, Golden Mdlle Marthe, Perle des Beautés, Salamen, Sanguineum, Souvenir de Jersey, La Vierge, Amaranthina, and Model of Perfection.

Twelve Single: W. Falconer, Septimus Lyon, Rosalind, Pyrethrum, President Arthur, Peter Henderson, Mrs. C. L. Allen, J. W. Chambers, America, Mrs. Gubbins, Zephyr, and James Y. Murkland.

Queens, N. Y.

LILIE BURGESS. From Nature. Fig. 38. (See first page.)

I HAVE one fault to find with the RURAL, though I do not know how to suggest a remedy. It habitually prints good articles on both sides of its leaves, so that we who make scrapbooks must either subscribe for two copies, or else lose many good things that we would gladly keep. "Preserve the whole paper," you will say. Too bulky. If we preserved all the good newspapers, we should soon have to build a house to hold them.—[This may be so with a few who take a number of papers; but not in the case of the vast majority of people.—EDS.]

PITTI SING. From Nature. Fig. 40. (See first page.)

* * *

The RURAL is annoyed by pea-weevils. In making crosses it is easy to tie a bit of mosquito netting around the young pods as soon as they commence to enlarge. Last season, I preserved the second crop of a very promising cross by inclosing the whole row in mosquito netting as soon as the plants commenced to bloom. The cost is slight, where there are but few plants to cover, and it saves every pea. Treating with bisulphide of carbon after ripeness makes them all right outside, but the germs of some have already been destroyed. [Thanks.—EDS.]

* * *

Yes; we succeed in growing cabbages from leaf cuttings, but I fear this method of propagation will never have any practical value. The sections root very promptly, no matter from what part of the head they are taken; but it takes two-and-a-half to three months for the bud to start. All of this time, the slips are subject to dampening off and the attacks of aphides, and but a very small percentage of them ever form buds.

* * *

The RURAL criticizes our opinions as to the flavor of different raspberries. I wonder whether it made a more thorough test? I had a basketful of each kind set on the table before me. The Early Prolific seemed poorest, so I took this for the standard. I first tasted a few berries of this sort, then of another, comparing the two, and making my notes. I tasted the standard again and then a third variety, and so on. Where the flavor of two seemed to have a close resemblance, I tested these with each other. In cases of doubt, I called in a second party to decide. But we are all fallible. [True.—EDS.] E. S. GOFF.

Geneva, N. Y.

Sheep Husbandry.

Notes from the Rural's W. N. Y. Farm

FEEDING LAMBS.

THE FEEDING OF GRAIN

is an absolute necessity, if the largest profits are desired. It is a fact that with proper care lambs may be wintered on an exclusive diet of hay and other fodder with roots so as to make some growth; but the increase will be so little, and the proportion of food used in mere existence is so great that the gain made will not pay for the trouble, interest and risk. This we will endeavor to show by and by so plainly as to convince the most skeptical. What we are after in the winter feeding of this class of sheep is a large increase in flesh and wool, and to secure this it is imperative to feed, and feed high with grain. And, besides this, we wish the resulting manure for the enrichment of our farm.

As before said, grain feeding should have been commenced while the lambs were still at pasture, and if so, they have become accustomed to its use, and will scarcely have noticed the change from grass to dry forage. But, while at pasture, one feed daily is sufficient, they should be fed twice a day as soon as they are properly penned and sorted; and this is as often as they will need it at any time while being fattened.

A VARIETY OF GRAINS

is preferable to any one kind. In sheep feeding, we have at least three important ends in view: the production of meat, the growth of wool, and the amount and value of the manure made. But we must remember that while in feeding a mature sheep, the principal gain in weight would be simply fat, whether mixed through the muscles, or stored inwardly or upon the outside of the carcass it would be entirely different with a bunch of lambs. With the latter there should be made a gain of at least 40 pounds, of which at least 20 would be lean meat, bone and wool. So that while the food of the mature sheep should be largely those grains rich in carbo-hydrates or fat and heat-producers, of which none are superior to corn; that of the lambs must contain not only a supply of these elements, but a large proportion of such foods as have abundance of the albuminoids or nitrogenous elements, and also of the phosphates, the phosphates being for the bone growth, and the albuminoids for the production of the lean meat and wool. Of the latter class of food, oil meal, cotton-seed meal, and bran are all superior, the latter also supplying an abundance of phosphates. Barley is a capital lamb food, and so are oats, beans and peas, but at the usual prices of these, the same amount of nutrition may be obtained more cheaply in other forms. For lamb feeding, a mixture of three parts of corn, two parts of bran and one part of oil meal, is well adapted where the principal forage is clover hay, and straw is used as a relish and for bedding. But where compelled to use corn fodder or meadow hay as a principal forage, the proportion of oil meal should be doubled.

MALT SPROUTS;

are they a good food for lamb feeding? we are asked by two or three friends. We have tried them to a limited extent, but so far, we have never succeeded in getting them so combined that the lambs would eat them well. Mix them as we would, the other ingredients were selected out and the sprouts left, or when mixed with bran and oil-meal, so as to be inseparable, the lambs would refuse the mixture.

We know that chemically they show a very high value as feeding stuff, being extremely rich in nitrogen, but,so far, our experience in their use for sheep or cow feeding. has not been at all satisfactory.

We now have the pens all cleaned of manure the first time over, and all the sheep are doing splendidly. We have 175 young lambs, and the number is increasing very rapidly. Quite a number of the older ones are ready for market, and will be sent as soon as there is a demand for young lambs.

The weather has been quite severe, though Western New York has the most uniform climate of any part of the Union: the coldest weather has been 1° below zero, but by operating the ventilators we had no trouble in keeping the barns at an even temperature of 55° even in the coldest days.

JOTTINGS.

We have several hen houses, each located in a different place in the orchard. They are double-boarded, with tarred paper between. and with large windows on the south side. In each we keep a stock of hens and by raising several broods of chickens in each,there is no trouble in keeping the hens and chickens scattered all over the orchards.

We have never found a better insecticide for all class of insects that ever come to the ground than an old hen with a brood of chicks, unless perchance it be a clutch of ducks. And our orchards, so far as the hens roam, are entirely clear from insects.

There is also a good margin of profit in the rearing of the chickens, especially so in an open Winter like this, when they are able to forage for almost their whole living. We sold January 12th over a ton of chickens, raised in the orchards, at 11 cents per pound for the bodies with the blood out and the feathers off. This pays better than pork at 4½ cents per pound dressed weight.

Dairy Husbandry.

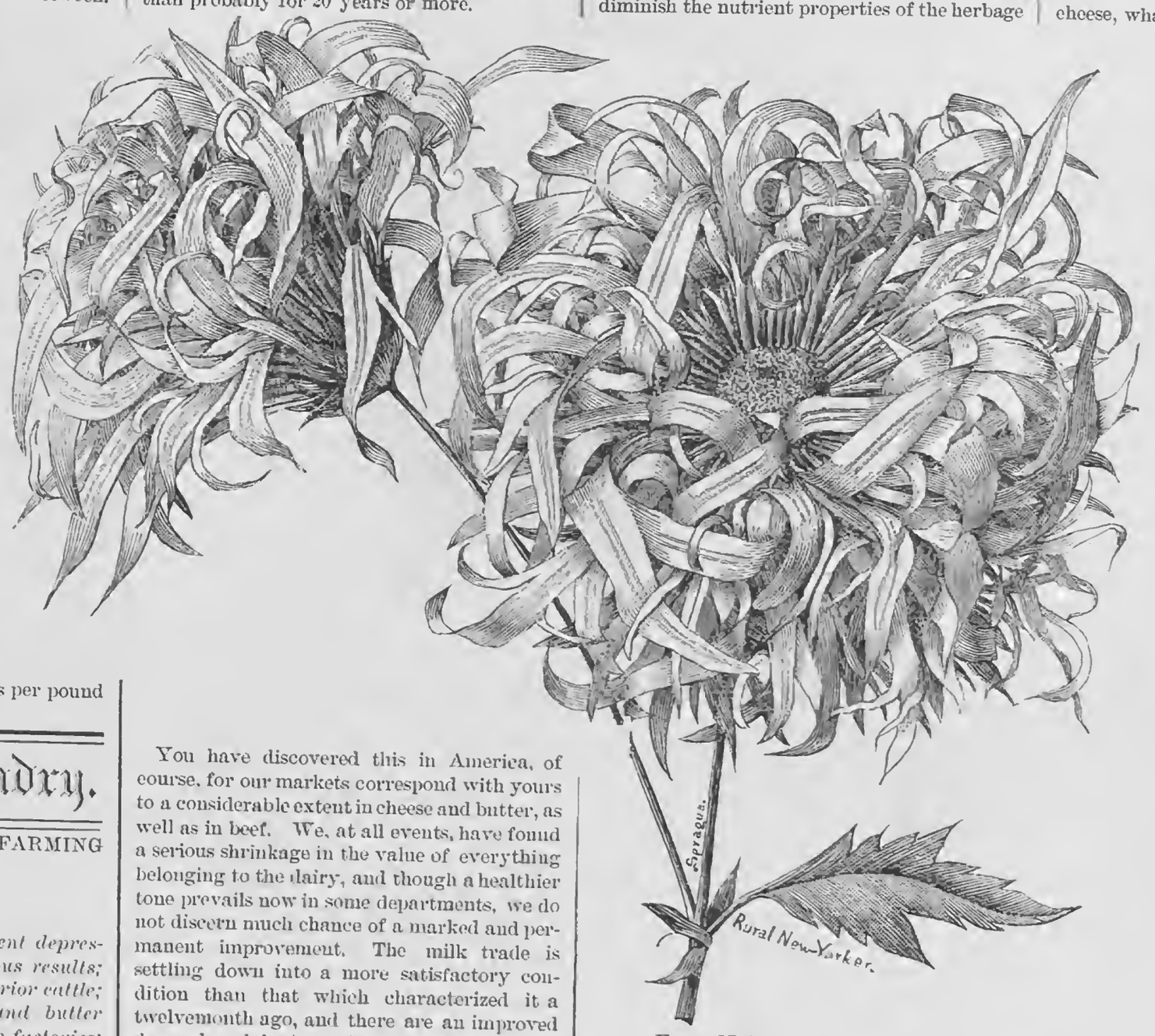
THE CONDITION OF DAIRY FARMING IN ENGLAND.

PROF. J. P. SHELDON.

Late prosperity of dairying, present depression; overdone trade; disastrous results; advantage of superior over inferior cattle; little improvement in cheese and butter making; reasons therefor; cheese factories; prospective prices.

THE year just concluded may be reckoned as the worst of the last twenty, so far as dairy farming is concerned. Other branches of agriculture had been laboring under severe depression for seven or eight years, particularly that devoted to grain raising, but, until the early Spring of 1885, dairy farming had been so far more profitable than any other sort,that no end of people began to look upon it with envious eyes, and it attained a measure of popularity which it never aforetime enjoyed. The long-sustained prosperity which had distinguished it, was the result of several causes, one of the chief of which was the high price of cattle; this in its turn was the result of a still flourishing meat market and a well sustained demand for beef. Stock-raising,which is or ought to be a prominent feature in dairy farms in general, remained a very good business, and farmers had no difficulty in disposing of anything good they had to sell in the way of cattle. Graziers made good prices off their fat stock, and the demand for barreners for fattening purposes was tolerably brisk the year round. Many dairy farmers, indeed, had relinquished dairying in favor of fattening, but they found after a time that fattening began to show signs of relaxation, and not a few of them returned to dairying once more, only to find that depression was coming upon that industry as well.

It was surprising, however, how well dairy farming held its ground, in the teeth of an almost all-round gloom. Cheese and butter had shrunk greatly in price since 1876, and the wet Summers had diminished the yield of both. Still, dairying as a whole, held its own well enough, all things considered. For this prolonged success we were indebted in no small degree to the milk trade, which continued to expand ever since the Adulteration of Food Act came into operation. In Winter particularly, the demand for milk had been, until last Winter, greater than the supply, and many efforts were made to meet the deficiency. These efforts, so far as meeting the demand for milk was concerned, were crowned with success a year ago, but the immediate result was a glutted market and a demoralized trade in milk. The price usually paid for winter milk was no longer sustained or remunerative, and down-calving cows declined pretty considerably in value. The milk-trade for years before had been regarded as the sheet-anchor of dairy farmers, relieving the cheese and butter markets, and providing a profitable outlet for what would otherwise have been surplus milk. But at length farmers saw with some dismay that the cherished milk-trade was no longer immaculately safe,the price of cheese kept on declining; butter was not a rent-paying product, and the price of cattle fell pretty rapidly. It may be said, in fact, that a drop of 20 or 30 per cent. has taken place in the value of cattle within 12 months, and dairy products have been lower in price during the past Summer and Autumn than probably for 20 years or more.



From Nature. Fig. 41. (See first page).

You have discovered this in America, of course, for our markets correspond with yours to a considerable extent in cheese and butter, as well as in beef. We, at all events, have found a serious shrinkage in the value of everything belonging to the dairy, and though a healthier tone prevails now in some departments, we do not discern much chance of a marked and permanent improvement. The milk trade is settling down into a more satisfactory condition than that which characterized it a twelvemonth ago, and there are an improved demand and better prices for calving cows; but in respect of young and barren cattle and of cheese, there is no improvement at present. Butter, it is true, has regained some of the position it had lost in the market, but this is simply because, in the depth of Winter, less butter is made; and the probability is that, with the approach of Spring, the value of butter will recede once more. So far as cattle and cattle and cheese are concerned, more particularly than in respect of butter and milk, the decline in value has taken place most of all in inferior specimens and qualities. There is more than cent per cent. disparity between good cattle and bad ones, and the same may be said in reference to cheese. While inferior cattle have shrunk some 40 or 50 per cent. in value, good stock have declined only 20 per cent. or so; and the original difference between them has to be reckoned within the computation. It was never plainer than now that it will not pay to raise inferior cattle, and we may hope that our farmers will permanently learn at all events this one important lesson of adversity.

It is more than disappointing to find that but little real, permanent progress has been made during the past 10 or 15 years in the practice of cheese and butter making in the farm-houses of England. A great deal of pains has been taken by the press, and in other ways, to inculcate sound dairy principles, but it does not yet appear that the rank and file of our dairymaids produce much better dairy goods now than they did a score of years ago. A few years ago there were signs of a general improvement, but there has been more or less of retrogression since. This retrogression is attributed to the wet seasons, which have done so much to reduce the fertility of the soil, to diminish the nutrient properties of the herbage and to lower the physical stamina of cattle. There can be no doubt that this explanation contains a good deal of truth, but the whole trouble is not in it. We are bound to admit, as a further and more potent explanation, that a disinclination to be taught lies at the root of the mischief with many cheese and butter makers. I admit the need of tuition is considered tantamount to a confession of ignorance, and this sort of thing does not commend itself to adult human nature on the average. [That is just as true on this side of the Atlantic as on the other.—EDS.] To seek for information is not popular with people who fancy themselves tolerably near perfection, and a spirit of emulation is inseperable from marked and general progress in such a thing as dairy work. Many opportunities for tuition in dairy matters have been offered to the public, who, I regret to say, have to a very limited extent availed themselves of such chances of improvement.

From Nature. Fig. 42. (See first page).

The cheese factories established in this country have done a great amount of good, but they have not been uniformly successful. We have no great number of them even now—perhaps 30 or so—but there is a disposition to increase the number. The chief reason why they have not become more numerous is found in the rapidly expanding milk trade of the last 10 or 15 years; but since the milk trade became upset, many farmers have turned their attention once more to cheese-making, and a few additional cheese factories have been built. The disastrous lack of uniformity in farm-house cheese, is a leading cause of failure in commanding high prices; and herein the factories have a great advantage, for factory cheese, whatever else may be said of it, is tolerably uniform in character. The low price of ordinary and inferior cheese of late years, has thrown a gloom over dairying, no doubt, and yet everybody knows that really good cheese is always in brisk demand, and even now commands a good price. We have a few butter factories in Great Britain, and most of them have done very well; have demonstrated the value of sound principles, and have returned a good price for the milk they manipulate. In Ireland, where dairy tuition has made very important improvements in late years, there is a growing consensus of opinion in favor of butter factories; and it may be expected that the Emerald Isle will, with the help of these institutions, regain a good deal of her pristine reputation for butter. Many Irish dairymaids are remarkably clever, thanks to the tuition disseminated by the managers of the Munster Dairy School.

That a low average range of prices for cattle and dairy produce will prevail for some time to come, appears highly probable, and we probably shall not see again in a hurry the halcyon days of 1871 and 1876. During the past ten years, much of the money previously made by farmers in England has been ebbing away, and also in dairy farming there has been a great deal of loss of late. A general statement of this sort holds good no doubt in respect of the Eastern States of America, and it is owing directly or indirectly to the vast territories which railroads have opened up to cultivation, and to the consequent increase of agricultural products. So long as the area of the cultivatable world was narrowed down for want of means of communication, the production, not of grain only, but of beef and of dairy goods, was necessarily limited; but steam has made, theoretically at least, the earth's production of food illimitable. This expansion we have to reckon with, in the future, and in view of it there seems but little chance of agriculture becoming a very prosperous business for some years to come. Yet, as nothing is so "certain as the unforeseen," a man does wisely in not pretending to be a prophet. Meantime we must live somehow, and cheap food is an untold boon to all the millions who toil and moil for their daily bread. In Britain, at all events, which cannot produce much more than the bread her people want, cheap food from abroad is of the first importance.

Surrey, England., Jan. 1st, 1886.

MILKING WHILE EATING.

SOME people advise that something to eat should be given cows while being milked. Now, I never can or could milk most cows with any comfort, while eating; for I have always found that it makes them uneasy and quite irritable to meddle with them in any way while they are feeding. Then they step back and forth to select the choice morsels of feed, and if they are chidden they are pretty sure to kick, no matter how gentle they may be at other times; and, moreover, they are very likely to withhold their milk. The better way is to give them a little feed or hay preferably the former, and let them eat it all up before one undertakes to milk them. This

satisfies them, and if properly handled they will give down their milk at once. If they don't get something to eat before milking, the result will be almost as bad as if they are milked while eating. In Winter I generally give mine their mess of feed just before and their fodder soon after milking, though it might be better to reverse the order. That's a matter of opinion however. C. L.

Morris Co., N. J.

Pomological.

HUBBARDSTON NONESUCH AND HUBBARDTON PIPPIN.

T. H. HOSKINS, M. D.

In a recent trip through the state of Maine, I visited the little city of Gardiner, on the Kennebec River. While there I met my old friend Robt. H. Gardiner, Esq. (from whose ancestors the city got its name). He is an enthusiastic and very successful fruit grower, and was for several years (until he declined further service) the president of the Maine State Pomological Society. He makes a specialty of the Yellow Bellflower Apple, which grows in great perfection on his soil and under his careful culture. I saw 400 barrels of these apples, not headed, but otherwise ready for shipment to Boston, where they command a fancy price. This fruit was of the largest size, fair, with the rich pink cheek only seen upon this variety when in its highest state of perfection. The soil of Mr. Gardiner's orchard is a rich, gravelly loam, and his trees are kept heavily mulched with oat straw. Great care is taken with the trees, especially in growing so as to admit the sun to the fruit on all sides, and they were models of health. The Yellow Bellflower is, I think, essentially a river valley tree, and so far as my observation goes, is rarely produced in perfection elsewhere. It cannot be grown profitably on the hills back from the Kennebec River, and it is the same on the Connecticut River. In Westminster, Vermont, I have seen this apple on trees but a few rods from the Connecticut, as fine as at Mr. Gardiner's, but fruit growers elsewhere in the State regard it as a failure.

While at Mr. Gardiner's, I was shown two apples, apparently quite alike, specimens of which I forward to the RURAL. When told that they were very different in season and in quality—that one was the Hubbardston Nonesuch and the other the Hubbardton Pippin—I at once declared that at least they must be seedlings from the same tree; but I was met with the statement that Hubbardston is in Massachusetts, while Hubbardton is in Vermont. Mr. Gardiner for a long time grew the Pippin for the Nonesuch, and believed it to be that apple, until repeatedly assured by Boston dealers that he was mistaken. He then obtained trees of the Nonesuch, and when they bore was able easily to see the great difference between them in all but looks. Then he set himself to work to solve the puzzle, and by the aid of Charles Downing and of Mr. Alfred Breezee, of Hubbardton, Vt., was able to establish positively the fact that his first apple, so like and yet so unlike the Hubbardston Nonesuch, was in fact the Hubbardton Pippin. The RURAL's pomological readers will agree that in undertaking this task and accomplishing it, he showed the true pomological spirit and set an example for us all.

As regards the two apples, the Nonesuch has been long and widely known as one of the choicest New England apples of late Fall and early Winter, and a standard market apple. But, so far as I am aware, the Pippin is little known, even in Vermont, and might have sunk into entire obscurity but for this strange, double coincidence of being like the Nonesuch both in name and looks. Yet it is far from being without merit, being large, handsome, a far better keeper than the Nonesuch, and, though not its equal in quality, yet a very good apple. I subjoin Downing's descriptions of both apples, adding that while he speaks of the origin of the Pippin as "uncertain," Mr. Breezee believed it to be a native of the town from which it takes its name.

HUBBARDSTON NONESUCH. Fig. 43, with cross section at Fig. 44, is a fine large, early winter fruit, which originated in the town of Hubbardston, Mass. The tree is a vigorous grower, forming a handsome branching head and bears very large crops. Young shoot, dull grayish brown, slightly downy. It is worthy of extensive orchard culture. Fruit large, roundish oblong, much narrower near the eye. Skin smooth, striped with splashes and irregular broken stripes of pale and bright red, which nearly cover a yellowish ground. The calyx is open, and the stalk short in a russeted hollow. Flesh yellow, juicy and tender, with an agreeable mingling of sweetness and acidity. Very good to eat, October to January.

HUBBARDTON PIPPIN. Fig. 45, with cross section at Fig. 46. Origin uncertain. Tree thrifty, spreading, irregular; a strong grower and productive. Young shoots clear reddish brown. Fruit large or very large, variable in form, globular, inclining to conic, slightly oblique, yellow, shaded and striped with red. Stalk short, inserted in a moderate cavity. Calyx closed. Basin small, corrugated. Flesh tender, yellowish, crisp, juicy, pleasant subacid, slightly aromatic. Core large and open. Very good. Nov. to March.

Entomological.

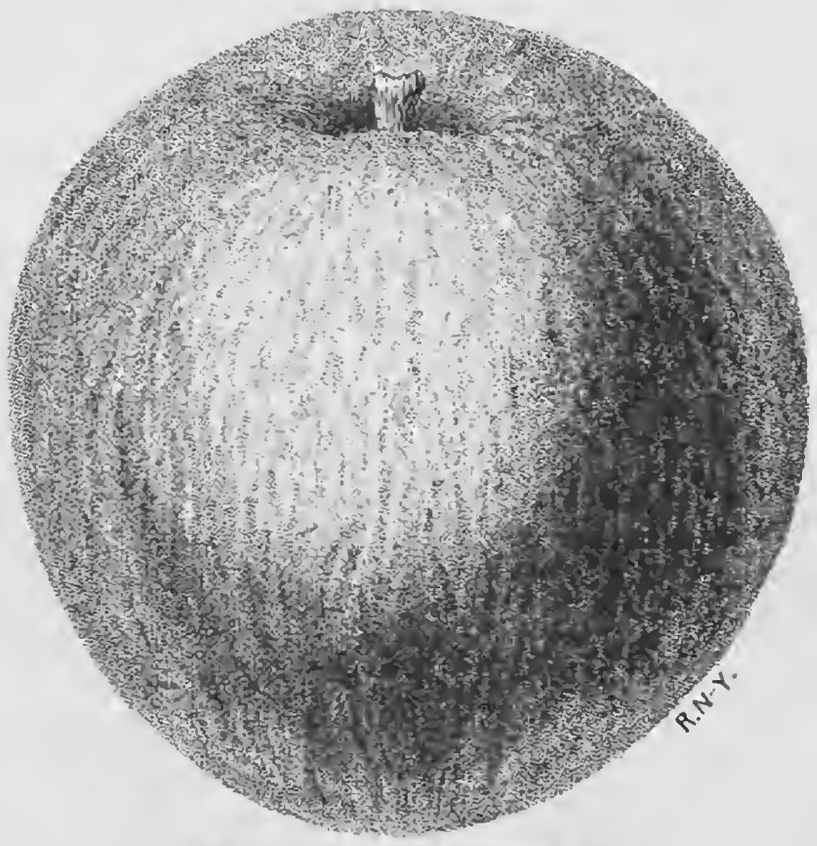
THE MILDEWS OF THE GRAPE-VINE.

AN EFFECTUAL REMEDY FOR PERONOSPORA.

DR. C. V. RILEY.

TWO CHIEF SPECIES.

THERE are very many fungi known to attack the grape-vine, as is evidenced by a glance at such works as "Funghi parassiti dei Titigni," by Dr. Romueldo Pirotta (Milan, 1877), or "Die Pilze des Weinstockes," by Felix von Thümen (Vienna 1878). But the two principal fungi, both of them popularly called "mildews," which interest the grape-grower, on account of the extensive injury they cause, are the Uncinula spiralis (Berkeley & Curtis) and the Peronospora viticola (Berkeley). Any popular statement in reference to grape-vine mildews, in order to be accurate, must take cognizance of these two species, which occur ordinarily under opposite atmospheric conditions. Failure to do so has wrought much confusion in the fugitive literature on the subject. As popularly distinguishing terms, it would be well to call the former the "Powdery Grape-vine Mildew" and the latter the "Downy Grape-vine Mildew."



HUBBARDSTON NONESUCH. From Nature. Fig. 43.

It is my purpose here to deal chiefly with the latter, but it will be desirable first to briefly consider the characteristics of the former, that the differences between the two may the more readily appear.

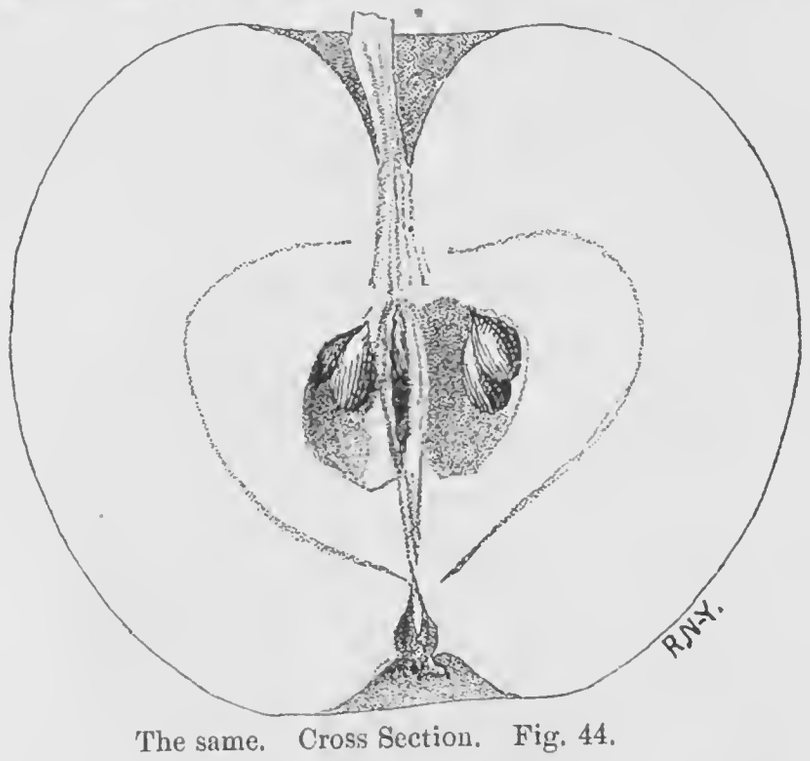
THE POWDERY GRAPE-VINE MILDEW.

This is the Uncinula spiralis (Berkeley & Curtis), and the conidial form has long been known by the name of Oidium Tuckeri (Berkeley.)

GENERAL APPEARANCE.—This particular fungus produces a white, powdery appearance on the upper surface of the leaves, which at first looks not unlike dust, and which is much less conspicuous on the lower surface. Beginning in spots, these grow larger and larger until they cover the whole leaf and include even the young stems and berries.

STRUCTURAL CHARACTERISTICS.—The powdery spots consist of mycelial threads attached to the epidermis of the leaf by suckers. These filaments have a diameter of .004 mm. Portions of this mycelium rise up from the surface of the leaf and become constricted or intersected (Fig. 47, *a* p. 74) thus forming cells. As these cells, which are the conidial spores, multiply, the terminal ones enlarge, ripen and drop off, so that a succession of conidial spores is formed. The spores germinate at once by pushing out a germinating tube, generally at one end.

Late in the Summer and Autumn, the perithecia and asci are formed, ripening about the first of October (Fig. 47, *b*). These are the resting or winter spores, and are small, black bodies occurring on both surfaces of the leaf and on the stems. They consist of an opaque sac with a cellular wall, from which a number of appendages radiate, to from three to five times the length of the diameter of the perithecium, and some of them either undulate, or spiral at tip. The perithecium measures from .07 to .12 m m. in diameter, and the number of appendages varies from 15 to 32. Inside the perithecia are the asci or sacs (Fig. 47, *c*), which contain the spores. The asci vary from four to eight in number, nominally six; the spores also vary in number, the average being six. The Uncinula spiralis therefore appears in two phases—first as a white flocculent mold; secondly as perithecia with more or less uncilate, or spiral appendages,



The same. Cross Section. Fig. 44.

VARIATION IN HABIT.—One of the most interesting facts in connection with this fungus is that only the conidial form, known as Oidium Tuckeri, occurs, or is so far known in Europe. There is some question as to the actual specific identity of Oidium Tuckeri as found in Europe and the conidial stage of Uncinula spiralis as found in this country. The bulk of opinion is, I think, that they are identical, for while Von Thümen in his Fungi Pomicola and in his Pilze des Weinstockes, follows Fuckel in giving Sphærotheca castagnei, Lev. as a synonym of Odium Tuckeri, thus implying that this last is the conidial form of the former, Fuckel merely makes the conjecture without positive proof, and there is great improbability in the conjecture being correct. We have in fact, in this case, so far as the evidence goes, one somewhat parallel to that of the Grape-vine Phylloxera. The gall-making form of this insect upon the leaf is of very common occurrence, and the form most easily observed in America; whereas in Europe the species very rarely produces the gall. Yet the historic evidence is conclusive as to the introduction from America of Phylloxera vastatrix, and almost as conclusive as to the similar introduction of this Oidium; and to my mind, they both furnish admirable illustrations of a change of habit in an organism sufficiently marked that, without the historic evidence, the question of the exact specific identity of the parent and its transcontinental issue might well be raised. The interesting question, philosophically considered, is why, if the winter spore is necessary to the perpetuation of the Uncinula in America, the species can propagate for an indefinite period without it in Europe?

EFFECT ON THE VINE.—This fungus is less injurious to our hardier native grape-vines than to the European Vitis vinifera and hybrids of it. Hence it is more to be dreaded in California and in Europe than in the Eastern United States. It also prevails most in a dry atmosphere.

REMEDIES.

Sulphur is well known to be one of the most satisfactory remedies against this fungus, and is in universal application where the disease prevails. It is generally applied dry by means of bellows, though, it seems to me, the wet method would have advantages with the use of the cyclone nozzle. Mr. A. Vitch, of New Haven, Conn., has found that in green-houses the sulphur may be advantageously applied by mixing it with linseed oil to the consistency of paint, and brushing it on the flues or hot water pipes. Mr. Wm. Saunders, the Horticulturist of the Department of Agriculture, has for many years used, with great satisfaction, a weak solution of lime and sulphur obtained by pouring water on one-half bushel of lump lime and 10 pounds of sulphur, and then diluting for use.

THE DOWNY GRAPE-VINE MILDEW.

GENERAL APPEARANCE.—The other mildew, namely the Peronospora, shows itself on the underside of the leaves in the form of a small patch of whitish down, and sends its mycelium into the adjacent tissues, destroying the parts, which scorch and turn brown as if sun-burnt. It has been known by various popular names as "blister of the leaf," "blight" and so on. It generally escapes attention in its earlier stages and experience shows that it is most destructive where the dews are heavy, or in continued damp, rainy weather. This particular mildew is the Peronospora viticola (Berkeley & Curtis), DeBarry having first referred to it as Botrytis vitieola.

STRUCTURAL CHARACTERISTICS.—The mycelial threads or hyphæ are about .01 mm. in diameter, somewhat larger in the stems and petioles than in the leaves. They are found everywhere except in the wood proper, but particularly in the tissues of the leaves. Their contents are granular and somewhat oily, and cross partitions, so characteristic of the Uncinula, are rare. Just beneath the stomata of the leaves, the hyphæ are particularly abundant. Those which are to bear the conidia pass through the stomata and grow more rapidly than the rest, ramifying and reaching from .3 to .6 mm. in hight (Fig 48 *a* p. 74), and bearing the conidia on the tips of the branchlets. The conidia are oval and obtuse, varying in size from .012 to .03 mm. in diameter (Fig. 48, *bb*), Germination takes place with great rapidity whenever there is sufficient moisture. Conidia placed in water become swollen and somewhat segmented in an hour. The segments become oval bodies, collect at the distal end of the conidia, rupture the wall in a short time and escape, swimming off as zöospores, each with two ciliæ (Fig. 48, *ee*). Each conidium produces, on an average, five or six zöospores, though the number is quite variable. They vary also in shape, and from .008 to .01 mm. in length. They move about from 15 to 20 minutes; then come to rest, when the cilia drops off, and a new mycelium develops from the side.

The winter spores, or öospores, are found, in September and October, in discolored and shriveled parts of leaves. They are spherical; .03 mm. in diameter, with a thick, smooth, yellow cell-wall. Fig. 48, *d*). They fall to the ground with the leaves and lie dormant till Spring.

So far as I can find the actual steps by which the winter spores are produced, have not been observed in this species, or, for that matter, in the Uncinula, but as the process is known in the order Perisporiaceæ, we may confidently assume that they result, later in the season, from the union of the contents of two cells or hyphæ, *i. e.*, they are of sexual origin.

We thus have, as in the Uncinula, both summer and winter spores. The summer spores develop outside the leaf and germinate rapidly as soon as moistened by rain or dew. Consequently, during a wet Summer, the spread of the fungus is extraordinarily rapid, so that within a few days a large vineyard

becomes infested. The winter spores are found in the interior of the dry leaves and hibernate within those of the ground. In Summer they again get on to the young leaves by the agency of animals, wind and rain.

(To be continued.)

What Others Say

LET US USE OUR FEED-STUFFS AT HOME.—Some time since, Mr. Moreton Frewen sent from the Far West to England some steers as they come from the ranges, for the purpose of having them fattened by the farmers of Great Britain. Bell's Messenger, in noticing their arrival, says that it is surprising that we Americans do not see that it must pay us better to expend $22.84 (the cost of transportation from the Plains to Liverpool) for the transportation of a $100 steer, than upon one worth only $60. It is preposterous not to feed the animal on mixed meal and hay on the spot where those foods are grown, in preference to sending the half-fatted animals to Great Britain to be there fattened on the self-same food also sent over and greatly raised in cost by the transit. There is so much truth and common sense in these remarks, that every American farmer should commit them to memory and ponder on them well. Not only are full-grown, but half-fattened animals sent forward, thus taking in the bone and muscle the largest proportion of the expensive phosphates and nitrates to the gross weight, but we are sending abroad, at a price scarcely above the cost of transportation, thousands of ship-loads of feeding stuffs rich in the very elements of plant growth for which our fields are languishing. The sooner we realize the full truth of these facts and heed them, the better for our future.

ABSORPTIVE POWER OF MILK.—Dr. Dougall of Glasgow, Scotland, has been trying some experiments to determine the absorptive power of milk, which he details in the Scottish Agricultural Gazette. He inclosed in jars a portion of milk, and in different jars but not in connection with the milk, different substances giving off flavors. At the end of eight hours a portion of the milk was carefully drawn from near the bottom of each jar, by means of a pipette so as not to disturb any other part of the milk. In every one, of 15 trials, the milk had absorbed the flavor to such an extent that it had penetrated the very lowest stratum. This shows the great importance of having all places in which milk is kept perfectly free from any bad odor even though very faint.

THE MANURIAL VALUE OF FOOD A MATTER WORTH CONSIDERING.—Sir John B. Lawes has given a table of the value of the manure made by the consumption of different foods. As determined by chemical investigation at Rothamsted, the maximum values of dung yielded from the consumption of different foods are shown in the following table in the figures opposite:

Manurial residue from one ton of	Total money value of fresh manure.
Decorticated cotton cake	$27.40
Rape cake	20.70
Linseed cake	19.03
Malt sprouts	17.16
Beans	16.08
Bran	14.17
Peas	10.06
Clover hay	9.94
Oats	7.23
Wheat	6.93
Meadow hay	6.93
Malt	6.46
Barley	6.36
Maize	6.08
Pea straw	4.65
Bean straw	4.29
Oat straw	2.81
Wheat straw	2.45
Barley straw	2.45

We have only included the feeding stuffs commonly in use in this country. Dr. Lawes estimates that of these values one-half is appropriated by the first crop, one-third of the remainder the succeeding year, and so on, each succeeding crop appropriating one-third of what remains in the soil from the preceding year. While these figures are, of course, too high for this country, they are, no doubt, comparatively correct. That is, they give the comparative value of the manure made from a ton of the several foods therein named.

EGG-LAYING PROPERTIES OF MINORCAS.—Mr. J. Physick says: "On January 1st, 1885, I placed seven Minorca hens that were hatched in May, 1884, with a stag on a grass run, with the intention of knowing what quantity and weight of eggs they would produce in 12 months. They remained there until the end April, when, for want of room for chickens, I placed them, without the stag, on a flat roof, over a small store. Dimensions of flat roof, including roosting house, 20x9 feet. Eggs taken as follows: January, 69; February, 108; March, 125; April, 102; May, 152; June, 162. I have several times weighed their eggs, and find them average 29 ounces for 12, so that these seven hens have produced in six months 122 pounds of meat, equal to 17½ pounds for each hen." This rather large hen story we find in the Scottish Agricultural Gazette. As will be seen, each hen laid an average of over 9 7-12 dozen eggs in six months, or 115 eggs in 181 days, and by weight they produced more than four times their own live weight in very rich food. Who will say that hens do not pay? What other stock can make as good a showing?

RESULTS OF STARVATION.—The National Live Stock Journal speaks of the hereditary results of starvation. The health and vigor of all animals depend upon regularity and sufficiency of the supply of nourishment. This fact is true even of wild breeds, and it becomes more and more apparent as animals are improved. An improved animal is the product of special care and is trained to require that care. To starve such an animal does not lower it to the condition of wild animals, but puts it beneath their level. Its constitution is an artificial product, and by starvation we lose all that enables us to control the form and quality of the animal. Degeneracy sets in and only death or infertility can prevent the "improved" breed from rearing a race of weeds below the scrub in form and vigor. Every man who procures an improved animal assumes a duty.

THE POOR EDITOR!—Mr. C. A. Green has the following to say of the editor who is heartily interested in his work: "Of all hard-working men, none labor so hard as a successful editor. During every working hour his burden hangs heavily; in the still hours of night his harness is not removed, but hangs like a nightmare upon him. There is no hour when his paper is dismissed from his mind. He reads to gather items for his journal. He travels to gather information. He talks with people that he may fill his pages. He has no vacation, no rest until the daisies blossom over his grave."

MULTUM IN PARVO.

THE Sharpless Strawberry will continue among the most valuable varieties for size of berry and vigor of plant. In these two respects we do not know of its equal.....

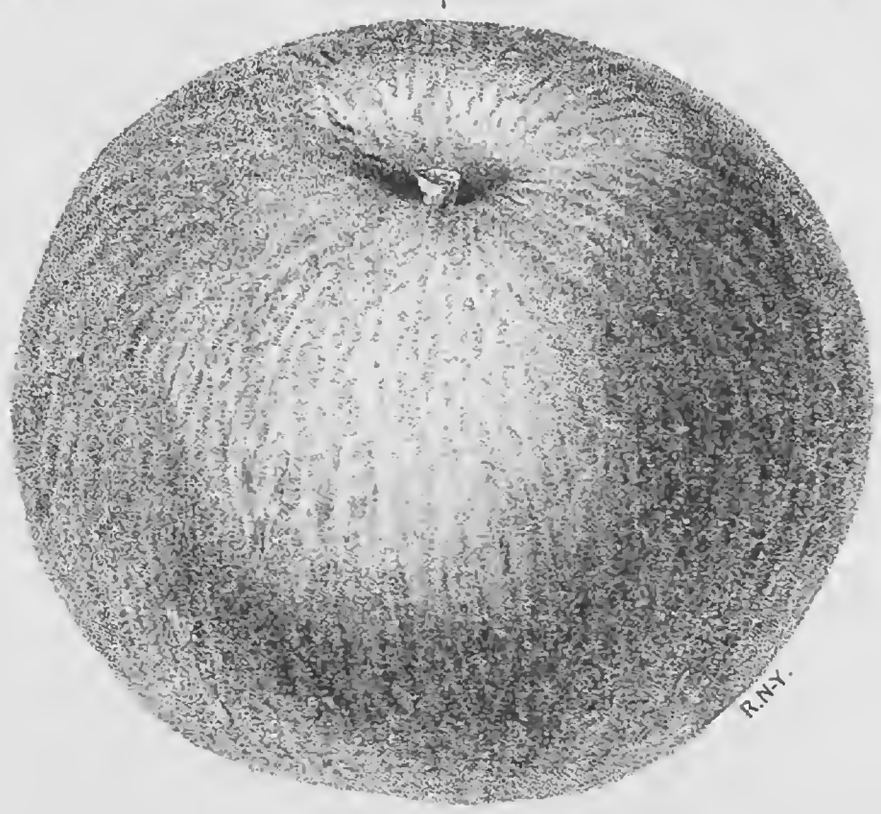
WE like the Parry for the large size and symmetry of its berry; for its quality and earliness. It gave us the finest early berries last year. The plant is fairly vigorous—flower perfect.....

THE RURAL was the first journal to praise the Cumberland Triumph Strawberry. The fruit is always shapely and of fine quality, though it is not of the firmest.....

THE Henderson is unquestionably of fine quality and goodly size. As to its productiveness and vigor, we must try it another year before a just report can be made.....

THE Jewell is the most productive strawberry ever raised at the Rural Grounds. The plants are vigorous. The quality of the berry is fair. Flowers pistillate. All should try the Jewell. We shall make an early report of its behavior next season.....

The Breeders' Gazette truly says that many a man who is wide-awake to the necessity of a reaper in the harvest field, is fast asleep to the importance of improved stock in the stable; yet one is no more important than the other..

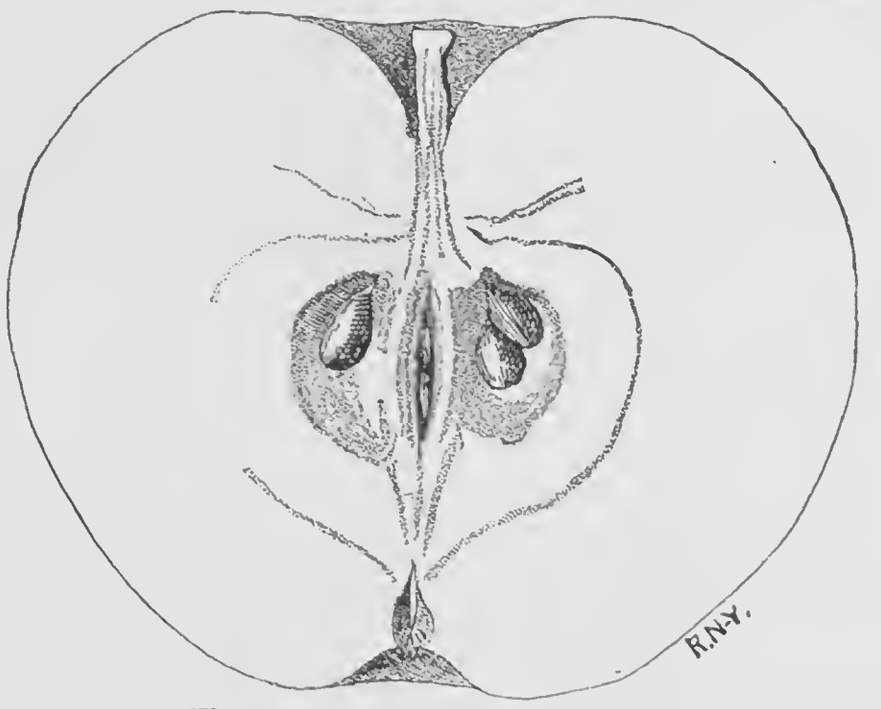


HUBBARDTON PIPPIN. From Nature. Fig. 45.

THE same paper thinks that "salt and pepper" is a better term than "marbled" in speaking of the best beef. There should be not only streaks of fat and lean, but the two should be blended in every part.....

THE good and enterprising John Thorpe speaks of the Progressive Chrysanthemum as the plant that extends the floral season for a month into late Autumn and early Winter. He mentions its other merits, as cheapness, simple culture, bright colors, hardiness, an ability to thrive in a variety of conditions, and its gay appearance when gardens are bare.....

JOSIAH HOOPES expresses the opinion in the N; Y. Tribune, that the longer he lives, the more he is convinced that very little, if any, harm is done to trees or plants by pruning in midwinter.....



The same. Cross Section. Fig. 46.

WHAT is the reason that people go on planting the same old trees and shrubs, when there are others that are far better—handsomer, hardier, longer-lived?.....

MR. LOWELL sent the following stanza to Dr. Asa Gray on the occasion of his 75th birthday:

"Just fate prolong his life well spent,
Whose indefatigable hours
Have been as gaily innocent
And fragrant as his flowers."

THE Congregationalist says that a "duck of a man" usually makes a "goose of a husband."

IT seems that it cannot be too often repeated that we do not mulch for the purpose of keeping plants or their roots *warm*, but merely to guard against the ill effects of sudden freezing and thawing.....

FROM the above cause, probably more injury is done to plants during late February, March, and even April than during any other part of the cold season.....

MOST of the catalogues thus far received announce Welcome Oats. As already stated, it has been ascertained that there are several names for this oat. Perhaps Welcome is as good as any. It is certainly one of the best varieties in cultivation.....

JOHN THORPE says, in the Floral Cabinet, that the Fall of 1886 will see chrysanthemum exhibitions far surpassing any ever held. We do not doubt it. He mentions that one horticultural society alone will offer $500 in one premium for 25 plants; $50 for 100 cut blooms, and others in the same proportion.....

THE Wine and Fruit Grower says that some may consider it a foolish proceeding to keep on testing novelties; but we take lots of comfort and pleasure in this kind of foolishness. If we like to dance we are willing to pay the fiddler.....

MR. J. T. LOVETT says of the Golden Queen that it is head and shoulders above all other yellow raspberries. He does not think it is the best market berry, or *as* a market berry superior to all red varieties. "It cannot fail to win the affections of the amateur," he says.

MR. LOVETT also asserts that the Early Harvest Blackberry is hardier than the Kittatinny. Don't mistake the Brunton for the Early Harvest.....

PROF. BROWN, an English author, in his work on "Animal Life," says that the tendency of animal life in domestication is, in his opinion, "the survival of the unfittest." He looks upon an animal as "a tub with a hole in the bottom," which must be filled by pouring into it quickly, because the more quickly you pour in the less the waste.....

To make both ends meet: Eat beef tongue and drink ox-tail soup.....

ROSE-COMB Leghorns may be preferred to Single-comb Leghorns, for the reason that the rose comb does not freeze so easily.....

THE Poultry Keeper says that the Pekin duck is the largest in size and the most easily kept within an inclosure, but the Aylesburys are the better layers on an average. The Rouens are the most beautiful and attractive, while the common puddle duck is the hardiest. The Muscovey is a large breed; its rank flavor of flesh has been an obstacle to its popularity.....

THE Orchard and Garden, after detailing many of the merits claimed for the Earhart Everbearing blackcap, concludes thus: "We cannot relate all the other good points claimed for this 'wonderful' berry, as they are drawing almost too heavily on our credulity."....

COUNTERFEITERS should be sent to the penitentiary. It makes no difference in their guilt whether they counterfeit bank notes or butter, says the Orange County Farmer.....

THE N. Y. Times says that if the owner of a 100-acre farm worth $20,000, were to sell his property for cash he could not possibly invest his money nearly so well as it was in the farm, for the interest at five per cent. on the capital would not begin to provide him with house, provisions, comforts and luxuries which he enjoyed on the farm, but never took any account of in his bookkeeping.....

"WILL the butter of the future be the product of the cow or the hog?" asks the Philadelphia Press. The hog is rooting his way ahead. Nothing will help him more than poor cows, poorly fed, poorly milked and the butter poorly made. Bad butter, though genuine, is the best aid the butterine man can hope to have. Unless the cow is sustained by the best dairy methods, she will be left in the race.....

THE Press says that "Mr. Caywood can't understand why people are not allowed to buy fruit for its beautiful appearance on the table alone. They buy flowers with no taste at all. Why decry beautiful fruit because its flavor is not the best?" Mr. Caywood may have reference to the Lawson (Comet) Pear, or possibly to the Kieffer. We would humbly answer that it is better to buy flowers for their beauty and fruits for their quality, since the one is not fit to eat while the other gives us the most delicious and healthful of foods. But Mr. Caywood overlooks the fact that the most delicious fruits are, as a rule, the most beautiful.....

IT seems to be the general opinion that the hogs, the poor cows and the slovenly farmers are doing their best to aid oleomargarine. The hogs have come to stay, but the rest of the allies must "go."....

BRO. GARDNER, of the Lime-Kiln Club, thinks little of men who try to be ruled by mottoes. He knew a man once who had "Time is money" posted in every room. He always put in his corn 10 days too early, and had to

plant potatoes 20 days late to make up. The only good crop he ever had was one raised by his wife while he was sick.....

THE American Dairyman wonders who will be first to advertise polled herds of Jerseys. It thinks the horns of this breed are already in a dilapidated condition. They grow in all directions, are soft and easily broken, and would be much better bred into the air. A polled cow is surely better looking than a "lop horn," or a cow with an ugly stub sticking up from her head.....

WE never lose information by giving it away.....

PROF. BROWN says that animals can not be fattened on roots without grain. No animals can be made to pay their keeping when fed for beef, unless the value of their manure is taken into the account. Stock husbandry is yet the chief reliance to the ordinary farmer. Roots are worth more in practice than chemical analysis indicates. The water in roots is not like the water from the pump. Enough roots should be fed to prevent cattle from drinking much water.....

CARELESSNESS in saving manure has driven more than one farmer "out West." The same carelessness, if inherited, will send his children still further towards the "setting sun," or into the factory.....

NITROGEN has often been called the lazy manurial element. It hates to enter into a combination with other substances where it would be obliged to work at farming. It is the chemical gentleman of agriculture. It floats lazily in the air, even though plants that it brushes against are dying for it. It is slow about entering work, it is like a flash in getting out of it when once it has been trapped. Any farmer who throws his barn-yard manure out into the rain will sadly testify to this latter fact.....

THE English Farm and Home says that the old English song, "The Roast Beef of Old England," was written and composed after a dinner of beef from the ten-year-old steer which had done his plowing and his harrowing, and been "fatted off" for market on the turnips he helped to cart to the homestead. Fat-stock show beef is not the best to eat, though it ought to be.....

THE Philadelphia Press has an article on "Tree Butchers," under which head it classes those who wantonly destroy forests as well as those who disfigure trees and shrubs by unskillful cutting. It is not in all respects a good name. A butcher always grows fat at his business, however savage it may be; the tree butcher will grow poorer the longer he works at his trade.....

THE U. S. Dairyman says that butter, in the granular form, may lie an hour in the brine and yet take no harm. No more salt will enter the globules than is needed. The overplus will run off. Too much salt can be ground into butter, by mechanical force, but it will not absorb any more than it needs.....

THERE is little value in a single test of milk. There are too many conditions of weather, feed, temper and treatment that affect milk to render a single test absolutely reliable.....

SCRUB cows appear to have some arrangement within them that skims the milk before it passes into the udder. It is hard to say where the cream goes to. It must be spent mostly in thickening hide and building up bone. It takes a thick hide to sell for 20 cents per pound, and ground bone is dull at two cents. The scrub cows appear to use the material, which in a thoroughbred would produce 50 pounds of 30-cent butter, in making one pound of hide or bone.....

Everywhere.

RURAL SPECIAL REPORTS.

Georgia.

MACON, Bibb Co.—The Rural seeds all did well. The corn was grown on poor, thin soil, well manured. The stalks grew from five feet to eight feet high, and bore from one to five ears. One (a yellow dent) was fit for the table in 70 days. The peas were very fine. The Rural Bi-color Tomato is of superior excellence; but I think not better than Livingston's Prolific. The beans I consider of little value either as snap or shelled. The Garden Treasures were very pretty. D. M.

Indiana.

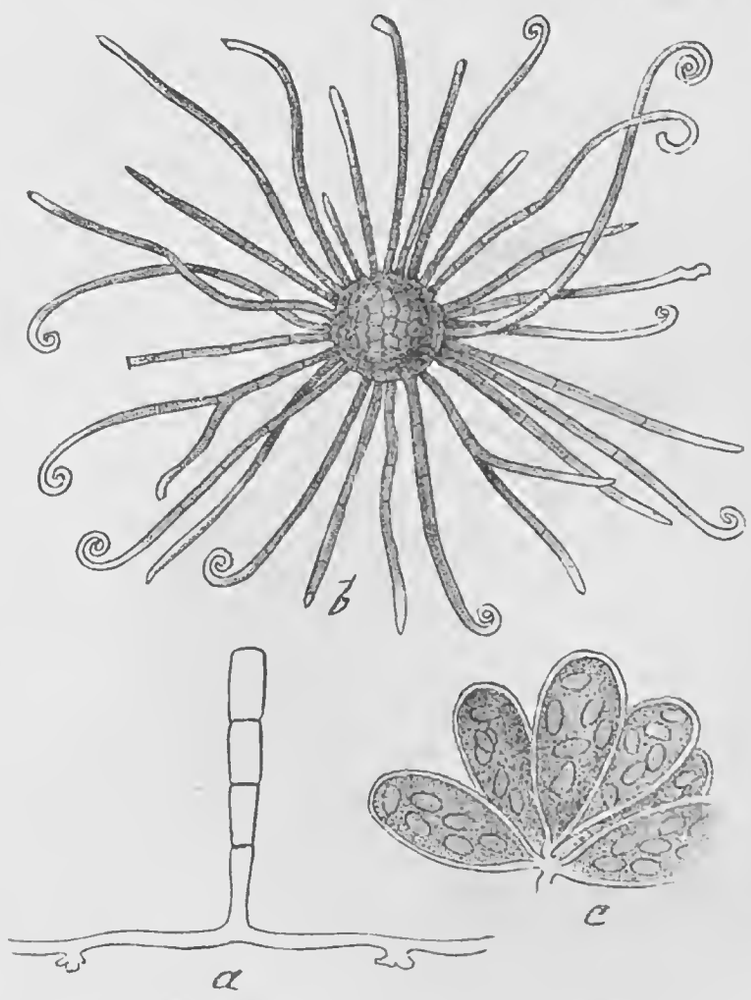
MONTPELIER, Blackford Co., Jan. 14.—My Diehl-Mediterranean Wheat was splendid; and my Thousand-fold Rye was also good. The Green Flageolet Bean yields well. The tomatoes were not so good as the ones produced from seed of the year before. The peas did well. The Johnson Grass I did not plant. The corn amounted to nothing. P. L. E.

Kansas.

MICHIGAN VALLEY, Osage Co.—The Rural Corn did well. I intend planting the best of it again. The peas and beans were very fine. The tomatoes did not do well, as the weather was wet; they grew all to vines and no fruit. The Johnson Grass did not come up. The Garden Treasures were particularly fine. I had an endless variety of beautiful and choice flowers, and many perennials. We are all flower lovers at this ranch. D. J.

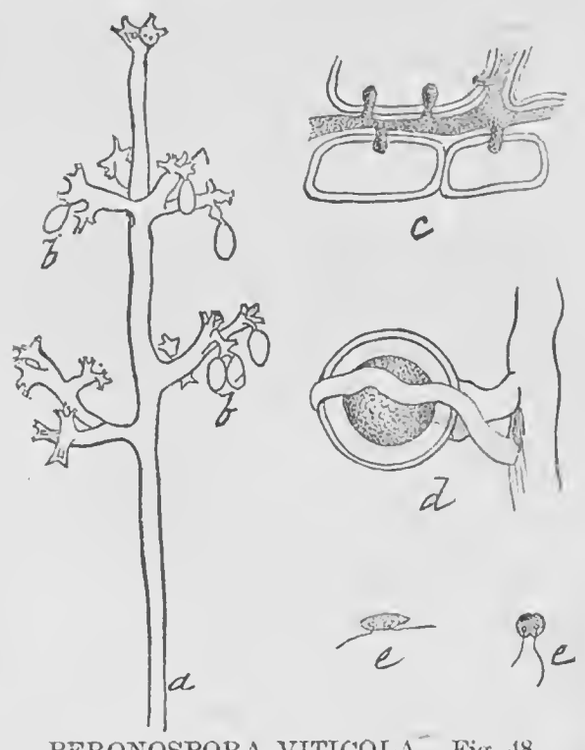
New Jersey.

MANALAPAN, Monmouth Co.—Some of the Rural seeds have been quite valuable to me, among which are the the Mold's Ennobled Oats and the Blush Potato. Some kinds of



UNCINULA SPIRALIS. Fig. 47. (See page 72.)

a, Conidia and Mycelium; *b*, Perithecium, with appendages; *c*, Asci and Spores.—*After Farlow.*



PERONOSPORA VITICOLA. Fig. 48. (See page 72.)

a, Mycelium, with Conidia (*b b*); *c*, Haustoria; *d* oospore; *e*, zoospores.—*After Farlow.*

corn also grew well, as did the Cuthbert Raspberry and the R. N.-Y. Pea. The Blush made a much better crop than any potato I grew this year. The beetles ate them but little, and the grub-worm did but little damage. The R. N.-Y. Pea bears well and ripens early.

W. H. DU B.

New York.

STAPLETON, Richmond Co.—All the RURAL seeds did well. The corn was interesting, some stalks having four ears (not large, however), a large number having three, and more two. Of these last, some were splendid and on almost all that bore only one ear, that was excellent. The peas and beans did well. I like the Rural Union Corn the best. The flowers were appreciated very highly. In fact, all seeds from the RURAL are considered, by me at least, worthy of a careful trial. W. E. S.

North Carolina.

HENDERSON, Vance Co., Jan. 11.—We read a great deal in the papers of the great prosperity of the South during the year 1885, which may all be true of the section as a whole, but it is not so of this portion of it. Our crops of all kinds were light. Cotton, on which we depend considerably as a money crop, was not more than two-thirds of an average, and, besides, the price is so low as to barely pay the cost of production when up to a full average. This condition of things causes inability on the part of tenant farmers to pay their rent, which in many cases entails a dead loss to the landlord, especially where the renter deems it cheaper to move than remain another year, and try to pay up old scores. Tobacco planters have done somewhat better for many years past; yet mixed farming would be much safer and more profitable, as has been demonstrated by all those who can be induced to practice it. The prices in our home market are:—Wheat, good, $1.25; corn, 80 cents; cotton, 8¼ cents; sweet potatoes, 75 cents; Irish do., $1 to $1.25; hay, in bale, $20 to $25; eggs, 20 cents; butter, prime, 30 cents. Until January 4, we had a delightful Fall and Winter—no cold weather or severe storms to interrupt farm work. Roads good, and but little fuel required for comfort. Stock came into the New Year in better condition than usual, which is fortunate, owing to our light forage. A heavy rain on the 4th was followed by cooler weather until the 8th, when snow and sleet covered the ground, the weather growing colder until this morning when the mercury went to 2° above zero, with indications of milder weather. M. B. P.

Pennsylvania.

SHOUSETOWN, Allegheny Co.—I cannot do without the RURAL. I value the Seed Distribution highly. The D-M. Wheat I think good. The 50 different kinds of corn were no use here. The Rural Union Dent sent out in 1884, is fine; it yielded one-third more than the Leaming on the same ground. J. C. B.

WINTERBURN, Clearfield Co.—In summing up the year's operations in agriculture in this county, the general condition is that the farmers have been liberally rewarded for their labor, although prices of produce are not the best. Crops were good and are remunerative at present figures. Winter commenced early here, and we had several weeks of good sleighing, but it turned warm on the 20th, taking off the snow, and we have had no sleighing since. H. F. S.

NORTH PINE GROVE, Clarion Co.—Both varieties of Rural Peas did well. The Flageolet Beans all grew well, ripened early and yielded well. The Johnson Grass did not come up. The 50 crosses of corn all came up nicely and grew well from five to twelve feet high, and had one to five ears on a stalk; but none ripened really well. The King Humbert Tomatoes were fine. The Garden Treasures gave us a choice selection of very fine flowers all Summer and Fall. We had a very fair crop of hay; wheat was one-half a crop, oats a full crop; potatoes, poor and badly rotted; apples the largest crop we ever had and of the best quality. Buckwheat a fair crop. Prices of all farm products are low. Success to the RURAL! A. B.

THE FARMER'S CLUB

ANSWERS TO CORRESPONDENTS.

[Every query must be accompanied by the name and address of the writer to insure attention. Before asking a question, please see if it is not answered in our advertising columns. Ask only a few questions at one time.]

ANGORA GOATS; SCABIES OR PRURIGO IN A HORSE, ETC.

K. C., San Juan, Cal.—1. Where can I get a full-blood Angora "billy goat?" 2. How long does a female of that breed carry her young? 3. One of my horses bites and scratches himself until he is covered with sores; what ails him? 4. What is a good washing machine? 5. What is the best potato digger?

ANS.—Large numbers of these goats are profitably kept in the mountainous parts of Southern California; but we do not know who has them for sale in that State. They can be obtained from Robert W. Scott, Frankfort, Ky., or Richard Peters, Atlanta, Ga., the oldest breeder and importer in the United States. They are worth about $50 per pair. 2. Five months, or about 150 days. 3. The irritation of the skin, causing the horse to rub and bite himself, is due either to scabies (also called mange, itch, scab, etc.), or prurigo. The former is a disease of the skin caused by the presence of acari or the itch parasite, while the latter is a nervous irritation of the skin, most commonly due to disordered digestion or unwholesome surroundings. For scabies, examine the skin very carefully for the presence small scabs or crusts. Remove a few of the crusts, brush them up over a sheet of white paper and watch very closely (preferably with a magnifying glass), for any movement among the fine particles. It may be necessary to examine several crusts before one will be found in which the minute parasites may be seen. When their presence becomes known, the treatment is quite simple, but to be entirely successful it must be very thorough. Wash the animal thoroughly with warm, strong, soft soap suds and a stiff brush, to break up and remove all the crusts. Then apply a decoction of tobacco made by boiling one pound of good leaf tobacco in 12 quarts of water. Repeat the application on the third and sixth days if necessary, after washing with the soap suds as before. It will also be necessary to treat the woodwork of the stable, harness, saddles and all grooming utensils to a similar thorough cleaning and the application of the tobacco liquor or a strong solution of caustic potash. Blankets and other clothing may be boiled for a few hours in strong soap suds. If fowls are allowed the run of the buildings, and especially if their roost is in close proximity to the stables, it would be well to whitewash the walls of the stables and roost with freshly slacked quick-lime. Clean, dry, airy buildings are very important auxiliaries in the prevention of scabies. For prurigo, which is to be suspected in the absence of any parasites, give a purgative—four to six drams of Barbadoes aloes, according to the size of the animal—and put on a strict laxative diet. Bathe the skin, when irritated, with a mixture of two drams of liquor of potash, and one dram of hydrocyanic acid, in one quart of water. Internally give, night and morning, four drams of bicarbonate of soda and two or three grains of arsenic, to be given in solution and continued for one or two weeks, or until the irritation ceases. 4. The Keystone and Walker machines, for sale by Frank Adams, Erie, Pa., are both good. 5. The Harrington Potato Digger, made by the Planters' Hoe Co., Troy, N. Y., is as good as any.

ACTION OF GYPSUM ON LEGUMINOUS PLANTS.

R. H., Montreal, Prov. of Quebec, Can.—In this Province, sulphate of lime (called here land-plaster) is largely used as an application for field peas, being sown broadcast *on the foliage* while still wet with dew, after the plants are three or four inches high. In a few days, the effect is evident from the increased greenness. What is the action that takes place? Does the sulphate draw ammonia which is then absorbed by the leaves?

ANSWERED BY PROF. S. W. JOHNSON.

It is an old observation that gypsum sprinkled on the leaves of leguminous plants when wet, appears to deepen their green color, and to give them a look of increased health and vigor. Whether the same result would follow a similar sprinkling in the absence of dew, or if an equal dose of the sulphate were applied directly to the soil, or, finally, if there were no application whatever, has not, to my knowledge, been the subject of comparative experiments. If we take it for granted that sulphate of lime, sprinkled on the leaves of peas when wet with dew, really causes them to take on a deeper green color, I can offer no satisfactory explantion of such an effect. The sulphate of lime can scarcely act by drawing ammonia, for the reason that air and dew contain very little ammonia to be drawn. A million parts of air contain, by the most liberal estimates, but two parts of ammonia. Boussingault found in a million of dew but four to six parts of ammonia. It is accordingly difficult to see how plaster can visibly affect vegetation by collecting ammonia from these sources. If there be a real effect, it is most likely the result of the solution of the sulphate of lime itself in the dew, and its absorbtion by the leaf. But even here considerable difficulties are in the way. It is a fact that dew condensed from the air by a fall of temperature, rests in globular drops on the leaf hairs, having very little contact with the leaf, and probably evaporates away for the most part, without wetting or being at all absorbed by the foliage, whose surface is, in fact, so slightly adapted to absorbtion that, as Duchastre has demonstrated, a healthy plant continuously loses weight, by loss of water, when exposed for hours to rain, if that rain is allowed to fall on its leaves only, and is debarred access to the soil.

Again, in accord with the above facts, is the observation that much of the dew seen on foliage in the morning after a cool night is water exuded from the leaves and not water condensed from the air, the natural course of the water of vegetation being in at the roots and out at the leaves. It would, therefore, appear highly probably that the increased greenness noticed a few days after the sprinkling of plaster, is either not the effect of the sulphate of lime at all, or is the effect of it after it has mostly fallen to the ground and

acted on the plant through the roots. I am inclined to think that in most cases the increased greenness follows altogether independently of the sulphate of lime, as I have frequently observed that young plants, especially Indian corn, often appear yellow for a week or so when a few inches high, but shortly afterwards assume a deep, healthy green without any application whatever.

The young plant is at first nourished almost exclusively from the seed. It may easily happen that the cotyledons are nearly exhausted before the rootlets have struck deeply enough to draw adequate nutriment from the soil, and the plant may suffer temporarily during the weaning process, but quickly recovers when its root-tips reach a depth that insures suitable and regular supplies of moisture and plant-food, and protects them from too great fluctuations of temperature.

GRAPE QUERIES.

H. K. Onawa, Ia.—1. Would pigs pastured in a plum orchard destory the curculio? 2. When should plums be grafted? 3. What is the standing of the Duroc-Jersey among breeders? 4. Can grape-vines be grafted with success, and when? 5. What is the advantage of bagging grapes, and what kind of bags are used, and when should it be done? 6. How are grapes hybridized?

ANS.—1. They would have no immediate effect, but would help to diminish future numbers were there no trees outside of the pig yard in which the curculio could breed. The best and cheapest way to rid the plums of these pests is to jar the trees, catching the "bugs" on canvas sheets, and destroying them. 2. Plums should be grafted as soon as the first warm days of Spring come; though if the cions are well kept, the work may be done later with fair success. 3. They have many friends, though most people regard them as too large and late-maturing. 4. Yes, at any time before the buds swell much. It is best done by what is called the Wagener method. This consists in sawing and cutting out a small piece of the stock, so that when the cion is cut on three sides, so as to make it a little wedging, it is crowded tightly into the kerf, the whole then being buried. It is hard to describe this method without cuts. If you can find a file of last year's RURAL, it is fully illustrated on page 259. 5. The advantages of bagging-grapes are that it prevents the lodgement of the rot or mildew "spores" on the fruit, and thus saves it from disease. It should be done early—as soon as the grapes are fully out of bloom. The bags are what grocers call one and two-pound bags. They are made of thin manilla paper. In putting them on, the lower corner of the bag is cut off so as to let any water that might enter escape. The bag is slipped over the cluster, up over the cane and pinned. 7. The petals of the unopened flowers of the plant used as female are carefully opened; the stamens, or male organs, are cut out and the clusters covered with fine muslin. In a day or two the clusters are uncovered and dusted with the pollen of the plant used as male, and the clusters are again covered with the muslin. It is well to repeat this operation again the following day

ABSCESS IN BULL'S NAVEL.

J. C. S., Holbur, Ia.—About three months ago a swelling, the size of an egg, appeared in the navel of my eight-months-old bull calf. It soon opened and for some time discharged pus; then disappeared, and finally the sore healed. Three weeks ago the swelling reappeared in one night, as large as a man's fist. A blistering salve was applied, and within a week it opened and discharged a lot of matter. Now the swelling has again all disappeared, but there is a small hole from which a quantity of thick, yellow pus is discharged. What should be done?

ANS.—There is evidently an abscess due to some unknown cause, or, possibly, the navel has never perfectly healed. If the opening is large enough to admit the finger, carefully explore the cavity from which the pus flows and endeavor to reach the bottom of the abscess. If this can be done, wash out daily with some weak astringent antiseptic solution, as one-half dram of zinc chloride in a quart of water, or, if the opening is small and the bottom cannot be reached, use a common syringe to throw the solution into the opening.

TENDER FEET IN A HORSE.

"*Subscriber*," *Moore's Forks, N. Y.*—For three years my seven-year-old roadster has been lame at times in the right fore-leg and left hind-feet. The wall of the hoof is thin. Long, hard drives and heavy pulling, or standing in the stable do not make his limbs tender or swell them; but he is often lame when first hitched up; what ails him?

ANS.—Unless the difficulty or tenderness can be more definitely located a satisfactory answer cannot be given. It may be that the animal is constitutionally week in his limbs, and all that is necessary is careful usage. A competent veterinary surgeon by a personal examination of the horse would probably be able to locate the difficulty and prescribe a proper course of treatment if such is necessary.

FODDER QUERIES.

J. D. J., St. Thomas, Florida.—1. We can raise only about 10 bushels of corn per acre, while we can buy it at the railroad station for 85 cents. Would it not be better to buy it, raising some sort of fodder crop? Timothy hay costs $1.75 per hundred pounds. 2. What is the best plant for me to use for soiling and curing for fodder? 3. Would it not pay to plant artichokes, chufas and sweet potatoes for hogs, letting them root them out? 4. What is the best breed of hogs to use for crossing on our long-nosed pigs for making pork for home use? 5. Where can chufas be procured?

ANS.—1. Ten bushels at 85 cents would be $8.50 per acre. You should be able to tell whether any other crop will pay better. It would seem to us that some other crop would give more clear money; if so then it would pay to buy the corn. 2. Try the Rural Branching Sorghum or Millo Maize; also try corn sowed thickly for fodder; also try the cow-peas in a small way. 3. No one can tell you half so well as a trial on a small scale, although we doubt the practicability of this plan. Artichokes have been tried for this purpose North, but have not been a success. 4. Either Essex, Small Yorkshires or Berkshires. 5 Try P. J. Berekmans, Augusta, Ga., or W. B. Jones, Herndon, Ga,

RING-WORM OR MANGE IN A CAT.

F. M. B. B., Buffalo, N. Y.—1. What is a cure for mange in a cat? The symptoms are a humor or sore on the head, which is inclined to spread, and has closed her eyes and made the hair fall out.

ANS.—The symptoms given would indicate ring-worm rather than mange, a baldness and eruption most commonly about the face, caused by a vegetable parasite—Trichophyton tonsurans—living within the hair follicles and bulbs. As a test, apply a little chloroform to the hairs about the affected part, and if it is ring-worm, the diseased hairs will be bleached while the sound ones will not be changed. The diseased hairs will also be found to be split, broken, and bristly, and the microscope will show the presence of the spores of the parasite. The treatment is very simple. Pull or shave the hair from the part affected and paint thoroughly with tincture of iodine. In the absence of the above symptoms, treat for mange. Apply a dressing made of oil of tar one part and sweet or castor oil 25 parts. Two or three applications may be necessary.

COUGH IN A COW.

R. M. C., Portland, Ohio.—Last April one of my cows aborted and didn't clean well. Soon afterward she commenced to cough in a low subdued way and did so considerably for ten or twelve weeks. The cough then abated but lately it is as bad as ever. She looks and eats well; what can be done for her?

ANS.—Unless the bowels are already laxative, give one pound of Glauber salts with two ounces of ginger. Then take one dram of solid extract of belladonna, and four drams of saltpeter, mix with a sirup or honey to form a thick paste, and smear upon the back teeth to be swallowed leisurely. Repeat twice daily. Apply a mild blister over the region of the throat—ammonia one part, sweet oil two parts. Steam the nostrils every evening by feeding a hot bran mash made by pouring boiling water over four quarts of wheat bran, and let the animal eat from the bucket while cooling.

Miscellaneous.

C. S. N., Lamartine, Wis.—What is the ratio between the fattening values of corn and barley?

ANS.—The fattening value of a grain depends almost entirely upon its free oil or fat, and its carbohydrates (the sugar, starch, gums, etc). One per cent. of oil is reckoned as equivalent to about 2.4 per cent. carbohydrates. At these rates 68 pounds of corn are equal to 78 pounds of barley. Dr. Wolff, in his tables, gives their values of 147 pounds of corn as equal to 175 pounds of barley; but in these figures he includes the value of the albuminoids which are considerably in favor of the barley.

L. C. B., Bora, no State named.—Cook's Manual of the Apiary is the best work on bee-keeping; price $1. To be had from Prof. A. J. Cook, Agricultural College, Lansing, Mich.

DISCUSSION.

W. H. H. J., HONOKUS, N. J.—I wish to note my decided objection to the plan of hen roost by Mr. L. D. Wood, illustrated in the RURAL of January 2. Any plan that permits the fowls to spend a night in such close proximity to the fresh droppings, breathing the gases which are constantly being thrown off, must be dangerous to health: nor do I advocate the low roosts used by many poultrymen. The natural instinct of the fowl is to roost high, out of dampness and foul air. Build the roosts not less than 3½ to 4 feet from the floor and have easy steps or ladders for the birds to go up and down. Cover the floor with about six inches of sand sieved through a quarter-inch-mesh sieve, so that it will be free from stones larger than peas. Every morning rake up the manure with a fine-tooth iron rake and remove it to the manure shed. This will keep the poultry house always sweet and clean. The sand can be renewed when necessary, but it should always be dry when put in.

R. N.-Y.—We do not wish to take the lance in defence of Mr. Wood. He is able to defend himself. We only wish to remark that while we are in favor of having the roosts at least above the middle of the house, we do think there should be a floor under them and not more than one foot away. With the improved and heavy breeds the danger of injury by falling from the roosts is worth considering, and the floor effectually prevents this.

G. H., PENFIELD, N. Y.—This cold Winter weather I have been studying the RURAL'S Special Fertilizer Number, which I had laid away for reference. From the study of that, combined with my own observation and experience, I confess I have become rather mixed on the question. Several contributors to the Special agree that more benefit is derived from the use of commercial fertilizers on clay than on light soil: but they do not touch on the question whether there are not some soils upon which commercial fertilizers are of no benefit whatever. That has been my experience after testing them for a number of years, and my soil cannot be called either light or sandy. I have used several standard brands of superphosphate which should be complete fertilizers, as they contain phosphoric acid, potash and nitrogen. They are considered very valuable in this immediate vicinity by farmers who use them upon what is here called "phosphate land"—that is land inclined to be moist, and nearly always beech and maple land, also black or peaty and clay soils. Did you ever know of commercial fertilizers benefiting a crop raised upon limestone land, upon which the natural timber was oak and chestnut? If so, what were the situation of the land, the fertilizers used, the amount per acre, the crop raised, the yield per acre, and was the increase in yield sufficient to pay for the fertilizer? If complete fertilizer is of no benefit on this soil, would you advise me to try phosphoric acid alone, potash alone, and nitrogen alone, and combinations of two of these constituents with the third left out? If so, what shall I buy to get the phosphoric acid in the best and cheapest form? What for potash, and what for nitrogen? My soil is neither light, porous, sandy nor leachy, the only soils mentioned as those upon which phosphate is of little or no benefit.

R. N.-Y.—A superphosphate is *not* a complete fertilizer. It contains only phosphoric acid. Your land may need one, two or all. This can be ascertained *only* by trying them separately and in their several combinations. Our friend may rest assured of one thing, viz., that commercial fertilizers will increase the crop if the soil is not already abundantly supplied with plant food, no matter whether the land is limestone or not: no matter what trees grow upon it. Bone flour is best for phosphoric acid—muriate or sulphate of potash or wood ashes for potash; blood, nitrate of soda or sulphate of ammonia for nitrogen. We have seen barley growing upon lands of gravelly limestone character, whereon a complete fertilizer had been used, strips the width of the drill being occasionally left without, and the difference between the fertilized and unfertilized parts was at least fourfold in favor of the manured. We did not see the grain harvested and thrashed, and so cannot tell whether the fertilizer was paid for by the increased crop, but we have no doubt of it. We have seen equally as favorable results with wheat and other crops, and yet the only safe way is for every man to test these manures for himself.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING SATURDAY, January 23, 1886.

M. B. P.—F. H. P.—W. H. C.—J. K. E.—B. E. M.—T. W.—L.—J. T. M., thanks.—M. K. B. Jr.—J. W.—F. A. R. C. D.—M. A. S.—W. E. J.—G. K. E.—E. S.—F. H. M. C. B.—F. D. C.—H. K.—E. S. G.—J. M. H.—T. B. Mc —R. L. F.—J. B. C.—C. E. B., thanks.—R. J. Y.—F. F., thanks.—H. S. T.—W. H. H. J.—W. J. C.—C. S.—C. T. G. —E. L. D.—R. B. S.—H. W.—W. A. B.—R. E. D.—J. S., thanks.—T. B. B.—L. H. T.—E. G., thanks.—R. L. G.— T. D. S.—E. P. J.—B. F. J.—S. H.—O. M. B.—J. P.—D. J. B.—L. L. E.—C. B. P.—T. H. H.—J. McK.—T. D. C.—A. W. B.—J. B. A.—J. D. M.—S. S. C.—F. A. B.—S. C.—R. A. F. A.—C. W. C., thanks.—H. B. S.—A. J. C.—E. T., thanks. W. M.—S. M.—H. W. L.—A. W. W.—W. F. B.—P. B. M. W. B. H.—A. M.—H. W.—H. O. B.—A. N. F.—G. A. R.— M. H.—C. L.—W. E.—C. F. G.—T. E. C.—W. W. C.—W. O.—S. W. M.—W. B.—W. R. L.—D. H. B.—J. J. D.—E. G. C. Y.—F. H. H.—B. K.—E. C.—S. L. W.—G. P.

Miscellaneous Advertising.

SAVE Your POSTS and use SHAW'S WIRE FENCE TIGHTENER. Can be adjusted to any wooden post; can tighten or slacken, according to climate, with an ordinary monkey wrench. Price $8 per doz. For full particulars, apply to
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Delaware, Ontario, Canada.
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W. S CURRIER, Bagley, N. H.

SITUATION WANTED, by a man who thoroughly understands Farming in all its branches. Age 35. Sober, industrious, and a worker. Can refer to Editor of R. N.-Y. Address "FARMER," River Edge, Bergen Co., N. J.

Farmers and Horsemen will find it to their advantage to send for new 64-page Catalogue and Price List of heavy and light, single and double Harness, made of the best oak leather, all hand work, at wholesale prices to the consumer. KING & CO., OWEGO, N.Y.

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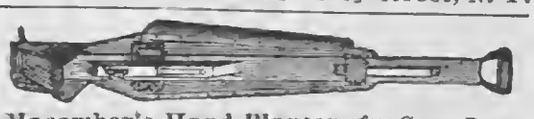
(Formerly 422 West St.) 28 Vesey Street, N. Y.



Macomber's Hand Planter, *for Corn, Beans, and Beet Seed.* The BEST in the world. Money refunded if it does not prove satisfactory, after a fair trial. Agents wanted. Send for circular and terms.
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Patented March 23d, 1880.
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DESCRIPTIVE CIRCULARS ON APPLICATION.
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Don't pay exorbitant rental fees to the Bell Telephone Monopoly to use their Telephones on lines less than two miles in length. A few months' rental buys a first-class Telephone that is no infringement, and works splendid on lines for private use on any kind of wire, and works good in stormy weather. It makes homes pleasant; annihilates time; prevents burglaries, saves many steps, and is just what every business man and farmer should have to connect stores, houses, depots, factories, colleges, etc., etc. The only practicable and reliable Telephone that is sold outright and warranted to work.
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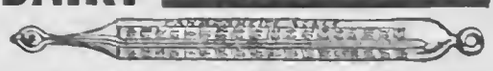

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THE
RURAL NEW-YORKER.
A National Journal for Country and Suburban Home.

Conducted by
E. S. CARMAN, Editor.
J. S. WOODWARD, Associate.

Address
THE RURAL NEW-YORKER,
No. 34 PARK ROW, New York.

SATURDAY, JANUARY 30, 1886.

IF the number on your address label is 1879, your subscription expires with this number; if 1880, next week; 1881, in two weeks, etc.

THE chrysanthemum illustrations in this issue are faithful drawings made from flowers sent to this office by Mr. John Thorpe, of East Hinsdale, Long Island, N. Y.

WE have always been troubled in preserving our celery in trenches. Last Fall it was taken up with all the soil that would adhere to the roots, and it is keeping better than ever before.

IT may be well that we should again remind our readers that chrysanthemums may be very easily grown from seed. Sow them now and most of the seedlings will bloom next Fall. The plants do not seed in this climate, but seeds are offered in some of the catalogues we are noticing.

THE considerable space devoted to the chrysanthemum in this number may not please all of our farmer readers, but we trust their wives and children may be pleased. We consider floriculture a legitimate and very important adjunct to the farm. A farm-home without flowers is deprived of one of its most captivating charms.

OUR subscribers are respectfully solicited to renew as soon as, or before their subscriptions expire, since, owing to the fact that our calls for specimen copies are far greater than in any preceding year, we can not supply back numbers later than the tenth of February, probably.

MR. WILLIAM FALCONER kindly sent us some fruit of the comparatively new shrub Xanthoceras sorbifolia. The seeds were planted and sprouted in a few days. The seedlings are doing well. This shrub belongs to the same family as the horse-chestnut, and bears its flowers in similar racemes. It was first illustrated in the R. N.-Y. about 10 years ago. It is now offered by several nurserymen. We shall have occasion to refer to it again ere long.

THERE is no fruit, grain, root or vegetable that will do well everywhere, while most of the new seeds, fruits or plants will thrive in *certain* localities. How then are we to secure improved varieties except by experiment? We may say that the Concord is the grape for the million. But there are many places where an Eldorado, Jefferson, Lady Washington, Brighton may yield better fruit and more of it. We may speak of the Clawson or Fultz Wheat as succeeding over a wider range of country than any other; but in many parts of the country the Armstrong (Landreth), or Diehl-Mediterranean may yield more and give a far better quality of flour. The same may be said as to other cereals, fruits, potatoes, etc. If we would increase the quality or quantity of our farm products, we *must test new things*. Let this be done in ever so small a way, only so that the results may guide us in our future selections.

ABOUT the middle of December, we received a basket of Concord grapes from Mr. C. M. Hovey, raised in Fitchburg, Mass. They were in fine order, and very good in quality to those who like the Concord flavor. In sending them Mr. Hovey called our attention to an enterprise started some time since by him to give Mr. Bull, the originator of the Concord, some testimonial in recognition of his great services to the American people in originating the Concord. We think this a worthy thing to do, and that there are thousands everywhere who would like to contribute a mite toward the memento. Mr. Hovey informs us that the names of the subscribers, together with valuable letters from the successful cultivators of the Concord in Massachusetts and New Hampshire, will be published and sent to all who care to contribute toward so worthy an enterprise. We hope hundreds will help in this matter, and subscriptions may be sent directly to Mr. C. M. Hovey, Boston, Mass., or to the RURAL NEW-YORKER, and we will see that they are forwarded. Already the leading cultivators and amateurs and dealers in grapes around Boston have liberally contributed.

NEARLY two years ago we strongly urged the convenience and, indeed, importance of a uniform standard of grain measure for all parts of the country, and suggested the cental system, current on the Pacific Coast and in Liverpool, as the best. The National Board of Trade, now in session at Washington, has just adopted our recommendation, by urging upon Congress the passage of a law providing for the measure we approved; but advising that it should be made an international standard, especially for such countries as export or import wheat. Congress can at once enact a law providing for the proposed amendment within our own borders, where the contents of a bushel vary in weight in different States; but it can only recommend to other countries the adoption of an international standard. Negotiations to effect this must be slow. We want a speedy improvement. Then our advice to others in favor of an international standard will carry more weight, when we have ourselves put it in practice by establishing a uniform standard at home.

POSITIVELY.

INTENDING advertising patrons would save us and themselves trouble in the way of correspondence, if they would *accept* our published rates as absolutely *invariable*. The RURAL'S price is 30 cents a line, unless 1,000 lines are engaged and used within a year from the first insertion. *Then* the price is 25 cents. Now we will not even consider, any deviation from those prices, no matter how large the proposed contract may be.

A COMMENDABLE MOVE.

A STATE Farmers' Institute has been called at Ithaca, N. Y., to be held February 16, 17 and 18th. We are not yet in receipt of the programme, but we are assured it will be one of deep interest to the farmers of the Empire State. We hope every farmer who can possibly do so, will make it a point to be in attendance. Set in motion the ball that should never stop till we have some Body in this State with authority to hold, not a single Institute each year, but a score or more. Reduced rates are assured on all railroads, and we hope to see a rousing turnout. For further particulars write to Prof. I. P. Roberts, Ithaca, N. Y. We shall have more to say about this later.

TO NEW FRIENDS.

OUR seed distribution for 1886 (now soon to be mailed) will contain the following quantities of seed:

Angel of Midnight Corn, from 80 to 85 kernels.
Alaska Pea, 200 seeds.
Mixed Water-Melons, 50 to 60 seeds.
Hackensack Muskmelons, 50 to 60 seeds.
Bird Cantaloupe, 15 to 20 seeds.
Garden Treasures, about one-eight of an ounce.

Multiplying these figures by 20,000, some idea of the entire cost of the distribution may be arrived at. Then $1,000 for postage, and also the cost of seed envelopes, putting up the seeds and sending them off must be added.

It has *never* been the design of these seed distributions to furnish seeds in *quantity*. We leave that to the seedsmen. Our object is to enable our readers to test the latest and most promising novelties without incurring any expense beyond that of planting and cultivation.

WE WANT

a large number of sketches for 1886 from our readers, for which we propose to pay our regular price for such matter, as the illustrations *appear* in these columns. It matters not how rudely the sketches are drawn, if only our artist can understand them and the descriptions which accompany them. The sketches desired are those of *any* contrivance whatever which will save labor or promote economy or comfort, whether for man or beast. For the farm, garden, orchard; for the barn, stable, shed, corn-crib, carriage house, tool-house, granary; for the pig-pen, poultry yard, poultry house, chicken coop; for the sheep, cattle, swine; for the house, kitchen, laundry; for wells, pumps, well-houses, ice-houses, we want sketches for illustrations. We want sketches and plans of farm houses, dairy houses, and all sorts of farm buildings; of every sort of tool or implement used in country life; of anything, in short, which may help in any way the farmer, the farmer's wife or children, and all who work the soil either for pleasure or profit. Go to your neighbors and see if they cannot help you; see if they have nothing upon their premises which you would like, and which you think would be worthy of being illustrated in the RURAL NEW-YORKER. We do not ask or expect artistic sketches or good writing. We only ask for legible writing and for sketches which may readily be understood. Photographs of any of the above will be acceptable.

IMPORTANT.

OUR REGULAR premium-list offers liberal pay certainly to all who will assist in increasing the RURAL'S circulation for 1886. It would seem, however, as if all neglected our

$3,300

worth of presents for the largest clubs, regardless of their size, for the reason, apparently, that all seem to *take it for granted* that *others will secure these presents*, and so they prefer to work for the regular premiums, which, though more liberal than ever before, will not pay half as well as would these presents. It seems probable, therefore, that for 1886—the same as last year—this list of sterling presents will be so neglected that they will be awarded, in many cases, for numbers of subscribers which, at $2.00 each, will amount to less than the *actual cost of the articles to be presented*, while many will not be awarded at all. The list of presents referred to will be found in our issue of November 14, last, and is worth looking at.

MANUFACTURERS, BEWARE!

THE Ohio Wool Growers' Association at its recent session petitioned Congress to restore the tariff on wools fixed by the Act of 1867, and appointed a committee "to go to Washington and importune Congress." Yes, that's what the agriculturists of the Nation, constituting half its industrial population, are accustomed to do when seeking State or National legislation in behalf of their special interests—they have to "*importune*" the lawyers, manufacturers, merchants and bankers who constitute nine-tenths of the State and National Legislatures. Well, "who will be free, himself must strike the blow." Just in the same way, the farmers of the country, the best and far away the most multitudinous part of its population, must "importune," a handful of people in other limited callings for their rights until they assert their own importance and dignity. And, then, what a howl goes up from the editorial sanctums of all the political papers at the supreme selfishness, imbecility and impudence of the sheep-raisers of the country in seeking a protective duty on wool, while it is to the interest of all other wearers of woolen clothes that the price should be low! Even the papers that favor a heavy protective tariff join in the outcry. They want no protection for raw materials—the products of the farm. Protection for the manufacturers is all they care for; and the manufacturers of woolens are benefited by a low duty on imported wool. The farmers of the nation are out of pocket millions and millions of dollars every year on account of the higher prices they have to pay for goods, owing to the heavy duties on foreign wares for the protection of the manufacturers of the country. At the National Farmers' Convention lately held at Boston, it was resolved that while it abstained for the present from advocating free trade or protection, it insisted that while farmers had to pay millions annually for the "protection" of manufacturers, it was only just that their own interests should likewise be protected in the few cases where "protection" is possible. The wool-growing interest is the most important of the "few." It will be a "cold day" for the "protectionists" when the mighty mass of farmers become "free-traders."

WE VOTE "AYE."

REPRESENTATIVE Albert J. Hopkins, of Illinois, has introduced a bill into Congress putting the manufacture of oleomargarine and similar compounds on the same footing as the manufacture of whisky and tobacco. His bill provides, first, that all manufacturers of the stuff shall be registered and shall give bonds to the Commissioner of Internal Revenue; second, that every manufactory shall have a conspicuous sign, giving the name and business; third, that the makers of the oil used in the manufacture of bogus butter and cheese shall keep and furnish to the Collectors of Internal Revenue a record of all their sales; fourth, that the manufacturer shall place on every tub, crock, box or other package a printed label similar to those now placed on tobacco packages, stating that all the requirements of the law have been fully complied with; and it shall be unlawful for any party to use such package a second time; fifth, the tax is required to be paid by stamps the same as in the case of cigars, etc.; sixth, imported adulterated butter or cheese will have to pay the same tax as that manufactured in this country in addition to the regular import duties.

The tax is fixed at 10 cents per pound for butter and three cents per pound for cheese substitutes. The penalties fixed for the violations of this Act are made very severe, and no loop-holes are left for the manufacturers to crawl out. "Adulterated butter or cheese" is defined as "any article or compound manufactured, in whole or in part, of any oleaginous substance, oleomargarine, suine, butterine, beef-fat, lard, neutral-vegetable oil, or any substance other than that produced from unadulterated milk, and designed to take the place of butter and cheese, or to be sold or offered for sale as an article of food."

We hope this bill will be speedily pushed through to a passage. It is alike in the interest of every laboring man, every trading man and every producer, as well as of the farmers of this country. It is an act in the interest of honesty as against fraud. We would suggest, however, that the bill is not quite complete. We think the compelling of the entire product to be colored some distinctive tint would provide an easy means for its detection, whether offered for sale in or out of the packages. Let this little ammendment be added and then we hope to see the measure speedily become a law.

BREVITIES.

WE want our friends to try Schwerdler's Maple as an ornamental tree.

FOR *home* use we know not to-day of a better raspberry than the Turner.

THE Rancocas Raspberry seems to be well received. Another season will help to settle its merits at the Rural Grounds.

SHORT, pithy articles from our subscribers are always welcome. We can always find space *for them*. Thus we should help one another.

THE RURAL NEW-YORKER posters for 1885 will be gladly sent to all who will tack them up in their carriage houses or other conspicuous places.

HENDERSON'S "Rose" proves to be one of the best varieties of celery we have ever tried. One can not do much better than to select this and the Perfection Heartwell for his main crop.

CHUFAS, or Earth Almonds, are offered in most catalogues. Under the Farmers' Club of this week two Southern firms are mentioned, giving the impression that they are not offered by Northern seedsmen.

NEXT week we shall give another full exposure of Florida land frauds. Let no one invest a cent in Florida land until he sees the result of our investigation, unless he has inspected the place personally or through a trustworthy and competent friend.

THE very best yellow raspberry we have ever raised is a seedling from Mr. Macomber, of Vermont. It is probably, however, a seedling of the Antwerp, and its hardiness is as yet doubtful. We shall report later. The berry is of the largest size, though rather soft.

THUS far this Winter our Wyandottes have not given us so many eggs by half as last Winter. The reason is, as we believe, that the chicks were hatched later. With our Wyandottes we are again trying the Crested Golden Spangled Hamburgs. But our strain seems tender and feeble.

THERE is a road leading out of Tokio (Japan) 22 miles long with the Retinispora plumosa (an evergreen conifer, somewhat resembling Arbor-vitæ) planted on either side. So we are informed by Mr. Peter B. Mead, who has relatives living there. This tree, as well as its variety, Retinispora plumosa aurea (golden-variegated), thrives well at the Rural Grounds.

YEARS ago, 12 perhaps, we first tried Tailby's Hybrid Cucumber. We thought it then the best of cucumbers, being almost seedless and very tender. We have spoken of it often since, and now it may be found in many catalogues. But it is not a productive variety, and would not pay to cultivate for pickles.

The Poultry Yard.

A FINE BIRD.

We show, at Fig. 49, a handsome specimen of the Partridge Cochin breed of fowls. Our picture is re-engraved from the London Live-Stock Journal. This bird belongs to Mrs. H. J. Goodall of England, and recently won the cup at the Chrystal Palace Show. He was described by the judges as being "as nearly perfect, as birds of his breed are likely to be got." He is very rich in characteristic color; his legs are fluely covered, and he is truly a giant as to form. The Cochins appear to be exceedingly popular in England at this time. Their hardiness, good nature and admirable laying and breeding qualities render them particularly valuable on small farms or in yards. Their large size and admirable table qualities find them many friends among those who do not keep poultry for profit, but simply for the purpose of supplying fresh eggs and chickens for their own use. In this country, the Cochins have not made the great reputation that was expected when they were first introduced. Most farmers desire a "general-purpose fowl," and the Plymouth Rock and Wyandotte come nearer their ideal. Still, we find marked evidences of the Cochin blood among the live poultry sent into the markets, and it is clearly evident that the breed has been widely scattered about. Their march into popular favor hereafter will be slow, but sure. Their many admirable points will surely be recognized when the poultry business becomes more systematized.

POULTRY ON THE FARM.

MICHAEL K. BOYER, JR.

Care of poultry; inducing egg laying; "poultry powders"; perches; Plymouth Rocks; Wyandottes; Brahmas; Leghorns; crosses; eggs for hatching; will the business pay? sources of gain; poultry business on a cash basis; causes of failure.

In the first place, poultry must not be crowded. Here is where the wrong too often lies. Fowls need room, and we must give them plenty of it. Every rule of cleanliness must be enforced. At least twice a year the interior of the house should be white-washed, and the exterior painted. Every week it should be carefully cleaned of the droppings and every two weeks the nests should be destroyed, and new ones substituted. Sulphur should be strewn in the nests to ward off lice. Droopy, or otherwise sick chickens should at once be removed from the flock. Fowls should have plenty of exercise, plenty of fresh water and food, all the greens possible, and, in fact, anything and everything that will promote health and egg production.

Hens can be made to lay, all other assertions to the contrary notwithstanding. Let them have plenty of cracked bone, ground oyster shells, lime, buckwheat, oats, greens, etc. Feeding is everything. Give corn sparingly during Summer, and then only as evening feed, while in Winter it should be more plentifully fed. Change the drinking water several times a day. A few rusty nails placed in it give a cheap and excellent tonic.

The country is full of all sorts of poultry powders, which claim to keep fowls in constant health, with almost a guarantee of an egg every day. Some of these preparations are good, but many are not worth anything. Cleanliness is one of the first and best steps toward the promotion of health. Remember that proper feeding, such as I have mentioned, will give the hens the material, and force them into actual service.

I may add a word concerning perches. In this so many farmers err. I do not like the thin, round prop. I find a wide—say 3x4-inch scantling—roost far better, especially for the heavier breeds. These should be placed about one foot above a dirt catcher (a platform erected directly under the perches), which should not be more than two feet above the ground floor. By this arrangement, the droppings can easily be cleaned away. As a caution, I might advise not to let pullets roost until they are about four months old, unless shape is no object—I consider it of some value.

There are many varieties of fowls to select from, and which can serve many purposes. My particular fancy are the Plymouth Rocks. I prefer them because they are hardy, of good size, excellent layers, and fine table birds. With the proper feeding, they make superior winter layers, and this is a valuable point for farmers to consider, for at no other season of the year are eggs in such demand, nor are they ever at such a high figure as during the cold months. The Wyandottes are also highly rated in all these qualities, only their eggs are smaller in size.

My father was an extensive breeder of the Brahma fowls. My chief objection to them is their heavy weight for hatching. I have known them to crush many young; but it must be said of them that they are faithful mothers, and patient and quiet hens.

The Leghorns are good layers and essentially non-sitters. I have had excellent results from a cross with them and Plymouth Rocks. For general table purposes, almost any variety crossed with Game, gives excellent results. A very successful cross of mine has been the Game with Plymouth Rocks.

When wanting eggs for hatching, pick out a half dozen of your best hens and yard them with a pure cock, and the regular standard will be retained. For general use, a count of 25 hens to a cock will not be too much.

Now, let us carefully consider the value of the business—will it pay?

1st. By a proper system of feeding, and by careful attention, fowls will lay in Winter. It is needless for me to call attention to the prices paid for eggs during the cold months.

2d. The large cities pay enormous sums for early spring chicks. With an incubator and a brooder, we can have a good supply for the market by February or March.

3d. Poultry manure is considered a rich fertilizer, and very salable. Catch up the droppings and make an item of them.

4th. Feathers, too, have a market, and command figures that make it an object to preserve them. Geese feathers especially command high prices.

Let a man invest but $1,000 in the enterprise, and if he has any business gumption whatever he can, the first year, realize six per cent. on his capital. This is no idle talk; I know it to be a fact, and, moreover, I believe that if the strictest attention is paid to the business, a still better result can be obtained. But this is a business that one dare not go to sleep at. He must be wide-awake, and market early and well. Be up with the times, and you'll not "get left."

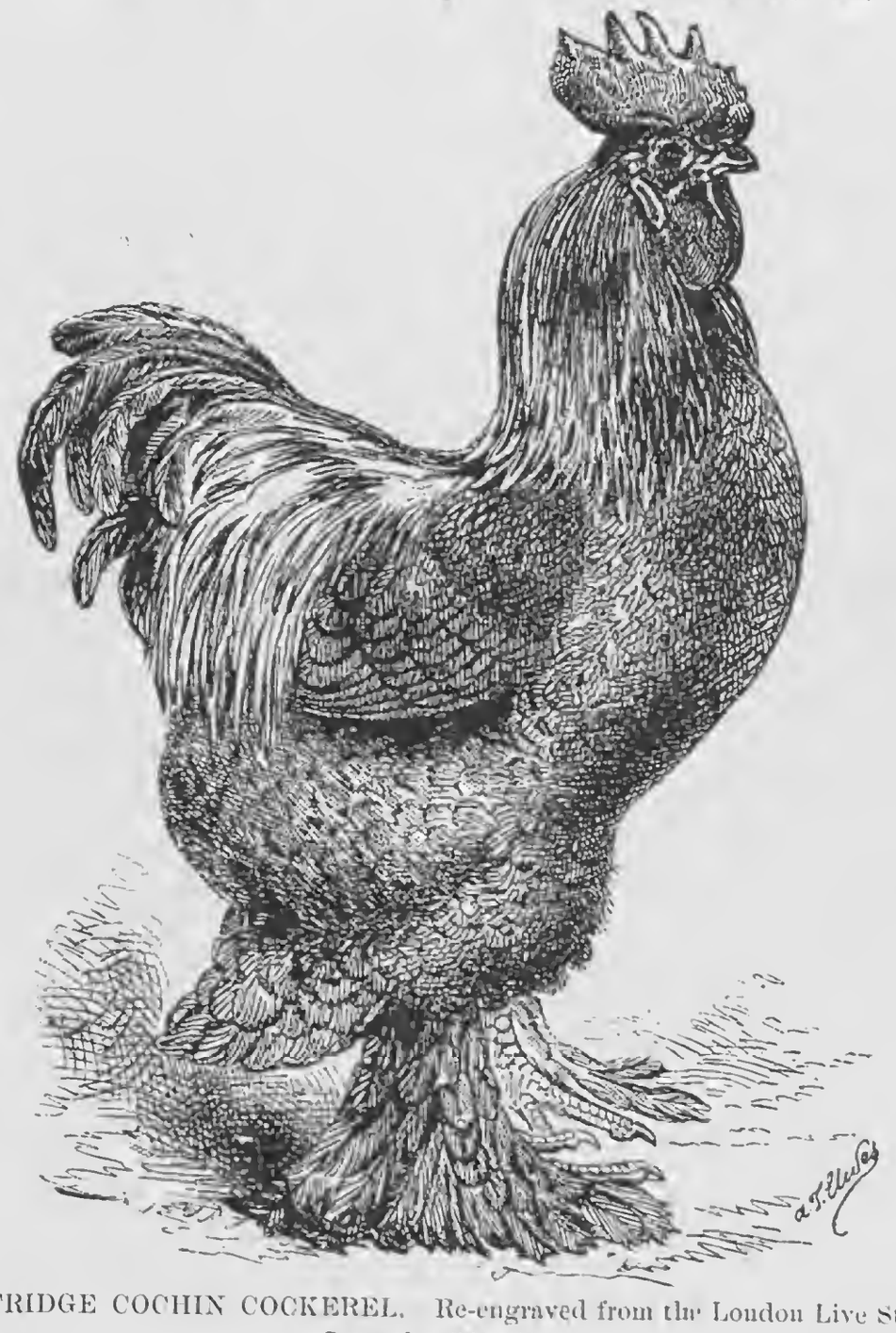
The enterprising poulterer will establish regular custom. For instance, he will arrange with large consumers to supply them regularly with so many boxes of fresh eggs. This the consumer will consider quite an accommodation, and he will pay full prices for every dozen, which gives the poulterer more cash and saves him a large amount of labor. It pays better to sell to consumers than it does to dealers, as you make the profit you would have to give them, and without the outlay of any additional expense or labor. It should be a fundamental rule to get as much real cash as possible. Therefore watch the markets closely.

The enterprising poulterer will set his hens or start his incubator as early in the year as possible, and then, watching the quotations, will ship into the markets just when the prices are at their highest. It is better to sell chick of 1½ pound when the figures are up to 75 cents, than to let your stock average two pounds apiece and have the prices drop to 50 cents a pound.

The enterprising poulterer will also carefully save the manure and feathers, and market them as soon as possible. One cannot afford to overlook trifles in any business. And there is so much scope in the work! Ducks, geese, turkeys, guineas and pigeons are also profitable and add pleasure to the labor. The markets cannot be over-stocked for years and years to come.

The great feature of the poultry business is that it can be conducted on a purely cash basis. You can refuse credit without affecting you in the least. There is always a demand for your surplus, and people expect to pay cash. To my mind no other business requiring such a small capital to start with, in comparison with other enterprises, opens up such a quick trade. I am surprised that more are not engaged in it. I believe it cannot be overrun.

If a man has enough cash to purchase a tract of land, erect substantial buildings, purchase stock, etc., and a little to live with, and keep the mill going awhile, can very soon establish himself. But some fail in this, as well as in any other business, but it is generally their own fault. How? Well, first, by not giving it enough *personal* attention. Second, by not economizing in the right way. Third, by not watching the markets and disposing of the stock when prices are high. Let a man have patience, business tact, enterprise, be wide-awake, and constantly have his shoulder at the wheel, and he will succeed. He will build up a paying business, and can save money.



PARTRIDGE COCHIN COCKEREL. Re-engraved from the London Live Stock Journal. Fig. 49.

Indust'l Societies.

NEW YORK STATE AGRICULTURAL SOCIETY.

[RURAL SPECIAL REPORT.]

The annual meeting of this society was held at Albany on Wednesday, January 20. The attendance was extremely meager and those present were mostly the officers of the Society. James McCann, of Elmira, was elected President and T. L. Harrison, of St. Lawrence Co., Secretary. An evening session was held, attended by but few. Dr. Sturtevant read a paper on silage, and showed samples of corn preserved without any pressure in the silo. The Doctor said the experiments at the New York Station had conclusively shown that too large a ration of silage always had an injurious effect upon the milk and butter; that 10 pounds per day is the most desirable amount. He had also found that a certain amount of acetic acid is, not only not injurious to the cows, but that it produced positively beneficial results. He also thinks that when properly ensilaged, the raw material is actually improved by the process, and that the silage will produce better results than would the same forage in its green state. He also thinks there need be no haste in filling the silos. In 1885 it took about 25 days to put in the corn used to fill the silo at the Station. They had merely leveled the material as put in, not even treading it down, and when filled had put on the plank covering without weighting it at all, and the silage shown was the result. The surface for six inches was found nearly rotten; but below that the silage was bright, and from that the sample was taken. This silage looked of good color, but to the smell it was very sour, and the writer would prefer good mangels or carrots as a diet for the cows whose milk and butter he was to eat.

There is one thing in all these silage-talks not easy to understand. Why is it, that if 10 pounds of silage is so good for a cow, a greater quantity is injurious? No one ever found any injury resulting from a full ration of clover hay or good sound, well cured fodder even if allowed its fill, nor in feeding mangels or carrots if the cows are housed in warm stables. Here is a conundrum for the advocates of "cattle krout" to explain.

Mr. E. H. Roberts, of Utica, delivered a very able eulogy on Mr. Samuel Campbell, the former joint owner of the famous New-York Mills herd of Short-horns with its $35,000 cow, and also a long-time member, and ex-President of the State Society. Gen. N. M. Curtis gave a short history of the cattle diseases of this country, and the measures being adopted to stamp them out. He urged the importance of a National law with a proviso for buying and slaughtering diseased cattle. It would be a good plan if a little more lightning could be infused into this old society, so that its annual meetings, might be something like those of yore, when instead of a couple of baker's dozens being in attendance, the Assembly chamber could not hold all who gathered. Where is the trouble and what the remedy? W.

NEW YORK EXPERIMENT STATION.

(RURAL SPECIAL REPORT.)

The Board of Control held its annual meeting at Albany, on January 19th. All the members were in attendance. The usual method of having the reports of State institutions printed by the public printer is so very objectionable, on account of their being so long delayed, that the Board this year obtained leave to print its own report, and so in making its annual report had a complete printed copy to present. This is a great improvement as the report goes out while the matter is fresh and timely, instead of a year behind as usual.

R. J. Swan, of Geneva, was elected President, and N. M. Curtis, of Ogdensburg, Secretary. In laying out work for the coming year, it was decided to continue the experiments now in progress of feeding cattle to ascertain, by actual tests, what may be called the American-value of certain feeding stuffs. That is, their comparative value as grown on our soils, and as fed in this climate under favorable circumstances both for the production of meat, and when fed to cows, for the production of milk and butter.

A resolution was adopted making the station a "trial" ground for new plants, seeds, vegetables and fruits, without cost to the owners sending them there, and that all such things, sent there for test, shall be considered as only in its hands for trial, and under no circumstances to be disseminated; and that such things should have a full and careful trial and be reported upon from time to time by the station.

This is a step that every station should take. Every State should have several such depots where new candidates for public favor could be carefully tested and an honest report made for the guidance of the people. It would work immense advantage both to the originator of good things and the public. The owner of good things should see to it that their candidates be now placed in Director Sturtevant's hands, as a failure to do so must be construed as an evidence of an unwilliugness to have them fully tested, and their true character made known. The New York Station is doing a good work and taking the lead of similar institutions in this country, and the misfortune is, that some better means are not provided by which its good work may be brought more prominently before New York farmers. We need Farmers' Institutes to do this most thoroughly. W.

YOU WANT IT!—*That No. 22 Enterprise Meat Chopper is worth its weight in gold to every family. While it sells for $4, we give one to any one sending a club of only four new subscribers. Will you have it?*

Miscellaneous.

CRUSHING AND CUTTING CORN FODDER.

I FIND by practical experience, that corn fodder is more than doubled in value by crushing and cutting it. I use a cutter that crushes before cutting, and that cuts one-fourth of an inch long, rendering it all palatable for all kinds of stock, and eaten readily without the least waste. And for me, a pound of stalks that have been harvested at the proper time and well cured, is equal to a pound of the best hay. This may seem to many a little overdrawn. Before I had learned it by experience, it would have appeared to me absurd. A vast amount of stalks are thrown away, so to speak, by being thrown out in barn-yards and fields in the foddering of stock, and in the majority of cases but very little benefit is secured from the practice. The leaves and husks are eaten, and, what I have found to be better, the stalks are wholly lost as a food. J. L. B.

Chatham, N. Y.

FUNGUS CAUSES SCAB ON POTATOES.

I THINK if any one will examine a freshly dug scabby potato with a microscope, he will find a fungus busily at work. I have never failed to find the pest in different fields and at different times whenever the scab appeared.

New Hartford, Conn. C. G. R.

CLEARING LAND.

EVERY farmer who has bushes on his land should clear an acre every year, and if he has turned over a piece this Fall, let him next Summer harrow, manure and seed down, and report.

Portland, Maine. F. H. P.

For Women.

CONDUCTED BY MISS RAY CLARK.

WHAT TO READ, AND HOW TO READ IT.

I.

SEATED the other day on a deal box in my storeroom, and surveying complacently my rows of well-filled jars, I drew a deep sigh of relief at the thought that the breathlessly busy season is over, and the long evenings have come, with the opportunity of growing once more familiar with the printed page. And for the moment a pessimist, I wondered whether, after all, this same printed page is not as often an instrument of evil as of good, whether, when garden and field and preserving-kettle claim us again, we shall lay aside our books wiser and more noble women for their society.

As a result of my musings, it was "borne in upon me" to lift up my voice in the columns of the good RURAL, before our first desultory literary excursions harden into the winter's habit.

There is an idea, as prevalent as it is false, that a woman who is reading is necessarily gaining some culture. The non-literary mind makes no classifications. Books are books; and, if a daughter of the house is prone to become absorbed in reading, her family, and very soon her friends, regard her as devoted to self-improvement, as "a clever girl," perhaps even as something of "a blue stocking;" Never was there a greater mistake! She may be aimlessly drifting along through half-comprehended pages; she may be amusing herself, perhaps as harmlessly, certainly as uselessly, as if she were playing at "cat's cradle;" or, worst of all, she may be committing intellectual and moral suicide, unfitting her mind to act vigorously, or her heart to beat purely and truly. Few subjects are of more momentous importance to us than what we read, and how we read it.

Our associates are, many of them, forced upon us; our books we choose, and by that choice, we are doing much to determine the poise of our minds, and the "ply and tendency" of our characters.

Obviously then, our first rule must be, Never read a *bad* book. No matter how great the temptation; no matter who has read it before you, resist firmly every influence which is for evil and not for good! Life is too short, and sin too powerful for us to lend even our imaginations to the side of wrong. I have heard girls say, laughingly: "When I am told not to read any book, I never rest until I get hold of it!" Do you ever think, girls, *why* you are warned against certain books? Simply because those who love you, know they would sully the purity of your fair souls! Sin may be forgiven, and error retrieved, but who can ever restore the bloom to the peach, or innocence to the heart? Years ago, I heard this narrative from an aged and holy man. I have never lost the impression it gave me. "Thirty years ago," he said, "I was waiting at a street corner for a friend. I opened a volume on a neighboring book stand. The first sentences that met my gaze were of a vile character. I hastily put aside the book, and, seeing my friend, joined him at once. During all these years, I have read many books, wise, eloquent, religious. Alas! how little I can recall from their noble pages; but those few sentences of that ribald volume are written in my memory. I would give worlds to forget them, but I cannot." This little anecdote has been to me a life-long sermon. May it be so to you! While we are upon the painful subject of bad books, let me say that the *worst* books are not those vulgar old stories that everybody has heard of and nobody reads, those stories that "call a spade a spade," and "keeps you so busy holding your nose that you can't even laugh at their jokes," as a recent reviewer cleverly said. Far worse are the refined modern tales that gently break down all the barriers between right and wrong, that use no word which would bring a blush to the cheek of "Mr. Podsnap's" typical "young person," that don't even "leave a bad taste in your mouth," as was said of Balzac, but that subtly and surely make the eternal laws of purity and truth seem to crumble as do the rocks themselves under atmospheric influences! A novel was once given me, which a young girl had just read aloud to a large circle of ladies and gentlemen. She did it with impunity; there was not an "improper" word in the book, but the entire romance treated of a young wife's love for one who was not her husband, and the reader was constrained to give her the fullest and most approving sympathy! A bad, immoral book, under all its delicate wording, even as a book which treats of sin, plainly shown to be sin, may be a pure and noble book. The test is not whether a book can be safely read in general society, but whether any portrayal of vice is sanctified by the motive of the portrayal; whether it puts before us right and wrong as God puts them; whether our utmost tenderness for the sinner results, not in our condoning the sin, but in something like the Divine pity which never forgets to say, "Go, and sin no more!"

Having resolved to read no bad book, resolve just as firmly to read no useless book—no "trash." "I wish," said to me once a gentle-looking teacher, "that Miss Braddon, Mrs. Southworth and Mrs. Holmes were burned on a funeral pile made of all they ever wrote!" I forgave her the exclamation when she told me that, having before her a class of 90 grown girls, some point in the history lesson suggested to her to ask how many had read "Ivanhoe." Six hands were raised! "How many," she continued, "have read "The English Orphans?" and lo, there were 80! "I think 'The English Orphans' is real sweet," I hear some girl poutingly whisper. Ah, yes, my dear, if life were only long enough for everything! But think what great books are lying closed around you while you dawdle over the "real sweet" ones! Don't be frightened at the words "great books;" greatness is always simple, and while the mandlin sentiment will unfit you for your daily duty, whatever that is, the truly great novel, or poem, or biography, if you read it aright, will make you knead your dough more thoroughly and scrub your floors with a more gallant heart! There is an atmosphere about the mountain tops of literature that fills the mental lungs and sends the sluggish blood coursing along the veins, and we come from those hights looking about for something to do "with our might," if only to dust a room! We catch something of the author's thoroughness and fine finish, and, as we cannot put it into words, we are fain to express it in resolute avoidance of all slackness and slovenliness of practical work.

And the last rule of abstinence is: Never read an unaccredited book. It stands on the same footing with the wayside tramp. He *may* be an admirable character, but appearances are very much against him!

And now, having told you what *not* to read, I fear I have already transcended my limits, and must postpone until another letter the fulfilment, or rather, the beginning of the fulfilment, of the promise of my title.

A COUNTRY HOUSEKEEPER.

SKETCHES OF GERMAN LIFE.

BERTHA A. ZEDI WINKLER.

PEASANT CHARACTERISTICS.

THERE are some things which call forth exhibitions of traits quite beyond the surface of ordinary life. Among these are periodical sensations and excitements furnished by that vagabond tribe known as gypsies, traveling acrobats, and itinerant musicians. Their advent marks epochs of village life from a pleasurable as well as pecuniary point of view. For what they do not give in cash for a gypsy's flattering prophecy, or to an importunate smaller appendage of the caravan, they lose by pilferings from chicken-coops and vegetable gardens. Many of the peasants are left poor in purse and poorer in contentment for this reason. Being ignorant, the smallest appearance of anything beyond their common experience or ability, excites superstition and often an inordinate desire for gain by supernatural means. Peasant simple-mindedness and shrewdness is often amusingly illustrated by the escapades of shrewder vagabonds with whom there is no getting even. They have always in reserve that fund of "Mystery and Magic"—mere trickery to call it by its right name—which fills the good people with awe and dreading admiration. The appearance of a "band" is the signal of sharp watchfulness. Geese that have been left to roam at large are quickly driven home and stabled, and so with everything that can possible come within reach of covetous hands. On the other hand, when anything is once stolen no effort is made at recovery though they may see their property in broad daylight by the tents of the thieves, the recovered chicken might have a spell put on her and afterwards lay bad eggs; or the goose shed feathers on which no one could sleep, or die in peace. They have seen the jugglers perform some impossible things and surely anyone that could walk on a tight-rope in mid-air must lean on the invisible arm of the devil. So they look on with grave, absorbing fascination, ask timid questions and are told bold lies for which they pay, quite satisfied, and afterwards go to church more diligently for having had to do with the evil one.

This desire to pry into the mysteries of life as they deem it, is not a healthy craving for knowledge. It is an impulse of cupidity. They judge everybody's motive by their own. Every person known to carry on some business outside the pale of ordinary life and knowledge is credited with supernatural powers from Satan to make money. The mysteries of alchemy still buzzes in many an inquisitive head, and souls are yet subscribed for obtaining knowledge of some "black art."

All this is quite in keeping with characteristics of a better tendency. Their necessities drive them to scheming for better conditions, and their superstitions and general ignorance of the wide world keeps them from realizing their folly, while the sinfulness of it is outweighed by some such thought as "the church we have always, but the magic man comes but once a year." After a week of excitement and wealth-seeking in vain, everybody settles down and makes the best of their old life, sorry that they have been tempted from it even in thought, and heartily glad, after the pastor's visits and reconciling prayers to God, that the devil did not come when they called him.

Besides the traveling shows, there is a peculiar mode of communicating tragic and sensational news from the cities. The latest murder, robbery, or railroad accident is carried in descriptive and horribly illustrated detail on painted canvas from village to village, by some moneyless adventurers who make a living in this way.

While the gaudily painted canvas picture of the tragedy, given, of course, in its most exaggerated style, is displayed on every street by turns, the bearers, in horrible monotonous and doggerel verse, sings of the occurrence and everybody stands agape. Tears soon come to the eyes of the most susceptible, and everybody's feeling is wrought up to an injurious pitch. That being all the news that comes to them of the great world, they are not likely to form a very high estimate of it. To them it is a maelstrom of wickedness. And if they only go to the city to yearly market, they keep guardedly within their booths, or preserve that half scared watchfulness, if necessity takes them around, which we can see in their faces any day at Castle Garden.

AS THE HOMES, SO THE NATION.

"IF our homes were all abodes of purity there would be no more national questions of reform to solve. There would be no more evils rising up and overshadowing our land till they must be supplanted by reform or crushed out by revolution. If every school girl could perfectly understand this, what a step would be taken in the advancement of the next generation! In conversing upon this topic the other day, a lady of rare culture and intelligence said "I always feel a twinge of unpleasantness whenever any one speaks of the corrupt government at Washington, for it always brings to my mind the thought that there is a corrupt people behind it. The government cannot rise above the people. When the day comes that the farmer comes to town with just as straight sticks of wood on the bottom of his load as he has on the top, and just as large potatoes on the bottom of his basket as he has on top; when the merchant gives full measure for a yard; when capitalists do not cheat their dependents—then and not till then we shall hear no more of bribes and the stealing of public money at Washington."

I thought this remark would grace any political speech, but ladies as a rule do not make political speeches, yet we can do a great deal in our homes for politics. No woman should think she is prepared to converse intelligently in a mixed company without being well versed on all political questions of the day. To thoroughly understand these things is to make women more thoughtful of their responsibility and to make a closer connection between our home and our public life. The home life should foster in every child such a love for truth and virtue that the National life will be strengthened in such characteristics. So let us see to it that the daily newspaper is often found lying on top of our fashion magazine. EMMA C. STOUT.

JET BONNET.

ANY one having a little knowledge of millinery, as well as some taste, can always make

over a bonnet or make a new one, more particularly if they have something for a pattern. So we present in this cut an exceeding-

Miscellaneous Advertising.

Art needle-work and valuable embroideries are frequently ruined, or their beauty much impaired by washing them with ordinary soap, which is too rank for such delicate articles. A simple, and the proper method is to make suds of hot water and Ivory Soap, and allow to cool till lukewarm. This solution, while very effective, is perfectly harmless.

Free of charge. A full size cake of Ivory Soap will be sent to any one who can not get it of their grocer, if six two-cent stamps, to pay postage, are sent to Procter & Gamble, Cincinnati. Please mention this paper.

ly stylish, but easily to be made bonnet. The front has the velvet put on in bouillonnes, or puffs, divided by rows of beads the color of the velvet used. If brown, then brown beads, or iridescent, which makes the bonnet rather more dressy. The lace has fine wire run through so that it can be arranged in high loops and, be made to keep in place. The strings are of velvet ribbon.

Domestic Economy

CONDUCTED BY EMILY MAPLE.

TABLE MAT.

MRS. HIGHTON'S DIARY.

ANNIE L. JACK.

JANUARY 10th.—The holidays are over, we are settled down to steady routine and fearfully cold weather. Edgar says this house is not nearly so warm as his late lodging, and the water-pipes bursting the other day, added to the discomfort. I wonder if he is sighing for the freedom and comfort he used to enjoy. Last night I had a bad headache and went to lie down in my dressing room. I must have fallen asleep, for when I awoke I heard voices and recognized Jack Sebright. He said something in a bantering tone and then I heard Edgar's reply: "Its no joke having a sick wife and a careless servant, old boy. Why, I had to go to a hotel for my breakfast yesterday; wife couldn't get up and there was no sign of breakfast. My business requires promptness—I can't wait." "Why didn't you get up and cook it yourself, Ed?" inquired Jack; "It would remind you of the old camping days." But Edgar made no response, and I could smell the tobacco that they puffed away in silence. That is one thing I have against Edgar; he gave up smoking before we were married to please me, but as soon as we were fairly off on our trip he began to smoke cigars. I hate tobacco; it makes me so sick, and I do think he has very little consideration for me. But my headache vanished as I lay on the sofa, and I arose and bathed my face, combed my hair and put on a pretty dress. Then going down to the parlor began playing softly one of Chopin's waltzes, after turning up the gas. The gentlemen soon came down stairs, and Edgar's "Why, Dolly!" amply repaid me for the effort I had made. But how homesick poor I was in that quiet parlor with the newness shining on everything and Edgar and his friend criticizing, even though perhaps they admired me. I was proud of my music, for at one time I had intended to devote my life to it; that was before Edgar came and changed the current of my thoughts. Dear mother always made me practice and study, and did all the cooking herself; she was used to it, she said, and I was far better at entertaining company, so I did not learn how to bake and boil and attend to the thousand and one things a housekeeper must. Oh, how I miss the comfort of my old home! Yesterday we had a boiled ham for dinner, and I know mother used to have a box of parsley in the kitchen window that stayed green and crisp all Winter, to be used for trimming, or in sauce, so I sent the girl to the greengrocers to get some. It was 50 cents for such a little handful, and hard to get, she said. So different from home, where everything is so plentiful, for if I want a few apples, or a carrot for the soup, it costs so much to get it. We have a cellar, but the furnace makes it so hot we cannot keep anything in it, and I always feel so lonesome when I just look down into it and think of home and all the good things mother kept down there, from cabbage and celery in the outer compartment to cherry cordial and apples and the wonderful jars of fruit.

HOUSEKEEPERS' MUTUAL HELP CLUB.

GLADDYS WAYNE.

IT has often seemed to us that the housekeeper who has that "mine of wealth," a good orchard, to draw upon, need never be at a loss for something nice for dessert.

Apples may be prepared for the table in so many ways that they seem invaluable. The following, long practiced at our house, is an excellent way: Pare tart apples and with a pointed knife remove the calyx end of the core; put the apples, stem down, in a shallow baking dish, one apple deep, fill the cavity in each with sugar, also sprinkling sugar (more or less as you wish them rich) among the apples, pour in hot water to nearly half fill the dish. Bake till soft, then remove to a plate to cool, pouring over them whatever sirup may remain. The lower part of the apple should be clear as amber, the upper a light delicate brown. When piled on a glass dish or white plate to be served, this makes a pretty dish. They may be served plain or with sweet cream. The Spitzenberg cooks very handsomely this way. However, though the housekeeper may bake and stew and preserve, converted into pies, puddings and all the dainty dishes known to her art, in my opinion she can never add to the native wholesomeness, deliciousness and beauty of the apple, the peach or the pear. Pile glass dishes with the fresh, ripe, mellow fruit, and what fairer or more delicious dessert can be desired? And who would not rather be treated to a simple dessert like this (or none at all) than have, when visiting, the hostess spend the greater part of one's stay in preparing elaborate dishes that give not half the pleasure derived from these fair creations of a higher hand.

The lack of apples, etc., which seems one of the greatest inconveniences of a "new" country, has led us to give the culture of small fruits our greatest attention. I wonder if this lack also leads the Western sisters to resort to this method of securing fruit? Strawberry plants may be had so cheaply by mail, and they propagate so rapidly, that the cost of starting in their culture is very small. Currants and gooseberries well repay the care given them, both being easy of cultivation since we have learned to outwit the currant-worm. It is said that if the bushes are shaken each night after sunset the first week in June, it will destroy them; but a sure method, as all probably know, is to dust the bushes with powdered white hellebore. Gooseberries make excellent sauce; they are nicest used nearly full grown, when they scarce begin to ripen. I cook them with half their weight of sugar, and while boiling hot, fill the cans and seal them tightly, tightening them from time to time as they cool. Currants—red or white—are used ripe in the same way. Black currants, ripe, are also nice this way.

Uncle Dan says that gooseberries dried in sugar are an excellent substitute for raisins in mince pies. And by the way, some of the citron preserves, so dear to the masculine heart, also improve the mince pies; and mother thinks that mince pies without sugar-dried strawberries are not complete, whatever the other ingredients.

REWARD OF LABOR.

IN much of the work we are called to perform, there is a reward which far outweighs the strength expended. How many times, in the course of the year, do we reap actual benefit as a result of patient toil. Very fully do we housekeepers realize this, as we enjoy the simple home-comforts, which our busy hands help to produce. Have we sweet, clean, tidy rooms?—It is because we do not sit down in idleness. Do our children brim over with good nature and healthy activity?—It is because they are not neglected.

Do we not feel happier when we know that our daily duties have been bravely met—even tho' weary oftentimes—than tho' we had folded our hands and sat idly looking on while others worked for us?

How much better to be well and have plenty to do, than to be dragging out weary days upon a bed of sickness. MRS. S. B. E.

SUBSTITUTE FOR PUMPKIN.

I went into a neighbor's kitchen the other day, and she set before me a piece of pie to eat while we talked. "Your pumpkin pie is rather high colored," I said as I finished the last bite. "It's carrots," she said. I detest carrots—the flavor and smell and taste of them—but here I had been cheated into eating them, and did not know it. The pie was very good; made just like pumpkin. Things depend largely on how they are made. A. L. J.

One tablespoonful of kerosene beaten in one cup of soft-soap and rubbed among soiled clothes when put to soak, will make the washing easier. Kerosene also softens old, hard leather. MRS. A. L.

Miscellaneous Advertising.

Catarrh

Is frequently an indication of a Scrofulous taint in the system. Ayer's Sarsaparilla purifies the blood, and thus restores health to the affected membranes. It also stops the nauseous catarrhal discharges, and prevents the infection from reaching the lungs and stomach. Catarrh should be treated as a blood disease.

I suffered for years from chronic Catarrh. My appetite was very poor, and I felt miserably. None of the remedies I took afforded me any relief until I commenced using Ayer's Sarsaparilla, of which I have now taken five bottles. The catarrh has disappeared, and I am growing strong and stout; my appetite has returned, and my health is fully restored.—Susan L. W. Cook, 909 Albany st., Boston Highlands, Mass.

Ayer's Sarsaparilla,

Prepared by Dr. J. C. Ayer & Co., Lowell, Mass. Sold by all Druggists. Price $1; six bottles, $5.

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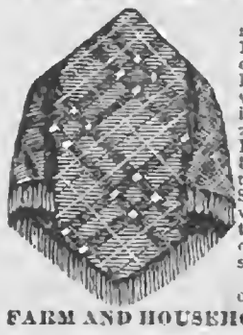

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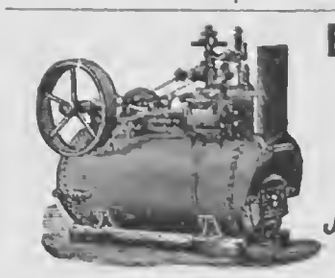

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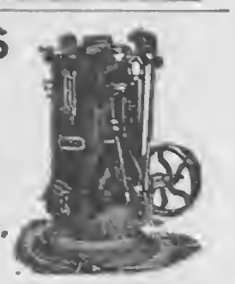

News of the Week.

HOME NEWS.

SATURDAY, Jan. 23, 1886.

THE anti-Chinese agitation still continues on the Pacific Coast. On Wednesday night, all Celestials in Chehalis, W. T., were driven for refuge to the brush by a gang of hoodlums. Most of the poor fellows were bare-headed and footed. It was snowing hard.....President Darling of the Toronto Board of Trade says that at the close of 1885, trade in the Dominion was in a sounder condition and business more active and healthier than at the opening of the year. Payments of late have materially improved, and purchases have been made with great caution.....The Cigar Manufacturers' Association of this city have declared a "lock-out" against over 7,000 men, women and children in their employ, who wanted a trifle more than starvation wages..... ....The Superintendent of the Board of Health of Montreal reports that there is not a single case of smallpox in the city or suburbs..... ....Still reports continue to come from the Northwest Territory that the Blackfeet Indians will "rise" in Spring. Now they are wandering off their reserves well armed, resisting the police authorities, etc. Sir John Macdonald says, however, that such reports come from malcontent traders, and that there is no fear of any trouble..... "Boycotting" is rapidly extending in this country. The Cigar Makers' Union threaten to boycott the goods of 14 firms that have locked their shops in this city. Three firms are boycotted in Syracuse, N. Y. The Knights of Labor have boycotted four manufacturers in Chicago. In Massachusetts alone, there are 200 local assemblies of the Knights of Labor, and all join in boycotting persons and their goods against whom boycotting has been declared. In Ireland, the evils of boycotting are by far the worst, and it is to suppress the practice that all parties in the English Parliament are inclined to combine in stringent legislation.....The divorce cases in Lane County, Oregon, for 1885, outnumber the list of marriages twelve to one, according to the San Francisco Bulletin..... The Government anti-Bell telephone suit is to be tried in Washington first, before the District Supreme Court, and then, whichever side wins, before the U. S. Supreme Court.... The Government is bringing suits against people who have unlawfully cut timber on the unsurveyed public domain. One fellow in Utah has mills of 10,000-feet a day capacity, and the lumber is worth $4 per thousand feet in the tree!.....The Labor Committee of the House of Representatives has acquired much importance owing to the organization of so many industrial societies, such as the Knights of Labor, the Granges, etc. The Committee is to introduce a bill raising the head of the Agricultural Department to the position of a Cabinet officer as Secretary of Agriculture and Labor. There was great competition to get good places on this committee, by those who wished to influence the "working men's votes."..... One of the severest storms that ever visited the Pacific coast began on Sunday and reached its greatest force about noon on Thursday. It raged from the northern boundary of Wyoming Territory to the southern boundary of California—rain, snow and wind at the rate of 82 miles an hour most of the time, wrecked houses, shattered windows, flooded basements, upsetting of wagons and railroad cars, total interruption of telegraph communication, railroad washouts, etc.. .... The silver discussion has been active in Congress during the week, where bitter language was used about the "conspiracy of capitalists and bondholders" who want a stop put to the coinage of silver dollars. Senator Beck, of Kentucky, started it; then Vance, of North Carolina, both Texas Senators, and Brown, of Georgia, joined in. Eustis, of Louisiana, wants to pay the interest on the $10,000,000 worth of bonds recently "called in," entirely in silver. The silver men are decidedly the most aggressive.....In Maine, the great prohibitionist State, over half the commitments to jail last year were for drunkenness, and exceeded those of the year before by 440. More bloody crimes and murders were there due to liquor than in any other State in New England! ..... Ex-Senator Ross, of Kansas, has been appointed Governor of New Mexico. .....Southern Dakota has 450,000 population—much more than is requisite—and having already elected Senators and Members of the House, is demanding admission into the Union as a State. There is a very good chance that she will be admitted, though some Congressmen growl that she didn't wait until her admission before electing Congressmen. Several of the old States, however, acted precisely in the same way before demanding admission ....Secretary Bayard and Chairman Belmont, of the House Committee on Foreign Relations, are reported to be heartily in favor of the negotiation of a new treaty of reciprocity between the United States and Canada. Public opinion on the other side of the boundary is also making itself known. At Halifax, for example, the Chamber of Commerce has unanimously resolved to urge the Dominion Government "to negotiate such reciprocal trade relations with the U. S. Government as would be mutually advantageous to both countries." .....Blaine goes strongly for silver coinage.....As the idea gains ground that the Panama Canal will prove a failure, the Nicaragua Canal route is gaining a great access of attention. It is thought much more practicable than Ead's Tehuantepec ship-railroad scheme.....Apostle Lorenzo Snow was sentenced last week in the District Court at Ogden, Utah, on each of three convictions of unlawful cohabitation, to six months' imprisonment and $300 fine and costs. James H. Nelson, on one conviction, was sentenced to six months' imprisonment and $300 fine and costs. Both men were defiant. James Taylor, on promising to obey the law, was sentenced for the same offence to pay a fine of $300 and costs, but without imprisonment.....Gov. Cornell says there is no intention among the Grant monument corporators to ask for public aid from the State or Congress. The fund now amounts to $114,145.....The earnings of the Canadian Pacific Railroad during 1884 were $8,349,557; expenses, $5,124,374—net earnings about three millions and a quarter, against a little over a million in 1884. The increase is chiefly due to transportation of troops, ammunition, etc., and also food, during Riel's rebellion.....The movement of manufacturers to avail themselves of the Pennsylvania natural gas as fuel is growing, many large manufacturers removing to the area where it can be obtained, as an enormous saving is made in the cost of fuel for furnaces, etc. The Standard Oil Company has gone into the business heavily, and will supply the gas to both Buffalo and Cleveland—the farthest points to which it has hitherto been driven.....One of the most serious explosions in the history of the Rocky Mountain mines took place early Wednesday morning last week in mine No. 4 at Almy, Wy., causing the death of 13 men..... An important decision of the United States Supreme Court in the Mississippi railroad cases completely settles the question that a State Legislature may pass laws prohibiting unjust discrimination in freight charges. It shows, too, that if the State Legislatures do their duty, there is no need of invoking the powers of Congress.....The cashier of the late Wall Street firm of Grant & Ward says that their debts at the time of the failure amounted to $16,792,647. Since that time $11,770,039 had been paid to creditors. The amount which would probably be realized from the remaining assets was about $150,000. So, at best, there will be a deficet of about $5,000,000 !..... Cornell University has 635 students—26 more than ever before in the history of the institution. More are coming.

For a full illustrated Description of our Free Seed Distribution for 1886, examine the Nov. 14 issue. Preserve it for future reference. It is sent to all applicants for specimen copies.

AGRICULTURAL NEWS.

SATURDAY, Jan. 23, 1886.

A BILL is to be introduced into Parliament by an Irish member, providing "for the growth and cultivation of tobacco in Ireland."..... ....In the west of Ireland out of 9,300 tenants under the Land Act of three years ago, which greatly reduced rents, 7,100 now absolutely refuse to pay a cent of rent unless an abatement of from 10 to 50 per cent. be made in the "fair rents" provided for in that law. Starvation among the peasants and fishermen along most of the west Irish coast....The annual meeting of the Pennsylvania Board of Agriculture and a general Farmers' Institute will be held at Harrisburg, Wednesday and Thursday, January 27 and 28. Every farmer in the State is invited to attend.....In Southern California, unthrashed barley, baled as hay, brings $20 per ton.....On the Rio Grande Plantation, Cape May County, N. J., 7,420 tons of unstripped sorghum cane were gathered from 960 acres. The marketable sugar made was 281,000 pounds; sirup, 50,000 gallons; seed, 10,000 bushels, all finding ready sale at fair prices..... ....Cigar manufacturers are vigorously protesting against any increase of duty on Sumatra tobacco. The tariff bill of 1883 increased the duty from 35 cents to 75 cents per pound, and they protest against a further increase to $1.50 and $2 per pound as proposed. Tobacco growers, however, are well organized and very urgent for the increase. The present duty of 75 cents per pound is five times greater than the average price of leaf tobacco grown in the United States..... ....Michael Davitt approves the proposition to buy out the Irish landlords, and suggests an Anglo-Irish arbitration Commission to settle terms of the purchase.....Complaints come from Florida that several people have been "poisoned" by eating frosted oranges; the cold drove inward the "poison" naturally held in the skin.....The New York State Court of Appeals sustains the law establishing a milk standard of 12 per cent. solids and 88 per cent. water.....Five members of the Hausmeyer family at Tarentum, Pa., have died of trichinosis. The lives of the three remaining members of the family are despaired of. ....Marshall P. Wilder helps along the Massachusetts State Agricultural College by giving its library 250 volumes of agricultural and horticultural periodicals and pamphlets, 60 bound volumes—a complete set—of the London Gardener's Chronicle (folio), that cost $500, each volume containing the giver's autograph, the records of the American Pomological Society for 37 years, and of the Boston Society of Natural History from 1866 to 1885 inclusive... ....The New York State Beekeepers' Association, founded by Moses Quimby in 1868, will hold its annual convention in Rochester, Feb. 2–4. All associations in the State are entitled to three delegates. New York beekeepers are invited to attend.....The estimated yield per acre of the corn crop in Illinois for 1885 is 31.7 bushels, the largest since the crop of 1880.....Trappers in the towns of Western Massachusetts have been unusually busy this Winter. Muskrat skins are worth from 25 to 35 cents in Springfield, and good fox skins sell for $1.....The chemical preparations that have been resorted to in France to check the ravages of insects in vineyards appear to have failed, and the report comes that mildew and phylloxera are fast spreading.....In spite of, or rather owing, in part, to the constant exportation of horses from the United Kingdom, there is a serious scarcity there of horses suited for certain purposes. The latest returns published by the War Office regarding the 24 regiments of regular cavalry in the British army, show that for upward of 17,500 cavalry troopers there are only about 10,300 chargers. .....Revenue frauds have been discovered in Chicago in the importation of potato starch as farina. Farina is on the free list, while there is a duty of two cents per pound on potato or corn starch. The frauds have been going on for years. No doubt many other shipments have escaped detection. Has this had any influence on the low prices generally paid for potatoes at the starch factories?..... A new State Agricultural Society of Massachusetts, has been organized, so that the old "Loring ring" has been completely "knocked out." Edward Burnett, of Southboro, was enthusiastically elected President is spite of his strong protests..... The number of Texan and Indian cattle received in Chicago last year was 298,188 head, against 259,374 in 1884. From the Northwest the receipts of range cattle last year were about 30,000 less than in 1884. During 1885 Swift & Co. slaughtered 429,483 head of cattle, Hammond & Co. 160,960, Armour & Co. 325,131... .....The total receipts of wheat and flour expressed in wheat at San Francisco in 1885 was 16,890,278 centals, against 17,277,840 centals in 1884, according to the Commercial Herald. This represents in bushels 28,160,465 for 1885, and 28,796,400 for 1884..... .....The wool clip of California in 1885 was 36,561,390 pounds, which is the smallest since 1873, although but 852,940 pounds short of 1884. The average annual clip for ten years ending with 1885, is 44,393,000 pounds, the largest year being 1876, 56,550,970 pounds..... .....The receipts of Western dressed beef at New York and Jersey City last year more than doubled the receipts in any former year! At the lowest estimate they averaged 100 car-loads per week, or 5,200 car-loads for the year; equal in round numbers to 160,000 carcasses. The receipts at Orange, Newark, Paterson, and other outlying cities and towns which formerly drew their supplies from the stock-yards will carry the total up to 200,000 carcasses, equal to one-third of the total beef supply of New York City and it environs..... .....The English Privy Council has just permitted the immediate landing of Canadian cattle carried on vessels that had touched at an American port before taking them on board. The rule used to be that no cattle could be landed alive from a vessel which within 30 days had touched at a scheduled port, unless for slaughter at the port of debarkation. Canadian cattle can now be taken directly to pasture from such ships.. ...The New Jersey State Board of Agriculture will hold its annual meeting in the Masonic Hall, Trenton, N. J., on Tuesday and Wednesday, February 2 and 3, commencing at 10 o'clock, A. M. We notice that a wide-awake programme has been provided and New Jersey always exceeds rather than falls behind the promised interest. P. T. Quinn, Secretary, Newark, N. J.....

QUARTER CENTURY devoted to the improvement of Thatcher Orange Butter Color. It was the first, is the best and has been every day in every year. If you want the highest human testimony, send your address to H. C. Thatcher & Co., Potsdam, N. Y.—*Adv.*

Crops & Markets.

SATURDAY, Jan. 23, 1886.

THE Chicago Times the other day reports from nearly 590 points as to the crop of corn and hogs in the Northwest and Southwest. It appears that the yield of corn has been overestimated and its quality ranked too high. Ohio and Indiana framers have sold more freely than those in other States. Hog cholera has made its appearance in every State of the corn belt, forcing hogs upon the market much more rapidly than is usual, and it is probable that the receipts at the chief packing points for the remainder of the season will be less than last year.

It is reported that the biggest wheat deal ever attempted is now in progress in Chicago. It is said to be worked by Phil. Armour and the Minneapolis millers, as well as by railroads, elevators and "grain" banks. It contemplates putting wheat down as low as possible—certainly below 80 cents at Chicago—buying in heavily as it descends, and then jumping for a profit of 30 to 40 cents, making the price over $1.20 in May. Pork and provisions are to go up with it. The amount of wheat to be "controlled" to render the scheme successful is, it seems to us, by far too large to permit shrewd men to embark in such an enterprise. According to good estimates, 292,000,000 bushels of wheat remained on hand on Dec. 31, of which 58,000,000 bushels were in the "visible supply" and 234,000,000 invisible and in the form of flour. It may be that the latter estimate is too large, for all the interior storage points, such as St. Louis, Chicago, Milwaukee, Detroit, Toledo and Buffalo, have been receiving orders from millers in the country for supplies of wheat, which shows plainly that little or no wheat exists in their neighborhoods. Council Bluffs is buying wheat in Chicago! Evidently there is not a large surplus in the hands of farmers, or, if there is, they are able and determined to stick to it for higher figures. The Northwest holds fast to the opinion that 90 cents for cash, No. 1 Hard, is about right, and though it has touched 84 cents at Minneapolis, but little was marketed at that figure, and confidence in 90 cents remains firm...The general impression is that the recent frigid wave did little or no harm to winter wheat, as its advent had been preceded by a heavy fall of snow, which warmly blanketed the crop..... Last Saturday there was a drop of one to two cents per bushel in wheat, due to the large visible supply and to a foolish rumor that the English Government would recommend a duty on wheat imported from the United States into the United Kingdom. On Tuesday there was an advance of 1¾ cent per bushel, due to a decrease of 850,000 bushels in the visible supply, and to reports that Austria, Russia and Turkey, as well as all the Danubian States, and perhaps most of the rest of Europe, would be at war as soon as Spring renders campaigning possible—and certainly bloody trouble seems brewing north of the Balkans. There seems little doubt now that the visible supply will rapidly decline even in the absence of exports, as receips are small and sales to millers at interior points sharply increasing.

Indian corn has followed wheat. When the advance in wheat prices came, corn showed an improvement in prices too, though to lesser extent, and there was not so much activity in the market. There is considerable interest taken in the reported plan of the Chesapeake & Ohio Railroad to ship corn freely to Newport News for storage.

The oats market has been quite but moder-

Miscellaneous Advertising.

When Baby was sick, we gave her Castoria,
When she was a Child, she cried for Castoria,
When she became Miss, she clung to Castoria,
When she had Children, she gave them Castoria,

ately firm, with a movement visibly influenced by those of wheat.

Armour & Co., of Chicago, have been bulling hog products during the week, as the supplies of hogs at packing centers have declined below late expectations, and the "visible supply" of hogs is considerably less than expected, as so many were rushed to market earlier through fear of hog cholera.

At Philadelphia hog products have been moderately dealt in, but the market has ruled firm at a slight advance. Butter has been very quiet, owing to the inferior quality of most of the receipts. The trade in artificial butter is showing greater activity, owing to the scarcity of fancy lots of the genuine product. Three-fourths of the stuff sold in the wholesale market is butterine. Poultry and eggs have declined and close dull under liberal supplies. Fruits and vegetables continue quiet but steady. . . . Provisions at St. Louis generally are dull and weak, in sympathy with other markets. Cattle and hogs are advancing and active, though the quality of receipts is mostly poor. . . . At Milwaukee hogs are advancing, the supply being light, and products are higher. There is a good demand for meats.

According to the Buenos Ayres Standard, this season's crop of linseed from the River Plate country is roughly estimated at 200,000 tons, or ten times in excess of last years, and the tremendous growth of linseed farming is such that a crop of one million tons is expected next year. The figures above give a crop of eight million bushels, calculating 40 bushels to the the ton, and if next year's expectations are realized, the crop of South American seed would reach 40 million bushels. In the census year the American production amounted, in all, to only 7,190,951 bushels.

Brown's Bronchial Troches will relieve Bronchitis, Asthma, Catarrh, Consumptive and Throat Diseases. *They are used always with good success.*—Adv.

MARKETS BY TELEGRAPH.

SATURDAY, January 23, 1885.

CHICAGO.—Compared with prices a week ago, "regular" wheat is ⅝c. lower; No. 2 Chicago Spring, 1c. higher. Corn, ⅝c. higher. Oats, ⅜c. higher. Pork, 55c. lower. Cattle, a trifle lower. Hogs, from 15c. to 25c. higher. Sheep, from 15c. to 20c. higher.

WHEAT, strong; sales ranged: January, 78¼@80¼c; February, at 79⅝c@80⅝c.; May, at 85c@85⅝c.; No. 2 Spring, at 80¼c.; No. 3 Spring, at 67c. CORN—Higher and firm; Cash, 36¼c.; January, 36⅝@36¾c; February, 36¾@37c. May, 40⅝@40¾c. OATS—Steady; sales ranged; Cash, 29c; January, 28¾@29c; May, 31¾@32c. RYE—Dull; No. 2, 57c. BARLEY.—No 2, 63@65c. PORK—Active; Cash, $10 95@11 00; January, $10 97½@10 45; February, $10 87½@11 00; May, at $11 15@$11 32½. LARD—Firm; sales ranged; Cash, $6 15@6 17½; January, $6 15@6 17½; February, $6 15@6 17½; May, $6 35@6 37½. BULKMEATS—Shoulders, $4 00@4 05; Short rib sides, $5 35@5 37½; Short Clear sides, $5 70@5 75. CATTLE—Market quiet; Shipping steers, $3 50@5 90; stockers and feeders, $2 70@4 00; cows, bulls and mixed, $1 85@3 75; bulk, $2 90@3 35. HOGS—Rough and mixed, $3 60@4 05; packing and shipping, $4 05@4 40; light, $3 35@3 95; skips, $2 50@3 45. SHEEP—Market firm; Natives, $2 25@5 00; Western, $2 20@4 25· lambs, $4 00@5 75; Texans, $2 00@3 80.

ST. LOUIS.—Compared with cash prices a week ago, wheat is ⅝c. higher. Corn, ¼c. higher. Oats, ⅜c. lower. Rye, ½c. higher. Pork, 50c. higher. Cattle, a trifle higher. Hogs, from 10 to 15c. higher.

Wheat strong. No. 2 Red, Cash, 88¾@90c.; January, 89½c.; February, 90c.; May 95¼c.. Corn firm; Cash, 33¾@33¾c.; January, 33⅝@33¾c.; February, 33¾c.; May, 37½c. Oats dull; No. 2 Mixed, Cash, 28⅝@28¾c.; January, 28¾c., May, 31½c. Rye steady at 58c. Barley dull at 60@60c. Eggs steady at 17@17½c. Flax Seed steady at $1 08. Pork, $11 00. Bulk Meats—Long Clear, $5 25; Short Rib, $5 40@5 45; Short Clear, $5 45. Lard firm at $6 00@$6 0.. Cattle—Market fairly active. Good to Choice Shipping, $4 80@5 20; common to medium, $3 90@4 50. Native Butcher Steers, $3 25@4 25; Cows and Heifers, $2 25@3 50; Stockers and Feeders, $3@4. Hogs.—Market strong and active. Butchers' and best heavy at $4 10@4 30; mixed packing, $3 80@4 05; Light, $3 50@3 80; SHEEP—Market steady and unchanged.

BOSTON.—Compared with cash prices a week ago, corn is about ¼c. higher; oats, ¼c. higher; hay and straw steady; butter steady in most grades, with a slight advance in some. Cheese almost unchanged, slight upward tendency. Eggs steady. Potatoes from 5c. to 10c. higher.

BOSTON—GRAIN—CORN has been in moderate demand. We quote Steamer Yellow, at 51@51½ steamer mixed at 50@50½c; and no grade at 49@50c. per bushel. OATS—Have been quiet but steady, with sales of barley oats at 41@42c; No. 2 white at 41½c@42c; No. 3 white are held at 41@41c, per bushel. RYE has been quiet at 67@70c, per bushel. BRAN is steady at $18 00 for Spring and 18 50 for Winter; fine feed and middlings at $18 00@21 00, and cotton seed meal at $25 00 on spot and $23 00 per ton to arrive. HAY AND STRAW—Hay is a little firmer at $19 00@20 00 per ton for choice and fancy, $17@18 for fair to good, $16@18 for fine and $13@15 for poor and damaged. Western choice $16@17 do fair to good $14@15. Rye straw is held at $19@20 for choice, and $13@14 for common to good. Swale hay, $11@12; Oat straw, $9@10 per ton. PRODUCE—The various articles under this head continue to command fair prices. BUTTER-Northern creamery, choice to extra 23@25c; good to choice summer, 15@20c; western creamery, 21@23c, for choice to extra; northern dairy, 22@23c, for Vermont extra; 18@20c, choice, and 12@16c, for fair to good; Western dairy, 18@22c, for choice, and 10@15c, for fair to good; Imitation creamery at 15@25c, for good to extra; ladle-packed, at 20@22c, for choice. CHEESE—New York choice to extra, 9@10½c, and common to good, 8@8c; Vermont choice to extra, 8½@10c, and common, 6@7c; Western common to extra, at 4@9½c. Sage, extra, 11@12c, good to choice, 8@10c. EGGS—Cape and near-by, per dozen, 23@24c; Eastern extras, at 27c; do, firsts, at 25c; Northern, fresh, at 26c; Western fresh, 23@24c; Provincial, 24@26c. BEANS—Choice Northern hand-picked pea, at $1 60@1 65 per bushel; do, do, New York, $1 55@1 60; do, do, screened $1 25@1 35; medium choice, $1 50@1 55; do, screened, $1 25@1 40; Yellow Eyes, improved, at $1 55@1 60; do, choice flats, $1 40@1 55; Red Kidneys, $1 80@2 00. Canada peas, 85c@$1 00 per bushel for common to choice. Green peas, Northern, at 90c@$1 00; do, Western, $1 20@1 25. Potatoes range at 60@80c, per bushel, as to quality.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, January 23, 1886.

STATE OF THE MARKET.—Compared with cash prices last week, flour is unchanged; wheat from 1c. to 1¼c. lower; corn 1c. to 1¼c higher; oats ¼c. higher; pork 25c. higher; butter and cheese steady; eggs, a shade lower; poultry lower in consequence of large shipments and uncertain weather; vegetables steady.

FLOUR, FEED AND MEAL. FLOUR—Quotations: Flue at $2.15@$3.00; Superfine, $2 75@$3 25; Extra No. 2, $3 10@$3 50; Good to Fancy Extra State, $3 60@4 25; Common to Good Extra Western at $3 10@$4 00; Good to Choice Extra Western, $4 00@$5 50; Common to Fair Extra Ohio, $3 10@$3 75; Good, $3 80@$4 30; Good to Choice, $4 25@$5 25; Common Extra Minnesota, $3 10@$3 65; Clear, $4 10@$4 50; Rye Mixture, $4 00@$4 25; Straight, $4 50@$5 00; Patent, $4 75@$5 50; Bakers' Extra, $4 10@$4 75; St. Louis Common to Fair Extra, $4 10@$4 80; Fair to Good, $3 85@$4 75; Good to Very Choice, $4 80@$5 40; Patent Winter Wheat Extra, $4 50@$5 50; City Mill Extra for West Indies, $4 75@$4 90; South America, $4 85@5 00. SOUTHERN FLOUR—Common to Good Extra at $3 35@$3 80; Good to Choice do., $3 85@5 40. RYE FLOUR—Quiet and unchanged. Sales 600 bbls. Superfine, $3 25@3 90. BUCKWHEAT FLOUR, at $1 90@$2 00. CORN MEAL—Yellow Western, at $2 80@$4 15; and Brandywine, at $3 00@3 15. FEED—Bran ranges from 90c to 87½c; from track and mill; for 60 lb, average at 75c@82½c.; 80 lb, average at 75@82½c.; middlings at 75@90c., and sharps at 85½c@$1 05. Rye feed at $16 00@$17 00.

GRAIN.—WHEAT.—Ungraded Red, 83½@89c.; No. 2 Red, 84½c; No. 2 Red for February, 88@88½c.; do. for March, 89½@90¼c.; do. for April, 90⅞@91½c.; do. for May, 92¼@93c.; do. for June, 93⅝@94¼c.; do. for December, $1.00@$1.00¾. RYE—60@62½c. for Western, and 63@66c, for State. CORN—Ungraded Mixed at 45@51c; Rejected at 46c; No. 3, 47½@48c. Steamer Mixed, 48c.; Steamer Yellow, 48½c.; No. 2, Mixed at 51¾c; No. 2 Mixed for January, 51@52c.; do. for February, 49½@49¾c.; do. for March quoted at 49¼@49¾c. and 49½c. for April; do. for May, 48⅝@48½c. OATS—No. 3 Mixed at 36c.; No. 2, 36¾c.; No. 1 quoted at 37c.; No. 3 White, 35½c.; No. 2 do. 39¼c.; No. 1 quoted at 43c.; Mixed Western, 36¼@38½c.; White do., 39@44c.; No. 2 Mixed for January, 36¾c.; do. for February, 36½@37c.; do. for May, 37@37½c.

BEANS.—Quoted: Marrows at $1 75@$1 80; mediums at $1 50@1 75; pea at $1 50; red kidney at $2 00 for choice; turtle soup at $2 25; white kidney at $1 95@2 00 for choice.

PEAS.—Green are quoted at $1 15.

PROVISIONS.—PORK.—Mess quoted at $10 50@$10 75 $11 00@$11 30 for Family Mess; $12 00@$13 50 for Clear Back; and $8 50@$9 25 for Extra Prime. BEEF.—City Extra India Mess, $17 50@$18 00; Extra Mess, bbls., $10; Packet, $11 00@$12 00 in bbls.; Family Mess, $12 00@$13. BEEF HAMS.—Quoted at $16 50@$17 00. CUT MEATS.—Pickled Bellies, 10 lb, average, 5¼c; do, 11 lb, average, at 5¼c; Pickled Shoulders, at 4¼c.@4½c.; Smoked shoulders, at 5¾c.; Pickled Hams, at 8¼c.; Smoked do., at 9¼c. MIDDLES—Long Clear in New York quoted 5¾c. for Western delivery Long Clear, 5.45c.; Short Clear, 5.75c. DRESSED HOGS.—City Heavy to Light, at 5@5¼c.; Pigs, 5¾@5¾c. LARD.—Choice, 6.75c; January, at 6.48@6.50c; February, at 6.48@6.50c.; March, at 6.50@6.54c.; April, at 6.59@6.60c.; May, at 6.65@6.66c.; June at 6.71c; August, at 6.83@6.86c; Refined Continent at 6.70c, and South American, 7.00@7.05c.

BUTTER—Eastern Creamery, 33@34c; Western Creamery, 18@33c.; Elgin do., 34@35c.; State Dairy half-firkin tubs, 18@25c.; Western Factory, 11@18c.; Imitation Creamery, 13@26c.; Western Dairy, 12@22c.

CHEESE—State, 7@10¼c.; Night Skims, 5¾@7c. Western flat, 7@9½c.

EGGS—State, 22@22½c.; Western, 22@22½c.; Southern, 22@22½c.; Limed State, 19c.; do. Western, 19c

LIVE POULTRY.—Chickens, 7@8c., fowls, Jersey State and Pennsylvania, per lb, at 10c.; do. Western, per lb, at 9@10c.; turkeys, per lb, at 9@10c.; ducks, western per pair, at 70@90c.; geese, western, per pair, at $1.25@$1.75; pigeons, per pair, at 40c.

DRESSED POULTRY—Turkeys, 12@13c. for Philadelphia 11@12c per lb for Jersey, and 10@11c per lb for western chickens. Philadelphia large, 13@14c. per lb; do, small at 10@11c.; Jersey scalded at 10@11c; do, State at 10c; do. western, at 10@12c.; fowls, Philadelphia, prime, 10@11c; do. Jersey at 10@11c.; State and western at 9c. Ducks, Philadelphia, at 15@16c; do. Jersey, at 14@16c; do. western, at 13@15c. Geese, Philadelphia, at 13@14c; do, Jersey, at 12@13c; do, western, at 10@12c.

GAME—Quail, ₰ doz., $2; partridges, State and Pennsylvania, choice, per pair, at 90@$1; do, Ohio and Michigan, prime, per pair, at 70@80c.; grouse, prime, dry, per pair, at $1@$1 25; do. inferior at 50@75c.; wild ducks, canvas, per pair, at $3@$3 50; do., red-head, per pair, at $1@$1 25; do. mallard, western, per pair, at 50@75c.; do., teal, blue wing, 50@65c.; rabbits, per pair, at 30@40c; hares, eastern, per pair, at 30@35c.

COTTON—The quotations, according to the American classification, are as follows:

	Uplands.	New Orleans and Gulf.	Texas.
Ordinary	6 11-16	6⅝	6⅞
Strict Ordinary	7⅛	7 5-16	7 5-16
Good Ordinary	8 1-16	8¼	8¼
Strict Good Ordinary	8¼	8 11-16	8 11-16
Low Middling	8⅜	9 1-16	9 1-16
Strict Low Middling	9⅛	9 5-16	9 5-16
Middling	9 5-16	9½	9½
Good Middling	9 11-16	9⅞	9⅞
Strict Good Middling	9 15-16	10⅛	10⅛
Middling Fair	10 5-16	10½	10⅜
Fair	10 15-16	11⅛	11⅜

STAINED.

Good Ordinary	6¼	Low Middling	8
Strict Good Ordinary	7 3-16	Middling	8¾

FRESH FRUITS—Quotations are: San Blas cocoanuts at $37 50@40 00; Baracoa cocoanuts at $29 00@$30 00. Apples—Baldwin, per bbl., at $1 75@2 00; Greening, per bbl. at $2 00@2 25; Spy, at $1 50@2 00; King, at $2 00@2 50. Grapes—Catawba at 6@7c. per lb, in baskets; Isabella, at 8½c. per lb. Cranberries—Cape Cod, choice, per bbl., $4.50; do. fancy, $5 00; good to prime, per bbl., $4 00@$4 50; do. choice, per crate, $1 25@$1 50; do, fair to good, per crate, at 75c.@$1 12. Florida oranges—Fancy at $3 25; Choice at $2 50@3 00; do, inferior at $1 75@$2.

DRIED FRUITS—Quoted: Apples—Fancy evaporated, 7½@7¾c; new, choice, 7c; fancy North Carolina sliced, new, at 4@4¼c.; choice do. at 3½@3¾c.; choice Tennessee quarters at 2@2¼c.; State quarters at 3½@3¾c.; North Carolina quarters at 2½@2¾c. Peaches—Peeled North Carolina, choice, 10@11c.; fancy, 12@13c.; extra fancy at 13@14c.; Georgia, choice, new, at 10@11c.; do. prime, 9@9½c.; unpeeled halves, 2¾@3c.; unpeeled quarters at 2½@3c.; Delaware evaporated, peried, 24@25c. Choice pitted cherries at 11@11½c. Evaporated raspberries at 17@18c; sun-dried do. 15@16c. Blackberries—Prime at 8@8¼c. Whortleberries at 7c.

PEANUTS.—Quotations at 5@5¼c. for best hand picked, and 3¾@4¼c. for farmers' grades.

HAY AND STRAW—Quotations are for: Choice timothy hay at 90@95 cents; good at 85@90c.; medium at 80c.; shipping at 70@75c; clover mixed at 70@75c.; No. 1 rye straw at $16@$16 05; short rye straw at 70@80c; oat straw at 40@50c.

SEED—Clover is slow, yet held firmly; quotations are nominal at 10@10½c. as to grade. Timothy is quiet; quoted at $1 90@2 00. Linseed nominal.

SUGAR—Cut, 7@7¼c; Crushed, 7@7¼c; Cubes, 6 13-16@6¾c; Powdered, 6 13-16@7c; Granulated, at 6¾@6 11-16c Mould "A," 6¾@6 11-16c; Confectioners' "A," 6½@6 9-16c; Standard "A," 6¼c; Off "A," 5¾@6c; White Extra "C," 5¼c; Extra "C," 5 7-16@5¾c; "C," 5¼@5⅜c; Yellow, 4⅞@5⅛c.

TALLOW—Prime City quoted at 4¾c.

VEGETABLES—Potatoes—Long. Island Rose, bulk, per bbl., $2 00@$2 25; New York Rose, $1 75@$2 00; Eastern and Nova Scotia Rose at $2 00@2 25; Burbank, State, at $1 75@$2 00; eastern and Nova Scotia, per bbl, $2@2 25; Hebron, do, do, do, per bbl, at $2 00@2 25. Prolific and Goodrich, per bbl., at $1 75@$2. Maine, double-headed, bbl., at $2 25@$2 50; Peerless, per bbl., at $1 75@2; Magnum Bonum, imported, per sack, $2; Champion, imported, per sack, at $1 62@$1 75. Sweet potatoes, Virginia, at $2 50@$3 00 per bbl. Cabbages, per 100, at $6@$8.00; State at $3 00@5 00. Onions—Yellow, per bbl., at $3@$4 00; do, red, per bbl., $3 50@4 00.; do. white, at $4 50@$5. Turnips,—Russia, per bbl., at 50@62c. Marrow squash, per bbl., at 50c.; Hubbard squash, per bbl., at 75c@$1. Scotch kale at 75c@$1, and $2@$2 50. for spinach,

LIVE STOCK MARKET.

NEW YORK, SATURDAY, January 23, 1886.

BEEVES—Total receipts for the week 10,481 head against 10,880 for the same time last week. Shipments of meat for the week, 744 live cattle, 5,195 quarters of beef, 180 live sheep and 449 carcasses of mutton. The highest price was paid for one extra fine grade Shorthorn from Kentucky. This animal weighed 1,580 pounds and $6.35. One bunch of 47 good steers averaging 1,325 pounds brought $6. These were well matched as regards shape, color and weight. Such uniformity goes far with buyers. Several lots of dry cows in very poor condition, sold as low as $2.90. As a rule, the cattle offered were a trifle lighter than usual, but they were of better shape. A few bulls and old stags were offered, and met with slow sale at $2.30 to $4. The following figures give a general idea of the run of prices: Kentucky Steers, 1,486 lb at $5 70; do. 1,433 lb, at $5 20; Ohio do., 1,332 lb, at $5 60; do, 1,268 lb, $5 25; oxen, 1,514 lb, at $4 45; oxen, 1,265 lb, at $4 50; Bulls, 1,580 lb at $3 85; 6 do., 1,655 lb, at $4; Indiana steers, 1,120 lb, at $5 10; do. 1,119 lb, $5 10; Pennsylvania do., 1,021 lb, at $4 70; 10 do., 1,294 lb, at $5 45; 18 Indiana cows and bulls, 1,089@1,570 lb, at 3½@4c, Chicago steers, 1,122 lb, at $4 90; Mixed Western Steers, 1,316 lb, at $5 50.

CALVES—A few common to fair veals sold at 6@7c, and Grassers are quoted at 2@2½c.

SHEEP AND LAMBS.—Receipts for six days, 31,458 head, against 44,711 head for the same time last week. Choice lambs sold at fair prices, but Common were neglected. Sales of Common to Choice Sheep were at 3¾@5¾c., and Common to Good Lambs ranged from 4½@6¼c., with two carloads of Canadas sold at 6¾c. Canada lambs, 85 lb, at 6¾c.; Indiana sheep, 99 lb, at $5 20; Ohio sheep, 79 lb, at 4½c; Chicago sheep, 94 lb, at $4.75; Canada lambs, 80 lb, 6¾c; Michigan sheep, 95 lb, at 4½c; Kentucky do., 110 lb, at 4¾c; Michigan do., 79 lb, at 4½c; State sheep, 80 lb, at 4¼c; do, 89 lb, at 5¼c.

HOGS.—Receipts for six days 18,423 head against 47,670 head last week. Market firm and 5@10c. higher. Quotations $4.15@$4.30 for Common to Good Hogs. A few pigs sold at $3.35. Ohio hogs, 105 lb at 4¼c.; Roughs, 159 lb, at $3.25; 43 pigs, 85 lb, at $4.85.

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Yours very truly, WHITE & CO.
[N. B.—White & Co., since writing the above letter, have purchased $4.50 worth of the remedy.]
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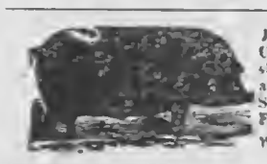
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For the Young.

SOME of the Cousins have been writing me about the tremendous squashes they raised last year. I have thought of away for them to make some money. The RURAL offers $10 for the largest Bird Canteloupe. Now can't you get your father to give you one or two seeds, or make you a present of a vine after it comes up? I believe you can. Then work at that vine the very best you know how. It may be that some of the smallest of the Cousins may bring out the biggest canteloupes. Let us try this now. Don't forget it.

The Cousins send in reports of very cold weather. We are all having a touch of it, I guess, even those of us who live in the South. That makes me speak of one thing I have noticed about cold people. These who hate to move away from the fire have the hardest work to keep warm. The best way to keep the blood in circulation is to jump about and make things lively. That is the reason people stamp their feet and slap their hands when their toes and fingers tingle. Keeping over the fire makes us tender and more apt to get cold when we have to go out. When I was a boy I had to go barefoot until quite late in the Fall. It used to be cold enough running through the frosted grass. I was glad enough to run and step on the places where the cows had been laying all night. People used to tell me to take a little switch and whip my feet. It made them tingle but I believe it made them more comfortable.

Now is the time when the hens ought to be kept as warm as toast. If they are standing about with frozen combs and legs, they will not lay many eggs, and I for one don't blame them at all. Some people think that animals only suffer when they are out in a bitter cold. I think it is just as bad for them in a damp or windy day. I know that I feel better on a clear, cold, day than I do when it is damp and rainy.

I hope the RURAL dogs will not have the hydrophobia. I don't believe any of them will. From what I can learn, our dogs must be pretty well behaved animals. I wouldn't let a dog lie with his head under the stove. It will make him lazy and stupid. It is a bad plan, too, to plague dogs. Sometimes they are taught to bite in this way. I know of a dog that was plagued by having his tail and hair pulled. He got so that he would snap whenever his hair was pulled. One day the baby put its little hand on the dog's side and Frisk snapped so quickly that he bit the baby's arm. I never thought that bite was really intentional, and yet the dog had to be killed. It pays to be fair and honest with animals. They know more than we think they do, and they will take their revenge when we least expect it.

How many of the Cousins have "spelling schools" in their districts? I used to go when I was a boy. I can remember the first one I ever went to. Our school drove over to another district and spelled against the school there. I don't think I had better tell you what word I missed. It was too easy. If I should tell you you would all say at once that you knew more than Uncle Mark did. How should I feel then?

Is there a wood-box in your house? If there is, I hope you are keeping it well filled. We never want to see the bottom of a wood-box. I should be very sorry to think that any of my boys are willing to have mother bring in wood herself, when they have such stout arms for playing ball and throwing snowballs. I would like to have all such boys go without dinner once or twice; then they would realize that something of the good things of life depends upon their own work.

WHAT THE COUSINS SAY.

MILLIE M. MYERS would like to get some subscribers for the RURAL, but says she is so little that she is afraid to try. These little people amount to a great deal more than they think. The largest people are not always the smartest by any means.

MARY B. BRETH lives on a farm where there is a Jersey red hog that will weigh 1,000 pounds when he is fat. It must be hard to tell, from the looks of it, whether it is a hog or a cow. They also have two bulldogs and nine cows.

NINA G. CLUTE writes about a poor little colt that seemed so weak and thin that her Papa wanted to kill it. Her Mamma took it and fed it on milk and oats. It is quite a nice colt now. That shows what good care and treatment will do.

LOTTIE E. STEVENSON says the people found a great many piles of hazel nuts piled up by the mice. One man found 14 bushels. I wish some of those mice would move this way and go to work.

BERTHA HEETER is ten years old and has seven studies. She can milk. They have two muley cows.

WALTER G. SMITH lives in Oregon. There are many Indian mounds near his home, in which people find spear and arrow-heads. What a life these old Indians must have led, so long ago. Ocean shells have been found out there on the tops of the highest mountains. How did they get there? When you come to know more about geology you will see how they came there. Years and years ago these high mountains were entirely covered by the sea. The waters slowly and slowly moved away until these great hills were left. There are high mountains at the bottom of the ocean now. New land is constantly being formed, and the great forces that have made hills and valleys are still slowly going on.

PHŒBE L. SHERMAN lives on an island near Washington Territory. That is far away from headquarters; still our club is large enough to cover the whole country. They have plenty of fruit, such as apples, pears, plums, peaches, prunes and cherries.

ROSA C. MILLER says she could do all kinds of kitchen work and sew on the sewing machine. She has a doll with four dresses which she made herself. She finds it very hard to teach the cats any tricks.

LOTTIE NOON lives in Illinois. She and her sisters have two pet lambs and a pet chicken. The dog, Carlo, is very playful. He will run after a ball when they roll it on the ground.

NELLIE R. DE COU enters the club from Iowa. She says they have had some awful blizzards out there. Think of 33 degrees below zero! Last Summer they had so much rain that the creek jumped out of its bank and washed the corn away.

LETTERS FROM THE COUSINS.

DEAR UNCLE MARK: I do not belong to the Y. H. C. but I suppose I may write you a letter, because I read the RURAL. I have no father to take the paper, for he died five years ago, before I was eight years old. I am the oldest of the children. Then Grandpa, who had no boys, took Mamma, brother Glenn, two years younger than I, little sister Arlie, baby Daisy and myself, all home to live with him. We go to school every Summer and Winter, work in the garden, pick up potatoes, and put wood in the wood-house. Brother Glenn likes to farm it, but I like to use the saw, hammer and plane. They call me the carpenter. We did not think Santa Claus would remember us, but on Christmas morning we found some candy in our boots, and in one of them was a letter from him in rhyme. It was dated in Chicago and was written on paper that had a picture of the Pacific Hotel on it, and contained two dimes, one for each of us. Perhaps some of the RURAL Cousins would like to know what he wrote us. It was this:

As I rode through town at reindeer speed,
Looking for all the children in need,
For girls and boys who liked to work,
Who told the truth, and would not shirk.
I spied two laddies hauling wood:
And I said I think those boys are good.
So I wrote their names in my gift book,
And on I sped, for more to look.
When I came back they had chopped the meat
That made the sausage fine to eat:
So I dropped a dime in each stocking toe,
And gathered up my reins to go.
But lo! the coins looked rusty and old,
So that their worth could never be told;
They had idle lain, so long a time,
They appeared no more a shining dime.
The boys might think them only a penny,
But use would make them as bright as any.
Idleness will every virtue dim,
Make pockets empty, and purses slim.
A shabby vesture and tarnished name
Are the results of the very same.

So here's a lesson, my boys for you,
The saying is trite but ever true,
If you dance the spring-time of life away,
In age you'll have but a cheerless day.
So work and study, 'twill make you bright,
Fit you the battle of life to fight,
And one thing more ere I take my flight,
The lesson is this; be sure and learn
All your dimes to save as well as earn
For when you are men, and in business start,
You will need some cash and a strong, brave heart.
—SANTA CLAUS.

Onondaga Co., N. Y. WIRT N. BISHOP.

[Your Grandpa is a good man to take care of you. Santa Claus gave us all some good advice in that poetry. We shall all remember it. Cash is good, when you can get it honestly, but a good character with plenty of perseverance and patience will be worth more. —UNCLE MARK.]

DEAR UNCLE MARK: We would like to join the Y. H. C. We had a Fuchsia that was frozen and hadn't any leaves on it, and we cut it half way down last Winter, and it began to bloom the last of July and did not stop until November. We had some very nice Petunias and three kinds of Tigridias, they were red, white and yellow. They did not do very well with us, we only saw the red one. They are very pretty, but only last one day. We had some annual chrysanthemums, but they were very small. It must have been a grand sight to see them in New York. We have a Yucca filamentosa that has never bloomed. How long does it take to bloom? We have a ageratum that bloomed all Summer; it was a Tom Thumb. We have plenty of Amaranthus and Verbenas. We had some very pretty tea roses, and perpetual and moss roses.

From your nieces,

Wheeling, W. Va. ANNIE AND GRACIE COOK.

DEAR UNCLE MARK: We had a very nice garden last Summer. We raised 300 quarts of strawberries from a bed containing two square rods. Our strawberries are the Sharpless and Great American. We also have red and black raspberries, red, white and black currants, cherries and some choice apples. We raised tomatoes kohl rabi, cabbage, lettuce, radishes, Hubbard and Summer squash, cucumbers, melons, beans, beats, onions, salsify, sage and summer savory. Our garden has been represented at the dinner and tea table since early Spring, and we often find ourselves wondering how people get along without a good garden. We found it more useful than ever at Thanksgiving. I have a small cabinet of curiosities. Some fine specimens of pyrites of iron; trinkets from the Centennial (brought me by my father) and from the New Orleans Exposition, a snake skin, a bullet taken from the shattered arm of one of Papa's friends in the late rebellion, are among the things in my cabinet. I am very anxious to get some good agates. Your niece,

L. MYRTLE PORTEUS.

St. Lawrence Co., N. Y.

[The table is a good place for the garden to send its representatives. There ought to be a good garden on every farm.—U. M.]

UNCLE MARK: May I join your club? My name is Hylon T. Plumb. I am a boy 11 years old, and my father keeps a nursery. I don't care about living on a farm or any such thing. I want to be a machinist. I make all of my boats and engines. I am at work now on an engine, which is to run by steam; I have it nearly done. I have a fine sail boat which is three feet long and two-and-a-half feet tall. I live very near the railroad track, and there is a pond of water a little ways from the railroad, on which I can sail my boat. There is a hill right side of my home, which gives me plenty of coasting, and there is splendid skating at the rink, but too much snow on the pond just now. Your nephew,

Rock Co., Wis. HYLON T. PLUMB.

[Yes, you may join. We need good machinists, and I hope you will surely be a good one. I hope some day you will be able to have a farm too. You will like farm work better then. I would like to see your engine. —U. M.]

DEAR UNCLE MARK: I live in the country, near a clear, running creek. I have a pet colt, four months old, named Belva, ten ducks, 15 guineas, a sow and six pigs. You may know I keep busy in cold weather feeding and attending them all. I love flowers. I have Wandering Jew and ivy growing. If you print this, I will come again and tell all about how I plant and cultivate my flowers in Spring. I have some beautiful grass bouquets for Winter. My father is a farmer and raises corn, cotton, potatoes and sorghum cane. I hope he will take your paper next year. I have two sisters older and three younger than myself, and no brothers. Haven't some of you a brother to swap me? Uncle Mark, if you ever come to Louisiana, I would be glad to have you call and see your little niece.

Ada, Grant Parish, La. MATTIE GRAY.

[We shall expect to hear more about the flowers. It may be that some of us have some extra brothers, but I hardly think they can be traded.—UNCLE MARK.]

Miscellaneous Advertising

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We doubt if there is, or can be, a specific remedy for rheumatism; but thousands who have suffered its pains have been greatly benefited by Hood's Sarsaparilla. If you have failed to find relief, try this great remedy. It corrects the acidity of the blood which is the cause of the disease, and builds up the whole system.

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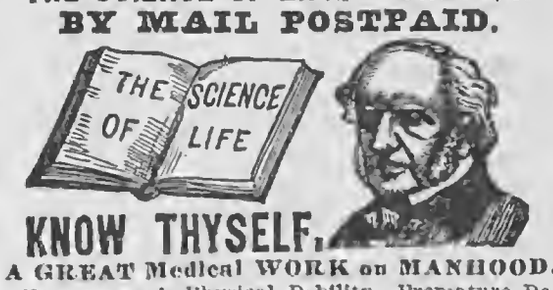

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RED INK POWDERS, 2 for 25c. (postal note). Makes 16 ozs. Sells for 10c. oz. J. E. RUE, JR., Littleton, N. C.

DYSPEPSIA Its Nature, Causes, Prevention, and Cure. By JOHN H. McALVIN, Lowell, Mass. 14 years Tax Collector. Sent free to any address.

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GOLD MEDAL, PARIS, 1878.

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20 New Style Chromo Hidden Name Cards, 10c. Game Authors, 10c. Acme Card Factory, Clintonville, Ct.

SPAIN'S CHURNS. Star Churns, Rapid Ice Cream Freezers, Improved Tree Tubs, all made of CEDAR. Send for illustrated circular and prices. Clement & Dunbar, Philadelphia, Pa.

PERSONALS.

Prof. Baird says that a fair estimate of the annual product of the American fisheries would not fall short of $100,000,000.

The late King of Spain is said to have been heavily insured in United States offices, presumably at extra heavy premiums.

The Vicar of Masham, England, thus concluded a sermon to his flock: "And now, friends, which is it to be—Salisbury, Churchill and heaven, or Gladstone, Chamberlain and hell?"

A blind boy preacher, 16 years old, is causing some excitement in Raleigh, N. C. A week ago he told his father that he had received a divine command to preach the Gospel, and would be made blind for a period of some days. On January 13 he was smitten with blindness.

"You should visit the Supreme Court tomorrow," Justice Bradley is credited with having said once, "for there will be some interesting arguments made. Mr. Sidney Bartlett, of Boston, is on one side and Mr. Roscoe Conkling is on the other; and one of them is a great lawyer!"

The French Minister of Agriculture is about to establish several experimental farms in various parts of the country, in order to show the peasant farmer what can be done in his own locality. The yield of cereals in France is little more than one-third per head of the agricultural population of what it is in England.

Mr. Labouchere, of the London Truth, says that he has never met with more practical, sensible men than the Irish Nationalist leaders when not under the influence of temporary excitement. "I have," he says, "been greatly struck with their broadness of view, which contrasts advantageously with our supercilious mode of treating political opponents, our insularity, and our want of facility to grasp new ideas."

A pretty little correspondence is Mr. Gladstone's. Three thousand letters a month, 36,000 a year, 100 a day, is not bad for one man, exclusive, it would appear, of indefinite quantities of newspapers, circulars, post cards and the like. He ought to have a special postman, with a special Gladstone bag, to totter backward and forward with all this huge load of ink-stained paper.

John Neitz, a solid Dutch farmer of Upper Savern, Pa., is 70 years old and looks 40. He chews garlic as others chew tobacco, as he believes it a preservative of health and a prolonger of life. He has it cooked in everything he eats—even pie and puddings. His wife couldn't stand it, and as he preferred garlic to her, she packed up and left some years ago, and though she lives near the old homestead, the couple "never speak as they pass by."

Gov. Hill, of this State, in his address on being elected, the other day, President of the State Bar Association, protested that lawyers—well, some of them—charge extortionate rates. "They seem to regard it as their province," said he, "to demand all the client can stand and something more." "All the traffic can stand and something more," is the demand of the railroads.

Miscellaneous Advertising.

Last week we asked you to watch this space. Now, if you will write Hallett & Co., Portland, Maine, you will receive, free, full particulars about work that either sex, young or old, can do, at a profit of from $5 to $25 per day, and upwards, and live at home. All can do the work. Capital not required; Hallett & Co., will start you. Grand success absolutely sure. Write at once and see.

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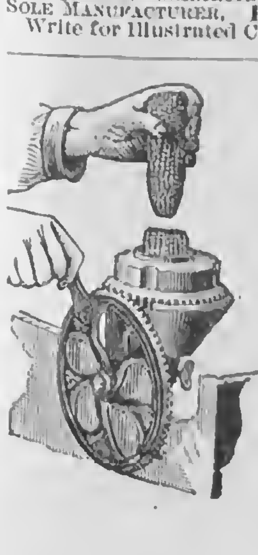

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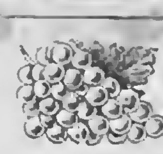

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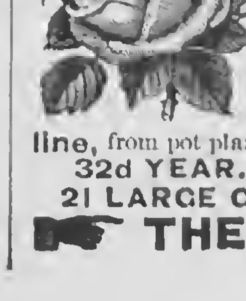

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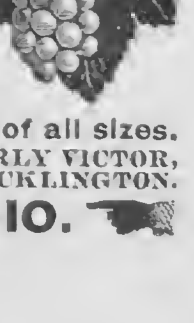

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"WHAT becomes of men who deceive their fellow men?" asked a Sunday-school teacher of her class. "They lose the confidence of good people," was the prompt answer. "Very well, indeed. Now, what becomes of the women who do the same thing?" The question stumped the class for a minute, and then a little girl piped out: "They usually catches the man for a husband, mum."

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SOME lady visitors were going through a penitentiary, under the escort of a superintendent. They came to a room in which three women were sewing. "Dear me!" one of the visitors whispered, "what vicious-looking creatures! Pray, what are they here for?" "Because they have no other home. This is our sitting-room, and they are my wife and two daughters," blandly answered the superintendent.

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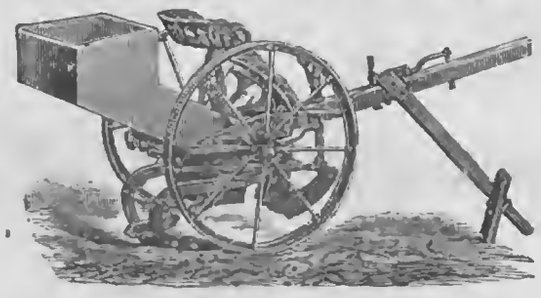

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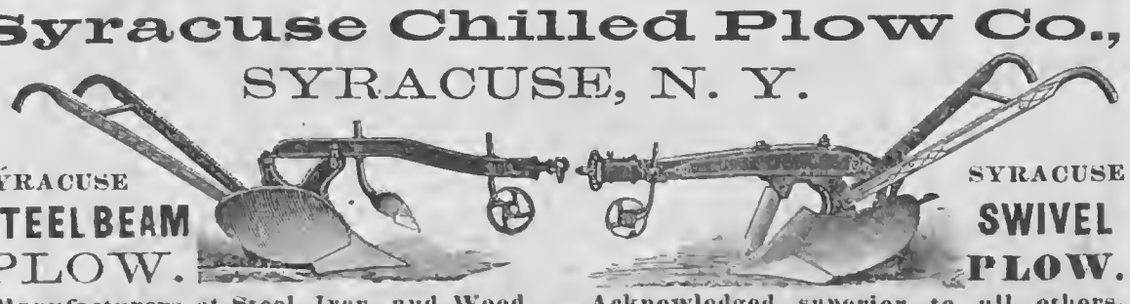

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Five Cows have averaged 20 lbs. 7 ozs. in a week. Nine Cows have averaged 19 lbs. ¼ oz. in a week. Fifteen Cows have averaged 17 lbs. 6 ozs. in a week. Six 3-year olds have averaged 14 lbs. 8 ozs. in a week. Eleven 3-year olds (the entire number tested) have averaged 13 lbs. 2 ozs. in a week. Six 2-year olds have averaged 12 lbs. 1⅓ ozs. in a week. Fifteen 2 year olds (entire number tested) have averaged 10 lbs. 8 3-10 ozs. in a week. The entire original imported Netherland Family of six cows (two being but three years old have averaged 17⅔ lbs. in a week. This is the Herd from which to get foundation stock. Prices low for quality of Stock.

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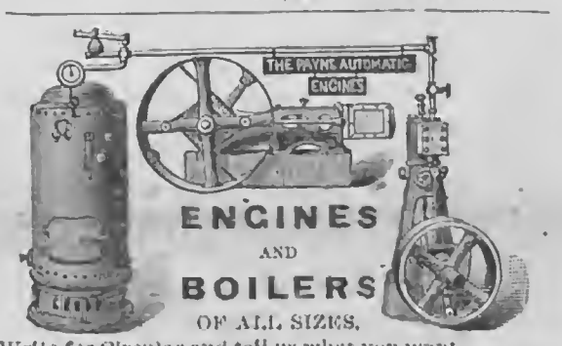

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THE RURAL NEW-YORKER

A JOURNAL FOR THE SUBURBAN AND COUNTRY HOME

VOL. XLV. No. 1880. NEW YORK, FEBRUARY 6, 1886. PRICE FIVE CENTS. $2.00 PER YEAR.

Entered according to Act of Congress, in the year 1886, by the Rural New-Yorker in the office of the Librarian of Congress at Washington.

Horticultural.

THE EVERGREEN BLACKBERRY.

We show this week faithful drawings of the Evergreen Blackberry about which some discussion was held in the RURAL a few months since. These illustrations were made from a vine sent us by Mr. W. J. Sears, of Walla Walla, W. T. This vine was one year old and measured 14 feet in length. Mr. Sears states that owing to the dry season of last year the berries shown are smaller than usual. Fig. 50 shows the shape and size of the berries, and Figs. 51 and 52 (pages 86 and 87) show the leaf and vine growth. The following notes explain themselves.

From CHARLES A. GREEN.

About five years ago a friend in Oregon sent me a few plants of this variety, stating that it was discovered by a sailor on an island in the Pacific Ocean. The plant succeeded well and bore a moderate quantity of fruit the third year. It has a trailing habit of growth, spreading a long distance over the ground, and propagating from tips. The foliage is unlike that of any blackberry I have ever seen. It is cut into fantastic forms, and remains green with us throughout the Fall and Winter, probably for the reason that it does not seem to be affected by the late frosts, and, lying so close to the ground, it is partially protected. Where the canes extend upward for two or three feet the leaves turn reddish, but are retained—do not drop off. It did not bear fruit in sufficient quantities to indicate that it could be cultivated with profit, and the berries were too acid for my taste, therefore, I did not continue to propagate it. It has been growing on our place every year since. It possesses great vigor and seems to be hardy and enduring. I consider it of more value as an ornamental than as a fruit-bearing plant.

Recently, parties have been offering the Evergreen Blackberry, and advertising it through the press. It is claimed by the parties who are introducing it that it is of excellent flavor, enormously productive, exceedingly hardy, etc. In passing over the fields the past season, I found several branches bearing fruit, which was of fair size, and quality. I have never yet seen a bush bearing a crop that would pay to pick. As an ornamental plant it is attractive, and very many would be pleased to have it growing on their grounds as an ornament, but for fruit I do not consider it of much value. While the foliage generally remains green all Winter, a portion of the bush that is most exposed will become beautifully tinted as Autumn approaches and the bush is certainly a thing of beauty.

Clifton, N. Y.

From W. J. SEARS.

As some appear to think there is no such thing as an evergreen blackberry, since we have the genuine Evergreen here, I deem it no more than justice to our Territory that the merits of the plants be shown. They are nothing like the Cut-Leaf Blackberry. These were brought on this coast from the South Sea Islands a few years ago, and have proved themselves very hardy where other kinds kill down every Winter; but then we have other fruits that are natives of warm climates that do well in all parts of the United States—the peach, for instance. This is not as mild a climate as many Eastern people seem to think; for the mercury often goes from 20 to 30 degrees below zero during the Winter, and again it will be very warm for a week or so, and that is what kills our berries throughout the whole of Eastern Oregon. If the Evergreen Blackberry stands the weather here (and it does), it will do so in Colorado or any of the Eastern States. Then again, it is an abundant bearer and a little later than other varieties—say two or three weeks—and the berries are about like those of the Lawton in size, color and flavor—some say a bit sweeter and others about the same. I am not interested in the sale of the Evergreens, only I like to see justice done to all parties, and if our men from this Territory are selling the genuine Evergreens and delivering them genuine there, it is no swindle.

Walla Walla, Wash. Ter.

From S. S. WALKER.

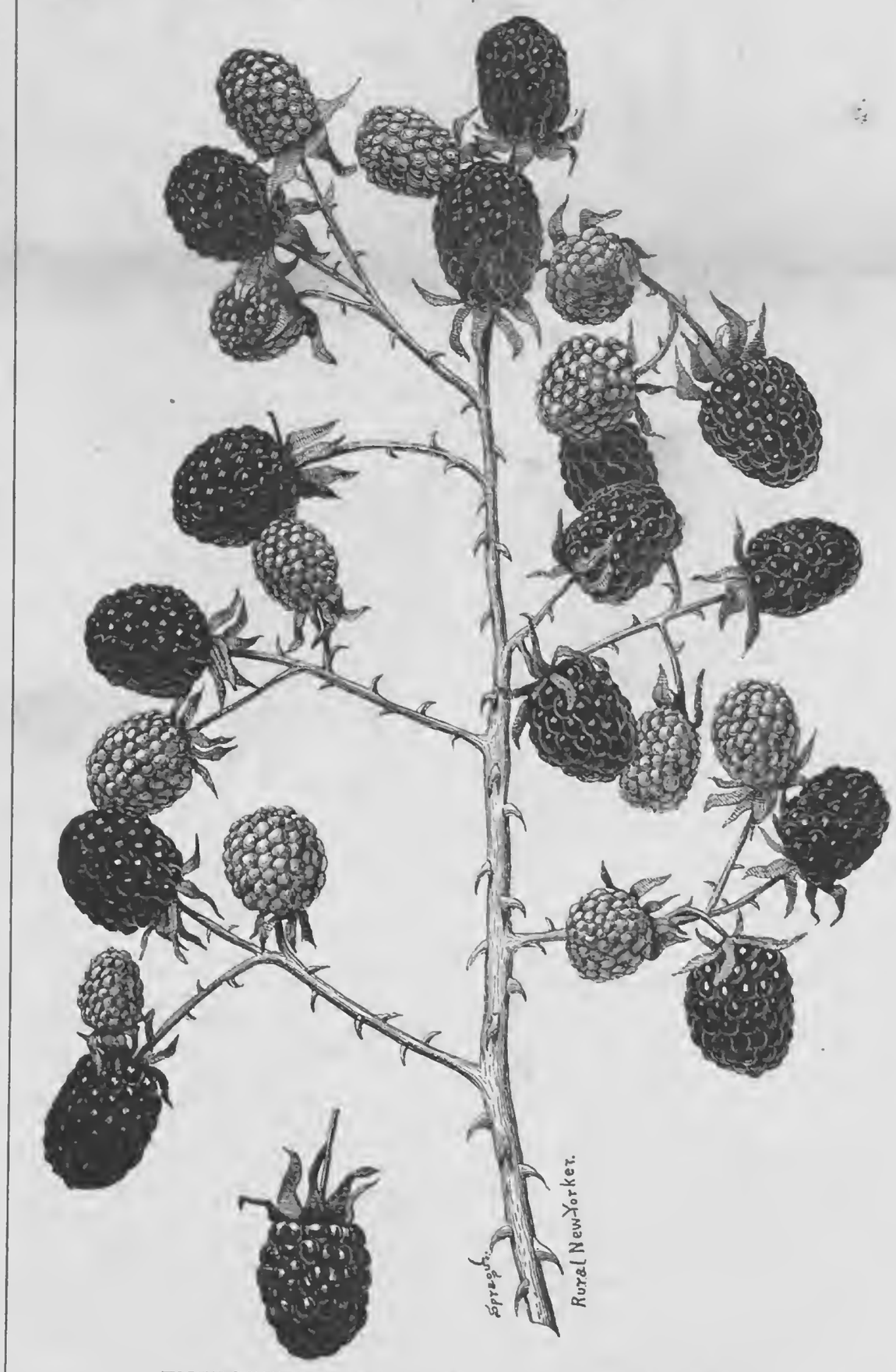
I believe that the Lawton and Kittatinny Blackberries are considered standards for quality and productiveness where they can be grown to perfection; but two-thirds of those who have either of these growing beside the Evergreen will give their preference to the latter. A man who had carried both 25 miles in a carriage, told me that while the Lawtons were all jam when he reached home, the Evergreens were in good shape. Still, no one should pay too high a price for them. The variety is worthy of a trial.

Forest Grove, Oregon.

From O. DICKINSON.

I have sent the Evergreen Blackberry to nearly every State in the Union, and I shall hear next Summer how it stood the present severe Winter, and also of its growth last Summer. To the present time, I have not heard of a single loss on account of the cold.

Salem, Oregon.



EVERGREEN BLACKBERRY. From Nature. Fig. 50.

From W. ASHWORTH & Co.

The Evergreen Blackberry is nothing like the old "Cut-leaf." There are millions of them growing wild hereabouts all through the woods, and instead of the Evergreen being the Rubus fruticosus—as the RURAL called it—it is the Rubus fructuosus—(? EDS.) We can get plenty of testimonials from different parts of the Territory that they are genuine Evergreens, very hardy and the most prolific in bearing of any of the berry family.

Seattle, W. T.

From PHILLIP RITZ.

I brought to this new Northwest 29 years ago, from Long Island, what was known as the Parsley-leaved Blackberry. It proves to be an evergreen here, and is now known as such. The vine is trailing and bears a nice, sweet berry, not quite so large as the Kittatinny.

Walla Walla, W. T.

Rural Topics.

Experiment Grounds of the Rural New-Yorker.

SPRAYING BELLOWS.

IN the way of labor-saving contrivances there is nothing that has given us greater satisfaction than the Woodason spraying bellows which are now sold by most seedmen. There may be other spraying apparatus that will serve better, but not having seen or tried them, we speak only of that which we can commend from experience. A single minute is long enough to spray every part of a hen house 10 feet square, perches, roof and all. Kerosene is used and answers every purpose of whitewashing, which requires much time and labor. For spraying small patches of cabbages with Buhach or Pyrethrum powder mixed with water, to rid them of the cabbage worm; or currant bushes with hellebore, to rid them of the currant worm, there is nothing more efficacious. It is tiresome, however, to blow the bellows, so that where a large number of plants or bushes are to be sprayed, spraying pumps may be preferred. There are other bellows made for the distribution of dry Buhach or hellebore powder. It may, of course, be extended with flour or plaster as desired.

The RURAL began the use of these bellows years ago, and through its commendation they are now used and greatly valued by many. There is little about them to get out of order and their durability may be estimated by the fact that a single pair of bellows has served us for five years and is now as good as ever.

BUHACH.

This is the powder made in California from the flower petals of the Pyrethrum cinerariæfolium. When first offered for sale, the manufacturers sent a box of it for trial to the Rural Grounds. It was claimed that it would kill every form of insect life—a claim which we found to be but partly true. Nevertheless, in many cases it seems to us the most desirable insecticide at present known. We tried it upon flies, mosquitos, plant lice, caterpillars of various kinds, beetles, cabbage worms, squash bugs, potato beetles and their larvæ, tomato worms, currant worms, and finally upon the rose bug. Our reports have appeared before RURAL readers from year to year, showing that, with the single exception of the potato beetle, it has proven more or less effectual with all.

If used dry, it may be mixed with several times its bulk of flour. But we prefer to mix it with water in this way: Take, for instance, an ounce of Buhach; *wet* this with alcohol and stirring it until it becomes muddy, add two quarts of water. This may then be poured into the reservoir of the bellows as needed and thus sprayed upon the infested plants, or if poured into a pail, any of the several kinds of force-spraying pumps may be used. The bellows, however, will be found much handier where but small quantities are required. It is said that a pound of Buhach

preferably first wet with alcohol) will bear the addition of 50 gallons of water, and still kill the insects which receive the spray; but we doubt it. It may be that the imported Pyrethrum powder is just as economical an insecticide as the California Buhach. Never having tried it, we speak only of that which we have tried, and that, too, with much satisfaction. Last year, for the first time, the Buhach was sprayed upon the spiræas growing here, which of all plants the rose bug attacks first. Though the bushes were *alive* with these bugs, in 10 minutes after the spraying not one was to be found, some having flown off, the others dropped to the ground where they seemed to wriggle either in agony, a sort of palsy paralysis or drunkenness—it was hard to say which. Dwarf apple trees, grapevines and other plants were subsequently sprayed with the same effect.

As is well known, this pyrethrum powder is utterly harmless except to insect life.

RURAL LIFE NOTES.

THE NEW CELERIES.

MUCH is written and said of late concerning the comparative merits of the newer varieties of celery. Henderson's White Plume has received praise from some quarters and condemnation from others. Such, after all, must be the lot of every new vegetable product that dares raise its head in these days. Tastes differ widely; conditions of soil, location and cultivation are diversified. Man develops better and enjoys better health in one locality than in another; and the sooner a like existing principle is recognized with respect to the vegetable kingdom the better. A writer in the London Garden finds two varieties of the White Plume—one a tall, upright grower, the other low and spreading. The last he obtained from an American seedsman under the guise of "Improved White Plume." "Get the original" is his advice, the other being much inferior. For the second season I am pleased with the White Plume. The flavor is good, the celery is attractive on the table, and it keeps pretty well. But it is not a vigorous grower with me, and is liable to rust. I lost some from this cause last season. It also inclines to rot if earthed up early. Although it may be used without earthing up at all, the blanching is more perfect where the soil has been drawn up against the stems for a time.

* * *

I am also pleased with the New Rose Celery. It grew vigorously and without a particle of rust. I am inclined to regard this as one of the best for general culture and family use. It is hard, very brittle, and crisp, the stems breaking easily when handled. In flavor it is excellent. It has, however, but little of the rose tinge, only a few of the stems showing it. Mr. Henderson is doubtless right in saying that the difference in flavor in celery is due more to condition of growth than to variety. But the red sorts differ from others and are usually better.

The plan of packing in a deep box in a cellar for winter use, the roots resting on a few inches of soil, is a good one. I shall, however, cover the roots with soil next time, as mine is wilting just a trifle now.

* * *

ECLIPSE BEET.—This is a poor acquisition, as it comes from my garden eclipsing all predecessors in lack of flavor. It is no sweeter than the Egyptian, and not worth growing except for its handsome shape and appearance. If in beets for the table fine quality means sweetness, then we have few sorts fit to grow. The Early Bassano seems the best so far. If flavor is no object, and only a flabby mass of tissue that will cook tender is wanted, then almost any of the new early beets are good. But I am always troubled with the notion that beets ought to have a sweet flavor. Possibly conditions of soil and growth are elements to be considered.

* * *

WINDOW TRAY.—For window-plant culture, after trying various methods, I find the best plan is to have a tray in which to set the pots; placing them upon about an inch of clean sand. The tray catches the drip and saves the carpet, while the sand holds the moisture longer and keeps a healthful degree of humidity in the atmosphere which is essential to personal inmates as well as the plants. My tray is of heavy galvanized iron. I have the tin-man take a sheet of full width and cut it off as long as wanted for the width of the window, or a little more. Then let him turn up the edges all around at right angles with the bottom, making the tray about two inches deep and twenty inches wide; and then have him solder the corner neatly and strongly. If desired, the upper edge could be wired, which would make it stiffer and more finished, but it is not necessary. Such a tray is inexpensive, durable. Mine does not rust, and it will be found well adapted to the purpose. Some 30 or 40 pots can be placed in it, depending of course upon size of pots and plants. They can be easily watered, even sprinkled with a fine rose nozzle, by the exercise of a little care, and many plants will thrive under these conditions, that are apt to fail or die when kept isolated in pots and saucers on a shelf by themselves. This tray should stand on a table about the hight of the window sill; then if desired to get at the front side, the whole may be moved out together. A shelf on brackets about half way up the window will hold another row of pots, the drip from which is caught in the tray. Then if one has still a few other plants which cannot well be crowded in the tray, the movable iron brackets of the shops may be screwed on at the sides of the window, especially if it be a bay-window, and some fine flowering specimens may thus be conspicuously accommodated and displayed. The whole forms a miniature, impromptu conservatory, easily arranged by anyone and with very little money.

* * *

HOMES.—I wish everybody had a home. It's a grand thing to have, and I say this not forgetting the thousands of unhappy homes, yes, miserable homes that exist in every land. Take away the influence radiating from the homes of any community, and the moral and social atmosphere of that place would soon become appalling. How very little it usually takes to make home happy, and yet, how many either forget or refuse to do even that little. A bad temper is nowhere else so virulent as in the home; and yet a single ray of genial sunshine flung in at the right time—and any time is the right time—will shatter the impending cloud, and avert the storm. Oh, let us be cheerful in our homes. Deal gently with the weak, the irascible, and the doleful members of the family. But never forget to scatter smiles and sunshine. Don't let the children see long faces or hear angry words. If I could prevent just this one thing in every family that reads the RURAL, it would be glory enough for me.

* * *

Now who wants a chrysanthemum flower that measures seven inches in diameter, or a plant of the species eight feet in hight? Such were shown at the last exhibition in New York. This tendency toward monstrosity and colossal proportions in the garden is growing detrimental in its prevalence. Massive fruits, flowers and vegetables usually attain such abnormal proportions at the expense of quality and flavor. Surely we have nothing to sacrifice in these respects. Let us stop all this horticultural jugglery to make things big, and go to work honestly to make them better. But let us make quality the first consideration.

H. H.

On-the-Hudson.

EVERGREEN BLACKBERRY. From Nature. Fig. 51. (See first page.)

Sheep Husbandry.

Notes from the Rural's W. N. Y. Farm

LAMB RAISING AND FEEDING LAMBS.

NEW AND OLD PROCESS MEAL.

OUR old friend, J. D. Stannard, of Wisconsin, asks at what price will oil meal cease to be a profitable food for sheep?

Several others ask what is the difference between old and new-process meal, and which is the better as a sheep food? Another inquires how should oil meal be fed?

These questions open up the whole subject of the manufacture of oil meals and their comparative value with each other and with other feeding stuffs. Oil-cake meal, and oil meal (the old-process), and linseed meal (the new-process), are all made from flax seed, resulting from the extraction of linseed oil. The best brands by either process are made from selected seed, such as does not contain over five per cent. of "fouls"—other seeds and foreign matter. In both processes the seed is first cracked or ground, by the same machinery and in the same way. In the old process this ground seed is first heated and then subjected to immense pressure which expresses from 88 to 91 per cent. of the oil, and along with it, from three to five per cent of the albuminous matter. The solid hard cakes left by the presses are then ground, making the meal sold as oil or oil-cake meal. In the new-process the cracked seed is placed in large tanks holding about 300 bushels, and from this the oil is dissolved and washed out with a solvent which takes from 97 to 98.7 per cent. of the oil, but has no effect upon the albuminoids. The meal is then subjected to the action of superheated steam which expels the last trace of the solvent. It is then subjected to the action of heated air which expels the moisture, when it is ready for use. According to the average of all the American analyses, at hand, of the two meals, they contain as follows:—Of albuminoids or flesh, wool and milk-formers, the old-process has 30.26 per cent., the new-process, 35.61 per cent.; of carbohydrates, or fat and heat-formers, the old-process contains 38.13 per cent., the new-process 36.48 per cent. Corn has an average of nine per cent. of albuminoids and 68 per cent. of carbohydrates.

Figuring the values of all these by the German valuation, which, though much too high is as fair for one as another, the comparative values of 100 pounds of each would be as follows:

OLD-PROCESS MEAL.

30.26	pounds albuminoids @ 4½c. per pound	$1.31
38.13	" carbohydrates @ 9-10c. " "	.34
	Total value of 100 pounds	$1.65

NEW-PROCESS MEAL.

35.61	pounds albuminoids @ 4½c. per pound	$1.54¼
36.48	" carbohydrates @ 9-10c. " "	.29½
	Total value of 100 pounds	$1.84

INDIAN CORN.

9	pounds albuminoids @ 4½c per pound	$ .39
68	" carbohydrates @ 9-10c. " "	.61
	Total value of 100 pounds	$1.00

In these estimates, the value of one per cent. fat is reckoned as equal to 2.4 per cent. of carbohydrates.

These figures make the ton value of each, counting corn as worth $20, or one cent per pound:—Old-process meal, $33; New-process meal, $36.80. These estimates do not take into account the value of the manure for use upon the farm. This to the good farmer who desires to maintain the fertility of his fields, is a matter not to be lightly passed over, so that we should take the value of the manure made in the consumption of the various food when deciding which is the most profitable to feed. We must also consider this when considering at what price linseed meal ceases to be profitable. Without giving exact figures, it is safe to say that the manure resulting from feeding a ton of linseed meal is worth at least three times as much as that from a ton of corn, so that if we take $3 as the fair value of that from the corn, then that from the oil-meal would be worth $9, and at least $6 should be deducted from the price of the meal.

Let us suppose a case as the basis of a calculation. Suppose corn to be worth, in the market, 28 cents per bushel or $10 per ton; then the new-process meal would be worth $18.40; to this we should add $6 for the superior value of the manure from it. This would make it a profitable food at $24.40 per ton.

From our experience in the use of oil meals as a stock food and of the manure resulting therefrom in the production of crops, we are very sure not one-half as much is used as would be profitable.

JOTTINGS.

We recently bought a large lot of culled beans (those picked out in hand-sorting), for which we paid $6.15 per ton. We cook them, and after they are cooked, add a small proportion of corn meal and a little bran, and they make the best kind of hog food. On this food we are now feeding 100 hogs.

With such cheap food, and with warm, dry quarters, there is not the least difficulty in making pork and selling it even at the very low price of $4.50 per 100 pounds, and making a large margin of profit. It is no experiment, as we have done the same thing before.

We have not the least fear but that good, nice, well fattened shoats, weighing from 200 to 225 pounds, will sell, about next June, at from $5.50 to $6.00 per 100 pounds, and at that price we shall double our money.

But the best of it all is that the manure is worth 50 per cent. more than the beans cost, so that if we did not make a cent in feeding the hogs, we should still count the whole transaction a very profitable one.

In buying feeding stuffs we always have due regard to the amount and value of the manure their consumption will leave available for use upon the farm.

While we have great faith in commercial fertilizers and would not say aught against their use, we still give the palm to such manure as we make on the farm. There should be thousands more doing the same thing.

Dairy Husbandry.

CANADIAN DAIRYING.

A fair attendance; dairying as a specialty; progressive dairying; possibilities of the dairy; kinds of cheese wanted; dairy buildings; practice of a successful dairyman.

[RURAL SPECIAL REPORT.]

THE Dairymen's Association of Western Ontario met on January 13th, and continued its sessions until noon of the 16th. As an admission fee was charged, the attendance might be considered large and the interest was certainly intense.

Mr. F. Malcolm favored dairying as a specialty, as against mixed husbandry. Even in mixed farming, dairying is the most profitable branch. But conditions must determine the line of farming. Those who go into dairying, where the conditions are against them, will make a failure. Farms in the dairy districts of Ontario are rated much higher than equally good ones in districts where mixed

farming is carried on. Any business which is able to establish a special market and draw buyers from all parts is able to command better prices than one which depends upon the general market.

Rev. W. F. Clark favored progress in dairying. The management of the cheese factory has improved faster than the production and delivery of milk. Dairy farmers lack thoroughness. He favored carrying instruction right to their doors. First, hold free conventions in the towns of the dairy districts, where their best home talent could reach the factory patrons and instruct them in the requisites of successful dairy farming. Second, employ experts and allot to each 18 or 20 factories, and make it the duty of the experts to regulate everything about the factories and extend their labors to the farms and herds of the patrons, correcting evils and giving the required instructions for producing the best milk and delivering it in the best condition. This idea was favored by the convention and bids fair to be carried out during the coming season.

The possibilities of dairying were presented by Mr. Thomas Shaw. There should be a more scrupulous honesty permeating all the details of dairy farming, and a higher standard for the dairy herd. Dairymen should bring their troubles to these conventions and submit them to the scrutiny of all present, who will be most likely to throw some light on the means of remedying the troubles in the future. The dairyman who does not encounter and overcome obstacles is not progressive, and he who is not progressive is sure to be left behind in the race. There is inexcusable meanness in the practice of dishonesty by the patrons of cheese factories, who not only inflict a degree of evil on themselves, but a much greater one on their unoffending and perhaps unsuspecting neighbors. Improvement in dairy farming is not for the benefit of the factories alone, but for the greater benefit of the farmers themselves, who will reap the reward of increased receipts.

The kinds of cheese wanted and the kinds not wanted were pointed out by Mr. John Robertson. Those not wanted are stiff, dry, curdy, soft, pasty, loose, open-cutting, bitter, sour, strong-flavored, a variety of sizes in the same factory, and that made from dirty, tainted or skimmed milk. Too much rennet, tainted rennet, too little rennet, too much or too little heat, too much acid, bad condition of the herd, rank flavored food, variable temperature in the curing room, whey-soaking, uncleanliness, carelessness and all kindred causes tend to the production of these objectionable qualities in cheese. The kinds of cheese wanted are mellow, silky, meaty, solid-textured, fine-grained, rich, pure, nutty or creamy flavored, shapely, clean, smooth-rind and uniform-sized cheese of 60 to 70 pounds weight. This kind of cheese is made from wholesome, clean milk, with a proper amount of sweet rennet, even and sufficient, but not too much heat, fine and even cutting, gentle stirring to prevent adhesion of the lumps to each other, avoidance of too much acid, warm make and press room, even temperature in the curing room and scrupulous care and neatness at all points.

Prof. L. B. Arnold dwelt upon the importance of properly-constructed dairy buildings, and gave a description of the one lately erected at Cornell University as a model. It is comparatively inexpensive, but by the use of building paper is provided with four or five dead-air spaces in the walls, which render the interior practically free from the influence of changes in the outside temperature. He also exposed the poor economy of employing cheap cheese makers when the best can be had at reasonable wages. A single sale often realizes the difference in wages for the entire season. He also deprecated the hurry so often manifested by cheese makers to get their work off their hands, thereby prematurely rushing the curds to press when they ought to be curing in the vat or sink.

Mr. D. M. Macpherson runs 66 cheese factories in Eastern Ontario. He is studying to get rid of the exercise of judgment as much as possible on the part of the cheese maker, and reducing everything to routine practice. In the first place, he is careful to have correct thermometers, finding those in common use vary from two to ten degrees. He sets his milk at 80 to 86 degrees, according to temperature and season; takes one hour for coagulation fit to cut; cuts fine and even, and is one hour steadily raising the temperature to 98 degrees—not above, as he considers it injurious. As soon as the curd will string the least bit by the hot-iron test, he draws the whey; he piles up the curd and cheddars in the vat, frequently cutting it in quite small pieces, and turning it to facilitate the separation of the whey: when it will spin a half-inch on the hot iron, he grinds the curd; he then lets it stand an hour and air, keeping it warm, but frequently stirring it; then he salts the curd and lets it stand another hour exposed to the air before he puts it to press. The pressing is light at first and very gradual.

Mr. Robertson, Jr., follows the rule of having his curd coagulate ready to cut in as many minutes as he wants it days to be curing and ready for market, that is to say, if he desires the cheese to be fit for market in 30 days, he puts rennet enough in his milk to complete the coagulation ready to cut in 30 minutes; this, with his system of handling curds, produces about the desired result every time.

The subject of the sanitary arrangement of the factory was discussed; the health officers are taking hold of the subject to remove offensive pig-styes, whey vats and leaky spouts that scatter the whey in inaccessible places that cannot be cleansed.

On the whole, the Canadians appear to be more widely awake to the necessities of successful dairying than are their neighbors in the States. "C."

The Poultry Yard.

SOD-HOUSE FOR POULTRY.

THE best winter-laying my hens ever did was when they lived in a "sod-house." (See Fig. 59). A pen was built and a door-frame was set into it on the most sheltered side and sods built over and around it, making the foundation about three feet broad. Earth was liberally heaped over all, and a ventilating tube, 8x10 inches, was set in the top like a chimney. The most successful cheap contrivance ever used for saving the little pitiful chicks is a hole dug in the ground, not over eight inches

EVERGREEN BLACKBERRY. From Nature. Fig. 52. (See first page.)

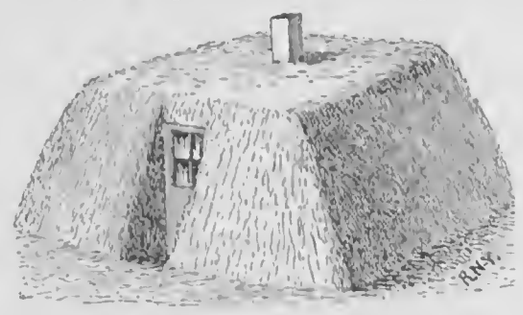


Fig. 59.

deep. A box, with an opening on the most sheltered side, is set over the hole, and the entire thing is snugly banked up with earth. (See Fig. 60). Put one brood in each place of the kind and feed with screenings and crumbs from the table, and see how well it pays. If you give them drink enough they will not be stunted in size. An old salt barrel, sawed in halves, or, for small fowls, even a nail keg, laid on its side in the hole and banked up, or sods built up around it, will answer well.

Fig. 60.

MRS. E. S. LINCOLN.

FIVE GOOD LAYERS.

IN the Fall of 1884, I purchased five pullets and one cockerel of the Plymouth Rock breed. The hens averaged 7¾ pounds and the cock weighed 11 pounds. There was also one egg in the coop when they arrived at the express office, which showed their good will: and from the first of January, 1885 to the 31st of December, 1885, they layed 1,051 well-developed eggs, or 210 1-5 per hen. In January they layed 38; February, 76; March, 92; April, 136; May, 102; June, 94; July, 112: August, 94; September, 90; October, 71; November, 60; December, 86; the record was kept each day. If the readers of the RURAL wish, I will draw plans of our hen-house, and explain how I feed chickens. [Certainly.—EDS.] J. T. W.

Decatur, Ind,

Entomological.

THE MILDEW OF THE GRAPE-VINE.

AN EFFECTUAL REMEDY FOR PERONOSPORA.

PROF. C. V. RILEY.

(*Continued.*)

SULPHUR as a means of checking or remedying this particular mildew has proved a failure, and indeed no satisfactory remedy has until recently been found, though prophylactic means, such as those recommended by Mr. Wm. Saunders, namely, the sheltering of the vines by a board covering over the trellis, have been more or less successful.

The fact that no satisfactory remedy existed until lately was well illustrated by the discussion which followed the reading of a paper by Mr. F. S. Earle, at the meeting of the American Horticultural Society, at New Orleans, last February, on "Fungoid Diseases of the Strawberry.* The concensus of opinions was that we have no remedy for most of the fungus diseases of plants. That this was, unfortunately, a true state of the case, practical cultivators will admit; for, though intelligent treatment will check the growth of the black knot and the proper use of lime and sulphur will check Erysiphe and Uncinula, these are about the only fungus diseases which we can control with satisfaction and certainty. Prof. G. C. Caldwell is reported to have stated about a year ago, at a meeting of the New York Horticultural Society, that mildew could be prevented by soaking the stakes in the vineyard in a solution of blue vitriol; but as that report does not specify which mildew was intended, I know not how authoritative it is.

During my visit to South France in the Summer of 1884, I was struck with the prevalence of this Downy Mildew in most of the vineyards, and the French grape-growers around Montpellier felt far more anxiety as to the consequence of this peronospora than they did as to the work of the Grape-vine Phylloxera. They feel now that with the aid of our American stocks they can control and defy this underground pest; but the peronospora, which was a few years ago unknown to them, but which has been introduced with the American vines, has so far entirely baffled them, as, I believe, it has baffled our own grape-growers.

In an address which I had the honor to deliver before the Central Society of Agriculture of the Department of Hérault in June, 1884, and which treated principally of insecticides and insecticide appliances, I took occasion, in view of the interest then felt in this mildew, to recommend the use of the following as a promising fungicide: The ordinary milk-kerosene emulsion prepared after the formula given in my late official reports as U. S. Entomologist, with from two to five per cent. of carbolic acid and the same percentage of glycerine, and then diluted in 20 to 50 parts of water to one of the emulsion and sprayed onto the under surface of the leaves by means of a cyclone nozzle of small aperture, so as to render the spray as fine as possible. The suggestion of the carbolic acid was due to the results obtained by Prof. Gustav Foëx, Director of the Ecole Nationale d'Agriculture at that place.

It was very gratifying to find this recommendation at once acted upon, and, up to the time when I left Montpellier, with satisfactory results. Reports of further trials showed also that this mixture so sprayed at once arrests the spread of the mildew. I was well aware of the difficulty of dealing satisfactorily with a fungus which may, in a single night, without any warning, manifest itself all over a vineyard; but it is a great point gained to know how to check it, even if the knowledge may at times be of little practical avail in large vineyards. But much good nevertheless resulted, and "*Le Procédé Riley*" was much written about in *La Vigne Americaine* and other viticultural journals a year ago. However, the experience of the past year in France has furnished a remedy which, from all accounts, is in every way satisfactory, because it not only destroys direct, but acts as a prophylactic.

My attention was drawn some months ago to two articles by C. B. Cerletti published the 15th and 30th of August in the *Revista di viticoltura ed Englogia Italiana*, announcing the success of hydrate, or slaked lime. My friends, M. J. Leichtenstein and P. Viala, of Montpellier, the latter having charge of the *Labaratoire de viticulture* at the *Ecole Nationale d' Agriculture de Montpellier*, soon thereafter communicated to me the discoveries made. M. Velicogna in a report in the *Actes et Memoires de la Societé imperiale et royale d Agriculture de Gortiz*, for September and October, 1885, has also discussed the effect of hydrate of lime at length, his formula being 2½ kilogrammes of the lime (chaux éteinte) in 100 liters of water.

The general tone of the experience with this hydrate of lime is satisfactory, but with a mixture of hydrate of lime, and sulphate of copper is still more conclusive, and numerous communications to viticultural journals and to the French Academy attest the complete efficacy of the remedy. It has been the custom in some of the wine-growing parts of France to sprinkle lime and verdigris upon those vines which border on the roadside, as a means of warding off depredators. It was found that vines so spattered were not infested by Peronospora, while the rest of the vineyard might be attacked. This discovery led to further experiments.

Various formulæ have been given, but the most important articles are those by M. A. Perrey in the *Comptes Rendus de l'Ac. d. Sc.* Oct. 5, 1885, and by M. A. Millardet in the same publication and reproduced in the *Messager Agricole du Midi* for Nov. 10, 1885. From this latter article I condense the following: Dissolve eight kilogrammes (18 pounds) of ordinary sulphate of copper, in 100 litres (about 22 gallons) of any kind of water (well, rain, or river), in a separate vessel. Mix 30 litres (about 6½ gallons) of water, and 15 kilogrammes (about 34 pounds) of coarse lime so as to make a milk of lime. Then mix with this the solution of sulphate of copper. These will form a bluish paste. Pour a portion of the mixture in a bucket or other vessel, thoroughly shaking it, and brushing the leaves with a small broom, taking care not to touch the grapes. There is no fear of any accident, not even to the most tender portion of the vines.

The treatment was made from the 10th to the 20th of July. At some points the operation was repeated a second time at the end of August, but without much advantage. It was therefore demonstrated that one application was sufficient.

The mixture, when dry, sticks very fast to the leaves. After the vines were treated there were several showers the beginning and end of August, also the frequent September rains, notwithstanding which the evidence of the efficacy of the treatment, where no more than half the leaves were touched by the mixture, could easily be detected. That this remedy will prove effectual for the many other similar white mildews on other plants, caused by other Peronosporæ, there can be little doubt.

The same fear of danger as to the effect of this fungicide on the vine and on the wine, has been experienced in Europe as we experienced in this country in the early use of Paris-green as an insecticide, and experience alone will settle the amount of danger there may be in the use of this new remedy.

*Many writers on mycological subjects misuse this term "fungoid" (which means something not a fungus, but fungus-like) in speaking of true fungi or of a fungus diseases.

BIBLIOGRAPHY.

I know of no one who has more fully recognized the practicable bearings on the best method of dealing with these two fungi than Mr. Wm. Saunders. In the Report of the Commissioner of Agriculture for the year 1861, p. 495, ff., he has an article: "Remarks on Grape Culture, with reference to Mildew, both on the native and foreign varieties," and in a number of subsequent reports, as those of 1864, '65, '66, '67, '69, '81-2 and '83, he has dwelt either at length or incidentally on the essential facts that the Uncinula is encouraged by a dry atmosphere and the Peronospora by a moist atmosphere. His experience shows that the nature of the soil or mode of cultivation has but little influence on the fungus and that protection from above as by covered trellis, is about the best prevention of the Peronospora; also that grape-vines with downy foliage are more susceptible to the Peronospora than those with smooth foliage. His experience is very well summed up in a statement of it furnished for publication in my 5th Report on the Insects of Missouri, p. 70 (foot-note).

Of the writers on the structure and development of these mildews, Dr. Thomas Taylor was one of the earliest in this country, and found the perithecium of the Uncinula on the European vine. His chief articles are contained in the Reports of the Department of Agriculture for 1871 and 1874, but are marred by confusion in both text and plates. For accurate details the student should more particularly consult the following:

W. G. Farlow (whom I have mostly followed) "Notes on Some Common Diseases Caused by Fungi," (Bull. Bussey Inst. Vol. II, part II., 1877, pp. 106-114); also "On the American Grape-vine Mildew (ibid. for 1876, pp. 415-425); Maxime Cornu, "Le Peronospora des Vignes," Paris, 1882; B. D. Halsted "The White Mildews" (Proc. 19th Session Am. Pom. Soc., for 1883, p. 87); and Wm. Trelease, "The Grape Rot," (Trans. Wis. Hort. Soc., 1885, pp. 196-199.)

SUMMARY.

We thus have, indigenous to this country, two mildews that are more particularly destructive to the grape-vine:

1. The Uncinula spiralis, or the Powdery Grape-vine Mildew, flourishing most in a dry atmosphere, not particularly destructive to our hardier native grapes, and easily controlled by the use of sulphur. It develops chiefly on the upper side of the leaf, and produces simple, ovoid summer spores and more complex and ciliate winter spores, which are found upon both the leaf and the cane. Introduced into Europe many years ago, according to trustworthy evidence, it is only known there in the conidial form as Oidium Tuckeri, and works more injury than it does with us.

2. The Peronospora viticola, or the Downy Grape-vine Mildew, which ramifies its mycelium in the substance of the leaf and even of the fruit, and develops most in moist or wet weather. It produces its summer spores on the underside of the leaf, and a winter spore in the tissues of the dry and fallen leaves. It is not amenable to sulphur, but is checked by a diluted kerosene emulsion in which a small amount of carbolic acid is mixed, but far more effectually checked, and even prevented, by a mixture of slaked lime and sulphate of copper. This should be applied early in the season, say in June, so as to act as a preventive, while the gathering and burning of the old leaves in winter time will assist. This species is more injurious with us than the other, and is especially troublesome on the European vines. It was first introduced into Europe in 1877, when it was found in Hungary, and has since spread through the greater portion of France, Italy, Switzerland, Austria, etc.

Pomological.

TWO RARE PEARS.

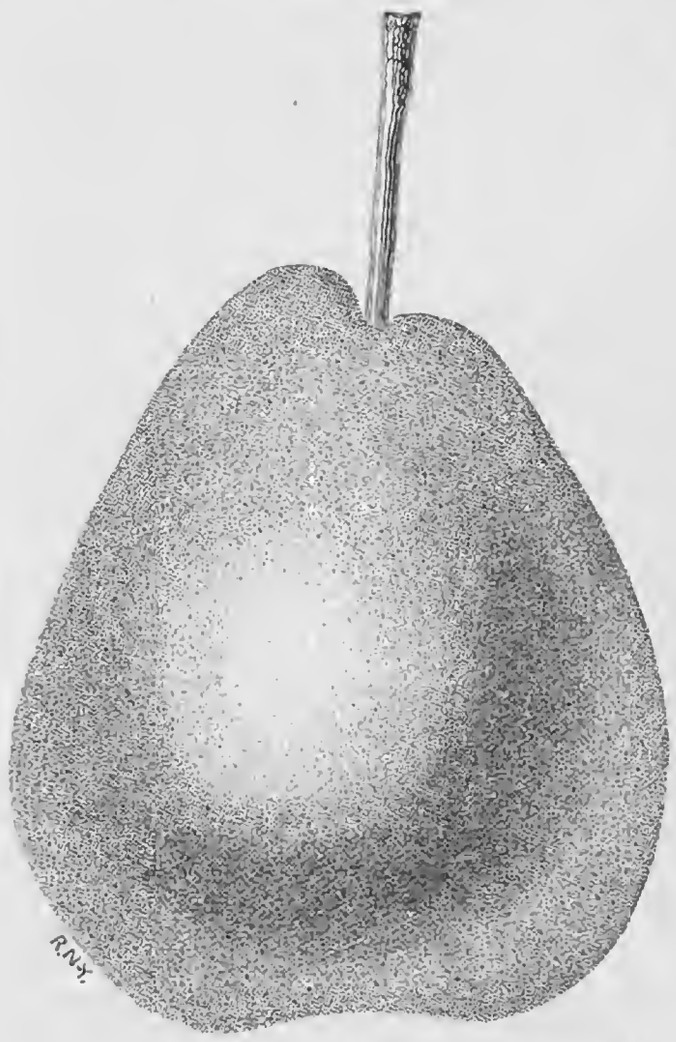
GEN. W. H. NOBLE.

THE Hericart and Omer Pacha pears are both French, and both September pears—early September and last of August. Their season is over, and all, out of a refrigerator-house, have vanished or become worthless by September 15th. They may be set down as about two weeks ahead of the Bartlett. Although the number of good September pears is "legion;" yet I think there is room for these two large, fine-fleshed, aromatic and luscious pear.

The trees are both healthy and very fair growers. I have never known the leaf or any other blight to touch them. The Omer Pacha throws out its limbs very regularly and squarely. But those of the Hericart (see Fig. 55, with cross-section at Fig. 56,) are somewhat straggling. It needs some interior pruning. Since the trees began to bear in their early fruitage, they have never failed to give me a crop. The Hericart is rather apt to over-bear. Although every pear, even windfalls, are good, yet, like all others, the fruit is improved by thinning.

The Omer Pacha (see Fig. 57, page 89, with cross-section at Fig. 58, page 89), like the Beurré Bosc, sets its fruit at such judicious intervals that it saves that duty, so sure, on most trees, to give us better pears.

For market their size and fine quality make them very desirable. We want no more small September pears unless they can rival the Seckel in all that makes it the queen of its race. In fact, I think the most anxious search should be for large and later pears and those keeping like apples joyously while "Winter lingers in the lap of Spring."

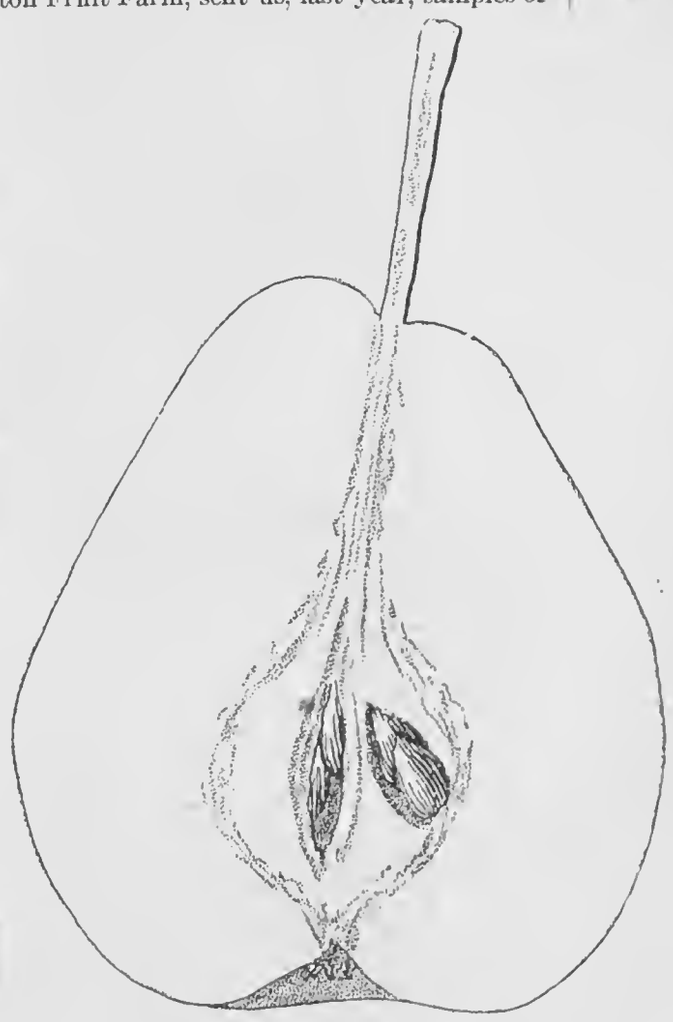


HERICART PEAR. From Nature. Fig. 55.

In this search and watch, large pears, of good keeping qualities, should always be had in mind. Short of the high qualities of a Dix, or an Easter Beurré, and close up to their size, we should not give our hearts to many pears of any season. The markets will not pay for small fruits when big ones can be had, of anywhere near equal merit.

THE GLOBE PEACH.

MR. CHRISTOPHER SHEARER, of the Tuckerton Fruit Farm, sent us, last year, samples of



HERICART PEAR. Cross Section. Fig. 56.

the above-named peach, which we illustrate at Figs. 65 (p. 90) and 66. The samples sent were very large and oblong with a prominent apex considerably pointed. Skin considerably downy, lemon-yellow with a fine, mottled-red cheek. Suture well defined, but shallow, 9½ inches in circumference. Flesh, yellow with a deep shade of red about the pit, juicy, sweet, rich and melting: a very good flavor, but not the highest. October 2 it was in fine order; a great improvement over the Late Crawford. Leaves large and healthy, heavily veined, but entirely free from glands, quite pointed, but not deeply serrated.

Mr. Shearer states that this peach is an accidental seedling with him, and has proved so profitable that since he has learned its value he has grown it in preference to all other varieties. He has trees of this sort 12 years old, and still healthy and vigorous. The tree is a rapid and vigorous grower, well adapted to our climate, and is an excellent bearer, sometimes breaking down with an excessive load of fruit. In ordinary years these peaches measure from nine to ten inches in circumference, and in favorable seasons from 12 to 14. It begins to ripen in the second week of September, and lasts till the first of October.

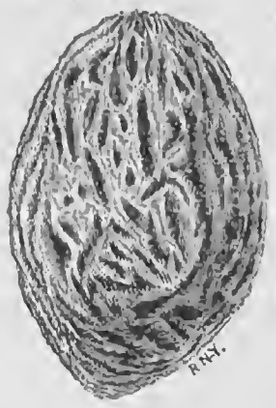


Fig. 66.

MEECH'S PROLIFIC QUINCE.

A LETTER FROM MR. W. W. MEECH.

NOW that the RURAL is satisfied that Meech's Prolific Quince "is plainly *not* the Champion," I need not again recall their points of difference. I did not say in my letter that the RURAL NEW-YORKER decided that the Champion and Angers were the same, but having been told so, asked you if that was the fact.

You think the attack on my quince was made by the judges at Mt. Holly rather than by the RURAL NEW-YORKER. I beg leave to differ with you. In the official report of awards at that fair my name with quinces is in the list of "honorable mentions," and it was all they could do for me as Meech's Prolific was not in the premium list—I was assured by an oversight.

You ask "Is Meech's Prolific a distinct variety?" I answer, "Yes, as distinct as other varieties." After the discussion of this variety at the late meeting of the New Jersey Horticultural Society, I asked Mr. P. M. Augur, the Pomologist of the Connecticut State Board of Agriculture, if he ever had seen in any fruit catalogue or heard any name for a quince answering to the description of Meech's Prolific, and he said he had not. I have not yet found any one who has given me any other name for my quince.

Chas. A. Green says, "I have reason for believing Meech's Quince to be an improved type of the Orange."

You inquire after the history, and how it comes to bear my name? It is mine by right of discovery. I never claimed to originate it. Being a special student of quinces and their culture, I have tested all the sorts I could get, and by their comparison have found this superior to all the rest. In sympathy with the opinion of Mr. Green as to its origin, I called it the Pear-shaped Orange Quince until my horticultural friends said this was not distinctive enough, as there were so many pear-shaped quinces, and that it was most suitable it should bear my name. To this suggestion I acceded, adding Prolific, its most prominent characteristic. That is how this "acquisition to the quince family" so long in obscurity and without a name known to the horticultural world, has come to be known as Meech's Prolific Quince.

The writer of the letter on the "True Story of Meech's Prolific Quince" tracing it back to Ohio some 20 years ago, stated in the discussion at Trenton, that he had also traced it to New York and Connecticut, all of which may be true. The man from whom I obtained my original stock, had it in Connecticut in 1857; but with no specific name, and it was probably carried to New York and Ohio, as he, and perhaps others, brought it to New Jersey.

It is unaccountable to me that so valuable a variety should be so long unknown to horticulturists; and that when I had discovered, tested, and made known to them its superior merits, and when some of them had attached my name to it as the disseminator, there should be so many to question the propriety of its bearing my name.

By the rules of the American Pomological Society "the originator or introducer (in the order named) has the prior right to bestow a name upon a new or unnamed fruit." Should the question of priority arise between different names for the same variety of fruit, other circumstances being equal, the name first publicly bestowed will be given precedence." Having settled on the merits of this quince as a new variety, I asked Mr. Downing as to the propriety of sending it out with my name attached as had been proposed; and he replied that he saw no objections to it, and so it has gone forth to the world.

Finally, if it be an old variety and bearing trees are found well scattered, even then I know of no stock to warrant your charge that trees can be bought at less than my price.

Vineland, N. J.

[We have cut out what we deem unimportant matter from Mr. Meech's communication and present the above in justice to him. Our own views remain unchanged. So let the matter rest. EDS.]

Farm Economy.

A FEED-BAG FOR HORSES.

WE give two illustrations showing a good form of feed-bag for horses, and one that can easily be made by anyone. With this in use the position of the feed in the bag is controlled by the horse moving his head up or down.

The feed-bag, see Fig. 54, as will be seen,

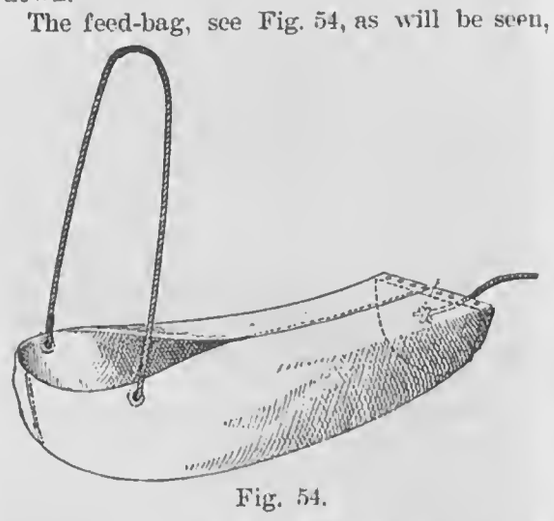


Fig. 54.

consists of a cylindrical canvas bag, or other suitable material, one end of which is closed by a semi-circular block of wood, tacked securely to the canvas. The other end of the bag is closed by a seam. Upon the upper, outer end of the feed-bag is formed a longitudinal slit through which the horse's nose passes. The main portion of the bag may be formed from a single piece of cloth sewed together along the upper edge, the opening being formed simply by leaving an open place in the seam.

A cord is secured to the wooden inner end, and is designed to be tied to the hames or saddle, in supporting the bag at its inner end. A similar cord is attached to each side of the nose end of the bag, and passes over the head of the horse. This cord should be short enough to hold the horse's nose within the slit in the bag.

Its application is clearly shown at Fig. 53 (p. 89). The position of the bag when the horse's head is down is indicated in dotted lines. The length of the bag should be sufficient so that when the head of the horse is in its forward position, the bag will not be stretched tight.

A DOUBLE HARROW.

ALTHOUGH it is hardly the time to use harrows, now is the time to get them in order for Spring work. I found the four-horse harrow, shown at Fig. 61, very useful last Summer, as it saved a hand to drive and, as I thought, did

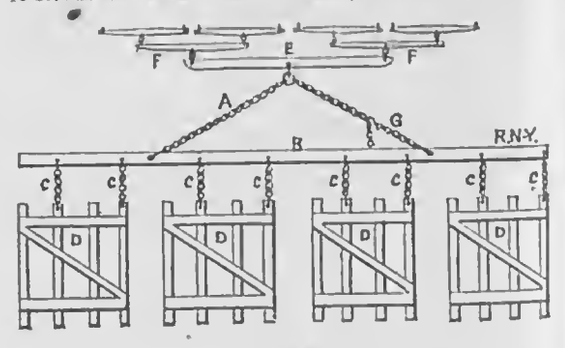


Fig. 61.

better work; it certainly is a fast way for it will take 16 feet at a cut. I take two common harrows (D D D D), with four beams in each section, bore a hole through the end of every other beam, and a corresponding one in the draw bar (B); then take short chains (C C C), put a bolt in the last link on each end (being careful to have all the same length), and fasten as in the figure, using a clevis at the draw bar. The chain (A) has a ring in the center to which the double-tree (E) is fastened. G is a short chain fastened to B, and ending with a hook. A stay chain is what I use. By lengthening or shortening this short chain the movement of the harrow is changed so that the harrowing is coarser or finer. The more the chain is lengthened the straighter

the implement draws, and consequently the coarser the harrowing. By shortening the drawbar and taking off one section, it can be made into a three-horse harrow.

Champaign Co., Ill. GEO. WHITON.

A HOME BINDERY.

MOST readers are loth to cast aside valuable papers. Those who do so lose more than half the value of the year's subscription. The best papers are intended for study as well as for reading. The trouble with most persons is that binding is expensive, if done by a regular binder, and unsatisfactory if done at home. I have a method of binding my own papers and pamphlets which I find very cheap and substantial. I arrange the numbers in regular order, with the back edges and one end as even as I can get them. With an awl I pierce three holes, as shown at the numbers in Fig. 63. These are large enough to admit the passage of a darning needle, and are made, say half an inch from the back margin. Now, with a darning needle, strong wrapping twine is passed down through the hole at 1, across and up at 2, down at 3, up again at 2 and across to 1, after which it is tightly drawn and tied.

Fig. 63.

If there are covers to put on, take a piece of stout cloth—as brown drilling—the length of the volume, and wide enough to cover the back and come an inch or so on each side. If there are two covers, one may be pasted on the outside and one on the inside of the cloth, so that when pasted on the book the edges of the covers shall be about half an inch from the back corner. With good paste fasten the back thus prepared on the back edge of the volume. From some poster or advertisement cut the name of the paper and paste it on the side or back and the book is complete.

Canyon City, Col. L. J. TEMPLIN.

GARDEN TROWEL.

THE trowel shown at Fig. 62 was made by our blacksmith from an old cross-cut saw, and is a little heavy. He furnished the steel and charged 50c. for making it, I having to polish

Fig. 62.

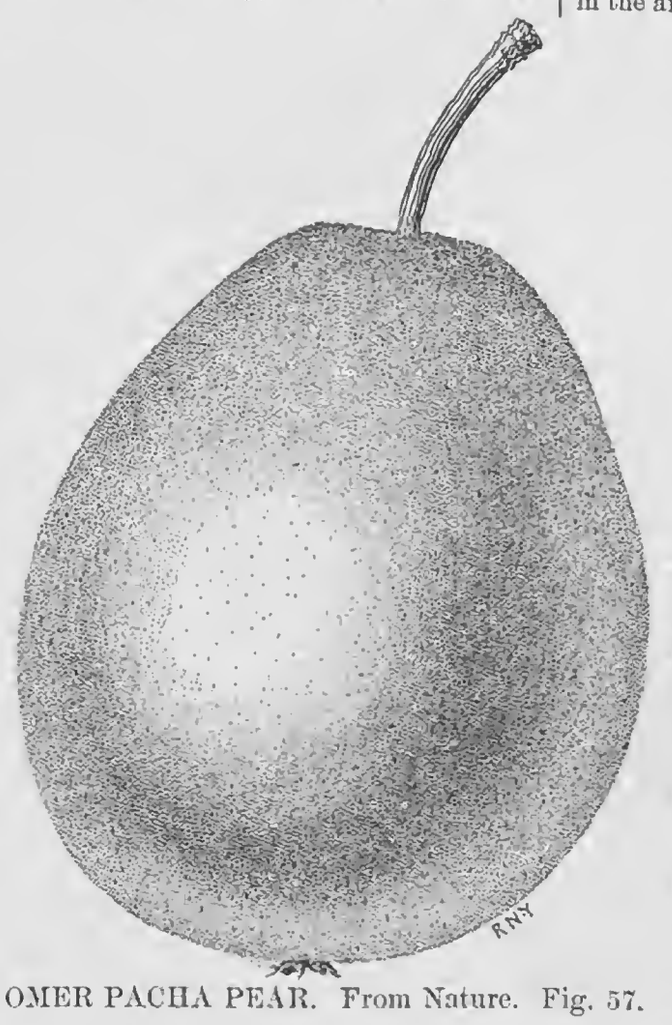
it myself. It is very strong; in fact, I very much doubt if a man can break it by prying on it. In some kinds of work a good, stout handle, three or four feet long, can be inserted and save stooping over. Thus fixed it is fine for working around shrubbery, taking up strawberry plants, digging holes for transplanting, etc. S. T. W.

Forest Grove, Or.

What Others Say.

OUR HOGS.—The statistician of the Agricultural Department gives the average number of hogs in the United States during recent years as about 44,000,000. The average number for Europe is about 49,000,000. Our country contains 55,000,000 inhabitants, Europe over 300,000,000. In other words, there are, in this country, 80 hogs to every 100 inhabitants, while in Europe there are but 15 to every 100. Our average exportation for 25 years has been 530,000,000 pounds or nearly 3,000,000 hogs. These figures show that the European consumption of pork is relatively small, that over supply may easily become a glut, and that an increase of production in these countries may seriously affect our trade, while an increased consumption would at once be felt in our markets.

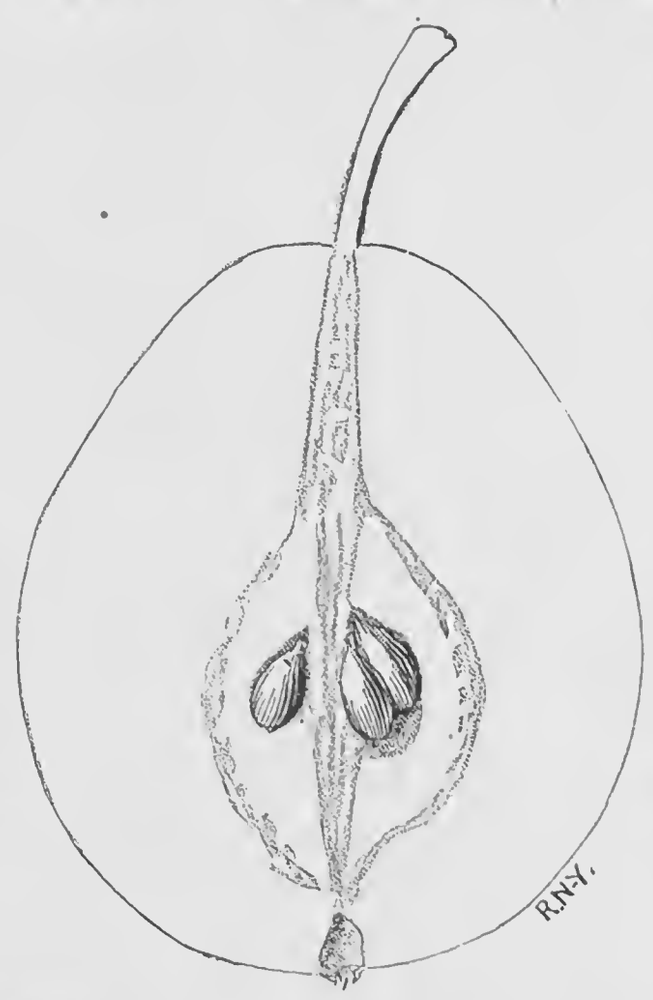
LIQUID MANURE.—The Agricultural Gazette says English farming in some sections has reached a point where the losing of liquid manures may mean ruin. It appears strange that while liquid manure is known to be the most valuable, most of the time spent in devising means for handling and utilizing has been devoted to the management of solids. We know the composition of liquid manures, but few can tell the amount yielded by the animal or how different foods affect its quality. It is well known that when the animals are fed upon certain substances, such as vegetables, silage, or other succulent matter, the quantity of urine is greatly increased. Doubtless the inferiority of certain manures is at least partially made up by the increased quantity and quality of urine. How to save such an unmanageable article is a great problem. Where many cattle are kept it will surely pay to construct drains leading to a pit or cistern, into which the liquid may run. We know of one farm where this product is conducted to the basement, into a hogshead, set on wheels, where it can be dragged out and sprinkled over grass land. Absorbents, such as sawdust, sand, straw, moss or sea-weed can be used to save much of this valuable product—too valuable by far to run to waste.


OMER PACHA PEAR. From Nature. Fig. 57.

POINTERS.

THE Japan Cercis or Judas Tree is a beautiful shrub or small tree—but not always hardy at the Rural Grounds.....

REMEMBER the Quercus Concordia or Yellow-leaved Oak. We have had a specimen of this for ten years. It is now ten feet in hight,


OMER PACHA PEAR. Cross Section. Fig. 58.

having been cut back once. The young leaves are of a bright yellow. This is lost in Summer, returning somewhat in the Fall.....

CERCIDIPHYLLUM JAPONICUM has a leaf somewhat like the Cercis. It is a very hardy tree so far as we have tested it. The young leaves are purple.....

THE Pendulous Conus Florida is said to be compact in habit, which cannot be said of the species. The main shoot grows up, the side branches downward.....

THE new Variegated Red Dogwood bears leaves margined with yellowish-white. The young leaves have also a tint of red. It is a desirable shrub, but one is enough.....

THE Fastigiate Oak grows like a small Lombardy Poplar and the foliage remains intact until early Winter. It is not quite hardy at the Rural Grounds.....

THE Purple Myrtle-leaved Elm is of dwarf habit and well suited to grounds of small extent.....

PUCK says: "There are two sides to the bread question, farmers," shouted a political speaker, "and my record shows you which side I stand upon." "Yes," replied a voice," the buttered side."....

ART can beat nature every time, says Thomas Meehan; but only those who take pleasure in the art can do it.....

THE American (Nashville) calls clover the "elixir of agricultural life."

THE N. Y. Tribune remarks that it is most true, as quoted from the Rev. Mr. Bushnell, that the high culture of the few does not elevate the many: and that benefactions to collegiate institutions would be greater benefactions to any country if applied to the humbler cause of universal elementary training in work as well as in words.

AS an illustration of the safety to the stomach of using water that has been well boiled the same paper mentions a case of water used in a stoneware bottle and heated on cold nights as a bed-warmer. Being left in the bottle all Summer slightly corked, it was found wholly unchanged in appearance when Winter came again..

OUR friend Mr. Hale of Conn. says that the Kieffer Pear suggests in quality "a cross between a quince, a squash and a seed cucumber." We do not think such extreme comparisons fair. The Kieffer is better than a quince, squash, cucumber or any conceivable combination of them.....

THE Editor of the Industrialist of the Kansas Agricultural College feels a good deal of sympathy for the proprietors of advertisements, which he occasionally sees, who end their announcements with the terse observation that "no notice will be taken of postal cards." The Editor has observed that the man who writes about stock upon a postal rarely buys. Still, we do not see why inquiries or requests, not of a private nature, may not be written upon postal cards.....

OUR esteemed contemporary, the Florist, gives a fine colored plate of the new rose, "Her Majesty." It also presents a life-like photographic portrait of Peter Henderson.....

GOOD points from the Breeder's Journal: The nearer water is to the temperature of the body, the less heat is wasted in assimilating it. Profits waste with the heat. Never feed frozen roots to stock. Give the calves more oats. Do not turn the cows that are in-calf out on to slippery places.....

THE English grain crops are the wonder of the world, and yet they do not pay to raise. Reasons, high rents and foreign competition.....

A CORRESPONDENT of the London Live Stock Journal holds that live-stock will still be the mainstay of British agriculture. He proposes to produce more "baby beef" and "baby mutton." England cannot compete in the number of cattle, for her area of available land is limited, but she can strive for early maturity and choice quality.....

To help in reducing England's $50,000,000 butter bill, he suggests the keeping of more of the smaller butter breeds near towns and cities. A Jersey cow that would feed on the lawn with a little extra feed, would keep the family in milk and butter..

A COW knows enough to rest after eating a hearty meal. How many human beings are equally intelligent?

WHEN the farm begins to run down, the boy runs to town, says Prof. Roberts.....

BREEDING for disease may be described as using an unsound animal for breeding purposes, or subjecting pregnant animals to cruelty in any form. The list of diseases thought to be hereditary constantly increases as science probes into the matter. The young is so much a part of its parent that any derangement of the blood of the latter cannot help being transmitted.....

MR. T. B. TERRY, writing from Milton Junction, Wis., to the Albany Cultivator, says that though he does not wish to speak ill of his own town, he wishes he could select a hundred acres in Southern Wisconsin, and place them around his Ohio home. He would show some crops that would be worth looking at.....

WHAT to Major Alvord seems most necessary for dairymen and friends of dairymen, as he expresses himself in the Farm Guide, is for them to stop their complaints and expressions of fear, with the accompanying cries for help to protect them in their honest labors from some terrible enemy. Instead of this, they should make their business and product such that it need fear no competition in the form of a substitute or adulteration.....

THE Saskatchewan, spring wheat (so called) is spoken well of by many.....

THERE is a *weeping* variety of the Purple Beech.....

Plant the Colorado Blue Spruce, Try the Imperial Cut-leaved Alder. Have you the red-flowering Horse-chestnut?.. :.....

CHAS. A. GREEN says in the Weekly Press, of Philadelphia, that the fields, woods, flowers, fruits, rocks and hills are the best of teachers to a receptive mind, and all the processes of growth and all the operations of agriculture enforce lessons of patience, industry, economy and hope.....

MR. GREEN thinks that the phenomenal success of Cornelius Vanderbilt, the elder, and his son in accumulating a fortune, is worthy of study. It was not accidental. These men had well defined plans and methods, which they adopted in early life, and Mr. Green believes it was their experience on the farm that was largely instrumental in forming those purposes and fixing those habits which commanded their surprising success. To this the editor replies that the farm is a good school for a boy, but of the millions who attend school only one Vanderbilt is evolved in a generation—and the world might worry along if there were none.....

SOME ONE has said that old people should never sleep with children. The argument has been that the vitality of the child would be absorbed by the older person. Dr. Hoskins says this is most absurd. People do not grow poisonous as they grow old. The good grandmothers, who so love their children's offspring, and take such sweet care of them, should not be made the victims of a gross and groundless superstition.....

OUR friend, the Western Rural, says that a lazy man ought never to get married. Home duties are too exacting for laziness. It is the husband's duty to assume a full share of the labor that is by many supposed to be peculiarly the wife's.....

IT further says that the average theory of home life is that the happiness of home depends solely upon the wife. She is advised always to have the husband's supper ready and hot. It seems to be supposed that she has married a stomach; and we admit that the stomach appears to be all there is to some men.....

"THE bull is half the herd." Yes, and often only half. The cows represent the other half. If hey are scrubs, their half will be plainly evident.....

THE Poultry World says that the great success attained in developing the Plymouth Rock and Wyandotte breeds has greatly encouraged the making of new varieties. Dozens of men are quietly at work building up new breeds.....

H. S. BABCOCK sums up the good qualities of the Plymouth Rock. Its peculiar plumage is pleasing to the eye. It has a satisfactory figure—solid without being clumsy. Considering size, structure and flesh, it is as good as any breed for the table. It is hardy. It adapts itself to all circumstances. By nature it is tame.....

THE London Live Stock Journal speaks of four hens that live in a small basket on the wagon of a strolling pedlar. When a halt is made the hens hop down and forage, and thus pick up part of their living. We know of a small flock of hens that lived on a construction train in the West, and kept the cook well supplied with eggs. The hen is one of the best friends the farmer knows.....

THE English papers are discussing the much-vexed question relative to the determination of sex in offspring. They do not seem to come much nearer any real solution of the question. A great deal of conflicting evidence has been brought out. It has even been stated by some that pullets or cocks can be produced at will. A writer in Gardening says that, from his experience, he should advise those who wish to hatch pullets (1) not to use the eggs from young birds for hatching, but from more matured ones; (2) not to have less than eight or nine hens with each cock; (3) not to begin hatching before March or April.....

So far as we can learn, the honor of producing the greatest amount of butter or milk in

proportion to live weight, lies between the Brittany cow and a goat. Most farmers would rather feed cows at a loss than to keep goats at a profit. In Scotland a goat show is one of the regular events of the year.....

"If you want the kettle to boil, don't add cold water." Remember this you gentlemen who feel disposed to laugh at the boy's plans just because you know more than he does.....

Farm & Home says that rancid butter may be restored by washing it first with good new milk, and next with spring water. The butyric acid is said to be freely soluble in fresh milk.....

Among new roses try Marshall P. Wilder, Her Majesty and W. F. Bennett.....

We would recommend a trial of the following new or comparatively rare shrubs: Rhodotypus Kerreoides, Viburnum plicatum, Sambucus aurea, Philadelphus aurea and Hydrangea quercifolia.....

To our newer readers, who are so situated that they desire to try new fruit, we would mention as worthy of trial the Poughkeepsie Red, Empire State, Ulster Prolific, Eaton, Roenbeck, Cayuga, F. B. Hayes, Eldorado, Cottage and Brighton Grapes; the Golden Queen, Marlboro, Earhart Everbearing Raspberries; the Industry Gooseberry; the Parry and Jewell Strawberries; the Frederick Clapp and Dr. Reeder Pears.....

The premium crop of turnips at the Gloucester Root Show, England, recently held, yielded 34 tons, 1,104 pounds, or 1,152 bushels per acre. The yields of the best acre of mangels winning the first prize at the same show was 46 tons, 1,172 pounds, or 1,553 bushels. These were very large crops for any country, and represent an enormous amount of stock food. It is a great pity American farmers do not pay more attention to root-crops.....

Everywhere.

RURAL SPECIAL REPORTS.

Alabama.

Huntsville, Madison Co., Jan. 24.—None of the Rural corn fully matured, neither did the beans. The tomatoes were fine and I think worth raising. I am much pleased with your Seed List for 1886, and shall test them thoroughly, as I have now an opportunity for such work. I am saving the Rural to make into yearly books. J. D. W.

Arkansas.

Poteau, Scott Co., Jan. 12.—The past Fall and Winter have been all that could be desired for fine weather. Very little rain yet, hardly enough to keep the ground in good plowing order. But now we are having the coldest weather ever experienced in this part of the country. The "blizzard" set in here on the evening of the 7th, and the mercury fell 42 degrees in 15 hours. The thermometer stood at 10 degrees below zero on the morning of the 8th, and stood at from six to eight below all day, and has ranged from zero to 18 above ever since, making this the coldest spell ever witnessed here by about five degrees. There has been but little snow yet, hardly enough to cover the ground. It is feared by some that the peach buds are killed; but this is such a dry freeze, I don't think they are injured to any great extent. Cattle are in fair condition for this time of year, and have needed but little attention yet; but now they are faring badly, however well they are fed, for most of them are without shelter, and have to take the storm as it comes. Hogs are doing well out yet, as there is plenty of swamp mast. Many hogs died from cholera, which makes pork a little scarce. It is selling at from five to six cents. Most of the pork hogs will have to be corn-fed, as the swamp mast will not fatten much till late. And it is an "up-hill" business here to make six-cent pork with 50-cent corn. One bushel of corn will only make about five pounds of pork on an average; so it will take two bushels of corn to make enough pork to pay for one bushel. H. C. B.

Arkadelphia.—The Rural seeds proved valuable. The corn matured early and was of good quality; some stalks had from two to four ears of good size. The beans and peas were fine; and as to the tomatoes, I raised some of the largest I ever saw; one of them tipped the scales at 1½ and another at 1¼ pound. The Garden Treasures did well and furnished many flowers to the delight of my little-four-year-old daughter. McG.

California.

Diamond Springs, Eldorado Co.—Some of the Rural corn was splendid—ears 14 inches long. The peas did not germinate. The beans did very well, and the melons and the beautiful flowers were grand affairs. Success to the Rural! W. A. S.

Canada.

Renton, Ont., Jan. 22.—We are well pleased with the Rural seeds. The peas were splendid. H. M. Garden of 1884 are the most productive. Part of the mixed corn was too late, the rest was nearly all destroyed. The Garden Treasures did not come up very well, owing to cold, wet weather. Crops are generally good, except potatoes—they were poor in quality and rotted badly. Prices are low. M. S.

Indiana.

Lawrence, Marion County.—Prices of farm produce are low, and farmers, especially renters, are not making much more than a living—some of them hardly that. Rents are high here, and most of the farmers have a lesson to learn in keeping their ground clovered and in good order. Continual cropping without rest or manure, is beginning to tell on the fertility of the soil. Stock are being wintered in fair order; but it takes an immense amount of feed, especially where the right kind of shelter is not provided. G. H. H.

Nebraska.

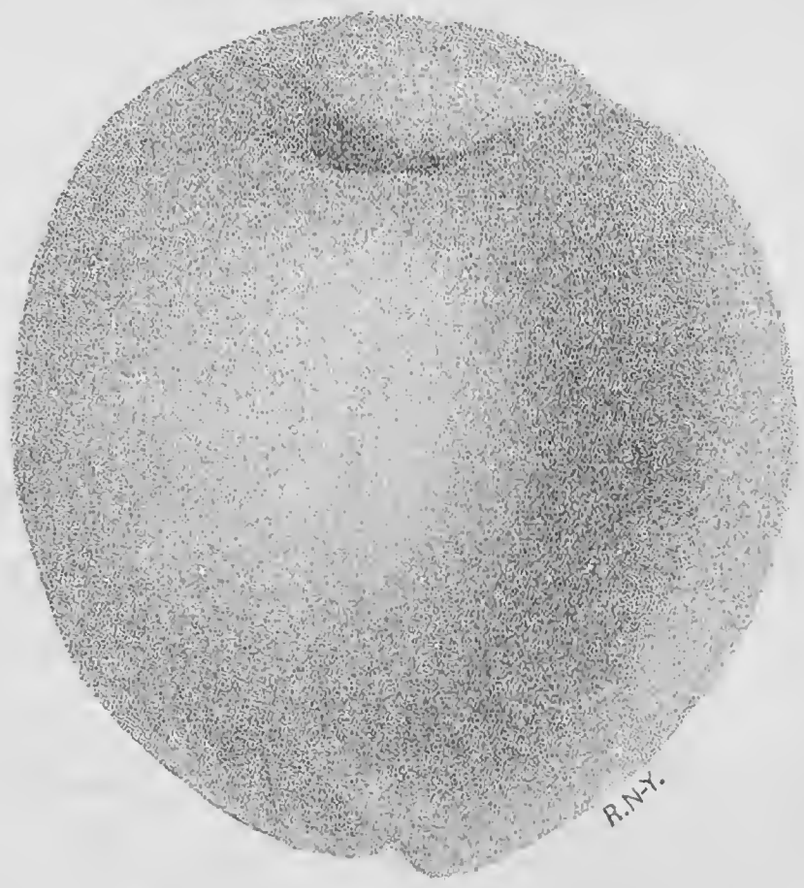
Medicine, Lincoln Co., Jan. 15.—All the Rural seeds germinated and grew very well. All proved to be good, and seemingly adapted to this part of Nebraska except the Rural Corn. It matured, but was mostly too small and flinty. Nebraska wants large, long and many-rowed corn, while the Rural's, as it grew with me, was mostly a white and yellow eight-rowed flint variety. There were a few ears of other kinds, but none to compare with our native corn. The Johnson Grass came up in about four weeks and grew about six feet high. I have about one-fourth of a bushel of the seed in the chaff. My Flageolet Beans attained a hight of only about one foot. The tomatoes, peas and beans were all very fine. The Garden Treasures contained some seed that produced some fine flowers. I wish the Rural the success it richly deserves. J. L. McA.

New York.

Ellenville, Ulster Co., Jan. 19.—The 50 different crosses of the best kinds of corn were planted about May 25. Most of it came up, but did not mature before frost caught it. Sorghum halapense, planted at the same time, did not come up at all. The Stratagem Pea grew finely: pods very fine, long and well filled; have saved them all for seed. The Prince of Wales Pea did not grow as well as the others, but I got a fine lot for seed to try another year. The Green Flageolet Beans all came up and grew finely. I am very much pleased with them. The King Humbert Tomato is too small—will not be profitable for market. R. T. C.

Oregon.

Toledo, Benton Co., Jan. 19.—The White Elephant Potato, though small, has paid us many times more than the Rural has cost us.



THE GLOBE PEACH. From Nature. Fig. 65. (See page 88.)

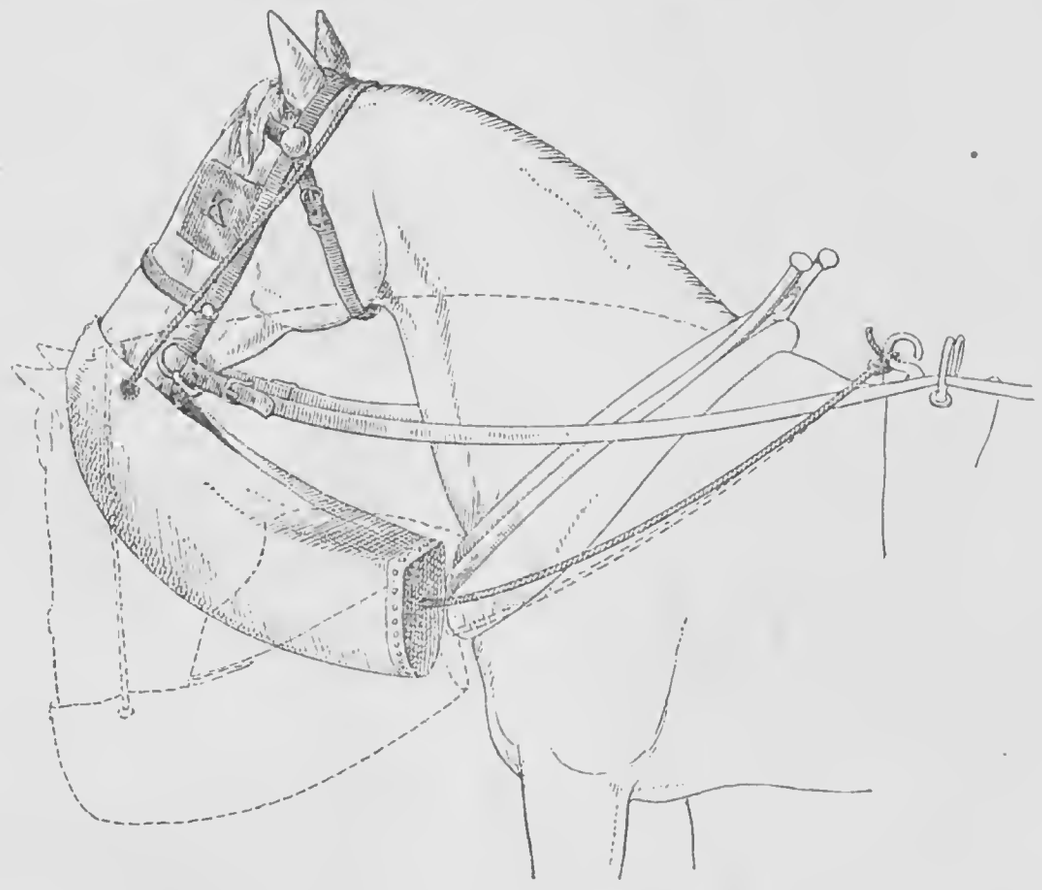
It is the best potato we raise. Of the other seeds, the tomatoes yielded finely—the best we ever raised in Oregon. The beans and peas gave good crops. I am waiting for the Johnson Grass to come up. We have had some beautiful flowers from the Garden Treasures. Potatoes, 40 cents per bushel; eggs, 25 cents a dozen; butter, 25 cents per pound. Wheat low, money scarce, tramps plenty. Don't let everybody rush to Oregon; those who have good homes in the East should stay where they are. L. N. B.

Pennsylvania.

New Paris, Bedford Co.—The Rural seeds all grew well, except the Johnson Grass: sown in May, did not come up till after the rains in July. The cross-bred corn did well, except that some was rather late. I raised nearly one bushel of ears from the seed I received; it was nearly all of the flint varieties. Price of wheat, $1; buckwheat, 40 cents; oats, 40 cents; corn, 50 cents; butter, 20 cents; eggs, 20 cents. N. B.

Washington Territory.

Puyallup, Jan. 18.—Snow is falling to-day, first of any account for the season. Of the Rural's seeds, the Stratagem was a wonder to look at—such pods! The Prince of Wales bore a fine crop—twice as much as the former. Saved all of both for seed. The beans also produced a fine crop—three quarts—which were also saved for seed. The flowers did equally well, and were a source of much pleasure to the little ones. The rest amounted to nothing with us. J. M. O.



FEED BAG FOR HORSES. Fig. 53. (See page 88.)

THE FARMER'S CLUB

ANSWERS TO CORRESPONDENTS.

[Every query must be accompanied by the name and address of the writer to insure attention. Before asking a question, please see if it is not answered in our advertising columns. Ask only a few questions at one time.]

MANURE AND FEED QUERIES.

H. W. K., Clayton, Penn.—1. What percent on its cost would be saved by erecting a shed, costing $100, for the manure from 15 cows? 2. Chemists say that nothing is lost in curing hay; if this be so, why do cows give more milk when grazing than when eating the hay from the same meadow? 3. How many dollars per head of stock will it pay to spend in bringing pure water into their troughs?

Ans.—1. This all depends upon how the manure is treated. If put into piles as fast as made and away from the water coming from the barn roofs, there is no loss from leaching under ordinary circumstances. The manure from the horse and cow stables should be mixed as piled, and unless plenty of bedding is used, should have the leaves, weeds, etc., about the premises, mixed in as piled, and the piles should be broad enough so that the rain and snow falling thereon should prevent their heating. If the $100 is put at interest instead of into a shed, and the $6 interest be used in purchasing gypsum to be scattered daily over the heap, it will pay much better than the shed. We much prefer hauling the manure to the field just as fast as made and spreading just where to be used in Spring, unless the ground is liable to be flooded or the snow is extremely deep. 2. The nutritive elements of the green grass are more soluble and much more easily assimilated by the digestive organs of the animals. If the dry food could be steamed to a point very like its summer condition, the hay would produce the same results. It is because of the mixing in of the succulent food that cattle do better when roots or silage are added to their dry forage. 3. It is useless to try to keep stock without plenty of good water; 75 per cent. of their entire bodies is made up of water, so that water must be had in plenty if we would feed stock successfully. Man will find much to answer for in not giving the animals what water they need. Whether it will pay to bring water in pipes depends upon how cheaply it can be had otherwise. If a man spends $500 in bringing water, and the work is well done, the annual interest is about $30, which would be cheap enough for 15 head of cattle.

CHRONIC GLANDERS IN A HORSE.

A. C. J., Columbus, Ky.—My three-year-old mare came out of the cane after last Winter in poor condition, though she should have been fat. She worked well; but her appetite was not good. She was put on a second crop clover, from which she came up one night with her throat and jaws very much swollen, so that we thought she had been "fooling" with some bumble-bee's nest. She was treated accordingly for a while; her throat would be quite swollen at night and better in the morning. The swelling is worse when she is feeding where the pasture is short. And she holds her head to the ground for a long time. She is now very thin and has a very poor appetite. This morning her throat and a narrow strip under the belly were swollen. All last Winter she would shiver as if cold, and at times she stamped a great deal as if through nervousness, and trembled. What is the matter?

Ans.—The symptoms given lead to a suspicion of chronic glanders. If the animal has been in contact with any glandered horses, the suspicion becomes almost a certainty, and the animal should be destroyed at once, as dangerous to man and other animals. If there has been no known glanders in the neighborhood, the animal may be isolated, the nostrils steamed daily by feeding hot bran mashes, poultices applied to the throat, and fed on a laxative, nutritious diet for two or three weeks. If there is no improvement, the case may be diagnosed as glanders and the animal shot. Care should be exercised by the attendant that any discharges from the animal are not allowed to come in contact with his person, especially if he has any sores on hands or face.

ACTINO-MYCOSIS.

C. B., Mansfield Valley., Pa.—For the last six months a lump has been growing on the angle of the jaw of one of my cows; it is about 2½ to 3 inches in diameter and apparently adheres to the bone, otherwise she is in good con-

dition and feels well; what can be done for her?

ANS.—The growth is probably due to a radiating or star-like vegetable parasite, the actinomyces or ray fungus, producing a malignant or parasitic tumor known as actino-mycosis. Any part of the body may be attacked by this parasite, but the jaw-bone and tongue are most commonly implicated. The fungus usually enters the system through some sore, as in case of the jaw bone, the disease can usually be traced to a diseased or decayed tooth. The only known successful treatment is anti-parasitic. In general, clear out all diseased masses and fungoid growths, and dress with iodized-phenol, a mixture of iodine and carbolic acid. The tumor should be cut down upon and entirely removed and the surface painted with the iodized-phenol, an operation requiring a knowledge of the anatomy of the part. Great care should be exercised in handling the disease since it is communicable to man. Diseased animals should be isolated, if treated, or destroyed to prevent contamination of healthy animals.

AN AILING PIG.

F. E. S., Hudson Center, N. H.—At the end of October I got from New York State a pair of Duroc-Jersey pigs about six weeks old. When taken out of the box they began to rub themselves against the sides of the pen, as though they itched badly all over. In two or three days the boar pig had scours. His skin looked very bad, and his head and neck became covered with a sort of black scab that looked like dried blood. His skin now looks somewhat better, but he scours all the time. His food does him little good, leaving him as it entered him; yet he is hungry in an hour after eating. He is in pretty good condition, but gains very slowly, being now only 33 pounds against the 70 pounds of his companion from the same litter; what can be done for him?

ANS.—This sick pig may have taken cold which developed into a chronic diarrhea, or its food may have been too hearty or strong for good digestion, and on this account an inflammation of the stomach may have followed. The pig may have been shut in the car too closely and got heated on this account. The itching and inflammatory condition of the skin would be a result of over-heating. The pigs may not have been fed on the way and gorged themselves when fed on arrival. All these things are likely to occur. Give the pig dry oats and charcoal with a quart of warm water for drink. Let it eat all of the oats and charcoal it will, and if it does not get better in a few days, give it two tablespoonfuls of castor oil, taking care not to strangle it. After this medicine has had time to cleanse the stomach, feed nothing but dry oats and charcoal and inject warm water and starch with a few drops of laudanum added to it. Do this twice a day.

SWELLING ON A MULE.

C. P. T., Eureka, S. C.—What is a sure cure for swelling on a mule?

ANSWERED BY F. L. KILBORNE, B. V. S.

If the injury is recent, with only heat and tenderness of the part, bind a wet blanket over the seat of tenderness as long as the heat and tenderness remain, and keep the animal quiet. For slight wasting of the muscle, active friction with a corn-cob, brick, or other hard substance, for 15 or 20 minutes once or twice daily, along with moderate daily exercise on level ground, may be all that is necessary. Failing in this or in cases of longer standing, the repeated application of a mild blister of ammonia and oil, and in obstinate cases, cantharides blisters may be demanded. The most rapid method, however, of replacing the wasted muscle where an electric battery can be had, is to send a current of electricity through the muscle 15 or 20 minutes daily. Apply one electrode at the upper and the other at the lower end of the muscle. The moderate daily exercise on level ground is very essential, except during the period of heat and tenderness, when rest is desirable.

CONJUNCTIVITIS IN A HORSE.

Constant Reader, Waverly, Tenn.—My mare's eyes have been running matter and water for several weeks; what is a remedy? Her eyes are otherwise good and there are no symptoms of blindness.

ANS.—The watering of the eyes is due to some external irritation producing slight inflammation or conjunctivitis. First examine the eyes carefully for foreign bodies, which if present must be removed. In their absence the difficulty may be due to a common cold, standing in a current of air, or to irritating gases, as from accumulating dung and urine. For treatment, keep in a clean, dry, airy, darkened stable. Give a laxative—four or five drams of Barbadoes aloes. Apply tepid fomentations to the eyes and protect them from the light. Give special attention to the general comfort of the animal. It will also be desirable to apply a little soft extract of belladonn around the eyes to prevent adhesion of iris and lens. If the case does not yield to the above simple treatment, cover the eyes with a cloth kept constantly wet with the following solution: Water one quart, lead acetate one dram, and morphia 20 grains.

SORE FOOT IN A COLT.

Subscriber, (address mislaid).—My nine-months-old colt stands too much on the toe of its right fore-foot. Examination shows the frog to be small and the hoof a little long at the heel at each side of the frog. The frog is filled out and grown down at the heel, with one or more cracks in it at the heel, which spring open when the heel is pressed; but the colt shows no sign of weakness. What should be done?

ANS.—Examine the frog carefully for any foreign body. Pare away the dry hard edges of the cracks, clean the whole with soap and water, and apply a tar bandage until the cracks are healed. The heels must be gradually pared down to bring the foot to the ground in its proper position. If possible it would be well to place the case in the hands of a competent veterinary surgeon.

Miscellaneous.

W. A. C., Almont, Mich.—Where and how can I get the last U. S. Census Reports?

ANS.—Like all other works printed for free distribution, the Census Reports can be secured only through the Representative for the applicant's district, or one of the Senators for his State. It is a trifle doubtful whether the reports can be obtained at such a late date, as so many applications have already been made for them. The Compendium of the Census, in two volumes, may still be obtained, however. All the full Census reports have not been published yet.

E. D. B., Seneca Falls, N. Y.—1. Bones can be ground more easily when baked brown; would doing this hurt them for fertilizer purposes? 2. What is a good plan for a home-made horse or any other power?

ANS.—1. Yes, the bones would be thus deprived of their nitrogen. That is all. 2. We have given many plans in previous numbers. We may present others ere long.

C. E. R., H St., Sacramento, Cal.—Are any of the white strawberries worthy of cultivation? If so, which one?

ANS.—Only as a curiosity and perhaps for amateur use. Lennig's White we think the best. It is very good-flavored.

J. E. C., Middle Grove, N. Y.—Yes, Mapes' Potato Manure is as good as any; but several other brands have given equally satisfactory results.

DISCUSSION.

W. H. H. J., HOHOKUS, N. J.—Referring to remarks of J. J. H. Gregory, on overvaluation of hen manure, as published in a late RURAL, has not Mr. Gregory got slightly out of his latitude in thus underrating the efforts of the hen to produce large crops of corn? An experience of many years with poultry, during which I have made careful experiments with a desire to do justice to both the debit and credit sides of the ledger, has satisfied me that the following figures are approximately correct:—The average full-grown fowl consumes in a year the following quantity of food or its equivalent: 56 pounds of corn, 30 pounds of wheat, 25 pounds of bran and an unknown quantity of hay in Winter, grass in Summer, bugs, worms, ground shells, bone, lime, broken crockery, gravel stones, etc., etc. The following table gives the value of manure from 100 pounds of each of the above named grain foods: Corn, 33 cents; wheat, 35 cents; bran, 73 cents. Thus we have, leaving out fractions, from 56 pounds of corn manure valued at 18 cents; from 30 pounds of wheat, 10 cents, and from 25 pounds of bran, 18 cents—total 46 cents, to say nothing of all the other articles consumed. The waste need not be more than with any other stock. With me it is less, for I have learned the value of the manure, and am careful to save and properly store it. For corn and many other crops, it has equaled Peruvian guano, pound for pound, on my farm.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING SATURDAY, January 30, 1886.

L. L. A., thanks.—V. E. H.—J. M.—A. Q.—A. H. P.—R. C.—M. C. G.—E. M. T., the RURAL NEW-YORKER never sells anything except the paper itself.—G. H. P.—C. H. H., thanks.—H. G. C.—G. K. E.—E. M., thanks.—J. P. S.—J. C. G., thanks.—O. H. A.—I. S. S.—R. P. L.—M. B.—R. W. B.—.—G. D.—T. H. L., thanks.—G. E. M.—E. R. G.—H. B.—E. G.—S. P. G.—F. S. N.—F. A. B.—G. W. G.—W. P. O.—C. W. M.—W. W. C.—E. G. B.—E. H. L.—R. H. W.—W. A. S.—H. C.—D. I. B.—W. E. J.—E. W., seeds received.—G. E. M.—U. G. C.—L. C.—C. G. H., will try.—I. A. M.—J. E. M.—W. K.—H. H. C.—C. Q. B.—E. G.—W. B. T.—W. S. C., thanks.—E. W., seeds received.—J. N. M.—D. C.—A. R.—B. P. V. H.—P. H. J.—T. J. S., thanks.—G. H. P.—M. L. S.—S. W.—E. B. P.—A. F.—E. J. P.—R. L. J.—E. Z. J.—J. C.—W. W. W.—J. O. W.—R. A. H.—J. G.—G. S.—W. L. W.—O. N. R.—J. M. A.—C. H. B.—C. C. Mc. C.—N. T.—J. P. D.—D. W. Jr.—G. S. H.—J. M.—G. B. C.

Miscellaneous Advertising.

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SITUATION WANTED, by a man who thoroughly understands Farming in all its branches. Age 35. Sober, industrious, and a worker. Can refer to Editor of R. N.-Y. Address "FARMER," River Edge, Bergen Co., N. J.

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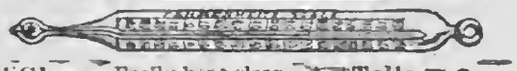

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CUTBUSH'S MILLTRACK never fails a quick and ready crop. Price 15 cts. per cake, or $1 for 12 cakes.
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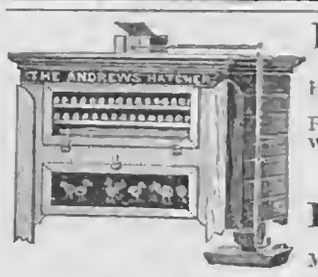
The oldest and most highly concentrated of all artificial manures, is admitted to be the most effectual and permanent fertilizer. Tins, 35c., 60c., $1.20, and $3 each. **C. M. Hovey,** Agent for the United States, 21 SOUTH MARKET STREET, BOSTON.



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Hatches Ducks, Turkeys, Geese and Chickens. Received First Premium where exhibited. Send for Circular.
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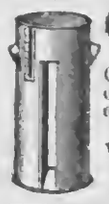

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A Perfect Smoothing and Scotch Harrow Combined.
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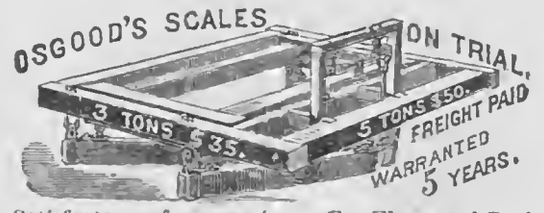

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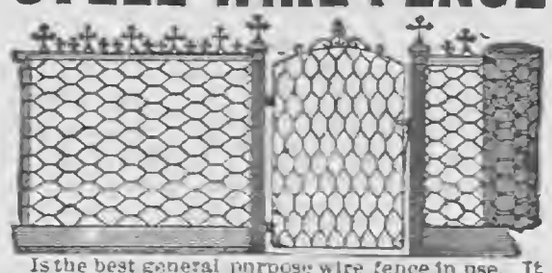

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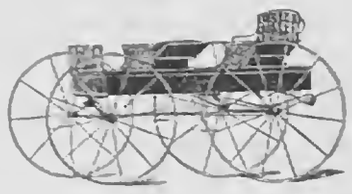

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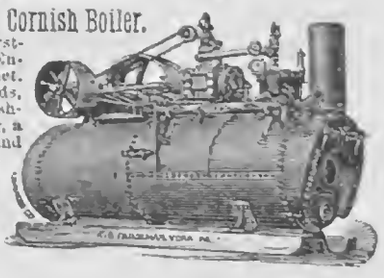

THE
RURAL NEW-YORKER.
A National Journal for Country and Suburban Homes.

Conducted by
E. S. CARMAN, Editor.
J. S. WOODWARD, Associate.

Address
THE RURAL NEW-YORKER,
No. 34 Park Row, New York.

SATURDAY, FEBRUARY 6, 1886.

If the number on your address label is 1880, your subscription expires with this number; if 1881, next week; 1882, in two weeks, etc.

How far north is the Japan Chestnut hardy? We would feel obliged if nurserymen or any of our readers who are growing this tree would answer. How much hardier is it than the Spanish Chestnut?

Subscribers of the Rural *need never take the trouble to write us to "stop" the paper. It is invariably discontinued at the expiration of the subscription term, except by oversight, in which case it is our loss.*

A neighboring farmer has had an Evergreen Blackberry growing beside his kitchen (looking east) for six years. The canes make a strong growth from the root every season, but are always killed back during the Winter. The leaves are still (Jan. 28) green. It has never borne fruit.

We have received very many letters regarding what is known as the Evergreen Blackberry since our statements, made from time to time, that it is simply a variety of the European species Rubus fruticosus, and valuable chiefly as an ornamental vine or curiosity. But it seems there are varieties and varieties. During the past season, we have received fruit from the Far West, that was of very good quality, while the vines were absolutely loaded. Our illustrations, which have been prepared with great care, and the articles accompanying them should therefore excite some interest.

FORFEITURE OF UNEARNED RAILROAD GRANTS.

As long ago as August, 1856 and March, 1857, large land grants were made to Alabama, Louisiana and Mississippi, for the construction of various railroads, none of which have been built; yet, during all these long years, the land has been withheld from settlement. A bill is now before the Lower House of Congress for the forfeiture of all unearned land grants in those States, and from the tone of the discussion, it is evident that a large majority of both parties are determined to vote for all bills forfeiting these and similar grants. The grants to the Southern Pacific Railroad and all the unearned parts of the extravagant grants to other roads, are also likely to be declared forfeited. All these lands, amounting in the aggregate to over 100,000,000 acres, should be at once restored to the public domain for entry under the Homestead Laws. It is a burning shame that, while multitudes of poor settlers have for years been hunting for favorable locations for homesteads, these lands—some of them excellent for agricultural purposes—should have been held so long at the disposal of a handful of wealthy speculators. Instead of being the happy homes of numerous families, and contributing to the wealth of the nation and the income of the Government, they have lain waste, or been a stimulus to the idleness and thriftlessness of the squatter and the vagabond.

SQUABBLES OF STOCKMEN.

In spite of the late amalgamation of the two great live-stock associations—those of Chicago and St. Louis—the cattle baron, king, syndicate and corporation family doesn't appear altogether happy. The members own millions upon millions of beef-covered beasts in Summer, and of hide-clad skeletons in Winter, but there's a world of bickering and contention in the family circle. Those of Wyoming and Montana are tolerant of cheap Texan stockers and feeders, because by filling out the gaunt creatures on their ample ranges, they can make an excellent profit, while the danger from Texas fever is trifling when the beasts have reached those northern latitudes. The stockmen of Nebraska, Kansas, Arkansas and Colorado, on the other hand, bitterly oppose the admission of the Texans as destructive to the other herds along their route. The land-grabbers of New Mexico strenuously resent any outside encroachment on their stolen domain. There is also a multitude of other grounds of contention between the lords of the various State ranges. Even within the several States and Territories there is a great deal of squabbling between different interests. In Texas, for instance, the stockmen from the south are a unit against "free grass," and generally are squarely opposed to their brethren of the Pan-handle on the question of Spanish or Texan fever. They also insist that grazing lands are worth from 16c. to 20c. an acre annually, whereas the Pan-handle men contend that half that amount is an exorbitant rental. There are also rancorous differences on the quarantine and several other local questions; besides the never-ending war with the sheep men, etc. Truly, the possessor of cattle on a "thousand hills" is not always happy, unless, perchance, he finds happiness in constant contention.

PRIZES.

TEN DOLLARS

for the largest Bird Cantaloupe from the Seed of the Rural's present Free Seed Distribution.

TEN DOLLARS

for the largest Watermelon.

TEN DOLLARS

for the longest ear of the Angel of Midnight Corn containing the greatest number of kernels.

TEN DOLLARS

for 10 of the heaviest pods from the Alaska Pea.

The Prizes will be awarded October 1st, 1886. All competitors will be required to advise us as to the weight or size of their peas, melon, or corn by postal card. Those who take the prizes will then be required to send the peas, corn, or melons by express at the Rural's expense.

AWAY WITH ALIEN LANDLORDISM!

In what other nation in the entire civilized world are aliens, who have no intention of settling in the country, permitted to become the possessors of large tracts of real estate? Here this evil has become so flagrant and its results so intolerable that prompt Congressional legislation, putting an end to the practice, is urgently demanded. Not only have foreigners bought vast areas of the public domain at merely nominal figures, and either leased or used them as cattle ranges, or held them until, owing to the rapid rise in the price of land, they could sell them at an enormous profit; but they have also illegally seized large tracts of the public land, fenced them in, and in the grossest way oppressed and abused our own native and naturalized citizens who sought homes there in accordance with the law of the land.

There is another class of alien land owners about whom the public knows little or nothing, but who cause a world of misery and degradation. These are the alien absentee landlords who own large estates in this country, and, in order to get money to hoard or squander abroad, grind the faces or their American tenants, and introduce into this free country the worst features of the cruel landlordism that has for centuries cursed shackled Ireland. William Scully, of Celtic birth but now a resident of London, is an instance of this abhorrent species. As an Irish landlord, his career was so disgraced by oppression and extortion, that it was appropriately finished by an encounter with his tenants. He was tried but acquitted of double murder, but was so execrated that he sold his Irish property in 1865, and since then has been building up in Illinois, Kansas and Nebraska the system of landlordism, which even Irish peasants, accustomed for centuries to oppression, could not endure. For 50 cents an acre, he bought land warrants issued to the soldiers of the Mexican war, and in this and like ways, acquired large tracts of land in the above and other States. In Logan County, Illinois, alone, he has 40,000 to 45,000 acres, and his rule over his 250 tenants there has, we are assured by the Chicago Tribune, "reduced their families to a condition approaching serfdom." The long account given by that paper of Scully's system of landlordism in Illinois shows a heartless cruelty, a pitiless oppression equal to anything we have ever heard of or seen in Ireland.

Congress, before the close of the present session, should pass laws providing not only against the prevalence, but even against the possibility of such abuses. We want neither alien land-grabbers, alien landlords, nor, above all, Irish landlordism in this country. Away with every vestige of them!

SLUG-SHOT.

Mr. Bemjamin Hammond, the proprietor of Slug-Shot, writes us as follows:

"A copy of your paper, dated January 23, 1886, is received, and comments on 'Hammond's Slug-Shot' noted. As the substantial formula of 'Slug-Shot' has not been kept a secret, and the statement made by me is correct, I extend you and all persons interested, an invitation to visit my factory, and go through my works, from cellar to garret, and investigate and publish the report as fully as you choose."

On page 322 of the 1884 report of the N. . Experiment Station, is the following statement:

"The indications are that Hammond's Slug-Shot is neither more nor less than London-purple mixed with a very large proportion of gas or slaked lime."

The qualitative tests of lime and arsenic are very simple, and it seems reasonable to suppose that the Chemist of the Station would not have made the above statement without having made these tests.

If, however, the Chemist is wrong, it will be a very easy matter for Mr. Hammond to *prove* it—and that is what he should do. Our interest in the matter does not go beyond desiring to inform the public whether it is or is not an economical and safe insecticide. Its efficiency is not questioned. A thorough chemical analysis of samples procured of retail dealers would settle the question at once.

If, as the Chemist of the N. Y. Station intimates, Slug-Shot is composed of London-purple and lime, it certainly is not an economical insecticide at the prices charged for it.

Since writing the above, we have received a letter from Director Sturtevant, who says that the Chemist of the Station "did not make the statement" with which we credit him, thus removing the responsibility to some other officer of the Station. He further refers to a letter sent to us, Jan. 8th, in which the following passage occurred:

"There is no doubt but what Hammond's Slug-Shot contains arsenic. The test for arsenic cannot be mistaken. Whether this arsenic is in the form of white arsenic, Paris-green or London-purple, I do not know. . . . The mere fact that it contains arsenic is sufficient. If Mr. Hammond makes an affidavit that there is no arsenic in his preparation, it will then be time enough to present evidence."

This note from Dr. Sturtevant was in reply to a printed card from Mr. Hammond, sent to us, which we forwarded to the Station. The card was, as we remember, an affidavit that the Slug-Shot contained neither London-purple nor lime.

Dr. Sturtevant's letter reproaches us with injustice both to the Station and the Station's Chemist. No injustice was intended, and we shall gladly present the case fairly as soon as we are shown wherein the injustice lies.

WINTER LOSSES OF STOCK ON THE RANGES.

As usual, there is a great difference of opinion with regard to the extent of the losses of live stock, and especially of neat cattle, on the great Western ranges thus far during the Winter. As yet all reports must be based on mere estimates founded on the deaths observed within circumscribed areas under special conditions. Dead cattle have been seen by hundreds along the lines of railroads, where they sought shelter; by thousands along river banks, where their ceaseless drifting before the blizzards was checked; by tens of thousands beside wire fences, where, huddled together, they starved and froze to a miserable death. No calculation, even approximately trustworthy, can be made before the Spring "round-ups." Then, too, nearly all the business of stock raising on the plains and prairies has been concentrated in the hands of a comparatively small number of cattle kings, foreign syndicates and domestic joint-stock companies. The days of the small stockmen are over. The owners of "bunches" of 100 to 500 head of cattle have been either ruined or forced to sell, at any figure, by the rapacity, arroganee and tyranny of their wealthier, more powerful and wholly unscrupulous neighbors. Many of these corporations have been formed for the express purpose of securing investments from people at a distance, either in this country or in Europe, and there has often been as much misrepresentation, exaggeration and fraud in their circulars and prospectuses as in those of the most disreputable "wild-cat" mines further West. Most of them are only too willing to dispose of some of their stock at extravagant figures, by selling shares at prices based on grossly exaggerated accounts of profits. It is to the interest of all these to minimize the winter losses of stock, so as to prevent any serious depreciation of their property in the eyes of prospective investors. Accordingly, every year, through the press and in other venal ways, they are accustomed to belittle the losses due to their shiftless and cruel mode of stock raising and the severity of a semi-arctic Winter on the elevated and exposed ranges.

Probably the most disastrous cause of loss, however, arises from the introduction of wire fences on the ranges. In most cases, the use of these was prompted by an unscrupulous rapacity which defied law and all considerations of fair play. Corporations inclosed millions of acres to which they had not a shadow of title. They drove out hundreds of poor men, struggling for a living by a little farming and raising a few head of cattle. Often they deliberately fenced in wells and water-courses to force their weaker neighbors either to sell their stock for a song or leave the country. They tore down the fences and turned in their herds upon the crops of the weaklings. When all other means failed, their hirelings' rifle, pistol or bowie got rid of an obnoxious settler, in a purposely provoked quarrel, and his starving family soon scrimped or begged their way to a less brutal region. So long as they made large profits, these spoliators cared not a whit for the laws of God or man. While the wire fences, however, kept intruders out of the stolen ranges, they have also prevented the stock from seeking food and shelter in stormy weather. On the shelterless plains and prairies, cattle never cease drifting before a beating storm unless they find the shelter of a timber belt, a bluff or a depression. On encountering a wire fence, they crowd along the line in dense masses, the weak and ailing are trampled to death, and their stronger comrades soon perish from hunger, thirst and exposure. So great have been the losses from this cause, that in some sections there has been serious discussion among stock owners as to an advisibility of removing the fences. "A just retribution!" one is tempted to exclaim. But just think of the horrible agony of the perishing cattle! The stock owners, too, if their losses are great and widespread, can generally recoup most of them by throwing them on the consumers, by raising the price of cattle on the hoof.

BREVITIES.

Music in the farm home! Let us have more of it!

Parsley-leaved is one name for the Ever-Green Blackberry.

Yes, "let us be cheerful in our homes." Read Rural "Life Notes."

Money sent in letters for subscriptions to the Rural New-Yorker is at the sender's risk. Our terms are invariably $2.00 a year in advance.

We have received a number of communications regarding Meech's Prolific Quince, which we cannot publish. Our space is too valuable to be given to a matter which really needs no further discussion.

W. L. Ward, of Marshall, Dane Co., Wis., writes: "The Enterprise Meat Chopper has just come to hand. It is the best machine I ever saw for cutting meat, for it truly *cuts* it. The machine is surely a prize."

Notices of catalogues are continued this week on the following page. Refer to the advertising columns for particulars, and mention the R. N.-Y. in any correspondence. Such mention is advantageous to all parties—the correspondent, the advertiser and the Rural.

Referring to Notes from the Rural Grounds of this week, and to the effectiveness of Pyrethrum powder as an insecticide, it may be well to say that we have tried it as a remedy for gapes in chickens. The chicken inhaling it died, though possibly too sick to recover in any case.

We are now mailing the Rural's Free Seed Distribution. Plant the seeds carefully in well-prepared, mellow soil. Give them all a good chance and let us see who will raise the largest water-melons and musk-melons; the best plot of corn (the name oppresses us); the earliest peas, the best assortment of flowers. Try and interest the children in this good work.

Mr. Thomas describes the Hericart Pear, illustrated on page 88, as of medium size, fine-grained flesh, buttery, often gritty and slightly astringent. He says it is not rich, but possesses a peculiar aromatic flavor. It ripens the last of September. With regard to the Omer Pacha, he rates the quality as juicy, buttery and vinous, and says it ripens Sept. 1st. The size is also medium.

In our premium list we were in error in stating that the sets of Pilling's milking tubes contained different sizes. The truth is the four tubes are all of the same size. The price we gave correctly—50 cents each, or $2 for a set of four. They are just what is needed by every man keeping cows, and we shall take great pleasure in sending them as mentioned in the premium list.

Indust'l Societies.

WESTERN NEW YORK HORTICULTURAL SOCIETY MEETING.

THIS old and influential society held its annual meeting at the Common Council Room, City Hall, Rochester, New York, commencing Wednesday, at 11 o'clock, A.M. President Barry, on taking the chair, congratulated the society on having the largest attendance he had ever seen at the opening of the session. As was very proper, Mr. P. Barry was unanimously re-elected President; Messrs. S. D. Willard, of Geneva; W. Brown Smith, of Syracuse; J. S. Woodward, of Lockport; and W. C. Barry, of Rochester, were elected Vice-Presidents, and Mr. P. C. Reynolds, of Rochester, was re-elected Secretary and Treasurer.

The President, in his annual address, said the signs of a general revival of business were plenty, and nothing would be more profited by such a revival than horticulture, fruit growing and kindred pursuits. He was glad to see so much attention being given to the improvement of the methods of agriculture, and commended the experiment stations and agricultural colleges. He also had a good word to say for forestry, and thought our State would be the gainer were thousands of acres of its rough land planted with forest trees. He said that the Sequoias on their grounds had been slightly injured by the last Winter, but had nearly recovered during the Summer. He thinks the fruit crop is of so much importance to New York that our orchards should receive more care and better culture. In a report of the markets in the large cities he had noticed ordinary apples quoted at $1.50, while extra nice, selected barrels had brought from $2.50 to even $4. While pears, as ordinarily sorted, packed and sent to market, had sold for from $1.50 to $5 per barrel, he had known fine pears, nicely sorted, each pear wrapped in tissue paper, and packed in bushel kegs and boxes, to sell readily at $5 per bushel. More care in sorting and packing fruit will certainly pay.

Mr. George Ellwanger, in an essay on ornamental trees and plants, said people soon tire of the finest pictures ever painted; but a beautiful landscape or a fine tree, only interests and charms us the more the longer we study it.

Mr. Chas. A. Green, in a report on ornithology, said a single swallow in a Summer's afternoon will destroy more insects than a man with a bucket of Paris-green and water. The birds destroyed that their stuffed skins might disgrace the hats of the city belles, would, if allowed to live, have been of more real use to mankind than will all the city belles in a century of their aimless lives. It had been charged that some birds were destructive to fruit, and it might be necessary sometimes to kill them; but we should do so only with the same feeling with which we would take the life of a human being—only as a painful necessity.

Mr. Harrison charged that the English sparrow was not only destructive to grain and fruit, but that it did much to drive away ornamental and useful birds.

Mr. Woodward said he was no friend of the sparrow; but that the insane fashion of wearing stuffed birds as ornaments had done more to exterminate beautiful and beneficial birds than all other causes combined. It seemed to him anamolous that woman, the personification of gentleness, mercy and love, should be so cruel and so far forget her nature as to ornament her hat with the corpse of man's best friend. He wished that he could make every woman realize that to wear one of these ornaments costs a little life, as much in God's keeping as her own.

Dr. Sturtevant said that at the Experiment Station English sparrows have injured the wheat plots as much as five bushels per acre. In a report on botany he suggested a modification of the definition of fruits and vegetables to correspond with the popular idea. He would have classed as fruits such plants as are raised from off-shoots, runners, cuttings or grafts; as vegetables such as are usually raised from seeds.

Mr. J. J. Thomas, in an essay on "Increasing the Attractiveness of Country Homes," said that too many farmers' houses were mere boarding-houses, in which the farmers' wives and daughters work like slaves. It would be much better and give a far better class of help on the farm, if married men were employed, houses furnished, and each boarded at home. A few inexpensive plants and flowers would make the surroundings pleasant and the home happy, even though the house be cheap and rude. Better spend money in making the home pleasant and enticing with flowers and books and pleasant faces, and thus keep the children at home, than by stinginess to drive them away to the corner grocery or the gambling saloon.

Dr. G. C. Caldwell, in considering salt as it affects plants, said it could in no sense be considered as a manure. It is found in most plants, but it exists in all soils in abundance, and in most waters, and the plants are obliged to receive it, yet it may sometimes be useful to the soil and to the crops growing thereon. It aids in rendering some compounds more soluble. It carries other elements with it down deep in the soil. In enabling the plant to better withstand drought, it does it, not by attracting moisture and making the soil more humid, but by forcing the plant to use water more economically, or in other words, by evaporating less from its surface. It is what may be termed an amendment instead of a manure; it adds nothing to the soil which the plants need, but it causes the soil to more readily yield the food it already contains. He said the salt employed in agriculture is impure, and as a rule, the greater the degree of impurity, the more valuable they are as an application.

(To be Continued).

SPECIAL PREMIUM—THE AQUAPULT.

A CONVENIENT, handy force pump, fire engine, sprinkler, window and wagon-washer, bug-destroyer, etc., etc. The illustration fully explains its construction and the manner in which it is used. It is a very convenient tool

for use in the green-house or on the lawn, and throws water with considerable force. It is made by W. & B. Douglass, Middletown, Conn. We have nine of them complete. Price $9. We will send one of these to each of the nine subscribers wishing it who shall first send us clubs of five new subscribers. Remember we have but nine, and the offer will not be extended beyond that number.

Miscellaneous.

CATALOGUES, ETC., RECEIVED.

FRANCIS BRILL, Riverhead, Long Island, N. Y.—A treatise (16 pages) on cauliflowers and how to grow them. Mr. Brill is an experienced grower, and he tells the whole story in a plain, thorough manner.

WALDO F. BROWN, Oxford, O.—Twentieth annual catalogue of vegetable and flower seeds. Mr. Brown also offers eggs of pure Plymouth Rock hens for the low price of one dollar for 13 eggs.

A. W. LIVINGSTON'S SONS, Columbus, Ohio.—An illustrated catalogue (70 pages) of seeds. The new tomato, Livingston's Beauty, is honored with a colored illustration, and other novelties are announced. Free.

WM. E. LINCOLN & CO., Warren, Mass., and London, Ontario.—Illustrated circulars of the Lincoln Patent Channel Can Creamery; also circulars of churns and butter-workers made by the same firm. This contains a full setting out of the claims made for this style of can. Send for it and read what they say.

JOEL HORNER & SON, Merchantville, N. J.—A descriptive catalogue of grape-vines and small fruits. An excellent chapter is given on planting, pruning, and the culture of the grape. All the new kinds are offered, such as Empire State, Niagara, Cayuga, Ulster Prolific, Poughkeepsie Red, F. B. Hayes, etc. The Jewell Strawberry is spoken of in the highest terms. Free to RURAL readers.

W. MITCHELL MCALLISTER, 720 Chestnut Street, Philadelphia, Pa.—Illustrated catalogues of optical instruments, spectacles, eye-glasses, opera, field and spy-glasses. It also contains a very clear description of the eye, explaining the various troubles with this delicate but very important organ; also a catalogue of all sorts of meteorological instruments. All persons interested in such things should not fail to send for one of these catalogues.

ORVILLE H. SHORT, SUCCESSOR TO SHORT & SMITH, Syracuse, N. Y.—An illustrated circular of the Patented Run-about Wagon. This circular gives a cut and description of the various styles in which the Run-about Wagon is made. These wagons are light, handy, strong, easy-riding and light-running. They weigh from 300 to 500 pounds, and are capable of carrying from 600 to 900 pounds. A good wagon cheap. Send for circular, and see how it is.

H. D. THATCHER & Co., Potsdam, N. Y.—The Dairy Stockman's Guide Book, or how to produce the best results with the dairy. This is a pamphlet of some 30 odd pages and gives much useful information to every one keeping cattle. Of course, it is issued to tell you about Thatcher's Orange butter-color, but the information in regard to the dairy and care of cattle, is worth its cost. Send for it, mentioning the RURAL, and you will be well pleased with it.

AMERICAN SMALL-YORKSHIRE CLUB. Geo. W. Harris, Sec'y, Box 3432 N. Y. City.—Volume No. 1 of the Small-Yorkshire Swine Registry is just issued. It is a nice little volume, containing the record of 350 males and 700 females, together with the names of the breeders and present owners. It also contains a history of the breed, of its introduction into the United States, the organization of the club, and the constitution and by-laws of the same. It also gives a scale of points for the use of judges and breeders.

CORNELL UNIVERSITY EXPERIMENT STATION.—The report of this station covering the work done in 1883-4 and 1884-5. Among other things it contains tables showing the cost and value of stable manure; the quantity and value of the manure from milch cows; changes in milk with changes of rations; gain of steer on a fattening ration, and also on a maintenance ration; experiments with various crops; cost of plant food in commercial fertilizers etc., etc. A good report worth careful study.

JONES OF BINGHAMTON, Binghamton, N. Y.—Price list of Jones's scales illustrating all the styles made, from the little Stop-Thief, weighing from one ounce to ten pounds and selling for $1.50 (which we give for three subscribers) up through the various styles and sizes, including the five-ton farm scale at $60, to the monster canal boat scale weighing 500 tons. The scales are all well made of good material and fine finish. It will pay you to send for and examine this catalogue, and remember always that "Jones, He pays the Freight!"

SYRACUSE CHILLED PLOW CO, Syracuse, N. Y.—An illustrated almanac and circular issued by this substantial house, giving every size, style and a description of the plows made by them; also cultivators, road scrapers, etc., etc. It is sufficient evidence of our estimation of this sulky plow to say that we have placed it on our Premium List and offer it, full-rigged, complete, and we pay freight to destination, for only 50 subscribers. Send for this circular, see what they say about this plow and then go to work and secure one. We ought to give away 100 of them.

NASH BROTHERS, Millington, N. J.—"Tillage is Manure," "How to Avoid Difficulties of Climate," "The Acme Pulverizing Harrow on New Breaking." Also a collection of over 2,300 testimonials from persons who have used the "Acme" in 48 States and Territories, embracing nearly every agricultural county of the Union. We have so often spoken favorably of this tool on the Rural Farms, and how well we like it, that we need to say nothing more here than to advise all to send for these books, which will be gladly sent if you mention the R. N.-Y. Each can then learn of this tool for himself.

GALBRAITH BROS., Janesville, Wisconsin.—A nicely illustrated catalogue of Clydesdale and English Shire horses owned and for sale by these extensive importers and breeders. This catalogue gives the pedigrees of over 50 of these fine horses, and is illustrated by numerous cuts of the most valuable animals. It also contains the names of 175 animals imported and owned by this firm since 1881, and by the stars we are reminded that more than two-thirds of them are noted prize-winners. Galbraith Brothers have also included in this a notice of some of the fine little Shetlands which they have imported direct within the past year. They range in hight from 36 to 42 inches, and one of them would make glad the heart of any boy.

BOWKER FERTILIZER CO., No. 43 Chatham Street, Boston.—A catalogue setting forth the value of the Stockbridge Manures and the Bowker's Hill and Drill Phosphate, Bone, Chemicals, etc., together with prices of the various fertilizers per bag and per ton. This firm also offers, as will be seen by the pamphlet, the various chemicals for home mixing, all of which are delivered free on board the cars either in Boston or New York. These so-called "chemicals" for home mixing, or for separate use, as desired, are muriate and sulphate of potash and German potash salts for potash; sulphate of ammonia, nitrate of soda and dried blood for nitrogen; ground bone, dissolved bone, dissolved bone-black and bone black for phosphoric acid. Thus the farmer may apply any one or any combination of these essential plant foods to his land, as from experiment he has ascertained what his land needs, or for the *purpose of ascertaining* what it needs. The pamphlet presents the results, of the use of the Stockbridge & Bowker fertilizers, as furnished by the farmers of many States. Our readers should examine the catalogue, which will be sent free to all of them who apply to the above firm.

SUMMARY

OF THE RURAL'S SEED DISTRIBUTION FOR 1886.

A full description, with illustrations, w given in the R. N.-Y. of Nov. 14, and this number will be mailed (free) to all who apply.

The Nov. 14th Number also presents a full count of the

$3,300

worth of presents which are offered to subscribers (not to regular agents) for clubs.

N. B.—One package (six in all), will be sent to all REGULAR SUBSCRIBERS who apply, and to them only. A two-cent stamp should be inclosed in the application, except by those who subscribe for the R. N.-Y. in connection with some other journal which offers the seeds in connection with the combination. In that case, an application is unnecessary. The seeds will be sent without application.

FIRST.

The Alaska Pea.

It is claimed that this is the earliest blue pea; that it is the best of its class; that it has superior shipping qualities, the pods remaining green longer than those of any other variety. It has never been offered for sale.

SECOND.

The Best of the New Watermelons.

Comprising a few seeds each of Kolb's Gem, Mammoth Ironclad, Scaly Bark, Cuban Queen, and Pride of Georgia.

THIRD.

Angel of Midnight Field Corn

This proved last season the earliest field corn ever tested at the Rural Grounds, though it may not so prove again. The longest ears measured 14 inches. The ears were borne low, with often three to a plant. Plants short.

FOURTH.

Garden Treasures,

for our lady friends, being a packet of not less than 100 different kinds of flower seeds mixed together.

FIFTH.

THE BIRD CANTALOUPE

(From Colorado.)

Introduced by the R. N.-Y. Oblong in shape, thickly netted, deeply ribbed; flesh thick and light green, sweet and delicious. Very early. The largest specimens weigh 20 pounds, as grown in Colorado.

SIXTH.

Hackensack Valley Muskmelons.

Gathered by the R. N.-Y. from the best growers of the Hackensack Valley of New Jersey.

IMPORTANT.

1st.—The RURAL NEW-YORKER never SELLS seeds or any plants grown upon its Experiment Grounds.

2d.—ONLY Regular Subscribers need apply.

3d.—IN MAKING application, it is only necessary to write "SEND SEEDS."

4th.---Strangers should send for the Nov. 14th issue of the R. N.-Y., which fully describes the Free Seed Distribution. Mailed without charge.

Address
THE RURAL NEW-YORKER,
34 Park Row, N. Y.

For Women.

CONDUCTED BY MISS RAY CLARK.

HOW WE INTERESTED OUR YOUNG PEOPLE.

Our Ladies' Sewing Circle belongs to a struggling church on the Western frontier. We have no church edifice yet, but use a hall instead. The society has furnished the hall with chairs, stoves, lamps and a good organ. We also have the foundation of a Sunday school library. A small room adjoining serves for a kitchen. We also have tables, and crockery enough to serve 50 people or more.

Our circle consists of active, intelligent women, who meet for social intercourse, and generally employ themselves with some light work.

The sewing circle meets once in two weeks in this hall instead of at the houses of different members, gentlemen being invited to tea at six. I cannot refrain from telling you how it has become so dear and homelike. The hall is lighted by three windows at one end and a sky light at the other, the platform and minister's desk being placed at the end with windows. This arrangement made it very trying to the eyes of the audience. One of the ladies conceived a plan to remedy this. She made a long curtain, reaching to the floor, of dark maroon cantou flannel with a lambrequin edged with heavy fringe, for the middle window, directly behind the speaker.

This curtain extended to the edge of the other windows, being 10 or 12 feet wide, completely excluding the light from one. The light from the other two windows was softened by movable screens. The upper part of these screens were composed of light blue paper-cambric with a dado below of dark maroon, and when these screens and curtains were decorated at the harvest festival, with bright leaves and trailing vines and ferns, the effect was delightfully artistic and restful.

Another lady, skilled in drawing and cutting out letters, prepared mottoes for the walls from dark brown plush paper. In a semi-circle above the middle window was pasted this motto in capital letters directly upon the white wall: "The Kingdom of Heaven is within you."

Near the entrance and over the cabinet of Sunday-school books was placed this motto: "This commandment I give unto you that ye love one another as I have loved you."

The ladies made it a study to furnish amusements and recreation of an unexceptionable character for the young people of the society in the way of games, entertainments of a social and literary nature. We have persistently kept out petty gambling institutions known as grab bags and ring cakes.

Soon after the summer vacation when everybody was fresh and in good trim for work, the members of the Society were invited to the home of Mr. and Mrs. J. S., "for the pleasure of the society and the profit of the minister," as the good man put it.

A day or two before the time appointed a note was sent to a score or more of the people asking them each to write an answer in rhyme to the question enclosed, the rhyme to contain a certain word which was also sent in the note. These productions were to be read for the entertainment of the people, the game being called "Crambo." The evening came and the house was filled with a glad company. There were humorous readings and quiet games. One of these games engaged both old and young, and we call it, "What is it like and why?" One person is sent out of the room and the others agree upon a subject to talk about. This time the word "Moon" was chosen. When the person was called in, she asked a little boy, "What is it like?" He replied, "It is like the sun." "Why?" "Because it is bright." Another said, "It is like a cow because it had horns and a face." She asked the third and received the answer, "It is like bread because it rises." The one giving the most information by his answer, had to go out the next time. George Washington and other characters of history were talked about; and such things as the human hair, artesian wells, etc.

"Crambo" was then announced, and the crowd gathered about the reader, who stood by the center table and was to read one by one the articles which had been prepared, the author's names not being known generally, thus giving an opportunity for the company to guess the author of each piece. One paper was called "What did Katy do?" The word "sun" to be inserted. Another, "Why is the darkest hour just before day," and "darling," to be inserted. Another, "Does the mewing of the cat make music to your ears?" and "dollar" was the word. "Where is the mother of vinegar?" with the word "charity." This was written late the night before, by a tired tiller of the soil, and who is one of your subscribers, so I'll quote it:

Long time ago, when but a child,
Before we sought this "Desert wild,"
I lived upon an orchard farm,
And knew full well its storm and calm.
I've seen the fruit trees bending low,
In burnished red, or white, like snow.
I've seen the patient oxen come
Drawing the cider apple home.
I've seen the horse go round and round,
And heard the squeezing, crushing sound,
As apples good and apples bad,
Like Charity, gave what they had.
But I'm so certain, I could swear,
Tho' cider turns to vinegar,
I did not see its mother there.
Well, time flew on, till hour by hour,
The cider sweet was cider sour;
Yet, e'er it turned to vinegar,
We never saw its mother there.
Maternal sweetness keeps things sweet,
And prof'table to drink or eat.
Maternal presence hath no power
To turn a thing from sweet to sour;
And hence, I urge, with lawyer's care,
There wasn't any mother there.
We strained the cider in a butt,
Sometimes 'twas sweet and sometimes not;
And all was done with so much care,
I'm sure there was no mother there.
But time sped on; 'tis Sunday morn,
The day on which baked beans are born.
We haste away for vinegar,
And lo! we see its mother there.
She hides there all this time, it seems,
With latent love, to bless our beans.
Then solve the problem if you can,
"The boy's the father to the man,"
Or, take it this way, if you'd rather,
Vinegar's parent to its mother.

In a conspicuous place in one of the rooms stood a man's silk hat with a bunch of flowers on one side. This attracted so much attention from the gentlemen during the evening, that ten dollars were found within its depths when the company had gone home.

And thus I give you a peep into one of our quiet country homes, at an evening's sociable or entertainment, and if I have helped to give any new ideas as to how the winter evenings can be spent, as well as how talents which lie dormant (and many times are unknown even to the persons themselves), can be used with profit and pleasure, I shall be well satisfied.

MRS. O. HOWARD.

TROUBLES AND TRIALS.

Mrs. Nason was busy with her sewing when her next-door neighbor sent her little son over to ask her to come and see her.

"Is your mother sick, Henry?" she asked.

"I guess so; she is crying like everything, and she wants you to come right over as soon as you can."

"Tell her I will come directly," she said, folding up her work and putting a stick of wood in the stove. "I cannot stop long as Mr. Nason will be at home in an hour for his tea."

Putting on her shawl she followed the little boy, and found his mother in a flood of tears, sitting before the sofa, which was piled with blankets and comfortables.

"My dear Mrs. Langtry, what is the matter?" she exclaimed, as she stepped to her side.

"Oh dear! what shall I do? Just look at my winter's bedding! Everything is ruined! The mice and the moths have just destroyed all!" and she burst out afresh in a paroxysm of grief.

"It is too bad!" said Mrs. Nason. "I am sorry for you!" and she opened a pile of soft, white blankets that were literally made into open-work by the insidious moths. "I should hang them out in the sun and frost as quick as possible," she quietly said.

"Then my nice comforts are all gnawed by the mice and full of nests! I never saw such work," sobbed Mrs. Langtry.

"Did you wash your blankets before you packed them last Spring?" asked Mrs. Nason.

"No, they were not soiled, and so I laid them on the shelves in the closet. I thought they would be all safe, of course, and the comforts I packed on the floor. I do not believe the closet door has been opened since I put them there! Did you ever see such work?"

"I never did, certainly! Did you put in something to keep the moths out; and cover them up tight? Of course you did though."

"No, I never thought of it. I was in a hurry, and I supposed they would all be safe till Fall."

"You packed your furs in camphor or tobacco, I hope. It has been a hard Summer for moths," said Mrs. Nason gently, as she shook out a mouse nest with half a dozen little mice, on the carpet.

"I don't believe I did. If my set of furs are spoiled won't Ed. Langtry give me fits! I will go and look at them and see," she said, starting up.

"I would take care of these things first, were I in your place, and get them out of the sitting-room. Time enough to-morrow to look after the furs. I am very sorry for you, but my dear woman, an hour's work and care, last May, would have saved you a heap of work this Fall. I see no way but you will have to get some soft yarn and darn the blankets as well as you can, and I reckon you will have to patch the comforts after you get the mousey odor from them."

"Did you ever see a woman have so many trials and troubles as I have? You know that my sheets and pillow cases all mildewed last August, and my table napkins too," and she began to cry again.

"My dear Mrs. Laugtry, you have no one to blame but yourself; you are always in such a hurry that you do not take time enough to properly care for things. If you had dried your clothes they would not have mildewed. Troubles that we bring upon ourselves should be a warning against such haste in the future. 'Haste makes waste,' is an old maxim and a true one, I find."

"Oh, you careful, moderate people are always on the safe side, I suppose," she said testily. "We generally avoid such troubles as these," was the reply, "and I find it pays to take care of what things I have. I am just as sorry for you as I can be, but I do not believe you will ever meet with such a disaster again. Trials and troubles that the Lord sends us we have to accept as inevitable and try to be resigned; but those which we bring upon ourselves through neglect, haste or carelessness, are not so easy to bear, for we know they were brought upon us by our own oversight."

"Now, do not give me a lecture, for my husband can do that! but help me carry these detestable things on the back porch. I wish the whole lot was burned up and out of the way."

"Poor woman! You will never learn wisdom," said Mrs. Nason, as she helped her neighbor clear the débris from the sitting-room.

MRS. S. H. ROWELL.

Domestic Economy

CONDUCTED BY EMILY MAPLE.

PITHS.

Pansies are just now fashionable for dinner-table decoration. They are arranged in circles of color upon flat dishes or baskets.

A thoughtful, wise mother keeps pace with the development of her children.

Raisins will stone easier if first covered for a few moments with boiling water.

The tops of lamps require to be boiled every few weeks for half an hour in strong soda water. Do this if you would avoid explosions.

Garments worn at night should not be folded up and placed under the pillows.

GASTRONOMIC GOSSIP.

A DINNER FOR FEBRUARY.

Spring Soup.
Lobster Cutlets.
Breast of Veal, Jardiniere.
Curried Rice.
Salad ... Watercress and Beets.
Bavarian Cream.

It is quite true that "civilized man cannot live without dining"; but it is also true that he will not show any enviable degree of civilization unless he has dined well. The cynic who said that the road to a man's affections lay through his stomach, might have added that, like the "road to learning," it is not a royal one.

In view of the 365 breakfasts and dinners, not to speak of luncheons to be prepared for this New Year of our Lord 1886, you will agree with me, gentle housekeeper, that it looks a very weary one. The Rural proposes to give from time to time a series of bills-of-fare and culinary suggestions designed to relieve housewives of some of the share of the burden of catering.

In the early Spring, there is no better soup than the one named above. Make a stock, by boiling slowly for five hours, three pounds of shin of beef with three quarts of water; strain and let it get cold, in order to remove the cake of fat from the top. The next day, set the soup over the fire and add the following vegetables all finely chopped:—One small carrot, one turnip, also small, one good-sized onion, three tablespoonfuls of the thick part of canned tomatoes, two stalks of celery, and if you can procure it, a few teaspoonfuls of minced lettuce and watercress, and a little parsley. Boil slowly for half an hour, season to taste, and serve very hot.

Lobster cutlets can be made from canned lobster, although the fresh is always preferable. Put two ounces of butter into a stew-pan, and when it bubbles, stir in a heaping spoonful of flour; cook for a minute, and then pour in a small cup of boiling cream, and a half a pound of lobster cut in dice. Stir until very hot, take from the fire and add the beaten yelks of two eggs, salt to taste, add the least bit of grated nutmeg, and a dash of Cayenne; return to the fire and cook for a minute to set the eggs. Spread half an inch deep on a buttered dish to cool, then shape like chops, dip in bread-crumbs, then in beaten eggs, and again in bread and fry a golden-brown in hot drippings.

Have the butcher prepare a breast of veal for stuffing by making an incision between the ribs and the flesh, fill this with a force meat made of stale bread, a little stewed tomatoes, a boiled onion, and seasoning. Skewer the flap of meat into place, season well and put into a baking-pan with a cup of boiling water. Bake for an hour and a half basting frequently. A slice or two of fat pork laid over the meat adds to the richness of the gravy. Boil separately one carrot and one turnip and six button onions,; the two former should be cut in dice; heat in separate stew-pans half a can each of peas and string beans. Place the meat in the center of the dish, the vegetables in little mounds around it and pour the strained and the thickened gravy over the whole.

Boil some rice; fry a minced onion in a little butter until turning red, add a tablespoonful of curry-powder dissolved in a little stock, boil up once, and pour over the rice, shaking it well so as to mix it thoroughly with the rice. For those fond of curry, there is no more delightful accompaniment to baked veal.

A simple French dressing made by mixing half a teaspoonful of made mustard, and as much salt, with three tablespoonfuls of vinegar, and one of table-oil, and a salt spoonful of pepper, is the nicest for green salads. Salads are so healthful and refreshing that they should form a part of every dinner.

Bavarian creams are as delicious as they are simple, and where one has plenty of cream they are also cheap. Whip one pint of cream to a stiff froth, laying it on a sieve. Soak half a box of gelatine in a small cup of water for an hour, keeping it in a warm place near the range; stir into this one pint of boiling milk that has been sweetened and flavored with vanilla; let it cool slightly and stir in the well-beaten yelks of four eggs, when it gets quite cold and begins to thicken, stir it steadily until smooth, then stir in the whipped cream until well mixed; put in a mold and stand in a very cold place.

ELSIE.

HOME PHYSICIANS.

An amateur doctress may be very useful, provided she has sufficient intelligence not to overstep certain bounds. Ladies who are fond of dabbling in medicines, unless they know where to stop, may do much harm. There are many simple facts, however, that every mother should be acquainted with.

The woman who when beef-tea was ordered, put the beef in the tea-pot and poured on boil-

Miscellaneous Advertising.

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ing water, had no excuse for her ignorance. Of the many ways of preparing this popular form of nourishment for the sick, the writer prefers the following method, which is that of a celebrated physician. Cover one pound of lean beef with a pint of cold water; beat it with a silver fork for 10 minutes; place it over the fire and simmer for 20 minutes; strain and set aside to cool. When cold, remove the fat, which will have formed in little flakes on the top, heat, season with a little salt and serve with nice toast or thin wafers. The flatulency that sometimes follows the use of beef-tea, may be prevented by boiling a bit of bruised ginger with the tea.

In regard to poultices there is often a lamentable ignorance. A cold, clammy poultice is positively harmful. To make a linseed poultice, lay a piece of clean rag large enough to cover the required spot, upon a hot dish; meanwhile pour in a basin the desired quantity of warm water, scatter in the linseed meal, and stir with a knife until it is of the proper consistency. A sloppy poultice is damp and uncomfortable, and one that is too dry will not hold together. Spread over the rag evenly, and double it over an inch at the edges. Take it to the bed-side on a hot dish. Bind it on firmly with folds of bandaging and cover with a compress of flannel to retain the heat. A piece of oil-silk is less clumsy and will keep moisture from the bed-clothes. In the case of a bed-ridden person, a pailful of fresh, cold water kept under the bed will often prevent bed sores. Where these have formed, an old silk handkerchief tacked inside the garments will give a grateful feeling of relief and coolness. A MOTHER.

MATCH-HOLDER.

One of the prettiest Christmas gifts that I received was a match box made out of a little wooden butter tray, such as grocers give you when you buy small quantities of butter or lard, and two clay pipes. The butter tray is oval, painted black and varnished. The pipes are gilded, crossed and tied together with red satin ribbon so that the bowls set upward. These are secured to the tray by a few stitches through the ribbon that holds them together. One pipe bowl is intended for good matches, the other for those burnt. AUNT JANE.

RIBBON WASTE.

In reply to our inquiry as to where the above could be obtained, "Palmetto" writes:

The "ribbon waste" to which I referred in my article was obtained at one of the ribbon mills in Paterson, New Jersey. I presume it can be obtained at any mill where ribbons are manufactured. Floss in large skeins, and beautifully assorted colors for the embroidery, can also be had at the silk mills for 30 cents an ounce.

DOMESTIC RECIPES.

FIG PUDDING.

An economical fig pudding is made as follows: Chop fine half a pound of figs, and four ounces of suet, add eight ounces of bread crumbs, six ounces of brown sugar, two ounces of flour, a gill of milk and a little grated nutmeg; stir all these well together and add two beaten eggs; put into a buttered mold and boil for four hours. A plain and cheap pudding sauce is made by stirring into a pint of boiling water, a tablespoonful of corn-starch dissolved in cold water; add one cup of sugar, and two ounces of butter; flavor to taste with nutmeg, lemon-rind, cinnamon, brandy, or wine. A sauce made from the juice of tart canned cherries is especially nice for fig pudding which is rather insipid if it has not a rich and at the same time a sour sauce. Use as above, substituting the juice for the water.

MARY L.

MEAT CAKES.

The remains of a cold roast or boiled leg of mutton that has been rarely cooked, will be most delicious if prepared as followed: Chop the meat as fine as possible and mix it with half as much fine bread crumbs, and a quarter as much beef-suet, also chopped very fine and freed from strings. Put these ingredients into a bowl, with a cupful of minced oysters (fresh ones of course are best but the canned ones may be used), add a seasoning of thyme, marjoram, pepper, salt, and a little powdered mace; mix with two well-beaten eggs for a pound of the cold mutton; stir until it forms a stiff paste; form into balls or sausages and fry. MRS. A. M. FOSTER.

HASHED GAME.

Cut the remains of cold roast duck, partridge, or any kind of game into small pieces and dredge them well with flour; put them into a stewpan with a half cupful of stock and a tablespoonful of mushroom, catchup or some kind of table sauce; season with salt and red pepper and let it simmer very slowly for ten minutes. Lift out the pieces with a colander spoon, and lay upon nicely-browned toast. Put a few drops of lemon-juice into the sauce, boil up once and pour it over the whole. The pickings of cold game that could be used in no other way, fixed as above make a very tasteful breakfast or supper dish. If no stock is handy a little may be made by boiling the bones for half an hour with a small onion, and the usual seasonings. FANNY L.

BAKED INDIAN PUDDING.

The following is a reliable though somewhat expensive recipe for the above dish, but it is most delicious: Take one pint of yellow Indian meal and stir into it a quart of boiling milk. Let four ounces of butter melt slowly by the fire, and mix it with a pint of molasses; flavor with nutmeg and the grated rind of a lemon, and stir very gradually into the milk and meal; when almost cold stir in quickly six well-beaten eggs. Pour into a buttered pudding dish, and bake from one-and-a-half to two hours.

For a more economical pudding that is still quite good enough to be relished by hungry children and grown people too, we can recommend the recipe given below: Into seven tablespoonfuls of corn-meal stir one quart of scalding milk, a cupful of molasses, a teaspoonful of salt and a tablespoonful of ground ginger. Bake covered for two hours in a slow oven; remove the cover and brown for half an hour, increasing the heat of the oven.

M. A. B.

PRESERVING EGGS FOR FAMILY USE.

The following preparation I have used for 40 years for preserving eggs, without the loss of half a dozen a year. I do not pretend that eggs so kept are equal to fresh eggs for the table, but for all cooking purposes they are perfectly preserved. They not only keep good through the Winter, but I have taken them out 18 months after putting them in the brine and found them good. I use for the purpose two large butter tubs, so that while using from one I can be putting them down in the other. I prefer eggs laid in the months of May, June, September and October as most likely to be in good condition for keeping.

One pound of fresh unslaked lime, one pound coarse rock salt and three gallons of soft water. Twice this quantity will preserve from 20 to 25 dozen eggs. The ingredients should be prepared two or three weeks before using, stirring frequently so that the lime will be thoroughly mixed, as the heat evolved from slaking would harden the yelks of the eggs. When properly prepared, there will be a thin crust on the liquid like thin ice, and as long as there is a crust on top, eggs may be put in and taken out as needed. The shells will be slightly coated with lime. No straining is necessary. Mix the ingredients in the vessel you intend for the eggs and let the *cream* remain in the bottom after it has been stirred for a sufficient length of time. MARTHA.

REMEDY FOR BED-BUGS.

CORROSIVE sublimate, pulverized and mixed with lard, and applied to cracks and joints of bedsteads, is a life-long remedy of mine for these pests. I never put up a new bedstead without giving it a dose of preventive, and, during almost 50 years of housekeeping, have never had an insect in one of them. C. M. H.

WHAT OTHERS SAY.

M. E. DEWEY, in Good Housekeeping, says of hospitality that we may fairly acknowledge that to have visitors in one's house demands the sacrifice of our leisure, our attention, our little personal "ways" that are so dear to us, and that, notwithstanding the exquisite pleasure of close intercourse that often comes to us in this way alone, a large part of our care as hosts is spent upon people who are only moderately interesting to us, and sometimes upon those who require our utmost patience and indulgence to put up with them all.....

THE same writer, with rare good sense, suggests that if a friend comes in upon a homely or scanty dinner, that we eke out the meal with bread and butter or a jar of canned fruit, and say nothing in deprecation.....

CHRISTINE TERHUNE HERRICK says that the addition of a couple of teaspoonfuls of ammonia to the suds in which dish towels are scrubbed does no harm, and assists materially in the removal of dirt. The towels should never be boiled until washed thoroughly. Otherwise boiling sets the stains.....

G. O. GAINES, in Albany Cultivator, says that a child at first learns only by inquiring, but that in many cases, the members of a family cannot, or will not, take time to answer the hundreth part of the puzzling questions that rise in the busy brain of the little student. But, absurd and irrelevant as these inquiries frequently seem, it is unwise to turn the juvenile questioner away without at least attempting a sensible and definite reply, and that it will pay to furnish what information we can to an eager, curious child.....

Miscellaneous Advertising.

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Ayer's Cherry Pectoral, for three reasons:—it is perfectly safe for old or young,—can be relied upon in cases of emergency,—and possesses great curative powers.

I consider Ayer's Cherry Pectoral a medical success and a chemical triumph. I have found this medicine a powerful specific for Colds, Coughs, and Pulmonary Complaints. I use it in my own family and recommend it in my practice.—Parker Cleveland, M. D., Prof. of Chemistry and Materia Medica, Bowdoin College, Brunswick, Me.

Ayer's Cherry Pectoral is an invaluable remedy for Colds, Coughs, and all Pulmonary diseases. I use it myself and prescribe it in my practice.—A. S. Pettenger, M. D., Glen Gardner, N. J.

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Miscellaneous Advertising

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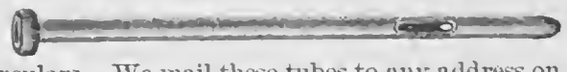

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This has been our 65c. Knife, but for a while we will sell at 50c., post paid by mail, or 5 for $2. Blades are file tested and warranted. Pruning Knife, 75c. Stock Knife, $1. 8-Inch Steel Shears, 75 cts. Gents' fine 3 blade Knife, $1. Boys' 1 blade, 25 cts.; Ladies' 2 blade, pearl, 50c. Send for 48 page free list, also "How To Use a Razor."
Maher & Grosh, 75 S Street, TOLEDO, O.

News of the Week.

HOME NEWS.

SATURDAY, Jan. 30, 1886.

THE House Committee on Military Affairs has favorably reported a bill appropriating $500,000 for the New York monument to Gen. Grant, the money to be available when voluntary subscriptions shall have reached $250,000. Many believe the National Monument should be in the National Capital.....On Jan. 10 Capt. Crawford, of the U. S. Army, while hunting hostile Apaches in the mountains of Sonora, came upon a party of Mexicans who fired on the Americans, killing Crawford. Our troops returned the fire killing four of the enemy. Geronimo was completely tired out by Crawford's relentless pursuit, and he surrendered hostages to Lieut. Maus who succeeded Crawford, and would have surrendered his entire band had Maus been able to grant terms of surrender. The matter is to be referred to Gen. Crook.....Owing to the law's outrageons delays in criminal cases, and the probability of the escape of notorious criminals through legal technicalities and mawkish sentimentality, "Judge Lynch" has been remarkably busy of late in a great many parts of the country. Indeed, there has been a good deal of talk of introducing his summary administration into several cities and large towns where crime by far too often goes unwhipped of Justice.....Mrs. Crag Wadsworth, who it was currently reported, three or four years ago, was about to marry President Arthur, died Wednesday.....Petitions for the reappointment of O'Donnell as State Railroad Commissioner of this State, are pouring in clonds upon Governor Hill from all classes of the community. Some farmers' associations, however, are opposed to him; but it would seem the majority are in his favor.....The railroads of Texas are indebted to the State for money due to the School Fund to the amount of $1,650,000.....American vessels are not allowed to carry passengers between one Canadian port and another, and a bill is now before Congress prohibiting Canadian vessels from carrying passengers between one of our ports and another.....John C. Kimball, his wife and three children, on their way home from Dodge City, Kan., were caught in a blizzard and frozen to death last Wednesday.....The bill authorizing the President to reinstate General Fitz John Porter as an officer of the army has been favorably reported from the Military Committee. It is proposed to restore him to the rank he held when cashiered, and put him on the "retired" list, with the pay, etc., of the position; but no "back pay" is to be allowed.....J. A. Chapleau, the Canadian Secretary of State, announces that an amnesty is to be extended to all political prisoners of the Northwest. The Indians are not included. The Indians of the Northwest have no vote.....The Chinese in Cloverdale, California, have been ordered to leave town within 48 hours, owing to excitement caused by the murder of a lady by her Chinese cook. "Anti-Chinese" organizations are being formed throughout the State, and the war against the pig-tailed race has received a lively impetus.

THOSE who have used the Boss ZINC and LEATHER COLLAR PADS and ANKLE BOOTS say they are the best and cheapest, because most durable. They will last a life-time. Sold by harness makers on 60 days' trial. DEXTER CURTIS, Madison, Wis.—*Adv.*

AGRICULTURAL NEWS.

SATURDAY, Jan. 30, 1886.

THE Sixth Annual National Agricultural Convention of the American Agricultural Association will be held at the Grand Central Hotel, New York, February 3d, 4th and 5th, 1886. All interested in agriculture and kindred pursuits are invited to attend and participate in the proceedings. Addresses will be delivered and papers read by the leading thinkers and writers on agriculture, live stock, dairying, ensilage, and other practical subjects, and there will be open discussions of each by the members.....A Convention of the National Dairymen's Protective Association will be held at the Grand Central Hotel, New York, Friday, February 5th, 1886, to which all friends of the dairy are invited. The object of the convention is to give expression to the sentiment against the manufacture and sale of fraudulent butter, and to consider means for the protection of dairymen and consumers against this gigantic evil.....Fifty million dollars' worth of gold has been shipped from British Columbia since 1858. The export last year was $595,000.....A farmer in New Hampshire has been fined for cruelty in not providing shelter for his cattle during the late cold weather. He was the richest man in the neighborhood.....White people of means and education are said to be leaving West Virginia, Ohio, and parts of Western Pennsylvania for Arkansas, their intention being to carry on farming extensively in the most productive and healthy sections of that State.....The fruit-growers of California are petitioning Congress not to pass the Mexican reciprocity treaty, as the competition it authorizes would greatly injure their business. They say that the present duty of 35 per cent. ad valorem on prunes, two cents per pound on raisins, and $1 per gallon on olive oil, affords no real protection to these enterprises. Congress is therefore asked to raise the duty on prunes to 50 per cent., on raisins to three cents, and on olive oil to $3, and to decline to ratify the treaty.....The Danish Government has been urging a protective duty on imported sugar and corn. That on corn would have prevented any American importations—they don't amount to much anyhow—but the Lower House of Parliament has rejected the Government's bill.....Mr. Pierre Lorillard, the most conspicuous figure on the American turf, is about to retire from it permanently. His famous racers are to be sold, but his great horse breeding establishment at Rancocas, N. J., is to be retained. His desire to give more attention to this and his large business interests, is the cause of his retirement.....The Connecticut Legislature, last Thursday, passed a resolution calling upon Congress to increase the duty on leaf tobacco so as to protect tobacco raising in the "Nutmeg" State.....The aggregate receipts of wool in Boston since January 1, 1886, have been 14,987 bales domestic, 2,639 bales foreign, against 14,245 bales domestic and 667 bales foreign for the corresponding period of 1885.....Hogs are still dying in great numbers around Beloit, Wis. Over 10,000 it is estimated, have lately died within a radius of 15 miles of the city—measles, it is thought.....The Atchison, Topeka and Santa Fé Railroad Company, it is said, will establish stock-yards and erect large packing-houses at Argentine, adjoining Kansas City, Mo., in connection with its projected lines into Indian Territory and Texas. The company, it is said, contemplate building 400 miles of road, to have ready for the moving of cattle next year, from Kiowa through the Territory to the Texas Pan-handle, and from Arkansas City, Ark., toward Fort Worth, besides short feeders to its lines.....New Orleans refuses to buy the Exposition buildings for the proposed $125,000. The thing must collapse soon, therefore, unless another raid on the city treasury shall prove more successful.....This is the severest Winter Scotland has had in 20 years. Sheep in great numbers are perishing from starvation.....The Randolph Peters Nursery Company was organized at Wilmington, Del., on the 28th of January. Sarah A. C. Peters was elected President and John S. Barnhard, Treasurer and Manager.....The House Committee on Agriculture has determined to recommend the establishment of a Department of Agriculture and Labor with a Secretary, who shall be a member of the Cabinet, at its head.....A largely attended cattlemen's convention is now being held at Denver, Col. Revision of the land laws for the interest of stockmen and the leasing of the "arid region" in large bodies, to stock owners are strongly advocated.....Heavy rains followed by severe frosts caused a heavy formation of ice on the trees in many parts of Massachusetts and Maine, last Thursday, and the disfigurement and destruction, due to the breaking down of trees and branches under the load, have been heavy and widespread.....Our New York readers should not forget the State Farmers' Institute to be held at Ithaca, N. Y., February 16th, 17th and 18th. Dr. Caldwell assures us that reduced rates are promised by the railroads and hotels. Let there be a grand rally.....

For a full illustrated Description of our Free Seed Distribution for 1886, examine the Nov. 14 issue. Preserve it for future reference. It is sent to all applicants for specimen copies.

THE MICROSCOPE raised the standard of Thatcher's Orange Butter Color until three eminent experts in New York State reported good enough.—*Adv.*

Crops & Markets.

SATURDAY, Jan. 30, 1886.

A cablegram from Rangoon, Burmah, says the exports of rice will be fully a million tons—nearly 15 times the whole product of the United States. It is thought, however, that the report is intended to depress other rice markets; for owing to the late disturbances it is not unlikely that the crop will be less than usual. Now prices of foreign rice are 12 to 15 per cent. lower than in 1882, when the crop was larger than the present estimate. This is due to competition with other low-priced cereals and to the fact that we now raise nearly enough to supply the home demand, except for brewery purposes, for which "broken" rice is used. Prices of domestic rice are unusually low, so that the crop is entering into consumption much more rapidly than usual, the sales to date being 300,000 barrels against 125,000 for the some period last year. The medium grades of domestic are about half a cent a pound lower than the same grades of foreign at this place, but Western buyers by purchasing at primary markets save nearly twice that difference.

THE forthcoming report of the Illinois State Agricultural Department on the amount of wheat raised and consumed during the year 1885, will show a condition of affairs not known to exist for the past 35 years, there being a deficit of 5,000,000 bushels in the crop. The acreage harvested was 1,068,364. The amount annually required for seed and consumption is 13,739,029 bushels, but the amount produced, as shown by the returns, was 8,299,243 bushels. Of the 102 counties in the State only 23 report a surplus in production over the demands for seed and consumption. These counties are not located in any particular belt, but are scattered throughout the State indiscriminately.

The Minneapolis flour market is somewhat brighter; and were it not for low water all the mills would be in operation. The production for the week was 90,648 barrels, against 72,366, the preceding week, and 97,000 the corresponding week in 1885. Receipts of wheat for the week, 404,880 bushels; shipments, 26,880 bushels of wheat, and 77,875 barrels of flour. Wheat in store—Minneapolis, 5,951,485 bushels; Duluth, 5,567,571; St. Paul, 1,172,000.

Reports from leading peach growing sections along the Hudson River Valley show that the buds were killed when the mercury went down as far as 16 below zero. This is the third total failure of the peach crop in three consecutive years. The prospective loss to Ulster County is estimated to exceed $150,000.

Eggs here are lower again. A few weeks ago, the price went up to 29 cents, but now they are dull at 23. Little probability of higher prices, unless the weather changes. The condition of the egg market may be seen from the following figures, giving prices for the different periods of late years. The number of eggs on hand this year is greater than ever before. These prices are for fresh State eggs:

	Jan.	Feb.	Mar.	Dec.
1886	27	22½		
1885	30	33	28½	28
1884	33	37	25½	28
1883	31	30	27	31
1882	34	28	31	33
1881	34	47	22	35
1880	25	20	15	33

It will thus be seen that eggs reached their lowest point in price in 1880, and their highest in the following year. The prices realized this year are far below the average. This is partly due to the fact that the egg market has changed of late years. Most of the eggs quoted are brought from a distance. The "near by" and State eggs are mostly sold direct to private customers at far better prices. Large quantities of Western eggs find their way into this market. Most of these are shipped well, packed in barrels with cut straw. The patent egg cases appear to be used mostly for near-by lots. Fresh eggs are carefully tested as soon as received. When held before a candle in a dark room, an experienced tester can tell at a glance the quality of an egg. A good hand can easily test 10 dozen per minute. Eggs are retailed at present at 10 for 25 cents. There is not much profit for the handlers. Many limed eggs are sold. They are generally considered fair for cooking purposes, but are worthless for boiling, as the shells fall in pieces. The greatest sale for limed eggs is found among the restaurant keepers. In some markets, there is a special craze for brown eggs. Many persons believe that a brown shell betokens an extra richness of the contents. In some markets, dealers have resorted to the practice of coloring eggs with a brown preparation in order to deceive customers. In many cases these colored eggs gave such good satisfaction that the whole theory was exploded. In this market, color appears to have less influence than it does in the Boston market. People naturally pick out the largest. A long, narrow egg gives one an idea of extra size and is generally chosen in preference to a solid egg, which really contains more nutriment. Tastes differ with regard to eggs from different breeds. One dealer finds Leghorn eggs the most salable, while others are anxious to obtain Plymouth Rock or Brahma eggs. At the fashionable clubs and restaurants, Game eggs are considered most palatable. Bantam eggs find good sale in the same places and are considered excellent. Where a fashionable market can be secured, the Bantam will give as large a percentage of profit for food consumed as any breed known. Great numbers of eggs are sold at five cents each; we know of families paying 90 cents per dozen. Such eggs are delivered every day a few hours after being laid. They are guaranteed absolutely fresh and pure; a single stale or ill-shapen egg would ruin the business. The greatest care is necessary in producing and delivering. Poultrymen who serve these fashionable customers frequently mark each egg with the date of its production. If an egg should turn out badly with this mark upon it, the dealer's reputation would be ruined. As in the case of "gilt-edged" butter, people pay an extra price for the assurance that the article is honest.

The Cincinnati Price Current of Thursday says: The number of hogs packed in the West last week was 290,000, compared with 270,000 the same week last year. The total to date since November 1 is 5,255,000 against 5,265,000 last year. The movement at the principal points since November 1 is as follows:

Chicago	2,085,000	Indianapolis	242,000
Kansas City	563,000	Cedar Rapids	159,000
Cincinnati	311,005	Louisville	121,000
St. Louis	295,000	St. Joseph Mo.	109,000
Milwaukee	270,000	Cleveland	57,000

Brown's Bronchial Troches will relieve Bronchitis, Asthma, Catarrh, Consumptive and Throat Diseases. *They are used always with good success.—Adv*

MARKETS BY TELEGRAPH.

SATURDAY, January 30, 1885.

CHICAGO.—Compared with prices a week ago, "regular" wheat is 3¼c. higher; No. 2 Spring, 1¾c. higher. Corn, ¼c. lower. Oats, ¾c. higher. Pork, 20c. lower. Cattle, a shade lower. Hogs, a trifle lower. Sheep, somewhat higher.

WHEAT.—January, 80¾@81¾c; February, 80¾@81¾c; May, 86¾c@87½c.; No. 2 Spring, at 82c.; No. 3 Spring, at 70c. CORN.—Steady and quiet; Cash, 36½c; January, 36½@36¾c; February, 36¾@36½c. May, 40¼@40¾c. OATS—Firm; sales ranged; Cash, 29¾@30c; January, 29¾@30c; May, 31¾@32c. RYE—Dull; No. 2, 58c. BARLEY.—No 2, 60@61c. PORK.—Quiet; Cash, $10 75@10 80; January, $10 77½@10 80; February, $10 75@10 87½; May, at $11 07½@$11 12½. LARD.—Firm; sales ranged; Cash, $6 10@6 12½; January, $6 10@$6 12½; February, $6 10@$6 12½; May, $6 27½@6 30. BULKMEATS.—Shoulders, $3 95@4 00; Short rib sides, $5 27½@5 30; Short Clear sides, $5 65@$5 70. CATTLE—Market slow; Shipping steers, $3 50@5 65; stockers and feeders, $2 50@4 00; cows, bulls and mixed, $1 80@4 00; bulk, $2 00@3 10. HOGS.—Market strong; rough and mixed, $3 65@3 95; packing and shipping, $3 95@4 35; light, $3 40@4 05; skips, $2 60@3 60. SHEEP.—Market firm; Natives, $2 50@4 85; Western, $2 50@4 00; lambs, $4 00@4 75; Texans, $2 00@3 75.

ST. LOUIS.—Compared with cash prices a week ago, wheat is 3¾c. higher. Corn, unchanged. Oats, ⅝c. lower. Pork, steady. Cattle, somewhat higher. Hogs, steady.

WHEAT.—Weak; No. 2 Red, Cash, 92½@91c.; January, 92c.; February, 92c.; May 90½c. Corn quiet; Cash, 33¾@33¾c.; January, 33¾@33¾c.; February, 34c.; May, 37½c. Oats dull; No. 2 Mixed, Cash, 28@28½c.; January, 28½c., May, 31½c. Rye steady at 60c. Barley dull at 60@80c. Eggs steady at 17@17½c. Flax Seed steady at $1 06. Pork, $11 00. Bulk Meats—Long Clear, $5 30; Short Rib, $5 40@$5 45; Short Clear, $5 55. Lard firm at $5 90@$5 95. Cattle.—Market active. Fair to Choice Native Shipping Steers, $4 00@$5 15; Native Butcher Steers, $3 25@$4 25; Cows and Heifers, $2 25@$3 00; Stockers and Feeders, $3 00@4 00. Hogs.—Light, $3 50@3 75; Packing, $3 80@4 05, Heavy, $4 10@4 30. SHEEP.—Market easy and quiet; Common to Choice, $2 50@4 50.

BOSTON.—Compared with cash prices a week ago, corn is from ½c. to 1c. higher; oats, steady, with a slight upward tendency; hay and straw steady; butter, northern creamery unchanged; choice summer, 2c. to 3c. higher; other grades steady; cheese, steady; eggs, about 2c. lower; potatoes, steady.

GRAIN.—CORN.—Steady, and in moderate demand. Sales of Steamer Yellow, at 51½c; steamer mixed at 51c; and no grade at 49@50½c. per bushel. OATS—Have been more active, with sales of No. 1 and barley at 44@46c; No. 2 white at 42c; No. 3 white are held at 41c. per bushel. RYE—No. 1 has been quoted at 67c. per bushel. BRAN is firm at $16 50@$18 00 for Spring and $18 50 for Winter; fine feed and middlings at $18 00@21 00, and cotton seed meal at $25 00 on spot and $23 00 per ton to arrive. HAY AND STRAW—Hay in good demand and steady, $19@20 ₱ ton for choice and fancy; fair to good, $17@19; fine, $16@18; for poor and damaged, $13@15. Western choice $16@17 do fair to good $14@15. Rye straw is held at $19@21 for choice, and $12@11 for common to good. Swale hay, $11@12; Oat straw, $8@10 per ton. PROVISIONS—The various articles under this head continue to command fair prices. BUTTER—Northern creamery, choice to extra 23@28c; good to choice summer, 18@22c; western creamery, 22@32c, for choice to extra; northern dairy, 22@23c, for Vermont extra; 18@20c, choice, and 12@16c, for fair to good; Western dairy, 18@22c, for choice, and 10@15c, for fair to good; Imitation creamery at 15@25c, for good to extra; ladle-packed, at 18@20c, for choice. CHEESE—New York choice to extra, 9@10¼c. and common to good, 5@8c; Vermont choice to extra, 8½@10c, and common, 5@7c; Western common to extra, at 4@9¾c. Sage, extra, 11@12c, good to choice, 8@10c. EGGS—Cape and near-by, per dozen, at 26c; Eastern extras, 24½@25c; do, firsts, 23@24c; Northern, fresh, 24@25c; Western fresh, 23@24c; Provincial, 24@26c. BEANS—Choice Northern hand-picked pea, at $1 60@1 65 per bushel; do, do, New York, $1 55@1 60; do, do, screened at $1 25@1 35; medium choice, at $1 50; do, screened, $1 25@1 40; Yellow Eyes, improved, at $1 50@1 65; do, choice flats, $1 50@1 55; Red Kidneys, $1 80@2 00. Canada peas, 85c@$1 00 per bushel for common to choice. Green peas, Northern, at 90c@$1 00; do, Western, $1 20@1 25. Potatoes range at 60@80c, per bushel, as to quality.

Miscellaneous Advertising.

When Baby was sick, we gave her Castoria,
When she was a Child, she cried for Castoria,
When she became Miss, she clung to Castoria,
When she had Children, she gave them Castoria.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, January 30, 1886.

STATE OF THE MARKET.—Compared with cash prices last week, flour is higher on inferior grades, steady on best; "regular" wheat 2¾c. higher; corn 1c. to 1½c. lower; oats 1c. lower; beans steady; pork steady; butter steady on best grades, a shade lower on others; cheese unchanged; eggs lower and dull; poultry unchanged; cotton ⅛c. lower; fruit unchanged; vegetables steady. The wheat market still goes up and down from day to day. Large shipments of eggs are noted. The fruit and vegetable markets hold prices remarkably well. Compared with prices last year at this time, potatoes are from 25c. to 50c. per bbl. higher; sweet potatoes are 75c. lower, while cabbages, onions and squash are all higher. Apples are about the same as last year.

FLOUR, FEED AND MEAL. FLOUR—Quotations: Fine at $2.15@$2.85; Superfine, $2 75@$3 25; Extra No. 2, $3 15@$3 60; Good to Fancy Extra State, $3 60@4 25; Common to Good Extra Western at $3 15@$4 00; Good to Choice Extra Western, $4 00@$5 65; Common to Fair Extra Ohio, $3 15@$3 75; Good, $3 80@$4 20; Good to Choice, $4 25@$5 25; Common Extra Minnesota, $3 15@$3 65; Clear, $4 10@$4 50; Rye Mixture, $4 00@$4 25; Straight, $4 50@$5 00; Patent, $4 75@$5 65; Bakers' Extra, $4 10@$4 75; St. Louis Common to Fair Extra, $3 15@$3 80; Fair to Good, $3 85@$4 75; Good to Very Choice, $4 80@$5 50; Patent Winter Wheat Extra, $4 50@$5 60; City Mill Extra for West Indies, $4 85@$4 95; South America, $5 00@5 10. SOUTHERN FLOUR—Common to Good Extra at $3 85@$3 80; Good to Choice do., $3 85@5 40. RYE FLOUR—Superfine, $3 25@3 50; fancy, $3 55. BUCKWHEAT FLOUR, at $1 90@$2 00. CORN MEAL—Brandywine, at $3 00@3 15; Yellow Western, at $2 80@$3 15. FEED—Bran, 60 lb. average at 80@82½c.; 80 lb. average at 80@82½c.; middlings at 80@90c., and sharps at $1 00@$1 10. Rye feed at $17 00 per ton.

GRAIN.—WHEAT.—Ungraded Red, 84@91¼c.; No. 2 Red, 93¾c; No. 2 Red for February, 90¾@91¾c.; do. for March, 92@92¾c.; do. for April, 93¾@91¾c.; do. for May, 94¼@95¾c; do. for June, 95¾@96¼c; do. for December, 1.02@$1.03. RYE—60@62½c. for Western, and 64@65½c. for State. BARLEY Ungraded Canada at 81½@86c; Two-rowed state, 71c. CORN—Ungraded Mixed, 47@49c; Steamer Mixed, 47¾@48c.; No. 2, Mixed, 49¾c.; Yellow, at 50¼c. in elevator; No. 2 Mixed for January, 50c.; do. for February, 49¾@49½c.; do. for March, 48¾@48¾c; do. for April, 48¾@48½c; do. for May, 48¼@48¾c. OATS—No. 3 Mixed, at 37c.; No. 2, 37¾@38c.; No. 1 nominal at 38c.; No. 3 White, 39¼c.; No. 2 do. 40¼@40½c; No. 1 at 43c.; Mixed Western, at 37@39c.; White do., 39@43c.; White State, 42c; No. 2 Mixed for February, 37⅜@37¾c.; do. for March, 37½c; for May, 37¾c.

BEANS.—Quoted: Marrows at $1 50@$1 55; pea at $1 50; red kidney at $2 00 for choice; turtle soup at $2 25; white kidney at $1 95@2 00 for choice.

PEAS.—Green are quoted at $1 15.

PROVISIONS.—PORK.—Mess quoted at $10 37½@$10 75; $11 00@$11 50 for Family Mess; $12 00@$13 50 for Clear Back; and $8 50@$9 25 for Extra Prime. BEEF.—City Extra India Mess, $17 50@$18 00; Extra Mess, bbls., $10; Packet, $11 00@$12 00 in bbls.; Family Mess, $12 00@$13. BEEF HAMS.—Quoted at $16 50. CUT MEATS.—Pickled Bellies, 12 lb, average, 5½c; Pickled Shoulders, at 4¼c.@4¾c.; Smoked shoulders., at 5@5¼c.; Pickled Hams, at 8¼@8½c.; Smoked do., 9¼c. MIDDLES—Long Clear in New York quoted 5¼c. for Western delivery. Long Clear, 5.15c.; Short Clear, 5.60c. DRESSED HOGS.—City Heavy to Light, at 5@5¼c.; Pigs, 5¾c. LARD.—Western steam, 6.47½c. January, 6.45c; February, 6.45@6.46c.; March, at 6.46@6.47c.; April, at 6.52@6.53c.; May, at 6.58@6.59c.; June at 6.65@6.67c; August, 6.76@6.78c; city steam, 6.35@6.40c; Refined Continent at 6.70c, and South American, 7.00@7.05c.

BUTTER.—Eastern Creamery, 34@35c; Western Creamery, 18@33c.; Elgin do., 35c.; State Dairy half-firkin tubs, 18@26c.; Western Factory, 11@18c.; Imitation Creamery, 18@26c.; Western Dairy, 12@22c.

CHEESE.—State, 7@10¼c.; Night Skims, 5¾@7c. Western flat, 7@9½c.

EGGS.—State, 22@22½c.; Western, 21½@22c.; Southern, 21½@22½c.; Limed State, 18@19c.; do. Western, 18@19c.

LIVE POULTRY.—Chickens, 7@8c., fowls, Jersey State and Pennsylvania, per lb, at 10c.; do. Western, 9 lb, at 9@10c.; turkeys, per lb, at 9@10c.; ducks, western per pair, at 70@90c.; geese, western, per pair, at $1.25@$1.75; pigeons, per pair, at 40c.

DRESSED POULTRY.—Turkeys, Philadelphia, at 11@12c; 10@12c per lb for Jersey, and 10@11c per lb for western chickens, Philadelphia large, at 13c. per lb; do. small at 11@12c.; Jersey scalded at 10c; do, State at 9@9½c; do. western, at 9c.; fowls, Philadelphia, prime, 10@11c; do. Jersey at 10@11c.; State and western, 8@9c. Ducks, Philadelphia, at 14@15c; do. Jersey, at 13@14c; do, western, at 11@13c. Geese, Philadelphia, at 12@13c; do, Jersey, at 10@11c; do, western, at 10@11c.

GAME.—Quail, ₱ doz., $2; partridges, State and Pennsylvania, choice, per pair, at 90@$1; do. Ohio and Michigan, prime, per pair, at 70@80c.; grouse, prime, dry, per pair, at $1@$1 25; do. inferior at 50@75c.; wild ducks, canvas, per pair, at $2@$3 50; do., red-head, per pair, at $1@$1 50; do. mallard, western, per pair, at 50@75c.; do., teal, blue wing, 50@65c.; rabbits, per pair, at 35@40c; hares, eastern, per pair, at 30@35c.

COTTON.—The quotations, according to the American classification, are as follows:

	New Orleans. Uplands.	and Gulf.	Texas.
Ordinary	6 9-16	6¾	6¾
Strict Ordinary	7	7 3-16	7 3-16
Good Ordinary	7 15-16	8⅛	8⅛
Strict Good Ordinary	8⅜	8 9-16	8 9-16
Low Middling	8¾	8 15-16	8 15-16
Strict Low Middling	9	9 3-16	9 3-16
Middling	9 3-16	9⅜	9⅜
Good Middling	9 9-16	9¾	9¾
Strict Good Middling	9 13-16	10	10
Middling Fair	10 3-16	10⅜	10⅜
Fair	10 13-16	11	11

STAINED.

Good Ordinary	6¾	Low Middling	7⅜
Strict Good Ordinary	7 1-16	Middling	8⅜

FRESH FRUITS.—Quotations are: San Blas cocoanuts at $40 00; Baracoa cocoanuts at $29 00@$30 00. Apples—Baldwin, per bbl., at $1 75@2 00; Greening, per bbl. at $2 00. Grapes—Catawba at 6@7c. per lb, in baskets; Isabella, at 2@3c. per lb. Cranberries—Cape Cod, choice, per bbl., $4.50@5; do. fancy, $4 50; good to prime, per bbl., $4 00@$4 50; do. choice, per crate, $1 00@$1 25. Florida oranges—Fancy at $3 25@4 50; Choice at $3 50@4 00; do. inferior at $1 75@$2.

DRIED FRUITS.—Quoted: Apples—Fancy evaporated, 7@7½c; choice, 6¾c; fancy North Carolina sliced, new, at 4@4¼c.; choice do. at 3¼@3¾c.; choice Tennessee quarters at 2½@2¾c.; State quarters at 3¼@3¾c.; North Carolina quarters at 2½@2¾c. Peaches—Peeled North Carolina, choice, 10@11c.; fancy, 12c.; extra fancy at 13c.; Georgia, choice, new, at 11c.; do. prime, 9@9¼c.; unpeeled halves, 2¾@3c.; unpeeled quarters at 2½@3c.; Delaware evaporated, peeled, 2½@2¾c. Choice pitted cherries at 11@11½c. Evaporated raspberries at 17@18c; sun-dried do. 15@15½c. Blackberries—Prime at 8@8½c. Whortleberries at 6½@7c.

PEANUTS.—Quotations at 3½@3¾c. for best hand-picked, and 3¼@3½c. for farmers' grades.

HAY AND STRAW.—Quotations are for: Choice timothy hay at 90c; good at 85c.; medium at 80c.; shipping at 75c; clover mixed at 70@80c.; No. 1 rye straw at $1; short rye straw at 75@85c, oat straw at 40@50c.

SEED.—Clover nominal at 10¾@10½c. as to grade. Timothy quoted at $1 90@$2 00. Linseed nominal.

SUGAR.—Cubes, 6¾c; Powdered, 6 11-16c; Granulated, at 6½c; Standard "A," 6¼c.

TALLOW—Prime City quoted at 4¾c.

VEGETABLES.—Potatoes—Long Island Rose, bulk, per bbl., $2 00@$2 25; New York Rose, $1 75@$2 00; Eastern and Nova Scotia Rose at $2 00@2 25; Burbank, State, at $1 75@$2 00; eastern and Nova Scotia, per bbl, $2@2 25; Hebron, do, do, do, per bbl, at $2 00@2 25. Prolific and Goodrich, per bbl., at $1 75@$2. Maine, double-headed, bbl., at $2 25@$2 50; Peerless, per bbl., at $1 75@2; Magnum Bonum, imported, per sack, $2; Champion, imported, per sack, at $1 62@$1 75. Sweet potatoes, Virginia, at $2 50@$3 00 per bbl. Cabbages, per 100, at $5@$8.00. Onions—Yellow, quoted per barrel, at $2 75@$3 50; do. red, per bbl., at $3 00@3 50.; do. white, at $4 50@$5. Turnips,—Russia, per bbl., at 50@62c. Marrow squash, per bbl., at 50c. Scotch kale at 75c@$1, and $2@$2 50 for spinach.

LIVE STOCK MARKET.

NEW YORK, SATURDAY, January 30, 1886.

BEEVES.—Western Stockers and two-year-olds sold down to $3 75@4; and decent to good steers at $4 20@5 50; with prime to choice bringing $5 60@6 05, and one car-load of extra prime Chicago bullocks averaging 1,563 lb, sold at $6 25; dry cows were plenty, selling at $2 60@3 75; and bulls were in light demand at $3@3 50; old oxen and stags sold at $3 25@5 25 per 100 lb; St. Louis steers, 1,194 lb, at $5 10; do. 1,167 lb, $4 60; do., 1,068 lb, at $4 55; Ohio do., 1,305 lb, at $5 12½; Chicago do. 1,390 lb, at $5 75; do, 1,307 lb, $5 30; dry cows, 1,000 lb, at $2 70; do. 974 lb, at $2 70; mixed Western steers, 1,370 lb, at $5 00; do. 1,417 lb, at $5 50; do., 1,374 lb, at $5 30; oxen, 1,925 lb, at $4 40; Bulls, 1,535 lb at $3 25; Chicago steers, 1,178 lb, average at $4 45 per 100 lb.

CALVES.—Grassers in very light demand and prices a fraction lower. One bunch sold at 2c., and 2½c. is the outside quotation to-day. Veals steady at 4½@8c. Dressed calves unchanged in price, but dull for everything but prime country dressed veals, which were in light supply. Grassers, 280 lb, at 2c.; veals, 186 lb, at 5½c.; do. 147 lb, 7½c.

SHEEP AND LAMBS.—Common to Good Sheep ranged from $3 65 to $5 00; Fair to Choice Lambs sold at 5¾@7c., with one car of Extra holding at 7¼c.; State sheep, 94 lb, at $4.85; do, 79 at $3 75; Illinois sheep, 107 lb, at 4½c; Michigan do., 87 lb, 4½c; Western do. 92 lb, at 4c; Ohio sheep, 80 lb, at 5c.; State sheep and lambs, 88 lb, 4¾c; Canada lambs, 83 lb, at 7c; Pennsylvania lambs, 71 lb, at 6¼c.

HOGS.—Quotations $3 85@4 15 for Ordinary to Good Hogs.

SEND TEN CENTS IN POSTAGE STAMPS TO

E. & O. WARD,

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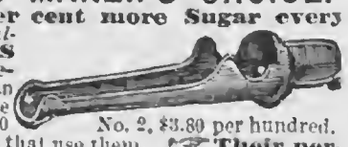

No. 2, $3.80 per hundred. **☞Their perfect working guaranteed.** Only a trial is needed to convince one of their **superiority over all others.** If every Sugar Maker not having tested them will tap half his sugar bush with the **Eurekas** the coming season, a full supply the following season will be the result. **If you fail to procure a supply of a Hardware dealer or Agent, I will deliver at any Railroad station named in the U. S. east of the Mississippi River not less than 100 Spouts on receipt of these prices.** I will send you samples of my No. 1 and No. 2 Spouts, post-paid, on receipt of five U. S. 2-cent stamps. Descriptive circulars sent free. **Mention this paper and** address orders at once to **C. C. POST, Burlington, Vt.** Buy **Eurekas** only, and avoid becoming infringers.

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Stands at the head of all **wire** and **picket machines** for **making fence in the field,** being the most complete, simple, speedy and easily operated, and having the most perfect tension device. It will weave in any kind of pickets from one to six inches wide, easily twisting a No. 8 wire, and making a fence that no stock will break down at a **cost of sixty cents a rod complete.** Works up or down hill or on a level equally well, keeping pickets perpendicular. Light and easily handled. A boy can work it. **Every farmer can afford to own one.** Write for circular and price.

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Farmers say that we have the **best** Hay Carriers ever made. Our **LITTLE GIANT HAY LOADER** is the greatest labor saving invention of the times. New Principle. Don't miss it. Illustrated circulars, showing how we can sell cheaper than any one, sent free. Address

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Save Time and Money by using

HOLT'S CELEBRATED FORGE and KIT of TOOLS

For $20.

Larger Size **$25.** Single Forge **$10.**

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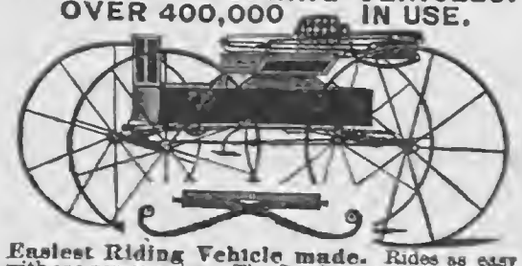

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POST HOLE DIGGER.

The **Greatest LABOR-SAVING** tool ever invented for digging holes in the ground. This machine works on a new principle, and is unlike anything in the market. It is neither an Auger nor a Plunger, but is driven in the ground with a driving rod, which works in a pipe similar to a telescope. **We claim** for this tool:

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It will pay you to send for descriptive circulars and prices to **COLE & FLEMING, Manufacturers, Springfield, O.**

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The only machine that will successfully sow Clover, Timothy, Hungarian, Millet, Red Top and Flax. Indispensable in windy weather when impossible to sow by hand. Send for circular describing latest improvements. Man'f'd by **O. E. THOMPSON, Ypsilanti, Mich.**

Simple and durable in construction. Feed positive and uniform.

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Mills on hand. Prompt delivery.

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HIPPARCHUS No. 11672; Sire Orange Peel, P. 288; Dam King's Fertile, No. 22765. Service Fees, $100.

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SINGLE and MATCHED ROADSTERS, by Lancewood and Indiaman, sons of Hambletonian and Belmont. Registered J. Red Swine; Pigs and Sows in pig. Prize P. Rocks; Cockerels weighing now 9 to 11 pounds each. Immense Nursery Stock of all Hardy Fruits, Shades and Ornamentals, including wholesale lots of prime one-year Apple Stocks, two-year Asparagus and Osage Orange Quicks. For catalogues and low prices address

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JERSEY BULLS.

I have for sale, at prices to suit the times, six young bulls from 1 mo. to 9 mos. old. Their sires are of a high standard, and of the favorite and fashionable butter strains; representing such blood as St. Helier, Stoke Pogis, Victor Hugo and Signal. The dams are all good cows of good strains, and some have butter records.

The calves are in good healthy condition, good colors, and of individual excellence and, will be registered if desired in the A. J. C. C. H. R. Prices very low either on selections or on the lot. Would take in exchange a perfect saddle horse 15½—16 hands.

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JERSEY RED, POLAND-CHINA, Chester White, Berkshire & Yorkshire Pigs. Southdown, Cotswold and Oxford Down Sheep and Lambs Scotch Colley Shepherd Dogs and Fancy Poultry. Send for Catalogue

W. ATLEE BURPEE & CO. Phila. Pa

Saybrook Valley Poultry Yards.

A few Trios of **P. Rocks,** at **$3.50** per Trio. Single Birds, Cockerels or Pullets, **$1** to **$1.50** each

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Send immediately, if wanted.

Clydesdale and English Shire Horses.

The only stud in America containing the very best specimens of both breeds. Prize winners at Chicago Fair, the World's Fair at New Orleans, the Royal Society of England, etc. Large importation arrived August 12, and more to follow. Our buying facilities being unequalled, there is no such opportunity offered elsewhere, to procure first class animals of choicest breeding at very lowest prices. Every animal duly recorded and guaranteed. Terms to suit all customers. Catalogues on application.

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GET MORE FOR YOUR BUTTER AND EGGS.

For twenty-five cents we will send you an *article* (no recipe) which will enable you to add twenty per cent to the appearance of butter, when ready for market. Thoroughly practical, and once used will never be laid aside. NOT A COLORING. Also a valuable and unfailing recipe for preserving eggs and keeping them fresh given away with each article. Send money in two cent-stamps, or a postal note. Address **FARMER'S SUPPLY CO., 13 and 15 Congress St., Boston, Mass.**

HOG CHOLERA, Its cause, prevention, and cure, with receipts, for **30** cents in silver or stamps. Satisfaction guaranteed. Also P. Rock and Wyandotte Eggs. Send for circular.

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ABSOLUTELY THE BEST FEED FOR

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This Meal is the product of pure sound Flaxseed. Linseed being its other name, and is the most nutritious of all feed, because it contains the largest proportion of nitrogenous substance.

It is almost needless to say that, in order to derive much benefit from the use of Linseed Meal, it must be fed in quantity. At least one-half of all an animal consumes may safely and profitably be LINSEED MEAL.

☞Please send in a sample order or for circular and prices. Orders will be promptly filled by any one of the following parties:

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80% PURE $3 PER TON

CAYUGA LAND PLASTER.

Contains Phosphate of Lime. Gives Plants an early start, improves quality, increases yield, Low freights to all points. **Farmers' Memorandum Book sent FREE.** Correspondence solicited. **CAYUGA PLASTER CO.** Union Springs, N. Y.

DARNELL'S PATENT FURROWER & MARKER

Leaves the earth well pulverized at bottom of furrow. Marks any width from 2½ to 5 feet, and from a mere mark to 6 inches deep.

"Take pleasure in recommending it. It does the business; is well made and will last for years." *J. S. Collins, Moorestown, N. J.*

"It far exceeds my expectations. If the real merits of this cheap implement were known to potato growers alone, the sales would be immense." *E. L. Coy, Pres. Wash. Co. (N. Y.) Agr. Society*

H. W. DOUGHTEN Manufact'r. **Moorestown, Burlington Co., N. J.**

For the Young.

BE sure that the cattle have plenty of salt this Winter. Animals need salt and they never can do well without it. It is absolutely necessary for them. Sometimes men are obliged to go without salt for a long time. They say it causes them the most awful suffering. In some countries prisoners are punished by being deprived of salt for a long period. All of their food is cooked without salt. For a time they stand it pretty well, but at last they begin to suffer. During the war, people at the South tried all sorts of plans to make salt. People have told me how they used to dig up the earth at the bottom of the smoke-houses and boil it to get at the salt that had soaked into it. In this way they got along. All you boys, whose duty it is to salt the cattle, must remember that it will not do to slight them. Take time for the work and do it well.

IN a great many districts there is a high hill near the school house, that gives a fine chance for coasting. The boys are generally quick to see this. The fun is so great that they sometimes seem to forget what they go to school for. I have seen boys half way up the hill when they heard the school bell ring. What do you think they did? Stop where they were and slide back to the school-house, or run on to the top of the hill and thus get the whole coast? What would you do? It is harder to stop and go back, but the spirit that makes one do it is the spirit that we want to see in our coming men and women. Don't be too anxious to think you know more than other people do. Everybody we meet can teach us something. We learn the most, make the best friends and have the best times by doing what is right and minding those who are placed over us.

IT would be a fine thing if we could have a good literary society in every district where the RURAL goes. The teacher will be a good person to start the work. It will do us all good to have practice in speaking, writing, and talking. Winter is the best time for this work, for then we have more time and people can come out. Such farmers as our boys and girls are going to make will need to be able to speak and write well.

THIS cold weather ought to teach us a good many lessons. If we have to dig wood out of the snow, if the wind comes in around the windows, if the cellar is not banked up, if the stock and poultry stand shivering about, if we have no flowers to make things pleasant, we ought to make up our minds that this is the last Winter we will be caught in this way.

LETTERS FROM THE COUSINS.

UNCLE MARK: I should like to be counted in among the Cousins of the Club so I will write you a letter and tell you who I am and what I am doing. I am 15 years of age and go to the Denver University. I am well pleased with the school. The first term has just closed and I have come home to spend the holidays. I had to ride 436 miles to get where my father lives on a fruit farm. Leaving Denver on the Denver & Rio Grande R. R. at 7.40 A. M., I started for Fruita, 436 miles away, in the midst of a snow storm. Going up the Divide between the Platte and Arkansas Rivers, we reached the summit where there is a beautiful lake called Palmer Lake. Going down the Divide we had a change of weather, instead of being cold and snowy it was as warm and pleasant as in Summer. Passing through the beautiful town of Colorado Springs, we journeyed on to Pueblo, where we stopped 20 minutes for dinner. Leaving Pueblo, we soon reached and passed by Canon City and its beautiful apple orchards, entering the grand Canon of the Arkansas, and it truly was the Grand Canon. On both sides solid masses and walls of rocks reaching up to thousands of feet and on one side the water, rushing, foaming and leaping madly on, found its way to the Mississippi and thence to the Gulf of Mexico.

Following the beautiful valley of the Arkansas, we reach Salida the end of the first and the beginning of the second division of the R. R. Here we change conductors, firemen, etc. Putting on another engine we begin the ascent of Marshal Pass, and by constant windings and curves past some of the most beautiful scenery, we stand on the top of Marshal Pass, 11,000 feet above the sea. The run down the western slope is soon made, and whizzing down some of the most beautiful scenery, we reach Sargenee where a bountiful supper is awaiting us. Here we enter the Tomichi valley and soon reach Gunnisou City and the Black Canon of the Gunnison, which is grander and more rugged than the Grand Canon of the Arkansas, even. Passing through it we reach Grand Junction. Here we again change engines, as this is the end of the second section. Soon we reach Fruita the end of my journey, and lying in the Grand Valley, which is especially adapted to fruit raising. In this valley we raise peanuts and chufas and, in fact, it is the only valley in which peaches and apricots are grown successfully. The railroad still goes on until Salt Lake is reached, where a few minutes ride takes us to the Great Salt Lake, the largest body of salt water in America. If a boy is any judge of the scenery through which the railroad passes it may be rightly named the Scenic Line of America, and if the Cousins wish to know about it and Colorado, I will write again. E. A. PABOR.

Fruita, Colorado.

[I wish we could all take such a trip together. We shall want to know more about Colorado. —UNCLE MARK.]

DEAR UNCLE MARK: I have not written for a long time, and now I have something to write about. It is a magic lantern. We have tried it and shown it to many people. We have over 100 pictures on slides. We can show many photographs and show them well. My Guinea pig has died of old age. He was four years old. He kept the mice away and liked all of our cats. There were six of them. He used to lie down by the side of all of them. My white rats I gave away for the magic lantern. There were a male and female rat and they had four little rats. Would you have given them away for the magic lantern? Papa said if I would give them away he would get it for me. I want to know why Cousins don't write to each other? I want to hear from them. Yours truly, RALPH SAWYER.

W. Medway, Mass.

[I think you did well to let the white rats go. The lantern must be much nicer. I don't like rats in any way.—UNCLE MARK.

DEAR UNCLE MARK: I live in the city of Louisville, but I spend vacation at Grandpa's in the country. He gave me some ground and I raised some celery, potatoes, tomatoes and a watermelon which weighed 42 pounds. My uncle planted it. I wish to join the club. Grandpa is going to give me a larger piece of ground next Spring. I will have to go out sometimes on Friday, after school, to get the ground ready for early vegetables. I like the country better than the city, and I want to be a farmer when I am a man. I will be ten years old next month. HARRY B. STILZ.

Louisville, Ky.

[That's right. I am glad you want to be a farmer. I hope you will make a good one.—UNCLE MARK.]

DEAR UNCLE MARK: I want to join your Club. I am a little girl seven years old. My brother and sister read the letters to me. I want them to join but they do not, so to-night while they are gone I have been telling my mother what to write for me as I can only write a few words; have never been to school. Thought I'd tell you we live on Hardscrable farm near Lawrence, Kan., have two horses, one colt, 30 head of cattle, some hogs and pigs, a few turkeys, about 150 chickens, several cats, some of them great pets. My cousin and brother take care of the stock. My mother makes butter, her butter took the blue ribbon at the Fair. My sister's sewing took first premium too; my sewing took premium last year. I am learning at home how to read, write, spell and add, so perhaps I can write a letter myself next time. MARY R. BROWN.

[Yes, indeed, you shall join and you must thank your mother, for me, for writing such a nice letter. I shall be glad to get a letter from you in your own handwriting. You must be quite a little seamstress. If you could be here I believe you would do some sewing for me. There is a loose button on my coat now. U.M.]

Miscellaneous Advertising.

Catarrh Cured

Catarrh is a very prevalent disease, with distressing and offensive symptoms. Hood's Sarsaparilla gives ready relief and speedy cure, as it purifies the blood and tones up the whole system.

"I suffered with catarrh 15 years. I took Hood's Sarsaparilla and now I am not troubled any with catarrh, and my general health is much better." I. W. LILLIS, Chicago, Ill.

"I suffered with catarrh six or eight years; tried many wonderful cures, inhalers, etc., spending nearly one hundred dollars without benefit. I tried Hood's Sarsaparilla and was greatly improved." M. A. ABBEY, Worcester, Mass.

Hood's Sarsaparilla

Sold by all druggists. $1; six for $5. Made only by C. I. HOOD & CO., Lowell, Mass.

100 Doses One Dollar

THE SCIENCE OF LIFE. ONLY $1.
BY MAIL POSTPAID.

KNOW THYSELF.

A GREAT Medical WORK on MANHOOD.

Nervous and Physical Debility, Premature Decline in man. A book for every man, young, middle aged and old. It contains 125 prescriptions for all acute and chronic diseases, each one of which is invaluable. So found by the author, whose experience for 23 years in such has probably never before fell to the lot of any physician. 300 pages, bound in beautiful French muslin, embossed covers, full gilt, guaranteed to be a finer work in every sense—mechanical, literary and professional—than any other work sold in this country for $2,50, or the money will be refunded in every instance. Price only $1 00 by mail, postpaid. Illustrated sample 6 cents. Send now. Gold medal awarded the author by the National Medical Association, to the officers of which he refers.

The Science of Life should be read by the young for instruction, and by the afflicted for relief. It will benefit all.—*London Lancet.*

There is no member of society to whom The Science of Life will not be useful, whether youth, parent, guardian, instructor or clergyman.—*Argonaut.*

Address the Peabody Medical Institute, or Dr. W. H. Parker, No. 4 Bulfinch Street, Boston, Mass., who may be consulted on all diseases requiring skill and experience. Chronic and obstinate cases that have baffled the skill of other physicians a specialty. Such treated successfully without an instance of failure.

HEAL all THYSELF

Mention this paper.

RED INK POWDERS, 2 for 25c. (postal note). Makes 16 ozs. Sells for 10c. oz. J. E. RUE, JR., Littleton, N. C.

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50 CARDS, Hidden Name, etc. 1 pretty ring, outfit and present, all 10c. 6 lots 50c. O. A. Brainard, Higganum, Ct.

50 Hidden Name, etc. Perfumed Cards & Prize 10c. CLINTON BROS, Clintonville, Conn.

50 Chromo or 25 Hidden name Cards, name on, 10c Samples & terms, 4c. Crown Ptg. Co. Northford, Ct

WORK FOR ALL. $30 a week and expenses paid. Outfit worth $5, and particulars free. P. O. VICKERY, Augusta, Maine.

CARDS! 60 Fancy Pictures and 25 Elegant Cards in Gilt Edge, Silk Fringe, Hidden Name, &c. 1 Songster, 1 $50 Prize Puzzle, and 8 Parlor Games, all for 10 cts. Game of Authors, 10c. IVY CARD CO., Clintonville, Ct.

300 FOR 10c. GAMES, Puzzles, Parlor Magic, Conundrums, Songs, Album Quotations, Embroidery Designs, and pack of Name Cards, Gilt Edge, Silk Fringe, Hidden Name. TODD CARD CO., Clintonville, Ct.

ONE pack fun cards, 6 transfer pictures and sample book for 4c. Hill Card Co., Cadiz, Ohio.

A cool soil is what oats delight in; and this grain may be put in on corn stubble without plowing by using the 'ACME' Pulverizing Harrow, Clod Crusher & Leveler. Its use will enable the farmer to sow oats from ten days to two weeks earlier than if he waits until the soil is dry enough to plow, and ten days saved may easily double the crop of oats or spring wheat.

See advertisement on page 100.

ON 30 DAYS' TRIAL.

THIS NEW ELASTIC TRUSS

Has a Pad different from all others, is cup shape, with Self-adjusting Ball in center, adapts itself to all positions of the body while the ball in the cup presses back the intestines just as a person does with the finger. With light pressure the Hernia is held securely day and night, and a radical cure certain. It is easy, durable and cheap. Sent by mail Circulars free. EGGLESTON TRUSS CO., Chicago, Ill.

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ORGANS: Highest Honors at all Great World's Exhibitions for eighteen years. One hundred Styles, $22. to $900. For Cash, Easy Payments or Rented. Catalogues free.

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A 25-cent package of BLISS'S WILD GARDEN FLOWER SEED and my new 120 page Catalogue and Amateur Guide, free by mail. F. E. McALLISTER, SEED AND BULB MERCHANT, 22 Dey Street, New York.

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ARBOR VITAE FOR HEDGES, WIND-BREAKS and TIMBER CULTURE. Two-year Seedlings, by mail, postpaid, $1 per 1000. Hedge Plants, 12 inches high, by mail, postpaid, $5 per 1000. Is the BEST TREE for all places and all purposes. My prices on forty varieties of Trees are below competition. Price Lists FREE. GEO. PINNEY, Evergreens, Door Co., Wis.

Small Fruit Plants.—First come first served. Price List free. G. S. Butler, Cromwell, Ct.

Send stamp for sample. Dietz Early Corn, Dietz Longberry Wheat, Dietz Fruit Dryer. New way of cutting fodder. G. A. DIETZ, Chambersburg, Pa.

GRAPE VINES CONCORD, AGEWAM, SALEM, CATAWBA, DELAWARE, WORDEN, JEFFERSON, AMBER QUEEN, and other varieties. Also the CATAWBA SEEDLING, "MARY," a Red Grape originated in Oswego Co., N. Y. Early as Concord and as heavy bearer. Fruit has been kept until May. This Grape is new, has not been on the market before. I have just bought the entire stock of the originator, and shall have the entire control for some years of same. Prices of vines within reach of all. 1, 2 and 3 year vines. Send for list. EVERETT BROWN, Bluff Point P. O., Yates Co., N. Y.

Will be mailed FREE to all applicants, and to customers of last year without ordering it. It contains about 120 pages, 600 illustrations, prices, accurate descriptions and valuable directions for planting all varieties of VEGETABLE and FLOWER SEEDS, BULBS, etc. Invaluable to all, especially to Market Gardeners. Send for it. D. M. FERRY & CO., Detroit, Michigan.

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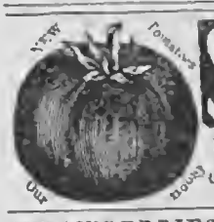

SEEDS Free A manual of all kinds of Seeds, Bulbs, Tools, &c. Contains prices, descriptions, planting directions, illustrations, Colored plates, &c. PRICES LOW. SEEDS RELIABLE. Elkington's Sons, Columbus, O. Originators of Acme, Paragon, Perfection, Favorite and BEAUTY for '86, Pkt. 25 Cts.

STRAWBERRIES How to grow them. Sent Free! E. L. PUTNEY, Brentwood, N. Y.

Best and most profitable LATE WHITE PEACH. Williams' Early Red, best early Apple. Good stock Apple Trees, most popular and late keeping varieties. Pear, Cherry, Quince, and other Fruit Trees. Large lot Strawberry Plants, including May King and other best kinds. Grape Vines & Small Fruits in variety. Shade and Ornamentals. Send for Catalogue, 1886. S. E. ROGERS & SON, MT. HOLLY, N. J.

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A CUSTOMER WRITES: "My gardener now refuses to plant SEEDS from any other house." Illus. Catalogue mailed FREE. PRICE & KNICKERBOCKER ALBANY, N. Y.

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PERSONALS.

WHEN Chauncey Depew was counsel for the Vanderbilt railroads he got $35,000 a year.

THE Duke of Athol has 17 inferior titles, the Dukes of Argyl and Hamilton 16 each, the Duke of Buccleuch and the Marquis of Bute 15 each, and the Duke of Northumberland 13.

PRINCE PAUL ESTERHAZY, with his boundless estates, Transylvanian forests, and other sources of wealth, would probably go beyond the late Wm. H. Vanderbilt by a trifle of 20 or 30 million dollars or so.

THE Misses Tilden, who are now in Washington, where they have made a very pleasant impression, are nieces of Mr. S. J. Tilden. In appearance they are strikingly alike, so much alike, in fact, that each is often taken for the other.

SENATOR RAMSEY, of Minnesota, several years ago gave his wife the choice between a lot block in Minneapolis or a nice new bonnet. Disregarding the traditions of her sex, she took the lot and recently sold it for $90,000. The present value of the hat she had in mind at the time is not known.

A DAUGHTER of Mrs. Elizabeth Cady Stanton says that when her mother and Miss Susan B. Anthony work together on their "History of Woman Suffrage" they often get into animated discussions over their subject and dip their pens into their mucilage bottles and their mucilage brushes into their ink bottles in indiscriminate excitement.

THE Earl of Airlie, who was married last week in London to Lady Mabel Gore, was formerly well known as Lord Ogilvie. His father died a few years ago at Denver, Colorado. The name of the present earl became familiar to Americans through the endeavors of an impostor to impersonate him. Lord Ogilvie was then serving in India.

THE President has received Fred Douglass's resignation of the $15,000 position of Register of Deeds for the District of Columbia. A pressure for a colored Democrat to succeed him is felt, but the Democrats of the District are confident that some white man of their number will be taken. Douglass is worth nearly $200,000 and can afford to retire.

LORD CREW must rank among the most liberal and progressive of British landlords. He is steadily increasing the number of holdings on his Cheshire estate, and decreasing the rentals. A good cottage and garden cost a laborer $22.50 a year. Plots of from two to three acres of good farm land, with excellent cottages and barns, rent for from $40 to $50 a year. Lord Crew at present has 195 tenants holding half an acre and under three acres; 144 with three and under 10 acres; 80 with 10 and under 20 acres; 31 with 20 and under 50 acres; 40 with 50 and under 100 acres; 41 with 100 and under 200 acres; and 14 only with 200 and under 500 acres.

Miscellaneous Advertising

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can be made in a postal card, if it is used to send your address to Hallett & Co., Portland, Maine, who can furnish you work that you can do and live at home; few there are who cannot earn over $5 per day, and one have made over $50. Capital not required; you are started free. Either sex; all ages. All particulars free.

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Osage, Honey Locust, Hawthorn, American Arbor-Vitæ, N. Spruce.

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Trees, Seeds and Plants.

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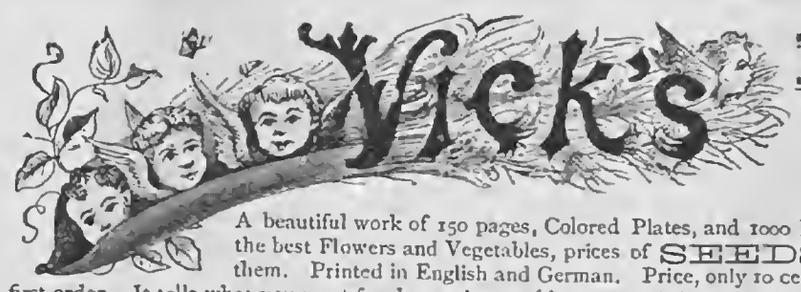

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J. T. LOVETT LOVETT'S GUIDE TO FRUIT CULTURE 1886 LITTLE SILVER, N. J.

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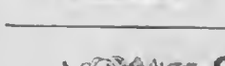

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SOME one says: "A very rich girl may make very poor pies." The chances are that she would. A very rich girl can afford to buy er pies at a pie factory.

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A SHREWD Louisville girl hurried things wonderfully by assuring her young man that she despised those females who continued to eat ice cream after they have married.

ALL doctors agree that to enjoy good health the mind must be kept in a cheerful condition. But no doctor can give a man points that will make him joyous when his collar don't fit.

A FLORIDA teacher in a colored Sunday-school asked her class why a man was forbidden to have two wives at the same time. A little youth replied: "Case a man can't serve two masters."

"UNCLE James," said a Boston young lady who was spending a few days in the country, "is that chicken by the gate a Brahmi "No," replied Uncle James, "he's a Leghorn." "Why, certainly, to be sure!" said the young lady. "How stupid of me! I can see the horns on his ankles."

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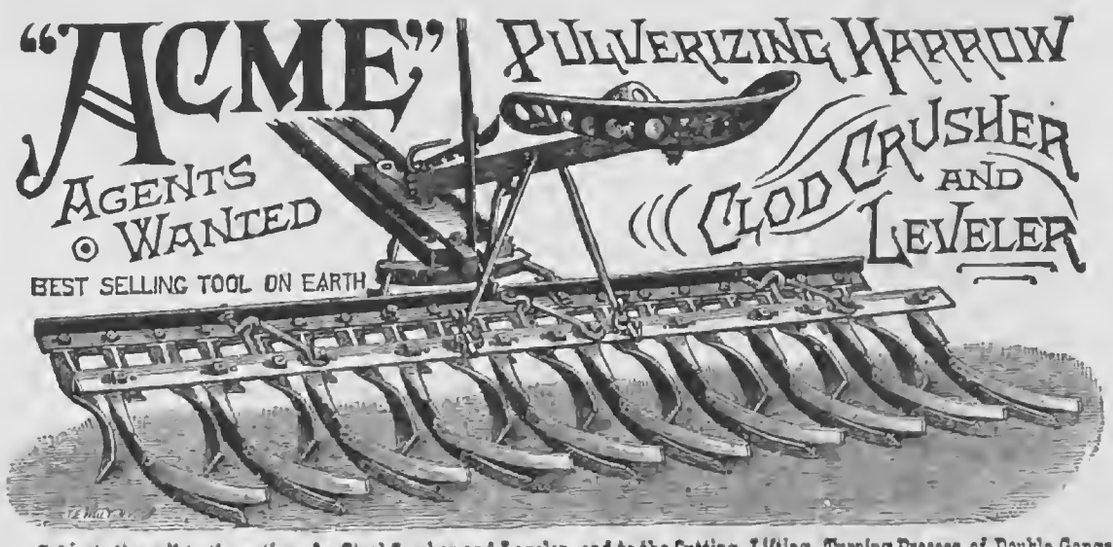

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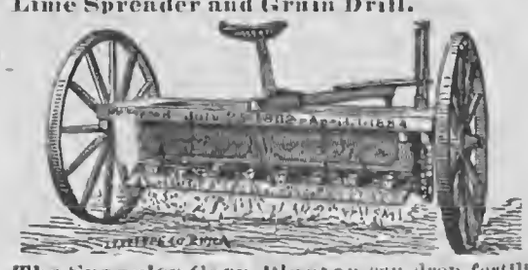

The Spangler Corn Planter can drop fertilizers with corn, or mix with soil before covering. The dropping of the corn is fully exposed to the operator, and can drop it in hill or drill. **The Spangler Vegetable Seeder** can sow any seed large or small, put in the fertilizer, cover and roll it, all at one operation. **The Spangler Potato Fertilizer Distributor** distributes fertilizers six inches wide in potato rows with cultivator both attached to mix with soil; shovels can be lowered or raised. **The Spangler Lime Spreader** will spread unslaved lime from 20 to 60 bushels per acre. **The Spangler Broadcast Distributor** will sow ashes, plaster and all kinds of fertilizers from 200 to 1000 pounds per acre with perfect regularity. **The Spangler Grain Drill** gives full view of the discharge of grain and fertilizer, and is made with or without seed regulator.

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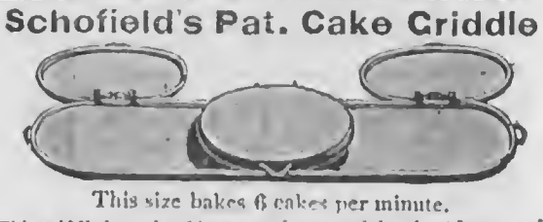

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THE RURAL NEW-YORKER

A JOURNAL FOR THE SUBURBAN AND COUNTRY HOME

VOL. XLV. No. 1881. NEW YORK, FEBRUARY 13, 1886. PRICE FIVE CENTS. $2.00 PER YEAR.

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1. 2. 3. 4.

WHEAT AND RYE HYBRIDS. ORIGINATED AT THE RURAL EXPERIMENT GROUNDS. TYPICAL HEADS MOST RESEMBLING WHEAT. Fig. 67. (See page 102.)

Rural Topics.

HYBRIDS BETWEEN RYE AND WHEAT ORIGINATED AT THE RURAL GROUNDS.

PROBABLY AT LEAST 50 DIFFERENT VARIETIES WILL BE THE OUTCOME.

SECOND HYBRIDIZATION BETWEEN THE HALF-BREEDS, AGAIN CROSSED WITH RYE, GIVING PLANTS BY PARENTAGE THREE-QUARTERS RYE, ONE-QUARTER WHEAT.

Experiment Grounds of the Rural New-Yorker.

THE PLANTS MOST RESEMBLING WHEAT.

As has been stated in these reports, a cross was effected between wheat and rye during the season of 1882. As among hundreds of different varieties of wheat, that known as Armstrong, but since popularized as Landreth, proved as hardy and productive as any, it was chosen as the female or mother plant. The anthers while green were removed by the aid of a pointed stick as with our wheat crossings, and the head was then bound with tissue paper, twisting it above and tying it about the stem just under the first spikelets. In a day or so the paper was removed, the palets and glumes (envelopes of the flowers) were again opened and pollen from rye flowers was dropped upon the stigma (the head of the pistil or female organ of the flower) from the point of a knife. The envelopes were closed and the tissue paper was again secured above the head. In this way the pollen was applied several times.

Ten more or less imperfect kernels formed which were planted September 22, one foot apart, nine of which germinated, passed through the Winter and matured grain the next year. Eight of the plants resembled wheat more than rye, and it is of these alone that we have to speak in this issue of the RURAL, reserving yet for a few weeks an account of those resembling rye, with illustrations of the characteristic heads. It may, however, be well to remark that we have effected two further crosses upon these wheat-rye plants, one during the season of 1884, the other last season, using again rye pollen which, by parentage, makes the plants (20 in number) three-quarters rye. Thus far they are wintering as well as any of the others.

Now in the eight original plants resembling wheat (or the female parent) more than rye, there was very little difference as to the heads. They were all somewhat bearded, all about the same shape. The plants, however, varied in vigor as well as in the size of the stems and leaves, in the number of stems to a plant and in hight. The best of these heads were selected to furnish seed which was planted September 29, one kernel each in the intersections of ten-inch squares.

The reader will, perhaps, share our surprise when he is told that the plot of about one-twentieth of an acre, presented the next season when the heads appeared, as varied an appearance as if kernels of all the most dissimilar wheats in cultivation had been sown. Our engravings, true to nature in every way, will serve to present this remarkable fact in the most forcible way.

Nos. 5, 6, 7, 8 and 9 (Fig 68, first page) are beardless and club-headed, varying a little in the number of breasts and in their position upon the stems, No. 5 being most crowded; No. 9 the least. Nos. 10 and 11 are partially bearded, and though bearing a close likeness to the female plant (Armstrong) in shape, they are much larger (as grown in this soil) and the number of kernels to the breast is greater. In several of the breasts of one or the other—we forget which—as many as *seven* kernels were counted, a not uncommon occurrence perhaps in the wheat portions of Colorado, Montana and Oregon, but never before observed in any of the hundred or more varieties grown in the impoverished soil of our test plots.

No. 1 (Fig. 67, first page,) is notable for the average length of head. No. 2 was cut from a low, feeble plant. No. 3 was also a feeble plant, but very different from No. 2. No. 4 and the horizontal head above do not differ materially from several old varieties of bearded wheat.

Some of the plants were marvels of vigor with very heavy straw of various colors—yellow, dark-brown, purplish. Some plants were exceptionally productive, as we have said, while others bore only two grains to a spikelet, and still others were half sterile. The grains themselves varied as much as the heads or plants, some being long and narrow, others short and plump.

It will probably require several years to separate these wheats so that they will resolve themselves into fixed and uniform varieties. The best heads were selected last Fall with a view to this, and they were divided into at least 30 different lots and planted as before in September, one kernel 10 inches apart either way. Looking at the plants at this time, one is struck with their dissimilar habits. Some tiller remarkably, some very little. Some grow upright, others close to and spreading over the ground.

Our next and concluding account of these hybrids will, as we have said, describe and illustrate those which most resemble rye.

In writing the above, we have kindly been permitted by the Agricultural Editor of the Weekly World to avail ourselves of a well-prepared account of these new varieties of cereals, which appeared in that journal of January 20.

THAT the Winter, thus far, has been a remarkable one, has been a subject of common remark. As additional evidence, I will state that I planted bulbs from time to time out-of-doors until the second of January, at which time the ground was free from frost, and worked as pleasantly as it does in May.

* * *

I have reason to know that some of us who write for the information of beginners are not always understood when we speak of the size of a flower pot. When, for example, we use the word inches, and say "a four-inch pot," some take the inches to mean diameter and others depth, while others again are at a loss to know which is meant. Gardeners, of course, will understand us whether we say "inches," or "pints," "quarts," etc.; but amateurs, especially that large class who are just entering the charmed circle of plant culture, many times will not. Let it be understood that when we use the word inches, we mean the diameter of the pot at the top, and many will be spared a good deal of perplexity. It seems but a small matter, but it is in small matters that we usually fail in imparting knowledge to others. It will usually be safe to assume that the novice knows too little rather than too much.

* * *

I think it was Mr. Parnell who lately spoke a good word for the Rostiezer Pear. He could scarcely say too much in praise of its quality. I esteem it as the best pear of its season. Last Fall it was difficult to get one worked on the quince; and yet I find it generally to yield abundantly as a dwarf. It is objected to it that the fruit is small and the tree a straggling grower. That shows how unreasonable some people can be. If I must choose between goodness and size, give me goodness all the time. As to the tree being a straggling grower, I remember an apposite old saw, "Handsome is that handsome does." A judicious use of the knife when the tree is young will give it a somewhat comely form. If you want a delicious early pear, plant the Rostiezer.

* * *

I am greatly pleased with "Christmas Eve" Chrysanthemum, a grand white variety of the Japanese type. At present I am inclined to think it is the best of its color, though I want to see more of it before making up my mind fully. The time has come to go slow in admitting new kinds. Seedlings are being presented in large numbers, and though some of them are very fine, and worthy of a name, the majority, I should say, from what I have seen, should be allowed to sink quietly out of sight. It is not going to be an easy thing to produce a new and distinct variety better than those we already have. I should like to see one, however, and would not, therefore, discourage the raising of seedlings, but only the indiscriminate introduction of kinds similar to, and no better than, those we already have.

* * *

The Editors ask for a good preservative for shingles, and a correspondent recommends petroleum and Virginia tar. These I know to be good. There are several forms of petroleum that may be used for the purpose with more or less success. The best, so far as my experience goes, is what is known as "finishing oil." It is about of the consistency of linseed oil, or, perhaps, a little heavier. It is applied with the common paint brush, and the shingle should receive a coat on each side to insure the best results, or it may be dipped in the oil. There is another good form of petroleum, of about the consistency of wax, which can easily be applied when melted. It penetrates every pore when it hardens, and renders the wood impervious to water. It is now often used on hard-wood floors, which can then be highly polished. Both these forms of petroleum are much cheaper than linseed oil.

* * *

Mr. Williams's description of the Alley Strawberry is about as nearly right as one could wish. It is a large and handsome berry, but very acid; too acid for me. People who are fond of sugar will find the Alley pretty good to flavor it with. I prefer a plant that will give me a happy combination of flavor and sugar in the fruit. It is so much better that way. To my apprehension, Mr. Alley has better seedlings than the one referred to.

* * *

I would suggest that the Gem Tomato be omitted from seed catalogues hereafter. It has been there too long already. [That is true.—EDS.] It is not a gem, and there seems to be no further use for it.

* * *

Two years ago I budded a large lemon on a seedling stock three years old. At the same time I made cuttings of three pieces left over. The buds took handsomely and the cuttings are growing finely. From which shall I get fruit first?

* * *

The figures of Forsythia, in a late number of the RURAL, remind me that some two or three years ago I saw Forsythia viridissima growing on a rather steep hillside, and it struck me at the time that I had never before seen it growing on a spot so admirably adapted to its habit of growth. It was in flower at the time, and very beautiful. I will add that it was growing as Nature intended it should grow, and not in the wretched moped-headed style all too common in our parks and gardens.

* * *

Mr. Falconer does not seem to like the turnip-rooted celery overmuch. I can not say that I think much of it myself, when eaten in a plain way; but when stewed and eaten as a salad, if only simply dressed with oil and vinegar, it is very nice. Try it this way, Mr. Falconer, and give it another chance.

* * *

Porous vases are a comparatively new introduction here. A potter, with his wheel, was one of the interesting features at the late fair of the American Institute. He made a good many of these vases for the edification of the boys and girls, large and small, and got orders for more than he made. They are made in various forms, classical and otherwise. They are filled with water, which very soon permeates them. The outside is then thickly covered with grass seed, which soon vegetates in a warm room, and you have a pretty object for the mantel, the center-table, or other suitable place. Different forms are made for growing ferns, which would seem to answer the purpose very well for some kinds, though I have not given them a trial. The price is an "unknown quantity" to me.

* * *

To see the Japanese village now on exhibition in New York is the next thing to visiting Japan. I can not remember ever having seen an exhibition so instructive and interesting. The Japs are working at their trades and professions just as they do at home. The work of these remarkable people, especially their painting and inlaying on vases, etc., is exquisitely beautiful. They do some things upside down, a good deal better than we do them right side up. As the village passes through the country the readers of the RURAL should by all means go to see it. Be sure to take the children. HORTICOLA.

The Apiarian.

SIXTEENTH SESSION OF THE NORTH AMERICAN BEE-KEEPERS' ASSOCIATION.

(RURAL SPECIAL REPORT).

Continued from page 25.

Bee-keepers' applicances; foundation; bee-keeping as a business; successes and failures; the Government and bee-keeping; advantages of reversible frames; the "pollen theory"; wintering bees; cellar wintering; some statistics; races of bees; conclusion.

MR. A. I. ROOT, in his paper "Cheapness or Excellence—Which?" advised buying the cheaper articles till experience showed that expensive implements were needed, and then buy carefully. Always make the bees pay in advance. Mrs. Harrison of Illinois, said she used simply loose bags tied over the hands to prevent stings. She did not like rubber, preferring linen. Dr. Mason found rubber gloves with finger ends cut off answered well. W. F. Clark used linen, with Canton flannel. Prof. Cook said the short hairs on the hands and fuzzy clothing induced stinging; the hairs should be burned off, and the fuzzy clothes avoided. Most present used no gloves and needed none. He said the idea that some were very apt to be stung while others were not, was due largely to nervousness. With his many students, he saw little to support the view that bees had favorites. Mr. Heddon thought the same. Mr. Doolittle had seen people who could, with perfect safety, go about any bees unprotected.

Mr. Vandervort spoke of comb foundation. He would use six feet to the pound for brood combs, and no wire. For sections he would use 12 feet to the pound. The wax should be soft and the foundation fresh. Old foundation, however, could be warmed, when it would be acceptable to the bees. Mr. Jones used seven feet to the pound, and found it best in the sections. It saved time, and, if crowded, the bees would thin it out well. Messrs. Pierce and Barber, of New York, thought the same. Mr. Boardman used thin foundation for sections. Mr. Dadant wished five feet to the pound in the brood chamber, and 11 feet to the pound in sections. He said that foundation in the center of the cluster would warm it and the bees would work on it at once. Dr. Mason warmed old foundation or dipped it into warm water. Mr. Manum had used foundation successfully in the same way even when ten years old.

Dr. C. C. Miller discussed the bee business. He had not found it as profitable as other kinds of business, but it kept him at home, out-of-doors, and gave him health. So though he had two years of comparative failure, he was not yet ready to abandon the business. This year his entire crop would be less than 1,000 pounds. Mr. S. D. Pettit, Ontario, said 75 per cent. of bees in Ontario died last Winter—cause, cold and inexperience. He thought the honey produced in Ontario the last 10 years had cost 25 cents per pound; the causes were unripe honey, adulteration by dealers and inexperience. Our journals show the bright side too often, and the failures too seldom. Mr. Root said Mr. Miller left a $3,000 position to go into bee-keeping. He could return to the old business at any time; but he preferred good health even with less money. And who wouldn't? Mr. Emigh, Ontario, said he had never lost his bees. In the Fall of 1884 he had 170 colonies; in the Spring of 1885, 168. He had secured 6,000 pounds of comb honey and 500 pounds of extracted. He sold 70 colonies in the Spring, and has 170 good colonies now. He was satisfied with the bee keeping and thought any one would be, who learned his business, and gave it attention. Prof. McLean, of the Department of Agriculture, said the Government now for the first time recognizes this industry. He gave the result of his very elaborate experiments which show that bees do not injure sound grapes. They only take the juice from such as are ruptured. He had fertilized queens by artificial introduction of the semen from the drone into the vulva of the queen. It must be done during the orgasm of the queen. Resolutions were passed thanking the Commissioner of Agriculture for his action, and urging that bee and honey statistics be included in the monthly reports, and that analyses be made of different grades and kinds of honey.

James Heddon, of Michigan, discussing reversible frames, said these were exceedingly valuable. They secured full frames of comb, united on every side to the frame, and, by judicious manipulation, all the honey could be secured in the sections. He preferred a hive which enabled him to reverse all at once and not each frame singly. Reversing secures more honey, stronger combs and more speedy capping. It also keeps brood chambers full of brood, not honey, and prevents swarming. Dr. Whiting said that if we reverse, just before the close of harvest, cells are filled and capped much better. Mr. Heddon said that inverting prevented swarming, as it caused the bees to tear down the queen cells.

Prof. Cook spoke of the "Pollen Theory." He showed that without pollen diarrhea did not occur. That animals that hibernate and people long sick, live for long periods with no food except the stored fat of the body. Pollen for food is hard to digest and affords more refuse or waste than the carbohydrates. Bees in Winter are very quiet if they winter well, and, like hibernating animals and people in sickness, need no albuminoids in the food. We know this as they often winter as well, and many think better, on clear honey or sirup, which has no nitrogenous elements in it. As the bees retain their feces all Winter, when in health, it seems scientific and in accord with analogy, as well as sustained by experience, that they may, in some cases, winter better if all pollen is excluded from their winter rations. If the heat is kept right, however, we need pay no heed to the pollen.

Mr. Ira Barber of New York, in the most valuable paper of the meeting, discussed the wintering problem. He said, "I have wintered colonies by the hundreds now for 25 years and with no loss. Hence, I feel free to say that wintering with me is safe. In all that time, 80 per cent. have wintered perfectly. The two essentials are heat and dampness. They are not safe without the heat, and will not remain as quiet in a very dry atmosphere. The cellar is always kept from 60° to 90° F. The only ventilation is a stove pipe, which passes through the wall to the top of the cellar and passes up several feet; this keeps the room from becoming too warm. When very cold, we keep fire in the

room above. The hives are kept tight above, so that there is no upward ventilation. In the cellar they are set on caps close together, so if the bees come out of the hives, they will get back either into their own or other hives. One end of the hive is raised one inch from the bottom board. I put them in the cellar before cold weather, and am sure they have plenty of good honey. Pay no regard to pollen. I think this an easy, cheap and safe way to winter. Last Winter I lost only three colonies out of 200. When my cellar was dry, I used to lose about three bushels of bees to 100 colonies in Winter; now I do not lose one bushel. Placing the hives close also saves bees. Mr. Hall of Canada has had no losses in wintering. He could indorse all Mr. Barber had said. He wished temperature 52° and upward. Mr. Emigh always wintered safely. His cellar was dry; temperature 45° to 48°. Mr. Dadant liked dry atmosphere. He had had no serious losses.

Mr. Barber said if the cellar was dry a temperature of 45 to 48 degrees was best, but it must not go above 50 degrees. When damp, it might rise safely to 50 or 70 degrees, or even higher. Mr. Hall said his bees bred late in Winter, so that when he set hives out May 1st, they would have three frames of brood, and by the 24th of May seven full L. frames of brood. Mr. Hedden said there was no conflict between him and Mr. Barber. In such a cellar as Mr. Barber's pollen did no harm Mr. Barber said the temperature got higher towards Spring; 45 to 50 degress may be high enough. His cellar was 22 by 28 feet, and he put200 colonies in it.

used no artificial heat, but the cellar is all under ground. His combs were somewhat moldy, but that did no harm. He cooled his cellar down with ice when he wished to carry bees out.

The number of colonies reported by the members was 4,283 in Spring, and 7,479 in October—increase 75 per cent: of comb honey there had been 155,354 pounds, and of extracted 86,928 pounds—total 242,282 pounds; wax 2,233 pounds; comb honey unsold 43,275 pounds; extracted unsold 33,425 pounds. The Convention, thus it seemed, was practically, at least, for comb honey.

Mr. D. H. Jones spoke of the races of bees. He had spent thousands of dollars importing bees. He does not like either pure Syrians or Cyprians, but does like very much a cross between these and the Italian or Carniolan. If crossed with Italian he would have one-third Italian with Carniolan, one-half Carniolan and one-half Syrian. The Carniolans had not troubled him by excessive swarming. He had found his bees, on the Islands of Georgian Bay, would mate when seven miles apart. Thus ended this large, interesting meeting. "C."

THE BEAUTIFUL POSTERS

OF THE RURAL NEW-YORKER WILL GLADLY BE MAILED WITHOUT CHARGE TO ALL WHO APPLY FOR THEM.

The Herdsman.

A YOUNG STOCKMAN'S EXPERIENCE.

ABOUT a year ago I moved into this country. My father and myself heard that the farm upon which I am located would be sold cheap. In a month's time all arrangements were made, and I was in charge of the business. It seemed to me that I was to take charge of the world, instead of a farm of 520 acres. It was my first experience in business. About the middle of March we commenced operations by grubbing and chopping. There was not a blade of tame grass on the farm. We cleared the land and sowed 25 acres of Blue Grass, 15 acres of clover and 30 acres of Timothy. These have all made good crops of hay, thus proving that the tame grasses will grow well here.

I tried my hand at plowing for the first time. The lookers-on seemed to enjoy the sight more than I did. However, I became a fair plowman before I finished. We put in 60 acres of corn and five acres of millet. Both did well, the millet yielding 2½ tons per acre.

I bought with the farm 45 head of cattle and 125 hogs. I afterwards bought a thoroughbred Short-horn bull and all the good heifers and steers I could find in the neighborhood. Before Summer I had 125 head of cattle and 240 hogs. The hogs kept in fine condition through the Summer on peaches and other fruits, for which this country is famous. When the mast commenced to fall, I turned my hogs out, and in five weeks had 80 ready for market. I fed them only 2½ bushels of corn each. My beef cattle kept in fine condition on the native grasses. In December I started for St. Louis with my cattle and hogs. We are 45 miles from a railroad. I felt proud enough when my animals were driven into the Stock Yards. The commission merchant told me I was the youngest man they had ever given checks to for stock. I looked so much like a boy that I had to identify myself. I am only 21 years old.

My first year's experience has certainly been a success. I like the life. I live in a log cabin which I had boxed and ceiled and then painted. I have a library of about 175 volumes, and other conveniences that make my life very pleasant. I give my men the use of my library and encourage them to improve their spare time. On the whole, I am much pleased with farm life in this country and would not go back to city life. I. C. G.

Boone Co., Ark.

Farm Economy.

TANK FOR OILING WAGON WHEELS.

MR. J. P. SIMPSON, of Palmer, Illinois, describes his method of oiling wagon wheels, which is illustrated at Fig. 70. B. represents

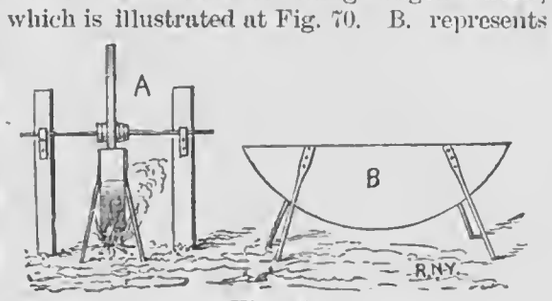


Fig. 70.

iron tank, in which the linseed oil is boiled. It is to be placed between the posts shown at A. When the oil begins to boil the wheel is placed in the tank, supported by means of a stick which rests on cleats attached to the posts. The wheel is turned slowly around and well rubbed with a small paint brush. To accommodate different sizes of wheels several sizes of cleats are placed on the posts, or the tank can be raised or lowered by using bricks. The tank should never be more than half full, or it will boil over. The advantages to be derived from carefully oiling wagon wheels are too obvious to require mention. The cost of such a tank as this will be easily saved in decreased blacksmith's bills.

YANKEE SCOOT.

MR. J. A. PUTNAM sends us the design shown at Fig. 72. He finds it very useful in

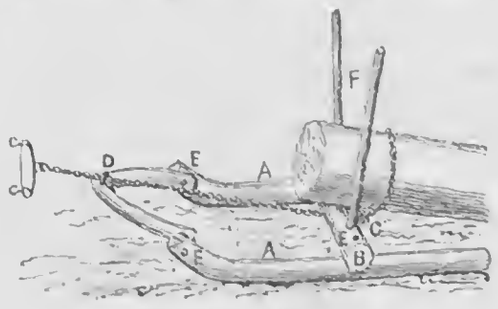


Fig. 72.

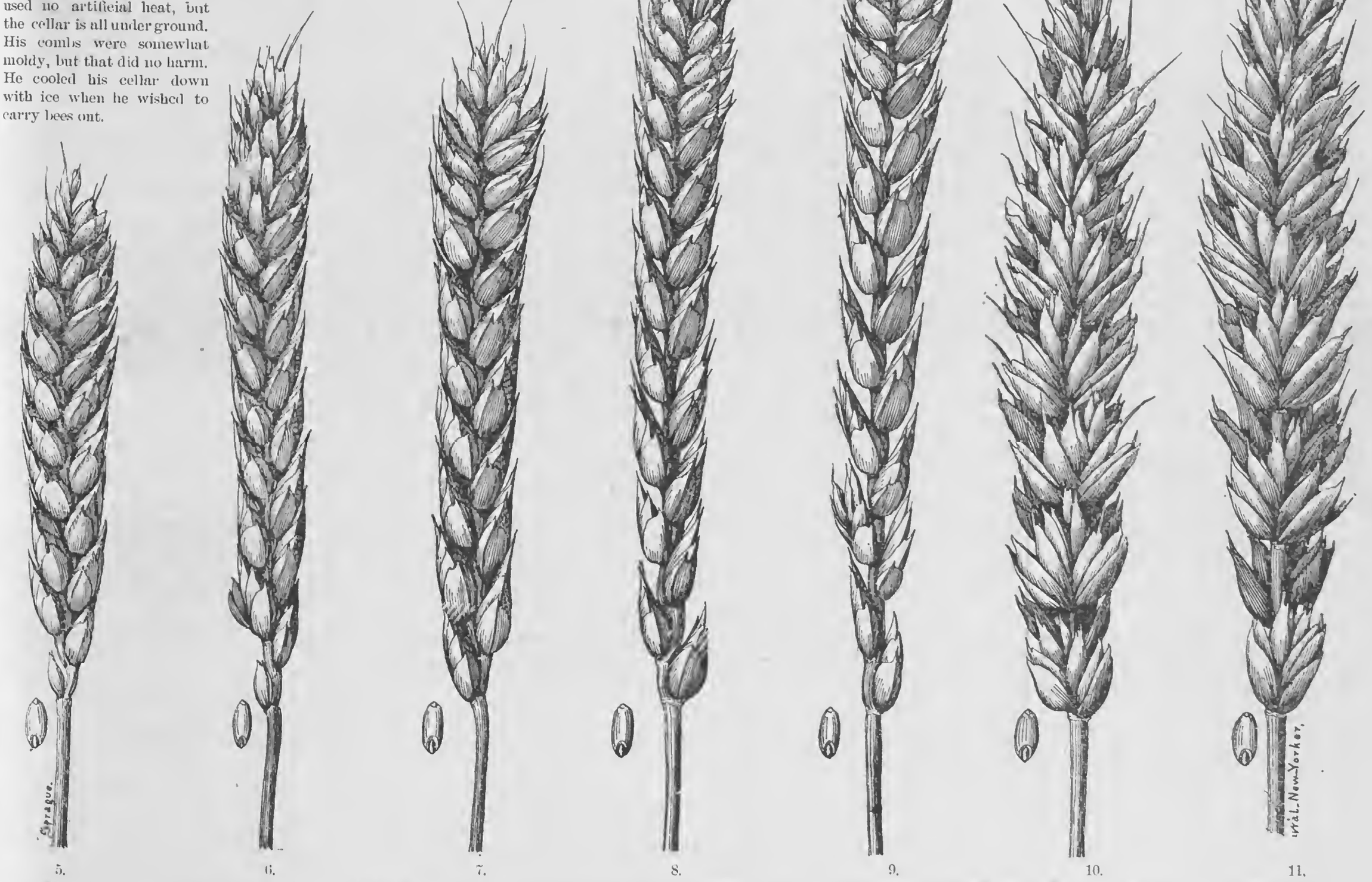
hauling brush, logs or poles. It makes a light substitute for a sled, and will keep in the road like a long-tongue sled. It will "scoot" over a log without catching. The horse pulls from the load and not from the scoot. It is easily made, as it contains but four pieces of wood and four iron bolts. The runners A. A. are 3½ feet long and four inches thick. The beam B. is 3½ feet long and five inches thick. C. is a staple to hold the chains to the center of beam. The bolts holding the runners to the tongue are eyed at E. E. The crotched tongued D. is made from the forked limb of a tree about three inches thick, or it can be made of two crooked pieces of wood bolted together. This is the strongest part of the whole sled, and, like the beam and runners, should be made of natural timber with only the bark shaved off. A ring or staple is placed under the point of the tongue to admit the passage of the chain hook. In loading the "scoot," the load is placed on the beam. Then the chain is hooked into the staple, passed over the load, back through the staple, under the beam and out through the ring or staple on the tongue.

A HOME MADE BENCH VISE.

A GOOD iron vise is a very useful tool, but it costs so much that many farmers do not feel

The Enterprise Meat-Chopper.

Every family should have one. Size No. 10 will thoroughly cut one pound in a minute. The meat is chopped—not mashed. The machine is simple and durable. The price is $3.00, and we give it for three subscribers. The RURAL sells nothing except the R. N.-Y. The No. 22 cuts two pounds per minute. Price $4.00. Given for four subscribers. This is the size you should have. Address the Enterprise M'f'g Co., cor. 3rd and Dauphin Streets, Philadelphia, Pa., for circulars.



5. 6. 7. 8. 9. 10. 11.

WHEAT AND RYE HYBRIDS. ORIGINATED AT THE RURAL EXPERIMENT GROUNDS. TYPICAL HEADS MOST RESEMBLING WHEAT. Fig. 68. (See page 102.)

that they can afford it. A wood screw vise is not very expensive, but for many purposes it is quite unsatisfactory, as the strength of the threads is quite limited. The device illustrated in Fig. 64 may be made by any one who has a saw, augur, mallet, chisel, and plane, and a little knowledge in their use. It may be constructed in an hour or two, and is stronger than the average wood screw vise. The power is exerted by means of a cam roller; a strong iron bolt passes through the roller lengthwise, but not quite at its center. The hole should be bored about five-eighths or three-quarters of an inch to one side of the center, and sufficiently large so that the bolt will slide in and out readily. It is evident that if the handle which passes through the roller be moved about so that it points downward instead of upward, the roller will be moved half way around, and the thicker side will be between the bolt and the movable jaw of the vise. As the handle has a long sweep as compared to the distance the jaw is moved, a very considerable power is exerted. The jaws are made to accommodate themselves to different thicknesses, by putting the bolt through different holes in the arm. The latter has a mate at the other end of the roller, not shown in the drawing. These arms pass through the side boards of the workbench, and the inner ends are also made adjustable by another series of holes. Thus the vise will accommodate almost any desired thickness. The roller should be about five inches in diameter, and of some firm wood that does not split readily. A section of the limb of an apple tree, or a round stick of cord wood of the proper size, will answer the purpose.

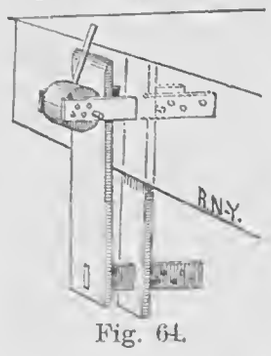


Fig. 64.

E. S. G.

SAWING MACHINE.

THE machine shown at Fig. 69 is in use by Mr. Geo. E. Sage, of Harpersfield, Ohio. A A are boards of light material; length, five feet; width, four inches; thickness, five-eights of an inch. B is a block of thick wood, one foot

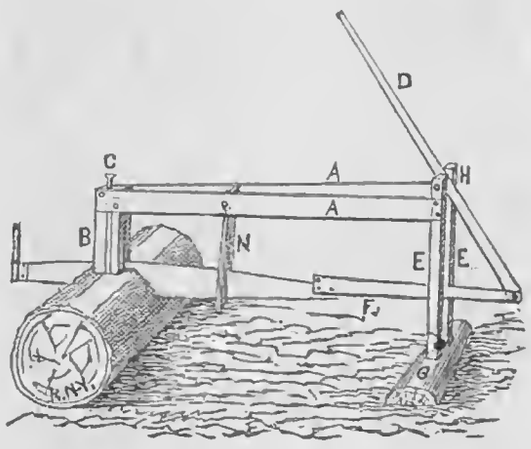


Fig. 69.

long, four inches square, with a slot eight inches long for the saw to play in, from the bottom up. Four inches from the top of block B, saw in five-eighths of an inch, and split out to admit the boards A A, and bolt on, as shown in the figure, with two one-fourth-inch bolts four inches long. Then one-half inch from the outside of block B bore a five-eighth-inch hole lengthwise of the block B between the two bolts. E E are sticks of ash 30 inches long and two inches square, placed four inches apart. Four inches from the top, they are cut in five-eighths of an inch, to admit the boards A A, which are securely bolted on. At the bottom of E E, a piece of light wood two feet long, rounded on the upper side, is placed for a foot rest. Two inches from the top of E E is bored a three-eighth inch hole to admit a bolt (H) 8½ inches long. On this bolt is to be strung a small piece of wood one inch thick, then an iron washer, then the handle (D, 44 inches long) hung in the center of the stick; another washer and another block of wood, D being a round stick two inches in diameter, flattened on each side to five-eight inch in thickness at one end. F is a tapering stick 4x1½ inches at one end, two inches square at the other, in which is an open mortise five inches long and five-eighths of an inch wide, to admit the handle D. Lengthwise of the wide end, saw in four inches to admit the saw-plate. Fasten together with two screws. Then through the stick, just above the saw, place either a large screw or a small bolt, to stiffen the stock and save the strain on the two screws fastening the saw-plate on. Through the hole in the block B, put a five-eighth inch rod 14 inches long, wedged-shaped at the lower end, with a hardened top end, to be driven into the log. If the saw is limber, it may be necessary to put on a board 22 inches long, with a slot 18 inches for the saw to play in, hung on a rod for the board to play in, as shown in the cut by N.

Pomological.

OLD FRUITS UNDER NEW NAMES.

C. M. HOVEY.

Objectionable and reasonable changes of variety; names of fruits; examples.

I HAVE noticed with much surprise that in the recent exhibitions of fruits of the Massachusetts Horticultural Society, our old and well-known pears have been shown under entirely new names. For instance, that fine pear, the Doyenné du Comice (the Doyenné of the Committee), is called the "Commice;" the Duchess d'Angoulême, the "Duchess," and there were similar changes all round. Boston is celebrated for its notions, and many of them I believe to be mighty good ones—some are indifferent—and occasionally some of them are bad.

Regarding this new notion, I had intended to notice it before. Our good and worthy President, in his address at the late meeting of the American Pomological Society, at Grand Rapids, made some suggestions as to the ridiculousness of some of the names given to fruits by the old cultivators, and the really nonsensical, meaningless and often uncouth and foolish ones of more recent fruit growers, such, for instance, as Big Bob, Old John Brown and Wizard of the North, Strawberries; Iron-Clad and Wild Goose Plums; Rancocas Raspberry; Wilson Junior Blackberry; Upper Crust Pear, etc. Here, indeed, his suggestions were very timely and valuable, and I hope important enough to prevent the further application of such absurd titles to good fruit. But I did not suppose he intended, now in his ripe old age, to alter old names and undo what he has for many years, as President of the American Pomological Society, devoted time and thought to accomplish—the improvement of the nomenclature of our fruits—and aided, so energetically, in detecting synonyms with which our catalogues were so full some few years ago, and which only perplexed and worried every one interested in fruit culture.

But now, after all the labor performed by the committee especially appointed to revise the names of fruits, and systematize and publish them in the Transactions of the American Pomological Society, the work has to be gone over again. Those who looked upon the Society's Report as some authority for names, now find they have to begin anew. That favorite old pear, which the late A. J. Downing thought identical with Beurré Bosc, the Paradise D'Automne, is now only the "Paradise;" the Hovey's Seedling Strawberry is only the "Hovey," and so on, depriving the enthusiastic cultivator of the honor of producing perhaps the best fruit of its kind. Anybody can raise a Hovey Strawberry, if he so chooses to call it, but anybody cannot raise Hovey's Seedling. Sir Thomas Andrew Knight raised a cherry which he called Knight's Early Black, because there was an old Early Black, and he was ambitious (modest as he always was) to have his name connected with it; it is now "Early Black;" and, as regards that superlative pear before referred to, the Doyenné du Comice, how ridiculous to write "Commice;" the pear having been christened by a committee of the Horticultural Society of Angers, France, who first decided upon its merits, the "Doyenné of the Committee," being in form, smoothness and beauty of skin, fineness of flesh and deliciousness of flavor, similar to the old and well known White Doyenné, in its palmy days, the type of all the numerous Doyennés that have since been produced. "Commice" is a word unknown in any language and more ridiculous and unmeaning than even Big Bob, and the name is a blot upon the reputation of the Society, through its committee.

(To be concluded next week.)

Farm Topics.

MARKET THOUGHTS.

How is the apple market? Farmers who have been holding their fruit for better prices are anxiously asking the question. The market has shown little signs of improvement thus far. The prices for the past six years are given below. The figures given are the prices quoted for best Greenings on the first of each month.

	Jan.	Feb.	March.	April.
1885	$2.25	$3.25	$3.00	$3.25
1884	4.00	5.50	3.75	4.00
1883	3.75	4.00	4.50	5.00
1882	3.75	3.50	3.75	3.75
1881	1.75	1.62	1.50	1.37
1880	2.50	2.75	3.50	3.50

The quotations for February 1, 1886, were $2.25 for best Greenings, with Baldwins 25 cents cheaper. Towards the end of the season red apples sell the best. After March Baldwins are always quoted at 25 to 50 cents higher. Immense quantities of apples were shipped abroad last season. The prices realized were not satisfactory; oftentimes the charges for freight and storage consumed all the profits. The great apple crop of last year clearly showed that in such times of plenty careful packing and sorting must be relied upon to bring out the best prices. In such times the best specimens always find the first sale, while the inferior lots can hardly be given away. With low prices, ordinary customers can afford to be fastidious, and they enjoy their brief moment of authority to the utmost.

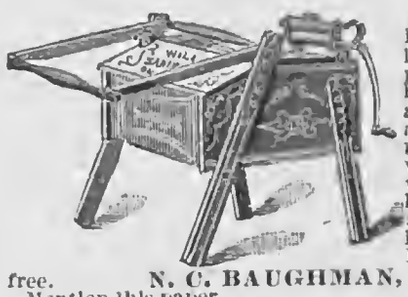
The low prices for apples here seriously affects the trade in dried fruits. Dried apples are from one-and-one-half cent to two cents cheaper per pound than in previous years, and other dried fruits are correspondingly lower. If farmers have reason to regret this state of affairs, city people have every reason to be grateful. Thousands of people are enjoying an abundance of fruit this year, that hardly knew what it meant before. Apple sauce and apple puddings hold an honorable place on many a boarding-house table, that had previously been guiltless of such healthful fare. One hears little of the dried apple pies and sauces so common upon the tables of the poor in years of high prices. Many city housekeepers bought their supply of apples and vegetables directly from some friend or relative in the country. This practice appears to be growing in favor. It would doubtless interfere seriously with the business of the produce merchant, if good storage could be secured. It would be greatly to the advantage of the farmer if city houses could be built with some better system of storage, where a Winter's supply of vegetables and fruit could be kept in fair condition.

The retail fruit trade in this city is enormous. It is estimated that over 500 barrels of apples are sold every pleasant day from the fruit stands alone. Add to this the great quantities of bananas and oranges disposed of, and we see how much of the health of the city depends upon these humble places of business. Everybody patronizes them from the newsboy to the Wall St. banker. The average New Yorker is always in a hurry. These little stands, where he can buy and eat his fruit almost without stopping, suit him exactly. If they were abolished he would not eat half so much. Red, medium-sized apples find the best sale, for eating purposes, in this market. People distrust a very large apple or a very small one. The first they consider too apt to be coarse and tasteless, and the other is too small for a fair bite. The sharpest dealers select a medium-sized, strongly acid apple, and thus retain their regular customers. A barrel of apples sold on one of these stands brings about $12. The retail prices seldom vary from year to year, regardless of the wholesale price. Apples are always about the same size, and the prices seem to be fixed at one cent apiece, two for five cents, or three for five cents, according to size. No wonder some of these dealers grow rich at the business.

Miscellaneous Advertising.

A Double Gang "ACME" Pulverizing Harrow, Clod Crusher and Leveler will be sent to any responsible farmer in the United States, and if it does not suit he may send it back at the expense of the manufacturers. No pay is asked until tried on the farm. Farmers should not, therefore, let dealers palm off on them a base imitation or some inferior tool under the assurance that it is better.

See advertisement on page 114.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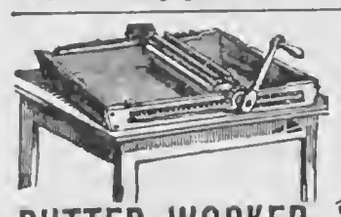
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Capacity 10,000 lbs. per DAY.
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A. H. REID,
26 S. 16th St., Phila., Pa.

MYER'S FORCE PUMP.
The only double acting Force Pumps with Expansive Plunger Bucket and GLASS VALVE SEAT. The only Successful Drill Well Pump.
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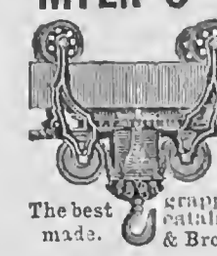
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A perfect reversible carrier. New Myer's iron and wood track carriers the simplest carriers made. Double and single harpoon hay forks, pulleys, grapplers, etc. Illustrated catalogue free. F.E.Myers & Bro., Ashland, Ohio.
The best made.

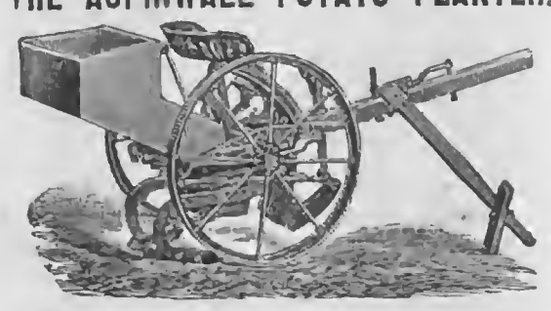
DUTTON GRINDER

Perfect Mowing MACHINE KNIFE GRINDER.
Weighs but 18 Lbs.
Can be carried into the field and attached to Mowing Machine Wheel. Send for Descriptive Catalogue. Agents wanted in every County.
R. H. ALLEN CO., 189 Water St., New York.

THE WILLIAMS

Grain Threshers, Horse Powers & Engines.
Highest prize awarded these machines at the New York State Agricultural Society's latest trial, over a large number competing.
Ample warranty and opportunity for trial given. For full particulars address
ST. JOHNSVILLE AGR'L WORKS,
ST. JOHNSVILLE, MONTGOMERY CO., N. Y.

THE ASPINWALL POTATO PLANTER.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THREE RIVERS, MICH.

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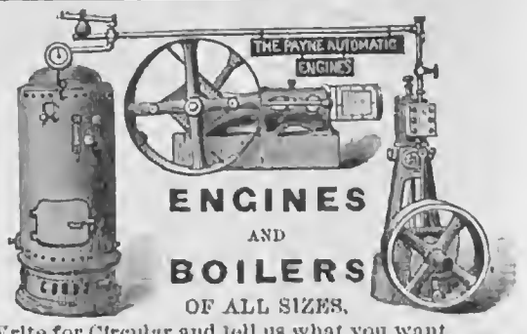
With either regular incline or level tread track, has the simplest and most efficient governor made. The Doylestown Junior Thresher and Cleaner has no superior. For Illustrated Catalogue address sole manufacturer, DANIEL HULSHIZER, Doylestown, Bucks Co., Pa.



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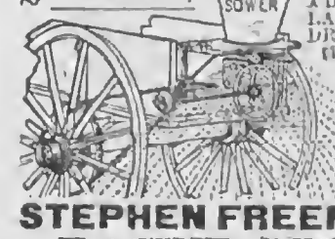

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LANE & BODLEY CO.,
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Arboricultural.

THE FORSYTHIAS.

YOUR notes on the Forsythea viridissima are very acceptable, and a just estimate of this pretty Golden Bell. But you are slightly in error in saying it was "introduced by Mr. Forsythe from China in 1845." If my recollection serves me, it was sent home among the other treasures gathered by Mr. Fortune on his memorable excursion to China, under the auspices of the Royal Horticultural Society of London. His explorations were then made about Shanghae. On his return in 1861, he went as far as Pekin, several hundred miles north of Canton, and here he found that most beautiful and desirable of all, F. suspensa, much hardier than F. viridissima, a much better grower and with a habit that can be made into a shrub or low weeping tree, trailing its slender, whip-cord branches to the ground, forming a drooping head more dense and graceful than a Kilmarnock Willow, and one made of golden blossoms as early as the earliest peach bud opens. This superb species you do not name. I have trees 10 feet high which are distinguishable 100 yards away, so conspicuous is their profusion of flowers. Besides, its slender shoots, the larger branches have a light yellow bark, as distinct as the Red Cornus: altogether it is one of the finest shrubs introduced by Mr. Fortune. F. viridissima often gets killed nearly to the ground in extremely cold Winters, while I never saw the smallest shoot injured on F. suspensa.

And this reminds me to say a few words in regard to the services of such men as Fortune, Von Siebold our own Dr. Hall, and others who brought us the rich treasures of almost unknown climes. We commemorate in some way eminent men, statesmen, poets and merchants. We fill columns with obituaries of millionaires and their charities, which never began to assume the relative proportions of the poor man's. We regale ourselves with the juicy pears, the delicious grapes and the luscious peaches as if they were Nature's productions, without ever a thought of such men as Van Mons, Knight, Dana or Bull, who produced them, or of their long, patient and laborious efforts to the end attained. The owner of every country home throughout the land ornaments his grounds with beautiful trees and shrubs—the Weigela, the Forsythia, the spiræas, the exochorda, the hydrangea, the Japan Viburnum and many others, as if they too sprang up spontaneously in the nurseryman's grounds, with no idea that any such men as Fortune, Van Siebold or Dr Hall ever lived. The erection of a statue is commendable and valuable, both for its commemoration of the man, and as a work of art; but how shall we estimate the introduction of those things which are the adornment of every country home, greeting us anew every Spring with their verdure and bloom, and are ever a perpetual source of pleasure and delight.

C. M. HOVEY.

What Others Say.

THE RURAL WHEAT-RYE HYBRIDS.—Our friend, the Farmers' Review, says: It is claimed that experiments in England to hybridize wheat and rye have proved successful, resulting in a berry closely resembling wheat, grown on a stalk of rye. The new grain has not yet been produced in sufficient quantity to test its quality for bread. The object aimed at is to obtain a good bread, making grain on a straw more hardy than wheat. Rye does not suffer from winter-killing as wheat does, and will succeed fairly well on soils too poor and thin for wheat. What the name of the grain will be is not yet made public. Perhaps it will be Ryeat. The RURAL NEW-YORKER, two or three years ago, was working at the same experiments in hybridizing the two cereals in its Experiment Grounds, and, if our recollection serves us right, reported partial success. Has it allowed the English to get ahead of it in achieving complete success?"

We think not. The report above referred to, no doubt, arises from the fact that an article in the Century Magazine gives a description of our rye-wheat hybridizations, without mentioning that the work was performed by the RURAL or indeed in this country. The "completeness" of our success may be seen at the Rural Grounds, where 40 little plots are devoted to fixing the varieties produced by the original hybridization, not to speak of the three-quarter-rye hybrids which were effected last year.

THE "HAY SPICE," so frequently advertised in English agricultural papers as a condiment and a means of rendering even damaged fodder palatable, appears to have for its chief constituent sugar or molasses. It is well known that a "sweet tooth" can be cultivated in cattle to such an extent that they can be induced to eat large quantities of straw or coarse fodder that has been sprinkled with sugar. Sugar feeding is said to be employed with profit in some portions of England, two quarts of molasses being considered a fair daily ration for a fattening steer. Waste sugar has even been used in preserving newly cut hay in what is known as the silage stack. It seems generally admitted that the practice of throwing a quantity of salt into the silo is needless if not unprofitable. It may be that waste sugar used in this way would give better results. Here is a chance for some of our experimental farmers to determine this point, which we think has not yet been tested.

PRIZE ENSILAGE.—The English Ensilage Society recently offered prizes for the best specimens of silage. There were 260 entries made, which were divided into eight classes. There were 79 entries in the class for Meadow Grass. The first prize was won with a sample of aftermath preserved in a silage stack. This same sample subsequently won the champion prize for best specimen in the show. The class for corn silage was the smallest of any in the show, there being but nine entries. The principal crops used for silage in England appear to be the grasses, clovers, beans and grains. It is simply uncured hay and hardly to be compared with our chopped corn-stalks.

THE LATEST AND BRIEFEST.

THE Burke Peach is advertised by a Louisiana nurseryman, with whom it originated, as "the largest and best peach in the world."....

WEBB & SON, of Wordsley, Stourbridge, England, announce a new beardless barley. The beards drop off as the heads ripen.....

MR. E. P. ROE, for the third year sends us (January 20) specimens of his Highland Beauty Apple, all well preserved and of fine quality. It is like the Lady Apple (Pomme d 'api), but larger and of better quality.....

DR. F. L. OSWALD remarks, in his book of Household Remedies, that drugs can rarely do more than change the form of disease or postpone its crisis. The best way to "assist" Nature is to give her fair play by forbearing to meddle with her restorative methods and by removing the predisposing cause of the disorder.....

A FLORAL novelty to be sent out next Spring is a semi-double Phlox Drummondii..

IT is a pity, as the London Garden states, that "semi-double" should be to many rose growers a term of reproach.....

THE Michigan Farmer is authority for the statement that a Grand Rapids merchant bought 27,000 eggs at an average price of 10 cents per dozen last Summer. He has just sold them for 18¾ cents, and is so encouraged that he will build a cold-storage house next season and largely increase his business.....

T. T. LYON advises, in the Michigan Farmer, that we always buy and plant peach trees one year old from the bud. Cut back all side branches to one bud each. From two to three feet of clear trunk are far better than more. If a few branches outgrow the others, nip off the tips so that the other branches may overtake them.....

MR. J. J. H. GREGORY says that lots of cabbages are raised about Marblehead (Mass). But they can't raise them oftener than once in four years. He tried using wood ashes this year on cabbages where they had been raised the year before. He used 100 bushels of unleached ashes and had raised as thrifty a lot of cabbage as he ever raised. The ashes ought not to cost over $45, which he calls cheap manuring for an acre.....

WHEN the RURAL first tried the Wyandottes and praised the breed, some of our friends spoke as if, in our inexperience, we praised them merely because the breed was new. It was much the same when we reported our success with the Plymouth Rocks. Well, others are praising them now—praising them far beyond their merits. There are good strains of Wyandottes and poor strains.....

IT is said that the new rose, "Her Majesty," is by far the largest rose ever introduced.....

ACCORDING to the N. Y. Times, the cost to the State for graduating a student at the New Hampshire Agricultural College is, $6,000....

AT a late meeting of the Massachusetts Horticultural Society, the Frederick Clapp Pear was spoken of as of superior quality, a good grower and bearer. Our readers must not forget the RURAL'S estimate of this fine pear.....

SEC. CHAMBERLAIN says, in the Ohio Farmer, that the buyer has a right to know that he gets just what he pays for; the exact substance and nothing else, the exact amount and nothing else. Therefore the seller must not substitute oleomargarine for butter.....

(*Continued on page* 106.)

New Publications.

DOGS

AND

THEIR MANAGEMENT.

BY HUGH DALZIEL.

Illustrated.

HARPER'S NEW MONTHLY MAGAZINE

(NO. 430)

FOR MARCH, 1886.

To be published February 16th.

CONTENTS:

The Open-air Sacrament.
Frontispiece (Illustration for "Cape Breton Folk"). From a Drawing by A. B. FROST;

An Iron City beside the Ruhr.
A Description of Krupp's Gun-making Establishment at Essen. By MONCURE D. CONWAY. Illustrated;

She Stoops to Conquer.
Beginning of Act IV. With Four Illustrations by E. A. ABBEY;

Portrait of Constance Fenimore Woolson.
Full-page Plate Engraving;

The City of Cleveland.
By EDMUND KIRKE. Illustrated;

Cape Breton Folk.
By C. H. FARNHAM. Illustrated by A. B. FROST;

With the Afghan Boundary Commission.
By WILLIAM SIMPSON. Illustrated;

Dogs and their Management.
By HUGH DALZIEL. Illustrated;

Africa's Awakening.
By DAVID KER. With Map;

The Home Acre. Part I.
By E. P. ROE;

East Angels. Part XV.
By CONSTANCE FENIMORE WOOLSON;

Brief—as Woman's Love.
A Story. By BRANDER MATTHEWS;

A Rose of Jericho.
A Poem. By FRANCIS L. MACE;

Editor's Easy Chair.
By GEORGE WILLIAM CURTIS.
Does the Puritan Survive?—Importance of the Individual.—American Opera in New York.—"And meanwhile, Brethren, how is it with us?"

Editor's Study.
By WILLIAM DEAN HOWELLS.
Dr. Holmes's Mortal Antipathy to Young Poets.—A Surfeit, not a Dearth, of Poets Impending.—Some Considerations why we should not Grieve if there never were any more Poets.—Difficulty of Forecasting Poets in the Absence of a Meteorologico-Literary Bureau.—Mr. Stedman's Poets of America, and Mr. Courthope's Liberal Movement in English Literature.—Defense of a Child of Darkness.—Mr. Gosse's Essays from Shakespeare to Pope.—Genius: a Philistine View of it.—Grant's Memoirs.—The First Napoleon.

Monthly Record of Current Events.

Editor's Drawer.
Conducted by CHARLES DUDLEY WARNER.
The New England Farmer.—A Plantation Funeral.—The Coolest Man in the French Army.—The Dingy Sod House of Dakota.—A Disappointment.—Taking Advantage of Company.—Why not Two Dozen?—One Satisfactory Item.—Only an Incident.—Trying to Make it All Right (Illustration by W. H. HYDE).

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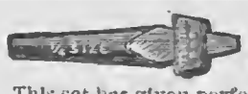

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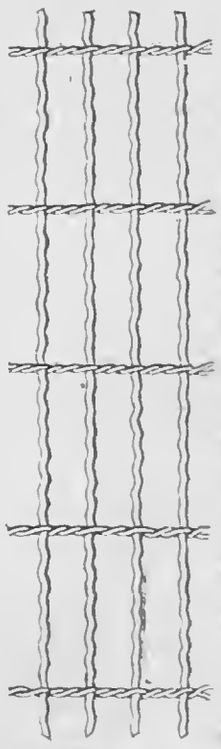
This set has given perfect satisfaction; is **durable, effective** and **cheap**, weighs less than 4 ozs., and is adapted to all varieties of cross-cut saws. Any man can perfectly set a saw in 3 mins. Also **CHAMPION GUAGE** for dressing raker teeth; warranted. Sample of each by mail on receipt of $1.00. Send for circular and prices to J. E. WHITING, MONTROSE, Pa.

38TH ANNUAL REPORT OF THE PENN MUTUAL LIFE INS. CO. OF PHILADELPHIA, PA., shows stability, steady growth, thrifty management, and low cost. Of interest to those seeking the **BEST** forms of life insurance. Get it and other publications of agents in all cities and large towns, or write to the Home Office, Phila.



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Suitable for Fencing in many locations, and for Railings, Window Guards, Tree Guards, and other purposes.

It consists of vertical pickets or bars, made of corrugated galvanized steel rods, oval in section, secured by horizontal cables, each composed of two strands of galvanized steel wire.

As a fence it is cheap, strong, durable, and easily erected; it is as effective as a barbed fence in turning cattle, and there is no risk of injuring either the animal or the fence; it requires no longitudinal rail to support it, as it carries itself from post to post as well as a plain wire or barbed wire fence; it can be seen as plainly as a regular picket fence; it can readily be taken down, rolled up and moved from place to place.

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Contains Phosphate of Lime. Gives Plants an early start, improves quality, increases yield. Low freights to all points. Farmers' Memorandum Book sent FREE. Correspondence solicited. CAYUGA PLASTER CO. Union Springs, N. Y.

THE LATEST AND BRIEFEST.

(*Continued from page* 105.)

MR. RAWSON, an experienced celery grower, estimates, in the Massachusetts Ploughman, the expense of growing an acre of 7,000 plants at $250—that is about four cents per plant. Blight is caused by a check in the growth, and the remedy against the check is water. Mr. Rawson's average selling price is six cents per bunch or root.....

GOOD seed and rich land for cabbages. It will soon be time to sow seeds in hot-beds for the earliest crop—the first of March for this climate. Mr. J. Harris recommends the true Early Jersey Wakefield, Henderson's Early Summer and Newark Early Flat Dutch; the first for earliest, the others for second early...

HAVE you any Moss Roses in your garden? They are quite hardy, and if there is a more delicately beautiful object than a Moss Rose bud just before the petals unfold, we don't know what it is.....

OUR friends should know that the so-called Monthly or Everblooming Roses are the only roses which bloom at intervals from June till frost. But they are not hardy without protection when the thermometer goes to zero, and sometimes perish even with the carefullest protection.....

IF hardy roses are desired, we must select from the so-called Hybrid Remontant (or Perpetuals), Mosses or Climbers. These, however, bloom but once or twice (June and Fall).....

IF we can rely upon what the new catalogues say, the Cory Sweet Corn is the earliest in cultivation. It resembles the Marblehead, but the ears are said to be somewhat larger..

THE Industry Gooseberry, though a foreign variety, promises well. We hope to be able to make a report as to its behavior next season. If it should not mildew, it would be well to raise seedlings from it.....

TRY the Arlington Celery. Try the hardy variegated grass Eulalia Japonica Zebrina. Try Silver-Hull Buckwheat, the Industry Gooseberry, the Frederick Clapp Pear, the Eaton Grape, the American Banner Oats, the All-seasons Cabbage, the Oak-leaved Lettuce, the Tomhannock Lettuce, King of the Garden Lima Bean. Send for the catalogues announced in our advertising columns.....

THE Massachusetts Horticultural Society deems the Jefferson, McLaughlin and Washington Plums the best. The new Belmont Strawberry was alluded to as most productive and, in quality, from fair to good. The Jewell was thought to be better in quality than the Belmont; while in size it compares favorably with the Sharpless, the form is better and it is a good bearer.....

PRES. WILDER recommends the Washington Strawberry Apple as next in value to the Gravenstein. The Prince of Berries is considered as high-flavored as any berry, while the Parry and Henderson are promising.....

THE American Dairyman thinks the Holland men lost caste by taking their cattle to the Fat Stock Show. The cattle received only second prizes though there were no competitors. Prize beef cows should have little offal and much meat. Prize dairy cows must have large offal. The two characteristics can hardly be combined.....

IN filling the ice-house go to a clean pond. Don't take frozen water that contains the germs of disease, sent into it by the drainage of stables or graveyards. We have seen both used. It is by no means proved that water is purified by freezing. Dr. Edson states, in the Analyst, that typhoid fever germs can retain their vitality at a temperature of 20 degrees below zero. The taking of a disease through a glass of ice water is by no means impossible. Avoid all stagnant pools either as solids or liquids.....

MANY people appear to think that air can not pass through ordinary wood and stone. This is a mistake. We have seen air blown from the lungs through wood, brick, stone and leather so strongly as to cause a flame to flicker. Rubber is almost the only substance, from which wearing apparel is ordinarily made that is entirely impervious to air. A man incased in an under-suit of rubber for any length of time would suffer seriously. Air and damp readily penetrate ordinary building materials. Stone allows from four to six cubic feet of air to pass hourly through every square foot of surface, while brick permits eight feet to pass through. A freshly made brick takes up from eight to 30 per cent. of its weight of water; and a good-sized house will often contain in the bricks of the foundation walls about 1,000 gallons.....

THE dairy cattle men are calling for a statement showing the cost of food used in fattening a steer for the Fat Stock Show. Good—let us see if a pound of this tallow costs as much as a pound of "test" butter.....

IN some parts of England the farmers and butchers are fighting each other. Last Autumn when fat stock of all kinds were plenty, and butchers had their pick, they combined to keep down the prices of live stock while the price of dressed meats remained the same. Then the farmers began to slaughter at home, selling the meat cheaper than the butchers did. Now the butchers refuse to buy of such farmers. It seems probable that in many places, farmers will combine and do their own slaughtering.....

THE Kansas Ag'l College recently lost a valued friend. The Short-horn cow Grace Young 5th died at the age of 15 years. She was bought 12 years ago for $1,080. Six of her offspring have been sold for $1,295. The college now owns a small herd of her descendents, worth several thousand dollars.....

IT seems likely that the word "yard" will be left out of the "farm manure" of the future. There is no reason why home fertilizer should be thrown into an open space to have the goodness washed out of it. It is well worth a shed.

MR. GUILFORD DUDLEY, of Kansas, fed 87 steers on an average grain ration of 18½ pounds bran and 11½ pounds shelled corn. They were fed in open lots, and made an average gain of 88 pounds in 30 days. One steer, very gentle, made a gain of 140 pounds in 30 days. The Live Stock Indicator rightly says that the nearer a fattening animal comes to being a pet, the greater the profit in feeding him.....

AT a recent English Agricultural dinner, the growing of tobacco was advocated as a means of productive labor for English farmers. The Mark Lane Express thinks there is enough of the "weed" now in the tight little island without adding a lot of poor home-grown stuff.....

THE Rev. F. O. Morris proposes the organization of what he calls a "Plumage League," an association of ladies formed for the purpose of discouraging the barbarous and cruel fashion of wearing birds or their plumage as ornaments to dress. We say yes, certain!.....

SPEAKING of ranching in the future, the Live-Stock Indicator says that while the West is locked up in immense pastures, growing up into jungles of cactus, mesquite and other growths of almost indestructible vegetation, there can be no material development of that section. Stock-raising should be placed on the basis that it is in Kentucky, fewer in number but finer in blood. Stock-raising and farming go hand in hand, and one should encourage the other.....

MR. THOMAS MEEHAN, the Philadelphia botanist, concludes that the use of the spines in the cactus is to prevent the full force of the sun on the leaves. Plant lovers set out their treasures in Summer under "arbors" of fish netting or galvanized wire, knowing by experience how the moving shadows of the twine or wire lower the temperature.....

THERE is one thing that farmers do not fully realize, viz., the difference between good and indifferent or poor help. The temptation is to hire any help that comes along, at a low price, and to trust to luck that he turns out a good investment. In nine times out of ten, we are disappointed.....

Everywhere.

RURAL SPECIAL REPORTS.

Canada.

ANDOVER, N. B.—An exceptionally fine Winter, with little snow. Hay a very fine crop and correspondingly high-priced. Oats good. The R. N.-Y. Peas very early and prolific—a decided success. Prince of Wales produced a good crop of five large pods, but not nearly equal to Carter's Stratagem, which are a great acquisition. Flageolet Beans a total failure. Rural corn all too late for this climate. Garden Treasures a complete success.

W. B. H.

EAST MINES, Colchester County.—The Blush Potato has done well with me, and I think it is just the potato the farmers want, as it will grow well with less manure than any other good table potato I know of, and I have tried all sorts in the market. It cannot be beat when grown in Nova Scotia soil as a table potato, and as to yield, I will give what it has done with me. In the Spring of 1883 I received two small potatoes, of which I made five hills. I dug 67 potatoes. From these, in 1884, I dug one barrel and a half, the season being the poorest I ever knew in Nova Scotia. These I planted on poor land with a light manuring in the hills, and dug 104 bushels of good, large potatoes, many weighing from one to one-and-a-half pound, having repeatedly dug hills giving 12 potatoes fit for any market, with no small ones. The Diehl-Mediterranean Wheat and the rye I sowed in the Fall of 1884, and gathered two quarts of good, full wheat, and of rye three quarts. The ground was bare, with hard frost until the first of February. I gave it up as lost, but it came up in the Spring and did well. I have sowed both rye and wheat this Fall, but we have had no snow to lie on the ground as yet. But as it came out all right last Winter, I hope for it this, and if it does it will be the hardiest we have ever had. All kinds of the peas were good. Cleveland's is the earliest. The tomatoes were all good, but King Humbert is the best for all uses. The Flageolet Beans yielded heavily, but are small, and I think will not give any more bushels than other sorts I have. The Johnson Grass did not grow. The corn is too late for this climate. The flower seeds were nice and were really admired by my neighbors.

J. E. F.

MOUNT ROYAL VALE, NOTRE DAME DE GRACE, PROV. OF QUEBEC.—Only two or three of the Marlboro Raspberries lived, and they did not grow a foot last year. My flowers did not do well. Neither did the beans; but I never saw such beauties as the peas. The Prince of Wales Pea did well and was good, but the Carter's Stratagem Pea was splendid.

M. E. S.

Dakota.

BEOTIA, SPINK Co.—I like what the RURAL says about Western lands. We men out here on the frontier may be all rascals, but let us believe our women are still honest and true. I know ten young women in this township who support themselves by hard work and yet have made improvements on their claims. They lived on the land all they could. They appeared on their claims every four weeks, ate and slept there, and then went back to their work. When this land was taken the nearest town was 18 miles away. These girls worked in the town and made the journeys to and from their claims, spending every cent they could spare in improvements. One that I know of walked 15 miles in a blinding snow storm that she might sleep on her claim. Another walked from my house one mile and a half through the dark for the same purpose. It takes grit for a women of 25 to spend a stormy night alone in a shanty, with no neighbor within two miles, yet hundreds of our Dakota girls have done it time and again in the hope of making a home. It seems as if women who work so hard ought to have their rights protected. Now, after all this hard work and exposure, Commissioner Sparks says they shall not have a patent, because they have not lived on their claims constantly. It seems hard to think that the United States Government has got so low that it must turn out these noble women. There is no justice in such a decision. Why make war on these defenceless women, who have worked for homes with a patience and devotion that will put to shame many a man? The honest settlers of the Northwest do not support such acts as this. It costs too much work and heart-breaking to make a home out here, without being obliged to do it all over again, when it is once done. G. H. P.

YORKTOWN, Dickey Co., Jan. 25.—Here in far-off Dakota the RURAL finds a welcome in an humble prairie cabin, 12x12 feet, built of boards, covered with tar paper. We burn twisted hay for fuel, and often live in houses built of sods. The reading of the "RURAL" passes many an hour pleasantly and profitably these cold winter evenings. Mercury 12 to 30 degrees below zero. Dakota is a new field of labor, a new country, a rich, productive soil. Thousands upon thousands of hard-working men, poor in purse, have come hither to seek a home. With energy and perseverance, in the course of a few years their object will be attained. Very many of the settlers had no experience in farming, consequently the crops of Dakota have been wheat in the north and corn in the south, these grains finding a cash market—and *cash* has been the needful thing to keep soul and body together in the settler; but the past year the farming has been more of a mixed character, and with excellent results. Flax was raised to a great extent. Millet yields largely; so does barley; while many have paid attention to the raising of stock. The Blue, Bunch and Buffalo Grasses are eagerly sought after by horses, cattle and sheep. Even when the thermometer indicates below zero, stock prefer feeding at the stack to being in stables. Thus the settlers are gradually working into a general mixed farming. Barley is destined to be a prominent crop in the near future owing to its superior qualities as feed for stock. The home production of this cereal will largely increase the raising of stock.

LENOX.

Illinois.

CHAMPAIGN, Champaign Co.—The RURAL seeds germinated pretty well, and did well except the corn and Sorghum halapense; I never saw any of the latter after I sowed it, and only about one-third of the corn came up, and that only had four or five little flinty ears on it. Wheat was a light crop, but of good quality; very little wheat sown last Fall on account of grasshoppers; it looks tolerable yet. Oats were only a moderate crop; the average was about 30 bushels to the acre; generally of good quality. Corn averaged about 40 bushels to the acre, of good average quality.

W. F. H.

Kansas.

DAMORRIS, Morris Co., Jan. 26.—Diehl-Mediterranean all winter-killed. Stratagem and Prince of Wales Peas good—never saw larger. King Humbert not worth growing. Garden Treasures fine. Saved all the Flageolet Beans for seed. Sorghum halapense has not put in an appearance yet.

D. B.

Maryland.

ST. MICHAEL'S, Talbot Co., Jan. 29.—The Rural Peas did well; the tomatoes were of all kinds. The beans did well; but are not favorites either for snaps or soup. Sorghum halapense came up badly and tardily. The Garden Treasures had the season against them, but some did well. The corn did not suit our soil and climate.

J. C. A.

Michigan.

CLIMAX, Kalamazoo Co.—The Rural tomatoes did well, but I do not consider them equal to the old standard varieties. The Prince of Wales Peas bore an enormous crop, but the quality was not equal to that of other varieties which I raised, such as American Wonder, Little Gem, Abundance, Bliss's Everbearing. The Stratagem vines were nearly all destroyed by moles. The corn was all sorts—some small and early and some large and so late that it did not fully ripen.

F. H.

OLIVET, Eaton Co.—The recent article headed "A Board of Agriculture" surprises me. Is it possible that the great State of New York is so far behind the times? We hear on all sides loud complaints about the low prices for farm products, particularly wheat and wool. We farmers of Michigan are seeking to learn the best way of getting out of our troubles. We hold Farmers' Institutes with grand results. If we cannot get speakers from our Agricultural College, we use our home talent. Each year, in connection with the meeting of our county agricultural society, we devote a day and evening to this work. Last week our Opera House was filled to listen to such a discussion of farm topics. Many able papers were presented by our best farmers and their wives. One farmer's wife presented an experience in butter making, which, if followed, would brush away all fear of competition from bogus butter. As necessary in profitable stock-feeding, the following points were brought out: Warm stables, exact times of feeding, quiet and gentleness, daily grooming, no strangers in stables, and variety in food. In crop growing it was conceded that there must be a rotation, constant and free use of clover, all the barnyard manure possible to make, and no more land than could be thoroughly worked. These rules will drive the slip-shod farmer out of existence. Our farmers are becoming more and more interested in these Institutes. They teach the principles, and the fairs show the results. The farmer must study his business. In no place can he do it to such good advantage as in these meetings.

L. S.

[We cannot commend too highly the ideas advanced by our correspondent. It is a shame that the great Empire State is not as progressive in this direction as are the States to which she has sent so many of her sons.—EDS.].

Ohio.

COE RIDGE, Cuyahoga Co.—Horsford's M. G. Pea we liked very well. The Rural New-Yorker Pea is very early and prolific. The tomatoes were very fine, one especially, which appeared like Mayflower. The corn (of 1885) did not ripen (all corn was very poor here this season); but few of the Stratagem Peas came up; I saved enough for seed, so I will be able to test them another year. Prince of Wales Pea was good. But a few plants of Sorghum halapense came up. I did not find any tomatoes that I knew were Bicolors. King Humbert did not ripen well; we did not like it. A small plum-shaped tomato was excellent and very prolific. The Flageolet Beans blighted; it was too wet here for them this season. The Garden Treasures were given to a neighbor and appreciated. There is on this place a cherry tree which is 60 or 61 years old. The seed or young tree was brought here from Connecticut and planted by my grandfather. The circumference is nine feet, five feet above the ground, and below the branches. The spread of the branches is 45 feet. The fruit appears identical with Downer's Late, and until a few years was borne abundantly. The tree is nearly dead now.

A. M. C.

Oregon.

TANGENT, Linn Co.—We are having the finest Winter we ever did see here. Fall wheat made a fine growth. The Rural seeds gave good satisfaction, except the Johnson Grass, which did not germinate at all.

A. L. B.

What You Can Get

By sending One New Subscription.

List 1.—Any PRESENT subscribers who will send us ONE NEW one, may select any one of the following: 12 plants of the Marlboro Raspberry, or 12 plants of the Ranocas Raspberry, or six plants of Golden Queen Raspberry, or eight plants of the Jewell Strawberry, or three plants of the Earhart Everbearing Black-cap Raspberry, or one Poughkeepsie Red, or one Ulster Prolific Grape Vine, or a combination Saw Set, or a beautiful Silver-Plated Butter Knife, or either "Needle Work" or "Knitting and Crochet," by Jennie June, or any book of the "One Syllable Series." See REGULAR Premium List.

FOR TWO NEW SUBSCRIBERS.

Any one sending two New subscribers, may select any three of the plants for one subscriber, or a Niagara Grape Vine, or a Louderback's Combination Tool, or a Needle Hay Knife, or a Pearl Rug Maker, or a Dust-pan, or a Pair of Shears, or a Knife, or a Shot Flask, or a Watch Charm, or a Harmonica, or a Premium Drill, or "Stop Thief" Scale, or any one of the following books: American Political Ideas, Uncle Tom's Cabin, Fruit Culture, Talks Afield, How to Paint, Low Cost Houses, Comforting Thoughts, Highways of Literature, Boy's Useful Pastimes, What Girls can Do; Simple Ailments of Horses.

THE FARMER'S CLUB

ANSWERS TO CORRESPONDENTS.

[Every query must be accompanied by the name and address of the writer to insure attention. Before asking a question, please see if it is not answered in our advertising columns. Ask only a few questions at one time.]

FRUITS IN EASTERN MASS.

J. E. G., Cambridge, Mass.—1. How should a Duchess dwarf pear tree be treated which blossoms very profusely every year, but never sets and holds fruit? 2. Is there any perfect-blossomed strawberry as large, vigorous, productive and evenly-ripening as the Manchester, to be used as a fertilizer with it? (Sharpless is unproductive with me; Miner does not ripen evenly all over like the Manchester; Cumberland is not productive enough; Downing is a failure; Bidwell is an uneven ripener). Would the Parry fill the bill? 3. Would the following stand the Winters of Eastern Massachusetts? Downing's Mulberry, Pecan Hickory, Præparturien's Dwarf Walnut, Spanish and Japan Chestnut. If the Downing's Mulberry would not, what sort would? (Black English?) What magnolia and what catalpa will stand the climate?

ANS.—1. Such an unusual occurence as a Duchess pear or quince blooming well, yet failing constantly to set any fruit, would lead one to suspect that a wrong bud was set of a sort with imperfect flowers, or possibly bud variation from a genuine bud. It may, perhaps, be due to over-nutrition. Any answer must be but a guess. 2. There is no perfect-blossomed strawberry as large, productive or as evenly ripening as the Manchester. The varieties named not being satisf :tory, we would recommend a trial of the Par y, which is a fine berry, although not as pro. uctive or evenly ripening as the Manchest. . 3. Downing's Mulberry and Juglan's præparturiens will not be winter-killed in Eastern Mass. Pecan hickory would suffer and probably fail to produce fruit, and the same might be true of Spanish Chestnut. Japan Chestnut has not been tested long enough. Both catalpas stand in Boston gardens, but C. speciosa is the hardier. Magnolia glauca is a native of E. Mass., and Gray says M. cordata is hardy at Cambridge. Probably M. acuminata also. Any nurseryman about Boston can answer these questions. Why not ask Mr. Hovey?

WOLF TEETH IN HORSE.

F. S., Washington, Pa.—1. My four-year-old horse had a "wolf tooth" in his upper jaw. It was knocked out more than a week ago; but the eye is still very weak and discharges water; what can be done for him? 2. For more than a year he has had a swelling about half way between the knee-joint and pastern of a hind leg, due, it is thought, to a kick more than a year ago. Sometimes it disappears, but reappears again, especially when he has been standing in the stable; what should be the treatment? 3. Are sweet pumpkins, fed raw, good for milch cows? 4. What is a good fodder cutter?

ANS.—1. The horse at this age is cutting the last of his permanent set of teeth, and the back upper molars, which appear at about this age, are in close proximity to the eyes. The irritation consequent upon the eruption of 12 or 16 teeth is considerable, and is frequently communicated by sympathy to the eyes. After the complete eruption of the teeth, the eyes usually recover without treatment. In severe cases a laxative (four or five drams of Barbadoes aloes), with warm fomentations to the eyes and exclusion of the light, is usually all that is necessary. The knocking out of the "wolf-tooth" was a mistake and an unnecessary cruelty to the animal. It would be just as sensible to knock out any other tooth as this one, which, of all others, could in no way produce any effect upon the eyes. It will be well, however, to carefully examine the eyes to see that they have received no external injury, or that there is no foreign body present to produce the irritation. If due to these causes, one eye only would probably be affected. 2. It ought to be removable. Try painting with tincture of iodine. 3. The pumpkins are excellent fed in moderate quantities and supplemented with dry or concentrated fodder. But if fed in too large quantities, they are positively injurious. If fed otherwise than broken up in an open field, the seeds should be removed. 4. A good fodder cutter is the "Sherman," made by the Higganum M'f'g. Corporation, Higganum, Conn. Another is Dick's Stalk Cutter, for sale by H. B. Griffing, Cortlandt St., New York.

BRAN AS FEED; ETC.

Wm. A. S., Tyre, N. Y.—1. There is a good deal of talk in the papers lately about cutting hay; will it pay, and if so, what machine will cut as short as three-sixteenths of an inch, and how much power will it take to run one? 2. Mr. Stewart gives the feeding value of bran as 33 per cent. more than that of clover hay; Mr. Allen gives it as five per cent. less; which is right? 3. Is roller-process bran of as much value as the stone-ground? 4. Has Allen's American Cattle been revised since 1868? 5. What are t e best books on cattle management and feeding?

ANS.—1. We do not believe it will pay. We have tried it and have abandoned it; any first-class cutter can be set to cut so short; but there is no advantage in cutting shorter than three-eighths or one-half inch. 2. Dr. Wolff's tables give the comparative prices as 70 cents for clover hay and $1.01 for bran. Assuming the prices used in the German tables for the nutritive elements as being as fair for one as for the other, it fixes the comparative prices per ton as $18.40 for clover hay and $24.84 for bran; or, dividing each by two, the comparative values are $9.20 for clover and $12.42 for bran, which is, no doubt, nearly correct. 3. It is of more value as appears by Dr. Jenkin's tables and by all other analyses. 4. Yes, there is a new and revised edition. 5. Stewart's Feeding Animals and Armsby's Manual of Cattle Feeding are the latest and best. The former can be obtained from Prof. E. W. Stewart, Lake View, Erie Co., N. Y.; price $2; the latter from John Wiley & Sons, 15 Astor Place, New York. Price $2.50.

PREPARING BONES FOR A FERTILIZER.

J. C. C., Somerset, Ky.—1. Will any of the Wilson lower-priced bone mills grind bones fine enough for fertilizing purposes? 2. Will it pay to buy dry bones at 40 cents per 100 pounds for fertilizing? 3. How can they be best prepared where hard-wood ashes are not to be had?

ANS.—1. They will grind fine enough, but they grind slowly—too slowly for use in grinding for this purpose. 2. Forty cents per 100 pounds is $8 per ton, and it will certainly pay at that price whenever the land needs phosphatic manure, which is probably the case in Kentucky. 3. Break the bones as fine as possible with an old ax, or, better, with a sledge. Make a heap of fresh stable manure from 10 to 20 feet square and a foot deep, leveling down and treading moderately. On this spread four inches of the broken bones, then another layer of manure and more bones, having a layer of manure on the top. It will be better if the sides are protected by boards or a layer of sods, so as to confine the heat. Keep the pile nicely wet, but not so damp as to drain, and all the better if wet with chamber and house slops. In three months it should be forked over, when the bones will be found mostly decayed, so much so as to crumble to dust. The larger and unrotted bones can be put into another pile.

MANURE QUERIES.

A. J. M., Auburn, N. Y.—1. Aside from feeding to cattle, what is the best way to reduce straw to a condition to be used on clay land as a manure? 2. Would mixing gas lime with half-rotted straw help to reduce the straw to manure? 3. Would a mixture of salt, plaster and lime be beneficial to all crops?

ANS.—1. There is no way by which the manurial value of the straw can be increased. If it be thrown down into the barn-yard and trodden under the feet of the cattle, it will only be wet straw. If we wished to use it on such land, we would draw and spread it as convenient, and plow it in next Spring. 2. No. It would rather have a tendency to preserve it. 3. No. Everything would depend upon the soil and the crop to which it is to be applied. To some crops one might be beneficial, and another of the three injurious. A trial of each and the mixture would be the only positive way to learn.

Miscellaneous.

A. F. H., Dansville, N. Y.—How can I cleanse a kerosene barrel so as to fit it for cider?

ANS.—Scald it out with hot water several times over, and then submerge it in a stream or pond with the bung out and also the spigot in the end open. The oil will all come out of the staves and float on top of the water. Running water is the best.

W. C., Carthage, Mo.—Where can I get the Jewell Strawberry by the hundred, and at what price?

ANS.—Of the originator, P. M. Augur & Sons, Middlefield, Conn. We don't know the price.

J. B., Marlboro, N. Y.—All important information about telephone matters should be sent to Secretary Lamar, of the Department of the Interior, Washington, D. C.

H. C. B., Porteau, Ark.—Yes, indeed; W. H. Moore, Subscription Agent, Brockport, N. Y., is quite reliable.

T. R. M., Middletown, Va.—You can get all from J. M. Thorburn & Co., 15 John Street, New York.

DISCUSSION.

R., OMAHA, Neb.—In a late RURAL James Sinclair, in an article on shoeing horses, says we are without evidence of the successful use of unshod horses. Here in Nebraska the shoeing of farm horses is exceptional, the majority of farmers never shoeing their horses, and we find that those which have never been shod have the best feet, while horses that were formerly shod are not as sure-footed, and the feet often need trimming or doctoring.

On the same page Professor Sanborn advises the young man without capital to change his system of farming, and to feed cattle and hogs in a costly barn. Does he think we can afford to mortgage our farms, at 10 per cent. to buy the cattle and hogs? If we tried this but few of us could raise money enough on our farms to buy half the required number, and then it would be necessary to borrow money on our cattle at two per cent. per month, and renew our notes every 90 days, for the building. If the Professor would come out here with the young men of Kansas or Nebraska, and try farming without capital, he would find it necessary to feed cattle in a sod stable and use straw roofs.

R. N.-Y.—Our friend does not quite comprehend the argument of Prof. Sanborn. As we understand it, the Professor would advise every farmer of the West to procure stock for feeding purposes, wherever he can do so, in order that the corn and other crops may be fed at home and only the resulting meat be sold. Whenever this can be done, even at a moderate profit, then the manure can be saved and returned to the farm to grow other crops. Moreover, by thus concentrating corn and other bulky food stuffs into beef and pork, the cost of transportation to distant markets is greatly reduced, an item the importance of which railroad greed never permits the farmers to forget. Further, the Professor would not, by any means, object to the sod barn with a straw roof. His point is that warm barns and houses for all stock save food, no matter how the barn be made, whether of straw, sods, stones or boards and paper, so long as it is warm, dry and well ventilated. We have seen sod stables and sheep houses in Nebraska as warm and comfortable as is our new barn on the Western N. Y. Farm, and no doubt such would produce just as good results. We have also seen those made of poles placed in two tiers, the space between which was filled with straw, that were a hundred times preferable to the exposure of the stock to fierce winter winds. The straw piles the fires of whose burning so often reddens the evening sky in the Prairie States, if used to house and shelter the stock, would add many thousands of dollars to the income of the stock feeders.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING SATURDAY, February 6, 1886.

C. C. L.—C. G. R.—F. W. S.—G. J. S.—P. G. S.—E. C. W.—I. M. S.—F. M. S.—A. Q., thanks for the relics.—H. H. B.—J. R. A.—W. B. T.—N. B. M.—J. G. W.—K. & B.—T. A. C.—J. H.—W. C. D.—F. J. A.—J. M.—D. R. H.—H. H. W.—O. S. C.—P. D. K. & Co.—J. A. R.—W. L. A.—Mrs. S. E. S.—M. A. B.—E. A. G.—W. G.—W. A. M.—R. O. C.—D. L. R.—J. P. S.—J. I.—J. S. McA.—S. S. D.—J. & J.—J. R. T'—R. T. R.—L. W. P., thanks.—T. D. E'—G. B. L.—C. T. F.—E. G. S.—G. M. P.—J. H., thanks.—A. H. R.—A. A.—E. C. W., will answer as soon as we can find space.—G. B. B.—A. J. C.—D. B.—J. T. T.—C. D. L.—F. A. D.—P. B. M.—H. B.—G. W. T., fruit received, thanks. R.—I. V. G.—J. M. A.—W. W. H.—J. C.—F. O. C.—M. C. S. S.—M. M. W.—E. L. M.—W. S.—H. B. M.—J. L. B.—C. W. K.—J. R. H.—F. C. McC.—F. S. N.—G. R., thanks.—H. H. H. & S.—W. C. G.—F. A. B.—W. D. S.—F. G.—E. W. B.—F. L. K.—P. B. M.—N. W. L.—E. S. L.—J. W. P.—J. W. S.—D. R. H.—A. A. M.—H. M. F. H. W. K.—C. E. R. O. C.—G. S. A.—J. Q. D.—G. A. R.—E. R. G.,

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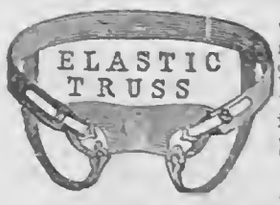

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THE
RURAL NEW-YORKER.
A National Journal for Country and Suburban Homes.

Conducted by
E. S. CARMAN, Editor.
J. S. WOODWARD, Associate.

Address
THE RURAL NEW-YORKER,
No. 34 Park Row, New York.

SATURDAY, FEBRUARY 13, 1886.

Subscribers of the RURAL *need never take the trouble to write us to "stop" the paper. It is invariably discontinued at the expiration of the subscription term, except by oversight, in which case it is our loss.*

WE are now preparing our next Potato Special.

THE Seed Distribution has been mailed to all who applied for it prior to January 10th.

WE have twice as many articles already as will suffice to fill our second POTATO SPECIAL to be issued in a few weeks.

IF the number on your address label is 1881, your subscription expires with this number; if 1882, next week; 1883, in two weeks, etc.

ONE of the RURAL's best friends writes: "I am sorry to see you lending your influence against Land Commissioner Sparks. The best information I can get is to the effect that he is doing an admirable public service."

PROF. BURRILL, after much experimenting and trial, now says most emphatically that the fruit, popularly so called, is not in the least affected by the kind of pollen used in the fertilization of the ovules. That this conclusion is essentially correct, we have little doubt.

THE RURAL does not wish to say too much in regard to the $3,300 offered in presents to subscribers who send us clubs. We think, however, that our friends will not be deceived if we assure them that they may be surprised at the value of the presents which even small clubs may secure.

"A TEXAS cow-boy's wife," writing from a cattle ranch, says the RURAL only makes her homesick. It comes into that dry and treeless region only to make her think of what the world outside is like. Yes, and so would her mother's picture make her homesick, and yet she would be happier for having it.

LET us say to all that the RURAL of November 14th, 1885, gives a full illustrated description of our Free Seed Distribution, together with a full list of the $3,300 worth of presents to be sent to subscribers (and to them only) who secure clubs for the RURAL NEW-YORKER. This Number is sent to all who apply for specimens.

ONE of the most successful potato growers in New York State says that he never thinks of marketing his crop without first examining the "Everywhere" reports in the RURAL. He can generally tell pretty clearly from these reports how large a crop has been raised, and how the probable supply will affect the price. Reports of this nature have come to be a valuable department of all the successful agricultural papers. Farmers begin to appreciate this method of comparing notes, particularly when the experience of a number of years has convinced them that the reports are not a series of opinions but a list of facts.

THE Japan Chestnut—we propose to talk about it; to keep it before the eyes of our readers, so to say. It is one of those good plants that crop out now and then among the "Novelties" which though ninety-nine prove worthless, the one-hundreth repays for all one's trouble. So far as we can judge, it will take a high rank as an ornamental tree, as it inclines toward a short-jointed, bushy habit. It bears very early, sometimes in three or four years even from the seed. The nuts are nearly twice the size of our American chestnuts, and the quality nearly as good. Of course seedlings will vary in every way. Next week we shall have more to say of the Japan Chestnut.

THE wandering subscriber generally becomes about as unsettled as the man who is continually moving. When a man takes one paper this year, another the next, and so on, he loses one of the best features of newspaper companionship. Every good paper draws a regular family about it, and the members come to know each other better and better as time goes on. Men betray their characters in their writings, and as we study their thoughts from year to year, we become so well acquainted with them, that, should we meet them, we would hardly need an introduction. This companionship is not gained in a single year. It is something that the wandering subscriber never knows, and yet it is, oftentimes, the best return one can get for the subscription price.

A FEW years ago what a sensation was caused by glowing accounts of the success of bonanza farming in the Northwest! The magazines and newspapers fairly reveled in pictorial and verbal descriptions of illimitable wheat fields, steam and gang plows in platoons, reaping machines in squadrons, and working-men in divisions! Who ever hears of bonanza farming now? Fortunately for the country it has been found that big farms do not pay. Nearly every experiment has resulted in the collapse of wealthy capitalists and corporations. The few big farms cannot compete with the many small ones carefully and economically tilled by their frugal owners. A fortunate discovery this, not only for the West but for the entire country, for the prosperity of the Nation depends largely on the success of a multitude of small farms personally managed by their owners. The soil for the tillers thereof!

NOTICE TO SUBSCRIBERS.

IT is our duty as well as our pleasure to inform our subscribers, who are kindly interesting themselves in increasing the RURAL's circulation, that the list of $3,300 worth of presents is being almost entirely set aside in favor of our regular premium-list, which offers certain articles for specified numbers of subscribers. The reason, in so far as we can find one, is that all seem to take for granted that *others will be entitled to them.* The fact at this time is simply that we offer twice as many presents in this gift list as there are competitors for them, and that even the most valuable will be awarded for merely nominal clubs.

THE Galloway breeders of Michigan recently effected an organization. As an evidence of the fact that they believe in the superiority of the breed of cattle they represent, it may be noted that they decided to confer with Prof. Samuel Johnson, of the Michigan Agricultural College, in regard to the experimental feeding of different breeds of cattle on the college farm. If arrangements can be made, the Galloway men will furnish two of the best specimens of their favorite breed to be fed under the direction of the college authorities. We hope the other cattle associations of the State will make similar provisions for furnishing cattle, and that the arrangements can be completed for feeding at the college. Many farmers at present complain that feeding experiments cost too much. The college authorities are frequently accused of selecting good specimens of one breed and poor ones of another, and thus insuring a victory for their favorites. Where the various breeders pick out the best specimens they can find and send them, free of charge, to a disinterested party, the test will be as nearly satisfactory as we are likely to get.

AT a representative meeting of the Associated Chambers of Agriculture of England, held in London last Tuesday, speeches were made strongly favoring protective duties on foreign grain, sugar and manufactures. A Royal Commission is now investigating the depression in trade prevalent in all parts of the United Kingdom, and it is expected that this body's report will favor a protective or "fair trade" tariff in "Free Trade" England. The English farmers will wait for the issue of the report before starting an agitation for protective duties on foreign agricultural products. In this they are likely to be backed up by a large body of manufacturers who favor an agitation in behalf of "Fair Trade," another name for retaliatory import duties on goods from those countries which tax imports of British products. "Protection" and "Fair Trade," had considerable influence in the last English elections; and are likely to have more in the next; but Free Trade is very likely to sway the masses at least in our day. English farmers are, of course, quite justified in agitating for "protection" of their own industries; but the comparatively small body of English farmers are not likely to have more influence on national legislation in England than is exercised by the immense body of American farmers in this country. The farmers' day is coming, however—at any rate let's hope so.

SO flagrant have been the abuses in illegally grabbing the public lands, especially under the Pre-emption and Timber Culture Laws, and so thoroughly permeated with fraud and knavery have been a large proportion of the officials connected with the administration of these laws, that both the present Congress and the last dispaired of being able to devise any effective remedy for the evils short of the entire repeal of the Pre-emption and Timber Culture laws, and a radical amendment of the Homestead Law. A bill reported by the Public Lands Committee of the Senate provides for this extreme form of reformation; but allows all valid claims heretofore initiated under these laws to be perfected. Entries hitherto made under the Pre-emption Laws, which have been proved up, paid for and sold to innocent purchasers, are confirmed upon proof of sale, despite any irregularity or taint of fraud on the part of the original entrymen. This is only fair. Why should the innocent be made to suffer for the guilty? The lot of the honest poor pioneer settler is at the best hard at the outset, why should the Government add to his troubles and hardships? The area of public land suitable for agricultural settlement is, however, decreasing so rapidly that the most stringent measures should be adopted and enforced to preserve what still remains for *bona-fide* homesteaders.

THE ITHACA FARMERS' INSTITUTE.

WE are very desirous of having a representative farmers' meeting at the Farmers' Institute, at Cornell University. We therefore again call special attention to the meeting to be held at Ithaca, on Tuesday, Wednesday and Thursday, February 16, 17 and 18 inst. Prof. Roberts informs us that 15 or more short papers are promised from very able persons on subjects relating to farmers and farming; after each of which the subject presented will be open for discussion by the audience. The day meetings will be held in the University buildings. On Tuesday and Wednesday evenings addresses will be delivered in some large down-town hall by President Adams and Mr. W. Powell "On the Influence of Climate, Soil, etc., upon the Breeding of the Animal Species." Railroads, so far as at present heard from, have promised reduced rates on return tickets to delegates. The headquarters will be in the Faculty Room in Morrill Hall. We hope that every farmer who can do so will make it a point to be present and take part in this meeting. We want it to be shown that New-York farmers are awake to what concerns them, and earnest to obtain the knowledge necessary to do better farming.

WE ARE NOT OPPOSED.

FROM numerous letters received since the appearance, several weeks ago, of our editorial regarding the rulings of Land Commissioner Sparks, regarding claims under the Homestead Law, it seems we have been somewhat misunderstood. We only intended to take issue with the Commissioner in so far as his orders worked injustice to honest people who had acquired homesteads in accordance with the then interpreted meaning of the law, and that we were right is proven by the fact that he has since modified his orders in accordance with our views. We fully believe that the intention of the law was to give the public land to actual settlers, that every 160 acres might be occupied and improved, and that thus the Government's unoccupied wilderness should be changed into towns and agricultural communities teeming with an industrious, busy people. We believe it not only the right but the duty of the Commissioner to make such rules as shall most effectually secure this very desirable end. We have no doubt that it would be within his powers to compel every person desiring to secure a home under the Act, to at least reside on and improve the land during the Summer months of each year, and this very likely would be for the best interests of the homesteaders themselves. But there were and are thousands of poor, honest people, men and women, who have complied with the law as interpreted by former Commissioners, and who we believe are equitably entitled to their homesteads, and we are glad to see the modification in this respect of Commissioner Sparks's orders.

That the laws have been very loosely construed we are certain. That gross fraud and dishonesty have in too many districts and instances enabled capitalists and corporations to gobble up thousands of acres of the best lands we have no doubt. That many a shanty has been worn out in being moved from claim to claim and occupied alternately by different persons in "living upon their claims" a night or two a month is a common talk at the Far West. That thousands and thousands of acres have been homesteaded only for the purpose of being sold to some speculator, and in securing which the law was never honestly complied with, is proven beyond a doubt by the extended tracts now pretended to be owned by some land-grabber on which there has never been a furrow turned or a stake driven, and on which a shanty did not remain two consecutive months at any one time.

We are glad the Commissioner is investigating these cases. We hope he will persevere in the good work and recover for the Government, for the use of actual settlers, all these rich acres so unjustly obtained.

This is but justice to the isolated "steaders" who are now compelled to live miles away from neighbors because of the holding of these lands all about them, and whose improvements help to increase the value of these grabbers' claims, on which nothing has, or will be done in the way of improvement so long as held by these non-resident sharpers. Let the good work go on. The RURAL has no wish to place any obstacle in its way.

BREVITIES.

QUEEN of the Fall, the Chrysanthemum.

THE good word now, good friends of the RURAL NEW-YORKER.

ONE of our friends, after writing us as to potatoes, signs himself "Your Beauty of Hebron, Fred Grundy."

OUR friends who followed the RURAL'S advice, given last Fall, to save their potatoes for better prices, have not had occasion to regret it.

THERE are probably as many as from 400 to 500 different varieties of Chrysanthemums that have been displayed at the various shows of the past season.

WE have yet to report upon the following new varieties of tomatoes, viz.: Alpha, Optimus, Challenge, Belle, Exquisite, Tom Thumb, Eclipse, Hovey, Carter's Acme and Early Market.

THIS week we are mailing the RURAL'S Free Seed Distribution to subscribers in England, France, Germany, Austria, Italy, Hungary, India, Australia, New Zealand, Africa and Sandwich Islands.

THE chief mission of fools seems to be to play into the hands of knaves. If the world were not so full of nincompoops, how could the Florida land swindlers and similar rascals "lay their lines in such pleasant places?"

MR. ROBERTS, who sent us the drawings for the device for salting butter, shown on page 54 of the RURAL, says our engraving is correct in every respect, except that the "bag of nails" or weight, used to balance the rack and butter bowl, is attached to the extreme end of the long arm of the steelyard instead of at A, as there stated. Any of our readers who think of making such an appliance should make a note of this.

THE wealth of a country is not its banks and bonds and hoarded money. It is the good sense and muscle of its workers and the brains of its thinkers. There may be hidden away, in its mountains and rocks, stores of metal and coal that, if put in machinery and used to run it, would accomplish the labor of millions; there may be in the farmers' fields fertility for the production of food for the world; but without the brain and muscle to do the mining and to work the soil and to put the products into usable shape, they are of no advantage. We see then how important it is that the Nation should foster and care for the laborer and thinker and should see that the money bags do not get more than their share of the profits.

WHAT are beans? The wisdom of the United States Circuit Court in this State has lately been taxed to decide this knotty question. In 1884 a decision of the court placed beans in the category of "garden seeds," on which there is an import duty of 20 per cent. Later on, they were placed among "vegetables," on which the duty is only 10 per cent. Last week it was decided that they must be admitted free of duty under the classification of "beans—drugs not edible in a crude state." If this decision is upheld, it will be of considerable importance to the bean-raising industry here and in Canada, and will take a fair sum from the National Treasury in the shape of repayment of improperly levied import duties.

Indust'l Societies.

WESTERN NEW YORK HORTICULTURAL SOCIETY.

(RURAL SPECIAL REPORT.)

(*Concluded.*)

Ammonia arresters; new fruits;—berries; grapes; quinces;—remedies for blight; insecticides; last season's fruit crops; repaying our orchards; best fertilizers for orchards; reform needed in vegetable names; best dozen hybrid perpetual roses; fine displays of fruit, etc.

MR. SMITH, of Syracuse, said he always used salt for scattering in and over manure when putting it into compost heaps, and he also thought it valuable about pear and quince trees. Mr. Root thought salt had great power to absorb both moisture and ammonia. Dr. Caldwell said the only good salt can do a manure heap is by its absorption of moisture; salt has no affinity for ammonia or nitrogen. Water or damp earth would be a much better addition to the manure, and gypsum would be much better than either, as that would really absorb and fix the ammonia.

In discussing new fruits, the Marlboro was highly commended. Hansel had proved disappointing to nearly every one. Rancocas so far as tried, was well spoken of. Shaffer is gradually working its way into favor. Dr. Van Duzen, of Wayne County, said it was the finest berry for drying of all he knew: 4¼ quarts made a pound and the dried fruit, even in these low-priced times, readily sold for 30 cents per pound. Mr. A. J. Caywood, of Marlboro, N. Y., had a new white raspberry, which he would send, free of cost, to all who wished to test it. The Jewell Strawberry had in every trial proven very satisfactory. Parry pleased many by its good quality, but was reported deficient in foliage. The old Wilson still has many friends in Western New York.

Among grapes, Worden and Moore's Early were in good favor. Niagara is rapidly gaining favor in New York. What was said of it more than substantiated the opinion heretofore given by the RURAL. Jessica, Poughkeepsie Red, Ulster Prolific and Empire State were all mentioned favorably, but no one present, except the introducers, had fruited either.

The Apple Quince was recommended for general culture in Western New York, but when asked just what the Apple Quince was, no one could describe it. There is great confusion in quinces, and people cannot be too careful in buying so-called new sorts. Mr. Ellwanger considered Rhea's Mammoth the best of all quinces—Champion was pronounced too late.

Prof. Arthur, of the Experiment Station, in discussing remedies for pear blight, said the application to the soil, to the bark of the tree, to the limbs or foliage, of sulphur, salt, lime, etc., could have no effect upon the disease. He recommended the selection of healthy varieties, good cultivation, proper manuring, etc. The best remedy now known is to cut from the trees promptly, on the first appearance of the blight, every limb or branch showing its presence, cutting at least a foot below any sign of it, and the immediate burning of the parts cut off.

In a discussion on insecticides the evidence was so strong that no one can doubt the efficacy of Paris-green and London-purple in destroying canker-worms and also codling moths, as well as curculios.

In the reports from County Committees as to the extent of the fruit crops and condition of the orchards, there was uniformly an abundant crop of pears, and consequently low prices. Apples were very abundant in the extreme Northwestern Counties, and quite so in many others as far east as Central New York. Niagara is the banner apple county of the State, and probably of the world, when compared with an equal number of acres anywhere else. The reported yield was 700,000 barrels of shipping apples, 250,000 of evaporating, and 150,000 of canning apples, and no body pretended to keep any record of how many went to the cider mills. One mill alone took as many as 6,000 bushels in a single day. The last was the largest crop ever grown in the county, and probably in any like area in any country. The buds of the peach trees were reported killed at Geneva, Waterloo and other places in central New York.

Mr. Powell thought our fruit growers should bestow better care on their orchards, and could see no reason why we could not profitably raise fruit at present prices, when Californians can raise it on land costing twice as much per acre, ship it thousands of miles, paying heavy freights, and sell it at a profit in competition with ours.

Mr. Woodward, in answer to the question, "What should we do to pay our orchards for the last fine crop of fruit?" said, first, we should realize how badly we had been robbing them, not only by the annual large crops of fruit which have been all taken away; but also by cropping them with grain. All that has been given back has been a little wet straw, trampled perchance by the stock, which we in our foolishness have called manure. We should realize the extent to which we have exhausted the land, and then study how we can restore it to its original fertility. The best of all manures for an orchard is barn-yard manure made by the consumption of rich feeding stuffs, thousands of tons of which we are now annually exporting. There is no doubt but this can be made on every farm of Western New York at a good profit, if the farmer only has the requisite knowledge. He did not believe it would pay to buy the ordinary manure of the cities for application to our orchards.

He said the orchards needed potash, phosphoric acid and nitrogen. The potash could be got in wood ashes or in kainit, sulphate and muriate of potash—he thought most cheaply in the latter. Phosphoric acid could be had in South Carolina phosphatic rock, in the apatite of Canada, and in bones. He thought the latter the best, all things considered. Nitrogen can be obtained in blood, tankage, fish scraps, nitrate of soda and sulphate of ammonia. In superphosphate, as sold, we usually get all three of the above elements, but pay an extra price for having them in a more soluble and available form.

Mr. Goff, of the Experiment Station, in a paper on vegetable names, said he often found a single vegetable with eight or ten new names; often a single seedsman offers the same thing under two or more names. We want some authority with power to test and report on varieties, and also to reform names. As bad as were some of the old names of fruits, they were as nothing compared to the names of vegetables. We think there is a crying need for this good work, and the New York Experiment Station is doing much to help it along. We hope the stations will soon speak right out and let us know who is responsible for this jangle and confusion.

Mr. Geo. Ellwanger, in discussing hardy hybrid perpetual roses, named as the best 12 for Western New York, Alfred Colomb, Anna de Diesbach, Baron de Bonstetten, Baroness Rothschild, Eugene Verdier, Fisher Holmes, John Hopper, Marshall P. Wilder, Paul Neyron, Madame Gabrielle Luizet, General Jacqueminot, Francois Michelon and Caroline de Sansal. He recommended to hill the soil up six inches high about each plant, and then to cover the whole with a foot of straw as the best treatment for wintering.

Messrs. Ellwanger & Barry made their usual fine display of fruits, showing 27 varieties of apples and 20 of pears. There were over 100 plates of fruit, among which we noticed a new variety of grapes from the above firm, two new seedling apples from A. M. Smith, St. Catherines, Ontario, Canada; the Mildling Apple shown by R. G. Chase & Co., Geneva; also some Catawba Grapes from A. G. Newton, Parma Center; also a basket from Mr. Sanderson of Crooked Lake, all in splendid order. We also noticed a combination picking and shipping berry crate exhibited by our friend, George Wilkin, Dundee, N. Y., which struck us as being very strong, handy and practical.

"W."

Miscellaneous.

CATALOGUES, ETC., RECEIVED.

JAMES VICK, Rochester, N. Y.—Vick's Floral Guide, 150 pages, full of illustrations, clear print and interesting, plain instructions. A colored plate of gladioli is the best we have seen, and is worthy of a frame. This old, good firm is very chary as to novelties, testing them carefully before offering them for sale. The catalogue commends the Eclipse Beet as to quality, earliness, shape and color. King of the Garden Lima Bean, Vick's Dwarf Cauliflower, Low's Early Cabbage, Arlington Celery, Perry's Sugar Corn, Cory Sweet Corn, all the new melons, several kinds of peas, radishes, turnips, Vick's American Banner Oats (which we shall try), spring wheats, winter wheats and many floral novelties are highly commended. Ten cents is the price of the Guide, which, in case seeds or plants are ordered, may be deducted from the order.

JOHN SAUL, Washington, D. C.—1st. A descriptive catalogue of a selection of roses. Here we have the grand new roses, Wm. Francis Bennett, American Beauty, and Her Majesty, which latter bears the largest flower of any in cultivation, namely, six inches in diameter. The list of all the classes of roses is well selected. 2d. A descriptive catalogue of new, rare and beautiful plants, including new pelargoniums, Pitcher plants, Crotons, Ferns, Alocacias, Yuccas, Palms, Begonias Primroses, Bouvardias, hardy trees and shrubs, Caladiums, Coleus, Fuchsias, Dahlias, Chrysanthemums, Carnations, Azaleas, Cactuses, Bamboos, etc., etc. These catalogues will please many of our readers. Send for them and mention the R. N.-Y.

THE CLEVELAND AXLE MANUFACTURING CO., Cleveland, Ohio.—Circular and price list of the various axles made at the above factory. It contains illustrations of the half patent, the swell taper, Brown pattern axles and also of the celebrated Arrow sand-band axle, and the Kritch improved self-lubricating axle, in perfecting which this firm has spent much time and which has justly a wide and favorable reputation extending even abroad; and so favorably are the goods known in other countries, that the company has already a large export trade. We advise all who wish a first-class axle to send for these circulars and read up on this point.

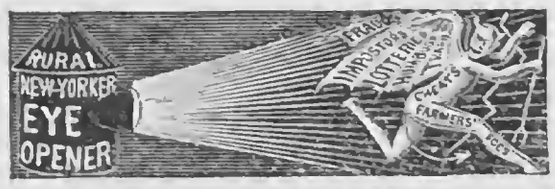
JOHNSON & STOKES, Philadelphia, Pa.—A catalogue of seeds of all kinds; also eggs for hatching of Wyandottes, Langshans, Plymouth Rocks, Houdans, turkeys and ducks; also sheep, swine and collie dogs. The new Christmas Watermelon is praised in high terms. There is no end to novelties, several of which we hope to test next season. The catalogue will be mailed free to our readers who apply as above.

PRICE & KNICKERBOCKER, Albany, N. Y.—Illustrated catalogue of seeds, etc. Among novelties, the Conqueror and Sunrise Potatoes, Surprise Musk-melon, Pee & Kay Sweet Corn are specialized. This firm offers *collections* of potatoes from 20 to 400 different kinds, one tuber of each put up separately, charging from five dollars upwards.

Z. DEFOREST, ELY & CO., Philadelphia, Pa.—Garden Almanac and Seed Manual (95 pages). Various onions, squashes, lettuces, beans and peas are offered among the specialties. Among peas, we see the Prince of Wales and Rural New-Yorker, both introduced through our Free Seed Distributions.

E. & J. C. WILLIAMS, Montclair, N. J.—A circular of the new and promising strawberry, the Jewell. A second circular of the Niagara Grape—the "white grape for the millions." A pamphlet of fruit and ornamental trees, grapes, small fruits, etc. All will be mailed free on application to the above firm.

A PLEASANT EXCURSION.—People in the East, whether North or South, who are tired of the tremendous cold weather of the present Winter and who wish to get to a sunny clime and luxuriate amid fragrant groves laden with the finest fruits, should take advantage of the excursions which the Burlington Route is now running from the Missouri River in connection with either the Central or Southern Pacific Railroads. They connect at Omaha and Pacific Junction with their regular trains from Chicago, Peoria and St. Louis. First-class excursions leave for Los Angeles February 17th, and for San Francisco March 3d. Very low rates are made to all California immigrants on every Wednesday until June 30th, inclusive. We only wish we had the time and money; we would get where it is warmer, on the double quick.



IN answer to many inquiries sent to us of late about Florida land schemes, we condense the following particulars from a mass of information of the absolute correctness of which we are assured. It is the result of personal inquiries of friends and acquaintances living near the places mentioned, or who are well acquainted with the localities and with the parties who have launched the enterprises, or their Florida agents. Much of it has been confirmed by reports furnished to the Herald of this city by a special Commissioner sent to Florida to investigate the matter. Investigations of such subjects are necessarily very slow by correspondence, for unless one is personally acquainted with the parties questioned, there is no assurance that the answers will not be misleading. Indeed, we have received several letters with regard to the character of some of the places, which we *knew* to be false. One of these purported to be from a clergyman who professed to know all about Sarasota Bay, the advertised misrepresentations about which we exposed in the RURAL of December 19th, 1885. Having personally visited the place some years ago, we knew the statements therein were misleading, and the screed went into the waste-paper basket. We have received several other letters of remonstrance, contradiction and explanation, about the eight other widely-advertised Florida land frauds, exposed and denounced in the Eye-opener of November 28th, last. The list given in both these issues contains the names of nearly all the places about which several papers have since made such a hubbub. The RURAL NEW-YORKER was the very first paper to expose those rascally swindles. Now for a few brief words with regard to the "paper towns," and imaginary "orange groves" widely advertised in many of our most prominent papers, and through the mails. Most of the "reclaimed" Diston swamp land in Polk, Hillsboro and Manatee Counties is, and will be for years, unfit for settlement. In these counties there are nearly 700,000 acres; but the other 3,300,000 acres which the concern was allowed to select, according to its contract with the State in 1881, are located in 12 other counties, and almost the whole is unsuitable for occupation, especially by Northern people. It is wet, swampy, under water in rainy weather, and the little dry land is sandy and barren and malaria is unavoidable in most places in Summer and Fall. No one should invest a dollar in any of this land, until he has thoroughly examined the exact location, either personally or through a reliable and competent friend. The companies now controlling the land are the Florida Land and Improvement Company, the Atlantic and Gulf Coast Canal and Okeechobee Land Company, and the Kissimee Land Company.

Sarasota Bay is the wretched hole described in the Eye-opener of December 19. Many of the 250 or more Scotch settlers, who were induced to immigrate to the place a few weeks ago, have returned in disgust to this city, and their accounts of the swindle transcend our account of the place. Others, whose money gave out, are forced to remain there still, while a considerable number have settled in Georgia and Alabama, having already had enough of Florida. Palma Sola is a beautiful place on paper, but is a miserable, unhealthy, God-forsaken, barren spot in reality, and the Palma Sola Land Company, which claims to own 13,000 acres, is a fraud of the worst kind in its presentation of the advantages, attractions and nature of the place. . . . St. Andrew's Bay is another fraudulently puffed up place—a nice, populous place on paper—a miserable hole in reality.

The other places dishonestly represented are Marion City, Grant Park, Parkersburg, Parkersville and DeWitt; Belmore City, Silver Springs Park and Bertram. We shall have more to say of Florida land frauds hereafter.

For Women.

CONDUCTED BY MISS RAY CLARK.

NURSERY SONG.

Go to sleep my baby dear—
God, the Father, now is near.
Close those heavy eye-lids, close,
Rest, in heavenly repose.

In the heavens, to and fro,
Fly the angels, white as snow.
They their watchful eye still keep,
While my little baby sleeps.

Seraphs bright and seraphs blest!
Calm my little babe to rest;
Then within its little bed
Love will hover o'er its head.

All without is white with snow,
And the storm winds fiercely blow.
But the God of love still keeps
My little baby while he sleeps.

ETTA POTTER.

SKETCHES OF GERMAN LIFE.

BERTHA A. ZEDI WINKLER.

COUNT AND PEASANT.

THE village nobility generally consists of a Count or a Baron and his family. When not of sufficient political importance to be considered necessary at the seat of government, or to hold a coloneley in the army, he is superintendent of the forests that surround his birth-place. Strictly speaking, he is the king's forester and game-keeper in the domains once owned absolute by his own ancestors. But that humiliating fact does not make him one whit less of a nobleman, either in his own eyes or in those of the peasantry. The vicissitudes of the rolling ages, and the destruction they surely work for certain worn-out institutions, classes of men or of creeds, seem to have made him more of a stoic gazing into the eye of inevitable fate, with the proud silence becoming the heir of yonder historic ruin, whose battlements have bid defiance to many a siege and battle-storm, only to succumb to time and the leveling hand of civilization.

Such, at least, was the bearing of the particular nobleman I have still vividly in my memory. A proud, prime old man he was. His erect figure, his military step, his iron-gray moustache, and his perpetual frown, scarcely lessening as he returned the salute of a passer-by, was in perfect keeping with his spare words and his reputation of being an "iron man." He was the village notability. Pastor, burgo-master, school-master and beadle together, could not create the stir that greeted the ap

pearance of the Count. Perhaps much of this importance was owing to his superior jurisdiction. He not only enforced the game and forest laws, which were the ones most frequently violated, but in serious, complicated cases of misdemeanor, he was always called by the village council to act as juror and judge. But besides all this, his own personality, his ancestral prestige and his history had much to do with inspiring the people with feelings of curiosity and awe which they had for no other person.

With his personality we are somewhat acquainted. His ancestral prestige consisted of the fact that his grandfather's castle was once the head-quarters of the great General Blucher, and of the current superstition that the ghost of this illustrious grandfather still rode around the village at night to see, as he did during his life-time, that all the soldiers of Blucher were well quartered with the peasantry. Of the present Count's history nothing is certain except that he was once in high favor with the King, and lived at court with his gay wife and beautiful daughter until he suddenly got transferred to his ancestral country seat with the small dignity and income of a forester. It has ever since been surmised and whispered that the Count must have incurred the King's displeasure by some over-bold opinions and expressions. That alone could account for his silence, the gloom of his residence, and the religious tendency of the young countess, who happily, they thought, was thus early turned from the vanity and unstability of the world. At all events, the charm of mystery and a pathetic interpretation of it surrounded the Count and his family. And though the peasants did not take kindly to him and his stringent rule, he was still a rare, fascinating personage, his daughter was worshipped by the children and his residence was the great center to which all interest, curiosity and gossip gravitated.

This residence was far from being a castle, however. It was situated at the foot of the mountain on which stood the ruin of his ancestor's castle, and was a simple, three-story, double mansion, fronted by a row of tall poplars. On one side was the stable, on the other the garden, and from the rear of the house one could look to the mountain's top and see all that remained of the family's ancient power and grandeur. And, indeed, even the ruins frowned fiercely and were picturesque in their desolation.

To the peasantry, this modest and modern mansion of the Count's was nevertheless a grand edifice. Nobody else's house had such an environment of gardens and well-kept lawns, and nowhere was there such an air of cold, aristocratic reserve. For this reason, everything looked greater and grander. Now, whether it was curiosity or the need of scraping in money wherever possible, or both, every delicacy that the peasants raised in the way of fruit, such as apricots or fine clusters of certain grapes, in fact, anything that they considered too good for themselves was quickly taken to the Count's residence, and considered amply paid for with a few pennies and the privilege of taking a hurried look at the interior of the house while they were waiting for the house keeper's appearance. Sometimes the old Countess herself would appear, and drive a sharp bargain with her gracious smiles and her easy way of offering next to nothing for something the peasant had made up his mind to demand his own price.

One day a peasant girl was reprimanded by her parents for bringing home an exceedingly small sum of money for a pair of young roosters that she was told to take to the Count's house, when she burst out triumphantly, "Well, didn't I see the whole house inside!—the Countess' bed-chamber, the kitchen, the cellar, and the pantry, everything all over!"

As that was a privilege never yet accorded to any of the peasants, the family crowded around to hear how she managed it.

"Well," she began, her eyes sparkling with mischief and shrewdness, "when I found that the Countess wouldn't give me any more than three shillings for my roosters I just thought to myself I'll make them roosters show me those grand rooms, anyhow. So, while I took the money in one hand I let the roosters, kind o', as if I couldn't help it, fly out o' my other hand. Well, you ought to have heard the racket they made, fluttering and cackling from one room to another and I scrambling after 'em and taking in everything with my eyes but the roosters. I thought it was time to take them in when I had seen everything else. The Countess was most frantic for fear the chickens might break something, and skipped from one side to another with her skirts pulled together as if she was afraid of them picking her to pieces. The young Countess laughed and tried to look angry at me at the same time. But I just thought I was in for it once, and was bound to get the worth of those roosters in sight-seeing. So I chased them from one room to another till I had seen every one. Then I caught them in no time and handed them to the Countess, who praised me for being so deft as to catch the vicious things before they broke any of her valuable china. Oh, I'm smart enough when I want to be!" was her final exclamation, and we thought so too when we heard it.

In my next I will give an account of the young Countess and the Sunday-school which she started in that village.

DOMESTIC HAPPINESS *vs.* DOMESTIC UNHAPPINESS.

"Mother," "Home" and "Heaven," are to us the sweetest, the most beautiful words in the world. The first two are associated with and inseparable from domestic life. The fact must be conceded, and cannot be too often or too strongly emphasized that the higher forms of domestic happiness are the nearest approach to heaven attainable in this world. This being true, the subject ought not to be taken up hastily or dismissed without careful and mature deliberation. Our Saviour continually recognized this, and the bride and bridegroom were terms used by him to express the embodiments of the highest forms of perfection and happiness.

If domestic happiness is the perfection of earthly joy, then its attainment is surely worthy of our serious consideration and most earnest endeavor. It is often urged that heaven would not be a place of enjoyment to a person whose whole life had been antagonistic to heavenly things. So it is with domestic life. A young lady whose entire life has been devoted to the acquirement of the so-called æsthetic accomplishments—accomplishments which are essentially public in their character, cannot be suited to the duties of domestic life, duties which are and ought to be essentially private in their character. I do not mean that isolation conduces to domestic happiness, but that success in domestic life requires an undivided interest in and consecration to home and home duties. In recent articles I have given some of the reasons why married life is no longer looked upon as a desideratum by young people of either sex.

An (to me) unknown writer has given as another reason this: "The lack of business-training in woman." I know that a woman will spend a day in what is called "shopping" and finally buy what she does not want, and will spend an hour or more getting ready to catch a train, only to miss it after all. Having had the morning hours before church time, to prepare for the service, she will be five or twenty minutes late. The word of the butcher or baker are accepted by them, when they themselves should be the judge. Salesmen in any dry goods house, especially at the "bargain counter," can testify to the truth of this statement. The author above quoted from, also says:

"It should be the aim of all to give the girls just as broad a business education as the boys. It makes them capable of taking care of the family, if such responsibilities are placed upon them; it broadens their ideas and makes them nobler and better. Girls, as a rule, are fully as clear-headed as boys when young, but if, as is the common practice, the girls are brought up to do nothing, to think but little except of dress and amusements, they fall far behind the young man, at the age of 20, in mental ability.

"What is needed is, that at home and at school, they be taught that to shine in social circles or to roll in wealth is not the highest aim of womanhood. But let them be taught to make a home joyful and happy, and yet be prepared, if necessary, for life's bitterest struggles. The young woman who is best equipped for life's battles is the one who has been brought up to see and know something of the shadows as well as the sunshine of everyday life; who knows what poverty is, what work is and what true happiness is. No person, whether man or woman, can be truly happy with nothing but idleness on hand, and girls should be educated that work of some kind is necessary to health and happiness. Give girls life's practical lessons—lessons that once learned are never forgotten. Let them understand thoroughly the details of everyday life, the value of all kinds of commodities used daily, how to make a check, draft, note and receipt. Let them be told the truth about themselves and about the world. They should know something about the snares and pitfalls that beset them. Let them be thoroughly impressed with the fact that on themselves, in a large degree, depends the success of the men they marry. Let them know how to cook, giving them a thorough course in the kitchen. Let them begin where their mothers left off, and we shall have a generation of girls strong, hopeful, ambitious and self-reliant, that will elevate the men, and make a hardier and more aggressive people, and thousands of firesides happier and better."

J. H. G.

SWEEPINGS.

Said a young mother to me not long since, after seeing her little girl safe into dreamland, "I often have a lonely hour when resting at night, wondering whether I have dealt fairly by my child through the day, whether I have been patient and forbearing enough, whether I have chided too much, or let her own way lead her too far, for our future happiness together."

How the words touched me, and they could not fail to reach any mother's heart. The day is so busy, so full of thought and care, that we sometimes put off the little requests, the demands on our time and patience, and it is only after we have time to think, that the pleading eyes seem so eloquent, the soft, red lips so tremulous over some little disappointment (great to them), that a pang of remorse strikes us as a blow, and gazing into the dear little sleeping face, with tear-blinded eyes, do we make new resolutions, and ask fervently for strength and wisdom to guide the plastic minds aright, realizing how solemn and weighty a responsibility is resting upon us. A mother who had suffered from misdoings of a child, once said to me: "You do not think now that your innocent baby can ever cause your heart other than throbs of pride and joy. I trust she never will, but after all, my prayers and teachings, which I bestowed tearfully and to the best of my knowledge, that I might see good results, have been for naught. I am often of the mind that we know not what we have given us, a blank or a prize."

ETTA.

Domestic Economy

CONDUCTED BY EMILY MAPLE.

HOME DRESSMAKING.

E. L. TAPLIN.

It is a noticeable fact that the average fashion column, bright and entertaining though it may be, is of no earthly use to most farmers' wives and daughters, who wish to attire themselves becomingly and in accordance with the mode, without other help than their own deft fingers. However, the present styles lend themselves readily to small purses, since extreme simplicity of design is effected in most woolen gowns; the beauty of the garment depends entirely on its perfect fit and grace of draping. The most popular models this Winter are made of two kinds of woolen goods, one smooth-faced—homespun or ladies' cloth; the other with a rough surface—astrachan or bouclé cloth. They should both be precisely alike in color. The material required will be two yards of the rough cloth and six of the smooth, unless a jacket is required; the latter would take two yards of the rough cloth.

Having cut the cambric lining for the skirt, face up the right side six inches deep with the plain goods, and the wrong side with canvas or glazed diagonal 12 inches deep; then over the canvas put black alpaca four inches deep, and bind with dress braid. The alpaca prevents dust from clinging to the skirt. Next, make a pleating for the front and side breadths; the back is left plain. This will require four breadths of plain goods, three six inches deep and one 20 inches. Cut the deep piece into halves, t en join first a six-inch piece, then the deep alternately; hem the bottom and make into side pleating, the pleats turning towards the front. The deep pleating should come over the seams in the skirt. Then cut three front breadths of the rough goods about four inches shorter than the foundation, line with crinoline, face about an inch deep around the bottom and front of the side breadths, first sloping them at the bottom for about 15 inches, so that they will show the deeper pleating at the seams. Lay these breadths on the foundation, first the front, taking care that it is accurately fitted, then the sides, bringing them well over the front. The breadths should be apparently fastened together on each seam by three large clasps, the lowest one placed at the head of the slash, showing the pleats. For the back breadth, take a breadth and a half of the goods, and make it into two triple box-pleats, which must come to within 12 inches of the top of the skirt; above this make a puff, which requires one breadth 27 inches deep. Pleat this across the top of the box-pleats and into the side seams. Draw up the surplus cloth in the middle, and tack to one side of the placket. Pleat it into the belt at the top, excepting about 18 inches in the middle, which should be hemmed across the top, pleated vertically in the center, and a hook put under the pleats, catching into an eye on the end of the belt. The grace of the puffy draping depends on the taste of the maker. Tapes will be required to hold the skirt in place.

The basque must be short; a pretty shape is square in front, sloped high over the hips, with short-tailed back. Cuffs, collar and vest of the rough goods may be used, and the metal buttons should match the clasps on the skirt. A little bonnet shape, with high horse-shoe crown, may be covered with the rough goods, edged with a single row of beads of corresponding color, and trimmed only with an erect, many-looped bow of bright ribbon, canary or orange being the favorite tints. The popular ribbon this Winter is what our grandmothers called "purl-edged," having little loops along it like feather-edge braid. A swallow-tailed bow or cluster of loops of this ribbon is much worn, pinned to the left side of the high collar.

If a jacket is required, to match the gown described above, get a pattern with loose front and tight-fitting back; trim it with very large metal buttons, and, if additional decoration is required, the military cords, which loop under the arm and across the chest, are very jaunty and handsome. A little muff may be made of the rough goods, trimmed with a bow to match the bonnet. The leading color for cloth gowns this Winter is brown in varying shades; dark greens and blues rank next. Garnet is little worn, except in children's frocks.

A WEEK'S WORK AT MRS. HOMESPUN'S.

AUNT RACHEL.

TUESDAY.

While her breakfast was cooking Tuesday morning, Mrs. H. proceeded to put her bread into the pans, that it might be ready for the oven when breakfast was over.

"It saves so much time," she remarked, "to mix the sponge up ready to be made into loaves, and let it rise over-night."

Breakfast over, she produced the tin pail in which the children carried their lunch to school, and placed in it slices of bread and butter, with cold meat, and some wholesome-looking brown doughnuts and apples, and soon three merry, rosy-cheeked children had started for school.

Then, having put her bread into the oven, Mrs. H. made a

STOVE-PIPE PUDDING,

which was to be put in the steamer at nine o'clock to steam until dinner-time. The directions for the pudding were as follows: One cup of molasses, one of sour milk, a small piece of butter, melted, a quarter of a teaspoonful of cinnamon, cloves and allspice,

Miscellaneous Advertising.

Free of charge. A full size cake of Ivory Soap will be sent to any one who can not get it of their grocer, if six two-cent stamps, to pay postage, are sent to Procter & Gamble, Cincinnati. Please mention this paper.

one cup of chopped raisins rubbed into a pint of flour, two eggs well beaten together; then add flour and raisins, and one teaspoonful of soda and a teaspoonful of salt and enough more flour to make a stiff batter. Steam three hours. To be eaten with pudding sauce or cream and sugar, as the taste dictates. "This is the most convenient pudding in the world," said she, as she placed it in the pan, "for you can make it serve for two days as well as one."

"The second day slice the remainder, lay it on a plate and steam it five or ten minutes before wanted, and it will be as good as new. It is also nice to make on Saturday, and then the dessert is already prepared for Sunday." The color, she said, was supposed to give the pudding its name."

She then made apple pies and cookies that they might be ready to go at once into the oven when the bread was done. She always intends to do as much cooking as possible on Tuesday, as she thinks Wednesday morning the best time to have the ironing done. In an hour the loaves were laid away in the pantry, and while the other cookery was being baked she brought in a spare-rib, placed it in the dripping-pan, sprinkled a little salt and powdered sage over it, put in a teacup of water, and when the last pie was taken from the oven, the meat was placed in it that it might be baked for dinner. And with baked potatoes this meal was easily prepared, and, although unexpected company came in, no extra work was required of the hospitable mistress. After dinner, while the helpful daughter put the kitchen in order, a dripping-pan of coffee was put in the oven to be roasted, and as Mrs. Homespun cut out some garments to make, she watched and stirred it frequently until, when a little was ground in the coffee mill, it had the right color and brittleness to suit her practiced judgment. It was then removed from the oven, a tablespoon of butter was stirred in it, and when nearly cool a fresh egg, well beaten, was stirred in and the coffee set by the fire to dry, before being put away in a tight drawer. A quiet, busy afternoon followed until the supper hour, and the hungry school children arrived at the same time.

Soon the whole family were summoned to the evening meal, where, with cheerful chattering, the children disposed of the remains of the baked spare-rib, supplemented with brown bread and butter and canned Siberian crab-apples, with a relish which was very complimentary to the cook. All but the tireless housewife devoted the evening to reading, but she sat beside a basket of stockings, whose dilapidated heels seemed to forbid such recreation, but she cheerfully took up the burden.

A FEBRUARY FARM BREAKFAST.

THIN slices of cold, boiled ham; eggs poached and dressed with plenty of butter and a little salt (no pepper). Place cold boiled potatoes, chopped fine, seasoned with salt and a trifle of pepper, over the fire; add half pint of water for each quart of potatoes, cover and cook fast for a few minutes without stirring; then add a good spoonful of gravy from the ham for each quart of potatoes and cook fast, stirring constantly, and dish up immediately. If fried potatoes are set back and allowed to cool a little, they become leathery. Graham gems and one kind of fruit sauce can be added at one's pleasure, with coffee and hot milk. No butter on the table separate from the food.

AUNT NINA.

DOMESTIC RECIPES.

PIES.

IT may seem presumptions in a Kentucky woman to tell the dwellers of pie land anything concerning pies. Yet so many remedies appear to keep pies from "boiling over," that I wonder the pies continue to do so. While I cannot lay claim to having been brought up on them, yet I've seen enough to know what they are, and my experience with them has been in every way satisfactory. After rolling out the under crust, before trimming it off, place in the fruit, then place top crust on, and with both hands press the two together as you slip the pie around. Next take a fork and press the edges all round and prick the upper crust. Place in a moderate oven. Never let the crust brown. Have it, when done, a flaky white. When the edge of the crust leaves the pan, and your best judgment says "'tis done," with a knife slip off the pie upon a plate. Will it always slide? Yes, if the pan is slightly greased and the pie properly baked. Such pies are not to be regarded with contempt. They have a place in the heart of man and boy, that nothing else fills so well.

I remember asking a "wearer of the gray" how he captured a squad of soldiers? He laughed, saying, "We were camped on a river, 'they' were just across; our 'boys' placed pies along the river bank and that brought them when nothing else would. While they ate the pies we surrounded and captured."

WATER INSTEAD OF MILK IN CAKE.

HEARING that a confectioner had said: "Water is much better than milk in cake, but you can't convince a woman that it is true," I began to use it, having a mind open to convictions, and the result left no doubt as to his being right about the water in the cake, though altogether wrong as regards the woman. For the past year in all cake recipes calling for *milk*, I have substituted water, using cream-of-tartar and soda, or baking powder.

A milk crock is very nice for cooking oatmeal, custard, hominy or fruit, in fact, anything requiring careful cooking.

Its cheapness and it being easily cleaned commends it.

In baking thin cakes to be placed one on the other, to have them come out nicely, loosen the edge with a knife, trim the cake down on a cloth, then lay a wet cloth all over the bottom of the pan. The cake will drop out.

TEA CAKES.

NICE tea cakes are made with one egg, two cups of sugar, one cup of sweet cream, one cup of butter, teaspoonful of soda, two teaspoonfuls of cream-of-tartar. Season with nutmeg. Enough flour for a soft dough. Roll thin and cut in fancy shapes.

SOUTHERN PUDDING.

THREE eggs beaten separately, two cups of white sugar, one cup of sweet cream, one cup of butter, two or three tablespoonfuls of flour. Flavor with lemon and bake in crust. Will make three puddings. M. L. S.

CORRECTION FOR FRUIT CAKE.

IN issue of January 2d, two pounds of butter and one-and-one-half pound of lard should have been one pound of butter and one-half pound of lard. S. M. T.

CUSTARD PUDDING.

One quart of new milk, yolks of six eggs, one cup of sugar, one tablespoonful of corn starch; flavor with vanilla. When cold beat the whites to a stiff froth, add one-half cup of sugar, spread on the top and brown in the oven.

SUET PUDDING.

One cup of molasses, one of chopped suet, one cup of raisins, one of sweet milk, one teaspoonful of soda; flavor with cinnamon and cloves. Steam three hours.

VIRGINIA PUDDING.

One quart of scalded milk, two tablespoonfuls of flour in a little milk, yelks of four eggs, the whites of two, and a little salt. Bake one half hour. When cold beat whites of two eggs to a froth, add a cup of sugar and juice of a lemon. Pour over the pudding.

MRS. B. C. D.

SPONGE CAKE. NO. 1.

Mix one cup of flour and two heaping teaspoonfuls of baking powder together. To one cup of sugar add three beaten eggs, two teaspoonfuls of milk, a pinch of salt. Stir all briskly together and bake at once.

NO. 2.

Three eggs well beaten, one cup of sugar, two cups of flour, three-fourths of a cup of cream, two teaspoonfuls of cream-of-tartar, one teaspoonful of soda and a pinch of salt.

DELICIOUS WHITE CAKE.

One cup of sugar, one cup of sweet milk, one-half cup of butter, two cups of flour, two teaspoonfuls baking powder, whites of three eggs beaten very stiff and added last thing.

OSTING.

One cup of sugar, white of one egg, one tablespoonful of water. Boil sugar and water together, take from stove and add the beaten egg while hot. MRS. S. B. EATON.

SALVE.

One tablespoonful of lard, a piece of shoemaker's wax, the size of a hickory-nut, the same quantity of bees-wax and three tablespoonfuls of flaxseed oil. Melt all together and put in a box. It will keep for years. This is known at our house as "Grandpa's salve." Nothing can equal it for sores that have dirt in them.

STARCHING.

I tried the way May Maple gave for starching shirts and have not been successful. The shirts did not get as stiff as they should and were far from being as good as laundry work. I followed her directions carefully. My way of starching with "elastic starch" looks better and does not take nearly so long. If any of the RURAL readers have tried May Maple's process, will they please report, as I am anxious to learn if I am at fault. HARRIET BROWN.

[Will Harriet Brown please tell us what "elastic starch" is?—E. M.]

Miscellaneous Advertising.

Worth Knowing.

THAT, as a household remedy, for children and adults, Ayer's Pills are invaluable.

THAT, in Colds, with headache, backache, coated tongue, symptoms of fever, and a constant feeling of weariness, Ayer's Pills will often effect a cure when other remedies fail.

THAT these Pills are sugar coated, perfectly safe to take, do not gripe, and contain neither calomel nor any other dangerous drug.

I have used Ayer's Cathartic Pills in my family for the past thirty-five years. For stomach or liver troubles, or any irregularity of the bowels, and in case of Colds, Ayer's Pills are unequaled. I am never without them.—Frank Tisdale, Montpelier, Vt.

Ayer's Pills,

Prepared by Dr. J. C. Ayer & Co., Lowell, Mass. Sold by all Druggists and Dealers in Medicine.

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For Sale, by the car load. Leached or unleached. Also Bone and Potash Fertilizers. Analysis guaranteed. Write to CHAS. STEVENS, Napanee, Ont., Can.

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Will pay good salary and all expenses.
Write for terms, stating Experience and salary wanted. SLOAN & CO., Manufacturers, 294 George St., Cincinnati, O.

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WARREN MILK BOTTLES
Patented March 23d, 1880.

Adapted for the Delivery of Milk in all Cities and Towns.
A Long Needed Want at last Supplied.
DESCRIPTIVE CIRCULARS ON APPLICATION.
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E. C. LINDSEY & CO., Norfolk, Va.

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WE SELL FARMS And all kinds Country Real Estate Everywhere. Catalogue FREE.
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2d.—If you send your subscription to THE HOUSEKEEPER for 6 months at 50 cents, we will send 50 cts. in seeds as above. For each two subscriptions for 8 months secured by you at 50 cents we will send 50 cents' worth of seeds as above, and same amount to each subscriber

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On receipt of subscriptions, we mail catalogue of the well-known seedsmen Northrup, Braslan & Co., Minneapolis, Minn., with an order for amount due in seeds, which order will be filled immediately when sent with your selection, to Northrup, Braslan & Co. *The leading specialties of this catalogue will be advertised in March Housekeeper and selections may be made from that list by all subscribers.* Address BUCKEYE PUB. CO., Minneapolis, Minn.

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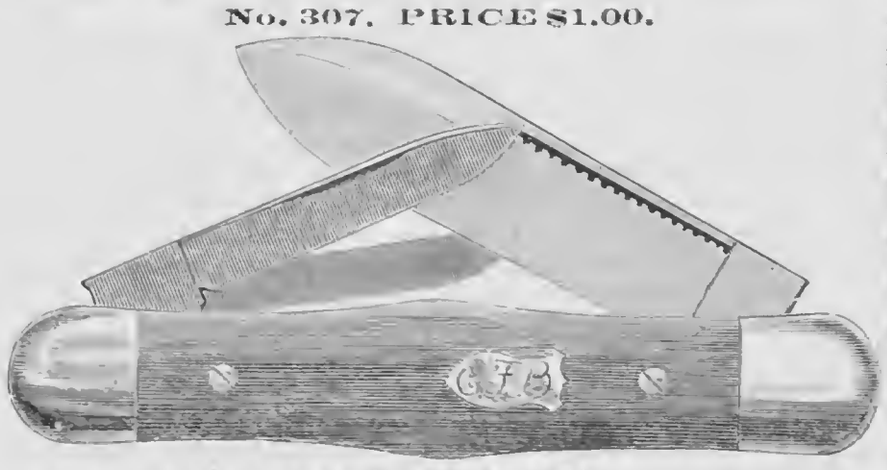

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MILKING TUBES.
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Send for descriptive circulars. We mail these tubes to any address on receipt of 25 cents. Mention this paper. Liberal discount to the trade.
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CORRESPONDENCE SOLICITED.

News of the Week.

HOME NEWS.

SATURDAY, Feb. 6, 1886.

MRS. BAYARD, wife of the Secretary of State, died last Sunday morning at Washington. The sudden, accidental death of her oldest daughter two weeks before was a blow from which she never recovered. The Secretary's double grief is sadly tragic.....The Pillsbury flouring mills at Minneapolis divided $35,000 surplus profits among 1,100 employees last year.....English holders of Confederate bonds have retained ex-Judge Fullerton of this city as counsel, and are going to force the United States to pay the bonds!!!.....Gen. Hazen, of the Signal Service, seems to have a special faculty for quarreling with his superiors, bullying his subordinates, and in his reports, etc., furnishing fun for the newspapers. Charges are now made by the Treasury Department that money has been spent extravagantly and illegally by his Bureau, which Gen. Sheridan says is of no earthly use to the army, and should be made a civil, instead of a military institution. Let it be attached to the Dep't of Agriculture and furnish frequent and trustworthy weather reports to our farmer friends!.....Dr. Shrady, editor of the Medical Record, laughs at the recent hydrophobia scare, and says there have been only three genuine cases of hydrophobia in the United States in 10 years! How the world or somebody on it is given to lying!.....It is estimated that the receipts of the 10,000 saloons of New York city average $220,000 a day, or about $74,000,000 annually. Judge Brewer, of the U. S. Circuit court in Kansas, has elaborately decided that no State can, by legislation or by constitutional amendment, prohibit the liquor traffic without paying for the private property thereby destroyed or injured. The case is to go to the U. S. Supreme Court, where it cannot be reached under three years!.....The United States Government is the greatest printer and publisher in the world. The number of publications issued annually amounts to about 2,500,000, of which about 600,000 are bound volumes.....In Warsaw, Ind., Barney Card has been arrested for forging notes to the amount of $30,000. He secured $8,000 from farmers whose names were obtained by tearing the signatures from the assessment blanks in the county auditor's office.....Geronimo, the bloody Apache renegade, together with his infamous band, has surrendered to Lieut. Mans. Careful estimates place the number killed by these fiends during their last raid at 170. Many of these were women, some of whom were highly refined and connected. A great number of the men were barbarously tortured and mutilated. Most of the women were inhumanly outraged, and fiendishly tortured and mutilated. The savages expect to be treated kindly like so many similar devilish raiders, and to be fed and petted at the San Carlos Reservation. They have already been comfortably clothed, well fed and cared for. In Arizona and New Mexico, the scenes of their atrocities, there is a fierce demand that the wretches shall be promptly hanged, and the Government is urgently pressed for vengeance on the monsters.....George L. Lorillard, well known, like his brother Pierre, as a great patron of the turf, died last Wednesday at Nice, France, where he was passing the Winter. He had for years been a victim of inflammatory rheumatism, and his death had previously been three times expected.....It appears probable that the killing of the brave Indian fighter Capt. Crawford, who had fairly hunted Geronimo to bay, was due to a blunder. The War Department believes he and his company were mistaken for hostile Indians, all reports of treachery, etc., etc., to the contrary notwithstanding.....A suit is being prepared by Solicitor-General Goode, at Washington, to try the validity of the Bell telephone patents. The papers are full of scandal about Attorney-General Garland's connection with the case, as he owns $1,000,000 worth of stock of the Pan-Electric Company, a rival organization, the stock of which was presented to him gratis while in the United States Senate. Secretary Lamar is also besmirched, as so many high officials in his Department own stock in the same company, which was also presented to them gratis. The whole business has an unhealthy look morally—but the fact remains that the Bell Company is an odious, extortionate and dishonest monopoly, the overthrow of which is demanded for the public welfare.....As the time for the meeting of the Canadian Parliament approaches it becomes more apparent that the death of Riel cannot be used as a political factor to build a party upon. The race feeling will make trouble, and the Conservatives will be forced into making concessions to the French element—such as they have never before been willing to make: but there is no organizing hand in the opposition to make a cry of free trade, administrative reform and justice to the half-breeds effective in politics.....The President has, at the request of the Secretary of the Interior, issued an executive order withdrawing 360 square miles of land surrounding Crater Lake, in Oregon, from settlement and public sale, pending legislation looking to the creation from these lands of a national public park.....The Mallory steamship company has again been placed under boycott at Galveston by an order issued last week by the executive committee of the Knights of Labor of Texas. The present trouble was practically caused by the company's refusal to discharge the new men and employ the November strikers in their places.....Manager Oakes, of the Northern Pacific Railroad, says negotiations are pending for the sale of all the lands east of the Missouri at Bismarck, amounting to about 4,000,000 acres, for $10,000,000 of the preferred stock.....The Pennsylvania Railroad and its allied companies is to establish a relief department on the plan so successfully operated by the Baltimore & Ohio. The members will be assessed on a scale according to their pay. The fund will be used to pay accident benefits, sick benefits and an insurance at death. The men, however, object to the plan, and even threaten to strike if it is enforced, as they say it is simply a scheme to reduce their wages by forcing them to insure against accidents on the road, so as to lessen the liability of the company for damages.....From the action and discussions of Congress so far, it is very evident that a reciprocity treaty with Canada is out of the question for the present. Even the President's suggestion of a Commission to consider the matter of fishing rights, meets with no support. The representatives of the New England fisheries, who oppose the free admission of Canadian fish, have monopolized attention. If the advocates of reciprocity were half as active as its opponents, the facts and arguments before Congress would not be so one-sided. The friends of the treaty are letting the case go by default.....

For a full illustrated Description of our Free Seed Distribution for 1886, examine the Nov. 14 issue. Preserve it for future reference. It is sent to all applicants for specimen copies. It also contains a list of the

$3,300

worth of Presents offered to those who send us clubs. This is distinct from the Rural's regular Premium-list.

AGRICULTURAL NEWS.

SATURDAY, February 6, 1886.

THE vintage of 1885 in Europe was the smallest harvested in many years. We shall have an abundant supply of French wines, however, as long as the California vineyards hold out.....The merchants of Buffalo are trying to have the New York State Fair located at that city this year. A suitable site can be secured for from $10,000 to $20,000—"a trifle compared with the benefits to be reaped by the city."....The Texas Oklahoma Homestead Colony, Denison, Texas, is inviting membership at a fee of $3 each, and making big promises of securing fine homesteads for each "as soon as a land office is established there." Land Commissioner Sparks says: "I have a very positive opinion that no benefits can be derived from a membership in the alleged 'colony.'" Land fraud sharpers are not all engaged exclusively in Florida land swindles.....The National Cane Growers' Association (successor to the Mississippi Valley Cane Growers' Association) has been in session in St. Louis since Thursday morning.....The Marquis de Mores thinks of exporting "frames" of lean young stock to France to be there fattened by the farmers. This has at times been quite a trade with Scotland. Mores says he can land the stock in France for $50 a head, and that when fattened they will there be worth $130.....The census of Nebraska shows that the population, from 1880 to 1885, increased from 452,433 to 350,645, over 50 per cent. The number of farms increased 58 per cent. The acreage under cultivation has just doubled. The value of farms grew from $105,000,000 to $289,000,000; value of live stock from $33,000,000 to $83,000,000. Wheat shows no increase, but other grains show from 200 to 500 per cent. The manufactured products increased from $12,000,000 to $43,000,000. In all material points the growth in wealth and facilities has outrun the increase in population.....A proposition is before the House Committee on Agriculture advocating the extension of the Signal Service system generally to the country districts. It is proposed to make every telegraph office a signal station for the display of weather predictions to be indicated by lanterns at night and flags in the day-time. It is estimated the cost of the plant will be $25,000, and the annual expenditure after its establishment would be $250,000.....

THE MICROSCOPE raised the standard of Thatcher's Orange Butter Color until three eminent experts in New York State reported good enough.—*Adv.*

Crops & Markets.

SATURDAY, Feb. 6, 1886.

Low prices of grain, high railroad freights and extremely cold weather have made things dull during the week in the Northwest. Eastern shipments are excessively dull. The total shipments of flour, grain and provisions east from Chicago during last week amounted to only 25,000 tons against 85,000 for the corresponding week last year—and business was then considered dull. Lately, only 18 carloads of corn were received at Chicago in one day, against 300 on the corresponding day last year; but receipts are now about 250 carloads a day. All through the more Northwestern States, however, shipments are unusually light. Besides the above causes, the great snow blockade of country roads and railroads impedes shipments. In many sections 20 per cent. of the corn is still under the snow; in many others, especially in Nebraska farmers are burning corn for lack of coal and wood. The impression is growing stronger that the Agricultural Department's estimate of the crop was too high as regards both quantity and quality. Anywhere in Illinois, Iowa, Missouri, Ohio and Indiana, corn to-day is bringing paying prices; but farmers are not selling freely, and as seeding commences in March in Illinois, Iowa and Nebraska, farmers won't have much time to ship their surplus corn. A great general reduction of freight rates is likely, however, or else the railroads will cut rates clandestinely.

The condition of the winter wheat varies. There are from 12 to 14 inches of snow in Northern and Central Illinois; from 18 to 24 in Wisconsin, and about the same in Minnesota and Nebraska. In Missouri and Kansas the depth varies greatly. In nearly all States, however, there are considerable areas in which the crop is only partially covered, and elsewhere the ground is quite bare of snow and covered with ice; but on the whole, the crop is safely blanketed north of the Ohio; south of that river the ground was generally bare before last Wednesday's widespread snow storm; later advices do not say whether the snow that then fell nearly all over the South from the line of Northern Texas, has remained on the ground—probably not in most places.

Immense damage has been done to the wheat crop of California by freshets in the San Joaquin Valley and near Stockton, while 25,000 acres of growing wheat have been ruined by the breaking of the levees on Robert's Island. Most of the island is owned by the Glasgow-California Land Company, composed principally of foreign capitalists, who lose $600,000 by the inundation.....A sleet storm has ruined many orchards and groves in New Hampshire. At Nottingham, one man lost 1,000 peach trees....Of all the States in the Union, the recent frosts have done the most damage in Florida, in proportion to the value of horticultural and pomological products. The cold was almost unprecedentedly severe, and extended over the entire Peninsula, except the southern point, on which little is cultivated. A great number of the bearing orange trees were either damaged or entirely ruined, while the loss in fruit alone is estimated at fully $1,000,000. In the young orange groves, a large proportion of the trees were ruined entirely, and nearly all the rest greatly injured. Garden truck, a great deal of which is grown in the State, was much damaged or wholly destroyed. As usual, some reports say the damage was not very great and will not be permanent. The rosiest reports come from natives, the gloomiest from Northern settlers. The warning from the Weather Bureau that the "cold wave" was coming, caused many to pick their fruit at once, working day and night, and thus saving much money. At Jacksonville, the thermometer registered 12° above zero; in 1835—the year of the greatest Florida frost—it registered 8° above zero. Then the cold lasted three days; lately, only one. The havoc now is considerably less disastrous than it was then.....

Special crop reports to the American Rural Home, of Rochester, N. Y., from all the wheat growing regions indicate that the plants are well covered with snow, and all in good condition in that respect for a large crop. Thousands of acres of wheat land in Dakota, however, will be fallow this Summer, to correct foulness and weediness.....

The terrible cold of the past week has added to the fears of the Western cattlemen. In many parts of the country the roads are completely blockaded, and the movement of agricultural products and stock on the way to market has been much impeded or entirely hindered. The railroads, too, in many States, and especially in the West, have been seriously hampered by snowdrifts. The wheat markets early in the week dropped everywhere, owing chiefly to the throwing of a large amount of "long" wheat on the market and the continued unwillingness of Europe to buy at our figures. Later, prices went up, owing to increased export demand, and the action of a "bullish" crowd in Chicago.

It is now possible that the heaviest run of hogs to market is over, and that the shipments for the rest of the season will be lighter. Farmers are a trifle discouraged by the low price of hogs, and the widespread fatality of disease. Kansas alone has lost $4,000,000 directly from hog cholera, to say nothing of the general depression which the swine industry has suffered in other ways from this plague.....The Cincinnati Price Current of Thursday says: The number of hogs packed in the West last week was 275,000, compared with 290,000 the corresponding time last year. The total to date since November (the beginning of the winter packing season) is 5,530,000, against 5,555,000 a year ago. The following indicates the movement at the principal points since November 1:

Chicago	2,175,000	Kansas City	558,000
Cincinnati	320,000	St. Louis	315,000
Milwaukee	280,000	Indianapolis	253,000
Cedar Rapids	167,000	Louisville	121,000
St. Joseph Mo.	116,000	Cleveland	63,000

The monthly average weight of hogs weighed at the Union Stock Yards, Chicago, for winter seasons, compare as follows:

	Nov.	Dec.	Jan.	Feb.	4 mos.
1885-86	250	249	252	...	...
1884-85	261	272	258	240	261
1883-84	247	253	242	218	243
1882-83	248	257	230	248	254
1881-82	262	268	252	229	255
1880-81	262	264	258	232	257
1879-80	264	264	265	266	265
878-79	278	277	279	236	268
877-78	265	270	280	270	272
876-77	269	267	253	257	262

The Indian corn market has been pretty steady, having advanced in some places and fallen behind in others. The visible-supply report shows a decline of nearly 400,000 bushels in the week. The relatively better export demand also continues.

Oats have been steady and closed here, for cash, last night at 38 cents, as against 37¾ one week ago, an advance of one-quarter cent. The visible supply report, New York Produce Exchange, does not indicate any change in the total quantity in sight.

For Throat Diseases and Coughs, —BROWN'S BRONCHIAL TROCHES, like all *really good* things, are frequently imitated. *The genuine are sold only in boxes.—Adv.*

MARKETS BY TELEGRAPH.

SATURDAY, February 6, 1885.

CHICAGO.—Compared with prices a week ago, "regular" wheat is 1½c. lower; No. 2 Spring, steady Corn, ⅝c. lower. Oats, 1½c. lower. Pork, 45c. higher; cattle higher on best sorts; somewhat lower on others. Hogs from 10c. to 25c. higher all round. Sheep, from 25c. to 50c. lower on poor sorts of all grades, and steady on higher or best grades.

WHEAT.—February, 87¾@79¾c; March, 74¾@80½c; May, 82¾@85¼c.; No. 2 Spring, at 82c.; No. 3 Spring, at 71¼c. CORN.—Firm and quiet; Cash, 36½c; February, 36@36¼c., March, 36½@36¾c; May, 40@40⅜c. OATS—Quiet; sales ranged. Cash, 28¾@28⅝c; February, 28@28¼c; May, 31¾@32c. RYE—Dull; No. 2, 58½c. BARLEY.—No 2, 60@61c. PORK.—Quiet; Cash, $11 20@11 22½; February, $11 20@11 32½; March $11 10@11 25; May, at $11 30@11 42½. LARD.—Firm; sales ranged; Cash, $6 12½@6 15; February, $6 12½@$6 15; March, $6 17½@$6 20; May, $6 25@6 20. BULK MEATS.—Shoulders, $3 35@4 00; Short rib sides, $5 57½@5 60; Short Clear sides, $5 90@5 85. CATTLE—Market strong; Shipping steers, $3 30@5 75; stockers and feeders, $2 50@4 00; cows, bulls and mixed, $1 50@3 75; bulk, $2 50@2 75. HOGS.—Rough and mixed, $3 70@4 10; packing and shipping, $4 10@4 60; light, $3 60@4 15; skips, $2 40@3 50. SHEEP.—Market firm; Natives, $2 00@5 10; Western, $2 00@4 00; lambs, $4 00@6 00; Texans, $2 25@3 50.

ST. LOUIS.—Compared with cash prices a week ago, wheat is 1½c. lower. Corn, ⅛c. lower. Oats, steady. Eggs, 1c. higher. Flax-seed unchanged. Pork, 40c. higher. Cattle, from 10c. to 35c. higher, according to grade. Hogs, from 20c. to 35c. higher. Sheep,

Miscellaneous Advertising.

When Baby was sick, we gave her Castoria,
When she was a Child, she cried for Castoria,
When she became Miss, she clung to Castoria,
When she had Children, she gave them Castoria,

50c. lower on poor sorts; 50c. higher on best kinds.

WHEAT.—Dull; No. 2 Red, Cash, 90@91c.; February 90c. bid; March, 90¾c.: May 94½c. Corn quiet Cash, 33⅝@33¾c.; February, 33⅝@33¾c.; March, 34½c.; May, 36¼c. Oats dull; No. 2 Mixed, Cash, 28@28½c.; February, 27¾c.; May, 31¼c. Rye steady at 59½c. Barley dull at 00@80c. Eggs steady at 18@18½c. Flax Seed steady at $1 06. Pork, $11 40. Bulk Meats —Long Clear, $5 60; Short Rib, $5 70@5 75; Short Clear, $5 85. Lard firm at $6 00@6 05. Cattle.—Market steady. Fair to Choice Native Shipping Steers, $4 75 @5 25; Native Butcher Steers, $3 25@4 25; Cows and Heifers, $2 25@3 60; Stockers and Feeders, $3 00@4 25. Hogs.—Light, $3 50@4 05; Packing, $4 00@4 20; Heavy, $4 30@4 56. SHEEP.—Market firm and active; Common to Choice, $2 00@4 00.

BOSTON.—Compared with cash prices a week ago, corn is ½c. higher; oats, steady; hay and straw unchanged; butter, somewhat higher on all good sorts; cheese, steady; eggs, from 1c. to 1½c. lower; potatoes, steady.

GRAIN.—CORN.-Steamer Yellow, at 52@52½c; steamer mixed at 51c; and no grade at 49@50c, per bushel. OATS are steady. No. 2 white are generally held at 42@43c; No. 3 white at 41½c, and mixed at 40@42c per bushel. Small sales of Rye quoted at 61c, per bushel. BRAN is in fair demand and selling at $17 50@ $18 00 for Spring and $18 50 for Winter; fine feed and middlings at $18 00@21 00, and cotton seed meal at $25 00 on spot and $22 00 per ton to arrive. HAY AND STRAW—Hay in good demand and steady, $19@20 ₹ ton for choice and fancy; fair to good, $17@18; fine, $16@18; for poor and damaged, $13@15. Western choice $16@ 17 do fair to good $14@15. Rye straw is held at $19@20 50 for choice, and $12@14 for common to good. Swale hay, $11@12; Oat straw, $9@10 per ton. PRODUCE—The various articles under this head continue to command fair prices. BUTTER-Northern creamery, choice to extra 24@25c; good to choice summer, 18@23c; western creamery, 27@33c, for choice to extra; northern dairy, 22@23c, for Vermont extra; 18@20c, choice, and 12@16c, for fair to good; Western dairy, 18@21c, for choice, and 10@ 15c, for fair to good; imitation creamery at 15@25c, for good to extra; ladle-packed, at 18@20c, for choice. CHEESE—New York choice to extra, 9@10½c, and common to good, 5@8c; Vermont choice to extra, 8½@10c, and common, 5@7c; Western common to extra, at 4@9½c. Sage, extra, 11@12½c, good to choice, 8@10c. EGGS—Cape and near-by, per dozen, at 25c; Eastern extras, 33@21c; do, firsts, 22c; Northern, fresh, 22@ 23c; Western fresh, 22c; Provincial, 22@23c. BEANS— Choice Northern hand picked pea, at $1 60@1 70 per bushel; do, do, New York, $1 50@1 55; do, do, screened at $1 25@1 40; medium choice, at 1 50; do, screened, $1 25@1 40; Yellow Eyes, improved, at $1 60@1 65; do, choice flats, $1 50@1 55; Red Kidneys, $1 80. Canada peas, 85c@$1 00 per bushel for common to choice. Green peas, Northern, at 90c@$1 00; do, Western, $1 20 @1 25. Potatoes range at 60@80c, per bushel, as to quality.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, February 6, 1886.

STATE OF THE MARKET.—Compared with cash prices last week, flour is unchanged except Southern flour, which is 5c. to 10c. lower; wheat has dropped 1c. to 1¼c. on all grades; corn 1½c. to 1¾c. higher, oats unchanged; beans 5c. lower for Marrows; pork 12½c. higher; lard 1½c. to 2c. lower with dull trade; butter and cheese hardly steady for other than choice grades; poultry firmer with a slight increase; cotton unchanged; fruit unchanged; vegetables steady. The cold, stormy weather of the latter part of the week interfered somewhat with business; still the supplies of provisions brought in were fair. No sign of advance in the apple market yet. The grain market still bumps up and down with each day's business. The rise of 1c. to 1½c. on eggs was a surprise. It is not expected to continue. The trade in seed potatoes is lively. The tubers stored in canal boats are in good condition.

FLOUR, FEED AND MEAL. FLOUR—Quotations: Fine at $2,15@$2.85; Superfine, $2 75@3 25; Extra No. 2, $3 15@ 3 60; Good to Fancy Extra State, $3 60@4 25; Common to Good Extra Western at $3 15@4 00; Good to Choice Extra Western, $4 00@5 50; Common to Fair Extra Ohio, $3 15@3 75; Good, $3 80@4 20; Good to Choice, $4 25@5 25; Common Extra Minnesota, $3 15@ 3 65; Clear, $4 10@4 50; Rye Mixture, $4 00@4 25; Straight, $4 50@5 00; Patent, $4 75@5 50; Bakers' Extra, $4 10@4 75; St. Louis Common to Fair Extra, $3 15@ 3 80; Fair to Good, $3 85@4 75; Good to Very Choice, $4 80@5 50; Patent Winter Wheat Extra, $4 50@5 55; City Mill Extra for West Indies, $4 85@5 00; South America, $5 00@5 10. SOUTHERN FLOUR—Common to Good Extra at $3 30@3 75; Good to Choice do., $3 80@ 5 30. RYE FLOUR—Superfine, $3 25@3 50. BUCKWHEAT FLOUR, at $1 90@2 00. CORN MEAL—Brandywine, at $3 00@3 05; Yellow Western, at $2 75@ 3 05. FEED—Bran ranges from 85@90c. from track and mill; for 00 lb. average at 80@82½c.; 80 lb. average at 80@82½c.; middlings at 80@90c., and sharps at $1 00@1 10. Rye feed at $17 00 per ton.

GRAIN.—WHEAT.—Ungraded Red, 86@91½c.; No. 2 Red, 89½c; No. 2 Red for February, 89½@90c.; do. for March, 90@90⅞c.; do. for April, 91¾@92¼c.; do. for May, 93@93¾c; do, for June, 93½@94c; do. for August, 94¾@95c.; do. for September, 95¾c; do. for October, 96c; do. for December, 99¾c.@$1 00⅜. RYE—60@63c. for Western, and 64@66c. for State. CORN—Ungraded Mixed 48½@49c; No. 3, 48¾@49¼c.; Steamer Mixed, 48¾ @48¾c.; Steamer Yellow, 49½c; No. 2, Mixed, 51¾c.; Ungraded White, 49c; Yellow, at 50½c; No. 2 Mixed for February, 50@50¾c.; do, for March, 48c; do. for April, 48¾@49c; do. for May, 48¼@48¾c. OATS—No. 3 Mixed, at 37½c.; No. 2, 38c.; No. 1 nominal at 39½c.; No. 3 White, 38½@38¾c.; No. 2 do. 39¾c; No. 1 at 43c.; Mixed Western, at 37@39c.; White State, 41c; No. 2 Mixed for February, 37¾c.; do. for March, 37½c; for April, 37½c; May, 37⅝c.

BEANS.—Quoted: Marrows at $1 70@$1 75; mediums at $1 50; pea at $1 50; red kidney at $2 00 for choice; turtle soup at $2 25; white kidney at $1 95@2 00 for choice.

PEAS.—Green at $1 20.

PROVISIONS.—PORK.—Mess quoted at $10 50@$11; $11 50@$12 00 for Family Mess; $12 75@$14 50 for Clear Back; and $8 50@$9 25 for Extra Prime. BEEF.—City Extra India Mess, $17 50@$18 00; Extra Mess, bbls., $10; Packet, $11 00@$12 00 in bbls.; Family Mess, $12 00@$13. BEEF HAMS.—Quoted at $18 00. CUT MEATS.—Pickled Bellies, 12 lb, average, 5½c; Pickled Shoulders, at 4½c.@4¾c.; Smoked shoulders, at 5@5¼c.; Pickled Hams, at 8¼@8¾c.; Smoked do., 9½c. MIDDLES—Long Clear in New York quoted 5¾c. for Western delivery. Long Clear, 5.50c.; Short Clear, 5.70c. DRESSED HOGS.—City Heavy to Light, at 5¾@6¼c.; Pigs, 5¾c. LARD.—Western steam, for export, 6.46c; Choice 6.48; February 6.45@6.46c.; March, at 6.45@6.47c.; April, at 6.53@6.54c.; May, at 6.58½@6.60c.; June at 6.65@6.66c; city steam, 6.45; Refined Continent at 6.75c, and South American, 7.00@7.05c.

BUTTER.—Eastern Creamery, 34@35c; Western Creamery, 18@33c.; Elgin do., 35@35½c.; State Dairy half-firkin tubs, 1s@27c.; Western Factory, 11@18c.; Imitation Creamery, 15@26c.; Western Dairy, 12@22c.

CHEESE.—State, 7@10½c.; Night Skims, 5¾@7c. Western flat, 7@9½c.

EGGS.—State, 24½@25c.; Western, 24@24½c.; Southern, 24@25c.; Limed State, 17c.; do. Western, 18c.

LIVE POULTRY.—Chickens, 8c., fowls, Jersey State and Pennsylvania, per lb, at 11c.; do. Western, ₹ lb. at 10@11c.; Turkeys, per lb. at 8@9c.; ducks, Western per pair, at 70@90c.; geese, western, per pair, at $1.37@ $1.75; pigeons, per pair, at 35c.

DRESSED POULTRY.—Turkeys, Philadelphia, at 10@11c; 9@11c per lb for Jersey, and 9@10c per lb for western; chickens, Philadelphia large, at 13c. per lb; do, small at 11@12c.; Jersey scalded at 10c; do, State at 8@9c; do. Western, at 8@8½c.; fowls, Philadelphia, prime, 10c; do. Jersey at 9c; State and Western, 8c. Ducks, Philadelphia, at 14@15c; do. Jersey, at 13@14c; do, western, at 11@13c. Geese, Philadelphia, at 12@ 13c; do, Jersey, at 11@12c; do, western, at 9@10c.

GAME.—Quail, ₹ doz., $1.50@$2; partridges, State and Pennsylvania, choice, per pair, at 90c@$1.25; do. Ohio and Michigan, prime, per pair, at 70@80c.; grouse, prime, dry, per pair, at 80@90c; do. inferior at 50@75c.; wild ducks, canvas, per pair, at $3 25@$3 50; do., red-head, per pair, at $1@$1 25; do, mallard, western, per pair, at 50@ 75c.; do., teal, blue wing, 50@65c.; rabbits, per pair, at 35@40c; hares, rustern, per pair, at 35c.

FRESH FRUITS.—Quotations are: San Blas cocoanuts at $40 00; Barnecm cocoanuts at $29 00@$30 00. Apples—Baldwin, per bbl., at $1 75@2 00; Greening, per bbl, $1 75@2 00. Grapes—Catawba at 6@7c. per lb, in baskets; Isabella, at 2@3c. per lb. Cranberries —Cape Cod, choice, per bbl., $4.00; do. fancy, $4 50; good to prime, per bbl., $3 00@$4 00; do. choice, per crate, $1 00@$1 25. Florida oranges—Fancy at $4 00 @4 25; Choice at $3 50@3 75; do. inferior at $1 75@$2.

COTTON.—The quotations, according to the American classification, are as follows:

	Uplands.	New Orleans and Gulf.	Texas.
Ordinary	6 9-16	6¾	6¾
Strict Ordinary	7	7 3-16	7 3-16
Good Ordinary	7 15-16	8⅛	8⅛
Strict Good Ordinary	8⅜	8 9-16	8 9-16
Low Middling	8¾	8 15-16	8 15-16
Strict Low Middling	9	9 3-16	9 3-16
Middling	9 3-16	9⅜	9⅜
Good Middling	9 9-16	9¾	9¾
Strict Good Middling	9 13-16	10	10
Middling Fair	10 3-16	10⅜	10⅜
Fair	10 13-16	11	11

STAINED.

Good Ordinary	6⅜	Low Middling	7⅛
Strict Good Ordinary	7 1-16	Middling	8⅛

DRIED FRUITS.—The quotations are as follows: Apples—Fancy evaporated, 7@7½c; choice, 6¾c; do. prime at 6½@6¾c.; fancy North Carolina sliced, new, at 4@4½c.; choice do. at 3½@3⅝c.; choice Tennessee quarters at 2@2½c.; State quarters at 3½@3¾c.; southern sliced prime at 2½@2¾c. Peaches—Peeled North Carolina, choice, 10@11c.; fancy, 12c.; extra fancy at 13c.; Georgia, choice, new, at 11c.; do. prime, 1@9½c.; unpeeled halves, 2¾@3½c.; unpeeled quarters at 2½@3c.; Delaware evaporated, peeled, 24@ 25c. Choice pitted cherries at 11@11½c. Evaporated raspberries at 17c; sun-dried do. 15c. Blackberries—Prime at 3½c. Whortleberries at 6½@7c.

PEANUTS.—Quotations at 5¼@5½c. for best hand-picked, and 3¾@4½c. for farmers' grades.

HAY AND STRAW.—Quotations are for: Choice timothy hay at 90c; good at 85c.; medium at 80c.; shipping at 75c; clover mixed at 70@80c.; Clover, 50@60c.; No. 1 rye straw at $1; short rye straw at 75@85c, oat straw at 40@50c.

SEED.—Clover is quiet and nominal; quotations are nominal at 10@10⅝c. as to grade. Timothy is firm and in demand; quoted at $2 00@$2 10. Linseed nominal.

TALLOW—Prime City quoted at 4½c.

VEGETABLES.—Potatoes—Long Island Rose, bulk, per bbl., $2 00@$2 25; New York Rose, $1 75@$2 00; Eastern and Nova Scotia Rose at $2 00@2 25; Burbank, State, at $1 75@$2 00; eastern and Nova Scotia, per bbl, $2@2 25; Hebron, do, do, do, per bbl, at $2 00@2 25. Prolific and Goodrich, per bbl., at $1 75@$2, Maine, double-headed, bbl., at $2 25@$2 50; Peerless, per bbl., at $1 75@2; Magnum Bonum, imported, per sack, $2; Champion, imported, per sack, at $1 62@$1 75. Sweet potatoes, Virginia, at $2 25@$2 75 per bbl. Cabbages, per 100, at $6@ $8.00. Onions—Yellow, quoted per barrel, at $2 75@ $3 25; do. red, per bbl., at $3 00@3 50.; do. white, at $4 50 @$1 75. Turnips.—Russia, per bbl., at 50@62c. Marrow squash, per bbl., at 50@75c. Hubbard, per bbl., 75c. @$1; Scotch kale at 75c@$1, and $2@$2 50 for spinach.

LIVE STOCK MARKET.

NEW YORK, SATURDAY, February 6, 1886.

With a light supply sellers tried to force prices upward, and some early sales appear to have been 10c. higher; but the general tone of the market unchanged for Poor and Common Cattle. The wholesale butchers carried over a good deal of stock last week, and beef has sold slowly ever since Monday, and the storm of Tuesday and the extreme cold to-day have caused a limited demand for meats of all kinds, so that the slight effect of the storm has been discounted, and not only has there been no "boom," but even the advance which would naturally be expected to follow a falling off in the receipts of over 4,000 head from last week, has not been realized. Shipments for the week, 1,131 live cattle, 5,660 quarters of beef, 855 live sheep, and 580 carcasses of mutton.

BEEVES.—Chicago steers, 1,289 lb, $5 85; do, 1,263 lb, at $5 35; do. 1,206 lb, at $5 05; Indiana do, 1,178 lb, at $4 60; Bulls, 1,465 lb at 4c; Chicago steers, 1,088 lb, at $5 12½; do, 1,282 lb, at $5 10; Ohio do., 1,207 lb, at $5 10; oxen, 1,240 lb, at $2 75; State do. 1,763 lb, $4 50; Indiana steers 1,189 lb, at $5 25; do. Cows, 1,113 lb, at $3 45; do., 1,380 lb, at $3 75; oxen, 1,251 lb. at $4 25.

CALVES.—Feeding firm, and Grassers are quoted at 2¾@2¾c; Fed Calves at 3@4c; and Ordinary to Choice Veals at 5@8¼. Extra would bring 9c. Fed Calves, 319 lb, at $3 10.

SHEEP AND LAMBS.—Receipts for six days, 30,592 head, against 36,584 head for the same time last week. Demand slack for sheep. Lambs firm and a fraction higher for good stock. Western Sheep, 79 lb, at 4¼c.; 209 State do, 77 lb, at 4½c.; Western Sheep and Lambs, 57 lb; at 5c; State Lambs, 65 lb. at 6¼c.; Ohio Sheep, 99 lb, at 5½c.; do, 88 lb, at $4.60.

HOGS.—Receipts for six days, 38,297 head, against 37,692 head for the same time last week. None for sale alive. Nominally steady at $1.22@$1.50 per 100 lb.

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ESTABLISHED 1865.
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In my remedy I make the following offer:
I will insure herds of swine of not less than one hundred in number against disease, at a small fee per head, provided they are fed my remedy under my direction, and prove upon examination prior to contract that they are in a healthy condition, and are neither in-bred, close-bred nor the progeny of such.
1. I will forfeit $100.00 to any breeder whose offer to examine for insurance I decline, provided he forwards remittance to cover my expenses to and from location of hogs, or I fail to prove to the satisfaction of any disinterested party, that failure to respond to invitation is caused by prior engagement or by matters of at least equal importance.
2. I will forfeit $500.00 if I decline upon examination to insure such herds, if my judgment as to their condition of health is overborne by the result of an examination made by at least two properly qualified and graduated veterinary surgeons.
Facts are Better than Assertions.
Please read the following testimony:
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Dr. Jos. Haas—Dear Sir: About a year ago our herd here numbered about 2,700 head. Disease broke out, and no remedy we had would arrest the trouble. Our losses were heavy and we had to give up feeding entirely for about two months. We then heard of your remedy and bought a trial lot, and began feeding again. We have used it constantly ever since. We have since April last received about 5,000 head of hogs into our herd and have not had a single death from swine disease. This is our experience. Our opinion is that the remedy has prevented disease, and we would not think of being without it. As an aid in fattening pork, we believe it to be good. On this point, however, we have not made an actual test, as we would not risk feeding a pen of hogs without the Remedy.
Yours very truly, WHITE & CO.
[N. B.—White & Co., since writing the above letter, have purchased $4.50 worth of the remedy.]
The remedy can be procured of all Druggists, or from my laboratory. Prices, $2.50, $1.25 and 50 cts. per package. 25 lb. cans, $12.50.
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Member of Indiana State Veterinary Med. Associat'n
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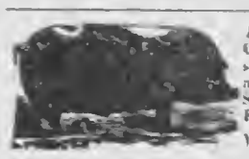
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And a face like a piece of leather,
And his eyes were dim and his nose was red,
And his few teeth jumbled together.
He had cash enough for a bank to spend;
He never could count his treasure,
But all of the money he had to lend
Couldn't buy him an ounce of pleasure.
He had frozen the hopes of his boyhood out
To further his great ambition;
His heart was withered and dry, no doubt;
It was surely a sad condition.
And I thought how happy he might have been,
With a wondrous hope before him,
Had he kept the dreams of his boyhood green
In his heart, and its hope thrown o'er him.
They tell me that youth is the best of life,
That a whitened head brings trouble,
That the hopes of youth in the winds of strife
Will burst like an airy bubble.
But don't you believe what the croakers say,
Though the top of the head be whitened,
Though the eyes grow dim and the joints lose play,
With hope you can keep the heart brightened.
Then cling to your youth, my boys and girls,
You will need it in life's to-morrow;
It will dull Time's scythe as it ceaseless whirls
And break down the teeth of sorrow.

—UNCLE MARK.

THIS is the season for buckwheat cakes. As a rule it is better fun to eat the cakes than it is to cook them. The members of the family who do most of the eating and least of the cooking should remember this, and show more appreciation.

What are you going to have in the garden this year? It is about time to begin to think about it. We can get our plans made, and then, when the time for planting comes, we know just what we are going to do. Don't try to plant too many things. Better select a few things and devote all the time we can to their cultivation.

Why not try a little experiment this year with canary bird seed? Get a package of seed, pick out a few of each of the different varieties, sow in good soil, and see what the result will be. I shall want to know how this results.

LETTERS FROM THE COUSINS.

DEAR UNCLE MARK: I have not written for so long, that I think it is fully time to write this letter, if I wish to continue a member of the Y. H. C. Last Spring, the 18th of May, my little brother and I planted a few peanuts; they came up within 10 days, and Travers, my brother, had three vines and I had two. We dug them in the early Fall as soon as the frost had sufficiently killed the vines. Upon counting the peanuts, we found that they averaged 50 to each vine, as Travers had 150 peanuts from his three vines, and I had 100 from my two vines. We dried and roasted a few, and they were very good. In my garden last Summer, I raised radishes, lettuce, salsify, red peppers, and a few carrots and onions that did not amount to anything. I also had several short rows of sweet peas which were beautiful. The Cousins who have raised sweet peas know how rich and varied the flowers are; and those who have not, will be well repaid in beautiful flowers by raising some next Summer. My lettuce was very nice; but I could not raise any nice radishes, for every one seemed to have a little worm in the root. The salsify has not been eaten yet. I had some pretty flowers, but I did not have them in a good place, for the bed was around an arbor, and the roots of the vines that covered the arbor took up most of the food in the soil. I did not plant my Lima Beans, because I did not want to undertake too much for fear that I would not accomplish anything, as I had my flower and vegetable gardens to take care of.

Your niece, CERISE E. A. CARMAN.

River Edge, N. J.

[It is much better to do a few things well than to undertake too many things I wonder that more of the Cousins do not try to raise peanuts.—U. M.]

DEAR UNCLE MARK: I have thought it was about time for me to attend one of the meeting of the Cousins. One of them says her father gave her a piece of ground for a garden all to herself. That's the kind of father I like, and she ought to love him with all her heart. I guess she does. When I was a little boy my mother gave me a piece of ground for a garden, and made me very happy. I am always happy now when I think of it. I loved my dear good mother fondly; and though she has been dead many years, there is nothing for which I cherish her memory more lovingly than that she gave me that plot in the garden and perseveringly and tenderly taught me how to grow flowers. It has been a constant source of happiness to me all through life. I would therefore urge all the fathers and mothers who read the RURAL to give the children some spot that they may call their own for the purpose of growing plants. Give them, too, a few pet animals, and so, among other good things, develop and foster the sense of ownership. Besides making them thoughtful, it will open up a new life for the Cousins, which I know they will appreciate and be grateful for.

COUSIN HORTICOLA.

DEAR UNCLE MARK: I am much interested in the Horticultural Club, and want to do what little I can to make it interesting to others. I have had good luck raising potatoes from the seed. I planted the seed in a little box, and when the plants were about three inches high, I transplanted them. I had 14 of them, and among the rest I found one that was white with a red end. Some of them were white with red spots the si of a pin-head all over. Some had deep eyes, and on some you could hardly see the eyes. Uncle Mark, if you would like one of my little potatoes, I will send you one. Pa bought a packet of squash seed last Summer, and among them was one seed different from the others, and I took it and planted it by itself. I got two squashes that weighed 77 pounds. The smallest weighed 32 pounds, and the other weigh·d 45. If any of the Cousins would like to try to grow them, and will send me their address, I will send them some seed. Your niece,

LIZZIE HARDCASTLE.

Eldred P. O., Sull Co., N. Y.

[You may send me the potato if you will. I am glad you did so well. The Cousins will do well to send for some seeds.—U. M.]

DEAR UNCLE MARK: As I can't go to school to-day, I will write a letter. We only have four months' school and it is half gone. I have gone to my sister for three years. Papa is the County Superintendent. He started yesterday to visit the schools. I believe there are 117 schools in this county. The reason that I didn't go to school to-day is that I have such a bad headache. It has ached every day since last February. If any of the Cousins know what is good for it I wish they would please tell in the next letter they write. Uncle Mark has promised to tell us about his trip with a Mustang pony. I am anxious to hear it as we had one when we lived in California. We lived there 13 months. Our pony's name was Kate. They are such good travelers. We lived in Santa Cruz. Papa went to the Yosemite Valley to see the big trees. He traveled about 40 miles per day, I believe. I still attend the Literary. Last Saturday was election night, and my sister was elected Critic. She also debated, the question being: "Resolved, That the use of tobacco should be prohibited by law." Your niece,

Wood Co., W. Va. CARRIE MCKUSICK.

[Now who can tell what to do for the headache. We all have it at times, and we all want to cure it. How many think there ought to be a law against the use of tobacco?

UNCLE MARK.]

DEAR UNCLE MARK: I am a little red-headed girl, 10 years old. My Papa has taken your paper a long time, and I like to read the little Cousins' letters, and I think them very nice. And I think that old Cousin that has such a funny name, "Horticola," is very nice, because he keeps flowers and plants. Papa grows them too, and in the Summer, I gather lots of flowers when I want them. Papa has some very nice flowers, and some of them are very funny; they grow on nothing but pieces of wood, and I just wish you could see them, Uncle Mark, they are just awful nice. Oh, I almost forgot to ask you if I can join the Y H. C., but I most know you will let me, for I have read so many of your talks, that you seem like you was too nice to say "no" to anybody. But I must not make this letter too long, for if I do, you won't ever want me to write to you again. Your niece,

Logan Co., Ohio. MARY F. DRAPER.

[Yes, indeed, you may join. I am glad you like flowers. I can say "no" quick enough and sharp enough, too, when people do wrong. I hope I never shall have to be cross with any of the Cousins.—U. M.]

DEAR UNCLE MARK: I am a farmer boy way out in the State of Minnesota in the county of Nicollet. It is situated in the southern part of the State, so we are no near neighbors to polar bears. Our county is very little wooded, but it is level and fruit-bearing. The inhabitants consist of English, Scandinavians, Germans, etc., in our town they are nearly all Scandinavians, and so you see that am a Swede, though I was born in America. I received the RURAL for the first time January 2, and I like it very much. It was the bes paper I ever read. It has been rather a dry Summer here. We had no snow until the last days in December it fell little, and to-day it is a kind of snow storm. Your nephew,

Nicollet Co. F. JOHNSON.

[I am glad you are not near the bears; they would make very poor neighbors, in my opinion.—U. M.]

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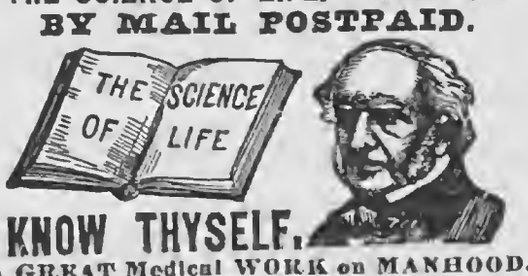

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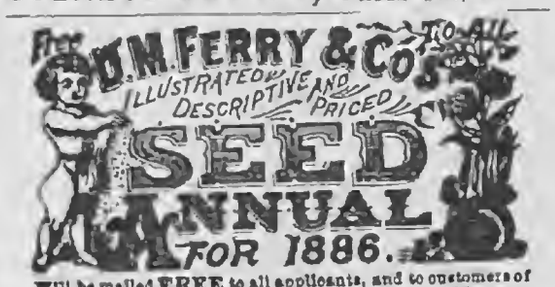

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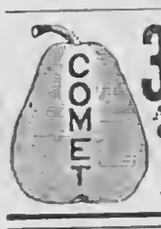

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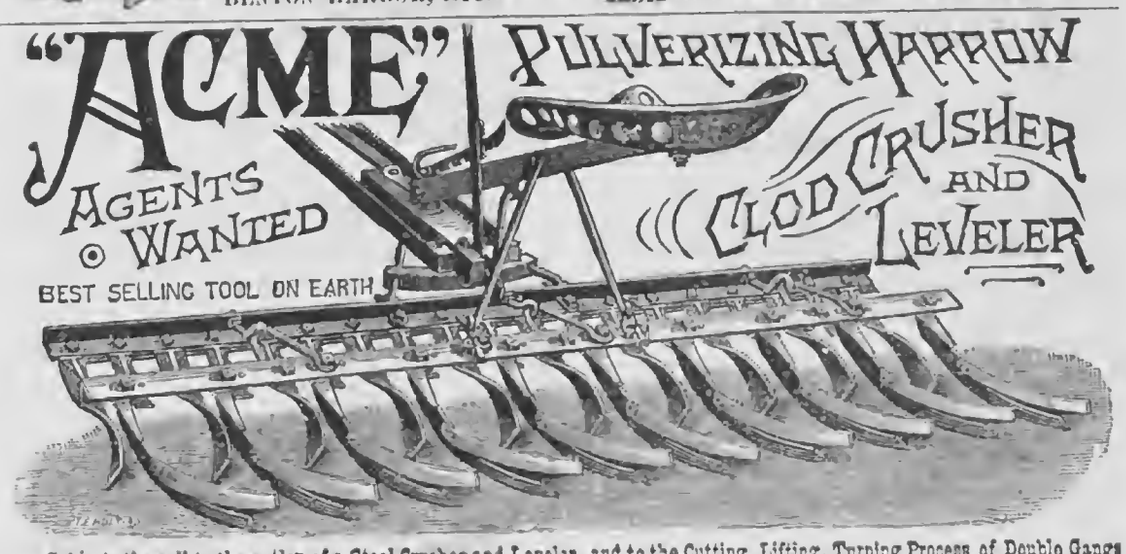

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PERSONALS.

THE aggregate amount of the pension drawn by the late Lord Brougham as a retired Master in Chancery was $530,000.

BLAINE frequently joins the boys "coasting" on the hillsides north of Augusta. Coasting should be good in any part of that uneven town.

JUSTICE MILLER, of the United States Supreme Court, is said to be a perfect picture of an old monk as he sits on the bench, wearing a dark velvet skull-cap.

THE Prince of Wales now wears a black silk ribbon as a watch-guard, and about the first of next July the Anglo-maniac in this country will affect the same style.

SENATOR BECK, it is said, can repeat "The Lady of the Lake" from memory, knows Burns by heart, and thinks there are no novels equal to those of Walter Scott.

DAVID ABEL, a minister of Burlington, N. J., who died the other day, provided in his will for the "pasturing and propagation of goats, in order to encourage the use of their flesh in the place of that of swine as an article of food."

THE richest men in Russia are two Swiss brothers named Noble. They bought up immense tracts of oil lands and now control, it is said, more petroleum than the Standard Oil Company. Their wealth has been estimated at $400,000,000.

MISS MARY GLADSTONE, daughter of the great English Premier, was married on Tuesday morning, to the Rev. Harry Drew, of Hawarden, now Gladstone's home. Among those present in addition to the immediate relatives, were the Prince and Princess of Wales, their sons and Lord Roseberry, with many other notabilities.

TH only girl student at the Yale Law Schoo has left the institution because the faculty have notified her that they couldn't grant her a diploma even if she passed a brilliant examination. This shows what it is to be unable to play base ball, break or bark a rival's shins at football, or knock fellows on the shins with a polo club.

A LADY clerk in the Interior Department was offered $5,000 and then $10,000 by a representative of a New York firm for a copy of Secretary Lamar's decision in the Bell telephone case, which she had transcribed. At the second offer she excused herself a moment and stepped into the Secretary's private office. When she returned the Secretary accompanied her, gave the speculator a very plain talk and informed him he would give him just 10 seconds to leave the room. It was wanted for stock jobbing purposes!

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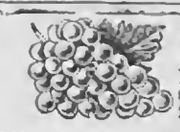

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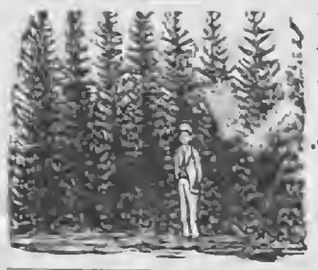

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Humorous.

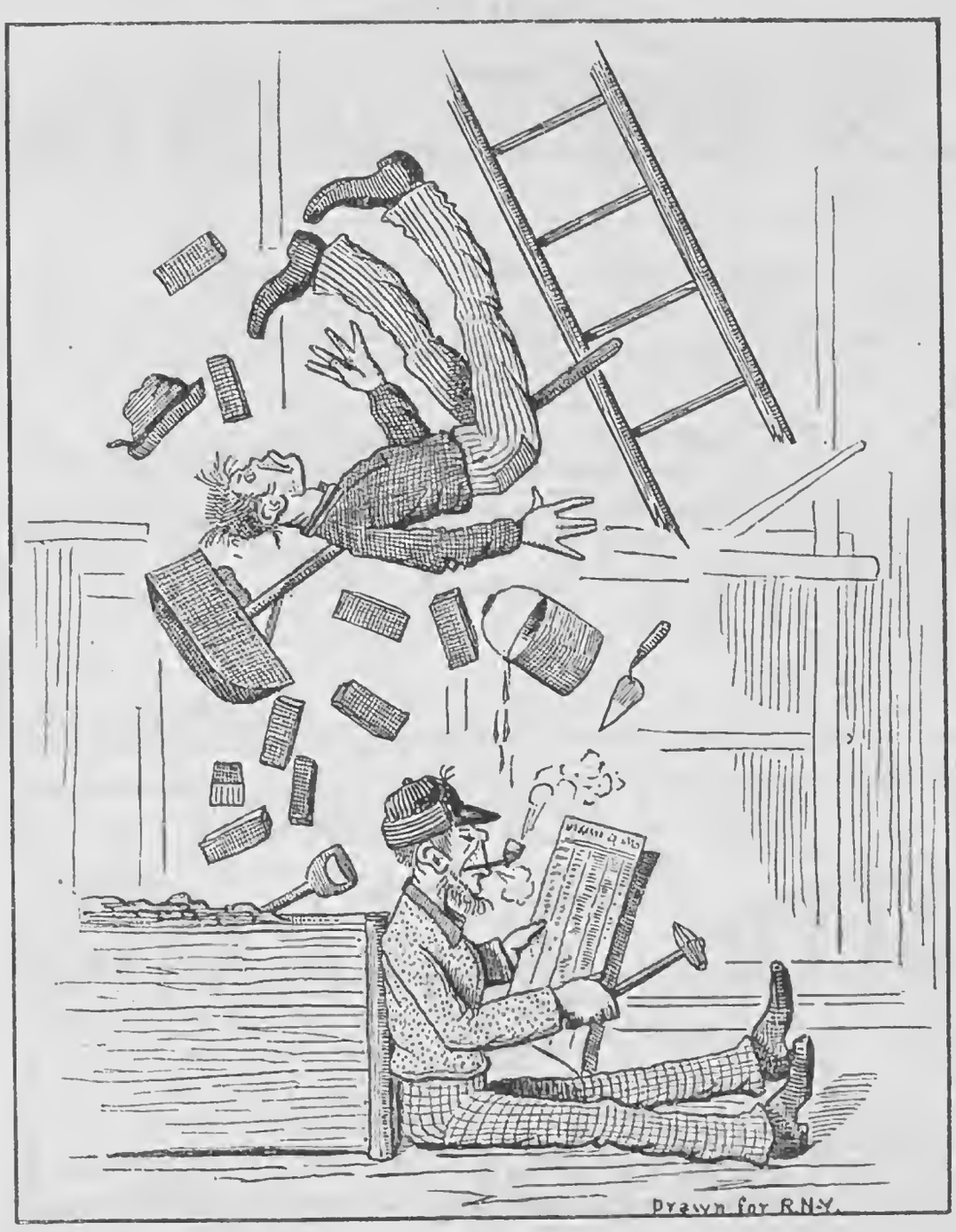
AN Iowa judge has decided that a man is in duty bound to tell his wife where he spends the evenings when he is away from home. This decision is all right to a certain extent, but suppose the man doesn't know.

THE world is full of people who go about fighting windmills and wasting effort in struggling with imaginary evil, but the man who attends to his own business and pays cash for groceries is the one with whom prosperity loves to roost.

"I TELL you, Fanny, I am bound to succeed. I have the aptitude. It is close attention to little things which makes a man succeed." "Ah, indeed! Well, that explains it." "Explains what, Fanny?" "Why you pay so very close attention to your moustache."

"I WOULDN'T worry about the cholera, dear," said a wife to her husband; "it isn't at all likely it will reach this country." "I don't know about that," he replied, nervously; "it might reach us at any moment, and we might have a frightful time. I—I think I had better pay the back pew rent, anyway."

"GENTLEMEN," said a tattered tramp, as he approached a settee in City Hall park, which was entirely occupied, "I am very tired. Will one of you be kind enough to get up and give me a seat?" No one moved; but all gazed at the impudent nomad with a stony stare. "Gentlemen," pleaded the vagrant, "you have no idea how tired I am. I left Montreal"—— Suddenly the seven men on the settee with one accord jumped up and fled, without looking around. "Yes," said the tramp, as he stretched himself out at full length on the bench, "I left Montreal when I was a boy."



Patrick, taking siesta—"Another wan av thim tornados out West! Oi wondher phat 'll come nixt."

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Five Cows have averaged over 19,000 lbs. in a year. Ten Cows have averaged over 18,000 lbs. in a year. Three Cows have averaged over 20,000 lbs. in a year.

We know of about 30 Cows that have made yearly records exceeding 16,000 lbs., and 14 of them are now in our Herd and have averaged over 17,500 lbs.

Twenty-five have averaged over 16,000 lbs. in a year. Sixty-three, the entire number in the Herd that have made yearly records, including fourteen 3-year olds and twenty-one 2-year olds, have averaged 12,785 lbs. 5 ozs. in a year.

BUTTER RECORDS.

Five Cows have averaged 20 lbs. 7 ozs. in a week. Nine Cows have averaged 19 lbs. ½ oz. in a week. Fifteen Cows have averaged 17 lbs. 6 ozs. in a week. Six 3-year olds have averaged 14 lbs. 3 ozs. in a week. Eleven 3-year olds (the entire number tested) have averaged 13 lbs. 2 ozs. in a week. Six 2-year olds have averaged 12 lbs. 1½ ozs. in a week. Fifteen 2 year olds (entire number tested) have averaged 10 lbs. 8 3-10 ozs. in a week. The entire original imported Netherland Family of six cows (two being but three years old) have averaged 17⅝ lbs. in a week. This is the Herd from which to get foundation stock. Prices low for quality of Stock.

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THE RURAL NEW-YORKER

A JOURNAL FOR THE SUBURBAN AND COUNTRY HOME

VOL. XLV. No. 1882. NEW YORK, FEBRUARY 20, 1886. PRICE FIVE CENTS. $2.00 PER YEAR.

Entered according to Act of Congress, in the year 1886, by the Rural New-Yorker in the office of the Librarian of Congress at Washington.

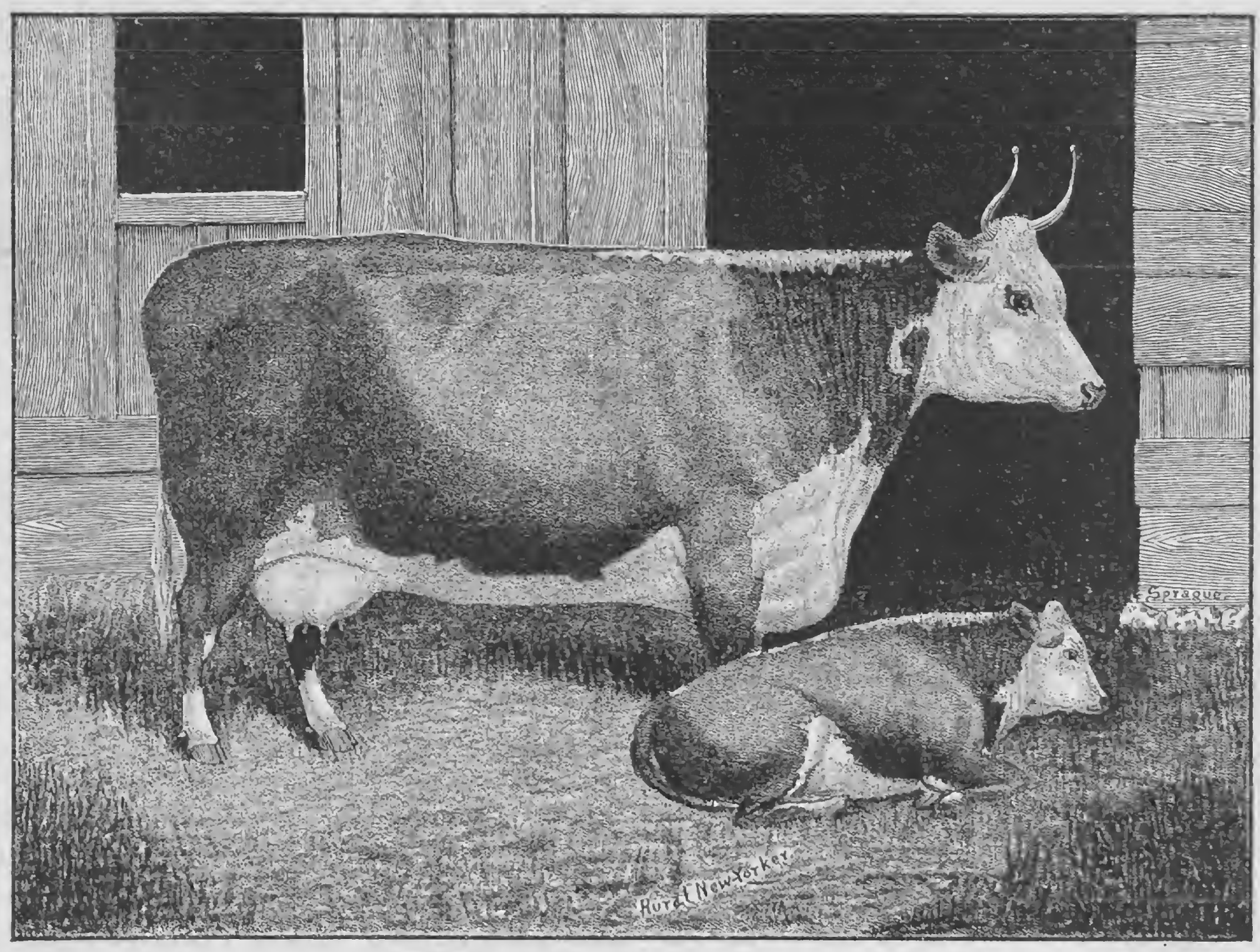
Dairy Husbandry.

A FINE HEREFORD COW.

WE show, at Fig. 73, a beautiful specimen of the Hereford breed of cattle. This cow, Lemon 2d, is an imported animal bred by Mr. B. Rogers, of Herefordshire, England. Since 1881 she has occupied a place in the fine herd belonging to the Agricultural College of Michigan. She has won a large number of first premiums at leading fairs, and is, without doubt, one of the best Herefords in Michigan. The cattle at the Michigan College are of the first order of merit. Under the skillful management of Prof. Johnson the herd has been greatly improved.

Short-horns predominate, yet there are specimens of all the popular breeds, so that students can study the characteristics of each. Stock growing is such an important feature of Western agriculture that it seems proper to push it to the very front in agricultural education. The stock at such institutions should be of the finest quality, so good that the surplus will always be in demand among the farmers of the State. The annual sales of stock from the Michigan College amount to $8,000, while the 250 students are supplied with milk from the dairy herd. The Short-horns have long held full sway in Michigan, but the Herefords are now rapidly growing in favor. One man has established a "White-faced dairy herd" that bids fair to become famous.

At a Farmers' Institute held a few years since, a successful breeder who had handled both breeds, stated that in his opinion, a cross between the Short-horn and Hereford would produce the finest breed the world has ever known. This seems possible when we study the pedigrees of many of the winners at recent fat stock shows. It is possible that some enthusiastic breeder with a fortune and a life-time to devote to the enterprise, may reach results that will rival in importance those of the famous Collings.



HEREFORD COW, LEMON 2d. Fig. 73.

WISCONSIN DAIRYMEN'S ASSOCIAT'N.

(RURAL SPECIAL REPORT.)

Attendance and interest good; bogus dairy products; selection of dairy stock; feed for dairy stock; roots for stock; ignorance in dairy matters; twaddle about the dignity of labor; amusements for the young; discriminating cows; effects of feed on the composition of milk; temperature in churning; no general-purpose cow in the dairy; experiments in feeding for milk and butter; ensilage; Farmers' Institutes; annual profit for dairy cows; woman in the cheese room.

THIS association met in its fourteenth annual convention, at Richland Center, January 26th. It was well attended, and the talent present was of a superior order. The interest was kept up to the close.

After the preliminaries were over, President Morrison read his opening address, bristling with suggestions and good points. Among other things, he said that at this stage of progress no one should expect to succeed in dairying who pursues it in a mere routine way. To be successful it must be pursued in a business way. He expressed the opinion that one-quarter of the so-called butter now thrown on the market is bogus, and that no law will ever afford protection to the best article of butter, which must be above all imitation or successful counterfeiting. So long as so much inferior butter is made, bogus butter has come to stay, for at least 60 per cent. of the butter in market is inferior to the products of the Chicago grease-vats. He favored protection of the consumer and the dairyman against fraud, by appropriate laws vigorously enforced. These sentiments met with the approbation of the convention.

Fred. E. Carswell found careful selection of dairy stock the first and most important step to be taken by the dairyman. He would not favor any one breed, because no one will suit all tastes and circumstances; but he would be careful to select cows with all the dairy characteristics, and breed pure or toward purity for the purpose of keeping up and improving the standard of excellence. The care of a dairy herd is important, but not as difficult to understand as is the selection. He recommended corn and shorts for winter grain feed; corn and oats for spring, and bran for summer feed. He believes in so feeding as to keep up the flow of milk and the condition of the cow at all seasons.

Hon. H. C. Adams contended that the dairyman should aim at the production of 300 pounds of choice butter per cow every year. This will afford twice the net profit of a yield of 200 pounds. He thought that it cost about $10 to pasture a cow through the Summer, or five cents a day. He recommended the growing of pumpkins, and recommended the removal of the seeds before feeding them. But they should be cultivated by themselves, on well manured ground, in hills eight feet apart. In this way, it is impossible for the bugs to keep up with the procession. His cows are fed grain twice a day, each time immediately after milking. He would feed three parts, by weight, of cut hay or stalks, with each grain ration. Corn and oats, ground together, produce the best-colored milk. No ration, exclusively of one kind of grain, equals ground oats, but these are too expensive if they cost over 20 cents a bushel. A cow needs change in her grain feed. A good alternation is from middlings and bran to corn meal and oil meal, or oat meal and middlings. Rye bran is good; but buckwheat bran is a nuisance. Malt sprouts are as nitrogenous as oil meal, but need soaking three days before they are fed. They weigh as light as bran, are sweet and relishable and easily digested. Clover cut in full bloom is the best hay, and millet ranks next. Corn fodder and fodder corn should always be run through a feed-cutter. The indications are that the silo is assuming a shape that will make a half revolution in our feeding processes, for there is need of a succulent food for winter use. Good management still secures a net profit to the dairyman,-even in these hard times of close competition.

T. D. Curtis read a short paper on the unknown in dairying. How to reach the great non-progressive mass who do not attend conventions or read papers, is still an unsolved problem. By holding conventions at different places, a few of these may be attracted and instructed; but there is such a multitude of them that the number benefited would be comparatively small. The man of experience in dairy matters is the man who is least positive about what he knows, and the one most desirous to learn. "Trifles light as air" are floating in the atmosphere, and often find their way into the milk, to the discomfiture of the unlucky dairyman. Knowledge and care are necessary to guard against or overcome these occult difficulties. Milk is a very complex and sensitive compound, mixed both chemically and mechanically, and is subject to manifold influences that hasten decay from the moment it is drawn until it is consumed or has gone into final decomposition.

Mrs. C. V. Layton, in a paper on the dignity of labor, ridiculed and satirized the hypocritical twaddle on the subject indulged in by orators and writers. Labor is a hard fact, useful, elevating and necessary, but often very far from being dignified. Martha Washington doing her own house work with her hands covered with dough and her face powdered with flour, would be a very different-appearing personage from Lady Washington with powdered hair and clothed in fashionably-made dresses of silks and brocades. "The strength of the State lies in the welfare of its weakest members. May we not all be employed in welding this chain of brotherhood? We are called to work with heart, head and hand—to work while the day lasts, 'for the night soon cometh when no man can work.'"

Mrs. D. G. James took up the subject of amusements for the young; there is a pressing need for something that will cultivative a refined sociality and at the same time not lead to excess and dissipation. Exuberant youth will not consent to be chained down to the sober routine of life that satisfies conservative old age. While the dangers that are encountered in cities and villages are not so imminent among a scattered rural population, there is hardly less danger in the isolation that makes the soul yearn for social intercourse, and fills it with a desire to mingle in the activities of the great outside world. There is danger in both extremes, and how to strike a just balance that will be satisfactory, and avoid both Scylla and Charybdis is the problem of the hour. This must be done by appealing to both head and heart, and subjecting all amusements to the guidance of reason and the dictates of virtue. None feel a deeper interest in this problem than the mothers of our land who have no voice through the ballot box in regulating the public places of resort, and guarding against the pernicious outside influences which

.nfest every community. A cheerful, sociable home is the best safeguard.

In presenting the yesterday and to-day of dairying, the Rev. L. B. Loomis reviewed the progress of dairying from the days of David to the present time, with many pertinent hits. "The wife and daughter of yesterday were the cheese-makers, dividing their time between the spinning wheel and cheese tub; between the cradle and the milking stool. The fittest survived, and I believe in as large numbers as now to over come the skating rinks and progressive euchre." We want improved breeds of cows that will not swallow frogs when they drink water, that abhor tallow from Texas steers, that are Jews in their abhorrence of swine fat, that will not give down to dirty milkers, and that will kick over every pail of milk into which dirt has fallen.

Prof. H. P. Armsby gave some experience in feeding for the purpose of ascertaining the effects of feed on the composition of milk. Rich feeding generally increases the flow of milk, but is more marked in its effects in producing better quality. It increases the proportion of solids to fluids, by reducing the per cent. of water. But the relative proportion of fat to casein is rarely changed perceptibly. In a very few instances there has been a slight increase in the proportion of fats. In one instance, and on one cow only, palm-nut meal had this effect.

Prof. Henry E. Alvord in a talk on churning emphasized the importance of paying more attention to temperature. Different seasons, different cows, different feed, different conditions, etc., require different temperatures, which range all the way from 56 to 70 degrees.

Mr. C. R. Beech argued that a good cow should return her owner $50 to $60 per annum, gross receipts. Less than this would not afford any net profit.

Prof. L. B. Arnold considered the question of dairying and the state of the art. He emphasized the importance of sweet rennet, drawing the whey sweet, holding the curd warm in the vat or sink until the cheesing process is well developed, and curing in a room the temperature of which can be perfectly controlled.

W. D. Hoard went for the "general-purpose" cow, and wanted to know what a cow is for. He concluded that she is either for the production of milk or for the rearing of calves for beef. It is impossible to combine successfully the two functions, and it is foolish and wasteful economy to hold for years a beef carcass that does not give a paying yield of milk and makes very poor beef at last. The special dairy cow gives enough more product, than the general-purpose cow, to buy the latter outright every year.

Prof. W. A. Henry related a little experiment in growing and feeding corn. He got 4,490 pounds of corn-stalks and 4,941 pounds of corn from an acre. By exchanging corn meal for bran, pound for pound, so as to make the relative proportion 25 pounds of corn meal to 35 pounds of bran, he found he had grain feed enough to make 324 pounds of butter, but only corn-stalks enough to feed with the grain for the production of 115 pounds of butter. The lack of the balance of coarse feed for the production of the 324 pounds of butter had to come from an outside source, there being only about one-third enough corn-stalks on the acre. In another experiment, it took 71 pounds of mixed hay (one part of clover to two parts of Timothy), 26 of corn meal and 36 of wheat bran to produce 100 pounds of milk, and 1,348 pounds of mixed hay, 500 of corn meal and 700 of wheat bran to produce 100 pounds of butter. Substituting corn-stalks for the hay, it took 195 pounds of corn-stalks, 25 of corn meal and 35 of wheat bran to produce 100 pounds of milk, and 3,880 pounds of corn-stalks, 514 of corn meal and 719 of wheat bran to produce 100 pounds of butter. On clover hay, it took 60 pounds of clover hay, 26 of corn meal and 37 of wheat bran to produce 100 pounds of milk, and 1,177 pounds of clover, 513 pounds of corn meal and 718 pounds of wheat bran to produce 100 pounds of butter. One of the cows was a full-blooded Jersey, the other a half-blood, and the third a native.

John Gould highly commended the silo. There are 17 in his neighborhood in Ohio, and they are growing more popular every year. The corn is grown in rows four feet apart, drilled in at the rate of one bushel to the acre, which makes the stalks stand three to four inches apart in the row. At first the field is harrowed with a smoothing harrow, and this is repeated until the corn is large enough to hill. This keeps down all the weeds, the ground being well prepared to begin with. Then a horse cultivator is run between the rows, with the teeth set so as to throw the dirt up against the rows. The corn is cut just as it is fit to roast, and run through a feed-cutter, which reduces it to half-inch lengths. It is slowly filled into the silo, which is divided into three compartments, and the cutting is done into a single compartment each day. This gives the cut stalks time to settle and heat. Two or three days after the last cutting, closely-fitting planks are put on the top of the stalks and covered with two or three inches of clay. The work is then complete until time to feed, when the entire covering to a compartment is removed, and each foddering is a layer taken from the entire surface. When fed in conjunction with some nitrogenous food, the milk product is said to be superior. The silage is known as "sweet" because the amount of acidity is so slight.

J. A. Smith spoke highly of the success of the Farmers' Institutes which are held throughout Wisconsin during the Winter. He estimated the feeding value of three tons of silage as equal to that of one ton of hay. Twenty-five tons of silage per acre is an average yield. There are 1,800 pounds of solids in a ton of hay, and only 900 pounds of solids in three tons of silage, but the latter has the advantage of being in a more available form for digestion and assimilation, which gives the solids double value as compared with dry hay.

Hiram Smith believes in rich thinking, rich soil and rich feeding. He has a grade Jersey herd, has put in a silo, and expects to keep 100 cows on 200 acres, 20 of which are woodland. He now has 64 cows; he formerly had only 40. He thinks that the milk of 40 or more can be more profitably worked up on the farm. He formerly got only $45 a year from each cow, but now he gets $65.

Mr. A. J. Decker thinks Wisconsin cheese can be improved by the employment of a State Superintendent of cheese factories, and the employment of more women as boss cheese-makers, as he finds they are more cleanly and thorough. The factory should be large enough to employ a woman cheese-maker and a man to work under her directions, and to do the rougher and to heavier work.

Mr. J. M. Thomas urged the importance of attending to all the details, no matter how good the general plans may be. No business, however well planned, will run itself. There must be constant attention from first to last. The surplus food above the maintenance ration is what the cow converts into milk. "C."

REMEDY FOR LEAKING TEATS.—If a flat India-rubber ring is put high up around the udder of a cow that drops her milk, just after milking, and kept there for a week, or longer, if necessary, it is a "sure cure." I have found it to be so a number of times. H. R.

Sheep Husbandry.

Notes from the Rural's W. N. Y. Farm

LAMB RAISING AND FEEDING LAMBS.

SUCCULENT FOOD

is extremely necessary if the best results are desired in feeding any class of sheep. It is doubly so in the feeding of lambs. Though not very well known to sheep feeders, it is a fact that when fed on a diet of corn and dry forage, it is never safe to continue the feeding of a sheep over 90 days; but with bran and oil meal mixed with the corn, the time may be safely extended 30 days. If to this diet be added a moderate daily, or even a semi-weekly allowance of succulent food of some sort, the time can be indefinitely extended and the sheep will remain in perfect health.

As before stated, in fattening but little is added to mature sheep in muscle (lean meat) and nothing in bones, the gain being almost entirely an increase of fat, and as it does not pay to carry this beyond a certain extent, they may be so highly fed as to reach this point in from 90 to 120 days, so that this may be done fairly well without green food. It is entirely different in the feeding of lambs; their gain is more than one half bone, muscle and wool, and with the proper food their growth may be continued, with very little diminution in the ratio of increase, during the whole Winter. If put into the barns in November, they may be profitably fed until May, making a period of from 165 to 180 days, so that in lamb feeding succulent food *must* be provided.

Aside from its cooling and laxative effects upon the system, green food stimulates the stomach and digestive organs to more thoroughly act upon the solid foods, and to take up and assimilate a much larger proportion of their nutritive matter, in this way causing greater gain for the same amount of food consumed. The whole carcass will be made to contain a much larger proportion of moisture; this not only adds to the weight of the carcass, but gives increased value to the animal, and greater satisfaction to the consumer, in its juiciness, so that while older sheep will do much better when supplied with succulent food, and its use will pay even with them, it is absolutely indispensable in feeding lambs.

SILAGE OR ROOTS,

which shall we use? We must admit right here that we have had no personal experience with the silo, and can therefore speak of silage only from second-hand knowledge. We have known many people to use silage in feeding older sheep; some recommend it highly, while others as strongly condemned its use. We know of but one person who has ever used silage for lamb feeding, and he abandoned it on the ground that roots were better. And then, we do not see how it is much cheaper than roots. The estimates for growing and putting it into the silo run all along from $1.25 to $2.25 per ton, and for $1.67 per ton, or five cents per bushel at the very outside, we can put mangels into the cellar; and we know just what we can do with them.

Our experience has been very extensive and of long duration in the use of the various kinds of roots, all of which are excellent in their season, as are also potatoes, and apples so long as they can be kept sound. We commence feeding roots as soon as the lambs go into the pens, and continue until they go to market.

WHAT KIND OF ROOTS

are cheapest to grow and will produce the best results in feeding is a question to be determined only by long experience, and depends considerably upon the soil. We have had good success with both English or flat turnips and swedes, with carrots, sugar beets and several varieties of mangels. We now largely depend upon English or flat turnips for feeding in the Fall and early Winter, and on mangels for late feeding; though we sometimes feed largely of swedes. We have so many inquiries as to the value of the different roots, the best soils on which to raise them, the best manure and manner of growing and harvesting each, and how to store and feed them, that we will, by and by, take these up and treat of each separately.

WHAT GRAIN WITH STRAW

and poor hay will make a complete food? Our good friend R. S. Davis, of Vermont, says he has 40 grade Cotswold ewes in lamb, with only straw and a poor quality of hay for forage on which to winter them, and he wishes to know what grain he should feed to keep them in good condition. Straw and meadow hay, and if the latter is in poor condition more markedly so, are very deficient in the albuminoids or nitrogenous elements, and as these are very essential in the food of a sheep (and especially of one bearing a lamb), for the growth of wool and also of the fœtus, we should select such grains as have a surplus of these elements. The best of all foods to mix with them, then, is cotton-seed meal (this is only theoretical, as we have had no experience with it), new-process or linseed meal, old-process oil meal, peas, beans; then bran and malt-sprouts mixed; then oats and barley. If oil-meal is used, one-half its weight may be added in corn or barley, or wheat middlings. The same may be done to advantage if peas or beans are used.

It would be a grand thing if the ewes could have two feeds of mangels or turnips, or sugar beets or potatoes every week. Corn alone is about as deficient in albuminoids as is the forage named. Bran is a capital ingredient to be included in the ration of breeding animals, as it contains so large a percentage of phosphate of lime, a thing very essential from which to grow the bones of the off-spring.

We had, January 27th, 252 young lambs, and they were still making it lively for the shepherds. We shall run somewhat over 300 this year.

January 27th we shipped the first six to market. They weighed, dressed, 35 pounds each, and sold for a very satisfactory price.

The demand seems now fairly open, and takes them as fast as we can force them into condition as to size and fatness. Up to Feb. 13th, 64 had been marketed, and we are now sending 18 each week.

It seems hard to pet and fondle the little fellows until you really come to love them, and then be obliged to take their lives. This is the only disagreeable feature in the whole business. But such is life! The stronger are always feeding at the expense of the weaker.

Farm Topics.

MARKET THOUGHTS.

So much has been said about the price of butter and the extent to which the use of oleomargarine has cut into the business, that it may be interesting to compare prices. In the New York market February 1, the best butter was quoted at 35 cents and the poorest at 11 cents. This was, of course, the wholesale price. Ten cents at least should be added for the retail price. That a fair comparison can be made, we give the prices quoted in this market for the past five years, for the best and the poorest butter.

	Jan.	Feb.	March.	April.	May.	June.
1881	31	34	31	35	24	23
	13	13	12	13	15	10
1882	43	43	48	44	31	25
	15	13	14	12	12	15
1883	44	38	42	33	31	20
	16	14	14	14	12	11
1884	36	40	36	38	31	20
	13	12	12	10	12	8
1885	31	36	36	29	27	19
	13	13	12	10	9	8

These figures show that the best grades of butter have held their own in price fairly well; but that the poorest grades have surely fallen away in value. The highest prices were reached in 1882, while the lowest were those of last year. The prices thus far this year are below those of last year, and it must be confessed that there seems little chance for improvement. Prices generally begin to drop about the middle of March. It must be remembered that city people are buying more and more butter directly from the producers. The thorough advertising which oleomargarine has received has frightened people and led them to be more careful in the selection of butter. Several families can club together and buy a quantity of butter directly from the dairy, and divide. This trade is growing in importance and bids fair to cut still further into the regular butter business.

Oleomargarine is quoted at six cents per pound, wholesale. Though thousands of pounds are handled each week, we have never seen it retailed under its proper name. It is next to impossible for an ordinary person to tell it from genuine butter. We have seen very intelligent people eat it with satisfaction, supposing that they were eating first-class butter. In many cheap restaurants and boarding houses consumers probably know what they are eating: but it seems evident that the great bulk of oleomargarine is sold and eaten as butter. The fact that the imitation is so perfect has led thousands of business men, who take their lunch in the city, to give up the use of butter when away from home. This action has injured the wholesale trade in two ways—it has actually decreased the demand for butter, and it has hastened the establishment of "dairies" or restaurants which are run in connection with a farm a short distance from the city, where the best of milk and butter can be secured. It appears evident that the increased business in oleomargarine will still further injure the wholesale butter trade. The result will be that city families will organize and buy butter directly from the country, or creameries will be established with retail agencies in the city.

The efforts to regulate the sale of oleomargarine in this market have not met with success; one section of the law has been declared unconstitutional. Plenty of arrests for offenses covered by other sections have been made, but owing to the slow process of law in this district and the influence against such prosecutions, little progress can be made. It seems likely that imitation butter has secured a permanent hold on the markets as at present conducted, and that the most successful methods of fighting it lie in organization among farmers and consumers. The most practical method appears to be the establishment of more creameries with retail branches in the cities where good butter can be sold at fair prices.

CROP NOTES.

THE best of my thoroughly tested potatoes is Clark's No. 1. The best new early is the Diamond Seedling, a new sort from Niagara County, N. Y., in shape and flavor like the Snowflake, but not quite as white-fleshed. If it does as well hereafter as it did the past season, it will be A No. 1. White Elephants all rotten. St. Patrick one of my best.

The Rural 50 kinds of corn nearly all ripened, but I did not consider any desirable.

All grapes were late in ripening the past Autumn. Iona ripened but about half the crop. Jefferson proved a great and early bearer of enormous clusters, about a week later than Concord: quality excellent. Vergennes was considerably earlier, and resembles Salem in wood and fruit. How foolish some self-sufficient persons are in ridiculing the Concord grape. The odor of the rose is offensive to some, and that of Limburger cheese agreeable to others. Of 200 persons eating grapes every day in a house near here, more than two-thirds prefer Concord to Delaware. The tenderest grape in my collection is the Hartford. It does not fully ripen its wood. Worden deserved a good word; so do Brighton and Lady, Eumelan and Agawam.

Schuyler Co., N. Y. H.

CROWS IN THE CORN-FIELD.

The way to avoid damage from crows is to hang a dead crow up in the field. One killed now, if the entrails are removed and the cavity is filled with salt, and salt is also placed in the crop and down the throat, and the carcass

is hung up and dried, will last for this purpose two years. Try it. W. H. B.
Carlisle, Pa.

REMARKS.—We have found that crows do much more good than harm. A few quarts of corn thoroughly soaked and scattered about the field just as the planted corn is coming up, will prevent all damage.

THINGS WORTH KNOWING.

ONE spoonful of coal-tar to a peck of seed corn will prevent crows from pulling up the corn.

Coal-tar will have no effect on the potato "bug." It will preserve shingles, if put on as they are laid; but pitch tar thinned with oil and mixed with paint is much better. Fifty years ago, I helped to put shingles on a roof, prepared in this way, and most of them are there yet.

Oil and pulverized charcoal will preserve fence-posts, but burning the end that goes into the ground, is the best preservative. I have some posts which were prepared in this way and set in 1862, and to-day they are just as sound as ever. N. H.

Farm Economy.

SNOW PLOW.

IN those parts of the country blessed with frequent and deep snows, it is no small chore to keep walks shoveled or cleared out. We well remember the many weary hours spent when a boy in clearing out the snow a few hours would again put back, and all the time the horses were standing idle in the warm stables, eating hay and oats.

A snow plow is quickly made, and with one and a good horse, or team when the snow is extra-deep or has got packed pretty hard, more roads can be cleaned in 15 minutes than any boy can shovel out in half a day, and with the plow it is only fun for boy or horse, unless too many roads are to be cleaned, when the horse ceases to see where the fun comes in. To make a good one, take two hard-wood boards, or tough wood will do; they should be eight or nine feet long, 18 or 20 inches wide, and one or one-and-a-half inch thick. The front ends should be cut three inches shorter on the upper than on the under edge, and chamfered on the back side so as to fit together V-shaped, and so that the rear end will be spread as much as it is desired to have the walk or path wide. A piece of 4x6 scantling, *a*, should be cut to fit into the angle between the sides at the front end, and to this the sides should be firmly nailed. One foot from the rear end a 2x6 piece should be put across from side to side, and let into both sides so as to come flush with the top. See *b*, Fig. 86.

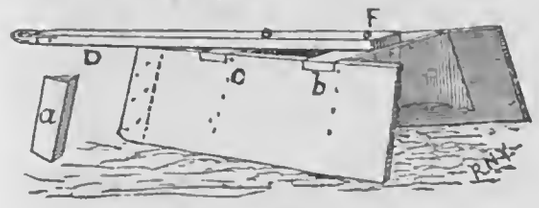


Fig. 86.

A piece of board or plank five inches narrower than the sides should next be cut long enough, and having its ends cut on an angle so as to fit closely to the sides when placed upright and close up to the cross-piece, *b*. The lower edge of this piece should be hollowed out in the middle between the sides so as not to strike any stones or frozen hubs on the ground; to this the sides and also the cross-piece should be firmly nailed. Another cross-piece and perpendicular board of the same kind, only shorter, should be put in, as at *C*. A beam should be provided, *D*. This should be 4x4 inches, and seven feet long. Its hind end should be bolted to the center of the hinder cross-piece, as at *F*. There should be a hole through this beam, where it passes over the forward cross-piece which should have three or more holes. By putting a bolt through these holes and the beam, the plow can be made to follow the team directly, throwing the snow on both sides, or be made to run angling so as to throw the snow at either side, as desired; the slant of the sides and the weight of the driver will cause the plow to run under the snow and follow close to the ground or walk.

The point should be rounded a very little to prevent it from running into the ground.

LARD PRESS.

MR. GEORGE WHITON sends us the design for the implement shown at Fig. 85. We think the women who burn their fingers and have a hard time generally over the hot lard, will look upon it with favor. A sheet-iron cylinder, A, is punctured with holes for one-third of the space from the bottom, as shown at B. A block of wood, two inches thick and just large enough to enter the cylinder, is shown at C. D is a common carpenter's bench screw, which plays through the block, which is in turn supported by two iron straps, F F, made from old wagon-tire iron. The pan, E, can be made from a six-quart milk pan. The tinner

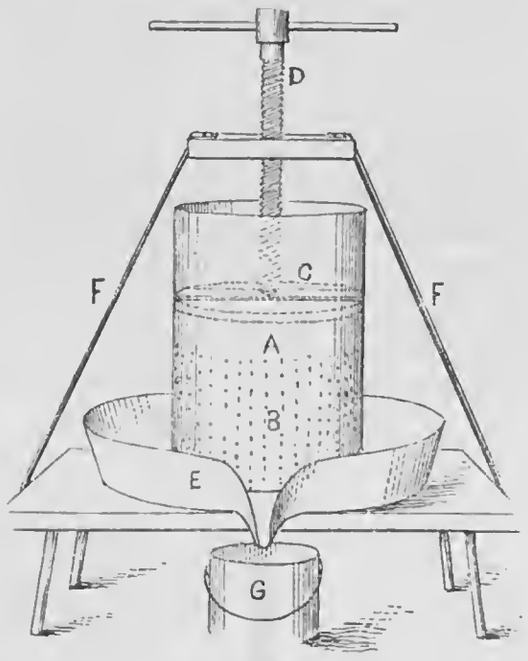


Fig. 85.

can put a spout on it, as shown. G is an ordinary pail. In use, the pan is placed as shown in the illustration, the cylinder filled with lard or cracklings, the piece of wood, C, placed at the top, and the screw applied. When the lard has been pressed out, the screw is reversed and the cracklings pushed out.

HARD TIMES DEVICES.

"NECESSITY is the mother of invention." Hard times can be looked upon as the grandparent. The walls of a new home generally look bare. There are usually plenty of unframed pictures. These can be framed at home. I give my experience as a framer. A box to fit the corners was needed. This was made, as shown in Fig. 82, from three dressed inch boards, six inches wide and 18 inches long, another four-and-one-fourth inches wide being added. The angles must all be right, and the nails driven so that they will not come in the way of the saw. The sides are divided into three equal parts, and cut down with a saw so as to form a perfect X at the bottom. With this box to prepare the corners, I took pieces of bed and crown molding, left from the house, and fitted them together. They were pine, so I oiled and added walnut stain. When the frames were dry, small strips a trifle thicker than the glass, were added to the back and finally a thin board to hold picture and glass in place. When walnut and gilt are desired, stick strips of gilt paper on the inner edge of the molding.

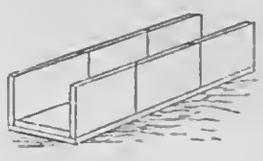


Fig. 82.

A convenient way of arranging saws on the lid of a tool chest is shown at Fig. 83. The end of the blade is put in a small pocket and the handle is held with a button. MAY BEE.

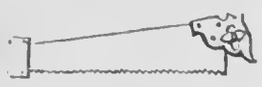


Fig. 83.

SAFE BARN LOCK.

MR. J. KRUPP, of Franklinville, Ont., Canada, tells us how he fastens his barn door. The lock proper is an ordinary sliding wooden bolt, fixed on the inside of the door. A hole, half an inch in diameter, is bored through the door two inches above the bolt. The key, shown at Fig. 84, is a piece of ordinary three-eighth inch iron with a hinge at *a*. When the key is pushed through the hole, the shorter part falls into the position shown at Fig. 2, between two projections on the bolt, so that when the key is turned the bolt is pushed into place. This lock is cheap and will be hard to pick.

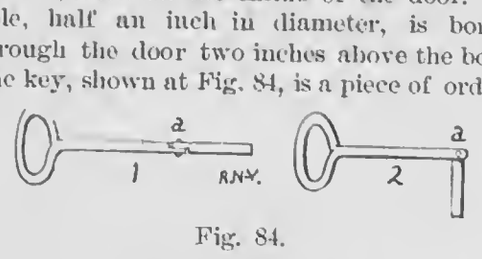


Fig. 84.

USE THE OLD HORSE-SHOES.

THERE is economy in making things live two lives. Fig. 80 shows how this principle can be carried out with respect to old horse-shoes. Mr. W. F. Woodruff, who sent us the sketch, says: "Horse-shoes may be made to do duty in a number of ways after they have outlived their usefulness on the animal's hoofs. For instance, when I discover a fence post which has split, I draw it up with a chain and

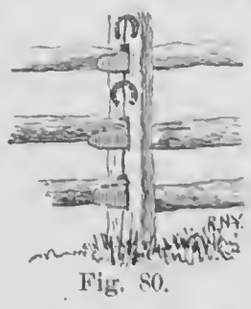


Fig. 80.

stout stick, and nail an old shoe on to hold it together.

HARNESS HOOK.

THE "hook" shown at Fig. 81 is intended, by those who have it in use, to be placed where it is not practicable to drive a pin. It is far better than the old-fashioned crotched stick so much in use. A is a piece of 2x3-inch scantling, two feet long, with a mortise at the top, into which C fits. C is one inch broad, four inches wide and 20 inches long. It is hollowed to the depth of one inch at the center. It fits in a mortise at the top of the brace B. B is made of 2x3 inch scantling, two feet six inches long. It is beveled at one end to fit at the bottom of A, to which it is nailed. The whole arrangement is spiked to the wall.

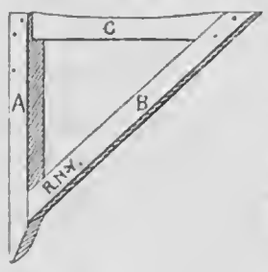


Fig. 81.

Arboricultural.

THE JAPAN CHESTNUT.

Is it larger than the Spanish? Nuts weighing over one ounce; are they from the Japan or the Spanish?

AN ILLUSTRATION TRUE TO NATURE.

THE following letter explains itself:

"We are surprised at what is said editorially on page 60 of the RURAL for January 23, in relation to the comparative sizes of the Spanish and Japan Chestnuts. We have handled a good many of both, and our impression is, and always has been, that the Japan averages much the larger, as well as being of superior flavor. We mail to the RURAL office three samples of the Japan, which weigh over four ounces. We have had some that weighed 1½ ounce each. Those we mail have been carelessly exposed to freezing and thawing, and are somewhat injured. We should not have taken any notice of the item, were it not that we had given representations of each kind in our catalogue, and if the Spanish is the larger, they are incorrect. The chestnuts forwarded were grown in Japan. We have none of our own raising that we can send. They have fruited with us in two years from grafts put in bearing trees of the American chestnut, and they have borne in the nursery row at three years from seed—the trees not being more than three to four feet high. We have at different times grown considerable fruit of the Spanish Chestnut, but every once in a while we have had a cold Winter that killed them pretty well down to the ground; but we do not know that the roots were ever injured. We think from what we have seen of the Japan Chestnuts on Long Island that they are neither as dwarf in habit, nor as large in fruit as those we are growing. We have imported a good many hundred pounds of nuts from Japan, and the average size has always been larger than that of any lot of Spanish Chestnuts we have ever seen.

Painesville, O. J. J. HARRISON."

Five or six years ago, the writer saw, for the first time, a Japan Chestnut tree. It was about six feet high and had borne fruit. A tree was ordered for the RURAL'S Experiment Grounds. It died. Another was ordered, and that died. A third lived and is now about four years old though still only a bush four feet high.

Upon inquiry, we found that several years prior to our first trial, Mr. Bruggerhof (of the firm of Thorburn & Co., N. Y.), had received and planted some nuts from Japan. Many of them fruited in three or four years, bearing nuts not as good in quality as our native chestnuts, but nearly twice as large. He now informs us that these seedling trees are about 20 feet in hight, being 10 years old. Unless deprived of their lower branches, the trees assume a bushy form, spreading over the ground and bearing fruit within three feet of it. Even when the branches are cut away, exposing the main stem, the tops still assume a bushy, round form. The nuts borne by these seedlings (see Figs. 74, and 75—p. 120) are all very much smaller than that shown entire at Fig. 76, and in half-section at Fig. 77 (see page 120).

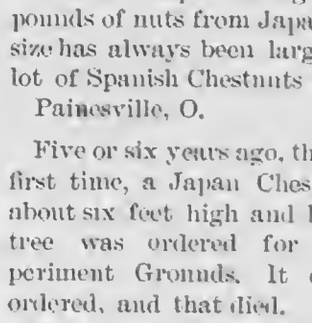


Fig. 74.

Lots of chestnuts come to this country under the names of Japan, Spanish, Italian and French; but, so far as we are informed, they are all tender in this climate except the

(*Continued on page* 120.)

Miscellaneous Advertising.

That Tired Feeling

The warm weather has a debilitating effect, especially upon those who are within doors most of the time. The peculiar, yet common, complaint known as "that tired feeling," is the result. This feeling can be entirely overcome by taking Hood's Sarsaparilla, which gives new life and strength to all the functions of the body.

"I could not sleep; had no appetite. I took Hood's Sarsaparilla and soon began to sleep soundly; could get up without that tired and languid feeling; and my appetite improved." R. A. SANFORD, Kent, Ohio.

Hood's Sarsaparilla

Sold by all druggists. $1; six for $5. Made only by C. I. HOOD & CO., Lowell, Mass.

100 Doses One Dollar

ORGANS The most beautiful and finest toned in the world. Low prices, easy payment. Send for Catalogue. Address Weaver Organ & Piano Co., YORK, PA.

TO ALL LOVERS

of the PURE and GOOD, this soap recommends itself. For the TOILET without an equal, for SHAVING a great luxury. In pound bars, also in packages of 6 Round or Square Cakes. Ask your druggists for it, or send 2c. stamp for trial sample.
IT WILL DELIGHT YOU.

COLTON'S

SELECT FLAVORS.

OF THE CHOICEST FRUITS AND SPICES.

Their absolute purity, unequaled strength and economy are winning friends everywhere, surprising and delighting families, and trebling sales for dealers.

Ask your grocer for them.
Laboratory (Home Dep't) Westfield, Mass.

EPPS'S
GRATEFUL—COMFORTING.
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With Diamond Dyes, for 10 cts They never fail. 32 fast colors. They also make inks, color photo's, etc. Send for colored samples and Dye book. Gold, Silver, Copper and Bronze Paints for any use—only 10 cents a package. Druggists sell or we send post-paid.
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THIS NEW
ELASTIC TRUSS
Has a Pad different from all others, is cup shape, with Self-adjusting Ball in center, adapts itself to all positions of the body while the ball in the cup presses back the intestines just as a person does with the finger. With light pressure the Hernia is held securely day and night, and a radical cure certain. It is easy, durable and cheap. Sent by mail. Circulars free. EGGLESTON TRUSS CO., Chicago, Ill.

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ORGANS: Highest Honors at all Great World's Exhibitions for eighteen years. One hundred Styles, $22, to $900. For Cash, Easy Payments or Rented. Catalogues free.

PIANOS: New mode of Stringing. Do not require one-quarter as much tuning as Pianos on the prevailing "wrest-pin" system. Remarkable for purity of tone and durability.

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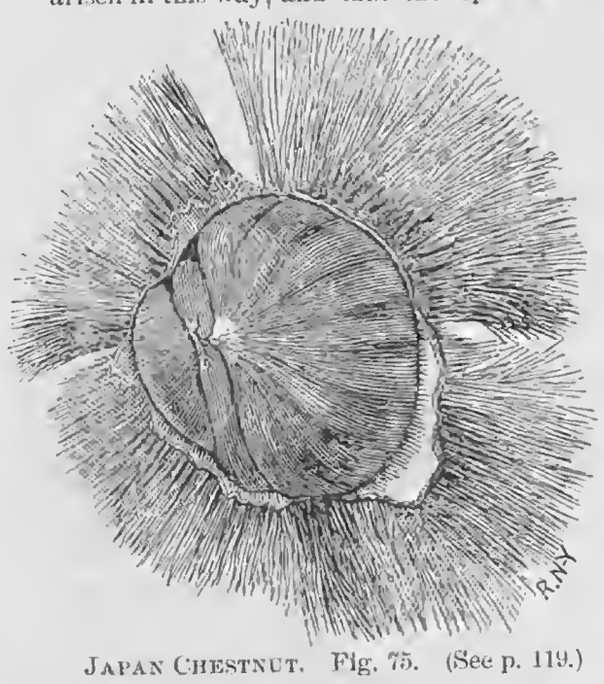
SAVE Your POSTS and use SHAW'S WIRE FENCE TIGHTENER. Can be adjusted to any wooden post; can tighten or slacken, according to climate, with an ordinary monkey wrench. Price $8 per doz. For full particulars, apply to
W. SHAW,
Delaware, Ontario, Canada.
Agents wanted. Patent applied for.

THE JAPAN CHESTNUT.

(*Continued from page* 119.)

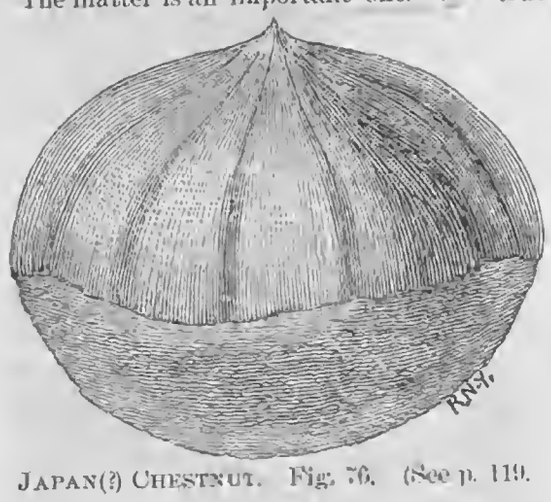
Japan, which is perfectly hardy here and, indeed, further north. Possibly confusion has arisen in this way, and that the Spanish has



JAPAN CHESTNUT. Fig. 75. (See p. 119.)

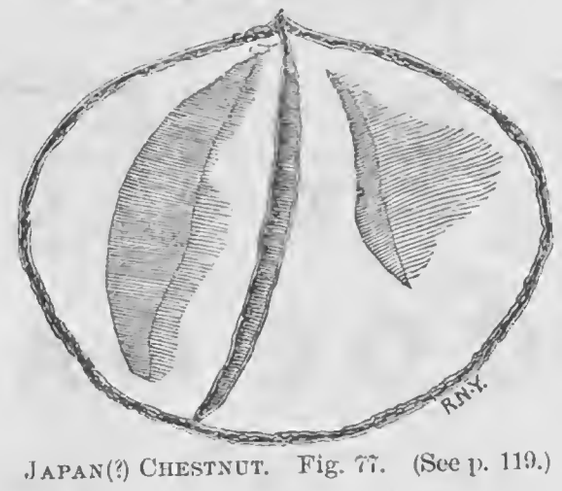
been mistaken for the Japan variety, for botanists view these different kinds as of the same species.

The matter is an important one. The true



JAPAN(?) CHESTNUT. Fig. 76. (See p. 119.

Japan Chestnut, whatever the size of its nuts, is a most valuable acquisition—valuable as an ornamental tree of small size; valuable for



JAPAN(?) CHESTNUT. Fig. 77. (See p. 119.)

fruiting within from three to five years from nursery trees, if not from seed in all cases, and valuable for the size and quality of the nuts, and, finally, for the hardiness of the tree.

Pomological.

PEARS.

GARRETT'S SEEDLING.

ABOUT July 12, 1885, we received from Mr. Franklin Garrett, of Monroe, La., a few pears. We give a cut of one of the smaller ones, as the others were not in good order owing to the great distance they had been transported: (See Fig. 78, and for a cross-section see Fig. 79.) He thinks it a chance seedling of the Le Conte and, like that, it will grow from cuttings. It is a good grower with bright glossy leaves, and is healthy and productive, and the fruit hangs very firmly to the limbs, very few being blown off even in high winds. The pears are only of medium size, and are very uniform in shape, all having the peculiarity of the elevation or shoulder on one side of the rim surrounding the stem. The stem is very long —2¼ inches—and tapers from the pear to its junction with the limb. Calyx small and closed, and in a small but quite deep basin; core not large, and with only few seeds; color a dull yellow, showing through a semi-transparent mottled skin. Where exposed to the sun, it has a beautiful red cheek. Flesh tender, quite juicy, entirely sweet to the core, with no astringency and no hard, sour part surrounding the core, even when only partially ripened. From its appearance and quality, we should think it is worthy of further trial, especially in the South.

Spring approacheth. Any of our present subscribers may secure eight plants of the Jewell Strawberry, or six plants of the Golden Queen or Rancocas Raspberry, or three of the Earhart Everbearing, by sending us *one new subscriber*. See regular Premium-list.

What Others Say.

SELF-FERTILIZATION OF CORN.—Our esteemed friend, Prof. I. P. Roberts, made a careful experiment to ascertain the effect of self-fertilization on corn. A plant was inclosed partly with glass, partly with muslin, so as to admit air, light and sun; but so as to keep out foreign pollen. Pollen in the greatest abundance was produced and covered the leaves, ear and ground with a thick, yellow dust. The ear, however, contained no kernels. This, Prof. Roberts thinks, points strongly towards the incapacity of the corn plant to close fertilize. We beg to think otherwise. We have studied this matter for a number of years and have found that, in some seasons, the pollen would mature and fall before the pistils (silks) were receptive, while in others the reverse would occur, while in still others the maturity and fall of the pollen and the receptivity of silk were simultaneous. We also found that such differences change or may be reversed according to the season from year to year. Observations one year were made upon 20 kinds of sweet corn. In most of them the silk was receptive during some part of the time that the pollen matured.

MULTUM IN PARVO.

MR. JAMES HUNTER, of Massachusetts, writes us that the Flageolet Wax Bean bears the longest pods of any of the wax beans. He does not believe there is a finer wax bean in cultivation. He says: "Try it if you want something nice."....

PUCK calls New York milk "a white lie."....

NEVER insure your life so much that you will be worth more dead than alive....

MANY of the seedsmen's catalogues advertised in the R. N.-Y. give instructions as to the formation and care of hot-beds and cold frames....

THE Farm, Field and Stockman says: Don't be fooled into sericulture by some man who has mulberry trees to sell....

THE Drovers' Journal says that a single London dealer last year sold nearly 800,000 tropical birds of gay plumage for the trimming of hats and costumes. Is not that quite too bad?

THE New York Tribune remarks that Professor Arnold has found four parts of bran, two of corn meal and one of linseed meal "very satisfactory" as a grain food for milch cows....

AFTER the hams are smoked, place them in boiling water for half-a-minute, then cover with sacks of any kind, which have been boiled in unslaked lime. Prof. A. J. Cook makes the above note in the New York Tribune..

CHILDREN leave the farm, says Mr. J. J. Thomas, because it is not *attractive*. He suggests that less money be spent on buildings and more on grounds....

MR. E. W. WOOD thinks that hillsides can be more profitably planted with apple orchards than with forest trees. The former would bring quicker returns....

MR. C. L. ALLEN, of Long Island (N. Y.), says that a friend of his had a farm of 240 acres, 140 being rough land, from which he cleared all the growth, except the chestnut, and planted locust. This is now the most profitable part of his farm.....

EVERY farmer can have a little forest of his own on land now useless, says Marshall P. Wilder, of Massachusetts.

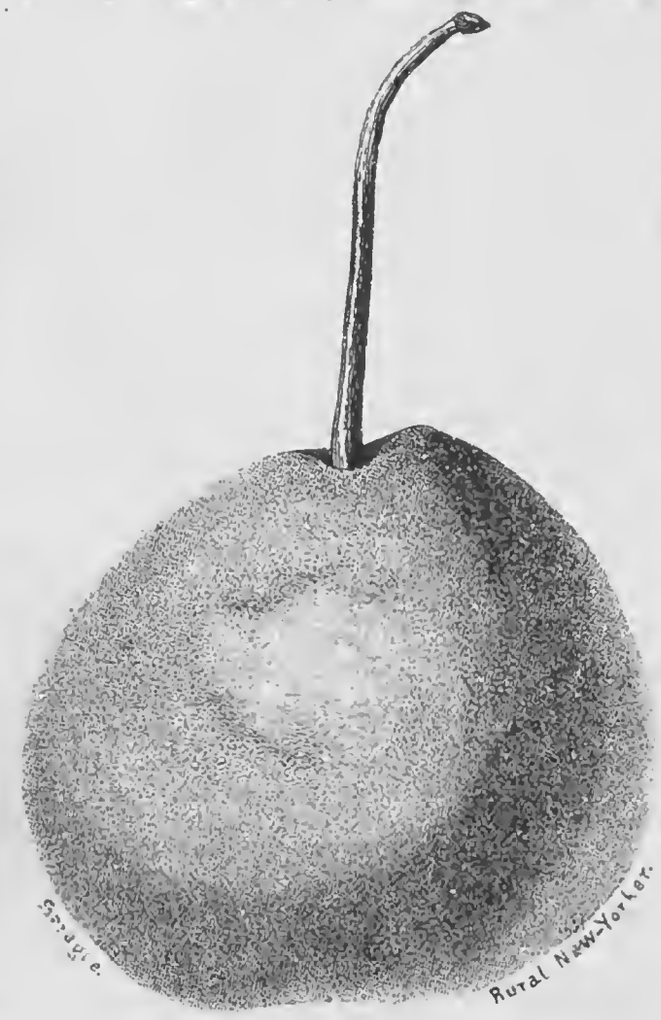
WE should have health preserved and homes fit for civilized, human beings. Forestry strikes at the root of the whole of it, says H. W. Fuller at a recent meeting of the Massachusetts Horticultural Society....

EVERY incorporated agricultural society receiving State bounty should include the subject of forestry in its annual discussions.....

MR. W. W. COLES tells the American Florist that the American Beauty is the best rose for general cultivation, introduced for over 20 years. It is a good, healthy grower and is a rose for all the year round in-doors or out. The W. F. Bennett is all that is claimed for it; but it *must have* good culture. The white Bon Silene, he says, will never become popular; it is too much of a "dirty white."...

THE same journal says that extravagant statements about the profits to be made from growing flowers are especially vicious, and, worst of all, they are sure to come home to roost....

FLORISTS complain about the competition coming from men of wealth who have made their money in other lines of trade, and who have now built vast establishments for the production and sale of cut flowers. But, pray, who is responsible for this, if not the florists themselves? Would these men have invested their money in greenhouses if it were not for the extravagant and absurd stories about the business and its profits which these same

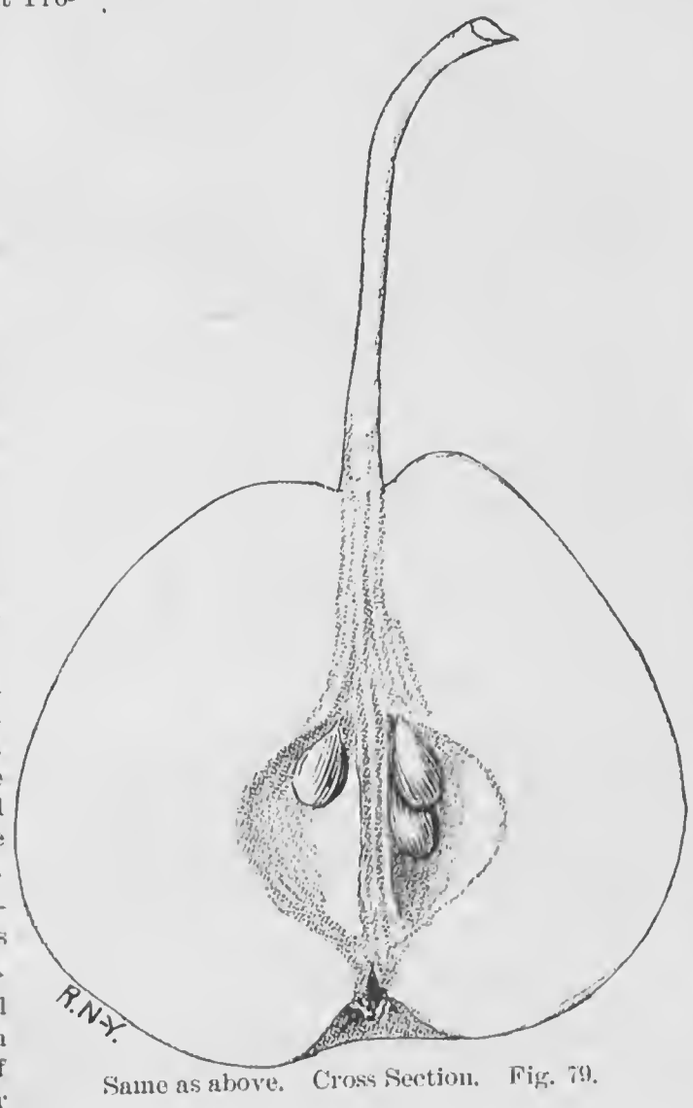


GARETT'S SEEDLING PEAR. From Nature. Fig. 78.

florists have invented and circulated, and which the daily papers in their turn have spread before the public?....

STOP the food of a fattening animal, subject it to extreme cold, and it at once begins to feed upon itself. It consumes its own flesh and fat and loses weight....

GOOD rules for the dairyman:—Low feed for ten days before the calf is dropped, fair feed for ten days following, and then big feed for ten months....



Same as above. Cross Section. Fig. 79.

MR. JOSIAH HOOPES, in the Philadelphia Press, thinks the "Reading," which originated near the city of that name in Pennsylvania, the finest of mid-winter pears. It is medium in size, yellow in color, and so attractive in appearance that, were it worthless for eating, it would be desirable for decorative purposes. We are tired of seeing varieties of fruits recommended for good looks alone. All such fruits are a positive injury to the fruit grower. What we should do is to teach people to eat more fruit, not to disgust them with good look[s] and poor quality. It is time we had done with such foolishness....

CONNECTICUT gives a State bounty of ten cents for any person planting, protecting and cultivating elm, maple, tulip, ash, basswood, oak, black-walnut, hickory, pear or cherry trees, not more than 60 feet apart, for three years, on any public highway....

BE reasonable with incubators, says the Homestead. These machines are not alive. There is something to be done besides buying them and giving them a start. You must learn all the patience, common sense and ingenuity that the hen commonly assumes.....

THE most favorable sign of Irish agriculture lies in the fact that, as compared with 20 years ago, Ireland has diminished her potato crop by one-fourth and increased her live-stock by one-third....

A "ROOT MARKET" is a feature of many English market towns. Roots are brought in and sold in loads just as hay is brought into our own markets. The annual root crop of England is enormous. It is a great help to her cattle interests....

A FARMER should be the architect of his own barn, but when he builds his house, he ought to leave the arranging of the interior to his wife. Happy is the man who has sense enough to do this....

THE frost in Florida appears to have frozen the "boom" in Florida lands as well as the oranges....

DON'T put your best days behind you. Live so that the future will always be the brightest part of life....

DE CANDOLLE states that oats will persist longer when sown by themselves than almost any other plant. The origin of the plant he locates in Eastern Europe and Tartary. Oats played a less important part in the earlier history of the race than either wheat, barley or rye. Ancient civilization was the product of a hot country. Oats did not come into important use till the stronger civilization of Northern Europe found them to be a necessary article of diet. In our own country, oats stand the third cereal in importance. The crop of 1884 was 583,623,000 bushels, against 135,000,000 in 1844. Over 80 per cent. of the crop was grown in the comparatively small space cut off by a line drawn through the southern boundary of Pennsylvania to the middle of Nebraska and then north to the British line..

GRADUALLY, says a writer in the N. Y. Times, some of the mysteries of the dairy are being cleared up, and dairymen's labors are being lightened by new knowledge. The pith of this new knowledge of the character of milk and the fat globules suspended in it is that temperature is mainly the secret of success or failure in making butter, and the difference of a degree or two in the cream when it goes into the churn is sufficient to produce a vast amount of trouble in the way of foaming cream, butter not coming, and butter not gathering....

Everywhere.

RURAL SPECIAL REPORTS.

Canada.

DELTA, Ont.—Most of the RURAL seeds did well. Maggots injured the melons while they were getting along finely. Some of the wheat was killed out, but I got a quart of seed. I have 40 bushels of Blush Potatoes, though owing to ill-judged planting, I nearly lost all last year. Corn nearly all too late; but one yellow flint kind will do for this section. Garden Treasures fine. L.

LISTOWEL, Ont., Feb. 4th.—We are just now experiencing our cold snap with the mercury below zero. Spring wheat was a failure —only fit for chopping. Fall wheat fair, but not much of it, and the price is low—72 and 73 cents per bushel. Rough grains are also cheap, and hay only worth $7 per ton; and the low price of cheese was much felt, as this is a great dairy section; still it was as profitable as anything else. The farmers are turning their attention to bees, and have formed an association among themselves, and meet to discuss subjects of interest in connection with the little workers. A poultry association established here is also creating a greater interest in fowls and the supply of winter eggs is now about equal to the demand. The favorites are Leghorns. Fowls are being provided with warmer winter-quarters, and are better fed during cold weather. A. J. C.

MANCHESTER, Nova Scotia.—The Rural peas turned out well, especially the Prince of Wales and Stratagem. None of the Rural Union Corn ripened; but two ears of the 50 crosses matured. Flageolet Bean very productive but late. The tomatoes grew well. The King Humbert is very productive and no "humbug;" and it didn't rot like some others.

Garden Treasures very satisfactory. Black Champion Oats late; but good on good ground. D. S.

SEVERN BRIDGE, Ont.—Frosts killed all the produce of the Rural seeds, except the Prince of Wales Peas and the Blush Potatoes; the latter did extremely well, having withstood the frost long after the Early Rose and Beauty of Hebron had succumbed. It also successfully resisted bugs and rot. J. MC L.

TOUCHWOOD HILLS, Assiniboia, N. W. T.—I notice some "annexation notions" sometimes peeping out in the RURAL. Not one in 500 of our people could be tempted to entertain the idea of absorption into the grand republic south of us. As to reciprocity with you, we once had it, but your people very hastily abrogated it, much to our annoyance at the time; but the abolition of it taught us that we can get along very well without it. The only annexation we Canadians would countenance would be the annexation of the United States to the Dominion, so that they would have the advantage of "the best constitution in the world." J. M.

[Our friend must live in a super-patriotic community, if he finds the proportion of "annexationists" so very small; or else the talk of Canadians with "Americans" is very different from that among themselves. Robinson Crusoe also found he could "get along very well" without the rest of the world. Whatever desire for a renewal of the reciprocity treaty exists, is on the other side of the line. "Americans" do not seem to like a return to the former relations, as may be learnt from the tone of the recent discussions on the matter in Congress. Didn't England formerly become "annexed" to Scotland in the above way, when James VI. of Scotland became James I. of England? But the larger country at once absorbed the smaller, and has ever since been "assimilating" it. This country has a marvelous power of "assimilation." We have already "assimilated" a good deal more than the population of our dear neighbor, and the addition has been far more incongruous than the cognate race across the border. We would sooner be warm friends, however, than unfriendly countrymen.—EDS.]

TOUCHWOOD HILLS, Assiniboia, N. W. T.—This section is very new and thinly settled. Wheat, oats and barley grow well and yield bountifully. Last season, much of the grain was damaged by frost. Potatoes and turnips good. In spite of our very cold Winters, this is one of the best stock-producing regions. With reasonable care and enough wild hay, stock comes out in Spring "beef-fat." Plenty of land here yet to homestead. L.

Colorado.

FT. COLLINS, Larimer Co.—Of the product of the 50 crosses of corn I only saved one ear. This grew on a stalk eight and a half feet high, the only stalk in the hill, and ripened very early. Tomatoes and millet failures. Peas satisfactory. Beans did not prove to be even moderately good. The RURAL itself just splendid! H. S.

Connecticut.

MANSFIELD, Tolland Co.—All the Rural seeds grew well except the Johnson Grass. The corn grew all the way from six to 12 feet and yielded one bushel of sound corn. The Rural Blush Potatoes were the best of a large number of different sorts I raised. Apples were abundant here. Corn good. Buckwheat and oats fair. J. N.

Dakota.

WHITE SWAN, Charles Mix Co., Jan. 31.—In a late RURAL was a statement that much discontent exists in the frontier States and in the Territories with Commissioner Sparks's rulings in regard to land cases. I know all about land frauds in this Territory and also about the working of the Commissioner's rulings, and I am convinced that his rulings are just what is needed to check—for they can hardly put an end to—land frauds. There are fraudulent claims all over this country. Lands have been proven up, on which not a furrow of breaking was ever turned, and on which nothing was ever raised but a shanty ten feet square. When the owner had "proved up" his land, this shanty was sold to his next neighbor for a like purpose, and sometimes the shanty was built just on the division line of two claims, so that it could act as a home for both entry-men for a night or two each month, so that they could take the necessary oaths on "proving up" without fear of being indicted for perjury, and so the shanty passes from one "honest settler" to another, until it is worn out. This is only one of many forms of swindling. Most of the grossest frauds were under Republican rule; but though I am a charter member of that Grand Old Party, I believe in an honest government and an honest settlement of the public domain. W. A. M.

TALBOTTON, near Deadwood, Lawrence Co.—The Rural peas a nice acquisition. Corn too late for this climate and elevation. The Johnson Grass germinated fairly well and grew five or six feet high; roots very fleshy, and it seems likely to survive this Winter. For the beans and the King Humbert Tomato I would not take a year's subscription to the RURAL. G.

TULARE, Spink Co.—We are having an exceptionally pleasant Winter. Spink County is in the James River Valley, between the 44th and 45th parallels. I have been here four years. We have ample railroad facilities and markets, good schools and churches. The Summers are delightful and the Winters not nearly so severe as I had anticipated. Wheat, oats and barley are the staple crops, and corn and flax are raised to a considerable extent. This is a splendid country for potatoes, as they yield heavily and I don't know of a single instance of rot. This county is quite thickly settled by an energetic class of farmers from the Eastern States, New York being well represented. The country is rapidly improving, and every year the population is increased by parties from the East seeking cheap lands and business locations. Tree culture is becoming quite general, and young groves are to be seen everywhere. I raised 65 bushels of onions on one-eighth of an acre. The soil hereabouts is dark or rather black sandy loam, about two feet deep, with a yellow clay subsoil, varying from 10 to 20 feet deep, under which is found a stratum of gravel and sand, in which is found a bountiful supply of good water. We raise here mostly the hard varieties of Spring wheat, Scotch Fife being the standard. M. M.

Illinois.

WATAGA, Knox Co.—The Rural corn did not for the most part amount to much. The tomatoes were very good and very prolific. The Stratagem Peas did not come up well; but they are very large—will try them again. The Prince of Wales came up finely, and are very prolific. Beans, not snap; but very early and large. E. G.

Indiana.

PENDLETON, Madison Co.—Wheat prospect good for a full average crop. The area is ten per cent. larger than in the previous year. The corn crop was 20 per cent. larger than that of 1884. Corn worth in local market, 35 cents. The mild Winter has been favorable for all kinds of farm stock. S. W.

Indian Territory.

CADDO, February 4.—We have long summer seasons here; but the drought sometimes sets in rather early and cuts late corn very short. A great many of our farmers send north for seed corn. Our native corn is large and very fine, but late-maturing. We like our northern seed corn better after the second and third year's planting, as it is then greatly improved in size, though it matures later every season, so that more new seed is necessary. Any kind of corn grown north is earlier than ours. B. H.

Iowa.

OSAGE, Mitchell Co.—The Rural corn made a fine growth and ripened the grain. It is valuable for this section. The other seeds gave satisfaction, except the Garden Treasures, few of which germinated. L. S. E.

Kansas.

GENEVA, Allen Co.—Of the Rural corn left me by a sweeping flood, several stalks of a white, eight-rowed dent bore well. On one there were five ears that measured 34 inches. On several later stalks there were seven ears. The Johnson Grass did not come up. The peas did well. N. MCG.

Massachusetts.

HARRIS, Bristol Co.—The Rural Corn produced nine or ten distinct varieties. Some matured as early as the Angel of Midnight, and some resembled it to a dot. Ten ears were exactly like Pride of the North. The peas were fine in yield and quality. Tomatoes good, but rather small. Beans good yielders. Garden Treasures fine. There were half a dozen blades of Johnson Grass. W. B. V.

Michigan.

BATTLE CREEK, Calhoun Co.—I see by my books that during the last 30 years I have paid over $500 for subscriptions for the RURAL for myself and others, and in no instance have I had cause to regret the outlay for my own copy or those presented to others. I neither drink spirits, chew tobacco nor smoke, and am 66 years old, hale and hearty. When asked to "treat" by a farmer, I always say, "Well, I will treat you to a month or year of the RURAL NEW-YORKER," and in that way I have been paying for from five to twenty copies of the paper nearly all the time. S. C. B.

[Thanks.—EDS.]

CHARLOTTE, Eaton Co.—Two years' experience convinces me that the RURAL is the best paper of the kind in the country. The seeds were worth the subscription price. All the Rural corn got ripe, and was splendid. Of the Stratagem and Prince of Wales Peas I

(*Continued on page 122.*)

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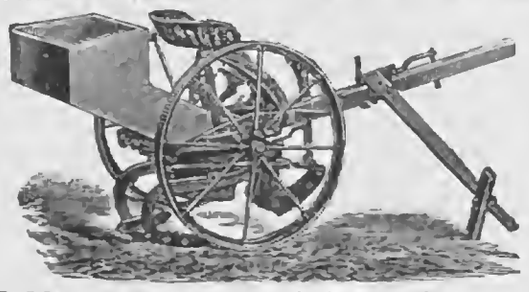

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The Greatest LABOR-SAVING tool ever invented for digging holes in the ground. This machine works on a new principle, and is unlike anything in the market. It is neither an Auger nor a Plunger, but is driven in the ground with a driving rod, which works in a pipe similar to a telescope. We claim for this tool:
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3d. That it will work successfully in very hard or rough ground where other diggers and augers will not work at all.
4th. You stand up straight while using it consequently no back-breaking work is required.
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1500 to 4000 FEET of lumber can be cut in a day. Built in a first-class manner. The Best Mill made. Many hundreds of these in use, giving universal satisfaction. We have the best Mills of larger sizes, Portable and Stationary. Send for circular R
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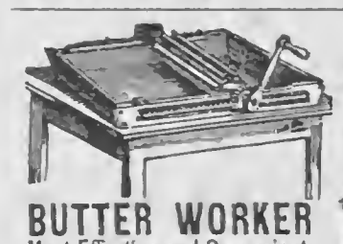
WAYNE AGRICULTUR'L CO. Richmond, Ind.



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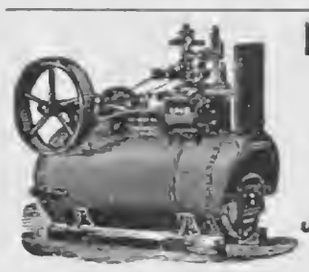

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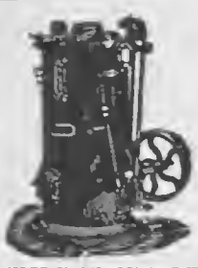

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SEDGWICK BROS., Richmond, Ind.
EDWARD SUTTON, Eastern Agent, 300 Market St., Philadelphia, Pa.

(*Continued from page 121.*)

have three quarts each—very excellent peas. Of the beans I have four quarts. The tomatoes and flowers were fine. Crops here were good. Wheat, 25 bushels per acre, worth 85 cents; oats, 50 bushels, worth 30 cents; corn, 80 to 120 bushels, worth 25 cents; potatoes, 100 to 480 bushels, worth 35 cents. Stock in good condition. Sheep are being picked up close, worth $1.50 to $4.00. Cattle are neglected. Hogs worth $4.00, dressed. W. A. C.

Montana.

PHILBROOK, Meagher Co.—The Stratagem and Prince of Wales Peas were splendid; pods very full; peas quite sweet. The beans and tomatoes were killed by frost June 14th. The Johnson Grass did not come up well and did not grow very fast; it spreads out on the ground too much. The Rural corn came up nicely, but the seasons are too short here for corn to do any good except the earliest kinds. On the Rural corn there was not a single setting when the frost came. The Garden Treasures were satisfactory. H. M.

New Hampshire.

NASHUA, Hillsboro Co.—The RURAL seeds came up and did well. The tomatoes were beautiful, and we also had a lot of the Flageolet Beans. We are new beginners in farming and are anxious to make the business a success, and could not get along without the RURAL. J. P. D.

New Jersey.

ORANGE, Essex Co.—The Rural Peas were fine and the beans were most prolific. F. J. O'N.

New York.

AFTON, Chenango Co.—Rural peas quite satisfactory. The beans did very well, though the season was too wet to give them a fair chance. The tomatoes grew nicely and bore well; but didn't ripen ditto, and rotted badly on account of the excessively wet weather. T. H.

BENSON, Hamilton Co.—I harvested a quart each of the Thousand-fold Rye and Diehl-Mediterranean Wheat—both first-class. The cross-bred corn grew well; but most of it is too late for this section. The peas very fine. Flageolet Beans didn't do well. Garden Treasures nice. D. W. C.

PECONIC, Suffolk Co.—On the whole, I have had very good luck with the Rural seed. Some I have given up, because I had better of the same kind; but the good ones have more than repaid me for the trouble and expense for all. Of the last Distribution, for instance, the Thousand-fold Rye was first-rate; but the corn ran too much to stalk. As we use the stalks for fodder, we want leaves, not cord-wood. W. A. H.

Ohio.

FREMONT, Sandusky Co.—Owing to excessive wetness of the ground, most of the Rural wheat was winter-killed; what survived did well. So did the rye. The King Humbert Tomatoes were late; the Bi-colors were nice. The Flageolet Beans yielded well. What peas came up well, were good. The Rural Corn is not as well adapted to this section as some other sorts. Garden Treasures very satisfactory. The Beauty of Hebron has been the favorite early potato with us ever since we obtained it from the RURAL. J. D. M.

HILLSBORO, Highland Co., January 31.—The Rural Peas were splendid, especially the Stratagem. The tomatoes did not amount to much—too small. Rye and wheat nice. Flageolet Beans not extra. The Garden Treasures were very fine. We had a very open and delightful Winter until after New Year's. The mercury then fell to 18 degrees below zero. Times dull and money scarce. Stock and produce are low, but the outlook is somewhat promising. Corn was a good crop. Wheat was almost a failure. Wheat that was sowed looks *very* well. Success to the RURAL! N. B.

SPRINGFIELD, Clark Co.—The Rural Tomatoes did not prove desirable. The King Humbert was very little or no improvement on Nesbitt's Victoria. The Stratagem and Prince of Wales Peas were fine, but of the two I prefer the Stratagem which is very fine and large. The Flageolet Bean did well. The Sorghum halapense, sown in May, came up well and grew from four to five feet tall. I did not cut it, but saved some seed. The corn was planted in a square plot in a field of Clark County White and Golden Beauty Corn, so it was well mixed; but I did not consider it of any special value. The season is not long enough here to grow the heavy-yielding varieties, such as Golden Beauty, Chester County Mammoth, etc. Leaming does well. Henry Ward Beecher was right when he said: "To have the RURAL once is to want it always." N. W. L.

SANDUSKY, Erie Co.—I think my seeds worth all the paper cost last year. I planted one bushel of Blush Potatoes and got 25 bushels. Not any Johnson Grass came up. The Flageolet Beans all blighted. The peas did well; my wife had some splendid flowers from the Garden Treasures. The Humbert Tomatoes were very poor. W. R. C.

WEST POINT, Columbiana Co.—The Diehl-Mediterranean Wheat was entirely destroyed by the Winter, not a single stalk remaining. Nearly all the wheat hereabouts was winter-killed. Wheat is worth $1 per bushel; corn 50 cents. Prices of most products are low. M. E. C.

Pennsylvania.

CORRY, Erie Co.—The Garden Treasures gave such satisfaction as to compensate for the failure of some of the other seeds. The tomatoes looked nice, but the frost caught them. Peas good, but did not yield as well as some other kinds. W. O. P.

LACKAWANNA Co.—The Stratagem Peas are an acquisition, although the Prince of Wales yielded the most seed owing to so many of the former failing to germinate. The King Humbert Tomatoes were great yielders if numbers count anything. Don't think they would be missed. Was in hopes the Flageolet Beans would be what were wanted, as I am very partial to Limas, but they don't come within talking distance of the good, old-fashioned Limas, so will have to cut poles a while longer. The Horsford Market Garden Peas yielded well and were of good quality, but won't take the the place of the American Wonder. The Garden Treasures were fine. M. C.

NEW ALEXANDRIA, Westmoreland Co.—Whoever saw the plants from the Rural seeds last season, said they alone were worth the price of the paper. Here the Flageolet Beans will take the place of the Lima, as they are more easily cultivated and finer in flavor. The Prince of Wales and Stratagem were of extraordinarily large size and of good quality—certainly first-class garden peas. The King Humbert Tomato has been so derided everywhere, that in pity I shall not say a single word about it. Some of the cross-bred corn ripened and will get another chance. The Garden Treasures delighted us during the entire Summer. H. M. F.

Texas.

MERCER'S GAP, Comanche Co.—The Rural Corn would have done splendidly were it not that the hogs took such a fancy to it that they stole it all. The tomatoes did well. Everybody likes to get some of the seed. The Flageolet Bean did finely. J. H. W. B.

Washington Territory.

COIN, Whitman Co.—I have about six quarts of the Diehl-Mediterranean Wheat. The tomatoes were nice. The peas did well. I have about a peck each of the R. N.-Y. and Market Garden Peas. The oats did pretty well. The Garden Treasures were not as good as usual. W. A. J.

POMEROY, Garfield Co.—The cross-bred corn is of no account in this country. The King Humbert Tomato is a humbug, as it is the old Pear Tomato re-named. The Flageolet Beans are not adapted to this climate and soil, hence they were poor. The peas were all that was claimed for them. The Diehl-Mediterranean Wheat was all that was claimed and produced more than a gallon, which will be sown. The Thousand-fold Rye was not sown till last Spring, and hence is not matured. The Black Champion Oats do not promise much thus far. The season was too dry for the Garden Treasures. A. O. H.

THE FARMER'S CLUB

ANSWERS TO CORRESPONDENTS.

[Every query must be accompanied by the name and address of the writer to insure attention. Before asking a question, please see if it is not answered in our advertising columns. Ask only a few questions at one time.]

CEMENT WATER-PIPE.

W. B. H., Como, Montana.—1. I wish to lay a pipe for water from a spring to a house from 300 to 350 feet distant; the head will be about 10 feet. Iron pipe costs, for 1¼ inch, 25 cents per foot; can I use cement of any kind? 2. What should be the proportion of cement to sand, and what would be the proper thickness to sustain the pressure?

ANS.—1. Cement makes a capital pipe for such use, and when once laid lasts forever, unless destroyed by frost. 2. If the cement is good and the sand clean (free from dirt or loam), one part of cement to two of sand will be ample, and with this mortar, when mixed, half as much more coarse gravel may be worked in. Make the pipe two inches inside; have a stick turned true and six feet long, and a half inch larger at one end than at the other, for a core to be used in forming the pipe or bore, and thoroughly soak it in linseed oil and dry it before using. Dig the trench deep enough to be below frost and six inches wide at the bottom. Commence at the upper end; throw in two inches of the cement and be sure that it is compacted, so as to have no air holes in it; on this in the center, place the stick for a core, large end down. Apply enough of the cement to fill the trench to a depth sufficient to cover the core two inches deep, working all down until solid and free from air-holes. When the cement has firmly "set," move the core slightly so as to loosen it, and after a little withdraw it, leaving about six inches of the smaller end in the cement already laid. Apply another lot of cement as before, being careful to have it well joined to the part already laid, and that all bubbles of air are worked out. When a day old, each part should be covered two or three inches deep with soil, being careful that no stones are allowed to fall on, or crush it. At the lower end, connection should be made with the cement pipe by a lead pipe of the same size outside as the bore, having two or three flanges 1½ inch larger than the pipe, and be sure that the cement is packed closely all about them. In one month, let in the water, and if all is sound, fill the trench, packing the earth solid. If well done, it will last longer than you and your children will live.

AN AILING HORSE.

F. K., Rochester, N. Y.—1. After driving my horse three or four miles, he acts as if he couldn't go any further. If I continue driving, he will sometimes stop very suddenly. His flesh on the hind-quarters twitches, and if driven too long without stopping, he sometimes turns his head to one side, shakes it, and nearly falls down. The spells soon pass off if he is allowed to stop and then move slowly for a few minutes. They trouble him after traveling the above distance, and not at other times, and are least severe when he is on pasture. What ails him? 2. What would be the fittest feed for him? 3. What medicine does he need?

ANSWERED BY F. L. KILBORNE, B.V.S.

1. If the condition is due to heart disease, as is very likely the case, a cure cannot be expected. 2. A laxative diet at all times. During the summer months, it should consist largely of grass or other green food with grain, according to the needs of the animal; in Winter, roots or vegetables with a moderate allowance of good hay and grain. Oil meal or cotton-seed meal will also be excellent. An occasional laxative—aloes or Glauber salts—may also be desirable during the Winter if the bowels do not move freely. 3. Give five or six drams of Barbadoes aloes to unload the bowels; and then, thrice daily for several days or a few weeks, two drams each of potassium bromide and chloral hydrate. Examine the collar to make sure that it does not press upon the great veins of the neck. It should be large enough to sit well back on the shoulders. In many cases of this kind, medicinal treatment is of very little use, and nothing can be done except to feed cautiously. Avoid all violent exercise or over-exertion, and give special attention to the general comfort of the animal.

ABOUT CALIFORNIA.

W. P. K. (address mislaid).—1. Are there chills and fever in the Golden State? 2 How would poultry raising do there? 3. How about bees? 4. Is lumber cheap?

ANS.—1. There are no chills and fever anywhere within the range of the sea breezes on the Pacific Coast—say 100 miles inland. 2. Fowls and eggs bear a much higher price in California than in the Atlantic States. The prices of eggs range from 20 to 50 cents per dozen, and fowls sell for from $4.50 to $8.00 per dozen. There seem to be as little risk and expense in growing poultry there as in New York State. The high prices are a relic of the flush times of gold mining. 3. Bees do exceedingly well all over the State. Very large exports of honey are sent to the East every year. The favorite ranges are chiefly in the hills covered with wild sage or chemisal, overlooking the plains. At all seasons some portion of the bee pasture is good for foraging. With the early rains of Winter the face of the earth is carpeted with grass. During the Spring months—February, March, April and May—the landscape is bright with flowers. Then the chemisal—made up of many sorts of shrubs, growing wild in dense thickets along the slopes—is almost continuously in blossom. Honey made from these flowers is quite fragrant. We have seen as many as 90 stands of bees in one apiary in Los Angeles County. 4. Yes; lumber is plentiful and cheap. Whether a man would succeed better there in poultry and bee raising and truck farming, than near New York City, is a question we don't care to answer. There is more in the man than in the land.

CRACKING OF GRAPES.

J. F. T., Brantford, Conn.—1. Of ten varieties of foreign grapes I grow in a cold grapery, the following cracked so as to be useless last season: Trebbiano, Chasselas Musqué, Black Hamburgh, Muscat Hamburgh and Muscat of Alexandria. They did well till the end of July, when six weeks of cold, wet weather set in: was this the cause of their cracking? 2. Would a boiler and hot water pipes be beneficial if put in early in the Spring?

ANS.—1. Without a more definite knowledge of the condition of your vines and the circumstances of their cultivation, we cannot say definitely what causes your grapes to crack. An unusual and long-continued soaking of the border, especially if succeeding a dry spell, and at a time when the berries had about attained their full size or were beginning to color, would be reason enough to cause them to crack. The evil lies, probably, in an ill-drained border. 2. A hot-water heating apparatus might not overcome cracking if the evil exists in the border, but it would help the grape crop in other ways. By a judicious use of it you could greatly assist your vines in breaking evenly, when they would be in flower, help them to "set" well, assist them through the "stoning" period, and when they begin to color, help them to ripen well and thoroughly, color well and assume a deep bloom; also in the case of immature wood you can greatly assist in ripening it by means of fire heat and ventilation at the same time.

COW WEAK IN HIND PARTS, ETC.

J. L. W., Liverpool, N. S.—1. When my cow lies down she has hard work to get up. She gets on her fore legs well enough; but her hind parts fall over, so that often she has to be helped to rise. The trouble seems to be in her loins; what ails her? 2. What is the best work on diseases of cattle?

ANSWERED BY F. L. KILBORNE, B. V. S.

1. Without knowing anything of the condition of the cow, we cannot very well prescribe for her. If she is heavy with calf and very thin in flesh, as is too frequently the case at this time of the year, probably all that is necessary is more generous feeding and a little extra care until after calving when, as the condition improves, the weakness will disappear. An excellent feed is made by mixing equal parts of ground oats and corn-meal, which may be added one-half part of wheat bran if you like; feed four quarts twice daily and as much good hay or corn fodder as the animal will eat; also a daily allowance of oil-meal or roots if convenient. See that the stable is clean and dry, the floor laid so that the cow does not slip backward in rising, and the animal made comfortable with plenty of bedding. If the cow is in good flesh and the condition is due to slipping or other injury, a mild blister of mustard and turpentine, applied to the loins, may prove beneficial. 2. The answer to this question depends somewhat upon the special purpose for what the work is intended. For a farmer who wishes to make himself familiar with some of the more common ailments of his stock, together with their proper treatment, probably the best work is the Farmer's Veterinary Adviser, by Dr. James Law, of Cornell University, Ithaca, N. Y. Price $3.00, to be had of the author.

SWELLING OF HORSE'S LEG.

J. S., Fort Howard, Wis.—Last harvest, one of the hind legs of a mare became so swollen that she became quite lame. The swelling at first reached only to the hock, but soon extended to the udder and along the belly. After treatment she got quite well for a time; but the trouble has returned. Her belly is hot and painful; she is crippled all over. When she walks, the stiffness becomes less; when she stands, it is worse. Her appetite is good. What should be done for her?

ANSWERED BY F. L. KILBORNE, B. V. S.

Bathe the swelling with tepid water in which there is dissolved one dram of chloride of zinc to each quart of water. Internally give, thrice daily, two drams each of chlorate of potash and niter and one-half ounce each of powdered cinchona bark, gentian and ginger. If there is any costiveness, add one dram of Barbadoes aloes night and morning until relieved. The stable should be clean, dry and warm, but yet well ventilated. Allow a little moderate exercise daily whenever the weather is suitable and the animal has recovered sufficiently to be able to move comfortably. Unless the mare is in very good flesh, a few quarts of grain with a pint of linseed meal daily will also be beneficial.

"STOCK" LEG IN A HORSE, ETC.

W. T. W., Hays City, Kans.—I followed the directions given in a late RURAL for the cure of "stock" leg in a horse; but the frogs of both hind feet are still ragged and split into scales; what should now be done? 2. On the lower point of the shoulder of one of my horses there was a swelling which I removed with a lan-

ment, but a hard lump still remains under the skin; what is a cure?

ANS.—1. You should have continued the medicine for several days or longer. The cure of a case of this kind cannot be expected in two or three days. As many weeks may be required. Try the following prescription twice daily: One dram each sulphate of iron and aloes, oes, one-half ounce each of gentian and niter and one-half dram of potassium iodide. Continue for two or three weeks or until the swelling is reduced. If a permanent thickening then remains, apply tincture of iodine to the swelling every four or five days. Do not forget the laxative diet and moderate daily exercise. 2. Paint it with tincture of iodine every three or four days for a month. If this does not succeed, the lump must be cut down upon, and removed through a vertical incision in the skin. Then bring the edges of the skin accurately together with white silk, and treat as an ordinary wound.

LAME LEG IN A SOW.

T. H. W., Princetown, Ind.—One of my sows has for some time been lame in one of the hind legs. She walks as though it were a wooden leg without a joint, and limps very much. The leg is swollen; what is the matter?

ANSWERED BY F. L. KILBORNE, B. V. S.

From so brief a description, it is impossible to say definitely what is the trouble. Probably the sow has sustained some sprain or injury to the shoulder or elbow. Manipulate each joint of the limb to ascertain the seat of lameness. If there are heat and tenderness, apply fomentations; in their absence, apply a blister of cantharides one part and turpentine four parts. Unless it is very desirable to keep this sow for breeding purposes, she can most profitably be turned in to the butcher, if there is not a speedy recovery.

Miscellaneous.

R. W. S., Elmer, N. J.—Mills in our vicinity have recently added machinery for reducing the cobs of corn to meal, making corn-and-cob meal; is there any benefit in feeding corn-and-cob meal over feeding the corn meal mixed with bran or with cut hay?

ANS.—Chemically there is considerable nutriment in corn cobs; mostly carbohydrates or fat and heat-formers, but it is in a very indigestible form, and unless ground extremely fine, would be practically unavailable as animal food. We have tried corn-and-cob meal many times, and have yet to be convinced that it will pay to use the cob-meal to dilute the richer foods, in place of bran or cut hay, or cut straw, even. The experiments made by Prof. Shelton, while clearly showing that corn-and-cob meal produces better results than the same amount of corn meal without the cobs, do not tell us the true reason, which probably was because of the more extended condition of the corn meal when mixed with the finely-ground cobs. We should like to see a series of extended experiments substituting bran in place of the cob meal. We believe these would clearly demonstrate the wisdom of such a course.

G. H. F., Morley, Mich.—My four-year-old horse is perfectly sound and well, but he cannot eat hay. He chews it up and spits it out. He eats oats and corn in the ear; he doesn't seem able to grind hay, cut or otherwise. Nothing in his mouth appears wrong. What is the matter?

ANS.—Some of the molar teeth are either overgrown or diseased, or there is some foreign body or growth in the mouth or throat. With a plow-clevis between the jaws, or by carefully withdrawing and holding the tongue to one side, hold the mouth open and make a thorough examination, especially of the teeth and back part of the mouth. Any overgrown or diseased teeth must be rasped down or extracted, and a foreign body or growth be removed.

M. A. B., Weston, Oregon.—Why is it that in some countries—Texas, for instance—a deep furrow is plowed and this half-filled with straw, and the potatoes planted on top of this and then covered?

ANS.—The only reason we can see for using the straw in this way is that it may become saturated, and by holding the moisture keep it for the use of the potatoes in a severe drought. We think that the RURAL's trench-mulch system—that is, placing the straw above the potatoes—would give much better results. At least, it is worth trying.

J. C., Macksville, Ind.—One of my cows spits up her food. She eats heartily, looks well, chews her cud and hasn't fallen off in her milk yield; what's the matter?

ANS.—The dropping of the food is probably due to overgrown or irregular teeth. Examine the teeth carefully, and if any such are found, they must be cut or rasped down. If the teeth are perfect, examine the mouth and throat for sharp-pointed, foreign bodies which may have become partially imbedded in the flesh.

H. S. T., Williamsport, Pa.—From a setting of what I bought as Wyandotte eggs, I raised two chicks; one has a single comb and two clean legs, the other a double comb and feathered legs. Which is a Wyandotte?

ANS.—Neither. The chicks should have double combs and clean legs.

H., Bennett's Corners, N. Y.—How does the Primate Apple compare with the Oldenburg and Red Astrachan for family use?

ANS.—It is an early autumn apple of the best quality; the others are summer apples of medium quality.

H. E. K., Nickel Plate, Ind.—Could wild grapes growing thickly in timber be used as stocks for choice cultivated varieties, so as to convert a wood into a vineyard?

ANS.—No, it would be unprofitable—impracticable.

J. K., East Milan, Mich.—Where can I buy the Angel of Midnight Corn?

ANS.—Of Joseph Breck & Sons, Boston, Mass.

"New Subscriber," Emery, Ill.—T. V. Munson, Denison, Texas, can probably furnish pecan trees. Like all other hickories, the pecan does not transplant well, and should be removed from the seed-bed when one year old. The tree grows along river bottoms from Central Illinois to Texas.

Joseph Cauchon, Northwest Territory, Canada, asks where can he get an incubator suitable for hatching 100 eggs.

E. P., Suffern, N. Y.—Write for information to the Pacific Rural Press, San Francisco, Cal.

H. S., Limesville, Ohio.—Fay's Manilla Roofing is a good article—not a humbug.

DISCUSSION.

PRESERVING POST, ETC.

H. E. K., NICKEL PLATE, Ind.—In a late Farmers' Club, in answer to J. D. F., Salem, W. T., the RURAL recommends to boil the posts in tar, etc. As I devoted years in studying the preservation of timber, I beg to present the following suggestion in connection with the all-important matter of the preservation of timber used upon or under the ground, in water, or in such other ways as subject it to unusual risks of decay, such as effect not only fence posts, but sills for dwellings, barns, the posts, floors, or planks used as walls in a bank barn, telegraph posts, railroad ties, etc. Of the numerous preparations for preserving timber, chloride of zinc, which was known as an antiseptic in ancient times, and has been known as a wood preserver for 47 years, is the cheapest and most efficient. It is applied to the green log, in a very dilute form, say 1 part to 100 parts of water. By forcing the sap out of the cells with the solution, the albumen is partly coagulated, the fermentation checked, and a solid mass insoluble in water is formed, after the wood is seasoned. I have seen pine railway ties thus preserved, which had lain under the track for 27 years: the wood was perfectly sound. This process is simple and the cost of impregnation will vary according to the softness of the timber, from two to three cents per cubic foot.

J. W. K., DENTON, MD.—In a late RURAL, G. H. of Penfield, N. Y., in discussing commercial fertilizers, asks, "Did you ever know of commercial fertilizers benefiting a crop raised upon limestone land, upon which the natural timber was oak and chestnut?" Now I would like G. H., or any other subscriber to the RURAL, to state positively and without any possible probability of error, whether he has seen or knows of any limestone land on which chestnut grows naturally like oak and other kinds of timber. My reason for asking this question is, that I have repeatedly seen it stated by writers trained to careful and exact observation, that the chestnut is never found growing naturally on limestone land; and during the last five years I have taken some trouble to find an exception; but I have yet to find a single instance. Sometimes I have found chestnut bordering closely on limestone, but when I felt most sure of finding it on the limestone, there was invariably a sudden change from limestone to slate, the chestnut being always on the slaty side.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING SATURDAY, February 13, 1886.

A. S.—J. J. H.—R. T.—J. A. H.—J. L. R.—G. C. C.—H. O. N.—W. F.—D. S.—J. D. S—A. R. J.—E. W. R.—B. T. G.—R. and P. G.—J. C.—F. L. P.—C. M. P.—M. W. F.—L. B.—C. A. H.—M. Mead, thanks for corn received.—J. D. J.—J. H. S.—P. E. K.—J. McL, thanks.—W. D. Sawyer, we can hardly do it.—J. D. O. B.—J. W. D.—W. F.—L. C.—J W K., thanks.—D. C. U.—N. J. S.—R. W. T.—O. H. A.—P. R., thanks.—J. S. B.—J. S.—H. E. K.—R. M. W.—N. Alsup, seed received.—S. B. S.—G. L. M.—G. L. P.—E. S. B.—A. W. W.—E. R. S.—E. C. P.—R. P. R. W.—T. H. G.—C. S.—J. W., thanks.—H. C.—H. D. P.—J. E. C.—C. E.—B. B.—M. Y.—H. D. P.—J. B. R.—C. C. M.—J. W. H.—Wm. W. W.—G. S. A.—J. P. R.—J. K.—A. K.—R. P. McC.—F. H.—J. McL.—E. W. B.—S. S. C.—W. S.—Dr. L. E. H.—J. E. O.—E. W. R.—P. M.—W. B. T.—J. T. H.—R. G. C.—J. W. G.—G. I. L.

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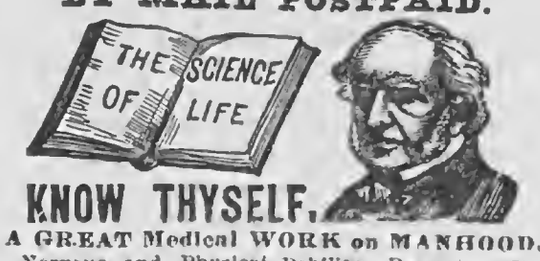

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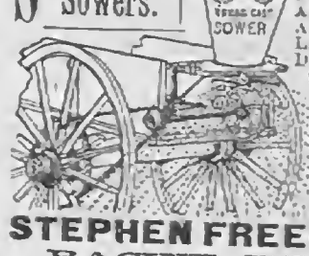

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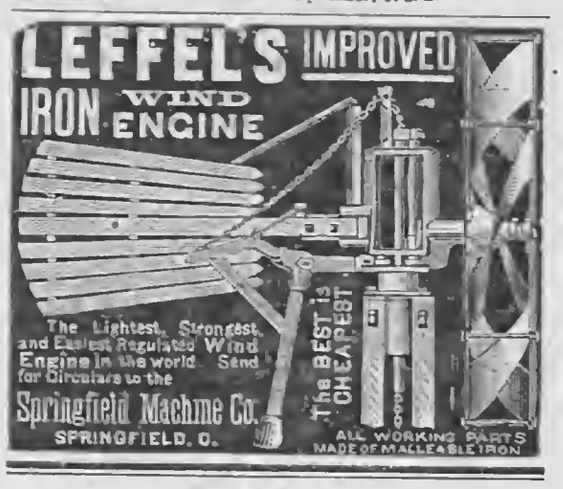

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No. 34 PARK ROW, New York.

SATURDAY, FEBRUARY 20, 1886.

IF the number on your address label is 1882, your subscription expires with this number; if 1883, next week; 1884, in two weeks, etc.

Subscribers of the RURAL *need never take the trouble to write us to "stop" the paper. It is invariably discontinued at the expiration of the subscription term, except by oversight, in which case it is our loss.*

MR. JOHN THORPE writes us that some seedling Japan Chestnuts he has handled varied as much as seedling apples, with a very large proportion of crabs.

SPECIAL.

ALL orders (applications) for the Rural's present Seed Distribution received *prior* to Feb. 8th, have been mailed. Those who have not received them will please notify us by postal card.

LET us say to all that the RURAL of November 14th, 1885, gives a full illustrated description of our Free Seed Distribution, together with a full list of the $3,300 worth of presents to be sent to subscribers (and to them only) who secure clubs for the RURAL NEW-YORKER.

EVERY one who loves hash, mince pies, or sausage (and who does not when they are made of meat *chopped*, not *mashed*), should have an Enterprise Meat Chopper. We have used one now for years and know that it is all that can be desired. The No. 22 *chops* two pounds per minute, and we will send it to any one for only four subscriptions. We ought to have calls for more than a thousand. No one will regret the time he spent in securing one.

WE have received from Luther Burbank, of Santa Rosa, Cal. (Feb. 11), five Japan Chestnuts which average five inches in their widest circumference. These are large specimens of what we have always supposed to be the Japan variety, and they differ materially in shape from the Spanish, so much so, indeed, that it is easy to separate both kinds when they are mixed together. The Japan may be described as in shape an enlarged American chestnut, while the Spanish is more angular—less conical.

WHEN Pringle's Hybridized Hulless Oats were first offered, about five years ago, we purchased enough of them to sow a small plot beside the old Chinese Hulless. We judged them to be the same. There was no evidence of crossing, much less of "hybridization," as the RURAL uses this word. This displeased the introducer. Mr. Pringle, the originator, replied that he was surprised that the RURAL could see no difference. Now, the N. Y. Experiment Station, after two years' trial, pronounces them the same.

A FRIEND who has had occasion to use the Ideal Fountain Pen almost incessantly for three months, remarked a few days since, that he would not sell it for $50 if he could not procure another. The No. 2 size, worth at retail $4, is offered for four subscriptions. It will be sent in a substantial case, prepaid, in a registered letter, and be warranted to fit the hand. These pens, which are warranted in every way, may be seen and examined in almost any book store. It will then appear that the best way to secure one is by getting up a little club for the RURAL. Every farmer, every farmer's wife and daughter should have one.

THOSE whilom noble rangers of the Plains—the buffaloes—once so very numerous that, when moving in droves, the sound of their tread was like distant thunder, are about exterminated, it being estimated that not 500 are left in the whole country. Though most of the lands once fed over by them, are being occupied by herds of domestic animals, one cannot but regret the wholesale slaughter of those noble beasts. With proper regulations as to their slaughter, there are thousands of acres amid the mountain ranges where immense numbers might have lived and thriven for many years. But man's wanton cruelty in killing game for mere sport (?) has so reduced their numbers that a year or two more must see them extinct.

IN addition to the long list of special articles already announced to appear in the RURAL during 1886, we have now to add, first, articles from the pen of Pres. J. M. McBryde, of the South Carolina College, upon *Phosphates versus Acid Phosphates*, and *Notes on Bermuda and Other Southern Grasses;* and, second, several articles from J. B. Armstrong, of California, embracing *Grain-growing, Under-draining, Manuring, etc.*, and *some experiences with orchards; planting, pruning, grafting, etc., with reference to soils.*

THE recent exhibition of poultry at the N. Y. Fancier's Club was an excellent one. There has been a wonderful advance in poultry breeding during the past 20 years. The business has never been overdone, and it seems almost impossible to crowd it into the conditions which dairying and wool-growing all too frequently assume. The consumption of eggs increases from year to year, and it is impossible to counterfeit them. The sale for thoroughbred poultry is on the increase. Of all farm stock, the poultry can be most easily, cheaply and rapidly improved. At the late show, so far as numbers were concerned, the Wyandottes led, with the Plymouth Rocks a close second. All breeds were well represented, and the fact was made more apparent than ever that no one breed can satisfy everybody. All have superior points, and the selection must depend upon the location and one's love for the business. We shall show ere long some of the best birds on exhibition.

WHEN a good general is not engaged in active campaigning, he is always looking over his forces and putting everything into the best of order. The same should be the case with the farmer, and now is the time to see that every implement is in perfect condition. Thousands of dollars are annually lost by neglect of this matter. Often the seeding of a field of grain is not completed when the rain comes, only because of a little carelessness the drill did not do its best work and a delay was caused, and a rain sometimes delays the seeding days and weeks, thus making the crop late and lessening the yield. On many farms the shortage of crops, caused by late sowing, and the loss by delayed harvests, both largely the results of the implements not being in the most perfect order, would not only keep all farm tools in perfect condition, but go far towards buying new ones. If any thing on a farm ever paid compound interest, it is the putting of every tool and implement in "apple-pie" order during the Winter. To be forearmed is to be well armed!

ANNOUNCEMENTS.

IT is with much pleasure that we may now announce that the next picture to adorn our portrait gallery will be that of the RURAL'S respected friend and long-time contributor, Mrs. Mary Wager-Fisher. Mrs. Fisher is one to shrink from such publicity, and she grants our request only after repeated solicitations. A very interesting sketch of her life is written by herself.

OVER a year ago, a project was broached in the Canadian Northwest to construct a railroad from Winnepeg to a point on Hudson Bay near the mouth of the Nelson River. The original purpose of the road was to connect with a line of steamers designed to carry the grain of Manitoba and the Northwest Territory to Europe through Hudson Straits; but the hard experience of the Alert last Summer disclosed that this would be a hazardous route at most times. The projectors, however, seem determined to have their road any way, mainly, it would appear, because the country is so admirably adapted for track-laying that the line will cost only $20,000 a mile. The local business is now almost nothing; but it is hoped that the road, when built, will develop the country. Haven't our Pacific railroads done so? Work is to be begun when the snow clears off; and it will at any rate bring workmen and money into the Northwest—and workmen and money are just the things wanted there.

WHY not have a fat stock show at the East? Are not the consumers of beef interested in the cheap production? Why should these great shows be held for the benefit of producers alone? The great market for the surplus Western beef is at the East. The New England States, with New York, New Jersey and Pennsylvania, contain over 20 per cent. of the total population of the country. They have but 13 per cent. of the total number of persons engaged in agriculture, but over 60 per cent. of the persons engaged in manufacturing. These States have of all kinds of cattle 7,000,000, while the whole country has over 40,000,000. These figures show what an immense meat bill these States are called upon to pay. A series of fat stock shows held at the East might work a benefit in two ways—they might do much to overcome the prejudice that at present exists, in some quarters, against Western beef, and they would surely stimulate our Eastern farmers to increased efforts in beef production.

FOR some years, the southern termini of five railroads have been just on the northern border of the Indian Territory. All this time, the companies have been waiting impatiently for an opportunity to push their roads through the Territory to tap the Texas trade. The Chicago Burlington and Kansas City R. R. is now making preparations to extend its route to the same line. The Oklahoma "boomers" and similar adventurers, steady-going, home-seeking prospectors, the Knights of Labor and several other industrial organizations, foreign and domestic cattle kings and syndicates, as well as lobbies from all the waiting railroads, are urging Congress to throw the Territory open to settlement, reserving only a small part for the Indians. It is highly probable that the pressure will be effective. What a scramble there will then be for choice locations! How the weak but obstinate settlers will be trampled in the dust or mud by the rushing herds of the cattle kings, or ground to powder beneath the whirling wheels of the railroad monopolists! The reckless land-grabbers having appropriated all the best locations, the *bona-fide* settler will have either to seek a home on less valuable land, or buy one from the lusty land-grabbers. The past is the prophet of the future.

CHEAP POSTAGE IN DANGER.

A BILL has been quietly introduced into the Senate of the United States by Senator Wilson of Iowa, doubtless at the instigation, as it is in the interests, of the express companies. Its object is to double the rate of postage to be charged on fourth-class matter, which includes seeds, bulbs, cions, cuttings, plants, etc. Some years ago, such things were charged one cent for two ounces; but later, through the direct lobbying influence of the express companies, this was changed to one cent per ounce, and now an attempt is being made to increase it to two cents per ounce—the same as first-class or letter rates.

No doubt the express companies secretly desire to see the mails closed to all such matter, and they are cautiously working with that end in view. What care they for the convenience or necessities of the people, so long as they can secure such legislation as shall put 25 or 50 cents into their coffers for the carrying of every packet, however small? What care they if the lone pioneer or homesteader be deprived of the facilities for securing a few garden or flower seeds, to give his family a treat of fresh vegetables or to beautify his home, as long as they can secure a firmer hold on the public's necessities? Wherever there is competition, the companies' charges are usually moderate, but in the absence of competition, they practice bare-faced extortion, and it is the lonely pioneer, the isolated settler and the farmer far away from large towns that suffer most from their rapacity. Deprive these of cheap mail facilities, and they are at once placed at the mercy of greedy corporations that know no mercy. Our sister country, Canada, still carries this class of mail matter at the old rate of one cent for two ounces, and does not find it burdensome to her mails, and why should not we go back to the old standard? We certainly are strenuously opposed to any increase of the present rate. Express companies are a great convenience and are all right in their places; but we are utterly opposed to cutting off so great a public necessity as cheap postage on this class of goods, or of doubling the rates charged for its enjoyment, merely to enrich them or enable them to pay large dividends on their greatly watered stock. We are moving in the right direction in cheapening letter and newspaper postage; do not let us go backward in this other direction.

We hope that every Grange, Farmers' Alliance and other organization will see to it that their Members of Congress be warned that such a measure would be unpopular, and urge them to a firm stand against so foolish a change. The farmers of Iowa should also bear in mind that in this matter Senator Wilson has become the tool of the express companies, working against the agricultural interests of the country; how can they trust him in other matters in which the interests of the public clash with those of wealthy corporations? Corporations soon learn what legislators can be "influenced" in their behalf, and the law-maker who acts for one, is hardly likely to refuse to act for another for a like consideration. Cheap postage has helped to make our people happy and prosperous, and cheap postage in all classes we must maintain.

NOTICE TO SUBSCRIBERS.

IT is our duty as well as our pleasure to inform our subscribers, who are kindly interesting themselves in increasing the RURAL'S circulation, that the list of $3,300 worth of presents is being almost entirely set aside in favor of our regular premium-list, which offers certain articles for specified numbers of subscribers. The reason, in so far as we can find one, is that all seem to take for granted that *others will be entitled to them.* The fact at this time is simply that we offer twice as many presents in this gift list as there are competitors for them, and that even the most valuable will be awarded for merely nominal clubs.

BREVITIES.

MONEY sent in letters for subscriptions to the RURAL NEW-YORKER is at the sender's risk. Our terms are invariably $2.00 a year in advance.

FROM all we have been able to learn during the past few weeks, the Spanish Chestnut is not hardy in this climate. But the Japan Chestnut is about as hardy as the American.

AN acquaintance, "just for fun," sent 20 cents to an advertiser in one of our city dailies, to learn how to make $35 a week at home on a capital of $1, and received a printed slip with the advice: "Fish for fools as I do."

OFFICIAL statistics show that the eggs laid in the United States during the year are worth twice as much as all the silver produced in the same period. Why all this talk, in Congress, press, and pot-house about silver legislation, while eggs and egg-producers are neglected?

WHAT a high breeding standard for milch cows is that of the Rev. L. B. Loomis, as set forth in his address before the Iowa dairymen! One might imagine that such intelligent cattle would be found pasturing "in the green fields of Eden," to which the Rev. gentleman invites his flock every Sunday, were it not that there frogs could not be in the drinking water, tallow in the feed, or dirty milkers at the pail.

THE State Horticultural Society of Indiana recently decided to establish 11 horticultural experiment stations in different parts of the State. The central or controlling station will be located at Perdue University, in charge of our friend, Prof. James Troop. The Indiana horticulturists show a commendable enterprise in this work. It would be impossible to select any single place where experiments would give equal satisfaction to dwellers in all parts of the great State. By scattering the stations about, far more accurate reports can be obtained.

WHAT is to become of the bill appropriating $500,000 for the extension of the benefits of the Weather Bureau to farmers by means of signals displayed at the various telegraph stations? It was favorably reported to the House by the Committee on Agriculture last Wednesday; but no action was taken on it. Has the Committee done its whole duty in merely reporting the bill; or is it not bound to push it until it passes the House, and then to get the Committee on Agriculture of the Senate to continue to push it in that body? Let us have a little earnestness and honesty in those in charge of legislation affecting agriculture.

LAST week snow fell heavily nearly all over the country. This week mild weather has been almost universal. In the Lower Missouri, Mississippi and Ohio Valleys the temperature has ranged from 10 to 20 degrees above freezing point, and there has been a steady northerly flow of warm, moist air from the Gulf. Are floods likely to devastate the Western river bottoms? Snow and ice have been melting rapidly, while heavy rains, due to the condensation of the atmospheric moisture from the South, add to the flood?

The Poultry Yard.

BEAUTIFUL BIRDS.

WE show, at Fig. 87, two beautiful White Leghorns from the flock of Messrs. Knapp Bros., Fabius, N. Y. These birds have won numberless prizes at poultry shows in this country. It appears to be generally admitted that the White Leghorns have never been excelled as egg producers. The pullets mature early, and it is often next to impossible to get them to sit. With proper care and treatment, they are fine winter layers. The eggs, in this market at least, command an extra price. The fowls consume less food than the larger breeds, and are good foragers, and when well bred, exceedingly beautiful. In every breed of cattle, sheep, horses or poultry there are good and bad strains. This fact frequently explains why it is that some people are much pleased with a certain breed of poultry in which others find nothing but disappointment. The strain to which these birds belong is an excellent one. They are larger than the average Leghorns, are remarkable for their pure white plumage, yellow legs and beak, white ear-lobes, without being white in the face, good forms and medium-sized combs. As an evidence of the laying quality of this flock, Mr. Knapp states that in one year 200 hens averaged 13 dozen eggs. A fine display of eggs from this flock was made at the late poultry show in this city. They were beautiful in shape and color, and attracted much attention.

POULTRY NOTES.

THE exhibitors at the recent poultry show in this city were all pleasant gentlemen, glad to answer questions and talk about their stock. Some of the best points in poultry management could be gleaned from them. A day can always be well spent at such an exhibition in talking with successful breeders and learning their methods of feeding, handling and breeding. The best plan is to think out a list of practical questions before you go, and to take notes of the answers. Strive to avoid all foolish questions. Frame the inquiries, if possible, so that they can be answered in a few words.

The use of incubators appears to be on the increase. The most successful breeders are evidently using them, and many of their prize chickens were hatched in this way. Good breeders say that they can raise 80 per cent. of incubator chickens with the use of brooders and constant care. The idea of supposing that an incubator can think and keep track of its own thermometer is absurd. Dozens of different incubators and brooders were on exhibition, with eggs in all stages of hatching. A large number of chicks broke the shell each day, so that visitors were able to study the process. As they first struggle out from the shells, the chicks appear to be about as insignificant specimens of life as one can imagine. After tumbling about among the eggs for a while, they become dry and gain strength enough to stand or run about. In several incubators we noticed these stronger chicks pecking at the eyes and combs of their feebler brothers who were unable to defend themselves. The little rascals had become canibals at the age of a few hours. This trouble could be obviated, however, by removing the chicks to a brooder.

It is customary to present these chicks to visitors. Many city people took the little things home to keep as pets. The strongest evidence of the vitality of incubator chicks came from an old colored women who stood watching an incubator: "Dey give me one ob dese chickens las' year, an' I took it home in my basket. It's so big now that it drive every rooster outer sight." When asked how she took care of it, she said: "I's de greatest critter you ever did see ter keep things warm and full of vittles." A good hint there for many more scientific poultrymen.

One curious exhibit that attracted much attention was a large Game capon taking care of a small brood of chickens. The capon looked like a large hen with a rooster's heavy tail and spurs. His comb was undeveloped and his beak and head had little of the warlike appearance for which his breed is noted. The chickens tumbled about over his great spurs in their efforts to get under him for warmth. The poor fellow looked unhappy enough. The practice of caponizing is but little practiced except by those who make a business of supplying fancy poultry for epicures. The work is most properly done by skilled veterinarians. There are men who make a specialty of it and are able to make good all losses. The ordinary poultryman will make but bungling and cruel work of the process, and had much better let it alone.

We were sorry to see a few lousy fowls among the rest. It is a shame to send such birds to an exhibition of this kind. Not only is their condition evident to visitors, but there is danger to other clean and healthy birds. Most breeders are seldom troubled with vermin. Lice are produced in filth, and will not live in absolute cleanliness. Frequent cleanings, and applications of white-wash, with dustings of buhach are the most practical methods employed in fighting vermin.

The successful poultry breeders appear to think almost as much of their birds as they do of their babies. Gentle treatment is absolutely necessary in successful poultry keeping. The birds can be handled about like kittens. One very successful breeder said that he could not expect to leave his flock of hens in the care of strangers, for ten days, without a shrinkage of 30 per cent. in egg production.

Most poultrymen believe that to get the best out of the business, one must devote his whole time to it. There appears to be less difference, as regards profit, in the breed of poultry than in the breed of man. A nervous, irritable, quick-tempered man had better leave the poultry business alone. He should never buy an incubator at all events. A man who is willing to learn patience and perseverance, cannot find a better teacher than an old hen, or a better college than a poultry yard. The poultry business is surely increasing in profit and importance. The hen on the farm, uncared for and often neglected, still pays her way. Poultry form the best combinations with the growing of small fruits, flowers or bees. The best results are obtained when the farm is given up to exclusive poultry growing. The whole attention is then given to the work, and the very best methods are studied out.

It seems strange to think of a hen worth more than a cow; yet there were plenty of such on exhibition. One little six-pound rooster could not be bought for $300. How many ordinary cows would it take to equal that price?

DRINKING FOUNTAIN FOR FOWLS.

A TIN or galvanized iron can that will hold about half a gallon, flat on top and bottom, is provided with three legs (Fig. 71). The bottom should be made like an ordinary pie tin, and the can part be large enough to come within half an inch of the sides at the bottom of the tin, and, about half an inch up from the bottom of the can, there should be five or six one-quarter-inch holes (shown at *c c*). In the bottom there should be an inch hole fitted for a cork or an ordinary can top screw-cap, as shown at *a*. To fill, invert the can and pour in the water through a funnel; cork or fasten up the hole and set the can on its legs; the water will run out of the little holes around the base, and partially fill the trough around the can. As the fowls drink out the water below the top of the holes, a little air forces itself in, and more water runs out, but not enough to flow over the edge of the trough. The advantages are, that the water is always fresh and clean, the fowls not being able to make it foul; nor can they get their wattles wet and so cause them to be frozen, as frequently happens in very cold weather. The legs should be about six or eight inches in length, and flare out at the bottom a couple of inches, so as to make it stand more strongly. It can be picked up by the legs and brought into the house if the weather freezes out-of-doors during the night. Another important advantage is that it can be made oblong or square, according to choice. J. T. C.

WHITE LEGHORNS. From Nature. Fig. 87.

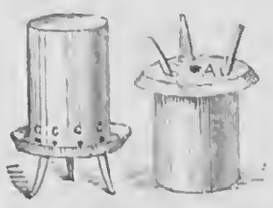


Fig. 71.

Miscellaneous.

OLD FRUITS UNDER NEW NAMES.

C. M. HOVEY.

(*Concluded from last week.*)

Prospective troubles from the innovation; need of a uniform rule in the new nomenclature; objections from personal experience; the proper course to follow; prevention, not amendment, in order.

IT is the coming generation of fruit cultivators that are to be burdened with this new style. The innovation has come just as many carefully prepared volumes have settled down upon a solid and ascertained basis—the result of nearly 50 years' labor in the importation, cultivation, identification and dissemination of all the fine fruits under generally accepted and well known names. There are to be cultivators after Messrs. Downing, Wilder, Barry, Thomas and others have dropped their earthly labors, who will be looking up the fine old fruits which they will read of in their fathers' day, and they will consult Cox, Kenrick, Prince, Thomas, Barry, the Magazine of Horticulture, and the Fruits of America, only to find that many of the pears and apples have, according to the new nomenclature, gone out of cultivation, their places being supplied by new varieties.

Again, there must be some uniform rule in the new nomenclature. Paradise d'Automne Pear is to be simply Paradise; but the Winter Paradise Apples and the Summer Paradise are, I presume, to remain, otherwise there would be inextricable confusion—in two Paradise apples, one Winter and one Summer. That old pear, Jalousie de Fontenay Vendée, was called in some catalogues, "De Fontenay Vendée," but having been described in pomological works of authority under the former name, it has been retained. It would be going backward to strike out the "Jalousie," although there was and is a "Jalousie" Pear.

Mr. Downing took the liberty of calling a pear raised by Mr. Knight, of Rhode Island, Knight's Seedling, creating the supposition that it was the same as some of Thos. Andrew Knight's seedlings. It was first generally described by me, in the Magazine of Horticulture, as "Knight's R. I. Seedling," which name should be retained in full. It is unnecessary to say that, though it is advisable to have short names, it aids persons who are selecting from catalogues, to know that a certain apple or pear is a summer or winter fruit, as Summer Queen, Summer Rose and Summer Bellflower Apples; and Winter Nelis and Osband's Summer Pears, which it is proposed to shorten to "Nelis" and "Osband's" only. "Brevity" is said "to be the soul of wit;" it is not always a safe guide in science.

Some years ago, I raised two seedling peaches, one of them the most beautiful peach I ever saw, as it was the richest I ever tasted. This one I named the "Cambridge Belle;" the new code would strike off the Cambridge—which would be as unmeaning as it would be absurd. The name had this significance, that I wished to honor the beauty of a Cambridge belle, and as the peach was the most beautiful of all peaches, so the Cambridge belle, to my eyes, was the most beautiful of all belles, whether a Washington, a Baltimore, or a Boston belle. So with the other, which I called "White Ball," to denote the snowy whiteness of its skin and roundness of form; to nickname it "Ball" would be an outrage on all the proprieties of pomological science. And who is to decide how many of the adjectives shall remain and how many be rejected?

One thing only can we do to purge hereafter our catalogues and books from these inappropriate and often vulgar names, and that is, to appeal to the intelligence of all cultivators, and kindly urge them to reflect before they bestow names upon their productions, which, if really meritorious, are to be known perhaps to future generations. A zealous raiser of seedling fruits might possibly produce a pear as good as Dana's Hovey, and name it the "Rooster" if he happened to be politically inclined; and nobody could deny him the right to do so. Like all prohibitory laws which attempt to prevent a man from doing what he pleases provided it is lawful and does not interfere with the rights of others, such attempts will surely fail. A gentlemanly protest will do more. No! Societies or individuals can only do what President Wilder has so well and gracefully done—suggest that no more inappropriate and ugly names be given to our fruits. It is what I urged 30 years ago in the Magazine of Horticulture. Mr. Bull, the raiser of the Concord Grape, asked me what name I thought would be most appropriate, suggesting one himself, which should embody his own name: but I said at once, "Call it by the grand, old, historic name of Concord," the site of the first battle-field for Liberty, and the place where the grape originated, which was to be as victorious over all other grapes as Capt. Davis's company was in their famous Spartan defence of the bridge a few rods from Mr. Bull's garden.

No! let the names remain as we find them in pomological works; but let us try and prevent the adoption so far as we can, by example and practice, of any but euphonic and appropriate names to express some characteristic of the fruit or tree, to honor the grower, his country, his town, his city, his friends, his family; or recall the pleasant reminiscences of romance and poem.

CATALOGUES, ETC., RECEIVED.

THE FOURTH ANNUAL REPORT OF THE NEW YORK EXPERIMENT STATION.—We are indebted to the very efficient Director, Dr. E. Lewis Sturtevant, for the above report. The New York Experiment Station is doing very much, and, for so short a time as it has been organized, is doing much good. Among other things we notice very carefully conducted feeding experiments; also trials of various cereals and vegetables. From experiments made with regard to the effects of various depths of planting on the germination of wheats, it seems that the best depth, all things considered, is from one to two inches. While a larger per cent. germinates, and that very quickly, at a quarter to a half inch, and while it makes a very satisfactory growth during the Fall, when the seed has been planted at those depths, the wheat does not seem so capable of withstanding an unpropitious Winter. Deeper than four inches, the proportion that germinates very rapidly diminishes, and the proportion that is winter-killed rapidly increases. Trials have demonstrated that White Australian, White Belgian, Welcome, New Australian and Race-horse Oats are all one and the same variety. Probsteier and White Probsteier are also identical. White Russian, White Novelty and White Zealand are all one. The same may be said of Chinese Hulless, Pringle's Excelsior and Pringle's Hybridized Hulless. In vegetables the confusion of names and the giving of new names to old varieties are many times worse, some varieties appearing under as many as a dozen or even more different names. Of the lettuces alone there are, in the list which is given, only 81 distinct varieties, and for these there are over 500 synonyms.

This is an abomination and is becoming simply unbearable. Too strong condemnation of this course cannot be expressed. Such a person as will be guilty of putting out an old variety under a new name is an enemy to every honest seed dealer, and no better than a highway robber, in filching from the planter his hard-earned, honest dollars for what he already has under some old name. The report also contains the result of Prof. Arthur's researches and examinations on the pear blight. It also illustrates and describes a fungus that is destructive to the clover-leaf weevil, and which he thinks will entirely rid the clover fields of Western New York of this destructive pest. The Board have showed commendable promptness in having their report printed and ready for distribution when presented to the Legislature.

THE FOOS MANUFACTURING COMPANY, Springfield, Ohio.—A little pamphlet, showing their scientific grinding mill for grinding corn and other grains on a new principle. It first breaks the corn coarsely, then rebreaks and rebreaks until it is quite fine, and then it passes between a pair of plates armed with small, inclined ribs, between which it is rolled and crushed in such a way that it is delivered as fine and soft as meal ground with the very best buhrs. It also grinds corn with the cobs on which it grew, and grinds it fine. There is no doubt that when properly ground the addition of the cob meal to that made from the corn alone, will produce much better results in feeding than would the clear corn meal. Prof. Shelton's experiments clearly demonstrate this point. We have thousands of readers not situated within reach of a custom mill, and thousands of others in the West where the tolls for grinding are so very excessive that they can do no better thing than to buy a mill with which they can grind their own grain. We recommend all such to send to the Foos Manufacturing Company for this circular, and see what advantages they claim for the scientific mill. They also make steam engines and portable forges, and furnish with them a full set of blacksmith's tools. This is a good house.

THE DINGEE & CONARD CO, West Grove, Chester County, Pa.—A New Guide to Rose Culture. If there is one kind of catalogue we enjoy looking over more than another, it is the *rose* catalogue. The present catalogue is issued by the most extensive rose growers of this country, and offers nearly every variety, both old and new. The prices are reduced. These roses are grown to be sent by mail so that at the prices appended, they may be delivered to any post-office in the country in good growing condition. There are two colored plates, showing three new roses of 1886 and three of 1885. The catalogue also offers hardy shrubs, vines, carnations, chrysanthemums, etc., and will be forwarded to our readers upon application to the above well-known firm.

R. H. ALLEN COMPANY, 189, 191 Water Street, N. Y.—Circular of the Dutton Mower Knife-Grinder. This is a little machine that can be taken to the field and attached to a fence-rail, wagon wheel or a wheel of the mowing machine, and the machine knife can be ground in a short time, and all sections will be ground uniformly. The stone is made hollow, and the water, being placed in the cavity, is forced through the stone, moistening it sufficiently for use. With this little machine handy in the field, any knife badly dulled by running against a stone can be quickly sharpened, and much labor be saved for the team. "A merciful man is merciful to his team." Send for this circular.

MR. C. HENLY, Richmond, Indiana. An illustrated circular showing the construction and method of using Henley's Improved Monarch Fence Machine. It is claimed that while this machine is very cheap, it builds a much better and more substantial fence than that made in sections and afterwards nailed to the posts. There are many advantages claimed for it, which we cannot specify, but it will pay any one having fences to build, or who wishes a good substantial and cheap fence, to send for this circular.

CALENDAR from N. W. Ayer & Sons.—The calendar sent out this year by this well known advertising agency is the largest and finest of any we have seen. The calendars of former years have been given away, but this one is so expensive that it will be sent only on receipt of 25 cents.

For Women.

CONDUCTED BY MISS RAY CLARK.

NAPOLEON III.

"NANCY, come out here and see what I've got!" called out exultingly the voice of John Hopkins, as he drove up to the kitchen door one Monday morning in October.

"Nancy," a tall, spare woman of some 35 years, appeared in the door-way, her bare, brown arms dripping with soap suds, a cloud of steam enveloping her like a mist, and her sharp, black eyes rested disapprovingly on the white, wooly object standing upright in the wagon.

"Now, John," she exclaimed, "you've ben a makin' one of your foolish bargains, I'll warrant. Paid a fancy price to a fancy man for a ornery beast no better than could be bought of some honest farmer for a quarter of the money!"

"Oh no, Nancy," replied John, "I got him dirt cheap. Morrison said he'd held him all along at $75, but seein' 'twas me, I might have him for $60; but I wasn't to say but what I give the whole $75."

"John Hopkins, you're a simpleton!" said his wife, and saying it, her look and tone expressed even more meaning than her words. "I'd like to see you get your money back! He's cross, too, I can tell by his eyes. I shouldn't wonder if he'd pitch into you the first chance he gets."

"But he's got a pettigree, Nancy; his name is down in a book, Napoleon III. And a sheep or a horse or any other anamile with its name in a book, is worth jest seven times as much as the same anamile without; Morrison said so. And he ain't cross at all, he's jest as kind as a kitten. Whoa there, Dolly!"

And as Hopkins turned towards his restless horse, Napoleon III. drew back the length of the rope with which he was tied, and with a sudden leap, brought his broad forehead into such forceful contact with the seat of his admirer's blue overalls, as to pitch him suddenly out of the wagon and head foremost into a barrel of boiled pumpkin and milk, which stood by the wood-shed door.

Old Dolly, startled by the splashing mass which flew all over her, started at a furious pace for the barn. The gate into the yard being closed, she cleared it at a bound, her heels hitting the dashboard with such force as sent it flying in fragments, the cross-bar snapped asunder and Dolly gained her stable, where she stood shivering with terror, while the wagon remained balanced across the gate, with Napoleon III. standing serene and untroubled, viewing the scenery from his elevated position with evident satisfaction.

Hopkins kicked and floundered, the barrel was upset and rolled over on the walk, and as he arose from the ground the yellow and white streamers rippled down his clothes, his hair and beard were matted with pumpkin and as he gagged and spluttered he growled "Dang that Morrison."

"You'd better have that performance set down in the book along with the name," said Nancy, drily.

Her careful, prudent eye viewed the wreck of the wagon with dismay, also the loss of that beautiful barrel of mush which was intended to feed a litter of young pigs for many a day. But she wisely restrained the expression of her thoughts and returned to her steaming tubs, her quick, nervous movements and vigorous rubbing bearing testimony to the conflict raging within.

Hopkins was the owner of a fine flock of Merinos which were the pride of his heart. During the late fall and winter months they were allowed to run in an orchard which was separated from the house-lot by a rather low board fence. Into this orchard was Napoleon turned, and here his owner (after a few days had passed and he had gotten over the affair of the barrel and the broken wagon) was wont to gaze upon his new acquisition with great pride and satisfaction.

Now, it so happened that the cellar drain of the Hopkins residence failed to fulfill its obligations, and Nancy's crocks and tubs were continually in a state of inundation not at all in accordance with her ideas of the fitness of things, and after due inspection and consideration, John decided that a new one must be dug in a different direction and tiled. Accordingly, he set about it with a will, and soon a long, deep ditch stretched away from the house, and all things being in readiness, one pleasant morning he called on Nancy to assist him by handing down the tile. This she was quite willing to do, and soon they were busily at work.

"The top of the mornin' to ye, mum!" said a voice in an unmistakable Irish brogue, and looking up Nancy beheld a short, stumpy figure clad in ragged, filthy garments. He had a bloated face half covered by a bristling, unshorn beard, and a little, twinkling, snapping eyes, and his coarse, red hair straggled unevenly from beneath the brim of a battered stove-pipe hat. He had a short pipe in his mouth and over his shoulder he carried a stout stick from which depended a pair of faded overalls stuffed with old clothing, a pair of worn-out rubber boots and a tin pail.

"An a foine mornin' it is, mum. And sure the sun's niver a bit plisanter to say than your swate face, mum. By me sowle, I've not seen your aiqnil in this counthry. I'm an unfortunate craythur, mum. I've thravelled nigh on to 200 miles to find worruk, and, Glory be to God! I can't find a bit. Could yez give me a bit of pie or cake mum, to kape the two sides of me from sthickin' togethir, mum? Bless me sowle, your two eyes shine like bugs in a chimney, mum."

"I'll give you something to eat," said Nancy, "but I don't want any of your blarny."

"Oh, but a lady of sinse ye are, and sure sinse comes before beauty. Me ould mither was a woman of uncommon sinse and I inherited the whole of it. Sure, afther I was born she hadn't sinse enough left to light her pipe, or peel a pratie. Sure, I've been a famous man in me day, but I had to lave the ould counthry on account of me principles. I'm down in the worruld now."

And truly he was down the next moment, for Napoleon III had marked the strange apparition, and no doubt thinking it something that would endanger the peace or safety of his many wives, had cleared the fence and with a few long leaps reached the spot. A well directed blow and the tramp was hurled into the ditch and came down on the bent head and shoulders of the unconscious John (who being much engaged in his work and quite hard of hearing, was unmindful of the presence of a third person), embedding him in the soft earth like a brick in a wall. The stuffed overalls flew from the stick and locked themselves around Nancy's neck, the rubber boots sailed away and were caught in a pear tree, and the tin pail landed in the midst of a flock of hens that were treating themselves to a bath of chip dust, scattering them in all directions.

As for Napoleon, the force of his charge had been so great he could not save himself, and he too pitched headlong into the ditch on top of the tramp, who, with a loud shriek of terror began calling on the Virgin Mary and all the saints to defend him. For a few moments there was an almost inextricable confusion of heads, arms, legs and horns, but presently Napolean freed himself from the struggling mass, and with the stove-pipe hat impaled on one horn, bounded along the ditch and soon regained his companions who had fled from him in terror. The tramp arose to his feet and with chattering teeth exclaimed:

"An' its an airthquake it is, and the devil has come from the bottomless pit to claim his own. I see his horns and felt his fiery breath! Oh, Saint Peter, deliver us!!"

Hopkins dug the mud out of his eyes and ears and looked at Nancy, who had freed herself from the embrace of the overalls, for an explanation. This was soon made and the candidate for pastry at length comprehending the situation, exclaimed,

"It'll take a whole pie and a moity big one at that to settle with me for this job."

He got his pie and a large slice of bread and jam besides, and having recovered all of his treasures except the hat, which was more than replaced by a similar one from the garret which had belonged to John's father, went on his wandering way.

The next Saturday was a lovely day, and along in the afternoon, who should drive up to the door of the Hopkinses, but Nancy's niece, Miss Aurelia Dunbar, from the city, and her beau, Mr. Gustave Delors Wannermaker, clerk in a fashionable jewelry store.

After tea, the young couple strolled out to a little grove of maples which crowned the summit of a gentle slope back of the orchard. Seating themselves on a bed of soft moss, they watched the glorious Autumn sunset, and Gustave taking the young lady's hand, murmured,

"My dearest Aurelia, there is something I have long wished to say to you, and what more fitting opportunity than this, here in this lovely spot, with nothing to disturb—

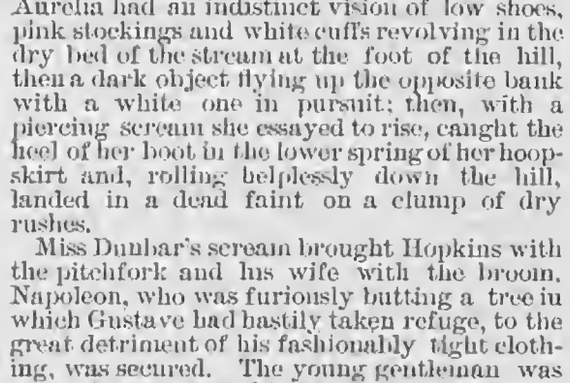
At that instant a rushing sound was heard. Aurelia had an indistinct vision of low shoes, pink stockings and white cuffs revolving in the dry bed of the stream at the foot of the hill, then a dark object flying up the opposite bank with a white one in pursuit; then, with a piercing scream she essayed to rise, caught the heel of her boot in the lower spring of her hoop-skirt and, rolling helplessly down the hill, landed in a dead faint on a clump of dry rushes.

Miss Dunbar's scream brought Hopkins with the pitchfork and his wife with the broom. Napoleon, who was furiously butting a tree in which Gustave had hastily taken refuge, to the great detriment of his fashionably tight clothing, was secured. The young gentleman was assisted down from his perch and the young lady restored to consciousness. But when an apology was attempted, it was received with dignified silence, and the visit, which was intended to bridge over the Sabbath, was brought to an abrupt termination by their immediate departure.

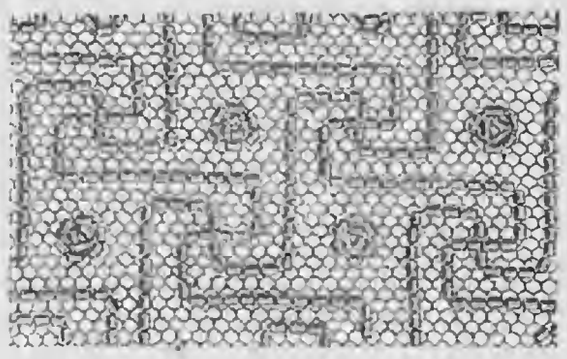
After this last unfortunate escapade, Napoleon III. was placed in close confinement. But, even then, John was obliged to "keep his eyes peeled," to use his own expression, when he gave him his daily rations. He began to think that a peaceable disposition was more desirable than a "pettigree," and made a solemn vow in his secret heart to consult Nancy before making another bargain. BRUNSWICK.

DARNED NET.

WE give our lady friends two patterns for



darning net. Linen floss and bobinet lace are the materials, and well pay for any amount of work done with them. A child's dress made this way, and lined with colored silesia, is exceedingly pretty, and has the advantage of being strong, durable and of washing well. It makes a pretty trimming for underclothing, and just as lovely and cool-looking bed-spread as can be imagined. The



lace can be bought two yards wide, and is not costly. Those who have time for fancy work will find this to be fascinating as well as profitable.

Domestic Economy

CONDUCTED BY EMILY MAPLE.

WASHING DAY

ANNIE L. JACK.

"THEY that wash on Monday have all the week to dry," sang the family Oracle. "But I don't *want* to wash on Monday, nor yet to be all the week drying the clothes," I said, though certainly in this Canada of ours, it takes nearly that long if they are left to freeze dry. Some people advocate Monday as washing day, because one is fresh and rested after Sunday, but I do not know that it always follows. I don't like going about picking up clothes on Sunday, and if done on Saturday, something is sure to be overlooked. So we try to be ready on Tuesday morning early, and to have the clothes soaked and sorted into separate tubs the day before. Of all the numerous washing sodas, I prefer pure borax kept in a wide-mouthed bottle; ten cents' worth will last for a dozen or more washings. There is nothing in the washing day to me so dreadful as some people make it out to be, even the smell of suds can be avoided if the kitchen is kept ventilated. But it is a great help and comfort to have a stove in an out-kitchen or shed where the washing will not interfere with the rest of the work, and to keep all the laundry utensils there. We have worked one of the small steam washers to great advantage for the last three years—they are a saving of labor, and help in cleansing the clothes. Blue is best in the balls, and rock salt is very useful in rinsing water when new prints are washed, to set the color. When the hot water is used, it sets the soiled places so that they are hard to clean; cold water loosens it so that it is always best to put clothes into cold water to boil, whether with a steam washer or without it. When to be wrung out of the soaking water, let them be put into good warm suds. There is a great deal of difference in the quality of soap now-a-days. I have not had an opportunity of trying some of the kinds so largely advertised, but I know there is a wonderful difference in the soaps of local manufacture that we purchase by the box. There ought to be analysis made of soap as well as of other articles of housekeeping to prove that it is fit for family use, as it doubtless often needs a purifying process. Washing now-a-days with a wringer and steam washer and all the labor-saving contrivances that can be bought so cheaply, is not such a terrible affair after all; and we thought the hanging-out the hardest part of it, till the handy man of the family put up ropes and pulleys in the woodshed, and the clothes hang there unmolested, and can get out-door air through a long window just behind them, as well as the doors, yet not be subject to the vicissitudes of all weathers. Clothes put through the wringer require to be well shaken out before putting on the cord, or they will carry the marks of uneven pressure along with them. I prefer a common hemp line to that of galvanized wire, as the latter cuts the clothes during a strong wind or when frozen. A bag for clothes-pins is a necessity, and I think I could almost tell the character of a family if I went to a house where, however fine the appointments, I found the clothes-pins left out in the yard and half embedded in the earth, broken and discolored;

Miscellaneous Advertising.

When Baby was sick, we gave her Castoria,
When she was a Child, she cried for Castoria,
When she became Miss, she clung to Castoria,
When she had Children, she gave them Castoria.

for it is one of the wasteful "straws" that show how the winds of extravagance blow.

SOLID AND VALUABLE.

THE best way to buy lamp-wicks is, uncut, at three cents per yard.

Best fastening for shoe-buttons: a small brass disk with a tongue cut out in the center; can be used time and again.

Best food, except milk, to raise fine pigs on: wheat shorts.

Best way to prepare clothes for washing easily is to put a pailful of warm, soft water into your tub, set in your washboard and soap clothes, one garment at a time, all over, giving extra soaping to extra dirty places; roll up each piece as fast as soaped, like damp clothes for the ironing, and put into the warm water behind your board; let lie an hour, if done on washing-day morning, otherwise do it the evening before. Saves two-thirds the rubbing.

The best mitten for men's wear in chopping wood, handling stone, lumber, etc., in very cold weather, is cut from heavy ducking (I use Stark Mills A grain sacks). Cut inside of the hand double, line with heavy woolen—old pieces from coats and trowsers will do. Can make a hundred pairs in a day on the machine after they are cut and basted.

Best way to use stocking feet after they are past mending: cut off with an inch or two of ankle and slip over your shoes when the walks about the yard are icy or the floor is cold. Saves putting on and fastening up overshoes a great many times.

Best use for a tomato jug that is cracked around the top: hold an iron against it to make it break true, and tap carefully with a rather light hammer, first breaking off the handle, till the dome is all off; it makes a good soap dish or drink dish for chickens, etc.

Best way to scald meal for johnny-cake, if you have not milk to do it with, is to use the water in which you boiled your potatoes.

Best johnny-cake is made by thoroughly scalding nice yellow meal with new milk, sweeten a little, let cool and then thin with well-beaten eggs; shorten with two tablespoons melted butter to the pint of milk; don't forget to add a pinch or more of salt.

Best way to ventilate and dry a damp cellar is our way: a four-inch tin pipe runs from near the cellar floor into the pipe of the kitchen stove through a hole cut in the floor.

COUSIN E.

WINTER BUTTER-MAKING EXPERIENCES.

CHURNING TRIALS AND TRIUMPHS.

I WANT to have a consoling talk with some of the younger housekeepers who, like myself, have been in the depths of despair on account of churning day. I have discovered a glimmer of light, a star of hope, and would like to say something to comfort and help some of you for the rest of your natural lives.

Oh! the anguish of butter-making when you churn on and on for hours, and the cream looks every minute as if it might turn to butter, but *doesn't!* Your arms ache—every bone in your body aches, and your heart aches worst of all, while the stubborn stuff in the churn still smiles up at you with provoking sweetness and tantalization. You old experienced housekeepers who never make mistakes or have such butter battles, know nothing whatever of our sufferings. This letter is not for you—you would only laugh—and you need not read any further. Neither is it intended for you who have large dairies, spring-houses, big patent pans, patent churns and butter-workers with all the other appliances and regulators that make butter-making so easy and sure. It is for those who, like us, have one solitary cow, and churn in an earthen jar with an old-fashioned dash—or beat the cream in a large bowl with a spoon or egg-beater. Last Winter we had a memorable scene—"John" and I—over some particularly fractious cream that we struggled with at intervals for nearly all one afternoon and till 11 o'clock at night. We churned it, we beat it, we shook it, we added milk, we applied hot water, cold water and warm water, separately and altogether; and, if there be any other earthly thing that people do to make refactory butter come, I'm sure we did that too. Well, perseverance was rewarded at last, but I ought to add that the triumph was a small one for the butter was dark and strong—hardly suitable for cooking. I have since learned that this is apt to be the case when it has been necessary to churn very long. I have also learned that the longer cream is churned the smaller become the butter globules, and that after a reasonable time, the less the chances usually are, so to speak, that butter will result. A few weeks ago, during some very cold weather, the butter stubbornly refused to come for several successive churnings. It looked so lovely and seemed so nearly ready to yield for hours that it was hard to give up, but we did. The cream was sweet and so we had cream cakes, cream sauces, cream pie crust and cream everything, but I was in despair about ever getting any more butter till "John" suggested a dairy thermometer. He immediately got one and some one advised us to scald the milk when fresh, just enough to make it look "crinkly" a little. We did that too, and now there is no more trouble. Earth is no longer a desert, and life is once more serene. With the cream at about 62 degrees, ten minute's churning is usually sufficient to do the work and the butter is firm, yellow and sweet every time. Perhaps we should be equally successful if the scalding were omitted, but a "burnt child dreads the fire," and while things work so well this way, I don't feel like launching out into any new experiments even for the cause of science.

RENA ROSS.

WINTER BUTTER.

IT is not very difficult in Summer to make good, sweet butter. But when December comes and the streams are frozen over, and the fields covered with snow, and the cows have nothing but dry feed, and the milk cools while bringing it to the house, then is the time that worries the housekeeper and brings the poor, white, bitter butter into market.

I have pursued a plan of my own for several years, and think it about as good a one as anybody can follow. Of course I am writing this for women who have no creamers, and are obliged to keep the milk in the pantry, as the majority of farmers' wives do. The greatest harm to butter made in Winter is in letting the milk stand too long before skimming. Some old butter-makers that I know think it must stand until it sours, or they do not get all the cream. The consequence is, it becomes bitter and full of white flakes. I churn every third day in Winter, no matter how little cream I have, and do not wait to get a large churning, for I would rather churn a little and have it good. The milk that is strained one morning I warm the next morning by setting the pans on the range or over a kettle of boiling water. Let it get just milk-warm, not hot; then let it stand until night or the next morning, and skim. The night milk I serve in the same way; it takes but a few minutes' time. I never have but three or four milkings on hand at once.

While I was sick a few weeks one Winter, I had an old lady, experienced in all household affairs, to attend to the milk. The first day I was able to walk, I inspected the milk room and found 11 milkings that needed skimming. She was waiting for it to "sour," with the thermometer down to zero.

I always try to keep my pantry doors shut while sweeping and while cooking cabbage, turnips or any vegetable, and raise the windows a little, never forgetting to stir the cream well after each skimming. I use a little coloring and have the cream as near 64 degrees as possible. When ready to churn, I usually set it near the kitchen stove a few hours until it reaches that temperature, wash it well while in a granulated state (you have been told that often), and my butter is nice and yellow, has no white flakes, no frowy, bitter taste, and is as good as "winter butter" can be.

ANOTHER important item I wish to mention is the necessity of washing the cow's teats with a cloth and warm water every morning, to remove the dirt that has accumulated during the night while lying in the stable, and which is too often found in the milk pail, and I have seen suspicious streaks in butter, which I attributed to the same cause.

FANNIE FLETCHER.

A FARM DINNER IN FEBRUARY.

Boiled ham; boiled potatoes; hot corn bread; pickles; celery; buttermilk or cold water. No butter—no dessert. Rule for corn bread: One quart of buttermilk, three eggs beaten thoroughly, three spoonfuls of melted shortening, a good pinch of salt, soda to neutralize the acid of the buttermilk (the quantity must be learned by experience), one cupful of flour and corn meal enough to make a rather stiff batter. Now I cannot say two or three cupfuls, for I do not know the size of the cups or the kind of meal you will use. By making corn bread of one kind several times in succession one learns how to proportion everything. Bake in a quick oven. AUNT NINA.

APPLE SAUCE FROM SWEET APPLES.

We are very fond of a good, sweet apple cooked as follows: Cut in halves and take out the core; put in a dish with a little butter and a little sugar and some water, and set in the oven and bake, so that the juice and sugar will be as thick as honey, pour it over the fruit and let it cool. Sweet Russet suits me best of any we have here. Can you tell me of a sweet apple that will keep at least two months longer and be as good to cook? H.

(The Winter Sweet Paradise is an excellent cooking apple and a better keeper than the Sweet Russet.—E. M.)

Miscellaneous Advertising.

Pain in the Side

Is a symptom of disease. It may be caused by Rheumatism, or by Neuralgia, but it usually indicates a disordered condition of the Stomach, Liver, or Kidneys. Ayer's Sarsaparilla corrects the action of the vital organs, and removes every trace of disease from the system.

Last fall and winter I suffered from a dull, heavy, pain in my side. I did not notice it much, at first, but it gradually grew worse until it became almost unbearable. During the latter part of this time, disorders of the Stomach and Liver increased my troubles. I began taking Ayer's Sarsaparilla, and, after faithfully continuing the use of this medicine for some months, the pain disappeared and I was completely cured.—Mrs. Augusta A. Forbush, Haverhill, Mass.

Ayer's Sarsaparilla,

Prepared by Dr. J. C. Ayer & Co., Lowell, Mass. Sold by all Druggists. Price $1; six bottles, $5.

DIPHTHERIA, or SORE THROAT THEIR CAUSE AND CURE. Sent free. Address Prof. Drury, 108 TREMONT ST., BOSTON, MASS.

THE "COMMON SENSE" MILK PAIL.

This is the only *perfect* Pail made. There are no seams in the front to catch the cream. It has a perfectly filling strainer, which can be instantly removed, so that every part of the pail may be *quickly* and *thoroughly* cleaned. Should the strainer become foul or worn with use, we can furnish new ones at very little expense. The Pail is well made of heavy XX tin, and we offer it to the farmer at the very lowest price at which a really good article can be sold. *Send for special circulars* Price $1.25 each. Discount to the Trade.

MILKING TUBES,

FOR MILKING COWS WITH SORE TEATS.

This is the best Tube in the market. Sent, post paid, to any address on receipt of price. One Tube, 25 Cents. Five Tubes, $1.00. Send for special Circulars.

Send us your name and address and we will mail you, FREE, our

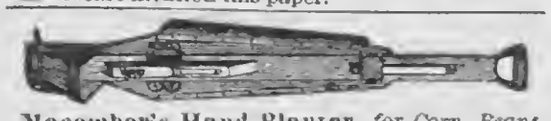
Seed Catalogue for 1886.

Choice New England Seeds. The very Best and Purest Stocks of Cabbage, Onion, Beet, Parsnip, &c. All grown by ourselves and sure to give complete satisfaction. TRY THEM.

BARTLETT & DOW,

LOWELL, MASS.

Please mention this paper.



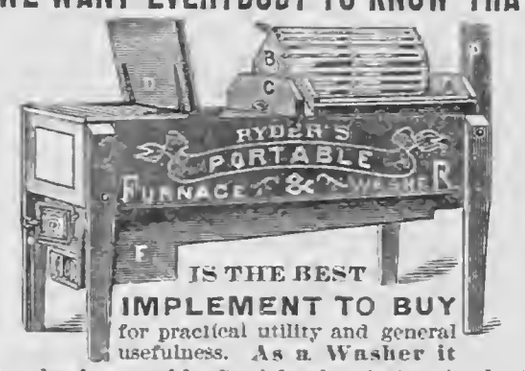
Macomber's Hand Planter, *for Corn, Beans, and Beet Seed.* The BEST in the world. Money refunded if it does not prove satisfactory, after a fair trial. Agents wanted. Send for circular and terms. S. M. Macomber & Co., M'f'g's, Grand Isle Vt.

MAKE MONEY.

The long evenings are at hand. Improve your time.

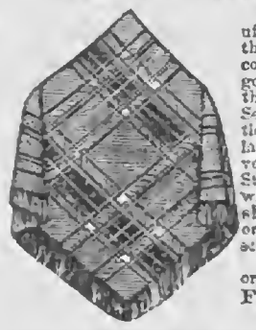
The House Patent Scroll Saw runs easy, cuts fast, and is a pleasure to use. You can decorate your walls with beautiful brackets, or sell the work and make money. Send 6c. for 36-pp. Illustrated Catalogue, giving full description of SCROLL SAWS, NEW DESIGNS, etc. Address A. H. POMEROY, Adv. Dept., 216-220 Asylum St., Hartford, Conn.

WE WANT EVERYBODY TO KNOW THAT



for practical utility and general usefulness. **As a Washer it leads the world.** Send for descriptive circular to **B. L. Ryder & Co**, P.O. Box B, *Chambersburg, Pa.*

PLAID SHAWL GIVEN AWAY!



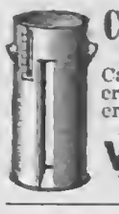
Through the failure of a large manufacturer of **Cashmere Shawls**, there has come into our hands a large consignment of Plaid Shawls, perfect goods, which we propose to present to the ladies in the following manner: Send us 75 cents for 8 mos. subscription to **Farm and Household**, a large **32 page** illustrated paper, devoted to Farm and Household topics, Stories and general miscellany, and we will send you one of these **beautiful shawls FREE** by mail postpaid, or we will send 5 shawls and 5 subscriptions to one address for $3.00 Satisfaction guaranteed or money refunded. Address **FARM AND HOUSEHOLD, Hartford, Conn.**

"SMOKE Your MEAT"

With Krauser's Liquid Extract of Smoke.

It is a liquid; you wash it on; it will keep it in a well preserved condition and free from insects; it is much more pleasant to the taste than meat smoked in the old way; it is done in less time, no trouble, and less expense. There is no danger from fire or of being stolen, as you can hang it in a more secure place than a smokehouse. Send for circular,

E. KRAUSER & BRO., Prop's and M'f's, DRUGGISTS, Milton, Pa.



CHANNEL CAN CREAMERY.

Makes more Butter than any other process. Calls for less labor and ice. Will raise all the cream without ice. Automatic Butter-workers, Churns, etc. One at wholesale. Agents wanted. Send for circulars.

Wm. E. Lincoln Co.,

WARREN, MASS., and FORT ATKINSON, WIS.

SAW SET

This set has given perfect satisfaction; is **durable, effective** and **cheap**, weighs less than 4 ozs., and is adapted to all varieties of cross-cut saws. Any man can perfectly set a saw in 3 mins. Also **CHAMPION GUAGE** for dressing raker teeth; warranted. Sample of each by mail on receipt of $1.00. Send for circular and prices to J. E. WHITING, MONTROSE, Pa.

KNAPP BROS.,

FABIUS, N. Y. (Box 74.)

BREEDERS OF THE LEADING STRAINS OF

WHITE LEGHORNS.

Highest honors at all the leading exhibitions, winning the **Grand Special Prize** for the Best Breeding Pen and Pair of any variety at the late New York Show. Send stamp for our new Catalogue.

"Preston's Wyandotte Gazette."

Size 9 by 11. Finest 50-cent Poultry Book in the world. Contains a large chromo of Wyandottes and two other elegant chromos in six colors. Also a magnificent engraving of my new $500 Wyandotte House and a cut, and complete working plan of our two mammoth Incubator Buildings, each 120 feet long by 20 feet wide, and containing two large incubators with a capacity of 4,400 eggs, giving a correct idea of how we are making some quick and easy cash. Original cost of other engravings over $600. A complete guide on selecting, scouring and breeding Wyandottes, by B. N. Pierce, illustrated with his drawings of head, neck, wings, feathers, etc. Also all manner of brief, practical and valuable information. Large Wyandotte Chromos at 10 cents each. Circulars containing 17 illustrations free to all.

GEO. A. PRESTON, D. L. & W., Ticket Agent, Binghamton, N. Y.

THE KEYSTONE WASHER.

OVER 300,000 IN ACTUAL USE

And all giving perfect satisfaction.

AGENTS WANTED.

Will wash Cleaner, Easier, and with Less Injury to Clothes than any other in the World. We challenge any manufacturer to produce a better Washer. **Every Machine Warranted FIVE Years,** and Satisfaction Guaranteed. The only Washer that can be clamped to any sized tub like a Wringer. Made of malleable iron, galvanized, and will outlast any two wooden machines. **Agents wanted.** Exclusive Territory. Our agents all over the country are making from $75 to $200 per month. Retail price, $7. Sample to agents, $3. Also our celebrated

KEYSTONE WRINGERS AT LOWEST WHOLESALE PRICES.

Address E. E. ADAMS & CO., Erie, Pa.

THE BEST 50c. KNIFE EVER SOLD

50c.

This has been our 65c. Knife, but for a while we will sell at 50c., post paid by mail, or 5 for $2. Blades are file tested and warranted. Pruning Knife, 75c. Stock Knife, $1. 8-Inch Steel Shears, 75 cts. Gents' fine 3 blade Knife, $1. Boys' 1 blade, 25 cts.; Ladies' 2 blade, pearl, 50c. Send for 18 page free list, also "How To Use a Razor."

Maher & Grosh,
75 S Street,
TOLEDO, O.

News of the Week.

HOME NEWS.

SATURDAY, Feb. 13, 1886.

THE House Committee on Railways and Canals has decided to report favorably the bill committing the Government to the construction and maintenance of the Henuepin Canal. It provides for the acceptance and enlargement of the existing Illinois and Michigan Canal from Chicago to La Salle, 96 miles, and the construction of a canal from Hennepin to the Mississippi River, at Rock Island, 74½ miles, with a feeder 37 miles long. The estimated cost is $6,673,000 for the canal and feeder, and $2,299,000 for the enlargement of the Illinois and Michigan Canal, or nearly $9,000,000 in all. It is proposed to begin with an appropriation of $1,000,000 and follow it with $2,000,000 a year until the work is done.....Some weeks ago Sir Ambrose Shea was appointed Governor of Newfoundland. He was the first native ever appointed and the first Catholic since the days of Cabot. His appointment, however, has just been canceled—the Orange body made such strenuous efforts that the Government couldn't resist the pressure.....The Virginia Assembly favors "local option," and a bill "ingrossed" provides that on petition of one-fifth of the popular vote cast at the last election, a special election is to be held in any county to determine whether liquor is to be sold within its borders. All cities and distilleries are to be excepted from the operations of the law.....The Mass. Legislature is likely to pass a bill requiring wages to be paid weekly to working people.....Major-General Winfield Scott Hancock, Commander of the Military Division of the Atlantic, died at his head-quarters on Governor's Island, at 2.55 o'clock last Tuesday afternoon. Although his death had been sudden, he had been in poor health all Winter, and had never fully recovered from the shock caused by the death of his only son, and sole remaining child, Russell Hancock, on December 30, 1884, on his Mississippi plantation. General Hancock was born in Montgomery County, Pa., February 14, 1824; entered West Point in 1840; graduated 1844; received commission as Lieutenant of Infantry in 1846. Served in the Mexican War, and against the Mormons under A. S. Johnston. Was made Brigadier-General of Volunteers in 1861, and greatly distinguished himself in all the campaigns of the Army of the Potomac, especially at Gettysburg, where he commanded the left-center, and on the third day repulsed Pickett's famous charge of 18,000 of the flower of the Confederate army, thus deciding the contest. His career since, who does not remember? Regret universal; condolences from all quarters multitudinous. Will have a quiet funeral, and be buried at Norristown, Pa.....The will of Wilber F. Storey, late editor and owner of the Chicago Times, has been declared valid. The Court says he was of sound mind, and not unduly influenced when he made it. The paper and most of his other property goes to his young widow—blood-relations left out in the cold.....John Bigelow, of this city, and Nathan Appleton, of Boston, appointed by the Chambers of Commerce of the respective cities to inspect the Panama Canal, according to the request of M. de Lesseps, started on their mission Wednesday.....Archbishop Gibbons, of Baltimore, is to be created a cardinal at the Consistory to be held in Rome next month. He was born in Baltimore July 23, 1834; ordained priest in 1861; made Bishop of Richmond in 1872.....The largest coal-producing combination in the world—one that will practically monopolize the whole coal production of the South—is being perfected at Birmingham, Alabama. A convention of the representatives of all the corporate and individual interests in the Warrior coal fields, comprising 244,700 acres, has met there "to secure a consolidation of interests for mutual advancement and protection,".....A syndicate, said to represent a capital of $50,000,000, is to reorganize the Reading railroad, Pa., and also to control the leading hard coal companies, and also the shipments of soft coal, for the purpose of putting and keeping up prices—"milking" the public.....It is reported that six mounted Canadian policemen have been ambushed and killed near Regina, Manitoba, and that a rising of the Indians and half-breeds in the Spring is a foregone conclusion. The police in some parts of the Northwest Territory are said to be insubordinate. A delegation from the Council of the Northwest Territory has arrived at Ottawa with a "bill of rights" from the people of the Northwest. It demands the grant of the right of habeas corpus, representation in the Commons and Senate, the construction of railways through the Territory, and a rebate equal to the duties now imposed on agricultural implements and lumber.....Tramps are overrunning Florida to such an extent that the County Commissioners have decided to anchor great lighters in the St. Johu's River, and corral the tramps there for 90 days each. .....Twenty-five horses—chiefly roaders and hunters—belonging to the Meadow Brook Hunt Club, were burned to death in the stable at Meadow Brook, near Hempstead, N. J., last Wednesday night. Some of the animals were high-priced; loss $25,000.....Horatio Seymour died at Utica, N. Y. yesterday.....President Cleveland has determined that the Government's suit to upset the Bell telephone patent shall be prosecuted promptly and earnestly. This extortionate organization, which has an annual income of millions at stake, finds hosts of supporters in the press. It is stated that for a single favorable article in one of the great New York dailies it paid $5,000. Of course the appearance of that single editorial would determine the whole policy of the paper in the controversy. Secretary Garland, it is said, will donate his entire stock in the Pan-Electric Company to some charitable institution, so as to be free from all "intangling alliances." What a godsend some of the political papers must find in the controversy—they can fill their columns with the matter and their coffers with the boodle!.....The Grant Monument Fund here now amounts to $115,194.57. It increases very slowly. None of America's millionaires has yet contributed. The United States Senate has passed the bill appropriating $500,000 towards the cost of the monument. Will the House be equally liberal?.....Peter McGeoch, of Milwaukee, well-known as a former large operator in provisions and grain at Chicago, is suffering from two late strokes of paralysis.....The Senate has passed, by a vote of 33 to 22, the bill providing for the division of the Territory of Dakota at the 46th parallel of latitude, and admitting the Southern portion as a State.....Very heavy rains since Wednesday east of the Alleghanies—west of the crest of the mountains only local rains have prevailed.....The anti-Chinese war on the Pacific coast is becoming more open and determined. All the labor organizations, under the guidance of the Knights of Labor, are boycotting the Chinese and threaten to boycott those who employ them or deal with them. All the Chinese scattered through the surrounding country were lately forced into Seattle, W. T., and then all the resident Chinese with the new-comers were expelled from the town, and their passage was paid to San Francisco. The Territorial militia was called out, and the compulsory emigrants were given the choice of going or staying—they preferred the former. The mob grew turbulent; the troops fired, killing a few and wounding others. The United States troops were summoned, and now hold the town with bristling bayonets. More trouble expected. At Portland, Oregon, an organization is being formed to expel the Celestials, and the greatest trouble of all is expected to occur soon in San Francisco. The people have given up all expectations of effective Congressional legislation to keep out the hated race, and seem determined to take the matter entirely into their own hands. The vast majority of the population is opposed to the presence of the Celestials in the country, though, of course, the antipathy is strongest and most active among the laboring classes, whom their cheap labor keeps in poverty.....The Canadian Government has expended $40,000 in relieving distressed settlers and half-breeds in the Northwest Territory.....Prohibition is said to have caused business failures at Atlanta, Ga. A large amount of capital—some say as much as $4,500,000—has left the city to be invested chiefly in Texas, and outside creditors are frightened and press for the prompt settlement of outstanding accounts with Atlanta merchants.....

80-DAY SEED CORN.

DEAR EDITOR: I have a limited amount of a very superior quality of extremely large *field corn* which has recently been originated, and which will mature in from 80 to 90 days. Ears are from 10 to 14 inches long, and has a slender cob and very fine, large grains; is a marvel of beauty; 134 bushels of shelled corn have been raised per acre. I am very anxious to know what this corn will do in other climates before advertising it for sale, and will send a large sample package *free* to any farmer who will take good care and report his success with it, and will inclose 25 cents in silver to pay postage, packing, etc., on same. Address W. F. RUST, Springfield, Ohio.—*Adv.*

AGRICULTURAL NEWS.

SATURDAY, February 13, 1886.

MR. GLADSTONE has reduced by about 25 per centum the rents of the farms on his Hawarden estate.....The eleventh annual meeting of the Ayrshire Breeders' Association was held last Tuesday in this city. President J. D. W. French said that the price of Ayrshire cows had not fallen off in the past year, but he doubted the advisability of the association sending an agent to Scotland to purchase 20 head of Ayrshire cows for breeding purposes. Prizes were awarded for 1885, and the list of prizes for 1886 was read.....The question of adopting a plan whereby all live stock will be shipped by weight instead of by the car-load, is being discussed by railway officials at Chicago.....Parties in London report that the shipments of clover-seed from the Continent to America continue on an unprecedentedly large scale.....A meeting of Western fruit preservers, representing the trade in six different cities, was held last week in Chicago, effecting a temporary organization preliminary to forming a permanent society.....At a meeting at Chicago Tuesday, in which 80 per cent. of the linseed oil crushing interests was represented, the organization of an association or pool was agreed upon, fashioned after the old Consolidated Linseed Oil Company in existence some years ago. Stock in the association will be taken in proportion to the crushing capacity of any given member. The price of oil was fixed at 41 cents per gallon, an advance of one cent. It is pretty sure soon to "regulate" the price of oil-cake also.....The cash system went into effect on February 1 at the National Stock-yards, St. Louis, and buyers must now pay before the stock is delivered. All stock is kept under lock and key and delivered only on a written order duly signed and stamped by the firm owning or controlling the same.....A telegram from Texas says: "It is estimated that fully 15,000 head of cattle lie dead on the prairie within a radius of 75 miles of Fort Elliott. It is the coldest Winter ever known in Texas.".....The Chief of the Bureau of Statistics reports that the total values of the exports of domestic cattle and hogs and beef, pork and dairy products for the month of January, 1886; also of beef and pork products for the three months and of dairy products for the nine months ended January 31, 1886, as compared with similar exports during the corresponding periods of the preceding year, were as follows: January, 1886, $6,671,597; January, 1885, $11,965,978; beef and pork products for three months ended January 31, 1886, $20,141,296; for three months ended January 31, 1885, $28,265,364; dairy products for nine months ended January 31, 1886, $6,977,354; for nine months ended January 31, 1885, $13,200,349.....Some New York jobbers have lately claimed that in the shipment of dried blackberries to the West, it was necessary and legal to apply a certain amount of water and molasses to the berries in transit. The West is the market for enormous quantities of dried blackberries, Chicago alone handling about two millions of pounds per year. The United States Circuit Court in Brooklyn yesterday decided that an allowance must be made in the price for the decrease in value of the goods owing to the water thus applied.

W. RUSSELL, Aurora, O., manager of eight butter and cheese factories belonging to Frank Hurd, says, Jan. 15, 1885:—"I have tried all the butter colors, and am convinced that Thatcher's Orange Butter Color is the best in the market." For 50c we will forward prepaid a 25c bottle to any express office in United States. H. D. Thatcher & Co., Potsdam, N. Y.—*Adv.*

For a full illustrated Description of our Free Seed Distribution for 1886, examine the Nov. 14 issue. Preserve it for future reference. It also contains a list of the $3,300 worth of Presents offered to those who send us clubs. This is distinct from the Rural's regular Premium-list.

Crops & Markets.

SATURDAY, Feb. 13, 1886.

Advices from Russia state that the increase in German duties on wheat has had the effect of reducing the value of Russian wheat to so low a point that it no longer pays to raise it, and that the acreage of 1886 will be much less than that of last year. . . . . France is said to be now receiving from India wheat which is able to pay the duty of about 16 cents per bushel, but it will not pay to import American, Chilian or Australian wheat. . . . The official report of the condition of the wheat crop in the Central Provinces of India, dated December 21, indicate a generally hopeful promise.

THE Every Evening, Dover, Delaware, says that peach-growers are despondent over the condition of the buds. Some predict an entire failure of the crop. No bad reports have been received from other districts.

The Cincinnati Price-Current reports that the total number of hogs handled by Western packers last week was 365,000, against 235,000 for the corresponding week of last year. This makes a total of 5,795,000 since November 1, compared with 5,790,000 for a like period in the preceding year.

The Chief of the Bureau of Statistics reports that the total values of the exports of breadstuffs from the United States during the month of January, 1886, and during the seven months ended January 31, 1886, as compared with the corresponding periods of the preceding year, were as follows:

	1886.	1885.
January.....	$9,407,315	$17,872,413
Seven months ended Jan. 31	62,406,047	97,572,920

The falling off has been exclusively in wheat; there has been an increase in our exports of flour, corn, oats, etc.

Wheat has been extremely dull in the Northwest during the whole week—prices have barely kept steady at 87½c. for No. 1 Hard. Receipts at Minneapolis have been a trifle short of 500,000 bushels for the week—mostly from grain stored in elevators, with some from sales by farmers. The condition of the winter-wheat crop will be the chief regulator of prices for some time to come. Recent mild weather and consequent thaws have left the crop exposed to injury from freezing and thawing in many sections. The flour market is better. The thawing weather has given the mills more water. Output for the week 89,400 barrels—shipments 79,000 barrels.

Grain has everywhere advanced during the week, mainly on account of reports of injury to winter-sown wheat in the Southwest and to the announcement that stocks in the United Kingdom have declined about 2,775,000 bushels since January 1, and the home visible supply 4,445,000 bushels since the same date. The amount on passage to Europe has increased about 2,050,000 bushels within six weeks. This points to a net decrease on land and sea (United Kingdom and United States) of 5,225,000 bushels within six weeks. The high price for cash wheat at interior markets, a number of points holding the grain higher than it is at New York, does not point at abundant country supplies. The interior milling demand from the central winter-wheat region, for grain at primary markets, has increased.

The Indian-corn market has been higher and more active. The advance has been stimulated by the strength shown in wheat. The visible-supply report indicated an increase of the quantity in sight of but 65,000 bushels. The demand for export has been noticeable, and this, with a little squeeze in the option market, managed to direct considerable attention to this cereal.

Oats have been firm and steady, but with limited transactions. The visible supply declined 170,000 bushels, which served to sustain the bullish view of holders.

The butter situation is entirely unchanged, demand being principally upon choicest grades, which are in limited supply. Outside of the better grades the market is dull, and overheld-stock sales are difficult to make.

	Feb. 12.	Feb. 12,'85.	Feb. 5.	Lowest, '84.	Lowest. '85.
Creamery, new choice to fancy	31@36c.	32@36c.	30@35c.	19c.	
State, new dairy fancy	23@25c.	23@26c.	26@27c.	18c.	

Exporters are not anxious buyers of cheese, and without their support the market is always more or less depressed. Sales for export are made at a concession, some being considerably below asking prices.

	Feb. 12.	Feb. 12,'85.	Feb. 5.	Lowest, '84.	Lowest. '85.
Choice, fancy state cream'ry	9¾@10¼	12¾@13	10@10¼	8¾	6@6¼

THOSE who have used the Boss ZINC and LEATHER COLLAR PADS and ANKLE BOOTS say they are the best and cheapest, because most durable. They will last a life-time. Sold by harness makers on 60 days' trial. DEXTER CURTIS, Madison, Wis.—*Adv.*

MARKETS BY TELEGRAPH.

SATURDAY, February 13, 1885.

CHICAGO.—Compared with prices a week ago, "regular" wheat is 1¾c. lower; No. 2 Spring, 3½c. higher Corn, ¾c. higher. Oats, 1¼c. higher. Barley, steady. Pork, 15c. lower. Cattle, a trifle higher. Hogs, a shade lower. Sheep, a shade lower; lambs considerably higher.

WHEAT.—Sales ranged: February, 79¾@80c; March, 79¾@80¼c; May, 85c@85¾c.; No. 2 Spring, 79½@82c; No. 3 Spring, at 71¼c. CORN.—Firm; Cash, 36¼c; February, at 36⅞@37c., March, 37@37¼c; May, at 40¼@40¾c. OATS—firm; sales ranged: Cash, 30c; February, 28⅞@29¼c; March, 29@29¼c.; May, 32@32¼c. RYE—No. 2.

"**Brown's Bronchial Troches**" are excellent for the relief of Hoarseness or Sore Throat. They are exceedingly effective."—*Christian World, London Eng.*—*Adv.*

59c. BARLEY.—No 2, 60c. PORK.—Cash, $11 05@11 10; February and March $11 07½@@11 17½; May, at $11 27½@$11 40. LARD.—Easy; sales ranged; Cash, $6 07½@6 10; March, $6 07½@$6 15½; May, $6 20@6 25. BULK-MEATS.—Shoulders, $3 95@4 00; Short rib sides, $5 42½@5 45; Short Clear sides, $5 75@5 80. CATTLE—Market steady; Shipping steers, $3 50@5 75; stockers and feeders, $2 40@4 50; cows, bulls and mixed, $1 57@3 75; bulls, $2 50@3 00. HOGS.—Market strong; Rough and mixed, $3 70@4 20; packing and shipping, $4 05@4 50; light, $3 50@4 20; skips, $2 90@3 60. SHEEP.—Market steady; Natives, $2 00@4 90; Western, $2 00@4 75; lambs, $3 75@5 25; Texans, $1 50@3 75.

ST. LOUIS.—Compared with cash prices a week ago, No. 2 Red Wheat is 1½c. higher. Corn, 1½c. higher. Oats, 1c. higher. Rye, ½c. higher. Barley, steady. Eggs, 1c. lower. Pork, 15c. lower. Cattle, unchanged. Hogs, light higher: other grades lower. Sheep, higher.

WHEAT.—Dull; No. 2 Red, Cash, 90½c.; February, 91½c. bid; March, 91½c.; May 94@91½c. Corn higher; No. 2 Mixed Cash, 34½@35c.; February, 34½c.; March, 35½c; May, 37½c. Oats dull; No. 2 Mixed, Cash, 29½@29½c.; March, 30½c. asked, May, 31½c. Rye higher at 50c; Barley dull; no sales; Butter quiet; creamery, at 25@30c.; dairy, 16@24c; Eggs steady at 17c. Corn Meal firm at $1 90. Pork, $11 25. Bulk Meats—Long Clear, $5 50; Short Rib, $5 00; Short Clear, $5 75. Lard firmer at $5 95@$6 00. Cattle.—Market steady. Fair to Choice Native Shipping Steers, $4 75@$5 25; Native Butcher Steers, $3 25@$4 25; Cows and Heifers, $2 25@$3 75; Stockers and Feeders, $2 75@4 20. Hogs.—Light, $3 60@4 00; Packing, $3 90@4 50, Heavy, $3 40@4 45. SHEEP.—Market firm and active; Common to Choice, $3 00@3 75.

BOSTON.—Compared with cash prices a week ago, corn is 1c. lower; oats, 1½c. higher; butter, cheese and eggs, unchanged.

GRAIN.—CORN.-Steamer Yellow, at 51@51½c; steamer mixed at 50@50½c; and no grade at 48@50c. per bushel. OATS have been firm, with sales of No. 2 white at 42½@42¾c; No. 3 white, 44½c; good barley oats, 44½c, per bushel. Small sales of Rye quoted at 67c. per bushel. BRAN is in fair demand and selling at $17 75@$18 00 for Spring and $18 50@18 75 for Winter; fine feed and middlings at $18 00@21 00, and cotton seed meal at $25 00 on spot and $23 00 per ton to arrive. HAY AND STRAW—Hay is plentiful and steady, at $19@20 ₱ ton for choice and fancy; fair to good, $17@18; fine, $16@18; for poor and damaged, $13@15. Western choice $16@17 do fair to good $14@15. Rye straw is held at $19@20 50 for choice, and $12@14 for common to good. Swale hay, $11@12; Oat straw, $9@10 per ton. PRODUCE—The various articles under this head continue to command fair prices. BUTTER-Northern creamery, choice to extra 24@25c; good to choice summer, 18@23c; western creamery, 21@23c, for choice to extra; northern dairy, 22@22c, for Vermont extra; 18@20c, choice, and 12@16c, for fair to good; Western dairy, 18@22c, for choice, and 10@15c, for fair to good; imitation creamery at 15@25c, for good to extra; ladle packed, at 18@21c, for choice. CHEESE—New York choice to extra, 9@10½c, and common to good, 5@8c; Vermont choice to extra, 8½@10c, and common, 5@7c; Western common to extra, at 4@8½c. Sage, extra, 11@12½c, good to choice, 8@10c. EGGS—Cape and near-by, per dozen, at 25c; Eastern extras, 23@24c; do, firsts, 21@22c; Northern, fresh, 22@23c; Western fresh, 22c; Provincial, at 22c. BEANS—Choice Northern hand-picked pea, at $1 70@1 75 per bushel; do, do, New York, $1 60@1 70; do, do, screened at $1 25@1 40; medium choice, at $1 50; do, screened, $1 25@1 40; Yellow Eyes, improved, at $1 60@1 65; do, choice flats, $1 50@1 55; Red Kidneys, $1 80@1 90. Canada peas, 85c@$1 00 per bushel for common to choice. Green peas, Northern, at 90c@$1 00; do, Western, $1 20@1 25. Potatoes range at 65@75c, per bushel, as to quality.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, February 13, 1886.

STATE OF THE MARKET.—Compared with cash prices last week, flour is unchanged; ungraded red wheat 3c. higher; "regular" wheat 1½c. higher, corn 2½c. higher; oats ½c. higher; pork unchanged; butter a shade higher; cheese barely steady: eggs lower, poultry a trifle higher, fruits steady; cotton ⅛c. lower; vegetables without material change.

FLOUR, FEED AND MEAL. FLOUR—Quotations: Fine at $2.15@$2.85; Superfine, $2 75@$3 75; Extra No. 2, $3 10@$3 55; Good to Fancy Extra State, $3 60@4 25; Common to Good Extra Western at $3 10@$4 00; Good to Choice Extra Western, $4 00@$5 50; Common to Fair Extra Ohio, $3 10@$3 75; Good, $3 80@$4 20; Good to Choice, $4 25@$5 25; Common Extra Minnesota, $3 10@$3 65; Clear, $4 10@$4 50; Rye Mixture, $4 00@$4 25; Straight, $4 50@$5 00; Patent, $4 75@$5 50; Bakers' Extra, $4 10@$4 75; St. Louis Common to Fair Extra, $3 10@$3 80; Fair to Good, $3 85@$4 75; Good to Very Choice, $4 80@$5 40; Patent Winter Wheat Extra, $4 50@$5 45; City Mill Extra for West Indies, $4 90@$5 00; South America, $5 00@5 10. SOUTHERN FLOUR—Common to Fair Extra, $3 35@$3 75; Fair to Choice do., $3 80@5 30. RYE FLOUR—Superfine, $3 15@3 50, latter for choice. BUCKWHEAT FLOUR, at $1 50@$2 00. CORN MEAL—Dull. Brandywine, $3 00@3 05; Yellow Western, at $2 75@$3 00. FEED—Bran ranges from 85@92½c. from track and mill; for 60 lb. average at 80@82½c.; 80 lb. average at 80@85c.; middlings at 85@97½c., and sharps at @$1 07½. Rye feed at $15 00@$17 00 per ton.

GRAIN.—WHEAT.—Ungraded Red, 89@93c.; Amber Pennsylvania No. 2 Red, 91½c; No. 2 Red, 93c. and No. 3 Red at 85c; No. Red for March, 91½@92½c.; do. for April, 93½@93¾c.; do. for May, 94½@94¾c; do. for June, 94½@95½c. RYE—60@63c. for Western, and 64@65½c. for State. CORN—Ungraded Mixed 49@51c; No. 3, 47½@48½c.; Steamer Mixed, 49@50c.; No. 2, Mixed, 55c.; Ungraded White, 49c; White Southern, at 50@54c, and Fancy do, 60@64½c; Ungraded Yellow, 50c; Graded Yellow, 53c; Low Mixed, 51½c; Jersey Yellow, 49½c; No. 2 Mixed for February, 54½@55½c.; do. for March, 50½@50¾c; do. for April, 49¾@50c; do. for May, 48¾@49c. OATS—No. 3 Mixed, at 37¼c.; No. 2, 38¾c.; No. 1 quoted at 39c.; No. 3 White, 39½@40c.; No. 2 do, 41c; No. 1 quoted at 43c.; Mixed Western, at 37@39¼c.; White do., 40@45c; White State, 41½@42c; No. 2 Mixed for February, 38¾@38¾c.; do. for March, April and May, 37¾c.

BEANS.—Quoted: Marrows, at $1 70; mediums, at $1 45@1 50; pea at $1 50; red kidney at $1 85@1 90 for choice; turtle soup at $2 15.

PEAS.—Green at $1 20.

PROVISIONS.—PORK.—Mess quoted at $10 50@$11 00; $11 50@$12 00 for Family Mess; $12 75@$14 50 for Clear Back; and $8 00@$9 25 for Extra Prime. BEEF.—City Extra India Mess, $17 50@$18 00; Extra Mess, bbls., $10; Packet, $11 00@12 00 in bbls.; Family Mess, $12 00@$13. BEEF HAMS.—Quoted at $17 75@18. CUT MEATS.—Pickled Bellies, 12 lb, average, 5¼c; Pickled Shoulders, at 4¼c.@4½c.; Smoked shoulders., at 5@5¼c.; Pickled Hams, at 8½@8¾c.; Smoked do., 9½c. MIDDLES—Long Clear in New York quoted 6c. for Western delivery. Long Clear, 5.75c.; Short Clear, 5.80c. DRESSED HOGS.—City Heavy to Light, 5¾@5¾c.; Pigs, 5¾@5¾c. LARD.—Contract grades, at 6.35@6.37½c; February, at 6.35@6.36c.; March, at 6.35@6.39½c.; April, at 6.43@6.44c.; May, at 6.50@6.52c.; June at 6.56@6.58c; city steam, fairly active at 6.35c; Refined Continent at 6.75c, and South American, 7.00@7.05c.

BUTTER.—Eastern Creamery, 35@36c; Western Creamery, 18@35c.; Eigin do., 36c.; State Dairy half-firkin tubs, 19@27c.; Western Factory, 11@20c.; Imitation Creamery, 23@27c.; Western Dairy, 12@18c.

CHEESE.—State, 7@10½c.; Night Skims, 3¾@7c. Western flat, 7@9½c.

EGGS.—State, 22½@23c.; Western, 22@22½c.; Southern, 21½@23c.; Limed State, 19c.; do. Western, 18@18½c.

LIVE POULTRY.—Chickens, 8@9c.; fowls, Jersey State and Pennsylvania, per lb, at 8@9c.; do. Western, ₱ lb, at 8@9c.; Turkeys, per lb, at 7@8c.; ducks, western per pair, at 70@90c.; geese, western, per pair, at $1.25@$1.50; pigeons, per pair, at 35c.

DRESSED POULTRY.—Turkeys, Philadelphia, at 13@13c; 11@13c per lb for Jersey, and 12c per lb for western; chickens, Philadelphia large, at 14@15c. per lb; do. small at 13@14c; Jersey scalded at 11@12c; do, State at 10@11c; do, western, at 10@10½c.; fowls, Philadelphia, prime, 11@12c; do, Jersey, 11c; State and western, 9@10c. Ducks, Philadelphia, at 14@15c; do, Jersey, at 14@15c; do, western, at 13@14c. Geese, Philadelphia, at 12@13c; do, Jersey, at 11@12c; do, western, at 9@10c.

GAME.—Wild ducks, canvas, per pair, at $3 25@$3 50; do., red-head, per pair, at $1@$1 50; do. mallard, western, per pair, at 50@75c., do., teal, blue wing, 50@65c.; do. wood, at 40@50c.; do. common, at 25@30c.

FRESH FRUITS.—Quotations are: San Blas cocoanuts at $3@$3; Baracoa cocoanuts at $2 00@$3 00. Apples—Baldwin, per bbl., at $1 75@2 00; Greening, per bbl. $1 75 $2 00. Grapes—Catawba at 6@7c. per lb, in baskets; Isabella, at 2@3c. per lb. Cranberries—Cape Cod, choice, per bbl., $4.00; do. fancy, $4 50; good to prime, per bbl., $3 00@$4 00; do. choice, per crate, $1 00@$1 25. Florida oranges—Fancy at $3 50@3 75; Choice at $3 50@3 75; do. inferior at $1 75@$2.

DRIED FRUITS.—The quotations are as follows: Apples—Fancy evaporated, 7@7½c; choice, 6¾c; do. prime at 6½@6¾c.; fancy North Carolina sliced, new, at 4@4¼c.; choice do. at 3½@3¾c.; choice Tennessee quarters at 2@2¼c.; State quarters at 3½@3¾c.; southern sliced prime at 2½@2¾c; do. common, 2c. Peaches—Peeled North Carolina, choice, 10@11c.; fancy, 12c.; extra fancy, 13c.; Georgia, choice, new, 11c; do. prime, 8@9¼c.; unpeeled halves, 2¾@3½c.; unpeeled quarters at 2½@3c.; Delaware evaporated, peeled, 24@25c. Choice pitted cherries at 11@11½c. Evaporated raspberries at 17c; sun-dried do. 15c. Blackberries—Prime at 8½c. Whortleberries at 6½@7c.

PEANUTS.—Quotations at 5¼@5½c. for best hand-picked, and 3¾@4½c. for farmers' grades.

COTTON.—The quotations, according to the American classification, are as follows:

	Uplands.	New Orleans and Gulf.	Texas.
Ordinary	7 9-16	6⅝	6¾
Strict Ordinary	6¾	7 1-16	7 1-16
Good Ordinary	7 13-16	8	8
Strict Good Ordinary	8¼	8 7-16	8 7-16
Low Middling	8⅝	8 13-16	8 13-16
Strict Low Middling	8⅞	9 1-16	9 1-16
Middling	9 1-16	9¼	9¼
Good Middling	9 7-16	9⅝	9⅝
Strict Good Middling	9 11-16	9⅞	9⅞
Middling Fair	10 1-16	10¼	10¼
Fair	10 11-16	10¾	10¾

STAINED.

Good Ordinary	6¼	Low Middling	7¾
Strict Good Ordinary	6 13-16	Middling	8⅛

HAY AND STRAW.—Quotations are for: Choice timothy hay at 90c; good at 85c.; medium at 80c.; shipping at 70@75c; clover mixed at 70@75c.; Clover, 55@65c.; No. 1 rye straw at $1; short rye straw at 75@80c; oat straw at 40@50c.

SEED.—Clover is neglected; quotations are nominal at 10@10¼c. as to grade. Timothy is quiet and held firmly; quoted at $2 00@$2 10. Linseed nominal.

SUGAR.—Raw, 5 5-16@5¾c; Cut Loaf, 6¾c; Cubes, 6⅝@6 11-16; Powdered, 6¾@6⅝c; Granulated, 6 7-16@6½c; Mould "A," 6¼c; Confectioners' "A," 6¾c; Standard "A," 6 1-16c; Off "A," 5¾@5 13-16c; White Extra "C," 5@5⅛@5 11-16c; Extra 5⅜@5½c; "C," 5⅛@5¼c; Yellow, 4 15-16@5.

TALLOW—Steady and in light demand. Prime City quoted at 4½@4 9-16c. Sales, 55,000 lb, at 4½@4 9-16c.

VEGETABLES.—Potatoes—Long Island Rose, bulk, per bbl., $2 00@$2 25; New York Rose, $1 75@$2 00; Eastern and Nova Scotia Rose at $2 00@2 25; Burbank, State, at $1 75@$2 00; eastern and Nova Scotia, per bbl, $2@2 25; Hebron, do, do, do, per bbl, at $2 00@2 25. Prolific and Goodrich, per bbl., at $1 75@$2. Maine, double-headed, bbl., at $2 25@$2 50; Peerless, per bbl., at $1 75@2; Magnum Bonum, imported, per sack, $2; Champion, imported, per sack, at $1 62@$1 75. Sweet potatoes, Virginia, at $2 25@$2 75 per bbl. Cabbages, per 100, at $6@$8.00. Onions—Yellow, quoted per barrel, at $2 50@$2 75; do, red, per bbl., at $2 75@3 25.; do, white, at $4 50. Turnips.—Russia, per bbl., at 50@62c. Marrow squash, per bbl., at 50@75c. Norfolk kale at 75c@$1.

LIVE STOCK MARKET.

NEW YORK, SATURDAY, February 13, 1886.

BEEVES.—Sales of Ordinary to Prime Bullocks were $4 20@5 85 100 lb; dry cows, bulls, stags and mixed lots sold at $2 50@4 05; old oxen at $3 50@5 70 per 100 lb; total shipments for the week, 276 live cattle, 6,120 quarters of beef, 61 live sheep and 500 carcasses of mutton. Chicago steers, 1,823 lb, at $5 10; do, 1,345 lb, at $5 00; do. 1,332 lb, at $5 00; Ohio do., 1,287 lb, at $4 60; oxen, 1,550 lb, at 4 40; Bulls, 2,000 lb at 3½c; Buffalo steers, 1,378 lb, at $5 00 per 100 lb; Ohio oxen, 1,780 lb, at $5 50; oxen and cows, 1,230 lb, $4 00; cows and stags 995 lb, $4 05; cows, 1,093 lb, at $4 00; Pennsylvania do. 905 lb, $3 65; State oxen, 2,210 lb, $5 70; mixed Western steers, 1,360 lb, at $5 25; do, 1,310 lb, at $5 05; Virginia do. 1,034 lb, at $4 15; Cows, 780 lb, 2½c; Indiana steers, 1,315 lb, at $5 08¾; Connecticut oxen, 1,835 lb. at $5 20; do., 1,583 lb, at $4 40.

CALVES.—A few fair to good veals were sold at 7@8c. No grassers offered. Veals 185 lb, at 7c; do, 117 lb, at 8c; Ohio do, 135 lb, at 7c.

SHEEPS AND LAMBS.—Medium to prime sheep sold at $4 50@5 30 per 100 lb, with no choice offered. Fair to choice lambs, sold at 6@7c. State sheep, 87 lb, at 4½c.; Pennsylvania do, 95 lb, at $4.70; State Lambs, 61 lb, at 6c; Western do, 79 lb, at 7c.; do, Sheep, 118 lb, at 4½c; do, lambs, 65 lb, at 6c; State do, 74 lb, at 6¼c; Indiana sheep, 120 lb, at 5c; State do, 105 lb, at 5¼c.; Ohio lambs, 74 lb, $6 70; do, sheep, 87 lb, at $4 85.

HOGS.—Receipts for six days, 37,784 head, against 38,200 head for the same time last week. None for sale alive. Nominally a trifle firm at $4.05@$4.40.

SEND TEN CENTS IN POSTAGE STAMPS TO

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PRODUCE COMMISSION MERCHANTS,

for Circular giving important advice about **shipping produce.** Also containing recipe for **preserving eggs.** Established 1845.

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This Meal is the product of pure sound Flaxseed, Linseed being its other name, and is the most nutritious of all feed, because it contains the largest proportion of nitrogenous substance.

It is almost needless to say that, in order to derive much benefit from the use of Linseed Meal, it must be fed in quantity. At least one-half of all an animal consumes may safely and profitably be LINSEED MEAL.

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Mills on hand. Prompt delivery.

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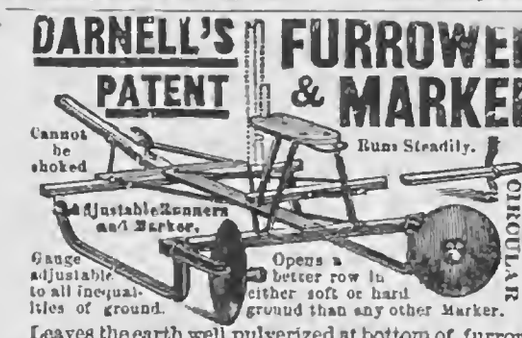

Leaves the earth well pulverized at bottom of furrow. Marks any width from 2½ to 5 feet, and from a mere mark to 6 inches deep.

"Take pleasure in recommending it. It does the business; is well made and will last for years." *J. S. Collins, Moorestown, N. J.*

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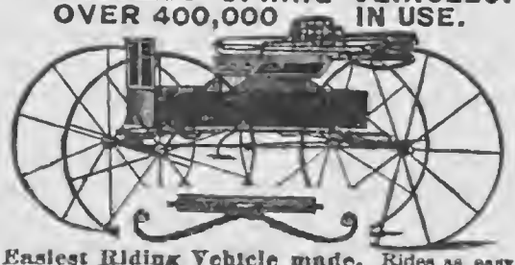

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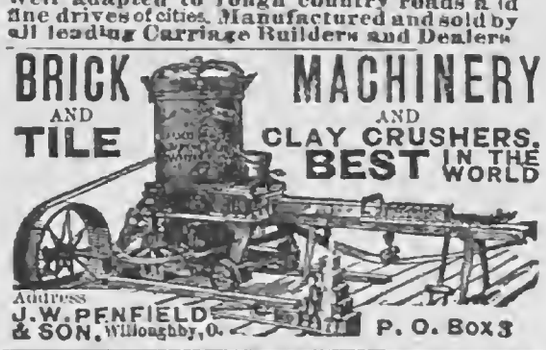

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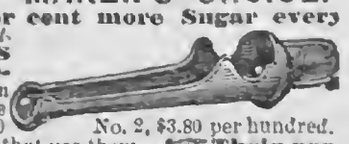

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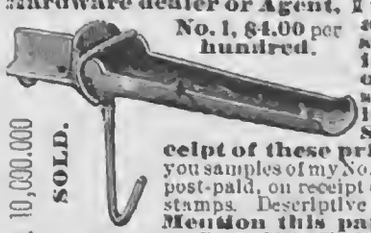

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I have for sale, at prices to suit the times, six young bulls from 1 mo. to 9 mos. old. Their sires are of a high standard, and of the favorite and fashionable butter strains; representing such blood as St. Heller, Stoke Pogis, Victor Hugo and Signal. The dams are all good cows of good strains, and some have butter records.

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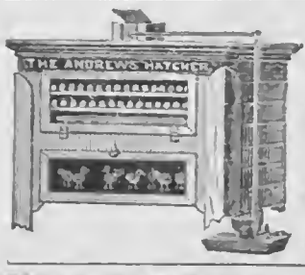

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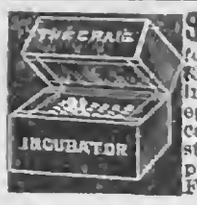

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For the Young.

I WISH some of the boys would write us about traps for catching rabbits and birds. I used to set snares and box-traps when I was a boy—now I want to know if any new kinds are in use. Let us hear about this, boys.

Many of the Cousins write me that they are studying music. I am glad of that. It is nice to be able to sing or play. It adds more to life than you can imagine. The trouble about learning to play on an instrument is that the practice is so tiresome that we lose interest in it. But we must remember that "practice makes perfect." If we could sing or play so beautifully without any work or trouble there would be little satisfaction in it. Pleasure is measured by work and self-denial. Never give up because a thing seems hard. Every good thing is hard to do at first. Only the bad things seem easy. I suppose many of the Cousins go to singing schools. The trouble with them used to be that the people cared more for the good times than they did for the singing. I wonder how they are now.

Will not a little chicken make a good pet for those who have no canary bird? To be sure it can't sing, but it will be cunning enough while it is small. I can remember that the first experience I ever had with a brooder was the result of an accident. We had an old hen that stole her nest, and hatched out a brood of chickens in January. There were six of the little fellows, and to add to their discomfort, the old hen broke her leg and had to be killed. The "men folks" thought the little things were not worth raising, but the "women folks" thought differently. If you will notice, you will see that the good mothers and sisters are the ones that generally look after those who cannot help themselves. They brought these little chicks in and put them in a large box by the fire. They were fed all they could eat, and had room to run about and get in the sunshine every pleasant day. At night, they would crowd up into a piece of an old blanket that hung in one corner of the box. We had a great air-tight stove where the fire kept all night long. We could put the box behind the stove every night, and there they would be safe and warm. And how they grew! We could almost see the growth from day to day. We had them all named, and we were all sorry enough when they got so large that they could run out-of-doors with the other chickens. No doubt they soon forgot us, but we always remembered them. Now don't let any of the poor little chicks die from cold or exposure. You can save them if you will only try.

LETTERS FROM THE COUSINS.

DEAR UNCLE MARK: I wonder if you and all the Rural Cousins have seen a mirage. Perhaps you have not, so I will tell you about it. We often see mirages here. On a clear morning, just after sunrise, houses and other objects that are out of sight over the hills come into full view, while those that are nearer and in sight seem to come still nearer and to be on lower ground. Sometimes it will look as if there were trees where there are none, or like a broad expanse of water where there is nothing but grass. Sometimes towns 12 or 15 miles away come into full view, and sometimes, but not often, are seen as if turned up-side down in the air. We all like the RURAL very much. I always look for the letters the first thing. We have no school here this Winter, so I study at home. We have been having steady cold weather. The mercury was 29 degrees below zero one morning. Uncle Mark I would like to know how many nieces and nephews you have. If you send us any beans or other seeds this year, I hope I will have better success.

Your niece,

Axtell, Kearney Co., Neb. ISA B. WELLS.

[I have a pretty large family. These letters are read by more than 50,000 people, so you see we have quite an audience.—UNCLE MARK.]

DEAR UNCLE MARK: The beans that you sent me I planted, but we live a little too far north for them to succeed well. But few of them ripened. Now I will tell you about my father's seedling strawberries that I spoke of last Winter. Most of them bore fruit in less than one year from the time that the seed was sown. We throw away all the weak plants when in the third or fourth leaf. The Prince of Berries, crossed by Great American, produced showy bunches of fruit, standing well up from the ground. The Vick, crossed with Sharpless, is low, with large fruit near the ground. The Daniel Boone, crossed by Kentucky, were strong, leafy plants with fruit of fine red color. We have the Amateur from Mr. Hart of Connecticut. We crossed it with Prince, Primrose, Bidwell and Mount Vernon. The plants are strong and vigorous. We prefer those kinds with perfect flowers. I will try to help my father remove the anthers in blossom time, and I intend to use an anther hook made from a pin, with the point bent acutely. It is recommended by Prof. Tracy.

From your niece,

Coopersville, Mich. MINIA A. WILDE.

[I hope you will be able to develop some good berries. Such experiments are valuable.

—UNCLE MARK.

DEAR UNCLE MARK: Here is another little boy wants to join the Y. H. C. My papa has a dry-goods store, but we have a small farm, too. Our Rural corn had a number of ears ripened, but the mice have got at them and nibbled some. We have enough left to plant a good many kinds, though. Something ate our peas, and we did not know what it was; but one day we went up to the farm and saw a little rogue of a woodchuck there. I guess he did it. I have two little brothers and a little baby sister. She is just beginning to talk. I think she is the best pet in the world, but you did not mean babies, did you? We have a dear little pony, all black; her name is Fly. I am going to have a little garden of my own in the Spring and when I learn to write better I will tell you about it. Mamma helped me write this letter, but I am going to school every day, and I will soon know how to spell all the words. Your nephew,

Peterboro, Ontario. LOUIS TURNBULL.

[That woodchuck was a rascal, surely. Babies just beginning to talk are very cunning. Never mind about waiting to learn how to spell and write better. Uncle Mark can read all the letters, and he is always glad to get them.]

DEAR UNCLE MARK: Last Summer I had a nice bed of geraniums, one of pansies and petunias. We also had a nice display of pop pies, the seeds of which were sent by the Rural. I love flowers very much and hope to have more next year than ever before. I am very much pleased with the letters written by the Cousins, Cousin Mattie Gray's in particular. I think she must indeed have her hands full attending to so much live stock. I would like to see her feeding ducks and Guineas. I have one brother. He is older than I, but I guess I will not trade him off, because he takes me on sleigh rides. He has a pony of his own. Her name is Dollie. I have also a baby sister. Her name is Mary. ANNA ROBERTS.

Elmira, N. Y.

[I hope you will have more flowers. You had better not let your brother go.

—UNCLE MARK.]

DEAR UNCLE MARK: I am a little boy 11 years old, and I want to be one of your nephews. We live on a farm of 208 acres, one half mile from town. I have half an acre of ground to cultivate for myself. I want your advice. Please tell me what to raise that will bring me the most money. I have $30 in the bank, and I always intend to have money there, but don't think I am stingy because I want to make money. I give some of my dimes occasionally for our church. I have never been to school because I am not very stout. I hope this will escape the waste basket. LEE WEBSTER.

Salem, Marion Co., Ills.

[I must know more about your land and how near you are to a good market before I can advise you properly. I guess you have more money than I have. I am glad you are not stingy. There are many other things besides money to be gained in this world.

—UNCLE MARK.]

DEAR UNCLE MARK: As I do not see many letters from Vermont, I thought I would write. I have a garden every year; last year I raised corn, potatoes, peas, beans, cabbages, turnips, onions, beets, carrots, radishes and melons. I planted some peppers last year, but the frost came so early that they did not get ripe. The corn and peas that you sent did nicely; some of the stalks were 14 feet in hight; one stalk had eight perfect ears, another four. Pa has taken the RURAL three years. His year is out, but he is going to subscribe over. I am 11 years old. I have 19 sheep to take care of, two cows and a calf, a pig and 20 hens, and a small lamb that was disowned by its mother. I would like to join the Y. H. C. As it is time to let out the cows and fodder, I will close.

Your nephew, ELVIN SAVAGE.

Windsor Co., Vt.

[I am glad you had such a nice garden. It is a good thing to learn to take care of stock.

—U. M.]

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PERSONALS.

MAJOR BARNETT, Secretary of the State of Georgia for 40 years, is 85 years old.

MR. EDISON, the wizzard electrician, is betrothed to an heiress, a daughter of Lewis Miller, the reaper and mower two-millionaire.

JUDGE DAVID DAVIS got his great fortune by being compelled to take 80 acres of land near the village of Chicago, when he was a young man, for debt. The land is now in the heart of the city.

MR. BLAINE has an iceboat, and he is fond of scudding along the smooth reaches of the ice-bound river, near which he lives. "He is getting so fat," says William Walter Phelps, "that I fear for him should the boat meet with an accident."

MRS. CARLISLE, the wife of the Speaker, recently asked a visitor of her sex: "How many children have you?" "Only one," was the reply. "Only one! Is that all you have done for your country? Why, I have eight," was the rejoinder.

THERE are reports that Roscoe Conkling will soon be invited to lead the Republicans of New York State once more. In the absence of his organizing mind, they have met with successive defeats. He is now employed by a Republican Senate Committee which is trying to find out whether Jacob Sharp secured for nothing the right to lay a surface railroad track on Broadway, by bribing the Aldermen. Over $1,000,000 had been offered for the concession. Conkling is winning golden opinions from all parties, except the suspected bribers and bribed.

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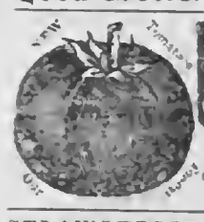

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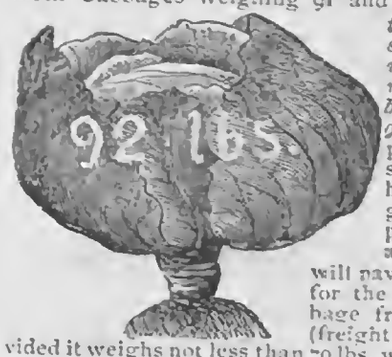

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A SOCIETY paper in describing the order in which a bridal party passed down the church aisle, says: "The bride walked on the arm of her father." This may be all right, but it seems to us that a church was hardly the place for her to display her acrobatic accomplishments.

AT a dinner table in Massachusetts, a gentleman remarked that A——, who used to be given to sharp practice, was getting more circumspect. "Yes," replied Judge Hoar, "he has reached the superlative of life. He began by seeking to get on, then he sought to get honor, and now he is trying to get honest."

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THE RURAL NEW-YORKER *advises gentlemen with false teeth not to attempt fancy skating in the presence of ladies.*

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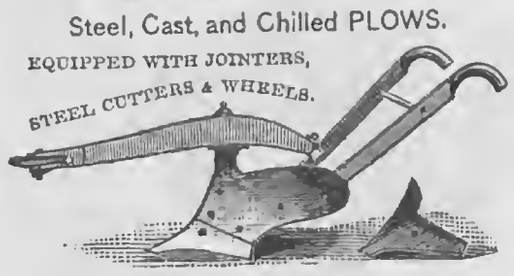

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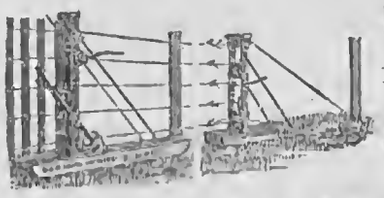

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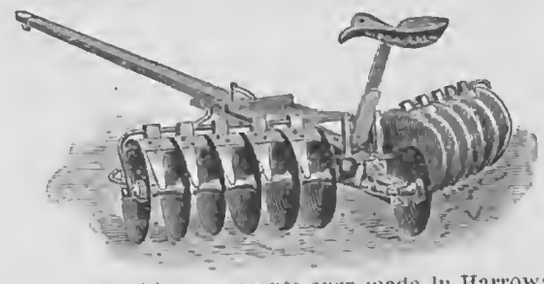

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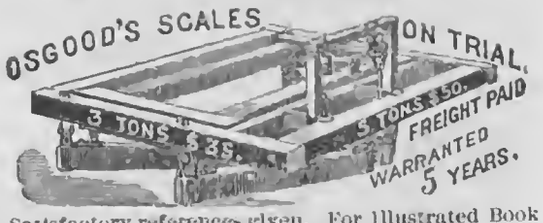

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THE RURAL NEW-YORKER

A JOURNAL FOR THE SUBURBAN AND COUNTRY HOME

VOL. XLV. No. 1883. NEW YORK, FEBRUARY 27, 1886. PRICE FIVE CENTS. $2.00 PER YEAR.

Entered according to Act of Congress, in the year 1886, by the Rural New-Yorker in the office of the Librarian of Congress at Washington.

The Vineyard.

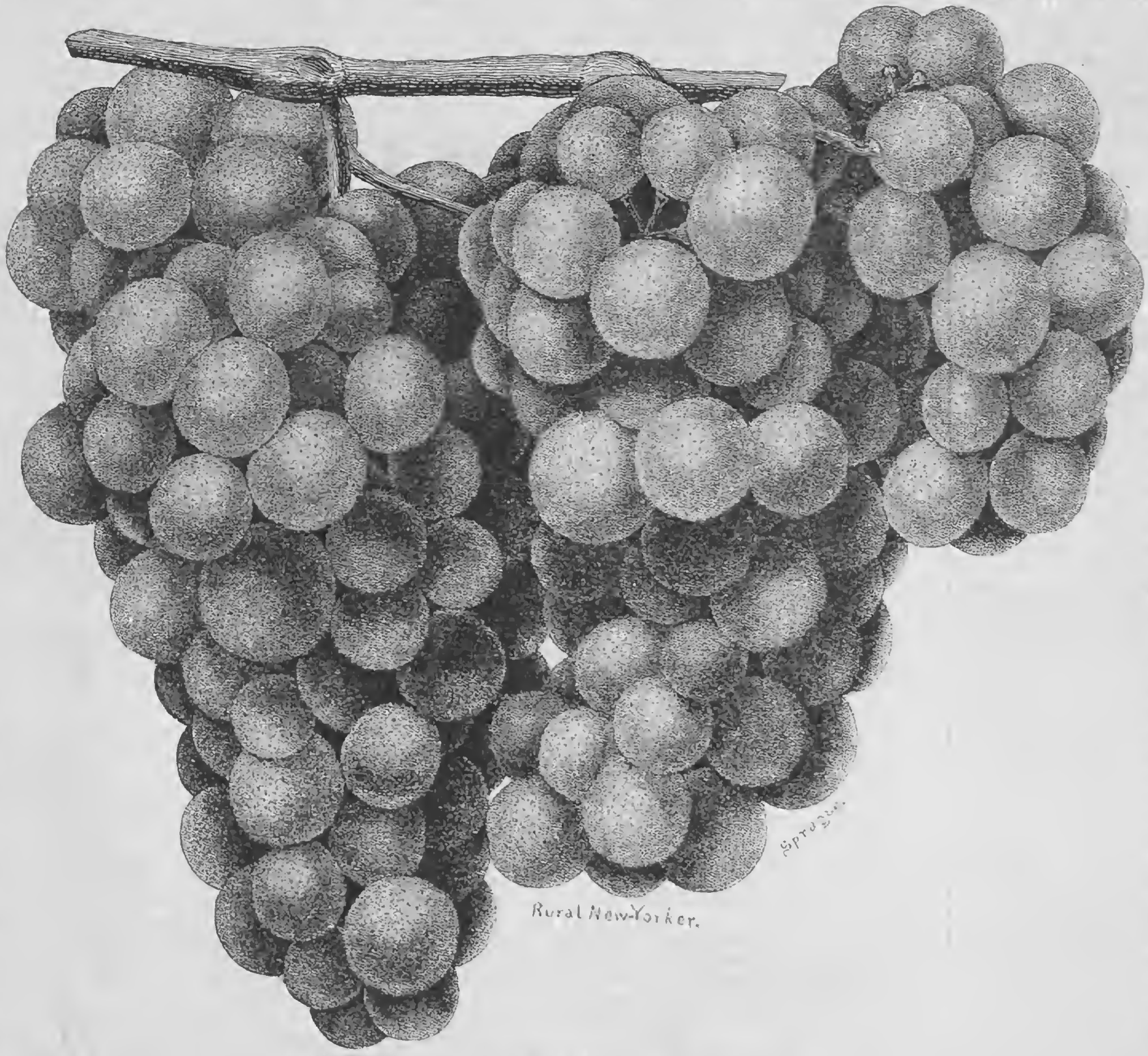
NEW WHITE GRAPE ROENBECK.

THIS grape, shown at Fig. 88, was first fruited in 1870. It is a chance seedling, originated on the grounds of Jas. W. Trask, Bergen Point, N. J. The wood is short-jointed and light-colored; vine hardy and prolific. Fruit needs thinning out, as the vine, like the Delaware, has a tendency to overbear. Our own notes on this grape, taken at the time it was left with us, are as follows: "One of the most promising white grapes we have seen, judging from the bunches left with us. Light-green berry, a little flattened. Pulp meaty and tender, two-seeded, sweet, vinous, not acid about the seeds. Skin very thin, though unusually strong. Bunches large, single-shouldered. Berry medium; hangs on well. Vine vigorous and hardy."

A PROFITABLE VINEYARD.

Concord cuttings set out on a quarter of an acre in March 1883, yielded in 1884, 1,000 pounds of grapes of extra fine quality and size. Such a crop on young vines injured them not a bit; for last year I sold 3,000 pounds of grapes which netted $125. In addition, I had 2,000 pounds from which I made 225 gallons of wine. The vineyard slopes gently to the south and is a sandy loam with a clay subsoil.

The posts were eight feet high. On their tops, at right angles with the rows, strips of oak 1x2 inches and three feet long were nailed, and on these No. 14 galvanized wires were stretched, one in the middle, and one at each end. The vines were trained to the tops of the posts and those bearing then allowed to grow, one to each wire. "P"



NEW WHITE GRAPE, ROENBECK. From Nature. Fig. 88.

Grapery.

SOME years ago, shortly after the plants had been moved to the open air, I cut about six inches of old wood from a Zonal Pelargonium and threw it aside. It had the customary rosette of small leaves at the tip. Some six weeks afterward I saw the cutting lying on the ground just where I had thrown it. It had not grown any, neither had the leaves fallen off; but the cut end had healed over and was well granulated. I put it in the border, where it soon rooted and grew. I was surprised at the amount of vitality stored up in that old stick. It was equal to a willow log. I have many times since cut off pieces of old wood, and thrown them about in various places to see how long they would live. I have kept them as long as three months, and then made plants of them. If the cut end should rest on the ground it will send roots into the soil.

* * *

Doubtless others have noticed this vitality in the old wood of the Zonal Pelargonium and some other plants. Being always on the lookout for something useful in everything I see, it occurred to me that this peculiarity might be applied to some useful purpose. Among other things, I thought it might be advantageously used for the transportation of cuttings over long distances. This I found to be true. Packed in sphagnum nearly or quite dry, and wrapped with oiled paper or muslin, they will bear transportation for thousands of miles, and arrive in good condition. If kept warm, the tips may grow a little and become etiolated; but these, when necessary, may be removed, and the cuttings will still be good. It is essential, however, that the cut ends should be thoroughly dry before the cuttings are packed.

* * *

But what I have particularly in view is the importation of pelargoniums from Europe. We almost invariably receive young, green-wooded plants, in full foliage. On the way the leaves and green wood mildew and rot, and a large percentage die. It requires, in fact, a good deal of nursing for several months before those that survive are good for any useful purpose. In the early part of December I saw the remnants of a lot of pelargoniums imported from London last Spring, and they were still far from being healthy-looking plants. This, in my experience, is a common case. I do not think these plants, however, were packed as well as they might have been, though they came from a well-known London firm. There is reason to doubt whether the English, the French, or the Germans pack plants for transportation as well as we do. The point I would make is, that, in ordering pelargoniums from Europe, we should make trial of cuttings from well-ripened wood, or rooted plants consisting mainly of such wood. The subject is one well worthy of consideration. I could anticipate some objections that will probably be made to the plan suggested; but I will drop the subject where it is for the present, simply stating that I propose to send some of these dried sticks on the long journey to Japan as an experiment, and will let the reader know the result in due time.

* * *

There is an old plant which I admire very much, which I do not remember to have seen noticed in the RURAL, at least not lately. I allude to Spiræa ulmaria (Meadow Sweet), a hardy herbaceous species, flowering late in the Spring. It is a most desirable plant for the border, bearing panicles of very pretty double white flowers. It is the variegated form, however, which I set out to notice. This is seldom seen now, though its bright variegation makes it a handsome plant, even when not in flower. It may sometimes be seen in some old country garden; but there seems to be no place for even such fine plants in the present style of gardening. I often, in the Spring, pull off a few side shoots, and send to friends, and try in that way to get it about again. In a rich soil, it will sometimes lose its variegation, and manure should therefore be kept away from it.

* * *

Abies Canadensis, it would seem, must now give place to Thuja Canadensis. Thus our old names, one by one, pass away, or mayhap, as Mr. Falconer found with the spiræas, they go in heaps. If this kind of thing keeps on, we shall have everything to learn over again.

* * *

I potted Friesia refracta alba about the middle of October. Those kept in a cool atmosphere are now (Jan. 21) just beginning to show color, while those kept in a warm temperature (but not forced) have been in flower for two or three weeks. With the help of a cold-frame, I think it would be easy to have this charming plant in bloom from the first of December to the last of March. It bears a good deal of cold, and responds readily to heat. It is one of the easiest plants to grow. I love the friesia all the more that it takes kindly to culture in the sitting-room.

* * *

Some people have not yet learned how to manage the pretty little Oxalis versicolor. It it a mistake, for example, to tie the shoots to sticks, or to try, by wires or other means, to keep them in an upright position. The plants should be started in the open air in the Fall, where they will make a strong beginning; but, whether started in the open air, in the green-house, or in the sitting-room, let them grow upright till they get ready to fall over, and then let them do so. They will form a pretty drapery around the rim of the pot, and flower abundantly. Half the bulbs are ruined by thrusting little sticks among them. It is a good rule never to put a stick to a plan

if you can grow it as well without. Besides, it is the nature of some plants to grow on the ground, and you can scarcely improve it. Sticks, I should say, are never ornamental.

HORTICOLA.

Dairy Husbandry.

DAIRYING IN THE NORTH STAR STATE.

(RURAL SPECIAL REPORT.)

Adaptation of Minnesota for dairying; bogus butter denounced; how to make the best butter; brains in dairying.

AT the recent annual convention of the Minnesota State Dairymen's Association, held in Albert Lea, on the 2d to 4th of February, some points were made which may be of general interest.

Col. John H. Stevens called attention to the peculiar adaptation of Minnesota climate, soil, grasses and water for successful dairying. All the tame grasses grow there in luxuriance, not excepting corn, which ripened in the short season of last year as far north as the line of the Northern Pacific Railroad. But the dairymen were not recommended to grow corn for fodder, as the tame grasses do better, are surer, and come on to make good pasturage when the prairie grasses begin to fail. The numerous lakes, so widely scattered through the State, give assurance of a never-failing supply of good water, while streams and wells are sources of satisfactory supply where lakes are not accessible. The numerous flouring mills make shorts, middlings, bran, etc., abundant. The State now has about 500,000 cows, turning out annually about $15,000,000 of dairy products. He urges the breeding of better stock and more attention to the practice of the economies of the dairy, as well as more conscientious and better work.

The bogus butter fraud was clearly laid bare and severely commented upon by W. D. Hoard. One man made the practical proposition to visit the boarding-houses, restaurants, hotels and dining cars, call for bread and butter, or other article with butter, and then pocket the pat and deliver it to the dairy commissioner for analysis, and the taking of legal steps where the butter is found to be bogus. A blow struck here would do much to suppress this dairy fraud, which is supported mainly by the class of establishments named. Resolutions were adopted calling for effective State and national legislation for the suppression of fraud and the protection of honest dealers in all kinds of food products.

Col. T. D. Curtis read a paper on how to make the best butter. He dwelt emphatically upon the importance of good dairy stock, good feed and shelter, scrupulous cleanliness in all particulars, and no exclusive dependence on the strainer to take filth out of milk. He said different conditions of milk and cream, some depending on the season, the care of the herd, etc., demand a wide range of temperature for churning. It may be from 55 to 70 degrees, and he recommended a higher temperature for winter churning, when the hard fats predominate in the butter globules and the cream is albuminous and viscid. In many cases it would be well to dilute the cream with tepid water. All intelligent dairymen now follow the granular process of washing butter, but only a few have yet got hold of the granular process of salting by stirring the salt into the butter, letting it dissolve, and then packing it into the tub directly from the churn or table, or first pressing it into a solid mass and then packing it for market, but avoiding all working. He condemned all coarse-grained, hard, impure and cheap salt as dangerous, and said the cost of using the best salt is so little—not to exceed one mill a pound—that no one can afford to take the risk of using any but the best. He recommended the small dairyman to purchase some one of the numerous patent creamers, which can be used anywhere, and occupy but little room. Most of them do good work. Ice, he said, could be saved by piling it on a crowning piece of ground and covering it with a straw-stack four to six feet thick all around and somewhat thicker on the top, which shall be built to shed water.

C. F. Defter commented on the importance of putting butter up in uniform, clean and attractive packages. He favored the tub holding 56 pounds net.

W. D. Hoard argued in favor of the reduction of cost of production, on which the net profit depends more than on high market prices for dairy products. Poor cows, exhausted soil, half crops, and half care and management are too expensive for a dairyman to indulge in. A little "cow sense" would do more to reduce the cost and increase the profits than any other one thing. Brains are a paying investment in the dairy. Secretary R. C. Jordan favored the keeping of a farm register as an efficient aid in enabling the dairyman to know the value of every cow, and improve his herd; also to lead him into the channel of correct business habits.

Resolutions denouncing the management of the last Chicago Fat Stock Show, in affiliating with the bogus butter men, and favoring a Northwestern organization for the exhibition of dairy stock and dairy goods, were unanimously adopted. C.

Farm Topics.

THE SUGAR BUSH.

Advantages; maple sirup; essentials in making it; straining; trouble in making; improved evaporators; profits.

OUR most thoughtful students of economics regret the rapid and wide-spread destruction of our forests, and are urging that the practice cease, and that we make up for the loss by liberal planting. It is very doubtful if we can magnify too highly the importance of Arbor Day. As the argument from æsthetics, and even from danger, when such danger is obscure, usually falls on deaf ears, I wish to offer an argument based on the pocket book. Nothing on my farm pays so well as a twenty acre sugar bush. Before this year I have tapped 400 trees; this year I shall increase to 600. Hence I urge that all who have sugar bushes should preserve them; others who have not, may add to the beauty of their place, the welfare of the country, and by securing good maple orchards, the prospective value of their farms.

The great point is to make a superior article of sirup, and that this may be perfection, we should spare no pains. Such an article is an incomparable delicacy and people who are able will have it if they once learn its excellence. Thus if we take a little pains to get an A No. 1 article of sirup on the tables of those who are able and willing to gratify the palate, we shall have no trouble to secure a sure market at from $1.25 to $1.50 a gallon for all the sirup manufactured.

The two things which the maple sirup producer must ever keep in mind are, first, neatness, second, dispatch. Like butter, maple sirup has such a delicate flavor, that it is easily tainted. Again, if not reduced from sap to sirup in the shortest possible time, it lacks in that indescribable flavor which we must secure. Only tin buckets should be used. They should be hung to the tree by a Post spout, and be all covered by an inch pine board cut square so as to cover the buckets and protect them from all snow, rain water and filth, like dust and leaves. We strain our sap through cloth as it enters the gathering tank, as it enters the store trough and as it passes into the evaporators, and the sirup as it passes from evaporator to can. This last filtering is through a woolen cloth. The store trough is kept covered, and it, the cask, and the buckets are all thoroughly rinsed with hot water after each run. We used to think only the first run would secure the best sirup. We now know that this is not true. If we keep all as neat to the last as it is at the beginning, the sirup will lose none of its excellence. Sap souring in trough, bucket or cask is what taints the sirup. Our house is kept clean; even the wood-shed is separate from the evaporating room, that all possible dust may be avoided. One trouble in manufacturing the sirup arises from a mineral which is held in solution in the sap, and usually in the hot sirup, but which is thrown down as the sirup cools. In Ohio they call this silica. Prof. Wiley of the Agricultural Department, says it is malate of lime, while another chemist tells me it is sucrate of lime. This substance forms an incrustation on the bottom of the evaporators, which is very difficult to remove.

Again, it is sure to form a deposit as the sirup cools, so the sirup must be cooled and then carefully poured off, after which we heat it and seal it in close, air-tight cans or jugs, where it will keep indefinitely, losing none of its delicacy and flavor. The improved evaporators are made in sections, so that these small light sections can be made to change places daily, and thus the old trouble of the lime crustation forming on the bottom of the pan is avoided. Siphons carry the sap from one section to another and are thought to act as filters and so add to the neatness. With these improved evaporators with iron furnaces, the sap is reduced with astonishing quickness and passes from sap to sirup with no intermixture of fresh sap, which is a matter of great importance. So valuable do I consider these improvements, that I have laid aside my old Cook's evaporator, although used only three years, and have secured one of these improved evaporators. I have also procured the iron arch which works so much better than does the brick arch, that it soon saves the extra cost. There is an automatic feeder that admits the sap to the evaporator, so that it will run in fast or slow, just as the evaporation is rapid or prolonged. Thus we can fill our furnace with good hard maple well seasoned wood, and leave for the night with perfect security that all will be safe.

Let us now compare the profit with our Short-horn. The evaporator will cost $125; 600 tin baskets at 18 cents each, $108; 600 spouts at $4.50, which equals $27; house, $100; cask, store trough, etc., $40.00. The total cost is $350, about the value of a good Short-horn cow. The work is in the Spring, when there is no press of farm work, especially if the fences have been fixed in Winter, as they should be, and the manure kept well drawn. Although this labor is, perhaps, more than that required to care for the cow, yet not much more. Each tree will give us 30 cents worth of sirup; this is a low estimate, which gives a total of $180, which is certainly more than we can hope to secure in profits from our cow. Thus it seems very evident that the maple bush well managed is one of the most valuable adjuncts on a good farm. M. S.

Owosso, Mich.

Horticultural.

EARHART EVERBEARING RASPBERRY.

LAST year, Nov. 21, page 789, we spoke of this new raspberry, and gave illustrations of it drawn from Nature. Briefly restating what was then written, we may say that this raspberry was found some 15 years ago in a grove in Mason County, Ill., late in the summer season, loaded with ripe berries. Thinking it a valuable sort for cultivation, plants were sought after the next Spring. Not being able to find them at the time, it was some years later that it was again discovered by Mr. Earhart in the Fall; and at the proper season,

EARHART EVERBEARING RASPBERRY.
From a Photograph taken July 3. Fig. 89.

plants were removed to the family garden, and it proved to be in truth an "everbearer," never failing of a crop even after the most severe Winters.

Mr. J. H. Hale, of South Glastonbury, Conn., who sent us the photographs from which our illustrations are made, says of this berry:

"The plant is a strong, vigorous grower, hardy as Souhegan or Tyler, ripens its first or main crop with the Doolittle; fruit larger, jet-black, and of superior quality (some think it equal to the Turner, a red variety), and as productive as any of the leading sorts now in cultivation.

The new canes of each season's growth begin to bloom when two or three feet high, ripening their berries very soon after the main crop is gone, and continue to bloom and fruit till frozen up in the Fall, the most of the fruit, however, ripening from the first of August to the middle of September, although ripe fruit can be found at all times from June to November.

While the first or main crop is fully equal to that of any of the old and reliable varieties, the second or after crop on the canes, ripening from July to November, is about twice the size of the first or main crop; so that all the fruit is equal to three full crops each season. And what the Earhart has done for the past six or eight years, it is likely to do in the future.

Plants set out early in the Spring, if they get a good start, will produce quite a crop in September and October in the year in which they were planted. And on older plantations, should the canes for the first crop get killed or cut to the ground in any way, the new canes will soon repair the damage by producing a heavier crop than usual, the only loss being a delay of some three weeks in the first ripening."

Fig. 89 shows the vine as it appeared July 3 in the middle of the first crop. Fig. 90 (p. 135) shows the vine as it appeared Sept. 15, and Fig. 91 (p. 136) as it appeared Oct. 15. As intimated last year, we have now specimens of this plant at our own grounds, and shall report in due time.

Miscellaneous.

CATALOGUES, ETC., RECEIVED.

JAMES J. H. GREGORY, Marblehead, Mass.—Mr. Gregory has an advantage over many seedsmen in being himself a hard-working farmer and farm student. His books on Fertilizers, Onion-raising, Squashes and How to Grow Them; Cabbages and How to Grow Them; Carrots, Mangolds, Sugar Beets, What Kinds to Raise, How to Grow Them and How to Feed Them, are before the public. The catalogue is one of "warranted seeds, vegetable, flower and grain." Cory Corn is referred to as being the earliest sweet corn known—earlier than the Marblehead. The All Seasons Cabbage is said to be a Drumhead, as early as Henderson's Early Summer, yielding heads a third larger. Among other novelties are Beauty Tomato, Pride of Georgia Watermelon, King of the Garden Lima Bean, Horsford's Market Garden Pea (introduced by the R. N.-Y.), Bird Cantaloupe and many others. Mr. G.'s Race-horse Oats were tried at the Rural Grounds last season, and were among the best kinds tested. Send for the catalogue and mention the R. N.-Y.

RUSSELL & COMPANY, Massillon, Ohio.—A fine illustrated catalogue of the "New Massillon" thrashers, of which they make six sizes; also their independent stacker, with which the straw may be put upon the highest stack and one situated in almost any position from the machine; also their mounted and down horse-powers. It also shows and describes their portable and traction engines, of which they make sizes from four to 16-horse power, both portable and traction. They are now at work perfecting a new traction engine, which they confidently expect to be perfectly practicable as a motor for steam plowing. We certainly wish them success, for this is the next great step in successful American farming. This firm also makes any number of sizes of stationary engines and saw-mills. Of the latter they build everything from a wood saw with tilting table to the ponderous machine capable of cutting all the lumber that can be got to it. Send for the catalogue; it will interest you.

THOMAS HARROW CO., Geneva, N. Y.—A descriptive catalogue of the widely renowned Thomas Smoothing Harrow, of which this firm now makes several styles. The distinguishing feature of these harrows is the slanting position of the teeth, which was the invention of the veteran agricultural writer John J. Thomas. We have long used these harrows and consider them indispensable for certain purposes. This catalogue, by illustrations, shows the advantages and also plainly tells the uses to which these implements may be applied, and the best manner of arranging and using them to accomplish the most effective work with the least expenditure of power. The easiest way in which to learn all about how they are made and what they will do is to send for this catalogue, which will be sent, free of cost, if you mention the RURAL.

TABOR ORGAN CO., Worcester, Mass.—An illustrated catalogue of the several styles of the Tabor organs, with a full description of each. These organs have the following improvements: A patent stop-action; patent valve tremolo; patent octave coupler; patent divided octave coupler; a very deep-toned sub-base; a double-action bellows; a grand crescendo knee swell, and a grand organ knee attachment. There are nearly a dozen styles from the Gem with a single manual, six stops and a single set of five octave reeds, to a double bank and pedal base chapel organ with

double manual, 18 stops and 10 sets of reeds, capable of filling a very large church with the richest melody. All these organs are well made, and finished in rich style with beautiful woods. Send for the catalogue and prices, mentioning the RURAL.

PRESTON'S WYANDOTTE GAZETTE. By Geo. A. Preston, Binghamton, N. Y.—A large, nicely gotten up circular, devoted to the description and illustration of Preston's fowls and poultry houses and to telling the good qualities of the Wyandottes. It contains many articles from the best poultry breeders and much useful information to those keeping poultry. Among the best articles is one written by Mr. B. N. Pierce, of Ohio, especially for the Gazette, which gives very full information respecting this new breed. It is fully illustrated and is worth the reading. We can't begin to tell all the good points of this circular, but we know it will please you. Send for it, mentioning the RURAL, and see if it does not.

FERTILIZERS: Where the Materials come from; where to get them in the Cheapest Form; how to Compound, etc., etc. By J. J. H. Gregory.—A book of 116 pages, written, he tells us in the preface, by a farmer for farmers. Mr. Gregory uses annually from 20 to 40 tons of commercial fertilizers. He has studied the matter till he thinks he knows where to buy and how to buy cheapest. He takes up and treats separately each of the fertilizing elements needed for successful plant growth. It will pay careful study. Issued by Rand, Avery & Co., Boston. The price is not given.

W. G. RICKER, Rochester, N. Y.—New circular showing the celebrated Rochester Hay Carriers and Slings, Hay Forks. This circular shows several kinds of carriers intended for wooden and iron tracks, and the way in which they are fastened in the barn. It also shows the Rochester Hay and Grain Stacking Frame, a very convenient thing to use, and with which hay is put into stack in better shape than it can be done without. Hay slings are very convenient and expeditious devices for handling hay, and with them, grain in bundles is as easily handled. Send for this circular. It is worth your while.

JAMES LEFFEL & Co., Springfield, Ohio.—A neat little book of 65 pages showing by cuts and descriptions the distinguishing features of the Bookwalter engines, of which they make a specialty. These engines are light and durable, but at the same time they are strong, give the full power claimed for them, and the price places them within the reach of many farmers for shelling and grinding corn, sawing wood, pumping water, cutting feed and other uses on the farm. There are hundreds of places in this country where a good engine and feed mill would not only be a great convenience, but would be a financial success. This circular free to readers of the RURAL.

CROWN M'F'G Co., Phelps, N. Y.—Catalogue containing full description of the Crown Grain and Fertilizer Drill. It has a perfect force feed, no gear wheels to change, and dial indicators. Their continuous steel axles with ratchets in hubs and simplicity in gearing make the Crown of extremely light draft. It has a steady unaltered motion to the distributors, which is essential in preventing fertilizer from clogging in the box. They also make an excellent wheel-barrow grass seeder, hay carrier adapted for the use of shir slings instead of the horse fork. Everyone send for a catalogue: free. First premium received at New Orleans Exposition and N. Y. State Fair, 1885.

EMPIRE WRINGER COMPANY, Auburn, New York.—Circular showing the Empire Wringer which is said to wring drier and run easier than any other wringer. It also shows the Empire Hammock Standards, Empire Swing, Empire Folding Cot-bed, and the Empire Clothes Drying-bars. It is claimed for the Empire Wringer that it is the only one which does not have the crank attached to the shaft of either roll. Send for this circular.

BROOKS & PARSONS, Addison, Steuben Co., N. Y.—Illustrated circular of the Smith's Self-adjusting Swing Cattle Stanchion, containing a description of the same, a list of prominent breeders using it, and many letters indorsing the same. Among others Mr. Ed. F. Towner, of Mass., says he has 70 in use and he thinks they have more than paid their cost in the saving of feed. Messrs. Woodward & McClellan, of Georgia, say they think a barn incomplete till it is provided with these stanchions. They will be glad to send these circulars if you mention the RURAL.

REPORT OF THE MINNESOTA STATE HORTICULTURAL SOCIETY for 1885, together with the Transactions of the State Amber-Cane Association.—In this report we find an interesting paper on the cultivation of ginseng. It seems that this plant is very profitable in some parts of the country and it seems a pity that more experimenting is not done with a view of discovering some feasible method of cultivating it. We notice that Turner is the favorite raspberry in Minnesota. This report also contains a list of fruits recommended for planting in Minnesota. This volume goes to every member of the society. S. D. Hillman, Sec'y, Minneapolis, Minn.

REYNOLDS & LANG, Ithaca, N. Y.—A catalogue of portable engines for thrashing and farm use, of which they make several sizes. They also make a superior traction or self-propelling engine, which they claim is not excelled for simplicity, durability and effective work. The power is conveyed through a series of close gears to a shaft having pinions on each end, thus applying the power directly to each wheel. This causes the engine to drive strong and saw smoothly, without jerks.

R. H. ALLEN Co., 189 Water Street, N. Y.—This is an illustrated, descriptive catalogue (90 pages) of farm, garden and flower seeds, roots, plants and garden requisites. Among the specialties may be noted the Deacon Lettuce, Oak-leaved Lettuce, Allen's Superb Pea, Pearl of Savoy Potato, Pine-apple Squash, Beauty Tomato, etc. This firm also offers fertilizers and farm implements of all kinds. The Eagle Pruner is an effective instrument which we heartily commend to all who have any kind of pruning to do. Send for the catalogue and mention the R. N.-Y.

SMALL & MATTHEWS, 21 South Market Street, Boston.—An illustrated circular of Small's Calf-feeder, an invention entirely novel in its way, and from which a calf takes its food by sucking. We used one last Spring and it gave very good satisfaction indeed. The milk is merely put into a can which is securely fastened against a building or broad post set up for the purpose, and the calf cannot upset it or "bunt" it over. We think you would like it. At least send for the circular and see how you like it.

BINGHAMTON SCALE WORKS, Binghamton, N. Y.—A circular of Osgood's Patent Combination Scales, giving a full description of the several styles made, and showing by cuts their various parts, and telling, in a plain way, wherein one is superior to another. It also shows wherein scales are apt to be defective; and how they should be cared for, to prove most reliable and last the longest. Send for it, mentioning the RURAL.

THE UNIVERSAL PLOW COMPANY, Canton, Ohio.—This circular fully describes and shows by cuts a new rear-adjusting right and left hand, also a front-adjusting right and left hand plow for one, two and three horses. These plows are made of chilled iron, crucible steel, or a combination of the two. We cannot describe these implements, but you can send for the circular and read up for yourself.

THE ANDREWS HATCHER CO., Elmira, N. Y.—A pamphlet setting forth the advantages claimed for artificial incubation in general and the Andrews Hatcher in particular. There is no doubt but the old hen must do her level best or take a back seat, as the incubators are working remarkably well. Send for this circular and study it well. They also make a very fine stationary engine having the cylinder frame, guides and main box all cast in one piece, making it very strong and rigid; also boilers and several sizes of portable saw-mills. Every person interested in machinery or needing an engine should send for this catalogue.

HENRY A. DREER, 714 Chestnut Street, Philadelphia, Pa.—A Garden Calendar and Guide to the successful management of the flower and kitchen gardens. This book of 130 pages, full of illustrations, gives lists of vegetable, flower, grass and farm seeds of all kinds; plants of new and standard sorts; small fruits, trees, shrubs, fertilizers, insecticides, books, implements and all sorts of garden appliances. Free to our subscribers.

F. R. WILSON & SON, 57 North Young Street, Columbus, Ohio.—A circular of Wilson's swivel-center, spring single-trees, which both shows and describes how this very valuable device is used. By its use the strain and jar on the horse's shoulders are greatly relieved and much of the wear and tear of drawing hard loads saved. It would pay every street car line as well as farmers to send for this circular and look into it.

A. D. COWAN & Co., 114 Chambers Street, New York.—A bright, tastily arranged catalogue (65 pages) of seeds, etc., well worthy of examination. Eight pages are devoted to novelties. A specialty is made of the Hales's Perfect Mole-trap, which we unqualifiedly commend to all whose gardens are infested with these animals. Mailed free to our readers. Apply as above.

ROBERT BUIST, JR., 902 and 904 Market St Philadelphia.—An illustrated catalogue (98 pages) of flower, vegetable and farm seeds.

(*Continued on page 136.*)

Miscellaneous Advertising.

FORTY-FIRST ANNUAL REPORT
OF THE
NEW-YORK LIFE INSURANCE CO.
Office, 346 & 348 Broadway, New York.

JANUARY 1, 1886.

Amount of Net Cash Assets, January 1, 1885, - - $57,835,998.45

REVENUE ACCOUNT.

Premiums	$13,517,426.03	
Less deferred premiums, January 1, 1885	795,323.00	$12,722,103.03
Interest and rents (including realized gains on Securities and Real Estate sold)	3,859,577.47	
Less interest accrued January 1, 1885	460,507.76	3,399,069.71
		$16,121,172.74
		$73,957,171 19

DISBURSEMENT ACCOUNT.

Losses by death, including reversionary additions to same	$2,999,109.64	
Endowments, matured and discounted, including reversionary additions to same	741,764.47	
Annuities, dividends, and purchased policies	3,940,999.64	
Total Paid Policy-holders	$7,681,873.75	
Taxes and re-insurances	250,142.32	
Commissions, brokerages, agency expenses and physicians' fees	2,024,090.50	
Office and law expenses, salaries, advertising, printing, &c.	488,446.62	$10,444,553.19
		$63,512,618.00

ASSETS.

Cash in bank, on hand and in transit (since received)	$2,042,542.60	
United States Bonds and other bonds and stocks (market value, $36,991,923.88)	33,640,220.56	
Real Estate	6,855,532.63	
Bonds and Mortgages, first lien on Real Estate (buildings thereon insured for $16,500,000 and the policies assigned to the Company as additional collateral security)	18,159,500.00	
Temporary Loans (market value of securities held as collateral, $594,480.00)	451,500.00	
*Loans on existing policies (the reserve held by the Company on these policies amounts to over $2,000,000.00)	416,034.15	
*Quarterly and semi-annual premiums on existing policies due subsequent to January 1, 1886	878,161.65	
*Premiums on existing policies in course of transmission and collection. (The Reserve on these policies, included in Liabilities, is estimated at $955,000)	575,699.50	
Agents' balances	58,142.73	
Accrued Interest on investments, January 1, 1886	435,284.18	$63,512,618.00
Market Value of Securities over Cost on Company's Books,		$3,351,703.32

*A detailed schedule of these items will accompany the usual annual report filed with the Insurance Department of the State of New York.

CASH ASSETS, Jan. 1, 1886, - - - - $66,864,321.32

APPROPRIATED AS FOLLOWS:

Adjusted losses, due subsequent to January 1, 1886	$144,424.00	
Reported losses, awaiting proof, &c.	248,423.12	
Matured endowments, due and unpaid (claims not presented)	41,854.06	
Annuities due and unpaid (uncalled for)	10,595.21	
Reserved for re-insurance on existing policies; participating insurance at 4 per cent. Carlisle net premium; non-participating at 5 per cent. Carlisle net premium	56,200,875.00	
Reserved for contingent liabilities to Tontine Dividend Fund, January 1, 1885, over and above a 4 per cent. reserve on existing policies of that class	$2 633,796.70	
Addition to the Fund during 1885	952,683.31	
DEDUCT—	$3,586,480.01	
Returned to Tontine policy-holders during the year on matured Tontines	462,737.24	
Balance of Tontine Fund January 1, 1886	3,123,742.77	
Reserved for premiums paid in advance	29,934.03	
		$59,799,848.19
DIVISIBLE SURPLUS (COMPANY'S STANDARD)		$7,064,473.13
SURPLUS BY THE NEW YORK STATE STANDARD, AT 4½ PER CENT.		$13,225,053.94

From the undivided surplus of $7,064,473.13 the Board of Trustees has declared a Reversionary dividend to participating policies in proportion to their contribution to surplus, available on settlement of next annual premium.

SURPLUS.

Jan. 1, 1885:—Co.'s Standard,	$4,371,014;	*State Standard,* $9,896,773
Jan. 1, 1886—Co.'s Standard,	7,064,473;	*State Standard,* 13,225,053
Increase:—Co.'s Standard,	$2,693,459;	*State Standard,* $3,328,280

Death Claims Paid.		Income from Interest.		Insurance in Force.		Cash Assets.	
1881,	$2,013,203	1881,	$2,432,654	Jan. 1, 1882,	$151,760,824	Jan. 1, 1882,	$47,228,781
1882,	1,955,292	1882,	2,798,018	" 1883,	171,415,097	" 1883,	50,800,396
1883,	2,263,092	1883,	2,712,863	" 1884,	198,746,013	" 1884,	55,542,902
1884,	2,257,175	1884,	2,971,624	" 1885,	229,382,586	" 1885,	59,283,753
1885,	2,999,109	1885,	3,399,069	" 1886,	259,674,500	" 1886,	66,864,321

During the year 18,566 *Policies have been issued, insuring* $68,521,452.

TRUSTEES:

WM. H. APPLETON, WILLIAM A. BOOTH, ELIAS S. HIGGINS, HENRY BOWERS, LOOMIS L. WHITE, ROBERT B. COLLINS, EDWARD MARTIN, HENRY TUCK, ALEX. STUDWELL, R. SUYDAM GRANT, GEORGE H. POTTS, WILLIAM L. STRONG, ARCHIBALD H. WELCH, RICHARD MUSER, WILLIAM H. BEERS.

THEODORE M. BANTA, Cashier.
D. O'DELL, Superintendent of Agencies.
A. Huntington, M.D., MEDICAL DIRECTOR.

WILLIAM H. BEERS, President.
HENRY TUCK, Vice-President.
ARCHIBALD H. WELCH, 2d Vice-Presid'nt.
RUFUS W. WEEKS, Actuary.

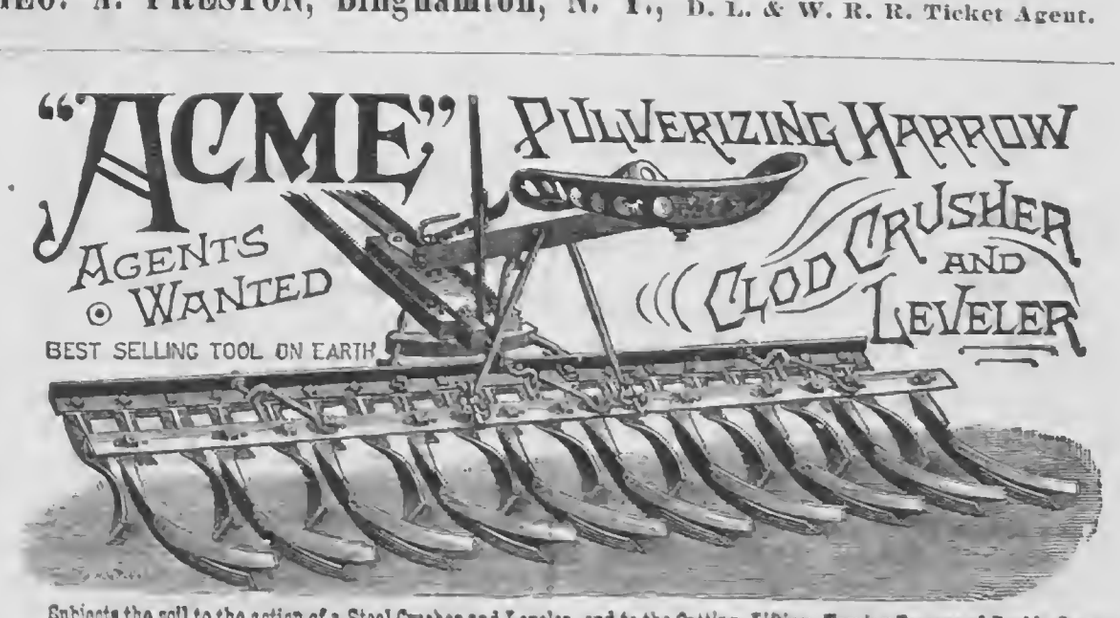
PRESTON'S WYANDOTTES!

15 *GRAND BREEDING PENS FOR* 1886.

EGGS from Two Pens of First Premium Stock, headed by "Earl and Truston," at $5.00 per 13; $10.00 per 39. Eggs from 13 other pens of good breeding birds, carefully selected, and mated for best possible results, at $3.00 per 13; $5.00 per 26. Eggs from one pen each of fine Langshans, Light Brahmas, Plymouth Rocks and R. and S. C. Brown Leghorns at $2.00 per 13.

Elegant Wyandotte Chromos at 10 cents each. Large circulars with illustrations FREE to all.

GEO. A. PRESTON, Binghamton, N. Y., D. L. & W. R. R. Ticket Agent.



Subjects the soil to the action of a Steel Crusher and Leveler, and to the Cutting, Lifting, Turning Process of Double Gangs of Cast Steel Coulters. Immense cutting power. Crushing, Leveling and Pulverizing performed at the same time. Entire absence of Spikes or Spring Teeth avoids pulling up rubbish. Only Harrow that cuts over the entire surface of the ground. Sizes, 3 to 15 ft. wide. With and without Sulky attachment. We deliver free at Distributing Depots.

FAIR PLAY. **DO NOT BE DECEIVED.** Don't let dealers palm off a base imitation or some inferior tool under the assurance that it is better. SATISFY YOURSELF BY ORDERING AN "ACME" ON TRIAL. We will send a **double gang** Acme to any responsible farmer in the United States; if it does not suit, he may send it back, we paying return freight. We don't ask pay until tried on his own farm.

Send for pamphlet containing thousands of testimonials from 18 States and Territories.

Branch Office, HARRISBURG, PENN. **NASH & BRO.,** Manufactory and Principal Office, MILLINGTON, NEW JERSEY.

N. B.—"TILLAGE IS MANURE" and other essays sent free to parties who NAME THIS PAPER.

CATALOGUES, ETC.

(*Continued from page* 135.)

The formation and use of cold-frames, hot beds, formation of the kitchen garden are well explained. The lists of peas, potatoes, cabbages, beets and beans are especially good. Send for the catalogue and mention the R. N.-Y.

B. L. BRAGG & Co., Springfield, Mass.—This is a bright, handsome catalogue of 98 pages, with many desirable new things in addition to the usual lists of seeds, small fruits, fruit trees, ornamental trees, implements, etc. This firm is headquarters for the remarkable "Top-over" Corn, which is distinct in many ways. The ears, though small, are crowded with large kernels, always covering the tip and butt ends (hence Top-over), which latter are united to the stalks by stems scarcely more than a quarter of an inch in diameter. The cobs are the smallest we have ever seen. The catalogue gives a true portrait. It will be sent to all who apply to the above firm, mentioning the R. N.-Y.

ALFRED BRIDGEMAN, 37 East 19th St., N. Y.—A substantial, plain, unpretentious, but trusty catalogue (75 pages) of vegetable, grass and flower seeds. Established in 1824, this firm is everywhere favorably known. After reading the exaggerated, sensational stuff with which many of the catalogues of the present day abound, the terse statements, simple arrangement and well-selected lists of this catalogue are quite refreshing. Among novelties will be found the Rural Blush Potato, Rural New-Yorker Pea, which our newer subscribers may wish to try.

JAMES VICK, Rochester, N. Y.—A portfolio (14x11 inches) of beautiful flowers consisting of six large chromo-lithographic plates from original paintings. They are accompanied by interesting letter-press descriptions, all on heavy paper of the first quality, making the colored plates suitable for framing. The pictures are various orchids, a passion flower and roses and pansies. It is, indeed, a work most creditable to the enterprising publisher. A descriptive circular will be sent to all who apply to Mr. Vick.

THE STORRS & HARRISON Co., Painesville, O.—A combination catalogue (138 pages) of all sorts of fruit and ornamental trees; small fruits of all kinds, including the latest novelties; grape-vines, roses in great variety, chrysanthemums, cannas, pelargoniums, flower and vegetable seeds of all kinds with cultural hints—all fully illustrated. Very liberal inducements are offered in the way of various collections of plants and seeds. This is a good house of long experience.

ROBERT J. HALLIDAY, Baltimore, Md.—A large illustrated catalogue (130 pages) of all sorts of seeds, garden and greenhouse supplies, including valuable hints for the amateur, and a guide to seasonable work for the year. Many new plants are mentioned, and excellent cuts of new roses, chrysanthemums, etc. presented. It is a lively catalogue, and will well repay an xamination.

E. H. RICKER & Co., Elgin, Kane Co., Illinois.—Here we have a circular of evergreens and a few of the leading deciduous trees. Norway Spruces are offered from six cents to 75 cents each, according to size; Scotch Pines from 10 cents to 50 cents; Arborvitæ from five cents to 35 cents, etc. Very much lower prices are given by the hundred.

SHAKER SEED Co., Mount Lebanon, N. Y.—An illustrated Catalogue and Amateurs' Guide to the flower and vegetable garden. This company claims to grow all of its own seeds that can be successfully raised in its section of country. The catalogue (77 pages) is well worthy of an examination. Free.

P. M. AUGUR & SONS, Middlefield, Conn.—A circular of the promising Jewell Strawberry, with testimonials from good men. Probably no other strawberry has been introduced that has had so much said in its favor and so little against it. Try it all. It originated with the above firm.

F. N. LANG, Baraboo, Wis.—Illustrated catalogue (48 pages) of flower, vegetable, field and tree seeds. Lang's Hand Weeder which we have used, is a handy little implement. The Badger Queen is mentioned as the earliest oat in cultivation. Catalogue free.

MASSACHUSETTS: ESSEX COUNTY AGRICULTURAL SOCIETY.—We are under obligations to the Sec'y, D. D. Low, of Gloucester, for a copy of the transactions of this honorable old society. This is its 65th year.

F. K. PHŒNIX, Bloomington, Illinois.—Catalogue (20 pages) of trees (fruit and ornamental) shrubs, roses, etc. We see that huckleberry plants two to three feet high are offered. Free.

W. W. HEILBORN, Arkona, Ontario, Canada.—A catalogue of small fruits, which should interest not only our many friends in Canada, but those at home as well.

EVART H. SCOTT, Ann Arbor, Mich.—A circular of the Woodruff Red Grape, with testimonials as to its vigor, etc. This is a large, showy grape, certainly, but the quality is not much better than that of the fruit of wild Labrusca vines.

W. H. SMITH, 1018 Market St., Philadelphia, Pa.—A catalogue (100 pages) of all sorts of farm and garden seeds. The specialties are very well selected, though too numerous for mention.

Fig. 90. (See p. 134.)
EARHART EVERBEARING RASPBERRY. From a Photograph taken Sept. 15.

COLE & BROTHERS, Pella, Iowa.—In addition to the usual list of seeds, this catalogue offers "Dollar Collections" of trees and plants suitable for mailing, postage paid.

S. FROGNER, Herman, Grant Co., Minn.—Circular of potatoes and Spring wheat.

ANNOUNCEMENT.—The old and popular firm of J. Stevens & Co., of Chicopee Falls, Mass., manufacturers of the celebrated Stevens' Fire Arms and Fine Machinists' Tools, have sold out their business to the new corporation just formed under the name of the J. Stevens' Arms & Tool Co., with the following officers: Joshua Stevens, President; William B. Fay, Joshua Stevens, George S. Taylor, Directors; Irving H. Page, Secretary; James E. Taylor, Agent and Treasurer. The above took possession of the business January 1, 1886.

THE record of the New York Life Insurance Company is a brilliant one. When it was first organized, 41 years ago, life insurance was a doubtful experiment; now the great majority of our business men hold policies in one or more companies. Since 1845, the New York Company has paid $33,921,708.69 as death claims. Last year $7,681,873.75 were paid to policy-holders. The great success attending this company has been the result of liberal dealing with policy-holders, and great care in the acceptance of risks and in making investments. The man who wishes to insure his life, for the purpose of providing for those who are near and dear to him, cannot be too careful in selecting an Insurance Company. Our readers will do well to investigate the Statement of this company.

A CARD FROM DR. LORING.

I assure you a statement in a late issue of the RURAL NEW-YORKER that the "Loring ring was overthrown" at the organization of the Massachusetts Society at Worcester, is without foundation. I welcome all new agricultural societies, and I have no desire to control them in any way. The statement that the New England Agricultural Society, of which I am President, desired to exert its influence in either of the agricultural meetings at Worcester, is also a mistake. No such effort was made. The New England Agricultural Society has its sphere, and confines itself to it.

Washington, D. C. GEO. B. LORING.

THE DR. REEDER PEAR.

IN the RURAL of January 23d is presented a very correct illustration of the Dr. Reeder Pear. If I mistake not, this pear was raised by Dr. Henry Reeder, of Seneca Co., N. Y., from seed of Winter Nelis. We have fruited it at Geneva for several years, and find it "best" in quality every time. While, probably, it will never prove profitable as a market variety, as the average customer will persist in buying for looks rather than for quality, every man who cares to have a desirable fruit for his own eating, will plant it. To my taste it is superior in quality to most, if not to all, varieties ripening in October. The tree appears to be hardy, healthy and fairly productive. HOWARD A. CHASE.

Fig. 91. (See page 134.)
EARHART EVERBEARING RASPBERRY. From a Photograph taken Oct. 15.

THE RURAL'S AVERY SEWING MACHINE.

BELIEVING that the RURAL always tries to "hew to the line," and being in need of a good machine, I sent for an Avery, which I have now had for two months. I believe it as good as any made in every respect, and better in some. It doesn't seem possible that a lighter lock-stitch could be made, unless the shuttle were made to run on "thin air," and so noiseless is it that it can be run while baby sleeps—and both these are important considerations with a woman. M. C.

Scranton, Pa.

[The Avery is given for 40 subscriptions. The retail price is $60.—EDS.]

J. C. MASON, of this city, advertises that sufferers from piles "will learn of a simple remedy by addressing" him. In answer to inquiries he sends a pamphlet puffing his remedy "Electrobole," and other stuff. This mode of angling for gudgeons is that of a charlatan. The "Electrobole" is not a whit more effective than any of the pile-curing salves or other remedies obtainable at the nearest drug-store. The best treatment of piles, according to the different causes which have produced them, is to diminish the amount of blood sent to the parts, by active habits, abstemious living and attention to hygienic rules. In case of irritation, leeching or cupping in the neighborhood, fomentation, poultices, enemata, refrigerant and soothing lotions, are beneficial. Strict attention to cleanliness, a stringent applications, like tannin ointment, pressure by bandages and pads, and ice will suffice in most cases; but a surgical operation is often necessary for a radical cure. This consists of excision by knife, cautery or ligature, usually the last. It is excessively painful unless the patient is placed under the influence of anæsthetics. It would be much cheaper and better in every way to consult a skillful physician than to patronize any advertised nostrum.

TO SEVERAL INQUIRERS.—We don't recommend the Connecticut M'f'g Co., Hartford, Conn.....The Chicago Dried Fruit and Produce Company, which solicits consignments, is a light concern financially. The name is by far too big for it, and one is usually safe in doubting small concerns with big names. It may be honest, however, and we are inclined to think so, but as its means are quite limited, it may collapse at any time, and in such an event the consignors would, of course, be the sufferers. Any concern (especially a new one) which offers patrons unusually favorable terms should be treated with great caution. As there are a multitude of thoroughly trustworthy and responsible business houses in all large cities, wouldn't it be wise to deal with these and thus make the risks of loss as small as possible?.....We do not recommend the Crown Manufacturing Company, of Cincinnati, Ohio.....We have twice already given our opinion here of T. S. Page of this city, who advertises a remedy for deafness. There is no doubt that he has afforded relief in a number of cases; but we have also learnt of some in which his treatment was of no use. As deafness has a great number of widely different causes, no single method of treatment can prove effectual in all cases. To send money for a "cure" under such circumstances is like investing it in a "blind pool;" and while "blind pools" occasionally turn out very profitable for investors, it is only when the managers are well known to be quite trustworthy, and even then losses are nearly as frequent as profits. In other cases losses are the rule.....We have had quite a number of complaints about the Kensington Art Co., Kensington Outfit Co., etc., of Boston and one or two other places in Massachusetts. Judging from the locations mentioned in the advertisements of this concern, it must be of a migratory nature. It is one of the work-at-home humbugs, which after selling "outfits" at a large profit, seldom or never fulfill their promises.

WE cannot recommend the Crescent Art Company, or the Decorative Art Works, of Boston. The "Hub" is becoming the headquarters of a lot of advertising humbugs and swindlers with high-sounding names and abundance of "brass" instead of silver, gold or greenbacks for capital. The work-at-home dodge is "played for all it is worth" by most of them. They appeal chiefly to women in search of genteel employment, by which they can make a little pocket money or eke out a scanty income. Boston is a good center for such sharpers, as there is a great superabundance of women in New England, and many of them with artistic inclinations are in genteel but straitened circumstances, so that any quiet way of earning a little money clandestinely would be welcome. The unscrupulous fishers for gudgeons are sharp enough to put on their hooks the bait most likely to attract their intended victims. Hence, art and art "companies" are temptingly dangled before them.

What Others Say.

ONE farm journal, the Agricultural Epitomist, says that the editor of the RURAL NEW-YORKER raised at the rate of 7,391¼ bushels per acre of the Green Mountain Potato!.....

THE children might amuse themselves making paper bags with which to cover grapes next Summer.....

BY careful experiments made last year at the N. Y. Ex. Station, it appears that pinch-

ing off the terminal shoots of potato plant does not increase the yield of tubers.....

CONTINUING the experiments to ascertain the difference in the yield between seed potatoes taken from the most and least productive hills, it was found that the former exceeded the latter as seven to ten. Hence, it appears that it pays to select seed from the most productive hills.....

EXPERIMENTS were made to ascertain the effect of spraying trees with Paris-green and water to destroy the Codling Moth. It appears that the percentage of wormy fruits from the trees sprayed with Paris-green and water was about 22 per cent. less than from those not sprayed. In other words, at this rate 100 barrels of apples picked from the sprayed trees would have yielded 22 barrels more fruit free from worms, than the same number from the unsprayed trees.....

The N. Y. Ex. Station finds White Novelty, White Russian and White Zealand the same oats.....

IT also pronounces the following oats the same: White Australian, White Belgian, Welcome, New Australian and Race Horse. The RURAL reported the first three the same several years ago, but the Race Horse, as tested last year, was thought to be different. But *then* there were no neighboring plots of the others to compare with.....

APROPOS of the untiring efforts of politicians to use agricultural associations for their own purpose, the Macon Telegraph says: The Georgia Agricultural Society is holding a fair in Columbus this week. Ceres makes no spread, but the exhibit of gubernatorial candidates is nobly large and varied.....

GRIEF counts the seconds; happiness forgets the hours.....

DECORATING a home that is never irradiated with hearty good-nature is like frescoing a cellar wall.....

GEORGE ELIOT once remarked that pride helps us; and pride is not a bad thing when it only urges us to hide our own hurts—not to hurt others.....

J. J. H. GREGORY remarked at a late meeting of farmers, as reported in the Massachusetts Ploughman, that there was a time in the early agriculture, when barnyard manure was just as much an innovation as our commercial fertilizers are now.....

How much does potash cost you in wood ashes? In muriate of potash it costs four cents per pound. But in wood ashes we have some phosphoric acid, you know.....

THE Michigan Horticulturist speaks of the Lida Strawberry (a seedling of Durand's King Cluster) as a pistillate variety of large size, and as being very productive, a good shipper, of bright red color and excellent quality.....

PRES. LYON in the same journal has something to say as to honesty in fruit-growing. A fruit grower may go to the manufacturer and insist upon being supplied with packages, in which his fruits are to be packed, just enough short of honest measure so that the buyer will not be likely to observe the shortage. Another, having discovered the poteney of fine appearance, deliberately selects for market planting a showy but worthless variety, knowing full well that in so doing he is planning to deceive the buyer, or rather leading him to deceive himself by anticipating more from his purchase than it is capable of realizing .....

MR. LYON on one occasion was present at a large meeting of market fruit-growers, where the propriety of the use of "snide" packages was being discussed; and he was astonished to hear one of the prominent Lake Shore fruit-growers openly and positively declare that he had been using short packages, and that he should continue to do so so long as they could be sold at full prices.....

MR. KNISELEY, of Benton Harbor, Mich., is of the opinion, as expressed in the Horticulturist, that it is better to plant a good tender blackberry and protect it, than to rely upon "hardy" sorts without protection. The "hardy" varieties, after last Winter's cold (30° below zero), were found to be almost entirely killed, while the Wilson and Lawton came through all right, and yielded a bountiful crop.....

IN his locality, there are probably four times as many Wilson Blackberries as of all others combined. Yet the Wilson is one of the tenderest plants, and that is just why it succeeds so well. Everybody knows it is tender, and therefore everybody protects his plants.....

PROF. TRACY, speaking from careful experience, says there are no beans which are unquestionably superior to the old Golden Wax, Black Wax, Valentine, Horticultural and Dwarf Kidney.....

IN his remarks about vegetables in the Michigan Horticulturist elsewhere alluded to, Prof. Tracy thinks that while the several "self-blanching" kinds of celery have here and there proved a success in private gardens, he does not know of any large commercial growers who had found them profitable.....

OF Kolb's Gem Watermelon, he says that it is so hardy that many can succeed in raising good melons, who fail with the more delicate sorts.....

IN Michigan, it appears that the Worden is at least a week earlier than the Concord. Thus far at the Rural Grounds, we see no difference in this particular.....

SPRING approacheth. If you want eight plants of the new Jewell Strawberry, or six plants of the new Golden Queen Raspberry, or three plants of the Earhart Raspberry, or 12 of the Marlboro or Rancocas Raspberries, or one plant of the Poughkeepsie or Ulster Prolific Grapes—then any *present* subscriber can get them by sending us one *new* subscriber...

ALL who have not yet received it should send for the R. N.-Y. of November 14. It gives a full account of our present Free Seed Distribution, as well as a list of the $3,300 worth of presents offered to subscribers for clubs.....

THE National Press calls the apple the pomological index of civilization. It is found wherever man can live in comfort. It is more extensively disseminated than even the great cereal, wheat.....

THE same paper states that the terrible thirst of drunkards can be at least partially assuaged by the use of fruits.....

A. W. CHEEVER says that Connecticut spent $40,000 in investigating poisons in the stomachs of two murdered persons, and yet refused an appropriation of $5,000 to investigate the condition of some of her polluted streams and ponds.....

J. J. H. GREGORY points out the fact that a big crop of cabbages necessitates a big lot of manure. It would take 60 tons of ordinary barn-yard manure to provide the potash found in 60 tons of cabbage. There is where commercial fertilizers come in to advantage.....

THE dust-bath is the surest, safest, cheapest and most complete treatment for hen-lice, says O. S. Bliss in the N. Y. Tribune.....

THE vital statistics in the census report present some suggestive facts. The total number of deaths reported for 1880 were 756,893 from 118 diseases. Of these 91,170 were due to consumption, 104,824 to other diseases of the respiratory system, chiefly pneumonia, 32,824 to digestive troubles, 81,905 to diseases of the nervous system and 38,143 to diphtheria. Nearly 250,000 deaths were caused by diseases more or less acquired by exposure and neglect. The frightful prevalence of consumption is shown in the fact that in 33 out of 47 States and Territories, the greatest number of deaths was due to this dread disease.....

LICE are sapping the vitality of thousands of cattle at this season. Kill the vermin.....

IF you live in a hilly country, be sure the boys have a good place to coast. If you get blue and discouraged, borrow a sled and slide down a few times yourself. You will feel better for it.....

STILL we find farmers who claim that grain fed to cattle in Winter when they are in fair condition, is wasted. The Husbandman rightly says that farmers who keep life in their cattle with hay and sell grain for cash, disgrace their calling.....

THE calves will be making their appearance soon. Have things ready to give them a welcome. Get over the idea that calves are produced simply to be knocked on the head. You can make money by raising the little fellows on skim-milk, oats and meal if you only think so.....

A TURKEY hatched in April should be fine eating by Christmas. Remember this in your calculations for the year.....

IT is well to remember that the turkey must have wide range. Confinement is death to him. He will show his gratitude, if permitted to forage, by making most of his living.....

IT is evident that the demand for thoroughbred Merino rams is looking up. For the past year or so they have been almost a drug.....

AN egg is the natural product of warm, sunny weather. It is produced in Winter only when the hen is induced to believe that Summer is coming. The ordinary hen accepts as evidence warmth, ability to exercise, variety of food and cleanliness.....

How do you provide green food for the hens? Did you ever try feeding them hay cut in small pieces? Try it once.....

PEOPLE used to say that the amount of an animal's food should be estimated by its live weight. It was said that three per cent. of the live weight daily would support life. This is not a reliable doctrine. Health, activity,

(*Continued on page 138.*)

Miscellaneous Advertising.

Young DUTCHMAN, age 26, speaking French and German, well conducted, with good recommendations and 10 years' experience, seeks place as SHEPHERD to Breeder or Fatteuer of Sheep. Replies, B. C., 3155, J. F. JONES, 31 bis Faubourg Montmartre, Paris, France.

WANTED LADIES to work for us at their own homes. $7 to $10 per week can be quietly made. No photo. painting; no canvassing. For full particulars, please address at once, **Crescent Art Co.**, 19 Central St., Boston, Mass. Box 5170.

The Best SIDE HILL PLOW in the Market
WARRANTED TO DO AS GOOD WORK AS ANY PLOW IN THE MARKET.
We manufacture a full line of Tools, including the Mudgett Hay Tedder. Circulars and Price Lists FREE.
B. & J. W. BELCHER,
P. O. Box 75, Chicopee Falls, Mass.

THE ASPINWALL POTATO PLANTER.

It Marks! It Furrows! It Drops! It Covers! It Distributes Fertilizer!
CORN PLANTER ATTACHMENT FOR 1886.
Send for Circular to
ASPINWALL M'F'G CO.,
THREE RIVERS, MICH.

DR. HUMPHREYS' Book on all Diseases
RICHLY BOUND IN
CLOTH and GOLD
MAILED FREE.
Humphreys' Homeopathic Medicine Co.,
109 FULTON ST., N. Y.
HUMPHREYS' HOMEOPATHIC SPECIFICS
Sold by Druggists, or sent postpaid on receipt of price.

GOLD MEDAL, PARIS, 1878.
BAKER'S
Breakfast Cocoa.
Warranted *absolutely pure Cocoa*, from which the excess of Oil has been removed. It has *three times the strength* of Cocoa mixed with Starch, Arrowroot or Sugar, and is therefore far more economical, *costing less than one cent a cup*. It is delicious, nourishing, strengthening, easily digested, and admirably adapted for invalids as well as for persons in health.
Sold by Grocers everywhere.
W. BAKER & CO., Dorchester, Mass.

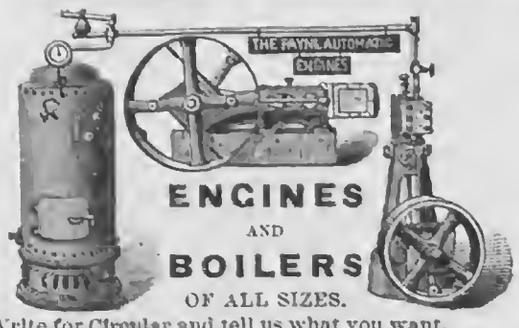
BEST TRUSS EVER USED!!

Improved Elastic Truss. Worn night and day. Positively cures Rupture. Sent by mail everywhere. Write for full descriptive circulars to the
NEW YORK ELASTIC TRUSS CO.,
744 Broadway, N. Y.

TELEPHONES SOLD.

Don't pay exorbitant rental fees to the Bell Telephone Monopoly to use their Telephones on lines less than two miles in length. A few months' rental buys a first-class Telephone that is no infringement, and works splendid on lines for private use on any kind of wire, and works good in stormy weather. It makes homes pleasant; annihilates time; prevents burglaries; saves many steps, and is just what every business man and farmer should have to connect stores, houses, depots, factories, colleges, etc., etc. The only practicable and reliable Telephone that is sold outright and warranted to work.
Chance for agents. No previous experience required. Circulars free. WM. L. NORTON, Buffalo, N. Y.

W, R & CO'S IMPROVED BUTTER COLOR
IF YOU REALLY WISH to use the very best Butter Color ever made; one that never turns rancid, always gives a bright natural color, and will not color the buttermilk, ask for Wells, Richardson & Co's., and take no other. Sold everywhere.
MORE OF IT USED than of all other makes combined. Send for our valuable circulars.
WELLS, RICHARDSON & CO., Burlington, Vt.



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or address our New York Office.
Eastern Agents, HILL, CLARKE & Co., Boston, Mass.
Our Patented Vertical Boiler will not prime. No danger of burning flues.

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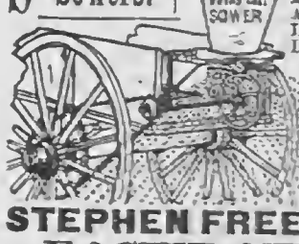
WARREN MILK BOTTLES
Patented March 23d, 1880.
Adapted for the Delivery of Milk in all Cities and Towns.
A Long Needed Want at last Supplied.
DESCRIPTIVE CIRCULARS ON APPLICATION.
A. V. WHITEMAN, R. N.
72 Murray St., NEW YORK.

TILE and BRICK MACHINERY.
STONE-SEPARATING CLAY-CRUSHERS
Illustrated Catalogue free.
H. BREWER & CO.,
No. 154 Mill St.,
TECUMSEH, MICH.

$250 WILL BUY

THE BEST
SAW MILL
Yet offered for the money.
SEND FOR CIRCULAR.
RICHMOND MACHINE WORKS,
RICHMOND, INDIANA.

Strowbridge Broadcast Sowers.



SOWS ALL GRAINS, Grass Seeds, Plaster, Salt, Ashes, Fertilizers, BETTER and FASTER than in any other way. SAVES SEED by sowing PERFECTLY EVEN. Readily attached to any wagon or cart. LASTS A LIFETIME. Sows 30 ACRES A DAY. Crop ONE-FOURTH LARGER THAN WHEN DRILLED! The only practical Broadcaster made. Not affected by wind. Fully warranted. Perfectly simple. Send at once for FREE illustrated Catalogue "S." (Mention this Paper). Address
STEPHEN FREEMAN & SONS
RACINE, WISCONSIN.

THE DANA
CENTRIFUGAL-GOVERNOR
WINDMILL
Is the best working and most powerful Wind-Engine in the world, because it is the only one which unites the most perfect form of wind-wheel with the most perfect method of regulation. Geared Mills a specialty.
For Descriptive Circulars apply to
THE DANA WINDMILL CO.,
FAIRHAVEN, MASS., U. S. A.

The Edward Harrison MILL CO.,
Manufacturers of HARRISON'S STANDARD GRINDING and FLOURING MILLS of all sizes and varieties for Steam, Water, Wind, Horse & Hand Power. Possessing great capacity and durability. Every Mill warranted to do just what we claim for it. Write and enclose a 3ct. stamp for our new 80 page illustrated catalogue and mention this paper. The Edw. Harrison Mill Co., New Haven, Ct.

SMALL'S CALF FEEDER

This NEW article is appreciated and approved by all progressive Farmers and Stock Raisers. The calf sucks its food slowly, in a *perfectly natural* way, thriving as well as when fed on its own mother. Circulars free. SMALL & MATTHEWS, 24 South Market Street, BOSTON, MASS.

GET THE BEST FARM GRIST MILL

With *Cast-Steel Grinding parts, Steel Cob Crusher, and Sieve for Meal.* They take LESS POWER, do More Work, and are *more durable than any other mill. Send for Descriptive Catalogue.* Also man'frs of the Union Horse Power, with Level Tread. *Threshers and Cleaners, Feed Cutters, Circular Saws, etc.*
W. L. BOYER & BRO., Philadelphia, Pa.

EVAPORATING FRUIT
Full treatise on improved methods, yields, profits, prices and general statistics, FREE.

AMERICAN MAN'F'G CO.
Box P, WAYNESBORO, PA.

Heebner's Patent Level-Tread Horse-Powers.
WITH PATENT SPEED REGULATOR.

Heebners' Improved Threshing Machine. *Fully warranted.* Catalogues with valuable information Free. Sole owners of *Level-tread* patents. All others infringements. Heebner & Sons, Lansdale, Pa.

Grind your own Bone, Meal, Oyster Shells, GRAHAM Flour and Corn in the $5 HANDMILL (F. Wilson's Patent). 100 per cent. more made in keeping poultry. Also POWER MILLS and FARM FEED MILLS. Circulars and Testimonials sent on application. WILSON BROS., Easton, Pa.

80% PURE $3 PER TON
CAYUGA LAND PLASTER.
Contains Phosphate of Lime. Gives Plants an early start, improves quality, increases yield. Low freights to all points. Farmers' Memorandum Book sent FREE. Correspondence solicited.
CAYUGA PLASTER CO. Union Springs, N. Y.

(*Continued from page* 137.)

nervous force and occupation have much to do with the feeding. There are plenty of boys of 75 pounds who eat as much as men of 140. Why are not animals much the same? The only safe way to feed stock is to watch each one and see what its needs are.....

An English farmer has found that hop vines, preserved in the silo, make a good cattle food. He proposes to grow hops wild for stock.....

Be careful about drying off the cows. The udder is not a meal bag or a milk can. Do not let it become inflamed. Milk often enough to keep the udder limp and cool. Better milk up to the time of calving than to have the udder hard and inflamed.....

Everywhere.

TRANSCONTINENTAL LETTERS.—XLIX.

MARY WAGER-FISHER.

The finest farm in the White River Valley; a profitable meadow; farm hands' home; hiring them; domestic co-operation; potato digging; Indian and Chinese labor; a fratricide; twins among the Indians; a stoneless region.

At the head of steamboat navigation on the White River, on the right-hand side, lies the finest farm in the valley—a domain of 1,100 acres, owned by Mr. and Mrs. T. M. A., both natives of Cortland County, N. Y. They came to the valley 26 years ago, soon after their marriage, and have lived on this farm since that time. As I spent several days at their hospitable dwelling, I am able to give some details of the life and work on the farm, that I found very interesting.

Three hundred and twenty acres were taken up as a donation claim (a privilege no longer in operation) and the rest has been acquired by purchase. Five hundred acres are cleared and 280 are in meadow. It has cost from $40 per acre up, to clear the land, and the farms in this valley are held at $100 per acre. The meadows are cut once and yield three tons to the acre when in first-class condition. One meadow which was seeded 18 years ago and has been cut annually since then, yielded the present season at the rate of 2½ tons to the acre. When the grass shows thin in places, a dressing of barnyard manure is occasionally applied. About 900 tons of hay were harvested this year, and the price received for hay during all these years has ranged from $7 to $17 per ton—$7 being a "bed rock" price. Four mowers are on the farm for the hay harvest, and from 25 to 35 men are required to do the work in the haying season. They are boarded at the farm, but bring their own blankets and sleep in the hay. There are four large barns, but some of the hay is stacked outside, but under roof. One of Mr. A's sons—still a pupil in the University at Seattle—invented, last Summer, an arrangement to be used in connection with the hay fork, which dispenses with the labor of one man. The young fellow is full of inventive genius, and has a large, airy work-room in the "wood-house" loft, in which to work out his ideas. A place in which to store fire-wood is an important adjunct to these valley farm-houses, and the cords and cords of cut wood that I saw piled up in different places, bore testimony to the thrift of the farmers. The wood-house is a separate building, and painted like the dwelling. Another out-building in corresponding style is the lodging-house of the farm hands. It has a sitting-room in which is a fire-place, where the men can dry their clothing if wet, and enjoy the comfort of an open fire. They make their own beds, and care for their own rooms, and they were reported as keeping them in good order. Occasionally a Klootchman (Indian woman) is hired to wipe up the floors and clean the windows. During the Winter, four men are employed—one man for each barn—as cattle are stalled for fattening purposes. The barns have eaves, there are large tanks to hold rain water for all requirements.

There is an Indian reservation a few miles from the farm, and Indians are employed, more or less, in the farm work and receive in haying the same wages as do white men, but are fed at a separate table. The wages paid during the last harvest ranged from $1 to $1.35 a day. I asked Mrs. A. how they managed to secure so large an extra force for the haying season. She said that as the time approached, men began to come asking for work, and they were engaged until a sufficient number were secured. If Mr. A. was not about she hired them, and at night they compared notes to see how many each had engaged. She said that she had had so much experience in hiring men, that she could now tell from the appearance of an applicant, whether he was the kind of man they wanted or not. And I may as well put it in here, as later on, that probably one of the important factors in the success achieved on this farm has been, and still is, due to the efficient and intelligent co-operation of the two heads of the house. Mrs. A. is thoroughly conversant with all the details, keeps accounts and the bookkeeping is not small, and is as much interested in the making of a road, the building of a bridge, or the harvesting of a crop, as is her husband, and is thoroughly capable, in his absence, of directing the men in their work.

Potatoes were being dug when I was there, the work being done by Indians—men, women and children all in the field. The bargain was made, of course, with one Indian who agreed to do the work at the rate of $6 per acre, and a sack of flour. They also do most of the weeding, but in clearing new land they are less desirable that the Chinese. The Chinese work in large bands, attend to the work with strict faithfulness and so accomplish it quickly. Like the Indians, they camp and feed themselves, which is a great convenience to the employer. There was quite a camp of Indians on the farm on the river bank, and on the morning after our arrival word came that a murder had been committed in the camp on the previous evening—that one "Jim," a tall Indian, had been stabbed in the neck by his brother while drunk. As a young woman was dying in the camp from consumption, and as Mrs. A. wished to take to her something appetizing, we walked over to the scene of the tragedy. The laddie had never seen a dead human being, and I hesitated to have him accompany us, as it seemed shocking that his first experience should be that of a murdered man—and I myself had never seen one. He was very desirous of going, however, and I thought, perhaps, the body might be quite out of sight. But as we reached the camp, we came at once upon the dead man who had been very decently cared for by his friends, and all traces of the crime had been removed, save the inch-long cut in the neck—one of the men lifted the covering from the head sufficient for us to see the wound. The body was wrapped in a bed quilt, and lay on the ground in the open air. At its feet sat the poor mother—suffering the double agony of one son murdered by another—and the latter was still asleep in a tent,—not yet awakened from his drunken stupor and all unconscious of his awful deed. The old woman sat bolt-upright, her eyes almost sightless from weeping, the tears streaming down her face, and she kept up a continuous monotone of wailing most pitiful to hear. I was never more touched at a spectacle of grief, and the laddie who had quietly surveyed the dead Indian with no apparent emotion, was moved to tears by the heart-broken mother and sought to comfort her by giving her an apple which he had in his pocket. In the early evening of that day, I saw from the tower of the dwelling-house, the body borne away in a box, on the top of which sat the mother, whose wails rung far out on the air. The murderer meantime had awakened, and stolen away on horseback, but was, later on, apprehended. An amusing incident was connected with the affair. The Indian who hired a team and wagon to remove the body to the reservation, or place of burial, returned in the night, and in passing a farm house a dog ran out and frightened the horses, and the wagon wheels ran over a stump. But neither wagon nor horses were injured, but when the man made out his bill for expenses, he made a charge of $1.50 for having been so frightened! Mrs. A. told me that the Indians never rear twins. When there are two children born, the weaker one, regardless of sex, is killed. The Indians here are religiously looked after by the Roman Catholics, which religion "has had more than the ordinary success in converting them." The Indians dig potatoes with a stick and their hands—an easy thing to do, as the soil is loose and fine like the best garden loam, and entirely free from stones. I asked Mr. A. what led him to leave New York State to farm on this coast, and he said, "I didn't like the cold Winters there and I was tired of picking stones." His wife said that their first cook-stove here burnt on the bottom in baking, and she requested her husband to bring her a flat stone from the fields when he chanced upon one—as she had heard of housewives making use of one under their baking tins. But in 26 years he had not come across the stone. Potatoes yield 200 bushels to the acre in a good season—the present season being very dry, there is only a half crop. The tubers until sacked are put into huge bins out-of-doors, under a roof built for the purpose. California absorbs a good many potatoes, and owing to the better price this year the half crop will be more profitable by far than the full crop of last year with a drugged market. One farmer told me that last year he had 6,000 bushels and the entire crop yielded him a profit of but $401 Indians plant the potatoes and a Vermont plow is used in cultivating them.

RURAL SPECIAL REPORTS.

Indiana.

Mexico, Miami Co.—Last Winter killed all the peach, and a part of the apple trees, and badly injured those not killed outright. Owing to the increasing severity of our Winters there is little hope in setting out new orchards. As our forests disappear, the cold increases. Artificial protection must be given by those determined to raise fruits, instead of the natural protection offered by timber belts. Not until farmers set out shelter trees, can they expect to raise fruits successfully. N. B. G.

Monrovia, Morgan Co., Feb. 12.—Of the "Flageolet Beans" I got about five pints, quite an acquisition for this locality. The "Prince of Wales Peas" produced a full crop. Of the Stratagem Pea those that grew produced fine peas. Corn no better than old sorts. I consider what I raised from the seeds received in 1885 worth more than the subscription price of the Rural, though it is the best agricultural paper I know. The practice of the Rural's system of potato culture has been worth more to me than the cost of the Rural for one year. J. H.

Kansas.

Ayres City, Lyon Co.—The Cross-bred Corn grew of all sizes; some early, some late; but all too small for Kansas. Peas and tomatoes fine. Diehl-Mediterranean Wheat and Thousand-fold Rye all winter-killed. Garden Treasures the finest flowers I ever saw. D. C.

Salina, Saline Co., Feb. 5.—The weather was so very cold that several hundred cattle, hogs and sheep perished in this county last month. The Stratagem and Prince of Wales Peas and also the tomatoes did well. The 50 crosses of corn were all a failure. The beans were killed by a little black bug that perforated the leaves. Johnson Grass too coarse and woody. Garden Treasures a failure; but we cannot do without the Rural. W. B.

Minnesota.

Howard Lake, Wright Co.—We are much pleased with the Flageolet Beans and the Prince of Wales and Stratagem Peas. Most of the former ripened by the middle of August and were very fine-flavored—quite as good as the best Limas. Garden Treasures very pretty. M. E. B.

Nebraska.

Nebraska City, Otoe Co.—Although a fourth of the Diehl-Mediterranean Wheat froze out, I got over half a peck. I had also over a peck of the Thousand-fold Rye. Both were sown again in the Fall and were looking well when Winter set in. N. R.

New York.

West Oneonto, Otsego Co.—The Prince of Wales Peas did splendidly; Stratagem not so good; Green Flageolet fine. Tomatoes better than any we have had. The corn stalks grew from six to 12 feet high, and set as many as six ears apiece—too late, however, for this section. Garden Treasures very fine. E. G.

Pennsylvania.

Indiana, Indiana Co.—The Rural New-Yorker Pea and Flageolet Bean for quality and productiveness could not be excelled. Prince of Wales Pea productive, but of inferior quality. King Humbert Tomato not valuable, but a good yielder. Rural Cross-bred Corn did well. I have about a bushel of very fine seed. W. W. L.

West Virginia.

Newark, Wirt Co.—The Rural seeds did well. I got about a quart of Prince of Wales Peas. The flowers sent did not germinate well. The tomatoes bore abundantly, but the fruit was small. E. A. L.

Wisconsin.

Ketcham, Fond du Lac Co.—Owing to cold, wet weather corn and potatoes did not do well. With the latter I followed the Rural system of flat culture, but mine rotted badly. Oats and wheat fine crops. Apples scarce. Rural corn too late. The oats rusted badly. Garden Treasures did well. Dairy business not a success here last year, as prices ruled too low. Bogus dairy goods hurt dairymen badly. Prices now: wheat, 80c.; corn, 40c.; oats, 30c.; barley, 40c.; potatoes, 60c.; butter, 18c.; eggs, 17c.; dressed pork, $4.25 per 100 pounds; cattle on foot, 3c. H. D. P.

Outagamie Co., Feb. 12.—Harvest scarcely an average, yet most farmers have enough and to spare of most products. Rot has made potatoes scarce. Apples plentiful, but they come from New York and Michigan. Our trees were mostly killed last Winter and Spring. We have some Duchess, Wealthy, and a few other hardy summer and fall kinds, but of good long-keeping, hardy, winter apples we have none. Prices of produce are: 80 cents per bushel for wheat; 40 cents for corn; 30 cents for oats; 60 to 75 cents for potatoes; $4.50 to $5.00 per 100 pounds for dressed pork and beef. Hay from $10 to $12 per ton. Butter, 20 cents; cheese, 14 cents; eggs, 20 cents per dozen; wood, $3 to $5 per cord. E. N.

THE FARMER'S CLUB

ANSWERS TO CORRESPONDENTS.

[Every query must be accompanied by the name and address of the writer to insure attention. Before asking a question, please see if it is not answered in our advertising columns. Ask only a few questions at one time.]

FERTILIZER FOR POTATOES, ETC.

H. H. B., Bloomfield, Mo.—1. Will Timothy and Red-Top do well if sowed in Spring? 2. Will they grow on sandy land? 3. What fertilizer is best to produce a good crop of Irish potatoes on sandy land in this climate?

Ans.—1. They should be sowed very early in Spring, and then they will do well except in case of severe June droughts. They are both better if sown in Autumn, say the middle or last of September, or even later. 2. Very well, if not too light and dry, and even then Timothy does well if the land is fairly rich. 3. A complete fertilizer, but one containing much potash. On many soils, a liberal application of ashes will double the crop. If 30 or 40 bushels of hard-wood ashes are used with a good brand of ammoniated phosphate, a good crop should be the result. On the light lands of New Jersey, growers often use as much as 1,000 to 1,500 pounds per acre of a fertilizer containing from four to five per cent. of ammonia, from eight to ten per cent. of phosphoric acid, and about seven per cent. of potash. Dr Combs reported a yield of nearly 400 bushels per acre with such a fertilizer. We think a mulch would also pay on such soils.

ROOF FOR BARN.

D. J. B., Harbourton, N. J.—I have a barn 40x50 with 20-feet posts, covered in "48" with pine shingles. They are now so decayed that they let the water through. I wish to cover the old roof and I fear slate would be too heavy and tin would need painting often, and the barn being on a nine foot basement is pretty high; is there anything like copper that would not cost more than slate or tin ($6 per square), that would not require painting and that rats could not eat through when the barn is full of grain?

Ans.—If the rafters are sound we do not believe you can get a better roof than one of slate, or a comparatively cheaper one than slate at $6. We think that even a copper roof would need painting occasionally. But if you use Rossie paint and a good raw oil, it would not need paint oftener than once in from six to ten years. A slate roof well put on will last for a life-time without paint or repairs.

AN AILING COW.

W. E. E. (no address).—A swelling as large as a man's arm, on the lower jaw of a cow, extended from the angle of the jaw back to the gullet. The back part of the tongue was swollen so as to fill the mouth, so that she couldn't take feed or swallow anything. She was fat when attacked; three weeks after her tongue swelled she had a calf, and is now so poor she can hardly walk; what is the matter?

Ans.—Knowing nothing of the nature of the swelling, we are unable to give a definite answer. From the description it may be due to one of several causes. No treatment can be recommended. Although the case is now most likely a chronic one, if the cow is valuable it would be well to call in a competent veterinary surgeon.

Miscellaneous.

W. M., Mt. Gilead, Ohio.—1. Is Cole's New Agriculture of any value, and will it increase crops four-fold as he claims? 2. Is Eggine made by W. W. Clough, good to feed poultry as a steady food? 3. Can eggs of Phœnix fowls be had at reasonable prices for spring hatching?

Ans.—1. There is no doubt much that is good in the trenching of land and the filling of the trenches with stones or other material offering storage of water; but it is very expensive and we doubt whether it is practicable, except perchance near large cities and where land is very dear. We doubt whether it would increase the crops two-fold. We understand the use of manure has had fully as much to do in producing the yields Mr. C. claims, as has the expensive preparation of the land. 2. We have never used or seen it. Good food containing a variety of grains and vegetables is the best steady diet, and this with good care should keep the hens healthy and profitable. 3. We don't think the Phœnix fowls have any value beyond mere ornament. We doubt whether eggs are for sale; as few specimens of the breed have as yet been imported.

F. O. C., Washington, Kans.—A late frost last May killed every bud on my grape-vines

and there being no dormant buds, canes were thrown up from the roots and bore no fruit; 1, how can I prevent the killing of the buds by late frosts? 2. Can pruning be delayed till the leaves are half-grown and the fruit set, or would it be better to mulch the ground to retard the flow of sap in Spring? 3. Would it be advisable to plant Concord vines to be used as stocks for grafting better varieties? 4. Is there any grape that ripens with the Concord or later, that would be as profitable here?

ANS.—1. Only by retarding growth by mulch and shade as with evergreen boughs, etc. 2. No. Our own experience is that it is not well to allow mulch to remain during the season. It induces a surface growth of roots, harbors fungi, etc. 3. We should doubt it. 4. We would mention Eaton and Niagara.

J. L. McA., Medicine, Neb.—1. In latitude 40 degrees, 51 seconds, north; longitude 100 degrees, 34 seconds, west; at an elevation of about 2,700 feet, what evergreens would serve as a wind-break? 2. Should the seed of evergreens be planted where the trees are to grow? When should they be planted? 3. Can Osage Orange seed be drilled in, in the Fall, where the trees are to grow? 4. Where can Paradise Apples be obtained?

ANS.—1. The Austrian, Scotch or White Pine. 2. No. It is better to start them in frames. They may be planted in Fall or Spring. 3. Yes, but it would be better to raise them in plots and transplant. 4. Try Storrs, Harrison & Co., Painesville, Ohio, or Ellwanger & Barry, Rochester, N. Y.

Dr. L. E. H., Harrington, Kans.—1. Is sheep manure a good fertilizer for potatoes? 2. If so, how much should be applied per acre, or how thick should it be spread? 3. Is the Golden Tankard Mangel a good food for hogs, and what is the most profitable way of feeding it?

ANS.—1. Yes, a capital manure, especially if the sheep have been grained. 2. That depends upon how poor or light the land is—from 10 to 30 loads. There is but little danger of getting it too thick. 3. They are splendid to feed in connection with corn or other dry food, especially where the animals are kept in warm quarters. We have always fed them sliced or cut with a root cutter.

L. E. S., Richmond, Va.—1. Would it be injurious to grape-vines to paint the cedar posts that support them with coal tar? 2. Will paint made of linseed oil and Venetian red be injurious to vines? 3. Can I club the N. Y. World with the RURAL?

ANS.—1. Not in the least, if the paint does not come in contact with the vine? 2. It is not good to have paint of any kind applied to any living plant. The bark has an office to perform as much as the leaves, and paint of any kind stops up the pores and is injurious. It will do no harm, however, if on posts or wires. 3. Yes for $2.65 for both papers, and the RURAL's Free Seed Distribution.

"B" (no address).—1. Are corn-cobs of sufficient value as feed to pay for grinding, except as extra bulk in a very rich ration? 2. How long should corn-stalks be cut for feeding? 3. Would it pay to steam cut stalks?

ANS.—1. No. We much prefer to extend the meal with wheat bran. 2. Three or four inches—just short enough so they can be handled well with forks when in the manure. 3. No; every man we ever knew who tried steaming food, has abandoned the practice. It is a good plan to raise a few roots to feed along with the dry food.

Williamsboro, N. C.—A seedling of the Niagara Grape grew 12 feet the past season, having been cut back to two buds; should it be cut back as severely? This is its third year of growth.

ANS.—It depends upon how many branches there are. If the main stem divides into two branches, then cut each back to two or three buds. If there is but one stem, we should cut that back to four or six buds, depending upon its size (thickness).

J. H., Dayton, Ohio.—What will induce a three-year-old hybrid perpetual rose, which did not bloom last year, to do so this? It grew to a large bush; but was not cut back last Spring?

ANS.—If our friend will cut it back severely and root-prune the bush by sinking a spade around the stems within a foot of them, it will bloom next season. Its vigor needs a check.

C., Sandusky, Ohio.—My finger nails are very pliable and brittle, what will harden them? What will prevent the skin from peeling off the hands whenever I wash them?

ANS.—The business one follows may have a great effect upon the nails and hands. Carpenters or wood-workers, hatters, soap-makers or those handling acids or alkalies are perhaps most liable to such troubles as those mentioned. They may, however, depend upon some constitutional disturbance or condition of health depending on hereditary or acquired taint. Consult a physician (not a quack) and be guided by him.

W. B. C., Shippersburg, Pa.—1. Is the Niagara Grape superior to the Lady? 2. From whom can I procure the Colorado Blue Spruce three to four feet high?

ANS.—1. It is about the same in quality, but ripens later—with the Concord. 2. Storrs Harrison & Co., Painesville, O., can give you as large trees as any nurseryman we know of. This spruce is a magnificent tree and we commend it to every reader of the R. N.-Y.

A. P. L., Sheboygan, Mich.—1. In the trench-mulch system of planting potatoes is the ground spaded between the trenches? 2. What variety of barley is best for a black loam?

ANS.—1. No; the land is merely plowed between the trenches. 2. The Manshury is the best we have ever tried. It can be got from any prominent seedsman, we suppose.

A. B., Centralia, Kans.—My grape-vines bore a heavy crop last season; but the wood has not ripened enough to make good canes for next season's fruiting; how should the vines be treated?

ANS.—Cut them back severely, and let them form new canes. It is a misfortune to let any vine bear too much fruit, and with some it is a fatal error—the Iona, for instance, never recovers after bearing an over-crop.

W. N. F., New Alexandria, Pa.—Would it be advisable to raise kale for feeding milch cows during the Winter? 2. Is rye better than corn for egg production?

ANS.—1. We should prefer cabbages. 2. It is; but we much prefer a mixed diet, such as rye at one time, corn at another, and wheat screenings at yet another. To lay well, hens should not be made too fat.

E. W. B. (no address).—What is the best grass or combination of grasses for a permanent lawn, and how much seed for a quarter of an acre?

ANS.—We would choose either Blue Grass or Red-top, sowing at the rate of three bushels to the acre. You may add Agrostis canina and some White Clover.

G. D., Carysville, Ohio.—As our forests are disappearing, and wood for fuel is getting scarcer in most parts of the country, it is important our dwellings should be warmed for the least outlay of money and labor. What experience have RURAL readers had with wood-burning furnaces? Are they more economical and convenient than stoves, and above all, are they healthful? What style is best, and what is the cost of heaters, pipes, etc.? How often must they be replenished, and what length of wood is used?

DISCUSSION.

A. A. M.—In a late RURAL, Inquirer asks why the butter did not come. I think it was because the person did not churn the cream before it had turned sour; at least my experience tells me this, and I have made butter for 27 years. When I first began I met with similar troubles; but of late I never have had any. I seldom have to churn more than 30 or 40 minutes. I always skim when the cream is sweet, set in a warm room, and churn as soon as it sours; for if it stands very long it is difficult to make the butter come and the quantity will be less.

S. E., ALEXANDERVILLE, Ohio.—In a late Farmers' Club the statement was made that it doesn't pay to cut hay for stock. From personal experience I know that it will pay to cut hay and straw to be mixed with the grain ration—corn meal, mill feed, etc. I have found that hogs will starve when following cattle fed in this way, as so little grain will pass out undigested. On the other hand, I have found that hogs following cattle will thrive as well when the latter are fed corn meal unmixed with cut rough food as when whole corn is fed. There is certainly no economy in grinding the grain for cattle, if it is fed unmixed with cut hay or other rough food.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING SATURDAY, February 20, 1886.

W. P.—C. E. P., thanks.—A. W.—N. P. G.—R. F. B.—P. G. B.—F. S. N.—A. B. A.—F. J.—A. C. K.—J. F. K.—L. A. P.—G. B.—J. G.—W. H.—T. D. C.—F. L. K.—E. F.—D. P. D.—J. A. C.—S. S. B.—J. C. B.—J. O. W.—J. W. T.—S. W. B.—W. H. B.—A. B.—E. E. F.—D. C.—D. S.—S. S. D. O. B.—W. B. T.—R. V.—E. F. B.—E. A.—A. S. B.—E. W. H.—A. F. W.—D. H.—E. W. J.—W. P. A.—T. J. D. C.—T. R. W.—J. I. C.—G. W. D.—D. C. S.—F. R.—H. G. W.—S. W. H.—E. H. S.—D. P. D.—H. W. C.—J. P. S.—J. F. G.—J. W. P.—J. R.—E. S. S.—S. E. H.—T. W.—W. H. G.—L. J. T.—W. D. S.—W. H.—O. H. A., seed received.—D. S.—J. C. B.—P. S.—L. E. B.—C. E. M.—R. M. W. P., declined.—J. P. V.—J. W. B.—C. G.—T. J. W.—J. L. B.—J. D. T.—T. D. C.—D. H. B.—P. D.—H. M. S.—J. P. B.—A. F. L.—J. S. McF.—S. J.—J. A. L.—H. S. C.—L. E. M.—A. B.—L. O. H.—T. H. Y., thanks.—A. M.—H. T. F. H. R.—J. H. L.—H. B. F.—W. H. L.—R. P. McA.—G. E.—W. W.—C. L.—L. J. T.—G. P. W., thanks.—W. J.—W. J. B.—J. T., thanks.—W. D. S.—P.—J. B.—J. M. S.—W. G.—F. W. W.—H. H. C.—C. E. P., many thanks.—J. F. B., thanks.—J. E. G.—P. H. S.—M. A. G.—W. W. T.—J. T.—W. B. N.—I. R. M.—H.—E. A. S.—S. S.

Miscellaneous Advertising.

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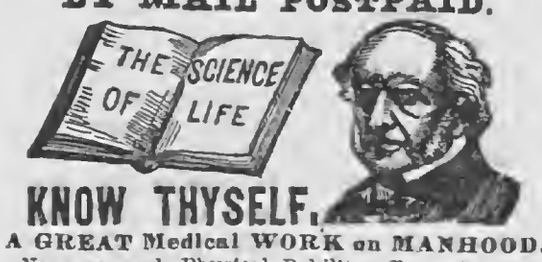

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Address the Peabody Medical Institute, or Dr. W. H. Parker, No. 4 Bulfinch Street, Boston, Mass., who may be consulted on all diseases requiring skill and experience. Chronic and obstinate cases that have baffled the skill of other physicians a specialty. Such treated successfully without an instance of failure. **HEAL** all **THYSELF**

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WORK FOR ALL. $30 a week and expenses paid. Outfit worth $5, and particulars free. P. O. VICKERY, Augusta, Maine.

CARDS! 60 Fancy Pictures and 25 Elegant Cards in Gilt Edge, Silk Fringe, Hidden Name, &c. 1 Songster, 1 $50 Prize Puzzle, and 8 Parlor Games, all for 10 cts. Game of Authors, 10c. IVY CARD CO., Clintonville, Ct.

300 FOR **10c.** GAMES, Puzzles, Parlor Magic, Conundrums, Songs, Album Quotations, Embroidery Designs, and pack of Name Cards, Gilt Edge, Silk Fringe Hidden Name. TODD CARD CO., Clintonville, Ct.

PATENTS

Interferences conducted. Assignments prepared. Copy of any Patent issued since 1866 sent for 50 cts. New book—"*Information for Inventors*"—FREE. J. W. FLENNER & Co., Patent Attorneys, P. O. Drawer 458, Washington, D. C.

New Reversible Harrow.

A Perfect Smoothing and Scotch Harrow Combined.

Thoroughly Tested and Warranted.

Send for Illustrated Pamphlet to THOMAS HARROW CO., Geneva, N. Y.

"Pulverise the land whatever you do—Go on the principle of the woman making gooseberry pie, who sweetened it all she dared and then shut her eyes and put in a handful more. Work your land until it is fine enough and then go over it again. If you do not think this will pay, try it on a strip through the field, and then contrast it with the balance."

See advertisement of the "ACME" Pulverizing Harrow, Clod Crusher and Leveler on page 135.

Real Estate.

FARMS FOR SALE.

In the Fruit-growing Section of Western New York.

As Administrator of an estate which must be sold, I offer for sale TWO FARMS, one of 100 Acres, and one of 50 Acres adjoining, with APPLES, PEACHES, GRAPES, etc. To those wishing to buy good Farms on easy terms, I solicit correspondence. Address C. S. MURDOCK, MEDINA, Orleans Co., N. Y.

WANTED TO HIRE OR LEASE, A FARM,

Of not more than 100 Acres, in the East. New York State preferred. Must be convenient to a R. R. or steamboat. Address, with terms, to

John S. Hyde,

NURSERYMAN,

Box 1970, Aurora, Kane Co., Ill.

Milk or Butter Farm.

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FARMS FOR SALE IN MICHIGAN.

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WE SELL FARMS And all kinds Country Real Estate Everywhere. Catalogue FREE. Phillips & Wells, Tribune Building, N. Y.

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SEND RED STAMP for Late Edition of MAP & PAMPHLET OF THE DISSTON LAND COS., 305 WALNUT ST., PHILADELPHIA.

VIRGINIA LAND AGENCY.

Cheap Farms. Splendid Climate. Short Mild Winters Good Markets. Descriptive Land List Free. GRIFFIN & JERVIS, Petersburg, Va.

MARYLAND FARMS.—Book and Map free. by C. E. SHANAHAN, Attorney, Easton, Md.

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Either by way of Omaha, Pacific Junc., St. Joseph, Atchison or Kansas City.

It connects in Union Depots with through trains from NEW YORK, PHILADELPHIA, BOSTON and all Eastern points. It is the principal line to

SAN FRANCISCO, PORTLAND & CITY OF MEXICO

It traverses all of the six great States of ILLINOIS, IOWA, MISSOURI, NEBRASKA, KANSAS, COLORADO with branch lines to all their important cities and towns.

From CHICAGO, PEORIA or ST. LOUIS, it runs every day in the year from one to three elegantly equipped through trains over its own tracks between

Chicago and Denver,
Chicago and Omaha,
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Chicago and Atchison,
Chicago and Kansas City,
Chicago and Topeka,
Chicago and Cedar Rapids,
Chicago and Sioux City,
Peoria and Council Bluffs,
Peoria and Kansas City,
St. Louis and Omaha,
St. Louis and St. Paul,
Kansas City and Denver,
Kansas City and St. Paul,
Kansas City and Omaha,

For all points in Northwest, West and Southwest.

Its equipment is complete and first class in every particular, and at all important points Interlocking Switches and Signals are used, thus insuring comfort and safety.

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50 CARDS, Hidden Name, etc. 1 pretty Ring, outfit and present, 10c. [illegible] Ct.

ONE pack fun cards, 6 transfer pictures and sample book for 4c. Hill Card Co., Cadiz, Ohio.

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THE
RURAL NEW-YORKER.
A National Journal for Country and Suburban Homes.

Conducted by
E. S. CARMAN, Editor.
J. S. WOODWARD, Associate.

Address
THE RURAL NEW-YORKER,
No. 34 Park Row, New York.

SATURDAY, FEBRUARY 27, 1886.

If the number on your address label is 1883, your subscription expires with this number; if 1884, next week; 1885, in two weeks, etc.

SPECIAL.

All orders (applications) for the Rural's present Seed Distribution received *prior* to Feb. 10th, have been mailed. Those who have not received the seeds will please notify us by postal card.

EXCEPTION.

The seed packets to *Canada* will be mailed all at once in a few weeks.

The catalogues which we notice this week on pages 135 and 136, are of especial interest, and we take the liberty of inviting all to send for them.

We are sorry to see that J. A. Everitt, of Watsonville, Pa., quotes the Rural as having stated that the Green Mountain Potato has yielded 1,391½ bushels per acre, instead of at that rate per acre, as estimated from a few hills cultivated in rich soil.

If all we have heard regarding the Earhart Everbearing Raspberry be true, it is the most remarkable cap variety ever produced. We have just examined the canes of our own plants, and find them plump, green and sappy to the very tips.

For small lawns we prefer the White to the Norway Spruce. It is more compact and symmetrical; its foliage is lighter and brighter, and its branches, being less spreading and heavy, never give to the tree that gloomy appearance often seen in the Norway after it arrives at the age of from 12 to 15 years. Nurserymen charge about the same price for either, viz., from 25 to 75 cents, according to size.

Referring to our illustration of the Roenbeck White Grape, on the first page of this issue, it should be said that we speak of it only from having seen and eaten the fruit, the single specimen at the Rural Grounds having been planted not until last Fall. We have rarely eaten a grape that impressed us more favorably. The quality is much like that of the Duchess; the fruit being meaty and tender, is without pulp. The seeds are few and small. The skin is thin, but tough. From this description, it will be judged that it has foreign blood in its veins. Be this as it may, the vines are said to be both healthy and hardy.

Several subscribers ask us to explain how and when the prize cantaloupes, melons and peas are to be measured. The rules governing the measurement of the corn appear to be plain enough. The heaviest cantaloupe, melon and peas will win the prizes. The peas are to be weighed while green. The others can be weighed at any time, and the record at once forwarded to us. The greatest care should be taken to preserve the prize melons or cantaloupes from the frost. We think that this can be done in most latitudes, so that they can be shipped to this office after October 1.

Well, we have orders for a good many lots of the various plants which we offer—some for one kind and some for another, and some for more than one kind and some for all of them. But yet we know there are thousands of farmers' homes without a single small fruit plant to bear its welcome fruit to refresh and bless the family. Too many of these are among our readers, and so long as we offer them such favorable terms, we want every family to have more than one kind. This is a good work that the women and children can do. A kind word fitly spoken will induce some friend to subscribe for the Rural, and secure you a choice of the plants offered. Such a result would make three happy parties—the friend in receiving and reading the Rural would be made happy; we in getting one more subscriber will be made happy, and yourself and whole family will be made many times happy as you pick and eat the fruit. Is not this worth the effort?

NOTICES.

Send all potatoes, seeds or plants of any kind direct to River Edge, Bergen Co., New Jersey, and not to this office.

All letters of a strictly personal nature for Mr. Woodward should be mailed direct to him at Lockport, N. Y., until further notice. Mr. Woodward is giving increased attention to sheep husbandry.

A bill has been introduced into the New York Legislature by Senator Low, creating a State Department of Agriculture under charge of a Commissioner of Agriculture with a salary of $4,000 per annum for two years, to be elected on the State ticket with other State officers, in November. He is to have the powers and duties now assigned to the Dairy Commissioner, the Forestry Commissioners and the Director of the State Experiment Station, and the power to appoint fish and game protectors. The offices of the parties named are to be abolished. Among his chief duties are to be the enforcement of the anti-oleomargarine laws and the suppression of contagious pleuropneumonia among cattle. There will doubtless be some objections to this measure, especially in connection with the Experiment Station; but they cannot be on the score of economy either in money or labor. By the combination of the three Departments, the work of all could all be laid out under a single head so that there would be no clashing, no going over the same work twice, and each could be made to help the others. A single Department with one set of clerks should spend less money than three separate Departments, each with its own clerical force and its own line of contingent expenses. The main advantage, however, would be that the agricultural interests of the State would, most likely, be better cared for, if all were under the control of a single, honest, capable and efficient head.

Gabriel Dumont was Riel's chief lieutenant during the late half-breed rebellion in the Northwest. He has a ranche up in Montana, and reports are frequent that delegates from the Crees and other Canadian Indians have been visiting him for the purpose of planning another campaign to be started early in Spring. It is also announced that arms and ammunition are being supplied to the malcontents by traders on this side, and that the Sioux and some other tribes of Indians on this side of the line, are to reinforce their brethren on the other side. The United States should promptly take a hand in this matter. When savages combine against scattered and helpless frontier settlers, a great Government like ours should not stand on too much ceremony before acting. If Mexico permitted denizens within her borders to aid the murderous Apaches, what a howl of indignation would be justly raised in this country! What would be culpable in Mexico in the Southwest, cannot be blameless in the United States in the Northwest. An Indian campaign means ruthless slaughter of the helpless and weak, and should be prevented if possible.

FAULTY LIBEL LAW.

Journals which, like the Rural, expose the humbugs and frauds that prey upon the public are greatly hampered by the present law of libel. The rascals denounced often threaten and sometimes actually begin suits for damages. Of course, they do not intend that the cases shall ever come to trial; but by impudent "bluffing," they hope to be able to carry on their nefarious operations a little longer with a brazen face. The publishers, however, have to incur considerable expense and annoyance in engaging lawyers, collecting legal evidence and in other ways, however cautious the statements in their papers, and however strong the proofs of the rascality of the plaintiffs. If these never appear, to the publishers' useless trouble and outlay is added exasperation. If by some strange freak they do appear and are shamefully defeated, the publishers' satisfaction may be great, but does it compensate them for their outlay? For, of course, they must pay their own costs, as the plaintiffs are sure to be penniless, irresponsible "nobodies." The same trouble exists among our Canadian friends, in an aggravated form, and the Canadian Press Association is about to apply to the Legislature for an alteration of the law. In all cases some security for costs should be required in both countries from those who have no property which can be attached therefor. Reputable papers are very careful in making charges; they can have no personal motives in the exposures; why for honestly and disinterestedly serving the public should they be exposed to annoyance and expense by humbugs and swindlers?

MORRISON'S TARIFF BILL.

Representative Morrison, of Illinois, last Monday introduced his new tariff bill in the House. It will effect a reduction of about $20,000,000 in the revenues from duties on imported goods. All undressed wood and lumber are put on the free list; but this does not apply to imports from Canada and other countries which impose an export duty on these articles. Other agricultural additions to the free list are hemp, jute, jute butts, sisal and other fiber grasses, chicory, grease, tallow, beeswax, corn, oats, hay and potatoes. On various grades of sugar there is a reduction of 20 per cent. There is a slight reduction on starch and a large one on rice, duties of 2 and 2½ cents per pound, being cut down to 1 and 1¾ cents. There is no reduction on wools, except that one grade of carpet wools at 28-10 is substituted for two grades at present taxed 2½ and 5 cents. The present duties on the additions to the free list are: hemp, $25 per ton; jute, 20 per cent; jute butts, $5 per ton; sisal, $15 per ton; chicory, 2 cents per pound; corn and oats, 10 cents per bushel; hay, $2, per ton; potatoes, 15 cents per bushel; grease, 10 per cent; tallow, 1 cent per pound; beeswax, 20 per cent. The change will affect agricultural products almost exclusively, the change of duty on sugar alone making a difference of $10,000,000. Is this discrimination against agriculture fair?

The tobacco growers of Connecticut who expected an increase of duty on Sumatra wrappers, loudly express their bitter disappointment. The rice growers of South Carolina and Louisiana who have been pleading for more "protection," will think seriously of giving up rice growing, should this tariff be enacted. The sugar producers of Louisiana find it hard to make a slight profit under the existing tariff, what will they and the makers of beet sugar in California, of sorghum sugar in New Jersey, Illinois and Kansas, and of maple sugar in a large number of States, do when exposed to the keener competition produced by lower duties on imported sugar? The abolition of duties on potatoes and hay would be as grateful to our Canadian neighbors as it would be exasperating to the farmers of New England and of all the States bordering on the Dominion. The wool-growers of Ohio and the rest of the country, who have been expecting, or rather begging for a restoration of the tariff in force before 1876, must be sadly disappointed. The bill may pass the House; but it is very likely to be killed in the Senate.

THE JAPAN CHESTNUT—ATTENTION!

There is no other tree that we feel like talking about more at present than the Japan Chestnut. As a purely ornamental tree it is by no means to be despised. It is of dwarf stature, round-headed, and its lower branches will sweep the ground if permitted so to do. It is as hardy as the American Chestnut, and, being short-jointed, never develops long, far-reaching, leafless limbs. But as a nut-bearing tree we are disposed to urge it upon the consideration of our readers. Five years or more ago, we did this with an "if." The "if" is now removed, and we unqualifiedly commend it to our readers—for the lawn, for the field, or for the orchard, to use this word in a somewhat unusual sense. As we have said, seedlings bear at a very early age, though they vary of course. Some will bear in *three* years from seed, while the tardiest of those we have inquired about will bear within six years. The size of the fruit borne by seedlings varies as much as that of the American, but the smallest fruit of the Japan is, so far as we have seen, larger than the *largest* of the American, while the quality is nearly as good and in some cases fully as good. We have referred to the Japan Chestnuts recently sent to us by Luther Burbank, of Santa Rosa, Cal. There were five and they weighed 4¼ ounces. Grafted trees are now growing on Long Island (N. Y.), which bear nuts nearly as large, while the quality is excellent. The best way to do is to plant the nuts and graft the shoots to the best kinds known.

Inasmuch as the Japan Chestnut is twice as large as the largest native variety and of about the same quality, it is plain that it will meet with ready sale in the markets. The Long Island farmer above mentioned remarked to a friend, a few days ago, that if he had planted 100 acres of his farm to seedling Japan Chestnuts five years ago and worked upon them varieties he then knew of, the farm would now yield him an independent income. We have no doubt of it.

Some of our cranky readers may fancy that we have the Japan Chestnut "on the brain." P'raps so. It will not be the first time that, through our Experiment Grounds, we have been enabled to give our readers several years the start of those who wait for the news to reach them through the usual somniferous channels.

BREVITIES.

Try the *Japan* Chestnut—not the Spanish.

We are still receiving communications as to Meech's Prolific Quince. They are all of the same tenor, viz., that Mr. Meech has no right to give this quince his name.

Try the Earhart Everbearing Raspberry. To any present subscriber who sends us a new subscriber, we will mail three plants well packed and delivered postage free.

J. T. Macomber, of Grand Isle, Vermont, writes us that he has found the kerosene-and-soap emulsion very effective in killing and preventing mildew on roses. It is, he says, a dead shot for the red spider and rose thrip.

The oldest and, as we believe, one of the hardiest of evergreen conifers is the Umbrella Pine—Sciadopitys verticillata. The specimen at the Rural Grounds makes but a slow growth, however. We illustrated this tree in the R. N.-Y. about five years ago.

Don't buy the Champion Quince. It is later than the Orange or Rea's Mammoth, and in no respect better. The Rural was among the first to test this quince, and its first report was an unfavorable one. We have since had no occasion to change it.

A good movement is on foot, started by Prof. Bailey, of the Agricultural College of Michigan, to urge the Commissioner of Agriculture to make an investigation of the disease in peaches known as Yellows. A good deal of investigation has already been made, but with no very positive results.

A friend writes us regarding the new self-husking corn already noticed in the R. N.-Y., that "its great merit lies in its departure from the habit of all other corn, in the inclination to strip itself clean of its husk." If this self-husking operation begins before the kernels harden, it would not answer for the Rural Grounds, where sparrows abound.

Prof. Sheldon, our valued English correspondent, writes us: "There is a good deal to admire in the vigorous phraseology which you in America employ in reference to things which vex you, and the term 'Bogus Butter' is the most telling designation I have yet seen applied to the article which has done and is doing so much mischief to dairy farmers," See next week's R. N.-Y.

Representative Beach, of New York, has introduced into Congress a bill which extends the benefits of the Patent Laws to discoverers and producers of new varieties of plants, fruits and flowers. Such a measure is perfectly just; but is it feasible? Certainly some way of affording legal protection to property in such productions should be devised.

There are hundreds of farmers in this country who should have a good sulky plow, and who will, next Summer, do more walking in a single week following a walking plow than would be sufficient now to secure one of the Syracuse iron sulky and steel-beamed plows offered in our premium-list. And this splendid plow once their own, would last for many years, lightening their labor, and making them happy. Is it not sound wisdom to make the effort?

We have come to look upon the "weather prophet" as a national benefactor. In sugar-making districts, the "sugar prophet" is a greater man than the "oldest inhabitant." Mr. Timothy Wheeler, of Waterbury, Vt., who has prognosticated for several years, with only one failure, says that the coming season for sugar making will be "the very best." Mr. W. judges from the appearance of the maple trees in November.

Some of the most reliable information pertaining to gardening and horticulture will be found in the seed catalogues of the present year. The value of such information grows from year to year. The facts sent out this season render the use of horticultural text books almost surperfluous. We hold that a person sending for such a catalogue is in duty bound to inclose stamps for postage, and to state where he saw the advertisement. No honorable farmer desires to depend upon charity for his horticultural information, and surely he is always ready to return thanks for useful guidance.

How the farmers are fleeced in some parts of the West, while the merchants and bankers grow rich, is well illustrated in an "interview" held here with A. M. Cannon, banker of Spokane Falls, W. T. In early days in Spokane he made from 75 to 100 per cent. on the goods he sold: now he can make *only* 25 per cent. Until lately he was getting two per cent. a month, or 24 per cent. per annum, on short-time loans; now he can wring from the distressed only 1½ per cent. a month, or 18 per cent. per annum. He can borrow money here on 40 years' time at six per cent. Shylock is given to boasting in these days.

SUMMARY

OF THE RURAL'S SEED DISTRIBUTION FOR 1886.

A full description, with illustrations, was given in the R. N.-Y. of Nov. 14, and this number will be mailed (free) to all who apply.

The Nov. 14th Number also presents a full account of the

$3,300

worth of presents which are offered to subscribers (not to regular agents) for clubs.

N. B.—One package (six in all), will be sent to all REGULAR SUBSCRIBERS who apply, and to them only. A two-cent stamp should be inclosed in the application, except by those who subscribe for the R. N.-Y. in connection with some other journal which offers the seeds in connection with the combination. In that case, an application is unnecessary. The seeds will be sent without application.

FIRST.

The Alaska Pea.

It is claimed that this is the earliest blue pea; that it is the best of its class; that it has superior shipping qualities, the pods remaining green longer than those of any other variety. It has never been offered for sale.

SECOND.

The Best of the New Watermelons.

Comprising a few seeds each of Kolb's Gem, Mammoth Ironclad, Scaly Bark, Cuban Queen, and Pride of Georgia.

THIRD.

Angel of Midnight Field Corn

This proved last season the earliest field corn ever tested at the Rural Grounds, though it may not so prove again. The longest ears measured 14 inches. The ears were borne low, with often three to a plant. Plants short.

FOURTH.

Garden Treasures,

for our lady friends, being a packet of not less than 100 different kinds of flower seeds mixed together.

FIFTH.

THE BIRD CANTALOUPE

(From Colorado.)

Introduced by the R. N.-Y. Oblong in shape, thickly netted, deeply ribbed; flesh thick and light green, sweet and delicious. Very early. The largest specimens weigh 20 pounds, as grown in Colorado.

SIXTH.

Hackensack Valley Muskmelons.

Gathered by the R. N.-Y. from the best growers of the Hackensack Valley of New Jersey.

IMPORTANT.

1st.—The RURAL NEW-YORKER never SELLS seeds or any plants grown upon its Experiment Grounds.

2d.—ONLY Regular Subscribers need apply.

3d.—IN MAKING application, it is only necessary to write "SEND SEEDS."

4th.---Strangers should send for the Nov. 14th issue of the R. N.-Y., which fully describes the Free Seed Distribution. Mailed without charge.

Address
THE RURAL NEW-YORKER,
34 Park Row, N. Y.

The Poultry Yard.

POULTRY NOTES.

SCIENTIFIC amateurs claim to be able to determine the sex of an egg before it is hatched. Many rules have been propounded, taking into consideration the shape of the egg, the size, the age of the hen and her condition, and the number of hens placed with each cock. We interviewed the best breeders we could find at the late poultry show, to learn how practical men regard such ideas. Every man with whom we talked declared such "rules" to be the worst kind of nonsense. No man can tell what the egg will produce. In fact, it is almost impossible to tell, after the chicken is hatched, until the comb and tail begin to grow. It seems safe to assume that the rules for determining the sex of eggs will be monopolized by "scientific amateurs."

The favorite egg for setting appears to be as nearly oval as possible. The best breeders reject every pointed or irregular egg, or a very large one. It is customary to pick out the eggs very carefully in breeding fine stock. Generally 80 per cent. are rejected as liable to produce inferior chickens. In the ordinary practice, little attention is paid to the shape of the egg. Thirteen eggs are picked out "just as they come" and put under the hen. Farmers generally have as an argument that the hen that "steals her nest" always brings out good chickens, even though the eggs are of all shapes and sizes. But few farmers can tell how really good these "stolen" chickens are. They appear to be vigorous when young, but running about as they do with other hens, any comparison as to egg production is mere guess-work. The ordinary farm poultry could be greatly improved by a more careful selection of eggs for setting. Eggs with soft shells, with a ring or crust on the shell, or with an uneven or rough surface should be rejected. Very large eggs containing a double-yelk are frequently set in the hope of producing a very large chicken, two chickens, or a curious monstrosity. Such eggs very rarely hatch and should not be depended upon. As the best seeds are selected for planting, it seems natural to suppose that the best eggs should be picked out for setting.

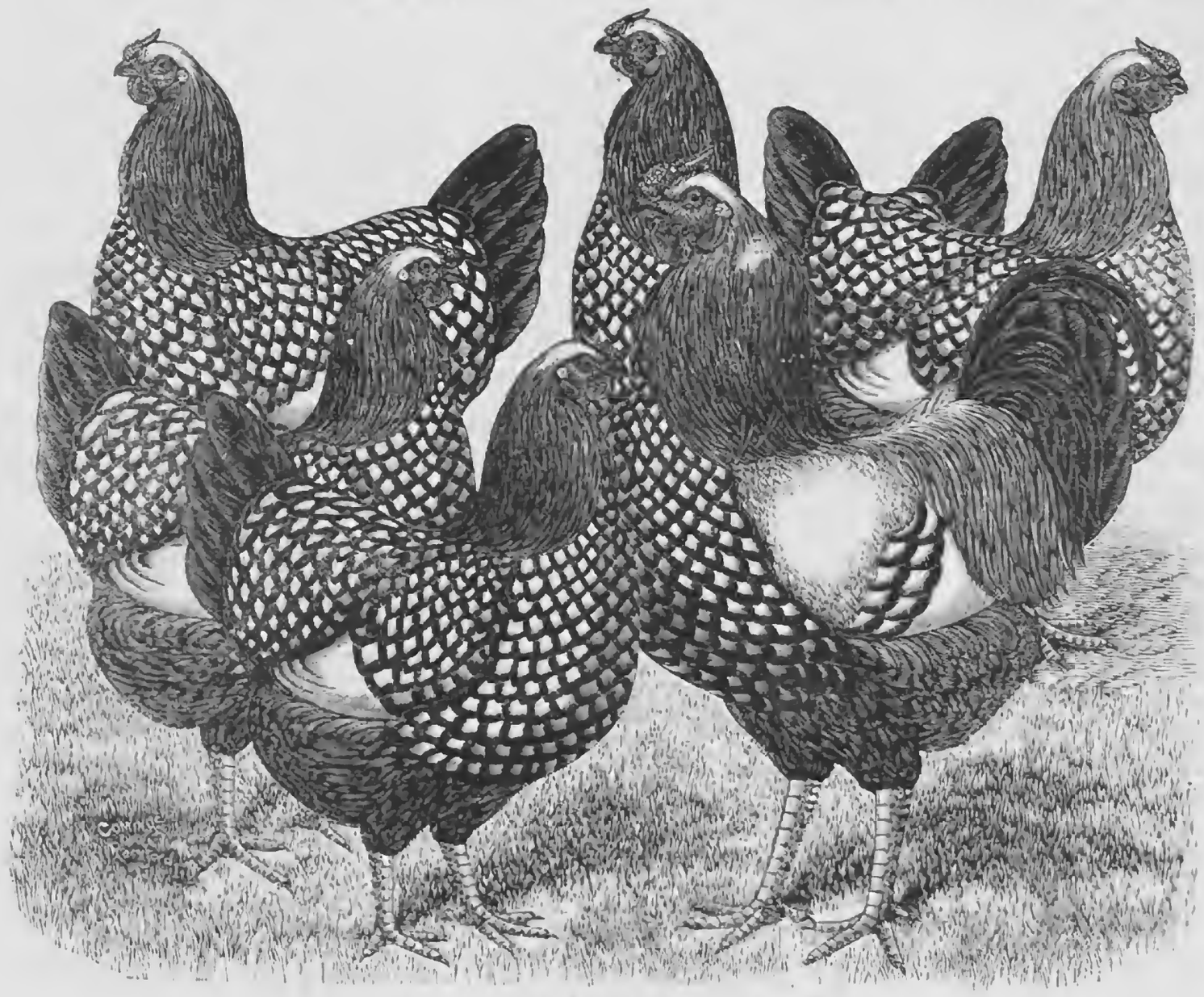
With regard to the shape of an egg, the point was raised by some breeders that certain hens always lay a pointed egg, and that it would be safe to set eggs from a good hen even though they were pointed at both ends. By examining any large quantity of eggs, one will be surprised to see how few of them are really egg-shaped or oval. Almost all are much larger at one end than at the other. It appears that the shape of the egg is greatly determined by the condition of the hen. A very fat hen will never lay a perfect egg, neither will a weak or thin hen. A fat hen's egg is always pointed and small. The shape of the egg is determined in its passage through the oviduct. Experiments have shown that a pullet kept fat from the time it begins laying, will always lay a pointed egg. An over-fed hen with little exercise will lay small eggs of poor shape. With proper care and feeding the shape and size of the egg can be improved. The best eggs are obtained from hens that are kept in good growing condition, just hungry enough to exercise freely. Breeders stated that they would not set a badly shaped or pointed egg from the best hen in their flocks. They would prefer to feed her so that her eggs would be of better shape. That much can be done to improve the shape of eggs by careful selection and feeding was proved by several collections of eggs on exhibition. Taken just as they were brought in from the nests, the shape was remarkably uniform.

A FLOCK OF WYANDOTTES.

WE show at Fig. 92 a splendid flock of this popular breed of fowls, bred by Mr. G. A. Preston, Binghampton, N. Y. Mr. Preston writes as follows concerning this breed:

"For an aspiring fancier to have predicted a few years ago that the Wyandottes would soon be the most popular fowls bred, would have seriously endangered his reputation for foresight. Yet to-day these same birds are not only welcomed into the yards of our American fanciers and farmers, but are almost daily sent to England, Ireland, Scotland, New Zealand and to many other countries; and truly they merit their success, as, for layers of eggs they have convinced their admirers that they stand unrivaled; and for broilers no bird can be said to be more juicy, or as roasters, finer in texture. For the market they are heavy and profitable, and their bright yellow skin wins for them a preference. For beauty no other variety can excel a flock of well-bred Wyandottes. They have beautifully laced hackles and saddles; solid black tails, white breasts heavily laced with black (no spangles), and wings which when folded show the much coveted duck-wing, or bars of black. They are low, medium-sized. Comb with well defined spike. Comb, wattles and ear-lobes a deep, rich red; legs smooth and yellow. They are exceptionally hardy, standing our severe Winters fully as well as, if not better than, any other breed. They mature very early—pullets often commence laying when five months old. I have mated and bred many of the other varieties described in the "Standard of Excellence," and I can truthfully say that of all the breeds recognized in that book, I regard the Wyandottes as the most desirable for all purposes for which fowls are kept. This opinion has been formed after several years of practical experience in raising them for market and for fancy breeding."

The RURAL was the first paper to call attention to the superior qualities of the Wyandottes. Our experience with them has been most satisfactory. They have given the best satisfaction of any of the 13 breeds tried at the Rural Grounds. As winter layers and as general-purpose fowls we have found them unexcelled. The eggs average eight to the pound. Nine hens laid in December 131 eggs.



FLOCK OF WYANDOTTES. Fig. 92.

LOSSES IN LARGE NUMBERS O CHICKS.

P. H. JACOBS.

Losses of hen-hatched and raised chicks; losses of incubator-hatched and brooder raised chicks; the hens at a disadvantage.

IT may not have occurred to the readers of the RURAL NEW-YORKER that a comparison of the losses of chicks among large numbers and small broods will show curious results, yet, though every farmer will admit that but few hens succeed in raising all the chicks in a brood, they may not be prepared for a review of losses that annually occur on every farm.

The most profitable chicks are those that are hatched early in the season. The number of eggs to be placed under each hen, according to general opinion, is 13. If the hen succeeds in hatching 10 chicks from the 13 eggs, she will be considered as having faithfully performed her duty, though often the whole number of eggs will produce chicks; while at other times the number will be as low as two or three. If, however, we have 100 hens sitting, and each brings off 10 chicks from 13 eggs, no complaint will be made, as 10 is above the average. Having hatched 10 chicks, the reader will admit that if the hen loses only two, especially in the Winter season, she will be fortunate. But, for the purpose of comparison, let us suppose that a hen hatches 10 chicks from 13 eggs (which is about 75 per cent.), and raises eight of the ten, the loss, being but two, will appear small, and will consequently often be overlooked.

When, however, the farmer attempts to hatch thousands of chicks, the most discouraging spectacle is the apparently great mortality that occurs. He becomes appalled, and wonders how the "old hen" can be so successful, while the brooders seem to fail. But let him reflect, and apply the standard of eight chicks raised from ten hatched, and make his comparison. Figures are said to be truthful, and they make out a very bad case for the "old hen." Supposing, for illustration, that she was capable of hatching 100 chicks. 20 of them would be lost, and, raising the number to 5,000, she would lose 1,000. Hence, with the use of incubators we may hatch 5,000 chicks, suffer a loss of 1,000, and be proportionately at par with the hen that hatches 10 chicks and raises eight.

This great mortality of 1,000 chicks in 5,000 occurs every year on all farms if we look at the loss proportionately; and yet farmers continue hatching and consider the loss a small one, while the poultryman who makes a specialty of hatching large numbers, can better afford to lose 1,000 chicks in 5,000 than can the farmer two in ten. No doubt some will disagree with such a statement, but the merciless figures again place the "old hen" at a disadvantage. It must be remembered that labor is a very important factor in raising chicks, and it must receive its reward, whether the poultryman performs it himself or purchases it. It is proportionately cheaper to care for 1,000 chicks than for 100. The cost of raising 100 chicks, if they required the whole attention of the poultryman, would be greater than the receipts, while, with the same labor, he can manage 1,000 or more, according to his conveniences for the purpose. He can better afford to sell his 1,000 chicks at 25 cents each, than the 100 at $2 each, and the advantage is, therefore, in favor of the larger number. One or two hens on the nests require some care, and when they bring off their broods the labor is increased, as the chicks must be fed and very often the hens kept separate in order to avoid

quarreling. It must be admitted that in feeding a single hen and brood, the attention so given is but little less than that required for several. It requires, therefore, no argument to prove that the larger the number of chicks the cheaper the cost of production, in proportion to numbers, and that it is simply custom that permits us to accept 20 per cent. loss on the part of the hen, though regarding the same ratio of loss as excessive when it occurs in brooders.

I venture to affirm that a majority of farmers would make the hatching of early chicks a matter of greater interest if they could be assured that they would lose only two out of ten, and the farmer who uses incubators and attempts the hatching of large numbers, will find that he can afford to lose 200 in every 1,000 better than two in ten. I am prompted to make the above comparison for the reason that figures can be used with terrible effect against incubators and brooders, and though entertaining the greatest respect for the "old hen," and willing to give her all the advantages in the comparison, yet when the facts are presented in their true light, she is shown to be far in the background.

Atlantic Co., N. J.

WYANDOTTES AND LANGSHANS.

LAST year I raised 15 Wyandotte chicks, which hardly came up to my expectations as layers. The Langshans are very large fowls, and with me better layers. The eggs, too, are larger and the birds more profitable. I keep my hens in a large, warm barn-cellar all Winter, feed corn, buckwheat and baked potatoes, and give them plenty of gravel, coal ashes and old plaster, and I have never had a sick fowl. If I found one in that state, I would cure it and save the others by cutting off its head. O. H. A.

Charlotte, Vt.

PLASTER IN HEN MANURE.—I sprinkle land plaster freely twice a week under the chicken roosts. I think it keeps the house sweet and improves the manure, making it easier to handle. F. I.

Dundas, Ontario, Can.

For Women.

CONDUCTED BY MISS RAY CLARK.

AN "OLD HOME" DREAM.

Back to my Old-time Home again—
  Last night, in a dream, I say
I stood as real beneath its roof
  As I stand 'neath my own to-day.

My hand on the cherry rail, again,
  That led up the winding stair—
Going a "skipity-hop and jump"
  With my child-feet, warm and bare.

To the sunny chamber where we slept—
  My darling sister and I;
To the bed, with old-time coverlet
  And its curtained bedstead high;

To the roses on the mantle shelf—
  Three tumblers full brimming o'er—
Picked in the dew of the early morn
  From the bush by the half-way door;

To the chimney-place, with narrow hearth;
  To the snowy-white, pine floor,
Much worn by sand and the scrubbing brush,
  During forty years and more.

We heard the touch of a weary foot
  Come softly across the floor,
Then a face looked in, with a smiling "good night!"
  And gently closing the door.

Our precious mother!—we heard the step
  To the old north chamber go,
Then, down the stairs, and across the hall
  Into the bedroom below.

We knelt by the open window, where,
  June zephyrs were passing by,
And called, "good night!" to three pet lambs
  That out in the clover lie.

Nature was pouring an anthem, then,
  Abroad on the evening air,—
We filled our child-souls with her sweets
  E'er we said our evening prayer.

The mountains were echoing from their sides
  The rush of river below,
To the minor tones of the insect world's
  Small voices, that come and go;

There was "whip-poor-will," in lilac bush,
  And bleating sheep in the lane—
A barking fox on the near hill side,
  And the morning doves refrain;

The monotone of the poplar leaves,
  The owl in the "hickory tree,"
The croaking frogs in the "willow ditch,"—
  All, all, a marvel to me.—

We laid us down, my eyelids closed
  Repelling the moonbeams' light,
Lips pressing mine were whispering low,
  Sweet sister, dear "good night."

A dream—Oh, Heaven.
Time has printed my brow and frosted my hair—
  And fenced in my life with sorrow and care.
But why do my laggard pulses so thrill
  With the old-young love of the vanished years?
And why, does my mental vision thus view
  My dream world's picture through mists of tears?
Ah!—that darling sisters last good night!"
  Was spoken to earth, in the long ago,"—

And the precious mother soon had rest
  In her lowly, narrow bed, I know.
And the dear old home! ah, bitter thought!—
  By the stranger hands has been swept away—
And my childhoods ever sacred haunts
  By the stranger feet are trodden, to-day.

MARIETTA HUNTLEY.

WHAT TO READ, AND HOW TO READ IT.

II.—BIOGRAPHY.

IF each period of time could be distinguished by its most prevalent species of literary composition, ours would surely be known as the Age of Biography. Almost every review that falls into our hands contains a notice of some recently published work of this class. "A Biography," says the author of "Rab and his Friends," "is either a golden goblet wherein a man holds on high the memory of his friend, or a millstone tied around that memory to drag it into swift oblivion." A large proportion, certainly, of the biographies of our own time belong to the "golden goblet" order; and, if the overtaxed student or the wearied workman had ever an excuse for taking up a worthless story by way of relaxation, he has none now. All around us lie the garnered memories of high and heroic lives, of genial and charming characters, of severe and untiring searches after wisdom, of sweet and saintly souls. We may have, as we lie resting upon our lounges, a society around us which we would vainly seek in the world of the living. In former days men made long and even dangerous pilgrimages to enjoy the privilege of a single interview with some intellectual giant, whose works claimed their reverence. Now, by our own firesides, we take a little volume in our hands, and lo! the giant rises before us, like the famous imprisoned genie of the Arabian tale! We are admitted into his confidence, we read his letters, we see him in his family, we know what he thought, what he suffered, how he fell or conquered. And we learn to separate what was great in him from what was small: we learn,—to quote from a noble letter handed me since I began to write this paper—that "The grand lives are those that endure, and repress self and self-indulgence: that submit bravely to the quenching of light, taste and ambition. Anybody with education and talent can write grand things. Who can *live* them?" We learn that nothing worth the doing has ever been done without strenuous toil, and "a great patience." We learn to be very pitiful to the failings of these children of genius so high-strung, so quiveringly sensitive, so tried in a thousand ways that we know nothing of, and, lastly, we learn that all faithful work bravely and honestly done, puts us into the same guild with these, the world's great workers. Do you remember how poor Mrs. Carlyle, struggling in the watches of the night with her obstinate loaf, was cheered and strengthened by the recollection of something in the biography of Benvenuto Cellini? "What matter," thought she, "whether the aim be perfect bread or a perfect statue? I am one with the artist in my labor and in my patience." When we "stand in our lot," and do "with our might" the work before us, we touch hands with every one of those who have made the world better because they have lived in it! And who shall estimate how great a privilege it is to go from our dish-washing and our sewing-machine, from our laundry and our cooking-stove, into the illustrious society which admits us through the magic power of a well-written biography?

I shall pay my tribute to the educational and moral influence of the best novels; and yet, when I recall the many admirable biographies so little known to the general public, I am tempted to say: "Leave for awhile *all* novels, even the greatest, and learn to know the real men and women who have toiled and achieved, on this earth of ours!

Time would fail me to name the biographies of soldiers, statesmen, or specialists—such as artists, or musicians. I can only recommend to you such memoirs as are of interest and instruction to the general reader. These are chiefly to be found in two classes, the literary and the religious. That the parent of all good biographies is Boswell's Life of Johnson, is perhaps, unnecessary to name; and yet I fear, after the fashion of our age, we are more familiar with the title than with the pages of that unique book. I once knew "a man of one book," and that book was Boswell's "Johnson!" I used sometimes to think he knew enough! Read it, and decide for yourselves. But we people of the 19th century—particularly young people—like our own time. I am half afraid to recommend old Boswell as your biographical pioneer. Begin, instead, with Mrs. Gaskell's "Life of Charlotte Brontë," or Trevelyan's "Life and Letters of Macaulay," or the delightful series of "The English Men of Letters," or Trollope's charming "Autobiography." Then you will be ready for Boswell, and *via* Boswell, for Johnson's own, "Lives of the Poets." Indeed, among so many admirable lives, it is difficult to discriminate. It is safe to say, in the region of secular biography, read what most attracts you. Not so, however, in the region of religious memoirs. The Roman Catholic Church has its hagiology, and the Protestant Church is not far behind. Eschew in both what may be termed the school of dyspeptic piety—the people who spent their lives "i' lookin' t' their own insides"—who have minutely recorded every sympathy of their spiritual *malaise* in diaries intended for "no eyes save their own." Avoid especially the sad, sad little stories of the morbid children, nurtured in the shadows of gloomy creeds, the poor little "Nathan Dickerman's" who found, let us hope, in a heavenly home, a natural, spontaneously gleeful childhood, never accorded them on earth. It is not good for one's own spiritual state, to think of their parents—they seem scarcely less cruel than the parents of the famous Welsh Fasting Girl!

But there is a religious biography far different from these—a biography which is like a fresh mountain breeze in its bracing tonic to our souls. Read Stanley's record of Arnold's manly piety. Read Mrs. Kingsley's story of her great-souled and loving-hearted husband's Christian ministry. Read the recently published "Life and Letters of Frederick Denison Maurice, whom Kingsley loved to call his "dear master," and to whom Tennyson dedicated his "In Memoriam." Read, above all, the "Life and Letters of Frederick Robertson," and when you have finished it, read again; and then turn to the end of the volume, and read the addresses, especially those to the workingmen. Never lived a more gallant spirit, a purer heart, a more sensitive nature, a more consecrated soul!

What would not be our own possibilities, if we threw away now and forever all the mawkish sentimentality of romance and religion, and lived during our leisure hours with these high and holy souls, whose manhood and whose Christian faith were one!

A COUNTRY HOUSEKEEPER.

"A MAN MAY BUY GOLD TOO DEAR."

—Old Proverb.

A MAN who for mere desire to accumulate, toils unreasonably long and hard, every working day of his life; denying himself the comforts which he can well afford, and depriving his family of books, papers and other intellectual enjoyments, until, although he may show a large bank account, his health has became sadly impaired, and his mind narrowed down to one idea, that of saving and hoarding money, has paid too dearly for his wealth.

Other things besides money may be too dearly purchased; a woman who for love of excitement spends an undue part of her time in society, leaving her domestic duties unperformed, leaving her little ones to the care of others, thus losing the purest affection; who allows her mind to become filled with frivolous ideas, and who wastes her time and means in vain display which is beyond her means, pays too dearly for her enjoyment.

The student, who in the pursuit of knowledge gives the time to study, which rightly belongs to sleep, or recreation, until health is broken, and himself become a mere bookworm, with no practical experience to assist him in making his way in life, will find that a good and desirable thing may be when carried to extremes, a ruinous investment.

Whatever worthy thing in life is too exclusively pursued, to the detriment of other things equally desirable, will even if the point is gained, have been too dearly bought, if the mind has by means of it been unequally developed. SOLITUDE SWEETENED.

Domestic Economy

CONDUCTED BY EMILY MAPLE.

A KITCHEN CONVENIENCE.

AT Fig. 93, is shown a little device which I have found very serviceable and convenient. It is a box in which I keep materials for scouring table cutlery, and for polishing silver-ware, putting the scouring materials on one side of the partition, and the polish on the other. When not in use, it may be hung up by the screw eye, or it may be stood up on the broader end in any convenient place. The shallow part in front forms a convenient place for scouring knives, forks and spoons; and whatever scouring material that is drawn out but not used, falls back into its place again when the box is hung or stood up. The box is made of half-inch pine boards, and is 13 inches long and seven inches wide, outside measurement, and about four inches in hight at the broader end. To make one like it for mother, will give Johnnie a chance to take a lesson in the use of tools. HOUSEKEEPER.

Fig. 93.

ON THE CARE OF THE HANDS.

AT this particular time of the year most women are apt to suffer from chapped and cracked hands. This state of the skin is exceedingly painful, and to be avoided if possible. There are many popular formulas for giving to the hands the softness and smoothness which comfort requires. Some of these are very desirable, taking kindly to the skin of some persons, while to others they render matters worse. If the hands are extremely sensitive it is advisable to avoid the use of soap as much as possible. This can be done to a much greater extent than one would suppose from first thought. Even dishes can be washed without soap if one is careful to have good hot water. When through using your hands, wash carefully and before wiping them put a few drops of glycerine on them, rubbing it in thoroughly and then drying. This will be found effective in almost every instance. But if it does not act satisfactorily, try vaseline, applying the same way. In using either vaseline or glycerine in this way there will be no sticky or greasy sensation left on the hands. It is often recommended to wear gloves at night or about your work, but this will not be found to be necessary. In blacking stoves it is advisable to cover the hands, and you may slip a paper bag on the hand that holds the brush.

The finger nails seem to come in for their share of attention in this connection They should be properly trimmed, neither cut too short nor allowed to grow long. Follow the contour of the finger in paring them, and have them of medium length irrespective of Fashion's dictates which, just now, decrees that they shall be allowed to grow abnormally long. If cut too short, Nature, to protect herself, causes the ends of the fingers to grow fat and broad, and so gives an ungainly appearance to the finger which should be rather small and tapering. Have a dull instrument to clean the accumulation of earthy matter from under them. A small bone paper cutter with one end pointed, will be found very good for the purpose, and remember always to clean them while they are wet, scrubbing them with a brush after. In this way you will avoid breaking the smooth surface of the nails, and will be able to keep them perfectly clean and polished. If the flesh has grown over the root of the nail, force it down, while still wet, and in drying your hands be certain to rub around the finger nails with the towel, pushing the flesh back to its proper place. An exceedingly small scissors is often used to cut this troublesome skin away, but by following the direction above given you will experience no difficulty in keeping your hands in that nice order in which every lady likes to have them.

AUNT ADDIE.

OMELETS.

ARTISTIC AND APPETIZING.

"NEITHER FISH, NOR FLESH, NOR GOOD RED HERRING."

WE do not think that omelets could have been invented, when Horace wrote, "The vulgar boil, the learned roast an egg." For certainly the perfect omelet—a symphony in golden-brown, luscious, and quivering like a jelly, is more a poetical subject than a roasted egg. In the hands of the ordinary kitchen fiend, an omelet, tough and scorched, or half-cooked and colorless, is a thing to be shunned.

The principal causes of failure are in using too many eggs in one omelet, or in having the pan and fire too hot or not hot enough. The pan to be used for omelets should be of wrought iron, and about nine inches across the top. Most cook books insist upon having a pan to be used exclusively for omelets, and Professor Blot says further, that this pan should never be washed, but simply heated and wiped with a clean cloth before using. With due deference to higher authorities, we have learned from actual experience that to have a clean, smooth pan is sufficient. The smoothness is essential, as the least particle of roughness will cause the omelet to stick. Use no more than five eggs at one time; break these into a bowl, season with salt and fine, white pepper, and beat just enough to break the yelks; add three tablespoonfuls of rich cream, put the pan over the fire with one tablespoonful of butter—the fresher the better, as very salt butter will often cause the omelet to stick—melt this slowly, shaking the pan to

Miscellaneous Advertising.

When Baby was sick, we gave her Castoria,
When she was a Child, she cried for Castoria,
When she became Miss, she clung to Castoria,
When she had Children, she gave them Castoria,

keep it from browning. As soon as it is all melted, pour in the beaten eggs with a circular movement, so as to distribute them evenly over the pan with one dash. Stir with a broad-bladed knife until the eggs begin to set, raising them here and there to prevent sticking. It must be done quickly, and should not take more than two minutes to cook. The moment the mass begins to set, fold it over from opposite edges towards the middle, reverse a warm, oval dish on the pan, press firmly, describe a circle with your wrist, turning the pan upside down, and, presto! your omelet lies a "thing of beauty," which you will do well to use no delay in serving.

Having made a plain omelet successfully, you may vary it indefinitely by the addition of herbs, vegetables, meat or fish. A dainty omelet is made by spreading three tablespoonfuls of chopped water-cress over it just before folding; parsley, chives or the green tops of very young celery plants may also be used; they must be minced as fine as possible and a tablespoonful of either will be sufficient; parsley, thyme and sweet marjoram, mixed, give the famous French "omelette aux fines herbes," so popular at every wayside inn in the most remote corners of sunny France. Chop fine parsley, chives, onions, shallots, a few sprigs of chervil and a few leaves of sorrel; mix two tablespoonfuls of them with the beaten eggs, cook and dish as directed. It will take a little more butter to fry it than a plain omelet. This omelet is called by the French a "jardiniere." A tablespoonful each of grated onion and minced parsley, mixed with the beaten eggs, gives a most savory omelet and is a pretty accompaniment to veal cutlets.

The French also serve omelets on a purée or sauce of stewed onion, tomatoes or sorrel. According to the taste of many epicures, the best tomato omelet is made by adding, just before the folding process, a few tablespoonfuls of tomatoes that have been seeded, chopped, drained and seasoned.

A delightful summer omelet is made by using in the same way, a little boiled sweet corn, grated, seasoned and heated in a bit of butter. There is nothing more delicious than pea omelets. The peas simply require to be cooked, drained and seasoned, and if they are cold ones left from a preceeding meal, heat them in a bit of butter. Fold some in the omelet and put a circle of them around it. Asparagus tips and sprigs of cauliflower can be used in like manner. For those fond of mushrooms, there can be no greater delicacy than a mushroom omelet. Fry in butter a few thinly sliced mushrooms, and spread them, butter and all, over the omelet. Do not let the butter scorch.

Two tablespoonfuls of boiled ham, tongue or cold, cooked veal chopped small, heated in a bit of butter with just cream enough to moisten it, a dash of Cayenne added, and spread over before folding, gives a delightful breakfast dish or entree at dinner.

Space fails to tell of the many other varieties. They are all made as above, however. Kidney and cheese omelets are highly esteemed. PALMETTO.

BREAKFAST DISHES.

Dried beef is very good for breakfast. Cut thin, put into a frying-pan, cover with cold water, and, while other things are cooking, let simmer. Then pour off the water and add to the beef, cream, pepper and salt, if needed, also a tablespoonful of melted butter and a very little flour thickening. Cover and heat through; keep hot till needed for the table.

Codfish is good if cooked in the same way if one has the dessicated article, which is not so salt as the fish in bulk, and can be simmered and cooked almost as easily as the beef, only requiring a little more flour thickening.

A little minced beef or lamb can be made up with any palatable scraps into balls, and fried as are codfish balls. If an egg is beaten up with them to hold the particles together, and properly seasoned, this can be made a dainty dish.

An omelet makes a very good breakfast, and for a small family can be made by beating separately yolks and whites of five eggs and adding to the former a little flour (less than a tablespoonful) rubbed smoothly, with a cup of milk, and seasoned to taste. Put in a buttered baking dish and cook in the oven. The cook must use her own judgment as to when it is done. A. L. J.

A FEW HINTS.

How few know the convenience of sand bags? Long ones, rather larger round than a broom stick, are so handy to put over the lower sash of windows to shut out the air which comes in between the sashes, or on the sill close up to the sash, or across the lower edge of a door. It is surprising how much cold they keep out, thus adding to the comfort of the house. Then a bag made like a round bolster, about 12 inches around and a little longer, filled with sand and thoroughly heated in a warm oven, is about the best way of applying heat to a person's feet, and these cold nights, if one is put in the bed an hour or so before retiring, it makes one much more comfortable. The bags should be made of heavy unbleached muslin, and finely sewed.

After you have boiled a ham it improves it much to skin it, sprinkle with pepper and bake in a brisk oven for one-half hour.

Do you want good fried mush? Dip it out of the kettle it is boiled in, while hot, and fry in round cakes on the griddle. AUNT EM.

DOMESTIC RECIPES.

CHICKEN CROQUETTES.

Boil a chicken—one weighing about five pounds will make two dozen croquettes—when cold chop very fine, season with salt, pepper, a little grated nutmeg or mace, and a teaspoonful of minced onion. Put in a saucepan one and a half cup of milk or cream, and two ounces of butter; when this boils, stir in a tablespoonful of flour (which has been rubbed smooth with a little cold milk); let it boil a minute to cook the flour, then put in the chicken, and mix thoroughly. Flour a bowl, put in the mixture, pressing it down, and set in a cold place until cold and stiff. Flour your hands, mold the croquettes in any shape you prefer, roll in beaten egg, then in crumbs, and fry in boiling fat. Calf's brains are considered by many to be a nice addition to chicken croquettes. They are simply boiled and added to the minced chicken. Still another way is to add a cupful of boiled rice to the above quantity. E.

OYSTER KROMESKIES.

Cut three dozen fresh oysters into small pieces, and chop fine an equal bulk of cold cooked chicken, and half a cupful of cooked mushrooms. Boil the oyster liquor until it is reduced to a gill, add two tablespoonfuls of cream, the oysters, chicken, and mushrooms and the beaten yelks of three eggs; stir over the fire for a few minutes, remove and spread on a dish to cool. When cold roll in small sausage-shaped pieces, wrap each piece in the thinnest possible slice of fat bacon, dip into frying-batter, and fry in boiling fat.

CUISINIERE.

BREAD JELLY.

This simple delicacy comes under the head of cookery for invalids and requires a little skill in its preparation to make it as palatable as it really should be. Cut a French roll into thin slices and toast a golden-brown on both sides; then put them into a saucepan with a quart of water, and simmer over the fire until they begin to jelly. When done, strain through a thin cloth and flavor with lemon-juice, nutmeg and sugar. A little sherry or port wine is an improvement. If a French roll is not at hand, light, stale home-made bread will do very nicely. ALICE.

BAKED PARTRIDGE.

Although the Game Laws expire February 1st, it is possible that a stray bird shot by the hands of some enthusiastic sportsman, will find its way into a few homes. This recipe, at any rate, is worth keeping until next year. This bird is called pheasant at the South, but by "any other name is just as sweet." Like all game, it is better for having been kept some time. A French cook hangs the bird by the feathers of the tail, and when it falls they prepare and eat it, but we would scarcely advise this for an American palate. Clean and truss the bird as you would a chicken, stuffing it or not as your taste may direct. An ordinary bread stuffing, with a great deal of minced onion, is nice. Cut thin slices of salt pork, and tie them over the breast, or fasten them on with small skewers; put the bird on its back in a baking-pan with a lump of butter, and half a cup of hot water; set in a quick oven and baste often. Forty-five minutes will be sufficient to cook it, but as the flesh is naturally dry it must be basted frequently. Boil up the gravy in the pan, thicken slightly, add the juice of half a lemon, and serve. Raw potatoes, thinly sliced and fried in hot fat, or spinach, are nice accompaniments. If you have any left, it will make a nice breakfast dish. Boil up the bones with the ordinary soup seasonings, and when you have a cup of stock, strain. Put a bit of butter in a frying-pan, stir in a tablespoonful of flour, add the hot stock; lay in the remains of the bird cut in neat pieces; simmer for five minutes and pour over buttered toast. A few chopped mushrooms are a great improvement. If served as a dinner or supper dish, some kind of jelly or pickled or spiced fruit should be passed with it. MRS. A. G.

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Miscellaneous Advertising.

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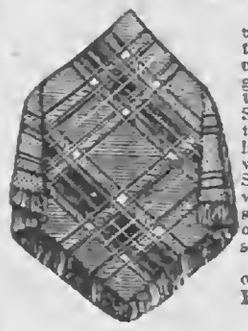

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Write at once for circulars and special offer to first purchaser. Address
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RUSSELL & CO.'S ANNUAL for 1886. Sent free to all interested in **Improved Threshing Machines, Horse Powers, Saw-Mills and Engines for Farm and Plantation Use.** Address **RUSSELL & CO.,** Name this paper. **Massillon, O.**

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Are used by more fine butter makers and stock breeders than any other apparatus, because they have proved to make the **largest quantity** and **best quality** of butter with **least labor** and **expense.** They surpass everything in the Cream Gathering System. Patrons realize from 3¾ to 4½ cents per quart for milk. Send for Circulars giving facts and references sustaining these claims. *Davis Swing Churns and Improved Eureka Butter Workers.*
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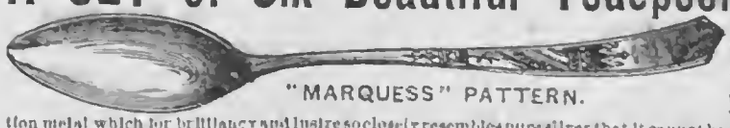

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STODDARD Creamery & Refrigerator | **MOSELEY'S Cabinet Creamery** 6,000 in use.
Have **No Equal** on the market. Adapted to **large & small dairies,** families, factories, the *cream-gathering system,* hotels etc. Used *with* and *without ice.* The "**Stoddard**" has patent skimming attachment. Cream drawn off the milk. No possibility of sediment drawn with it. Milk or cream drawn at any time. Has thick walls and double air space. Has a **Perfect Refrigerator.**

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THE BEST! Made of white oak, without floats or dashers. **NINE SIZES,** for **Dairy and Factory.**
MORE'S PYRAMIDAL STRAINER
Cleans milk perfectly, and does **not clog,** because milk falls on point of strainer. Butter Workers, Boxes, Prints, Dog Powers and Factory Supplies.
MOSELEY & STODDARD M'f'g Co, Poultney, Vt.

Agents wanted.

News of the Week.

HOME NEWS.

SATURDAY, Feb. 20, 1886.

OWING to the large deficit in the Canadian Treasury (between five and six million dollars), the Government will not be able to enlarge the Welland Canal this year—cost would be about $1,500,000. All interested in the carrying trade of the West are urging the abolition of tolls on the St. Lawrence canals, as most of their former traffic has been diverted to the Erie since this State made it free. The maratime Provinces, however, and other sections which gain nothing by the traffic, while they have to contribute largely to the maintenance of the canals, are strongly opposing their being made free.....Montreal is said to have 1,000 cases of diptheria, and the disease is terribly prevalent in Quebec, Toronto, St. John, Halifax, and several other Canadian cities.....Several of the Ontario cities, Toronto and Hamilton among them, have memorialized the Dominion Government to cease spending public money for the purpose of inducing immigrants to come to Canada..... .....George Q. Cannon, the "brains" of Mormonism, who had been hiding for some weeks from officers seeking to arrest him for polygamy, was arrested last Saturday, while trying to steal away from Winnemucca, Nev. .....Gens. Howard and Terry are likely to succeed Hancock, dead, and Pope, "retired," as Major-Generals. They are highest in rank as Brigadier-Generals. Though Gibbon and Stanley are their seniors in service, their real rivals are Crook and Miles..... ....The License Law of Connecticut provides that liquors shall not be sold to minors. The State Supreme Court has just decided that this means for their own use; and that it can be sold indiscriminately to minors for the use of adults. An amendment of the law is probable.....There is a movement to transplant Mormonism into Mexico, negotiations for large tracts of land being, it is said, under way. Pres. Diaz is reported to favor the transfer.... There are four propositions with regard to Dakota, before the House Committee on Territories. First, to amend the Senate bill so as to wipe out the present State organization and submit the question of division to a vote of the people. Second, to pass an enabling act for the southern half of the Territory. Third, to divide the Territory into two parts on the Missouri River, and admit the eastern part as a State. Fourth, to divide the Territory and postpone the admission of either portion. Neither of these propositions is popular with the Dakota people, who still hope to see the House pass the Senate bill admitting the southern part of the Territory as a State. .....The anti-Chinese agitation continues on the Pacific coast steadily but more quietly. The anti-Chinese Congress at Portland, Oregon, recomends the impeachment of Governor Squires, of Washington Territory, for his vigorous action against the anti-Chinese rioters, and the abrogation of all treaties with China that permit immigration. It commends newspapers that indorsed the rioting at Seattle and Tacoma, and permanently boycotts those that went in for "law and order."..... The Government telephone suits will be brought to trial probably at Columbia, Ohio, certainly outside the District of Columbia, as it is thought that juries there are too easily "influenced" by corrupt considerations..... The Knights of Labor demand postal savings banks, to preserve their savings from the clutches of bank cashiers starting for Canada. .....In Texas the Knights are still boycotting the Mallory line of steamers, and soliciting merchants all through the State not to patronize it. The wholesale dealers are chary of making promises; the retailers, whose trade is directly affected by workingmen's patronage, are more compliant..... The business of the Morgan railroad and steamship line which monopolize the trade between Texas and New Orleans, is at a standstill, as the men have struck for higher wages. No freight is received or handled—all means of transportation are "tied up."...All over the country "labor troubles" are injuring or paralizing regular business in places; and the strikers are much better organized and much more successful than ever before. The Knights of Labor are everywhere the "brains" of the movement, and strikes and boycotting the weapons.....In Congress the Fitz John Porter bill has passed the House by a large majority..... .....A bill providing for a fine of not more than $500 and imprisonment of not more than one year or both on all going on Indian lands with the object of settling there, passed the Senate Wednesday..... Senator Mitchell, of Oregon, has introduced a bill for the repeal of all treaties permitting the immigration of Chinese, and prohibiting their coming, except in case of deplomatic and official personages.....The Republican Senators, who are in a majority, will not confirm appointees to office where the heads of Departments refuse to furnish information as to the reasons for the removal of former officials, when it is asked for by the Senate.... ....The House Committee on Agriculture has agreed to report favorably the bill introduced by Representative Hatch to establish experimental stations in connection with agricultural colleges.....The Pan-Electric controversy is to be investigated by the House..... Claims for damages caused by the anti-Chinese riots at Rock Springs, Wy., last Fall, have been filed with the Secretary of State; others are expected on account of the riots in Oregon and Washington Territory. The Cabinet is about to urge legislation to indemnify the Chinese.....The House has passed a bill reducing from eight cents to five the charge for money orders not exceeding $5.... Again a bill is up in Congress to allot lands in severalty to the Indians. This is the best way of cutting down the vast territory assigned them.....The battle for and against a continuation of silver coinage is loud and hot in Congress, with advantage hitherto in favor of the silver men; but Eastern papers expect the case will be reversed soon.....The Transcontinental R. R., Association which for some time has controlled passenger and freight traffic between the Pacific and Mississippi has burst up, as some of the roads wanted a larger share of the traffic than the others were willing to give. Some say rates will at once be cut; others that another conference will soon be held.....The New Jersey Supreme Court has decided that the railroad and canal tax law of 1884 is unconstitutional. It was supposed that no taxes would be needed except those on railroads and canals. The Court decides that these can be taxed only under a general law taxing corporations. The States will have to refund over $1,000,000 already collected, and it has made no provision for income from other sources. It is considered temporarily bankrupt. The Treasurer refuses to pay out a dollar. Decision of Court to be contested..... .....

THOSE who have used the BOSS ZINC and LEATHER COLLAR PADS and ANKLE BOOTS say they are the best and cheapest, because most durable. They will last a life-time. Sold by harness makers on 60 days' trial. DEXTER CURTIS, Madison, Wis.—*Adv.*

AGRICULTURAL NEWS.

SATURDAY, February 20, 1886.

A MACHINE just invented in France, it is said, perfectly separates the fiber of ramie, ready for bleaching, carding and spinning. If the report turns out true, the culture of ramie in the Gulf States is sure to take a new start, as the difficulty of separating the fiber has hitherto been the great obstacle in the way of utilizing it.....The exports of hog product in January were nearly 40,000,000 pounds short of corresponding month last year..... .....The production of St. Louis flour mills for 1885 is officially estimated at 1,838,782 barrels; for 1884 at 1,960,737 barrels, and for 1883 at 1,892,633 barrels.....The low price at which Nebraska corn can be laid down in San Francisco, has been taken advantage of by large stockmen and dairymen. Some have abandoned feeding barley, and are substituting corn and low grades of wheat, which can be purchased cheaper and are said to produce better results.....Telegraphic reports from all the great cattle-raising sections of the Northwest, West and Southwest are rosy. Loss in Texas not over five per cent.; in Kansas, 25,000 head instead of 100,000 as earlier reported; in Colorado, two per cent.; in Wyoming, one per cent.; in Dakota, all wintered well; in Montana "cattle were never looking better at this season"—mildest Winter since 1877; in New Mexico, Winter exceptionally severe; but little loss of cattle, as they found shelter in the cañons and arroyas. Losses light in Manitoba and throughout the Canadian Northwest..... .....Interviews with cattlemen do not give estimates quite so favorable. Loss throughout the Northwest is put three per cent. Letters from ordinary travelers and prospectors through the cattle ranges are still less favorable. "Native" stock have everywhere suffered less than pure breeds or even crosses or high grades. In farm stock there has been little loss, as even the rude shelter and care they got, have saved them from death, though many are in poor condition. Curious—isn't it?—that owners of range cattle everywhere say they expect unusually high prices for their stock, although the losses have been so "insignificant."..... Massachusetts proposes to impose a fine of $250, or imprisonment for six months, on any one who negligently or willingly sets fire to another person's woods or to his own if another person's property is injured.....In the matter of Green's driven well patent, which expired about a year ago, ten appeals were taken to the United States Supreme Court from the decision of Judge Nixon of the Circuit Court of New Jersey, who had supported the validity of the patent. The Supreme Court has dismissed all the appeals, putting the costs on the well owners, and establishing the validity of the patent—good job it runs no longer!..... ....Comte de St. Vallier, the French statesman who died lately, had for 20 years, in consequence of a disorder of the stomach, lived exclusively on milk, of which, during his splendid dinner parties, he sipped glasses. .....The New Jersey State Board of Agriculture asks the Legislature to remove legal protection from the English sparrow..... Great Britain consumed 365,000,000 pounds of wool the past year, and the United States 308,000,000.....The McCormick Reaper Works, at Chicago, have been shut down, throwing 1,400 men out of employment. After a late strike the wage question was arranged quite satisfactorily: and the men then insisted on the discharge of all non-union hands—hence the shut-down.....A decree has been signed by the Queen Regent reducing by 15 per cent. the duties on Spanish flour imported into Cuba. The law will be in force until the 1st of April next.....Eight more arrests of retailers of bogus butter in this city yesterday. .....In the year from May 1, 1884, to April 30, 1885, the shipments of fertilizers from Baltimore constituted 45.6 per cent. of the whole fertilizer trade of the country. The total shipments were 801,229 tons. The shipments to the different States were: Alabama, 47,282; Delaware, 10,040; Florida, 5,546; Georgia, 265,202; Illinois, 3,533; Kentucky, 216; Louisiana, 355; Maryland, 57,141; Michigan, 389; Mississippi, 6,748; New York, 18,633; New Jersey, 32,957; North Carolina, 105,147; Ohio, 2,295; Pennsylvania, 68,347; South Carolina, 136,577; Tennessee, 5,751; Virginia and West Virginia, 92,066; Western States, 15; District of Columbia, 84; New England, 1,905..... ....The House Committee in Agriculture has practically agreed upon amendments to the Bureau of Animal Industry Act, which will provide for the condemnation of animals infected with pleuro-pneumonia, or suspected of such infection. These amendments will fix a maximum price on animals so condemned, of $60 for common animals, and $120 for blooded cattle.

OUR EXPERIMENTS, substantiated by dairymen and the proprietors of creameries in all the fancy butter districts, warrants us in asking strangers to try Thatcher's Orange Butter Color. We know it will please them. Ask your dealer for it.—H. D. Thatcher & Co., Potsdam, N.Y.—*Adv.*

IF you grow Cauliflowers or Cabbages, send 20 cents in stamps to Francis Brill, Riverhead, Long Island, N. Y., and get his book with practical information in minute detail.—*Adv.*

Crops & Markets.

SATURDAY, Feb. 20, 1886.

A cargo of California wheat was sold in the Mersey (at Liverpool), last Wednesday, at 31s. 6d. per quarter (93¾c. per bushel), the lowest price on record. California wheat is the highest-priced American wheat in the English market. As it is quite hard, it is usually mixed with softer English wheats by millers in grinding.

The general impression in England is that prices of wheat have touched bed-rock; still English importers are slow to make an advance, although purchases are chiefly for legitimate wants—not speculative purposes. The Mark Lane Express says the Liverpool grain markets are "paralized" and that "the American option is the curse of the world." The pressure of Russian wheat in the German markets holds prices down on the Continent. The high tariff shuts American wheat entirely out of France and almost entirely out of Germany.

Compared with corresponding date last year, the amount of wheat on passage from all parts of the world to Europe shows a decrease of 6,960,000 bushels and corn of 640,000 bushels. The visible supply of wheat in the United States and Canada, with the amount of wheat afloat for Europe, is 71,125,170 bushels, against 73,237,803 bushels one year ago, and of corn 11,391,000, against 10,314,000 bushels last year.

Bombay exports of wheat in January, according to Beerbohm's reports, were 137,000 quarters for the Continent and 54,000 quarters for the United Kingdom, making an aggregate of 191,000 quarters, or 1,628,000 bushels. Bombay exports to all ports during the calendar year 1885 were 20,169,467 bushels, the largest on record. For 1884 they were 12,523,754 bushels, and an average of 16,918,354 bushels for the three years 1881 to 1883 inclusive. The Agricultural Department of India reports a decrease of 125,000 acres in the wheat crop, compared with last year's area in Gujerat districts of the Bombay Presidency, and of 25,000 acres in the Native States. In the Deccan there is an increase of 100,000 acres, and in the Karnatic country the area is 50,000 acres above average. This is an improvement on previous reports. The British receipts of Indian wheat within two years past were: In 1884, 15,119,832 bushels, and in 1885, 22,590,336 bushels. The estimated probable British receipts of Indian wheat, January 1 to July 1, 1886, was given at 8,000,000 bushels. India, with its extremely cheap labor, fast developing transportation facilities, and great area suitable for wheat culture, is now our great rival in foreign wheat markets, and there is a growing impression that it will soon shut us out from them, by selling at prices with which we cannot afford to compete. We should, therefore, keep well posted with regard to its wheat crop.

The home wheat market has been very dull, with a slight downward tendency during the week. The prices vary considerably more each day, however, even in dull times, than the variations recorded for the week in the various markets. Cables announce the lowest prices yet in England. Reports of injury to winter wheat, by frost, have been made and strongly denied—probably there is some, but not much hitherto. Heavy orders have been coming to Toledo and other collecting centers for wheat wanted by millers in the interior, which shows that there is little wheat in first hands, and tends to enliven trade. The superabundance of wheat on the Pacific Slope lowers prices "east of the Rockies," by competing with "Eastern Slope" wheat in the United Kingdom. Prices at San Francisco have declined three cents per bushel owing to heavy supplies. Walla Walla wheat has sold at Portland, Ore., at 66c., which, with the current rate of freight to the United Kingdom, would make it cost about $1 per bushel, delivered. The receipts of wheat at Minneapolis during the week were 460,000 bushels, which is quite as much as the mills can dispose of; so that there was no diminution of the stocks on hand. Those at Duluth are increasing. It is said that little of the supply came from farmers' hands, most of it having been drawn from the elevators along the various roads. It is thought that unless war news or trustworthy reports of extensive damage to the winter wheat crop interfere to bolster up prices, there will be a drop in wheat within a few weeks. The output of flour was 78,000 barrels; shipments, 76,000; market dull.

The Cincinnati Price Current of Thursday says the number of hogs packed last week in the West was 210,000, against 265,000 for the preceding week—total since November 1, 6,005,000, against 5,995,000 last year.

ADVICES dated February 15, from Elgin, Ill., the great butter market of the West, say that on that day 15,720 pounds of butter were sold at 33 cents; with small choice lots at 34 cents, closing firm. Cheese was firm at five cents for hard skims. The sales for the day aggregated $12,472.

A change has been made in the dressed and live beef freight rates from Chicago to the seaboard. The old live stock rates were based on 25 cents per 100 pounds from Chicago to New York; the basis now is 35 cents. The old dressed beef rate was 43½ cents; the new is 65 cents. Formerly there was a distinction of 74 per cent. between the live stock and dressed beef rates in favor of the former. The dressed beef rate is now made about 85 per cent. higher than the live cattle tariff, and all the pool lines are pledged to accept it. The change is in favor of Eastern butchers, cattle owners and drovers, and is likely seriously to diminish the Western dressed beef trade in the East. The prices of roasts and steaks are sure to go up.

As soon as practicable after the close of the year, the Department of Agriculture made special investigation with regard to the last cotton crop. Its report estimates the cotton remaining on plantations on February 1, the proportion of lint to seed, the quality, average date of close of picking and the price of cotton seed. The quality is poorer than last year on the Atlantic coast with much discolored and trashy fiber. The staple is shorter than usual, except in favored places west of the Mississippi, and the yield of lint which should average at least 32 per cent., is only about 31 per cent. from Virginia to Alabama and Tennessee. It is 32 in Mississippi and about 32 to 32½ in States west of the Mississippi. The quantity on the plantations on February 1, is apparently about one-sixth of the crop, five-sixths having gone forward, appearing at the ports about February 5. The percentage of the crop marketed is as follows: Virginia, 82; North Carolina, 82; South Carolina, 84; Georgia, 85; Florida, 87; Alabama, 84; Mississippi, 83½; Louisiana, 88½; Texas, 83; Arkansas, 83; Tennessee, 82. General average nearly 83. The indications thus point to a crop approximating the November estimates of yield per acre, which looked to a product of about 6,500,000 bales.

Sudden Changes of weather are productive of Throat Diseases, Coughs, Colds, etc. There is no more effectual relief in these diseases to be found than in the use of BROWN'S BRONCHIAL TROCHES. Price 25 cts.—*Adv.*

MARKETS BY TELEGRAPH.

SATURDAY, February 20, 1885.

CHICAGO.—Compared with prices a week ago, "regular" wheat is ¾c. lower; No. 2 Chicago Spring, ½c. lower; Corn, 1⅛c. higher. Oats, ¼c. higher. Rye and Barley unchanged. Pork, 5c. lower. Cattle, slightly higher on most kinds. Hogs from 10c. to 25c. higher. Sheep, steady on lower kinds; higher on best quality.

WHEAT.—Sales ranged; February, 79¼@79⅝c; March, 79¼@79⅜c; May, 84½c@85½c.; No. 2 Spring, 79¼@81½c

No. 3 Spring, at 71¼c. CORN.—Cash, 37⅞@38c; February, at37⅞@38¼c., March, 38@38½c; May, 41¼@41¾c. OATS—firm; sales ranged: Cash, 30½c; February, 30@30⅝c; March, 30@30¾c.; May, 32⅞@33½c. RYE—No. 2, 59c. BARLEY.—No 2, 60c. PORK.—Cash, $11 00@$11 05; February, $11 00@$11 05; March $11 00@@$11 05; May, at $11 17½@$11 22½. LARD.—Quiet and steady; sales ranged; Cash, $6 05@$6 07½; March, $6 05@$6 7½; May, $6 17½@$6 20. BULKMEATS.—Shoulders,$3 90@$4 00; Short rib sides, $5 50@$5 55; Short Clear sides, $5 80@$5 85. CATTLE—Shipping steers, $3 50@$5 75; stockers and feeders, $2 00@$4 40; cows, bulls and mixed, $1 75@$4 00; bulk,$3 00@$3 10. HOGS.—Rough and mixed, $3 85@$4 15; packing and shipping, $4 20@$4 52; light, $3 70@$4 15; skips, $2 90@$3 60. SHEEP.—Market firm; Natives, $2 00@$5 40; Western, $2 50@$4 50; lambs, $4 00@5 80 Texans, $1 75@$3 50.

ST. LOUIS. — Compared with cash prices a week ago, No. 2 Red Wheat is ¾c. lower, Corn, 1¼c. higher, Oats, ¾c. higher, Pork, unchanged, Cattle, Native Butchers' and Stockers and Feeders higher; others unchanged. Hogs, all grades, except "packing," higher. Sheep, from 5c. to 25c. higher.

WHEAT.—No. 2 Red, Cash, 91c.; February, 91c.; March, 91c. bid; May, 93⅞@95c. Corn quiet; No. 2 Mixed Cash, 36@36¼c.; February, 35¾c.; March, 36c; May, 37¼c. Oats quiet; No. 2 Mixed, Cash, 30@30½c. bid; March, 29½c., May, 32c. Rye at 59½c; Barley American, 60@80c; Butter quiet; creamery, at 24@30c.; dairy, 18@24c; Eggs steady at 19c. Pork, $11 25. Bulk Meats — Long Clear, $5 45; Short Rib, $5 55; Short Clear, $5 75. Lard firm at $5 90@$6 05. Cattle.—Market active. Fair to Choice Native Shipping Steers, $5 00@$5 35; Native Butcher Steers, $3 25@$4 25; Cows and Heifers, $2 25@$3 75; Stockers and Feeders, $3 00@$4 20. Hogs.—Light, $3 65@$4 05; Packing, $3 85@$4 15; Heavy, $4 20@4 45. SHEEP.—Market active; Common to Choice, $3 25@4 80.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, February 20, 1886.

STATE OF THE MARKET.—Compared with cash prices last week, flour is 5c. to 10c. higher, "regular" wheat ½c. lower, corn ½c. lower; oats unchanged; pork unchanged; butter 1c. advance on best grades; cheese steady; eggs 2½c. higher for State; poultry unchanged, fruit a trifle lower; vegetables steady.

FLOUR, FEED AND MEAL. FLOUR—Quotations: Fine at $2.20@$2.90, Superfine, $2 85@$3 25; Extra No. 2, $3 20@$3 75; Good to Fancy Extra State, $3 60@4 25; Common to Good Extra Western at $3 20@$4 00; Good to Choice Extra Western, $4 05@$5 50; Common to Fair Extra Ohio, $3 20@$3 75; Good, $3 80@$4 30; Good to Choice, $4 25@$5 25; Common Extra Minnesota, $3 20@$3 65; Clear, $4 00@$4 50; Rye Mixture, $4 00@$4 25; Straight, $4 50@$4 80; Patent, $4 75@$5 50; Bakers' Extra, $4 25@$4 60; St. Louis Common to Fair Extra, $3 20@$3 80; Fair to Good, $3 85@$4 75; Good to Very Choice, $4 80@$5 50; Patent Winter Wheat Extra, $4 50@$5 50; City Mill Extra for West Indies, $4 90@$5 00; South America, $5 00@5 10. SOUTHERN FLOUR—Common to Fair Extra, $3 85@$3 75; Fair to Choice do., $3 80@5 30. RYE FLOUR—Superfine, $3 15@3 50, latter for choice. BUCKWHEAT FLOUR, at $1 85@$2 00. CORN MEAL—Brandywine, $3 03@3 05; Yellow Western, at $2 75@$3 00. FEED—Bran ranges from 85@92½c. from track and mill; for 50 lb. average at 80@82½c.; 90 lb. average at 80@85c.; middlings at 85@97½c., and sharps at 97½@$1 07½. Rye feed at $16 00@$17 00 per ton.

GRAIN.—WHEAT.—No. 1 Northern, $1.01½; No. 1 Hard Duluth, $1.03½; No. 2 Red, 92c; Ungraded White at 91½c, No. 2 Red for March, 91½@92c.; do. for April, 92¼@93½c.; do. for May, 91⅝@91⅞c; do. for June, 95½@95¾c.; do. for July, 95¾@96c; do. for August, 95¾@96¾c; do. for September, 96¾@97¾c; do for October, nominal at 97½c; do. for December, $1.00¾@1.01. RYE—59@62½c. for Western, and 61@65½c. for State. CORN—Ungraded Mixed 47@50½c; No. 3, 48@48½c.; Steamer Mixed, 49½@49½c.; Steamer Yellow, 49¾@49½c; No. 2, Mixed, 52¾@53c.; Yellow, 51c; No. 2 Mixed for February, 53½@55c; do. for March, 50¾@51¾c; do. for April, 49¾@50½c. do. for May, 49¾@49¾c; OATS—No. 3 Mixed, at 37½c.; No. 2, 38¼@38½c.; No. 1 quoted at 38½c.; No. 3 White, 39¼@39½c.; No. 2 do. 40¾@40½c; No. 1 quoted at 43c.; Mixed Western, at 37@39c.; White do., 39@45c; White State, 40@42c; No.2 Mixed for February, 38¼@38½c.; do. for April, 38¼@38¼c; do. for March and May, 38¾c. Barley, ungraded Canada, 79c.

PROVISIONS.—PORK.—Mess quoted at $10 50@$11 00 for Old and $11 75@12 for New; $11 50@$12 00 for Family Mess; $12 75@$14 50 for Clear Back; and $8 50@$9 25 for Extra Prime. BEEF.—City Extra India Mess, $17 50@$18 00; Extra Mess, bbls., $10; Packet, $11 00@$12 00 in bbls.; Family Mess, $12 00@$13. BEEF HAMS.—Quoted at $17 75@18. CUT MEATS.—Pickled Bellies, 12 lb, average, 5¾@5¾c; do. 11 lb, 5¼c; Pickled Shoulders, at 4⅝c.; Smoked shoulders, 5¼@5½c; Pickled Hams at 8¼@8½c.; Smoked do., 9½c. MIDDLES—Long Clear in New York quoted 6c. for Western delivery. Long Clear, 5.55c.; Short Clear, 5.80c. DRESSED HOGS.—City Heavy to Light, 5⅝c. LARD.—Western Steam spot, 6.85@6.87½c; March, at 6.32@6.33c.; April, at 6.39@6.40c.; May, at 6.47c.; June, 6.52@6.53c; city steam, 6.30c; Refined Continent at 6.65c, and South American, 7c.

BUTTER.—Eastern Creamery, 34@35c; Western Creamery, 18@31c.; Elgin do., 35c.; State Dairy half-firkin tubs, 19@27c.; Western Factory, 11@20c.; Imitation Creamery, 25@26c.; Western Dairy, 12@18c.

CHEESE.—State, 7@10¼c.; Night Skims, 5¾@7c. Western flat, 7@9¼c.

EGGS.—State, 23c.; Western, 24½@25c.; Southern, 24@23c.; Limed State, 18@18½c.; do. Western, 17@18c.

LIVE POULTRY.—Fowls, Jersey State and Pennsylvania, per lb, at 8@8½c.; do. Western, per lb, at 8c.; Turkeys, per lb, at 6@8c.; ducks, western per pair, at 65@86c.; geese, western, per pair, at $1.12@$1.87; pigeons, per pair, at 35@40c.

DRESSED POULTRY.—Turkeys, Philadelphia, at 12@13c; 11@13c per lb for Jersey, and 12c per lb for western; chickens, Philadelphia large, at 13c, per lb; do. small at 11@12c; Jersey scalded at 11@12c; do, State at 10@11c; do, western, at 9@10c; fowls, Philadelphia, prime, 11c; do, Jersey, 10@11c; State and western, 8@9c. Ducks, Philadelphia, at 15@16c; do. Jersey, at 14@15c; do, western, at 13@14c. Geese, Philadelphia, at 10@12c; do, Jersey, at 10@12c; do, western,at 9c.

GAME.—Wild ducks, canvas, per pair, at $2 75@$3 25; do., red-head, per pair, at $1@$1 50; do. mallard, western, per pair, at 50@75c.; do., teal, blue wing, 60@75c.; do. wood, at 30@45c.; do. common, at 25@30c.

COTTON.—The quotations, according to the American classification, are as follows:

	Uplands.	New Orleans and Gulf.	Texas.
Ordinary	6¾	6 9-16	6 9-16
Strict Ordinary	6 13-16	7	7
Good Ordinary	7¼	7 5-16	7 5-16
Strict Good Ordinary	8 3-16	8¾	8¾
Low Middling	8 9-16	8¾	8¾
Strict Low Middling	8 13-16	9	9
Middling	9	9 3-16	9 3-16
Good Middling	9¾	9 9-16	9 9-16
Strict Good Middling	9⅝	9 13-16	9 13-16
Middling Fair	10	10 3-16	10 3-16
Fair	10⅝	10 13-16	10 13-16

STAINED,

Good Ordinary	6 3-16	Low Middling	7 11-16
Strict Good Ordinary	6⅞	Middling	8 7-16

FRESH FRUITS.—Quotations are: San Blas cocoanuts at $30@35; Baracoa cocoanuts at $20 00@$30 00. Apples—Baldwin, per bbl., at $1 25@ $1 75; Greening, per bbl. $1 37 $2 00. Grapes—Catawba at 6c. per lb, in baskets; Isabella, at 2½@3c, per lb. Cranberries—Cape Cod, choice, per bbl., $4.00; do. fancy, $4 50; good to prime, per bbl., $3 00@$3 00; do. choice, per crate, $1 00@$1 25. Florida oranges—Fancy at $3 50@$4 75; Choice at $3 00@$3 25; do. inferior at $1 75@$2.

DRIED FRUITS.—The quotations are as follows: Apples—Fancy evaporated, 7@7½c; choice, 6¾c; do. prime at 6½@6¾c.; fancy North Carolina sliced, new, at 4@ 4½c.; choice do. at 3½@3¾c.; choice Tennessee quarters at 3@3¼c.; State quarters at 3¼@3¾c.; southern sliced prime at 2½@2¾c; do. common, 2c. Peaches—Peeled North Carolina, choice, 10@11c.; fancy, 12c.; extra fancy, 13c.; Georgia, choice, 11c; do. prime, 9@9½c.; unpeeled halves, 2¾@3c.; unpeeled quarters at 2¾@3c.; Delaware evaporated, peeled, 21@25c. Choice pitted cherries at 11@11½c. Evaporated raspberries at 16@17c; sun-dried do. 13@14c. Blackberries—Prime at 8½c. Whortleberries at 6½@7c.

PEANUTS.—Quotations at 5½@6c, for best handpicked, and 4@4½c. for farmers' grades.

HAY AND STRAW.—Quotations are for: Choice timothy hay at 90c; good at 85c.; medium at 80c.; shipping at 70@75c; clover mixed at 70@75c.; Clover, 55@65c.; No. 1 rye straw at $1; short rye straw at 75@80c; oat straw at 40@50c.

SEED.—Clover is dull and nominal; quotations are at 10@10½c. for best and 9¼@9½c. for low grades Timothy is inactive; quoted at $2 00@$2 10. Linseed nominal.

SUGAR.—Muscavado, 5c; 69,000 mats Manilla, 5c; Refined dull. Cut Loaf, 6¼c; Crushed, 6¾c; Cubes, 6½c; Powdered, 6½c; Granulated, 6 5-16@6⅜c; Standard "A," 6c; Off "A," 5¾@5⅞c; White Extra"C," 5@5½c.

TALLOW—Prime City quoted at 4½c.

VEGETABLES.—Potatoes—Long Island Rose, bulk, per bbl., $2 00@$2 25; New York Rose, $1 75@$2 00; Eastern and Nova Scotia Rose at $2 00@$2 25; Burbank, State, at $1 75@$2 00; eastern and Nova Scotia, per bbl, $2 25; Hebron, do, do, do, per bbl, at $2 25. Prolific and Goodrich, per bbl., at $2. Maine, double-headed, bbl., at $2 25; Peerless, per bbl., at $1 75; Magnum Bonum, imported, per sack, $1 90@ $2; Champion, imported, per sack, at $1 62@$1 75. Sweet potatoes, Virginia, at $2 50@$2 75 per bbl. Cabbages, per 100, at $5@$7.00. Onions—Yellow, quoted per barrel, at $2 50@$2 75; do. red, per bbl., at $2 75@$3 25.; do. white, at $4 50. Turnips.—Russia, per bbl., at 37@62c. Marrow squash, per bbl., at 50@75c. Norfolk kale at 50c@$1.

LIVE STOCK MARKET.

NEW YORK, SATURDAY, February 20, 1886.

BEEVES.—Receipts for six days 7,032 against 8,341 for same time last week, Market is lower and diffiler. The dressed beef trade injures sales perceptibly. Shipments of meats for the past week, 126 live cattle, 8,150 quarters of beef, 149 live sheep and 700 carcasses of mutton. Among the sales were three cars of tidy, Corn-fed Cherokees, at $4 80; and four cars of little Ohio "Stockers," at $4@$4 12½. Dry Cows, Bulls, and mixed lots of Oxen, Stags and Cows sold at $3 25@ $4 37½; but outside of a few poorish Steers which sold at $4 25, the range for Decent to Prime bullocks was from $4 50@$5 65; with a few selected tops reaching $6 per 100 lb. Chicago steers, 1,377 lb, at $5 40; do, 1,428 lb, at $5 30;do. 1,122 lb, at $4 50; Cherokees, 1,033 lb, at $4 80; St. Louis steers, 1,308 lb, $5 27½; do., 1,247 lb, at $5 25; Still Bulls, 1,225 lb at 3½c; St. Louis do., 1,322 lb, at $3 35; Ohio steers, 1,271 lb, at $6; 1,156 lb, at $4 85; Pennsylvania do. 1,319 lb, at $5 20; oxen, 1,765 lb, at $5 15; do. 1,845 lb, $5 40; State Steers, 1,290 lb, at $4 75; do. 1,126 lb, at $4 70; Indiana do. 1,150 lb. at $4 70; do. 1,315 lb, at $5 05; oxen, 1,371 lb, at $4 30; stags, oxen and cows, 1,160 lb, at $3 38¾.

CALVES.—Demand good and prices steady at 2¾@3¾c. for grassers; 3¾@5c. for fed calves, and 5@8½c. for poor to prime Veals, with a few Extra reaching 9c.

SHEEPS AND LAMBS.—Receipts for six days, 34,419 head against 29,494 head for the same time last week. On an increased supply the market ruled dull at a still further reduction in selling rates at fully ¼c. per lb. on all grades except Choice and Extra heavy. Common to prime sheep sold mainly at $4 50@5 50; Choice at $5 65@$5 75, and one car at Extra at 6c. Ordinary to choice lambs, ranged at from $5 50@$7 25; one deck selling at $7 37½. Michigan sheep, 92 lb, at 5½c; Western do, 90 lb, at $5 40, Ohio do, 70 lb, at 4¾c; State lambs, 62 lb, at 6¼c; Culls, 56 lb, at 4½c.; Western Sheep, 81 lb, at 4½c; State do, 77 lb, at 4¾. Western lambs, 73 lb, at 6¾c; Jersey ewes, 100 lb, at 4¾c; Michigan do, 79 lb, at 7¼c; State Lams, 87 lb, at 7¼c.

HOGS.—Receipts for six days, 38,297 head, against 37,781 head for the same time last week. Nominally firm at $4.40@$4.50 per 100 lb,

PRODUCE COMMISSION HOUSE
ESTABLISHED 1865.
S. H. & E. H. FROST,
100 PARK PLACE, N. Y.
Shippers desiring to favor us will be furnished stencils, shipping cards, etc., on application. Promptness guaranteed. References, RURAL NEW-YORKER, Irving National Bank, etc.

COUNTRY SEAT,
JERSEY CATTLE AND POULTRY FARM
At New Brunswick, N. J., in sight of depot, college and schools, one hour to New York. Trains every hour. 12 or 40 acres of Land in high cultivation. Location elegant. Fruit and Shade Trees in abundance. No malaria. House and buildings large and in good order. Can give possession at once.
A. D. NEWELL, M.D.

EGGS From Prize Wyandottes, P. Rock, Langshans and Lt. Brahmas, at $2 and $3 per 13. Few Fowls for sale. W. R. TEETER, Pittston, Pa.

LITTLE'S PATENT FLUID
NON POISONOUS
SHEEP DIP AND CATTLE WASH.
MORRIS, LITTLE & SON,
Manufacturers. Brooklyn, E. D., N. Y., Box 3. and Doncaster, England.

PRICE ONLY $16.00.

GUARANTEED RELIABLE
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Best known for hatching chicks. Its principle is just like a hen sitting on a nest full of eggs. Chicks can be raised in it at 5or 6 cts. per lb., and sold for 20 to 25 cts. per lb. A fine chance for women and boys to make money. Send for circular
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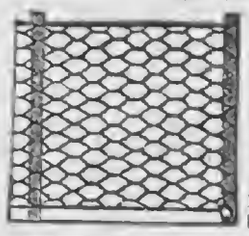
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THE SILVER CUP,
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Manufactured by L. N. CLARK & SON, Dealers in all the leading Incubators, Poultry Supplies, etc.
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THE "STANDARD"
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POULTRY FENCE.
Only One Cent per Square Foot, for 2-inch Mesh, No. 19 Wire.
IN BALES OF 150 LINEAL FEET.
Hatchers, Brooders, Poultry Houses, etc. Supplies of all kinds for the Poultry Yard, Dog Kennel, and Garden. Write for Circular.
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Williams Im. Incubator is warranted reliable. Send stamp for Circular of Incubator and Brooder.
A. F. WILLIAMS, Bristol, Ct.

MULES! MULES! MULES!
200 fine Kentucky MULES, all grades and sizes. Choice pairs constantly on hand, and for sale low by
E. B. BISHOP'S SONS,
630 Grand Street, Jersey City, N. J.

"MARCHMOOR FARM."
HIPPARCHUS No. 11672; Sire Orange Peel, P. 288; Dam King's Fertile, No. 22765. Service Fees, $100.
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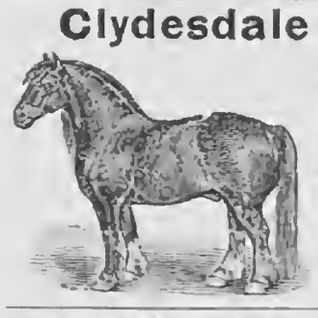
PRINCE NERO Sire Nero, P. S. 249; Dam Mrs. Langtry, C. 3746. Service Fees, $100.
CHAS. R. HOE.
New Brunswick, N. J.

Wyandottes & Ply. Rocks.
Eggs from selected mature birds only. Circulars free.
T. WILTON HILL, Jamesburg, N. J.

Clydesdale Horses.

I would sell two or three Fillies and two Yearling Stallions imported from Scotland last Fall. These are superior animals, all registered in the Clydesdale Stud Book of Great Britain and Ireland. I have also a few Canadian bred Mares for sale.
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Toronto, Can.

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A large, hardy, prolific fowl, suited to the farmer and villager. Stock thoroughbred. Have won Two First Premiums this season.
Eggs, $2 per 13, packed for shipping.
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ALL EGGS GUARANTEED.
Partridge Cochins, Plymouth Rocks, Wyandottes, and S. S. Hamburgs. Per Setting, $3; Two Settings, $5.
Light Brahmas, Langshans, Brown Leghorns, and Pekin Ducks. Per Setting, $2.
Orders for Stock and Eggs may be sent to 38 Dey St., New York City, or direct to yards.
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BEAU NASH (2978)
The only stud in America containing the very best specimens of both breeds. Prize winners at Chicago Fair, the World's Fair at New Orleans, the Royal Society of England, etc. Large importation arrived August 12, and more to follow. Our buying facilities being unequalled, there is no such opportunity offered elsewhere, to procure first class animals of choicest breeding at very lowest prices. Every animal duly recorded and guaranteed. Terms to suit all customers. Catalogues on application.
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A mixture of Pure Bone and Ground Oyster Shells. All poultry need it. 25 Pounds, $1.00; 50 Pounds, $1.50, by freight. Samples, 10c. mail.
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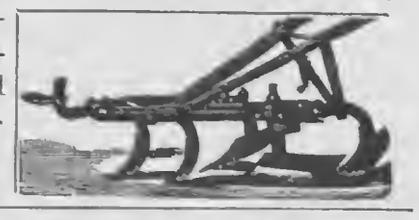

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Manufacturers of Steel, Iron, and Wood Beam Plows, Sulky Plows, Swivel Plows, Steel and Wood Frame Cultivators and Road Scrapers. Our Steel Beam Jointer and Wheel Standards will not break or bend.

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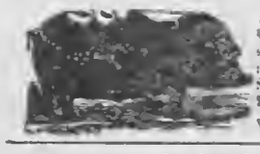
Is the only Practical Preventive of the so-called Swine Plague.
It has never been surpassed as an increaser of pork and general system tonic. Aiding digestion, stimulating the biliary organs, preventing torpor and engorgement of the liver, and regulating the bowels, it removes and prevents the formation of disease germs, and preserves to the well bred hog his natural constitution. Where it has been fed to such animals in the prescribed quantities, and other directions faithfully observed, it has proved a thorough preventive against swine disease.
AS AN EVIDENCE OF FAITH
in my remedy I make the following offer:
I will insure herds of swine of not less than one hundred in number against disease, at a small fee per head, provided they are fed my remedy under my direction, and prove upon examination prior to contract that they are in a healthy condition, and are neither in-bred, close-bred nor the progeny of such.
1. I will forfeit $100.00 to any breeder whose offer to examine for insurance I decline, provided he forwards remittance to cover my expenses to and from location of hogs, or I fail to prove to the satisfaction of any disinterested party, that failure to respond to invitation is caused by prior engagement or by matters of at least equal importance.
2. I will forfeit $500.00 if I decline upon examination to insure such herds, if my judgment as to their condition of health is overborne by the result of an examination made by at least two properly qualified and graduated veterinary surgeons.
Facts are Better than Assertions.
Please read the following testimony:
GIBSONTON P. O., PA., Feb. 2, 1885.
Dr. Jos. Haas—Dear Sir: About a year ago our herd here numbered about 2,700 head. Disease broke out, and no remedy we had would arrest the trouble. Our losses were heavy and we had to give up feeding entirely for about two months. We then heard of your remedy and bought a trial lot, and began feeding again. We have used it constantly ever since. We have since April last received about 5,000 head of hogs into our herd and have not had a single death from swine disease. This is our experience. Our opinion is that the remedy has prevented disease, and we would not think of being without it. As an aid in fattening pork, we believe it to be good. On this point, however, we have not made an actual test, *as we would not risk feeding a pen of hogs without the Remedy.*
Yours very truly, WHITE & CO.
[N. B.—White & Co., since writing the above letter, have purchased $450 worth of the remedy.]
The remedy can be procured of all Druggists, or from my laboratory. Prices, $2.50, $1.25 and 50 cts. per package. 25 lb. cans, $12.50.
JOS. HAAS, V. S.
Member of Indiana State Veterinary Med. Associat'n
INDIANAPOLIS, IND.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1,517 Ohio Improved Chesters,
Sold in one year for breeders.
The only hog Not Subject to Cholera. Two weighed 2,806 lbs. Send for description of this famous breed, also fowls.
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For the Young.

TEN LITTLE WATERMELONS.

Ten little watermelons, growing on a vine,
A little rabbit came along and left us only nine.

Nine little watermelons, each day gain in weight,
Mrs. Biddy scratched off one, and then we had but eight.

Eight little watermelons, we'd rather had eleven.
Piggy found an open gate, then there were but seven.

Seven little watermelons, Nell, the baby, picks
One of them to make some pies, and left us only six.

Six growing watermelons, how rapidly they thrive.
Paul went out to see them grow, and we had but five.

Five pretty watermelons, our Ransom looked them o'er;
He slyly cut one into halves, and then we counted four.

Four lovely watermelons, but green as green can be;
Lewis plugged another one and left us only three.

Three watermelons. Bessie thought that one would do;
But 'twas hardly fit for piggy, then we had but two.

Two precious watermelons ripening in the sun.
Mamma tried one, found it green, and left us only one.

One darling watermelon left for all our care,
But when Papa went to pick it, he found it wasn't there. S. G.

HERE is a letter that speaks for itself. Now you have a chance to get something that will be of great value on the farm. Remember that a very small club may win the prize. Let every one of the Cousins see what they can do. Remember this is to be the property of the boy or girl who sends in the largest club. It shall not be "father's pig" unless father pays for it. I will see that every boy or girl who sends in a single subscriber is paid for the work. Now, let us see what we can do:

"UNCLE MARK: If you will accept my offer, I will give as a present, to the boy or girl under 16 years of age, who by the first of June, 1886, will secure the largest club for the RURAL NEW-YORKER, a pure bred Poland-China pig, either sex, as desired. Pig will be eligible for record in Northwestern P. C. Record, and of the finest strain.

Very truly, ROBERT I. YOUNG.
St. Joseph, Mo."

LETTERS FROM THE COUSINS.

DEAR UNCLE MARK: My little brother and I wish to join the Y. H. C. I am 10 years old and he is four years old. We have lived here almost four years. It is a new country; when we came here, we did not have any house to live in, and we had to camp out. The antelopes would come right close to camp. They are very pretty. I have seen two pet ones; they didn't look very nice; they were poor. We have a little baby. It is not our own; its Mamma is dead, and our Mamma has taken it to keep a while. We had a very nice garden last Summer. Squashes and cucumbers, melons and such things will not do well here. The vines grow nicely but they will not bear. They will be covered with flowers, but no fruit will set.

JOHNNIE AND JESSE MONTGOMERY.
Meagher, Co., M. T.

[We would like to see the antelope I am sure. I hope you will take good care of that baby.—U. M.]

DEAR UNCLE MARK: I would like to join the Cousins. I am a little boy. My Papa is dead and my Mamma is poor, so I live with Mr. Magers. He says if I am a good boy I can stay until I am a man, and I intend to try to be good. They live in Johnson Co., Kansas, on a farm, and have three horses, three cows, two pigs, one dog and lots of hens. I can't write, so Mrs. Magers writes this for me. If you will let me join, I will try and write the next letter myself. WESLEY NEW.
Zara, Kans.

[Yes indeed, you can be one of my boys. Uncle Mark knows just how you feel, my boy. He could tell you a story about his own life that would read very much like yours. Be a good boy and do what is right. I want you to make a strong, earnest and good man. Don't forget your mother either. Uncle Mark can't help feeling an interest in boys who do their best. He is always glad to help them.]

DEAR UNCLE MARK: I would gladly accept the offer of joining the Y. H. C. I am ten years old. My father takes the RURAL, and we all like it very much, but I enjoy reading the letters of the Cousins best. We have no flowers. I have the prettiest kitten I ever saw. Its name is Frisk. On week days it is so very playful, and it seems to know when Sunday comes, and that it ought not to play, but will come to my lap to learn its Sunday-school lesson. I am going to take singing lessons. We live two miles from town. I go to a district school. It is half a mile from our house.
Paw Paw, Mich. BERTHA A. GLIDDEN.

[I have seen some pretty kittens. Yours must be very pretty to excel them. I know certain boys who make more fuss about learning their Sunday-school lessons than Frisk does.—U. M.]

JACK FROST.

"AHA," said Jack Frost, after a warm pleasant day in the winter, "I must start out for a little fun now. First I will ornament the houses and barns with a fringe of icicles on the eaves; and I really think a fringe on these board fences would be an improvement."

Now let me see. Here comes a boy. He is looking at that pretty girl sitting by the window across the way. I will teach him better manners than that. Here is a wet place and I will freeze it over. Ha! down he goes, and the pretty girl is looking at him. He won't look at her now. You will learn to look where you step, and not at the pretty girls next time, my boy.

Here is the little boy's sliding place all spoiled by the thaw. That is too bad, I will fix it up. There they come. Hear them shout. They are glad that old Jack Frost has come. It does my old heart good to see them.

This young gentleman has been giving his lady-love a ride, and they are several miles from home. It was warm when they started and they were too proud to take any extra wraps, though they were cautioned by their prudent mothers to do so. I will make their ears and noses tingle. Cold hands and feet are not conducive to happiness. To-morrow, when the young gentleman has thawed his ear out, and it is all swollen, and the young lady, with her throat tied up, is taking doses of pepper-tea, etc., they will wish they had not been quite so proud and had heeded their mothers.

Now I will thicken up the ice on the pond and give the boys and girls some fun this evening. Here they come boys and girls and old folks too, I declare. Well, they shall all their fun, but beware, the ice is smooth. There goes a boasting young chap flat on the ice. Just see how careless farmer Brown is to leave his watering trough uncovered. I will freeze it solid and he will cover it over to-morrow. Mrs. Green has left her canned fruit in this cold room. I will snap a few cans for her. She must learn to tend to her things better than that.

I will hang up my frost pictures now I guess. This poor sick girl can see nothing through her window except the sky. I will hang up such lovely pictures in her window that when she awakes in the morning she will think she is in fairy land.

Here are some plants close by a window, and the fire has gone out in the room. Such carelessness; I will give them a nip. And here are some bottles of vinegar in a castor. It is strange folks never will learn to take care of their things. I will snap the bottles. This man is too proud or too lazy to have his house banked. He says he will risk the frost. The idea; with such a poor old wall. I will teach him a lesson. Here is a good bin of potatoes, and there are some barrels of turnips, and yonder some nice apples His wife has some canned fruit on this shelf. He must learn that he cannot have good things without taking care of them. I will give them all a nip, and smash a few cans. Here is a schoolhouse close by. The water-pail is half full of water. I will make it solid. They will have to get a new pail to-morrow and some new ink, too, for I am going to take the color out of this.

Here comes the milkman. I will nip his toes to make him hurry around faster. There are some men going to their work. I will hang some icicles on their beards. The boys and girls are on their way to school. I will give them a sharp bite, so as to sharpen their wits and make them keen and bright.

Here is a dandy all dressed up in his best style. There are a couple of young ladies coming toward him. He is fixing to make his best bow. I will glaze that spot. Down he goes just as he is lifting his hat. When he goes to rescue his hat from the street he will find it hopelessly mashed by a passing team. A group of students are coming from school. Poor old Mrs. B. is coming along too. I will see whether any of them are polite enough to help her across this icy spot. If it was a stylish young lady every one would jump to help her. Oh, yes; they are good hearted young fellows. One takes her basket and another helps her across. The young ladies are just behind, and one of them picks up a little girl who has slipped down, and holds her hand till she is across the ice. Widow Gray says that Jack Frost brings out the good in folks, and they all bring her wood and coal and provisions when Jack Frost comes." GLENNIE HOPE.

["Jack Frost is a good old fellow after all. I hope our friends will all heed his teachings. —U. M.]

Letters received during the week from L. J.—O. D.—L. H.—G. B. B.—C. C.—M. E. P.—C. W. P.—N. L.—G. S. B.—S. S. B.—D. R. D.—F. D.—W. D.—M. E. V.—A. W. L.—G. F. L.—W. N.—O. M. P.—G. T.—C. H.—G. F. M.—A. E.—

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SECRETARY LAMAR, the other day, called on the family of Congressman Blount at their hotel; but when, on receipt of his card, they reached the reception room, he wasn't there. Late in the evening his card came up again, and he explained that he had wandered away, having quite forgotten what he had come to the hotel for. After his apology he departed—without his hat.

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Humorous.

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"WHAT are pauses?" asked the teacher of a primary class. "Things that grow on cats," piped the small boy at the foot.

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Will you have white meat or dark.

A SAFE FAMILY REMEDY.

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The Spangler Corn Planter can drop fertilizers with corn, or mix with soil before covering. The dropping of the corn is fully exposed to the operator, and can drop it in hill or drill. **The Spangler Vegetable Seeder** can sow any seed large or small, put in the fertilizer, cover and roll it, all at one operation. **The Spangler Potato Fertilizer Distributor** distributes fertilizers six inches wide in potato rows with cultivator tooth attached to mix with soil; shovels can be lowered or raised. **The Spangler Lime Sprender** will spread unsieved lime from 20 to 60 bushels per acre. **The Spangler Broadcast Distributor** will sow ashes, plaster and all kinds of fertilizers from 200 to 1000 pounds per acre with perfect regularity. **The Spangler Grain Drill** gives full view of the discharge of grain and fertilizer, and is made with or without seed regulator.

The merits of the **Spangler Fertilizer Feed** are attested also by their most successful use by A. B. Farquhar or. his Pennsylvania Drill, Keystone Cultivator (under conditional license from J. W Spangler which expires January 1st 1887), and on Hench's Cultivator. **Galvanized** feeds are furnished when desired. For further information send for illustrated catalogue.

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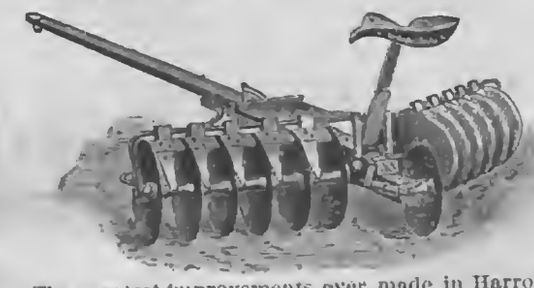

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It is the most perfect working Harrow ever put into the market.

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GUARANTEED ANALYSIS.	
Available Phosphoric Acid,	8 to 9 *per cent.*
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Every batch of this fertilizer is analyzed by *Messrs. STILLWELL & GLADDING*, Chemists to the N. Y. Produce Exchange, whose high reputation is abundant guarantee that the goods are equal to the analysis.

Buyers are invited to have samples drawn and analyzed by their STATE CHEMISTS, and the fertilizer is guaranteed to come up to the above standard by their tests.

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It is warranted to contain no leather, shoddy, hoofs, horns, or similar material; all its fertilizing elements being in their most *available forms.*

Compare the analysis and price (*which includes freight*) with other brands.

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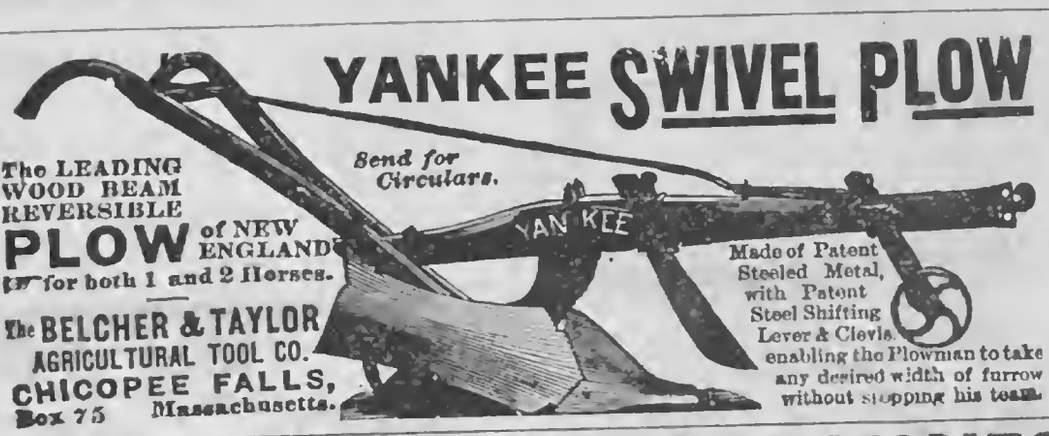

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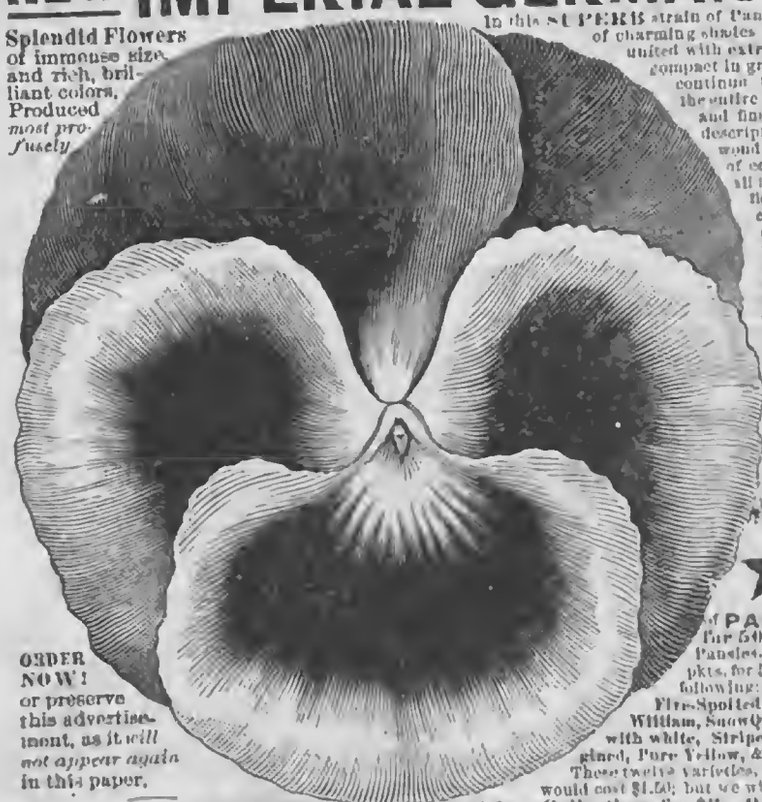

Splendid Flowers of immense size and rich, brilliant colors. Produced *most profusely*

In this SUPERB strain of Pansies we have an almost endless variety of charming shades of color, and good circular substance, united with extra large size of flowers. The plants are compact in growth, and flower very profusely. They continue to **bloom most freely** throughout the entire Summer, the flowers being much larger and finer than in other strains. In a written description, it is impossible to do justice to the wondrous beauty and countless combinations of colorings of the flowers. They embrace all the solid or self colors; delicately shaded flowers; five-spotted on backgrounds of every color, large spotted, edged or bordered flowers of various colors, each with a distinct rim of white, yellow or blue; dark and light marbled varieties; flowers with bold, distinct eyes; striped flowers of striking beauty, and vividly-colored fancy varieties, blotched, mottled, veined, and margined in combinations that would be thought impossible until the flowers are actually seen. We offer, in our Catalogue, seed of **50 distinct varieties** of these **NEW Imperial German Pansies**, making in all the finest collection of Large Flowering Pansies ever offered for sale. Price of mixed seed of all the 50 vars. of the Imperial German Pansies—per pkt of 100 seeds 25c. 3 pkts 50c, 6 pkts. $1.00, 13 pkts $2. 20 pkts. $3. *postpaid.*

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of PANSIES—12 pkts. (12 distinct vars.) For 50 Cents. We want every one to try our Pansies. For this purpose we offer for 1886 12 pkts. for 50c., embracing 1 packet each of the following: New Imperial German (mixed), Fire-Spotted or Odier, Lord Beaconsfield, Emperor William, Snow Queen, King of the Blacks, Violet margined with white, Striped and Mottled, Azure Blue, Gold Margined, Pure Yellow, & Extra Choice Large Flowering (mixed.) These twelve varieties, purchased in our regular retail packets, would cost $1.50; but we will send the entire collection, postpaid, to any address, on receipt of 50c. in postage stamps, or 5 Star Collections for $2. Order Now, and if you have not already received a copy, ask for **BURPEE'S FARM ANNUAL FOR 1886**, with colored plate of the New Imperial German Pansies, and illustrated descriptions of all the best Garden, Farm & Flower Seeds, Plants, Bulbs, etc., including **RARE NOVELTIES** in Vegetables and Flowers, which cannot be obtained elsewhere. It is a handsome book of 128 pages, and is pronounced one of the neat and most complete catalogues issued.

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HOLSTEIN-FRIESIAN CATTLE!

ALL AGES AND BOTH SEXES. HOME-BRED AND IMPORTED.

Cows and Heifers Bred to best Netherland and Auggie Bulls.

The average Records of a Herd are the true test of its merit.

The following Milk and Butter Records have all been made by animals now in our Herd:

MILK RECORDS.

Five Cows have averaged over 19,000 lbs. in a year. Ten Cows have averaged over 18,000 lbs. in a year. Three Cows have averaged over 20,000 lbs. in a year.

We know of about 20 Cows that have made yearly records exceeding 16,000 lbs., and 14 of them are now in our Herd and have averaged over 17,500 lbs

Twenty-five have averaged over 16,000 lbs. in a year. Sixty-three, the entire number in the Herd that have made yearly records, including fourteen 3-year olds and twenty-one 2-year olds, have averaged 12,785 lbs. 5 ozs. in a year.

BUTTER RECORDS.

Five Cows have averaged 20 lbs. 7 ozs. in a week. Nine Cows have averaged 19 lbs. ⅛ oz. in a week. Fifteen Cows have averaged 17 lbs. 6 ozs. in a week. Six 3-year olds have averaged 14 lbs. 3 ozs. in a week. Eleven 3-year olds (the entire number tested) have averaged 13 lbs. 2 ozs. in a week. Six 2-year olds have averaged 12 lbs. 1¼ ozs. in a week. Fifteen 2 year olds (entire number tested) have averaged 10 lbs. 8 3-10 ozs in a week. The entire original imported Netherland Family of six cows (two being but three years old) have averaged 17⅞ lbs. in a week. This is the Herd from which to get foundation stock. Prices low for quality of Stock.

SMITHS, POWELL & LAMB,

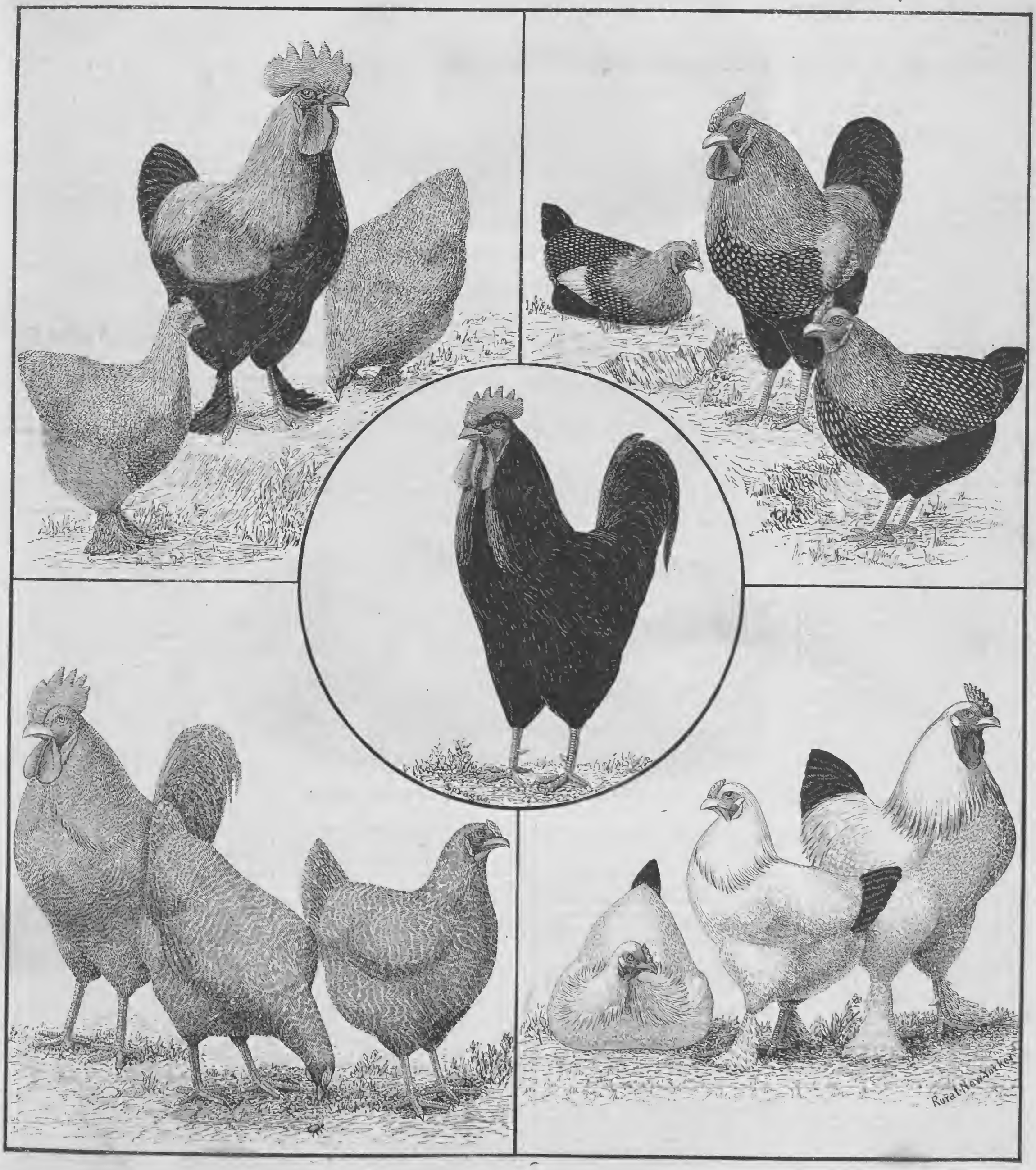
LAKESIDE STOCK FARM, SYRACUSE, N. Y.

THE RURAL NEW-YORKER

A JOURNAL FOR THE SUBURBAN AND COUNTRY HOME

VOL. XLV. No. 1884. NEW YORK, MARCH 6, 1886. PRICE FIVE CENTS. $2.00 PER YEAR.

Entered according to Act of Congress, in the year 1886, by the Rural New-Yorker in the office of the Librarian of Congress at Washington.



PRIZE POULTRY. Fig. 94. (See page 156.)

Rural Topics.

MACOMBER'S NEW RASPBERRY.

NEW VARIETIES OF CORN—THE TOP-OVER, ANGEL OF MIDNIGHT AND BEAVER-DAM.

NEW VARIETIES OF POTATOES—GILEAD RED, PRESIDENT CLEVELAND, EVERITT, AND MANHATTAN MARKET.

Experiment Grounds of the Rural New-Yorker.

MACOMBER'S ANTWERP SEEDLING RASPBERRY.

HALF a dozen plants of this seedling were received from J. T. Macomber, of Grand Isle, Vermont, and planted last May. They made a fine growth, beginning to fruit in early July and continuing in fruit for a long time. Mr. Macomber supposes it to be a seedling of the Yellow Antwerp. It was found in his garden far away from any plants of the Yellow Antwerp; but its resemblance is such that there can be little doubt as to its parentage. Mr. Macomber writes: "It is a better bearer and we think more hardy. It is entirely hardy here, but its situation is well protected by cedar hedges and numerous fruit trees. We now grow it in preference to the Yellow Antwerp."

Now, while no sort of a positive opinion should be based upon the trial of a single season, the quantity of berries borne by these plants was a surprise to all who saw them during the entire fruiting period. The berries averaged very large. They were of a light amber color, adhering firmly to the stem, and as full of juice as a raspberry well could be. The drupes were large with few and small seeds. The flavor, though not of the highest, was yet most agreeable on account of the juiciness and tenderness of the fruit. It is a beautiful family berry and we hope, rather than expect, that it may prove hardy enough to endure this climate without protection. The plants at this time (Feb. 14) show they have been injured a trifle by the present very trying Winter. It is probable this fine variety will prove hardy further north, where it receives the protection of snow

It is a matter of regret that all fruits, when drawn true to nature, look upon paper much smaller than they really are. The berries shown at Fig. 109 (see p. 157) *average* as large as any raspberries we have here, though smaller in the engraving than many of the nurserymen's cuts of Hansell and Cuthbert.

NEW VARIETIES OF CORN.

ANGEL OF MIDNIGHT.—Since this strangely-named variety of field corn was placed in the Rural's Seed Distribution, we have received two letters stating that, as grown with the writers, it is not so early as the Rural represents it to be. One of those letters (already published) was from our friend and contributor, Dr. T. H. Hoskins, of Newport, Vermont, whose statements are always worthy of consideration.

We now give our report of this corn as raised here the past season on a poor soil enriched with chemical fertilizer at the rate of about 600 pounds to the acre, from careful notes taken at various times from planting to maturity.

"Planted May 13, kernels one foot apart, rows four feet apart. Begins to ripen August 5. One of the earliest we have tried. The early part of the season cold and backward. Fully ripe August 18. Plants six feet high. Ears low, often two to a stalk. Some ears 14 inches long, eight-rowed. Many plants bore three and four ears. Kernels fair size, yellow flint, about 60 to the row. Cobs small, shanks long. Plants sucker considerably. Leafy at bottom, slender at top. The ears from 47 plants weighed 32 pounds."

Following are extracts from letters written to the introducers, and by them kindly forwarded to us at our request. We have copied from the best and worst reports—all from Vermont or New Hampshire.

HEBRON, N. H.—It did not get quite ripe with me. Season very poor. I shall try it again. F. M. JESSEMAN.

STOWE, Vermont.—The corn did not ripen very well. It was about half soft. There was a big yield. I never saw so large a yield in my life. Two to four ears to a stalk, and one was 14½ inches long. Plants six to seven feet high. I shall plant some of it another year. IRA H. FULLER.

MOUNT VERNON, N. H.—The Angel of Midnight Corn ripened a little later than that usually planted about here. The yield was double. L. E. DILLON.

ALEXANDRIA, N. H.—Planted one quart. It ripened in splendid shape. The ears were long and perfect, generally two to a stalk. I cut off ripe ears before the King Philip ripened. I shall plant this alone another year, and would recommend it to farmers as far north as N. H. J. F. PHILLIP.

POWNAL, Vermont.—It ripened satisfactorily with me as early as any field corn, and yielded well. Ears 14 inches long and over 500 kernels to the ear. It will take well. W. J. BARRINGTON.

The above extracts will show the tenor of 30 letters. One writer speaks of stalks eight feet high. Another (Middlebury, Vt.) says it yields at the rate of 220 bushels of ears to the acre, etc., etc. Our object in presenting these quotations is to show how greatly the same variety of corn may vary under different conditions of soil and climate. It may also vary from season to season, even if grown in the same field and given the same manure and care. Our statement is that the Angel of Midnight is the earliest field corn we have ever raised, as judged by one season's trial.

When it is considered that the chief object of the RURAL'S Free Seed Distributions is to introduce or popularize *improved* varieties, it will be understood that we can fully share the disappointment of our subscribers when, after incurring considerable expense, we fail to do so.

BEAVER DAM was received from M. V. B. Andrews, of South Berwick, Maine. It is an eight-rowed yellow flint, the twin rows often separating widely. The ears are about 10 inches long, 40 or 50 kernels to the row. Husks leafy; very long shanks or ear-stalks. The suckers often terminate in an ear. It suckers considerably. Plants six feet high, very leafy at bottom. One or two ears to a stalk. Mr. Andrews writes us that it has been in the neighborhood for 50 years or more. These plants gave us roasting ears July 23. Seed planted May 13. It is one of the earliest varieties ever tested here.

TOP-OVER.—This was tried in 1884 and again last year. It is now offered in many catalogues. Planted May 13, it was not ready to cut until September 1st. The plants grow six feet high, very leafy at the bottom—bushy in fact. Joints short. Each plant has from three to five suckers which do not bear ears generally. The main stalks bear from one to three ears, always low and covered with leafy husks—the leaves often of full size. The ears average eight inches in length, kernels large, from 37 to 40 to a row. Rows straight and close together. The tip is almost invarably covered with kernels, hence the name "Top-over." The shank or ear stalk is scarcely larger than a pipe-stem. Sixty-three plants gave 73 ears, which weighed 25 pounds. Ninety-five plants on another plot with less fertilizers and no nitrogen gave 79 ears, which weighed 22¾ pounds.

TESTS OF NEW VARIETIES OF POTATOES CONTINUED.

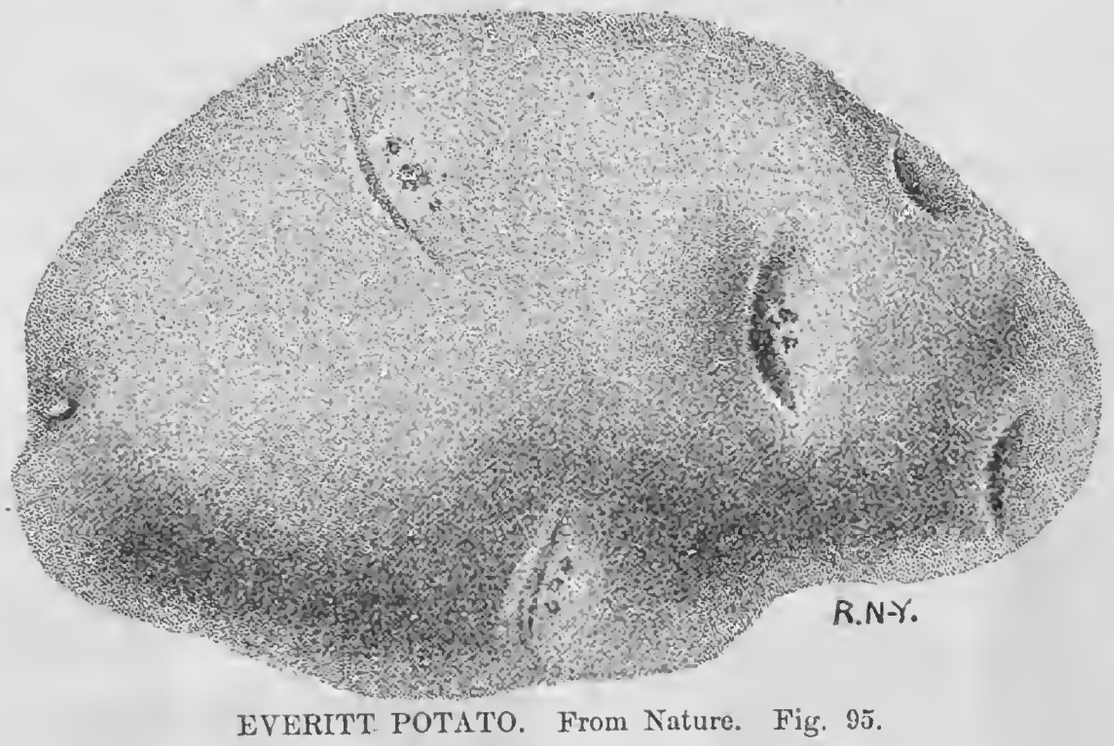
SOIL, CULTURE, ETC.

SUBSCRIBERS should understand that these tests are made in a rich, moist, garden soil. The crop never suffers seriously either from drought or too much wet, as the land is well drained. Not only has farm manure been liberally supplied, but fertilizers of every kind have been used in abundance. Potatoes have been raised on this plot for six consecutive years. Trenches are dug one foot wide and six inches deep, and three feet apart. Two inches of soil are raked back in the trenches, and the seed pieces (two strong eyes each) are placed one foot apart. Two inches of soil are then raked over them, and the fertilizer is strewn evenly at the rate of about 1,000 pounds to the acre. The rest of the soil is then returned to the trenches as loosely as possible. The cultivation is then effected by hand cultivators, and hilling up is studiously avoided.

GILEAD RED. Received from Wm. Murray, Mt. Gilead, Morrow Co., O. He writes: "It is supposed to be a sport of the Belle. Very nice shape, smooth, not very large."

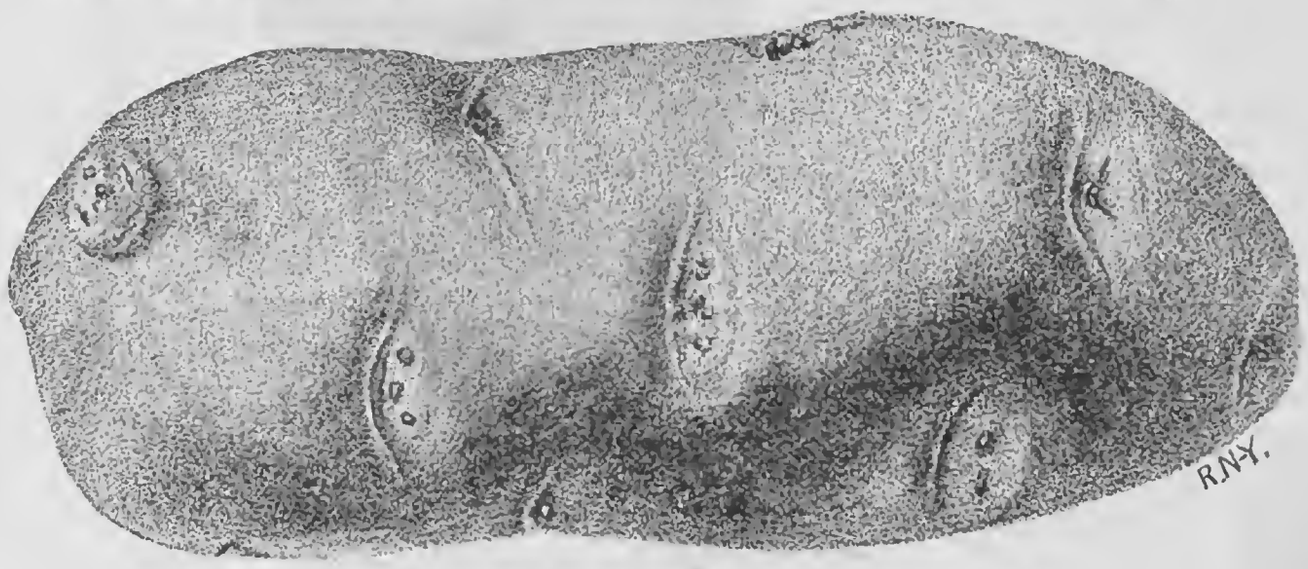
Six pieces were planted April 20, which matured August 31. The yield was 10 pounds, or at the rate of 403 bushels to the acre. There were 34 tubers—25 marketable. The best five weighed two pounds 10½ ounces. Shape, oblong-flattened; skin, russeted pink. Eyes a little deep, medium as to number. A solid looking potato, nearly white flesh and quite mealy and nutty as eaten Nov. 15.

PRES. CLEVELAND, from Alfred Rose, of PennYan, N. Y., who writes: "It is a seedling of the good old Peachblow. You will find it as good as you ever ate." Ten pieces were planted April 20 and yielded 6½ pounds. There were 35 potatoes of which 16 were marketable. Best five weighed two pounds two ounces. Yield per acre at the rate of 238 bushels. Shape irregular. Eaten Nov. 8. Nearly white flesh, not dry or mealy.



EVERITT POTATO. From Nature. Fig. 95.

EVERITT, shown at Fig. 95, from J. A. Everitt, Watsontown, Pa., (no history). Planted seven pieces May 30. One hill yielded six-and-one-half pounds, which is perhaps the largest hill we have ever dug. There were 22 tubers nearly all of fair size. The yield of the seven hills was 24 pounds, or at the rate of 826 bushels to the acre. There were 88 potatoes, 70 of which were marketable. None large, few small. The illustration shows the characteristic shape as nearly as we could find it. Skin, light. Eaten Nov. 14. White flesh, mealy. About like Early Rose.



MANHATTAN MARKET POTATO. From Nature. Fig. 96.

MANHATTAN MARKET, from Ira W. Green, East Avon, at the request of W. P. Andrus, Rochester, N. Y., who says that they give great promise of being superior for yield, quality and appearance. Twenty pieces were planted April 22, and yielded 52 pounds—243 tubers, 170 marketable. Best five weighed three pounds, three ounces. The yield per acre would, at the above rate be 620 bushels. In shape they are rather irregular, long, cylindrical, tapering at ends, often curving as shown. Eyes medium in number and depth. It would generally cut to waste. Buff white skin, white flesh, quite mealy, as eaten Nov. 6th. See Fig. 96.

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Dairy Husbandry.

ENGLISH DAIRY NOTES.

BUTTER-MAKING IN WINTER.

PROFESSOR J. P. SHELDON.

Trouble in churning; requisites indispensable for prime winter butter; food of cows; temperature; causes of butter "not coming."

EVERY dairyman and dairymaid who has been used to butter-making all the year round, has had trouble at times in Winter—trouble with the churning. For it is in the churning that the difficulty lies, most of all, rather than in preliminary and subsequent operations. The act of churning, indeed, is the leading and central feature in the domain of a butter dairy; and if that part of the ceremony passes off well, the rest is tolerably simple and almost certainly satisfactory. In any time of the year, in fact, everything else may be taken to be in order if only the churning is a success—everything preliminary, I mean. The mechanical operation of churning is, after all, in reference to winter butter, the leading test of the whole business, in the cow-shed as well as in the dairy. If butter comes within an hour, it is usually a proof that the cream was in good condition, and that the cows were properly fed; it proves, too, that the temperature of the dairy was properly regulated, and that the cows, or some of them, have not been too long in milk.

It is hardly possible to make as good butter in Winter as in Summer; some say it is impossible to do so. But, in any case, there is one condition indispensable to the making of first-class butter in Winter, viz.: the cows must have calved pretty recently. I do not believe that the best of butter can be made from cows which are six months after parturition; and in winter time the butter from such cows will, as a rule, be only tolerable at the best. Much depends, of course, on the system employed in feeding the cows, on the kind of food they get, and on the state it is in. One of the reasons why summer butter is, as a rule, the best of the year, is found in the sweet and fresh and succulent grass on which the cows are fed; and another in the rule that the cows are not long after parturition. These two reasons, indeed, providing the cows are well-bred for the purpose, are all-important—either in cheese and butter-making: and we may lay it down as an axiom that, all things considered, there is no cheese or butter equal to that made in June.

The condition and quality of the food given to cows in Winter have a good deal to do not only with the quality but with the quantity of the butter produced. By "condition" I mean the measure of easy digestibility with which the food is endowed, its physical and mechanical state, and also the degree of succulency found in it. These considerations touch everything by reason of which silage is superior to its equivalent in hay. Dessicated forage, as compared with the succulent vegetation from which it is made, is deprived of its condition; it is no longer easily digestible, it is no longer succulent and easy to masticate. The labor involved in masticating hay first and in digesting it afterwards, as compared with the ease and facility with which grass is masticated and digested, supplies an explanation of the general superiority of summer butter, and of the greater yield of it at that period. This, however, is not the whole of the business, for isothermal considerations come in as well; and temperature is a condition we cannot afford to overlook, though to our loss we do overlook it a good deal. Given the same food, the same cattle, the same everything excepting only temperature; given also the same kind and quality of food, except that it may be dry and hard instead of succulent and soft: here we include a range of conditions, over and above the cow herself, which sufficiently account for the difference found in the quality and quantity of butter yielded in Summer and Winter respectively.

These considerations have a good deal to do with the trouble there is with churning in Winter, though they are not the whole cause of the mischief, or even the chief cause of it. It may be said, in fact, that if the cows are in good form, and are decently fed, there will be no very great deal of trouble with churning in Winter after all. But when cows calve in April and May, or earlier still, and we try to make butter from them in the following Winter, it is frequently found that the butter shows

great reluctance to come in any reasonable time, and once in awhile will not come at all. And even when it does permit itself to be separated from its matrix of cream, it is almost always of inferior quality. Butter obtained under these conditions is similar to that which comes from the second and third risings of cream on milk produced under more favorable conditions. In both cases the butter globules are inferior in size, in color, in flavor, and in quality; for the longer the time a cow is in milk, the smaller are the globules, and in the case of milk of good quality the larger globules rise first, say in 12 hours or so, the smaller ones ascending afterwards, in a more take-it-easy fashion.

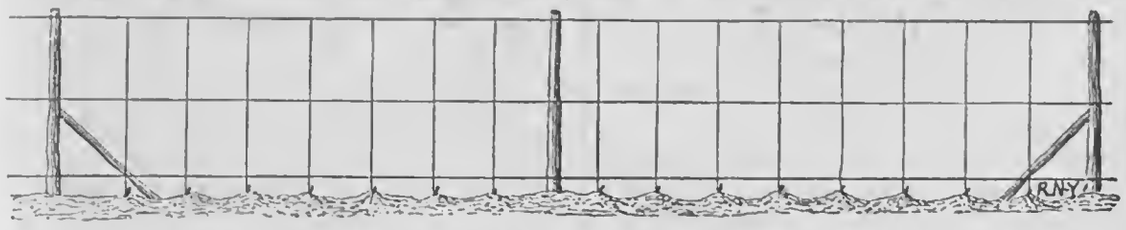
It is sufficiently obvious that these smaller globules, whether they come from inferior milk to start with, or from the later risings on better milk, will be more difficult to churn into butter than the larger globules which abound in the milk of Jersey cows, or in the milk of almost any other breed in the early months after parturition. Such cream, too, produced from dry forage in Winter, is apparently in a condition, which, in a chemical, no less than in a physical sense, is inimical to easy churning. What this chemical condition is, in reference to what is known as "sleepy cream," does not appear to be well understood, if understood at all, and it remains a problem whose solution has already occupied a good deal of hitherto fruitless inquiry. It is not owing to acidity, or an alkali would alter it, and acidity in cream, indeed, commonly causes butter to come in less time than when the cream is fresh. Be it whatever it may, however, it may be taken for granted that an improvement will be effected by giving the cows a generous supply of food that is in an easily digestible condition.

Surrey, England.

Horticultural.

RAISING LIMA BEANS WITHOUT POLES.

LIMA beans, as a general thing, grow well, if good seed is planted, and the hills are well made and good manure is put in each hill. Still some people never succeed in raising a good supply, simply because they plant their



RAISING LIMA BEANS WITHOUT POLES. Fig. 97.

beans, never have any poles of their own and cannot afford to pay from four to five cents apiece for them; consequently the vines run and spread over the ground and begin to rot, and the bean crop is ruined.

The following plan for raising beans will be useful to this class:—As shown in Fig. 97 the substitute for poles can be very easily made, costs but little, and is far better than poles in every respect, as Limas need plenty of space for branching out, as shown in Fig. 98. Fig. 97 shows posts which can be set in the ground 20 feet apart. Dig holes two feet deep, and pound the dirt firmly around the posts. Set them in line with each row. This can be done before or after planting the beans. Old wire which has been used for other purposes, is as good as any; if there is none of this kind, some can be bought at very little cost. At the ends of each row, brace the posts as shown. Fasten the wire with small wire staples, pull tight—two or three wires are sufficient. Then if the beans have commenced to run, use small cut labels which can be bought at any label manufactory, as shown at Fig. 99.

Fig. 99.

Fig. 100.

If these are not satisfactory, use small crotch sticks about five inches long, as shown at Fig. 100. These can be cut very quickly, and, costing nothing, answer just as well. Tie a string, as shown at Fig. 100, around the crotch, then to the ground in the middle of each hill of beans, then tie it to the wire. If the vines have grown long enough, tie them around the strings a few times so as to give then a fair start, and in a few days you will be astonished at seeing how soon the vines will spread out, covering the wire, as shown in Fig. 98. There will be no bother from poles breaking down, letting the beans in the dirt; nor will there be half the bother in taking up, and they will be always ready to take right in after the beans are gathered in Autumn. If preferred, you can leave the wires fastened on the posts; dig up the latter and roll the wires around them; then put them away in a dry place until Spring, when they will be as good as ever. It is not necessary to have large posts: light ones are more easily handled, if sound. This plan always gives good results, and each hill of beans will yield one-third more. Very simple!

J. S. BENNETT.

The Poultry Yard.

CHEAP HEN-HOUSE.

THE house shown at Figs. 106 and 107 is in use by Mr. Ira A. Merritt, who says the size is 10x20 feet, and it is six feet high at the eaves, sills 6x6 inches, plates 5x5; no posts; sided

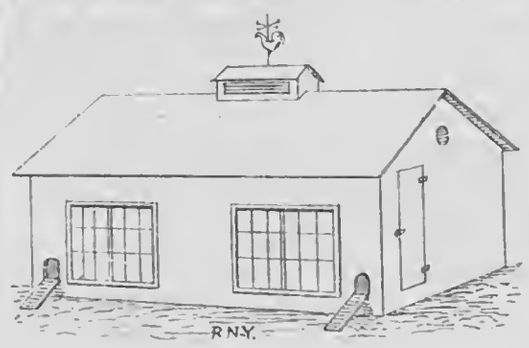
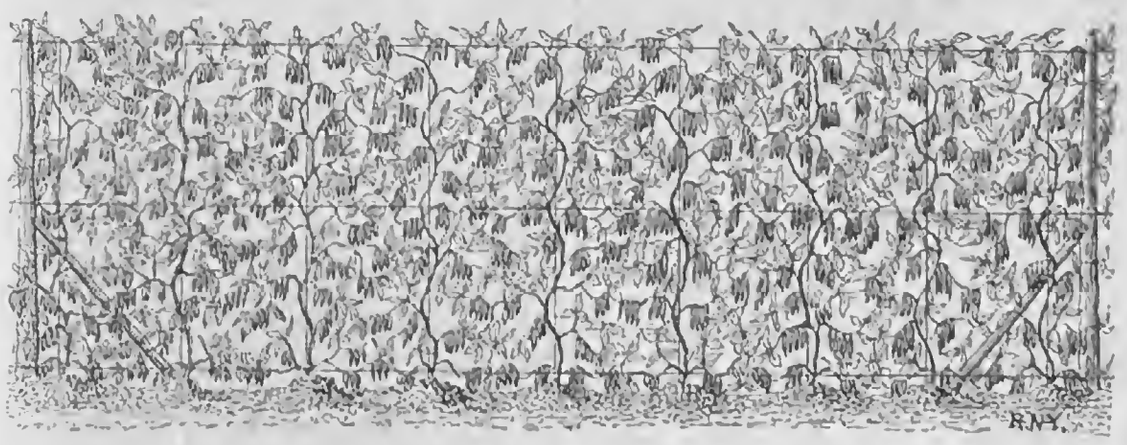


Fig. 106.

with thoroughly seasoned planed and matched hemlock. Ordinary rafters and roof boards, on which is laid a covering of tarred paper, on which the shingles are placed. Inside plan: two rooms 10x10 feet, divided by wire netting. Each room accomodates 20 hens. Wire screens, 1½-inch mesh, are put over the windows in the south side to protect the glass in Winter, and to take its place in Summer, thus, in connection with the ventilator, insuring excellent ventilation during the warm summer months, with entire safety to the fowls from stray foxes, skunks, owls or other nocturnal visitors. The ventilator is arranged with a sliding board, so as to be closed during the coldest weather. The little entrances are closed with sliding boards on the inside, which are suspended above them by hooks when they



LIMA BEANS WITHOUT POLES. Fig. 98.

are open. Along the north side and west end runs a shelf 2½ feet wide two feet above the floor, on ⅜-inch wire brackets, which are

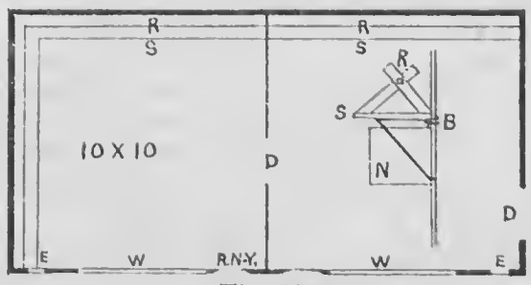


Fig. 107.

hooked into staples driven through the wall, and clinched on the outside. The roosts are round poles on wooden legs (saw-horse style), eight inches above the shelf. Under the shelf

(Continued on page 152.)

Miscellaneous Advertising.

PATENT
CORRUGATED
WIRE FABRIC,

Suitable for Fencing in many locations, and for Railings, Window Guards, Tree Guards, and other purposes.

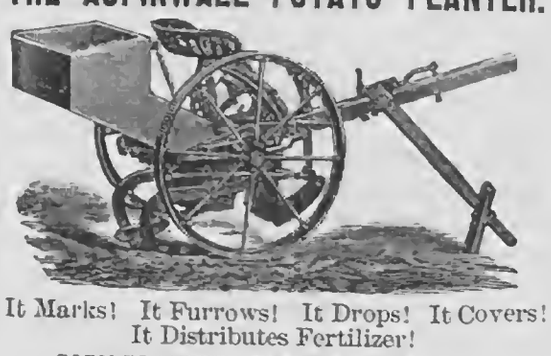
It consists of vertical pickets or bars, made of corrugated galvanized steel rods, oval in section, secured by horizontal cables, each composed of two strands of galvanized steel wire.

As a fence it is cheap, strong, durable, and easily erected; it is as effective as a barbed fence in turning cattle, and there is no risk of injuring either the animal or the fence; it requires no longitudinal rail to support it, as it carries itself from post to post as well as a plain wire or barbed wire fence; it can be seen as plainly as a regular picket fence; it can readily be taken down, rolled up and moved from place to place.

TRENTON IRON CO.,
Manufacturers of Wire & Fence Material,
Trenton, New Jersey.
NEW YORK OFFICE:
COOPER, HEWITT & CO.,
17 *Burling Slip.*
Send for circulars and prices.

The Best SIDE HILL PLOW in the Market
WARRANTED TO DO AS GOOD WORK AS ANY PLOW IN THE MARKET.
We manufacture a full line of Tools, including the Mudgett Hay Tedder. Circulars and Price Lists FREE.
B. & J. W. BELCHER,
P. O. Box 75, Chicopee Falls, Mass.

THE ASPINWALL POTATO PLANTER.



It Marks! It Furrows! It Drops! It Covers! It Distributes Fertilizer!
CORN PLANTER ATTACHMENT FOR 1886.
Send for Circular to
ASPINWALL M'F'G CO.,
THREE RIVERS, MICH.

JACKSON ARCHITECTURAL IRON WORKS.
Iron Work of all kinds for **Buildings.**
Office 315 EAST 28TH STREET, NEW YORK.
STABLE FITTINGS A SPECIALTY.

The J. S. C.
FRAMELESS DISK HARROW

The greatest improvements ever made in Harrows are embodied in the J. S. C.
It is the most perfect working Harrow ever put into the market.
Be sure and examine it and send for circular.
Higganum M'f'g Cor'n,
SOLE MANUFACTURERS. Higganum, Ct.

LINSEED MEAL.

ABSOLUTELY THE BEST FEED FOR
CATTLE, HORSES, CALVES, SHEEP AND HOGS.

This Meal is the product of pure sound Flaxseed, Linseed being its other name, and is the most nutritious of all feed, because it contains the largest proportion of nitrogenous substance.
It is almost needless to say that, in order to derive much benefit from the use of Linseed Meal, it must be fed in quantity. At least one-half of all an animal consumes may safely and profitably be LINSEED MEAL.
☞ Please send in a sample order or for circular and prices. Orders will be promptly filled by any one of the following parties:
Cleveland Linseed Oil Co., Cleveland, Ohio.
Toledo Linseed Oil Co., Toledo, Ohio.
Detroit Linseed Oil Co., Detroit, Michigan.
I. P. Evans & Co., Indianapolis, Ind.
St. Paul Linseed Oil Co., St. Paul, Minn.
Cincinnati Linseed Oil Co., Cincinnati, Ohio.
AGENCIES AS FOLLOWS:
T. M. F. RANDOLPH & CO., 196 West St., N. Y. City.
J. E. SOPER & CO., Nos. 2 and 3, India St., Boston.
J. CUSHING & CO., Fitchburg, Mass.
JOHN KING, Norristown, Penn.

THE "COMMON SENSE" MILK PAIL.

This is the only *perfect* Pail made. There are no seams in the front to catch the cream. It has a perfectly fitting strainer, which can be instantly removed, so that every part of the pail may be *quickly* and *thoroughly* cleaned. Should the strainer become foul or worn with use, we can furnish new ones at very little expense. The Pail is well made of heavy XX tin, and we offer it to the farmer at the very lowest price at which a really good article can be sold. *Send for special circulars* Price **$1.25** each. Discount to the Trade.

MILKING TUBES,

FOR MILKING COWS WITH SORE TEATS.

This is the best Tube in the market. Sent, post paid, to any address on receipt of price. One Tube, 25 Cents. Five Tubes, $1.00. Send for special Circulars.

Send us your name and address and we will mail you, FREE, our

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Choice New England Seeds. The very Best and Purest Stocks of Cabbage, Onion, Beet, Parsnip, &c. All grown by ourselves and sure to give complete satisfaction. TRY THEM.

BARTLETT & DOW,
LOWELL, MASS.
Please mention this paper.

CHANNEL CAN CREAMERY.
Makes more Butter than any other process. Calls for less labor and ice. Will raise all the cream without ice. Automatic Butter-workers, Churns, etc. One at wholesale.
Agents wanted. Send for circulars.
Wm. E. Lincoln Co.,
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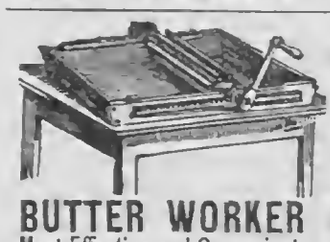

REID'S CREAMERY
SIMPLEST & BEST.
Agents Wanted

BUTTER WORKER
Most Effective and Convenient
Also **Power Workers**
Capacity 10,000 lbs. per DAY.
BUTTER PRINTERS, SHIPPING BOXES, &c. *Send for circular.*
A. H. REID,
36 S. 16th St., Phila., Pa.

SAVE Your POSTS and use SHAW'S WIRE FENCE TIGHTENER. Can be adjusted to any wooden post; can lighten or slacken, according to climate, with an ordinary monkey wrench. Price **$8** per doz. For full particulars, apply to
W. SHAW,
Delaware, Ontario, Canada
Agents wanted. Patent applied for.

Real Estate.

FOR SALE!

A FARM OF 200 ACRES, about 20 of which is in heavy Chestnut timber, the remainder suitably divided into Mowing, Tillage and Pasturing; running water in pasture; good fences; fruit of all kinds: two story frame house with well; barns, shed, hen house and ice house.
Also, a FARM OF 160 ACRES, wood enough for the use of the farm; bearing apple orchard of young trees, cherries, quinces, etc.; plenty of water; fences in good repair; convenient dwelling house and barns.
Both of the above named farms are situated in West Hartford, 5 miles from the center of Hartford city, 2½ miles from churches and post-office, and ¾ of a mile from school. Are admirably adapted for stock or dairy farms, or general farming purposes, and will be sold at a bargain to close an estate. For further particulars call on or address CORA A. S. FLAGG, executrix, West Hartford, Conn.
ALSO, 40 ACRES OF MOUNTAIN WOODLAND.

Milk or Butter Farm.
Splendid chance. Cheap. Send for full description to
H. H. INGHAM, Frankfort, N. Y.

300 FARMS for Sale, in TIDEWATER, VIRGINIA. Cheap and Rich Lands. Healthy and Mild Climate. Fish and Oysters in great abundance.
E. C. LINDSEY & CO., Norfolk, Va.

FARMS FOR SALE IN MICHIGAN.

New Price List just issued for Free Distribution. Over 200 of the finest Farms in the State fully described. Also a Map of Michigan, showing railroads, towns, cities, etc.
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REAL ESTATE AND LOAN AGENT,
103 Griswold Street, Detroit, Mich.

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Virginia Farms.—Mild Climate. Cheap Homes. Send for Circular. A. O. BLISS, Centralia, Va.

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FLORIDA
☞ SEND RED STAMP for Late Edition of MAP & PAMPHLET OF THE **DISSTON LAND COS.**
305 WALNUT ST., PHILADELPHIA.

(*Continued from page* 151.)

are placed the nests, which are portable, and the entire internal furniture can be easily removed for convenience in white-washing, etc. Entire cost of material about $20; labor about $20 more.

WATER TROUGH FOR HENS.

MR. A. C. CARPENTER finds the arrangement shown at Fig. 108, convenient and simple. Milk pans are used to hold the water. The space between the roof and the board on

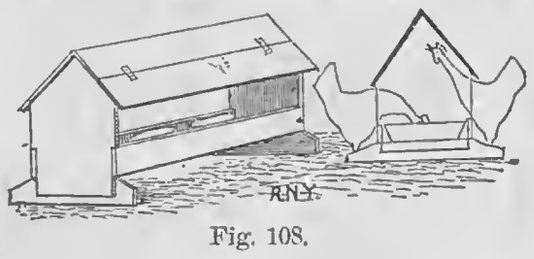

Fig. 108.

the side is just large enough to permit the hens to pass their heads through. They cannot crawl in. The roof is high enough to allow them to hold up their heads to swallow. The floor being raised from the ground, they cannot scratch dirt into the pan.

What Others Say

THE KIEFFER AND LAWSON PEARS.—The Orchard and Garden has the following:

"The RURAL NEW-YORKER and other lesser lights which follow the lead of the former, have succeeded in making it quite fashionable to condemn the Lawson and Kieffer Pears. We cannot call this anything but prejudice in the leaders and ignorance in the followers. All the influence which the RURAL, the N. Y. Tribune and many famous horticulturists may bring to bear against these pears will not be sufficient to kill them. The general grower will not condemn a good fruit merely because it is not perfect, or because it does not succeed in every part of our country."

The R. N.-Y. has tried very hard not to be prejudiced in regard to either of the above pears. Had we been influenced by selfish motives of any kind, we should never have uttered a word against either.

BARNYARD MANURE AND FERTILIZERS.—The Mass. Ploughman reports Mr. J. J. H. Gregory as saying that he has good reasons for doubts whether fertilizers are best in all cases. We do not give enough stress to the mechanical effects of barnyard manure. It is a great thing to have land made light and warm in a cold Spring with barnyard manure. That is an advantage we get over commercial fertilizers, and it amounts to more than we generally think, but it is one which is worth studying. To get that advantage we want a manure which will stimulate the crop. We put on, say 25 cords of barnyard manure to an acre. That will be from 60 to 70 tons. Why? Because with it we can push along our cabbage crop early. That this vast application of manure has a prompt effect is largely due to the nitrates formed in it pushing forward the crop. These nitrates don't form unless there is a certain amount of heat. The higher the heat, the faster they form. In the Spring the ground is very cold. To get a small portion of nitrogen it takes a tremendous amount of barnyard manure. Stick a pin there. You can do better. You can get your nitrates better than in this way. In nitrate of soda we have the nitrates already formed. We can get them without this process of tremendous manuring, because in this nitrate of soda the nitrates are already formed. Then we save the necessity of depending on this tremendous manuring. We need but a portion of the barnyard manure, and by the use of nitrates get the same result of an early start, at only one-fourth the cost.

THE MODEL COW.—Prof. Wm. Brown, of the Ontario College, in his object teaching lecture at the Connecticut Farmers' meeting at Norwich, said he liked a flattish, oval horn better than a round one; but that he liked "no horn at all" better than either. He thinks horns are not wanted on cattle kept in domestication. They are of use only in fighting and are a nuisance. In considering the best form of cows, he said a cow's neck should not be heavy and masculine, but lady-like. The fore-quarters should be deep rather than wide. The neck should fall away from the shoulders forward—be what is called ewe-necked. The cow should have a large barrel, giving lots of room for food. A quiet eye shows a quiet disposition, and such a cow always shows a good return for the food. He prefers a thick skin with a mellow feeling beneath in preference to a thin one. Fine, thick, soft hair is to be preferred to coarse hair, and if it be inclined to curl, so much the better. The Professsor should have added a long, well-developed udder and large milk veins, and he would have fully completed the picture.

MILKALINE.—A substance known by this name is largely advertised in English papers as a substitute for milk in feeding young stock. It appears to be a chemical preparation, closely resembling the solids of milk, which is to be mixed with water. One hundred pounds, costing about $5, will, it is claimed, make 300 gallons of good calf-food. This would allow about six ounces to the gallon, and would cost less than half a cent per quart. The artificial milk used in Paris to support children, contained 87 parts of water, while this "milkaline" would contain only 80 parts. We have never had much faith in these prepared foods, yet it is evident that the common practice of killing calves in dairy herds because of the reported difficulty in raising them on skimmed milk might be improved upon. With eggs, hay tea, oat meal, beans and other foods, the skimmed milk can be fed to advantage.

MILK SECRETION.—The American Dairyman says it has generally been supposed that the cow secretes her milk during the day and has it ready for delivery at night. It has often been a surprise that a cow with a small udder should give more than one with a larger one. Prof. Ballantine says many animals have no milk reservoirs, the lactiferous duets being connected directly with the milk vescicles, so that no considerable amount of milk can be carried ready formed. Such, he says, is the case with the human female, and the larger portion of the milk must be secreted while the child is at the breast. This would appear to explain why a cow, suffering from fright, worry or overexertion, "holds up" her milk, the shock to which her system has been subjected rendering it impossible for her to give down and secrete her usual flow.

SPARKS AND THE LAND OFFICE.—Hon. E. Washburne, in his letter to the Chicago Tribune, fully indorses the action and rulings of Commissioner Sparks; of the latter he says: "They are substantially just in accordance with law." Of the past management of the General Land Office, he says:

The General Land Office, for the last fifteen or twenty years, has, according to my judgment, been the most corrupt department that ever existed in any government on the face of the earth. For years and years the land jobbers and the land grabbers seemed to have had full sway there, and it was quite time they were rooted out. And I am glad to find that an Illinois man like Mr. Sparks has had the courage to attack these stupendous abuses and to attempt to recover for the benefit of the people at large some portion of the public lands which had been obtained from the government by the railroad companies. I hope that his hands may be strengthened and that he will continue in the course which he has laid out for himself. Some say that a pressure has been made upon the President and upon the Secretary of the Interior, Mr. Lamar, and that it will be necessary for him to be removed It is impossible to believe that such can be the case; that an honest, faithful, and incorruptible public officer should be hounded out of his place by the men whose action he has exposed and who is making such laudable efforts, as I think he is, to get back for the government hundreds of millions of acres of public lands which have been literally filched from it by the land-grant railroads."

Language like the above says the Farmers' Review coming from such a source, and from one who has neither personal nor political relations with Commissioner Sparks,—for Mr. Washburn in his letter says "I have no acquaintance with Mr. Sparks and have never seen him, and politically we are as far apart as it is possible for two men to be,"—ought to go a long way in counteracting the clamor that has been raised against Commissioner Sparks's action.

REMEDY FOR LICE ON CATTLE.—Speaking of preparations for killing lice on cattle, Prof. A. J. Cook thinks a decoction of tobacco, upon the whole, gives the best satisfaction. This is easily made by turning hot water on any kind of tobacco. The cheap stems answer as well as any other kind. Were it not for the eggs, one application of this would always suffice. He has often found it unnecessary to use it more than once. The work of washing an animal is quickly and easily performed. Though he detests tobacco, he finds this use of it not very disagreeable.

HEREFORDS ON THE RANGES.—Hereford cattle appear to be great favorites in Montana. The Montana Stock Gazette says they are hardy, mature early and are long-lived. The flesh is superior, handsomely marbled, heavy in the prime parts, and they fatten to great weights. Their constitutional hardiness and resistance to cold are remarkable. Their massive strength, honesty and gentleness make them the best work oxen known, and the bulls are remarkable for their prepotency. High praise for a fine breed!.....

DISHONESTY IN NURSERYMEN.—A subscriber, Mr. R. Morrill, of Michigan, writes as follows: "We are repeatedly warned to let traveling tree peddlers alone, while the fact is the most dangerous men are supposed to be reliable, and they get the heavy orders from fruit growers; then, under cover of the substitution clause in their catalogues, they often put some worthless substitute on the buyer, or sell him something they do not know to be all right, and it often proves to be all wrong. Now such a deal I consider to be worse than robbery, as a robber would only get your money, while the dishonest nurseryman robs us of money, the use of our land and, most valuable of all, our time."....

BOILED DOWN AND SEASONED.

P. M. AUGUR thinks it harder to reform a whiskey guzzler than a serious case of the yellows.....

THE Iowa Dairy Journal, speaking of adulterations, tells the story of three flies that came upon a table bearing some sugar, some cream and some fly-poison. One attacked the sugar and at once died from the effects of the alum and nitric acid it contained. Another sampled the cream and died from contraction of the stomach caused by the lime water in the milk. The third, resolved to commit suicide, took to the plate of poison, but found it so badly adulterated that he only grew fat upon it.....

STEPHEN BEALE notes in favor of turkeys as mothers that they can cover twice the number of eggs an ordinary hen can, and care for three times the number of chickens.....

Is there any sadder sight than an ignorant rich man? A rich pocket-book without a rich mind throws nature out of joint.....

THE evils which arise from eating pork are not from the use, but the abuse of the food—so says Dr. Hoskins.....

THE Western Rural says that malaria, general debility, liver complaint, "bad blood" and dozens of other troubles can all grow out of one disease—bad kitchen. In 1880 these kitchens aided in the work of disposing of $15,000,000 worth of patent medicines.....

THE Farmers' Review says that more seed corn is being wintered in dry, warmed lofts, chambers and attics than ever before.....

STEPHEN POWERS does not like a hog, yet he believes him to be the best cultivator and fertilizer that a careless farmer can turn into the orchard. He dates the destruction of a splendid orchard from the day the hogs were excluded from it.....

PROF. CALDWELL says that succulent food increases the flow of milk, but does not necessarily increase the proportion of water in it. The flow is greatest in June, yet the milk is no poorer than at other times.....

IF you want to get the good-will of your hens, says the Prairie Farmer, feed them dry, *hot* corn at night. Heat the corn in an iron pan or kettle in the oven, and stir occasionally. No matter if it gets a little charred. It won't do any harm to give warm water either.....

THE Poultry Bulletin says: "Never use wood ashes for a dust bath. They will make the brightest plumage rusty. Put the dust box where the sun will shine on it longest.....

VICK'S Monthly gives a good colored plate of the white and pink varieties of the Ramanas Rose—Rosa rugosa.....

OUR lady friends must not forget to plant sweet peas. There are few flowers more suitable for bouquets. The odor is pleasant and they last a long time. A few will be found among the Garden Treasures of the RURAL'S Seed Distribution.....

INSTEAD of the Norway Spruce, plant the White Spruce.....

IN Michigan, the ladies help to make the Farmers' Institutes a great success. Not only do they take a prominent part in the discussions, but they provide such a bountiful supply of food that every farmer who attends is placed in the best of spirits.....

NEXT month as soon as the weather will permit, we may sow early turnips, peas, radishes, onions, beets, carrots and spinach. Potatoes may also be planted. In the hot-bed may be sown tomatoes, peppers, parsley, cabbage, carrots, celery, cauliflower, egg plants, lettuce, cucumbers and melons.....

AN Illinois breeder has been prosecuted for practicing dishorning on mature cattle. The case attracts considerable attention, and will doubtless result in giving the polled breeds an added "boom."..... .....

MORE working oxen and fewer trotting horses upon New England farms is the sensible suggestion of Dr. Loring.....

MR. J. J. H. GREGORY makes the statement that the corn plant has the power of getting its nitrogen from the air. We have therefore but to supply potash and phosphate to the soil. For three years, the experiment has been tried upon the poor-soil plots of the Rural Grounds. No matter how large the quantity of potash and phosphoric acid used, we *can not* get a good crop without nitrogen.....

AT a late meeting of New England farmers, as reported in the Massachusetts Ploughman, Mr. King said that he raised 750 bushels of onions on an acre of land by the use of 1,400 pounds of complete chemical fertilizers.....

HAVE you ever tried the Shell Flower or Molucca Balm, Moluccella lævis. The RURAL introduced it 10 years ago. It is a queer flower.....

IT is very easy to raise roses from seeds.....

A BED of pansies will give about as much pleasure as any bedding plant we know of. It is now time to sow the seeds. Any sunny window will answer.....

THE New Orleans Picayune says farmers are pouring into Western Texas so fast that ranchmen have just time to move their cattle out and prevent their tails from being cut off by the advancing hoe.....

DRY corn-cobs are excellent material to supply the smoke to cure hams for home consumption.....

THE Cultivator says that large apple dealers in Boston claim that good apples would not command over 75 cents per barrel had it not been for the export trade, unsatisfactory as the latter may have been to shippers. There always seems, however, to be a healthy demand for the choice lots of apples, whatever the year may bring forth with poorer qualities.

THE editor of the Southern Cultivator has had very fine success in raising potatoes that were heavily mulched with pine straw and leaves soon after planting, and not cultivated at all.

DR. HOSKINS says that the agricultural student, if faithful, will accumulate a vast amount of information of sterling value for use on the farm, but he cannot and does not expect to graduate a perfect master of his art. And why sneer at agricultural colleges for that?.....

HE alone succeeds who has his heart in the work. The man who simply works for money never half succeeds. He loses the best part of life. Yet the man who sees no money ahead in his business will always be looking for some other calling. It does not follow that one should work the heart at the expense of the head, however. Be just in all business, before you are generous.....

REMEMBER, says the Cultivator, that time will be precious after the plow starts again, and there will be no profit in stopping work to cut wood for the kitchen fire, or to mend up harnesses or carts.....

W. C. STEEL advises farmers to make a greater use of copper wire. It can be used to easily mend tools. A spool of it carried in the wagon will be of great assistance in case of an accident to a trace or other parts of the wagon or harness.....

NOT a week passes without news of the poisoning of a family by eating "Rough on Rats." This poison contains arsenic. Cats handle the rats far more roughly.....

A Western editor says he writes "we" because he wants to give his wife full credit for her part of the work. Sensible man!.....

THE Carp Journal reports losses from muskrats which appear to be particularly fond of carp.....

IN his "Book of the Pig," Mr. James Long says that sows which have farrowed should not, as is popularly supposed, be immediately fed on rich food given in large quantities, for few things are more calculated to do them harm.....

AS the young ones increase in size, common sense will dictate that the food should be augmented both in quantity and quality. Some kinds of food diminish the quantity of milk that the sow gives to her young, and others (especially changes) are liable to cause scours or diarrhœa in the litter; they should consequently be avoided. At the end of the first month, however well the sow may have been fed, it will be noticed that her family have considerably pulled down her condition, and that the little pigs will now require some food to themselves.....

AT the end of a month it is a good plan to commence to feed young pigs with a handful of wheat or peas, scattered among the straw in the sty, the mother also getting a little at feeding time. There are no foods as good as these, although oats are frequently and strongly recommended. If the quantity given is increased as the pigs grow, until weaning time, it will be found that they wean well, and continue growing as though they had not been deprived of their mother's milk.....

Everywhere.

RURAL SPECIAL REPORTS.

Colorado.

CAÑON CITY, Fremont Co., Feb. 9.—All around us we have heard of terrific storms and heavy snows, while here we have been almost free from both. We have abundance of coal right here, exhaustless supplies of iron and copper near at hand, and lead, silver and gold in this and adjoining counties. Our smelter here runs two furnaces day and night and keeps some thousands of tons of ore constantly on hand. The Arkansas River has an average fall of about 40 feet to the mile, affording almost unlimited water power, only a small fraction of which is as yet utilized. Much land is being brought under irrigation and fruit raising is a great success. Heavy losses of stock are reported from all directions; but as yet no reliable data can be procured as to the extent of these losses, partly on account of a lack of accurate information on the part of the stockmen, and partly because they are in no hurry for the public to know all the facts in the case. The price of butchers' stock will probably be extensively "bulled" on the strength of these losses.

L. J. T.

Dakota.

HAROLD, Hughes Co.—Crops were very good here last year, but we hope to do better this. Wheat is worth 50 to 60 cents; corn, 25 cents; oats, 25 cents; potatoes, 40 cents; eggs, 15 cents; butter, 15 cents; coal, $6 to $8. A great many farmers are using flax straw for fuel. This is done by means of a straw-burner, which is simply a sort of a box made of sheet-iron, in the shape of a wash boiler. This is filled with straw and the two front lids and cross-piece of the cook stove (very few farmers here use more than one stove as yet) being removed, it is turned over the fire-place, the lower drafts of the stove are shut up tightly, and the burner raised a little so as to admit of a draft at the top of the stove. This will make a good fire for an hour or more. It is a "big thing" for the farmers, as coal is very high, owing to the unreasonably high rates charged by the railroad companies, and flax straw is very plentiful and represents no value whatever. A certain agricultural paper, "published in the interests of the Dakota farmers," offers for the small sum of $1.00 to inform its subscribers how to make the above described straw burner. Very liberal, isn't it? It seems to me that a farm journal that would ask money of its patrons for such information, is published in the interest of its publishers rather than that of the farmers. What does the RURAL think about it? [We heartily agree with you.—EDS.] H. S. C.

Delaware.

DOVER, Kent Co.—January was rather a rough month, on the whole. Wheat looking well. Peach buds went into winter-quarters in good shape. Markets are about as follows: Wheat, 85 to 90 cents; corn, 40 cents; oats, 35 cents; potatoes, 50 cents; sweet, 50 to 60 cents; butter, 25 cents; eggs, 22 cents; turkeys, 11 cents; chickens, 9 cents; beef 8 to 10 cents. Stock wintering well; food plenty at fair prices. S. T. S.

RISING SUN, Kent Co., Feb. 15.—The thermometer ranged from zero to 12 degrees below on the 5th and 6th of this month, threatening and in many places injuring the peach crop for 1886. Many farmers in this county report the peach buds all killed every Winter, and yet we do not have an entire failure more than once in 10 years. By recent examinations, I find that the reports that all the peach buds are killed, are not correct in this immediate vicinity. Some orchards show 50 per cent. of the buds good, while others show from 10 to 50 per cent. good; but some are apparently all killed. From examinations made and consultations had with other farmers in this vicinity, I think it safe to say enough live peach buds are left to make a crop equal to that of 1885, and if the same be true of the whole Peninsula, there will be a crop of 3,000,000 baskets. Peach growing is the greatest industry of our State, and in many cases the dependence of our farmers. A good crop at good prices brings to this county alone more than half a million dollars. Many of the farms are from one-half to three-fourths under peach trees, containing from 1,000 to 30,000 trees each, thus setting all other crops in the background. C. G. B.

Florida.

MANATEE, Manatee Co.—I do not believe that orange culture in this State can ever prove a success, for the following reasons: 1, The continually reduced market will not compensate for the outlay of time, labor and money necessary to raise a grove and sustain it. 2. The trees are too subject to disease and insect depredations. 3. Heavy frosts, snow and ice set back—sometimes for several years—the larger trees, killing outright the smaller ones and destroying the fruit. J. F. B.

Indiana.

PENDLETON, Madison Co., Feb. 15.—Thirty to forty years ago this part of Indiana was unsurpassed as a fruit country. Apples, peaches and cherries were so abundant that the two former often rotted on the ground for want of a market at a remunerative price. Peaches refuse to grow here any longer. Apple orchards have died out until there is not half enough fruit raised for home consumption. Apples from Michigan and New York sell readily for $1 and upwards per bushel. Apple trees from home and distant nurseries, have been planted in great numbers every year, but insects, diseases or climate, or all combined, kill them before they bear fruit. Fortunately small fruits—grapes excepted—do well, and farmers and villagers are appreciating them more and more, and the supply will soon be ample. Last Summer strawberries and raspberries were plentiful at 10 cents a quart. S. W. H.

Michigan.

MAPLE, Ionia Co.—From 42 kernels of the Rural Union Corn I raised, the first year, two bushels of very nice grain. Last year I planted a quarter of an acre of sod; the cut-worms destroyed all the first planting except six plants. From the second planting, on June 15, I obtained 41 bushels of ears. The Blush Potato is tip-top—doesn't rot; all others rotted badly here. The Boss Melon is very early and the best market melon in this section. The Diehl-Mediterranean Wheat is very productive. I got eight pounds. From 50 seeds of the Thousand-fold Rye, sown October 26, I got 10 pounds. Garden Treasures splendid—some rare plants among them. H.

New York.

BURNHAMS, Chautauqua Co. — Stratagem Peas the finest I ever saw—pods larger than those of any other variety; all saved for seed. Flageolet Beans very nice. Tomatoes fine. An unruly cow liked the Johnson Grass so well that it didn't get a fair show. The ears on some of the 50 crosses of corn were as high as I could reach; while those on others were close to the ground. Some of the latter failed to mature, and some of it was quite early. The Garden Treasures were rightly named; they were perfectly charming—a delight to all flower lovers. A. W. W.

Pennsylvania.

MADISONVILLE, Lackawanna Co. — The Rural tomatoes were not as good as those it sent out in 1884,-or as some old sorts we had grown for several years. Beans excellent. Garden Treasures just splendid. I planted my potatoes partly on the RURAL plan, and though the weather was very dry they kept green all Summer, and I got about 200 bushels to the acre—the largest yield in the neighborhood. Crops generally light. This is a great place for small fruits. B. G. E.

SAEGERSTOWN, Crawford Co.—The RURAL seeds all did reasonably well. The corn did well, but some of it didn't ripen—most of it is too late for this section. The peas and beans did well. I shall save the former for seed; but I think we have better beans than the Flageolet. I got 10 pounds of rye from my small packet, and I have five pounds of the wheat. I value both highly, and sowed both, and they looked well when snow came. Snow abundant. Success to the RURAL! D. A. K.

Virginia.

MONTEITHVILLE, Stafford Co., February 9. The RURAL seeds did well except the corn. That did not grow uniformly, and we had only a few fine ears. The peas and beans were most excellent. Garden Treasures gave us a mound of beauties that delighted the family until frost. Last year was very unfavorable for all field crops except oats. These were uncommonly good. Wheat, corn and potatoes were very little over half an average crop. Fruits of all kinds were abundant. Prices are low except for potatoes, which are 75 cents per bushel. Wheat, 85 cents; corn, 42 cents; oats, 35 cents; beef cattle, three cents to 3½ cents; baled hay, $18 per ton. Winter has been severe—12° below zero in January, with ice eight inches thick. Snowed first of this month 36 hours without intermission, leaving snow two feet deep, with drifts five feet. Mercury fell to 5° below zero. Farmers here generally prepare for rough winter weather, but such a storm as the above has not occurred since 1857. All honor and success to the RURAL! It is beyond all praise. Every farmer that owns an acre of land ought to be a subscriber, and no family should be without it. Deducting the worth of seeds sent free, and, all things considered, I believe it to be the cheapest not to say the purest and most elevating in a moral sense, of all first-class papers in the land. We sometimes think this national journal ought to be called the RURAL AMERICAN. In nothing else could we wish for a change, or desire improvement.

J. O. L.

Miscellaneous Advertising.

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Hand Cultivator, Wheel Hoe,
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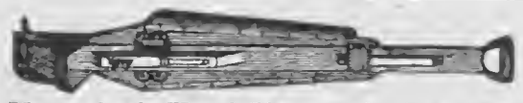

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BEATS THEM ALL.
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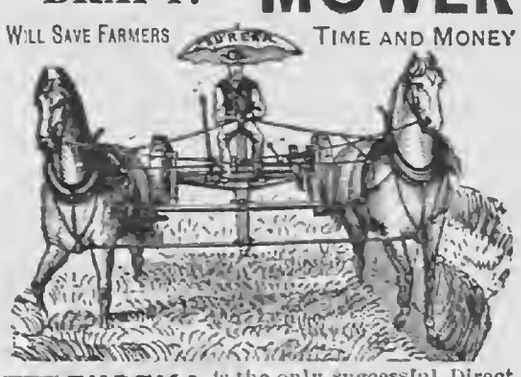

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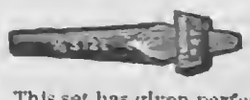

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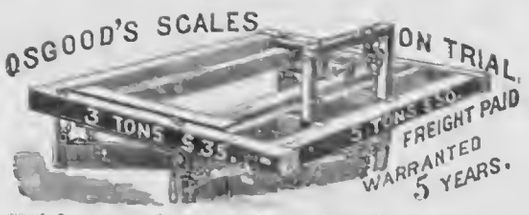

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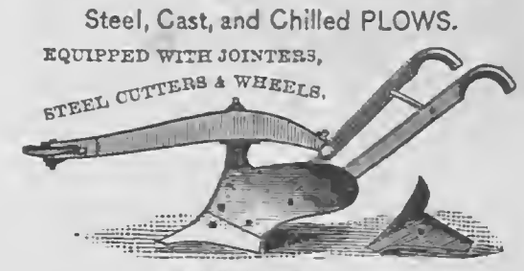

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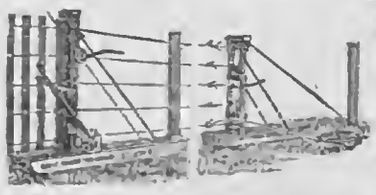

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THE FARMER'S CLUB

ANSWERS TO CORRESPONDENTS.

[Every query must be accompanied by the name and address of the writer to insure attention. Before asking a question, please see if it is not answered in our advertising columns. Ask only a few questions at one time. Put questions on a separate piece of paper.]

SWEENY IN A MARE.

M. C. G., Fredericksburg, Va.—My six-year-old mare became quite lame one night last Summer. I could discover no sign of injury. Now the top of the shoulder seems slightly flattened. She was turned out to grass for several months in Summer, and did not limp when taken off. I drove her twice to a sleigh, and now the lameness has returned. If it is sweeny, how should she be treated?

ANSWERED BY F. L. KILBORNE, B. V. S.

Stand directly in front of the animal and compare the two shoulders. If one shoulder is sweenied and the other sound, there will be a marked rolling, or bulging outward, of the point of the affected shoulder when the weight of the animal is thrown upon the lame side. For slight wasting of the muscle, as in this case, active friction over the wasted muscle with a wisp of hard twisted straw, a corn-cob, brick, or other hard substance for 15 or 20 minutes once or twice daily, may be all that is necessary. Failing in this, repeated an application of a mild blister of ammonia and oil. The most rapid method, however, of replacing the wasted muscle is by sending a current of electricity through the muscle for 15 or 20 minutes daily. Apply one electrode of an electric battery at the upper end of the wasting muscle, and the other electrode at the lower end. During any form of treatment, moderate daily exercise on level ground is very important as tending to stimulate the growth of the muscle. If the affected shoulder does not roll outward, the cause of the lameness must be looked for in the lower part of the limb and be treated accordingly. A slight wasting of the muscles of the shoulder is sometimes due to such lameness, and does not always indicate sweeny.

FEED FOR MILCH COWS.

E. G. B., Penn's Grove, N. J.—I am feeding my cows 20 pounds of dry, cut corn-stalks and six quarts of "cob meal" each per day. They are in fairly good stables and kept up most of the time, except on pleasant days, and yet they are falling off rapidly in milk; what is the cause?

ANS.—There are two reasons: the cows are insufficiently fed and the food contains too little nitrogenous food. If the cows are 1,000 or more pounds in weight they should have not less than 30 pounds of good clover hay per day, even when not giving milk, and if giving milk, an additional quantity. Of the 20 pounds of ordinary stalks not 10 pounds are really valuable food, and of the six quarts of meal at least one-half is cob. In both these foods the albuminoids do not constitute more than one part to every eight or more parts of carbohydrates; while the lowest profitable proportion should be one to four, and it would be better still if the proportion was much higher. The cows should have, in addition to the ration already given, at least four quarts of wheat bran and one-and-one-half quart of oil meal. The whole grain ration should be well mixed and the ration intended for the night feed be mixed with boiling water in the morning, and the same should be done at night for the next morning's feed. It would be much better if the cows had a liberal allowance of roots or silage each day. Also make the barns a little warmer and keep the cows there all the time, except when out to drink.

WORMS IN PIGS.

M. B., Anna, Ill.—What is a good remedy for worms in pigs?

ANS.—Pigs are greatly troubled by several sorts of worms. The round worm is usually the size of a small goose-quill, six or seven inches long, of a brownish color and somewhat corrugated. Probably the most effectual remedy is santonin—the active principle of a plant called worm-seed. It is in small white crystals and may be given in doses of one-third of a teaspoonful mornings and nights for three or four days, following with a brisk carthartic, such as calomel, in teaspoonful doses. Two other worms, one a white, slender pest, as large as a knitting needle and three inches long; and the other a little white wretch, three-quarters of an inch long, and shaped like a tad-pole, dwell in the lower bowels and larger intestines, and are sometimes seen coming from the anus. These may often be removed by giving, each morning for a week, one-and-one-half tablespoonful of Barbadoes aloes with a teaspoonful of copperas. If this fails after having been taken for four or five days, give an injection: tincture of assafœtida, one teaspoonful; salt, one teaspoonful; water, half a pint; mix together, warm slightly, and inject. A remedy much easier and generally effective is to mix wood ashes with soap-suds and feed once a week with slops.

DIARRHEA IN HENS.

N. H., Peterboro, N. H.—Can you give me a remedy for diarrhea in hens?

ANS.—We do not know the cause of the disease. It may be a symptom of cholera. In this case the dischage will be thin and frothy—greenish or like sulphur and water. Treatment for cholera is generally unsatisfactory. Remove the sick fowls from the others in any event. Ordinary diarrhea is not uncommon among fowls. It is not a dangerous disease in a mild form, but the danger lies in permitting it to become chronic, which will be the result if left to itself. The disease is caused generally by indigestion, resulting from unwholesome food, lack of gravel, or inability to exercise properly. All who have examined the digestive organs of a fowl know how necessary gravel is to the proper digestion of the food. Hens should always be allowed access to coarse sand or gravel. The diet should be changed. Cooked rice or stale bread with milk and seasoned with pepper is good, with plenty of burnt bone. Where hens can be "dosed" a pill as large as a pea made of equal parts of powdered chalk, rhubarb and cayenne pepper, with a little camphor, may be given daily. The "Douglass Mixture" is highly recommended by many. This is made by disolving one pound of copperas in two gallons of soft water, to which one ounce of oil of vitriol is added; this is placed in a jug and kept corked. The dose is one teaspoonful in a pint of drinking water. This medicine will be found valuable in many of the diseases to which chickens are liable.

COTTON-SEED FERTILIZER FOR POTATOES.

J. M., Selma, Ala.—1. Which is the better for growing Irish potatoes, on sandy land with a red clay subsoil, ashes from cotton-seed hulls, or cotton-seed meal, each costing $20 per ton at the mill? 2. How should I use them and hen manure to produce the best results? 3. Would you prefer all of each or a mixture of both with the ashes?

ANS.—1. Ashes from cotton-seed hulls, when pure, contain about 30 per cent. of potash and about seven per cent. of phosphoric acid, mostly in an available form, and valuing the potash at six cents per pound (it being mostly carbonate), and the phosphoric acid at about nine cents, it would be worth $48.30. Cotton-seed meal contains only 2.47 per cent. of phosphoric acid and 1.51 per cent. of potash; but it contains 7.25 per cent. of nitrogen, which, valuing the nitrogen at 17 cents and the phosphoric acid and potash as before, makes it worth $30.89 per ton, so it is easy to see which is the best to buy. 2. A mixture of cotton-seed-hull ashes with hen manure would be a capital potato fertilizer, although it would contain a surplus of potash. 3. We should prefer the ashes mixed with hen manure and soluble phosphate or very fine bone dust, although the cotton-seed meal is a good manure at the price; but it is too rich in nitrogen and too poor in potash and phosphoric acid for a potato manure.

ROUP IN POULTRY.

P. H., Helena, Dak.—One eye of a hen was afflicted with a red swelling; she died shortly afterwards. A small red lump is now growing between the eye and the bill of a turkey hen; is it the same trouble; and what is it?

ANS.—Roup in both cases. There are different forms of the disease, or rather different symptoms; but whatever the indications, the malady is caused by exposure to cold or damp weather. The swelling may be relieved by bathing the head in a solution made by dissolving a teaspoonful of boracic acid in half a glass of water. Bathe the head and eyes once a day, using a soft sponge, and making the solution warm. Keep the birds in a dry, warm place. Feed on nourishing food. A teaspoonful of the solution poured down the throat will be beneficial, as it will do no harm, and will destroy the disease which is really in the system. After bathing with the mixture, anoint with a few drops of glycerine.

SUBDUING PRAIRIE GRASS.

R. C., State Line, Ind.—I have about 10 acres of drained slough, completely covered with prairie grass. The sod is so tough that it is next to impossible to break the ground. Is there any crop that I can sow on the ground that will, in a year or two, kill the prairie grass?

ANS.—It must be a tough prairie sod a sharp steel sward plow will not turn. To subdue without breaking the sward, all that is necessary is to fence off the 10 acres so they can be pastured. Sow, during the Winter or early in the Spring, about twice the amount of Timothy, Blue Grass or clover used on plowed land, to let the cattle tramp the seed in. The tame grasses will not make much show the first season; but they will get a good catch the second, and have routed the wild grasses out the third. The waste from hay where stock is fed in considerable numbers, may be scattered on the prairie grass to assist in subduing it.

GRAFTING WAX, ETC.

O. S. C., Greenlawn, L. I., N. Y.—1. How shall I make a good grafting wax? 2. When should cherry cions be cut, and when set?

ANS.—1. Melt four pounds of resin, two pounds of tallow, and one pound of beeswax in an iron kettle, and when thoroughly melted stir it well and pour it into a tub of cold water, and as soon as it is cold enough to handle, pull and work until it becomes quite light-colored, like candy. It can be made harder or softer by using more or less tallow. 2. They should be cut any time between now and Spring, when not frozen. They should be set on the first warm day and before the buds start in the least.

"Inquirer," Fredonia, Wis.—I wish to make a fruit garden on new land, some heavy clay and some inclined to be sandy. A part received a heavy coat of stable manure last Summer and was thoroughly harrowed several times. It is on a river bank and I think of underdraining most of it. I am thinking of planting a part to raspberries and a part to strawberries next Spring. Should I wait another year, cultivating the ground to other crops, and under-draining it where necessary, and manuring it?

ANS.—Waiting until another year, as you represent it, would be the better way, we are confident.

RASPBERRIES AND BLACKBERRIES FOR N. S.

R. W. T., Halifax, N. S.—1. What are the best raspberry and blackberry for market in this section? 2. Will rasperries keep better if picked with the hulls on?

ANS.—1. The Winters of Nova Scotia are reported not to be so severe as to prohibit the cultivation of such varieties as the Cuthbert and Turner Raspberries, or any of the black-caps, of which Doolittle is as good as any. The Snyder and, perhaps, the Wilson Blackberries would probably prove successful. 2. It is not practicable to pick and market raspberries with the hulls attached.

TOP-DRESSING FOR MEADOW.

G. W. D., New Haven, Ct.—What is the best commercial fertilizer for top-dressing an upland meadow that has been seeded to Timothy two or three years? My land is rather heavy loam, with hard-pan two or more feet below the surface, and ashes appear to do no good while bone manure produces good results, but I have to draw it 10 miles.

ANS.—We should use boue flour, 400 pounds; wood ashes, 10 bushels, or in place of these, 200 pounds of muriate of potash, and 200 pounds of tankage or fish scrap per acre, scattered broadcast, and the surface well harrowed. All this early in Spring.

Miscellaneous.

H. N. C., Columbia, Dak.—1. Where can I get the best seed corn of the dent variety, suitable for Central Dakota? 2. Where can I procure seeds of the Angel of Midnight Corn? 3. Where can I get Manshury Barley true to name? 4. Is the wheat you are experimenting with, all winter varieties?

ANS—1. Write to Northrup & Braslin, Minneapolis, Minn., for the corn. 2. Of Joseph Breck & Sons, Boston, Mass. 3. Probably of any large seed dealer near you. If not, write to H. M. Jaques, Wright's Corners, N. Y. 4. Yes,—without an exception.

J. H. V., New York City.—What kind of commercial fertilizer would be best on a sandy kitchen and flower garden?

ANS.—Purchase the "complete manures for light soils" offered by fertilizer firms. Bone alone is, however, all that is needed on many such soils. Try, bone, potash, etc., on different plots.

E. E. F., Hampden, Me.—Where can I obtain the pure strain of the Rural New-Yorker Pens?

ANS.—Of the leading seedsmen, we think, or certainly of A. B. Cleveland, Cape Vincent, N. Y.

H. S. B., Catskill, N. Y.—We have repeatedly stated that all works printed by the Government can be obtained by application to the Representative in Congress for the applicant's District, or one of the Senators for his State. Prof. Riley's reports are printed by the Government.

T. W., Matta, Ohio.—A good paint for shingles is made by thinning Portland cement with skimmed milk (not soured) to the consistency of whitewash. It is also a good application to all out-buildings and fences. Objects coated with it have stood exposure to all sorts of weather for 20 years.

J. H. P., Gallatia, Ill.—Manshury is a Winter barley. It ought to be suitable to Southern Illinois and Missouri. A small work on tobacco culture and marketing is made up of 14 essays by practical growers. Price 25 cents; to be had through the American News Co., this city.

L. W., Malta, Ohio.—It is our impression that the flowers of the pyrethrum should be cut while in full bloom, then dried and powdered. The foliage is of no use as an insecticide.

J. H. G., Little Horse Creek, Wy. Ter.—A good work on the management of cattle is Allen's American Cattle, $2.50; to be had through the American News Company, this city.

E. H.—"Hooks" of several years standing can be cured by the treatment given in a late RURAL, if they can be cured at all.

F. S. W., (no address).—Yes; asparagus roots from a five-year-old bed will do for setting out a new bed.

E. B., Union, N. Y.—Yes; tobacco stems are good to plow under for strawberries, if given time to rot. Use as much as you can plow under.

J. R., Fayette Co., Pa., asks what kind of apples, sweet or sour, should be raised for hogs?

DISCUSSION.

C. H., CANESTOGA, PA.—In the RURAL of Feb. 13, it is stated that Prof. Burrill says that fruit is not in the least affected by pollen from another variety; and to this the RURAL appears to assent. A few years ago I had a top graft of the Reine Horteuse Cherry on a Mahaleb stem. After a few years' growth it was neglected, and the sprouts from the Mahaleb grew through the top of the Reine Hortense, and both fruited—result, the Hortense was about two-thirds of the usual size, and the fruit was nearly as bitter as the Mahaleb.

J. S. H., SACO, ME.—In a late RURAL, it was said that petroleum would preserve shingles. Here is an illustration of what another oil will do. A neighbor about 20 years ago shingled his house with No. 1 cedar shingles, which he had boiled in a kettle of hot linseed oil—he used about six gallons per thousand. They are in good condition now, and seem good for 10 to 20 years to come. During the same time my father's residence, about 50 feet away, has been shingled three times with the best cedar shingles.

D. F. G., OSCEOLA CO., Mich.—In answer to an inquiry in the F. C. of a late RURAL, it was said that from 2½ to 4 bushels of peas should be sown per acre. Well, I should like to see the crop from that quantity of seed growing and harvested. This is one of the best sections for raising peas I have ever seen, the crops running from 30 to 60 bushels per acre, and we sow, broadcast, from 1¼ to 1½ bushel per acre, and no more. If we sow more we get too many vines and a small crop of peas.

S. J., SOUTH BEND, Ind.—An inquirer asked about the Surprise Apple, in a late F. C. We have here an apple known by that name. It is medium-sized, colored outside like the Maiden's Blush, while the flesh is a dark-rose or purple to the core—not streaked with red, but a solid color like a beet.

J. J. C., MARIETTA, Ga.—In a late RURAL C. A. Green is discouraged about killing Canada Thistles. The right way to kill the pests is to plow early and deep, harrow, roll, and gang-plow so often that they cannot show their heads above ground from May until frost. Quack and Bermuda Grass can be got rid of in the same way. I speak from experience in Western New York as well as in this State.

R. N.-Y.—Canada Thistles are easy to kill. We never fail to "fix" them the first time we try, by plowing once, and afterwards thorough culture through the season.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING SATURDAY, February 27, 1886.

A. A.—W. A. B.—A. G. A.—F. L. K.—P. M. G.—M. O. C. A.—A. P. C.—T. H. H.—H. M. E.—W. R. S.—P. H. J.—M. J. H.—A. C. S.—P. H. J.—E. H. U.—A. H. R.—E. J. B. E. C. B.—F. S. W.—T. T. L.—P. B. M.—E. B.—W. A. B.—J. H. V. N.—J. B. D.—R. W. W., thanks.—J. S. H.—H. W. V. N., Johnson Grass is not the thing.—A. V. H.—A. G. C.—S. W. H.—D. T. G.—W. F. B.—J. D. S.—H. S. B.—T. E. P.—J. A. S.—C. G.—W. Z. H.—E. A. H.—F. L. K.—L. S.—N. D.—L. R.—W. T.—H. & B.—C. M. G.—S. E. C.—M. L. H.—C. T. G.—A. K.—J. W.—J. P.—J. M. S.—W. B. H.—S. W. B.—W. H. B. B.—A.—E. E. F.—D. C.—D. S.—S. S. D. O. B.—W. B. T.—R. V.—E. F. B.—E. A.—A. S. B.—E. W. H.—A. F. W.—D. B.—E. W. J.—W. P. A.—T. J. D. C.—T. R. W.—J. I. C.—G. W. D.—D. C. S.—F. B.—H. G. W.—S. W. H.—E. H. S.—D. P. D.—H. W. C.—J. P. S.—J. F. G.—J. W. P.—J. R.—E. S. S.—S. E. H.—T. W.—W. H. G.—L. J. T.—W. D. S.—W. H.—O. H. A., seed received.—D. S.—J. C. B.—P. S.—L. E. B.—C. E. M.—R. M. W. P., declined.—J. P. V.—J. W. B.—C. G.—T. J. W.—J. L. B.—J. D. T.—T. D. C.—D. H. B.—P. D.—H. M. S.—J. P. B.—A. F. L.—J. S. McF.—S. J.—J. A. L.—H. S. C.—L.

Miscellaneous Advertising.

Scrofula

Probably no form of disease is so generally distributed among our whole population as scrofula. Almost every individual has this latent poison coursing his veins. The terrible sufferings endured by those afflicted with scrofulous sores cannot be understood by others, and their gratitude on finding a remedy that cures them, astonishes a well person. The wonderful power of

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in eradicating every form of Scrofula has been so clearly and fully demonstrated that it leaves no doubt that it is the greatest medical discovery of this generation. It is made by C. I. HOOD & CO., Lowell, Mass., and is sold by all druggists.

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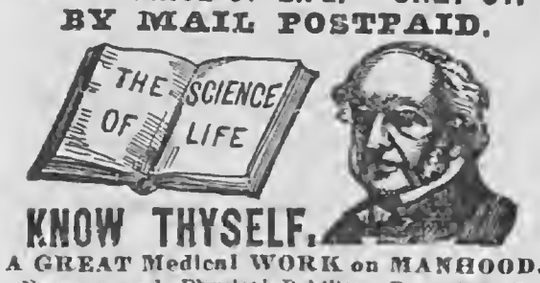

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The Science of Life should be read by the young for instruction, and by the afflicted for relief. It will benefit all.—*London Lancet.*

There is no member of society to whom The Science of Life will not be useful, whether youth, parent, guardian, instructor or clergyman.—*Argonaut.*

Address the Peabody Medical Institute, or Dr. W. H. Parker, No. 4 Bulfinch Street, Boston, Mass., who may be consulted on all diseases requiring skill and experience. Chronic and obstinate cases that have baffled the skill of all other physicians a specialty. Such treated successfully without an instance of failure.

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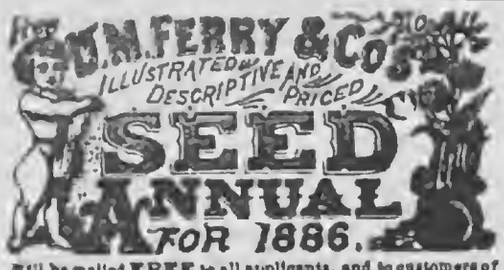

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HEDGE PLANTS.—Honey Locust, Osage N. Spruce, Arborvitæ. For price address

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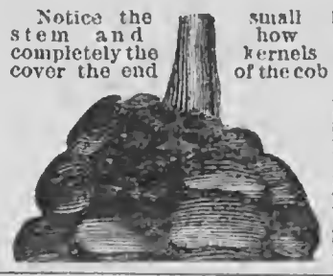

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We introduced this Great Novelty last season. The demand was so large we were soon obliged to refuse orders and return the money. Our stocks are now heavy and we propose to make this a grand benefit (note price). Therefore order early and secure enough for seed. We again offer the originator's crop grown exclusively for us and can be obtained only from us for the season of 1886. Prices: Sample Ears, postage prepaid, 12c. Sample packets, postage prepaid, 10c. One quart (add 25c for postage if by mail), 20c. By express: Four quarts, 50c. One peck, 75c. One bushel, $2.50. Five bushels, $2.25 per bushel. Ten bushels, $2 per bushel. Seed catalogue now ready. Sent free to any address. B. L. BRAGG & CO., Springfield, Mass.

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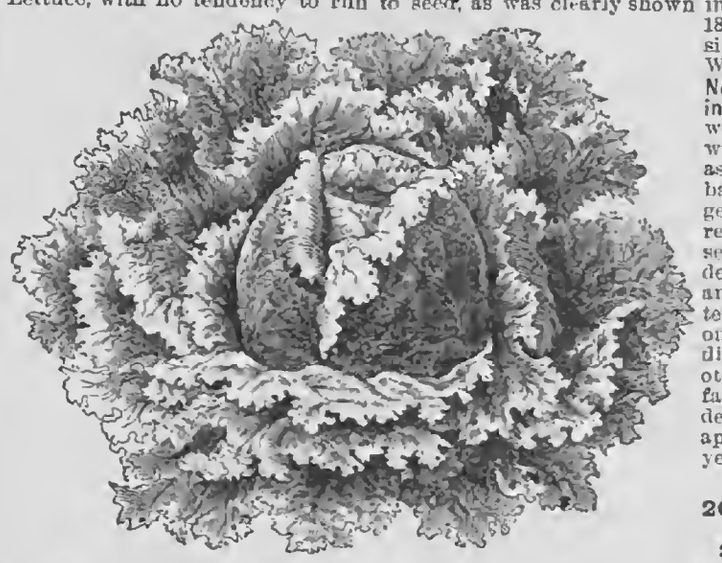

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DISBROW M'F'G CO., Rochester, N. Y.

HERE IS THE HARROW
For Enterprising Farmers.

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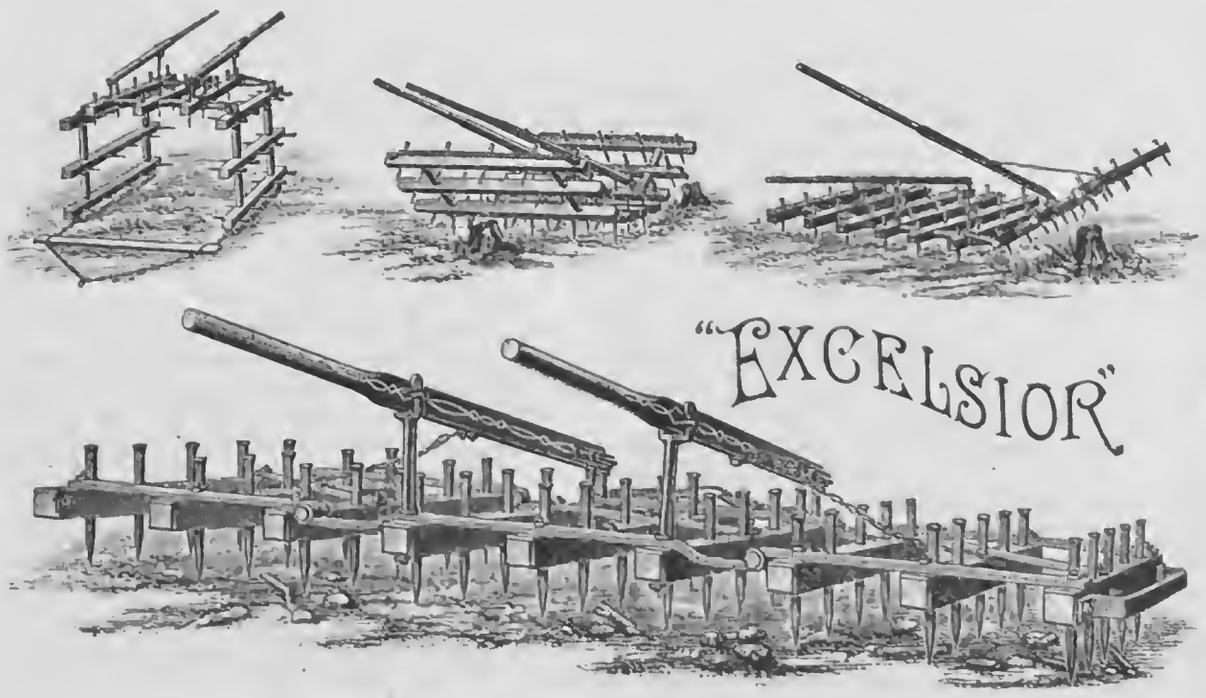
FARMER'S FRIEND M'F'G. CO.,
DAYTON, O.



WE ALSO MAKE

2-Horse Corn Planters,
2-Horse Corn Drills,
Fertilizer Corn Planters,
Wire Check Rowers,
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Our Planters and Corn Drills are recognized as the best in all the Corn States.

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DAYTON, O.

THE
RURAL NEW-YORKER.
A National Journal for Country and Suburban Homes.

Conducted by
E. S. CARMAN, Editor.
J. S. WOODWARD, Associate.

Address
THE RURAL NEW-YORKER,
No. 34 PARK ROW, New York.

SATURDAY, MARCH 6, 1886.

Subscribers of the RURAL *need never take the trouble to write us to "stop" the paper. It is invariably discontinued at the expiration of the subscription term, except by oversight, in which case it is our loss.*

SIR JOHN B. LAWES favors us with an article regarding the Composition of the Ash of the Potato, which we reserve for our next Potato Special, soon to appear.

IF the number on your address label is 1884, your subscription expires with this number; if 1885, next week; 1886, in two weeks, etc.

ROBERT DOUGLAS, the veteran nurseryman of Waukegan, Ills., writes, in answer to our question: "We cannot succeed with the American Chestnut here, for which reason we have never tried the Japan."

IN the course of a few weeks, we shall complete our account of the RURAL'S hybrid wheat and rye varieties, with illustrations. The concluding article will speak only of those plants which most resemble rye.

SIR J. B. LAWES says that the difference in the forms in which potash, phosphoric acid and nitrogen are met with, greatly affects their value. The present method of analyzing manures does not properly recognize these distinctions, and the valuations founded upon these analyses are altogether false and erroneous. Thus, it would appear, our farmers are placing quite too much confidence in the reports of the chemists of our agricultural experiment stations.

A FRIEND in Pennsylvania (post-mark and name illegible) advises us to be careful about commending the Japan Chestnut too highly. He has a number of trees seven years old, that have not yet fruited. The tallest is seven feet high and six inches in circumference—"a pretty little tree" he says. With him the trees are apt to grow too late in the Fall, so that the wood does not mature. We are anxious to give both sides as to the Japan Chestnut. In the above case, is our friend quite positive that his trees are not the Spanish Chestnut?

A COTTON-PICKING machine was tried at the Cotton Exchange last Tuesday, and gave great satisfaction. The annual cost of picking cotton is put at $40,000,000, or one-sixth of the value of the crop. Should the machine prove successful in field operations, it is thought that at least half this sum will be saved; and the more perfect it may be made, the greater will be the saving. It is now nearly three years since we first announced this invention; improvements have since been made in it; but it does not appear that it has ever been practically used in field work. It has taken years, however, to perfect some of our most valuable inventions.

AT Burlington, Vt., a company was organized and a factory built last Summer for the extraction of milk sugar from whey. Contracts have been made with farmers of the neighborhood to send their milk to cheese factories to supply the company with whey for five years. Prof. Sabin, of the State University of Vermont, is reported to be making contracts with Western farmers for larger supplies of whey than can be supplied by small New England factories. This is a more profitable use for whey than feeding it to hogs, and we rejoice at every discovery by which the value of any product of the farm is increased.

FIVE different breeds of poultry are illustrated on our first page. Which would you select? All have good points and would give satisfaction if carefully handled. Wyandottes and Plymouth Rocks unquestionably enjoy the benefit of the "boom" just now; but all the breeds have staunch defenders. It is safe enough to say that any of the groups shown in the picture, placed in the farm-yard and given a fair chance, would, in two years, completely change the color and character of any flock. All the farmer would be called upon to do would be to provide warm quarters, give plenty of feed, and industriously make "fried chicken" of all mongrel roosters. Is there any American farmer who cannot do that?

SPECIAL.

THOSE who, having applied for the RURAL'S present seed distribution prior to February 20th, have not yet received it (Canada subscribers excepted), will kindly notify us by postal.

STORRS, HARRISON & Co., of Painesville, O., write us that the Japan and Spanish Chestnut trees are so unlike, both in leaf and wood, that they can readily be distinguished by either. They use the American Chestnut to graft on. Why is the American preferred to the Japan for stocks? Mr. Harrison writes us that the shoots of the Spanish trees are thick and stubbed and the buds and leaves partake of the same characteristics. The shoots of the Japan are invariably smaller, and the leaves, though long, are not as broad or thick. Mr. H. has never, in an experience of 20 years, met with a Spanish Chestnut as sweet as the Japan, the skin under the shell being bitter and astringent. When the skin is removed, the meat is not sweet. While there is a trace of bitterness in the Japan eaten with the skin on, when the skin is removed the meat is nearly as sweet as that of the American and, Mr. Harrison concludes, "we believe with you that the Japan Chestnut is a grand, good thing." The upshot of this is that our friends, in ordering trees, must be careful to obtain the Japan. The Spanish, besides the inferiority of its nuts in quality, is not hardy in this climate.

OF how much value are the reports of analyses of chemical fertilizers made by Stations? It is a growing question and one which should be understood by farmers. The analyses determine the *strength* of a fertilizer—that is well known. But they do not determine the *value* of the strength. According to the present method, as we understand it, the Station analysis always tells us what it *may be* worth, but the actual value depends upon whether the ingredients used to make the the fertilizer are derived from one set of materials or another. To put it in a plain way: Here are two samples which analyze just alike and are so valued by the chemist. Nevertheless, the one may be worth, agriculturally, twice as much as the other. This being so, here is what we cannot understand: Why don't the fertilizers of fraudulent manufacturers analyze to show a far higher value than they do? Why don't they avail themselves of this tempting margin to counterfeit the first-class article more nearly? Ah, please, explain this.

THERE are greenhouses near New York, covering less than half an acre, that pay their owners far more profit than many a large farm. Single roses frequently sell for more than a farmer can get for a bushel of wheat. The florist works as hard at his business as the farmer does at his, but it is study and close observation instead of hard physical labor that enable him to make one square rod of land do the work of an acre under ordinary cultivation. It has been proved, time and again, of every business under the sun, that one man can do but a certain amount of work. The more he condenses and pushes that work, the greater the result will be. The more he scatters and spreads his work, the less will he accomplish. There are two ways of looking at the fact that a rose in New York brings as much as a bushel of wheat in Kansas. We may envy our more fortunate brother his location and knowledge, and write another chapter on our own "hard luck," or we may look about and see whether there is not a chance for us to condense our work. Are we not trying to farm too much land, to feed too much stock and make ourselves so busy that we have no time for the family? Think of this before you buy more land. An American farmer can be far more independent on a 40-acre farm than dozens of the little kings and princes of Europe.

NO DELAY!

LET it be remembered that the bill introduced into Congress by Senator James F. Wilson, of Iowa, doubles the present rate of postage on seeds, plants and all other fourth-class matter. The present rate is 16 cents per pound; the rate was eight cents a pound before 1872. In Canada, it is now only four cents a pound, and the United States' charges are only at that rate on all seeds, etc., mailed in Canada; so that the Government, even now, charges its own citizens four times as much for its postal facilities on this class of goods as it charges outsiders. In England, the rate is six cents per pound on packages not exceeding one pound, and lower rates on heavier packages. In other countries also, the charges are less than they are here. Cheap postage on this class of goods is everywhere else regarded as a public benefit. It is looked upon in the same light in this country by the people at large who have to pay for it. It is not a godsend to the express companies, however, and the attempt to increase the charges is made exclusively for the benefit of these extortioners, to enable them to increase the profits on their watered stock by fleecing the public. It is a petty business for a Senator of the United States, an aspirant for the Presidency, to become the mouthpiece, the willing tool of these corporations, to the injury of the public at large. We earnestly urge all our readers to write at once to the Senators from their respective States and the Representatives from their respective districts vigorously protesting against the proposed change, and urging that if any change is to be made, it should be to eight cents a pound, the rate in force here before 1872, or, better, to four cents a pound, the rate now in force in the Dominion. The farmers of the country have no lobby in Washington to look after their interests; the greater the need that they should frequently impress their wishes through the mail on their representatives in Congress. Don't delay; do so AT ONCE.

DRESSED-MEAT TRADE AND THE RAILROADS.

THE great Western railroad pool has decided that the consumers of the East must pay more for their meat, and the producers of the West get less for their cattle, and that the railroad companies and their friends must get all the profits from the oppression of both parties. Last year the dressed meat of over 1,000,000 cattle, shipped from Chicago in refrigerator cars, was consumed in the East. Since the commencement of the dressed beef trade on a large scale in 1873, there has been constant conflict between the shippers of dressed beef and those of live cattle, and the railroads have invariably favored the latter by discriminating against the former in freight rates. Instead of making equal charges for equal service rendered to both parties, they have constantly overcharged the dressed meat shippers, and their latest schedule, which is to go into force on March 1, virtually prohibits the shipments of dressed beef, according to those engaged in the business. Since 1878 the rates for dressed beef have been 50, then 60, then 75 per cent. more than for live stock, and the rate soon to be enforced will be 85 2-3 per cent. more. The expressed object of the companies in making this discrimination, is "to place the dressed beef and live stock shippers on an equal footing, so that a man who buys in the Eastern market dressed beef that is shipped from Chicago as such, and dressed beef that is derived from live stock which is shipped from the West and slaughtered in New York, will have to pay the same money per pound." Who gave the railroads the right of determining the price of meat in the East or of cattle the West? What right have they except to make equal charges for equal service? The truth of the matter is that the directors and their friends own or are heavily interested in stock-yards along the various routes and in slaughter-houses at the ends of the roads, as well as in stock cars, and while live cattle contribute heavily to the profits from all these, dressed meat whirls by them without paying a cent of toll. In the interests of the stockholders, and especially of the directors and their friends, the railroads are enforcing the odious claim of a right to charge "all the traffic will bear." The right to discriminate in this way will probably be contested in the Courts, and the claim to it will certainly strengthen the conviction in favor of the regulation of railroad traffic by the General Government.

BREVITIES.

WHAT is the best and cheapest flooring for stables?

MONEY sent in letters for subscriptions to the RURAL NEW-YORKER is at the sender's rist. Our terms are invariably $2.00 a year in advance.

Happy is the farmer who was able to plow last Fall and who has distributed the manure directly from the stable. The spring work will be shortened and eased.

A BUSHEL of corn and a bushel of wheat bring, in this market, $1.50. It is a very poor farmer who cannot turn this grain into eggs and make it bring five times as much.

THE brooder which was shown on page 55 is not public property. It is patented by Mr. Pressey, of Hammonton, N. J. This fact was omitted in the description which appeared at the time the cuts were printed.

CATALOGUE notices are continued this week on pages 157 and 158. The farmer's rest is drawing to a close, and we hope all our readers will prepare themselves in every available way to secure the best seeds at the most reasonable prices.

THE violent alternations of freezing and thawing have hereabouts injured the wheat and rye materially. The soil is water-soaked and bare. The season will prove a severe test as to the hardiness of the wheat and rye hybrids and the cross-bred wheats of the Rural Experiment Grounds, as the plants are nearly a foot apart, thus receiving little protection from each other.

THE construction of the Hennepin Canal will greatly cheapen the rates of transportation from the whole Northwest to the seaboard, by establishing a water-route competition with the great trunk railroads from the Mississippi to the Atlantic. Good authorities say the rates will be lowered one-half. We advocate lower rates of transportation everywhere, and to this end we rejoice at all competition with or between railroads. The Hennepin Canal should straightway be constructed.

SUCH words as these, from our long-time friend Edwin Nye, of Outagamie County, Wis., are at once cheering and stimulating:—

"I have been a subscriber to the RURAL NEW-YORKER for 30 years. I have lived on the same farm for all that time; and I believe that my farm and home, and its surroundings, show the results of the instruction which I have received from the RURAL. Its influence for good upon my seven children, born and raised upon the farm, is counted not among the least of its benefits."

COOMASSIE, Eurotas, Jersey Belle of Scituate, Bomba, Mary Anne of St. Lambert, Value 2d, Ida of St. Lambert, Jersey Queen, and other famous Jersey butter-makers are eclipsed by an Atlanta Jersey cow of pure Dauncey blood, a descendant of Rioter of Stoke Pogis, which has given 8,724 pounds of milk in six months, and last year made 900 pounds of butter! What were the names of the men who won glory by owning those other famous creatures? Hopkins is the man who shines in the effulgence radiating from the Georgia wonder. Some men are born great; others achieve greatness; others have greatness thrust upon them; while others buy it when it is young!

A FRIEND, A. C. Sabin, writes thus encouragingly from Mills County, Ia.:

"I want to say right here that your Potato Special is worth more to me than the year's subscription. I consider it one of the most valuable numbers I have received. I will do my best to help the RURAL, for I feel that in doing so I am doing my friends the best service I can do them. Times are very dull, and it is not an easy thing to persuade a person to pay $2 for a weekly paper, no matter how good it is. A great many prefer to pay 50 cents for a paper that has no individuality about it, and consists of clippings with no credit given, instead of original articles from parties of known reputation. Success to you in your efforts!"

WHY butter "does not come" under certain conditions, is a puzzle that has defied not only practical dairymen and "maids," but dairy experts as well. Has sufficient notice been taken of the effect, in this connection, of the lapse of a considerable period since the cows have dropped their calves? Prof. J. P. Sheldon, author of the best work published on dairy husbandry, and a high authority on dairy matters, attaches a good deal of importance to this point in his instructive article in this issue of the RURAL. The "unknown in dairying" still covers a great many points; and sometimes the best dairy experts and operators must alike agree with the rhymster:

"I thought I knew I knew it all;
But now I must confess
The more I know I know, I feel
I know I know the less!"

CONGRESSMEN from Louisiana will oppose the reduction in the tariff on sugar, and those from South Carolina will fight against lower duties on rice for the same reason that Congressmen from Pennsylvania would oppose a low tariff on coals, and those from Maine would fight against the free admission of lumber. After all, isn't the welfare of the country best secured and protected when each of its leading interests does battle in its behalf? In private life who, except a simpleton, would without a struggle permit the ruin of his own honest business for the benefit of any number of his neighbors? It will be a fortunate day for the Nation when the public business shall be conducted in accordance with the principles that secure success in private affairs. Every interest of any considerable importance fights fiercely in its own behalf before Congress except agriculture.

The Swineherd.

KENTUCKY BEAUTY 2,718.

THE sow shown at Fig. 105 is a thoroughbred Chester White. She is sired by Major 2,237 out of Moody's Beauty 2,340. She is considered a typical specimen of this popular breed. Mr. C. H. Warrington, who has made the breeding of Chester Whites a study, writes us as follows with reference to the history and characteristics of the breed:

"In 1818, Captain James Jeffries brought from England some swine which he called Bedfordshire, because they were from the herd of the Duke of Bedford; but in England they were known by the name of Woburn, after one of the country seats of the Duke. The imported stock were crossed on Chester County swine and produced the present very strong, hardy and valuable breed known the country over as Chester Whites. They fatten easily and quickly, are of rapid growth and reach a great size, some having dressed as high as 1,050 pounds. They are very potent in transmitting their characteristics, for when coupled with a black hog, their potency is shown by the fact that the progeny are nearly always entirely or partly white. The sows are prolific breeders, often having as many as 14 pigs at one litter. Some claim they are cholera-proof, but I believe this can be justly claimed for no hog or breed of hogs."

Miscellaneous.

CATALOGUES, ETC., RECEIVED.

THE MAPES' FORMULA AND PERUVIAN GUANO CO., 158 Front St., New York.—The catalogues, or treatises, issued by this firm are always both interesting and instructive, and all Rural friends should look them over and, in fact, study certain parts. Station analyses as is stated, do full justice, no doubt, in determining the *strength* of the samples of fertilizers analyzed, but here their discrimination ends. One firm may use bone; another may use South Carolina rock or phosphate of iron and alumina. But the analyses do not inform the farmer which is which — the analyses might be the same even though one of the articles were really worth but half as much as the other. Again, there is nothing in the analysis, as now made, to show whether nitrogen (the costliest of plant food) is derived from animal matter, nitrate of soda or sulphate of ammonia, or from such comparatively worthless stuff as leather, hair, horn or shoddy. Dr. Voelcker once remarked that he would prefer *one* per cent. of nitrogen in sulphate of ammonia, to *six* per cent. in powdered leather. Now, what the Mapes Co. claim is that their fertilizers are made from the very best known forms of plant-food, and from what we know of the firm, we believe their claims to be substantially correct. Send for the catalogue.

F. D. CRAIG, North Evanston, Cook Co., Ill.—Here is a treatise on incubators in general and the Craig Folding Incubator in particular, which our readers who delight in poultry may examine to their advantage. It is claimed that this machine is equally well suited to small and large enterprises, and that it combines, above other incubators, the essential qualities found in the most perfect imitation of the ways of the old hen. The prices range from $12 (100 eggs) upward. Aside from incubators and how to manage them, there is a deal of useful information in this little book, which will be mailed free to RURAL readers who apply to Mr. Craig.

FRED. W. KELSEY, 208 Broadway, N. Y.—A descriptive catalogue of fruit and ornamental trees, shrubs, roses, etc. The selection of varieties, as the catalogue states, embraces all the latest and most promising introductions, as well as the most popular and thoroughly proved older sorts.

Also an abridged catalogue of specialties and novelties, which is precisely what the amateur wants, who doesn't mind spending his money freely. Both sent to all applicants.

HARPERS' MAGAZINE FOR MARCH.—Harpers' Magazine for March is by far the best number of the year. The table of contents was given in a recent RURAL. This sterling magazine is constantly improving, and we have no hesitation in pronouncing it the best suited for family reading of any of its class. The paper entitled "The Home Acre" by E. P. Roe, will be read with interest by the thousands of city men who so earnestly desire to see more of country life. The paper, "Dogs and Their Management" is timely and valuable. The short description of the symptoms of hydrophobia ought to be printed on the back of every dog license. Farmers generally agree that a good dog is decidedly useful as a farm servant. The outcry raised in the press is directed against the ill-bred, sheep-killing mongrels. Many practical facts and hints on the management and training of dogs can be obtained from the excellent article in Harpers'.

FLEMING MANUFACTURING CO., Fort Wayne, Ind.—Pamphlet and circulars of the Boss Road Grader and Leveler. It is claimed that this is the cheapest and best road machine manufactured. It is for contractors and farmers. The points of superiority are (1) simplicity; (2) strength and durability; (3) having but two wheels it is easily operated in narrow places; (4) lightness of draft, the tongue being attached directly to the knife plank; (5) large wheels; (6) the knife is constructed of concave sections made of the best Bessemer steel, and may be taken off readily; (7) the weight of the machine and the operator may, if necessary, be thrown upon the knife plank. It is further claimed that two horses and one man may do as much work with the Boss as four horses and two men can do with ordinary machines. Many excellent testimonials can be presented. All interested should send for the documents, which will be mailed free

MACOMBER'S SEEDLING ANTWERP RASPBERRY. From Nature. Fig. 109.

(See p. 150.)

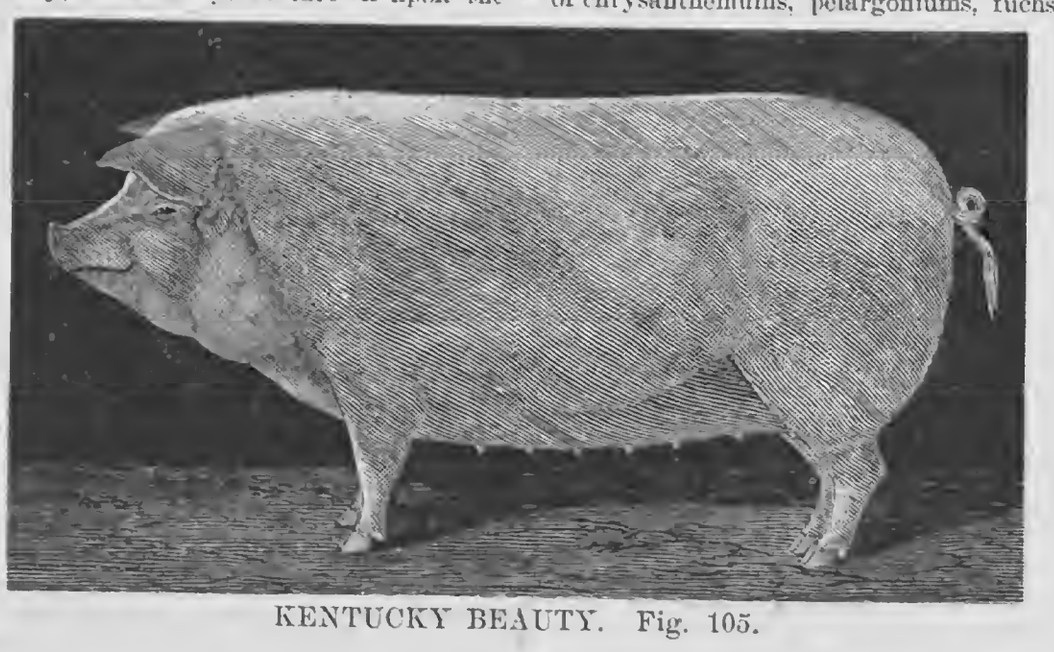
ELLWANGER & BARRY, Rochester, N. Y.—No. 1. A catalogue descriptive of fruits. A colored plate shows the Industry Gooseberry introduced by this firm. Plain suggestions are offered as to the preparation of the soil and of the trees to be planted, as to the planting, staking, mulching and after-culture. There is no list published more trustworthy than this.

No. 4. is a wholesale catalogue of grapes, small fruits, ornamental trees and shrubs, etc.

No. 5. is a descriptive catalogue of roses with careful cultural instructions. The lists are divided and arranged in a manner so simple that all may select discriminatingly.

No. 3. is a descriptive priced catalogue of strawberries, with directions as to planting and culture.

V. H. HALLOCK, SON & THORPE, East Hinsdale, Long Island, N. Y.—Home Adornment.—A select catalogue of what is needed. This seems to us one of the best treatises of the kind published anywhere, and we want all of our readers to examine it. Hallock & Co. know what they are talking about, and have their hearts in their business. The lists of chrysanthemums, pelargoniums, fuchsias, roses, lilies, etc., are judiciously selected, and the catalogue is full of such sterling floral gems as are well worthy of cultivation. Flower and vegetable seeds and the best of the small fruits are also offered.

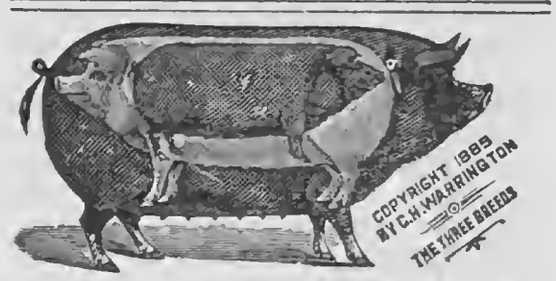


KENTUCKY BEAUTY. Fig. 105.

MAHER & GROSH, Toledo, Ohio.—Illustrated circulars of knives, razors and scissors of every description. This firm, everywhere favorably known, warrant every knife having their name stamped on the blade, to be *hand-forged* from razor steel, and they authorize all dealers to exchange *free* any knife

(*Continued on page* 158.)

Stock and Poultry.



RECORDED PRIZE SWINE.

(N. C. W. R.) Chester Whites, Choice Strains. Poland Chinas from fancy and costly blood. My own importation of Berkshires direct from England. Herd Book and unreg'd Jersey Cattle, Butter Record Stock. C. H. WARRINGTON, BREEDER, P. O. Box 36, West Chester, Chester Co., Pa.

Please write name and address plainly, and mention this Paper.

Pedigree and Full Guarantee. Send Stamp for Catalogue and come see me.

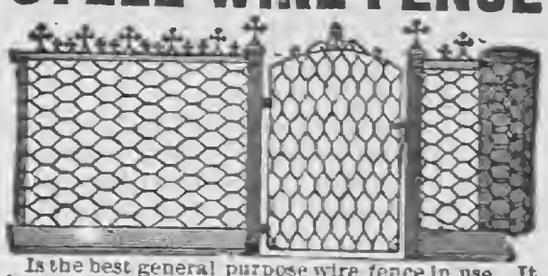
POULTRY NETTING
CHEAP,
AT
WM. CABBLE
EXCELSIOR WIRE M'F'G CO.,
43 Fulton Street, New York City.

THE COLD WATER DIP!
(Thymo-Cresol.)
NESS & CO., MANUFACTURERS.
Non-Poisonous. Safe in Coldest Weather.
Sure Cure for Scab, Mange, and all Skin Diseases. Stimulates growth of Wool. Kerry, Watson & Co., Montreal, Agents for Canada. For full particulars, address
T. W. LAWFORD & CO., Baltimore, Md.

Clydesdale and English Shire Horses.

The only stud in America containing the very best specimens of both breeds. Prize winners at Chicago Fair, the World's Fair at New Orleans, the Royal Society of England, etc. Large importation arrived August 12, and more to follow. Our buying facilities being unequalled, there is no such opportunity offered elsewhere, to procure first class animals of choicest breeding at very lowest prices. Every animal duly recorded and guaranteed. Terms to suit all customers. Catalogues on application.
GALBRAITH BROS., Janesville, Wis.

SEDGWICK STEEL WIRE FENCE



Is the best general purpose wire fence in use. It is a **strong net-work without barbs.** Don't injure stock. It will turn dogs, pigs, sheep and poultry, as well as horses and cattle. The best fence for Farms, Gardens, Stock Ranges and Railroads. Very neat, pretty styles for Lawns, Parks, School-lots and Cemeteries. Covered with rust-proof paint, or made of galvanized wire, as preferred. It will last a life-time. It is **better than boards or barbed wire** in every respect. The **Sedgwick Gates** made of wrought-iron pipe and steel wire, defy all competition in lightness, neatness, strength and durability. We make the best, cheapest and easiest working **all-iron automatic or self-opening gate,** and the **neatest cheap iron fences now made. The best Wire Stretchers, Cutting Pliers and Post Augers.** For prices and particulars ask Hardware Dealers, or address, mentioning paper.
SEDGWICK BROS., Richmond, Ind.
EDWARD SUTTON, Eastern Agent,
300 Market St., Philadelphia, Pa.

Just published, 12 Articles on
Practical Poultry Raising.
By FANNY FIELD,
The greatest of all American writers on Poultry for Market and Poultry for Profit. Tells how she cleared $449 on 100 Light Brahmas in one year; about a mechanic's wife who clears $300 annually on a village lot: refers to her 60 acre poultry farm on which she clears $1,500 annually. How to put up buildings, raise green food, etc. Tells about incubators, brooders, spring chickens, capons, and how to feed to get the most eggs. Price 25cts. Stamps taken. Address R. B. Mitchell, 69 Dearborn Street, Chicago.

PALISADE POULTRY YARDS.
C. S. COOPER,
Schraalenburgh, N. J.,
Breeder of Wyandottes and Plymouth Rocks. Four grand pens of each variety. Eggs from pens one and two, $3.00 for 13; $5.00 for 26. Eggs from pens three and four, of each variety, $2.00 for 13; $3.00 for 26.

N. T. LATTIN,
Originator and Breeder of
BLACK AND MOTTLED JAVA FOWLS.
GAINES, ORLEANS CO., N. Y.
Fowls, $5.00 each. Eggs, $3.00 per 15; $5.00 per 30.

HALF-WAY BROOK KENNELS
AND POULTRY YARDS,
Lock Box 150, GLENS FALLS, N. Y.
OUR SPECIALTIES.—St. Bernards, Eng. Mastiffs and Eng. Beagle Hounds. Imported Dogs in the Stud. Fees reasonable. Can furnish dogs of any of the popular breeds, at low figures, for quality of stock.
IN POULTRY.—We breed the best and most popular varieties of land and water fowls. Stock for sale at all times. Eggs in their season. Send stamp for circular.
COFFIN, ZIMMER & CO.

Wyandottes & Ply. Rocks.
Eggs from selected mature birds only. Circulars free.
T. WILTON HILL, Jamesburg, N. J.

PLYMOUTH ROCKS.
A large, hardy, prolific fowl, suited to the farmer and villager. Stock thoroughbred. Have won Two First Premiums this season.
Eggs, $2 per 13, packed for shipping.
A. C. KILMER, Cobleskill, N. Y.

(*Continued from page 157.*)

proving soft, or breaking from a flaw. A printed warrant is given with each knife sold. The market is at present flooded with cheap knives which are not, however, made *to cut*. We have used M. & G.'s knives of several kinds for years, and find them to be as represented. When needing a knife of any kind (from 25 cents upwards) we respectfully solicit our readers to send for the circular and try this firm.

JOSEPH BRECK & SONS.— A very large catalogue (146 pages) well illustrated with wood-cuts and many colored pictures. Breck & Sons are the originators of the Angel of Midnight Corn, and in the catalogue may be found to whom the premiums of $200 offered by them for the best yields have been awarded by the Massachusetts Horticultural Society. They are also the introducers of the now famous Pearl of Savoy Potato tested at the Rural Experiment Grounds three years ago. The catalogue is one of the best, and should be included among those examined by our readers. Nos. 51, 52 and 53 North Market St., Boston, Mass.

W. W. RAWSON & Co., 34 So. Market St., Boston, Mass.—We take pleasure in announcing that the above firm has made arrangements to continue the business formerly conducted by the well-known firm of B. K. Bliss & Sons of New York, having secured the services not only of Mr. Bliss senior, but also those of Mr. J. M. Gleason, who for 15 years was manager of the old seed house of R. H. Allen & Co., also of New York, and a member of the late firm of Everett & Gleason. The catalogue in which the above announcement is made is very large as to size, and quite original in its get-up, though we can not find space for a more particular notice this week. Our readers ought to send for it.

HALE BROS., South Glastonbury, Conn.—This is a catalogue of small fruits, and a stirring novelty is offered in the shape of the Earhart Everbearing Black-Cap Raspberry. We never like to speak too well of any new plant we have not tested. We might lead hundreds of readers astray, and thus do great harm. The claims made for this berry are simply astonishing, and we merely express the hope that half of them will be realized. We have talked with Mr. Hale about it, and he is himself timid about speaking of the berry, as its merits *seem* to justify. The catalogue will be sent free to our readers.

D. M. FERRY & Co., Detroit, Mich.—It will be remembered that on January 1 the immense warehouses of this well known and trust worthy seed house were destroyed by fire, together with probably the largest stock of assorted seeds ever gathered under one roof. We are glad to learn that the untiring energy of the firm has promptly placed it on its legs again, ready to fill all orders from all its old customers and from all new patrons who may feel disposed to encourage such spirit and energy. As all the books were saved from the fire, all orders received before the catastrophe will be faithfully filled.

H. J. BAKER & BRO., 215 Pearl, Street, N. Y.—This is the usual chemical fertilizer catalogue or treatise issued in the form of a pocket book with blank ruled pages for each month's memoranda. It is a very convenient affair. The book presents "Facts for Farmers," speaks of "Large Yields," "Complete Manures Made for Each Crop," etc. All kinds of chemicals are offered separately so as to enable the farmer to mix them as he chooses. This firm has a first-rate reputation and our readers need not hesitate to deal with it. All should send for and examine the book, mentioning the R. N.-Y.

INJURIOUS AND OTHER INSECTS OF NEW YORK.—The second annual report on this subject is sent out by the State Entomologist, Prof. J. A. Lintner—an exceedingly valuable pamphlet of 250 pages, profusely illustrated and carefully arranged. Every farmer in the State should possess a copy. It is impossible to do justice to the value of such a work in a simple notice. Every country boy and girl ought to be permitted to study entomology, and be provided with microscopes for the purpose. It is a good time of the year now to study out the best methods of preventing the depredations of injurious insects. They will be organized for battle a few months hence.

J. T. LOVETT, Little Silver, Monmouth Co., New Jersey.—A catalogue of small fruits, grapes, large fruits, nuts, etc. We find the Japan Chestnut announced in this. A colored plate is given of the Lawson (Comet) Pear, which, if intended to show the largest and most brilliantly colored pears that this variety bears, is not far astray. The Lawson is very early and very handsome. No one will object to such claims. The quality is fair for one of its season. That is precisely the view we take. There is another colored picture of the Golden Queen Raspberry. There is much of originality and enterprise shown in this catalogue.

ROBERT SCOTT & SON, cor. 19th and Catharine Streets, Philadelphia, Pa.—An illustrated catalogue of roses. Directions for rose growing, selection of varieties, enemies of the rose, aprotection and pruning are treated in a pretical way. Excellent lists are presented of Hybrid Perpetual, Ever-blooming, Hybrid Teas, Polyantha roses, and finally, a general collection. Collections are offered at low rates. All may be sent by mail. Catalogue free.

STANDARD ROOFING.—Circular from A. F. Swan, 43 Cortland Street, New York, describing the excellent roofings and roofing materials manufactured by him, with direction for applying the same. The circular also contains many letters from responsible parties and from all parts of the country, extolling the excellence of these roofing materials. Tarred felt is largely used for lining barn and poultry houses.

C. E. ALLEN, Brattleboro, Vt.—An illustrated catalogue of seeds, plants and small fruits. It is now "quite the thing" to add colored fly leaves for the illustration and description of new seeds and plants. The idea is a good one. Mention the R. N.-Y., and send for the catalogue.

J. A. FOOTE, Terre Haute, Ind.—A catalogue of farm, garden and flower seeds. A colored plate shows the Mammoth Long Rose Radish. Self-husking Corn, Mikado and Seeville's Hybrid Tomatoes, and the Volga Watermelon, are among the novelties. Mailed free to applicants.

R. D. HAWLEY & Co., 492 Main St., Hartford, Conn.—Illustrated catalogue of garden, field and grass seeds; agricultural and horticultural implements, etc. Free.

CHAS. C. MCCOLGAN & Co., 58 Light St., Baltimore, Md. An illustrated catalogue of seeds, plants, roses, etc., with many of the latest novelties. Free.

CHAS. T. STARR, Avondale, Chester Co, Pa.—Illustrated and descriptive price-list of flowering plants, bulbs, etc. Free.

E. D. PUTNEY, Brentwood, N. Y.—A select list of trees, fruits and flowers, and a treatise on their culture. Free.

Literary.

BOOKS RECEIVED.

THE CENTURY for March has for an opening paper, "Italy from a Tricycle," by Mr. and Mrs. Joseph Pennell. A novel pen and pictorial account of a trip from Florence to Rome in a manner of travel and description peculiarly their own. Mrs. Schuyler Van Rensselaer contributes a second paper on "City Dwellings." The accompanying engravings show for the most part interior views of some of the notable houses in Boston, New York and Washington. Mr. W. D. Howell's novel, "The Minister's Charge," is continued; also the fifth part of Mrs. Mary Hallock Foote's story of mining life. This month's war article is by Don Carlo Buell, called "Shiloh Reviewed." "The Strength and Weakness of Socialism," by Dr. Washington Gladden, is considered from the standpoint of social agitators, also from that of conservative reformers. "Topics of the Time" takes up two important subjects. In "Open Letters," Dr. Howard Crosby and Dr. A. A. Hodge contribute to the discussion of "Christian Union" or "Church Union."

ST. NICHOLAS.—One of the principal features of this number is the first nine of the "St. Nicholas Dog Stories." This series is to include interesting stories, sketches and anecdotes collected from various sources during the last five years, and will be published from time to time for the benefit of dog lovers. "Tit for Tat," by H. H. Henry Eckford's "Wonders of the Alphabet;" Horace E. Scudder's biographical serial, "George Washington;" Frank R. Stockton's "Personally Conducted," are some of the continued articles. There are several short stories, each fully and beautifully illustrated. Also Poems, Jack-in-the-Pulpit, Editorial Notes, etc.

Domestic Economy

CONDUCTED BY EMILY MAPLE.

ATTENTION is called to a series of articles upon California Housekeeping, by Mary Wager-Fisher, which will appear from time to time under this Department. The first of these interesting sketches appears below.

HOUSEKEEKING IN CALIFORNIA.

NO. I.

MARY WAGER-FISHER.

IN comparison with New York City, "boarding" is very reasonable in California towns, and restaurant life, particularly in San Francisco, is surprisingly cheap, though excellent. The usual price for board in a private family, with "a sunny bay window room," is $25 a month, everything in that way being rated by the month. This price is also general in Oakland, which lies across the Bay from San Francisco. But as "The Three Fishers" detest boarding-house life, and like the freedom of a home so far as we can secure it in our present migratory existence, we went house-hunting on the day following our arrival in Oakland, where we had decided to tarry for two or three months. We wanted a small, furnished cottage, with plenty of sun, first-class drainage, and ample room for the laddie's play ground. After a day's hunt, we found what we concluded would "do"—a furnished cottage of six rooms—kitchen, dining-room, parlor, and a bed-room on the first floor; up-stairs two large sleeping rooms and a nice bath. House needed paint, furniture very ordinary, but sufficient for respectability and comfort. The lady from whom we rented sub-let the house, the furniture alone being hers. She was a Boston woman, still young, and a woman of "faculty." Part of her family was in the East and part of it here. The house had a large, open, sunny backyard, and at one side was a vacant lot. The street and neighborhood were excellent. Our landlady said that in taking the house for herself she had counted on making her "fortune." She could have the use of the vacant lot, and in that she intended to keep chickens. The back yard she converted into a vegetable garden, where she planted everything that grows in a California garden. The grounds in front and at the side of the house she had laid out in walks and flower beds, and every flower she had planted with her own hands. There were great groups of Calla Lilies, in full bloom all Winter, roses, marguerites, asters, fuchsias, passion-vines, English ivy, abutilons 15 feet high, pelargoniums, carnations—among the best of bloomers—violets, primroses, sweet alyssum and many other plants, so that I had from the outset a flower garden ready-made, from which I kept three vases in our little parlor, with its sunny bay window, filled during our sojourn. There was a bed of parsley by the kitchen porch, and beets, turnips, carrots, and some parsnips still growing in the garden! also a pumpkin-vine that was in constant bloom until nipped by the frost in January. For the first few days I was considerably entertained in noting how the landlady's ingenuity—peculiar to "thrifty" people—had helped her to make the best of things. She had evidently furnished her house by picking up much of the furniture piece by piece at auction sales, and then remodeling it, covering the stuffed dining chairs with cretonne; making bureau and washstand tops tidy with white oil-cloth veined lightly with blue to resemble marble! neatly tacked on; concealing flaws in the walls with deft arrangement of Japanese and Chinese fans, and brightening up chairs with tidies.

In acceding to my requirement for table linen—which it is not usual to provide with a furnished house—she remarked that in her sister's house where she lived—and her sister lived very prettily—they only put a cloth on the table for dinner; that they used the white oil-cloth instead for breakfast and lunch; it was much more convenient and economical; that it cost 25 cents to have a cloth done up at the laundry! I observed that our dining table was furnished with the oil-cloth, which, like everything else, had a very clean and wholesome look, and I am quite sure that if I had to wash and iron my own table cloths, I should take very kindly to the oil-cloth substitute. It is certainly one of the ways in which economy of strength, time and money may be practiced without detriment to either health or manners. She had the same material, with ornamented edges, on the pantry shelves and on a window shelf, where she had potted plants. The kitchen was very light and sunny in the forenoon, and she had fitted it up so that it was a cheery room, and she evidently had spent much of her time in it. Over the lower window sashes—a single large pane of glass—she had tacked white Nottingham lace, and across the top, well up to the ceiling, she had frills of cretonne for lambrequins. Chromo-lithographs were on the wall, and some boxes in which she had things packed, were also covered with cretonne. She had painted the floor a pale, dull gray, the exact shade which never shows dust or mud tracts—a color, the ingredients of which ought to be known to every painter of kitchen and porch floors. In the middle of the floor was a square rug of tapestry nailed down. The wood-work of the entire house inside was "grained" to imitate ash or maple, and this, too, in the land of red-wood forests, where red-wood is used in building as commonly as white pine is in the East, and makes a beautiful finish when simply oiled. In the rear of the kitchen was an apartment for coal and wood, for the storing of fruit, vegetables, etc.

After everything had been arranged, and the landlady, Mrs. D. had come to put up some fresh curtains (and she was a very good carpenter as well, having her box of nails, her hammer and step-ladder), I asked her to name the annoyances I would have to encounter in living as a housekeeper in California. "Ants," she promptly responded, "I can't begin to tell you how we suffer from small black ants; they get into the pantry and invade every article of food that is not ant-proof. You can even find their routes of travel between houses. I think, however, I have extirpated them from this house; but I wont be sure. You know we try everything on them here, but the best plan after all is to place a piece of meat in their haunts, which will soon swarm with them, and then drop meat, ants and all into hot water. You will not be troubled with mice. You can get a woman I know to come in and wash and iron and clean up for a dollar and half a day; it is the usual charge. She may not do the washing very good unless you watch her."

"I'll not have her then," I promptly responded, "for I can't afford to watch any body. I'll send out the washing, and if I could send out the house, room by room, and have that swept and cleaned, it would be a capital arrangement; perhaps in the magnificent future that is so rapidly coming, houses will be built on such a plan and when a room needs to be rehabilitated, all one will have to do will be to detach it from the main structure, and roll it away—for it will be on wheels—to the house decorator, who will send it back as good as new." This small flight of fancy seemed to induce Mrs. D. to remark that she would in a few days send a man around to kalsomine the dining-room, a woman to clean the windows, and she would have the screen to the kitchen door hung. But of course they never came. I reduced the abundance of flies in the kitchen very speedily by means of the old-fashioned trap, a honeyed piece of bread, with a hole in the middle, set over a glass containing soap-suds. It was the first week in November and as no rain had fallen for months, everything was as dry as a bone, except when kept moist by the hose. The laddie anticipated great fun in watering the flower garden, but in a few days it began to rain, and for three weeks it rained most of the time, with intervals of absolutely cloudless days. Grass sprang up every where, on the hills in the distance, the rose bushes filled with buds, it was like the Spring of the year. On sunny days we went off on expeditions of sight-seeing, and on rainy days I tried to despatch my accumulated work, which I think it a good plan to keep below the level of one's head and ears."

MRS. HIGHTON'S DIARY.

ANNIE L. JACK.

I REMEMBER ONCE reading that "a wound to a man's vanity leaves a permanent scar," and the sentence flashed upon my mind to-day when in speaking to Edgar this morning of the gentlemen we met at a party, last night, I happened to remark, "You haven't so much ease of manner as Dick Egerton." "Check, you mean," said Edgar, quite cross-like, and he left the house without much ceremony or attention to me. I wish I hadn't said it; but I didn't think men so absurd that they couldn't hear another man praised for one good quality while perhaps they have a dozen equally good, though not the same. I thought when we were *one*, we could speak our thoughts to each other; but I am learning that we are two in that respect and I must be more guarded in what I say. It would be a comfort though if one could just think aloud even to one person, and know that he would not take amiss anything you might say. There's nobody but a mother that it is safe to do that with; she *understands*. All day I kept repeating the song,

"If I had known in the morning
How wearily all through the day
The words unkind, would trouble my mind
I said when you went away,
I had been more careful, darling,
Nor given you needless pain,
But we vex *our own*, with look and tone
We may never take back again."

But when Edgar came home to dinner he seemed to have forgotten all about it, and brought Mr. and Mrs. Bigelow, from Boston, without giving me a word of warning. I hurried to the door when the bell rang, intending to give him an affectionate greeting, and was met by the introduction to these strangers. I had heard of the lady, a relation of Edgar's, but I disliked her the first minute I looked at

Miscellaneous Advertising.

When Baby was sick, we gave her Castoria,
When she was a Child, she cried for Castoria,
When she became Miss, she clung to Castoria,
When she had Children, she gave them Castoria.

her. We sat down to dinner everything was neat and clean, but she left all her meat on the plate, and could not eat anything but bread and butter (I knew the butter was good for it was some of mother's, and she did condescend to praise it). I asked if she had a headache and tried to tempt her appetite, but could not induce her to taste any of the dessert except an orange, and she gave no explanation for her want of appetite. When they left, Edgar said, "My dear, why didn't you cook the turkey I sent home." "Oh, Edgar," I said, almost crying, "it didn't come till afternoon, and there was plenty of the cold beef for *us*. You didn't tell me you intended to bring any guests, and you know well that if I prepared a dinner for four every day half of it would be wasted, and you ought to tell me when you intend asking any one." "I expect my table to be ready whenever I choose to bring any one," he answered loftily; "but if you object, and cannot be prepared, I will not ask any one again." How inconsiderate men are! And how foolish to expect a woman to prepare for two or three guests every day, and then have to waste the food nine times out of every ten, besides the extra labor of preparing. And it is in this way misunderstandings often arise, and people become careless and indifferent because, in the first place, they do not see things in a proper light.

My girl has done very well so far, but she came to me to-day to say that her sister is sick and needs her—what shall I do if she leaves me? The very thought gives me a shiver of dismay.

SOMETHING TO BREAK THE MONOTONY OF HOUSEWORK.

If you are in want of a lamp mat, you can make one by taking a square of all-wool canvas and putting a row of cross-stitch embroidery around it about two inches from the edge, then ravel out the edge to form a fringe. Work some sort of figure in the four corners and then fold the corners to the middle and turn them back half way. Tack them and the border here and there with tiny bows of ribbon and place a piece of pasteboard covered with silesia in the middle to form a foundation on which to place the lamp.

An exceedingly pretty tidy may be made out of a yard of scrim or bolting cloth. After putting a two-inch hem around it finish the ends with a suitable lace and embroider two or three rows of daisies above the hem. Or you can put rows of ribbon across instead of the embroidery; in either case gather the tidy one quarter of a yard from the end and tie it with a ribbon to match or contrast prettily with the work at the ends. AUNT ADDIE.

DOMESTIC RECIPES.

MRS. RANSOM'S SPONGE CAKE.

Six eggs, one pint of flour, one-and-one-half teacupful of sugar, one-half teaspoonful of soda, one teaspoonful of cream-of-tartar. Dissolve soda in a spoonful of warm water, mix cream-of-tartar with the flour. Bake in a quick oven.

APPLE JELLY.

Two quarts of water to one dozen apples, pare and slice, then boil soft and strain through a flannel bag.

To one pint of juice add one pound of loaf sugar and the juice of one lemon. Boil 15 minutes, putting in the lemon peel and strain again.

NEW YEAR'S COOKIES.

Six cups of sugar, four of butter, two of milk, six eggs, one ounce caraway seed, one teaspoonful of soda. Flour to roll.

SODA CAKE.

Two cups of butter, four of sugar, one of sour cream, one-half cup of sweet milk, two teaspoonfuls of soda, one of cream-of-tartar; flavor with nutmeg or vanilla.

JOHNNY CAKE.

Two teacups of Indian meal, one of flour, one tablespoonful of molasses, two teacupfuls of buttermilk, a teaspoonful of soda, and salt to taste.

GINGER CAKE.

Three cups of molasses, one of butter, six teaspoonfuls of ginger, four of saleratus dissolved in a cup of warm water, one cup of sour milk or buttermilk. Add a piece of alum as large as a hickory nut, dissolved in hot water. AUNT RACHEL.

QUESTIONS ANSWERED.

MARION HARLAND'S CALENDAR.

Please let me know where I can get the above and oblige. H. B.

ANS.—It is not published this year. Charles Scribners' Sons were the publishers last year.

OIL STOVE.

In answer to several correspondents, we would say that the stove referred to by "Aunt Em" is the Florence Stove Lamp, sold by various dealers.

Miscellaneous Advertising.

Debility

Languor, and Loss of Appetite, are cured by the use of Ayer's Sarsaparilla. It removes that terrible sense of *Constant Weariness*, from which so many suffer, gives tone and vigor to the stomach, and restores health and strength more surely and speedily than any other medicine.

Three years ago I suffered from Debility and Loss of Appetite, the result of Liver Disease. After having tried various remedies, and consulted several physicians, without benefit, I was induced to take Ayer's Sarsaparilla. The first bottle produced a marked change, and the second and third accomplished so much that I felt like a new man. I have, since that time, taken about one bottle every year, and had no recurrence of the trouble.—William E. Way, East Lempster, N. H.

Ayer's Sarsaparilla,

Prepared by Dr. J. C. Ayer & Co., Lowell, Mass. Sold by all Druggists. Price $1; six bottles, $5.

DIPHTHERIA, or SORE THROAT
THEIR CAUSE AND CURE. Sent free. Address
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Also manufacturer of the **Buckeye Hose Reel and Lawn Sprinkler, Iron Turbine Wind Engines, Buckeye Force Pumps and Buckeye Iron Fencing.** Send for Illustrated Circulars to
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The **Greatest LABOR-SAVING** tool ever invented for digging holes in the ground. This machine works on a new principle, and is unlike anything in the market. It is neither an Auger nor a Plunger, but is driven in the ground with a driving rod, which works in a pipe similar to a telescope. **We claim** for this tool:
1st. That one man can dig from 40 to **three hundred** holes two feet in ordinary ground in one day.
2nd. That it will dig holes any **size** or **depth** required.
3d. That it will work successfully in **very hard** or **rough** ground where other diggers and augers will not work at all.
4th. You stand up straight while using it, consequently no back-breaking work is required.
It will pay you to send for descriptive circulars and prices to **COLE & FLEMING, Manufacturers,** Springfield, O.

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With Diamond Dyes, for **10** cts. They never fail. 32 fast colors. They also make inks, color photo's, etc. Send for colored samples and Dye book. Gold, Silver, Copper and Bronze Paints for any use—only 10 cents a package. Druggists sell or we send post-paid.
Wells, Richardson & Co., Burlington, Vt.

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Has a Pad different from all others, is cup shape, with Self-adjusting Ball in center, adapts itself to all positions of the body while the ball in the cup **presses back the intestines just as a person does with the finger.** With light pressure the Hernia is held securely day and night, and a radical cure certain. It is easy, durable and cheap. Sent by mail. Circulars free. EGGLESTON TRUSS CO., Chicago, Ill.

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1. **The Widow Bedott Papers.** This is the book over which your grandmothers laughed till they cried, and it is just as funny to-day as it ever was.
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3. **Grimm's Fairy Stories for the Young.** The finest collection of fairy stories ever published. The children will be delighted with them.
4. **The Lady of the Lake.** By Sir Walter Scott. "The Lady of the Lake" is a romance in verse, and of all the works of Scott none is more beautiful than this.
5. **Manual of Etiquette** for Ladies and Gentlemen, a guide to politeness and good breeding, giving the rules of modern etiquette for all occasions.
6. **The Standard Letter Writer** for Ladies and Gentlemen, a complete guide to correspondence, giving plain directions for the composition of letters of every kind, with innumerable forms and examples.
7. **Winter Evening Recreations,** a large collection of Acting Charades, Tableaux, Games, Puzzles, etc., for social gatherings, private theatricals, and evenings at home; Illustrated.
8. **Dialogues, Recitations and Readings,** a large and choice collection for school exhibitions and public and private entertainments.
9. **Parlor Magic and Chemical Experiments,** a book which tells how to perform hundreds of amusing tricks in magic and instructive experiments with simple agents.
10. **The Home Cook Book and Family Physician,** containing hundreds of excellent cooking receipts and hints to housekeepers, also telling how to cure all common ailments by simple home remedy.
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13. **The Budget of Wit, Humor and Fun,** a large collection of the funny stories, sketches, anecdotes, poems, and jokes that have been written for some years; Illustrated.
14. **Useful Knowledge for the Million,** a handy book of useful information for all, upon many and various subjects; Illustrated.
15. **Called Back.** A Novel. By Hugh Conway, author of "Dark Days," etc.
16. **At the World's Mercy.** A Novel. By Florence Warden, author of "The House on the Marsh," etc.
17. **Mildred Trevanion.** A Novel. By "The Duchess," author of "Molly Bawn," etc.
18. **Dark Days.** A Novel. By Hugh Conway, author of "Called Back," etc.
19. **The Mystery of the Holly Tree.** A Novel. By the author of "Dora Thorne."
20. **Shadows on the Snow.** A Novel. By B. L. Farjeon, author of "Bread-and-Cheese-and-Kisses," etc.
21. **The Gray Woman.** A Novel. By Mrs. Gaskell author of "Mary Barton," etc.
22. **The Frozen Deep.** A Novel. By Wilkie Collins author of "The Woman in White," etc.
23. **Red Court Farm.** A Novel. By Mrs. Henry Wood, author of "East Lynne," etc.
24. **In Cupid's Net.** A Novel. By the Author of "Dora Thorne."
25. **Back to the Old Home.** A Novel. By Mary Cecil Hay, author of "Hidden Perils," etc.
26. **John Bowerbank's Wife.** A Novel. By Miss Mulock, author of "John Halifax, Gentleman," etc.
27. **Lady Gwendoline's Dream.** A Novel. By the author of "Dora Thorne," etc.
28. **Jasper Dane's Secret.** A Novel. By Miss M. E. Braddon, author of "Aurora Floyd," etc.
29. **Leoline.** A Novel. By Mary Cecil Hay, author of "Brenda Yorke," etc.
30. **Gabriel's Marriage.** A Novel. By Wilkie Collins, author of "No Name," etc.
31. **David Hunt.** A Novel. By Mrs. Ann S. Stephens, author of "Fashion and Famine," etc.
32. **Reaping the Whirlwind.** A Novel. By Mary Cecil Hay, author of "Old Middleton's Money," etc.
33. **Dudley Carleon.** A Novel. By Miss M. E. Braddon, author of "Lady Audley's Secret," etc.
34. **Esslemont** OR THE MYSTERY OF THE HEARTLAND. A Novel. By Ella W. Pierce, author of "The Birth Mark," etc.
35. **A Golden Dawn.** A Novel. By the author of "Dora Thorne," etc.
36. **Valerie's Fate.** A Novel. By Mrs. Alexander, author of "The Wooing O't," etc.
37. **Sister Rose.** A Novel. By Wilkie Collins, author of "The Woman in White," etc.
38. **Anne.** A Novel. By Mrs. Henry Wood, author of "East Lynne."
39. **The Laurel Bush.** A Novel. By Miss Mulock, author of "John Halifax, Gentleman," etc.
40. **Amos Barton.** A Novel. By George Eliot, author of "Adam Bede," "The Mill on the Floss," etc.

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NOTABLE AND SIGNIFICANT ITEMS
From the Forty-First Annual Report
OF THE
NEW YORK LIFE INSURANCE COMPANY.

A total income of over sixteen millions one hundred thousand dollars, and payments to policy-holders of nearly eight million dollars.

Interest income, over three million dollars, being about 5½ per cent. on average net assets, and nearly four hundred thousand dollars in excess of losses by death.

Market value of securities, over three million three hundred thousand dollars in excess of their cost.

Liabilities, both actual and contingent, provided for, and a Divisible Surplus by the Company's standard of over seven million dollars; Surplus by the State standard, over thirteen million dollars.

An increase of nearly two million dollars in income, over three millions in surplus, over seven millions in assets, and of over thirty millions of insurance in force, during 1885.

SUMMARY OF REPORT.

BUSINESS OF 1885.

Received in Premiums	$12,722,106.03
Received in Interest, Rents, etc.	3,399,069.71
Total Income	**$16,121,172.74**
Paid Death-claims	$2,999,109.64
" Endowments	741,764.17
" Annuities, Dividends, and for Policies purchased	3,940,999.64
Total Paid Policy-holders	**$7,681,873.75**
New Policies issued	18,509
New Insurance Written	$69,521,452.00

CONDITION, JAN. 1, 1886.

Cash Assets	**$66,864,321.32**
*Divisible Surplus, Co.'s Standard	$7,064,473.13
†Tontine " " "	3,123,742.77
Total Surplus, " "	**$10,188,215.90**
Surplus by State Standard	**$13,225,053.94**
Policies in Force	86,418
Insurance in Force	259,674,500.00

PROGRESS IN 1885.

Excess of Interest over Death-losses	$320,960.07
Increase in Income	1,889,697.35
Increase in Surplus, State Standard	3,313,707.48
Increase in Assets	1,580,597.75
Increase in Insurance Written	7,086,902.00
Increase in Insurance in Force	30,291,914.00

* Exclusive of the amount specially reserved as a contingent liability to Tontine Dividend Fund.
† Over and above a 4 per cent. reserve on existing policies of that class.

The Seven Advantages
OF THE
NEW YORK LIFE INSURANCE COMPANY'S
Nonforfeiting-Tontine Limited-Endowment Policy.

FIRST ADVANTAGE.—Insurance for a definite amount, or for an amount increasing with each premium paid, as desired.
SECOND ADVANTAGE.—A Definite Cash Endowment, and a Tontine Dividend, to Policies in force at the end of Endowment and Tontine periods, which periods correspond, and may be either Ten, Fifteen or Twenty Years.
THIRD ADVANTAGE.—Insurance for the full amount of the Policy, extended for as long a time as the value of the Policy will carry it, within the Endowment period, in case of discontinuance of payment of premiums after three years.
FOURTH ADVANTAGE.—A Grace of one month in the payment of premiums, during which time the policy-holder's security is unimpaired.
FIFTH ADVANTAGE.—Three valuable options, including cash value to policy holders who survive their Tontine and Endowment periods and keep their policies in force.
SIXTH ADVANTAGE.—Practical freedom of action with respect to occupation, residence and travel.
SEVENTH ADVANTAGE.—The payment of death-claims immediately upon the approval of the required proofs of death.

Do not insure until you have seen full particulars of this Policy. Do not fail to write the nearest Agent, The NEW-YORK LIFE INSURANCE COMPANY, 346 & 348 Broadway, New York City.

WILLIAM H. BEERS, President; HENRY TUCK, Vice President; ARCHIBALD H. WELCH, 2d Vice-President; RUFUS W. WEEKS, Actuary; THEODORE M. BANTA, Cashier; D. O'DELL, Supt. of Agencies; A. HUNTINGTON, M. D., Medical Director.

Waldo F. Brown, of Butler County, Ohio, in describing several experiments with reference to thorough pulverization of the soil, says: "The result of the experiment, thorough pulverization, and observation was that $1.00 of extra work per acre with good Pulverizers adds from 5 to 10 bushels per acre."

See advertisement of the "ACME" Pulverizing Harrow, Clod Crusher & Leveler on page 161.

A MAN AND WIFE (Scotch) want work on a farm. Thoroughly competent. Address KIRKLAND, Hamden, Del. Co., N. Y.

"Preston's Wyandotte Gazette."
Size 9 by 11. Finest 50-cent Poultry Book in the world. Contains a large chromo of Wyandottes and two other elegant chromos in six colors. Also a magnificent engraving of my new $500 Wyandotte House and a cut, and complete working plan of our two mammoth Incubator Buildings, each 120 feet long by 20 feet wide, and containing two large incubators with a capacity of 1,400 eggs, giving a correct idea of how we are making some quick and easy cash. Original cost of other engravings over $500. A complete guide on selecting, scouring and breeding Wyandottes, by B. N. Pierce, illustrated with his drawings of head, neck, wings, feathers, etc. Also all manner of brief, practical and valuable information. Large Wyandotte Chromos at 10 cents each. Circulars containing 17 illustrations free to all.
GEO. A. PRESTON, D. L & W., Ticket Agent, Binghamton, N. Y.

WALKER -- THE BEST WASHER

Warranted 5 years, satisfaction guaranteed or money refunded. **The Best, most Efficient, and Durable Washer in the world.** Has no rival, the only machine that will *wash perfectly clean without rubbing.* Can be used in any sized tub, or shifted from one tub to another in a moment. So simple and easy to operate the most delicate lady or child can do the work. Made of Galvanized Iron, and the only Washer in the world that has the **Rubber Bands on the Rollers,** which prevent the breaking of buttons and injury to clothes.
AGENTS WANTED Exclusive territory. Retail price, **$8.00.** Agents' sample, **$3.50.** Also the celebrated **KEYSTONE WRINGERS** at Manufacturers' lowest price. Circulars free. We refer to editor of this paper. Address **ERIE WASHER CO., Erie, Pa.**

THE BEST 50c. KNIFE EVER SOLD

This has been our 65c. Knife, but for a while we will sell at 50c., post paid by mail, or 5 for $2. Blades are file tested and warranted. Pruning Knife, 75c. Stock Knife, $1. 8-inch Steel Shears, 75 cts. Gents' fine 3 blade Knife, $1. Boys' 1 blade, 25 cts.; Ladies' 2 blade, pearl, 50c. Send for 48 page free list, also "How To Use a Razor."
Maher & Grosh,
73 S Street,
TOLEDO, O.

News of the Week.

HOME NEWS.

SATURDAY, Feb. 27, 1886.

THE Legislature of Indiana passed a law reducing the yearly rental of telephones to a maximum of $3 apiece. The company clapped on new charges (incidentals) and brought the matter before the courts. The State Supreme Court has just decided against it, and forbidden it to evade the law by making "extra" charges. Other States are expected to follow the example of Indiana in their dealings with the most rapacious, unscrupulous and extortionate monopoly in the Union.....The total amount to the credit of depositors in the Canadian Government savings banks on January 1, 1886, was $19,656,028—an increase of $2,188,496 since January 1, 1885.....It is likely that the treaty with the Sandwich Islands, which admits their sugar duty free, will be abrogated soon. Investigation proves that no one is benefited by it except Claus Spreckles and a few English and German capitalists in Hawaii, who have gone into sugar raising extensively and obtained their machinery and supplies from England and Germany.....The Knights of Labor are petitioning Congress to make liberal appropriations for public works, to give employment to the unemployed in a "time of depression.".....The Knights of Labor are supporting the strikers at the McCormick Reaper Works, Chicago. They will prevent shipments of goods from the works by rail or canal until the demand of the men for the discharge of non-union hands is complied with; and meanwhile the men (about 1,400) will be supported by contributions from all labor organizations, if it takes $1,000,000 and 12 months to secure the demanded concession. No violence is expected. .....Results due to the organization of labor are seen in the meeting of federated Western coal-miners at Columbus, Ohio; the success of the striking New York cigar-makers, and of the railroad hands in the Southwest, and, indeed, of labor strikers in many other parts of the country, as well as in the stubborn attitude of the striking coke-burners and the Western nail-makers, and also in the fact that most Eastern cotton mills will pay a 10 per cent. advance in wages in the Spring. .....The Educational Bill now before the Senate divides $75,000,000 between the various States and Territories in the next eight years, the amount received by each to be in proportion to the illiteracy of its inhabitants. The outlay is to be as follows: The first year, $7,000,000; the second year, $10,000,000; the third year, $15,000,000; the fourth year, $13,000,000; the fifth year, $11,000,000; the sixth year, $9,000,000; the seventh year, $7,000,000; and the eighth, $5,000,000. The object is to secure a Common School education for all children in the country, for the greater safety of the Republic. Each State must contribute from its own means as much as it gets every year from the General Government. The Southern States will get much the largest share in proportion to population..... It is likely that Congress will compel the land-grant railroads to maintain a telegraph service at reasonable rates, instead of making over their rights to the Western Union Telegraph Company, which makes extortionate local charges.....De Lesseps has arrived at Panama. M. Rousseau, special agent of the French Government, says one-sixth of the canal has been dug at an expense of $100,000,000. De Lesseps now asks for $120,000,000 to dig the other five-sixths and to cross the Chagres River—the most difficult part of the undertaking. Over 100,000 Frenchmen have invested in the speculation. The real cost must ultimately be enormous. To drop the thing now would be to have $100,000,000 lie useless in Panama mud, and to exasperate 100,000 Frenchmen and their kindred and friends against De Lesseps and the Government which authorized him to raise the money. The money is likely to remain in the mud, however....Geronimo refuses to surrender unconditionally to Gen. Crook, and went off, flying the white flag, with 95 "bucks."....A destructive fire in the business part of Wilmington, N. C., Sunday afternoon caused a loss of $500,000.....The five-foot gauge of almost every railroad south of the Ohio and Potomac Rivers, will be changed June 1, to correspond to the northern or standard gauge of four feet nine inches. Monday, May 31, and Tuesday, June 1, have been set apart for the work, which will extend over about 13,000 miles of railway..... .....While the New England fishermen are vigorously opposing a free fishery treaty with Canada, the Boston fish dealers are vigorously supporting it.....Mormon Cannon had no difficulty in securing bail for $45,000 at Salt Lake City, where he is to be tried for "unlawful cohabitation".....Congress has passed the bill appropriating $250,000 for a monument to Grant at Washington. No Congressional aid can now be expected for the monument in this city. The fund for this amounts only to $115,200..... ....The Government postal telegraph scheme is dead, the House Committee on post-offices having unanimously reported against it. .....Canada has appropriated $50,000 to support a marine patrol against the incursions of Yankee fishermen into Canadian waters. Trouble is anticipated..... ....The trouble between the Morgan Railroad and the Southern Pacific Railroad and their operatives have been settled. The men have made slight concessions in their demands, but have gained substantially what they asked. ....The Mallory line boycott still continues at Galveston.....The war against the Chinese continues systematically on the Pacific Coast. The plan is, first, to drive them from the country into the towns; then from the towns to the city of San Francisco. There the bitterness of the rest of the Coast against them is intensified, and when they are all driven into that "net," it is not at all unlikely that there will be a grand uprising of their foes, trouble certainly, massacre perhaps, and shipment to China very likely, unless the State and Federal forces intervene promptly and energetically.....

MESSRS. SMITHS, POWELL & LAMB, of Lakeside Stock Farm, Syracuse, N. Y., who own the largest herd of thoroughbred stock in the world, report that their dairyman, W. H. Wilson, Esq., finds Thatcher's Orange Butter Color the best he has ever used. Mfg. by H. D. Thatcher & Co., Potsdam, N. Y.—*Adv.*

H. J. BAKER & BRO., N. Y.

Gentlemen - I used your Potato Fertilizer this year on clayey loam soil, supplementing it with 5 cords of stable manure per acre, plowed under and putting your fertilizer in at the rate of 800 pounds per acre, in drills. The season was very favorable, and the yield of potatoes exceeded 350 bushels per acre. As for the quality, I have just been awarded six (6) first, and one (1) second premium at the Southington Fair, over 64 competitors. It is needless to add I am satisfied with the fertilizer.

R. J. BATES,

Sept. 30, 1885. West Cheshire, Conn.—*Adv.*

Crops & Markets.

SATURDAY, Feb. 27, 1886.

Hops, the "gamblers' crop," is a losing one this year. It costs from 14 cents to 15 cents a pound to raise them, and now prices here range from five to ten cents per pound. At this time last year, prices were from 14 cents to 17 cents per pound; in 1884 they were from 22 cents to 26 cents; in 1883, 95 cents to $1; and in 1882, from 25 cents to 27 cents. At other times in each year, prices were considerably higher. The high prices for the crop of 1882, which culminated at $1.25 per pound for choice hops, led a multitude of outsiders to engage in hop-raising, hence the present glut. California advanced from 7,000 bales in 1882 to 75,000 bales in 1884; New York from 100,000 in 1882 to over 150,000,000 in 1884. The increase was proportionate in the other great hop-growing States—Wisconsin, Michigan, Oregon and Vermont—and in Washington Territory the increase was greatest of all. Germany, Belgium, Australia and England all likewise added thousands of acres to their hop areas. Although prices were hardly remunerative last year, and are far "below cost" this year, growers cling to the business like topers to their beer. All see that a great curtailment of production is absolutely necessary to make the crop remunerative, and each wishes his neighbor would "plow up," and the reluctance of any to make a beginning of plowing up the whole or a great part of their hop yards, encourages the others to hold on, and little or nothing is done.

The supply of broom-corn in this country—and none is raised elsewhere for manufacturing purposes—is practically "cornered" just now by holders in Chicago, St. Louis and Nashville. The advance in the price of the stock has caused an advance of 50c. per dozen in the price of cheap and of $1 a dozen in that of first-quality brooms. It is estimated that there are 3,000 tons in Chicago, and from 2,000 to 3,000 tons in other places. A few weeks ago 400 tons were burned up and prices at once went up, too. The seven States producing the largest amount of broom-corn are, in their order: Illinois, Kansas, Missouri, New York, Nebraska, Ohio and Iowa. An average crop is not far from 15,000 tons.

Peanut planters in Lower Virginia are very despondent at the low prices of "goobers," which, they say, do not pay for the labor and expense of raising them and bringing them to market. Many this year will engage in tobacco growing.

Although two severe freezes had occurred in the winter wheat area since the opening of the year, yet down to last Friday very little damage had been done. On that day a very severe frost occurred in all the section after a spell of warm weather had melted the snow, and the ground was nearly everywhere frozen hard. For the next four or five weeks the condition of winter wheat will be the chief topic of interest in grain circles. There doesn't appear to be much frost in the ground, and farm work is likely to begin early. Already there is talk of spring seeding in Minnesota and Dakota, but little will be done there before early March.

In Liverpool wheat is ¾ of cent higher than a week ago. The decline in stocks of grain and flour in England between January 1, and February 13 was equivalent to 3,500,000 bushels of wheat; while there has been a total decline here, too, of 5,000,000 bushels, east of the Rockies; hence the advance in prices and increased orders for American wheat. In interior parts of Germany and France prices have also become stiffer. The opinion is growing stronger across the water, that prices for wheat have touched bottom, and must advance.

In home markets the great question has been: "Has Europe at last been forced to buy American wheat." Over 875,000 bushels are said to have been taken for exportation; but many question the fact. Prices went up early in the week, weakened later, and closed everywhere at an advance over last weak. This was highest at Chicago. Reports of damage to winter wheat by the present frigid spell are beginning to come in and tend to stiffen prices. This morning accounts of injury are gloomy from Kansas, and reports from several other States are also by no means bright. When the cold spell is succeeded by a thaw more will be known of the damage. In most places March is the hardest month on winter wheat. Indian corn has been irregular and lower on heavy receipts. No. 2 closed at 50¼c., against 54c., a week ago. Wheat flour is about 10c., higher per barrel, and production is increasing, but the market is duller at the advance. The market for oats has been steady at firm quotations, but inactive so far as the export trade is concerned. The visible supply of oats increased about 136,000 bushels last week.

In the Northwest the prices of wheat closed yesterday the same as a week ago, having fluctuated about 2c. per bushel during the week. The Minneapolis mills are running lively, having turned out 91,000 barrels of flour, and shipped 87,000,000, mostly for export at an advanced price. Receipts of wheat for the week at Minneapolis reached 575,000 bushels, and in spite of heavy grinding, the stock there and at St. Paul increased 20,000 bushels. The country elevators are reported to be drained to furnish this amount; but other reports say farmers are rapidly filling them again.

Last Saturday at New Orleans cotton reached its lowest point since the war, the lowest, in fact, for 38 years. The grade of middling dropped to 8 5-16. The lowest previous point on record was in 1878, when it dropped to 8¾.

The exports for the crop year are 280,000 bales short, owing to the great depression in trade in Europe; and the stocks at the various ports here are 200,000 bales larger and at the interior points 190,000 bales larger than a year ago, making about 1,500,000 bales held against 1,100,000 bales a year ago. Thus about $70,000,000 must be locked up in cotton, much of which has been loaned by banks, and a slight pressure to sell has caused the decline in price. Moreover, the last official report of the last crop shows that fears of a shortage were unfounded.

Wool prices are not as firm as they were, as takings are light, but prices are, as yet, unchanged. As stocks of common are very low, and the demand for fine fleeces is fair, it is believed that manufacturers will take liberally in the near future, thus promising a good spring trade.

Provisions have tended upward, but speculative influences have prevented any special display of strength. It is currently estimated that Chicago stocks of pork March 1 will show an increase of 25,000 barrels as compared with February 1. It is added that lard stocks will probably not increase, and that stocks of meats will be some 6,000,000 pounds larger than at the like date last year.

Rice is weak in the face of probable large supplies.

The following are the old and new rates on shipments of dressed meat and live stock from Chicago to New York:

	New rates. cents.	Old rates. cents.	Difference. cents.
Live cattle	35	25	10
Live sheep	45	25	20
Live hogs	30	30	....
Dressed beef	65	43½	21½
Dressed hogs	55	43½	11½
Dressed sheep	90	15	45

THOSE who have used the Boss ZINC and LEATHER COLLAR PADS and ANKLE BOOTS say they are the best and cheapest, because most durable. They will last a life-time. Sold by harness makers on 60 days' trial. DEXTER CURTIS, Madison, Wis.—*Adv.*

IF you grow Cauliflowers or Cabbages, send 20 cents in stamps to Francis Brill, Riverhead, Long Island, N. Y., and get his book with practical information in minute detail.—*Adv.*

"Brown's Bronchial Troches" are widely known as an admirable remedy for Bronchitis, Hoarseness, Coughs, and Throat troubles. *Sold in boxes.—Adv.*

MARKETS BY TELEGRAPH.

SATURDAY, February 27, 1885.

CHICAGO.—Compared with prices a week ago, "regular" wheat is 2⅛c. higher; No. 2 Chicago Spring, ½c. higher; Corn, ¼c. lower. Oats, ¼c. lower. Rye and barley unchanged. Pork, 35c. lower. Cattle, a trifle higher. Hogs, from 5c. to 10c. higher. Sheep, from 25c. to 75c. higher, according to the grade; but all are considerably higher.

WHEAT.—Sales ranged; February, 80⅝@81⅜c; March, 80¾@81¾c; May, 85⅞c@86⅜c.; No. 2 Spring, 80¾@82c; No. 3 Spring, at 71¼c. CORN.—Cash, 37⅛@37¾c; February, 37¼@37½c.; March, 37⅝@37½c; May, 40⅛@40⅞c. OATS—Dull sales ranged; Cash, at 30c; February, 29@29½c; March, 29@29⅜c.; May, 32⅛@32¾c. RYE—No. 2, 59c. BARLEY.—No 2, 60c. PORK.—Cash, $10 70@$10 75; February, $10 75@$10 95; March $10 75@@$10 95; May, at $10 85@$11 15. LARD.—Quiet and weak; sales ranged; Cash, at $5 95@$5 97½; March, at $5 97½@$6 00; May, $6 05@$6 07½. BULK MEATS.—Shoulders, at $3 95@$4 00; Short rib sides, $5 40@$5 45; Short Clear sides, $5 75@$5 85. CATTLE—Shipping steers, $3 90@$5 70; stockers and feeders, $2 90@$4 90; cows, bulls and mixed, $1 75@$4 00; bulls, $2 90@$3 80. HOGS.—Rough and mixed, $3 90@$4 20; packing and shipping, $4 20@$4 50; light, $3 60@$4 25; skips, $2 75@$3 75. SHEEP.—Market firm; Natives, $2 50@$5 00; Western, $3 50@$4 50; lambs, $4 00@$5 50 Texans, $2 00@$4 25.

ST. LOUIS.—Compared with cash prices a week ago, No. 2 Red Wheat is 1c. higher. Corn, ½c. lower. Oats, ⅝c. lower. Pork, 15c. lower. Cattle, from 5c. to 15c. lower. Hogs, from 5c. to 50c. higher. Sheep, from 25c. to 65c. higher.

WHEAT.—No. 2 Red, Cash, 93c.; February, 92c.; March, 92c. bid; May, 94¾@95c. CORN dull; No. 2 Mixed Cash, 35⅛@35¾c; February, 35⅞c; March, 35⅝c; May, 31⅝c. OATS quiet; No. 2 Mixed, Cash, 29¾@29¼c; March, 29⅞c., May, 31⅝c. RYE firm at 60⅝c; BARLEY American, 60@80c; BUTTER quiet; creamery, at 21@30c.; dairy, 18@24c; EGGS steady at 11½c PORK, $11 10. BULK MEATS—Long Clear, $5 45; Short Rib, $5 85; Short Clear, $6 00. LARD firm at $5 85@$5 87½. CATTLE.—Market easier. Fair to Choice Native Shipping Steers, $4 85@$5 30; Native Butcher Steers, $3 25@$4 25; Cows and Heifers, $2 25@$3 65; Stockers and Feeders, $3 00@$4 15. HOGS.—Light, $4 00@$4 15; Packing, $4 00@$4 25; Heavy, $4 20@$4 50. SHEEP.—Market firm and active; Common to Choice, $3 50@$5 50.

BOSTON.—CORN has been firm but quiet; Steamer Yellow, at 51@51½c; steamer mixed at 50½c; and no grade at 48@50c, per bushel. OATS in light demand; No. 2 white and barley oats, at 44@45c; No. 2 white, 42½c, and mixed at 39@41c. Rye quiet at 67c, per bushel. BRAN is firm at $18 50 for Spring and $19 00@19 50 for Winter; fine feed and middlings at $19 00@21 00, and cotton seed meal at $25 00 on spot and $23 00 per ton to arrive. HAY AND STRAW—Hay is plentiful at $18 50@19 00 ₱ ton for choice and fancy; fair to good, $17@18; fine, $16@17, and $13@15 for poor and damaged. Western choice $16@17 do fair to good $14@15. Rye straw is held at $19@20 00 for choice, and $12@14 for common to good. Swale hay, $11@12; Oat straw, $9@10 per ton. PRODUCE—BUTTER-Northern creamery, choice to extra 24@30c; good to choice summer, 18@23c; western creamery, 25@33c, for choice to extra; northern dairy, 21@23c, for Vermont extra; 18@20c, choice, and 12@16c, for fair to good; Western dairy, 18@22c, for choice, and 10@15c, for fair to good; Imitation creamery at 15@26c, for good to extra; ladle-packed, at 18@22c, for choice. CHEESE—New York choice to extra, 9@10½c, and common to good, 5@8c; Vermont choice to extra, 8½@10c, and common, 5@7c. Western common to extra, at 4@9½c. Sage, extra, 11@12½c, good to choice, 9@10c. EGGS—Cape and near-by, per dozen, at 23@24c; Eastern extras, 21½@23c; do, firsts, 2 2@2½c; Northern, fresh, 22@23c; Western fresh, 20@22c; Provincial, at 21@22c. BEANS.—Choice Northern hand-picked pea, at $1 75@1 80 per bushel; do, do, New York, small, $1 60@1 65; do, do, screened at $1 15@1 30; medium choice, hand picked at $1 45@1 50; do, screened, $1 15@1 30; Yellow Eyes, improved, at $1 55@1 60; do, choice flats, $1 45@1 50; Red Kidneys, $1 75@1 80. Canada peas, 85c@$1 00 per bushel for common to choice. Green peas, Northern, at 90c@$1 00; do, Western, $1 20@1 25. Potatoes range at 55@75c, per bushel, as to quality.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, February 27, 1886.

STATE OF THE MARKET.—Compared with cash prices last week, flour is 10c. higher, on most grades; "regular" wheat, 1c. to 1½c. higher; corn 1c. lower; oats ½c. lower, pork, unchanged; lard, 5c. to 5c. lower; butter, lower and weaker; cheese, steady; eggs, 2c. to 2½c. lower; poultry, higher, particularly on "near-by" lots; slight advance on apples; dried fruits steady; vegetables steady.

FLOUR, FEED AND MEAL. FLOUR—Quotations: Fine at $2 90@3 05; Superfine, $2 90@$3 30; Extra No. 2, $3 25@$3 80; Good to Fancy Extra State, $3 80@4 25; Common to Good Extra Western at $3 25@$4 00; Good to Choice Extra Western, $4 00@$5 60; Common to Fair Extra Ohio, $3 30@$3 75; Good $3 80@$4 70; Good to Choice, $4 75@$5 80; Common Extra Minnesota, $3 25@$3 75; Clear, $4 00@$4 50; Rye Mixture, $4 00@$4 25; Straight, $4 50@$4 90; Patent, $4 75@$5 60; Bakers' Extra, $4 25@$4 60; St. Louis Common to Fair Extra, $3 25@$3 80; Fair to Good, $3 85@$4 75; Good to Very Choice, $4 80@$5 50; Patent Winter Wheat Extra, $4 50@$5 60; City Mill Extra for West Indies, at $5 00; South America, $5 00@5 10. SOUTHERN FLOUR—Common to Fair Extra, $3 40@$3 80; Fair to Choice do., $3 85@5 40. RYE FLOUR—Superfine, $3 15@3 50, latter for very choice. BUCKWHEAT FLOUR, at $1 85@$2 00. CORN MEAL—Brandywine, $3 00@3 05; Yellow Western, at $2 75@$3 00. FEED—Bran ranges from 85@92½c, from track and mill; for 60 ℔ average at 89@92½c.; 80 ℔, average at 84@85c.; middlings at 85@97½c., and sharps at 97½@$1 07½. Rye feed at $18 00@$17 00 per ton.

GRAIN.—WHEAT.—No. 2 Red at about 94c; No. 2 Red for March, 93½@94c.; do. for April, 94½@95¾c.; do. for May, 95 11-16@95¾c; do. for June, 96¾@97½c.; do. for July, 97@97¾c; do. for August, 97¼@98c; do. for September, 97⅞@98¾c; do for November, $1,00¼@1,01¼; do. for December, $1,01¼@1,02¼; do. for January, $1,02@1,02¾. RYE—58@62½c. for Western, and 64@65½c, for State. BARLEY.—Ungraded Canada at 79@95c. CORN—Ungraded Mixed 46@51c; No. 3, 47¼@48¼c.; Steamer Mixed, 48¼@49c.; for February, 48¾@49⅜c; do. for March, 47¼c; do. for May 46¾c; Steamer Yellow, 48¾@49c.; No. 2, 52¾@54c.; No. 2 White, 52c; Ungraded Yellow, 51c; Jersey Yellow, 49c; No. 2 Mixed for February, 52¼@56c; do for March, 50¾@50¾c; do. for April, 49¾@49¼c; do. for May, 48¾@49c. OATS.—No. 3 Mixed, at 37½c.; No. 2, 37¾@37¾c.; No. 1, at 38c; No. 3 White, 39½c.; No. 2 do. 39¾@40c; No. 1 at 43c.; Mixed Western at 37½@39c.; White do., 39½@45½c; White State, 40@43c; No. 2 Mixed for February, 37½c; do. for March and April, 37½c; do. for May, 37½@37¾c.

BEANS—Quoted: Marrows, at $1 65; mediums, at $1 45; pea at $1 45@1 50; red kidney at $1 85@1 90 for choice; turtle soup at $2 00@2 10; white kidney, $1 80@1 85, for choice.

PEAS.—Green are quoted at $1 15@1 20.

PROVISIONS.—PORK.—Mess quoted at $10 50@$10 75 for Old and $11 75@12 for New; $11 50@$12 00 for Family Mess; $12 75@$14 50 for Clear Back; and $8 50@$9 25 for Extra Prime. BEEF.—City Extra India Mess, $17 50@18 00; Extra Mess, bbls., $10; Packet, $11 00@$12 00 in bbls.; Family Mess, $12 00@$13. BEEF HAMS.—Quoted at $17 75@18. CUT MEATS.—Pickled Bellies, 12 ℔, average, at 5 3-16@5¼c; do. 12 ℔, at 5¼c; do. 18 ℔, at 5¼c; Pickled hams, at 8¾c; Pickled Shoulders, 4½@4¾c; Smoked Shoulders, 5@5½c; Pickled Hams at 8¼@8½c.; Smoked do., 8½c. MIDDLES—Long Clear in New York quoted 5¾c. for Western delivery. Long Clear, 5.50c.; Short Clear, 5.75c. DRESSED HOGS.—City Heavy to Light, 5¾c; pigs, 5¾@5¾c. LARD.—Western Steam spot, at 6.29@6c; March, at 6.23@6.30c.; April, 6.30@6.37c.; May, 6.35@6.43c.; June, at 6.42@6.49c; July at 6.48@6.55c; city steam, at 6.20@6.25c; Refined Continent at 6.55@6.60c, and South American, at 6.85@6.90c.

BUTTER.—Eastern Creamery, 29@31c; Western Creamery, 18@30c.; Elgin do., 31c; State Dairy half-firkin tubs, 18@25c.; Western Factory, 10@19c.; Imitation Creamery, 18@25c.; Western Dairy, 10@11c.

CHEESE.—State, 7@10½c.; Night Skims, 5¼@7c. Western flat, 7@9½c.

EGGS.—State, 22@22½c.; Western, 22c.; Southern, 21@22c.; Limed State, 17@18c; do. Western, 16½@17½c.

LIVE POULTRY.—Fowls, Jersey State and Pennsylvania, per ℔, at 11c.; do, Western, per ℔ at 10½@11c.; chickens at 8@9c; turkeys per ℔, at 10@11c.; ducks, western per pair, at 50@75c; geese, western, per pair, at $1 00@$1.25; pigeons, per pair, at 35@40c.

DRESSED POULTRY.—Turkeys, Philadelphia, at 10@12c; chickens, Philadelphia large, at 13@14c, per ℔; do, small at 11@13c; Jersey scalded at 11@12c; do, State at 10@11c; do, western, at 9@10c.; fowls, Philadelphia, prime, 11@12c; do, Jersey, 10@12c; State and western, 10@11c. Ducks, Philadelphia, at 14@15c; do, Jersey, at 13@14c; do, western, at 12@13c. Geese, Philadelphia

at 10@12c; do, Jersey, at 10@12c; do, western, at 8@9c.

GAME.—Wild ducks, canvas, per pair, at $2 50; do., red-head, per pair, at $1@$1 25; do. mallard, western, per pair, at 40@75c., do., teal, blue wing, 40@70c.; do. wood, at 30@45c.; do. common, at 25@30c.

COTTON.—The quotations, according to the American classification, are as follows:

	Uplands.	New Orleans. and Gulf.	Texas.
Ordinary	6¼	6 7-16	6 7-16
Strict Ordinary	6 11-16	6⅞	6⅞
Good Ordinary	7⅝	7 13-16	7 13-16
Strict Good Ordinary	8 1-16	8¼	8¼
Low Middling	8 7-16	8⅝	8⅝
Strict Low Middling	8 11-16	8⅞	8⅞
Middling	8⅞	9 1-16	9 1-16
Good Middling	9¼	9 7-16	9 7-16
Strict Good Middling	9½	9 11-16	9 11-16
Middling Fair	9⅞	10 1-16	10 1-16
Fair	10½	10 11-16	10 11-16

STAINED.

Good Ordinary	6 1-16	Low Middling	7 9-16
Strict Good Ordinary	6¾	Middling	8 5-16

FRESH FRUITS.—Quotations are: San Blas cocoanuts at $36@38; Baracoa cocoanuts at $29 00@$30 00. Apples—Baldwin, per bbl., at $1 50@ $1 75; Greening, per bbl. $2 00. Grapes.—Catawba at 6@7c. per lb, in baskets; Isabella, at 2@3c. per lb. Cranberries.—Cape Cod, choice, per bbl., $3@4; do. fancy, $4 50; do. choice, per crate, $1 00@$1 25. Florida oranges.—Fancy at $3 25@$3 50; Choice at $3 00@$3 25; do. inferior at $1 75@$2.

DRIED FRUITS.—The quotations are as follows: Apples—Fancy evaporated, 7@7¼c; choice, 6¾c; do. prime at 6¼@6½c.; fancy North Carolina sliced, new, at 4@4½c.; choice do. at 3¼@3¾c.; choice Tennessee quarters at 2@2½c.; State quarters at 3¼@3¾c.; southern sliced prime at 2½@2¾c; do. common, 2c. Peaches—Peeled North Carolina, choice, 10@11c., fancy, 12c.; extra fancy, 13c.; Georgia, choice, 11c; do. prime, 9@9½c.; unpeeled halves, 2¾@3c., unpeeled quarters at 2½@3c.; Delaware evaporated, peeled, 21@25c. Choice pitted cherries at 11@11½c. Evaporated raspberries at 16@17c; sun-dried do. 13@14c. Blackberries—Prime at 8¼@9c. Whortleberries at 6½@7c.

PEANUTS.—Quotations at 5¾@6c. for best hand-picked, and 4@4½c. for farmers' grades.

FERTILIZING MATERIALS AND CHEMICALS FROM WILLIAMS, CLARK & CO.

Dried Blood, 12 to 15 per cent. Ammonia, $40.00; Animal Matter, 10 to 12 per cent. Ammonia, $35.00; Fine Ground Dry Fish, $35.00; Nitrate of Soda, 95 per cent., 2¾c: Sulphate of Ammonia, 25 per cent., 3¾c; Sulphate of Potash, 48 per cent., $40.00; Genuine Kainit, 23 to 26 per cent., $15.00; Muriate of Potash, 80 to per cent., $15.00; Fine Ground Bone, $38.00; Plain Dissolved Bone, $28.00; Americus Bone Superphosphate, $28.00, Royal Bone Superphosphate, $32.00; American Potato Fertilizer, $45.00; Fish and Potash, $25.00; Americus Pure Bone Meal, $38.00.

HAY AND STRAW.—Quotations are for: Choice timothy hay at 90@95c; good at 80@85c; medium at 75@80c.; shipping at 70@75c: clover mixed at 70@75c.; Clover, 50@60c.; No. 1 rye straw at $1.00: short rye straw at 75@80c. oat straw at 45@50c.

SEED.—Clover demand in a jobbing way; quotations are at 10¼@11c. for best. Timothy is held firmly; quoted at $2 10@$2 20. Linseed nominal. Flaxseed at about $1.21@1.22.

SUGAR.—Raw, 5¼c, for fair; Crushed, 6⅝c; Cubes, 6¾@6 7-16c; Powdered, 6⅜c; Granulated, 6⅜c; Mould "A," 6⅜c; Confectioners' "A," 6¼c; Standard "A," 5 15-16c; Off "A," 5¾c; White Extra "C," 5⅝c.; Extra "C," 5⅜@5½c; "C," 5¼@5¾; Yellow, 4⅞@5.

TALLOW—Prime City quoted at 4½c.

VEGETABLES.—Potatoes—New York Rose, $1 75@$2 00; Eastern and Nova Scotia Rose at $2 00@$2 25; Burbank, State, at $1 75@$2 00; Burbank, eastern and Nova Scotia, per bbl, $2@2 25; Hebron, do, do, do, per bbl, at $1 75@2 25; Prolific and Goodrich, Bonum, imported, per sack, at $2. Champion, imported, per bbl., $2 00; Peerless, per bbl., at $1 75; Magnum, imported, per sack, $1.62@$1.75. Sweet potatoes, Virginia, at $2 25@$2 50 per bbl. Cabbages, per 100, at $5@7; do, imported, per 100, $5@$7. Onions—Yellow, ℔ bbl, $3 50; do. red, per bbl, $3@$3 75, do. white, $4 50. Turnips—Russia, ℔ bbl., 37@62c. Marrow squash, per bbl., 50@75c. Norfolk kale at 1.00@$1.50. Spinach, Baltimore at $2@2 25 per bbl. French onions at $1 25@1 50 for cases.

LIVE STOCK MARKET.

NEW YORK, SATURDAY, February 27, 1886.

Shipments of meats for the past week, 707 live cattle, 6,320 quarters of beef, 40 live sheep and 500 carcasses of mutton. BEEVES.—Total receipts for six days 9,771. Some little "Stockers," sold down to $4@$4 10; very Ordinary to Prime Steers at $4 30@$5 80; and nothing very Good offered. Yearlings, Stags, Oxen and Bulls, ranged from $2 50 to $5, and Dry Cows, and Heifers, from $3 to $4 40, with a few sales of Dry and Fed Cows by the head at $25@$40 each. Pennsylvania steers, 1,391 ℔, at $5 75; do., 1,270 at $5 20; Dry cows, 985 ℔, at $3 65; Chicago steers, 1,242 ℔, at $5 50; do. 1,409 ℔, at $5 45; Ohio do, 1,069 ℔, at $4 35; bulls, 1,450 ℔ at 3⅝c; Indiana Steers, 1,361 ℔, at $5 50; Dry Cows, 1,003 ℔, at $4 40; cows and stags, 1,119 ℔, at $1 81¼; State "Stockers" 973 ℔, at $4; do, oxen, 1,282 ℔, at $4; Dry Cows and Heifers, 902 ℔, at $3; do. 613 ℔, at $3; do., 987 ℔, at $3 05, do. 1,153 ℔, at $3 25; Fresh cows and heifers, at $25@40 per head; Ohio oxen, 1,187 ℔, at $4 87½; Kansas steers, 970 ℔, at $4 77½; St. Louis do, 1,463 ℔, at $5 60; Pittsburg do, 1,280 ℔, at $5 05.

SHEEPS AND LAMBS.—Receipts for six days, 24,980 head against 34,419 head for the same time last week. Demand good and market firm at yesterday's quotations. Common to prime sheep sold at 5@6½c., and one car extra at 6⅝c. Common to prime lambs sold at 6½@7½c. Western sheep, 97 ℔, 6c; Ohio sheep, 71 at $5 10; State sheep, 82 ℔, at 5¾c; Michigan sheep, 88 ℔, at 5⅜c; State Lambs, 82 ℔, at 7¼c.; Western lambs, 69 ℔, at 7c.

HOGS.—Receipts for six days, 39,338 head, against 37,406 head for the same time last week. None for sale alive. Nominally a trifle weaker at $4.40@$4.60.

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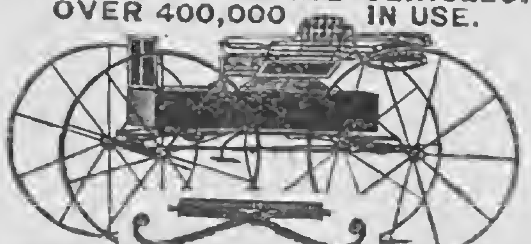
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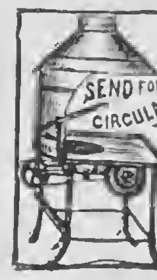

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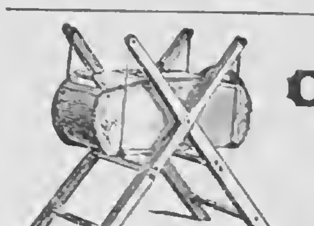
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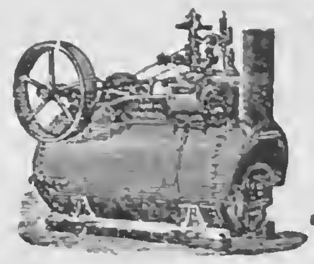
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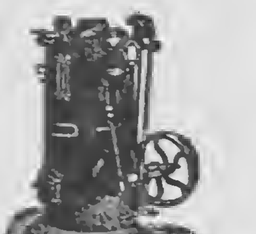

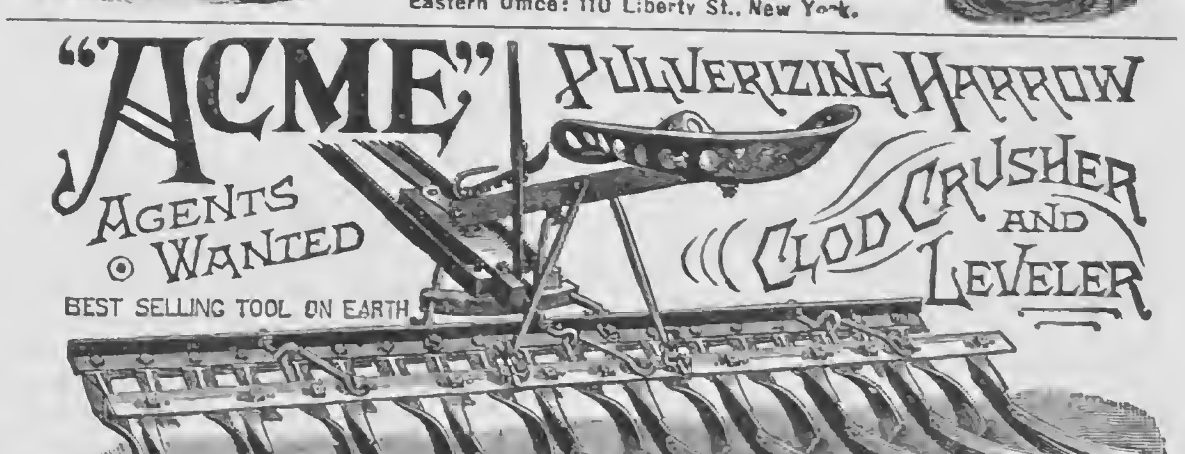

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Send for pamphlet containing thousands of testimonials from 48 States and Territories.
Branch Office, HARRISBURG, PENN. **NASH & BRO.,** Manufactory and Principal Office, MILLINGTON, NEW JERSEY.
N. B.—"TILLAGE IS MANURE" and other essays sent free to parties who NAME THIS PAPER.

For the Young.

A SHORT time ago I saw a cat that would jump through a hoop, play leap frog and perform a number of funny tricks. I think some of the Cousins will find lots of pleasure in training a cat. They will be proud enough to exhibit it. So I asked the Cousin who owns this trained cat to tell us how he went to work to teach it. I have no doubt we shall have hundreds of cats jumping about and performing all sorts of tricks before the Summer is over.

CAT TRAINING.

THE cat should be in good condition, well, sound of limb and not too fat; a cat that is too fat will not be able to jump. You want to teach her to know your voice; and to come at your call. Cruelty should never be used in training. Kindness alone will work with an animal. Before proceeding further I will describe my cat.

"Tom" is his name, he is exactly 13 inches high, 33½ inches from tip of his nose to tip of his tail, and weighs 13½ pounds. At times when he is not in condition he weighs on an average 14 pounds, and sometimes 14½ pounds. He can play leap-frog with anybody, play dead, will lie on his back, and one time he went to sleep on his back for 20 minutes. He can also jump through a hoop, and over your arm, will kiss you by a lap or two with his tongue on your face; but he is very partial with his kissing, as he bestows that favor only on the members of the family and a few of his most intimate cat friends. Cousins! will you believe it, Uncle Mark and Tom played leap-frog together.

To begin with, teach the cat at meal times. Place the meat and milk (fried liver and warm milk is the best food for a cat in training, on no account give any raw meat) on the floor in the usual place where the cat eats and forbid his touching it. If he goes to touch it hiss at him, and if he persists in touching it push him away, but do not strike or frighten him. This is enough training for beginning. Then after he has learned not to touch the food until you give permission, you can begin with some simple trick, such as jumping over your hand or a stick a few inches above the ground, But I must close now, and I will send some more facts some other time.

WILLARD SPRAGUE.

LETTERS FROM THE COUSINS.

DEAR UNCLE MARK: I forgot about the Club till I saw one of the RURALS yesterday. I have not been on the farm in over a year, so I have had no chance to read the RURALS. I have been in the store all this while. I am getting so I like it better than I ever did before. I go to school and attend to the store morning, noon and night. We are having quite a large school this Winter; we have a good teacher and about 35 scholars. We have a very good garden in the Spring. We planted potatoes, corn, beets, cabbage, radishes and peas. We had all the corn we wanted to eat, as we planted an early and a late kind.

Delaware Co., N. Y. HARRY K. LEWIS.

[We need some good merchants in the club. I hope you will surely make a good one. —U. M.]

DEAR UNCLE MARK: We all enjoy the Rural seeds very much. The flowers were lovely. The poppies were very nice. They were of different colors—pink, white, light red and dark red; also some were almost black, others were mixed purple and white. We have four very nice Catalpa trees raised from Rural seeds. This is the sixth year Papa has taken the RURAL. Papa says the Rural corn is too late for our climate. We have two cows, a calf, a horse and four pigs. Papa says this year I can raise some pop-corn and sell it and have the money for my own use. The snow is very deep. We have been having very cold weather. Whenever we have terrible storms here we always hear of worse storms in other parts of the country. My uncle, who has lived here 18 years, says there has not been any signs of a cyclone. I go half-a-mile to school. We live on the east coast of Lake Michigan, and about 90 miles from Milwaukee. This city is improving very fast. There are a number of saw mills and shingle mills. Salt was discovered last Summer at the depth of about 2,000 feet. One well is finished and barreling the salt at the rate of 350 barrels per day. There are three others in different stages of progression. Hoping that Uncle Mark will be pleased with my letter, I will close.

Your niece, EMMA F. THORN.

Luddington, Michigan.

DEAR UNCLE MARK: My name is Francis E. Gillice and I am eight years old, and my brother's name is James O. Gillice and he is six years old. We live ten miles from Clay Center (a town of 5,000 inhabitants). Our Papa has a farm of 160 acres, and three mules. Their names are Jin, Kit and Rip. We have one horse, his name is Napoleon. We have lots of chickens, and we are going to raise some more next Spring. Our Papa gave us some ground to plant last Spring and we planted some peanuts, but it was so dry that we did not get many. We had no rain from the 20th of May till the 20th of July and then from the first of August till nearly the last of September but very little, though they had plenty of rain about ten miles from here. We have been having a big snowstorm, the roads are all blocked up, but it is nice weather now. Yours truly,

Clay Center, Kansas. GILLICE BROS.

DEAR UNCLE MARK: I am a girl of 11 years old, so I would like to be mustered in with the rest of the Cousins. We went to school last Summer, and we expect to go this Summer. George, my oldest brother, killed two deer and two turkeys. During that cold spell we had it four degrees below zero, but now we have nice weather. Most all the land here is prairie. I can make hair-flowers. I tried to make feather-flowers, but I can't yet, but as I am young yet, I guess I can learn. If you ever come in this part of the country, you must come here and see what nice biscuit I can make. I do very near all the cooking and washing. I have one quilt pieced and am piecing another one. I do all the milking. We raised a good many peanuts last year. We are going to plant a good many this year. When we first came down here the wolves would howl. We haven't heard any of them for a long time. The country is settling up very fast. We live seven miles from the railroad. Pa has a good many flowers in his green-house. I had a few flowers last year but the chickens scratched them all up before any of them bloomed.

Stuttgart, Ark. MARY ELIZABETH PRACOP.

[What a little worker you are! I am so fond of good biscuits that I would willingly travel quite a distance to get some. I am glad you never invited the wolves in to supper. I don't like such visitors.—U. M.]

Letters received during the week from T. W.—M. B. C.—M. F.—B. C. U.—F. W. B.—M. M.—J. M. J.—J. G. V.—A. C.—L. P.—G. C. B.—F. S. W.—R. W.—F. L.—H. C. B.—A. M—A. F. J.—R. M. L.—R. E. S.—G. H.—G. L. A.—A. L. W.—O. S.—R. E. C.—J. C.—E. C. D.—B. M.—M. N. K.—L. C. B. -C. E. V.—G. M. P.—F. E. S.—J. M. C.—M. G. K.—D. D.—F. D.—K. R.—R. B.—M. S.

Miscellaneous Advertising.

CONSUMPTIVES NEED NEVER DESPAIR.

There Is a Cure at Hand.

PRETTY bold words! Yet warranted by facts. You naturally ask, "What is this cure?" The answer is CANNABIS SATIVA, the great East India Consumption Cure.

"And, pray, what is that?" you ask. There are two ways of telling you. One is by using great big scientific words, which not one in a thousand can understand. The other is by plain, straightforward speech, which no one can mistake. Our judgment is that the latter will be best.

Cannabis Sativa is not a human invention. God made it. When nature afflicts she seems cruel. But she is really kind, because she gives a remedy for every ill. The great thing is to get at it. Now, we have but lately gotten at Cannabis Sativa. It isn't a bit new. It came from the East Indies—the cradle of the human race. It has been used there for thousands of years.

We can do better with it than those old-world folks. We can extract, compound and preserve it better. We can prepare it by a formula of our own so that it will surely reach the seat of consumption and all those diseases for which it is a specific. We give it directive force and energy in the system—make it a remedy. That is our secret, and in this respect only it is new.

"Why and how does it cure consumption?" A grave question. Consumption is not a disease in itself. It is only a result of other diseases. Given, loss of appetite, stomach failure, liver congestion, constipated bowels, diarrhœa, weakness, nightsweats, nervous prostration, chills and fever—what have you got? Nothing but a set of diseases which breed consumption. They are sure forerunners of it—symptoms as the doctors say. The cough isn't consumption. It only tells you that part or all of the other diseases are becoming localized in the lungs.

The specific virtue of Cannabis Sativa is just here. It is the natural corrective of these very diseases or conditions which lead to and foster consumption. It cures the dread disease by curing its causes. And this is the treatment of modern science. Doctors—we mean the good ones—have all come to this.

Under treatment for consumption with Cannabis Sativa the provoking disease begins to back out, one by one. The stomach function is resumed; the liver begins to work; appetite returns; night-sweats cease; the blood circulates freely and purely; the cough diminishes; the man feels a man again. Only this kind of a cure is rational and sure. The entire secret is in this little nut-shell. The Cannabis Sativa Remedy cures consumption by breaking up and scattering the consumptive condition in the system.

A word of verification from others. Dr. J. G. Horton, of Whitesville, Alleghany County, N. Y., says of a patient, Mr. F. J. Baker: "Have practiced medicine for thirty years and acknowledge I never saw a more marked effect from any medicine than from this remedy—Cannabis Sativa. I am sure Mr. Baker would have been in his grave by this time but for your East India remedy. He had a very bad cough, profuse expectorations, haggard countenance, no appetite—in fact did not think he could live more than a few weeks. He can now walk three or four miles; has good appetite, and is in every respect greatly improved.

John M. Fisher, of Downes, McLean County, Ill., says: "I suffered for 18 months with cough, blood-spitting, difficult breathing, pain in lungs, palpitation, want of appetite, loss of sleep, and break-up of entire system. All remedies failed and the doctors gave me up. I lost hope, but finally tried Cannabis Sativa. Believe I am entirely well. Have not been so well in five years."

Mrs. M. McDowel, writing from Delvalle, Texas, says: "Had consumption for two years. Have taken Cannabis Sativa for some time and am now well. It is a blessing to the suffering."

Mrs. M. E. Collins, writes from Caldwell, Sumner County, Kan.: "Had enlarged liver; terrible cough; hemorrhage of lungs; pain in side, and constipation. Doctors said I must go to California in order to live. Heard of Cannabis Sativa through Rev. Mr. Morrin. Began to treat myself with it. Am now free from cough and all distressing symptoms. Walk half a mile to church and feel as well as I ever did."

D. O. Folsom, of Almont, Mich., was lifted from a consumptive's death-bed by Cannabis Sativa, and writes thankfully to say that "he is now in good health, weighs 180 pounds, and considers the Cannabis Sativa Remedy superior to all other consumption cures."

The Cannabis Sativa Remedy does its work quietly and naturally. There is nothing startling or miraculous about its cures; yet some of them are so remarkable, so unexpected, so contrary to the despondent opinions of patients and their doctors, that they seem almost in the nature of miracles. Thus, Charles F. Lottinville, postmaster and druggist, of Papineau, Ill., a man who knows all about medicines, and who had excellent opportunity to judge of his brother's case, writes: "My brother had been under the treatment of four different physicians, all of whom had given him up. His legs, arms and hands were swollen and paralyzed. He coughed and raised continually could not rest a minute in bed and had not had a wink of sound sleep in six months. His mental condition was as bad as his physical. for a wife and large family depended on him for support. He made his will and arranged his affairs in anticipation of speedy death. Your Cannabis Sativa Remedy was brought to his notice. As a last resort, and like a drowning man catching at a straw, he let me order a package. It now seems *as if a miracle had been wrought in his favor, and humanly speaking it was one.* He is now up and doing work about the house and barn. He has recovered his former weight and looks better than he has for the past three years. Since his cure I have ordered the Remedy for many persons, with good results."

Notice, if you please, the high character of all those who testify to the merits of the Cannabis Sativa Remedy. They are people who understand their cases and are careful of what they say. Druggists and doctors speak as positively as anybody else.

Consumption takes on a more decided form, and is harder to handle in the higher latitudes where the climate is severe. Yet, even there the Cannabis Sativa Remedy controls and cures it as easily as in Southern climes. Mrs. J. C. Callard, of 58 Oxford Street, Toronto, writes: "Six months ago my throat and lungs were so bad I could not speak above a whisper and my limbs were swollen. I used the Cannabis Sativa Remedy, but did not need to use the last package you sent me. I now feel perfectly well and am a wonder to myself. I talk and sing as before, and pray that God may bless you, for you restored me to health."

John Dier, Jr., of Westport, Ont., writes: "My son was given up by three doctors. He was reduced from 150 to 124 pounds. I spent hundreds of dollars for doctors before I got your receipt. I could see a change in three days after beginning your Remedy. After using five packages he is stronger than ever before. In this place his recovery is regarded as a miracle."

Not only that, but it cures are real and permanent. There was Robert A. Hamilton, a humberman, living near Peterboro, Ont. He contracted cold in the pineries and got as far as Peterboro, where he went to bed with inflamed and abscessed lungs and lingered for seven months under the care of four physicians, who at last gave him up to die. He was taken on his bed to his home, a distance of 15 miles, and there had the attention of three physicians, who also gave him up. The abscessed lung discharged fearfully. He made his will and waited for death. Contrary to all advice he resolved to try the Cannabis Sativa Remedy as a last resort. He writes: "Began to use it in February, 1876. By May, after using three or four packages, I was able to get out of bed alone for the first time in three years and three months. In seven months after leaving my bed I was smart, healthy and without pain, ache or any symptoms of disease. Have since been able to make a good living. Last Fall I cradled and drew in grain." For the last seven years Mr. Hamilton has not known a sick-day. The cure was permanent. He had previously spent $1,400 for treatment. The Cannabis Sativa cost him $20.

G. M. Luther, Justice of the Peace, of Clarkton, Mo., suffered with consumption for two years. He had a cough, hemorrhages, wasting; had tried everything, even travel, and was at last given up by his physicians. As a forlorn hope, he tried Cannabis Sativa. To his surprise he improved, got well, and after waiting till fully assured that his cure was permanent, he wrote: "Hemorrhages all gone and lungs sound. Can do as much hard work as any man in my neighborhood. Weigh 168 pounds—as much as I ever did. Had spent $300 for medical aid. Twenty dollars' worth of your remedy made me a sound man. Mr. Luther writes again in 1885 to say that he has not had a day's sickness since his cure in 1882.

These are only a few of many similar testimonials to the curative properties of Cannabis Sativa, the great East India Consumption Cure. And yet, a few years ago it was almost unknown in this country. Its use was begun in the narrow circle of a regular physician's practice, and thus far its introduction to the public has been mainly through those who have been cured themselves and voluntarily recommended it to others.

I now propose to give wider publicity to its virtues, since they have been so fully proved, and to this end have prepared a pamphlet whose contents are of special interest to all sufferers from consumption, cough, catarrh, asthma add kidney diseases. It will be mailed free on application. Address W. A. NOYES, 149 Powers Block, Rochester, N. Y.

IF YOU WANT TO KNOW

1,001 Important things you never knew or thought of about the human body and its curious organs,
How life is perpetuated, health saved, disease induced
How to avoid pitfalls of ignorance and indiscretion,
How to apply Home-Cure to all forms of disease,
How to cure Croup, Old Eyes, Rupture, Phimosis, etc.,
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PERSONALS.

QUEEN VICTORIA, as she appeared when opening Parliament recently, is described as "dumpy of form and vinegary of face."

WHITTIER says that yellow is his favorite color, because he can always distinguish it, while the red apples and green leaves on a tree all look alike to him, as far as color is concerned.

GENERAL HANCOCK, it is said, leaves no estate. He was a generous liver and a benevolent man, and lived up to his salary. A fund being raised for his wife already amounts to about $35,000.

IT is asserted that all the money Charles Stewart Parnell has been able to raise has been given to the cause he represents, and that the estates he is reputed to own have long since been mortgaged in the same interest to their full value.

THOMAS A. EDISON is thought to have cleared two millions out of his electric inventions. He has purchased a rural residence for $400,000 cash, for his new bride. In appearance he is a clean-shaven man, youthful in face, and nearly deaf.

"JEFF" DAVIS is now in fairly good health and lives at Beauvoir, which place only furnishes vegetables and fruit for home consumption, and has rather a dilapidated appearance. He is described as a tall, slender, erect man, white-haired, walking with a cane, but having no indication of decay or senility.

MRS. JAY GOULD is rather short in stature, though plump and comely. Her face denotes intelligence, and was doubtless very pretty when she was young. She is thoroughly domestic in her tastes, and has devoted her time to her home and children. She spends two hours a day with her three small boys, and carefully inspects all the books they read.

Miscellaneous Advertising

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If you have a sufficiency of this world's goods, but if you have not, write to Hallet & Co., Portland, Maine, and receive, free, full particulars about work that you can do, and live at home, at a profit of from $5 to $25 per day, and upwards. All succeed; both sexes; all ages. All is new. Capital not required; Hallett & Co. will start you. Don't delay; investigate at once, and grand success will attend you.

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Or 6 Hardy Climbing Roses, or 3 Fine Moss Roses, or 6 Single Geraniums, or 6 Double Geraniums, or 5 Fancy leaf Geraniums, or 6 Fuchsias, or 6 Chrysanthemums, or 5 Hibiscus, or 6 Carnation Pinks, or 6 Fancy Leaf Coleus, or 5 Begonias, or 5 Sweet scented Violets, or 6 Tuberose Bulbs, or 6 Gladiolus, or 15 Packets either Flower or Vegetable Seeds.

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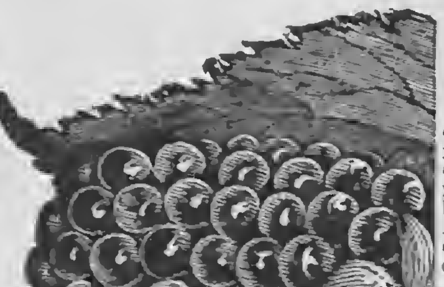

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1886 GREGORY'S SEED CATALOGUE 1886

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Believing that if a man has dealt squarely with his fellow-men his patrons are his best advertisers, I invite all to make inquiry of the character of my seeds among over a million of Farmers, Gardeners and Planters who have used them during the past thirty years. Raising a large portion of the seed sold, (few seedsmen raise the seed they sell) I was the first seedsman in the United States to warrant (as per catalogue) their purity and freshness. My new Vegetable and Flower Seed Catalogue for 1886 will be sent FREE to all who write for it. Among an immense variety, my friends will find in it (and in none other) a new drumhead Cabbage, just about as early as Henderson's, but **nearly twice as large!** James J. H. Gregory, Marblehead, Mass.

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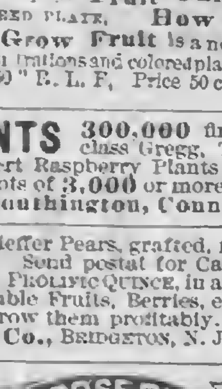

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PLANTS—SEEDS—BULBS. ROSES. SMALL FRUITS WITH NOVELTIES. MELON. STRAWBERRIES. CATALOGUE 90 PAGES FOR FARMERS GARDENERS AND EVERYBODY. CARNATION. GERANIUMS. VERBENA. C. E. ALLEN BRATTLEBORO VT

SPRING 1886

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EVERYBODY WHO PLANTS A FARM OR GARDEN
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SEND YOUR ADDRESS FOR OUR NEW ARTISTIC CATALOGUES
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My Annual Priced Catalogue is now ready, and mailed free to all applicants. It contains all the leading and most popular sorts of

VEGETABLE, FARM, AND **FLOWER SEEDS.**

Besides all the desirable novelties of last season, and nearly everything else in my line of business.

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SEEDS Garden, Farm and Flower Seeds, 33 5c. pkts for $1; 15 for 50c.; 7 for 25c., p. p. Catalogue *Free.* Geo. H. Colvin, Dalton, Pa.

FLOWER SEEDS, 12 choice pkts. 25 cents. Aster, Mignonette, Alyssum, Nasturtium, etc. Price list free. 5 sample pkts. 10 cents. James D. Ferris & Co., 56 Pine St., N.Y.

Send 10 Cents to Green's Nursery Co., Rochester, N. Y. and get 3 copies of Green's Fruit Grower and our 80-page Fruit Guide illustrated with COLORED PLATE. How to Propagate and Grow Fruit is a new book of 160 pages, 75 illustrations and colored plate. "It has saved me $50" R. L. F. Price 50 cts.

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ILLUSTRATED DESCRIPTIVE PRICED CATALOGUE FREE.
CHAS. T. STARR. AVONDALE CHESTER CO. PA.

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Miscellaneous Advertising.

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$25 A DAY saved by using the **Little Giant Road Machine,** instead of making roads in the usual way. It is the cheapest and the best. Send for circular.
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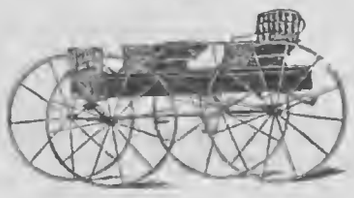

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500 PURE-BRED MARES & STALLIONS
Of the most popular families, all recorded with **Extended Pedigrees** in the **Percheron Stud-Books** of France and America, now on hand **at Oaklawn Farm.**

The Percheron is the only French breed possessing a Stud-Book in both France and America where eligibility to entry is based on authentic pedigree. I have a few imported Stallions of individual excellence (but not eligible to entry in the Percheron Stud-Book) which I will sell at half the price of pedigreed animals of equal appearance. 100-page Catalogue, illustrated with engravings sketched by Rosa Bonheur, sent free. Address, M. W. DUNHAM,
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Grain Drills. Cultivators. Seeders. Sowers. Spring Tooth Harrows. Cider Mills, etc.
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POTATOES WITH THE MAPES MANURES.

Not a Single Hollow or Decayed Potato—315 Bushels per Acre—No Stable Manure used—Only the Mapes.

JOSIAH HAWKINS, the well-known Seed-Grower, Southport, Conn., December 28d, 1885, reports:
Crop—Potatoes, "Dakota Red." Soil—Light, thin and gravelly. Time of Planting—April 25th.
Fertilizer applied—1,200 lbs. of Mapes Potato Manure per acre, sown broadcast and bushed in at time of planting. No other manure nor fertilizer used.
Cultivation—Hoed once and plowed three times.
Yield—Dug them the middle of September, they yielded 445 bushels of very large, handsome potatoes per acre.
Quality—Not a single hollow or decayed one. Quality and looks much like the "Early Rose," when they were first introduced. I am selling all the time for seed. Old farmers say they never saw such fine potatoes. I have 2,500 bushels of them. The quality of potatoes is of the greatest importance with me—and I generally grow eighteen acres.
Remarks—Last year, 1884, the yield of potatoes of the common varieties, upon the same ground with stable manure, was 115 bushels per acre. I have used many of the fertilizers offered for sale, and have found that it pays me well to use your fertilizers, and so say my neighbors. I have seen the analyses of your fertilizers repeatedly by our own and other State Boards (Experiment Stations) and I am fully convinced that all who want reliable, lasting fertilizers should have the Mapes. Your Corn and other Fertilizers have given great satisfaction.
Send postal for pamphlet. Address
The Mapes Formula and Peruvian Guano Co.,
158 Front Street, New York, N. Y.

BURPEE'S NEW SEEDS FOR 1886

RARE NOVELTIES IN CHOICE VEGETABLES

In the past ten years we have introduced more **successful novelties of real value** in Vegetable Seeds, than any other Seedsmen in America. This is explained by the fact that we make the *most thorough and exhaustive trials* of all varieties. By competitive trials, year after year, we detect any imposition of old sorts under new names. We are also enabled to discard all varieties of little account, and to work up, by critical selection, those that promise to be of value. Below we describe briefly our *LEADING NOVELTIES AND SPECIALTIES* for **1886,** all of which we can recommend as **THE VERY BEST** of their class, and **SURE TO GIVE SATISFACTION to the most critical Gardeners.** The varieties marked with a star (★) are introduced by us for the first time this year, and *cannot be obtained from any other Seedsmen.* The stock of Seed is limited, and we prefer to sell direct to planters, who will give us the credit of introducing these **RARE & VALUABLE NOVELTIES.**

NEW GIANT PERA CUCUMBER.
One-third Natural Size.

★ **NEW GIANT PERA CUCUMBER.**—Imported 3 years ago from Peru, and grown by us each year since, this is *undoubtedly the finest cucumber for table use ever introduced.* As shown in the illustration, the cucumbers grow straight and smooth, from *18 to 22 inches long,* by *3¼ to 4½ inches in diameter.* We have grown them to weigh **over 6 pounds** each. The flesh is entirely white, very clear, *peculiarly crisp, tender and brittle,* with *very few seeds.* No other variety grows so large or handsome while none other has so delicious a flavor. The Giant Pera is most prolific, the cucumbers set early, near the hill, and very close together. Per pkt. 15 cents; 4 pkts. for 50 cents.

★ **THE TURNER HYBRID TOMATO.**—Entirely distinct from all known varieties in foliage. It is **enormously productive,** the fruit is *extra large* in size and *remarkably solid.* The average weight of the tomatoes is 12 to 18 ounces, but many specimens reach 22 to 24 ounces. They ripen up evenly, of a deep brilliant red, and are entirely free from core. They make *the handsomest sliced tomatoes,* and are *unequaled in fine flavor.* Per pkt. 20 cts.; 3 pkts. for 50 cts.

★ **THE TOMHANNOCK LETTUCE.**—A very distinct novelty; forms a beautiful plant, ten to twelve inches high by nine to ten inches across; the outer leaves are handsomely wrinkled with edges of a glossy reddish bronze. The inner leaves are almost white, wonderfully crisp, and pleasant to the taste, *surpassing in tenderness* all other known varieties. It grows quickly; is ready to cut early, and *remains for weeks* of the finest quality. Pkt. 15 cts; 4 pkts. for 50 cts.

★ **EMERALD GEM MELON.**—*Extra early, very prolific* and *decidedly the sweetest of all melons.* Entirely unlike any other melon—see colored plate in our catalogue. Skin smooth of a deep emerald-green color. The flesh is of a suffused salmon, *sweet* and *luscious* beyond description. Per pkt, 25 cents; 5 pkts. for $1.00.

NEW MAMMOTH POMPEII ONION.—Last year several onions were grown to weigh **over 3 lbs. each,** and one onion attained the enormous weight of **5 lbs. 1 oz.**—the largest on record. We offer $5.00 cash for the two largest onions raised this year. The skin is very thin, of a beautiful reddish-brown; the flesh is pure white, fine grained, mild and pleasant. Per pkt. 15 cts.; oz. 35 cts.; ¼ lb. $1.00; per lb. $3.50.

GOLDEN QUEEN TOMATO.—The tomatoes are of good size, handsome, round shape, very smooth, and ripen up evenly. They mature early and are very productive; excellent for slicing, the handsome yellow slices making a beautiful contrast with red tomatoes. Per packet 10 cents; ounce 40 cents.

★ **BURPEE'S SWEET CORN.**—A large, sweet, new main-crop variety. It matures two to three weeks earlier than Stowell's Evergreen. The ears are fully as large, grain as deep and quality much superior. It is *sweeter* and *finer flavored* than any other variety; the kernels have a very thin skin and remain soft and milky even when old. Very productive. Per packet 10 cts.; per pint 45 cents, postpaid.

★ **EARLIEST CARMINE RADISH.**—The newest and best of all the extra early radishes; olive-shaped, with smooth skin of rich carmine. The foliage is *extremely small.* It takes only 20 to 22 days to form. Per pkt. 10c.; oz. 20c.; ¼ lb. 60c.; per lb. $2.00.

★ **WAX DATE DWARF BEAN.**—Our field of this superb new bean appeared like *one mass of gold,* the rich, long, golden yellow pods being produced so profusely. The pods matured *earlier* and were ready to market before any others. The pods are 6 to 6½ inches in length, full and fleshy. Per pkt. 15 cents; pint 60 cents.

★ **LAXTON'S EVOLUTION PEA.**—The vines are of strong growth, 3 to 3½ feet high, and *bear continuously* an abundant crop of magnificent large pods, each containing 8 to 12 twelve wrinkled peas of remarkable size and unusually rich and sugary flavor. It has been appropriately called **"The Everlasting Bearer,"** as from a single sowing it continues to bear as long as 3 months. We have had many letters in praise of its *great productiveness, the extra large size of pods* and the *delicious quality* of the peas. Per large pkt. 20 cts.; 3 pkts. for 50 cts.; pt. 60 cts.; per qt. $1.00, postpaid.

★ **GOLDEN WAX FLAGEOLET POLE BEAN.**—The pods are 7½ to 8 inches long; rich golden-yellow; fleshy; *entirely free from strings* and of superb quality. The vines, while still young, produce the long, handsome pods, in great abundance *earlier* than any other pole bean and *continue* to grow and *bear profusely* the *entire season.* Per pkt. 20 cts.; 3 pkts. for 50 cts., postpaid.

BURPEE'S SHORT-STEM DRUMHEAD CABBAGE.—Decidedly the best of all Drumhead Cabbages. It has a very short stem and the heads are *very hard, solid,* and attain 20 or 30 lbs. weight. Per pkt. 10 cts.; oz. 35 cts.; per lb. $3.50.

BURPEE'S MAMMOTH IRONCLAD WATERMELON.—Named and introduced by us. Of *extra large size,* oblong shape; striped. The flesh, very solid, dainty red, of rich, sugary flavor. The ripe melons will keep in fine condition for one month. Per packet 10 cts; ounce 15 cts.; ¼ pound 40 cts.; per pound $1.25.

MAMMOTH SILVER KING ONION.—This famous Onion, first introduced by us in 1884, *grows larger than any other variety in cultivation,* excepting only the New Mammoth Pompeii. Our two prize onions the past season reached the enormous weight of **4 3-4 lbs.** and **4 lbs. 2 oz.**—see reports in our catalogue and also cash prizes for 1886. Per pkt, 10c.; oz. 35c.; ¼ oz. 60c.; ¼ lb. $1.00; per lb. $3.50.

GOLDEN SELF-BLANCHING CELERY.—Decidedly *the best celery in cultivation.* Of compact growth, solid, crisp, brittle and of delicious flavor. Requires no banking up. Per pkt. 15 cts.; oz. 40 cts.; ¼ lb. $1.25; per lb. $4.50.

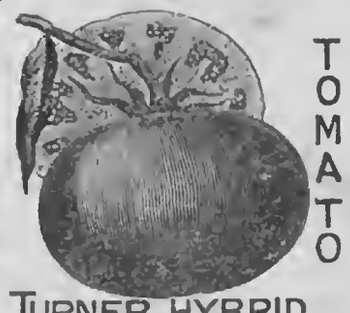
THE CORY CORN.—This new Sweet Corn from Rhode Island is *five to ten days earlier than any other variety.* The ears are large and handsome, sweet and of fine quality. Per packet 15 cts; pint 35 cts.; quart 60 cts., postpaid.

BURPEE'S RUBY KING PEPPER.—The best mild red pepper; fruits very large, thick, of a beautiful ruby-red. Per pkt. 10 cts; oz. 35 cts.

QUEEN'S GOLDEN POP-CORN.—Ahead of all others in yield, size and color—being of a delicate golden yellow. Above all is its exceeding tenderness when popped. Per pkt. 10 cts.; pint 40 cts., postpaid.

GOLDEN HONEY WATERMELON.—The flesh is a rich, golden-yellow color, sweet and rich flavor, even to the rind—a novel attraction on the dinner-table—of good size, round shape, with striped skin. Per packet 10 cts.

☞ We will send any of the above new and choice seeds **by mail, postpaid,** upon receipt of price in stamps.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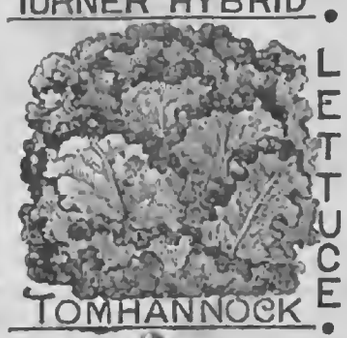
TURNER HYBRID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EMERALD GEM

ONION
MAMMOTH POMPEII.

TOMATO
GOLDEN QUEEN.

CORN
BURPEE'S SWEET.

RADISH
EARLIEST CARMINE.

SPECIAL OFFER.

Purchasers may select one packet each of **any five varieties for 60 cents, or any ten varieties for $1.00, or we will send the entire assortment for $1.70 (85 2c. stamps). Make your own selection** from this advertisement, send P. O. Order, Postal note or registered letter and you will receive the seeds, post-paid, by return mail. We accept **POSTAGE STAMPS the same as Cash. We guarantee entire satisfaction to every purchaser. BURPEE'S SEEDS** have a National reputation and are **warranted first-class** in every respect. The uniform success of our Novelties the past ten years is ample guarantee that we do not recommend new varieties beyond their **real merits.** Wide awake, progressive planters are always eager to try **Novelties of positive value,** and we are sure that none will be disappointed in any of the above. We have an established trade with more than one hundred thousand of the best planters and market gardeners in America which does not depend upon newspaper advertising. We place this advertisement thus prominently before the public in order that thousands of new customers may also have an opportunity to test **Burpee's Novelties. ORDER NOW OR PRESERVE THIS ADVERTISEMENT, AS IT POSITIVELY WILL NOT APPEAR AGAIN IN THIS PAPER.** ☞ If you have not already received a copy, ask for **BURPEE'S FARM ANNUAL** for **1886,** a handsome book of 128 pages, hundreds of illustrations, two colored plates and *honest descriptions* of all the **BEST** Garden, Farm and Flower Seeds, Bulbs, Plants, Thoroughbred Stock and Fancy Poultry. **OUR SEED WAREHOUSE,** the largest in Philadelphia, is located at **Nos. 475 and 477 North Fifth Street,** and **Nos. 476 and 478 York Ave.,** but all letters reach us safely if addressed **W. ATLEE BURPEE & CO., PHILADELPHIA, PA.**

N. B. **A COMPLETE VEGETABLE GARDEN FOR $1.00.** In connection with this advertisement we would call attention to **Burpee's Special Dollar Collection for 1886 of 30 packets Choice Vegetable Seeds.** Some years ago we originated the system of offering a collection of the best Garden Seeds at a price very much below the usual retail rates. We do this for the express purpose of inducing new customers to try our seeds, knowing that they will then become regular patrons. We give below a list of the seeds contained in **Burpee's Dollar Collection for 1886,** and we are sure that in no other way can so complete a vegetable garden be had for the money. **New Giant Pera Cucumber.** Now introduced for the first time. *See illustration.* **Jersey Wakefield Cabbage. Burpee's Sure-head Cabbage.** Celebrated as *all head* and always *sure to head.* **Burpee's Cuban Queen Watermelon.** Our own original strain, from which the prize melon, weighing 111 pounds, was raised. **Dewing's Improved Blood Beet. Yellow Danvers Onion. Burpee's Netted Gem Melon.** The best early, green-fleshed melon; very sweet. **White Pineapple Squash.** Of fine quality, summer and winter. **Burpee's Cardinal Tomato.** Far superior to Favorite. **French Breakfast Radish. Burpee's Superb Heat-Resisting Lettuce.** Of upright growth. **Hollow Crown Parsnip. Green Prolific Cucumber. Burpee's Improved Long Orange Carrot. Red Top White Globe Turnip. Wonder of France Bean. Champion of England Pea. Amber Cream Sweet Corn. Large Red Globe Onion. Imperial Dwarf Large-Ribbed Celery. Long Smooth Blood Beet. German Filderkraut Cabbage. Golden Globe Summer Radish. Burpee's New Silver Ball Lettuce.** Beautiful silvery white, rich and tender. **Hubbard Squash. Yellow Giant Rocca Onion. Extra Early Munich Turnip. Essex Hybrid Tomato. Long White Salsify. Montreal Green Nutmeg Melon.**—This, the largest of all Musk Melons, was first introduced by us and it was from our seed that the 39 1-2 pound melon was raised. **All the above are full, regular-sized packets, with illustrations of the vegetables and directions for cultivation printed on each.**

FOR ONE DOLLAR we will send the above splendid collection of **new and choice vegetable seeds,** postpaid, to any address, or **three complete collections,** ordered at one time, for **$2.50.** This is the most liberal offer ever made. **Order early!** Make up a Club.

IMPORTANT! To all who order any seeds from this advertisement to the value of $1.00 or more and *name this paper* we will send *free* a 25-cent packet of 100 seeds of the *superb large flowering* **New Imperial German Pansies,** fifty beautiful colors mixed. ☞ We will send one packet each of all the seeds named in this entire advertisement (in all fifty packets) postpaid by mail to any address for $2.50. Please show this advertisement to your friends and get them to order with you. When ordering ask for **Burpee's Farm Annual for 1886.** Address all orders to

W. ATLEE BURPEE & CO., PHILADELPHIA, PENNA.

THE RURAL NEW-YORKER

A JOURNAL FOR THE SUBURBAN AND COUNTRY HOME

VOL. XLV. No. 1885. NEW YORK, MARCH 13, 1886. PRICE FIVE CENTS. $2.00 PER YEAR.

Entered according to Act of Congress, in the year 1886, by the Rural New-Yorker in the office of the Librarian of Congress at Washington.

Horseman.

ENGLISH SHIRE STALLION.

THE stallion Garfit, shown at Fig. 110, is a fine young specimen of the Shire horse, a breed highly distinguished in England for its many excellent qualities; but about which, until quite lately, very little was known to the general public in this country. Recently, however, several large importations of choice specimens have been made, and a stud-book of Shire horses has been started to co-operate with that of England in keeping the breed pure. In view of the many merits of these horses, of their high standing in their original home, and of the enterprise and judgment of the men who are importing them, it is not at all unlikely that Shire horses will, ere long, take rank in this country with the Normans and Clydesdales.

Garfit is a bright bay with three white legs and a blaze on the face. He was foaled in 1882, and bred by John Garfit, a well known breeder of Nottinghamshire, England. He was imported in March 1885 by Messrs Galbraith Bros., Janesville, Wis. At present, at the age of 3½ years, he weighs 1,900 pounds, and when mature will probably turn the scales at 2,050 pounds in good working condition. He is a finely proportioned, symmetrical, animal with fine bone and hair, and promises to be a success in the show ring and the stud. His sire was Don Carlos (2416) a Shire horse well known in England, whose pedigree traces back through the best strains of Shire blood, to the famous Bassingham Brown horse foaled about the year 1790. His dam is by Lincolnshire Lad (1196), famous as the sire of many noted brood mares.

ENGLISH SHIRE STALLION, "GARFIT," 3093. Fig. 110.

Sheep Husbandry.

Notes from the Rural's W. N. Y. Farm

LAMB RAISING AND FEEDING LAMBS.

HOW OFTEN TO FEED

is a question greatly perplexing to the novice, and not fully considered by the majority of feeders. While it is a good feeder of mature sheep who adds 20 per cent. to their weight, and this mostly in fat, it is a very poor lamb feeder who does not add 50 per cent. to their weight, and this largely in muscle, and no one must expect rapid increase of carcass without a corresponding consumption of food; nor is it possible to crowd a sufficient quantity of food into the stomach at one or two feeds without overloading it, and producing indigestion. It is an old proverb that "Lambs eat always," and its truth can be easily attested by watching a bunch running at pasture; no matter how good the feed, they never cease eating except for a few hours in the extreme heat of the day, or when the flies are very annoying.

It is no wonder that lambs fed, as is the too prevalent custom, with hay once, or, at most, twice a day, and a run at the straw-stack for the rest, instead of gaining all Winter, come through "spring-poor" and many fail to come through at all. There is no stock on the farm that should be so generously fed as the lambs, even when only intended for stores, and doubly so when it is desired to render them fit for the market. Another point not to be forgotten is that lambs are very cleanly in their habits and we must follow the rule of feeding a

LITTLE AND OFTEN,

if we would have them eat the largest proportion of what we give them. If the fodder is thrown upon the ground, and they run over it but once or twice, they will not eat more of it, even though suffering from hunger. The same is true when it is put in large quantities into their racks, and they have "nosed" it over and breathed into it for a short time. The better way then is to put only such an amount of fodder into their racks at once as they will eat in a short time, and feed the oftener, and at each time of feeding the racks and troughs should be thoroughly cleaned.

FEED A VARIETY.

Lambs will be found to be quite "human" in their tastes. They love a variety, and not only do they love it, but it is very necessary for their most profitable growth. The various kinds of forage and grains used should be selected with a view to supplying the elements of growth, and beyond this they should be varied so as to keep the lambs always with a keen appetite, ready to eat quickly whatever is given them. This is best accomplished, not by mixing the different kinds of forage together, but by feeding each at a separate time, and also by varying somewhat from day to day; and in the grain even, it will pay to add occasionally a new ingredient, or to give a feed of some other grain.

SHEARING PAID HIM.

Our good friend Green, of Western New York, writes us: "I had my barns filled with feeding lambs that were uneasy, constantly rubbing and biting themselves so much that I feared they had the scab. But as they were in warm quarters, I mustered courage to follow your advice in shearing them. In taking off their fleeces, I took off all the ticks, and having thus removed the cause, the rubbing and biting ceased. Never before have my lambs done so well. Hereafter I will not question what you say." We hope no one will for a moment think that any parts of these notes are mere theory or are written for effect. They are only a plain recital of what we do and the manner in which we treat our stock, and which, all things considered, we believe to be the best.

SHEEP TICKS.

Another friend, J. T. Baynes, of Tioga Co., Pa., wishes to know what to do with a lot of ewes which are to drop lambs about April 6th, as it will then be too cold to shear them. We have tried many remedies for sheep ticks, but have never found one more effectual or easier to apply than the following:—Mix crude petroleum or, in absence of that, kerosene, with lard, lard oil or, better still, with the grease fried out of pork, in the proportion of two parts of kerosene to three parts of the other grease. Whatever is used, have the mixture as hot as it can be without burning the sheep. This should be applied to the animal by having one person part the wool along the back and sides of the neck and another pour in the mixture from the spout of an old-fashioned lamp filler. It is also advisable to occasionally give the sheep sulphur mixed with their salt, one pound to six of salt.

SHOULD BREEDING EWES BE HOUSED

constantly, or allowed to run at large in the fields, having a warm, close barn, nights? asks the same friend. It is far better to let them run out constantly, having only an open shed for protection against rains, than to put them into warm quarters a part of the time and turn them out-of-doors the remainder. Sheep have close, warm fleeces, which enable them to withstand dry cold very well; but these they must wear constantly, and housing them warmly a part of the time, and turning them out the rest is much like a man's wearing a heavy over-coat in the house, and going out into the cold without change or additional clothing—he would be sure to have a constant cold, and so will the sheep. It is also better to have them out constantly than in ill-ventilated barns; but when they can be confined in roomy, well-ventilated quarters, we should certainly advise it, as it will save much feed and be conducive to the health both of mothers and offspring. This we say after much experience of the different methods.

HOUSING ALL STOCK PAYS.

We have, this Winter, in one barn, 30 cows that are turned out twice each day so that the stables may be cleaned and they can get water. In another barn we have 26 cows that never go out, being watered inside. They are all well cared for, and have all of the hay, roots, rich foods and straw they care to eat. While those that never go out will drink about the same amount of water each day, those turned out to drink will, on very cold days, not drink scarcely any, and then the next day will drink till they "are ready to burst." The result is that the cows constantly housed give the most milk, which makes the most butter, and they are looking the best and taking on flesh most rapidly. Surely there is much yet to be learnt in the care of stock.

THERE are many useful things for the lawn and garden that may be made in the Winter; and among them what I propose to call summer and winter tubs, as they may be used as ornamental objects on the lawn or in the door-yard in both seasons. I intend these directions for those who, for any reason whatever, do not find it convenient to use the expensive terra-cotta vase. There are very few who can not afford to purchase a few oak butter firkins, which can be easily converted into effective rustic tubs for plants of various kinds. These tubs can usually be bought at almost any country store at a merely nominal price.

* * *

The first thing to do is to get rid of the grease, which is easily done by the use of pot-ash and hot water. Next, something must be done to make the tub durable. The tub itself will last many years, but the wooden hoops will rot, and the tub will then tumble to pieces. Something, therefore must be added to take the place of the wooden hoops. Iron hoops may he used: but it is cheaper and about as good to use No. 6 or 8 galvanized wire. Bore a couple of gimlet holes an inch or so from the top, and an inch apart. One hole should be a trifle lower that the other, to allow the ends of the wire to pass each other. Bend an inch of the end of the wire at a right angle; put the bent end into the left-hand hole, run the wire around the tub, and cut it off at the proper length, allowing for the bend at the end. Pull the wires up tight, and mark the place for the bend. This end of the wire, after being bent, is put into the right-hand hole, and hammered home. Even up the wire all around the tub, and drive a few small nails under it to keep it from slipping down. Put another wire near the bottom, and, if necessary, one in the middle also. It will not be necessary to remove the wooden hoops. Next bore half a dozen inch holes in the bottom, and the tub will be ready for use.

* * *

The tub may be painted almost any color but red, if wished; but I give them a rustic finish which I like much better than paint. I sometimes use bark to cover the sides, but small sticks of red cedar please me better, and are more lasting. The cedar sticks are nailed on vertically. For a finish I usually nail a band of fir cones around the top and bottom. The tubs, when in use, should be raised above the ground, on a flat stone or a rustic stand, or the stump of a tree; in short, wherever they will look well.

* * *

The tubs should be filled with soil suited to the plants to be grown in them. For zonal pelargoniums, petunias, verbenas, coleus, lysimachia (Moneywort) and similar plants, it should be a rich garden soil. For succulent plants, such as sedums, sempervivums, portulacas, etc., a light, sandy soil, without manure, is best. To prevent the soil from becoming soddened during long and heavy rains, about three inches of drainage should be placed in the bottom of the tub. Broken charcoal, potsherds, or small stones will answer the purpose.

* * *

Sedums and sempervivums are hardy, and may be left out all Winter; and this is why I call the tubs winter tubs. There are several of them just under the window where I am writing. They look so cheery during the dreariest days of Winter, that I should feel sad without them. The sedum, when fully established, will droop a foot or more over the side of the tub, producing a charming effect when the ground is covered with snow. The sedum may be cut into pieces from half to an inch long, and dibbled in two or three inches apart all over the surface. It will soon root and cover the ground. The proper sedums for tubs for winter effect are S. acre and S. acre variegatum, the latter having a golden hue when making its new growth. Any of the hardy sempervivums are suitable, such as S. hirtum (soboliferum), S. tectorum, S. arachnoideum, S. Californicum, etc., the last named one of the most beautiful of all. The sempervivums may be placed from six to twelve inches apart, according to the number you have on hand. In a few years they will be piled on each other in a solid mass, which should not be broken up. The sedums and sempervivums are very pretty when in flower, and are interesting at all times.

* * *

Lysimachia nummularia (Moneywort) is also hardy, but dies to the ground during Winter. It is a pretty plant for a tub, however, and is showy when in flower, while its long, pendent shoots form a graceful drapery for the tub. Short slips will grow readily. L. nummularia aurea, with golden-yellow foliage, is very handsome; but not quite so hardy as the plain form.

* * *

A lady friend lately asked me, "Why don't my Oxalis lasiandra grow?" The answer I gave her may be useful to others. It seems she bought the bulbs last Fall, planted them immediately, and has ever since been trying to get them to grow in her little green-house. Oxalis lasiandra is a summer-blooming species. The bulbs should be kept dry during the Winter, and planted in the Spring, either in the border or in pots.

* * *

I have a number of times been on the point of saying that the Stag's Horn Fern (Platycerium alcicorne) is a very desirable plant for the sitting-room as well as for the green-house. It receives its specific name from the resemblance of its fertile fronds to the horns of a stag, and the resemblance is striking enough to justify the name. It may be grown in a pot, on a piece of cork, on a short length of log, and is very effective grown on the dead trunk of some of the tree ferns.

* * *

When grown in a pot, use a large one, and fill up with potsherds or moderate-sized pieces of charcoal, and sprinkle in some leaf mold as the filling up goes on. The filling should be carried to the rim of the pot, and then rounded off, the top being a couple of inches above the rim. On the top place a thin layer of sphagnum; or, if you have no sphagnum, use leaf mold. Then place the plant on the top, and secure it there by fine copper or brass wire. When it becomes established it will hold itself in place. The only care it needs is an occasional spinkling of water. If leaf mold should not be conveniently at hand, any ordinary soil may be used.

* * *

When grown on a cork, it should be a large piece, not less than 18 by 24 inches, if you would have a fine specimen. Cover it with about an inch of sphagnum, which may be kept in place by copper wire and nails. Place the plant in the middle and secure it there by wire. It must by syringed occasionally, and must receive some attention in this respect till it has begun to grow. After a while it will almost take care of itself. Put a couple of brass screw eyes in the upper edge of the cork; through these run a wire, and you can hang the cork up in any convenient place. For years I had a Stag's Horn Fern thus mounted hung up in the dining-room by the window, where it was much admired.

* * *

The same directions will answer for mounting on a log. For the trunk of a tree fern, the sphagnum may be dispensed with in a green-house or a conservatory; but it is better to use the sphagnum in all cases where the plant is intended for the sitting-room. The plants may be put out-of-doors in Summer in almost any shady place.

* * *

There are several other species of Platycerium, some of them more desirable than P. alcicorne; but they are by no means common yet, or easy to get. I may mention the Elk's Horn Fern (P. grande), which has very large and broad fronds, and is a finer plant than P. alcicorne. P. Æthiopicum has still larger fronds, but it is very rare. I know of only two collections in which it is found. When I first saw it I suggested the common name of Moose Horn Fern; a name that would occur to most persons on seeing it for the first time. P. Wallichii is now getting to be common, and is a very fine species, the infertile fronds being very prettily lobed. This might be named from the horns of the caribou, though it would not be so telling as the others. I could go on and write pages about these grotesque and interesting ferns, but I seem to be at the end of my string. HORTICOLA.

NOTES AND COMMENTS.

I CAN indorse all that "Horticola" has said in praise of Allamanda Hendersonii; but I like A. nerifolia far better. This grows more readily to a bush shape and with a little care and attention fine specimens can be obtained. The flowers, which are of a yellow color, are much smaller than those of the other variety; but more freely produced. With me the plant is never out of bloom, Summer or Winter. It is an excellent pot plant, if properly treated and cared for. It does best when grown in a rich, turfy loam, and after it has attained the desired size, if it is not desirable to repot it, water it copiously with liquid manure water two or three times a week. Indeed both young and old plants are benefited by the application. Not only are the flowers much larger, but they are more freely produced.

The Ruellia macrantha is another good old plant that is again deservedly attracting considerable attention. It flowers in the greatest profusion during December and January. The flowers, which are of a bright rose color with lilac trimmings, are borne in pairs from the axils of the leaves. It does well when given a light, sunny situation and an average temperature of 55 degrees. Propagation is effected by cuttings, and if young plants are obtained early in the Spring and grown on in a deep, well enriched border during the Summer, good flowering specimens will be readily obtained.

The Asparagus Vine—Asparagus tenuissimus—is a very valuable and interesting climbing vine for the window garden, or conservatory, as a little neglect or ill-treatment will cause it no serious injury. Its fine, dark-green, filmy foliage far surpasses in beauty any fern, and, besides, it is of more rapid growth, and far more easily raised. The foliage stands without wilting for a long time after it is cut, and this is a great point in its favor. It is easily cultivated and will soon become a general favorite.

The Spotted Calla—Richardia alba maculata—is very beautiful for cultivation in the mixed border during the Summer. The leaves, which are precisely like those of our well-known calla in shape and color, are beautifully spotted with white, but the flowers are much smaller. They are pure white with a black center. It can be grown in any soil and can be treated precisely as a Gladiolus, that is, planted out in May, and taken up in Fall and stored in sand in a dry, frost-proof cellar, or in any situation where over 45 degrees can be maintained. CHAS. E. PARNELL.

Queens, L. I.

Dairy Husbandry.

IMITATION DAIRY PRODUCTS.

PROFESSOR G. E. MORROW.

Late change of sentiment with regard to bogus dairy products; conflicting assertions; at the Chicago dairy show the Illinois State Board of Agriculture helped the makers to puff their goods, and will do so again; need of moderation; disregard of the interests of dairymen; bogus dairy products to be classed with other substitutes and adulterations.

THE manufacture and sale of imitation butter products—butterine, oleomargarine, etc.—are undoubtedly increasing in this country. Doubtless there has been much exaggeration in statements concerning the extent of the manufacture and use, but there can be no doubt of the fact that very large quantities are made and eaten.

Within a year or two there has been a marked change of sentiment concerning these products. There is a clearer apprehension by dairymen of the injury to their business, and a more general recognition by the public that large quantities are being used. But comparatively a small number now believe it practicable to secure prohibition of their manufacture by legal enactments. Probably a still smaller number favor attempts to secure this in good degree by indirect means—as imposing a tax so great as to make it impossible to manufacture and sell the imitations at the prices at which butter can be profitably sold. Probably the large majority of dairymen now believe that the most that can be done by legislation is to attempt to compel the sale of all imitations or substitutes for butter under properly descriptive names. It seems clearly true that the mass of the intelligent public believe this should be done, and do not believe that more than this ought to be attempted.

Recently there has been a marked increase of statements concerning the claimed terribly filthy unwholesome or positively dangerous nature of these products. There has also been an equally marked increase of statements of an exactly contrary nature, and the evidence is strong that there are now many more persons who believe that butterine, oleomargarine, etc., may be and often are so manufactured as to be entirely unobjectionable. It certainly is true that the evidence from scientists is overwhelmingly on this side.

The whole question is being much more generally discussed than at any former time. Dairymen and dealers in dairy products are more interested and more active than before. There is, however, much lack of agreement as to the most effective line of argument, or concerning the best mode of preventing the fraudulent sale.

The above statements fairly present the chief features of the present situation, as I understand the case. The history of the connection of the Illinois State Board of Agriculture with the exhibition of these products seems to me a good illustration of the correctness of my view of the general situation. This Board is composed of gentlemen above the average in intelligence and enterprise; most of them I personally know to be reputable men and honestly interested in the advancement of agriculture. At the last Fat Stock and Dairy Show the admission of oleomargarine and butterine to the Dairy Department was denied; but their admission to a separate room was somewhat reluctantly granted. This action brought much very severe criticism from dairymen and dealers. The subject was prominently discussed in the press with the net result of largely increasing the number of visitors to the exhibit of these products, and of securing a visit by a part of the Board and a number of influential men to a leading manufactory of these imitations, and of convincing a good percentage of the visitors to both exhibit and factory that much of what was said against the productions was untrue and that all any one had a right to ask was that they be sold without fraud and deception. At a recent meeting of the Board it was decided, after full discussion, to admit these products to the next Fat Stock and Dairy Show under condition of being accompanied by sworn statements as to composition.

It seems to me evident that the wiser course now for all friends of the dairy is to drop all extravagance of statement and intemperate abuse of either men or their products; to abandon all hopeless, doubtful or extreme measures for relief; to make comparatively little in arguments for the general public or for legislative bodies, of the fact that the competition is pressing heavily on dairymen; to do all that is possible to relieve the dairy interest of any suspicion of aiding any approach to fraud; and then to unite with all citizens interested in honesty and justice and opposed to fraud and adulteration, in an effort to secure such legislation, National and State, as shall compel the sale of these and all other articles designed for food under their proper names and descriptions. I can see no good which can come from rehearsing the processes or compounds which have been prepared or patented for making these products, or of repeating the charges of horrible filthiness of manufacture, or of the danger to health from the use of these products—if it be designed to make people believe these things are true of most of the products now manufactured. All these stories can be told of genuine dairy products. Methods of making or preserving butter and cheese have been proposed or patented which would make them injurious to health. Countless articles and addresses have been filled with ridicule or denunciation of the filthy habits of some who make dairy products. Men have been poisoned by cheese. No reasonable man thinks these things sufficient reason for denouncing butter and cheese as unfit for use.

One effect produced, to some extent, is to cause a lessened use of butter. Another is to cause investigation of the question and sometimes a higher opinion of the articles complained of. It is not entirely consistent to extol the care and cleanliness with which beef and pork are handled by some of the great slaughtering establishments; to indignantly resent any insinuations that our meats are not of the highest class, and then to denounce the methods at the same establishments as horribly filthy. In conversation with intelligent men, not interested except as consumers, I find the opinion generally expressed that, so far as cleanliness and care in manufacture are concerned, they will place the imitation on a par with the genuine when they wish to buy in the open market.

I doubt if the question whether the interests of dairymen are being injured will have any appreciable effect on the opinions of the general public or on the final action of legislatures. If there should seem to be any room to suspect that any line of action was demanded chiefly for the benefit of the dairymen, the effect, so far as there was any, might be unfavorable.

There can be no doubt as to the justice and reasonableness of the claim that the aid of the law should be had in preventing the sale of these products for what they are not, and in compelling them to stand or fall on their own merits or demerits. I believe this can be more efficiently done by legislation looking to the prevention or punishment of adulteration, frauds and deceit in the sale of food products in general, rather than by specific enactment and machinery for their enforcement aimed at these products alone.

University, Champaign, Ills.

The Poultry Yard.

PROFITS FROM POULTRY IN WINTER.

A LARGE majority of those farmers who keep small flocks of, say, from 30 to 60 fowls, fail to receive anything from them during the Winter, in return for the cost of keeping, so that the eggs obtained in Spring and Summer must pay the expense of wintering the flock. Now, as one dozen fresh eggs in Winter are, on an average, worth two in Summer, and some young fowls will lay equally well during the warm weather after having been persuaded into laying during the Win-

ter, it is evident that if this can be accomplished with a reasonable outlay of labor, it will have been profitably expended. As I have been successful for several Winters in doing this in a climate where the mercury frequently falls to 20 degrees below zero, and this too without any superior facilities as to warmth of building, perhaps my method of management as to care, feeding, etc., may interest some RURAL readers.

Let no one think that without extra care hens can be expected to lay during Winter, for such a person is sure to be disappointed; but as with most farmers the Winter is a season of comparative leisure, this extra care can be usually given without inconvenience. The boys and girls can often be interested in this work by giving them a share in the profits. Hot food in some form every day is of prime importance. I have frequently given, twice a day, for several days in succession, hot pudding as thick and dry as it can be stirred, made of corn meal and wheat shorts or middlings mixed without any whole grain, with excellent results. I depend largely on the above mixture as a main feed for fowls, varying it by giving frequent feedings of oats, buckwheat, wheat, corn, etc.; in fact, anything for variety. Two or three times at least each week during Winter, give a feeding of some kind of green feed, which may consist of cabbage leaves, turnips, carrots, potatoes, apples, etc., chopped fine. Give also occasionally scraps of meat or something of that nature. Furnish constant supplies of clean, fresh gravel—an essential to health. Give plenty of shell-forming material, which may be pounded bones, clam or oyster shells, etc. Provide good dust baths. Use lime and sulphur freely about the hen-house, applying kerosene often to the perches. Give daily fresh water slightly warmed, and if you are not rewarded by a good supply of eggs during the Winter, I should advise you to change your breed of fowls. E. J. BROWNELL.

Delaware Co., N. Y.

Horticultural.

CUCUMBERS FOR PICKLES.

IN a late RURAL it was stated that the Tailby Cucumber (grown for pickles) is not a productive variety; while Gregory, in his catalogue, says it is enormously productive. Last season we grew 25 acres of cucumbers for pickles, and the coming season we expect to put in as many more, and as our stock is sold "by count," we wish to get the greatest number of thousands per acre, and at the same time combine firmness, freedom from seeds and large size, especially in length. We have never tried Tailby's, but have grown Long Green, White Spine, Green Prolific, Boston Pickling and Early Frame. The factories here pick out Long Green every time, as it is much larger and firmer than the other sorts; they prefer White Spine next; but neither is profitable to the grower. The Long Green is anything but productive. Boston Pickling and Green Prolific, both very productive, are not very desirable, as they are stubby and pot bellied, unless picked when quite small, and factories do not want small cucumbers. A cucumber as productive as the two latter kinds and as firm as the Long Green would be a godsend. Does the Tailby supply the desideratum?

[We tried the Tailby when first introduced. It is about perfect in every way as a cucumber, but it was not a *prolific* variety as grown at the Rural Grounds.—EDS.]

A HARDY BLACKBERRY.

IN 1852, when I was a gay sailor boy of 16, and spent the Summer in the arctic regions, I was on shore a number of times and found a very nice creeping blackberry ripe in August to the south of Behring's Straits, in the neighborhood of the bay where the old English ship Plover wintered in 1852 and 1853. The grass was six or eight inches high in a perfect mat, and the vines grew over the top of the grass. I well recollect with what avidity I hunted for the berries after discovering them. The vines would stand our Winters; but would they bear the heat of our Summers? Who will be the first to get and test them?

Salt Lake City, Utah. DR. WM. H. G.

Pomological.

TWO FINE PEARS.

ABOUT a month since, we received from Messrs. Ellwanger & Barry, of Rochester, N. Y., specimens of the pears which are illustrated in this issue. Duhamel du Monceau (see Fig. 101, with cross-section at Fig. 102, p. 168) is described in their catalogue, under "Pears of Recent Introduction," as being large, long-pyriform; skin rather tough, nearly covered with brownish russet; flesh melting, juicy, with the flavor of a Winter Nelis. It is a delicious pear. The tree is but a moderate grower. The pear is in use from November until January. Our own notes, taken at the date of its reception, describe it as of fine flavor, melting, juicy, very rich and excellent, very little russeted, with a fine red cheek on the sunny side. It is not only an extremely handsome pear, but its goodness is fully equal to its beauty. John J. Thomas describes this pear as "large, long-pyriform, light yellow, partly russeted, flesh melting, juicy, excellent. Early Winter. French."

President Mas (see Fig. 103, with cross-section at Fig. 104, p. 168) is described as a large, obovate-pyriform pear. The skin is yellow; flesh melting, juicy, slightly vinous. It is a handsome pear of fine quality—December to January. A moderate grower. The specimen sent us was over-ripe, so that we could not properly judge of its quality. Charles Downing calls it a Belgian variety. He describes it as follows: Fruit large, oblong, obovate, obtuse pyriform. Skin greenish-yellow, with some patches and traces of russet. Flesh yellowish-white, fine, juicy, melting, buttery, sweet. December, January."

What Others Say

MORE DRESSED BEEF.—The telegraph tells us that the Marquis de Mores and the Northern Pacific Refrigerator Car Company have sold all their plant on the line of the Northern Pacific Railroad to the Northwest Dressed Beef Company of this city. The capital of the company is $2,000,000. The Marquis de Mores will remain in the West as vice-president and general manager, and the company will operate the large plant on the Northern Pacific and open in New York 100 retail butcher shops. Oliver Summer Teall, the president of the company, is also president of the National Consumers' Meat Company, the Western Dressed Beef Company, the Southwest Dressed Beef Company, and vice-president of the Lyons & Campbell Ranch and Cattle Company, which owns a ranch of over 2,000,000 acres and a large herd of cattle. The National Company owns and is operating 12 retail shops in Baltimore. The Western Company is shipping dressed beef from Kansas City, and building there a plant capable of killing 600 beeves a day. The Southwest Company is duplicating the Kansas City plant in Silver City, New Mexico. The companies will own the slaughtering and refrigerating establishments in the West, the cars used in transportation, and the retail shops in the East.

TEMPERANCE FIGURES.—A good temperance lecture is contained in the figures recently printed by the Milling World. The total corn crop of this country for 1884 was about 2,000,000,000 bushels. Of this, but 18,927,082 bushels, or less than one per cent. were used for distillation. Calling the grain worth $9,000,000, when turned into spirits, it entails an expenditure of $900,000,000. A bushel of corn costs 30 cents and is turned into 17 quarts of intoxicating drink. The distillers receive 40 cents a gallon for converting it into whiskey. It thus represents the original 30 cents and $1.70 for the distiller, making its value at this stage $2. Then the government tax of 90 cents a gallon adds $3.85 to the value, swelling it to $5.85. By the time it has reached the retailers it has been "reduced" in strength and increased in quantity by the admixture of water and some more harmful substances, so that its measure has at least been doubled and the corn, when it begins to drop into the drinkers' glasses on the bar, represents about 8½ gallons of drink. Allowing 60 drinks to the gallon, the official bar average, the bushel of corn will furnish 270 drinks, which, at an average of 15 cents to the drink, will take $40.50 from the pockets of the consumers. This, added to the $5.85 put into the corn up to the time of reaching the jobbers, making a total of $46.35. Substract the 30 cents, which the farmer received for the corn, and the balance, $46.05, will show the amazing profits made by those who do not till the soil to grow the corn, but who multiply infinitely by scientific means the mischievous powers of the grain, and who from this hurtful multiplication reap easy, large and reliable profits. The original price of the bushel of corn is contained 155 times in the ultimate receipts from it. In this way the enormous wasting power of alcoholic drink can be easily understood. Political reformers and statisticians who talk so learnedly about "hard times" appear to

(*Continued on page* 168.)

Miscellaneous Advertising

Purify the Blood.

We do not claim that Hood's Sarsaparilla is the only medicine deserving public confidence, but we believe that to purify the blood, to restore and renovate the whole system, it is absolutely unequalled. The influence of the blood upon the health cannot be over-estimated. If it becomes contaminated, the train of consequences by which the health is undermined is immeasurable. Loss of Appetite, Low Spirits, Headache, Dyspepsia, Debility, Nervousness and other "little (?) ailments" are the premonitions of more serious and often fatal results. Try

Hood's Sarsaparilla

Sold by all druggists. $1; six for $5. Made only by C. I. HOOD & CO., Lowell, Mass.

100 Doses One Dollar

GOLD MEDAL, PARIS, 1878.

BAKER'S Breakfast Cocoa.

Warranted *absolutely pure Cocoa,* from which the excess of Oil has been removed. It has *three times the strength* of Cocoa mixed with Starch, Arrowroot or Sugar, and is therefore far more economical, *costing less than one cent a cup.* It is delicious, nourishing, strengthening, easily digested, and admirably adapted for invalids as well as for persons in health.

Sold by Grocers everywhere.

W. BAKER & CO., Dorchester, Mass.

The Best SIDE HILL PLOW in the Market

WARRANTED TO DO AS GOOD WORK AS ANY PLOW IN THE MARKET.

We manufacture a full line of Tools, including the Mudgett Hay Tedder. Circulars and Price Lists FREE.

B. & J. W. BELCHER,

P. O. Box 75, Chicopee Falls, Mass.

THE ASPINWALL POTATO PLANTER.

It Marks! It Furrows! It Drops! It Covers! It Distributes Fertilizer!

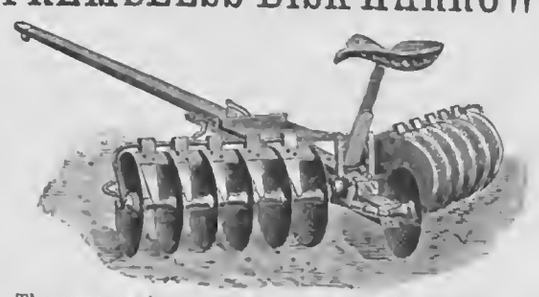
CORN PLANTER ATTACHMENT FOR 1886.

Send for Circular to

ASPINWALL M'F'G CO.,

THREE RIVERS, MICH.

The J. S. C. FRAMELESS DISK HARROW



The greatest improvements ever made in Harrows are embodied in the J. S. C.

It is the most perfect working Harrow ever put into the market.

Be sure and examine it and send for circular.

Higganum M'f'g Cor'n,

SOLE MANUFACTURERS. Higganum, Ct.

CHAMPION HARROW

A Corn Cultivator (cultivating two rows at once), **Potato Digger,** and **Spring Tooth Riding Harrow,** combined in one and sold at price of one. Sold on its merits and is the cheapest made.

New Victor Cultivator and **Horse Hoe** combined. Light and strong; easy to hold, and of easy draught. Six teeth.

Agents wanted. Send for circulars.

JOHN R. WHITTEMORE, Chicopee Falls, Mass.

New Reversible Harrow.

A Perfect Smoothing and Scotch Harrow Combined.

Thoroughly Tested and Warranted.

Send for Illustrated Pamphlet to

THOMAS HARROW CO., Geneva, N. Y.

TABER ORGAN.

Latest style; fine tone; made of best material, in the most substantial manner. Fully warranted. Send for Catalogue. Agents wanted.

TABER ORGAN CO., Worcester, Mass.

FREE SAMPLE to introduce THE GREAT Household Remedy, **Dr. GORDON'S KING OF PAIN.** I will send a sample free to any one sending stamp for postage. **Agents Wanted.** Address **E. G. Richards,** Sole Proprietor, TOLEDO, O.

THE

AMERICAN DAIRY SYSTEM

(Holds the Silver Medal.)

Wooster's Cabinet Perfection Creamery

Before buying any milk setting or cream churning apparatus, Address D. B. WOOSTER, Northfield, Vt.

Dairymen will do well to heed this notice.

THE "COMMON SENSE" MILK PAIL.

This is the only *perfect* Pail made. There are no seams in the front to catch the cream. It has a perfectly fitting strainer, which can be instantly removed, so that every part of the pail may be *quickly* and *thoroughly* cleaned. Should the strainer become foul or worn with use, we can furnish new ones at very little expense. The Pail is well made of heavy XX tin, and we offer it to the farmer at the very lowest price at which a really good article can be sold. *Send for special circulars* Price $1.25 each. Discount to the Trade.

MILKING TUBES,

FOR MILKING COWS WITH SORE TEATS.

This is the best Tube in the market. Sent, post paid, to any address on receipt of price. One Tube, 25 Cents. Five Tubes, $1.00. Send for special Circulars.

Send us your name and address and we will mail you, FREE, our

Seed Catalogue for 1886.

Choice New England Seeds. The very Best and Purest Stocks of Cabbage, Onion, Beet, Parsnip, &c. All grown by ourselves and sure to give complete satisfaction. TRY THEM.

BARTLETT & DOW,

LOWELL, MASS.

Please mention this paper.

REID'S CREAMERY

SIMPLEST & BEST.

Agents Wanted

BUTTER WORKER

Most Effective and Convenient

Also **Power Workers**

Capacity 10,000 lbs. per DAY.

BUTTER PRINTERS, SHIPPING BOXES, &c. *Send for circular.*

A. H. REID,

36 S. 16th St., Phila., Pa.

SAVE Your POSTS and use SHAW'S WIRE FENCE TIGHTENER. Can be adjusted to any wooden post; can tighten or slacken, according to climate, with an ordinary monkey wrench. Price $8 per doz. For full particulars, apply to

W. SHAW, Delaware, Ontario, Canada.

Agents wanted. Patent applied for.

SPAIN'S CHURNS. Star Churns, Rapid Ice Cream Freezers, Improved Tree Tubs, all made of CEDAR. Send for illustrated circular and prices. Clement & Dunbar, Philadelphia, Pa.

STODDARD CREAMERY and REFRIGERATOR.

Patent Skimming Attachment.

LATEST AND BEST!

IT LEADS THEM ALL

Cream drawn off the milk. *No possibility of sediment being drawn with the cream.* No cream wasted. Milk or cream drawn at any time. *Cream separation made without use of skim spaces.* Has thick walls and double air space. Has a perfect Refrigerator. Adapted to all dairies, *cream-gathering system,* etc. Used with or without ice. Stoddard Churn, Dog Powers, Butter Workers, Boxes, Prints, & Factory Supplies. For circulars address Moseley & Stoddard Manf'g. Co., Poultney, Vt, R. C. REEVES, Gen'l Agt., 185 Water Street, New York.

PURE MILK.

WARREN MILK BOTTLES

Patented March 23d, 1880.

Adapted for the Delivery of Milk in all Cities and Towns.

A Long Needed Want at last Supplied.

DESCRIPTIVE CIRCULARS ON APPLICATION.

A. V. WHITEMAN, R. N.

72 Murray St., NEW YORK.

DELAWARE COUNTY CREAMERY

Write at once for circulars and special offer to first purchaser. Address

Delaware County Creamery Co., BENTON HARBOR, MICH.

☞ FRIENDS! If you are in any way interested in

BEES·OR·HONEY

We will, with pleasure, send you a sample copy of our **SEMI-MONTHLY GLEANINGS IN BEE CULTURE** with a descriptive price-list of the latest improvements in Hives, Honey Extractors, Artificial Comb, Section Honey Boxes, all the books and journals, and everything pertaining to Bee Culture. **Nothing patented.** Simply send your address, written plainly, to **A. I. ROOT, Medina, Ohio.**

EVAPORATING FRUIT

Full treatise on improved methods, yields, profits, prices and general statistics, **FREE.**

AMERICAN MAN'F'G CO.

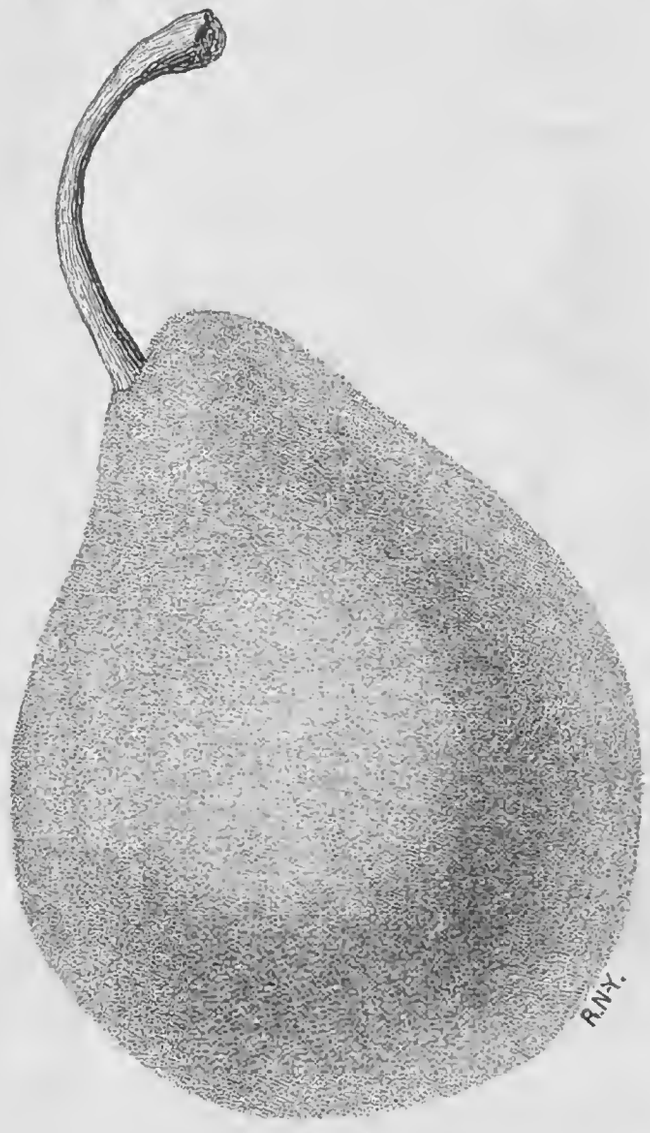
Box P, WAYNESBORO, PA.

(*Continued from page 167.*)

have skipped such calculations as the above. It may not be out of place to state that in 1880 there were 99,997 insane persons, 76,891 idiots, 88,665 paupers, 59,255 prisoners, or 316,812 persons, everyone of whom can trace a portion at least of his trouble to liquor.

ANTI-OLEO LEGISLATION IN ENGLAND.—A bill to prevent the sale of fraudulent butter has been drafted in England. The word "butter" is defined as an article made from the milk of the cow alone. The bill provides that all compounds of butter and fat, or of various fats without butter, or of any substances of a fatty, greasy, or oleaginous nature, and intended to be sold for human consumption, shall be called by names clearly and entirely distinguished from the word "butter," and from any compound modification or derivation of that word, and no adjectival or explanatory word shall be coupled with the word "butter." All manufactories of fatty substances are to be registered. Any such establishment carried on without such register must pay a penalty for each day so conducted. All imitation butters are to be colored some other color than yellow or orange. It is to be hoped that some of these laws will prove sound. This law seems to go at the matter in the right way.

WHAT'S IN AN EGG?—The American Cultivator, speaking of the difference in quality of different eggs, says: "The white of a Leghorn egg is like milk or lime-water, while that of a Brahma has substance, is gelatinous in appearance and will hold together if lifted a few inches." The Poultry Keeper says that a perfectly developed chick will grow from the 'milk or lime-water.' Young Leghorns and Brahmas have been weighed in lots of ten, as soon as hatched, and the difference in weight is so slight as to be unworthy of notice, which proves that there is as much nutrition in the Leghorn egg as in the Brahma. The elements are there—nature places them there—and if the eggs were as represented above, but few of them would hatch, and we can best know what is in an egg by that which comes out of it.



DUHAMEL DU MONCEAU PEAR. From Nature. Fig. 101.

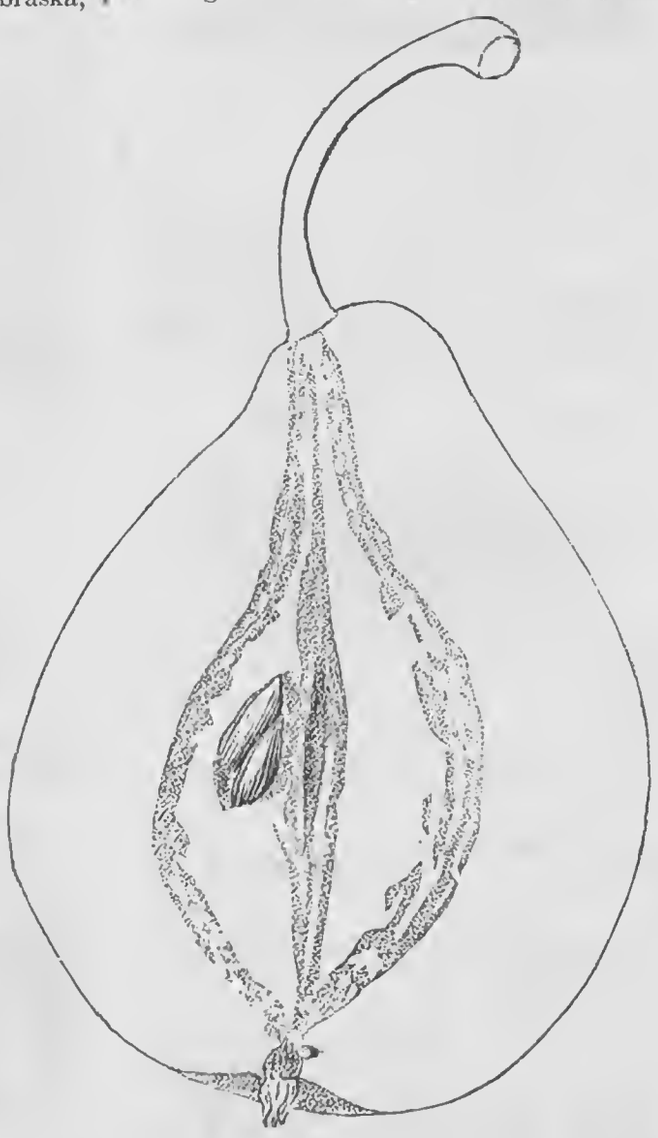
SAMPLES.

WHAT is said to be the largest barn in the world is situated at Papillion, Nebraska, covers five acres, cost $125,000 and shelters 3,750 head of cattle. It is the intention of the owner to enlarge its capacity so as to protect 8,000. The immense structure is used for the purpose of fattening cattle after they have been three or four years on the ranges. The great barn has a complete system of water works, and is thoroughly washed twice every day. The cattle are fed upon cooked meal—one man feeds the whole herd. All he has to do is to turn a large faucet and let the feed run to them

A CHAUTAUQUA COUNTY, N. Y., cheese-maker went to Buffalo the other day and brought home a fine imported Swiss cheese. All praised it but his wife, who, after the praise had ceased, said she had found her husband's private mark on the cheese. He had paid 33 cents a pound for the very cheese that he had made and sold for six cents.....

STATISTICS show that about 50 per cent. of the deaths in cities last year were those of children under five years of age; and also that the glass manufacturers turned out 10,000,000 nursing-bottles in the same time.....

IT is a disgrace to a great State, says the Philadelphia Press, to insist that experimental farms must be run for a profit. This "penny-wise-and-pound-foolish" policy has been tried at many agricultural colleges, with the result of clearing the colleges both of students and influence.....



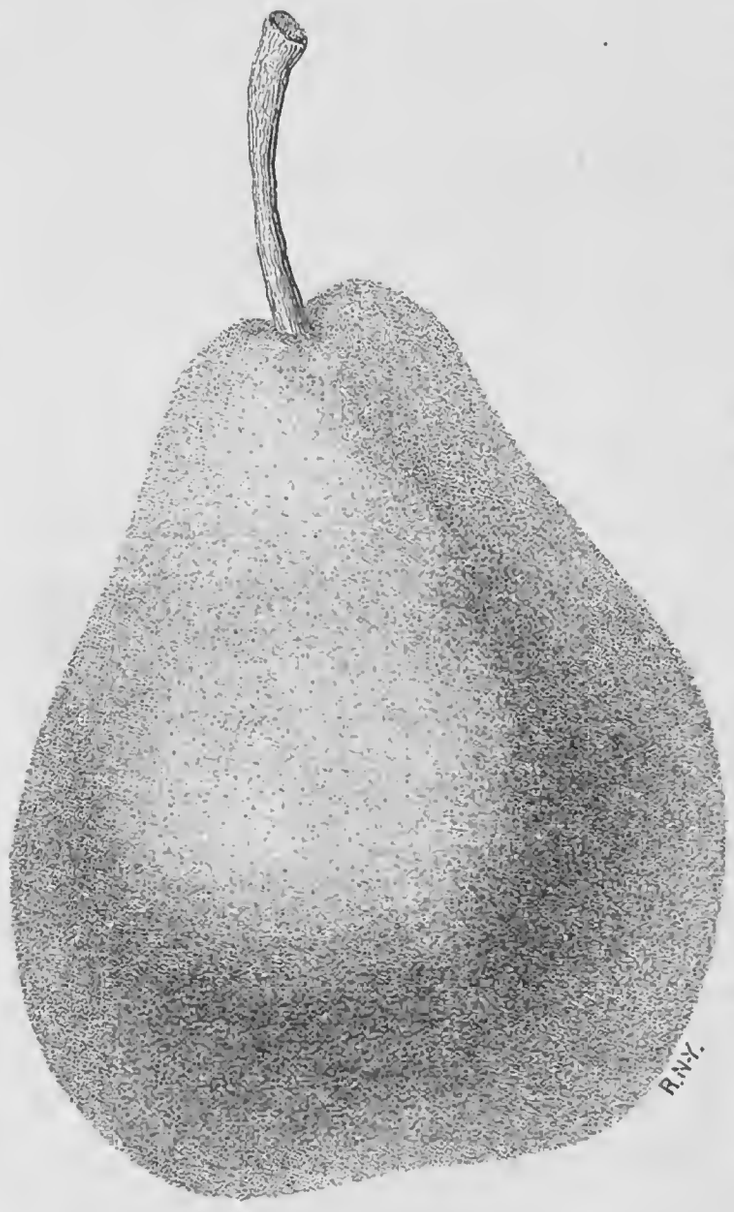
DUHAMEL DU MONCEAU PEAR. Cross Section. Fig. 102.

Various,

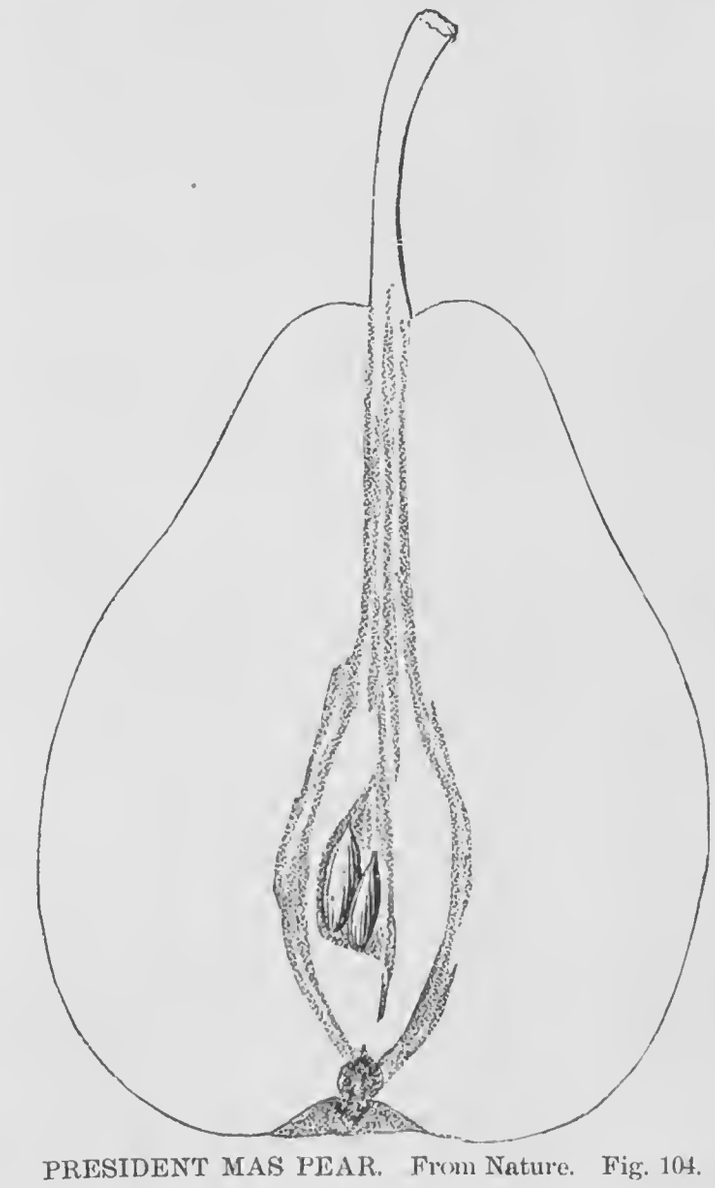
COMMISSIONER SPARKS AND THE LAND LAWS.

THOSE who are loudest in their charges and most virulent in their attacks on Commissioner Sparks and his rulings in land cases, belong to the press or the attorney and land agent species. The Commissioner's rulings are interfering very much with the land agents' business, hence their outcry, and the same remark applies to the gentlemen of the press who find their advertisements growing small by degrees and beautifully less. Every one, on proving up, must advertize his intention of so doing for five consecutive weeks in a county paper. This is the most lucrative part of the business of such papers, as it brings ready cash, the loss of which must cripple their financial resources very much. But one may very properly ask, is the land business to be run for the benefit of these men? I say emphatically no. Until of late, the national land business seemed to be run to support a horde of hungry attorneys and land agents all over this Territory. All men over 21, engaged in the various towns, either as clerks, bookkeepers or tradesmen, have filed either a homestead or pre-emption claim over some land near them, and although the nature of their employment prevents them from fulfilling the law in any measure, still they go before the Court and swear that they have done so, and get a patent for the land. One special government agent reports one district where over 4,000 homestead entries had been made a few years ago, and now there are only about 100 settlers to be found. The Homestead Act distinctly says a man must live on his land continuously and cultivate it for five years before he receives his patent; but anyone who had money could prove up on it after six months' residence, and get his patent. This opened the door to rich men for all sorts of jobbery and seriously interfered with the rights and interests of honest settlers, to whom only the law intended to give 160 acres. Commissioner Sparks will not allow the conversion of a "homestead" into a "pre-emption."

The Pre-emption Act requires six months' residence, the erection of a house and the cultivation of the land. Thousands of acres were taken up under the act, a small box shanty was erected, in which the entrymen would sleep two or three times during the six months, and hire five to ten acres of breaking. Then, with the help of the men who were hired, at a high price, to do the breaking, they would go to court and perjure themselves to obtain a patent for the land.



PRESIDENT MAS PEAR. From Nature. Fig. 103.



PRESIDENT MAS PEAR. From Nature. Fig. 104.

Now these lands will lie dormant until the efforts of the hard-working settlers around them shall raise their value to ten or twelve dollars an acre, when the holders will sell out.

A tree claim can be held by any one over 21, and requires no residence; hence such claims are held by people all over the Western country, mostly for speculation. They can be held at very little expense for three years, during which time the holders try to sell them. If that cannot be done, they transfer them to some other names, and then they are allowed to run three years longer before the trees are to be planted. If they are sold, they are usually made into "homesteads," or "pre-emptions," and so timber culture, so far as the act is concerned, is a huge failure. Quite a common saying is "Trees don't do any good anyhow in Dakota," but the few claims planted to trees are a complete refutation of that statement. Com. Sparks simply tells people they must abide by the law instead of the fraudulent custom of the past. After many inquiries all around here, even amongst those who think it the right thing to abuse him, I have not been able to find a single case where anything contrary to the spirit or the letter of the law has been enforced. Neither have I seen a *bona-fide* case of injustice reported in the press, nor can it be done. Instead of all this abuse, he ought to have the thanks of the American people for the manly stand he is making against the wholesale stealing of Uncle Sam's lands for so many years. The day is not far distant when all the public lands will be exhausted, and what are we to do with our surplus population and our ever fresh immigrants?

T. MACALPINE.

Raymond, Dakota.

Everywhere.

RURAL SPECIAL REPORTS.

Canada.

KENT Co., Ont.—Of the Rural Corn I saved all the yellow ears for seed. Four ears were early enough for second planting. Peas good. Beans very productive. Garden Treasures not as nice as those of former years. J. H.

KEYSER, Ont.—A very fine Winter. Wheat has been well protected by the snow—it had only a medium top. My Diehl-Mediterranean stood the Winter a great deal better than Martin's Amber or Democrat, and was ripe much earlier. The Rural New-Yorker Pea is grand for one so early. Carter's Stratagem are fine—immense pods well filled. The Prince of Wales looks as if it would make a good field pea. Flageolet Beans poor. Corn all too late. Tomatoes did well. Garden Treasures were treasures indeed. The Blush Potatoes are the best keeping potatoes I have—very few rotten; other varieties from one-half to three-fourths rotten, when dug and still rotting. N. D.

Colorado.

FT. COLLINS, Larimer Co., Feb. 15.—Wheat yielded only about two-thirds of an average crop—about 15 bushels per acre. Corn more than an average—from 30 to 40 bushels. The Rural corn too late; peas very fine, and the beans yielded over two quarts. Did not think much of the tomatoes. Wheat is worth only $1.10 per cwt.; corn, 75 cents per cwt.; potatoes, $1 per cwt.; hogs, $3.50 per 100 pounds alive, and cattle, $3. Almost all of the farmers are going into the stock business, sowing a part of their land with Alfalfa and feeding it out to their cattle in the Winter. Alfalfa does well here. I cut a piece four times last year, and got nine loads per acre during the season. We have had a very warm Winter so far, not more than two weeks of cold weather all put together, and not more than three inches of snow at one time. The cattle on the range are doing well. Success to the RURAL! E. H.

Dakota.

MANDAN, Morton Co.—Both kinds of the RURAL peas were the very best I ever saw. G. W. G.

Delaware.

DOVER, Kent Co., Feb. 23.—The year commenced warm and pleasant: on Jan. 2 plowing was being done; then the weather became cold, changeable and very disagreeable. February came in cold and blustering. On the 4th snow fell two feet deep, drifting badly and rendering the roads for several days impassable. On the 6th the mercury went down to 11 below zero—coldest weather for 20 years. On the 11th six inches of rain fell, taking off the snow and causing floods that did immense damage. We fear that the peach buds are

nearly all killed. When the mercury gets below zero it is rough on them. Wheat is looking fine. Stock is wintering in good condition. Working horses from $20 to $150; cows, $20 to $70; wheat, 80 to 90 cents; corn, 38 to 40 cents; oats, 35; potatoes, 50 cents per bushel; clover seed, 10 to 12 cents per pound; beef, 8 to 16 cents; butter, 25 cents; eggs 25 cents, and other produce in proportion.

S. F. S.

Illinois.

GEORGETOWN, Vermillion Co., Feb. 22.—Wheat looks pretty well—better than expected. Only enough for seed and bread raised here last year. Prices for wheat about 80 cents per bushel. Corn was a good crop, selling for 27 cents; hay about two-thirds of a crop, selling at $15. Times very close. At least three-fourths of the hogs died last Fall from swine plague. Every known remedy was tried without success. W. P R.

Kansas.

FAIRMOUNT, Leavenworth Co., Feb. 16.—We have had some very cold weather this Winter; the "oldest inhabitant" never saw it colder. However, the cold spells do not last as long as further north. I plowed as late as December 31st, and now the frost is nearly out of the ground so that we can plow. Winter wheat was pretty well covered with snow, that is, for this latitude, until the last ten days, and up to that time was all right. But now the snow is all gone, and continued freezing and thawing, as we are now having, are liable to injure it. Considerable old wheat (crop of '84) is still in the hands of farmers, and a great deal has become musty and will bring only 40 cents per bushel, for distilling purposes. Wheat suitable for milling purposes is worth 85 cents. Corn was a fair crop and some is yet in the field—worth 32 cents. But little attention is paid to potatoes, except near the cities, some farmers buying for their own use. A neighbor who is farming 320 acres buys his potatoes, and now when there is none to spare they are worth 75 cents per bushel. Peach buds are killed. A neighbor reports at least one-half of his apple trees standing on a northern slope winter-killed. The dairy interest receives but little attention here, and slaughter-house hog and bull butter reigns supreme. J. M.

PARSONS, Labette Co., Feb. 19.—The temperature of January was 11 88-100 degrees lower than the average of the preceding 19 years; so far this month the weather is seasonable. Snow has disappeared and the frost in some places is out of the ground. Half crops of most grains, low prices of stock and hog cholora make farmers poor. No losses from blizzards. The monster trunk roads are stretching out their feeders all through the State and the eagerness of townships and cities in voting bonds is alarming. We shall have to support the roads when built. J. B.

Kentucky.

PEMBROKE, Christian Co.—Marion County, Ky., raises leaf and burley tobacco, the prices for which range from 10 to 20 cents per pound. Southern Kentucky grows a large, dark kind known as regie, which is purchased mostly for foreign markets, where the Government monopolizes its manufacture and fixes the price of the product. This sort is raised mostly by negroes and does not, therefore, get the attention bestowed on that in the northern part of the State. The crop, therefore, is generally light in weight and inferior in quality. Creameries are springing up all over Kentucky and Tennessee. The Jersey craze of some years ago brought many fine animals into the State and these have, to a great extent, graded up our native stock; but the establishment of creameries has given a great boom to Holland cattle, which are in greatest favor at present. Several two-year-old registered heifers sold last Spring for $300 apiece, and calves brought $100 each. Farmers have begun to build fine stables, well equipped with all conveniencies for fine stock. Great advance in dairying is expected from the present attention to the business. Great improvements are also being made in home architecture and adornment. Even in Kentucky an anti-whiskey agitation is growing; for with whiskey it is found that our taxes are increasing, crime is becoming rampant, our prisons are overcrowded, our asylums multiplying, our courts always behindhand with their dockets, and idleness, vice and misery increasing. "GARDENER."

Michigan.

DOWAGIAC, Cass Co.—The Rural corn did not ripen. Beans and peas nice. Our corn crop was damaged more or less by frost. Fall late and wet. Some corn still in the field.

A. F. J.

HUBBARDSTON, Ionia Co.—Some of the Rural cross-bred corn was quite early. Tomato vines abundant; fruit scarce. Bad weather rusted the beans. Peas very fine. I have four acres of Fultzo-Clawson Wheat grown from the Rural seed sent two years ago; one acre of Surprise Wheat and a small plot of Diehl-Mediterranean. All are fine sorts, especially the last. Rural Blush Potato a fine yielder and free from rot. It is quite red inside, however, which is objectionable in a table potato. G. A. S.

MANESTIQUE, Schoolcraft Co.—The northern part of this State is nearly "new" land, a fine clay loam, very rich. Nearly all the "new" farms are homesteads. Most of them are now assuming a home-like appearance. The fine, hard-wood timber from thousands of acres will be burnt in log heaps, as there is no other way to dispose of it. T. C.

THREE RIVERS, St. Joseph Co., Feb. 22.—Wheat hasn't a good color for this time of the year. Snow on the ground nearly all Winter, and hardly any frost in it now. Wheat is worth 85 cents to 90 cents per bushel; hay, $8 to $12 per ton; wood, $3.50 to $4.00 per cord; oats, 25 cents; corn in the ear, 30 cents; butter, 14 cents; eggs, 16 cents; onions, 50 cents to 75 cents; peppermint, $3.90; dressed pork, $4; dressed beef, $5. J. H. S.

WEBBERVILLE, Ingham Co.—The Rural Tomatoes were not half as good as those sent out in '84—those others were splendid. The peas were all taken by the hens. We have peas of the previous distribution, however, and are very well satisfied. The other seeds we have kept for the new place on to which we have just moved. The weather now is very changeable and very hard on the wheat. D. C.

Minnesota.

NEW YORK MILLS, Otter Tail Co.—The Flageolet Beans came up finely; but a frost about June 15 killed every one. The Stratagem and Prince of Wales Peas were also somewhat injured, but recovered—very large and fine-looking. Corn too late. Garden Treasures fine. W. B. M.

Nebraska.

CRETE, Saline Co., Feb. 17.—Of 15 varieties of potatoes the Rural Blush and White Elephant are the best. The Rural peas did well. Weather warm; snow going off very fast. Lots of corn to be picked yet. Corn 18 cents; wheat, 45 cents to 65 cents; rye, 35 cents; potatoes 30 to 40 cents. E. MCI.

New Hampshire.

ASKWORTH, Sullivan Co.—The Rural corn matured sufficiently for seed—season short. Tomatoes very fine, but late; vines five feet high. Peas very fair. Garden Treasures very fine, ornamental and attractive.

J. S. G.

New Jersey.

MAINE AVENUE, Cumberland Co., Feb. 20.—Weather is warm and spring-like. The Rural seeds all did well, except the Johnson Grass and Garden Treasures, which did not come up well. Don't think much of the Flageolet Bean—too small. The Prince of Wales Pea did well and the Stratagem was just splendid. The Thousand-fold Rye did extra well; also the wheat. The corn was not very good. The Shoe-Peg Corn is away ahead of anything I have had yet. D. L.

Ohio.

FRANKLIN, Warren Co.—Rural Peas excellent and very prolific. Tomatoes very nice. Beans also very prolific, but of inferior quality, the pods being very woody. The Garden Treasures did very well. D. L. C.

Texas.

SHERMAN, Grayson Co., Feb. 24.—Farmers have nearly finished sowing oats. A large area will be planted to corn. Early sown fall wheat looks well; late sown nearly all killed out. Live stock not so well off as usual. We should have less but better stock, and better means of transportation. J. H. McG.

Oregon.

EAGLE POINT, Jackson Co., Feb. 18.—Winter very mild; no snow and only two weeks of freezing weather—24 degrees above zero was the coldest. The Diehl-Mediterranean Wheat and the Thousand-fold Rye did very well, and the cross-bred corn reasonably so. The peas were the finest I ever raised. The beans did poorly. The Garden Treasures were fine. I am much pleased with the Rural Union Corn. L. R.

ALTHOUSE, Josephine Co.—I like the B-B. Centenial Wheat better than any variety I have ever tried. It makes fine flour. Animals are very fond of it and eat the straw greedily. The Rural Blush I consider the best potato I have. The corn didn't ripen. Market Garden Pea fine. The Diehl-Mediterranean Wheat and Thousand-fold Rye were cut to the ground by a heavy snow storm; a second growth produced three pounds of each sort. Fruit scarce and dear. Flour $20 per ton; butter, 30 cents; beef, 10 cents; pork, 10 cents; mutton, eight cents; potatoes, 1½ cent per pound. Producers complain of low

(Continued on page 170.)

Trees, Seeds and Plants.

POTATOES Wild and New Seedlings; superb table varieties. Wonderful yielders, **600** to **1,000 bu.** per acre. Rose's Sweet Corn, best in the world. Ears large as Stowell's and 20 days earlier. Also the new Cory Corn, earliest of all. Also Burpee's new Welcome Oats. Catalogue free.
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BLUEBERRY PLANTS The Blueberry is a valuable fruit; succeeds in all soils, and is a profitable fruit to grow for market. Illustrated descriptive price list free.
Delos Staples, WEST SEBEWA, Ionia Co., Mich.

FOR SALE.
ENGLISH FIELD PEAS!
FRESH IMP. MANGOLD SEED
Of the best kinds. Lucern and other grass seeds for mixture. I find that all the big tests of Jersey cows are the result of feeding large quantities of peas and oats. For prices address **WM. CROZIER,** North Port, L. I., N. Y.

Miscellaneous Advertising.

10c. MUSIC Guaranteed equal to finest music Send for list or 8 samples mailed for **25c.**
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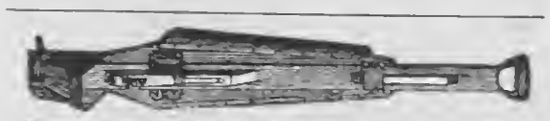
RUSSELL & CO.'S ANNUAL for 1886. Sent free to all interested in **Improved Threshing Machines, Horse Powers, Saw-Mills,** and **Engines for Farm and Plantation Use.** Address **RUSSELL & CO.,** Massillon, O.
Name this paper.

Peter Henderson says of the "ACME" Pulverising Harrow, Clod Crusher and Leveler: "We have found use for the "ACME" in our business that has made it to us the most valuable implement we have ever used on our ground."
See advertisement on page 171.



Macomber's Hand Planter, *for Corn, Beans, and Beet Seed.* The BEST in the world. Money refunded if it does not prove satisfactory, after a fair trial. Agents wanted. Send for circular and terms.
S. M. Macomber & Co., M'f'g's, Grand Isle Vt.

"SMOKE Your MEAT"
With Krauser's Liquid Extract of Smoke.
It is a liquid; you wash it on; it will keep it in a well preserved condition and free from insects; it is much more pleasant to the taste than meat smoked in the old way; it is done in less time, no trouble, and less expense. There is no danger from fire or of being stolen, as you can hang it in a more secure place than a smokehouse. Send for circular.
E. KRAUSER & BRO., Prop's and M'f's, DRUGGISTS. **Milton, Pa.**

FREE We want every Reader of this Paper to send us **10c.** to help pay postage, and we will send to your address our mammoth family paper, **"THE JOURNAL,"** 3 months on trial, and a costly present, *FREE.*
THE H. C. NEWTON CO., Essex, Ct.

THE BEST CATTLE FASTENING!
SMITH'S
SELF-ADJUSTING SWING STANCHION!
The only Practical Swing Stanchion Invented. Thousands in use. Illustrated Circular free. Manufactured by BROOKS & PARSONS, Addison, Steuben Co., N Y

SMALL'S CALF FEEDER
This NEW article is appreciated and approved by all progressive Farmers and Stock Raisers. The calf **sucks** its food **slowly,** in a *perfectly natural way,* thriving as well as when fed on its own mother. Circulars free. **SMALL & MATTHEWS,** 21 South Market Street, BOSTON, MASS.

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Interferences conducted. Assignments prepared. Copy of any Patent issued since 1836 sent for 50 cts. New book—"*Information for Inventors*"—FREE.
J. W. FLENNER & Co., Patent Attorneys, P. O. Drawer 453, Washington, D. C.

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CAYUGA LAND PLASTER.
Contains **Phosphate of Lime.** Gives Plants an early start improves quality, increases yield. Low freights to all points. **Farmers' Memorandum Book sent FREE. Correspondence solicited.**
CAYUGA PLASTER CO. Union Springs, N. Y

BAUGH'S $25 PHOSPHATE
TRADE MARK
Contains the Life and Essence of Animal Bones. We are now selling Baugh's Strictly Pure Raw Bone Meal, also Baugh's Ready Dissolved Pure Animal Bones at very low prices. It would surprise farmers to know how very low they can procure these brands direct from us. Send your name and address, and we will mail you our **PHOSPHATE GUIDE.**
BAUGH & SONS, 20 S. Del. Ave. Philada. Pa

THE BRADLEY HANDY WAGON
The Coming Wagon. Light, strong, convenient and low priced. **Handy** to get into and out of. **Handy** for single horse or pair. **Handy** for one person or more. **Handy** to load or unload. *Send for Free Circular, "How to purchase direct from the manufacturer."*
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BY MAIL POSTPAID.
KNOW THYSELF.
A GREAT Medical WORK on MANHOOD.
Nervous and Physical Debility, Premature Decline in man. A book for every man, young, middle-aged and old. It contains 125 prescriptions for all acute and chronic diseases, each one of which is invaluable. So found by the author, whose experience for 23 years in such has probably never before fell to the lot of any physician. 300 pages, bound in beautiful French muslin, embossed covers, full gilt, guaranteed to be a finer work in every sense—mechanical, literary and professional—than any other work sold in this country for $2.50, or the money will be refunded in every instance. Price only $1.00 by mail, postpaid. Illustrated sample 6 cents. Send now. Gold medal awarded the author by the National Medical Association, to the officers of which he refers.
The Science of Life should be read by the young for instruction, and by the afflicted for relief. It will benefit all.—*London Lancet.*
There is no member of society to whom The Science of Life will not be useful, whether youth, parent, guardian, instructor or clergyman.—*Argonaut.*
Address the Peabody Medical Institute, or Dr. W. H. Parker, No. 4 Bulfinch Street, Boston, Mass., who may be consulted on all diseases requiring skill and experience. Chronic and obstinate diseases that have baffled the skill of all other physicians a specialty. Such treated successfully without an instance of failure. **HEAL THYSELF**
Mention this paper.

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ELASTIC TRUSS
Improved Elastic Truss. Worn night and day. Positively cures Rupture. Sent by mail everywhere. Write for full descriptive circulars to the
NEW YORK ELASTIC TRUSS CO.,
744 Broadway, N. Y.

CATARRH SAMPLE TREATMENT FREE!
So great is our faith that we can cure you, dear sufferer, that we will mail enough to convince you, FREE. Send 10 2c stamps to cover expense & postage. H. S. LAUDERBACH & CO., Newark, N. J.

PILES. Instant relief. Final cure in 10 days, and never returns. No purge, no salve, no suppository. Sufferers will learn of a simple remedy, free, by addressing **C. J. MASON,** 78 Nassau Street, N. Y.

TELEPHONES SOLD.
Don't pay exorbitant rental fees to the Bell Telephone Monopoly to use their Telephones on lines less than two miles in length. A few months' rental buys a first-class Telephone that is no infringement, and works splendid on lines for private use on any kind of wire, and works good in stormy weather. It makes homes pleasant; annihilates time; prevents burglaries; saves many steps, and is just what every business man and farmer should have to connect stores, houses, depots, factories, colleges, etc., etc. The only practicable and reliable Telephone that is sold outright and warranted to work.
Chance for agents. No previous experience required. Circulars free. **WM. L. NORTON,** Buffalo, N. Y.

WE WANT ACTIVE AGENTS
TO SELL THE
Renner Combined Alarm and Door Bell
In every County in the United States and Canada. Geo. C. Owens, Modesta, Cal., says: "I have canvassed one day and took 22 orders." In same letter he ordered two gross. Wm. McKim, of Grand Haven, Mich., says "he took 13 orders in 10 hours." Profit on Bell, $2.50. In our EXTRAORDINARY OFFER to Agents we agree to take back all Bells unsold if the Agent fails to clear $125 in 30 days. Illustrated Circulars sent free. Address
RENNER MANUF'ING CO., Pittsburg, Pa.

1500 Album Verses 15c
Here you have the most complete collection ever issued for only 15 cents. Postage stamps taken. Large Illustrated Catalogue of Guns, Rifles, Revolvers, Watches Accordeons, Organettes, Violins, Banjos, Magic Lanterns Telegraph Instruments, Photograph Outfits, rare and curious novelties, books &c. **FREE** World M'f'g Co. 123 Nassau St. N. Y.

CARDS! 60 Fancy Pictures and 25 Elegant Cards in Gilt Edge, Silk Fringe, Hidden Name, &c. 1 Songster, 1 $50 Prize Puzzle, and 8 Parlor Games, all for **10 cts.** Game of Authors, 10c. IVY CARD CO., Clintonville, Ct.

300 FOR 10c. GAMES, Puzzles, Parlor Magic, Conundrums, Songs, Album Quotations, Embroidery Designs, and pack of Name Cards, Gilt Edge, Silk Fringe, Hidden Name. TODD CARD CO., Clintonville, Ct.

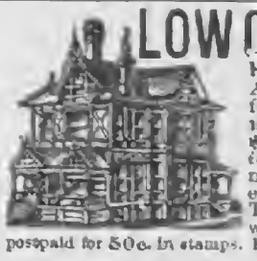
100 Scrap Pictures and 13 Concealed Name Cards 10c. Sample Sheet 4c. Foote Bros., Northford, Conn.

50 CARDS, Hidden Name, etc. 1 pretty Ring, outfit and present, all 10c. 6 lots 50c. O. A. Brainard, Higganum, Ct.

100 New Scrap Pictures and Agents' Samples for 1886, **5 cents.** S. M. FOOTE, Northford, Conn.

20 New Style **Chromo Hidden Name Cards, 10c. Game Authors, 10c. Acme Card Factory,** Clintonville, Ct.

IT PAYS to sell our Rubber Printing Stamps. Samples free. J. M. Mitten & Co., Cleveland, O



LOW COST HOUSES
HOW TO BUILD THEM
A large Atlas, giving cuts and full descriptions of 40 *desirable* modern houses, costing from $400 up to $6,000. *Profusely illustrating every detail* and many original ideas. Houses adapted to all climates described. The latest, best, and only cheap work published. Sent by mail, postpaid for 50c. in stamps. FRANKLIN NEWS CO., PHILADA

ONE MILE SIGNAL WHISTLE
The **loudest** and **most piercingly shrill** whistle of its size made. **Can be heard up to one mile.** The exact size of a **50 calibre U. S. Government Rifle Cartridge.** Made of **burnished brass** with **nickel bullet. Invaluable** as a signal for **teamsters, farmers, sportsmen** and all who wish to attract attention at a long distance. **Call your men to dinner with it!**

So attractive a little novelty that every one who sees it wants it. **You should have it.** To introduce our full, expensive, and interesting catalogue of guns, knives, novelties, and useful articles, we will send this whistle and catalogue by mail, postpaid, for only **25 cents** in stamps. Address **RENNIE & ALLSON MFG. CO., 725 Filbert Street, Philadelphia, Penna.**

(*Continued from page* 169.)

prices, while buyers say they are paying too much. L. E. M.

SPRINGFIELD, Linn Co., Feb. 14.—No frosts sufficient to kill tomato vines till January 5. On Christmas Day "volunteer" new potatoes were gathered. The volunteer crop of beans was a foot high, and tobacco still in bloom. We have had not more than 1½ inch of snow and that only for a couple of days. Now peaches are just beginning to show color of bloom. Early gardens are being planted, and fruit trees set out. Of prunes we are planting the Silver, Italian, German and Petite; of plums, Columbia; of peaches, Bradshaw and Washingon. J. S. C.

Pennsylvania.

HOPE CHURCH, Allegany Co.—Some of the 50 crosses of corn ripened as early as September 10; some wasn't ripe when frost came. The Rural Union Corn of '84 was very good. The Diehl-Mediterranean Wheat is the best and most prolific kind I have. White Elephant Potato an enormous yielder. RURAL'S Blush good; but straggles too much in the hill. Thousand-fold Rye excellent. Prince of Wales and Stratagem Peas the largest and most productive I ever saw. Garden Treasures splendid. Prices: wheat, $1; oats, 40 cents; corn, 60 cents; potatoes, 70 cents; apples, 60 cents; hay, $20; butter, 35 cents. Long life to the RURAL! A. S. I.

Vermont.

BAKERSFIELD, Franklin Co., Feb. 23.—Winter very cold. January 12 mercury 30° below zero. Not much snow. Farmers busy getting ready to make maple sugar—all expect a larger yield. Old sugar plentiful at six to seven cents; eggs, 18; new butter, 25 cents; corn meal, $23 per ton. W. O. S,

Virginia.

BIG SPRING, MONTGOMERY Co.—White Elephant Potato very fine; Blush, a No. 1 grower and yielder; both these RURAL presents have paid well. Corn no good. Wheat nearly all winter-killed. Garden Treasures fine.

G. W. B.

West Virginia.

LOOK-OUT, Fayette Co.—We are having a very severe Winter. The Diehl-Mediterranean Wheat was so badly winter-killed that I got only about a quart. Sowed in Fall, it is looking well. The Thousand-fold Rye yielded excellently. Beans very productive. Tomatoes did well; but were much inferior to those sent out in 1884. Prices: corn, 75 cents; wheat, $1; oats, 50 cents; potatoes, 60 cents; butter, 20 cents; eggs, 20 cents; green apples, from 50 cents to $1. J. C. S.

Wisconsin.

WILD ROSE, Waushara Co.—Of the mixed corn some yellow flint and yellow dent ripened nicely, but the white kind was all too late. The peas are the earliest we have. Flageolet Beans early and very prolific—quality middling. Hens didn't give the Diehl-Mediterranean Wheat a fair show. The Marlboro Raspberries that survived did splendidly. Stratagem Peas did well; Prince of Wales not so well—hens again. L. A. L.

Wyoming Territory.

FAIRBANK, Larimie Co.—Cross-bred corn tall, but too late. Stratagem and Prince of Wales Peas the best yielders I know. Tomatoes didn't get ripe. Beans not adapted to this climate. All sorts of garden truck and small grains do well here. Watermelons do extra well; I sold $90 worth from a quarter of an acre. Corn is worth 3¼ cents per pound; oats, 3½ cents; potatoes, 2½ cents; white beans, five cents; flour, $3.75 per 100 pounds; hay, $8 per ton; butter, 50 cents per pounds; eggs, 50 per dozen. Fort Laramie is our only market though I live 20 miles west of it. W. S.

THE FARMER'S CLUB

ANSWERS TO CORRESPONDENTS.

[Every query must be accompanied by the name and address of the writer to insure attention. Before asking a question, please see if it is not answered in our advertising columns. Ask only a few questions at one time. Put questions on a separate piece of paper.]

AN AILING HORSE.

F. M. S., Fredonia, N. Y.—1. A six-year-old high-spirited horse, broken when four years old, fretted and sweated excessively when at work the first year, and though receiving better feed and care than the other horses, he ran down considerably before Winter. On his back, shoulders and rump there appeared small pimples and in wet or cold weather he took cold very easily, and sometimes ran at the nose, the discharge being sometimes clear and sometimes of a milky color, and occasionally there was a slight rattling in his throat. At times his urine was quite thick and yellow. Nearly all the pimples disappeared last Spring, though he did not gain much in flesh. Occasionally during the Winter I gave him doses of condition powder made of equal parts of ginger, sulphur, black antimony and saltpeter. Last year the symptoms and condition were the same, but not so bad. 1. Were the powders good for him? 2. What ails him? 3. What is a remedy? 4. What causes him to take his weight of one foot as he walks along the road, as though he had stepped on something that had caused him pain?

ANSWERED BY F. L. KILBORNE, B. V. S.

1. Quite likely the animal might have derived some benefit from the powders if you had given them regularly for a length of time. But little or no benefit could be expected from an occasional powder. The black antimony might well have been omitted. Its action is so injurious and oftentimes so violent that we cannot recommend its use. 2. The symptoms would indicate disorder of some internal organs, as the liver, bowels, or both. A microscopic examination of the scales sent shows them to be nothing more than an excessive collection of dandruff, largely due to a want of thoroughness in grooming. 3. Give five or six drams of Barbadoes aloes to unload the bowels, and then, twice daily, as powders, one-half ounce each of powdered gentian, ginger, and sodium bi-carbonate, and two ounces of Glauber salts. Continue the powder for several weeks, omitting the salts if at any time the bowels become too laxative. The skin must be kept clean and free from the dandruff pimples by thorough daily grooming with a new curry-comb or wire-card, if necessary. A daily allowance of beets or potatoes with linseed-cake or oil-meal will be beneficial. Whenever the discharge appears at the nose, give a hot bran mash every evening until it ceases. The stable should be kept dry and clean and be well ventilated, and the animal allowed daily exercise, either moderate work or a run in a small yard. 4. If it occurs only when walking, it is probably due to carelessness on the part of the animal, and can sometimes be stopped by calling his attention to it with a slight stroke of the whip, which will tend to make him more careful.

SCALE OF POINTS OF SHORT-HORNS.

J. A. R., Pleasant Hill, Mo.—The "scale of points" of Short-horns is as follows:

Rump—level, with good length and breadth	6
Thigh and twist—full and well down	5
Hips—broad, level, and well covered	5
Flanks—well let down and full	3
Loin—broad, level and meaty	8
Ribs—fleshy and broadly sprung	7
Crops and chine—well filled, meaty, and no depression	7
Heart-girth—full and large	7
Shoulders—smooth and well covered	5
Brisket—well let down and forward, with little or no dewlap; broad between fore legs	3
Neck—clean and tapering	2
Horns—medium size, clean, tapering and well formed	1
Ears—medium size, fine and lively	1
Eyes—mild, but full and bright	2
Head—clean and fine; masculine in bull	2
Bones and legs—fine and shapely; medium length	6
Tail—well set on, tapering and fine	2
Hair—abundant and mossy	3
Handling—mellow, neither soft nor unyielding	5
Skin—fine, elastic, loose and medium thickness	2
Upper line—level and straight	4
Lower line—low down and even from brisket to twist	3
Weight for age of bull, on basis of 1000 pounds at 12 months, 1,400 pounds at 24 months, 1,800 pounds at 36 months, 2,100 pounds at 42 months. Of female, on a basis of 850 pounds at 12 months, 1,100 pounds at 24 months, 1,400 pounds 36 months, 1,600 pounds at 42 months	5
Symmetry, smoothness, style and general attractiveness	5
Total	100

A CONFIRMED HALTER-PULLER.

W. O., Proclorville, Mo.—While breaking my nine-year-old horse, seven years ago, she contracted a habit of breaking her halter, and ever since she has been a persistent halter-puller. She shows great nervousness on the approach of anybody with a bridle, and firmly resists hitching her to any vehicle, trembling as she plants her feet out and leans back; but as soon as she is hitched she starts and works well. How should she be treated?

ANSWERED BY F. L. KILBORNE, B. V. S.

The difficulty is evidently nothing more than an acquired habit, the result of faulty management of an animal that is probably naturally quite nervous. As a "halter-breaker" the animal should have been dealt with while the habit was being formed, when it would have been a very simple matter to have broken her. If the horse is nervous, the first requisite is that at all times he be treated with kindness and firmness. To correct the habit of pulling, procure a strong strip, 1¼ or 1½ inch wide and 12 or 15 feet long according to size of the animal (the exact length can be easily ascertained by a piece of twine), surcingle-webbing will answer the same purpose if strong. The strip is to be placed on the animal as follow: Put the middle of the strap under the tail and cross the ends immediately above the tail upon his hips; carry the ends forward, one on each side, and buckle in front of the chest. Place a common surcingle around the body, just back of the shoulders, but *outside* of the strap on each side to hold in position. Now, when you wish to hitch the horse, pass the tie strap of the halter through the ring in the manger or post and carry it back and fasten to the strap in front of check, and then let the animal pull. He will soon find that he is pulling to no purpose and a few lessons usually succeed in affecting a cure. An excellent tie for a horse in the harness is a strong rope that passes around the animal's neck, the free end through the ring in the bit and then carried to the post. Except in extreme cases, there is no danger of the animal injuring himself by choking when tied by this method.

CONDITION POWDER FOR A HORSE.

H. C. M., Fitchville, Ohio.—The best general recipe for condition powders for a horse that we can give is the following: 1. A good, clean, comfortable, well-ventilated stable. 2. Suitable food in abundance, but not in excess. 3. Thorough daily grooming. 4. Work moderately or even hard when necessary if properly cared for. When not at work allow a little exercise if possible. Further than this we cannot recommend any condition powder without knowing the special case to be treated. It is too much like many of our patent nostrums that are specifics—for everything good, and good for nothing. A recipe that would be suitable for one animal might be entirely unsuited to the needs of another. In order to recommend a condition powder that will meet the requirements of the case, it is necessary that one should have a careful description of the present condition of the animal; appearance of skin and hair, condition of bowels, kidneys, etc., together with the probable cause of the difficulty.

CUBIC FEET IN A TON OF HAY.

H. G. W., Richmond, Ind.—No one can tell how many cubic feet in a ton of hay in a mow without seeing the hay and knowing something as to how much it has been pressed. Fine Blue Grass (Poa compressa) cut ripe and well pressed in the mow, will make a ton for 300 feet; while coarse clover cut when nearly ripe, would take as much as 750 feet. Timothy and other grasses mixed, cut moderately green, so as to pack closely, and well pressed in the mow, will make a ton of 375 to 450 feet; but if coarser, and allowed to get ripe with the same amount of pressure, from 525 to 650 feet would be required.

REMEDY FOR INSECTS IN STORED GRAIN.

W. L. A., Flushing, L. I.—What is the insect on the inclosed samples of corn, and how can it be destroyed?

ANS.—It is the very common and widespread Silvanus surinamensis. This beetle is found all over the world and everywhere has the habit of feeding on stored grain, and other stored products. The best way to destroy it will be, when it occurs in numbers, to place the grain *en masse* in a tight bin, and place an open saucer of bisulphide of carbon on top of it. The bisulphide volatilizes readily and the vapor, being heavier than air, will sink down through the mass of grain and kill every insect. This remedy has been very satisfactorily tried for all sorts of insects injurious to stored grain, and is the most thorough one known.

Miscellaneous.

S. S. C., Norfolk, Neb.—1 can get livery stable manure for hauling the distance of one mile; can get bones for from nothing to one-quarter cent per pound. Which would be the cheaper for small fruit and market gardening. Would have to get a mill to grind the bones. What is hen manure worth per barrel under these circumstances? Would lime be a good addition to the compost heap?

ANS.—Use the stable manure by all means. Lime should never be used in a compost heap unless the latter contains an abundance of vegetable matter or it is covered with loam or muck to absorb the ammonia. Into the compost heap put plenty of the bones, first broken quite fine with an old ax or sledge. They will decay rapidly and be a valuable addition. Hen manure is worth about 30 cents per barrel when stable manure has to be hauled the above distance.

J. E. O., Port Jefferson, L. I., N. Y.—1. Will beet seeds germinate when two or three years old? 2. Which is the better tool in potato cultivation—a one-horse walking or a two-horse riding cultivator? 3. Which is preferable in a riding cultivator, four or six teeth?

ANS.—1. If well kept, yes, even when six years old. It should be kept in a cool, dry place. 2. Much depends upon the size of the field. The riding does its work rapidly; but it requires much room at the margins of the field for turning. Whichever is used it should not run deep. 3. We prefer the three teeth.

L. C., Aurora Spring, Mo.—In 1865 I purchased a truss in New York made of malleable iron with a spring to hold the pads in place: is there such a company now in New York or is there a better truss made?

ANS.—Trusses made in this way are barbarous. The elastic trusses have superseded them. The New York Elastic Truss Co., 744 Broadway, N. Y., make a truss worth a thousands of such as you describe.

E. W. R., Erie, State not given.—Is the Imperial Barley the same as the Manshury or if different; does it yield more?

ANS.—It is not at all like the Manshury; nor in our experience has it yielded nearly as well.

W. D., Wayne, Mich.—There are several "good onions." The Queen is a white onion of small size, but very early. For a main crop onion the Large Red Globe, Yellow Danvers and White Globe are as good as any. For a market red, the Red Wethersfield is about the best. The price is about one dollar a pound, except for the Queen, which is about three dollars, being somewhat new. The seed needed for an acre is about five pounds.

J. P. S., Sattersonville, Ia.—Most large seed dealers sell the Manshury Barley. If there is any doubt as to the genuineness of the seed, the real sort can be obtained from A. L. Jaques, Wright's Corners, N. Y.

G. I. L., West Plains, Mo.—The small Canada June field pea is usually sown for early and the Black-eyed Marrow-fat for late. The seed can be obtained of any large seed house.

J. M., Leavenworth, Kans.—Root-grafting of apple trees is certainly no new thing, and the trees are no stronger or more borer-proof than others.

E. B. T., Newport, Vt.—Both the Aspinwall and True's Potato Planters are recommended by users. We have personally never tried either.

R. E. Y., Macedonea, O.—A good hand corn-planter, which also sows fertilizers, is made by the Spangler M'f'g Co., York, Pa.

J. W. T., Topeka, Kans.—Scotch collie dogs can be had of W. Atlee Burpee & Co., Philadelphia, Pa.

DISCUSSION.

A. D. C., TICONDEROGA, N. Y.—The F. C. in a late RURAL, spoke as if it didn't believe in the existence of wolf-teeth in a young horse, or in the good effect of removing them. Now, my experience supports both points denied. The wolf-teeth are small tusk-shaped teeth, one on each side of the upper jaw immediately forward of the molars. They have two roots—one about three-eighths of an inch long, taken from a four-year-old mare last Spring, was the largest I have seen. I am opposed to the barbarity of roughly knocking them out; but I keep an old pair of forceps for that purpose, and whenever I observe a slight discharge from the eyes or a felon started, I examine the teeth, and extract the wolf-teeth if I find any, and after this has been done and hair oil has been applied to the eyes, a cure is effected in a short time. I have never known a single instance where this treatment hasn't given instant relief, and my experience is the same as that of many others in this neighborhood.

R. N.-Y.—So far from denying the existence of what are known as wolf-teeth in horses, we acknowledge that they are natural to all horses, the germs existing at birth, and the teeth generally making their appearance from the first to the fifth year and falling out naturally soon afterwards—generally before the eighth year. We do say, however, (and in this opinion we are supported by the veterinary profession) that they have very little influence on the condition of the eyes. The worst that can be said of these superfluous teeth is that they sometimes lacerate the tongue, and therefore there is no harm in removing them, provided this is done in a humane way. When the eye becomes inflammed from other causes, and these teeth are removed roughly, the gums are bruised, causing considerable local inflammation, which, acting as a counter-irritant, attracts the inflammation from the eye, just as a blister might have done if applied at some other place, and straightway the belief is confirmed that "wolf-teeth" were the cause of the trouble.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING SATURDAY, March 6, 1886.

W. H. L., thanks.—J. J. H.—J. H. L.—P. B. M'—J. M. D.—F. W. K. J. N. D.—A. F. H.—G. H. C.—A. H. R., thanks. Wheat rarely crosses, even though 40 kinds are raised in the same field.—E. C. P., thanks.—C. H. S.—F. W. W.—C. S. N.—N. L. K.—I. A. P.—T. F. B.—E. G. B.—G. A. R.—J. W. L.—G. C.—J. M., glad to receive your Everywhere notes.—A. B. C.—J. C.—W. A. P.—A. D. W.—A. N. T.—M. M. C.—S. H.—T. T. L., thanks.—E. B. S.—J. B. L.—M. D. E.—D. J. C.—S. B. H.—J. L.—G. A. S.—W. L.—W. E. W.—J. A. E.—F. S. P.—A. S.—A. S.—W. J. P.—W. G.—B. H.—C. J. C.—L. W. C.—W. H. R.—J. M. N., thanks.

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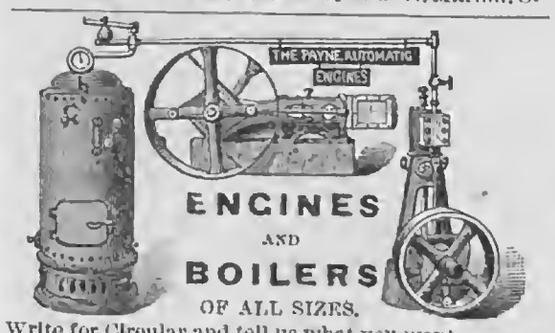

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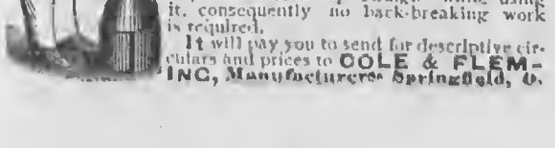
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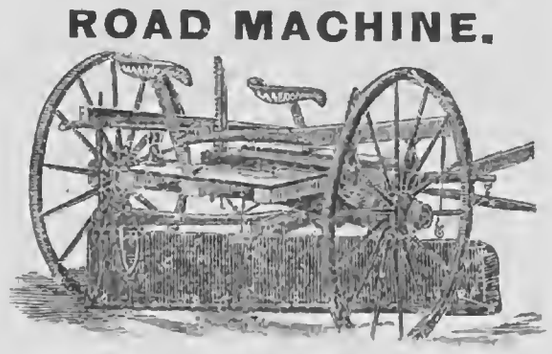
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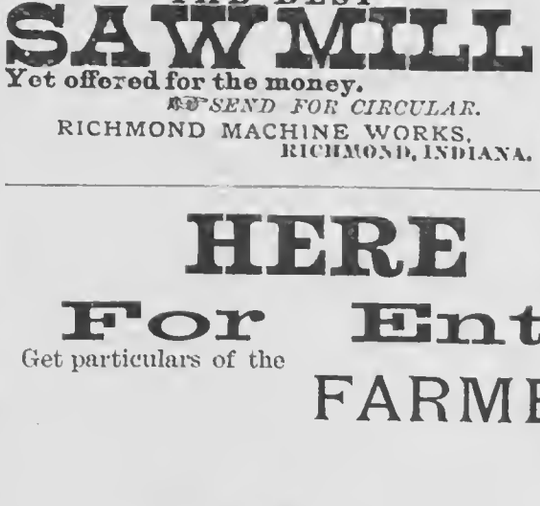
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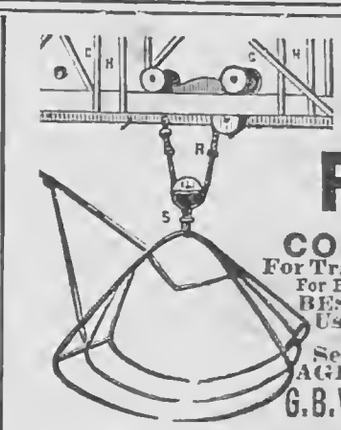
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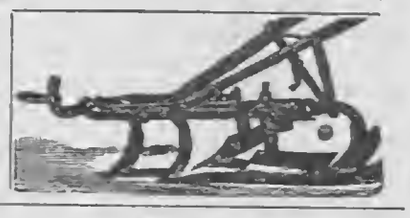

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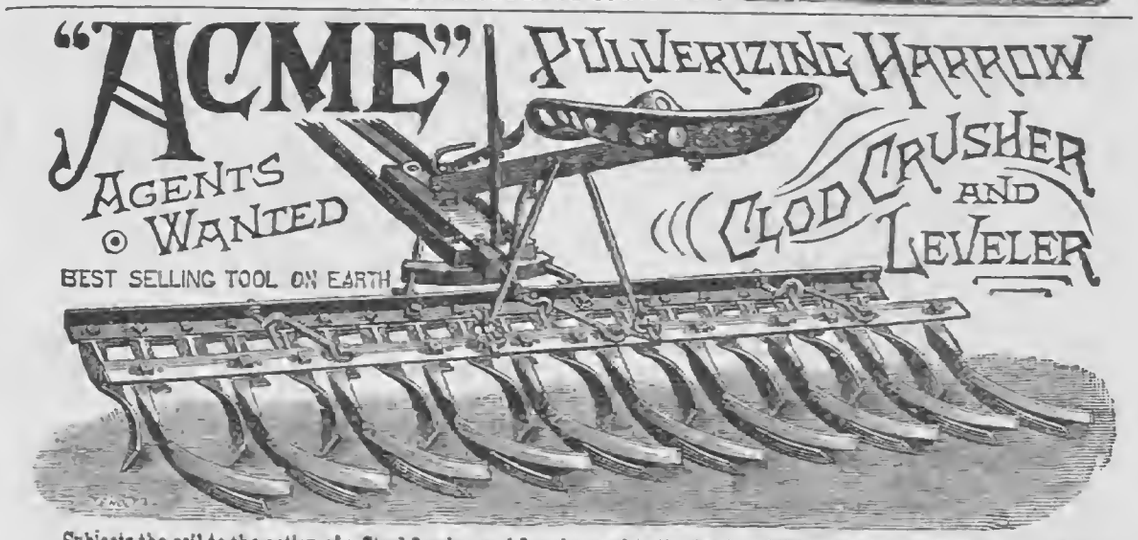
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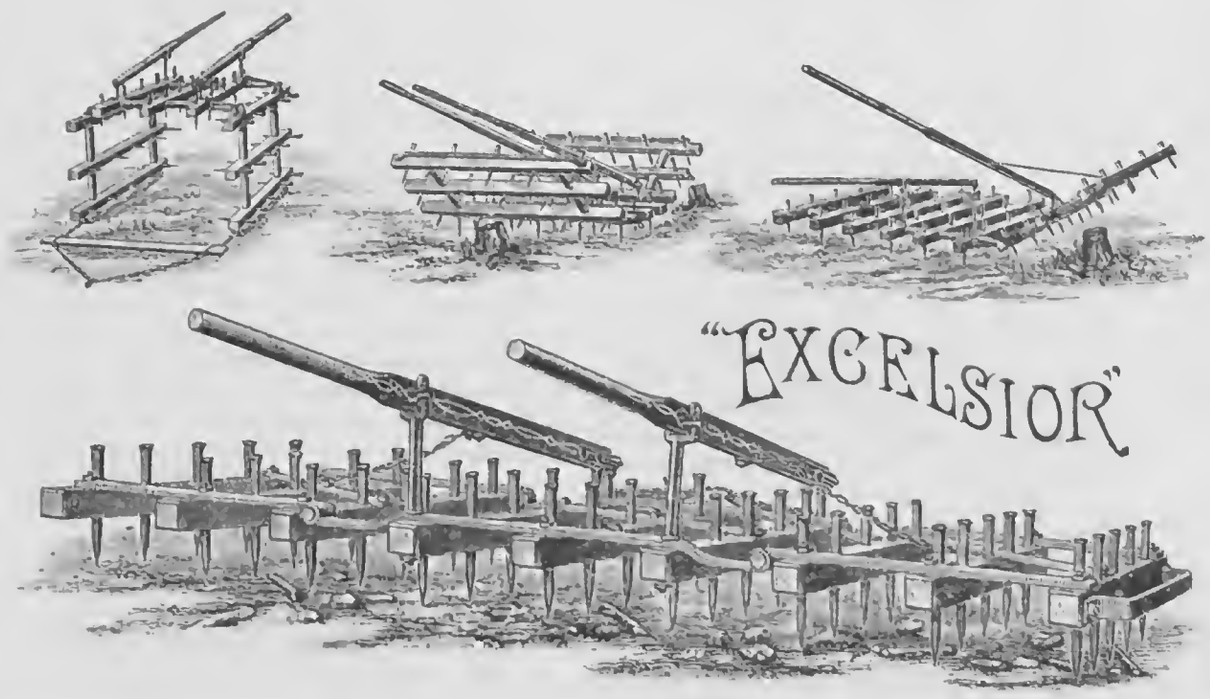

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A National Journal for Country and Suburban Homes.

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J. S. WOODWARD, Associate.

Address
THE RURAL NEW-YORKER,
No. 34 Park Row, New York.

SATURDAY, MARCH 13, 1886.

If the number on your address label is 1885, your subscription expires with this number; if 1886, next week; 1887, in two weeks, etc.

The next (second) Potato Special of the R. N.-Y. will be dated March 27th.

In reply to several requests that we give instructions about hot-beds and cold-frames, we would respectfully direct attention to the catalogues which we have been at pains to announce in these columns. Many of them give very full instructions, and it seems a waste of space that we should repeat them from year to year.

When we talk of the value of muck, what do we mean? Some muck may contain only one-half of one per cent. of ammonia; other sorts may contain as high as four per cent. There is muck and muck—one may be worthless, another of great value. We had better find out by analysis how much ammonia muck contains before we conclude to draw it a long distance.

A man in Michigan is selling lots of Prickly Comfrey to certain farmers. Do Rural readers need to be informed that though the plant is hardy; though it will yield heavily, and may be cut twice in good soil; though according to analyses it is nutritious——stock will not eat it unless starved? We have raised Comfrey for ten years and have yet to find an animal that cares for it.

The volume of the American Pomological Society, session of 1885, has been received. We never look at these invaluable works without a feeling that every American citizen should feel a sense of indebtedness to the good men who have made the Society what it is. We wish it might be in the hands of all our readers, and we shall endeavor to quote from it freely for their benefit.

Pres. T. T. Lyon writes us that he planted a couple of trees of the Japan Chestnut, one year from the bud, one of which died outright during the succeeding Summer, and the other made a moderate growth but died back to the stock during the second Summer, leaving him in doubt whether to charge the loss to injury in handling and transportation or to inability to withstand the Michigan Winter.

The power of the "boycott" is acknowledged. To "boycott" a thing is to let it entirely alone—to simply ignore it. The world would be much better off if farmers would apply this principle more judiciously. Poor tools, poor seeds, scrub stock and scrub methods of farming should be boycotted. In making up the list don't forget the representative who votes to help cover your bread with "bogus" butter.

The best way to secure a continuous supply of sweet corn until frost is, according to our experience, to plant early, medium and late kinds all at once—say in early May. Select, for instance, the Cory, Pee and Kay, Moore's Concord, Stowell's Evergreen and, finally, the Black Mexican and Egyptian. These will keep up the succession until mid-August. For a supply after this, we prefer to plant the Evergreen, Egyptian or Spanish about the 1st of June, rather than the earliest kinds later. After eating these late varieties, it is hard to return to the earliest, which are always of inferior quality.

We are opposed to the cheap packages of seeds which many seedsmen are now offering. These collections are advertised as $2.50 or $2.00 worth of seeds for $1.00, etc. So long as purchasers will buy such seeds, just so long they will offer inducements to seedsmen to sell an inferior article. A well-known seedsman said to the writer a few days ago that it was a matter of sincere regret to him and to all seedsmen who value their reputation, that there is a growing tendency to ensnare the purchaser by these "taking" offers. Seedsmen must live, and this cheap competition must be met. And the only way to meet it is by putting up seeds of inferior quality. There is no trusty seedsman who can afford to sell two dollars' worth of seeds for 50 cents.

It is hard to understand why the Liquidambar is not more of a favorite as an ornamental tree. It grows wild in most parts of our country, and though seeming to prefer swampy places, it thrives fully as well in dry, upland situations. It is a little difficult to transplant and should be severely cut back when removed. It assumes a pyramidal form of beautiful symmetry, and its star-like, deep green leaves colored more richly than those of any other tree in the Autumn. This feature should insure it a place upon the lawn even to the neglect of the best of the maples. Its corrugated bark giving the oddest appearance to the stems which are furrowed with it in the most irregular manner, is itself an interesting feature of the Liquidambar.

Let us suggest to our many lady readers who have raised the older kinds of geraniums for years and years, that they go over the lists in some of our catalogues that make such plants specialties, and select a dozen of what, by description, seem to be the newest and best of the pelargoniums (as they should be called) of the present day. The improvement in this flower, as beautiful for the garden as for the window or greenhouse, is really remarkable. A stock thus procured could be multiplied indefinitely for the benefit of one's poorer neighbors. Or—what would prove a fascinating employment—the flowers could be crossed in the house next Winter, and in this way crossbred seedlings could be raised. It is very easy to cross pelargoniums, because the anthers and pistils are rarely, if ever, mature at the same time.

Last Tuesday, the House Committee on Post Offices and Post Roads, which has before it a bill similar to that introduced by Senator Wilson, of Iowa, to increase the rate of postage upon fourth-class matter from one to two cents per ounce, voted unanimously to recommend the rejection of the bill, "as such an increase of postage would be manifestly in the interest of express companies, and in conflict with the interests of the people." "Level-headed" committee that! Even if the Senate should pass Wilson's "monopoly bill," it could not now pass the House, as that body seldom, if ever, passes a measure unanimously opposed by the committee in charge of such legislation. No harm in making "assurance doubly sure," however, by letting Congressmen know, through the mail, the opinions of their constituents on the matter.

What may be called the emigration season is rapidly drawing near. Thousands of young men have doubtless made up their minds to leave the old home and seek their fortunes in some newer country. Pride, poverty and love of adventure all tend to push them away from home and friends. Don't be in too much of a hurry to go, young man! The change you propose is a serious thing. Don't think all the good places will be taken up if you do not rush away at once. There are plenty of places left where good solid happiness can be obtained. The supply of such places is inexhaustible. We believe there is such a place right on the old farm that seems to you so poor and mean. See what you can do at home before you give it up. Some spots of this country are more productive than others, but, counting in health, markets, old associations and independence, there will be little difference in happiness to those who live upon them.

F. S. Phœnix, of Bloomington, Ill., writes us that he has two-year-old seedling Japan Chestnuts, also some older trees some of which were grown by budding upon the American Chestnut. The nuts planted grew readily. He finds that the trees do not prove hardy. "They kill back," he says, "annually, and five and seven-year-old trees are mere shrubs." He thinks, however, that the care bestowed on such trees by amateurs would insure bearing trees even in his climate. To his taste the nuts are quite as good as the American Chestnuts.

Is the climate of Bloomington, Ill., more severe than that of Painesville, Ohio, or Rochester, N. Y.? Mr. Phœnix adds that he was greatly disappointed to see the beautiful Prunus Pissardii—strong three-year trees—killed to the ground last (1885) Winter. He mentions this as it contradicts repeated assertions in the R. N.-Y. We are right sorry to hear it, and hope Mr. P.'s case is exceptional.

Although the estimates of the value of various fertilizers in the reports of the different Experiment Stations which analyze fertilizers sold in their respective States, are liable to be misleading; still there is no doubt whatever that such checks upon unscrupulous manufacturers are of no small benefit to the farming community. In the Cotton States the improvement in fertilizers due to this agency has long been acknowledged, and in the Nothern States where such Stations have been established, such as Massachusetts, Connecticut, New Jersey, Pennsylvania and Ohio, the results have been highly advantageous. Mr. Wallace Tappan has introduced in the New York Legislature a bill for the establishment of a similar Station in this State. It is based on the laws of Massachusetts, Connecticut, New Jersey and Pennsylvania, with such improvements as are suggested by experience in other States. Such a Station under the direction of an energetic, thoroughly competent director would save to the farmers of the Empire State, many times its cost every year, and the bill establishing it should be passed.

SPECIAL.

Those who, having applied for the Rural's present seed distribution prior to March 1, have not yet received it (Canada subscribers excepted), will kindly notify us by postal.

"BOYCOTTING' COTTON."

"Boycott Cotton" was the general sentiment at the Inter-State Agricultural Convention held the other day at Memphis, Tennessee. Last Saturday (Feb. 27), cotton in the New York market was 8¼ cents, a lower figure than at any time since 1852. This extreme depression is attributed chiefly to the manipulation of speculators. These have already fixed, so far as they can, the price for the next crop before the seed is in the ground or the plows have started. Cotton futures for December 1886 and January 1887 are now quoted in this market at from 8.90 cents to 8.75 cents. This means not more than 8¾ cents a pound in New York, and 8⅝ cents in the principal Southern shipping ports, and not over 7⅞ cents for the planter, who must pay freight, insurance and commission charges, which generally average from three-fourths of a cent to a cent per pound. A planter can not possibly make a bare living by selling cotton at this figure. Instead of getting out of debt to his commission merchant, he must sink deeper and deeper into his power, until, like so many other Southern plantations, his place passes, before long, into the possession of his creditor. The only remedy lies in diversified husbandry, and this the Convention earnestly urged upon the people of the "cotton belt." "Plant less cotton, and more grain and grasses. Raise hogs and hominy: let cotton be a surplus crop," is excellent advice. Instead of producing 6,500,000 bales of cotton, make only 4,500,000, and thus get long prices for the staple and be independent of speculating sharks who keep their victims in debt and misery. Every planter sees the wisdom of such a course, and wishes that his neighbors would follow it; but although it has been adopted to some extent of late years in many parts of the South, the movement has been slow and tentative. If the present great depression in cotton shall hasten and extend it, it will prove a "blessing in disguise." More economical methods in growing and handling cotton should also be employed. In all other lines of production the greatest economies are being introduced; why should cotton be an exception? An appeal was made by the convention for legislation against speculation in the staple; but although much has justly been said against buying and selling for future delivery, dealing in "futures" has certainly checked extreme fluctuations in the prices of cotton. The ups and downs now in the cotton market are trifling compared with those before the introduction of the telegraph and "futures."

BREVITIES.

A very expensive mode of riding—on a hobby.

Regarding the Rural's advice as to the Champion Quince, Mr. Kerr, of Maryland, will have a qualifying word to say in next week's R. N.-Y.

The Rural's Fertilizer Number is worth more than a year's subscription to any progressive farmer. J. D. MILLER.
Elmira, N. Y.

If the dairymen of the country ask the State and National Legislatures for nothing in particular, as Professor Morrow advises elsewhere in this issue, they are pretty sure to get it

Senator Wilson's bill raising the postage on fourth-class matter meets with an overwhelming opposition from all classes that sell or buy seeds or plants.

The idea of measuring the milk product of a cow in pounds and ounces instead of in quarts and gallons is good. When we can quote eggs by the pound we shall feel ourselves two steps in advance.

You promised yourself last Summer, when the fried pork began to taste so flat, that you would never let another Summer go without plenty of fruit. What is your promise worth? We are watching you to find out.

Senator Wilson thinks it may be advisable to make an exception in favor of seeds, plants, etc., in the bill which proposes to increase the postage on fourth-class matter. He solicits any suggestions from seedsmen and nurserymen.

The R. N.-Y., having tried about every other breed, proposes this Spring to make a start with Langshans. Our experience with the Plymouth Rock, and later with the Wyandotte, has certainly had its due effect in popularizing those fine breeds.

A good Canadian friend writes as follows about the present postal law of Canada, which places the rate of postage on fourth-class matter at four cents a pound: "It is a grand law for the people, and about the only grumbling we hear is from the *dear* express companies!"

A neighboring farmer has two wells, one close to the barnyard, the other close to the dwelling, 200 yards away. The latter is used by the family, except during long periods of dry weather, when the other is freely used. A number of cases of dysentery have occurred in the family.

The best way we have found to start celery seeds is to sow them in mellow, rich soil. Cover the drills with planks (hemlock), raising them above the soil an inch. These planks serve to retain the moisture so that watering is unnecessary. As soon as the seeds sprout, gradually remove the planks.

Bills prohibiting the sale or gift of cigarettes to boys under 18 years of age have again been brought before various State legislatures. It is surprising what strength is developed in favor of such measures; almost any man, though he be a confirmed smoker himself, would gladly have the "weed" kept away from his son.

Last year Congress tried to get on the soft side of editors by reducing the postage on newspapers to one cent a pound, besides carrying them free in the counties in which they are published. To carry newspapers for the publishers for one cent a pound and demand two cents an ounce for small parcels carried for the people—what an exhibition of consistency!

I enjoy the critical notes in the R. N.-Y. very much. By-the-way, the Rural is the best agricultural paper I get, all things considered. The one point that raises it in my favor is its independence in regard to new things. I detest a newspaper that will "slabber" for money. CHAS. W. GARFIELD.
Grand Rapid, Mich.

Why is it that the average yield of wheat on the long-used soil of the United Kingdom last year amounted to 31 bushels per acre; while the average yield on the comparatively new soil of this country was only 10¼ bushels? If prices, as seems likely, are to be lower here in future, won't it be necessary to force the soil to yield larger crops, or to abandon wheat raising altogether, as a source of loss instead of profit?

New England farmers are talking up the creamery system of dairying. We think they will favor it. Good creamery butter is uniform in quality and can be sold to best advantage. An organization of farmers will be far more powerful and conduct business better than a large number of single butter-makers. "Bogus" butter has fastened itself upon our markets. It will do no good to deny it. To fight it successfully, the butter trade must be revolutionized. The great mass of intelligent people who provide the butter market will never come to look upon oleomargarine with favor. They will simply change their methods of buying and go where care and honesty can be assured them. A good creamery with a retail city branch, will be the ideal butter establishment of the future. The new system can be made a great success in New England. With respect to distance to be traveled, similarity of pasturage and feed and good roads, that section will have greatly the advantage of the West, where the new system has been remarkably successful.

SAMPLES.

Our advertisement in a late Rural New-Yorker has paid us the best of any advertisement we ever sent out. CHAS. A. GREEN.
Clifton, N. Y.

We are receiving a large number of replies to our advertisement in the Rural—many more than we have ever received before. We are selling a large number of planters, some days the orders amount to over 100. We received an order from one man in Kentucky, who bought one on the strength of a remark he saw in the Rural New-Yorker. He was very much pleased with the implement, and thought the Rural the best paper in the country. About right.
Grand Isle, Vt. S. M. MACOMBER & CO.

Indust'l Societies.

CORNELL FARMERS' INSTITUTE.

(RURAL SPECIAL REPORT.)

Attendance good; commercial fertilizers; potash in potash salts; South Carolina rock; salt; special fertilizers; improvement in farming imperative; manure from rich feeding stuffs; "close" feeding of stock.

In holding this Institute Cornell University has taken a step worthy of high commendation. The meeting was called to order at 11 A.M., and Prof. Roberts was elected President and Maj. H. E. Alvord, of Houghton Farm, Secretary. The balance of the forenoon was spent in registering names and in making the members acquainted with each other. President Adams expressed his great pleasure in meeting the members and requested them to make themselves at home.

In the afternoon, a paper from Mr. A. Campbell, of Owego, was read; subject, Commercial Fertilizers. Continual cropping and cattle feeding have removed from the soil so much of the mineral matter used in successful plant growth that crops are no longer profitable, and in many cases the forage plants are so deficient in mineral elements that the animals fed thereon fail to thrive, while in some cases they even die. He has had the most satisfactory results from the use of kainit; a field almost barren, by the use of 400 pounds per acre each year had kept two sheep per acre, and the land had increased so much in fertility that last year it produced 30 bushels of wheat per acre. There is no such thing as exhausting land if annually manured with kainit, or other potash salts and phosphate of lime, and animals pastured on land so manured are not liable to abortion.

Prof. Caldwell said potash in kainit costs about six cents per pound; in sulphate about seven cents, and in muriate about 4¼ cents. He would not advise the use of sulphate(?) on tobacco or sugar beets. Muriate(?) he thought the best form of potash for general application.

Mr. J. S. Woodward said that near the large places where potash salts are sold by wholesale, the difference in the percentage of potash does not make so much difference to the purchaser; but where the fertilizers are to be transported long distances by rail, the high-grade salts are always the most desirable form in which to buy potash. In kainit we get only 250 pounds per ton; in sulphate about 500 pounds, while in muriate we get 1,000 pounds or more, so we should always buy the high-grade fertilizers of all kinds.

Maj. Alvord once thought kainit the most desirable form of potash salts; he now thinks differently. It contains too large a proportion of common salt and magnesia. The only place he would now use kainit is in the stables to be scattered as an absorbent.

Prof. Caldwell does not believe the action of the soil sufficient to dissolve the phosphoric acid in South Carolina rock, no matter how finely it may be ground, but we really need more careful experiments to determine its solubility. When dissolved, he thought its phosphoric acid just as valuable as that from any other source. Maj. Alvord had seen no good effects from the use of S. C. rock, even when in the form of "floats."

Prof. Roberts had applied to 100 rods of land, four loads of barn manure worth $4; to another plot of equal size $4 worth of chemical fertilizers; with one crop the fertilizer was ahead. Timothy hay the past Summer was of best color and gave the best yield with barn manure.

F. D. Curtis thought much of the effects of all manures depends upon the season; if very dry, but little good results, and barn manures sometimes are an actual damage to the crop by absorbing and retaining the moisture.

Mr. Allis had observed some very marked results from the use of salt on crops; it nearly doubled a bean crop.

Prof. Caldwell thought the result due to the solvent effect of the salt and not to any manurial value in it; it has a tendency to make soils more solid and retentive of moisture.

In an essay on commercial fertilizers, Prof. Caldwell said there are many sources from which we could obtain the elements most extensively taken from the soil by crops; and each year these are becoming more plentiful and cheaper. Where nitrogen once cost 28 or 30 cents per pound, it can now be had at 16 or 18 cents. We need more experimenting, more science on the farm. There is room for very many more agricultural colleges and more experiment stations. The great State of New York should at least have as many of the latter as some of the smaller States of Europe, which with a territory not much larger than some of our counties, have four or five of these institutions. He does not believe in the principle of special fertilizers. Different dealers offer different compounds for the same crop, and the same compound for different soils. Not all soils are deficient in the same elements, and more depends on the soil than on the crop to be grown.

Maj. Alvord said we need a little more definite knowledge of what is meant by commercial fertilizers. There is too much guess-work as to what they contain and what we get when purchasing them. He favors the purchase of phosphate of lime, potash and nitrogen in separate forms, and then experimenting to see which our soils need, and then the manufacture of our own compounds.

J. S. Woodward, in a talk on "Brains and Manure on the Farm," said the soils of New York were once rich; that they are now poor all concede. That we cannot subsist raising 10 to 12 bushels of wheat per acre, is too evident. We must either do better or sell out to those who can, and go West. The difference between the magnificent crops of our fathers and the meager crops grown by us is due solely to the exhaustion of the soil. There is only one means of restoring its fertility—"manure." By manure he meant any thing contributing to the growth of plants. He is an advocate of commercial fertilizers, and fully believes that by judicious selection and use, they can be made to pay. But when a ton is purchased, or when a load of barn manure is bought, the cost must be obtained before we can count any profit from their use. And right here is where the application of brains is needed on the farm. By their use it is possible to arrest the rich feeding stuffs that are being sent through the State from the West, and to combine them with the half-fattened animals in such a way as to make profit and give us all the rich manure we care to use, and such manure is a "complete fertilizer." When we purchase a ton of cotton-seed meal and feed it to stock, we should remember that, if properly saved and returned to the soil, the nitrogen, the phosphoric acid and the potash contained in the manure therefrom, would be worth, at the prices given, at least $30 per ton. A ton of linseed meal would give manure worth $17.50; a ton of bran, $13; a ton of clover hay, over $9. It must be a poor feeder indeed who cannot, if he adds one-half of these values to the value of the animals sold, show a profit in feeding; while a very good feeder, who makes great use of his "brains" in the operations, can show a nice profit, besides having all the manure at no cost. To accomplish this very desirable result, we must keep the stock in warm barns and under the most favorable conditions. He is in favor of close feeding and no exercise. J. S. W.

(To be continued.)

Miscellaneous.

CATALOGUES, ETC., RECEIVED.

The Vermont Farm Machine Co., Bellows Falls, Vermont.—Catalogues illustrating and describing the various implements manufactured by this reliable firm. The celebrated Cooley Creamers, the Davis Swing Churn, the Eureka Butter Worker and other excellent dairy implements are fully shown. Every wide-awake dairyman should examine this catalogue. In the fight against "bogus" butter he will need to make use of the facts contained therein. He who seeks to make "gilt-edged" butter must acquaint himself with every detail of the business. It has been proved from carefully prepared figures that in 1884 creamery butter sold both in Boston and New York, for five cents per pound more than the best dairy butter. The prices were averaged for each month in the year. The Pneumatic Fruit Drier and other implements for paring, coring and slicing fruits have received the highest commendations from practical fruit growers. The information contained in this pamphlet will be of interest to any man who owns even a single fruit tree.

The Spangler Manufacturing Company, York, Pa.—The first catalogue issued by this house is given up to a concise description of the corn planter, lime spreader, grain drill and other agricultural implements which they manufacture. A well arranged and valuable pamphlet. The Spangler Corn Planter is furnished with a fertilizer distributor which is said to work admirably. Lack of space forbids our giving an extended description of this implement. It must be seen to be appreciated. It is the fashion in these days to devote a considerable portion of the various advertising pamphlets to what may be called the literature of the subject advertised. This pamphlet proves no exception to this rule. Among other excellent articles we notice one on "Lime in Agriculture," taken from the Fertilizer Number of the Rural. Send for the pamphlet. It is well worth reading.

W. W. Rawson & Co., 34 South Market Street, Boston, Mass.—Mr. Rawson is said to be the largest producer of vegetables in New England, owning 40 acres, leasing 60, and having 10 acres under glass. The catalogue is one of the costliest and most comprehensive we have seen and has been arranged by a master hand and an experienced head. It is filled with illustrations worthy of the name. Many novelties are offered: the Bird Cantaloupe, Rawson's Clipper, claimed to be earlier than any other pea; Cory Corn, etc. The catalogue offers Bliss's Abundance and Everbearing Peas, the Rural New-Yorker Thoroughbred Flint—by far the best corn for ensilage purposes; Manshury Barley, about which we have had a number of inquiries. The flower novelties are many and attractive. The catalogue should be in the hands of all our readers.

Report of the National Swine Breeders' Association, from the Secretary, Phil. M. Springer of Springfield, Ill.—One of the most valuable pamphlets on hogs and hog products that we have seen. Every farmer in America ought to read the papers on Sanitary Reform, Swine Diseases, and Foreign Restrictions. The papers by Phil. M. Springer and N. L. Bonham on The Berkshire Hog—His Mission in America, and The Evolution of the Poland-China Hog, are generally looked upon as standard histories. In the discussions which followed the reading of these papers we find some of the most practical suggestions regarding the feeding and handling of hogs.

Sardy's Concentrated Plant Food.—A circular from A. L. Sardy, 10 Burling Slip, New York, containing a short lecture on Simple Chemistry for Practical Farmers, and many other facts of interest to those who use commercial fertilizers. Some excellent letters are printed from well-known and reliable farmers as to the value of this plant food The price of this fertilizer is $28.00 per ton. and the freight is paid to your nearest railroad station.

The Thermostatic Incubator.—Circular from E. S. Renwick, 19 Park Place, New York. This circular of 20 pages, discusses the scientific points involved in artificial incubation and presents numberless letters from those who have used the Thermostatic Incubator with success. We saw it in operation at the late poultry show. It appeared to give good satisfaction.

State Almanacs from Wells, Richardson & Co., Burlington, Vt.—These are arranged for each State in the Union, giving agricultural statistics and historical facts, as well as much other interesting information. One is sent to all who apply. If it is sent wherever the well-known butter color goes, the country will be well covered.

New Victor Feed Cutter, Champion Vegetable Cutter and Champion Double Spring-tooth Riding Harrow.—Circular from John R. Whittemore, Chicopee Falls, Mass., describing the above tools. These implements are cheap and durable. The use of feed and vegetable cutters is on the increase.

Catalogue of Holstein Cattle at Woodlawn Stock Farm, from G. W. Thompson & Son, Stelton, N. J.—It is not expected that members of this herd will become phenomenal or "bonanza" stock; but that they will prove deep milkers and good serviceable cattle seems evident.

Lewis Roesch, Fredonia, N. Y.—Descriptive catalogue of grape-vines, small fruits, etc. Colored plates of the Niagara and Empire State Grapes. Hints as to success in grape and small fruit growing. The Rural wants grape-vines and small fruits about the homes of all its subscribers. Free.

Poudrette, or Night Soil.—Circular from G. S. Pickering, 135 Fifth St., Troy, N. Y., in which night soil is described as "the cheapest and best fertilizer in the world." To learn the arguments and figures advanced in support of this theory, send for the circular.

George S. Josselyn, Fredonia, N. Y.—Descriptive list of American grape-vines, small fruit plants, etc. Mr. J. is the introducer of Fay's Prolific Currant—probably the best variety in cultivation. Free.

Buchan's "Silver Fleece Dip."—Pamphlet from the Carbolic Soap Co., 83 John St., New York, giving facts as to the symptoms, history and treatment of scab in sheep. Well printed and illustrated.

Burning Brands and Steel Stamps.—Those desiring any information in regard to any articles in this line should send to J. E. Mathewson, 274 Main St., Springfield, Mass., for circular.

E. B. Underhill, Poughkeepsie, N. Y. Berry-Leaf and Price-list.—A circular of small fruits, with a beautiful colored picture of the Empire State Grape.

Ellis Bros., Keene, N. H.—Pelargoniums, carnations, roses, etc; flower and vegetable seeds; eggs of Wyandotte, Leghorn and Langshan fowls. Free.

Stock and Poultry.

N. T. LATTIN,
Originator and Breeder of
BLACK AND MOTTLED JAVA FOWLS,
GAINES, ORLEANS CO., N. Y.
Fowls, $5.00 each. Eggs, $3.00 per 15; $5.00 per 30.

Wyandottes & Ply. Rocks.
Eggs from selected mature birds only. Circulars free.
T. WILTON HILL, Jamesburg, N. J.

POULTRY-CHOLERA & GAPES ALWAYS CURED!!!
FIVE YEARS TRIAL—NO FAILURES!
Haven's Climax Condition Powder.
"It has never failed to Cure Poultry-Cholera and Gapes."—Augustus Gunther, Harlingen, N. J.
"I cannot make turkey-raising profitable without it." Lincoln B. Reed, Princeton Junction, N. J.
"I know it will cure Gapes."—Wesley Stillwell, Freehold, N. J.
"These men who testify are of the best standing." W. S. Strong, Mayor of New Brunswick, N. J.
14 Ounce Packages, 25c. of Dealers. By mail, 40c.
Pamphlets Free by Mail.
WM. RUST & SONS,
P. O. Box 1201, New Brunswick, N. J
Ask your Dealer for it.

BLOOD WILL TELL.
Have bred fine Poultry for fifteen years and am selling a superior stock of Poultry and Eggs of the following varieties:
Plymouth Rocks, American Dominiques, Wyandottes, Single Comb White and Brown Leghorns, Silver Spangled Hamburgs, and Pekin Ducks. Am breeding from high-scoring birds that have won the highest honors in the show room. Price of Eggs: Wyandotte, $2.50 for 13; $6.00 for 40. All other varieties $2.00 for 13; $1.50 each for two or more settings. Eggs packed in new baskets to go safely any distance. Send for circular. Address
JONES WILCOX.
P. O. Box 10. East Chatham, N. Y.

At the Great N. Y. Poultry Show,
THE SILVER CUP,
value $50.00, offered by d & Barton for the largest percentage of chickens hatched was awarded to
THE STANDARD INCUBATOR.
Manufactured by L. N. CLARK & SON, Dealers in all the leading Incubators, Poultry Supplies, etc.
38 DEY STREET, NEW YORK.
Mention this paper.

SHELLBONE for POULTRY.
A mixture of Pure Bone and Ground Oyster Shells. All poultry need it. 25 Pounds, $1.00; 50 Pounds, $1.50, by freight. Samples, 05c. mail.
T. H. BOCK, Crisfield, Maryland.

Franklin Poultry Yards.
ALL EGGS GUARANTEED.
Partridge Cochins, Plymouth Rocks, Wyandottes, and S. S. Hamburgs. Per Setting, $3: Two Settings, $5.
Light Brahmas, Langshans, Brown Leghorns, and Pekin Ducks. Per Setting, $2.
Orders for Stock and Eggs may be sent to 38 Dey St., New York City, or direct to yards.
CLARK & BROWN, Proprietors.
Mention this paper.] Franklin, Essex Co., N. Y.

25 YEARS IN THE POULTRY YARD.
27th Edition. 108 Pages, explains the business. Symptoms and remedies for all diseases. Written by a farmer for farmers. 25cts. in stamps, or one ct. a year for my experience. A 50 page Ill. Cir. free.
A. M. LANG, Cove Dale, Ky.

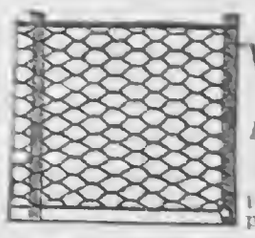
F. W. GAYLOR, Nassau, N. Y.
GAME BANTAMS
OF THE MOST FASHIONABLE STRAINS.

Excelsior, P. Rock, L. Brahmas, & Wyandottes.
A SPECIALTY OF FOWLS FOR FARMERS.
We exhibited a pen of Five Plymouth Rocks, averaging ten pounds each, at N. Y. Fanciers' Club Show, where we won First Prize on P. Rock Breeding Pen. Birds for sale at all times. Eggs, $5 for 13.
SCUDDER & TOWNSEND,
Glen Head, N. Y.

EGGS From Prize Wyandottes, P. Rock, Langshans and Lt. Brahmas, at $2 and $3 per 13. Few Fowls for sale. W. R. TEETER, Pittston, Pa.

HALSTED'S PERFECTED CENTENNIAL

Incubators & Brooders
The *leading machines* throughout the *world*. Positively Automatic. Send 2-cent stamp for illustrated circulars to *Centennial M'f'g. Co.*, Bx. 250, Rye, N.Y.
Our 50 egg machine, only $20, is giving unqualified satisfaction.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Wire Netting Co.
MANUFACTURER OF
POULTRY NETTING,
HARTFORD, CT.
Manufacture the best and sell the cheapest. Send stamp for prices. Mention this paper.

CAN'T BE BEAT!
THE "STANDARD"
WIRE NETTING
POULTRY FENCE.
Only One Cent per Square Foot, for 2-inch Mesh, No. 19 Wire.
IN BALES OF 150 LINEAL FEET.
Hatchers, Brooders, Poultry Houses, etc. Supplies of all kinds for the Poultry Yard, Dog Kennel, and Garden. Write for Circular.
Brockner & Evans,
(Formerly 422 West St.) 28 Vesey Street, N. Y.

For Women.

CONDUCTED BY MISS RAY CLARK.

THE EDITOR'S GIRL.

Spoken at the banquet of the Delta Tau Delta Fraternity.

HERBERT W. COLLINGWOOD.

You know the old fellow who, long ago, said,
After painfully thinking and rubbing his head,
That with one simple lever he'd make the world jump
From its place—into space—with a terrible thump.
If he had but a log and a good place to stand,
He could move the great world by one touch of his hand.
The old fellow's lever was easily found,
But the log and the place to stand never came round;
And the people laughed loud at the dreaming old man,
They called him a lunatic - sneered at his plan.
Yet we - foolish quill-drivers—know he was right;
The world *can* be swayed from the dark to the light.
The Press is *our* lever, far down in the heart
Of the people it reaches and holds for its part.
The Press is the lever, yet where does it rest?
The noble old Roman or Greek at his best
Was forced to give up on his log long ago;
Yet we have discovered it—listen! I'll show
The lever swings on as the busy years whirl,
And it rests in the hands—of the Editor's Girl!

The Editor's Girl? What, that small party there
With a square inch of forehead down under her hair?
With a fist like a snowball—a mouth like a rose,
With a smile that would thaw out your heart though it froze?
Admit it—be honest, my brothers, to-day—
We *are* brothers—I'll not give your secret away.
Own it up, has the little girl not made your life
Far better and purer and held you from strife?
Don't you know how you stood—may be years ago,
How you wanted to stay and yet wanted to go?
While the little girl looked up at you with a smile
And a queer sort of look in her eyes all the while:
Till you found that you *couldn't* stay longer aloof,
And you reached for her mouth—and, in fact, you "took proof?"
Now honestly—didn't you after that night,
Think of her every time when you sat down to write
Your wild editorials?—how they did shine
Touched up by friend Cupid, that fellow divine.
She would smile up at you from the bottle of ink,
While you sat there patiently trying to think.
You knew that your paper would always be read
By at least one subscriber whose dear little head
Would treasure the good and forget all the ill,
And think you a wonderful personage still.
And under your coat there, you carried a charm
That would make Trouble shake in its boots in alarm.
I know what it was—it was only a curl
From the head of the Editor's dear little Girl.

You smile at me now, and you say that these joys
Are all very well for a great crowd of boys;
But that when a man's beard and his head have turned gray,
The romance and poetry all fly away.
Now, if it be true, that the heart will grow cold,
Let us solemnly swear that we'll never grow old.
Say, tell me, you bald-headed men over there—
You studious fellows with more brain than hair—
You men who stand looking down through the dim years,
All filled up with pleasures and trials and tears—
Does the little girl really grow *old* with each year?
Is she ever less fair, is she ever less dear
Than she was when she looked in your face long ago
With the look in her eyes that sent fire through you so?
When she spoke the three words that have made up your life,
That have kept you from sorrow and held you through strife?
Would you not give as much—come, be honest to-night—
For one curl from her head though it be streaked with white?
Do her cheeks really fade as the busy years whirl?
Is she *ever* aught else but the Editor's Girl?

Think over your life; all the joys you have had;
All the beautiful memories tender and sad,
That come as the starlight breaks through the dark pine,
That twine round your heart as the soft tendrils twine.
Ah—the lip may well tremble—the eye may well fill
With tears—not unmanly is that tender thrill,
As you think of the anguish that wrung through her life
When the little child dropped from the world's busy strife.
Ah, the brave little woman—her lips wore a smile
Though you knew that her poor heart was breaking the while.
Ah, how small will *our* portion of fame be, my friends,
When the mighty bookkeeper shall foot up both ends
Of the ledger; our portion will be indeed small;
Yet she—little woman—would give us her all.

Do your troubles not bring you still closer together,
No matter how gloomy, how stormy life's weather?
Does she not still to you her best influence give?
Do you not know her better each day that you live?
Does she lead you in truth such a wonderful dance;
And *is* it all poetry, hosh and romance?
You've been over the road—*you* know what you're about;
We simple, young fellows would gladly find out.
For we have a notion—no doubt its all wrong;
No doubt down in practice its not worth a song—
That a man may mount high to the temple of Fame—
The honor, the love of the world he may claim.
Yet back of it all, unobserved and unknown,
A woman is silently building his throne.
She is patiently, lovingly working the while
With a woman's unreasoning love and a smile,
And as long as the years dance their magical whirl,
We will praise her for ever—The Editor's Girl.

THEN AND NOW.

In nothing have our ways changed more in 40 years than in our ways of traveling. Now when we wish to make a journey of a few hundred miles, we consult the railway time-table, look up our most direct route, and at the appointed time make our appearance at the depot, grumble if the train is five minutes behind time, hurry on board, and with a scream and a jerk off we go at the rate of 30 or 40 miles an hour.

Not so the staid old farmer two score years ago prepared to make a filial visit to his old father and mother, who lived a couple of hundred miles east of himself, among the Highlands of the Hudson. Days were given to the preparation of victuals for the use of his party on their trip which was to be made by private conveyance—a two-seated spring wagon, which he surveys with becoming pride in its neat and stylish appearance.

Early in the morning of the day appointed for the journey, a remarkably safe team was brought to the door, and the good man and his wife take the front seat, while two children too wild to be left at home, triumphantly clamber into the back seat, while the elder sister takes a seat between them to maintain something like order, a rather difficult operation where a boy of six and a lively girl of ten are concerned. Looks of lively pleasure are cast by them at the box containing the biscuit, pies, doughnuts and apples, as well as the other good things, waiting for their hungry lunch hour, and altogether the world seems to them just at that time to be overfull of enjoyment.

A last caution is given to those to be left in charge of the domestic affairs at home, and the party set out on what is to be to them a memorable journey.

This trip holds for every one of the party more enjoyment than many now in this faster age would gain from a trip to the Old World. On they go day after day, up hill and down, across the sandy pine plains and through toll gates built on the paved turn-pike; between long rows of Lombardy poplars, stopping at wayside inns, patronized by very many similar traveling parties, until the noble Hudson is reached, and to the young people what seemed like a wonderful invention, were ferried in a boat across the river, without getting out of their own wagon. They then pursued their journey over the more mountainous region beyond, often walking up hills which it seemed unsafe to ride up, without falling out behind, until at last they arrived at sunset one evening at the door of the grandparents, where such a welcome awaited them as only such relatives can give to the long absent loved ones. Then what joyful days of visiting uncles, aunts and cousins of the children; brothers, sisters and old acquaintances of the parents; a visit to the old farm where he had been brought up by the father who thought he did not remember that the rocks were so very large, and so near together as they seemed now; what unlimited spoiling of the grandchildren came in as a matter of course, before the time arrived for them to start for home once more by a more circuitous route, to visit by the way other relatives seldom seen; and what a long, delightful trip it seemed to all, and when home is reached once more, the cares of life are resumed, and seem to press less heavily than before; and to those children ever after that pleasant journey to their grandparents, seemed like a dream of paradise.

SOLITUDE SWEETENED.

CLOVER LEAF AND OPENWORK LACE.

Cast on 33 stitches and knit across plain.

1st row. Three plain, over twice and seam two together, three plain, thread over twice and narrow, four plain, thread over twice and seam two together, three plain, thread over twice, narrow, six plain, thread over, narrow, over, two stitches plain, thread over twice, seam two together.

2d row. Thread over the needle twice and seam two together, 13 stitches plain, seam one, three plain, over twice, seam two together, six plain, seam the loop stitch, three plain, over twice, seam two together, three plain.

3d row. Three plain, over twice and seam two together, four plain, narrow, four plain, over twice, seam two together, four plain, narrow, seven plain, over, narrow, over, two plain, thread over twice, seam two together, drop the loop at the end of the needle.

4th row. Thread over twice, seam two together, 17 plain, over twice, seam two together, nine plain, over twice, seam two together, three plain.

5th row. Three plain, over twice, seam two together, three plain, over twice, narrow, over twice, narrow, two plain, over twice, seam two together, three plain, over twice, narrow, over twice, narrow, six plain, over, narrow, over two plain, over twice seam two together.

6th row. Thread over needle twice, seam two together, 13 plain, seam one, two plain, seam one, three plain, over twice, seam two together, four plain, seam one, two plain, seam one, three plain, over twice, seam two together, three plain.

7th row. Three plain, over twice, seam two together, four plain, narrow, one plain, narrow, two plain, over twice, seam two together, four plain, narrow, one plain, narrow, seven plain, over, narrow, over, two plain, over twice, seam two together, drop the loop.

8th row. Thread over twice, seam two together, 19 plain, thread over twice, seam two together, nine plain, thread over twice, seam two together, three plain.

9th row. Three plain, thread over twice, seam two together, nine plain, thread over twice, seam two together, three plain (thread over twice narrow, three times), six plain, thread over, narrow, over, two plain, thread over twice, seam two together, drop the loop.

10th row. Thread over twice, seam two together, 13 plain, seam one, two plain, seam one, two plain, seam one, three plain, thread over twice, seam two together, nine plain, thread over twice, seam two together, three plain.

11th row. Three plain, thread over twice, seam two together, nine plain, thread over twice, seam two together, four plain, narrow (one plain narrow, twice), six plain, slip five stitches over one stitch, thread over twice, seam two together, drop the loop.

12th row. Thread over twice, seam two together, 15 plain, thread over twice, seam two together, nine plain, thread over twice, seam two together, three plain. E. M. N.

PERSONAL ADORNMENT vs. UNTIDINESS.

All mechanics, either builders of syntax or constructors of edifices, know that we must first lay a firm foundation. Let us come to the point and form the foundation for this topic—order and cleanliness in its strictest, strongest terms. We must first learn to be clean and neat in all things. Then comes Heaven's first law, which you all know is order. I wonder if every mother feels the great importance of teaching her child to be orderly. It would not only save her many steps, but she should think of the future, when her child had arrived at womanhood. What kind of a housekeeper will she make? Some children are born with order stamped in their nature; others, alas! with disorder. I must confess I was one of the latter. For a few years I was a source of great trial to my mother, who is extremely particular and orderly. It was more forgetfulness on my part, but I was very apt to leave my books, after studying, on the table instead of putting them in my book-bag. Not only this, but a hundred other things, which kept the room in constant disorder. When my mother remonstrated with me my only answer was: "O, mamma, I'm so sorry, but I forgot." Such terrifying spectacles was held before me of girls who had grown to be women, and were slovenly and untidy, that it frightened me out of my forgetful, heedless ways and compelled me to remember. My mother would not allow any one of the household to put things in their places after I had disturbed them, but would have me replace them myself. For a time I was continually being called here and there to straighten whatever I had disarranged, and as you may suppose, picking up after oneself was not a very agreeable task, and soon became a weary one.

I gradually improved and eventually became tidy and orderly, thanks to my mother's careful training of a habit which would have caused me a world of trouble throughout my life. Any lady who is a neat tidy housekeeper cannot be neglectful of her own personal appearance. When we see a woman about her work with her hair uncombed and having on a soiled dress, "it is a marked evidence of a slack housekeeper." But what is our opinion, if her hair is brushed, and her dress, though old and worn, is clean and neatly mended? How many young ladies with pretty faces delight in making a trim, showy appearance on the street to please the public eye, who, when at home, are directly opposite? Is it not of more consequence to look well before the home-circle of father and brothers, or husband and little ones? Does it not endear the husband to his home to be met at the door after his day's toil by a wife dressed in a pretty, calico dress, and clean white apron, having a smile and kind word of welcome?

I have heard of persons washing dishes on the table cloth, and with an embroidered white apron on, and of its being as clean and white afterwards as before; the table-cloth not having suffered either. We saw once, a lady of French birth and parentage, doing the week's washing for herself and husband, with linen cuffs on. But of course these are extreme cases, and there is a happy medium within the reach of every housekeeper, and while such cases are on record, as a lazy, slovenly woman blacking a stove while having on a satin dress, and going to evening prayer meeting wearing the same dress; and in direct opposition to this, the two just mentioned, there are many which could be related, of beautiful, orderly, quiet, homes, where love and obedience control, and where each strives to out-do the other in kind acts and words, and where the mother is always suitably attired, whether for morning, afternoon or evening, and where one is conscious of no great amount of labor required to produce this. May such homes and such mothers be multiplied a thousand fold throughout our land! W. N.

Domestic Economy

CONDUCTED BY EMILY MAPLE.

BREAKFAST PLATES WITH SOMETHING ON THEM!

A DELIGHTFUL REPAST IN WHICH DAINTY RELISHES FIGURE.

"And then to breakfast with
What appetite you have."

Breakfast parties are very fashionable, being less informal and expensive than dinner parties, and generally just as satisfactory to guests. Macaulay said, "Dinner parties are mere formalities: you ask a man to breakfast because you want to see *him*." In England they are greatly in favor among the *literati*.

The following modest breakfast *menu* has been prepared for the Rural readers by special request.

Broiled Salmon.
Kidney Toast. Potato Croquettes.
Tomato Omelet.
Rice Waffles.
Fried Bananas.

Have one or more half-inch slices cut from the thick part of the fish; wipe dry; dredge lightly with flour, and broil over a clear fire. When done, put little lumps of fresh butter over them, and serve very hot.

If a sauce is desired (and it is always a good addition), there can be nothing better than that simplest of sauces, Maitre d'Hotel butter; mix a spoonful of butter with a teaspoonful of lemon-juice, a little chopped parsley, and pepper and salt: spread this over any broiled fish, and set in a hot oven for a moment. A little drawn butter with the addition of a few capers, is also a nice fish sauce.

Kidney toast is a very delightful breakfast dish. Chop very fine four veal kidneys with half a pound of calf's liver; season with salt and pepper. Toss them into a frying-pan with a little butter previously made hot, until cooked but not overdone; have ready some hot squares of buttered toast; take the kidney from the fire and stir in the beaten yelk of one egg, and half a teaspoonful of lemon-juice; spread the mixture on the toast and serve at once. With stewed tomatoes and hot corn muffins this makes a very nice family breakfast.

For the potato croquettes, put in a mixing bowl one large cupful of mashed potatoes, a little nutmeg, and Cayenne pepper and the beaten yelk of one egg. Beat this with a fork until light and smooth, roll into little pear shaped cones, egg and bread-crumb them and fry in boiling fat. When anything is to be fried by immersion, always test the fat by throwing in a bit of bread: if it takes on a brown color at once the fat is hot enough, and your croquettes will be crisp outside and dry and light inside.

Directions for making tomato omelet were given in the Rural of February 27.

Make the rice waffles exactly after the following recipe, and eat with butter and honey or silver drips.

Take one cup of boiled rice and mash smoothly, moistening it gradually with a cup of water; stir in one-third of a cake of compressed yeast that has been dissolved in luke-warm water, and two cups of flour. Add enough water to make a batter rather stiffer than for cake. All the water used must be luke-warm and the batter be perfectly free from lumps. Let it stand in a warm place for three hours; add three beaten eggs, a teaspoonful of salt, and a very little sugar, and bake in waffle-irons. These waffles are quite possible at a company breakfast which is served at any hour from nine to twelve, but cannot very well be managed for the ordinary family breakfast, as they call for very early rising on the part of the cook, but they are good at lunch or supper, or as a dessert.

Cut sound bananas in three slices lengthwise, and *saute* in a little hot butter. If the latter is as hot as it should be, they will take on a delicate brown quickly, and will make a very dainty ending to a dainty breakfast.

PALMETTO.

KITCHEN TALKS.

ANNIE L. JACK.

"I have been greatly interested in the subject of frying," I said to the girls, when they

Miscellaneous Advertising.

When Baby was sick, we gave her Castoria,
When she was a Child, she cried for Castoria,
When she became Miss, she clung to Castoria,
When she had Children, she gave them Castoria,

told me that the soapstone griddle was getting rough and uneven for our buckwheat cakes.

"Frying," said one, "Oh! that would never do." I went to the rack where the papers are kept, and selected one with the remark:

"We have as high an authority as Miss Parloa in this matter, for she says: 'Since many people fry much of their food, information as to the best methods of frying seems desirable. The first thing to be considered is the fat. If expense did not stand in the way, olive oil would be the best liquid to use. Any pure, clear fat that is free from strong odor will do.' Her method of cleaning the fat from impurities is simple, but thorough. She tells us to put it on the stove in a frying-pan as soon as possible after skimming it from gravies, etc., and heat it slowly; when melted set it where it will bubble, and when all motion ceases, the sediment will have fallen to the bottom of the pan and the fat will be clarified. In frying doughnuts, she tells us that they require a heat of 350 degrees, and it is indicated by a smoke in the center of the fat. If a piece of stale bread dropped in requires one minute be become brown, it is of the right temperature for frying articles that require three or four minutes for cooking. Fried potatoes need 10 minutes' cooking and a temperature of 370 degrees; they should stand in ice-water before cooking, and be dried in a clean cloth quickly before putting them into the grease, as the least particle of water sends out little sparkles of grease over stove and fingers, and these are very trying to the cook. The smoke and the bread tests are quite reliable as to the readiness of the fat for the food.'"

Miss Parloa speaks of the "frying basket," and I think we must procure one for the Amateur Cook. It is made of fine wire, and the articles to be cooked are placed in it, and lowered gently into the fat. When they are cooked, it is lifted out, and the fat is allowed to drip on to a plate. Food cooked in this way will not have any of the clinging grease that weak stomachs refuse, and I should think pork rolled in flour and cooked in such a manner, would lose much of its objectionable quality. If the melted fat is strained through a piece of cheese cloth, it can be used over again for many things. Of course, one must use her own judgment in this matter.

"It is a case of Mahomet and the mountain," said the Epicure, "if folks will not give up frying, we must try to make frying less injurious."

"But that does not help my griddle," said the cook, and so as we survey its indentations, and find our pancakes do not have such an even surface: we send this question to the wise RURAL, which among its stores of wisdom may know how to improve a soapstone griddle.

A FLAT-IRON PAPER WEIGHT.

THIS is quite an amusing novelty and can be made of any old flat-iron, even if too much worn or rusted to be of further use for its original purpose. It is set up as shown at Fig. 111. Around its rim is first glued a strip of cotton cloth, and this should be thickly sprinkled with sachet powder. The face of the iron is covered with plush, which should be drawn smoothly over the edges and be glued to the iron in the groves near the back surface. If neatly done, it will lie smoothly and there will be no wrinkles. The back-side should then be covered with plush of a different color, which may be nicely stitched to the front covering, close by the edge made fast to the iron. Two little pockets for holding postage stamps may be stitched side by side near the lower edge of the face, as shown in the cut. A minature thermometer may be fastened near the point of the face and the space on each side of this and between it and the pockets may be filled in with any suitable design painted or embroidered upon the plush. The handle should be neatly painted in black, and ornamented with gold or bronze to suit the taste. It won't cost much and is tasty and handy.

Fig. 111.

UNCLE J.

MANTEL LAMBREQUINS; CURTAINS.

THERE is nothing new in the idea of a mantel lambrequin, but every one does not know how cheaply and effectively an unsightly mantel may be draped. I do not speak so much of old-fashioned wooden mantels, for to my mind no wooden structure can be as cheerless and uninviting as the ordinary marble mantle, which is suggestive only of graveyards.

To hide from view such an affair, take a strip of dark olive or cardinal felt half a yard longer and a quarter of a yard wider than your mantel-shelf. Cut it in points on the lower edge. Cut some material of contrasting color in diamond-shape pieces, and fit them in the felt in such a way that they will come between the points of the long strip. Feather-stitch these around, and tip each point with a tassel. If you have bits of velvet or silk of different colors, such as old-gold, cardinal, dark and pale blue, and black, they may be arranged alternately with good effect, and crewels may be used instead of embroidery silks. A very pretty and inexpensive lambrequin was made of dark-cardinal plush (cotton flannel), with the points in old-gold, and the embroidery in blues and black. A breadth of an old woolen dress, washed and dyed at home with Diamond Dyes, could be used, but it should be lined with something stiff. Old muslin starched would do, but the ends that hung over would require to be lined with the same material as the outside.

The writer was admiring at a friend's house a very rich-looking pair of window curtains. They were of dark red with a deep border of old-gold prettily embroidered. There was one wide curtain at each of the two windows suspended by the usual rod and rings. They were made from two old dresses—one, a pale blue much soiled, had been dyed red; the other, a child's white nun's veiling, was dyed old-gold. The border at the top, bottom, and sides, was made long enough to make the curtains of the right width and length. It was put on with fancy stitches in crewels, using cardinal for the old-gold border, and old-gold for the center, and the work was done so neatly that the curtain needed no lining. Many different designs were outlined on the border and put in with the etching stitch in different colored silks and crewels, a great deal of black being used and producing a most effective whole. MRS. M. A. FOSTER.

TIDIES.

Pretty tidies are made of white swiss or any kind of fine white goods. They simply require to be hemmed, and a design in silk worked in the center in outline stitch. There is a kind of silk for embroidery especially adapted for wash goods, that will not fade or run when washed. The newest shape in tidies is the "scarf." They are suitable only for the backs of easy stuffed chairs, should be a trifle longer than the chair is wide, and gathered up in the middle and fastened with a pretty bow of ribbon. In this case the design should be on the ends, which may be either hemmed or trimmed with lace. ALICE.

CRAZY-QUILT PORTIERES.

Now that the rage for crazy-quilts has somewhat abated, ladies may find their crazy embroidery a drug on their hands. It is very handsome and effective, however, in many kinds of decoration. A wide strip on the top or bottom or both, is very elegant for portieres. Used in this way, a piece of stuff that would otherwise be too small, can be helped out by the addition of the strip. It makes a pretty chair covering, alone or combined with some plain material, and if the materials and work are handsome it makes a rich and Japanese-looking border for a window curtain. A plain cotton plush table cover may be embellished with squares of any size, appliqu'd on. It is also pretty for edging the ends of the plush "scarf tidies" that are now so fashionable. NELLIE.

DOMESTIC RECIPES.

FRIED POTATOES.

TRY this for a most delicious lunch or supper dish. Chop very fine some raw potatoes that have been peeled and washed; add half the quantity of cold boiled fowl; they should both be chopped as fine as grains of rice, and dredge a *very* little flour over them with a pinch of fine salt: put a tablespoonful of butter in the frying-pan, and when it is hot put in the mixture and stir constantly with a wooden spatula until they are fried to a nice golden color. Send to table at once on a hot plate. This may be varied by using cold boiled ham or tongue in place of the chicken, omitting the salt. MOLLIE.

SWEET POTATO CAKES.

A VERY nice dish for lunch or tea is this: Sweet potatoes are often poor and watery at this season, and this is, perhaps, the most edible way of preparing them. Boil them, remove the skins, mash fine with some butter, and form into little round cakes. Fry brown in a little hot butter or dripping. R. B.

HOW TO BROIL MEAT.

IN broiling all meats it is essential that the surface should not be cut or broken any more than is positively necessary. The meat should be exposed to a clear, quick fire, close enough to sear the surface without burning, in order to confine all its juices. If cooked slowly over a poor fire, or seasoned before it is cooked, it will be comparatively dry and tasteless.

To cook a beefsteak nicely, see that the bars of the gridiron are smooth, grease them slightly, turn it frequently so that it cannot burn, until it is done to your liking. In order to ascertain this do not cut it, but press the tips of the fingers upon it; if it springs up again after the pressure, it is rare, but if it remains heavy and solid, it is well-done. Spread over it a tablespoonful of butter that has been rubbed together with a teaspoonful of minced parsley and a little lemon juice; season with salt and pepper and set in an oven for one minute. M. J. A.

Miscellaneous Advertising.

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Restore tone and strength to the Stomach and Liver enfeebled by disease, promote the Appetite, and cause the Bowels to move naturally. Ayer's Pills are safe to take, do not debilitate by excessive stimulation, and are not irritating in their action.

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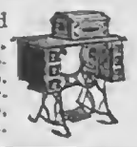

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Market value of securities, over three million three hundred thousand dollars in excess of their cost.

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An increase of nearly two million dollars in income, over three millions in surplus, over seven millions in assets, and of over thirty millions of insurance in force, during 1885.

SUMMARY OF REPORT.

BUSINESS OF 1885.

Received in Premiums	$12,722,103.03
Received in Interest, Rents, etc.	3,399,069.71
Total Income	**$16,121,172.74**
Paid Death-claims	$2,999,109.64
" Endowments	741,764.47
" Annuities, Dividends, and for Policies purchased	3,940,999.64
Total Paid Policy-holders	**$7,681,873.75**
New Policies Issued	18,566
New Insurance Written	$69,521,452.00

CONDITION, JAN. 1, 1886.

Cash Assets	**$66,864,321.32**
*Divisible Surplus, Co.'s Standard,	$7,064,473.13
†Tontine " " "	3,123,742.77
Total Surplus, " "	**$10,188,215.90**
Surplus by State Standard,	**$13,225,053.94**
Policies in Force	86,418
Insurance in Force	259,674,500.00

PROGRESS IN 1885.

Excess of Interest over Death-losses,	$399,960.07
Increase in Income,	1,880,697.35
Increase in Surplus, State Standard,	3,313,707.18
Increase in Assets,	4,580,561.75
Increase in Insurance Written,	7,036,902.00
Increase in Insurance in Force,	50,291,914.00

*Exclusive of the amount specially reserved as a contingent liability to Tontine Dividend Fund.
†Over and above a 4 per cent. reserve on existing policies of that class.

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FIRST ADVANTAGE.—Insurance for a definite amount, or for an amount increasing with each premium paid, as desired.
SECOND ADVANTAGE.—A Definite Cash Endowment, and a Tontine Dividend, to Policies in force at the end of Endowment and Tontine periods, which periods correspond, and may be either Ten, Fifteen or Twenty Years.
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SIXTH ADVANTAGE.—Practical freedom of action with respect to occupation, residence and travel.
SEVENTH ADVANTAGE.—The payment of death-claims immediately upon the approval of the required proofs of death.

Do not insure until you have seen full particulars of this Policy. Do not fail to write the nearest Agent, The NEW-YORK LIFE INSURANCE COMPANY, 346 & 348 Broadway, New York City.

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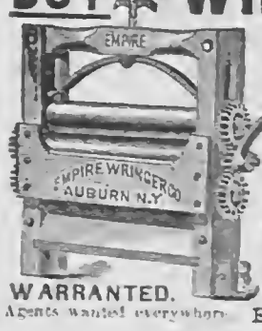

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News of the Week.

HOME NEWS.

SATURDAY, March 6, 1886.

Since the collapse of the transcontinental pool, a fortnight ago, the various Pacific railroads have been cutting freight and passenger rates briskly west of the Mississippi; the connecting lines east of the river have as yet taken no part in the struggle. The "pool" paid the Pacific Mail Steamship Company $85,000 a month for not cutting rates, and as this subsidy has stopped, the company has bought two new steamers and will have a weekly service from New York to San Francisco *via* Panama. It is thought peace will soon be declared, but the former extortionate rates can hardly be restored.....The Grant Monument Fund is still only $115,891,00. The Hancock widow fund now amounts to $35,950..... ....In view of the recent decision restricting telephone charges in Indiana to $3 a month for the use of each telephone, the telephone monopoly has determined not to let out any more telephones in the State. A bill has been introduced in the New York Legislature limiting charges to $5 a month per telephone..... A Tennessee court in which six murderers had just escaped conviction, has closed its labors by sending a hungry woman to prison for two years for stealing a quart of buttermilk..... ....The Republicans in the Senate want the $75,000,000 appropriated by the Education Bill, to be paid to each State and Territory which have separate schools for white and colored children, in proportion to the number of white and colored children in each according to the census of 1880, and not in proportion to the number of each color attending the schools. Without this proviso, it is thought the white schools of the South would get a disproportionately large share..... Last Tuesday delegates (324) from all the divisions of the Pennsylvania Railroad and its connections unanimously refused to agree to the "relief scheme" proposed by the road. The company required the men to abandon all other organizations and to surrender their rights against the company in case of injuries. The Baltimore & Ohio fund of a like kind now amounts to over $6,000,000, mainly collected from the men, and under one rule and another forfeited by them. The philanthropic scheme will probably be dropped: otherwise the men will strike...A big strike began Tuesday on the Southern Pacific Railroad and is likely to extend to the whole Gould system.... An excellent special committee has been appointed by the House to investigate the ownership of the Pan-Electric telephone stock..... There is to be a big Congressional fight over Eads' Atlantic and Pacific Ship Railway, which seeks to make this country liable for $37,000,000 "for the benefit of a private corporation located and to be operated exclusively in a foreign country."..... Canadian manufacturers are urging the Goverment to increase the duties on foreign goods, pork among them.....Sir John Macdonald says that, outside of compensation for losses in the late rebellion in the Northwest, the expenditure in the field and for transport services was nearly $4,000,000. The population of the Northwest Territory is: Whites, 23,344; Indians, 20,170; and half breeds, 4,848—a total of 48,362. He attributes the whole trouble to Riel's blandishments and misrepresentations. Latest reports say there will be no Indian troubles in the Northwest this year..... .....The Canadian Maratime Provinces are loudly dissatified at the Governor-General's speech which intimated that the Government did not expect a renewal of the fishery clauses of the late reciprocal treaty with this country. They insist on the exclusion of American fishermen (by force, if needed) from Canadian waters to compel the free admission of Canadian fish into the United States in return for permission to our fishermen to fish in such waters.....Virulent attacks are being made in the Dominion Parliament at Ottowa on the Government for hanging Riel. It is said the Government secretly favors the attacks, as it wishes a vote on its course in that matter.....The half-breeds of the Northwest have thanked the Government for recent aid for the distressed, and the proposed admission of representatives from that section into both Houses of Parliament.. .....The Supreme Court of New Jersey, has ordered the railroads passing through the State to pay to the State $300,000, the amount of the tax levied on all railroad property. This will meet all current obligations, and prevent State bankruptcy.....The public debt was reduced $2,902,153.41 in the month of February.....In Salt Lake City five Mormons were sentenced Mouday to six months' imprisonment for unlawful cohabitation. Several were convicted and will be sentenced at a future day.....It is charged that laborers on the Panama Canal are dying at the rate of 40 daily and 14,600 yearly..... ....A comet discovered by a Parisian astronomer last December will be visible in this country to the naked eye in the middle of April, and on May 2 will be *only* 12,000,000 miles away, and shortly after sunset will be as brilliant as the great comet of 1881..... The McCormick Reaper Works at Chicago have resumed work without discriminating between union and non-union hands. The union men still keep out, but the goods have not been boycotted yet; works running with about 800 hands—half the usual number..... ....The Champion Reaper Works of Springfield, Ohio, have discharged all the Knights of Labor in their employment (upwards of 300), "in order to avoid strikes, dictation and coercion." Over 100 fellow-workmen at once joined the "lock-outs." There are 3,000 Knights of Labor in the town and many belonging to affiliated labor organizations, and trouble is feared.....Nearly 100 out of the 400 employés of the Empire Mower and Reaper Works, of Akron, Ohio, have struck for an increase of 15 per cent. on the $2.70 a day they are now getting. Trouble referred to the National Board of the Knights of Labor.....Mrs. Grant has received $200,000 as her share of the profits on the sales already made of the first volume of Grant's Memoirs. The sale of the second volume, which will be ready next month, is just the same, insuring her an equal sum. There will also be a fine profit on the work sold in other countries, and the copyright has 16 years to run in this country yet, and the sales must be large every year..... ....James C. Matthews, colored Democrat of Albany, N. Y., has been nominated by the President as Recorder of Deeds at Washington, to succeed Fred. Douglass asked to resign. The place is worth between $8,000 and $10,000 a year.....The Senate Committee on Military Affairs has indorsed the Fitz John Porter bill as an act of justice. It is pretty sure to pass the Senate now; but by a proportionately much smaller majority than it got in the House the other day..... The anti-Chinese war still coutinues on the Pacific slope. Some 1,400 Celestials started for home on one steamer the other day. San Francisco is crowded with those driven out of Oregon and Washington Territory. The "Six Companies" are sending great numbers into Arizona and New Mexico, where white men are organizing to expel them. They are also reported to be swarming into Texas and Louisiana, and, indeed, into the Southwest generally. Large numbers are coming east, also. The Chinese claim $175,700 for losses at Rock Spring, Wy., last Fall. Pres. Cleveland has sent a special message to Congress recommending friendly legislation to indemnify them for their grievances there and elsewhere. China paid this country $735,000 for injuries to American citizens at Canton 30 years ago, and after the payment of all losses, over one-third of the sum remained in the United States Treasury. Great excitement is reported among the Chinese around Canton on account of the late outbreaks here, and retaliation on Americans in China is threatened..... ....Last Wednesday, the drivers and conductors on one of the street car lines in this city struck for higher wages and shorter hours. The car companies have been making from 12 to 30 per cent. per annum on their capital, a large share of which is "water," so that the interest on the actual capital has ranged from 16 to 40 per cent per annum. The men worked from 14 to 18 hours a day and got from $1 75 to $2.25 a day wages—but fines and missing trips, for which no pay was allowed, cut their average wages down about one-third. Having families to support as a rule, they could barely live in a city where living is comparatively high. The chief owner of the line refused the demand, and next day, the strike was extended to a number of lines he owns in Brooklyn. Rumor having spread that the other lines were going to help him, every line in the city was "tied up" yesterday morning. By 2 P. M. the demands of the men were granted in all chief points, while minor points were left for arbitration. The State law insists that railroad corporations cannot refuse or neglect to perform those public duties on account of a controversy with their employés about the expense of performing their duties, and the State Railroad Commissioners warned them that they were liable to forfeit their charters if they didn't run the cars.

MESSRS. BLINTZ BROS., Denmark, N. Y., who milk 60 cows say: March 3, '85: "That they have tried four of the leading butter colors, for two years past have been using Thatcher's and consider it superior to them all." Manf. by H. D. Thatcher & Co., Potsdam, N. Y.—*Adv.*

AGRICULTURAL NEWS.

SATURDAY, March 6, 1886.

The Associated Chambers of Agriculture of Great Britain on Tuesday adopted a resolution favoring the imposition of import duties on foreign grain.....Last Tuesday the House Committee on Public Lands took a test vote on the proposal to repeal the Pre-emption and Timber Culture Laws. The result was decidedly in favor of the repeal..... .....Holland threatens to raise the duty on American petroleum in retaliation for our duty on Sumatra tobacco, by which Pennsylvania, Connecticut, Maryland Wisconsin and Ohio are the chief beneficiaries.....The House Committee of Agriculture has reported favorably a bill requiring our Consuls abroad to send to the Commissioner of Agriculture reports of agricultural experiments in their respective districts, and also statistics beneficial for our farmers...As usual in Winter, exports of live cattle to Great Britain are light. Last week only 362 were taken from Boston.....The oleomargarine interest has a powerful lobby in Washington, and it is steadily increasing..... .....A bill has been introduced in the United States Senate providing for the inspection of meats for exportation, and authorizing the President to retaliate whenever our products are unjustly discriminated against in foreign countries.... A hog killed at Rhinebeck, on the Hudson, Thursday, dressed 888½ pounds..... The American Veterinary College of this city "turned out" 28 veterinarians last Monday. The medical colleges here turn out hundreds of doctors every year.....No fewer than 23 mills are at work bleaching barley in Wisconsin, nearly all in the neighborhood of Milwaukee. The fumes of sulphur remove the dark stain of low-grade grain, making it a bright straw color, and increasing its market value. Detection, it is said, is difficult, if not impossible. The State laws impose a penalty of $50 for each offense but as most of the product is shipped out of the State no one has hitherto thought it worth while to prosecute. The Milwaukee brewers are now aroused, however.....

THOSE who have used the BOSS ZINC and LEATHER COLLAR PADS and ANKLE BOOTS say they are the best and cheapest, because most durable. They will last a life-time. Sold by harness makers on 60 days' trial. DEXTER CURTIS, Madison, Wis.—*Adv.*

Crops & Markets.

SATURDAY, March 6, 1886.

Except from some parts of Ohio, Indiana and Michigan there are really no bad reports of injury to winter wheat; the condition of the grain in the winter wheat area, including Tennessee and Kentucky, is decidedly better than a year ago. Now, however, the ground is generally bare, and the danger line will not be passed before April 1. There are no indications of a very large yield; but a prospect of a fair average crop. Early seeding probable in Nebraska, Minnesota and Dakota; considerable snow still, however, in Wisconsin, Northern Michigan and Northern Minnesota. According to the "Weather Bureau," the snow covering at the end of February was from one to five inches in New England, from half an inch to six inches in the lower lake region, from two to fourteen inches in the upper lake region, a little less in the upper Mississippi Valley, from half an inch to five inches in the Missouri Valley, and in the northern Rocky Mountain slope from one-fifth of an inch to five inches. California wheat is in all conditions—some just seeded; some two feet high and sending out heads which will be ripe in June—prospect encouraging. Reports from Kansas say the condition of wheat is almost universally poor. "The corn area will exceed any previous record." In Nebraska corn left in the fields is much better than expected—will be all in soon. Corn cribbed on the ground will require some time to dry enough to grade. What little winter wheat has been sown "is in excellent condition."

A knowledge of the area planted to winter wheat is of importance to raisers of spring wheat, so that they may the better decide how much ground to give the crop. The best extended report hitherto made is that just published by the Cincinnati Price Current. The report covers only eight of the States, but, according to the report of the Department of Agriculture, these eight had, last year, 12,226,731 acres under wheat, against 9,925,189 acres in the rest of the country. These returns indicate that the area by States, compared with a year ago, is about as follows: Ohio 100, Indiana 100, Illinois 90, Missouri 90, Kansas 95, Michigan 100, Kentucky 100, Tennessee 90—indicating a general average of about 96½ per cent. From all we have seen on the subject, our impression is that the area now in winter wheat is about the same as that *harvested* last year. Quite a considerable area was sown, however, which was plowed up, or on which the stand was so light that it wasn't considered worth while to harvest it. The Price Current's estimate of the condition of the crop in the above States agrees pretty closely with our own estimate given above for the entire country. As compared with a strictly good condition, it thinks the present stand is 93 per cent. in Ohio, 94 in Indiana and Missouri, 91 in Illinois, 92 in Kansas (other reports are not so favorable here), 95 in Michigan, 93 in Kentucky and 95 in Tennessee.

This country, last year, produced 12,000,000 bushels of flax-seed on 1,200,000 acres, an average of 10 bushels an acre—value $13,500,000. All the fiber is wasted, for as present handled there isn't strength enough in it. Last year we imported $1,867,639 worth of flax and $12,160,000 worth of goods made of flax. The raising of hemp is rapidly declining. In 1860 the production was 74,493 tons; in 1870, 12,746; in 1880, 5,025, and last year, less than 6,000 tons Cause, substitution of jute for bagging, and of manila, sisal and jute for cordage, yarns, etc. Importations of substitutes last year were valued at $11,531,994. The Flax and Hemp Spinners' and Growers' Association, which met the other day at St. Louis, vigorously opposed any reduction of duties on foreign flax, hemp, or substitutes therefor.

There appears to be a combined movement on the part of cheese factories in this State and Canada to defer opening until about May 10, to keep down the make of fodder cheese, so as to keep up prices of the stock on hand. During the past Winter cheese has paid well in comparison with other farm products, and it is thought that if the customary amount of fodder cheese is made, foreigners will be able to force down quotations not only for the stock on hand at the time, but for that made afterwards. The trade appears to favor a light make previous to grass cheese. What should be done with the milk, say, from April 1 to May 10? If made into butter the quality must be poor, and the price is likely to be less than that for cheese. High prices for cheese early in the season tend to lessen consumption for quite a long spell afterwards, and is there not a danger that an increased make in Great Britain and Holland will block our foreign markets afterwards?

Dairy products are lower in consequence of poor export demand for cheese and fuller receipts of new-milk butter.

Exports of wheat continue somewhat heavier than of late, and prevent any material fall in prices. The decline in the visible supply was only between 600,000 and 700,000 bushels—one of 1,000,000 bushels was expected. The visible supply of corn has increased 2,530,000 bushels, and prices have been lower, partly on account of heavy receipts and partly because of the collapse of an attempted February "corner" in Chicago. Oats have been stiff, though the visible supply has increased 246,000 bushels.

The cut rates on the transcontinental lines (there are four all-rail and two part rail and part water) have caused heavy shipments east from San Francisco. Davenport, Ia., telegraphs that California oranges are driving others out of the market. Cotton here has gone up quite lively during the week. On Thursday there was an advance of $1 a bale in the course of the day. The Standard Oil Co. is reported to have put up the market to get rid of large stocks on hand; after it had unloaded, prices fell again.

Hops still continue a drug—very little demand for any except the best, which bring 10 to 14 cents per pound. Pacific slope hops much neglected. Receipts here from Sept. 1, to Feb. 26, 113,138 bales; exports in same period 50,900 bales. Brewers generally have as much as they have room for, many being stocked up till next December. Dealers, too, are heavily stocked, but most of them will have to buy more to fill contracts. The stock in growers' hands is quite large; but there is little prospect of change in prices for the next two months at any rate. The area and prospect for next crop, which will be known in late May or early June, will influence prices; but even with a poor crop next year, prices will hardly go above 25 cents to 30 cents a pound.

The winter pork-packing season closed on March 1, and next week will show a general summing up of the results and forecasts for the future.

A Sore Throat or Cough, if suffered to progress, often results in an incurable throat or lung trouble. *"Brown's Bronchial Troches"* give instant relief.—*Adv*

MARKETS BY TELEGRAPH.

SATURDAY, March 6, 1885.

CHICAGO.—Compared with prices a week ago, "regular" wheat is 1⅞c. lower; No. 2

Chicago Spring, steady; Corn, ¼c. lower. Oats, ⅛c. lower. Rye and barley unchanged. Pork, 60c. lower. Cattle, stockers and feeders, 10c. higher; "bulk" 15c. higher. Hogs, 10c. lower all around. Sheep, "Natives" and Texans, 50c. higher; Western and lambs unchanged.

WHEAT.—Steady. Sales ranged; March, at 79⅜@79¾c; May, 81¼c@84⅛c.; June, 85¼@86⅜c; No. 2 Spring, at 79¾@82c; No. 3 Spring, at 70@73c. CORN.—Easy. Cash, 31@31½c; March, 36¼@37c; May, 39¾@40c. OATS—Firm; sales ranged; Cash, at 29@29¼c; March, at 28⅞@29c.; May, 32¼@32¾c. RYE—No. 2, 59c. BARLEY—No 2, quoted at 60c. PORK.—Cash, quoted at $10 10@$10 15; March at $10 10@$10 12½; May, at $10 17½@$10 35. LARD.—Quiet and easier; sales ranged; Cash, at $5 90@$5 92½; March, at $5 90@$5 92½; May, $5 97½@$6 02½. BULKMEATS.—Shoulders, $3 90@$4 00; Short rib sides, at $5 30; Short Clear sides, at $5 60@$5 65. CATTLE—Shipping steers, $3 90@$5 90; stockers and feeders, $3 05@$4 10; cows, bulls and mixed, $1 75@$4 00; bulk, $3@$4 10. HOGS.—Rough and mixed, $3 80@$4 10; packing and shipping, $4 10@$4 50; light, $3 85@$4 15; skips, $2 75@$4 75. SHEEP.—Market weak Natives, $3 00@$3 65; Western, $3 50@$4 50; lambs, $4 00@$5 40 Texans, $2 50@$4 25.

ST. LOUIS.—Compared with cash prices a week ago, wheat is quoted at ½c. lower. Corn, ¼c. lower. Oats, ⅛c. higher. Rye 1½c. higher. Pork, 45c. lower. Cattle, steady on most grades; a shade higher on some. Hogs, from 10c. to 20c. lower. Sheep, a trifle higher.

WHEAT.—Dull; No. 2 Red, Cash and March, 81¼c; May, 81¾@81⅝c; June, 84½c. CORN—No. 2, Mixed Cash, 33¾@36c; March, 35c; May, 36½c. OATS—No. 2 Mixed, Cash, 29¼@29⅜c; March, 28¾c, May, 31⅜c. RYE firm, 62c; BARLEY—American, 60@80c. BUTTER Quiet; creamery, 25@30c; dairy, 18@25c. EGGS—Weak; quoted at 11¼c. FLAX SEED—Quoted $1 08@1 10. PORK, at $11 05. BULK MEAT—Long Clear, at $5 30; Short Rib, at $5 45; Short Clear, $5 60. LARD—Firm at $5 75@$5 80. CATTLE—Market active. Fair to Choice Native Shipping Steers, $4 85@$5 40; Native Butcher Steers, $3 25@$4 25; Cows and Heifers, $2 25@$3 50; Stockers and Feeders, $3 00@$4 20. HOGS.—Light, $3 80@$4 10; Packing, $3 85@$4 15; Heavy, $4 25@4 45. SHEEP.—Market firm and active; Common to Choice, $3 50@$5 05.

BOSTON.—CORN.—Steamer Yellow, at 51@51½c; steamer mixed at 50½c; and no grade of the best quality, at 50@50½c. per Bushel. OATS.—No. 2 white, at 42½c,; No. 3 white at 41½c. Rye steady at 67c. per bushel. BRAN is firm at $18 75 for Spring and $19 25@19 50 for Winter; fine feed and middlings at $19 00@21 00, and cotton seed meal at $21 25 on spot and $22 75 per ton to arrive. HAY AND STRAW—Hay is plentiful at $18 50@19 00 ₮ ton for choice and fancy; fair to good, $17@18; fine, $16@17, and $13@15 for poor and damaged. Western choice $16@17, do fair to good $14@15. Rye straw is held at $19@20 00 for choice, and $12@14 for common to good. Swale hay, $11@12; Oat straw, $9@10 per ton. PRODUCE—BUTTER Northern creamery, choice to extra, 29@30c; good to choice summer, 18@23c; western creamery, 27@33c, for choice to extra; northern dairy 21@23c, for Vermont extra; 18@20c, choice, and 12@16c, for fair to good; Western dairy, 18@22c, for choice, and 10@15c, for fair to good; Imitation creamery at 15@26c, for good to extra; ladle-packed, at 20@22c, for choice CHEESE—New York choice to extra, 8½@10c, and common to good, 5@8c; Vermont choice to extra, 8½@11c and common, 5@7c; Western common to extra, at 4@8½c. Sage, extra, 12½c, good to choice, 8@10c. EGGS—Cape and near-by, per dozen, at 24c; Eastern extras, 23c; do, firsts, 22c; Northern, fresh, 22@23c; Western fresh, 20@22c; Provincial, at 22@23½c. BEANS.—Choice Northern hand-picked pea, $1 75@1 80 per bushel; do, do, New York, small, $1 60@1 65; do, do, screened at $1 15@1 30; medium choice, hand picked at $1 45; do, screened, $1 15@1 30; Yellow Eyes, improved, at $1 55; do, choice flats, $1 45@1 50; Red Kidneys, $1 75@1 80, Canada peas, 85c@$1 00 per bushel for common to choice. Green peas, Northern, at 90c@$1 00 do, Western, $1 20@1 25. Potatoes range at 55@75c, per bushel, as to quality.

PRODUCE AND PROVISIONS

NEW YORK, Saturday, March 6, 18

STATE OF THE MARKET.—Compared with cash prices last week, flour is 5c. lower; "regular" wheat, is ½c. lower; corn 1c. lower; oats ⅜c. higher; pork, 25c. lower, lard, 6c. higher; butter, 1c. to 1½c. lower; eggs, 5c, lower; poultry, higher, on best lots; fruits steady; vegetables unchanged.

FLOUR, FEED AND MEAL. FLOUR—Quotations: Fine at $2.25@$3 00; Superfine, $2 90@$3 35; Extra No. 2, $3 30@$3 75; Good to Fancy Extra State, $3 80@4 25; Common to Good Extra Western at $3 20@$4 00; Good to Choice Extra Western, $4 00@$5 50; Common to Fair Extra Ohio, $3 30@$3 75; Good, $3 80@$4 20; Good to Choice, $4 25@$5 50; Common Extra Minnesota, $3 30@$3 75; Clear, $4 00@$4 50; Rye Mixture, $4 00@$4 25; Straight, $4 50@$5 00; Patent $4 75@$5 50, Bakers' Extra, $4 25@$4 90; St. Louis Common to Fair Extra, $3 30@$3 90, Fair to Good, $3 85@$4 75; Good to Very Choice, $4 90@$5 50; Patent Winter Wheat Extra, $4 50@$5 00; City Mill Extra for West Indies, at $4 90@$5 00; South American, $5 00@5 10. SOUTHERN FLOUR—Common to Fair Extra, $3 40@$3 80; Fair to Choice do., $3 85@5 40. RYE FLOUR—Superfine, $3 15@3 50, latter for very choice. BUCKWHEAT FLOUR, at $1 85@$2 00. CORN MEAL—Brandywine, $3 00@3 05; Yellow Western, at $2 75@$3 00. FEED—Bran ranges from 85@87½c. from track and mill; for 60 lb. average at 75@80c.; 80 lb. average at 70@80c.; middlings at 85@90c., and sharps at 90@$1 00. Rye feed at 77½@80c.

GRAIN.—WHEAT.—Ungraded Winter Red, 72½@91c; No. 2 Red at 93½c; No. 1 White at 94c; No. 1 Hard at $1 02½; No. 2 Red for March, 93@93½c., do. for April, 93⅞@94c.; do. for May, 94⅜@95¼c; do. for June, 95⅜@96½c.; do. for July, 96@96¼c; do. for August, 96@96¼c. RYE—62@65c. for Western, and 65@66c. for State. CORN—Ungraded Mixed at 46@50c; No. 3, at 47¾@48c.; Steamer Mixed, at 47¾@47¼c.; No 2 Mixed at 48¾c; do. White, at 51½c; Steamer White, at 49¼c; No. 2 Mixed for March, 49⅝@49⅞c; do. for April, 49@49¼c; do. for May, 48⅝@48¾c. OATS.—No, 3 Mixed, at 37½c.; No. 2, Mixed 38@38¼c.; No. 1, at 38½c.; No. 3 White, 40¾@40¼c.; No. 2 do. 41c; No. 1 at 43c.; Mixed Western, at 37½@39c.; White do., 40@45½c; White State, 41½@43c; No. 2 Mixed at 38c; do. for March at 38⅜@38½c; do. for April, 38c; do. for May, 37⅞c.

BEANS.—Quoted: Marrows, $1 62½@$1 65; mediums, at $1 45; pea at $1 45@1 50; red kidney at $1 85 for choice; turtle soup at $2 00@2 10; white kidney, $1 80 for choice.

PEAS.—Green are quoted at $1 15@1 20.

PROVISIONS.—PORK.—Mess quoted at $10 10@$10 50 for Old and $11 50@11 75 for New; $11 25@$11 75 for Family Mess; $12 50@$14 25 for Clear Back; and $9 75@$10 for Extra Prime. BEEF.—City Extra India Mess, $17 50@$18 00; Extra Mess, 1bls., $10; Packet, $11 00@$12 00 in bbls.; Family Mess, $12 00@$13. BEEF HAMS.—Quoted at $17 50@17 75. CUT MEATS.—Pickled Bellies, 12 lb, average, at 5¾@5 3-16c; do, 10 lb, at 5¾c; Pickled Shoulders, 4¼@4½c; Smoked do, 5c; Pickled Hams at 8¾@8¾c.; Smoked do., 9¼c. MIDDLES—Long Clear in New York quoted 5¾c. for Western delivery. Long Clear, 5.85c.; Short Clear, 5.60c. DRESSED HOGS.—City Heavy to Light, 5¼@5¾c; pigs, 6¾c. LARD.—Western Steamspot, at 6.25@6.27c; March, at 6.22@6.24c.; April, 6.24@6.26c.; May, 6.28@6.30c.; June, at 6.35@6.36c; July at 6.42c.; August, 6.45@6.50c; city steam, at 6.30c.; Refined Continent, 6.50c., and South American, 6.85c.

BUTTER.—Eastern Creamery, 32@33c; Western Creamery, 30@40c.; Elgin do., 32@33c.; State Dairy half-firkin tubs, 18@28c.; Western Factory, 10@19c.; Imitation Creamery, 18@25c.; Western Dairy, 10@17c.

CHEESE.—State, 7@10¼c.; Night Skims, 5¾@7c. Western flat, 7@9¼c.

EGGS.—State, 17c.; Western, 16¾@17c.; Southern, 16@17c.

LIVE POULTRY.—Fowls, Jersey State and Pennsylvania, per lb, at 12c.; do. Western, per lb, at 12c.; chickens at 9@10c; turkeys, per lb, at 10@12c.; ducks, western per pair, at 50@75c.; geese, western, per pair, at $1.00@$1.25; pigeons, per pair, at 40@50c.

DRESSED POULTRY.—Turkeys, Philadelphia, at 10@12c; chickens, broilers, 2 to 3 lbs. to pair, at 25@27c, per lb; do. 4 to 5 lbs. at 18@22c.; do, State at 12@12½c; do. western at 11@12c.; fowls, Philadelphia, prime, at 12@13c; do. Jersey, at 12@12½c; State and western, 11@12c. Ducks, Jersey, at 14@16c; do. western, 14@15c. Geese, Jersey, at 10@12c; do, western, at 9@10c.

GAME.—Wild ducks, canvas, per pair, $2@$2 25; do., red-head, per pair, at $1@$1 30; do. mallard, western, per pair, at 40@75c.; do., teal, blue wing, 30@65c.; do. wood, at 30@40c.; do. common, at 25@30c.; frozen poultry at 9@11c, for turkeys, 9@10c. for chickens, 15c. for ducks and 10@12. for geese.

COTTON.—The quotations, according to the American classification, are as follows:

	Uplands.	New Orleans and Gulf.	Texas.
Ordinary	6 9-16	6¾	6¾
Strict Ordinary	7	7 3-16	6 1-16
Good Ordinary	7 15-16	8⅛	8⅛
Strict Good Ordinary	8¼	8 9-16	8 9-16
Low Middling	8¾	8 15-16	8 15-16
Strict Low Middling	9	7 3-16	9 3-16
Middling	9 3-16	9⅜	9¾
Good Middling	9⅝	9 13-16	9 13-16
Strict Good Middling	9 15-16	10⅛	10⅛
Middling Fair	10 5-16	10½	10½
Fair	10 15-16	11⅛	11⅛

STAINED.

Good Ordinary	6¾	Low Middling	7⅞
Strict Good Ord	7 1-16	Middling	8⅝

FRESH FRUITS.—Quotations are: San Blas cocoanuts at $35@38; Baracoa cocoanuts at $29 00@$30 00. Apples—Baldwin, per bbl., at $1 50@ $1 75; Greening, per bbl. $1 75@$2. Grapes.—Catawba at 6@7c. per lb, in baskets. Cranberries.—Cape Cod, choice, per bbl., $3 50@4; do. fancy, $4 50; do, choice, per crate, $1 00@$1 25. Florida oranges.—Fancy at $3 25@$3 50; choice at $3 00@$3 25; do. inferior at $1 75@$2.

DRIED FRUITS.—The quotations are as follows: Apples—Fancy evaporated, 7@7½c; choice, 6¾c; do. prime at 6¼@6½c.; fancy North Carolina sliced, at 4@4½c.; choice do, at 3½@3¾c.; choice Tennessee quarters at 2@2¼c.; State quarters at 3@3½c.; southern sliced prime at 2½@2¾c; do. common, 2c. Peaches—Peeled North Carolina, choice, 10@11c.; fancy, 12c.; extra fancy, 13c.; Georgia, choice, 11c; do. prime, 9@9½c.; unpeeled halves, 2¾@3¼c.; unpeeled quarters at 2¼@3c.; Delaware evaporated, peeled, 22@26c. Choice pitted cherries at 11@11½c. Evaporated raspberries at 16@17c; sun-dried do. 13@14c. Blackberries—Prime at 5½c. Whortleberries at 6½@7c.

PEANUTS.—Quotations at 6½@6¾c. for best hand-picked, and 4½@4¾c. for farmers' grades.

HAY AND STRAW.—Quotations are for; Choice timothy hay at 90@95c; good at 85c.; medium at 80c.; shipping at 70@75c; clover mixed at 70@75c.; Clover, 55@65c.; No. 1 rye straw at $1.00; short rye straw at 75@85c, oat straw at 45@50c.

SEED.—Clover is in demand moderately; quotations are at 10¾@11¾c. for best. Timothy is quiet; quoted at $2 10@$2 20. Linseed quoted at $1 65@1 70. Flaxseed at $1.23@1.25.

SUGAR.—Fair Refining, 5c. Sales 120 hhds and 800 bags Centrifugal; 5⅜c. Refined quiet and generally steadier; Crushed, 6⅝c; Cubes, 6¾c; Confectioners' "A," 6⅝c; Powdered, 6½c; Granulated, 6⅝@6 7-16c; Mould "A," 6⅞@6 7-16c; Standard "A," at 6 15-16@6c; Off "A," 5¾@5¾c; White Extra "C," 5¼@5¾c.; Extra "C," 5⅛@5⅜c; "C." 5¼@5¼; Yellow, 4¾@5c.

TALLOW—Prime City quoted at 4½c.

VEGETABLES.—Potatoes—New York Rose, $1 75@$2 00; Eastern and Nova Scotia Rose at $2 25@$2 50; Burbank, State, at $2 25@$2 50; Burbank, eastern and Nova Scotia, per bbl, $2 25@250; Hebron, do, do, do, per bbl, at $2 00@2 25; Prolific and Goodrich, Bonum, Imported, per sack, $2@$2 25, Champion, per bbl., $1.62@$1.75; Peerless, per bbl., at $162@$1 75; Magnum, imported, per sack, $1 90@2 00. Sweet potatoes, Virginia, at $2 25@$2 50 per bbl. Cabbages, per 100, at $5@7; do, imported, per 100, $5@$7. Onions—Yellow, ₮ bbl, $3@3 25; do. red, per bbl., $3 25@$3 50; do. white, $4 50. Turnips—Russia, ₮ bbl., 50@75c. Marrow squash, per bbl., 75c@$1 00. Norfolk kale at 75c@$1.00. Spinach.—Baltimore at 1 25@$2 per bbl.

LIVE STOCK MARKET.

NEW YORK, SATURDAY, March 6, 1886.

Shipments of meats for the past week, 368 live cattle, 6,930 quarters of beef, 98 live sheep and 718 carcasses of mutton. BEEVES.—Total receipts for six days 8,405 head against 9,771 head for the corresponding time last week. Very Ordinary to Prime Bullocks sold at the extreme range of $1 40@$6 per 100 lb. No strictly Choice offered. Among the offerings were six cars of tidy little Cherokers which brought $4 67½@$4 70. A car-load of choice Ohio Steers 1,536 lb average, was sold at $6 20. Bulls and Dry Cows sold at $3 25@$4 25; Old Oxen at $4 90@$5 25; Indiana Steers, 1,285 lb, at $5 30; do.1,103 lb, at $4 35; Chicago steers, 1,388 lb, at $5 70; do., 1,265 lb, at $5 70; Ohio do, 1,265 lb, at $6; do. 1,416 lb, at $5 60; oxen, 1,520 lb, lb at $5; Illinois do. 1,117 lb, at $4 80; Pennsylvania steers, 1,247 lb at $5 40; do, 1,260 lb, at $5 25; Oxen, 1,413 lb, at $5 25; Cow, 870 lb, at 3¾c; Ohio steers, 1,051 lb, at $4 40; State Oxen, 1,512 lb, at $5; Buffalo steers, 1,382 lb, at $5; 1,061 lb, at $4 50; Bulls, 1,361 lb, at $3 90.

CALVES.—Market steady at 6@8¼c. for ordinary to prime Veals, with a few Extra selling up to 9c.

SHEEPS AND LAMBS.—Receipts for six days, 35,723 head against 24,980 head for the same time last week. Very ordinary to choice sheep sold at $5 12½@6 50, and two car-loads of extra State wethers, 124 lb, average, brought $6 80. Common to extra lambs sold at the range of $6@7 75 per 100 lb. Ohio lambs, (extra) 92 lb, at $7 75; Indiana do, 87 lb, $7 37½; do, sheep, 81 lb, at 5½c; Kentucky do, 104 lb, at $6 30. Michigan do, 86 lb, at 6½c; Ohio do, 76 lb, at 5½c; Western sheep, 82 lb, at 5¼c; do, 73 lb, at 5¼c; State Lambs, 80 lb, at 7¼c.; State bucks, 86 lb, at 3¼c; do, sheep, 87 lb, at 5¾c;

HOGS.—Receipts for six days, 40,402 head, against 39,838 head for the same time last week. No sales reported Nominally steady at $1.30@$4.50 per 100 lb.

PRODUCE COMMISSION HOUSE
ESTABLISHED 1865.
S. H. & E. H. FROST,
100 PARK PLACE, N. Y.
Shippers desiring to favor us will be furnished stencils, shipping cards, etc., on application. Promptness guaranteed. References, RURAL NEW-YORKER, Irving National Bank, etc.

THERMOSTATIC INCUBATOR.
Send for circular. **E. S. Renwick,**
19 PARK PLACE, NEW YORK.

50,000 PURE GERMAN CARP
Now ready for sale. Every farmer and every pond owner should raise carp for profit. Send at once for circular and price list to
C. S. MEDARY,
145 Broadway, N. Y. City.

Agents Make $5 a Day Selling Perfect FAMILY SCALES
Entirely new in principle. Weigh one ounce to 25 pounds. What every family needs and will buy. Rapid sales surprise old agents.
FORSHEE & McMAKIN, CINCINNATI, O.

HOW TO SUCCEED With Small Fruits and POULTRY. 35c.
HOW TO PROPOGATE AND GROW FRUIT 50c
Whole Fruit and Poultry business illustrated and explained. BOTH BOOKS sent postpaid for ONLY 50 CENTS. Send stamp for circulars.
R. COATES, Norwood Park, Cook Co., Ills.

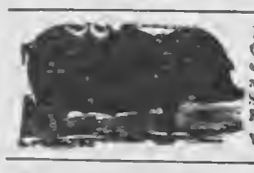
Young DUTCHMAN, age 26, speaking French and German, well conducted, with good recommendations and 10 years' experience, seeks place as SHEPHERD to Breeder or Fattener of Sheep. Replies, B. C., 8155, J. F. JONES, 31 bis Faubourg Montmartre, Paris, France.

MULES! MULES! MULES!
200 fine Kentucky MULES, all grades and sizes. Choice pairs constantly on hand, and for sale low by
E. B. BISHOP'S SONS,
630 Grand Street, Jersey City, N. J.

"MARCHMOOR FARM."
HIPPARCHUS No. 11672; Sire Orange Peel, P. 288; Dam King's Fertile, No. 22765. Service Fees, $100.
BRIGHTSON No. 11671, Sire Farmer's Pride P. 822; Dam Nellie Flanders, No 22764. Service Fees, $100.
PRINCE NERO Sire Nero, P. S. 249; Dam Mrs. Langtry, C. 3746. Service Fees, $100.
CHAS. R. HOE,
New Brunswick, N. J.

Clydesdale and English Shire Horses.

BEAU NASH (2978)
The only stud in America containing the very best specimens of both breeds. Prize winners at Chicago Fair, the World's Fair at New Orleans, the Royal Society of England, etc. Large importation arrived August 12, and more to follow. Our buying facilities being unequalled, there is no such opportunity offered elsewhere, to procure first class animals of choicest breeding at very lowest prices. Every animal duly recorded and guaranteed. Terms to suit all customers. Catalogues on application.
GALBRAITH BROS., Janesville, Wis.


JERSEY RED, POLAND-CHINA, Chester White, Berkshire & Yorkshire Pigs. Southdown, Cotswold and Oxford Down Sheep and Lambs Scotch Collie Shepherd Dogs and Fancy Poultry. Send for Catalogue
W. ATLEE BURPEE & CO. Phila. Pa

1,517 Ohio Improved Chesters,
Sold in one year for breeders.
The only hog Not Subject to Cholera. Two weighed 2,806 lbs. Send for description of this famous breed, also fowls.
E. T. SILVER, Cleveland, O.

LITTLE'S PATENT FLUID
NON-POISONOUS
SHEEP DIP AND CATTLE WASH.
MORRIS, LITTLE & SON,
Manufacturers. Brooklyn, E. D., N. Y., Box 3. and Doncaster, England.

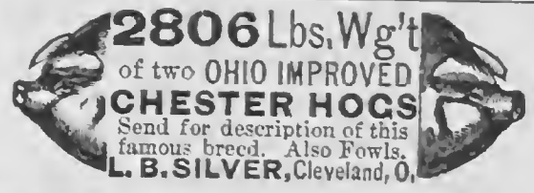
Newton's improved **COW TIE** holds them firmly, draws them forward when lying down, pushes back when standing, gives freedom of head, keeps clean. E. C. NEWTON, Batavia, Ill.

I WILL INSURE YOUR HOGS!
DR. JOS. HAAS'
HOG AND POULTRY REMEDY

[None Genuine without this Trade Mark.]
Is the only Practical Preventive of the so-called Swine Plague.
It has never been surpassed as an increaser of pork and general system tonic. Aiding digestion, stimulating the biliary organs, preventing torpor and engorgement of the liver, and regulating the bowels, it removes and prevents the formation of disease germs, and preserves to the well bred hog his natural constitution. Where it has been fed to such animals in the prescribed quantities, and other directions faithfully observed, it has proved a thorough preventive against swine disease.
AS AN EVIDENCE OF FAITH
in my remedy I make the following offer:
1. I will insure herds of swine of not less than one hundred in number against disease, at a small fee per head, provided they are fed my remedy under my direction, and prove upon examination prior to contract that they are in a healthy condition, and are neither in-bred, close-bred nor the progeny of such.
1. I will forfeit $100.00 to any breeder whose offer to examine for insurance I decline, provided he forwards remittance to cover my expenses to and from location of hogs, or I fail to prove to the satisfaction of any disinterested party, that failure to respond to invitation is caused by prior engagement or by matters of at least equal importance.
2. I will forfeit $500.00 if I decline upon examination to insure such herds, if my judgment as to their condition of health is overborne by the result of an examination made by at least two properly qualified and graduated veterinary surgeons.
Facts are Better than Assertions.
Please read the following testimony:
GIBSONTON P. O., PA., Feb. 2, 1885.
Dr. Jos. Haas—Dear Sir: About a year ago our herd here numbered about 2,700 head. Disease broke out, and no remedy we had would arrest the trouble. Our losses were heavy and we had to give up feeding entirely for about two months. We then heard of your remedy and bought a trial lot, and began feeding again. We have used it constantly ever since. We have since April last received about 5,000 head of hogs into our herd and have not had a single death from swine disease. This is our experience. Our opinion is that the remedy has prevented disease, and we would not think of being without it. As an aid in fattening pork, we believe it to be good. On this point, however, we have not made an actual test, *as we would not risk feeding a pen of hogs without the Remedy.*
Yours very truly, WHITE & CO.
[N. B.—White & Co., since writing the above letter, have purchased $450 worth of the remedy.]
The remedy can be procured of all Druggists, or from my laboratory. Prices, $2.50, $1.25 and 50 cts. per package. 25 lb. cans, $12.50.
JOS. HAAS, V. S.
Member of Indiana State Veterinary Med. Associat'n
INDIANAPOLIS, IND.

Herd Register, *Guernsey & Jersey Cattle:* also thoroughbred & grade *Guernseys & Jerseys*, Lincoln, Southdown, & Hampshiredown Sheep a specialty. *Chester White, Berkshire Yorkshire and Poland-China Pigs*, Scotch Collie Shepherd Dogs and a variety of Poultry. Come see our stock and select for yourselves. Send for circular and prices. T. WALTERS & SON,

WEST CHESTER, Chester Co., Pa.


2806 Lbs. Wg't of two OHIO IMPROVED **CHESTER HOGS**
Send for description of this famous breed. Also Fowls.
L. B. SILVER, Cleveland, O.

PERCHERON HORSES
ALL PERSONS CONTEMPLATING THE PURCHASE OF A STALLION OR BROOD-MARE ARE REQUESTED TO SEND AT ONCE FOR OUR ILLUSTRATED AND DISCRIPTIVE CATALOGUE WHICH WILL BE MAILED FREE
COME AND SEE OUR STOCK
SAVAGE & FARNUM ISLAND HOME STOCK FARM DETROIT, MICH.

NEW ENGLAND BREEDERS SPRING SALE.

HOLSTEINS AT AUCTION!
APRIL 14th & 15th, 1886.
125 Head of registered Cattle. Contributed from the best NEW ENGLAND HERDS. Houghton Farm, Putney, Vt., H. O. Warner & Son, New Milford, Conn., Geo. L. Wells, Wethersfield, Conn., E. M. Washburn, Lenox Furnace, Mass., S. L. Warner, Lanesville, Conn. Hon. Wm. A. Russell, No. Andover, Mass.
AT GREENFIELD, MASS.
CATALOGUES OF FRED'K L. HOUGHTON, PUTNEY, VT.

THE POPPLEIN SILICATED PHOSPHATE CO.
Manufacture and have Constantly in Stock the following Popular Brands of
FERTILIZERS.
Perfection Ammoniated Bone,
The Active Ammoniated Bone,
The Model Ammoniated Bone,
The Favorite Ammoniated Bone.
The Popplein Silicated Phosphate,
Alkaline Bone Phosphate,
Soluble Bone Phosphate,
Acid Phosphate.
Pure Raw and Dissolved Animal Bone.
Goods Compounded According to any Special Formula Desired on Short Notice.
ALL GOODS GUARANTEED.
OFFICE: 128 W. BALTIMORE ST., **BALTIMORE, MD.**
FACTORY AT CANTON, BALTIMORE CO.

For the Young.

LETTERS FROM THE COUSINS.

DEAR UNCLE MARK: I am a little girl seven years old. I would like to join the club. I like to read the Cousin's letters. I have three sisters younger than I am. We have four horses, four hogs, a cow and calf. I have never been further East than Illinois. I never saw apples growing, nor nuts on trees. Susie wants to join too, but she cannot write. Yours truly,

Hackett, Dakota. RACHEL STOWELL.

[It is pretty hard for us to think of one who has never seen an apple on the tree. I hope they will be able to raise apples in Dakota some day. Susie must join the club too.

—UNCLE MARK.]

DEAR UNCLE MARK: I like the RURAL, for it tries to help the farmer boys, and I think they need to be encouraged, for some of them have hard times. Their fathers don't take as much interest in teaching them and giving them a good education as their city cousins have; but I would not trade places with them, for we can be the most independent of the two. We have health and strength that most of the city boys don't, and can work our way through and be self-made men, and that is something to be proud of, I think. Don't you, Uncle Mark? FRED CORELL.

Chautauqua Co., N. Y.

[Yes, indeed I do. I mean that farmer boys shall have every chance they will improve. I should be sorry to see my stout and healthy boys come to the city to grow pale and weak. Stay on the farm, boys. We will make farm life what it ought to be. Don't run away from it now because it don't suit you. Cowards run away, but brave people stand their ground.—U. M.]

DEAR UNCLE MARK: I would like to join the Y. H. C. I am a boy 13 years old. We live on a farm one mile north of North Greenfield, Mo. We have set out a young orchard. I help on the farm. I have one hog and two pigs. I have caught 47 rabbits and five quails. I did not kill the quails. Pa said that they were too pretty to kill. J. WALTER ADAMS.

[And I am glad he said so. I wish more people would come to the same way of thinking.—U. M.]

Miscellaneous Advertising.

AT HOME ON THE DELAWARE.

Burlington, N. J., is the city of cosey homes and streets lined with shade trees. Its Delaware front is like a park. Back among its lawns nestle the most popular schools in the country.

Taking advantage of an off-day your correspondent ran up to this beautiful town to see the sights and breathe a little fresh air. Dropping into the busy law office of Mr. H. S. Prickett, one of Burlington's real live men, conversation naturally turned on the health of his family, and especially on that of his mother, Mrs. H. C. Prickett, who had been miraculously spared to them about three years ago. I became deeply interested in her wonderful recovery, and asked to see her that I might hear from her own lips the details of her suffering and relief.

Her home was but a step away at No. 17 Broad Street. I was ushered in and introduced to a matronly lady of sixty-five, who was presiding at a sewing machine in her comfortable sitting-room, and who proved to be as bright and vivacious as a maiden of sixteen.

"It was the winter of 1883," she said, "when I took a violent cold, which settled on my lungs and resulted in an unmistakable case of pulmonary consumption."

"Pardon me, Mrs. Prickett," I said; "but will you describe to me your exact symptoms? Your case is very interesting, and that is my excuse for being particular."

"Well, I had oppressive weakness in my lungs and severe pain. My cough was violent and constant, and I raised great quantities of thick pus. I wasted to a skeleton; had no appetite; suffered from fever and exhaustive night-sweats. Took my bed, on which I lay, gradually dying, for weeks. By May of that year all hope was gone. I had no longer strength to raise the phlegm from my lungs. My family were gathered to witness my death, which, the doctor said, might occur at any moment. How and why it came about I don't know, but I rallied somewhat and——"

"Did you get up and about?"

"Oh, no! except to be propped up in bed or carried to and from a pillowed chair. I had seen an account of the Cannabis Sativa remedy and had cut it out of the paper. I handed it to my son one day and said: 'I will try one more remedy; there may be time yet.' He took the slip, and in a day or two after handed me the medicine. I began to take it at once. The effect was perfectly surprising."

"Which one of your symptoms yielded first?"

"I could feel it taking hold of my system generally in less than a week. I got stronger all through. My appetite came back, and that was great encouragement. I got to walking from my chair to my bed; then about the room, and inside of the first week astonished them all by going down stairs."

"How about the local trouble in the lungs?"

"The cough became easier and less frequent every day and the expectorations diminished. The pain left my lungs, also the sense of weakness. I picked up in flesh, resumed my duties, and could run my machine by the hour. There is no trouble now with my lungs and I have no cough, except a slight one in the top of my throat when I take cold. My cure is all the more wonderful because my mother died of consumption and so did one of my daughters.

"No; when I take cold now—and I do not take it readily—it does not go to my lungs. It only troubles my throat and sometimes takes the form of remittent fever. I had such an attack this winter, but now am over it and at work, as you see."

"Are you convinced that the Cannabis Sativa saved your life?"

"As firmly convineed as that I am alive. But for it I would not be here to-day and well of my lung troubles. It has surprising curative powers in such diseases, and I have spoken of it to several people whom I thought might be benefited by it."

The good lady gave her convictions in a spirited manner, and, by way of emphasis, threw a little more speed, as I thought, into the sewing-machine.

"Yes," said she finally, amid the music of the machine; "yes; it saved me, and nothing else did. Its merits ought to be known everywhere."

Thanking her for her kindness I bade goodbye, and left that cosey home on the Delaware with the happy and thrice clinched conviction that but for a piece of good fortune in striking the Cannabis Sativa remedy in the nick of time its busy and genial mistress would not be there to bless it.

Remarkable as Mrs. Prickett's cure was it is only one of a thousand. Mrs. Dr. J. L. Adams writes from Breckenridge, Stephens County, Texas, to say that her rapid failure with a terrible cough and every symptom of confirmed consumption was arrested and her health entirely restored by the use of Cannabis Sativa. Now trained doctors don't often use my remedies, but their own, till the very last minute, and don't often say much about them when they do. But Mrs. Dr. Adams speaks very emphatically and unqualifiedly, and moreover says she was alarmed for herself because all of her family were dying of consumption.

To the same effect is the testimony of Dr. R. H. Baylor, of Pleasant Ridge, Princess Anne County, Va. He had exhausted his medical skill on his wife, who, he says, "had a very bad cough, difficult breathing, profuse expectorations, no appetite, and became very weak and emaciated. He had given up all hopes of her recovery." "But," he continued, "your Cannabis Sativa—(he seems to have tried it as a last resort)—has greatly relieved her distressing symptoms and she has improved in flesh. I will push the remedy. All its ingredients are good for diseases of the lungs, and I have no hesitation in saying it will do good."

And Dr. Pickett, of Macon, Mo., adds his testimony by saying: "I am well pleased with the results obtained by using your Cannabis Sativa. I think it a valuable remedy."

But the testimony furnished voluntarily by the medical fraternity would not be complete without that of Dr. J. G. Horton, of Whitesville, Alleghany County, N. Y. He sent for a package of the Cannabis Sativa to try upon a patient, Mr. F. J. Baker, who was bedfast with consumption, and whom, he was satisfied, could not live more than a few weeks. After watching the effects closely the doctor writes: "I have been a practising physician for thirty years, and have to acknowledge that I have never seen a more marked effect from any medicine than this on Mr. Baker. I am sure he would have been in his grave before this time had it not been for your East India remedy. His cough and expectorations have stopped; his appetite and strength have come back; he can walk three or four miles and do light work about the farm. His gain has been constant from the first dose, and he is better than he has been at any time within two years."

If you wish to know any more of Cannabis Sativa, the great East India Consumption Cure, and what it has done for others, send for a little book which I mail free to all applicants. It contains much information of value to any who may be suffering from consumption, catarrh, asthma or any similar difficulty. Address W. A. NOYES, 149 Power's Block, Rochester, N. Y.

Rawson's Clipper. Without exception the earliest variety introduced. We defy competition in earliness, productiveness, and quality. Trial pkt., 15c.; 1-2 pint, 30c.; pint, 55c.; qt., $1.00. By mail.
Bliss's American Wonder. Best early wrinkled variety. A world-wide favorite. Very dwarf.
Bliss's Abundance. Best second early. 120 pods counted on a single plant. Splendid quality.
Bliss's Ever-Bearing. Perpetual bearer. Very best late Peas 11o 1 1-2 inches in circumference. 100 pods counted on a single vine. The large silver medal of the Mass Hort. Society was awarded the Abundance and Ever-Bearing in 1884. Price of the three foregoing: pkt., 10c.; pint, 40c.; qt, 65c. By mail.
N.B.—These four varieties will give peas until frost, and will require no bushing.

Rawson's Handbook for the Farm and Garden. Finely illustrated; colored plates; giving list of all leading novelties in vegetable and flower seeds. It tells what, when, and how to plant. Mailed free to former customers of B. K. Bliss & Sons of New York, and Everett & Gleason of Boston; to all others, 6 cents in stamps.

W. W. RAWSON & CO., 34 South Market Street, Boston,
Successors to B. K. Bliss & Sons of New York, and Everett & Gleason of Boston.
Mr. B. K. Bliss is manager of our seed department, and solicits the patronage of his former customers.

850,000 GRAPE VINES
100 Varieties. Also Small Fruits. Quality unsurpassed. Warranted true. Very cheap. 3 sample vines mailed for 15c. Descriptive price list free. **LEWIS ROESCH,** Fredonia, N. Y.

LOVETT'S GUIDE TO FRUIT CULTURE
J. T. LOVETT LOVETT'S GUIDE TO FRUIT CULTURE 1886 LITTLE SILVER, N.J.
Is a book of **70 Pages,** with **illuminated cover,** embellished with **nearly 200 engravings** of **Orchard** and **Small Fruits, Nuts, &c.** Gives **honest** descriptions of **Golden Queen Raspberry, Lawson-Comet Pear,** and **over 400 varieties of other fruits,** and instructions for **planting, pruning, cultivation and management,** with **Low Prices** for Trees and Plants. Also directions **so clear** that even a novice can readily determine what and how to order. Price, with colored plates, **10c.,** without plates, **5c.** Price list of Trees and Plants **Free.** All who mention this paper will receive a copy of "Orchard and Garden" gratis. **J. T. LOVETT, Little Silver, N. J.**

GRAPE VINES Niagara, Empire State, and all the best varieties. Low prices for first-class stock. Jewell, Parry, May King, etc., **STRAWBERRIES** (several varieties $2 for 1000). New and Old **RASPBERRIES, BLACKBERRIES,** &c. **Plants by mail a specialty.** Descriptive Catalogue, with colored plates, **Free;** contains $1, $2, $3 and $5 collections, and instructions for planting. JOEL HORNER & SON, Merchantville, N. J.

"MICHIGAN."
This Seedling originated in Washtenaw County, Michigan, by H. C. Clark, is a prolific, vigorous, blight-resisting variety, of floury texture, and delicacy of flavor unexcelled by any other variety. Season, medium late.
Planted alongside of ten other varieties this past Season where four-fifths of them rotted, there was no sign of blight or rot with it. Price, $1.00 per pound by mail, post paid; by express or freight, at purchaser's expense, ¼ peck $2.00, peck $3.00, ½ bushel $5.00, bushel $8.00. Send all orders to **H. C. CLARK,**
Lock Box 95, Ann Arbor, Mich.

NORTHERN GROWN Seed Potatoes and Spring Wheat. Send for price-list, FREE.
S. FROGNER, Herman, Grant Co., Minn.

300 Varieties of Potatoes. New Seedlings. Foreign Varieties, etc. Illustrated Catalogue free.
M. F. Pierson, SENECA CASTLE, Ont. Co., N. Y.

Marlboro Raspberry, *Ulster Prolific and Pough keepsie Red Grapes.* Send for description and price to **A. J. CAYWOOD & SON, Marlboro, N. Y.**

359 VARIETIES OF **FRUIT TREES, VINES, PLANTS,** ETC.
Apple, Pear, Peach, Cherry, Plum, Quince, Strawberry, Raspberry, Blackberry, Currants, Grapes, Gooseberries, &c. Send for Catalogue
J. S. COLLINS, Moorestown, N. J.

For Sale—300 Bus. Fresh APPLE SEED
OLIVER BROS., Lockport, New York.

FOR SALE.—I have a fine lot of the celebrated Empire State Potatoes, pure seed, which I offer at $1.50 per bushel; $3.50 per barrel f. o. b. here. Address
E. D. COPP, Clifton Springs, N. Y.

WANTED By the Chase Nurseries, Honest and Energetic Men *to solicit orders for their Nursery Stock.* The business easily learned. Full instructions given. **Permanent Employment and Good Pay.** State age and previous occupation. Name this paper. New England applicants address us at Boston; York State and West, at Geneva, N. Y., Penn., N. J., and South, at Phila. State age. **R. G. CHASE & CO.**

More Men Wanted,
At Good Wages.
For local and travelling Salesmen. Inclose stamp and write for terms to **E. B. RICHARDSON & CO., Kaundesaga Nurseries, Geneva, N. Y.**

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On GRASSES, MEADOWS, PASTURES and LAWNS, Mailed to any address on receipt of a one-cent stamp.
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The Farm offered, contains 1850 Acres and is considered one of the finest stock farms in Eastern Virginia. It rents for a moneyed rental of from $400 to $500 per year and the taxes. Price $7,000. For particulars, Address **C. T. REEKER, Boydton, Va.**

FOR SALE.—$12,000 and Widower's Board will buy $30,000 Hotel, Store, and Farm of 155 Acres. Growing County Town; two railroads. Widow preferred. $6,000 down. **Kitchen,** Owner, **West Union, Ia.**

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PERSONALS.

MR. BLAINE'S two eldest daughters have become Roman Catholics. The first, who married Col. Coppinger, was baptized shortly after her marriage, and the second, Miss Margaret, has followed suit.

THE wife of Senator Joseph R. Hawley, of Connecticut, a niece of Rev. H. W. Beecher, died of pneumonia at Washington last Wednesday. Throughout her husband's entire public career she has been his private secretary and political adviser—an admirable woman and wife.

BRIG.-GEN. ALFRED H. TERRY was nominated Major-General *vice* General Hancock, last Wednesday, much to the disappointment of the friends of General Howard, whose commission antidated Terry's. Another vacancy will occur on the 16th of this month by the retirement of Gen. Pope for age; but even if Howard gets that, Terry has been passed over his head, and stands before him in possible command of the army.

PLINY MARTINDALE, of Kirtland, Onio, is a well-to-do, but apparently very lazy, heartless farmer. He had 300 sheep when Winter set in, and plenty of grain and fodder, but the other day an agent for the Humane Society found 71 of the sheep dead, 40 being piled in the basement of one barn and 23 in another, and others scattered about the place. They had all starved to death.

Miscellaneous Advertising

GOLD MINES

are very uncertain property; for every paying mine a hundred exist that do not pay. But if you write to Hallet & Co., Portland, Maine, you will receive, free, full particularls about their new business, and learn how some have made over $50 in a single day at it. You can live at home, and earn from $5 $25 and upwards per day. Both sexes; all ages. Capital not required; you are started free. Send along your address, and all will be proved to you.

Trees, Seeds and Plants.

The New JEWELL,

together with the best older varieties of Strawberries, Raspberries, Grapes, SEED POTATOES.
E. & J. C. WILLIAMS,
MONTCLAIR, N. J.

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MARKET GARDENERS' trade a Specialty.
CATALOGUE FREE. SEND FOR IT.
AARON LOW, Seed Grower. ESSEX, MASS.

Lang's Live **SEEDS** Flower, Vegetable & Field. Catalogue free. F. N. LANG, Baraboo, Wis.

Send stamp for sample.
Dietz Early Corn, Dietz Longberry Wheat, Dietz Fruit Dryer. New way of cutting fodder.
G. A. DIETZ, Chambersburg, Pa.

New Tested Radish, Magnum Bonum. 25cts. packet or 6 for $1. A. C. MITTING, Newton, Kan., Box 14.

O.K. SEEDS. High quality. Reduced Price. Inducements to gardeners. We are now giving away 19 kinds Free to test them. Send for elegant Catalogue. Don't fail. J. A. EVERITT & CO. Seedsmen, Watsontown, Pa

GRAPE VINES CONCORD, AGEWAM, SALEM, CATAWBA, DELAWARE, WORDEN, JEFFERSON, AMBER QUEEN, and other varieties. Also the CATAWBA SEEDLING, "MARY," a Red Grape originated in Oswego Co., N.Y. Early as Concord and as heavy bearer. Fruit has been kept until May. This Grape is new, has not been on the market before. I have just bought the entire stock of the originator, and shall have the entire control for some years of same. Prices of vines within reach of all. 1, 2 and 3 year vines. Send for list.
EVERETT BROWN, Bluff Point P O., Yates Co., N. Y.

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Raspberries, Strawberries, Grape-Roots, Cherries, Currants, Gooseberries and general assortment of Ornamental Shrubbery.

Especially Fine and Large Lot of Maple and Shade Trees at bottom prices.

Send for Catalogue.
EDWIN ALLEN,
NEW BRUNSWICK, N. J.

HEADQUARTERS or the Best Strawberry in the world—"THE HENDERSON." 75c. per dozen; $3 per hundred; $25 per thousand.
GEO. SEYMOUR,
South Norwalk, Ct.

E. B. Underhill, PO'KEEPSIE, N. Y. "BERRY LEAF" for Spring now ready. It is four-leaved, fresh, full and free. It tells of all the old and new, cheap and dear BERRY PLANTS. Please send for it to-day. Get the Best.

BIG BERRIES and lots of them can be grown if *you follow our method.* Free Catalogue describes all varieties. Also Earhart Black-cap Rasp. A valuable novelty. 3 *full crops each season.* Fruits from June to Nov. Hale Bros., So. Glastonbury, Conn.

SAMPLE OF GRAPE **ROSE OR GRAPE VINE** with Cat-log, postpaid, 15c. WM. B. REED, Chambersburg, Pa. | *Mention paper.*

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FOR ANNEXED PRICE WE WILL MAIL, PROMPTLY, EITHER OF THE FOLLOWING HIGH CLASS SEEDS SUITABLE FOR FRAMES.

	Per Packet.		Per Packet.
Thorburn's Gilt Edge Snowball Cauliflower	25c.	Earliest Roman Carmine Turnip Radish	10c.
New Bronze foliaged Trophy Tomato	10c.	Early Etampes Cabbage	10c.
Improved New York Purple Egg Plant	10c.	Improved White Plume Celery	25c.
Golden Perfection Nutmeg Melon	10c.	Early White Forcing Lettuce	10c.

The Eight Sorts, including One "Thorburn" Potato, for $1.
CATALOGUES FREE.

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That Seeds should be *new* and *true* to name. They should be bought of men who have had *experience* in the business. By sending to us you will get just what you order, and that which will give you satisfaction. We are importers and growers of Seed. Send for our Catalogue.
L. G. SHERMAN & CO.,
Mention this paper. Providence, R. I.

Off with the tariff on seeds! - - - - - Relief for the people!

GREAT SUCCESS TO OUR NEW DEPARTURE IN THE SEED TRADE

SEEDS AT YOUR DOOR AT WHOLESALE PRICES.

In order to sell our seed crop—1885—direct to the planter, we make the following PROPOSITION: For 60 CENTS in postage stamps or money, we will send by mail post-paid, 19 PACKETS each, of the following new and improved seeds:—Bastian's Early Blood Turnip Beet, the earliest and best for table use. "BEST OF ALL" BEANS, most remarkable snap bean in the world. Pods as tender and buttery in winter as in summer. Hawaii Sugar Corn from the Sandwich Islands; the sweetest sugar corn that grows. Early Etampes Cabbage, best and earliest of all early varieties. Sure Head Cabbage, best winter cabbage in cultivation. Wilson's Early Green Cluster Cucumber, good for early cucumbers or pickles. Golden Self-Blanching Celery, needs no banking up; excellent quality; keeps all winter. Perpetual Lettuce, tender and crisp all summer. Pride of Georgia Watermelon, none sweeter or better. THE SPANISH NECTAR a new muskmelon from the south of Spain. First premium at Penna. State Fair. Pronounced the best-flavored muskmelon in the world. New Red Rocca Onion from Italy. Grows large onions from seed first year. Tennessee Sweet Potato Pumpkin, none better for pies or custards. Abbott's Improved Sugar Parsnip. Ruby King Pepper, the largest and finest sweet pepper ever seen. Improved Long Scarlet Radish, best for early use. Half-long Strasburg Radish, good for spring or summer. New Brazilian Sugar Squash, sweetest and best-flavored, for summer or winter. Livingston's Favorite Tomato, large, smooth as an apple; productive; solid. Early White Egg Turnip, sweetest and best for table use. In all 19 PACKETS for 60 CENTS; TWO COLLECTIONS for $1.10; FOUR for $2.00. ANOTHER PROPOSITION To adorn your homes and make life pleasant, as we grow flower seeds by the pound, budded and by the acre, to give our lady friends the benefit of the wholesale trade, we will send by mail 13 PACKETS one each, of the following, for 30 CENTS Asters, fine, double, mixed. Balsams, extra large, double, mixed. Chrysanthemum (Paris Daisy), very fine. Mignonette, sweet scented. Double Rose-flowered Portulacca, nearly all double and all bright colors. Pansies, finest strain. Petunias, large-flowering; Phlox Drummondii, all bright colors. Verbenas, ten beautiful colors. Zinnias, large, double, bright colors. One fine Ornamental Grass. One splendid Climbing Plant. One beautiful Everlasting Flower. In all, 13 PACKETS for 30 CTS.; TWO COLLECTIONS for 50 CTS. *Directions for cultivating on each packet.* ONE COLLECTION OF FLOWER SEEDS AND ONE OF VEGETABLE SEEDS FOR 80 CENTS, OR TWO OF EACH, FOR $1.50. Our Beautiful Illustrated Catalogue accompanies each order. No changes. Address SAMUEL WILSON SEED GROWER, MECHANICSVILLE, BUCKS COUNTY, PENNSYLVANIA.

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The OLD and Well-known SYRACUSE NURSERIES offer for the Fall of 1885 an Unusually FINE STOCK

STANDARD APPLES STANDARD AND DWARF PEARS AND PLUMS

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HALF A MILLION GARDENS ARE ANNUALLY SUPPLIED WITH

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EVERYTHING FOR THE GARDEN

Our Seed Warehouses, the largest in New York, are fitted up with every appliance for the prompt and careful filling of orders.

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FARM ANNUAL FOR 1886

Will be sent FREE to all who write for it. It is a Handsome Book of 128 Pages, with hundreds of new illustrations, two Colored Plates, and tells all about the Best Garden, Farm and Flower Bulbs, Plants, Thoroughbred Stock and Fancy Poultry. It is the only complete catalogue of the kind published, and describes RARE NOVELTIES in VEGETABLES and FLOWERS, of real value, which can not be obtained elsewhere. Send address on a postal to
W. ATLEE BURPEE & CO., PHILADELPHIA, PA.

TRIUMPH Gooseberry, New. Send for Circular. Address GEO. ACHELIS, West Chester, Pa.

SEEDS Garden, Farm and Flower Seeds, 33 5c. pkts for $1; 15 for 50c.; 7 for 25c., p. p. Catalogue *Free.* Geo. H. Colvin, Dalton, Pa.

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LARGEST and BEST.

Testimonials and Colored Plate Free to all who apply. Address originators,
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EVERGREENS BY THE MILLION.
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PEACH TREES. PEACH TREES.

20,000 First-Class Peach Trees now in our roots cellars can be shipped at any time. Also a general assortment of nursery stock at hard times prices.
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Two years, extra choice, $3 per thousand.
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without writing for our Catalogue. Our prices DEFY COMPETITION, and Seeds are NEW, PURE, TESTED, RELIABLE.
FREE Catalogue, invaluable to all, of 136 pages, including Plants, Fruits, and price list, with 800 illustrations. Let us hear from you. Respectfully,
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Catalpa Speciosa, White Ash, European Larch, Pines, Spruces, Arbor Vitæs, etc., etc.
Catalpa Speciosa Seed.
Forest and Evergreen Seeds.
R. DOUGLAS & SON,
Waukegan, Ill.

NEW AND RARE FRUITS, PLANTS, SEEDS,

Trees, Vines, Seeds, &c., *by mail* a specialty. Postage paid. Safe arrival guaranteed. **64 CHOICE CHEAP $1.00 SETS.** For example: 15 splendid ever-blooming Roses, 15 sorts, our choice, $1; 15 magnificent Carnations, 15 sorts, $1; 15 Chrysanthemums, 15 sorts, $1; 20 Gladiolus, elegant mixed sorts, all blooming bulbs, $1; 15 Tuberoses, all flowering bulbs, $1. 36 PACKETS CHOICE FLOWER SEEDS, $1; or 17 for 50c. or 8 for 25c. 29 Packets CHOICE VEGETABLE SEEDS, $1; or 14 for 50c., or 7 for 25c. 7 pkts. Choice Vegetable and 8 pkts. Choice Flower Seeds, 50c. 1 Kieffer Standard Pear, 1 Russian Apricot, and 1 Champion Quince, $1. 12 Grape Vines, 4 sorts, $1, or 12 all Concord, $1. 100 Strong Strawberry plants, 5 sorts, early to late, $1. 75 Hardy Catalpa, $1. 30 Sweet Chestnuts and 1 Japan or Giant, $1. 15 Mulberries, 15 each Russian, Black English and White, $1. For the other 59 $1 sets and 1,001 things beside, send for our valuable Catalogue of over 110 pages FREE. Everything kept in the Nursery line, from pot plants to forest trees, including an immense stock of Grape Vines, and Fruit and Ornamental Trees of all sizes.

32d YEAR. 600 ACRES. 21 LARGE GREENHOUSES.

One each of FIVE famous GRAPE VINES, WORTH $4.15 FOR $3.00 viz: NIAGARA, EMPIRE STATE, EARLY VICTOR, WYOMING RED, and GOLDEN POCKLINGTON.

THE STORRS & HARRISON CO., PAINESVILLE, LAKE CO., OHIO.

Connecticut Agricultural Experiment Station.

Extracts from Annual Report by the Director, Prof. S. W. Johnson, on Fertilizers during past year, 1885.

Prof. S. W. JOHNSON states on page 61:

"In 1885, the average selling price of Ammoniated Superphosphates and Guanos (55 samples was $37.60, the average valuation $30.47, and the difference $7.13—an advance of 23.40 per cent. on the valuation and on the retail cost of the fertilizing elements in the raw materials."

"In the case of the Special (Crop) Fertilizers (26 samples) the average cost was $44.80, the average valuation $38.70, and the difference $6.10, or less than 16 per cent. advance on valuation."

SPECIAL CROP MANURES for 1885 *again found to supply plant-food AT LESS cost and to be cheaper to the farmer than the Superphosphates, Guanos, or "Fish and Potash," or any other fertilizer.*

	Average Cost.	Valuation.	Difference.	Percentage over cost.
Superphosphates, Guanos, "Fish and Potash," etc. (55 samples),	$37.60	30.47	7.13	23.40
Special Crop Manures (26 samples),	44.80	38.70	6.10	15 76
Fish and Potash (9 samples)	37.70	26.64	10.06	35.50
Bone and Potash (3 samples),	35.67	25.06	10.61	42.30
Mapes' Special Crop Manures (5 samples),	$48 60	$46.06	$2.54	5.50 per cent.

These five samples of the Mapes Special Crop Manures also comprise ALL that are reported upon by the Station during the past year. They are *all found* as heretofore to be *fully up to guaranteed strength.*

The above ARE STUBBORN FACTS and are not open to criticism on score of being selections of HIGH VALUATIONS FOR ONE and LOW VALUATIONS FOR ANOTHER MANUFACTURER, nor are they AVERAGED from valuations of years ago when valuations were high. They represent the station analyses of the PAST YEAR, 1885.

The Mapes Special Crop Manures again found to supply plant-food at the least cost. They are found to be the CHEAPEST of all the Fertilizers Sold.

The Mapes Company give a DOUBLE GUARANTEE with their Complete and Special Crop Manures.

FIRST.—That they are fully up in composition to their published Analytical standard.

SECOND.—That they contain no S. C. Rock, Phosphates of Iron or Alumina, or any inferior substitutes for Bone—no cheap, inferior substitutes for Sulphate of Ammonia, Nitrate of Soda, or Blood, such as Powdered Leather, Shoddy, Horn, Hair, or other insoluble animal or vegetable matter—no marl or inferior make-weights.

The Mapes Manures are made *from the very best known forms of plant food.* They *enrich* the soil. They are not stimulants.

Send postal for Pamphlet. Address

The Mapes Formula and Peruvian Guano Co.,

158 Front Street, New York; or 242 State St., Hartfo rd Conn.,

HOLSTEIN-FRIESIAN CATTLE!

ALL AGES AND BOTH SEXES. HOME-BRED AND IMPORTED.

Cows and Heifers Bred to best Netherland and Aaggie Bulls.

The average Records of a Herd are the true test of its merit.

The following Milk and Butter Records have all been made by animals now in our Herd:

MILK RECORDS.

Five Cows have averaged over 19,000 lbs. in a year. Ten Cows have averaged over 18,000 lbs. in a year. Three Cows have averaged over 20,000 lbs. in a year.

We know of about 30 Cows that have made yearly records exceeding 16,000 lbs., and 14 of them are now in our Herd and have averaged over 17,500 lbs

Twenty-five have averaged over 16,000 lbs. in a year. Sixty-three, the entire number in the Herd that have made yearly records, including fourteen 3-year olds and twenty-one 2-year olds, have averaged 12,785 lbs. 5 ozs. in a year

BUTTER RECORDS.

Five Cows have averaged 20 lbs. 7 ozs. in a week. Nine Cows have averaged 19 lbs. 5½ oz. in a week. Fifteen Cows have averaged 17 lbs. 6 ozs. in a week. Six 3-year olds have averaged 14 lbs. 3 ozs. in a week. Eleven 2-year olds (the entire number tested) have averaged 13 lbs. 2 ozs. in a week. Six 2-year olds have averaged 12 lbs. 14½ ozs. in a week. Fifteen 2 year olds (entire number tested) have averaged 10 lbs. 8 3-10 ozs. in a week. The entire original imported Netherland Family of six cows (two being but three years old) have averaged 17⅜ lbs. in a week. This is the Herd from which to get foundation stock. Prices low for quality of Stock.

SMITHS, POWELL & LAMB,

LAKESIDE STOCK FARM, SYRACUSE, N. Y.

FRENCH COACH HORSES.

"Superbe," winner First Prize, Antwerp, 1885.

This race of handsome, high-stepping carriage horses, whose fine style, grand action, beauty and power have attracted the attention of all people who have visited Europe, will hereafter find a place at Oaklawn Farm, among the Percherons for which it has so long been famous. The Coach horse of France has been developed under Government patronage, and for every animal of this breed now owned at Oaklawn we have the Government certificate of breeding.

Send for Catalogue of Oaklawn Stud. Address

M. W. DUNHAM,

Wayne, Du Page Co., Illinois.

Are you going to build? Do your roofs leak? **Standard Roofing** is cheap, durable and fire-proof. Can be applied by any one. Sample and Circular free.

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Solidly Made.
Tone Unrivaled.
Elegant Finish.
Years of Popularity.

ILLUSTRATED CATALOGUES SENT FREE.

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GOOD NEWS TO LADIES.

Greatest Inducements ever offered. Now's your time to get up orders for our celebrated Teas and Coffees, and secure a beautiful Gold Band or Moss Rose China Tea Set, or Handsome Decorated Dinner Set, or Gold Band Moss Decorated Toilet Set. For full particulars address

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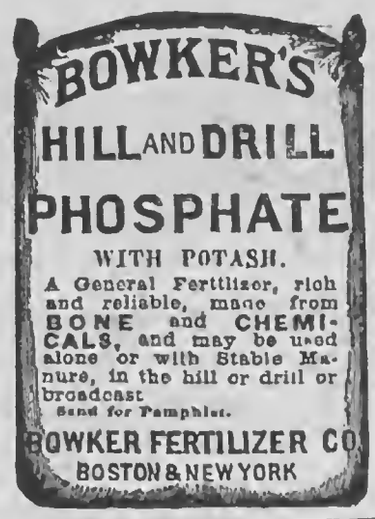
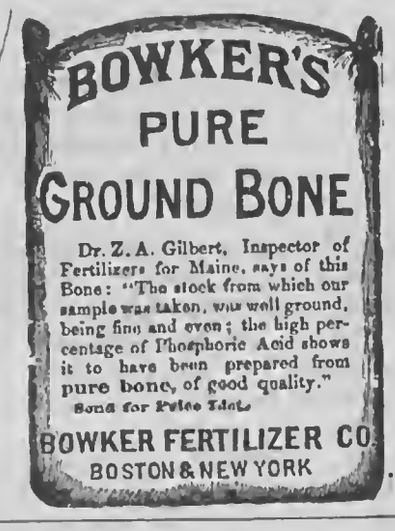
DYSPEPSIA Its Nature, Causes, Prevention, and Cure. By JOHN H. McALVIN, Lowell, Mass. 14 years Tax Collector. Sent free to any address.





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SARDY'S CONCENTRATED PLANT FOOD

A COMPLETE BONE MANURE FOR ALL CROPS.

GUARANTEED ANALYSIS.

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THE RURAL NEW-YORKER

A JOURNAL FOR THE SUBURBAN AND COUNTRY HOME.

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Rural Topics.

Experiment Grounds of the Rural New-Yorker.

THE RURAL'S RYE-WHEAT HYBRIDS.

THOSE PLANTS MOST RESEMBLING RYE.

THEIR HISTORY NOW COMPLETE UP TO THE PRESENT TIME.

WE have now to complete our history of the rye-wheat hybrids, which, four years ago, gave us the material for its first chapter. Our readers must bear in mind that the Armstrong was selected as the mother plant—mother, as we say, because its flowers received the rye pollen (the male principle), and were thus induced to bear the seed or *fruit*, as the grain (caryopsis) of the cereals is properly called. The flowers of wheat, if left to themselves, are close or self-fertilizing. It will be seen, upon examination, that when the anthers appear outside of the envelops (palets), and the wheat is *said* to be in bloom, the kernel is already partly formed and that the flower is, therefore, really beyond its bloom. If before the anthers can shed their pollen upon the stigmas (the top of the pistil or female organ) the anthers (or male organs) are removed and the introduction of any pollen from other flowers is prevented by tying the head in tissue paper, it is evident that kernels cannot form. If the paper be removed, the flowers opened and the rye pollen be thrown upon the stigmas and the paper replaced, if kernels should then form, it is evident that the rye pollen would be the father or male parent of the grain thus formed; in other words, a hybrid between rye and wheat would be produced. This is what was done, except that the tissue paper was removed and replaced each day for three days for the application of rye pollen. The result, as we have stated, was 10 grains so small and imperfect that it was feared they would not germinate. Only one, however, failed, and though the nine plants made little growth during the Fall, they wintered safely. Eight of them resembled wheat in all respects, though each plant differed somewhat from the others in leaf, stem and hight.

The ninth plant resembled rye in the color of its leaves, and later, it was seen that the culms just beneath the heads were *downy*, as in rye. The heads, 14 in number, at first resembled No 5 in the illustration, but later assumed the shrunken appearance of No. 3. Upon examination it was found that in all the 14 heads there were but 17 grains, only three or four of which were large or plump enough to give any hope of germinative power. Each grain, however, was planted with all possible care 10 inches from its neighbor, and, much to the writer's surprise, 14 of the 17 sprouted and grew. The plants, however, were nar-

THE RURAL'S RYE-WHEAT HYBRIDS. From Nature. Fig. 113.

row-leaved and seemingly feeble, so that it was deemed well to give them a careful mulching late in the Fall which perhaps assisted in carrying them safely through the Winter. Our engravings, 1, 2, 3, 4, 5, and 6, Fig 112, are faithful portraits showing the variations in the heads of the different plants. The plant which bore the first head in the engraving (1) was short and feeble, while many of the florets and several entire spikelets were sterile. The plant which bore the third head (3) was also feeble in growth and also partly sterile. The others, but especially Nos. 2 and 5, were remarkably vigorous, with strong stems and many heads. A peculiarity of the plant No. 5, was that the culms and heads continued green until after our latest wheats had matured, and it became necessary to cut them or run the risk of their destruction by blackbirds and sparrows. Nos. 4 and 6 ripened with the earliest wheats. No. 7 shows a section of the straw of the strongest plants.

Rejecting all inferior heads, enough grain was saved from the best to plant a plot of about one-thirtieth of an acre, that is, single kernels in the intersections of ten-inch squares. As shown in the engraving, all the culms (or straws) for an inch or so beneath the heads were covered with a hairy pubescence which always exists in rye culms, but never, so far as the writer is aware, in those of wheat.

Finally, to conclude this account, and record it up to the present time, we have to speak of our success in producing hybrids which by parentage are three-quarters rye, illustrations of which are shown at 8 and 9, Fig. 113. The first cross was effected by using rye pollen upon a head of those of our first hybrids which resembled wheat more than rye. A single plant was the outcome, which bore 22 heads, No. 9 showing it when first cut, No. 8 when thoroughly dry. These 22 heads bore but *three* kernels, which were planted last September. All sprouted, and two of the plants are still alive. Another cross was effected the past Summer, again using rye pollen, but this time upon a head of one of the hybrids most resembling rye. Seventeen kernels formed (also by parentage three-fourths rye), which were planted in September. Most of them sprouted, made a feeble growth during the Fall, and are now passing through the most trying Winter upon fall grain ever known in this part of the country. Two weeks ago when the frost was out of the water-laden soil, the thermometer suddenly sank to several degrees below zero. Then came a warm spell and another equally violent alternation occurred. For the past three days the wind has blown a gale, while even the surface soil scarcely thaws at midday. As to the prospective value of these hybrids, why speculate? It is better not to indulge the fancy which—especially the originator's fancy—is liable to cut up the cruellest pranks. We have given their history. Those of our readers who are interested in the matter may now follow their future developments, knowing all there is to be known about them.

Dairy Husbandry.

"TESTS OF DAIRY COWS."

E. A. POWELL.

A tardy but powerful refutation; no one cow a fair representative of 10,000*; conditions of a fair test; misrepresentations in the Canadian report; a "lanky, leggy," unacclimated heifer, not a fair representative of the Holstein-Friesian breed; comparison of her performances with those of other two-year-olds; an "unregistered," overgrown, Jersey (?) "pet" cow not a fair representative of the Jersey breed; comparison of her performances with those of three-year-old Holstein-Friesians; the latter's superiority for cheese; conclusions.*

My attention has been several times called to an article written by Valancy E. Fuller, of Ontario, Canada, under the above heading, which appeared in the RURAL NEW-YORKER of Oct. 17th last. This article purported to show the comparative merits of the Jerseys, the Ayrshires and the Holsteins for the dairy. The tables contained therein are said to have been complied from the "Advance Reports" of Prof. Wm. Brown, of the Ont. Exp. Farm. I do not wonder Mr. Fuller, one of the leading Jersey breeders of the country, should seize upon this report and take steps to publish it in every agricultural paper throughout the country. It was a golden opportunity for the Jersey breeders, provided they could convince the dairymen of the country that the tests were impartial and that the cows selected for the trial fairly represented the various breeds—that each cow was an average of the breed to which she belonged. I wish, however, even at this late date, to correct some erroneous impressions that may have been created in the minds of those not familiar with the actual facts. I do not wish to question Prof. Brown's good intentions or the accuracy of all his calculations, but either through lack of knowledge of the Holstein-Friesian breed, or from some other cause, he started on a false basis, by taking as a representative of this breed a heifer of the very poorest class, inferior in size, in appearance, and in quality of milk for both butter and cheese.

A single moment's reflection will convince any intelligent breeder that no one cow fairly represents any breed numbering tens of thousands of cows any more than a handful of sand can represent a sea-shore, and especially when that one is a poor insignificant heifer. As well might Prof. Brown, from the analysis of a handful of soil from some solitary sandhill, write a treatise on the agricultural possibilities of the Dominion. Had he given the various dairy breeds a fair, impartial trial, by having a competent committee, interested equally in all breeds, select, at least half a dozen good representative cows of each, have them given the same care and kind of food for a year previous to, as well as during the time of trial (for it is now an admitted fact, proven by actual experiment, that previous condition and food have almost as much to do with the product of the cow as her present ration), he would have done a work of incalculable value to the whole dairy world. As it is, his report is misleading, conveying an erroneous impression, and is a great damage to the dairy interests, not of the Dominion only, but of the whole country. Any misleading tests are decidedly worse than none.

I wish here to say that Prof. Brown doubtless was prompted by the best of motives, a desire to give the people of the Dominion an equivalent for their outlay in maintaining an experimental station; but he was too hasty and made his report without the proper material to make it from. Let us review some of the statements therein.

The Holstein is given in the report as "Verapina," three years old, weight 895 pounds, dropped first calf in January, 1885. Prof. Brown describes her as "lanky and leggy." Nothing is said of her breeding. No herd-book number or date of importation is given, but by reference to the H. H. B., I find the heifer to be "Verasina," 10450, Vol. 9, born March 15th, 1883, imported May, 1884, and she must therefore have come out of quarantine the August before she dropped her calf in January. This record and the name are confirmed by Prof. Brown in reply to a letter from me asking him for the dates of birth and importation, with herd-book number of heifer.

It will thus be seen that this representative Holstein-Friesian was only one year old past—a yearling—only 22 months old when she dropped her calf, and that she commenced her record at 22½ months, instead of being three years old, as stated in no less than six different places in Prof. Brown's report, and confirmed by Mr. Fuller's letter. She dropped her calf in January, before being acclimated and before she became accustomed to the severe Winters of Ontario or to the feed and water in use there. All importers know full well the bad effect of such changes, not only in quantity but in quality of milk. Many good cows are almost worthless the first season after importation. "Verasina" may, therefore, yet prove to be a good cow.

Why this heifer's name should have been misspelled, why her H. H. B. No., the date of importation and the fact that she was not acclimated, were all witheld in the report, and, above all, why she should be called a three-year-old cow when in fact she was but 22½ months, why a "leggy and lank" little unacclimated heifer should be selected by such an institution as the Experimental Farm of Ontario to represent the Holstein-Friesian breed in such an important trial, are matters beyond my comprehension.

We will compare this heifer with the average of some of the largest herds of the same breed in the country, in order to see if she is a fair representative. In doing so, I will be pardoned for referring to a herd in which I am interested. I am compelled to do this, as I have the necessary data at hand from only this herd and that of Messrs. Yeomans & Sons.

For the present milking year, now nearly closed, the Lakeside herd had in milk for five months (the length of time which the report in question covers), in all, 57 head of two-year-old heifers. Their records were carefully kept by weighing each milking. The entire lot averaged, for five months, 5,575 pounds. For the previous year there were, in all, in the same herd, of the same age, milked through the season 26 head. The entire lot averaged, for five months, a little over 5,350 pounds, and for the year 10,810 pounds, although a few did not complete the year. Fifteen of the number averaged 12,-307½ pounds. In 1882, Messrs. Yeomans & Sons reported 14 heifers two years old (their entire herd of that age) which averaged for the year 11,118 pounds three ounces. I have not their exact records for five months, but they must have averaged fully as much as the Lakeside herd for this season (5,575 pounds) and probably more if a large majority of them dropped their calves in the Spring and thus had the benefit of fresh feed. Here we had 97 two-year-olds, all recorded Holstein-Friesians, embracing the milking cows for two consecutive years in the Lakeside herd, and the entire number for one year in the Yeomans herd, which nearly all dropped their calves at from 22 to 28 months of age, and the entire lot averaged for five months 5,515 pounds.

"Verasina" gave for the same time, according to Prof. Brown's report, 3,239 pounds, showing a balance of 2,286 pounds for five months in favor of each of the 97 head. "Verasina" weighed, at 25½ months, 895 pounds. At the same age all the heifers at Lakeside referred to above, averaged over 1,050 pounds, and those in the Yeomans herd, I judge, were fully as heavy, showing this representative cow to be 155 pounds under weight, even as a two-year-old, instead of three years, as stated in the report.

In butter I cannot give a comparison with the whole herds, as only part have been tested. In the Lakeside herd 17 two-year-olds averaged for a week 10 pounds eight ounces. Messrs. Yeomans, in their report on butter tests, give nine two-year-olds which average 12 pounds 13⅛ ounces per week, so that 26 heifers averaged 11 pounds seven ounces. "Verasina" made in 151 days 108 pounds, showing an average of five pounds per week, or considerably less than half the average of the 26. Of course, "Verasina" here had the disadvantage of the longer trial, but it is probably safe to conclude that if the test of the 26 head had been continued for the same time, they would, on an average, have nearly, if not fully, doubled her record.

This will be enough to show the character of this "representative" Holstein-Friesian as compared with some of the entire large herds of the same breed. It shows her to be 155 pounds under weight, her milk for five months to have been 2,286 pounds below the average, and her butter about one-half below.

Let us now turn our attention to the Jersey. Prof. Brown in his report describes her as follows: "Beauty o' the Mill may be described as a Jersey that pokes her nose into everybody's pocket—an uneducated pet. With such a disposition we have had much pleasure in handling this cow. Cream-colored, even, roomy, a fine skin, but with little milk mirror and medium udder." Three years old, weight May 1st, 835 pounds, which shows that she was above the average of her breed in size, and the Professor's description shows that she was of just the type and disposition to insure the largest results. The report shows just what we could expect from such an animal viz.: that her combined milk, butter and cheese product for the five months is far above the average of her breed. In fact, it is far above that of any entire herd of Jerseys of a dozen heifers of the same age we have ever seen published. It should be borne in mind that this heifer was fully acclimated, accustomed to severe Winters and the feed of Canada. A few more singular facts regarding her are worthy of note. She is given in the report as a Jersey three years old; but the date of birth and herd-book number are not given. To get more definite information regarding this cow, I went to the office of Mr. Hand, the Secretary of the A. J. C. C., and to my surprise learned that no such cow was on record. I then wrote to Prof. Brown, who kindly replied that she was dropped in 1882 and was NOT recorded. I was not a little surprised that an unregistered animal should be taken as a representative Jersey, especially by such a breeder as Valancy E. Fuller. The question naturally arises: Is she a grade and does this fact account for her large flow of milk and the fact that her milk is much superior for cheese to that of any registered Jersey of which we have yet seen an account?

In order that a fair estimate of the two breeds, the Jersey and Holstein-Friesian, for the dairy may be found, we will compare the product of this heifer with that of entire herds of the same age. In the Lakeside herd of Holstein-Friesians, this last season, 24 three-year-olds, the entire number in milk for the time, gave, by actual weight in five months, an average of 6,114 pounds for each cow, while this Jersey gave 2,944 pounds, leaving a balance of milk in favor of the black-and-white cows of 3170 pounds per cow in five months, or, in other words, the Holstein-Friesians each gave 226 pounds more than double the amount given by the Jersey.

Our tests for butter do not comprise the whole herds, but I will make as fair a comparison as the data at command will admit. In the Lakeside herd 13 heifers three years old have been tested, and they averaged 13 pounds six ounces per week. Messrs. Yeomans & Sons, in their recent butter reports, mention four three-year-olds each of which averaged 17 pounds six ounces per week. It will thus be seen that 17 three-year-olds averaged, for a week, 14 pounds five ounces. In all the butter tests in both the Yeomans and Lakeside herds, the butter was worked dry and weighed before salting.

This Jersey made an average, for the five months, of a little over 11 pounds per week, a difference of two pounds 12 ounces per week in favor of the spotted cows. This I will frankly say is hardly fair for the Jersey on account of her longer test, but it will convey a good idea of the merits of each, and will satisfy anyone that these 17 Holstein-Friesians far excel her for butter.

I will make a few comparisons by taking, as a basis, the number of pounds of milk for a pound of butter, and as the following tests were made when the cows were in full flow and fresh, I think the fairness of the comparison will be conceded, for I believe it is an admitted fact that as the time after calving lengthens and the flow diminishes, the milk becomes richer, taking a less amount for a pound of butter.

The following table will show the result of the tests of seven heifers in the Lakeside herd—four three-year-olds and three two-years. It gives the amount of butter made by each in a week's test, the average weight of milk required for a pound of butter, the amount of milk given by each for five months, and on this basis the amount of butter each would have made in that time:

NAME.	Herd Book No.	Age at Time of Test.	Butter per Week. lb.	oz.	Lbs. of Milk to make 1lbs. of Butter.	Lbs. Milk Given in 5 Months.	Lbs. Butter in 5 Months. at same Rate.
Neth. Belle..	1876	3	16.7		22.34	7191	321
N. Countess.	2634	3	15.15		20.89	5724	274
N. Jewel....	2642	3	15.3	½	26.31	6667	253
Alex. Queen	6988	3	15.4		21.93	6028	274
B. Fletcher..	6891	2	16.9		18.11	6634	366
Soldene.....	2896	2	13		24.93	7068	283
A. Sarah 2d.	7142	2	12.1	½	24.41	6301	258
Seven, equal.....							2029
Average for five months.....							289
Jersey for five months.....							248
Balance in favor of Holsteins.....							41

I have dropped th fractions.

The "funny" part of this whole affair, the one which make all dairymen smile, is the claim that the Jersey leads all other breeds for cheese. This is the first instance on record that has come to my knowledge, where such a claim has ever been made. One of the prominent Jersey breeders of the country recently remarked to a large gathering of dairymen that "the superiority of the Holsteins for cheese was conceded by everybody excepting Valancy E. Fuller." Nearly all former tests have shown the Jersey milk while superior for butter to be inferior for cheese. It should be borne in mind that to obtain the results for cheese which are apparent in the report and in Mr. Fuller's letter, the same "lanky and leggy" little unacclimated 22½ months heifer had to be pitted against older native competitors.

I cannot give results in cheese production from personal experience, for I have no tests, but will take Prof. Brown's own figures, as used by Mr. Fuller, and concede, for the time being, that the Holstein-Friesian heifer would represent the breed in quality of milk for cheese (a statement that no intelligent breeder will believe to be a fact), and what is the result? It shows that it required 8.95 pounds of the heifer's milk for a pound of cheese. The 24 three-year-olds referred to above averaged, for the first five months 6,114 pounds of milk, and hence would have made 684 pounds of cheese, while the Jersey of the same age made 456 pounds, leaving, in favor of the Holstein-Friesian a balance of 228 pounds per cow or, in other words, they excelled her for cheese by just 50 per cent. The fact that Holland is the greatest cheese country of the world, making more cheese not only in proportion to the area of the country but in proportion to the number of cows, should be satisfactory proof of the superiority of her cows for that purpose.

A comparative test made by J. E. Grant, the owner of several large cheese factories in Illinois (who did not own any Holstein-Friesian cattle), with the milk from a herd of 50 pure-bred Holstein-Friesian cows, in comparison with the milk of the other herds, brought to his factory, showed that the Holstein-Friesian made 6¼ per cent. more cheese from the same amount of milk. He declares the test to have been a fair one, the conditions being similar in all respects. What are the conclusions to be drawn from the above facts?

1st. The Holstein-Friesian gave over 107 per cent. more milk.

2nd. The Holstein-Friesian made 16½ per cent. more butter.

3rd. The Holstein-Friesian made 50 per cent. more cheese.

If we call the average milk of the Holstein-Friesians equal to that of the Jersey for cheese (and I verily believe it to be better) they would have made 107 per cent. more cheese. From the above I feel fully justified in quoting Mr. Fuller's conclusions: "It seems, therefore, that there is little doubt as to which is the best all-round cow."

As to the test made at the exhibition at London and Toronto, I will only say that so much depends upon the condition of the cow, the amount and quality of her previous rations, her care and treatment, the length of time in milk, when due again, the distance shipped, whether fully acclimated or not, etc., etc., that such tests have no practical value as an evidence of the actual merits of the cows tested, and I will spare my readers a useless discussion regarding them. I will simply add that these tests were made by "the same experts" as those given in the report referred to above.

Syracuse, N. Y.

A GROUP OF HOLSTEIN-FRIESIANS.

THE fine group of Holstein-Friesian cattle shown at Fig. 119, (p. 189) belonging to the herd of James Neilson, of Woodlawn Farm, New Brunswick, New Jersey, coutains Rip Van Winkle, Billy Boelyn, Aaggie and Empire strains, together with much superior blood imported by the owner. The Holland herd has been bred since 1877 with a view of getting the best stock for the supply of milk for the city of New Brunswick. The original Woodlawn Farm herd was bred from Shorthorns imported more than 50 years ago by the father of the present owner.

In the accompanying illustration, Fig. 119, made from photographs, the splendid bull, Clarion (H. H. B. 870), the head of the herd, is shown in the center. His sire was Billy Boelyn 189; dam Clythe 549. He weighs 2,300 pounds, and is very vigorous in constitution. He has an excellent escutcheon and combines the milk and beef points to a remarkable degree. On the right is the cow Gorter 662, imported in 1878 from North Holland by her present owner. She won several prizes abroad, and has here a milk record of 84 pounds in one day and 14,449½ pounds in one year. On the left hand is the cow Mooike 4th, No. 2,984, which has a three-year-old milk record of 10,227 pounds in one year. The handsome form common to the Mooike family is well exemplified by her.

Of the other cows in this fine herd Stapel 4th has a milk record of 70½ pounds in one day and 1,750 pounds in a month, commencing when two years and 10 months old. Mooike 689, imported, gave 72 pounds of milk in one day, and one of her daughters, Mooike 3d, made 19 pounds five ounces of butter in seven days, 7½ months after calving, her milk testing 28 per cent. of cream, 12½ pounds of milk making a pound of butter.

The blood of Rip Van Winkle H. H. B. 35, the sire of Echo 121, with a milk record of 23,775½ pounds in a year, the greatest ever made, was introduced into the herd through the Iris family.

The imported cow Ekster has a milk record of 68 pounds in one day and 12,806½ pounds in a year.

The bulls in this herd are also descendants of famous milkers. Copia's Empire 3559, one of the stock bulls, is a son of Empire 588; he out of Empress 589, who has a milk record of 108 pounds in one day, and 19,714½ pounds in one year; while Copia's Empire's dam, Copia 1067, gave 8381 pounds in 283 days, when a three-year-old, and 79 pounds in one day as a five-year-old.

The imported cow Zwortkop took the sweepstakes prize, as the best cow for the dairy, at the International Dairy Fair, held in New York some years since, in competition with some of the finest herds of the various breeds.

Arboricultural.

THE JAPAN CHESTNUT.

Experience notes from one of the first to raise and graft them in America; hardiness; the best way to secure varieties.

IN planting any kind of fruit seed, we know that the result is always attended with uncertainty as to the quality of the fruit. The Japan Chestnut is no exception. The trees I have were from seed sent to a well known seed firm in New York, a case having been sent in an invoice of lilies. The major part of them were sent to a fruit stand. A few were taken by one of the proprietors and planted, and from them I received the grafts from which mine were grown. They were root-grafted on our native stock, and when three years old had some fruit. At four years one bore over a quart of the most beautiful chestnuts I ever saw, of a deep chestnut color, with dark lines running from the base to the point, making a beautiful contrast of color. The fruit of all partook of this character. But there was a very marked difference in the size of the burs and nuts. While some burs were very large with from three to five nuts, and early, others were very small and seldom had over one, never more than two nuts. Of course, the early and large ones are the most valuable. Some were ripe as early as Sept. 25; others were at least four weeks later.

As to hardiness, I think from my observation that they will not stand much below 15° below zero, or at least they have not with me. During the Winter of 1884–5 some were slightly hurt and one was entirely killed. Some had not sustained the slightest injury. It may be that extreme cold will not so much affect them as the peculiar conditions during the Winter spoken of, as I think more plants suffered in this section than I ever knew to have suffered in any former Winter. The true way to introduce the Japan will be either to import reliable stock, or else to grow them from seed and then, after fruiting, select the early and large-fruited trees and graft from them. They are a little shy to unite, sometimes growing two or three years and then blowing off. I tried budding, but failed, as the operation, I think, was performed too late.

N. HALLOCK.

Creedmoor, L. I.

Pomological.

MEECH'S PROLIFIC QUINCE.

A LETTER FROM MESSRS. HANCE & BORDEN.

WHY are you not willing to deal fairly with contributors? You are doing Mr. Meech an injustice and through him are injuring us. You seem to have a particular spite against the "Meech's Prolific Quince," and show a disposition to say everything possible detrimental to Mr. Meech's and our interests in connection with it; at the same time you are just as determined to give us no opportunity to deny what you say. You print a note in your February number in effect that all the communications you receive are of the same tenor, viz., that Mr. Meech had no right to give this quince his name.

Now some time ago you published an editorial bearing upon this same point, making assertions and insinuations, and calling upon Mr. Meech to answer, refute and explain if he could. Mr. Meech sent you a reply in detail, that, to an unbiased mind, would have been a satisfactory explanation and refutation; and would have lifted us from the position of impostors, to which your remarks have tended to lower us. You were in duty bound, according to what we are told by newspaper men is journalistic etiquette, to publish Mr. Meech's reply; and yet by your silence you refuse to do so. We are taking up the cudgels in Mr. Meech's behalf simply because what harms him injures us in this connection. We don't ask for assistance, but we do cry for justice, and if you are still determined to carry out your policy of saying what you please detrimental to our interests respecting this quince, and of printing innendoes and of asking questions with a covert meaning (for so your remarks have impressed us), and then refusing to publish the replies, thereby allowing your readers to infer that the questions are unanswerable; or, in other words, if you are not going to publish Mr. Meech's reply to your editorial above referred to, we shall have the editorial and reply published in some paper with a circulation equal to that of your own, if we have to pay for it as an advertisement. We don't mean this as a threat; but we are bound in justice to ourselves to make such a request, and we are further bound by the same law to place ourselves in a proper light before the public. HANCE & BORDEN.

REMARKS.—How are we doing Mr. Meech an injustice? Evidently, if at all, by an expression of the opinion that he should not append his name to a quince which he neither originated nor introduced, but is now merely popularizing. We have never uttered one word against the quince, knowing nothing against it. Hance & Borden are again wrong when they say we refused to print Mr. Meech's letter. The letter appeared in the R. N.-Y. of Feb. 8, with the omission only of such irrelevant parts as appeared to be simply a bold effort to obtain advertising without paying for it; and we may be pardoned for saying that the above letter strikes us as of the same character. Hance & Borden have no right to use such words as "inuendo," "covert meaning," "insinuation," in connection with the RURAL NEW-YORKER. We do not know Mr. Meech; we do not know Hance & Borden, but if we did and they were among our best advertising patrons, we should still feel that it was our duty to speak our mind to the public.

(*Continued on page* 184.)

Miscellaneous Advertising.

That Tired Feeling

The warm weather has a debilitating effect, especially upon those who are within doors most of the time. The peculiar, yet common, complaint known as "that tired feeling," is the result. This feeling can be entirely overcome by taking Hood's Sarsaparilla, which gives new life and strength to all the functions of the body.

"I could not sleep; had no appetite. I took Hood's Sarsaparilla and soon began to sleep soundly; could get up without that tired and languid feeling; and my appetite improved." R. A. SANFORD, Kent, Ohio.

Hood's Sarsaparilla

Sold by all druggists. $1; six for $5. Made only by C. I. HOOD & CO., Lowell, Mass.

100 Doses One Dollar

The Best SIDE HILL PLOW in the Market

WARRANTED TO DO AS GOOD WORK AS ANY PLOW IN THE MARKET.

We manufacture a full line of Tools, including the Mudgett Hay Tedder. Circulars and Price Lists FREE. Agents wanted in all unoccupied territory.

B. & J. W. BELCHER,

P. O. Box 75, Chicopee Falls, Mass.

THE ASPINWALL POTATO PLANTER.

It Marks! It Furrows! It Drops! It Covers! It Distributes Fertilizer!

CORN PLANTER ATTACHMENT FOR 1886.

Send for Circular to

ASPINWALL M'F'G CO.,

THREE RIVERS, MICH.

The J. S. C. FRAMELESS DISK HARROW

The greatest improvements ever made in Harrows are embodied in the J. S. C.

It is the most perfect working Harrow ever put into the market.

Be sure and examine it and send for circular.

Higganum M'f'g Cor'n,

SOLE MANUFACTURERS. Higganum, Ct.

New Reversible Harrow.

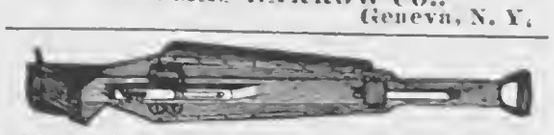
A Perfect Smoothing and Scotch Harrow Combined.

Thoroughly Tested and Warranted.

Send for Illustrated Pamphlet to

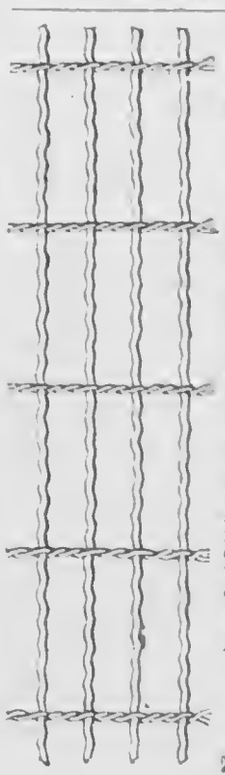
THOMAS HARROW CO.,

Geneva, N. Y.



Macomber's Hand Planter, *for Corn, Beans, and Beet Seed.* The best in the world. Money refunded if it does not prove satisfactory, after a fair trial. Agents wanted. Send for circular and terms.

S. M. Macomber & Co., M'f'g's, Grand Isle Vt.



PATENT

CORRUGATED WIRE FABRIC,

Suitable for Fencing in many locations, and for Railings, Window Guards, Tree Guards, and other purposes.

It consists of vertical pickets or bars, made of corrugated galvanized steel rods, oval in section, secured by horizontal cables, each composed of two strands of galvanized steel wire.

As a fence it is cheap, strong, durable, and easily erected; it is as effective as a barbed fence in turning cattle, and there is no risk of injuring either the animal or the fence; it requires no longitudinal rail to support it, as it carries itself from post to post as well as a plain wire or barbed wire fence; it can be seen as plainly as a regular picket fence; it can readily be taken down, rolled up and moved from place to place.

TRENTON IRON CO.,

Manufacturers of Wire & Fence Material,

Trenton, New Jersey.

NEW YORK OFFICE:
COOPER, HEWITT & CO.,
17 *Burling Slip.*

Send for circulars and prices.

THE

AMERICAN DAIRY SYSTEM

(Holds the Silver Medal.)

Wooster's Cabinet Perfection Creamery

Before buying any milk setting or cream churning apparatus, Address D. B. WOOSTER,

Northfield, Vt.

Dairymen will do well to heed this notice.

THE "COMMON SENSE" MILK PAIL.

This is the only *perfect* Pail made. There are no seams in the front to catch the cream. It has a perfectly fitting strainer, which can be instantly removed, so that every part of the pail may be *quickly* and *thoroughly* cleaned. Should the strainer become foul or worn with use, we can furnish new ones at very little expense. The Pail is well made of heavy XX tin, and we offer it to the farmer at the very lowest price at which a really good article can be sold. *Send for special circulars.* Price $1.25 each. Discount to the Trade.

MILKING TUBES,

FOR MILKING COWS WITH SORE TEATS

This is the best Tube in the market. Sent, post paid, to any address on receipt of price. One Tube, 25 Cents. Five Tubes, $1.00. Send for special Circulars.

Send us your name and address and we will mail you, FREE, our

Seed Catalogue for 1886.

Choice New England Seeds. The very Best and Purest Stocks of Cabbage, Onion, Beet, Parsnip, &c. All grown by ourselves and sure to give complete satisfaction. TRY THEM.

BARTLETT & DOW,

LOWELL, MASS.

Please mention this paper.

SAVE Your POSTS and use SHAW'S WIRE FENCE TIGHTENER. Can be adjusted to any wooden post; can tighten or slacken, according to climate, with an ordinary monkey wrench. Price $8 per doz. For full particulars, apply to

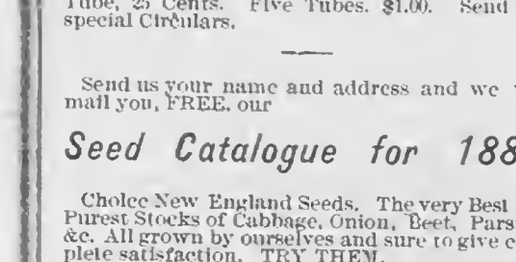
W. SHAW,

Delaware, Ontario, Canada.

Agents wanted. Patent applied for.

THE SPANGLER

Corn Planter, Single Row and Broadcast Fertilizer Distributor, Vegetable Seeder, Lime Spreader and Grain Drill.



The Spangler Corn Planter can drop fertilizers with corn, or mix with soil before covering. The dropping of the corn is fully exposed to the operator, and can drop it in hill or drill. **The Spangler Vegetable Seeder** can sow any seed large or small, put in the fertilizer, cover and roll it, all at one operation. **The Spangler Potato Fertilizer Distributor** distributes fertilizers six inches wide in potato rows with cultivator tooth attached to mix with soil; shovels can be lowered or raised. **The Spangler Lime Spreader** will spread unslaked lime from 20 to 60 bushels per acre. **The Spangler Broadcast Distributor** will sow ashes, plaster and all kinds of fertilizers from 200 to 1000 pounds per acre with perfect regularity. **The Spangler Grain Drill** gives full view of the discharge of grain and fertilizer, and is made with or without seed regulator.

The merits of the **Spangler Fertilizer Feed** are attested also by their most successful use by A. B. Farquhar on his Pennsylvania Drill, Keystone Cultivator under conditional license from J. W. Spangler which expires January 1st 1887, and on Bench's Cultivator. **Galvanized** feeds are furnished when desired. For further information send for illustrated catalogue.

THE SPANGLER MANUFACTURING CO.,

(Successor to J. W. Spangler & Bro.) York, Pa.

THE COLD WATER DIP!

(Thymo-Cresol.)

NESS & CO., MANUFACTURERS.

Non-Poisonous. Safe in Coldest Weather.

Sure Cure for Scab, Mange, and all Skin Diseases. Stimulates growth of Wool. Kerry, Watson & Co., Montreal, Agents for Canada. For full particulars, address

T. W. LAWFORD & CO., Baltimore, Md.

CHANNEL CAN CREAMERY.

Makes more Butter than any other process. Calls for less labor and ice. Will raise all the cream without ice. Automatic Butter-workers, Churns, etc. One at wholesale.

Agents wanted. Send for circulars.

Wm. E. Lincoln Co.,

WARREN, MASS., and FORT ATKINSON, WIS.

"SMOKE Your MEAT"

With Krauser's Liquid Extract of Smoke.

It is a liquid; you wash it on; it will keep it in a well preserved condition and free from insects; it is much more pleasant to the taste than meat smoked in the old way; it is done in less time, no trouble, and less expense. There is no danger from fire or of being stolen, as you can hang it in a more secure place than a smokehouse. Send for circular.

E. KRAUSER & BRO., Prop's and M'f's, DRUGGISTS, Milton, Pa.

A ROYAL GIFT.

Every person sending us **25cts.** for a 3 mos. subscription to the **ILLUSTRATED COMPANION** will receive as an **ABSOLUTE FREE GIFT** this **ELEGANT PARISIAN DIAMOND RING** represented by the annexed illustration. This ring is of a new and very beautiful pattern guaranteed to be **Solid Rolled Gold Plate** and will wear well. The Stone with which it is set is very clear, brilliant and sparkling. This Ring is of such value that any lady possessing it will be the envy of all her friends as it is to all appearances a very valuable article. Send a slip of paper the size of the Ring you wish. The **ILLUSTRATED COMPANION** is a mammoth **64 column 16 page** paper finely illustrated by full page engravings of artistic merit and contains Stories Sketches, Poetry, Anecdotes, Wit and Humor, and in fact all that goes to make up a complete family publication. Wherever it is once taken it is universally popular as our renewals show. **We know you will like it.** The regular price is **$1.00** per year. The above described **Parisian Diamond Ring** in a fine **Velvet Lined Case,** and the **ILLUSTRATED COMPANION** for three months for **25 cts.** is too liberal an offer to be passed by. Full **satisfaction guaranteed.** This is a **special offer** so **WRITE TO DAY,** as this will not appear again

E. F. NASON, Publisher, 120 Fulton St. N.Y.

(*Continued on page* 183.)

regardless of their interests. We publish Hance & Borden's letter, not as an act of justice,—since we have not spoken against the quince, which we now know for the first they offer for sale—but to show that the R. N.-Y. is willing to print an unjustifiable attack upon its honor, which we doubt if any reputable journal would publish even as an advertisement, rather than to give them the chance of distorting a refusal to do so into an act of self-protection or of attributing it to some low, selfish motive. E. S. C.

THE CHAMPION QUINCE.

IN the RURAL of Feb. 27th, under the head of Brevities, the entire family of RURAL readers are unconditionally advised as follows: "Don't buy the Champion Quince. It is later than the Orange or Rea's Mammoth and in no respect better," etc., etc. To this advice, I desire to file positive objections, and for the very reason for which the RURAL condemns this variety. The Orange and Rea's Mammoth ripen too early here; that is, they ripen and require attention at the same time when the good housewives are taxed to the full extent of their strength and ability in preserving and canning peaches, plums, etc., while the Champion—finer and larger than either of the others named, here at least—is later enough in season to afford opportunity to get through with the other fruits, and leisurely proceed with the quinces. I say "leisurely" because if not ready to use the fruit for a month after gathering, it makes no difference, as it keeps in splendid condition for a longer time than that, if picked in peach baskets and placed under cover in an airy situation.

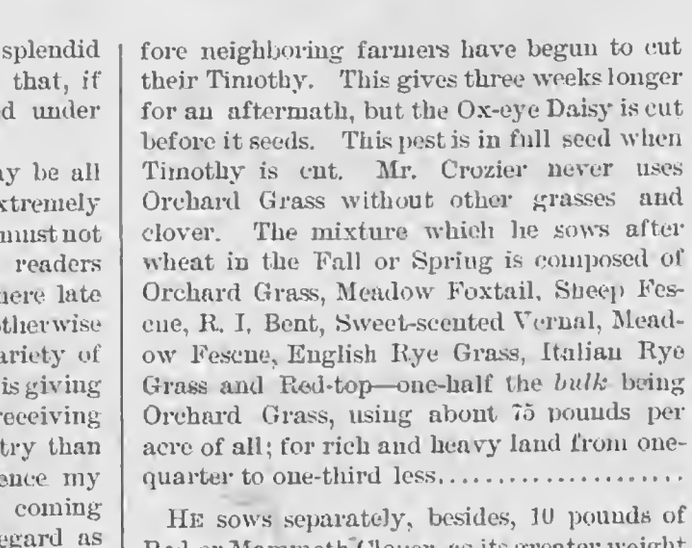
Now, while the RURAL'S advice may be all right for New Jersey and other extremely progressive fruit growing sections, it must not be forgotten that the RURAL has readers where Summers are longer, and where late ripening is not fatal to the value of otherwise valuable fruits. There is no new variety of fruit of any kind that I know of that is giving more satisfaction to the planter, and receiving more unqualified praise in this country than this self-same Champion Quince; hence my astonishment at the above advice, coming from a paper that, as a rule, I regard as conservative and sound, progressive and vigilant in its opinions and general work pertaining to the interests of its fruit-growing readers. I sincerely believe that it aims to give the unvarnished truth to its readers on all subjects; that it desires the general good of all; and in this belief the above exceptions are taken to its advice.

Caroline, Md. J. W. KERR.

[Thanks.—EDS.]

EXCELSIOR APPLES.

THE Excelsior Apple (Fig. 114, with a cross-section at Fig. 115) was originated by Mr. P. M. Gideon, of Excelsior, Minn. It is pippin-shaped, considerably ribbed, ground color light yellow, nearly covered in the sun with a bright carmine red, somewhat striped, with many deep greenish dots. Stem an inch long, and quite thick in a small, very shallow cavity. Calix small, very close, in a broad, corrugated, very shallow basin; core large for the size of the fruit, well filled with small plump seeds. Flesh fine-grained, nearly white, juicy, quite acid, tender, pleasant. A good cooking apple. Eaten September 16, 1883.



EXCELSIOR APPLE. From Nature. Fig. 114.

SEEDLING CRAB APPLE.

THE seedling crab apple shown at Fig. 116, with a cross-section at Fig. 117, also owes its origin to Mr. Gideon. It is a little irregular in shape, and slightly flattened, ground color greenish, nearly covered with a grayish red, and beautifully streaked, with deep crimson specks in the sun. Stem only half an inch long, rather stout, in a small, irregular, rather shallow cavity. Calyx large, closed in a broad, very shallow, irregular basin. Core large, full of large seeds. Flesh white with a slight tinge of yellow; very firm, juicy, acid, fine-grained. A good cooking apple. Eaten September 16; not quite in prime eating order. A fine crab in appearance. More crab apples of prime quality suitable for a wide range of country would be desirable for canning purposes.

What Others Say.

MR. CROZIER states in his book, jointly written by himself and Mr. Peter Henderson, that the base grass, as it may be called, for the hay crop in our Northern States, is Timothy, but he believes that Orchard Grass is much better fitted to be the leading kind in the mixture, whether for pasture or hay. It is more permanent, he says, and can be cut at least two weeks before Timothy.....

HIS crop is cut and in the barn 20 days before neighboring farmers have begun to cut their Timothy. This gives three weeks longer for an aftermath, but the Ox-eye Daisy is cut before it seeds. This pest is in full seed when Timothy is cut. Mr. Crozier never uses Orchard Grass without other grasses and clover. The mixture which he sows after wheat in the Fall or Spring is composed of Orchard Grass, Meadow Foxtail, Sheep Fescue, R. I. Bent, Sweet-scented Vernal, Meadow Fescue, English Rye Grass, Italian Rye Grass and Red-top—one-half the *bulk* being Orchard Grass, using about 75 pounds per acre of all; for rich and heavy land from one-quarter to one-third less.....

HE sows separately, besides, 10 pounds of Red or Mammoth Clover, as its greater weight makes it impossible to keep the seeds properly mixed.....

MR. BARRY is quoted by the N. Y. Tribune as saying that a spendthrift never squandered a patrimony with more reckless improvidence than our people have shown in havocking the grand forests that almost covered our country within the memory of many yet living.....

ONE spout to a maple tree is a great deal better than two.....

PROF. BEAL states, in the same journal (N. Y. Tribune), that Johnson Grass promises nothing for the North, though it lives over Winter to a greater or less extent and produces seed in Michigan.....

"WE can never be too careful what the seed our hands shall sow;
Love for love is sure to ripen, hate from hate is sure to grow.
Seed of good or ill we scatter heedlessly along our way,
But a glad or grievous fruitage waits us at the harvest day."

PUT not your trust in peaches, says Mr. E. B. Underhill. Plant pears for your heirs; comfort yourself with apples, but let Florida grow your oranges, and Delaware your peaches.....

MR. UNDERHILL says, and we are not surprised at it, that the May King Strawberry is making a reputation as a market strawberry for first early. See RURAL reports of last year. Bubach's No. 5 is praised as the "coming berry," if that reputation don't kill it on the start. Mr. Underhill speaks of the James Vick as the most unsatisfactory berry he ever had.....

MR. MEEHAN mentions that we should now bring the dahlias forward. Cut off the "stringy" roots and put them in pots or boxes and place them in a warm situation. When they sprout, divide the sprouts, giving a piece of root to each, and then pot separately.....

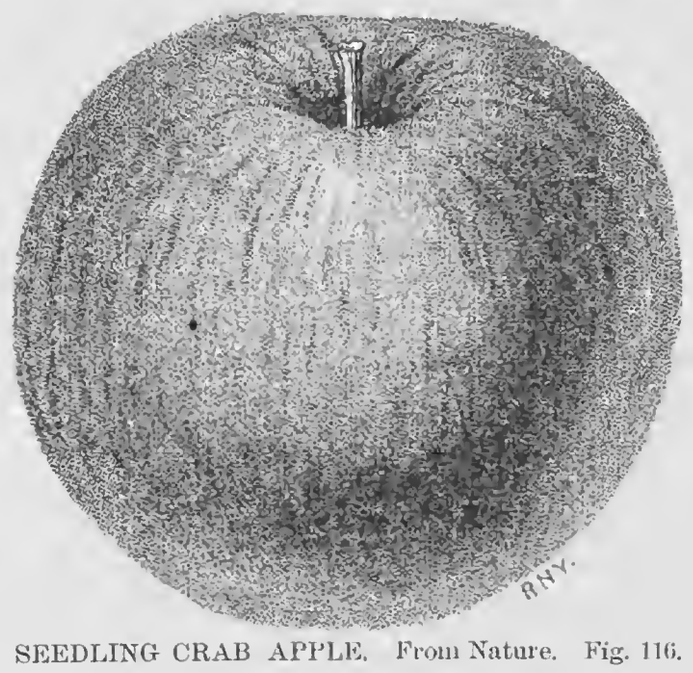
MR. MEEHAN further remarks that the best of grapes may be had by any system of pruning that will induce strong shoots to push where they are most desired.....

WHO has the Japan Chestnut? Thus far we know of the following: Storrs & Harrison Co., Painesville, O.; Ellwanger & Barry, Rochester, N. Y.; Luther Burbank, Santa Rosa, Cal.; J. T. Lovett, Little Silver, N. J.; F. S. Phœnix, Bloomington, Ill. We shall be glad to add the names of any other reputable nurserymen.....

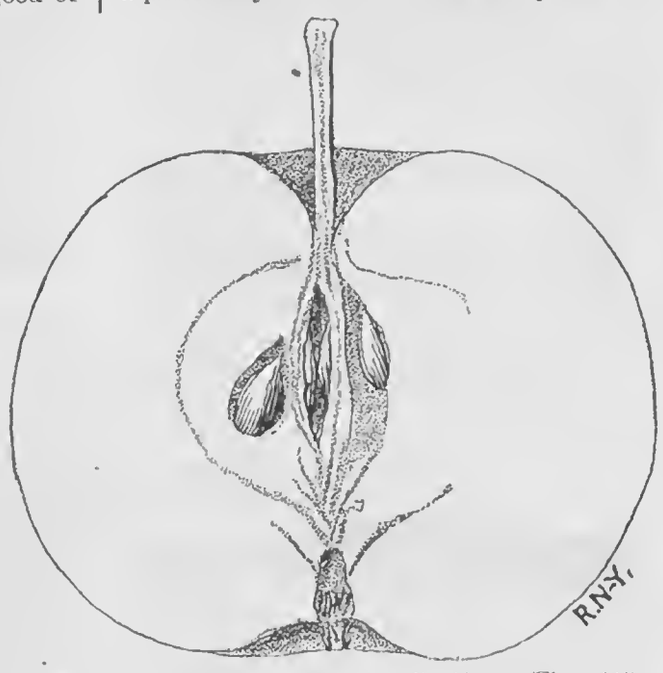
PROF. BURRILL (University of Illinois) says that the Snyder Blackberry, previously perfectly hardy, was so badly killed last Winter that the bushes were cut to the ground. The Turner Raspberry bore a full crop. Prof. B. agrees with the R. N.-Y. that the strawberry is not influenced in shape, color or quality by the variety which furnishes the pollen.....

PROF. MORROW, of the same university, speaks favorably of the Tower Pulverizer and Corn Cultivator; also of the Strowbridge Broadcast Seeder.....

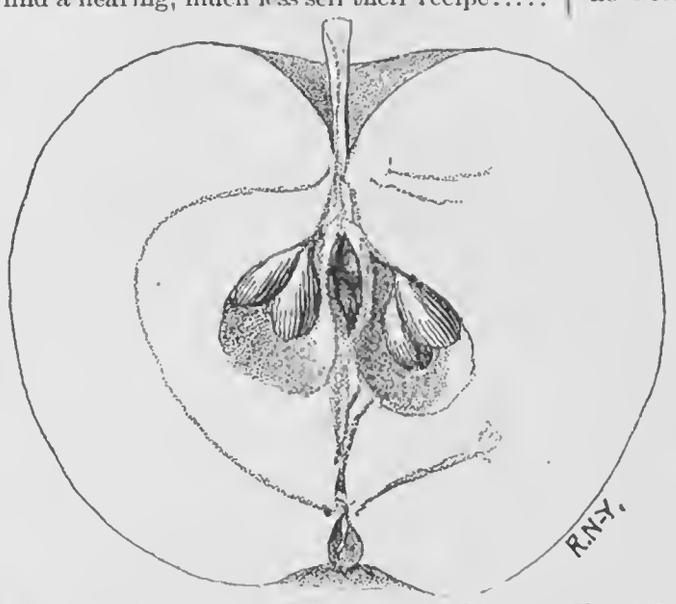
THE N. E. Homestead says that traveling agents are going among the farmers of Maine and Massachusetts, offering for $5 recipes for fertilizers worth $50 a ton, that can be made for $10. It is strange that such men can even find a hearing, much less sell their recipe.....



SEEDLING CRAB APPLE. From Nature. Fig. 116.



EXCELSIOR APPLE. Cross Section. Fig. 115.



SEEDLING CRAB APPLE. Cross Section. Fig. 117.

A CATTLE-RAISER from Mexico said, at the late meeting of the Am. Ag. Asso'n, that the method of dishorning young cattle practiced there is to saw off the horn down to the hair when the calf is three months old and the horns are about an inch in length. A hot iron is then applied to the surfaces, which are finally moistened with lime water as thick as cream.....

MR. T. D. CURTIS thought it better to slit the skin over the nub before the horn pushes through, and then with a chisel pry off the button.....

PROF. BURRILL says that we must choose for orchards lower sites or such soils as are least affected by droughts. This is to avoid the summer check of trees, causing premature ripening of the tissues, putting them in the condition to start into spring-like activity when the autumn rains occur.....

A DISGRACE and a national shame; an industry that thrives in spite of barbarity; a cruelty that in most other countries would be dealt with by rigorous laws. Thus a writer in the Rural World justly characterizes the present system of cattle ranching on the Western Plains.....

HARRIS recommends dried muck for bedding pigs.....

THE Early Ohio is unquestionably one of earliest of potatoes. At the Rural Grounds it is as early as any we have tried; but do not forget that it succeeds well in some places—poorly in others.....

DR. A. C. CARROLL, of the State Board of Health, says (*via* N. Y. Tribune) that it has long been a matter of common experience that low fevers and various forms of "filth diseases" are apt to prevail in the neighborhood of old burying-grounds when population gathers around them.....

THE chrysanthemum is the people's flower, appealing to the heart and not bearing heavily on the purse, says Mr. John Thorpe.....

OUR seed corn has been kept in a dry, warm place, and we know that every kernel is alive and sound.

DOES it pay to test seeds before planting them, whenever we have the least suspicion they may be injured in any way?.....

A WRITER in the New England Homestead finds the Essex to be the earliest potato as tried with the Pearl of Savoy, Clark's No. 1, Rosy Morn, Early Maine and Bliss's Triumph. We have not found Rosy Morn or Triumph to be as early as Beauty of Hebron. He condemns Dakota Red. The Belle grows too large. He finds Wall's Orange good for spring use.....

FOR family use, try the Drumhead Savoy Cabbage. The heads are never so solid as those of the other cabbages, but the quality is richer and sweeter.....

FOR main crop peas, sow Prince of Wales (tall), Telephone (tall), Stratagem (two feet). For earliest, there is very little difference between the "First and Best" varieties offered by leading seedsmen. All need brushing, as they grow three feet in hight. For dwarfs, the American Wonder and Abundance are excellent.....

THE RURAL is much in favor of transplanting trees in the early Spring as the soil will permit, rather than to delay until the danger from injury by drought becomes greater. We have transplanted evergreens when, owing to ice, the roots were badly mutilated, yet all lived. Others transplanted later, died.....

IF you have hardy vines to order, do not forget the Coral Clematis, Clematis coccinea..

THE Eclipse Beet, announced in every catalogue, is said by our contributor H. H., to be no better in quality than the Egyptian, of which it is a variety, and than which it is but a trifle earlier.....

MAJOR ALVORD says that silage, and especially good corn silage, when compared with dry corn fodder or with other feeding stuffs, produces results so satisfactory as to surprise the chemist, and which chemistry can not explain.....

MR. P. BARRY says that the English Walnut is fruiting in and near Rochester.....

MR. STILES, the observant agricultural editor of the Philadelphia Press, puts the thing forcibly when he says that a State agricultural college farm should never pay in dollars and cents. It should not enter the field in competition with any other farm, and the products should not be found for sale in the market. It is a place for the growth of ideas, the development of principles and the establishment of law. Does the chemical laboratory of the college pay its way in the manufactory of drugs or the entomological department help to fill the State Treasury by selling bugs.....

THE catalogue of V. H. Hallock, Son & Thorpe has it "geraniums, *properly* pelargoniums." This is a move in the right direction. Finally we can drop the name geranium except to donate the hardy plants by that name.....

IF you have canna roots to buy, don't forget Canna Ehemanni. Its peculiar magenta color, its large flowers and many spikes, together with the vigorous habit of the plant and its large, banana-like leaves, will please..

AND let us again call the attention of our readers to the two prettiest ornamental grasses in the world—the Zebra-striped Eula

lia and the Variegated Eulalia—Eulalia Japonica zebrina and variegata. Both are hardy.....

Sow seeds of chrysanthemums and coleus; of pansies and verbenas; of pinks and petunias.....

DON'T forget that "scours" in calves can be, for the most part, prevented by regular feeding and warm, dry quarters. Don't forget, also, that the disease is oftenest brought on by a failure to observe these rules.....

PHIL. M. SPRINGER says that a bushel of corn, as usually fed to common hogs, will produce from five to seven pounds of pork. In Central Illinois, where the hogs are more or less crossed with the Berkshire or other improved breeds, 8½ to 10 pounds of pork to the bushel of corn is considered a fair estimate. This shows what improvement in breeding will accomplish.....

THE Industrialist says that a dozen eggs will bring more in Kansas than a bushel of corn.....

E. P. ROE says that a home can be created in rented dwellings, but a home for which we have the deed, a cottage surrounded by trees, flowers and gardens, is the refuge which best satisfies the heart.....

F. D. CURTIS says there is too much breeding from unsound mares. Out West the best mares are used to breed from and the practice pays.....

EVERY farmer's wife, says Mrs. A. G. Chandler, knows how hard it is to get the husband to spade up the garden. The best way to overcome this difficulty is to move the garden operations out into the potato patch. Plant the vegetables there, in rows, where they can be cultivated by horse power. By putting the garden out there, cleaner culture will be insured.....

AT a New Hampshire farmers' meeting one speaker said he lost lambs enough in one Winter, trying to learn how to feed cotton-seed meal, to pay his hired help. He thought root feeding the most expensive way of *watering* sheep he had ever tried.....

THE notion common among farmers in some sections that all plants which are to grow upward—like corn or wheat—must in order to prosper, have their seeds put in when the moon is waxing; while all that grow downward—like beets and parsnips—must have the seeds put down in the waning of the moon, has, according to Prof. C. A. Young, never been verified by science, though it has tried to do so.

FRIEND J. J. H. Gregory estimates the value of hen manure at about 12 cents a year per bird.

Everywhere.

RURAL SPECIAL REPORTS.

Alabama.

GRAND BAY, Mobile Co., March 2.—The cold snap of January killed most of the cane stubble and froze out a good many potato banks and also lots of cane seed or seed cane. I have for several years planted more sorghum than tropical cane, as I find I can make as much and as good sirup with less fertilizer, in shorter time, save the fodder, and the value of the seed is equal to the corn that could be raised on the same land under the same circumstances. Spring is fairly open and planting of all kinds is going forward. Plum and peach trees in full bloom and pear trees not much behind. Plenty of green strawberries, the size of a pea, in the field, and if we have no set-back there will be plenty for market in three to four weeks. C. C. W.

Canada.

SOUTH RIVER, Ontario.—The D. M. Wheat rusted badly. The Thousand-fold Rye did well. The peas were all good; the Stratagem and Prince of Wales bore fine showy pods; but for general usefulness, I prefer Horsford's M. G.; it is a large cropper; the pods are well filled, and it is of good quality. But little difference between the Rural New-Yorker and other early sorts; perhaps it may be a little earlier. R. C.

Dakota.

REE HEIGHT, Hand Co., March 6.—I harvested a bushel of Rural corn ears. The dent sort didn't mature. The ground squirrels liked the peas so well that they left not one. The beans did well. Garden Treasures very fine. N. R. P.

Illinois.

DONNELLSON, Montgomery Co.—Wheat and grasses are in the best condition for years at this season. Cattle and sheep generally look well. Hogs scarce and in good shape. Horses suffering greatly from distemper, though as yet there have been few deaths. A. W. H.

LEAP RIVER, Ogle Co., Feb. 26.—Weather and wind extremely changeable. Farmers are holding their grain for higher prices. Corn is now worth 28 to 30 cents; oats, 25 to 27 cents; hogs, $3.50 to $4 per 100 pounds; stock hogs about all sold. Cattle wintering in good shape. Plenty of hay and straw to last till grass comes. Orchards were killed last Winter by the cold. D. E. K.

STRASBURGH, Shelby Co., Feb. 24.—Spring of 1885 late and unfavorable for Rural seeds, hence Stratagem and Prince of Wales Peas failed. Flageolet Beans did well, considering the chances against them from the weather and insects. The tomatoes were nice, especially the King Humbert. Of the Garden Treasures the poppies alone came up well. The corn all came up and varied immensely. I have saved a few ears for seed. Our general crop of corn was, most of it, light, and some rotted. Hay crop good. Potatoes an average yield, but of poor quality. No wheat for sale here. Oats, 23 cents; potatoes, 50 cents; corn, 25 to 26 cents; hay, $8 per ton. Fall sown wheat has been hurt a good deal by freezing and thawing. H. R.

Iowa.

GLENWOOD, Mills Co., Feb. 28.—February very fine; snow nearly all gone. No frost in the ground; ground well filled with moisture; and whenever this is the case in Spring we are almost certain of good crops. A. C. S.

Maryland.

CECIL Co., March 5.—Very cold, windy weather during the past week. Wheat was looking very well before the last freeze; but it does not look so well now as I expected. Corn did not come to perfection at all. The prices of grain are very low. J. A. W.

Michigan.

SMITH CREEK, St. Clair Co., March 2.—Port Huron markets report potatoes 15 to 20 cents per bushel; butter, 12 to 14 cents; eggs, 10 to 11 cents; wheat, 95 cents for No. 1 white; oats, 36 to 38 cents per bushel, choice barley, $1 to $1.10; clover seed, $4 to $5. We have the Concord and wild grapes and Iron-clad and Crescent Strawberries. We are great hands for fruit. C. J. P.

Miscellaneous Advertising.

CATTLE RAISING
ON THE
PLAINS.

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(NO. 431)
FOR APRIL, 1886.

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EVERYBODY WHO PLANTS A FARM OR GARDEN EXPECTS GENEROUS CROPS
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All who intend to purchase this Spring should send for our illustrated and descriptive Catalogues. They contain full information about *Old and New Fruits, Ornamental Trees, Roses*, etc., and are the most complete published. To regular customers *free*; to others as follows: No. 1, Fruits, 10c.; No. 2, Ornamental Trees, etc., 15c.; No. 3, Small Fruits, No. 4, Wholesale, No. 5, Roses, *free*.
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My Annual Priced Catalogue is now ready, and mailed free to all applicants. It contains all the leading and most popular sorts of
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Besides all the desirable novelties of last season, and nearly everything else in my line of business.
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THE FARMER'S CLUB

ANSWERS TO CORRESPONDENTS.

[Every query must be accompanied by the name and address of the writer to insure attention. Before asking a question, please see if it is not answered in our advertising columns. Ask only a few questions at one time. Put questions on a separate piece of paper.]

BROOM CORN.

C. C. L., Coopersville, Mich.—Broom corn grows readily wherever Indian corn grows. At present prices, its production should be profitable. The seven States producing the largest amount are, in their order: Illinois, Kansas, Missouri, New York, Nebraska, Ohio and Iowa. It is planted in drills on rich land, the richer the better, and 3½ feet apart. When first up it is "scraped;" that is, the dirt is scraped away from each side of the drill, exterminating the weeds. It is then cultivated with the same tools and manner as ordinary corn. It comes up quite feebly and grows slowly at first, but when a few inches high, it takes a start and grows very rapidly. When "brushed" out and the seed has passed the blossom, it is "broken;" that is, the stalks are bent over just below the first joint. If this were not done, the "brush" would be bent down on all sides by the weight of the seed and thus become crooked and worthless. When "broken" the brush hangs straight and so ripens. It is sometimes "tabled;" that is, the stalks of adjoining rows are broken in opposite directions and low enough so that the heads lap over and lie one upon another. When the seed is nearly ripe, but before the brush has turned brown, it is "cut." In doing this the stalks are cut an inch or so above the first joint and the head and stalk are slipped out of the sheath. It is then drawn to barns or sheds, which are fitted up with scaffolds from bottom to top. On these the corn is spread to "cure." When properly dried, it is thrashed by being held upon swiftly revolving cylinders having long, slim spikes or teeth, which strip off the seeds and leave the brush ready to sort and bale when it is fit for market. The thrashing, sorting and packing can be done at any time during Winter. 2. The seed is capital for hens, and if well cleaned, is very nearly as good as oats for any stock; for cattle, hogs and horses it is best when ground.

ARTICHOKES.

E. J. J., Richmond, Ind.—1. How much seed for an acre of artichokes to be fed to stock? 2. Where can the seed be obtained? 3. Are the stalks of any use? 4. When are they dug, and how stored and kept? 5. Can they be dug clean, so that they will not be plowed up like some troublesome weeds? 6. Do they do best in a rich soil?

ANS.—Jerusalem Artichokes are not produced from seed; but from tubers. The amount of these required per acre is about the same as of potatoes, six to seven bushels, the tubers being cut to pieces of three to four eyes. 2. The seed may be ordered of any seedsman advertising in the RURAL. In country papers seed is often offered at from 50 cents to $1.00 a bushel. 3. Cattle will eat the stalks when they are still green, but since cutting them in that state prevents the formation of any but small tubers, it won't pay. Sheep, horses and mules, in the order named, will eat the stalks after the foliage has turned black following a severe frost. 4. The tubers should not be dug until early in November, because the plant does not bloom till October and the tubers are nothing more than rudimentary until after the blossoming and fall of the flowers. But the best way to handle artichokes for stock, is to suffer them to lie in the ground and dig to feed as wanted, till frost stops the work, and then resume in the Spring, when the frost is leaving. The trouble about artichokes is the difficulty of keeping them. If they are dug and put in a dry place, they shrink and shrivel up as soon as a peeled potato, and the feeding of them is quite dangerous, producing bloating. If they are put away in bulk, if the temperature is not kept down to 40° or below, they sprout, heat and rot. The explanation of all this is, that artichokes contain just about those amounts of starch, albumen and phosphates which produce active fermentations in the quickest way, and in that respect resemble green sweet corn when cut from the cob. 5. No; not very well: nor can two full crops be grown on the same land, without liberal manuring. But as a weed, artichokes are not worse than Pigeon Grass, Crab Grass, Rag Weed, Wild Smart Weed and a dozen others. Any cultivation that will dispose of the latter will be quite effectual with the former. 6. Yes; artichokes, like all crops, do better on rich soil than on poor. They are, however, like rye, rather a poor-land than a rich-land crop; that is, both have the capacity of taking up from sandy soils and those of granite origin, food enough to perfect them, where most other crops would fail. But in planting on very rich soils care must be taken to give the plant room, because the yield of tubers is in direct ratio with the amount of the development of branches and leaves. When too close, the plants run up tall, like timber in dense woods without side limbs, and the tubers are few; when abundant space is given, the side branches strike out, are covered with leaves and the yield is large. Therefore one piece in a hill and the hills 3½ feet apart is not too thin seeding for such very rich land.

HARDY SHRUBS.

D. S., Manchester, N. S.—1. What shrubs, flowers, and ornamental trees would be hardy here—latitude 45 degrees 30 seconds north? 2. What hardy shrubs can be raised from seeds? 3. Would Prunus Pisardii be hardy here? 4. Would the American Ivy injure a wooden building? 5. Has the High Bush or Tree Cranberry been cultivated in the United States.

ANS.—1. We should try the Lilacs, Forsythia, Great-panicled Hydrangea, Spiræas in variety, Stuartia, Philadelphus, Japan Quince in different colors, Pavia macrostachya, Liburnums plicatum and lantanoides, Deutzias, Purple Hazel and Purple Barberry. 2. Almost all kinds, Lilacs, Deutzias, Weigelas, Philadelphus, Japan Quinces, Pavia, Barberry grow very readily from seeds. Please examine the catalogues we announce for the seeds. Prunus Pisardii would not probably stand your climate. You can not get seeds as yet. 4. Yes, more or less. 5. Yes.

TURNIPS AS SOIL EXHAUSTERS.

J. B. Downs, Pa.—A good crop of turnips, 800 bushels, weighing 48,000 pounds, would remove from the soil about 5,332 pounds of dry matter of which 643 pounds would be albuminoids or flesh and milk-forming substances and 4,322 pounds carbohydrates or fat and heat producers, such as sugar, starch, etc. Of these, about 86 pounds would be nitrogen. This crop would also contain about 336 pounds of ashes, of which 144 pounds would be potash, 48 pounds phosphoric acid. The rest of the dry matter is largely carbon, a thing easily replaced. This crop of turnips would remove about the same amount of nitrogen as 2¼ tons of clover hay, and as much potash and phosphoric acid as four tons, so that it is quite exhaustive, particularly so of potash and phosphoric acid.

COTTON-SEED MEAL AND MALT SPROUTS FOR MILCH COWS.

A. B. S., Oakford, Pa.—1. Cotton-seed meal is a perfectly safe and a good food for milch cows, except that, when fed to cows kept for butter-making, it is apt to give the butter an oily taste. 2. It should be fed in connection with corn-meal, Timothy hay, corn fodder, straw, barley meal, wheat middlings and bran. It is a very highly nitrogenous food, and also contains from 8 to 15 per cent. of free oil, and one quart is as much as any animal should have at once. 3. Malt sprouts (the germs or radicles of the grain when barley is being sprouted, and which break off when the sprouted grain is dried and handled) are also a very highly nitrogenous food, and though they contain very little free oil, they should also be mixed with the same foods as for cotton-seed meal—those with an excess of the carbohydrates or fat-formers.

SOME TREES HARDY IN DAKOTA.

D. B. C., Lincoln Co., Dak.—1. In Lincoln County, Dakota, the Yellow Transparent, Duchess, Wolf River and Wealthy Apples will be safe to plant of the sorts common in our nurseries; varieties of the grade of hardiness of Walbridge, Gros Pomier, Plumb's Cider and Fameuse will be apt to fail when of bearing size, as they have done in North Iowa. 2. The Red Cedar of the Platte River, the Silver Spruce of Colorado and the Austrian Pine will do well in your section when they attain depth of root. They should be planted in cultivated ground. In the sod they will fail before they attain depth of root. The upright form of Scotch Pine (Pinus Rigensis) is now obtainable and should succeed perfectly with you even on high prairies.

BONE-DUST AND ASHES.

D. C. M., Shelburne Falls, Mass.—If bone flour is "as fine as wheaten flour, and free from shavings," it should benefit next Summer's strawberry crop, "if applied early in Spring with ashes;" but a better way would have been to have mixed the two in casks or boxes with a layer of ashes at the bottom, four inches thick, then bone dust two inches; then ashes four inches, and so on, with four inches of ashes on the top, and the whole kept moist for several weeks before the time for application. Then the dust would be found well decomposed and in good condition for plant food.

COARSE AND FINE BRAN.

E. H. S., Orangeville, Pa.—1. What is the difference between the coarse and fine bran where both are made by the roller process? 2. Which is the better for cows and which for beef cattle, to be mixed with clear corn meal?

ANS.—1. The coarse is the larger particles of the covering of the kernel and the "chit" or germ rolled out flat and thin. The fine is the sifting out of this, and contains more of the starchy portions of the grain. 2. There is no doubt for either of these uses the coarser is the better, as it contains more of the albuminous matter, and that is just what the corn meal lacks.

BUCKWHEAT FOR FEED.

A. M. T., Farmington, W. Va.—For stock feeding buckwheat as compared with corn, according to Wolff's German tables, is worth, per hundred pounds, 77 cents against $1.11 for corn. This is, we think too large a difference, for, according to Prof. Jenkins's American tables and figuring on the German valuations of the food elements, they would stand per 100 pounds: buckwheat, $1.06; corn, $1.24½; which is probably near their comparative value. 2. To a limited extent buckwheat is good for egg production; but it should be fed with other grain.

USES OF SAWDUST.

T. U. C., Middlesex, Pa.—When hard-wood sawdust rots down, it makes a valuable manure for any purpose. It is also good to use on clay land, both for its manurial and mechanical effect. It makes a splendid mulch for an orchard, only there is danger that it may become so infested with worms as to injure the roots of the trees. If an application of ashes or lime is made every two or three years right on top of the mulch, there will be no danger of this.

LAND OFFICES IN DAKOTA, ETC.

W. J. P., Kensington, Ont., Canada.—1. We cannot recommend any particular part of Dakota for settlement, there are so many excellent locations in the Territory, and so much depends on the character of the settler and on many other points on which we are entirely ignorant. The best way is to investigate on the spot, leaving your family behind until you have a place for them. 2. The United States charge no duty on the effects of immigrants from Canada, including animals for working and breeding purposes. 3. Application for Government lands should be made to the Registers of the different land offices. Last year the names and locations of these officers were as follows: William Letcher, Mitchell, Dakota; M. W. Sheafe, Watertown; H. Austin, Fargo; G. A. Wetter, Yaukton; J. A. Rea, Bismarck; J. P. Luse, Deadwood; S. W. Duncombe, Aberdeen; D. C. Tiffany, Grand Forks, and G. B. Armstrong, Huron. Doubtless nearly all the same Registers are still in office. In any case a letter addressed simply to the Register of the Land Office at any of the above places would reach the right party.

Miscellaneous.

J. B. B., Monroe, N. Y.—Rossie paint is a red oxide of iron which comes from the the mines of Rossie, St. Lawrence Co., N. Y. It is about 75 per cent. iron rust. It is ground very fine, gives a dark-red color and adheres very firmly to wood, tin or iron. It makes a very pleasing color and will last two or three times as long as Venetian red. The nearest hardware or paint store should have it. If not, write the Rossie Paint Co., Ogdensburg, N. Y.

E. C. B., Wilmington, Vt.—It is our impression that the Primate Apple is hardy enough for Vermont; but the American Pomological Society does not "star" it there, and we can find no report of its doing well there, though it receives one star in New Hampshire, Maine and even in Nova Scotia—considerably further north. 2. Pears grafted on apple stock will not do well. 3. If tender varieties of apples are grafted on hardier stocks, we doubt if the stock would affect the hardiness of the graft.

E. S., Highland, N. C.—Certainly; you can train the main cane of a grape-vine up the posts of a veranda for a distance of 12 feet, and then run the fruiting arms along under the eaves. The distance of the fruit from the roots seems to make very little difference in the productiveness of the grape-vine. The main point is to keep the bearing canes as nearly on a level as possible, as the tendency of the sap in a grape-vine is strongly to the topmost canes.

S. W. H., Honeoye Falls, N. Y.—1. Cheat or chess has very little value as feeding stuff. 2. No; it will not pay to grind it to be mixed with corn meal for horses and cattle, and unless it is ground, it gets into the manure and thus becomes scattered over the fields. About the best use to make of it is to burn it. You are then sure it will not grow.

R. M., Newark, N. J.—Farmers may peddle their own produce in this city without taking out a license; but they cannot stand within 300 yards of the regular markets without payment of a small fee.

E. E., Rockwood, Tenn.—The goat belongs to the genus capra; the sheep to the genus ovis; both belong to the sub-family ovinæ. Animals of different varieties cross, and their progeny is fertile; animals of different species also frequently cross, but the progeny is not fertile as a rule. Animals of different genera do not cross.

E. A., Alexandria, Ohio.—For a wind-break of evergreens where the Winter of 1884 killed one-fifth of "a good growth" of Norway Spruce, we would prefer the Austrian or White Pine to the Norway.

A. N. V., Frankfort, Kans.—All the creamers advertised in the RURAL are good. Write to those advertising each kind for descriptive circulars, and judge of the special advantages claimed for each.

A. J. C., Mitchel Val., Cal.—Harrow teeth that are lose in the dry wood, become firmly fixed when the wood is wet, because the moisture causes the wood to swell and close up round the teeth.

R. C. D., Loveland, Ohio.—The Woodason Bellows, costing from $1.50 to $2, are what we use for spraying the houses with kerosene. See seedsmen's catalogues advertised.

T. R. W., Otter Creek P.O., Pa.—Muriate of potash will probably give you the potash at a cheaper rate than any other thing you can use in place of wood ashes.

R. M., Raleigh, N. C.—A deed of real estate in North Carolina must be recorded within two years, or it will be good for nothing.

DISCUSSION.

G. W., SOUTH ALABAMA, N. Y.—In the RURAL of February 20, a correspondent asks whether RURAL subscribers have ever seen chestnut trees growing on limestone land. We are on a ledge of limestone and flint that passes through Livingston, Genesee and Niagara Counties. The timber on it is mostly oak and chestnut, and in many places chestnut grows on quarries of blue limestone.

F. S. N., VINELAND, N. J.—A good deal of praise has been bestowed on the Early Harvest Blackberry. Now I have grubbed out all I had of them, because they bore very imperfect fruit. What berries we did get were a week ahead of the Wilson, but small and very few of them filled out. They seemed to set all right; but only three or four of the drupes would fill out, while the rest would remain green, hard knots. Were they really Early Harvest?

R. N.-Y.—We should say not. Our berries are exceptionally uniform and perfect.

J. B. C., NORTH PEMBROKE, N. Y.—In a late RURAL, J. W. K., Denton, Md., asks whether any one has ever seen chestnut trees growing naturally on limestone land. I have seen them growing naturally on such land together with oak and hickory, where there was no slate within five miles. They can be seen now in the western part of this county.

G. E. S., OLD MISSION, Mich.—In a late RURAL farmers were advised not to let professional tree trimmers into the orchards. One writer called them "tree butchers." Now I am a professional tree trimmer, and I understand my business, which is a necessary and honorable one; and if the RURAL doesn't stop injuring it, it will have to pay damages.

R. N.-Y.—The RURAL would truly regret having, even inadvertently, injured any "necessary and honorable" business; but, bless you, it has become so callous to threats from humbugs and worse, that all threats of punishment for having expressed an honest opinion itself, or for having allowed another to do so through its columns, have lost all terror for it. No "necessary or honorable" business has anything to fear from it; and it fears nothing from any other sort of business.

S. W., NIAGARA, N. Y.—In answer to an inquiry in a late RURAL, it was said that the Manshury is a winter barley. This is evidently a slip. I have grown it continuously for the past five years, and it is certainly a spring variety. I shall sow 60 acres this Spring.

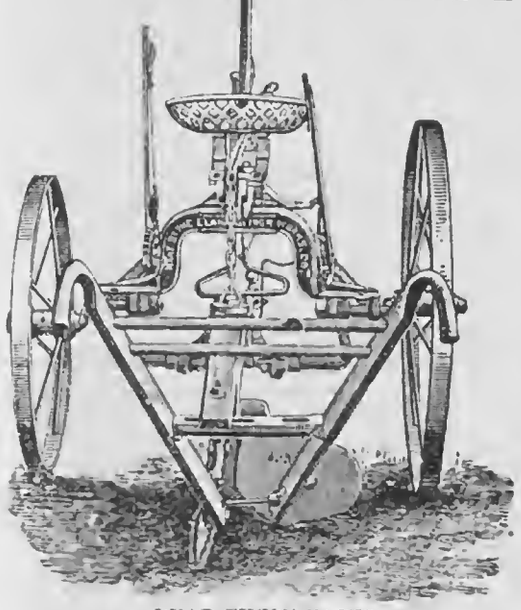
COMMUNICATIONS RECEIVED FOR THE WEEK ENDING SATURDAY, March 13, 1886.

H. and B. L. N.—J. W. K., thanks.—C. E. B.—L. N.—G. W. G.—I. P. R.—L. H.—C. G.—W. W. H.—B. Langan, thanks.—J. T. C.—J. W. K., thanks.—E. B. H.—V. L. E. B. C.—G. V. W.—J. M. B.—J. S. C.—J. H. T.—A. S.—W. G. W. Sr.—C. S. H.—E. W.—S. T. H.—F. W. S.—H. K.—W. M. F. F. D. C.—C. C. H.—G. W., thanks.—G. W. H.—C. C. W.—H. M. E., thanks.—J. B. C.—J. S.—A. G. W.—T. H. B.—R. K. P. J. G. L.—W. K.—T. C. R.—E. L.—A. S. L.—J. B. M. C.—C. B. C.—A. E. R.—J. H. B.—H. C. C.—H. H.—T. H. B.—J. F.—H. M. E., thanks.—T. H. H.—M. D. McP.—J. G. S., thanks for corn.—E. D. P.—W. G. W. Sr., thanks.—F. E. A.

Implements and Machinery.

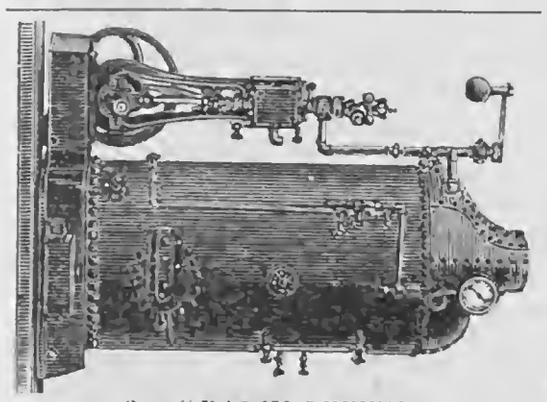
$25 A DAY saved by using the Little Giant Road Machine. Instead of making roads in the usual way. It is the cheapest and the best. Send for circular.
STRONG & PARKER, Vergennes, Vt.

THE ELKHART
PLOW SULKY



READ THESE FACTS.
Lighter Draft with Driver Riding than ordinary Plow with Driver Walking. Turns square corner without backing. It is wholly constructed of Iron except tongue and front lever.
We claim and GUARANTEE that a Plow attached to the Sulky and carrying the driver, is from five to 100 pounds lighter draft than the same Plow doing same work without the Sulky. Write for prices.

ELKHART IRON WORKS,
ELKHART, IND.
Mention Rural New-Yorker.



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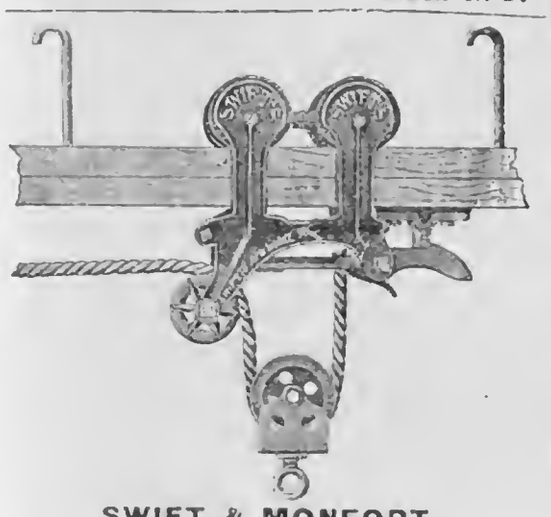
Upright Boiler and Engine.
Just what you need. In two, four, and Six H. P.
REYNOLDS & LANG,
Write for circulars. Ithaca, N. Y.



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Dealers in Forks, Ropes, Pulleys, and Agricultural Implements of all kinds. Send for circulars.
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Hand Cultivator,
Wheel Hoe,
SINGLE OR COMBINED.
Admitted by leading Seedsmen and Market Gardeners everywhere to be the most perfect and reliable implements in use for planting and cultivating garden crops. *Beware of cheap Imitations!* Inquire for the genuine machines which are made only by
T. B. EVERETT & CO., Boston, Mass
Send for circulars, giving latest prices and improvements.

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WHEEL-BARROW
The only machine that will successfully sow Clover, Timothy, Hungarian, Millett, Red Top and Flax. Indispensable in windy weather when impossible to sow by hand. Simple and durable in construction. Feed positive and uniform. Send for circular describing latest improvements.
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Leaves the earth well pulverized at bottom of furrow. Marks any width from 2½ to 5 feet, and from a mere mark to 6 inches deep.
"Take pleasure in recommending it. It does the business; is well made and will last for years." *J. N. Collins, Moorestown, N. J.*
"It far exceeds my expectations. If the real merits of this cheap implement were known to potato growers alone, the sales would be immense." *E. L. Coy, Pres. Wash. Co. (N. Y.) Agr. Society*
H. W. DOUGHTEN Manufact'r, Moorestown, Burlington Co., N. J.

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HAY and GRAIN ELEVATORS
SLING and STACKER
BEATS THEM ALL.
Agents wanted. Send for circular. Mention this paper.
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MOST IMPROVED and PERFECT CHILLED Plow on the market. STRONG, DURABLE, LIGHT DRAFT.
Interchangeable & Perfect Fitting Repairs.
No Experiment. For four seasons has given universal satisfaction where used.
Agents Wanted.
Bolts that cannot turn when tightened or loosened.
Write for Catalogue. Name this paper.
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South Bend, Indiana, U. S. A.
W. H. HOAG, SON & GUNGRICH, Gen'l Agents, 1719 Market St., Philada. 225 Pearl St., New York.

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CENTRIFUGAL-GOVERNOR
WINDMILL
Is the best working and most powerful Wind-Engine in the world, because it is the only one which unites the most perfect form of windwheel with the most perfect method of regulation. Geared Mills a specialty.
For Descriptive Circulars apply to
THE DANA WINDMILL CO.,
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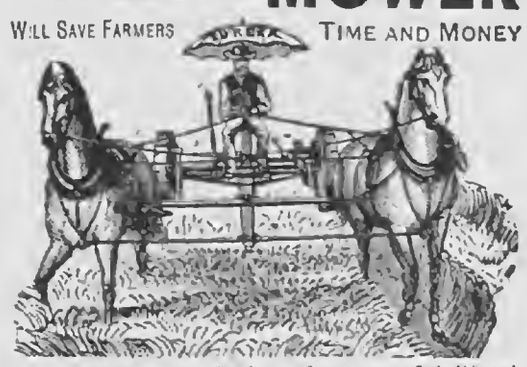
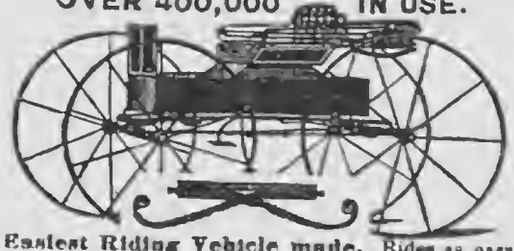
—THE—
Broad Cut Centre Draft. EUREKA MOWER
WILL SAVE FARMERS TIME AND MONEY



THE EUREKA is the only successful Direct Draft Mower manufactured. It will do at least, one third more work than the side-cut machines with same power. As the cut grass is untrampled, hay will cure quicker, and sell for more money. Don't fail to see the Eureka before buying. Send for new 1886 catalogue. Mention this paper.
EUREKA MOWER CO., Utica, N. Y.

TIMKEN SPRING VEHICLES.
OVER 400,000 IN USE.



Easiest Riding Vehicle made. Rides as easy with one person as two. The Springs lengthen and shorten according to the weight they carry. Equally well adapted to rough country roads and fine drives of cities. Manufactured and sold by all leading Carriage Builders and Dealers.

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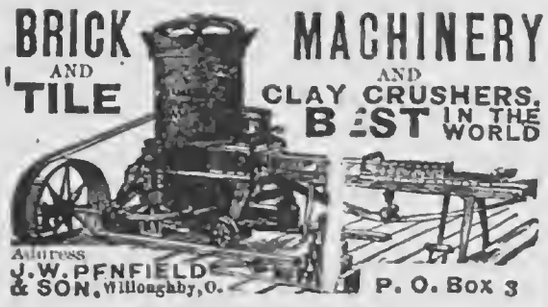
CLAY CRUSHERS.
BEST IN THE WORLD



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J. W. PENFIELD & SON, Willoughby, O. P. O. Box 3

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Buy the Best. **THE EUREKA**
Awarded FIRST Premium and Gold Medal at World's Fair New Orleans, over 12 leading Wind Mills. The EUREKA, after a trial lasting 4 mos. was pronounced the best over all and to-day stands at the head of all competitors. Sizes, 10 to 18 ft. diameter of wheel, either for Pumping or Power Mills. *Perfect in all parts and warranted.* Estimates on application. Also Mfrs. of the Adams Direct Draft Barn Floor Horse Power. *Live Agents Wanted.* Address Mfrs., SMITH & WOODWARD, Kalamazoo, Mich.

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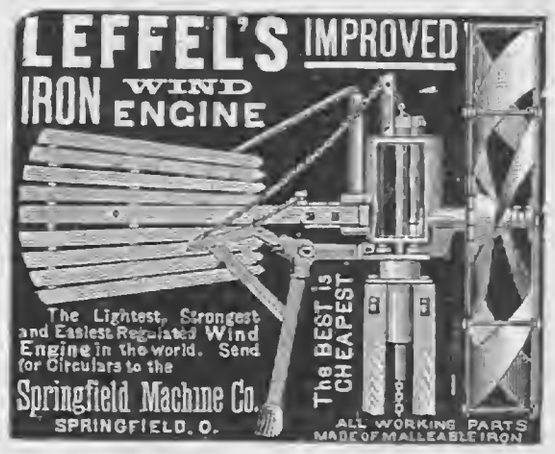

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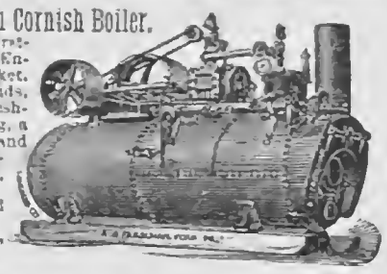
The BEST is CHEAPEST
ALL WORKING PARTS MADE OF MALLEABLE IRON

Ajax Engine on Cornish Boiler.
The cheapest, first-class, horizontal Engine in the market. Engines of all kinds, for Sawing, Threshing, and Ginning, a specialty. Saw and Grist Mills, Threshing Machines, etc., a specialty. Send for Illustrated Catalogue.
A. B. FARQUHAR, York, Penna.



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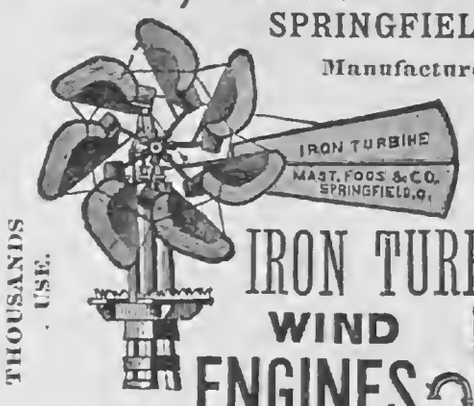

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IRON TURBINE WIND ENGINES

A CHILD CAN USE THEM.

Strong and Durable, will not Swell, Shrink, Warp, or Rattle in the Wind.

BUCKEYE FORCE PUMP
Works easy and throws a constant stream. Has Porcelain lined and Brass Cylinders. Is easily set. Is the Cheapest and Best Force Pump in the World for Deep or Shallow Wells. Over 90,000 in use. Never freezes in Winter. Send for Circulars and Prices, giving depth of well. Also manufacturers of the Buckeye Lawn Mower, Buckeye Iron Fence, Buckeye Hose Reel, Lawn Sprinkler, etc., etc.

THE GIBBS PATENT "IMPERIAL"
Steel, Cast, and Chilled PLOWS.
EQUIPPED WITH JOINTERS,
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MANUFACTURED BY
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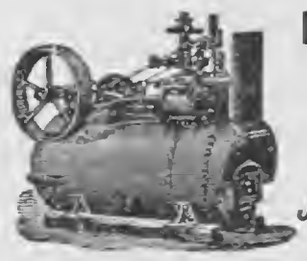

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UPRIGHT AND HORIZONTAL,
3 TO 10 HORSE POWER.
OVER 3,000 IN SUCCESSFUL OPERATION.
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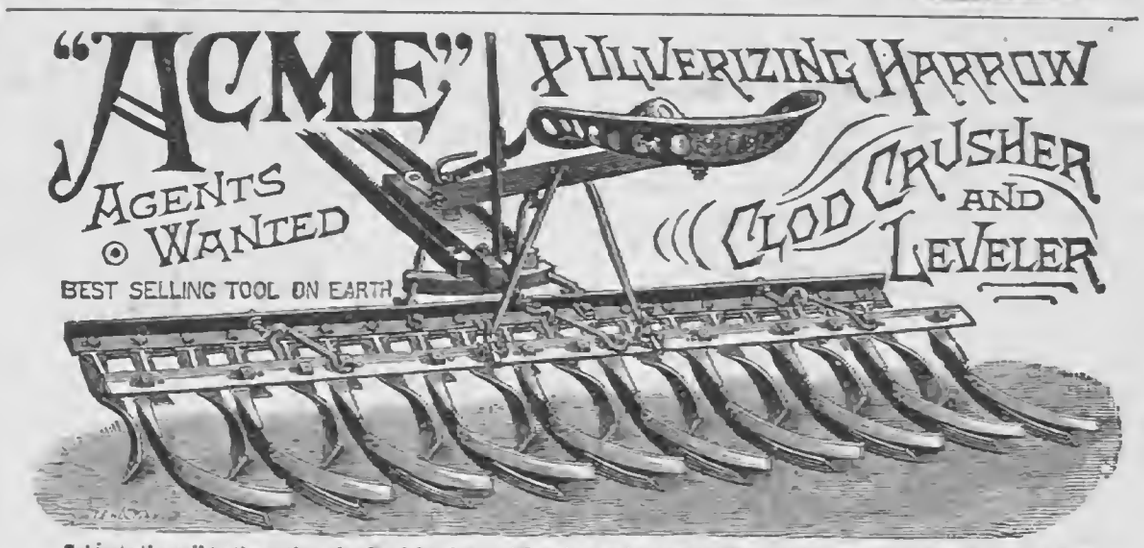
"ACME" PULVERIZING HARROW CLOD CRUSHER AND LEVELER
AGENTS WANTED
BEST SELLING TOOL ON EARTH



Subjects the soil to the action of a Steel Crusher and Leveler, and to the Cutting, Lifting, Turning Process of Double Gangs of Cast Steel Coulters. Immense cutting power. Crushing, Leveling and Pulverizing performed at the same time. Entire absence of Spikes or Spring Teeth avoids pulling up rubbish. Only Harrow that cuts over the entire surface of the ground. Sizes, 3 to 15 ft. wide. With and without Sulky attachment. We deliver free at Distributing Depots.

FAIR PLAY. **DO NOT BE DECEIVED.** Don't let dealers palm off a base imitation or some inferior tool under the assurance that it is better. SATISFY YOURSELF BY ORDERING AN "ACME" ON TRIAL. We will send a **double gang** Acme to any responsible farmer in the United States; if it does not suit, he may send it back, we paying return freight. We don't ask pay until tried on his own farm.

Send for pamphlet containing thousands of testimonials from 48 States and Territories.

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CORN PLANTERS, CHECK ROWERS, CORN DRILLS
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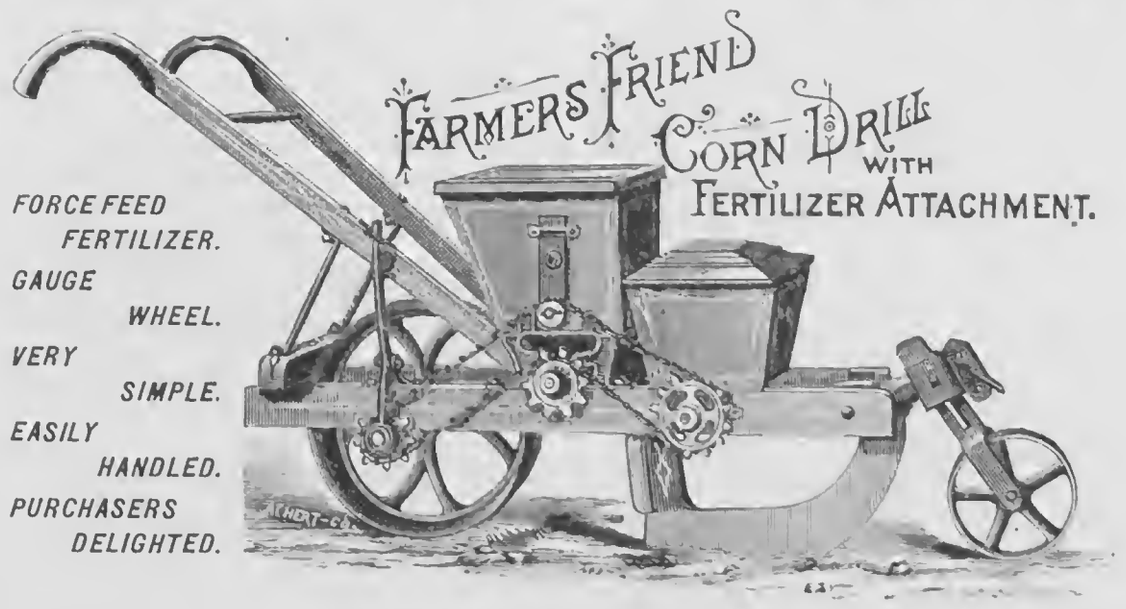
"EXCELSIOR" LEVER FOLDING HARROW
FOR PULVERIZING, SMOOTHING AND CULTIVATING, ARE OUR IMPLEMENTS FOR SPRING USE.



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WE ALSO MAKE
2-Horse Corn Planters,
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1-Horse Corn Drills,
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3 and 5-Hoe Wheat Drills.

Our Planters and Corn Drills are recognized as the best in all the Corn States.
Circulars, Cuts and Prices Free.
Supply Houses in all parts of the Country.
We sell to responsible farmers where we have no agents, and ask no pay until satisfied.

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DAYTON, O.

THE
RURAL NEW-YORKER.
A National Journal for Country and Suburban Homes.

Conducted by
E. S. CARMAN, Editor.
J. S. WOODWARD, Associate.

Address
THE RURAL NEW-YORKER,
No. 34 PARK ROW, New York.

SATURDAY, MARCH 20, 1886.

WE have many interesting contributions as to the Japan Chestnut, which we shall publish as fast as space can be found.

IF the number on your address label is 1886, your subscription expires with this number; if 1887, next week; 1888, in two weeks, etc.

WE have received a number of complaints that the Nature's Incubator, manufactured in Quincy, Illinois, is a worthless affair. We are investigating these charges, and, in the mean time, our friends may accept the above as a caution.

A FRIEND from Alexandria, Dakota, who does not sign his name (we would thank him to forward it), says that he planted both the Cory and Marblehead sweet corn last year, and found the claim in favor of the earliness of the Cory not well sustained. He thinks the Cory a strain of the Marblehead, which, we believe, is admitted by the introducers.

DURING the past week Catawba Grapes of the best quality have been selling at the retail fruit stands for 20 cents the pound, nominally five-pound baskets (about four pounds) for 60 cents. We have never before seen Catawbas offered for sale so late. They have been preserved by the cold-storage method. When, among the scores of new grapes, we find one as good a keeper, and as good in quality as the Catawba, the fact will be noteworthy.

THE Michigan Agricultural College is entering upon a new era of prosperity. The freshman class contains 165 members, and more are coming every day. "How fortunate," writes our informant, "that we have held to our labor and agriculture, pure and simple." There is the secret of the great success of this college in a nutshell. It is not the tail of a university, it is not ashamed of its name, it holds labor in the foreground. The few colleges that insist upon work as a necessary element of education grow stronger every year. The many that ape the influence and tone of a literary school and still attempt to pass as agricultural institutions, grow weaker and weaker. The reason is plain. In one case faculty and students are proud of their work; in the other there is a constant effort to apologize for the existence of the institution.

ACCORDING to the Report of the Connecticut Agricultural Experiment Station, potash in muriate has cost the past year, at wholesale in New York, about three-and-one-third cents a pound. At retail it has cost about four cents. Kainit at wholesale in New York cost in December less than one cent. It rose until April, when it cost 3.8 cents per pound. Then it fell to 2.8 cents per pound in July, rising to three cents in November. Now at *retail*, the cost has been about 4.5 cents per pound. Farmers should note this. A pound of potash in kainit is worth just as much as a pound of potash in the muriate, unless the salt in the latter is thought to reduce its value. It varies in composition, and at the above prices it is assumed that the per cent. of potash is as much as 12. At wholesale it has been much cheaper than high-grade muriate; while at retail it has been much higher.

As many as 10 years ago, one of the best farmers living in the vicinity of the Rural Farm, began the use of bone flour as a fertilizer. The effect was very satisfactory indeed. His crops were evidently increased. The neighbors saw this and bought *bone* and spread it upon their fields. Of late years, bone is less popular. The farmer above referred to thinks it does not have the same effect as at first, and some of the neighbors who followed his lead agree with him. Now, potash is just as much a plant food as bone, which, besides a little nitrogen, furnishes only phosphoric acid. During these 10 years, where has the potash come from which the crops required? Evidently from the soil. And the soil has been growing poorer and poorer in potash every year until now it can not supply the quantity which the plants need, and the lighter yields are attributed to the fact that "bone does not have the same effect now that it did 10 years ago." Try potash, friends, and if this does not give satisfactory crops, you may conclude that it still needs bone as well as potash, and, very likely, nitrogen as well. But don't condemn bone.

Perhaps, no other improvement in a garden or home gives such rich and enduring results as the setting of some well chosen grafts. Now is the season, and every boy should try his prentice hand while observing or assisting a practised operator. Success depends on a healthy stock, on sound, plump grafts of good firm wood, not dried or hurt by severe cold, nor at all swelled by any start of bud growth; a sharp knife, the close and unmoved joining at some one point at least of the line between bark and wood in the graft with the same line in the stock on faces freshly and smoothly cut; a complete covering of the entire wound with a coating of wax, which, being waterproof, and devoid of any oily, salty, or any other free matter, will prevent the wound from drying without interfering with the tender protrusion of new matter, which will unite the parts in the course of a few weeks, if not disturbed.

COMPLAINTS are made that carrying fourth-class matter in the mails at the present rate is a losing business. What if it is? Has not the carrying of any sort of mail matter into many parts of the country been always a losing business? Shall the mails be stopped altogether, therefore, over all the "star routes" and several others, or shall the rates on letters be raised to out-of-the-way places? Uniformity of postal rates for the whole country has been found best by every nation. A profit is made on some classes and for some distances; a loss is incurred in others, and generally they counterbalance each other. The letter and post-office-order departments of the Post Office are acknowledged to be the most profitable; and to the profits of these there is hardly anything that contributes more than the letters and remittances connected with the mailing of fourth-class matter. Such matter must not exceed four pounds, and includes a vast variety of goods, from silk to sorghum seed, and probably an average of three letters and one postal remittance is associated with the mailing of each package. Will not the profits on these more than make good any loss on fourth-class matter? An expert in the Post Office here says the present shortage in the Post Office receipts will be increased by at least $3,000,000 a year, if the Wilson Bill becomes law. One of the great dailies here characterizes it as a "foolish" bill; it is that and worse—it is a foolish and culpable attempt to tax the multitude for the benefit of a few.

SPECIAL.

Those who, having applied for the Rural's present seed distribution prior to March 5th, have not yet received it, will kindly notify us by postal at once.

The seed packages for Canada subscribers were expressed last week to be mailed there.

THE JAPAN CHESTNUT.—A WARNING.

THE RURAL would not influence anyone to invest largely in Japan Chestnuts unless he has money to lose. Too little is known as to their adaptability to diverse regions of our country. We are placing before our readers all the information we can gather, in order to enable them to act judiciously. How much cold will the trees stand? Not over 15 degrees below zero, Mr. Hallock thinks, as he states in another column. But different seedlings possess different degrees of hardiness. We know of trees that have stood 24 degrees below zero. Of this one thing we are confident:—Where the best varieties of the Japan Chestnut will thrive, they will prove among the most valuable nut-bearing trees in cultivation. Again, we fear that the Japan Chestnut is not the easiest tree in the world to transplant, and we would advise those of our readers who purchase trees, to see to it that they be not exposed to wind or sun; that the holes be large enough; that the soil be worked in among the roots; that the soil be well compacted *over* the roots, and, finally, if necessary, that a mulch be applied if the weather be very dry. The nuts sprout freely, and seedlings may be raised with little trouble.

Mr. Hallock was one of the first to raise seedlings, and to propagate from the best of them by grafting. He has many trees now in bearing, and wishes he had ten times as many. He says the quality is better than that of the Spanish, though not quite so good as that of the American unless the nuts are cooked, when there is no difference. He has no trees, nuts or cions for sale.

CHINESE LABOR ON THE FARM.

IT is said that 30,000 Chinese are engaged in agricultural pursuits on the Pacific Coast. Many of these work on their own account, raising garden "truck" for the markets in towns and cities; but the great majority are hired by farmers, hop growers, fruit growers, and especially by owners of vineyards. The wages paid are not low in comparison with farm wages in the East, as they range, it is said, from $25 to $45 a month and board. No complaints of Chinese "cheap labor" can therefore be justly made by those who wish the expulsion of the Celestials from the State. Indeed, there are not enough white men to take their places should they be driven out, and as their foes congregate mostly in cities, towns and villages, and are unwilling, and, for the most part, incompetent to perform agricultural work, the expulsion of the Chinese must entail disaster on the farmer and fruit grower. Accordingly, the agriculturists in many portions of the State are protesting against the crusade now carried on against this very useful class of farm laborers. In Solano County upwards of one hundred prominent fruit growers, owning 5,551 acres of orchard, say: "The present condition of the labor market, and the sparseness of our population make it absolutely impossible to carry on the business of fruit culture here without the employment of large numbers of Chinese laborers." Their workingmen are alarmed and ready to desert, and the fruit growers say their departure would cause them a loss of a $1,000,000. The Hop Growers' Association, of Mendocino County, say the hop crop is the only one to which they can look for money, and most of their capital is invested in hop-yards, and in machinery for raising and handling the crop. "We cannot pick and save our crops with white labor alone," they say, "as it is not in the State, and can not at present be had." Like many other employers on the Pacific Coast, they are willing to exert themselves to stop Chinese immigration, and prefer white labor when it can be found; but they insist that the Chinese now in California should be protected. The Anti-Chinese agitators, mostly foreigners, will not pick hops or grapes, or do any other farm work, and in any case many farmers prefer Chinese as "they are steadier, more faithful and more trustworthy." There are always two sides to a question, even to that of "Chinese cheap labor."

A STATE DEPARTMENT OF AGRICULTURE.

WHILE we are strongly in favor of placing the agricultural interests of any State under the control of a single honest, capable and efficient head, in the belief that such a course would best promote those interests, and be most economical of labor and money, we are very decidedly of opinion that such a head should not be a politician, or subject to the whims or influences of party "bosses," or be liable to be changed every two years, as is proposed by the Law bill now before the New York Legislature. As a rule, the farmers of this and other States, while capable of managing their own affairs, are not working politicians or wire-pullers, and if such a head were made elective and placed on the State ticket, in nine cases out of ten he would inevitably be some incompetent, political place-seeker, more intent on serving his party, than on advancing the farming interest of the State.

It is a sad fact that the farms of New York are not as productive as is desirable, or possible; that her dairies are languishing, and that their products are not always as good as we would have them; that our forests are being neglected and destroyed with no provisions for growing new ones in their places. But we can all see that a Department whose head is a politician and not even likely to be a farmer, and who would be liable to be changed every two years, is not by any means the best, or even a proper one into whose charge such important interests should be committed.

The RURAL is, and has been a strong advocate of the necessity of a State Board of Agriculture in the Empire State, which should assume entire charge of its agricultural interests. All States are alike to us, and we should have taken the same position with regard to any other, had the question arisen.

While we have at present no plan to propose for the organization of a State Board, we are very certain that it should be composed of active, progressive farmers, and should be so chosen or appointed that it would be next to impossible for it to become in any degree partisan or political.

CHARMING BARBARITY.

So enormous is the slaughter of birds now taking place to supply the demands of feminine adornment, that the speedy extermination of whole species is a question of only a short time, unless some means are devised for putting a stop to it. Out of our whole population, at least 10,000,000 are not only of bird-wearing age, but of bird-wearing proclivities. At least two-thirds of these are now wearing as ornaments to hat, bonnet or head, the wings, head or whole bodies of one or more birds, and they average at least two hats each thus adorned. Of 50 women met on one of the streets here yesterday, 41, by actual count, wore the spoils of song birds—the nine others were shabbily dressed and too poor to afford the cruel luxury. Over 40,000 terns were killed in a single season on the shores of Cape Cod to supply the demand for plumes. A similar slaughter in the interior has greatly reduced the number of feathered favorites that cheered the scene with their songs and brightened it with their plumage, besides doing an inestimable service to the agriculture of the country by destroying myriads of the insect pests that prey upon every branch of it. Add to the millions of birds annually slaughtered for frivolous fashion, the vast numbers of nests robbed by juvenile thoughtlessness, curiosity, cruelty and greed, and by the wicked ambition of older marauders to make up worthless "scientific" collections, and is it any wonder that the "balance of Nature" has been deranged, and that insect pests multiply to an alarming extent as their foes are recklessly exterminated? We are glad to see that associations are being formed in numerous places to discountenance and check this barbarous carnage; but laws should be passed and sternly enforced in every State to protect all insectivorous feathered friends of the farmer and fruit-grower, and every one of these should at once urge upon his representative in the Legislature of his State the importance of such legislation. If heartless fashion must be gratified, why not confine its cruelty to the English sparrows? With these pests the painter's art ought to be able to satisfy the desires of the vainest, most thoughtless, charming and fashionable of the amiable but cruel sex.

BREVITIES.

THE Potato Special next.

WE reap what we sow. Too many of us turn about and sow what we reap. We thus make sure of two poor crops.

THE careful experiment made by the RURAL several years ago, as to the best depth to plant peas, resulted in favor of two inches. The soil was a mellow loam, rather clayey than sandy.

A FRIEND who has raised the Japan and Spanish Chestnuts for years, writes: "I am glad that you are giving the Japan Chestnut a boom. I do not know of anything more worthy."

NUMBERS of our subscribers, in various parts of the country, write us that their cattle are afflicted with a serious skin disease. The symptoms are the same in all cases. Our friends are referred to the article printed on page 74.

A SUBSCRIBER of Erie, Co., N. Y., Isaac Henstreet, Jr., writes us that he received one Japan chestnut tree (by mail) from a nursery three years ago. It has done well, he says, not a bud having been harmed by cold weather as yet.

A FRIEND writes: "The attempt to double the rate on fourth-class matter is a rascally piece of business. It was a rascally piece of business engineered by the express companies in 1872, when the postage was raised from eight to sixteen cents a pound, and the people ought to demand of their Representatives that it be at once reduced to the old rate of eight cents a pound."

THERE are at least two sides to every question, and it is wise to hear both before coming to a conclusion. A short time ago Velancy E. Fuller presented, in our columns, the Jersey side of the question as to the "best cow for the dairy," according to the results of Prof. Brown's tests at the Agricultural Experiment Station, of Ontario, Canada. In this issue Mr. E. M. Powell presents very forcibly the Holstein-Friesian side of the matter, and really doesn't he make out a strong case?

Farm Economy.

FENCE ACROSS SMALL STREAMS.

The posts or crotches shown in Fig. 118, should be set firmly into the banks of the stream on opposite sides. Then get six bars with the bark on, long enough to reach from one crotch to the other. One bar rests above high water in the top of each crotch. One end of

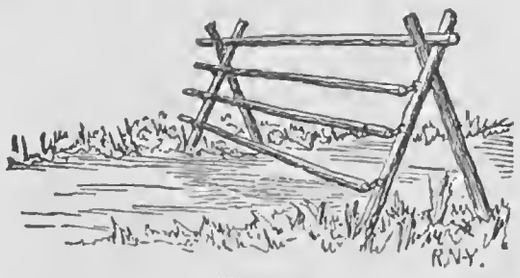


Fig. 118.

each remaining bar is fastened by two staples and one link to one leg of the crotch on one side of the stream. The other end rests loosely on one of the several pins in the crotch on the other side. These bars must be on the side facing down the stream, so that in time of high water one or more bars may swing around down the current and let all flood-wood and rubbish pass. Afterwards they can be restored to their places. J. KRUPP.

Miscellaneous.

CATALOGUES, ETC., RECEIVED.

JOHN S. COLLINS, Moorestown, N. J.—An illustrated catalogue of fruits, especially small fruits. Mr. Collins sent us plants of the May King Strawberry, on June 15, 1884, and we have found the variety of good quality and among the earliest of those tested at the Rural Grounds. We deem it well worthy of extended trial. Mr. Collins's is one of the two head-quarters of the Lawson (Comet) Pear, which the R. N.-Y. was the first to bring to the notice of the public. Whatever has been said for or against it, our opinion, as already expressed, is that it is one of the largest and *handsomest* pears of its season we have ever seen, its season being, as we remember, late July. The quality is—well, *sufferable*, or, as the Am. Pom. Society would class it "good," being the lowest rating. Mr. Collins also sent us plants of his Early Cluster Blackberry which we cannot as yet praise.

THE EUREKA MOWER, from the Eureka Mower Co., Utica, N. Y. The motto of this firm is a good one: "How good and durable a machine can we offer to the farmer?" Changes were made in 1885, which greatly strengthen these mowers. The grass-rods were made larger and of steel, resting higher upon the tongue-irons. The guards were made heavier and stronger; steel was substituted where wrought iron was previously used in the axles, back and crank shaft, side arms, pole braces, hoisting rig shafts, in fact, in all places where it would make the mower stronger and stiffer. A brace was introduced from the axle to the cross-rail near the gearing, making the frame more rigid and stronger. We cannot begin to give all the good point of these machines. Send for the catalogue.

D. M. FERRY & Co., Detroit, Mich.—Notwithstanding the main seeds house of this old firm was entirely destroyed by fire, the business scarcely suffers an interruption. The catalogue is one of 125 pages, offering everything in the way of seeds, and it will be mailed free to our subscribers. It opens with instructions as to the formation and management of a vegetable garden, and tells the whole story, including the making and care of hot-beds, etc. It offers Manshury Barley, the Saskatchewan (Spring), Fife Wheat, which is deemed by the firm to be the best No. 1 Hard Amber yet introduced, and the most valuable milling wheat in the world. Fruit, evergreen and deciduous tree seeds are also offered.

ELLWANGER & BARRY, Rochester, N. Y.—A descriptive, illustrated catalogue (140 pages) of ornamental trees, shrubs, hardy perennial plants, etc. This is probably the most trustworthy catalogue of its kind published. It aims to *aid* the reader to make judicious selections, not to confuse him by indiscriminate praise of everything in the list. If without the aid of one who knew, an inexperienced person was obliged to select his own plants from a catalogue, we should place before him this one.

PURE AUSTRIAN OR GERMAN CARP.—Pamphlet from Chas. S. Medary, 145 Broadway, New York. A short treatise on carp culture with various opinions as to the quality and productiveness of the fish and the profit to be derived from raising them. Prices are given. Those interested in carp culture should study the pamphlet.

GRAPPLING HAY FORKS AND RAILWAY HAY CONVEYERS.—Pamphlets from Gardner B. Weeks, Syracuse, N. Y. Unlucky is the man who, in this age, seeks to handle a large quantity of hay with the ordinary hand fork. If you wish to learn how to handle hay in a wholesale manner, send for this pamphlet.

PROCEEDINGS OF THE NEW JERSEY STATE HORTICULTURAL SOCIETY 1885.—190 pages. It is full of interest to the horticulturist, the best report yet published by the society. Write to E. Williams, Sec'y, Montclair, N. J.

BIG LAMBS.—I have just sold 13 Shropshire lambs, which averaged 136 pounds each; I began to feed them November 15. I fed nothing but whole grain and clover hay. My ewes are looking well. I feed them all the good straw they can eat three times a day, and about a pint of culled beans once a day to each ewe. I claim that with proper handling and breeding there is more money in feeding lambs than in any grain crop the farmer can raise. C. P.

Farmer Village, N. Y.

FIGHTING INSECT PESTS.—You can keep the cabbage worms in check by using the following mixture: Ten cents' worth of aloe, in six gallons of water raised to boiling heat. This amount will answer for 200 plants. Fight the currant worms by placing around the bushes, as soon as the ground thaws in the Spring, unleached wood ashes. Hoe away all grass and weeds. W. H. P.

Boone Co., Ind.

TO SEVERAL INQUIRERS.—Answers can seldom be returned to such inquiries as the following: "What is the standing of Graham & Co.? Is the firm trustworthy?" "Are the goods advertised by Brown, Smith & Co., worth what they say they are?" "Will Jones & Robinson do all they promise?" "Will the High Art Electrograph Co., really pay the salary they offer in their circulars?" Questions of this kind are constantly received from people who evidently think the Eye-opener must be acquainted with all the doubtful and rascally concerns in the country. What is the address of Graham & Co? What kind of goods do Brown, Smith & Co., advertise, and where do they "hang out?" Who are Jones & Co., and what do they promise? That highfalutin' artful affair, what salary bait is it offering to gudgeons?

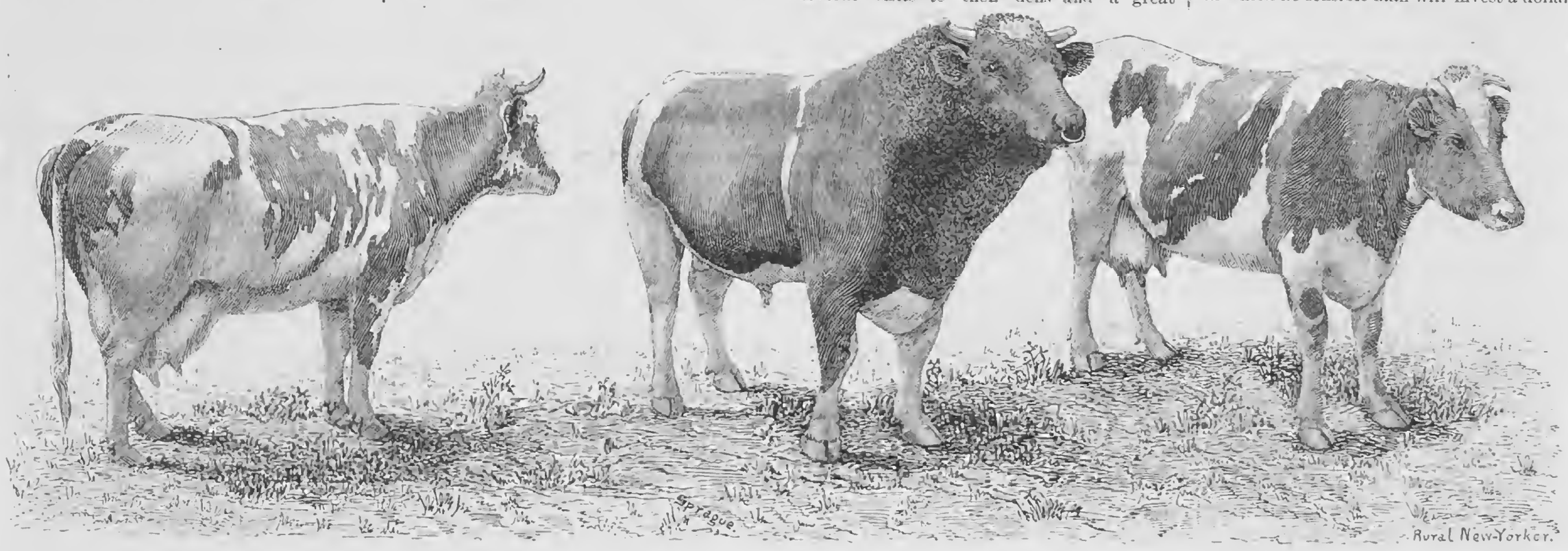
Most of the large towns all through the country are infested with a number of swindlers who prey upon the public and especially on the agricultural part of it, by means of advertisements in the press and in circulars; while many small places are notorious on account of the great number of frauds advertised from them. In such cases there are sometimes several advertising sharpers in a place; but usually there is only one person or set advertising under several different names. The knaves seldom operate under the same name for any considerable length of time. They soon become too well-known to be trusted; and as there is always a multitude of new and attractive names, they readily change a disgraced one for one which they will soon render equally notorious. Then these rascals have no stronger attachment to a place than to a name, and are constantly changing the scenes of their villainies. Neither mercantile agencies nor any other respectable sources of information take any notice of them; and as soon as the police "spot" them they generally change their abode or title or both. For these and other reasons it is quite impossible for the Eye-Opener to learn the names and abodes of all the advertising humbugs and swindlers in the country, or even to keep track of those that have once come within the blighting rays of his lantern.

Inquirers often say: "Answer in next issue, or better, by return mail." How little such people know about the difficulty of tracing swindlers. It has often required several visits to their dens and a great deal of inquiries among the neighbors and more interviews than one with the police to ascertain, beyond a doubt, the real character of several advertising swindlers in this city. How much more difficult it is to learn, through the courtesy of others, about similar swindlers at a distance, even when their addresses and the nature of the business they profess to carry on are known. Each inquirer should, therefore, send on all the information he has about the party whose standing he wishes to ascertain; and no one should feel hurt in self-importance or ruffled in temper by delay or even failure on the part of the Eye-Opener to answer his questions. In most cases it is difficult and in some impossible to discover not merely the standing of the parties, but even their names and residences. There is here a world of willingness to answer everybody promptly and fully, to expose all humbugs, mountebanks and swindlers; but there is an unsurmountable reluctance to base the answers or exposures on mere guess-work or inference, or on anything less trustworthy than solid information. One consolation each waiting inquirer will always have—if he does not deal with the doubtful advertiser until he sees an answer to his question here, he will not be swindled.

The doings of the petty swindlers who offer women "work at home" have become so outrageous in Boston, that the Women's Educational and Industrial Union of that city has undertaken to protect the "innocents" from their operations. Over and over again we have denounced a number of these frauds by name, and we are glad of the assistance of the above local association in our efforts to protect the public from the knavery of the rascals. The other day one of these victimizers of the needy and distressed was ejected from his den and his mail accumulated for four weeks, when it was found that it contained over $800 in small sums. These had been sent to him for "outfits" in answer to a number of advertisements in various papers, and were intended to cover the cost of materials, patterns, implements, etc., etc. The poor women who have scrimped themselves to send petty sums to such scoundrels seldom or never hear about their applications, unless there is a fair chance that more money can be weedled out of them. The above association, No. 74 Boylston St., Boston, "will gladly investigate, free of charge, advertisements offering to women 'work at home,' if the advertisers live in or about Boston." We advise all intending investors to seek its services. Similar sharpers advertise from all large cities and many small places—would that similar associations were ready everywhere to expose them.

We are constantly receiving accounts of swindles by agents for Bohemean Oats and other grains; but such swindles have been described here so often and so fully that none of our readers can be among the dupes unless through his own stupidity, gullibility or greed. A sharp, even if expensive lesson would doubtless be wholesome for such a person.... ..... R. F. Loyd, Hebron, Ala., who offers "10,000 books free," is a confessed humbug according to his own circular, and a swindler according to the judgment of any honest man. The rascal offers to send for $1 full instructions how to obtain books free on false pretenses. His plan might be successful if publishers were ninnies; as they are almost invariably smart business men, the only dupes of this precious rascal will be those who send him the one dollar required.

We have already said here that St. Andrew, by the Sea is one of the Florida "paper cities" in which no sensible man will invest a dollar in spite of the attractive circulars sent out about the place.....Some weeks ago we said that we were inclined to think the "Chicago Dried Fruit and Produce Company" an honest concern. Further information strengthens that belief. It is hardly wise, however, to talk too much about the value of a franchise which any sort of an honest concern can get for the asking under the State laws..... The Farm and Household, Hartford, Conn., is "all right".....We have said before that we do not believe in the claims put forth on behalf of the "Acme Penetrative," which "positively burns stumps." All we have heard about it since renders us all the more incredulous.....We do not recommend the Popular Monthly, Kansas City, Mo. The appearance of an advertisement in a religious paper is by no means a proof of the reliability of the advertiser. Of course, the editor is always a truly good man, but sometimes he has a "wicked partner" in the publisher, and it is the publisher's department that manages the advertising business.....The N. Y. Truss Co., of this city, will send on goods ordered, and their reputation is fair, but we do not indorse all the claims put forth on their behalf. .....We have twice already said that Garden City, Silver Springs Park and Palma Sola, Florida, were humbugs. The prospectuses and advertisements of these and other "Florida land frauds" are "meant to deceive," and have been quite successful, as many victims testify. The RURAL was the first journal to denounce about a dozen of them, as the writer was personally well acquainted with the miserable character of many of the places they represented as earthly paradises.



WOODLAWN HOLSTEIN-FRIESIANS. Fig. 119. (See page 183.)

Miscellaneous Advertising.

THE ANCIENT GREEKS.

THEIR BELIEF CONCERNING THE SEAT OF LOVE AND PASSION.

The Liver regarded as the Favored Organ—How Could it be So? Recent Facts partly Confirm this Belief.

THE ancient Greeks thought the seat of love and passion was in the liver, and in great measure their opinion was not far astray. The lover whose liver is off, or the husband who is bilious, is not half a man—his sluggish liver has filled his blood with bile.

Of all the mean contemptible counterfeits in the world, red blood full of bile is the worst, —the very worst!

We have about 10 *quarts* of this fluid in the average size man. It is constantly undergoing change and is manufactured from the food the we daily consume by a chemical process nature has. *She selects only that portion which, after digestion, is found to be proper*, and takes it up by a tube called the thoracic duct, emptying it into the large vein near the left collar bone, from which it is at once carried to the *kidneys to be strained of all the deleterious matter* which was left by the bowels.

If the kidneys are in healthy condition the blood is in *absolutely pure state*, contains all the elements for repairing waste, returns at once to the heart and is thrown by that organ to every part of the living body to give up its nourishment and take up all the worn-out material.

Contrary to general belief *the liver is not a blood-purifying organ;* its purpose is only for nutrition digestion and it secretes daily many pounds of bile, some being used in digestion and nutrition, and the balance as a cathartic.

Now, after being housed up all winter, with meat largely composing the diet for the purpose of producing heat, the liver *increases one-third of its supply of bile*, and in the spring, nature not having use for the excess, it is thrown into the blood, *carried to the skin* (for it must be got rid of in some way) *and causes that condition known as "bilious"* when the person is dull, lethargic, restless, well to-day and half sick to-morrow: because *the blood is loaded* with this substance, which is just as foreign to it as so much *dirt or corruption, and poisons the entire body, making your blood impure.* You know there is something out of gear and the natural impulse is to take cathartics, —but drastic cathartics do not remove the cause—they make matters worse.

You ask, why? Because, my friend, the liver is a sluggish, lethargic organ that cannot be relieved of any ailment except by medicine which acts upon it in a *quiet, steady manner, producing permanent effects, and assisting, not goading its normal action. The kidneys do the purifying.* Always remember that! No other organ in the body can take their place in this respect, and they *attend to over* 9,000 hogsheads of blood in a year! Think of it and wonder that they are able to do so large an amount of work!

A healthy kidney to purify, and a healthy liver, emptying its poison *into the bowels and not into the blood*, are the true and only givers of pure blood.

The interior of the kidneys have *few nerves of sensation*, and a stone can be, and often is present without any indication until it reaches the first outlet, which is supplied with nerves that soon sound the alarm.

Do you see the moral of this? A healthy liver and kidney is all there is to this question of pure blood. Keep them in order. Don't wait until you find they are diseased, for then it may be too late. Do this and you are *bound to have pure blood.* Warner's safe cure has a direct action upon both the kidneys and liver, and has become a recognized agent for its health-preserving and blood-purifying properties, and as such is used by many physicians. A few bottles will positively prevent disease, and we are certain that disease of either organ is prevented by its use if taken in time.

The spring approaches, and nature needs help. Take it and save sickness and doctor's bills. Don't let any season go by without its use, or you may regret it forever.

A prominent practical agricultural writer says of the "ACME" Pulverizing Harrow: "Its various qualities fit it for easy, rapid and efficient preparation of land and in cheaply working the broad fields of a large farm into as fine a condition as a garden."

See advertisement on page 187.

OH, MY! 30 Imp'd, Gold Fringe and Chromo CARDS, 10c. Sample Book, 2c. CARD CO., Essex, Ct.

INKS Recipes for 100 kinds of Ink! Send 13 2 ct. stamps to STANDARD INK CO., Buffalo, N. Y.

Domestic Economy

CONDUCTED BY EMILY MAPLE.

HOUSEKEEPING IN CALIFORNIA.—II.

MARY WAGER-FISHER.

OF course, one of my first questions in hiring our cottage was from where the water supply came, and what was its reputation. The landlady said it came from Lake Chabot (pronounced Shabo, being French). She didn't think it was very good, but it was "healthy." She never heard that it made anybody sick. However, our first terror was produced by the water. When it ran from the faucet connected with the hot water boiler, the smell of it was nauseating! I begged Anaximander to draw off the water at the bottom through the faucet at the end of the pipe by the fire, which, of course, man-fashion, he didn't think would do any good; but I insisted that it would do no harm, and when drawn off there were gallons of foul muddy water. This cleansing operation did some good, but the bad odor of the water still remained, and was so marked, that it was unpleasant to take a bath in it.

As it happened, there lived quite near us a very intelligent lady who had been a fellow-passenger on the upward Alaskan cruise, and who had begged us to come and see her when we came to California, so I went to her for information concerning the Lake Chabot water, and describing to her the smell of it as it came out of the hot water tank, she laughed and relieved my mind by saying that it smelt the same in everybody's house, and that it was even worse in Winter, after the rains had filled the lake, than it was at this time of low water. However, the water had never been regarded as unhealthful, but it should be filtered. Upon further investigation, it appeared that until within a few years Oakland had been supplied with water from artesian wells, which accounts for the numerous windmills all through the city—a population of 45,000. But these wells not being altogether satisfactory, arrangements had been made for bringing the water from this lake, which belonged to Monsieur Chabot, a wealthy resident Frenchman—the same gentleman who has given a charming little observatory to the city. This lake water is properly stored water, the lake being filled by the rains in Winter, and this supply lasts during the Summer. When by chance unfiltered water was put on to boil, a green scum usually collected on the surface, as if it had been dipped from a frog pond, and often aside from filtering it, I also boiled it for drinking. But although assured that the water was "healthy," we never drank it with any enjoyment, and drank milk instead, and more coffee, tea and cocoa than ever before, as well as mineral spring water, which we bought. Anaximander often declared that he would give much for his "fill" from the well at home, which to his mind is the best water in the world.

Our milk was served by a dairyman, whose ranch was six miles out of town, and he charged at the rate of $4.50 a month, for two quarts per day. The milk was good and only occasionally showed sediment in the bottom, which unpleasant fact I rarely failed to report to the dairyman. Unless one lives on a farm and produces his own food, he is utterly at the mercy of other people, honest or dishonest as they may be, and milk, which so readily absorbs the wicked influences of the world—conveying diphtheria, scarlet fever and kindred diseases—can one be too "cranky" and particular about it?

While out shopping, to provision our pantry, I noticed an attractive bakery, and going in, I asked a pleasant, bright-faced woman behind the counter what kinds of bread they made. She smiled and said "We make good bread," and then showed me their various kinds and styles of loaves. We selected what we desired—long French loaves, with a hard crust all over. These large loaves cost 10 cents, but a more economical way, the woman said, would be to buy 13 tickets for $1—each ticket paying for one loaf, so daily a little oldish Frenchman, with a large basket on his arm would come with the excellent bread, wrapped in a brown paper. Sometimes I would tell him not to come the following day, as we had bread enough to last over. But he usually came, saying it was no trouble, and that sometimes company came to me, and the bread would not be enough! After the rain set in, he nearly always had some remark to make about the weather. "*Toujours le mauvais temps, madame!*" In the afternoons I often saw him in a fresh suit of clothes, pushing a small cart about the streets in which he had French mustard to sell.

Our supplies cost as follows: Seattle coal, which in Seattle cost $4.50 a ton, cost here $9; anthracite coal from Pennsylvania sold for $16; wood costs about the same as coal. A dollar paid for 12 pounds of granulated sugar. Epp's cocoa in tins cost 25 cents; coffee about the same as in the East. Butter all prices; for rolls weighing rather less than two pounds, from 65 to 85 cents. California fresh eggs 50 cents a dozen; good Eastern eggs from Utah and elsewhere, 40 cents. Our landlady had abandoned her vegetable garden scheme as involving too much hard work, and her chicken ranche had become reduced to one lone hen, which roamed lonefully around in the Alfalfa in the adjoining lot. One would suppose that in a State which has so much of mild climate, where hens can get green food the year around, eggs and poultry would always be abundant and cheap. The scarcity of eggs is undoubtedly owing to the "rush" with which so many people have gone into the chicken business, expecting to make a fortune at once, but failed, for scarcely an attempt has been made in the State to raise chickens in large numbers, that has not resulted in failure. They do not thrive in large colonies, but if every farmer kept a few, the profit would be sure and unfailing, and the home demand would at least be filled. Porter-house steak cost 20 cents the pound; sirloin and from the round, 15 cents to 18 cents. Mutton chops and leg of mutton to roast 12½ cents. Three heads of lettuce, never so nice as the Puget Sound lettuce, five cents. A small bunch of celery the same; fresh tomatoes from three cents to five cents the pound, but it was very late in the season for them. A ten pound sack of cracked wheat 35 cents; of Graham flour 35; of oat meal 50 cents; of corn 35 cents; 25 cents bought three pounds of rice. Canned oysters, 20 cents the can. Fresh oysters—eastern oysters that have been fattened—here, from 40 to 50 cents the dozen. Eastern oysters do well here after being planted, growing rapidly, but no one has yet succeeded in propagating them in California waters. The small native oysters cost 50 cents the hundred. Cheese from 20 to 25 cents; cranberries from all parts of the Union, from 10 to 20 cents the pint; Fresh raspberries from five to ten cents the small basket; strawberries 10 cents the quart, or 30 cents for a box holding four quarts; Mexican limes five cents the dozen; California oranges were not yet ripe; quinces were abundant and cheap; pears rather dear, and apples—I am at the bottom of my sheet and will hold forth concerning them next time.

SUMMER GOWNS.

E. L. TAPLIN.

THRICE blessed is the busy housewife who has her summer sewing "done up" before warm weather begins, for the extra household work peculiar to this season, together with the enervating heat, makes much sewing trying in the extreme. It is not very difficult to arrange matters for this desirable result; a little foresight and industry during March and April will wonderfully lighten the burden of summer work. As far as purchase of material is concerned, an inspection of the good New York shops shows abundant choice in material and price during these months, since the spring novelties were shown almost before holiday goods had left the counters. So we must decide what we want and how to make it. Graceful simplicity is the cardinal rule of summer gowns, though this does not always imply inexpensiveness. It is a rule with the writer never to make a washing gown with flounces or ruffles when it can possibly be avoided, as these trimmings add so much to the labor of washing and ironing. For excessively warm afternoons, when the bare labor of dressing seems almost too much to undertake, it is well to have a *negligé* robe after the style of the oft-derided Mother Hubbard. The back may be pleated, the front gathered and tied in at the waist-line from the side seams with a ribbon or sash of the same stuff; at the back the fullness should be held in place by a tape at the waist, leaving the pleats to hang out full and unconfined. A very nice material for such a robe is "crazy cloth," a soft, cotton stuff with a crape-like finish. It comes in cream, pale pink and pale blue, is warranted to wash and costs from 12 to 15 cents a yard.

For ordinary afternoon wear, a simple muslin on very warm days, or seersucker when a trifle cooler, will be found most satisfactory. The crinkled seersuckers come in very handsome colors, and have a much better look than the plain goods, though only costing about as much as the crazy cloth. If a combination of dark colors is chosen, such as navy blue and red, navy blue and fawn, or seal brown and fawn, the gown may be worn a season without washing, only pressing it a little when it becomes tumbled. In this case, it may be made after the model of a stuff gown; but an every-day frock, likely soon to make an acquaintance with the wash-tub, must have no troublesome drapings or flounces to vex the soul of the laundress. In the latter case, either for muslin or seersucker, the best model is a peasant suit, having a plain, straight skirt, requiring three breadths of yard-wide goods; the bottom should be finished by a hem three-and-a-half inches deep, and two tucks each two inches deep, above the hem. A plain pleated waist should be finished by a belt or sash, with a large bow in the back; the ends of the sash may be tucked like the skirt.

A frock of this style would require about 12 yards of 27-inch material; it is becoming to most figures and very easily laundried. To my mind, this pleated waist is much prettier than the gathered spencer or yoke waist. The same style in gingham or cambric without the sash, does admirably for morning wear, and is much neater than the gabrielle wrapper affected by so many women, for this latter garment is very apt to have a dragged appearance after one washing. It is advisable always to tack a muslin frill or tucker, as our grandmothers would say, into the necks of our morning gowns—it removes the untidiness so often attendant on a hurried toilet. There are many models for our more elaborate seersucker gown, though it is well to avoid one having very bouffant drapery which is apt to become crushed. Navy blue and red stripes, trimmed with colored embroidery, navy-blue ground worked in red, would be handsome, and peculiarly becoming to a dark-haired woman. The skirt may have a very full back composed of two triple box pleats, without other drapery; the front and side breaths may be finished at the bottom by a knife-pleating three inches deep. A full front drapery, looped high on the left side, while falling to the pleating on the right, should have a border of the embroidery, put on perfectly flat. A short basque, with square front and two little tabs, separated to the waist line at the back, should be finished with embroidery put on to simulate a vest, and cuffs of the same. A little bonnet or round hat of rough blue straw, trimmed with loops of blue ribbon and a bunch of poppies, or with red velvet, will make this a very jaunty walking costume. These crinkled seersuckers come in all the pretty light shades; but the pale pinks and blues, charming while new, are apt to lose their color through exposure to the sun, though oddly enough, washing frequently restores the faded color.

This season we are offered many new and charming washing fabrics, a very pretty novelty being Turkish crape, a crape-like material printed in colors of Oriental aspect, but the price—45 cents a yard—seems to me excessive. There are also some very pretty linen etamines, or canvas.

Of course every woman, save those in the sere and yellow leaf, must have a pretty white gown for her "Sunday best," and we have a wide range of fabrics to choose from. We may safely say that a thick, entirely opaque, white washing gown is a mistake, therefore we should taboo piqué or Victoria lawn: the latter, by the way, looks as thick as Lonsdale cambric when washed. Fine India linen, organdy or mull is charming, and washes admirably. Most of the white gowns I have seen in the shops this season have skirts made after a design given for the seersucker suit, with a plainly fitting basque rather than a round waist. Swiss or nainsook embroidery is preferable to lace for trimming, as it washes better. Yoke waists are rather out of date, save on children's frocks.

Another pretty white gown of fine mull may be entirely without drapery: the back very full pleated, and the front and side breadths covered with an embroidered flounce reaching to the waist. A round waist with embroidered fichu is most appropriate with this skirt. A hat or bonnet to accompany the white gown should be covered with the same material and trimmed with a bit of lace and some white flowers. It is a very inexpensive head-gear, but harmonizes with the costume as nothing else would.

KITCHEN HINTS.

ANNIE L. JACK.

TAPIOCA cream is a very good dish for dessert, and is made by soaking four table-spoonfuls of tapioca in a cup of cold water for three or four hours. Then drain off the surplus water and beat up with a quart of rich milk.

Miscellaneous Advertising.

When Baby was sick, we gave her Castoria,
When she was a Child, she cried for Castoria,
When she became Miss, she clung to Castoria,
When she had Children, she gave them Castoria,

Place in a double boiler and let it cook till clear. Then stir in the beaten yelks of four eggs, a cup of sugar and whatever flavoring is prepared, stir till it thickens to a soft custard.

Part of the family being away, the younger members wanted to make some butternut taffy. It was done by stirring brown sugar with a little white vinegar, and boiling till it set quickly on ice. The nimble fingers of the children peeled some of the butter-nuts, and the taffy strung out white and pretty when they pulled it. This sort of candy is purer and simpler than any to be bought, while it pleases the little folk to help in the making.

We have some white corn flour, and it makes delicious muffins by using three eggs and a cup of sugar, and a pint of milk in two small cupfuls of the flour with a little baking powder. It is mixed just like a light cake, the last thing added being half a cupful, or a little more wheat flour. We cook in muffiin rings, or gem pans.

Eggs have been scarce till lately, and we made a very good molasses cake without them, by mixing together a cup of molasses, one-fourth of a cup of butter, half a cup of sour milk, two scant cups of flour, a teaspoonful of ginger, and a teaspoonful of soda which is desolved in the sour milk. The flour is put in last, and it is baked in shallow pans. The children quite appreciate it, though one of them said it had an egg—less taste.

NAPKINS.

I saw a very pretty set of napkins at a neighbor's house lately, and as the idea was a novel one I send it to the readers of the RURAL. They were made from a home-spun linen sheet well worn in the middle. Napkins of the desired size were cut from the edges and fringed, pretty designs of fruits and flowers were outlined in one corner with red marking cotton, using the etching stitch. A worn table-cloth might be made over in the same way. If wanted for ten napkins, the Kate Greenaway designs are pretty. M. B. S.

New Jersey.

RIBBON WASTE.

We fear our Western contributor "Palmetto" has been misinformed as to the price of ribbon waste per pound. Upon inquiry at the Paterson and other silk mills, we find the waste sells for several dollars per pound.

PRESERVING ORANGES.

Oranges are now plentiful and cheap, and there is no more delicious fruit for preserving. The Dundee marmalade is world-renowned and one can make it at home just as nice at one-half the cost. Cut up two dozen oranges, using a silver knife. Hold them over a bowl to save the juice. Be careful to extract the seeds. Have also two good-sized or four small lemons, which peel, taking off the white pith and cutting them up, add them to the oranges, together with seven quarts of water. Stir all together, and covering them, let them stand all night. In the morning put over the fire and let come gradually to a boil, place them where they will simmer until the orange peel becomes clear and tender, then add gradually 14 pounds of granulated sugar. Let it boil a quarter of an hour, or until the mass looks transparent and when a little cooled upon a saucer takes on the consistency of jelly. When this stage is arrived at, let it partially cool, then put in small jars with tissue paper covers inside the other covers. If this marmalade is well made it will keep for years.

Oranges and apples can be combined and together form an exceedingly nice and cheap preserve. You can make a jelly, a marmalade, and candy the orange and lemon peel by following the instructions given below. Take an equal number of oranges and apples, cut them up together with one lemon for every dozen oranges. Peel the lemon and the oranges, and place the peelings in sufficient water to cover them, adding an even tablespoonful of salt to every quart of water, let them stand all night. Put the oranges, apples and lemon with a stick of cinnamon and a blade of mace over the fire, cover with cold water and simmer them until they are reduced to a pulp; then pour into a jelly bag, and let the sirup drip out without squeezing it. To one pint of juice thus obtained, allow one pound of sugar, and after it comes to a boil stir in the sugar and let it boil until it jellies. Take the pulp out of the jelly bag, remove the spices, add sugar in the proportion of one pound to a pint of fruit and boil till well cooked. After your peeling has stood over-night, drain it and put it over the fire to boil in clear water, and let it boil until tender; then put it to drain upon a sieve. Make a sirup of a pound of sugar to a pint of water—this for the peel of a dozen oranges. Boil together until clear, skimming well. When the orange peel is dried and the sirup is getting rather thick, dip the peel into brandy, letting it drip off quite dry and dip it in the sirup; then place it on the sieve and let it get dry thoroughly. Repeat this dipping in the sirup three times. The day after you have begun this, heat your sirup and dip the peel in it, draining it on the sieve and dipping it three times. Repeat this for several days until the peel looks like that you buy. AUNT ADDIE.

ROOT CELERY.

If the RURAL and Mr. Falconer will dress their root celery, after stewing, with butter, vinegar and a little sugar, I think they will find it a very desirable dish; at least I have for the past 25 years. J. A. S.

Miscellaneous Advertising.

Catarrh

Is frequently an indication of a Scrofulous taint in the system. Ayer's Sarsaparilla purifies the blood, and thus restores health to the affected membranes. It also stops the nauseous catarrhal discharges, and prevents the infection from reaching the lungs and stomach. Catarrh should be treated as a blood disease.

I suffered for years from chronic Catarrh. My appetite was very poor, and I felt miserably. None of the remedies I took afforded me any relief until I commenced using Ayer's Sarsaparilla, of which I have now taken five bottles. The catarrh has disappeared, and I am growing strong and stout; my appetite has returned, and my health is fully restored.—Susan L. W. Cook, 909 Albany st., Boston Highlands, Mass.

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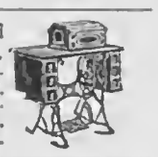

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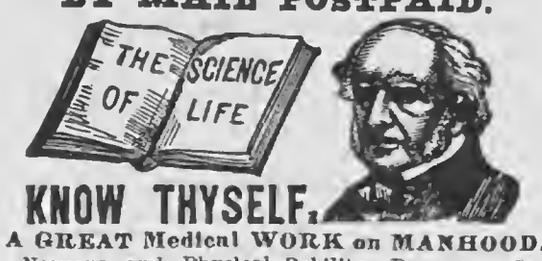

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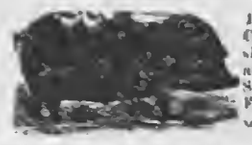

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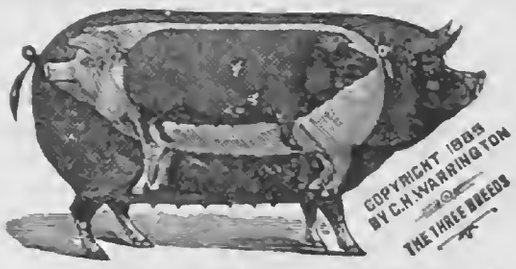

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News of the Week.

HOME NEWS.

SATURDAY, March 13, 1886.

REPORTS of great distress and starvation among the inhabitants of Labrador. No bread, people living on dog meat..... Several lynchings during the week—one of a negro outrager of a young woman in New Jersey, within 45 miles of this city; another near Shoals, Ind., where three brothers, who for years had terrorized several counties and committed all crimes, from pilfering to murder, were hung by a resolute mob.....A "high-license" bill, introduced last Wednesday into the New York Senate, provides that in New York and Brooklyn, where all kinds of liquors are sold, a liquor store of the first class shall pay $500 a year, of the second class $300, and of third class $150. Where ale and beer alone are sold the licenses shall be respectively $150, $75 and $60. In Buffalo, Albany and Rochester the first-class liquor stores are to pay $300, $200 and $100 respectively, and the ale and beer stores $100, $50 and $40. In cities of less population the licenses are to be $150, $100 and $75 respectively, and for ale and beer $30. In all other places the license fee is to be $100 and $60 respectively and $20 for beer.....A House bill declares forfeited the land granted to aid in the construction of a railroad from Portland, O., to the Central Pacific in California.....The Secretary of the Interior has rejected the selection of some 130,000 acres of land made by the St. Paul, Minneapolis and Manitoba Railway Company within Dakota Territory.....A Senate bill provides for "forfeiting a part of certain lands granted to the State of Iowa to aid in the construction of railroads in that State."....Tuesday the House passed without opposition a bill requiring Pacific Railroads to pay the cost of surveying their lands and to take out patents thereto. Same day, the bill prohibiting convict labor on work for the General Government was passed—yeas 249; nays eight..... .....Good prospect for the passage of a bill appropriating $250,000 to reimburse, at the rate of $3.50 per acre, those who, under the land laws, settled upon or purchased lands within the grant made to the Northern Kansas Railroad, but who were deprived of their lands by the courts "on account of priority of grant to the railroad."..... .....Legislation is sought by California viticulturists against adulterations and imitations of wine.....Mrs. Seymour, widow of ex-Gov. Horatio Seymour, died of pneumonia last Monday at Utica, N. Y., at the home of ex-Senator Conkling, who is married to her husband's sister.....Mrs. Brewster, wife of ex-Attorney-General Brewster, died of the same disease last Tuesday at Philadelphia..... ....Ex-senator Chaffee, of Colorado, died last Tuesday, at the age of 62, from the effects of a severe cold, at Salem Center, Westchester Co., N. Y., in the house of U. S. Grant Jr., who had married his only surviving child. Mrs. Grant will probably inherit nearly all her father's property—somewhat less than $1,000,000; he lost $500,000 by the failure of Grant & Ward.....Senator John F. Miller, of California, died at Washington, Monday, aged 55—a complication of diseases due to a wound in the eye received during the war..... ....After all, it is said the Panama Canal will be finished. The reports of the visiting experts and commercial representatives will, on the whole, be favorable. So much money has been sunk, that the enterprise cannot be given up now. Several times more money will be needed, however, than at present estimated. America is as quietly but steadily opposed to the Panama as England was to the Suez Canal, and about as doubtful of the possibility of its completion. De Lesseps says he, with his family, will steam through it from the Atlantic to the Pacific in July, 1889..... .....The Utah Legislature Tuesday showed the first sign of concession in agreeing to appropriate pay for jurors, heretofore voted down repeatedly.....Representatives of the rice growers of S. C., of the sugar growers of Louisiana and of the tobacco growers of Connecticut and Ohio have been urging upon the House Committee of Ways and Means the necessity of "protection" for their home products. The first were opposed by the brewers who say one brewery uses more "broken rice" every year than is produced altogether in this country, and that the increase of duty sought by the rice growers would therefore be unjust to them. They require several million bushels of "broken rice" every month—much more than we grow of all kinds of rice.....Owing to the falling off in exports of agricultural products, gold is leaving the country steadily to pay for goods bought in Europe and interest on American Government, railroad and other securities held there, and also the expenses of American tourists and residents abroad. Last Tuesday alone $1,500,000 in gold were engaged in this city for export.....Liquor licenses in Boston are to be raised from $50 to $500 a piece..... ....The "Gould Southwestern railroad system" extends into six States. Missouri, Kan. and Tex. are gridironed with these roads; one, the M. K. & T., crosses the Indian Territory. Louisiana is traversed from the northeast to the southwest by the leased Texas Pacific. Arkansas is crossed diagonally by the Iron Mountain, with seven lateral spurs. There are in all at least 6,000 miles, the Missouri Pacific being the main stem. On this whole system there is now a great strike which has blocked all freight traffic and a good deal of local passenger travel, though the mails are not interrupted, lest the U. S. authorities should intervene. The Texas Pacific is bankrupt and in the hands of a receiver, and the trouble began there by the refusal of the receiver to concede certain demands of the Knights of Labor; the strike was then extended to the rest of the system to prevent traffic with the T. P. Over 12,000 hands struck—freight handlers, brakemen, switchmen—all except conductors and engineers; but these are mostly ready to go out if ordered. The K. of L. who were not "called out" have all been discharged. Business all through the tributary country is paralyzed. Stock and perishable goods on the cars are greatly injured or ruined. Grain shipments are absolutely stopped. Not a car-load of freight has been moved for nearly a week on any road in the "system." There are reports that 'it is war to the knife"; that the railroads are determined to break up the labor organization at any cost. Others say the roads will be "boycotted"—the last recourse of the K. of L.; others say the latter must certainly win their point ere long. Plenty of funds on their side, and, apparently, of determination. Hitherto all has been peace; the K. of L. have detailed men to protect railroad property wherever danger threatened; but there is considerable muttering about tearing up tracks and burning bridges, should "scabs" be employed instead of the strikers.....The following are a few specimens of the hundred strikes in progress or imminent in various parts of the country: Strike of 1,500 car drivers and conductors threatened at Pittsburg, Pa.....Strike of chair makers for 10 hours a day, instead of 12, at Indianapolis. Strike of 2,000 shoe operatives for higher prices per piece, at Woburn, Mass.....About 20 different strikes in this city for more wages, shorter hours, or both—carpenters, plumbers, bricklayers, steam-heating workmen, laborers, musicians at places of amusement, waiters, etc., etc.....Strike of ship carpenters at Detroit, Mich..... Free striking miners threaten to release convicts working the mines at Greenwood, Ky., unless the Legislature passes a law against such work, within 10 days.....Plasterers of Montreal on strike for higher wages..... Russell M'f'g Co., Middleton, Conn., refuse to employ K. of L. Boycott of all dealing in their goods probable.....A hundred retail stove and tin-ware dealers in St. Louis have combined to boycott large mercantile houses who include these goods in their stock..... Over 600 workmen and 250 "girls" will strike at the cordage works at Newark, N. J., unless their wages are increased before April 1..... Over 10,000 miners are now out on strike in Pennsylvania.....More than 1,000 hands have struck at the Studebacker Wagon Works, South Bend, Ind.....A lockout of 6,000 spinners expected at Cohoes, N. Y..Here are a few specimens of the numerous strikes settled during the week: Knights of Labor amicably settled shoemaker strike against convict labor, Tuesday, at Chicago...Railroad amicably settled street car strike at Troy, N. Y., same day..Nearly 1,000 coal miners submit question of wages to arbitration at Clearfield, Pa..... ...The Fuller & Warren Stove Company, Troy, N. Y., after 18 months' struggle, yielded Tuesday to the demands of the Knights of Labor, and the boycott on their goods all over the country was removed. ....The "Standard" of Troy, which was boycotted for admitting F. & W.'s adv., yielded the night before. Boycott also everywhere removed from merchants who sold the stoves, ...Cigar-makers of Davenport, Ia., have yielded to the K. of L.....Coal miners near Charleston, W. Va., have resumed work on an increase of wages.....Since January 1, last, the Executive Board of the Knights of Labor, has settled satisfactorily by arbitration 350 cases in which strikes would otherwise have occurred..... Akron, O., Saturday morning was visited by a disastrous fire that destroyed the huge oatmeal mills of Ferdinand Schumacher and the New York, Pennsylvania and Ohio railroad stations with a total loss estimated at $1,000,000. The mills were the largest in the country, if not in the world.....Ida Schneider, a little dried-up, dirty, 57-years-old Chicago rag-picker, who was sent to an insane asylum last week, has picked up a fortune of $80,000 during 40 years' rummaging among the ash heaps and refuse piles of the city.....The delegates to Washington from the Creek Nation attempted treachery to their people by offering to sell Oklahoma; but the sale has been repudiated by the Indians, whose consent was essential to its validity..... .....After a delay of many months Chief Poundmaker and eleven braves of the Canadian Northwest have been liberated and returned to their tribes.....It is the talk at Washington that Gov. Stoneman, of California, will appoint millionaire Flood to the Senate to succeed General Miller.....Joshua T. Child, a Missouri nuknown, is to represent the United States in Siam.....Alexander Stewart, a Vermont farmer, who claims to be an heir of the dead millionaire, has filed a complaint in the United States Court at New York, in an equity suit against ex-Judge Henry Hilton to recover $200,000. Stewart has been adjudged a lunatic in his native State, and the action is brought by his guardian, Benjamin F. Whelden.....Archbishop Kendrick of St. Louis, and Archbishop Leroy of New Orleans, both refuse to follow in the footsteps of the Bishop of Montreal, and condemn the Knights of Labor. The Catholic Church, they say, has always been the friend of the laborer. .....The protest of Mormon women in mass-meeting assembled at Utah last week against their possession of undivided portions of husbands, must not be taken as an expression of the genuine sentiment of women in Utah. If the women favored the institution of polygamy, their voices would have been lifted in its defense years ago..... .....

AFTER two years' trial, we unhesitatingly pronounce the Boss ZINC and LEATHER COLLAR PAD, the only durable and successful one that we have ever used. It retains its shape, is cooling, prevents chafing, and thereby keeps the horses' necks clean and healthy. HIRAM G. DODGE & SONS, Wood & Coal Dealers, Madison, Wis.—*Adv.*

H. J. BAKER & BRO. N. Y.

Gentlemen—I used 1,000 lbs. of your Potato Fertilizer to the acre, in 1884, and had a good crop—better than from a piece alongside manured heavily with city stable manure. I then sowed wheat after the potatoes were dug and applied no additional manure, and I have harvested a *better crop of wheat* this year than I did from the piece manured with stable manure which was sown after the potatoes were dug. I am satisfied your fertilizer is as lasting on the soil as STABLE MANURE

JOSEPH WILLIAMS,
Dec. 8th, 1885. East Williston, L. I.—*Adv.*

AGRICULTURAL NEWS.

SATURDAY, March 13, 1886.

Great activity in the Texas cattle region. All preparations for the grand "drive" complete. Several herds will start northward within a week, as grass will henceforth meet them on the trail. Last Tuesday's telegrams say careful estimates show the drive for 1886 will reach 300,000 head, and with fair prices this will be exceeded. Yearlings in Northern Texas bring $12 per head, and "twos" $14, while in Southern Texas yearlings sell at $7 and "twos" at $10 apiece..... Mrs. Sensenback died Tuesday at S. Bethlehem, Pa., from trichinosis. One daughter died from same cause three weeks ago; another seriously ill—raw ham..... Benjamin Hill, convicted of selling bogus butter in this city, appealed to the Supreme Court to get a decision on the constitutionality of the law forbidding the sale of bogus butter. The court has reaffirmed his conviction and refused to question the constitutionality of the law.....Senator Miller, of New York, introduced in the Senate at Washington on Wednesday last a bill requiring all manufacturers of, and dealers in oleomargarine, butterine, lardine and suine to display signs in a conspicuous place in their places of business indicating that they manufacture or sell such articles, imposing a special tax of $500 on manufacturers, $250 on wholesale dealers, and $100 on retail dealers in such products, and requiring them to take out annual license to carry on such business, under penalty of fine and imprisonment, and requiring all persons engaged in such business to keep books and enter therein an accurate and detailed account of all imitation butter manufactured or sold by them, such books to be subject at all times to the inspection of the Treasury officials. There are at least half a dozen other anti-oleo bills before Congress, many of them merely "buukum," not to be pressed in Congress, but to be nicely printed at the Government's expense and generously distributed *gratis* among the introducers' constituents, "just to tickle the honest farmers."..... ....The Fruit Dealers' League in this city has voted to limit its membership to 100 instead of 500, as originally contemplated, and to raise the annual dues from $15 to $50. It embraces the principal fruit dealers in this city, Philadelphia and Baltimore....Ex-President Clark, of the Mass. Ag'l College, died Tuesday.....

STEBBENS & RICHMOND, Northfield, Vt., write: "We are selling Thatcher's Orange Butter Color and it gives satisfaction every time." For strongest testimony on earth send your address to H. D. Thatcher & Co., Potsdam, N. Y.—*Adv.*

Crops & Markets.

SATURDAY, March 13, 1886.

A slight advance in wheat prices in London and Liverpool during the week. Last week, however, prices of wheat in England were the lowest for over 100 years. The Mark Lane Express of last Monday cables that "continuous frosts retard Spring work" in the English wheat fields. It characterizes prices as "irregular," saying that in some places they have not improved, while in others they are 6d. to 1s. dearer. Foreign wheats in London were not as active as they have been since, but were firm and in some instances higher. The "consumption of bread" has increased in the United Kingdom during the Winter, owing to the prolonged cold weather and the short supply of vegetables. American flour has been quiet but steady.

THE March report of the Department of Agriculture, on the consumption and distribution of the grain crops, a summary of which was telegraphed from Washington last Thursday, makes the proportion of corn still in the hands of farmers 40 per cent. of the last crop. One year ago the proportion of the crop on hand was 37.6 per cent., two years ago 33 per cent. of the short crop of 1883. It amounts to 773,000,000 bushels, 98,000,000 more than last March and 261,000,000 more than in March, 1885. The proportion is lowest in the West, where heavy winter feeding is required, averaging 38 per cent. in 12 States. It is 45 per cent. in the South, where it is required for feed of plow teams in Spring and Summer; and 40 per cent. in the Middle States. The proportion merchantable is 62.6 per cent., which is slightly above the average of a series of years. The value of the merchantable averages 35.9 cents a bushel; of the unmerchantable 21.5 cents. This makes the average value of the stock on hand 33.3 cents, which is half a cent a bushel more than the December value of the crop, when the aggregate value was estimated at $635,000,000.

The Stock of wheat in the hands of farmers is 30.1 per cent. of the crop. It was 33.1 one year ago, and 28.4 two years ago. It amounts to 107,000,000 bushels, against 169,000,000 last March and 119,000,000 two years ago. It is only 9,000,000 bushels more than in March, 1882, and the shortest in visible supply of recent years. The visible and invisible supply March 1, was therefore 159,000,000 bushels, against 212,000,000 last March. The proportion of the crop for consumption within the county where grown is 41.8 per cent. The average weight per bushel as estimated, is 57 pounds, against 58.3 for the previous crop and 56.9 for that of 1881. The consumption for bread and other uses, the seed sown, and approximately 85,000,000 bushels exported since the 1st of March, 1885, make a distribution equal to the supply from March last.

A total (visible and invisible) supply of but 159,000,000 bushels of wheat on March 1, is below previous or current estimates, and leaves but 72,000,000 for Spring planting and exports until the next crop, inasmuch as about 88,000,000 bushels will be required for home consumption between March 1 and July 1 next. If 24,000,000 bushels be required for spring wheat planting, it cuts down the total remaining to 48,000,000 bushels. If we are to export from this, the reserve will undoubtedly be small enough to satisfy the most exacting bull.

Reports of the American Rural Home of Rochester, N. Y., from 5,000 correspondents in all parts of the country, say that the winter wheat crop continues generally in favorable condition. Some spring wheat is sown, but the area is small.

In the home markets prices of wheat rose early in the week, but suffered a reaction later. Here No. 2 Red cash has advanced five cents a bushel within six weeks. Strange, although the Southwestern strikes stopped shipments from that section, instead of raising, they have had a depressing effect. The Government report on the comparatively small amount of wheat still on farmers' hands was a bull card.

The visible supply of corn increased 1,465,147 bushels. Prime, the Illinois crop statistician, reports corn in the crib at 1,630 railway stations amounting to 13,614,600 bushels on March 6th, against 5,036,500 bushels a year ago, and 6,676,400 bushels on March 5th, 1884. The large stock of corn in farmers' hands, ac-

cording to the Department of Agriculture, has had a depressing effect on prices.

Oats weaker in sympathy with corn, though the visible supply declined 224,645 bushels. Little inquiry for rye or barley. The visible supply of the latter declined 126,792 bushels, and of rye 56,531 bushels.

The receipts of products, as well as of live hogs, at Western centers have declined, and the hogs received continue to show a smaller average weight than the record for the corresponding period last year. A report from Kansas City says that between November 1 and March 1, 300,557 hogs were packed there, out of 642,000 for the whole year, and the average weight was 261 pounds against 273½ pounds the previous year. The average cost was $3.57 1-16, against $4.21½ last season, and the loss in weight was 12½ pounds, while that of the value was 64 7-16 cents per 100 pounds. Current advices are that a like exhibit from Chicago shows an average decline of about 20 pounds in weight per hog as compared with the period November 1 to March 1, 1884–85. The receipts of hogs at Milwaukee were the heaviest and their weight the lightest for 10 years, with the exception of the season ending March 1, 1884. Receipts, 343,412; average weight, 190.74.

Receipts of wheat at Minneapolis during the week have been only a trifle short of 750,000 bushels. Grain there and in St. Paul and Duluth has increased 500,000 during the week. Country deliveries as brisk as ever. Market dead; but no fall in prices in spite of heavy stocks "in sight." Mills running as much as the stage of water will allow. Output for the week 76,680 barrels of flour, shipments 86,000 barrels.

The Combination of Ingredients used in making BROWN'S BRONCHIAL TROCHES is such as to give the best possible effect with safety. They are the best remedy in use for Coughs, Colds, and Throat Diseases.—*Adv.*

MARKETS BY TELEGRAPH.

SATURDAY, March 13, 1885.

CHICAGO.—Compared with cash prices a week ago, "regular" wheat is ¾c. higher; No. 2 Spring, 1½c. lower; Corn, ¼c. higher. Oats, unchanged. Rye, ½c. lower. Barley, steady. Pork, 5c. lower. Cattle, inferior shippers and stockers and feeders, unchanged; best grades from 25c. to 45c. higher. Hogs, from 10c. to 25c. higher. Sheep, somewhat lower.

WHEAT.—Firm. Sales ranged; March, at 80¼@80⅝c; May, 84⅝c@85⅜c.; June, 86¼@85⅜c; No. 3 Spring, at 80¾@82½c; No. 3 Spring, at 76@78c. CORN.—Firm. Cash, 37⅜@37½c; March, 37@37¼c; May, 40⅛@40¾c. OATS—Firm; sales ranged: Cash, at 29⅝@29¾c; March, at 28⅞@29c.; May, 32¼@32⅝c. RYE—No. 2, 58½c. BARLEY—No 2, at 69c. PORK.—Cash, quoted at $10 06@$10 10; March at $10 05@$10 07½; May, at $10 17½@$10 22½. LARD.—Quiet and steady; sales ranged; Cash, at $5 97½@6 00; March, at $5 97½@6 00; May, $6 02½@6 05. BULKMEATS.—Shoulders, $3 90@4 00; Short rib sides, at $5 32½@5 35; Short Clear sides, at $5 65@5 70. CATTLE—Shipping steers, $3 90@4 30; stockers and feeders, $3 00@4 00; cows, bulls and mixed, $1 75@4 00; bulk, $3 10@3 30. HOGS.—Rough and mixed, $3 85@4 25; packing and shipping, $4 25@4 50; light, $3 70@4 25; skips, $3 00@3 75. SHEEP.—Market steady; Natives, $3 00@5 75; Western, $4 00@4 60; lambs, $4 00@5 50 Texans, $2 50@4 25.

ST. LOUIS.—Compared with cash prices a week ago, wheat is quoted at ½c. lower. Corn, unchanged. Oats, ⅛c. higher. Rye, 2c. lower. Barley steady. Butter a shade higher for "dairy." Eggs 1c. lower. Flax-seed, unchanged. Pork, $1 lower.

WHEAT.—Steady; No. 2 Red, Cash and March, 91c; May, 93⅞@99⅛c; June, 94⅜c. CORN—No. 2, Mixed Cash, 35¾@36c; March, 35½c; May, 36¾c. OATS—No. 2 Mixed, Cash, 30⅝@31c; March, 30½c, May, 31½c. RYE dull, 66c. BARLEY—American, 60@80c. BUTTER—Quiet; creamery, 25@30c; dairy, 18@26c. EGGS—Firm; quoted at 10½c. FLAX SEED—Quoted $1 08@1 10. PORK, at $10 65. BULK MEAT—Long Clear, at $5 30; Short Rib, at $5 45; Short Clear, $5 60. LARD—Firm at $5 85@5 90.

BOSTON.—CORN.—Firm; Steamer Yellow, at 51c; do. mixed at 50c; and no grade, at 49@50c, per bushel. OATS.—Firm. Sales of No. 2 white, at 42¾@42½c.; and 42½c.; some holders ask 43c, per bushel. RYE is in moderate demand; quoted at 57c, per bushel. BRAN is firm at $18 75@19 00 for Spring and $19 50 for Winter; fine feed and middlings at $18 50@21 00, and cotton seed meal at $24 50 on spot and $22 75 per ton to arrive. HAY AND STRAW.—Hay is plentiful at $18 50@19 00 ₱ ton for choice and fancy; fair to good, $17@18; fine, $16@17, and $13@15 for poor and damaged. Western choice $16@17, do fair to good $14@15. Rye straw is held at $19@20 00 for choice, and $12@11 for common to good. Swale hay, $11@12; Oat straw, $9@10 per ton. PRODUCE—BUTTER Northern creamery, choice to extra, 24@30c; good to choice summer, 18@22c; western creamery, at 2@32c, for choice to extra fresh made; good to choice held stock, at 15@22c; northern dairy, 21@25c, fair Vermont extra; 18@20c, choice, and 12@16c, for fair to good; Western dairy, 18@22c, for choice, and 10@15c, for fair to good; imitation creamery at 18@37c, for good to extra; ladle-packed, at 20@22c, for choice. CHEESE—New York choice to extra, 8½@10c, and common to good, 5@8c; Vermont choice to extra, 8½@10c and common, 5@7c; Western common to extra, at 4@9½c. Sage, extra, 12½c, good to choice, 5@10c. EGGS—Cape and near-by, per dozen, at 20c; Eastern extras, 19c; do, firsts, 17@18c; Northern, fresh, 18@19c; Western fresh, 18@19c; Provincial, at 17@18c. BEANS.—Choice Northern hand-picked pea, $1 70@1 75 per bushel; do, do, New York, small, $1 55@1 60; do, do, screened at $1 45@1 50; medium choice, hand picked $1 40@1 45; do, screened, $1 25@1 30; Yellow Eyes, Improved, $1 50@1 55; do, choice lots, $1 45@1 50; Red Kidneys, $1 75@1 80. Canada peas, 85c@$1 00 per bushel for common to choice. Green peas, Northern, at 90c@$1 00; do, Western, $1 20@1 25. Potatoes range at 50@80c, per bushel, as to quality.

PRODUCE AND PROVISION

NEW YORK, Saturday, March 13, 1886

STATE OF THE MARKET.—Compared with cash prices last week, flour is a shade higher; Ungraded Winter Red wheat, 1@ 2c, higher; corn ½@c. to 2c. lower; oats ½@c. lower; pork, steady; lard, 1c. to 2c. higher, butter and cheese barely steady; eggs, lower; poultry, 1c. to 1½c. higher; fruits a shade higher; vegetables, higher.

FLOUR, FEED AND MEAL. FLOUR—Quotations: Fluent $2.30@3 10; Superfine, $2 90@3 45; Extra No. 2, $3 30@3 75; Good to Fancy Extra State, $3 80@4 25; Common to Good Extra Western at $3 30@4 00; Good to Choice Extra Western, $4 00@5 50; Common to Fair Extra Ohio, $3 30@3 75; Good, $3 80@4 20; Good to Choice, $4 25@5 30; Common Extra Minnesota, $3 30@3 75; Clear, $4 00@4 50; Rye Mixture, $4 00@4 25; Straight, $4 50@5 00; Patent $4 75@5 50; Bakers' Extra, $4 25@4 60; St. Louis Common to Fair Extra, $3 30@3 80; Fair to Good, $3 85@4 75; Good to Very Choice, $4 80@5 50; Patent Winter Extra, $4 50@5 50; City Mill Extra for West Indies, at $4 90@5 00; South America, $5 00@5 10. SOUTHERN FLOUR—Common to Fair Extra, $3 40@3 80; Fair to Choice do., $3 85@5 40. RYE FLOUR—Superfine, $3 15@3 50, Fancy, $3 55@3 60; BUCKWHEAT FLOUR, at $1 85@2 00. CORN MEAL—Brandywine, $3 00@3 05; Yellow Western, at $2 75@3 50. FEED—Bran—90 to 50 lbs. quoted at 85@90c.; for 60 lb. at 80@82½c.; 80 lb. at 80@82½c.; 100 lb. at 90@ 5c., and sharps at $1@1 05. Rye at 80@82½c.

GRAIN.—WHEAT.—Ungraded Winter Red, 85c@$1 02; No. 1 Red to arrive, at $1 01; No. 2 Red for March, at 94½@94⅝c.; do. for April, at 95¼@95¼c.; do. for May, 96@96⅜c; do. for June, 96½@96¾c.; do. for August, at 96¾@97c; do. for September, at $1 00¾@1 01⅛. RYE—62@64½c. for Western, and 65@67c. for State. CORN—Ungraded Mixed at 44@47c; No. 3, at 46¼@46½c.; Steamer Mixed, at 46@46½c.; Steamer Yellow, 46@46¾c; No 2, 47¾@48c; Steamer White, at 46¾c; No. 2 Mixed for March, 47¾@48¼c; do. for April, 48¼@48¾c; do. for May, 48¾@48¾c.; do. for June, 48¼@48¾c. OATS.—No. 3 Mixed, 37½c; No. 2, 37¾c.; No. 1, 38c; No. 3 White, 38¾@40½c.; No. 2 do. 40¾c; No. 1 at 43c.; Mixed Western, at 37½@39c.; White do., 39½@45½c; White State, 42@44c; No. 2 Mixed for March, 37¾c; do. for April, 37¾c.; do. for May, at 37¾c.

BEANS.—Quotations are: Marrows, $1 60; mediums, at $1 45; pea at $1 45; red kidney at $1 75@1 80 for choice; turtle soup at $1 35; white kidney, $1 75 for choice.

PEAS.—Green are quoted at $1 15@1 20.

PROVISIONS.—PORK.—Mess quoted at $10 10@10 50 for Old and $11 50@11 75 for New; $11 25@$11 75 for Family Mess; $12 50@14 25 for Clear Back; and $9 75@10 for Extra Prime. BEEF.—City Extra India Mess, $15 00@17 00; Extra Mess, in barrels, $8 00@8 50; Packet, $8 50@9 00 in bbls.; Family Plate, $9 00. BEEF HAMS.—Quoted at $17 50. CUT MEATS.—Pickled Bellies, 12 lb, average, at 5¼c; do., do, 10 lb, at 5¾c; Pickled Shoulders, 4¾@4¾c; Smoked do, 5@5¼c; Pickled Hams at 8¼@8¼c.; Smoked do., 9¼c. MIDDLES—Long Clear in New York quoted 5¾c. for Western delivery. Long Clear, 5.35c.; Short Clear, 5.60c. DRESSED HOGS.—City Heavy to Light, 5¾@5¾c; pigs, 5¾c. LARD.—Western Steam at 6.30@6.31c; April, 6.39c.; May, 6.32@6.33c.; June, at 6.38c; July at 6.44c.; August, 6.51c; City steam, more active, at 6.20@6.25c.; Refined Continent, 6.60c., and South American, 6.80@6.90c.

BUTTER.—Eastern Creamery, 32@33c; Western Creamery, 30@30c.; Elgin do., 32@33c.; State Dairy half-firkin tubs, 18@20c.; Western Factory, 10@19c.; Imitation Creamery, 18@25c.; Western Dairy, 10@17c.

CHEESE.—State, 7@10¼c.; Night Skims, 5¾@7c. Western Rat, 7@9¼c.

EGGS.—State, 14¾@14¾c.; Western, 14@14¾c.; Southern, 13@14¾c.

POULTRY.—DRESSED.—Turkeys, Philadelphia, 10@12c; chickens, broilers, 2½ to 3 lbs. to pair, at 25@28c. per ₱; do. 4 to 5 lbs. at 18@22c.; do, State at 12@13c; do, western at 12@13c.; fowls, Philadelphia, prime, at 12@13c; do. Jersey, at 12@13c; State and western, 12@12½c. Ducks, Jersey, at 14@16c; do. western, 14@15c. Geese, Jersey, at 10@12c; do, western, at 9@10c.

POULTRY.—LIVE.—Fowls, Jersey State and Pennsylvania, per ₱, at 12½@13c.; do. Western, per ₱, at 12½@13c.; turkeys, per ₱, at 10@11c.; ducks, western per pair, at 60@80c.; geese, western, per pair, at $1.00@1.50; pigeons, per pair, at 10@30c.

GAME.—Wild ducks, canvas, per pair, $2@2 50; do., red-head, per pair, at $1@$1 50; do. mallard, western, per pair, at 60@75c.; do., teal, blue wing, 30@35c.; do. wood, at 30@40c.; do. common, at 25@30c.; frozen poultry at 11@12c. for turkeys, 10@12c. for chickens, 15c. for ducks and 10@12. for geese.

COTTON.—The quotations, according to the American classification, are as follows:

	Uplands.	New Orleans and Gulf.	Texas.
Ordinary	6¼	6 11-16	6 11-16
Strict Ordinary	6 15-16	7⅛	7¼
Good Ordinary	7⅜	8 1-16	8 1-16
Strict Good Ordinary	8 5-16	8⅛	8⅛
Low Middling	8 11-16	8⅞	8⅞
Strict Low Middling	8 15-16	9⅛	9⅛
Middling	9⅛	9 5-16	9 5-16
Good Middling	9 9-16	9⅜	9⅜
Strict Good Middling	9⅞	10 1-16	10 1-16
Middling Fair	10¼	10 7-16	10 7-16
Fair	10⅞	11 1-16	11 1-16

STAINED.

Good Ordinary	6 5-16	Low Middling	7 13-16
Strict Good Ord.	7	Middling	8 9-16

FRUITS.—FRESH.—Quotations are: San Blas cocoanuts at $20@30; Baracoa cocoanuts at $20 00@30 00. Apples—Baldwin, per bbl., at $1 50@1 75; Greening, per bbl. $1 75@2. Grapes.—Catawba at 7@8c. per ₱, in baskets. Cranberries.—Cape Cod, choice, per bbl., $3 50@4; do. fancy, $4 50; do, choice, per crate, $1 00@1 25. Florida oranges.—Fancy at $3 00@3 25; choice at $2 75@3 00; do. inferior at 75c.@$1.

FRUITS.—DRIED.—The quotations are as follows: Apples—Fancy evaporated, 7@7½c; choice, 6¾c; do. prime at 6¼@6¾c.; fancy North Carolina sliced, at 4@4½c.; choice do. at 3@3½c.; choice Tennessee quarters at 2@2½c.; State quarters at 3@3½c.; southern sliced prime at 2½@2¾c; do. common, 2c. Peaches—Peeled North Carolina, choice, 10@11c.; fancy, 12@12½c; extra fancy, 13@13½c. Georgia, choice, 10@11c; do. prime, 8@9½c; unpeeled halves, 2¾@3½c, unpeeled quarters at 2½@2c.; Delaware evaporated, peeled, 24@25c. Choice pitted cherries at 10½@11c. Evaporated raspberries at 15@16c; sun-dried do. 13@14c. Blackberries—Prime at 8½c. Whortleberries at 6½@7c.

PEANUTS.—Quotations at 6¼@6¾c. for best hand picked, and 4¾@5½c. for farmers' grades.

HAY AND STRAW.—Quotations are for: Choice timothy hay at 95c; good at 85@90c.; medium at 75@80c.; shipping at 70@75c; clover mixed at 70@75c.; Clover, 55@60c.; No. 1 rye straw at $1.00; short rye straw at 75@85c. oat straw at 40@50c; wheat straw at 60@65c., all per 100 pounds.

SEED.—Clover is without trading beyond small lots; quotations are at 10½@11¾c. for best. Timothy is in small demand; quoted at $2 10@$2 20. Linseed quoted at $1 65@1 70. Flaxseed at $1.23@1.25.

SUGAR.—Fair, 5c.; Muscavado at 4 13-16c. Refined dull, Granulated at 6 5-16c; Mould "A," 6 5-16c.; Standard "A," 5 15-16c.

TALLOW—Prime City quoted at 4½c.

VEGETABLES.—Potatoes—Rose, Maine, fancy, d. h. bbl., at $2 25; Nova Scotia per bbl., at 2 00@2 25; State, per 180 lb., $1 50@1 62; Burbank, State, bulk, per 180 lb, $1 62@1 75; Burbank, eastern and Nova Scotia, per bbl, $2 25@2 50; Hebron, do, do, do, per bbl, at $2 00@2 25; Hebron, State, bulk, per 180 lb, $1 50@1 65; Prolific and Goodrich, eastern and Nova Scotia, per bbl., $2@2 25; Peerless, bulk, per bbl., at $1 50@1 62; Magnum Bonum, imported, 168 lb. sack, $2 00; Champion, imported, 168 lb, sack, $1 50; Bermuda, per bbl., $6@7. Sweet potatoes, Delaware River, per bbl., at $2 @$2 50. Beets—Bermuda, per crate, 75c.@$1. Cabbages—Long Island, choice, per 100, at $4@7; do, imported, per 100, $5@7. Celery, per dozen bunches, 75c.@$1.25. Kale.—Norfolk, Scotch, per bbl. $1 25@1 50. Onions—Bordeaux per case, $1@1 25; white, eastern, per bbl., $1 50; yellow, Connecticut, per bbl., $3.00@3.25; do. Massachusetts, per bbl., $2 75@3; do. State and western, flat hoops, $2 50@2 75; red, Connecticut, per bbl, $3 50@3 75; do, choice, Orange County, $2 75@3 25; inferior, per bbl, $1 50@2 50. Squash—Hubbard, per bbl., $1@1 25; Marrow per bbl., 75c@$1 00. Tomatoes—Bermuda, ₱ box, $1@1 50. Turnips—Russia, ₱ bbl., 50@75c.

LIVE STOCK MARKET.

NEW YORK, SATURDAY, March 13, 1886.

BEEVES.—Prices on live weights as follows: Native and grade steers, $4@6 10; per cwt. oxen, $4 40@6, per cwt.; dry cows, 5@4½c, per ₱; bulls, 3½@5½c, per ₱: Milch cows held on sale; dry cows, 955 to 1,270 lb, 3½@3¾c, per ₱.; 1,063 to 1,150 lb, $3 85@4; oxen, 1,650 lb, at $4 70 per cwt; Western steers, mixed, 1,152 lb, at $5 10 per cwt; Pennsylvania steers, 1,242 to 1,266 lb, at $5 30@5 60 per cwt; bulls, 1,105 lb, at $3 60 per cwt; Michigan steers, 1,033 lb, at 4c, per ₱; Ohio steers, 1,240 lb, at $5 25 per cwt; Indiana Steers, 1,090 to 1,301 lb, at $5@5 40 per cwt; oxen, 1,610 lb, at $4 95 per cwt, Pennsylvania steers, 1,035 lb, at 4½c, per ₱; do, 1,112 lb, at $4 70@4 90 per cwt; do., 1,103 lb, at $5 15 per cwt; Illinois do. 1,176 lb. at $4 80 per cwt; Indiana do., 1,203 lb, $5 30 per cwt; dry cows, 915 lb, 3¼c.

CALVES.—Veals scarcely steady; 6 Veals, 124 to 168 lb, 5@6½c. per ₱; do. 144 lb, 6½c.

SHEEP AND LAMBS.—Dull and off ¼c. per lb. Sheep sold at 5@5½c. per ₱.; Lambs, 6@7¼c. per ₱. State sheep, 82 lb, at $5 50 per cwt.; State Lambs, 81 lb, at 7¼c. per ₱; do. sheep, 75 to 100 lb, at 5½@6¼c.; Western sheep, 82 to 84 lb, at 5¾@5¾c; do, lambs, 76 to 89 lb, at 7¼@7¾c.; Michigan sheep, 75 lb, at $5 85 per cwt.

HOGS.—No live hogs for sale; City dressed opened at 5¼@5¾c. per lb.

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PRODUCE COMMISSION MERCHANTS,
for Circular giving important advice about **shipping produce.** Also containing recipe for **preserving eggs.** Established 1845.
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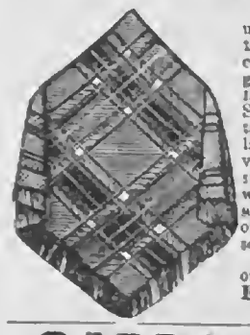
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JOHN KING, Norristown, Penn.

For the Young.

WE have had a "bushel of letters" lately. The names of those who wrote will be found at the end of the column. Have patience and I will get at them yet. Don't think because your letters do not appear at once that Uncle Mark ever forgets his boys or girls. He never does that. He is only sorry that we cannot have more space so that all can see their letters "in print."

Now here is another chance for somebody to get some fine stock. Remember that a very small club may win these chickens. Try hard for it.

UNCLE MARK: To induce the Cousins to get subscribers for the RURAL, we will offer a pair of our Light Brahma chicks (to be shipped in September), to the Cousin under 16 years of age, who sends the second largest club before June 1, 1886. The birds will be the very best and worth at least $5.00. We will send catalogues to any of the Cousins who will send us their address. E. H. UPSON & BRO.

Wilmot, Ind.

LETTERS FROM THE COUSINS.

DEAR UNCLE MARK: It ought to be one of the rules of our club that any boy or girl who knows of anything useful, he or she should tell what it is, so that all may have the benefit of it. Now, I have a little thing which I find very useful, and I made it myself. Any boy or girl can make one. It is made out of the handle of a tooth-brush, and I call it a dibble. It is one of the handiest little things I ever used for pricking out seedling plants, making drills for small and delicate seeds, and a good many other things. I have tried all kinds of wood and metal, but there is nothing equal to the handle of a tooth-brush for a small dibble. All the Cousins will want one when they get the RURAL seeds.

This is the way to make it: get an old tooth-brush and saw or file off the handle at the smallest part, which is near the brush. Then round the end off to a point with a fine file. In some handles there is a shoulder where the taper begins, and this should be rounded down with the file, to make it look neat. The small end will do for small seedlings and the large end for large ones, and also for cuttings. A dibble like this is always clean, and may be carried in the pocket. I usually have one in my pocket to give to some little boy or girl who loves plants. This dibble is not only good for little boys and girls, but is also worth the notice of the big boys and girls over in the RURAL Department.

If any of the Cousins would like to know how to use this dibble, I shall be glad to tell them. Now I want some of them to tell me something good for me to know. I wonder if any of them live near a big pond, where I could go fishing and get water lilies.

COUSIN HORTICOLA.

DEAR UNCLE MARK AND RURAL COUSINS: On the 17th of last October, Papa sold our farm in Iowa, and on the 11th of November, we started for this western country. So you may judge for yourself whether we were busy or not. We chartered a car and brought all household goods, farming implements, poultry, stock, canned fruit, house plants and nearly everything, except the place itself. We landed here on the morning of the 13th. Papa and brother found claims to suit them and have made some improvements on them. We (Mamma, sister and myself) are staying in town. Last Sunday we drove out to see the claims. They are 6½ miles from this town, and 3½ from Bordeaux. Will tell you some of the things that can be seen from our claims. Some of the country is lovely, but some of it is great buttes and hills. Now, Uncle Mark and Cousins, imagine yourselves with me just a few minutes. First, look northwest. There, do you see those black clouds? Those are the far-famed Black Hills, and loom up in the distance like great black clouds; they are 60 miles from us, but can be seen very plainly with the naked eye. Now turn your eyes farther north, and you will see the entrance to a great cave; that is 10 miles from us. Look east there! Do you see those two great hills with the narrow passage between? See; the walls are cut straight down; it looks as if man's hand had done it, but a more wonderful worker than man did that. It is called "Sheridan's Gates," so named because Sheridan and his men passed through it at the time of Gen. Custer's massacre; distance 10 miles also. Next is "Chimney Butte;" it is not very large, but quite high, and resembles a house with a big chimney set on the north end. It is quite a curiosity, and only three miles from us. Now, south. A telegraph wire is stretched across hill and valley from Fort Robinson to the Indian Agency. There! we have seen all the most important sights, so we will have a little chat. Our claims are on the old stage road from Sioux City, Iowa, to Helena, Montana. Custer and his men camped on the claim also. There are 12,000 cattle driven along the old stage road every year to the agency for the lazy Indians. I don't see why they do not work as well as we. I'm sure they are able to. A great many people think they will break out in the Spring and massacre the whites. So if I do not write again next Summer, you may imagine me with some of the rest. The first house in this town, Chadron, was erected the first of July last, and now it has over 2,000 inhabitants and is a great business town. The land around here is mostly taken up, but some is still vacant. Any single lady who is past 21 can take a homestead, same as the men.

Dawes Co., Neb. ETTA SHAFFNER.

[Indians ought to work. Every person who eats ought to earn his food. I think you will be safe. I am glad the ladies can take up claims. I believe in "woman's rights" to that extent surely.—U. M.]

DEAR UNCLE MARK: I use a figure four trap for catching rabbits. Perhaps some of the Cousins do not know how to make one. I will try and tell them. I use first for a box a large soap box and then three sticks, one upright, a diagonal piece, and the trigger or horizontal piece. The first may be made, say eight inches long, the upper end being whittled to a thick edge, not pointed. The horizontal piece or trigger about ten inches long, and square. Have a notch one side about seven inches from the end. On the upper face of the trigger about six-and-a-half inches from the side, notch in another notch. The diagonal has both ends beveled or brought to a wide edge and a notch cut near one end. In setting up the figure, hold the perpendicular up, fit the trigger to the side, then adjust the notch in the diagonal to the perpendicular and then insert the other end of the diagonal in the notch near the end of the trigger. Now let the box rest on the end of the diagonal. This will make the figure four stand firmly, yet ready to fall at a very slight pull upon the trigger to which the bait is fastened.

Macedon, Wayne Co. FRED. E. REEVE.

[That ought to catch them I think.—U. M.]

MY DEAR UNCLE: I am much pleased in reading the many letters from the Cousins out West, especially those who tell you what they see every day, whether it be a wild bird, or beast, a new flower or fruit, all of which have a great interest for lovers of nature whose homes are far from all of these things. I have seen the Rocky Mountains, Pike's Peak, Long's Peak, and Central City; buffaloes, antelopes, prairies and prairie dogs, but it was only once, and that time 10 years ago. Here we, on the stormy Atlantic, have entirely different surroundings. In an hour we can see hundreds of sailing and steamships, from Europe, Asia, Africa or the multitude of islands which dot the ocean. From these vessels are being landed continually fruits from France, Spain and "up the strait," as the sailors call those countries lying along the warm Mediterranean. Oranges, lemons, figs, dates, prunes, prunelles, almonds, French walnuts and chestnuts, Brazil nuts, Cocoa nuts, Bananas, pine apples, and hundreds of other articles of food. All of these are daily shipped in every direction by the railroads, reaching every village and hamlet from the Atlantic to the Pacific, and from the frozen regions of the north to the Gulf of Mexico on the southern border. Besides these ocean-crossing vessels, every hour are seen coming up the bay from Sandy Hook, or down through Hellgate from Long Island Sound and Eastward, myriads of smaller fishing vessels, with their holds or wells filled with cod, blue fish, herrings, or other fish, as we have, including those from fresh water, nearly 100 kinds to select from in our markets. Besides these edibles from the sea, there are sometimes brought by these fishing vessels, a small whale, a porpoise, a skate an octopus, or whatever else strange may be met with. Few of you have seen such vessels, or such animals, and many of you perhaps never will, and so, of us here, but few will ever see a real live buffalo, or a Rocky Mountain Sheep. So let us once in a while exchange ideas, and both will get new subjects for thought. HAWORTH.

Letters received from Burt Huntington; Jennie Hunt; Wesley J. Barber; Zella Simmons; Bertie Hall; Gertrude Underhill, "Texas Boy" Nannie Creek; Eva Waite; Charles H. Johnson; Etta L. Gilbert; Howard Minter; Nellie Mitchell; Kate and Flossie Cline; Frankie Beeler; Alabama Barker; Fannie C. Henvis; Luella J. Coburn; Willie Byrum; Carrie E. Harlan; Sallie L. Daniel; Kate Culbertson; Ida Gynn; Sophia Grover; Alice Wright; Emily B. Rhodes; Dannie E. Peckham; Anna B. Ore; Orlando A. Rector; Frank Williams; Agnes S. French; Lillie Shaw; Howard Fisher; Freddie Bogart; J. M Shull; W. T. Fulle; Florence Kirkpatrick; Johnnie B. Tansey; Paul Daily; Lulu and Gertie Saul; Alice McCarty; Alletta M. Upson.

Miscellaneous Advertising.

A MATCH FOR ASTHMA.

THE distressing wheeze and vicious cough of asthma are familar. It chokes and smothers till existence seems impossible. "The most stubborn of all diseases," said an old man and eminent practitioner, "and the most oppressive and treacherous."

Some one has described sea sickness thus: "At first you are afraid you are going to die; then you are afraid that you won't die." Asthma frightens with its suddenness and violence, and then becomes such a torture that death seems welcome.

A curious disease is asthma all through. Like a tiger in a jungle, it attacks you when you don't expect it. Doctors say it is a disease of the air-pipes, and they talk learnedly about it. This is very pleasant, but not so pleasant to a patient as a cure for it. It always seemed queer to us that a disease which was so common and on which so much learning was wasted, had never before this met its match.

But so it is, and there is no use regretting it. It couldn't be that way all the time. The day of keeping up a doubtful rough and tumble fight with asthma is passed. Any one who wants to can now grapple with it squarely and with full assurance of winning. If it strikes suddenly you can strike back suddenly. If it strikes violently you can give blow for blow. If it plays the bulldog you can batter him to death with your good, stout club.

Asthma is in the line of diseases which involves the pipes and lungs. It is generated and fed by conditions of the system, which, in another person, or, under other circumstances, in your own, would breed bronchial and lung troubles. Hence, its stubbornness and treachery, and hence also the failure to reach it with local remedies, except very temporarily.

"Such a thing as *a cure* had not been known till the introducion of the Cannabis Sativa Remedy, which has been prescribed for thousands of years in the East Indies as a cure for consumption.

That we now have in it *a cure* is due to the fact that as a treatment it reaches below the disease and breaks up the conditions which feed it. How far off we have been from anything we could hitherto call a cure is plain when we consider that most of those who have been cured of their asthma by Cannabis Sativa have suffered with the disease for a long time—some of them as much as twenty years. Please note this closely.

There is an instance right at hand—that of Rev. Phillip Axtell, of Prosperity, Pa. His old medical friend, Dr. E. H. Cary, met him the other day and thus writes of the interview: "Have known Mr. Axtell to be a sufferer from asthma and sub-acute inflamation of the air passages for ten years. He told me he was entirely well of his asthma and that he had been cured by the Cannabis Sativa Remedy alone, having taken no other medicine. He is one of the most reliable men we have."

Ten years is a good while to suffer with so terrible a disease; and no doubt he had the best of medical treatment all the time. At least such must surely have been the case with Mrs. Dr. Buffum, of Kilgore, Gregg County, Texas, who writes that she had been trying remedies for her asthma for twenty-three years and had lost faith entirely. Poor woman; no wonder! "But," she continued; "I used your Cannabis Sativa for two years, not regularly, and had but one spell. When without it I had eight spells in six months. I had despaired of ever being cured."

Mr. J. L. Kantner, of South Easton, Pa., was so grateful for the cure of his wife's asthma by Cannabis Sativa—she had been afflicted with it for ten years and was cured in six days—that he told some of his friends who were suffering with it, and they told others, and now the remedy has such a reputation that Mr. Kntner wrote us, saying he would soon need a secretary to help him answer correspondence if it continued to increase.

Sitting up at night in order to breathe is one of the many asthma horrors. Mrs. M. O. Ward, of 120 Congress street, Newark, N. J., did this off and on for two years. "Then:" she says, "I began to take Cannabis Sativa and found immediate relief."

Preventive power is a fine quality in a remedy. Rev. W. M. Williams, of New Market, Va., an asthmatic sufferer, took time by the forelock. Writing in July, 1883, he says: "Took two packages of your remedy last fall and had no asthma after November." He saved himself much suffering and an immense doctor bill.

What a contrast between the two existences of Mr. S. Samuel Monroe of Bassett, Chicksaw County, Iowa. He writes: "Before I took your Cannabis Sativa for asthma I could not sleep at night unless I burned saltpetre paper. Many a night I have had to sit up all night and thought I would die with it. Have not had the least sign of asthma since I began to take your remedy. Have worked every day since."

A crisp word from the Pacific coast. Says Arthur Bailey, of San Francisco, Cal. "Two years ago got three boxes of your Cannabis Sativa, which cured me of asthma."

A. J. Wilder, of Tidal Wave, Whitely County, Ky., fought his asthma for two years at an expense of $200, and then gave it up as a bad job. At the persuasion of his brother-in-law he tried Cannabis Sativa without any faith. Writing, he says: "To my surprise the trial package gave me more relief than all the medicines I had ever taken. Am glad to say I continued its use and feel like a new man."

Charles Atkins, of Severance, Kan., expresses a true filial feeling thus: 'Your remedy, Cannabis Sativa, has cured my mother of asthma."

These testimonials are tokens of gratitude. And well they may be, for of the diseases which flesh is heir to there is none so oppressive and provoking as asthma. Sufferers come to dread it worse than death, and especially after they find that doctors are of no avail and all their own expedients are no longer of any use.

There is no further occasion for dread. The above evidence of *a cure* for asthma ought to prove to the satisfaction of every one—or if it does not the testimony can be increased indefinately—that the disease has at last *met its match*.

For full information about the Cannabis Sativa Remedy and its remarkable curative properties address W. A. NOYES, 149 Powers Block, Rochester, N. Y.

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PERSONALS.

REPRESENTATIVE BRECKINRIDGE, of Kentucky, is not yet 49 years old, but his heavy hair and beard are snowy-white—a family peculiarity.

EX-PRESIDENT ARTHUR'S friends feel seriously concerned at his condition. While not alarmingly sick, he has been quite unwell for several weeks.

MRS. MARY GRANT CRAMER, sister of General Grant, is lecturing in Massachusetts under the auspices of the Women's Christian Temperance Union.

MOST of the late British Cabinet were smokers, notably Sir Hicks-Beach, Lord Randolph Churchill and Sir Richard Cross. Most of the present Ministers, including the Premier, are non-smokers.

LULU HURST, the electric girl, made enough money from her professional tour to stock her father's farm with Short-horned cattle and insure her family's comfort for life. She is now at a Southern college.

THE late Governor Seymour, speaking of State and National Government offices, said: "I never yet made or procured an appointment for a young man for a clerkship, which did not in the end prove of great injury to him."

THE late Ex-Senator Chaffee was of medium size and stout. His hair had grown gray and bald spots were plentiful on his head. He had a massive head, solidly planted on broad shoulders, an open, genial face, smooth-shaven, with a smile on it oftener than repose, a high and expansive brow, square-set iron jaws and steady gray eyes.

Miscellaneous Advertising.

Watch this Space NEXT WEEK!

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C. A. DIETZ, Chambersburg, Pa.

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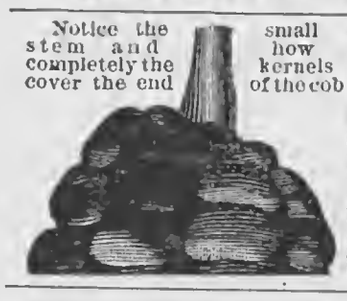

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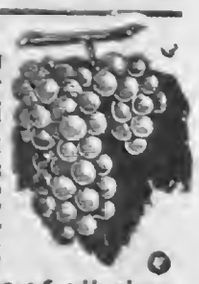

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Iris 3d's Clarion.—Calved January 19, 1885. Sire, Clarion 870 (for whose pedigree see above). Dam, Iris 3rd 1542. Milk record 68 lbs. in one day.

Iris 3d's Prince.—Full brother of above. Calved January 27, 1885.

Consul.—Calved February 18, 1886. Sire, Clarion 870. (For his pedigree see above.) Dam, Consul 1225. Record 48 lbs. of milk in one day.

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Dots Clarion.—Calved November 27, 1885. Sire, Clarion 860. (For his pedigree see above.) Dam, Dot 282. Milk record 8042 lbs. in one year.

Zyp's Robert S.—Calved January 20, 1886. Sire, Robert S. 3210. He by Sire Henry 2nd of Aaggie 1151, whose dam Aaggie Rosa 2705 gave 91 lbs. of milk in one day and whose sire was the celebrated De Ruyter N. H. B. 89.

All the above calves will be recorded in Vol. I. of the Holstein-Friesian Herd Book.

Hilda's Empire.—H. H. B. 3562. Calved August 2, 1884. Dam, Hilda 556. Record 58 lbs. of milk in one day. Sire, Empire 688, whose dam Empress gave 100 lbs. of milk in one day and 19,714¼ lbs. in one year.

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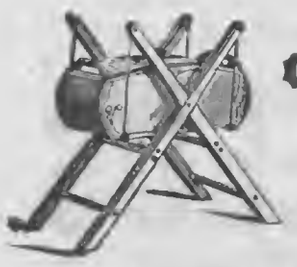

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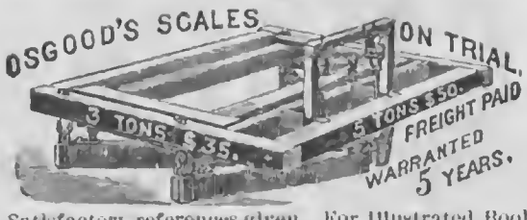

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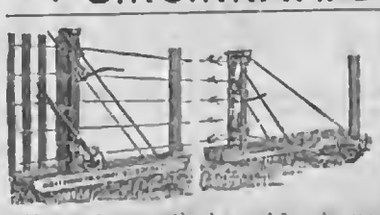

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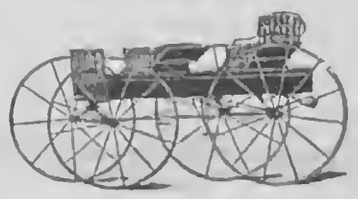

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THE RURAL NEW-YORKER

A JOURNAL FOR THE SUBURBAN AND COUNTRY HOME

VOL. XLV. No. 1887. NEW YORK, MARCH 27, 1886. PRICE FIVE CENTS. $2.00 PER YEAR.

Entered according to Act of Congress, in the year 1886, by the Rural New-Yorker in the office of the Librarian of Congress at Washington.

SECOND Potato SPECIAL!

COMPOSITION OF POTATO ASH.

SIR J. B. LAWES, LL.D., F.R.S.

THE RURAL NEW-YORKER of January 16, gives some analyses of the composition of the ash of the potato tuber, which, it must be admitted, show a very wide range in its composition, as it is stated that the potash ranged from 73 to 44 per cent., the soda from 17 to 0 per cent., the magnesia from 13 to 1 per cent., the phosphoric acid from 8 to 27 per cent., and so on. Without in any way wishing to raise a question in regard to the accuracy of these analyses, I would wish to point out that, as far as our experience at Rothamsted goes, the ash of the potato tuber is exceedingly constant in its composition, even when placed under circumstances where it was likely to show great variations.

Our system of growing crops without change of manure for a great number of years, is well adapted to bring out the properties of the various plants, as regards their capability of substituting one substance for another. For instance, if we apply nitrate of soda alone as a manure for a long period of time—say 30 years—we drain the soil to a great extent of its available potash. Under such circumstances the ash of hay grown in a pasture, instead of containing, as it would in its natural state, between 40 and 50 per cent. of potash, might contain not more than 14 or 15 per cent., and soda might be in larger quantities than the potash. The mangel is another of the plants which, when manured with nitrate of soda, will take up a large amount of soda.

Let us see what capacity a potato tuber has of making use of soda in the absence of potash, upon land which has been manured with nitrate of soda and has received no potash for about 30 years. This potato ash contains 52.61 per cent. of potash and less than three per cent. of soda. The ash of the potato which receives 14 tons of farm-yard manure every year, and that which receives 500 pounds of sulphate of potash per acre every year, contain, respectively, 57.47 and 57.58 of potash; that is to say, only five per cent. more potash than the nitrate plot, and they contain hardly any soda.

Phosphoric acid is a substance of such extreme value to plants that they cannot possibly exist without it. In the experiments published by the RURAL NEW-YORKER this substance is said to vary from 8 to 27 per cent. Some of our potatoes receive a large amount of superphosphate of lime every year, while others have never received any. The ash of the superphosphate plot contains 12.83 per cent. phosphoric acid; while that of the plot which receives no superphosphate contains 10.97, a difference of rather less than two per cent.

Magnesia is another substance which in the published experiments shows a very large variation, that is to say, from a little more than one per cent. to over 13 per cent. Our highest amount of magnesia is 3.76 per cent. and the lowest 3.12, a variation of not much more than half of one per cent. and this too on land of which some receives magnesia every year, while other portions have received none. As far as our own results go, it would appear that the potato—though it is grown under very different conditions in regard to the supply of mineral food—is yet very uniform in its composition, and although the ash does not equal in uniformity that of the cereal grains—when grown under similar variations in regard to manures—still it is evident that the composition of the minerals of the potato, does not indicate the character of the manure applied, as is the case with some plants.

The extreme difference in the percentage of ash in the dry matter of our potatoes is from 3.52 to 4.72, while the nitrogen varies from 0.755 to 1.523. Where nitrogen is applied every year without minerals, the potato contains twice as much as when it is grown every year with mineral manures, but without nitrogen. A deficiency of minerals therefore causes a great waste of nitrogen.

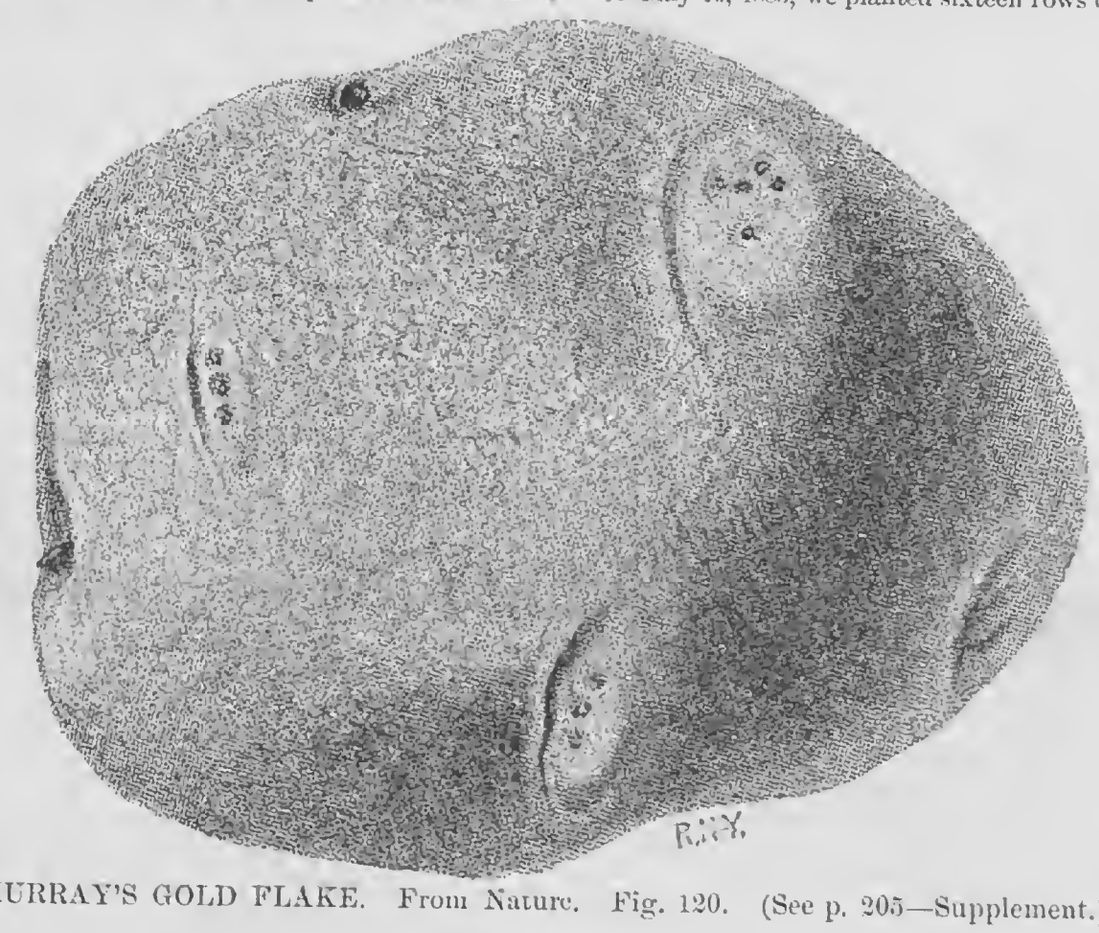
The amount of potash taken up by a potato crop is very large; some of our crops indeed carry off considerably more than 100 pounds per acre of that substance. In Great Britain potatoes are rarely grown as a farm produce unless where the cultivator has access to purchased town manure, the drain of potash being too great to be furnished by the resources of the soil.

Rothamsted, England.

POTATO EXPERIMENT IN NEW YORK.

PROF. I. P. ROBERTS.

ON May 16, 1885, we planted sixteen rows of Dakota Red and two rows of Mammoth Pearl Potatoes. The rows were meant to be 30 inches apart, but proved to be a shade less when the whole area was measured; they were 24 rods long, and two rows constituted a plot. The seed consisted of pieces cut to two eyes, and was planted 18 inches apart in the row. The land was fairly well drained, clayey, and had a south-west exposure. In 1884 it produced a heavy crop of grass and clover, which was mowed. In the latter part of the season the land was pastured. The plot was a part of a 20-acre field devoted to corn and mangolds, and was no richer than the remainder of the field. The object in planting these potatoes was three-fold: first, to illustrate to the students what I conceived to be the best and most profitable way or raising potatoes; secondly, to get some potatoes; and, thirdly, to make some simple experiments. In early Winter about ten tons per acre of manure were spread upon the grass. During the last days of April the land was plowed and well prepared and planted about the middle of May. About two weeks after planting, the land was treated to a dressing of 200 pounds of German potash salts per acre. Plot one received a mulch of cut straw, as recommended by the RURAL, and plot four a mulch of manure of nearly the same thickness. They were cultivated five times and the weeds were hoed out twice, and late in the Fall a few that had escaped were pulled. Flat culture was given in all cases.



MURRAY'S GOLD FLAKE. From Nature. Fig. 120. (See p. 205—Supplement.)

Plots.	Pounds Yield per Plot.	Bush. Yield per Acre.	How Treated.	Variety.
2	1215	457.11	Straw mulch.	Dakota Red
4	1260	474.04	Manure mulch.	" "
1	1205	446.42	No mulch.	" "
3	1185			
5	1186			
6	1164			
7	1194			
8	1186			
9	All rotted.			Mam'th Pearl

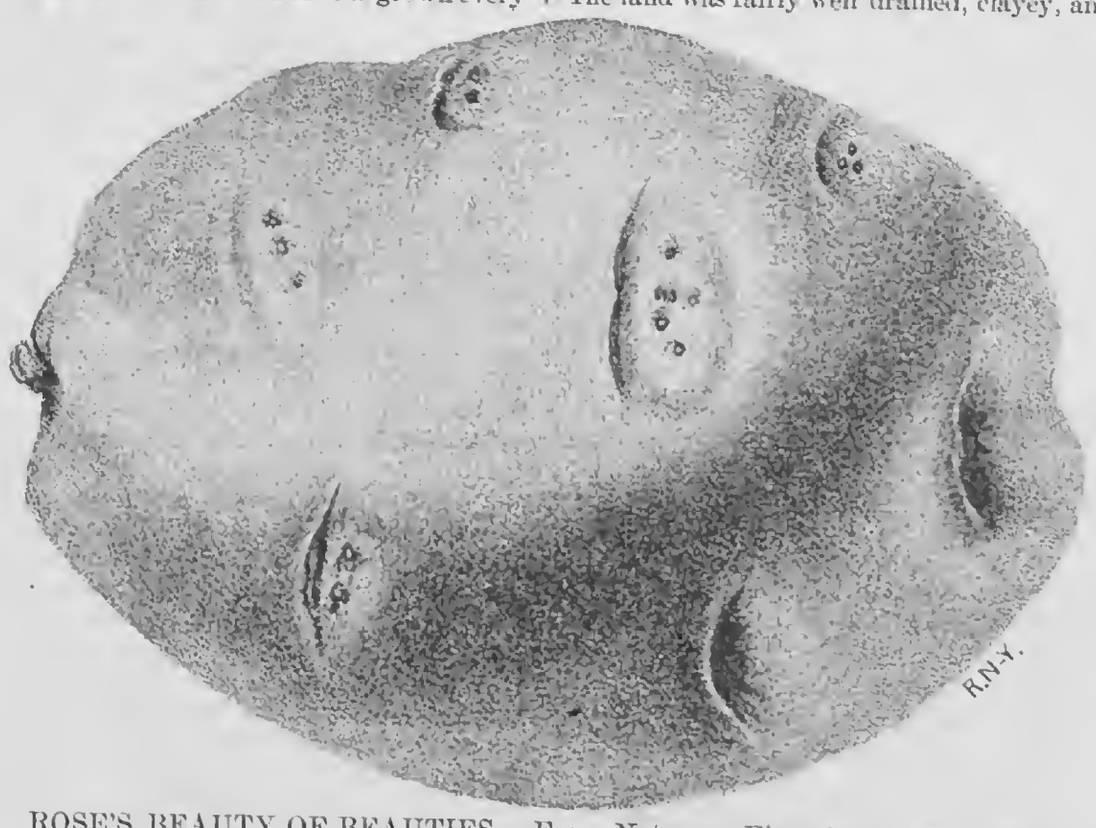
The labor account of raising these potatoes and the mangolds was kept under the general head of "root field," I am therefore unable to give the cost of raising them, and in any case it would be of no value to the public. One man may get 16 hours' labor for 75 cents, while another will have to pay $1,50 for ten hours. One man pays $4 a cord for manure; another gets for nothing all he can haul. It appears to me that it is far better to tell just what is done, and leave the reader to figure out what it will cost him to perform the same labor. It is evident that it would not have paid us this year to have mulched with straw, and the 28 bushels extra yield of the plot mulched with manure, over the unmanured plots, would hardly pay for the extra expenditure. The potatoes mulched with manure were very "scabby," while those from all the other plots were almost entirely free from that disease.

Cornell University, Ithaca, N. Y.

POTATOES IN THE POTATO DISTRICTS.—CULTURE, CARE AND KINDS.

COL. F. D. CURTIS.

POTATOES are a leading farm crop in the part of New York where I live. Washington County, which is adjacent to Saratoga, produces yearly between four and five million bushels. It has a larger crop than any other county in the State. The farmers all follow about the same system of routine and culture. The potatoes are planted on corn stubble or a clover sod. These are considered the most favorable conditions. The corn land is usually manured for the crop of corn and is in good heart for potatoes, with the desired mellow condition. The clover sod gives to the land the advantages of the decay of the roots, and the humus arising from the stems and leaves, and from these materials the potatoes derive a supply of the constituents required. Barnyard manure is relied upon by the large growers of potatoes as the best fertilizer, and the rotation of crops is so conducted that a good coat is given to the land for each crop of potatoes. A grain crop succeeds the potatoes, and with it the land is seeded down. Rye is the best to follow potatoes, but when the crop cannot be taken off in time, oats or barley are put on the following Spring and the land is seeded. When lands are very fertile an unwise farmer will sometimes raise several crops of potatoes on the same field. Potatoes are naturally a very exhaustive crop in potash, and will rapidly deplete land of this element unless there is a latent supply. This is the case in Washington and Rensselaer Counties where the crumbling rock furnishes an additional amount. Mr. David Smith has



ROSE'S BEAUTY OF BEAUTIES. From Nature. Fig. 123. (See p. 205.)

frequently raised five crops of potatoes on quite thin,sandy land by planting them early, in hills, and just as they were coming through the ground, putting a forkful of manure right on top of the hill. The manure keeps the weeds down and the moisture in, and at the same time enriches the hill. After the potatoes are well up through the manure, they were worked with a cultivator.

I have grown the smoothest and best potatoes I ever grew, by dropping pieces cut to one eye, about a foot apart right into the grass, and then covering the whole surface with oat and buckwheat straw, not mixed, but both kinds about a foot thick. Wherever the grass or thistles appeared above the straw, a fresh lot of straw was put on to smother them out. After the potatoes came up they took care of themselves, and the whole surface was a tangle of vines. In the Fall the vines and rotten straw were raked and pitched into heaps, leaving the potatoes in clean bunches or piles just as they grew. It was a perfect success.

The unmerchantable potatoes are generally kept for seed, and one, two or three are dropped where the marker rows cross. They are then covered by a double plow which turns two furrows inside over the seed.

Potatoes were dug with a fork, but many large growers use both a fork and a spring-tooth harrow. Some run a plow underneath the hills and then go over the ground with a coarse harrow. Thus most of the potatoes are gathered with little hand labor. No potato-digging machine has yet been invented which gives entire satisfaction or which has come into any general use. Potatoes are mostly drawn directly from the field or pits in the field to the point of shipment. Only a small per cent. are stored for Winter. When spread out rather thinly and dusted with dry lime, they will best resist the rot.

The kinds most grown and doing best are, Burbank, White Elephant and Beauty of Hebron. The Peachblows and Roses seem to be running out. The Peerless and Queen yield well, but do not command first prices. Two hundred bushels per acre is about the average yield. To make the crop profitable there should be 300. Wet, murky weather is conducive to rot and scab. Cool, dry weather is the most favorable to fine tubers, but the dryness should not be a drought.

Saratoga Co., N. Y.

NOTES ON POTATOES.

PROF. L. H. BAILEY, JR.

THE "ideal potato" in my judgment should be oblong, smooth, white, with shallow eyes, medium in size, and uniform throughout the hill. Oblong and rather thin potatoes are usually sound, and cook more quickly and evenly than very thick ones. A smooth surface is easily cleaned, and renders the tubers attractive. We have many excellent sorts, well-nigh perfect; but we must continually rear new ones to take their places. Probably varieties of no other crop run out so soon as those of potatoes. A series of experiments which were carried on through many years at the Michigan Agricultural College strongly illustrates this fact. The cause of this deterioration is apparent. The potato is propagated by cuttings from a variable, unstable tuber. Cross-pollenation has no influence upon the tuber, and we are constantly inbreeding. It is undoubtedly true that varieties of plants which are propagated by seeds hold their own longer than do those which are propagated exclusively from cuttings, other things being equal. Many wild plants propagate largely by stolons and bulbs, but they also produce seed which probably corrects the evil tendencies of other methods of propagation. Our budded fruits do not run out, probably because the stock upon which they are set is a seedling. I look for the most permanent improvement in varieties of potatoes by raising new sorts from crossed seeds; not that I should expect crossed seeds to produce a variety intermediate between their parents, but because of the increased vigor of those seeds.

I should expect better results from a cross made by bringing together varieties long grown in widely separated localities than from one made between plants long grown side by side. In other words, I should plant by the side of my Early Rose which I had grown for several years in Michigan, potatoes of the same or other varieties which had been long grown in New England or in Minnesota, and should cross them by hand. The wonderful value of this crossing with foreign seed was clearly demonstrated by Darwin, although not with potatoes. I expect that the wild potatoes which are now coming in as curiosities, from Arizona and Mexico, will prove valuable as stocks for crossing. It is undoubtedly better to use these plants for this purpose than to attempt to breed up large tubers from them directly. To be sure we need to experiment with them in both directions. I have no faith in the hope of some experimenters who look for a rot-proof variety from these Mexican potatoes. If the fungus will attack the tomato, it will undoubtedly attack all kinds of potatoes. In fact, a wild Mexican potato which has been cultivated in France has suffered from the rot the same as the common sorts. Our potato is losing the power of producing seeds; we must not let this tendency go too far.

As to soil, I prefer a well drained gravel which has had a recent application of vegetable matter. Unctuous soil makes poor potatoes. The typical prairie soils illustrate this fact. It is almost useless to plant over a high and retentive subsoil. I planted an acre on such ground last year, and, as I expected, did not get a quarter of a crop, and it was poor at that. It would have paid us better to buy potatoes. Another patch upon a freshly turned sod, in warm gravel, returned a heavy yield of most delicious, smooth tubers. A similar patch adjoining this, but upon which potatoes have been grown successively for five or six years, produced a scabby crop. I hear more complaints of scabby potatoes from the East than from the West. Do we need a rotation?

We have not tested varieties of potatoes to any extent of late, but of a half dozen sorts which we are growing, the Pearl of Savoy has done the best.

Ag'l. Coll., Lansing, Mich.

IMPROVEMENT OF THE POTATO.

PROF. J. L. BUDD.

IN every market of Eastern Russia, I found the Early Rose, introduced here by Mr. Chauncey Goodrich, and I was told that it was a favorite variety in Persia, Bokhara, and Central Asia. With the present general appearance of the potato rot, would it not be well to inquire whether such varieties as the Early Rose, White Elephant, Cloud's White Chief, Boston Market, Queen of the Roses, Pearl of Savoy, President Arthur, Charter Oak, and other new sorts, which at the West have escaped the rot the past season, are not direct descendants of the varieties which Mr. Goodrich grew from the seeds of the wild Peruvian and Chilian potatoes he imported in 1849, 1850 and 1851? In Europe I found the impression general that the new era in potato growing commenced with the thousands of seedlings which Mr. Goodrich tried and sent out for trial, and that his views in regard to the causes of the rot were well founded, viz.: sudden changes in temperature and moisture of air unlike those of their native clime, and consequent exhaustion of vitality.

I am told that the rot has never appeared in the cultivated potatoes of Chili, and I was shown on the grounds of M. Henry Vilmorin, in France, rows of several varieties of Chili potatoes, which exhibited marks of inherent vigor and vitality not shown by anything else in his great collection. Has not the time come when some of our enterprising originators of new varieties can profitably go back to the parents of the Garnet Chili, Cuzco, White Chili, etc.? With a little research, we may be able to find better parents for new seedlings in Chili than those which gave such valuable results in 1850.

Ag. Coll., Ames, Ia.

INSECT ENEMIES OF THE POTATO.

PROF. A. J. COOK.

OF course, all the noxious insects that infest the potato sink into insignificance in comparison with the Colorado Potato Beetle—Doryphora decemlineata, Say. Thomas Say discovered, named and described it on the Western Plains three-fourths of a century ago. For years after his discovery it was unknown even to our entomologists, when, all at once, it attracted attention in the Western States by its formidable attacks in the potato fields. Then the late B. D. Walsh described it anew, foretold its devastating march across the country, and made an exact prophecy as to just when it would reach the Atlantic coast, as subsequent experience proved.

REMEDIES.

Mr. Terry, the able writer and noted potato specialist, in his admirable little work on "Potato Culture," recommends hand-picking as the cheapest, safest and most desirable method of ridding the vines of these insects. He employs cheap labor—usually children—pays according to results, and lays special stress on the importance of "nipping the evil in the bud." That he is right in this last suggestion will appear from the fact that I secured over 1,300 eggs from a single female beetle. Killing such a beetle in time would prevent the laying of this number of eggs and the consequent appearance, later, of an equal number of hungry grubs. If hand-picking is resorted to, the beetles may be put into pails containing a little kerosene, and, as already suggested, the vines should be kept clean as soon as they come: so that all increase, so far as possible, shall be prevented.

I have experimented quite thoroughly, and have found that when the insects are at all common or numerous, it is much better to destroy them by the use of Paris-green or London-purple. I have known beetles to come to my garden each successive day for a week at a time, in numbers varying from a score to hundreds. To hand-pick under such circumstances is a task not to be coveted. To kill by the use of the arsenites is safe, quick, easy. One application just as the plants come up, kills all the beetles, prevents increase, and saves a great amount of work. Most fail right here—they wait till eggs are laid and hatched, when the vines are much larger and have been already seriously injured. Any one who uses the arsenites in time will never complain of the labor, efficiency and satisfactory character of the method. As all know, there are two ways of applying the arsenites—either dry or in a liquid mixture with water. For young potato vines (and it is on these it should always be applied), I have found the dry method the better. I prefer one part of the poison to 10 or 12 of flour, and then only put on just the slightest amount possible. The flour holds the poison even in heavy rains, and the strong mixture makes the poison fatal to the beetles, even though the slightest amount be used. It is desirable to use a slight amount, as the plants do better. To apply this, nothing is better than a muslin bag tied to the end of a cane or other stick. I have used all the various sieves and shakers, and prefer the simple bag to any and all. We have only to shake the bag slightly over each vine.

When the vines get large—time of the second brood—they nearly cover the ground, and then I would use the liquid mixture. If the first beetles are well attended to, there will be little to do in fighting the second brood, unless we have near neighbors, who cultivate the potato, and are heedless as to protecting against its chief enemies.

The enemies of the potato beetle, parasitic and predaceous, are becoming very numerous and efficient, so much so that some are hailing with joy the day of liberation. I fear such rejoicing is premature. True, these helpful insects, birds, etc., are doing us much good, but to say they will be sufficient protectors in future is, I fear, to reckon without our host. Last year some regions were almost free from the ravages of the beetles, while in other places they were never so bad.

OTHER ENEMIES.

The Cucumber Flea-beetle—Haltica cucumeris, Harr.—is also an enemy of the potato, as it is of all our garden vegetables. These little jumping beetles which are often the source of so much annoyance in the early spring, when our little plants need all their vitality, quickly succumb to the arsenites, and also to gas lime, either dry or in water, sifted or sprinkled on to the plants, and with care the plants will suffer no injury.

ATTACKING THE TUBER.

THE wire-worm grubs, or larvæ of Elater beetles, are the only insect enemies so far as I have observed, that injure the potatoes. These eat into the growing tubers and often bore through them. They are especially liable to attack potatoes planted on rich, deep soil the second or third year after plowing green-sward. As is well known, the Elater or spring beetles, the parents of these wire-worms, lay their eggs on the stems or roots of grass. If such grass is plowed, the decaying roots seem to satisfy them the first season, while the two succeeding seasons the corn, wheat, potatoes, etc., are often injured seriously. It is said that beans, peas and buckwheat will not be attacked by them. Upon making this statement at one of our Farmers' Institutes in Sanilac Co., where these wire-worms are almost as destructive as were the forest fires which devastated the same region, a farmer said, "They killed my beans. What do you say to that?" I replied, "I can only say that in your region they probably don't 'know beans.'"

On my own farm the past season I had a rich, deep creek bottom, thoroughly drained two years ago, and plowed one year ago, planted this season to potatoes. The crop was splendid and the potatoes superb, except that the scab and these same wire-worms had done their worst work; most of the potatoes were more or less tunneled and were only fit to feed the stock. The remedy here is obvious:—If these wire-worms are prevalent, plant potatoes the first year after plowing green-sward, and not the second or third, as these long, slender, wire-like, six-legged grubs live nearly three years as larvæ.

THE SCAB.

I still think this disease, as seen in Michigan, must result from fungus attack. This year I frequently examined potatoes on some sandy ground, which became very scabby, and I could find no myriapods—thousand-legged worms—anywhere in the soil. I know our friend, the Editor of the RURAL (and he is a close observer) thinks the myriapods the cause of the scab. It seems to me that either there are two kinds of scab, differing in their cause and character, or else in the cases mentioned by him, the scab was already present and furnished a good place for the jaws of the hungry Iulus which was in the soil. In this case, the Iulus would not be the cause of the scab; but being potato-hungry, would eat this diseased portion, thus doing the least possible harm to the tubers. Surely if the myriapods are thus kind and thoughtful, they deserve a well-earned vote of thanks. It has always seemed to me that scab was most to be dreaded in soils that were very rich, abounding in vegetable matter. I shall continue my study of this subject, and intend to settle it conclusively the coming Summer.

Ag'l Coll., Lansing, Mich.

[We hope that Professor Cook will be successful. We can give some forcible testimony that the scab which often injures our potatoes at the Rural Grounds and some other places, is caused by the Iulus. But so many have written us that scab prevails where wire-worms are not seen or known, that we are obliged to conclude that there is another cause or, as Prof. C. says, that there are two kinds of scab. —EDS.]

THE RURAL'S TRENCH-MULCH SYSTEM MODIFIED.

LEVEL VS. HILL CULTURE FOR POTATOES.

E. J. BROWNELL.

I HAVE long been an advocate of level culture for corn and for most garden crops, though, like many others, I had become so wedded to the hill system of culture for the potato, that I had come to think that no other could be correct for growing that crop, and as I have been much troubled with sunburned potatoes, especially with such varieties as Early Rose and Beauty of Hebron, I had got into a habit of making very large and high hills in the effort to cover the tubers sufficiently to prevent this trouble; but still a great many of them would reach the surface and become burned. Seeing such favorable reports of the RURAL'S trench-mulch method of cultivation, I resolved, the past season, to try a modification of that plan, not with the idea of avoiding the sunburn, but because it could hardly be worse with this system, which might be advantageous in some other respects. Accordingly, on a small garden plot of the same kind of soil in which I had previously grown potatoes for a number of years by the hill system, I planted about 20 square rods, as follows:

With a spade, I opened a trench about six inches in depth, in the bottom of which seed-pieces, cut from medium-sized potatoes with three or four eyes to a piece, were dropped and covered three or four inches in depth, a slight depression being left along each row until the first hoeing, when the dirt was hauled in to nearly a level. Clean, thorough culture was given and the ground was kept entirely level as far as possible, and after the last hoeing, a good coat of partially rotted horse and cow manure mixed, was wheeled on and spread over the entire surface. Now for the result: The season was very dry and unfavorable; but this plot seemed to withstand the drought much better than potato ground on adjoining farms treated in the ordinary way, and, much to my surprise, when I came to harvest the crop scarcely a sunburned tuber was to be found; in fact, the fewest I have ever had. I did not measure the yield, as a considerable portion were dug for family use before the time for harvesting the crop; but it was much greater than the ordinary yield this season on similar soil, and fully double that on a small plot in the same soil, which I cultivated in hills. I am so well pleased with the result that hereafter I shall admit of no hilling for potatoes on my grounds, unless further experience should change my opinion. I can see no philosophical reason for striving to raise the roots of any crop above the surface under ordinary circumstances, and certainly my experience with all garden crops is opposed to the practice.

Delaware Co., N. Y.

MARL—FERTILIZERS *vs.* FARM MANURES—APPLICATION, ETC.

UNTIL within the last 10 years the only fertilizers used in this section in the growing of the potato, were farm manure and marl. Of the last there are inexhaustible beds found everywhere throughout our country. In certain parts these are near the surface and underlie whole farms; in others they are deeper down and can be reached only at points where

"pits" are opened, and from these the neighborhood gets its supply. This marl is a green sand, and is not, I think, credited by the chemist with anything especially rich in the way of plant food. Its action, however, whether chemical or mechanical, has a decided influence on the growth of plants. Upon the potato it seems to have almost a specific effect, producing, as a rule, smooth and bright tubers. The ways of applying it to the crop are generally as follows:

1. The farm manure is spread upon the field in the Fall, and in the Winter the marl is carted from the "pits" and broadcasted over the manure. 2. The manure carted out of the yard in the Spring is composted with the marl, and the compost is either spread broadcast in the Fall and Winter, or put in the row in the Spring. 3. The marl is put directly in the row; the manure, applied sometimes in the Spring, being plowed under. It is with this treatment that the specific action of the marl spoken of is noticed. When the marl is on the farm, or so near it that its cost is nominal, and where large stocks of animals are kept on the farm, the conditions for successful and profitable potato growing are about perfect. Of course, on the great majority of farms these very favorable conditions do not exist, and the question always uppermost in the minds of their owners has been, "How can we best compete with those whose advantages are so superior to ours?"

It was in the search of an answer to this question that our farmers, about ten years ago, began the use of chemical fertilizers. As regards convenience, the verdict is unanimous in favor of the latter. As regards profit, a verdict is not so easily reached because of the fact that such variable values are placed upon farm manure. The one thing, however, that has been proven beyond a doubt is that, placing anything like a fair valuation upon the farm manure, and then applying, acre for acre, its equivalent in a high-grade chemical fertilizer, the yield, not only of the potatoes but also of the wheat following, will be greatest where the fertilizer was applied.

The almost universal way of using these fertilizers is in the row. That is very well if they are to supplement the use of manure; but if the crop is to be grown with them alone (and in that case, of course, more will be used) it has been found that the following is a more profitable way. Having plowed and harrowed the field, about one-third of the fertilizer to be used, is put on with an ordinary grain drill. By this not only is the fertilizer nicely distributed, but the ground is also put in order for the crop. The ground in order and the furrows marked out, the drill is again used. This time the hoes are taken off, and the rubber tubes are tied together so that they shall scatter the fertilizer in two of the furrows at the same time. In this way the second third is put on. Or, should there be a planter on the farm, this second application will be made by it instead of the drill. When the plants are about four inches high, the rest of the fertilizer is applied, using the drill as in the last instance except that the tubes nearest the plants are crossed and tied so that the fertilizer can not fall upon the plant. The cultivator following and working this in, the fertilization is completed. W. S. COMBS.

Monmouth Co., N. J.

CULTURE OF THE POTATO.

PRES. T. T. LYON.

THE Early Rose was, for a considerable period, the favorite in this region; but it is now mainly superseded by quite a number of more recent varieties, the most popular of which it would be difficult to determine. Among these, I will name Burbank, White Elephant, Peerless and Late Rose, which are esteemed about in the order named.

We regard a sandy loam, with porous, well-drained subsoil, as preferable for the potato. A vigorous shoot, from a single eye, is preferable to a greater number, but the habit of different varieties seems to vary considerably in this particular. Whole tubers of certain varieties will rarely push from more than a single eye; while others will generally send up several shoots, which, as a matter of course, are likely to be comparatively less vigorous. Single shoots will, in most cases, set fewer tubers, which will generally develop more evenly; hence be of average, even size. With several shoots, one or more will, in general, take the lead in vigor, resulting in unevenly developed tubers. Such being the case, my preference is to cut to a single eye, preferring those near the crown; and planting from one to three eyes in a hill, in check rows, about three feet apart each way, admitting of cross cultivation.

The potato is most nearly in its natural condition when left where it grew, until needed for use. This being the case, when dug, I would have it exposed to the air only long enough to thoroughly dry the surface, and then, as soon as practicable, remove it to cool, dark quarters. Probably few localities excel Northern Michigan in the production of sound, healthy potatoes. Here, the ground is never frozen, the earth being covered with snow before freezing, and vegetation starting even prior to its disappearance in Spring. It is a very common practice here to leave the crop in the hill till Spring, when not needed sooner for actual use. The potato evinces its satisfaction under this treatment by becoming a weed, very difficult of eradication; since every minute tuber remaining in the soil, is sure to become the parent of a more or less numerous progeny. Under this state of things, the shiftless farmer, when he has suffered the proper season to pass without having planted, resorts to his last year's "patch," and ekes out his supply with the second crop, known as "volunteers."

South Haven, Mich.

THE RURAL BLUSH.

THE past season I dug, in all, 750 Rural Blush Potatoes, 614 of which were of merchantable size, and of these I picked out 100 which weighed 87 pounds: the next 100 weighed 59; the third, 51; the fourth, 35; and the remaining 214 were quite large enough for family use. The 136 refuse potatoes, some of which were of good size but cut in digging, weighed 13¾ pounds. H. L.

POTATO GROWING IN KANSAS.

FOR a successful crop of potatoes, three conditions are essential—good seed, perfectly prepared ground, and very favorable weather. To have good seed, the potatoes should have been well handled at harvest time, well kept during the Winter in a place cold enough to prevent their sprouting and warm enough to prevent their chilling. Some varieties do better than others on the same soil. Some do well one year and not so well another. To have the ground perfectly prepared, the elements of plant life—nitrogen, phosphoric acid and potash—should be within easy reach and readily soluble, and there should be sufficient moisture, so that the plant may never suffer for one moment, from germination till maturity.

With me, seven hills of Mammoth Pearl yielded 60 pounds—one bushel. One hill gave 110 tubers, more than half of which were of marketable size; some weighed two and one-half to three and one fifth pounds. The land was quite new; on it prairie grass used to grow six feet high, and was burnt off the year before. I broke the ground in June, plowed it again in the Fall, manured it well in the Winter, and plowed it once more in the Spring. A crop of weeds had grown five feet high by July; and after plowing them under, I planted the potatoes, harrowed them when breaking the ground, cultivated them flat three times, and at the last cultivation gave them a mixture of burnt bone (dissolved), fish scrap, blood, wood ashes and fine sheep droppings—about a handful round each hill.

Being close to the creek, they never suffered for moisture, so I dug the finest, smoothest and the heaviest crop of potatoes I ever saw. I have had the same conditions on other parts of my farm, but never realized so large a crop. The RURAL's Fertilizer Special was worth the price of the paper for the whole year. Those "out West" who will only take the trouble to save all their manure will make crops when their neighbors will fail E. Z. B.

Solomon City, Kansas.

A CARD FROM MR. A. RAND.

IN the RURAL Potato Special of January 16, Rand's Dictator is a misnomer. It should be Brownell's. As sent to me by the originator last Spring, Dictator and Great Eastern are identical. The RURAL Special is a valuable issue, and I consider it worth more than the subscription price for the whole year. I have probably originated more varieties of potatoes than any other man in America; but they have not made me a rich man, nor have I yet found the "ideal potato." I have made all sorts of crosses, but have never been able to make such as Mr. Alexander claims in producing Carman, Carnival, State of Maine and several others. It cannot be done here in Northern Vermont. I have not been able to make the cross that Mr. Hawley speaks of on page 37. It may be possible under the most favorable conditions of soil, culture, etc., but we must have pollen in one of the varieties, or it is worse than nonsense to speak of a cross.

Shelburne, Vt.

DEEP PLANTING.—LIGHT SEEDING.—THOROUGH CULTIVATION.

FORTY-FIVE rods of land, gravelly loam, in hoed crops for several years, and only of moderate fertility, were plowed about May

(Continued on page 200.)

Implements and Machinery.

THE ASPINWALL
POTATO PLANTER.

IT MARKS! IT FURROWS! IT DROPS! IT COVERS! IT DISTRIBUTES FERTILIZER!
CORN PLANTER ATTACHMENT FOR 1886.
Send for Circular to
ASPINWALL M'F'G CO.,
THREE RIVERS, MICH.

The Hitchcock
POTATO DIGGER AND SHOVEL PLOW
COMBINED.

CHICOPEE FALLS, MASS.,
January 1. 1886.

Having purchased the Patent, Patterns, etc., of the Hitchcock Agricultural Works of Poughkeepsie, N. Y., we shall continue the manufacture of the above, and solicit your orders for the coming season. Yours truly,

BELCHER & TAYLOR
AGRICULTURAL
TOOL COMPANY,
Box 75,
Chicopee Falls,
Mass.

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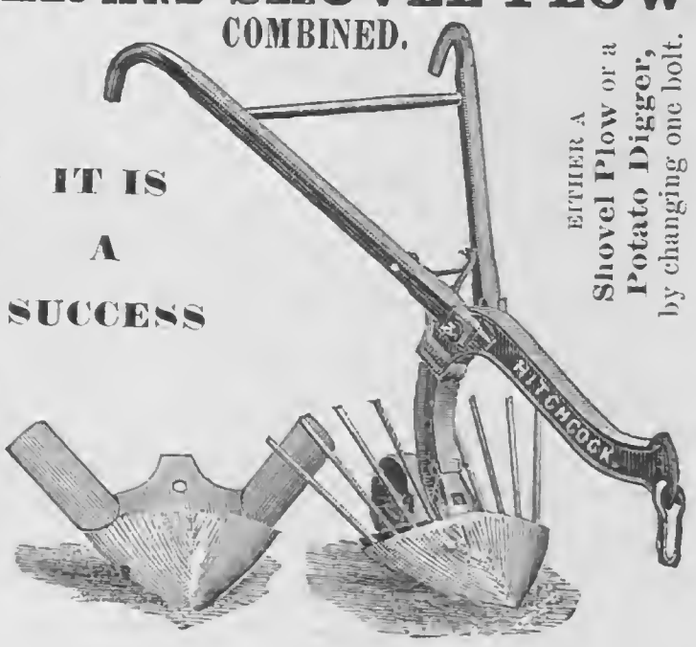
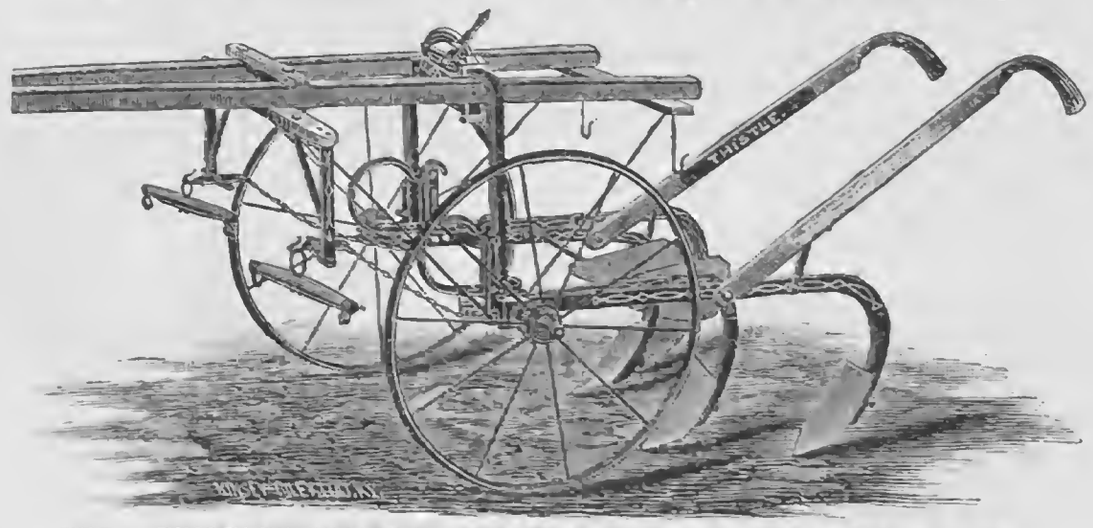
A
SUCCESS



EITHER A
Shovel Plow or a
Potato Digger,
by changing one bolt.

BEST POTATO CULTIVATOR.



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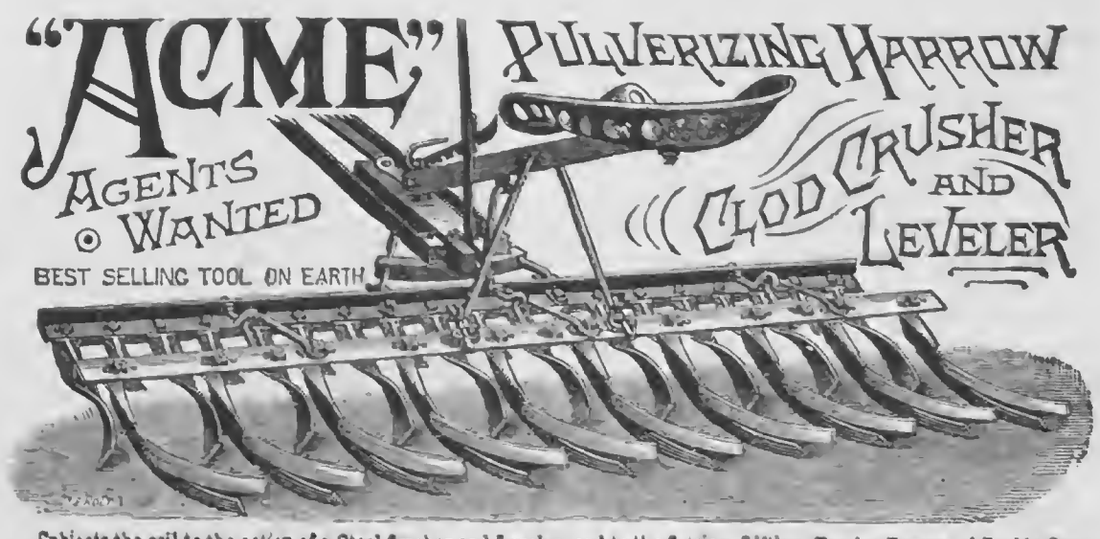
The only cultivator that the farmer can instantly adjust to cultivating rows any width apart. The expanding arch permits the wheels to be set closer together or further apart at the will of the operator. Just what you need for cultivating potatoes, corn, tobacco or any garden produce. Send for circulars and prices to
The Edmiston & Waddell Co., Brooklyn, E.D., N.Y.

"ACME" PULVERIZING HARROW
AGENTS WANTED
CLOD CRUSHER AND LEVELER
BEST SELLING TOOL ON EARTH



Subjects the soil to the action of a Steel Crusher and Leveler, and to the Cutting, Lifting, Turning Process of Double Gangs of Cast Steel Coulters. Immense cutting power. Crushing, Leveling and Pulverizing performed at the same time. Entire absence of Spikes or Spring Teeth avoids pulling up rubbish. Only Harrow that cuts over the entire surface of the ground. Sizes, 3 to 15 ft. wide. With and without Sulky attachment. We deliver free at Distributing Depots.

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N. B.—"TILLAGE IS MANURE" and other essays sent free to parties who NAME THIS PAPER.

(*Continued from page* 199.)

20 with a double team and the largest-sized plow, going plump 10 inches deep, and finishing by opening with the same team and plow trenches of the same depth and three feet six inches apart. Next by hand, fine soil to the depth of about three inches was filled into the bottom of these trenches, where the sets, cut to two eyes apiece, were dropped one in a place 12 to 15 inches apart. Next unleached ashes at the rate of 100 bushels per acre, were sowed in the trenches, and about three inches more of soil filled in, leaving the trenches not quite full. Just before the vines were ready to come up, I went over the plot with a light harrow. As soon as the tops were fairly up, I went through with a five-tooth cultivator, and t ereafter once every five days, on an average, for the next 40 days, I cultivated them out, going only once each time between each row. The labor of hoeing was next to nothing. There was not a pound of weeds at any one time on the field. The surface was kept perfectly level, and was at all times through the season literally "as mellow as an ash heap." No potatoes grew out of the ground, but in a trial in the season of 1884, with level culture and common shallow planting, very many were exposed, resulting in serious injury. Potatoes were dug as soon as perfectly ripe, the last day before September 1, and stored in barrels in a dark cellar. No loss from rot. The season of 1885 was exceptionally wet here, at no time did the crop suffer for rain, so that this trial did not fairly test the merits of this mode of cultivation in carrying a crop through a drought.

Now, as to the yield of the several varieties: The rows were each 18 rods long, and of no kind planted was there less than a full row. All were planted on the same day, and the estimate of the yield per acre is based on the actual yield per row, and on that of several rows of some varieties.

Dakota Red at the rate of 250 bushels per acre.

Early Sunrise at the rate of 175 bushels per acre.

Early Telephone at the rate of 150 bushels per acre.

Vick's Improved Peachblow at the rate of 50 bushels per acre.

Vick's Prize at the rate of 100 bushels per acre.

White Star at the rate of 175 bushels per acre.

Of no variety, except the Improved Peachblow, was there hardly enough small potatoes to render assorting necessary. The crop was not only sound, but unusually free from scab. On a piece on which, in 1884, by the use of stable manure only a light yield had been obtained, by substituting superphosphate, tubers of more than double the size were obtained and twice the yield. The average yield in this section last year was not more than half as great as usual. S. S. C.

Fredonia, N. Y.

HIGH MANURING.

HERE is my experience with potatoes:—The ground was naturally good, but very much exhausted. I procured about 100 loads, or 75 tons, of manure made by two or three horses, as many cows and a small number of hogs. The latter ran loose in the yard, and were also fed in an adjoining pen. The offal from the slaughter-house was thrown into the yard and was well mixed with the stable manure by the rooting of the hogs. About 40 loads of the manure were put, broadcast, on a trifle less than three-quarters of an acre—about 90 feet by 400 feet. The potatoes were plowed in every third furrow, making 30 rows not quite 400 feet long. Varieties, Peerless and Peachblow, which were worked with horse and cultivator, with some hand weeding. The growth of vines was simply immense.

Very much to my agreeable surprise, we dug 379 bushels of exceedingly large tubers besides a few bushels of small ones. Twenty of the largest actually filled a bushel measure, and aggregated 45 pounds, the largest single one weighing 4¼ pounds. I think I could have picked out 50 bushels, not one of which would have weighed less than half a pound. The Peerless were the largest, but the Peachblows were the smoothest and best formed.

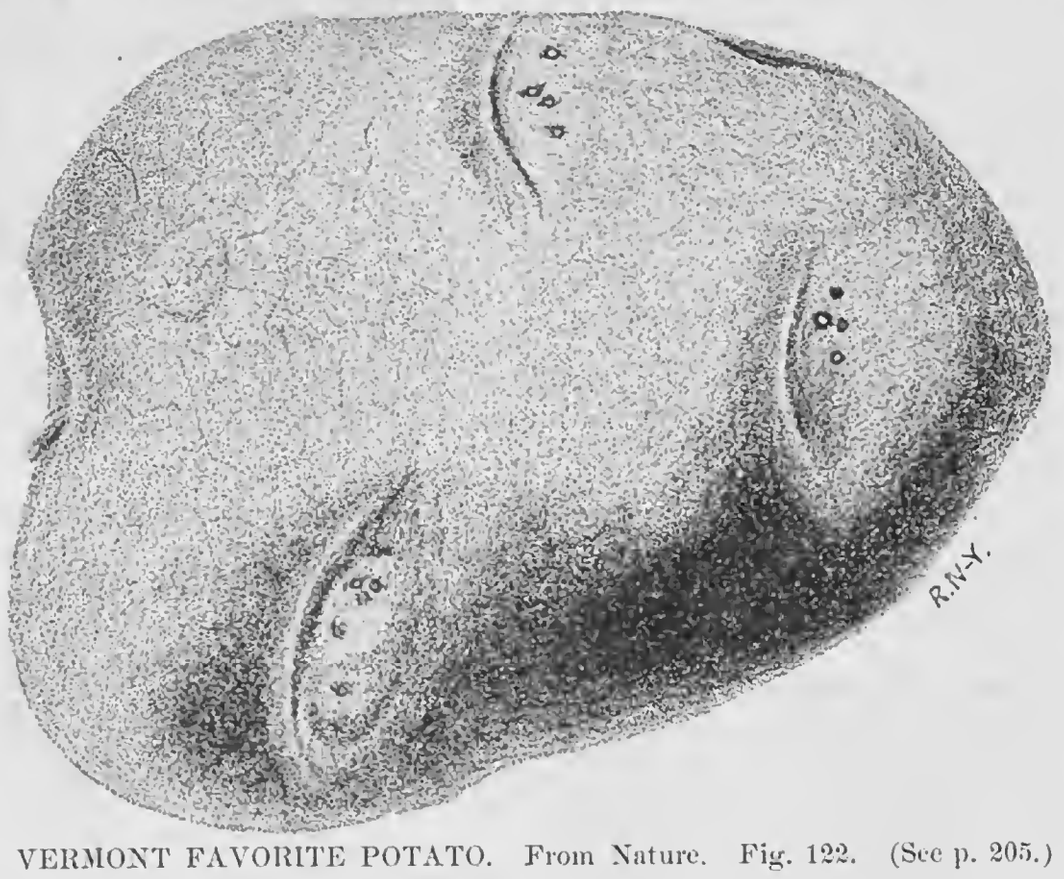
Northeast, Md. S. C. R.

POTATOES WITHIN POTATOES,

THE specimen from which our illustration, Fig. 124, was drawn was sent to us by Mr. M. E. Park, of Ontario, Can. He says it was found in a potato bin in the cellar, which was exposed to light and air. Such abnormal growths are not uncommon, and no doubt have their origin by some suppression of the external buds, which induces the growth of adventitious buds within.

FEEDING POTATOES WITH SAFETY.

WHEN animals are fed roots or potatoes whole or cut into large pieces, they are frequently in danger of choking themselves by attempting to swallow before the food has been properly chewed. The device shown at Fig. 125 will be useful in preventing this trouble. The small wooden bar, shown in the drawing, is placed across the stanchions so that the animal cannot raise its head to swallow a large piece. The bar is held in place by means of a pin, as shown. After the feeding the pin may be withdrawn, and the bar hangs down the stanchion out of the way.



VERMONT FAVORITE POTATO. From Nature. Fig. 122. (See p. 205.)

Farm Topics.

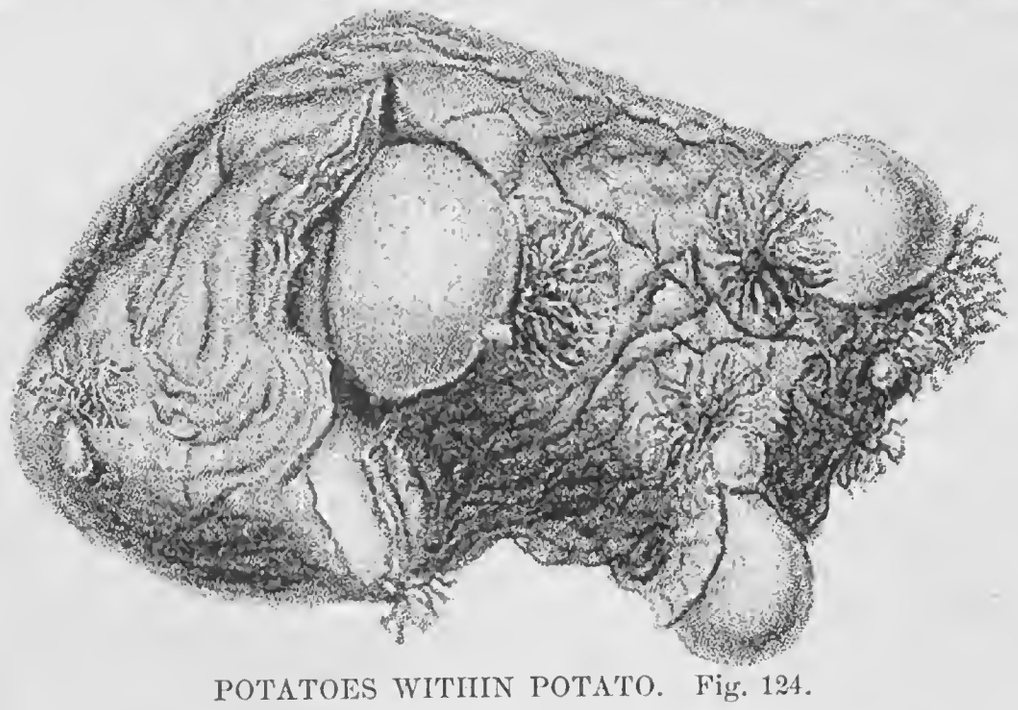
SILAGE FOR STOCK.

MR. EDWARD ATKINSON at the recent meeting of the ensilage congress, spoke as follows: "My experience in silos is limited. When my attention was drawn to the subject some five or six years ago, I built two small silos of 10 tons capacity, on the silage of which I keep my two family cows. Since building these silos I have studied the subject as an economist and statistician. I have concluded that if I were not an underwriter by profession, I would establish a beef factory in the East and feed the cattle on silage." In this connection a correspondent says:

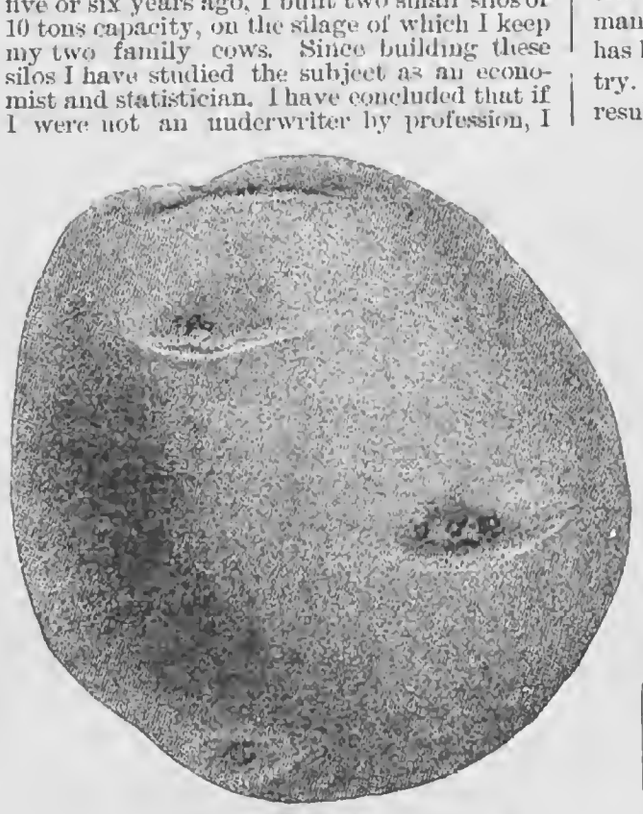
"My experience with ensilage is less favorable than that of Mr. Atkinson; practically, I find the results of silage not encouraging. As regards fattening stock, I think its effects first-rate, but for milk, it is of doubtful utility. Silage is tart and sour, and its acidity prevents the milk from keeping any length of time, say 24 to 36 hours; whereas, if cows are fed on cut fodder, corn meal and cotton-seed meal together with turnips or cabbage, all mixed and a little salt added, the milk will keep sweet fully that time, if not longer. Doubtless the flow of milk is good from cows fed on silage, and this kind of food encourages it, being a stimulant, but the quality and keeping properties e injured.

Now, would not the "sweet" silage counteract these defects and at the same time give a natural stimulation which would not injure the stock? R. H.

[The advantages of "sweet silage" have been discussed much more freely and frequently on the other side of the Atlantic than on this, and there it appears to be meeting with general approval, inasmuch as it seems to obviate many of the objections to sour silage, which has hitherto been generally fed in this country. In many cases the latter has given good results; but the enthusiasm which inspired its advocates a few years ago, has to a great extent died out, and some of the most earnest and honest of them have dropped the system. As we have frequently said, ordinary farmers will find hay, root and corn fodder the cheapest stock food. Ensilage is yet on trial; let men of ample means test the system thoroughly, and let prudent feeders act according to the results.—EDS.]



POTATOES WITHIN POTATO. Fig. 124.



LAKE GEORGE. From Nature. Fig. 121. (See page 205.)

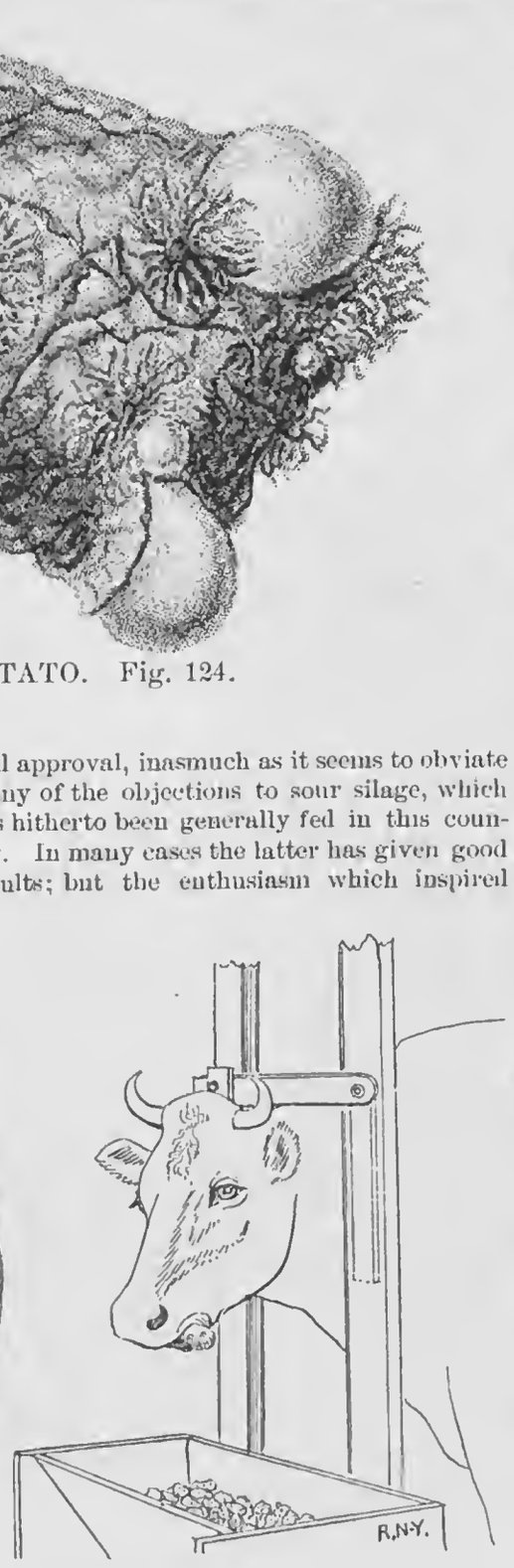


Fig. 125.

Miscellaneous Advertising.

Doctors Prescribe

Ayer's Cherry Pectoral, for three reasons:—it is perfectly safe for old or young,—can be relied upon in cases of emergency,—and possesses great curative powers.

I consider Ayer's Cherry Pectoral a medical success and a chemical triumph. I have found this medicine a powerful specific for Colds, Coughs, and Pulmonary Complaints. I use it in my own family and recommend it in my practice.—Parker Cleveland, M. D., Prof. of Chemistry and Materia Medica, Bowdoin College, Brunswick, Me.

Ayer's Cherry Pectoral is an invaluable remedy for Colds, Coughs, and all Pulmonary diseases. I use it myself and prescribe it in my practice.—A. S. Pettenger, M. D., Glen Gardner, N. J.

Ayer's Cherry Pectoral,

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Flexible Spray Hose Nozzle.
All Rubber. Indestructible. Requires no packing. Solid stream instantly changed to mist or spray, widely diffused or concentrated, by compressing soft rubber tip. Best for Gardens, Window Washing, etc. For washing carriages, will not scratch paint. By mail, post-paid, 50 cents. Trade supplied.
Hartford Rubber Mills,
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SAVE Your POSTS and use SHAW'S WIRE FENCE TIGHTENER. Can be adjusted to any wooden post; can tighten or slacken, according to climate, with an ordinary monkey wrench. Price $8 per doz. For full particulars, apply to
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Agents wanted. Patent applied for.

Are you going to build? Do your roofs leak? **Standard Roofing** is cheap, durable and fire-proof. Can be applied by any one. Sample and Circular free.
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MANILLA ROOFING!
Takes the lead; does not corrode like tin or iron, nor decay like shingles or tar compositions; easy to apply; strong and durable; at half the cost of tin. Is also a **SUBSTITUTE for PLASTER at Half the Cost. CARPETS and RUGS** of same material, double the wear of Oil Cloths. Catalogues and samples **FREE.** W. H. FAY & CO., CAMDEN, N. J.

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RURAL SPECIAL REPORTS.

Colorado.

TABLE ROCK, El Paso Co.,—From the package of Thousand-fold Rye I raised 24 pounds. The D.-M. Wheat winter-killed. The Garden Treasures did well. A few of the Flageolet Beans ripened, the rest were spoiled by frost. The White Elephant Potato is still ahead in this country—brings from five to 10 cents more per cwt. than any other, except Beauty of Hebron. The White Washington Oats yielded 54 bushels to the acre. J. E. K.

Dakota.

GLADSTONE, Stark Co., March 7.—Stark County lies about mid-way between the Missouri and Pyramid Park (Bad Lands) and is one of the finest agricultural counties in the Territory, and the best watered. Two good-sized streams—the Knife and Heart Rivers—run the entire length, and the Green River and Antelope Creek form a junction with the Heart at this village. Lignite coal is very abundant; in fact, it underlies the whole country west of the Missouri at a depth varying from five to thirty feet, and crops out along all the streams. Coal is worth, delivered in coal-sheds, $2 per ton. It burns readily in self-feeding base-burners, and in any cook stove is vastly superior to bituminous, although not so lasting. Wheat brings 62 cents; oats, 35 cents, corn 64 cents to 70 cents, on the cob; eggs, 25 cents; butter, 22 cents; potatoes, 85 cents; barley 65 cents. Diversified farming and stock raising are followed here, although farming in this country is the rule and herds are the exception. The Northern Pacific Railway runs through the center of the country and furnishes at present the only transportation. Our markets are west in the mining and stock regions of Montana. Gladstone boasts a roller flour mill built of stone, capacity 75 barrels per day, and will erect a woolen mill the coming season. Plenty of good Government land to be had for the asking, and all the fuel one wants for the digging. No straw is burned here. We feed and bed our cattle with it and return the good, rich compost to our broad acres to keep them in good trim for succeeding crops. G. S. C.

Florida.

SWITZERLAND, St. Johns Co., March 3.—In the RURAL of January 9 there is a letter from Manatee, Florida, signed J. F. B. As he says he has lived in the State 20 years, I think that he has used his eyes to very little advantage, judging from some of his statements with regard to the unsuitableness of Florida for certain kinds of fruit. It is true that tropical fruits, such as the mango, alligator pear, etc., etc., cannot be profitably grown in the State, except, possibly, in an occasional exceptionally favorable location in the extreme southeastern part; but many are proving their faith in the cocoanut by setting out thousands of trees, and they are not offering lands or trees for sale or urging others to go into the business; but the soil and climate suitable for the cocoanut are found only in a very limited territory along the Atlantic coast in the extreme south. The extreme cold of January 9 to 12 has probably put an end to many costly experiments in growing tropical fruits; but it has also shown conclusively that orange and lemon trees are not tropical fruits, and that they will stand a much greater degree of cold than has been generally supposed. The cultivation of the pineapple has been made quite profitable on the east coast of Florida, along the Indian River and in that region. It has been grown quite extensively in other parts of the State; but as it is necessary in those places to protect it from the cold during the Winter, I do not consider it as profitable as some other crops. Still, the pineapple and the banana can and should be grown for home use in almost any place where oranges do well. All that is necessary is to spend a little time and labor in protecting the trees from frost in Winter. Lemons are attracting very general attention throughout the orange belt, for as the prices are generally higher than for oranges, there is more money in them. The severe cold of the past Winter has not been equaled since February, 1835. Here, 22 miles south of Jacksonville, we can show hundreds of bearing orange trees entirely uninjured beyond the loss of their leaves. These trees are putting on their spring growth now, and are starting to the very tips of the smallest twigs. They are full of blossom buds, and give promise of a good crop this year. We can also show lemon trees from 15 to 18 feet high, from six to eight inches in diameter, only set six years, that never lost their leaves from frost until this Winter. Now they are somewhat hurt, many small limbs being killed back from six to eighteen inches. Occasionally a very tender sprout in the top, that had shot up very rapidly, was killed back for five or six feet feet. On the other hand, many of the twigs are starting into growth to the very last bud. These trees are growing in an orange grove near the river with no artificial protection whatever. Thousands of dollars were lost this Winter by the freezing of the oranges that were on the trees. But that is no real cause of discouragement—crops are lost in other States. How often has the wheat crop been destroyed by severe Winters at the North; how often are the peach buds killed by severe freezing, etc., etc., yet no one thinks of giving up the growing of wheat or the cultivation of potatoes on that account. W. C. S.

Massachusetts.

MARSHFIELD, Plymouth Co.,—I think so much of farming that I have no time to think of anything else. We find money in poultry raising. I have a goose that was hatched in July, began laying December 19, and has laid 22 eggs. I never before knew a goose to begin laying so early and to lay so many eggs before wanting to sit. C. S. P.

Michigan.

KELLOGG, Allegan Co., March 8.—This month, which is usually severe in this latitude, opened with quite severe cold weather, but as there was no wind, it has been regarded as very mild for March. There is very little snow left, and wagons have been in use for transportation for the past three weeks. Wheat, rye and clover fields were so well protected by snow that they are looking well now, and it is reported that peach buds are all right, except in a few unfavorable situations. There is plenty of forage here, both hay and grain, and consequently cattle and all kinds of farm stock are looking well. Prices rule low: Wheat, 80 to 86 cents; oats, 32 cents; corn, 35 to 40 cents; hay, $8 to $10; potatoes, 30 to 37 cents; beans, 85 to 75 cents. The weather was bad last Fall for curing beans, hence the variation in prices. Butter (dairy), 14 cents; cheese, 12½ to 15 cents; eggs, 14 cents; apples, per bushel, 25 to 36 cents; beef, dressed, per 100 pounds, $4.50 to $5.50; pork, $4.25 to $4.50. Business has been rather dull part of the time this Winter, consequently poor men with families have had to economize to make both ends meet. The potato crop last year would have been good except for the rot, which prevailed to a great extent after the crop was nearly ready to harvest. The tubers suffered worst on clayey and loamy soil, as many as seven-eighths of the entire crop having rotted in some localities. The corn crop, also, was poor on low land, owing to continued rains soon after it came up. The hay crop was good, and there has been a good demand for baled hay for shipment at from $8 to $11½ per ton. The maple sugar season has arrived and some of those having a "sugar bush" have commenced operations. Farms that 10 years ago made it a prominent industry, are now almost entirely devoid of maples, so ruthless has been the hand of destruction. H. D. E.

New York.

CLIO, GENESEE CO.—Most of the RURAL corn did well, but some was too late. Stratagem very fine. P. of W., mildewed somewhat. Flageolet Bean very prolific and better than the Lima. The Johnson Grass grew three to six feet. The Garden Treasures were indeed delightful treasures for the whole family. D. M. Wheat very prolific—got 6½ pounds which were sown and the stand is looking well. Wheat has been somewhat the damaged by the ice and cold weather since middle of Feb. Prices are: Wheat, 85 cents; oats, 32 cents; shelled corn, 50 cents; potatoes, 30 to 35 cents; butter, 14 cents; eggs, 15 cents. I heartily indorse all that has been said in praise of the RURAL, and look upon it as my Agricultural Bible. L. B.

Pennsylvania.

CARLTON, Mercer Co., Feb. 24.—The Rural Blush Potato has been worth more to me than four years' subscription to the RURAL. It has but three faults—deep eyes, flesh not quite as white as desirable, and it sometimes straggles in the hill; on the other hand, it resists drought, scab of all kinds, elater wire-worms, Colorado and other insect pests to a remarkable degree. It is also an excellent keeper, and there are few better table sorts. It is very productive, and there are very few small tubers. The cut-worms destroyed most of the corn crop; but I got at the rate of 60 bushels of ears to the acre. I am very much pleased with the Rural peas. The Flageolet Beans did well. The D. M. Wheat produced too much stalk; but is very promising. J. A. H.

SUNVILLE, VENANGO CO., March 9.—The Rural peas were very good; tomatoes and beans excellent. Garden Treasures, treasures indeed. Corn all taken by the birds. W. B.

Washington Territory.

SPRAGUE, Lincoln Co., March 1.—All the RURAL seeds were very good, except the beans,

(Continued on page 202.)

Trees, Seeds and Plants.

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Bliss's American Wonder. Best early wrinkled variety. A world-wide favorite. Very dwarf.
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N.B.—These four varieties will give peas until frost, and will require no bushing.

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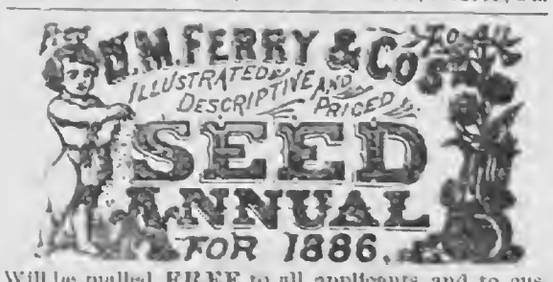

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For local and traveling Salesmen. Inclose stamp and write for terms to **E. B. RICHARDSON & CO.,**
Kanadesaga Nurseries, Geneva, N. Y.

(*Continued from page* 201.)

which didn't do very well. The Prince of Wales Peas were very prolific, with pods from five to seven inches long.(?) All the corn didn't get ripe; some stalks bore seven ears. Tomatoes and flowers excellent. W. A. D.

THE FARMER'S CLUB

ANSWERS TO CORRESPONDENTS.

[Every query must be accompanied by the name and address of the writer to insure attention. Before asking a question, please see if it is not answered in our advertising columns. Ask only a few questions at one time. Put questions on a separate piece of paper.]

POLL-EVIL; FISTULA OF THE POLL.

T. C., Carbondale, Ill.—1. A fistula on my mare is festering and running on both sides of the neck. A three-year-old mare has a fistula also; but it has not broken yet. Both animals are in good condition; what should be the treatment? 2. Another mare had sweeny last Fall; on turning her to pasture, the lameness disappeared, but the shoulder is still shrunken; what will make it fill out again. 3. What is a good condition powder for horses?

ANSWERED BY F. L. KILBORNE, B. V. S.

1. Carefully examine the recent case for any fluctuation about the poll to ascertain whether suppuration—the formation of matter or pus—has taken place. In case it has not, apply a large sponge to the swelling, and keep it constantly saturated with cold water, to which may be added vinegar and tincture of arnica. Internally give a purgative—five or six drams Barbadoes aloes—and follow by a laxative diet to keep the bowels freely open. When the inflammation has subsided and there is no longer any tenderness, tincture of iodine may be applied to reduce the swelling. If there is fluctuation, indicating that matter has already formed, an opening should be made as soon as possible to allow the escape of the pus. The treatment of the two cases will now be quite similar. With a silver probe, find the base of each and every sac, if there should prove to be more than one, and make a free incision to the base of each sac to allow the pus to readily escape as it is formed. Wash out daily with a weak solution of chloride of zinc or boracic acid—one-half dram to each quart of water—until the formation of pus ceases. Then treat as an ordinary wound until healed. If there is danger of the wound closing before the formation of pus ceases, tie in a piece of tape and allow it to remain until healing has begun, then gradually draw it out at the base as the wound heals from above. A competent veterinary surgeon should be employed to probe and open the sacs. If the disease has not reached the joint, a recovery can usually be expected, with proper treatment; but where the disease is deep-seated so that the joint becomes implicated, it is usually incurable. During the treatment it is very important that the animals should be kept indoors, fed from a high rack, and the head tied so as to keep it elevated. After healing, they should not be turned to grass or fed from a low rack for a year or longer. Avoid bad-fitting bridles or the overdraw check, and keep clear of low stables or low doorways, where the animal can bruise the poll by throwing up the head. Inquiries like 2 and 3 have been answered quite recently in the RURAL, and as our space is overcrowded, we must refer our friend to the answers.

PERIODIC OPHTHALMIA—MOON BLINDNESS.

E. A. S., Kinmundy, Ill.—1. The formation of the film over the eye of your young horse in the present case is due to the recurring attacks of periodic or specific ophthalmia, a constitutional and hereditary affection, the nature of which is not very well known. Anything that depletes the general health may develop the disease. Young horses out of condition, especially at time of teething, are most commonly attacked. The attacks are liable to recur every three or four weeks after the first until a cataract has formed on one or both eyes. An attack usually lasts about a week. 2. There is no known remedy for this disease. The most that can be done is to adopt preventive measures to ward off or prevent further attacks. When once the disease appears it is usually incurable and ends in a cataract, blindness, although a very few cases recover under an improved regimen. Give special attention to the general health and comfort of the animal, so as to bring him into prime condition. Daily exercise that does not exhaust the animal, thorough daily grooming, good feeding, and a comfortable, dry stable are all important. Wherever the disease is prevalent, avoid damp, marshy, or malarious localities. Do not breed from diseased animals as their offspring are very liable to be likewise affected. The severity of an acute attack may be partially relieved by giving a laxative—four or five drams of Barbadoes aloes—followed by one-half dram of powdered colchicum, four drams of niter and 20 drops of tincture of aconite twice or thrice daily. For an animal that is out of condition, a course of tonics will be beneficial by improving the general health. After recovering from an attack, give twice daily for a few weeks, two drams of sulphate of iron, one dram of aloes and one-half ounce each of gentian and ginger.

"HOLLOW-HORN."

H. G. C., Marietta, Ga.—1. One of my cows is subject to attacks of "hollow horn." The former owner, as is usual in such cases, bored holes in her horns, put in salt and pepper and then forced turpentine in at the roots of the horns. Shortly afterwards she recovered. The other night she came home looking bad, with her head down and to one side, as if in pain. She gave but little milk and ate nothing. By the advice of neighbors I reopened the holes in the horns. There was little discharge from one, but considerably more from the other—nearly a cupful of thick, bloody matter. I put salt and pepper into the holes and poured turpentine on the head, and she was well in a few days; though she has not given as much milk as she used to before the attack. What is the proper treatment? 2. What will prevent a sow from eating chickens? 3. A veterinary author condemns the boring of cows' horns for "hollow horn;" what does the RURAL think?

ANSWERED BY F. L. KILBORNE, B. V. S.

1. Strictly speaking, there is no such disease as "hollow-horn." It is a popular name conveniently used by "cow doctors" to indicate any disease of horned cattle, the nature of which they do not understand. When a cow is sick, they proceed to bore the horn, find it hollow and pronounce the disease "hollow horn." If they would bore the horns of a few healthy cattle they would find the disease much more prevalent than they suppose. In other words, the horns of a healthy animal are normally hollow, which fact accounts for their almost invariably finding them hollow in sick animals. No satisfactory treatment can be recommended on such general principles. The present case was most likely one of digestive disorder with some fever, the attack being brought on or hastened by exposure. A much more rational treatment would have been a moderate dose of Glauber salts, followed by niter and aconite. 2. Keeping the chickens out of the reach of the sow. 3. We fully agree with the author. Not only is it unnecessary and ridiculous, but it is oftentimes positively injurious, as we believe it was in the present case.

DEVICE FOR TRANSPLANTING STRAWBERRIES; HARDY PEARS; GROWING CLIANTHUS DAMPIERI.

P. O. M., West Bend, Wis.—1. Is there any successful machine for transplanting strawberries with balls of earth about the roots; would it pay to patent such a device? 2. Is the Anjou Pear sufficiently hardy to do well there. Flemish Beauty and Dearborn's Seedling thrive. If not, what early winter pear will? 3. For three years I have been unable to get seed of the Clianthus Dampieri to germinate; why?

ANS.—1. The transplanting of strawberries with a ball of earth is practicable only on a limited scale, and when the ground to be planted is in immediate juxtaposition with that from which the plants are to be taken. Even to this extent, however, a machine that can satisfactorily prepare the cavities to receive the plants, take up and settle them in their proper positions, without breaking the balls of earth, would be a desirable acquisition, if it were capable of rapid operation and not too expensive. 2. Our experience and observation would indicate that the Anjou Pear is fully as hardy as either the Flemish Beauty or Dearborn. Winter Nelis is decidedly superior to this in quality, though not as satisfactory in habits of growth, and possibly somewhat less hardy. 3. Clianthus Dampieri is a half-hardy shrub, a native of the desert regions of Australia, although in our climate it usually is treated as an annual. The seeds, as well as the young plants, are difficult to manage, even by an expert, and, in the climate of Wisconsin, should not be planted in the open ground until all fear of alternations of cold are past—say toward the middle of June. Even then, without special care in watering the young plants, they are very liable to "damp off," as propagators phrase it. The best method we know of avoiding this danger is to fill the pot in which the seeds are to be planted with rich sandy loam, and in its center insert a smaller pot, without a bottom, and fill this last with similar soil, about an inch higher than that in the outer pot. Water with care—not excessively—and in the outer pot only. When the earliest growth has become matured, the difficulty of management has mainly ceased.

THE NORTHERN BOUNDARY OF THE U. S.

R. H. S., Tiffin, Ohio.—There is little danger that any one wishing to settle in far northern Dakota will by mistake find himself in the Dominion. The boundary is marked plainly and continuously by stone cairns 7½x8 feet; mounds, 7x14 feet; iron pillars, seven feet high, eight inches square at the bottom and four at the top, and timber posts five feet high and eight inches square. There are 385 of these marks between the Lake of the Woods and the base of the Rocky Mountains. East and west of the Red River, the boundary is marked by cast-iron pillars at mile intervals. "American" and "British" pillars alternate. On one side of each post is "Convention of London;" on the other "October 20, 1818." Where lakes are crossed, stone heaps have been built projecting several feet above water. In forests the line was first marked by felling the timber a rod wide and clearing away the underbrush; where this line has since been obliterated, posts have taken its place.

BUILDING A CELLAR WALL.

D. C. S., Jasper.—In building a barn basement, where there is difficulty in making the wall stand up well, we can see no use in tapering ("battering") a wall on either side. In digging for the basement, excavate two feet more each way than the barn is to be; build the wall from one-and-a-half to two feet thick, according to the hight and size of barn to be placed on top of it, and leave a space of one foot on all sides next the dirt; fill this space with loose stones, so that no soil will touch the wall, and if you will provide good drainage to the foundation, nothing will ever disturb the wall. It is dampness and frost that ruin walls.

CHEST FOUNDER IN HORSES.

H. H., Stamford, New York.—As a remedy for chest founder in a horse, first make sure that the difficulty is in the chest and not in the feet. At the outset give four or five drams of Barbadoes aloes if the bowels are not already purged, and thrice daily 25 drops of tincture of aconite and one-half ounce of niter. Clothe warmly with blankets, and keep in a warm, airy stable. The cause of the difficulty will govern the general treatment of the animal, which should be such as will best relieve that particular case.

Miscellaneous.

"Subscriber," (no address).—1. For two years my mare has kept quite poor though liberally fed with carrots, oats and Timothy hay. While eating carrots and oats, she frequently chokes and then draws up her back and squeals once every two or three minutes. She then coughs up slimy matter with her feed. She doesn't digest her grain, though her appetite is good. She has had four colts in as many years, but is not with foal now; do her teeth need filing? 2. Is the Manshury Barley four or six-rowed?

ANS.—1. If any of the teeth are overgrown so as to project beyond the wearing or grinding surface, they should be filed. If the mare chokes only on the oats and carrots, it is, most likely, due to her habit of eating. Feed the oats in a box in which there are rocks as large as one or both closed fists. This will prevent the mare from eating the oats so rapidly. Also try feeding the carrots in some other condition. If the difficulty continues, there is something wrong in the mouth or throat, and the services of a veterinary surgeon may be required. Internally give five or six drams of Barbadoes aloes to open the bowels, and follow twice daily with two drams each of niter and sulphate of iron, one-half ounce each of powdered gentian and ginger, and one-half dram of aloes. 2. Six-rowed.

H. O. N., Weeks, M. T.—Three years since I lost four horses. They showed no signs of sickness, were in good health and flesh, with smooth hair and bright eyes, ate and looked well; but they would choke and fall down after the least exertion. A post-mortem examination showed that their lungs were almost entirely gone or solidified. I thoroughly cleaned the stable and bought a pair of mules, and last Fall, thinking I had got rid of all germs of the disease, I bought a pair of young mares. Since then both mules have died, though they showed no sign of disease; the mares are healthy still; what was the matter?

ANS.—We cannot tell from the symptoms given what caused the death of your animals, and consequently cannot suggest a course to pursue in regard to the cure or prevention.

J. W. D., Washington, Can.—1. A few days ago my calf began to run about as if stung by something, carrying its tail over its back; it would stop suddenly and try to gnaw itself all over. It drinks milk but doesn't take anything else; what ails it? 2. Which is the better way to feed wheat bran and corn meal mixed—dry or wet?

ANS.—1. The symptoms are too brief to say definitely. Probably there is either some nervous disorder or disease of the skin causing extreme irritation. Not knowing the nature of the difficulty, we cannot recommend a course of treatment. 2. It depends upon what stock you are feeding and also, to some extent, upon the diet of the animals. In general, for horses we prefer it moistened; for cattle or sheep, dry; for swine, wet.

A. B. H., Brooklyn, N. Y.—1. Some cattle in Massachusetts ate Polypod or Marsh Fern with their hay. They swelled up and moved round and round, as was discovered by the prints of their hoofs in the ground; what ailed them? 2. What are Scuppernong Grapes?

ANS.—1. There is no Polypod in Massachusetts that can be called a Marsh Fern. Of the other ferns there are several species that grow on marshy lands, but none, so far as we know, that has received the name of Marsh Fern. If the plant is a true fern the popular name thus given it must be purely local. Without knowing the plant, we can only recommend that it be avoided in the fodder. 2. Scuppernong Grapes are cultivated varieties of the Vitis vulpina, the Muscadine or Southern Fox-grape.

E. B. B., Oneida, N. Y.—My four-months-old sow pig is losing the use of her right fore-leg and foot. She makes motions as if to walk, but only touches the ground; sometimes she tries to get around on her knees. She is worst in the morning. The other legs appear to be affected of late; what ails her?

ANS.—A personal examination would be necessary to give a satisfactory answer. We would suggest that you should call a competent veterinary surgeon to see the case.

J. D. T., Brookside, N. J.—My cow has good care and feed, and gives six quarts of milk a day; but while there is a fine lot of yellow butter in the churn, it cannot be gathered; why?

ANS.—Perhaps your churn is in a cold place and the butter gets too cold to gather by the time it comes. Most dairymen would not worry about gathering the butter. They would take it out of the butter-milk, wash it, salt it and pack it together.

W. P., Newtonville, Mass.—My cow's milk has a bitter taste so that we can't use it. She is all right, eats well and is in good condition, but she comes in in April: what's the trouble?

ANS.—It is hard to answer such conundrums. She may get some bitter weeds in her hay, or her nearness to calving time may have some effect. The latter will make milk salty, and perhaps bitter. We should dry her off.

C. H., Mt. Pleasant, Iowa.—My last spring calves are troubled with spots, like warts. They spread and the scab and hairs come off. The hair of others falls off from about the eyes; what's the matter?

ANS.—Common ring-worm. See "Ring-worm in a Colt" in the F. C. of Jan. 30, for treatment.

R. D. F., Baltimore, Md.—There are several "Floral Dictionaries with apposite quotations from the poets:" but all of them are more or less disappointing. Miss C. H. Waterman published, in 1857, "Floral Lexicon—Language of Flowers," and H. G. Adams, in 1868, gave us "Language and Poetry of Flowers." Then there are Mrs. S. C. Carter's "Lexicon of Ladies' Names, with Floral Emblems," 1865; T. Miller's "Poetical Language of Flowers," 1855; L. Hooper's "Lady's Book of Flowers and Poetry," 1864, and some others not so well known.

M. A. B., Niagara, Ontario.—1. Yes, the Brighton Grape is quite suitable for a vineyard where it succeeds. It is a valuable grape. 2. Worden is as good as Concord and many think a few days earlier. It is not earlier at the Rural Grounds thus far. Moore's Early is at least one week earlier than Concord. The bunch is smaller, berry larger—the same in quality.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING SATURDAY, March 20, 1886.

C. H. R.—F. E. S.—J. H. T.—T. H. H.—P. H. J.—T. T. H.—W. C. S.—R. H.—W. P., thanks.—T. D. C.—J. H.—E. J. W.—L. F. M.—J. H., Jr.—W. H. M.—A. W.—T. D. C.—W. W.—C. H. W.—M. E. P. W.—C. H. W.—F. H. H—J. E. H.—I. A. S.—J. D.—G. W. D.—E. D.—R. L.—C. A. C.—C. B. M.—G. L.—M. A. P.—H. H.—C. A. G.—A. R. C.—P. B. M.—E. J. W.—C. P.—J. J. S.—W. F. R.—P. H. B.—C. B.—J. H. S.—L. R.—W. A. J.—L. S. R.—B. H. F.—S. A. H.—B—A. M—A. F. J.—R. M. L.—R. E. S.—G. H. W. P.—C. E. P., thanks.—A. W.—N. P. G.—R. F. B.—P. G. B.—F. S. N.—A. B. A.—F. J.—A. C. K.—J. F. K.—L. A. P.—G. B.—J. G.—W. H.—T. D. C.—F. L. K.—E. F. D. P. D.—J. A. C.—S. S. B.—J. C. B.—J. O. W.—J. W. T.—E. M.—A. B. L. O. H.—T. H. Y., thanks.—A. M.—H. T. F. H. R.—J. H. L.—H. G. F.—W. H. L.—R. P. McA.—G. E.—W. W.—C. L.—L. J. T.—G. C. W., thanks.—W. J.—W. J. B.—J. T., thanks.—W. D. S.—P.—J. B.—J. M. S.—W. G.—F. W. W.—H. H. C.—C. E. P., many thanks.—J. F. B., thanks.—J. E. G.—P. H. S.—M. A. G.—W. W. T.—J. T.—W. B. N.—I. R. M.—H.—E. A. S.—S. S.

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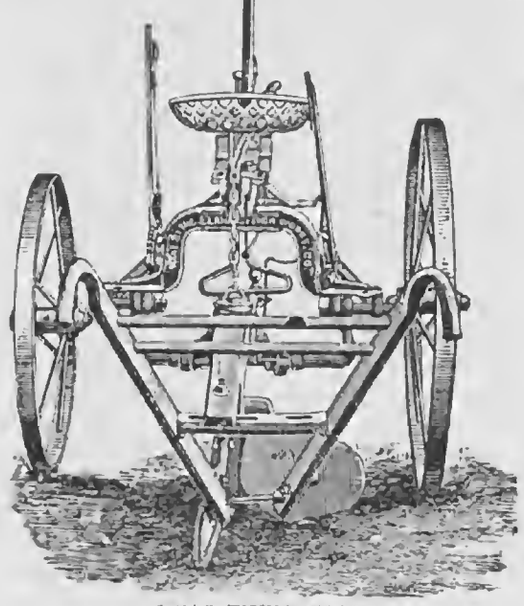

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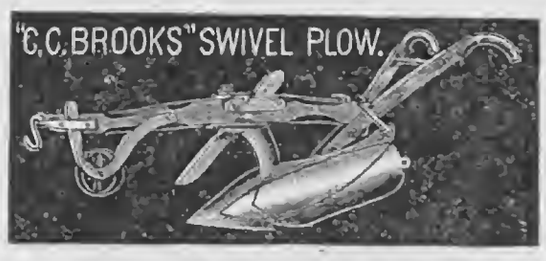

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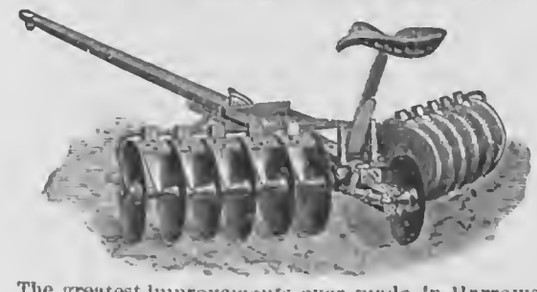

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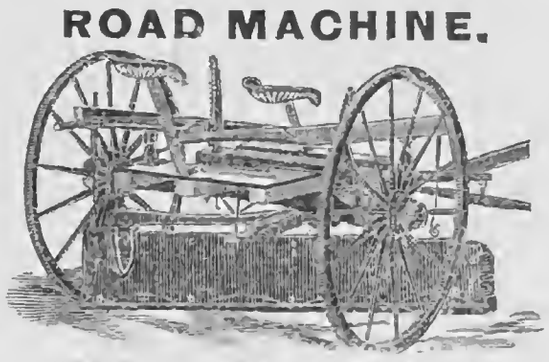

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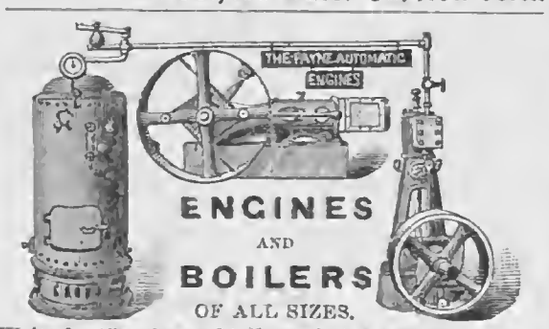

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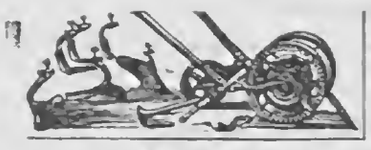

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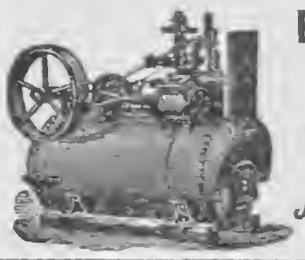

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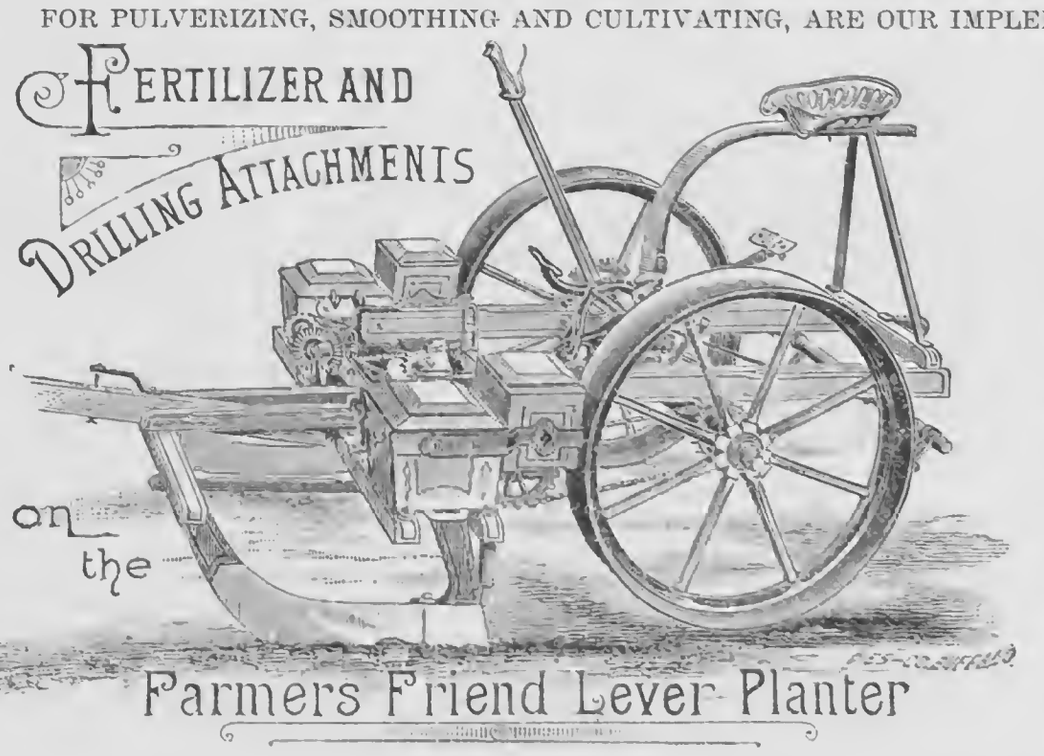

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No. 34 Park Row, New York.

SATURDAY, MARCH 27, 1886.

SECOND POTATO SPECIAL—20 pages.

If the number on your address label is 1887, your subscription expires with this number; if 1888, next week; 1889, in two weeks, etc.

The present Potato Special should be read as a part of our *first* Potato Special, since it is undesirable, for obvious reasons, to repeat what has so lately been published.

Mr. Peter B. Mead tells us of a farmer who raised potatoes for 42 consecutive years on the same land. The land yielded well and the potatoes were sound to the last. The potato rot had not then appeared.

Readers who are willing to interest themselves in extending the Rural's circulation should not fail to read our announcement on page 208, the last of the Supplement.

If the lady readers of the R. N.-Y. were aware how easy it is to raise roses from seed, we dare say there would be more seedling roses in their gardens. If one has no other facilities, the seeds may be kept until Spring and then planted in well prepared beds in the open garden. Try it, friends.

How much less does a bushel of deep-eyed potatoes weigh than a bushel with the eyes on the surface or *not* deeply sunken? Let us take a bushel of each and *peel* them for boiling, and then weigh each. We fancy that the result would determine our readers never again to raise deep-eyed potatoes if they could raise shallow-eyed potatoes as desirable in other respects.

Moore's Early and Cottage Grapes the Rural recommends for the earliest blacks. The vines are hardy and healthy. The berries of the latter are better than the Concord; those of the former larger in size and as good. The Cottage at the Rural Grounds follows Moore's by about a week. For a large, showy grape we are anticipating a good deal from the comparatively untried Eaton.

Ten years of experimenting with potatoes at the Rural Grounds have taught us that the results of the experiments of one season must not be accepted as trustworthy guides for the next. We do not think that any farmer could even learn at what depth he had best plant his potatoes in less than 10 years' consecutive trials, and he would then need to plant the same variety of potato and know in advance whether the season was to be wet or dry.

Let us allow that there are 230 good-sized potatoes to a bushel. If we plant a whole potato one foot apart in drills three feet apart, we have 14,520 hills in an acre, requiring, in round numbers, 62 bushels. If worth 50 cents per bushel, the seed will cost about $30. Now, if we cut these potatoes in five pieces, which would give more than one eye to a piece, about 12 bushels would be required for an acre—a saving of $24 per acre in the cost of seed. Careful experiments made at the Rural Ex. Grounds have shown that two-eye pieces, from potatoes of rather large size, will yield as well as if whole potatoes are used for seed. Experiments made by others, however, tell a different story.

A few weeks ago we bought two packets of chrysanthemum seeds at 50 cents each. They were labeled as being seeds from the choicest new varieties. The contents of either little envelope could easily be held on the "point of a penknife," as we say. "Rather high-priced seeds" thought the writer, as he sifted them over the nicely prepared soil of a flower pot as he would have sifted so much dust. In a few days—less than a week—no less than 50 seeds in each pot sprouted, and the little plants are thriving nicely. One must expect to pay high prices for choice, fresh seeds, and he should be well contented if he gets what he buys. But to pay high prices for trash maketh the heart sad. We presume that these seedlings will bloom next Fall.

Potato growers in Michigan have met with serious loss in consequence of the "red streak" in the Late Rose. Probably $75,000 would not cover this loss. In some localities, farmers are inclined to regard the report of losses as a "scare" intended to affect the market. The disease is undoubtedly genuine, however. We are reliably informed that there are thousands of bushels of potatoes in the cellars of West Michigan of no value whatever for eating purposes, while many even question the safety of feeding them to stock. Various reasons are given as to the cause of the trouble. Some farmers hold that it was simply the result of the very wet season last year; others assert that the tubers were stunted during the drier part of the season, and that the late rains induced a second growth. Those who have most carefully studied the matter state positively that the variety has "run out." This result has been brought about by continued planting. Potato growers who suffered last year will do well to try other varieties. We consider this to be the best way out of the difficulty.

Always desiring to be on the conservative side in speaking of the seeds or plants which the R. N.-Y. has introduced until their real value has been made known by the thousands of reports with which our readers kindly favor us, we have scarcely expressed any opinion whatever of the Rural Blush Potato since its introduction (three years ago), except to say that generally it "straggled in the hill" and was sometimes "hollow-hearted." Now, we eat samples of at least 80 different kinds of potatoes during the year, and we now wish to make the bold remark that the Blush is in quality as good as any we have ever eaten at this season. It is sweet, nutty, mealy—as much so as any of the old Peachblows at their best. It is certainly a good keeper, and, as the reports of our subscribers show, highly productive. Many seedsmen now offer this good potato for sale, and our newer subscribers might do well to plant it in a small way.

Mr. Casper Hiller is considered one of the most successful farmers of Lancaster County, Pa. Mr. H. M. Engle writes that he invariably gets the largest yields from large whole tubers. But when it is considered that at least 30 bushels of such seed are required for an acre, and that a great proportion of the increase is in small, unmarketable potatoes, he finds but little profit in using such seed. He agrees with the R. N.-Y. that the two-eye cuttings are the best. He advocates the Rural's trench-mulch system with the modification of spreading the fertilizer nearer the surface, or, in other words, covering the pieces with three inches of soil rather than less before sowing the fertilizer. In this case he thinks the fertilizer would be near enough the surface to feed upon the upper roots, while the leaching down of the manure would feed the lower. Mr. Hiller believes that commercial fertilizers are best for potatoes, giving a larger and cleaner crop, and being cheaper than farm manure. He uses nine hundredweight of dissolved S. C. rock, seven of kainit and four of nitrate of soda, costing $25 per ton. Unless salt and magnesia are deemed valuable additions, we should prefer potash in the form of sulphate, or, perhaps, sulphate and muriate, with a smaller proportion of the latter.

"One should never be ashamed to acknowledge that he has been in the wrong; for it is but saying, in other words, that he is wiser to-day than he was yesterday." Senator Wilson, of Iowa, is wiser to-day than he was when he introduced that bill for doubling the postage on plants, cions, cuttings, seeds, etc., and, strange phenomenon in a Congressman! he is not ashamed to acknowledge that he is. The Legislature of his own State has passed a joint resolution protesting against the proposed increase, and requesting the Iowa Senators (Wilson and Allison) and Representatives in Congress "to use all proper means to prevent such legislation." A "joint resolution" by the Legislature of a State is a marvelous teacher of wisdom to the Senators of that State, whose reelection will depend on the good-will of that Legislature. Wisdom has also been swept in upon the Senator by the storm—hurricane—of protest and denunciation from "all sorts and conditions of men" in all parts of the country. He has, therefore, changed the provisions of the bill so as to decrease the rate on plants, seeds, etc., while increasing that on other items of fourth-class matter. We are thankful for this tardy concession; although, in view of the hot indignation of the public at the proposed legislation, all danger that the original bill would pass through Congress, had vanished before the Senator's lately acquired wisdom had induced him to alter it.

CHECKS ON FRAUD IN FERTILIZERS.

In a recent editorial we remarked upon the value of the analyses of chemical fertilizers made by the stations. It was stated that these analyses determine the *strength* of a fertilizer, but not necessarily the *value* of the strength. Of two samples that analyze just alike, one might be worth agriculturally twice as much as the other. Why then, we asked, do not the makers of inferior grades avail themselves of this margin to counterfeit the first-class article more than they do? There are several answers to this question. In the first place, many low-grade materials are bulky and can not be so combined as to show a high percentage of plant ingredients. Again, while unscrupulous manufacturers do avail themselves of the cheapest sources of plant-food supply, yet the cost of selling inferior goods, through dealers who look to large profits, is very heavy. Their goods need pushing, while the first-class goods sell themselves. The general expenses of manufacture, freight, storage, etc., are perhaps as great for the poorest as for the best and highest grade fertilizers. The manufacturers of doubtful or fraudulent fertilizers are really in the hands of the dealers or sellers, who to sell them are obliged to put down the price, to give long credits and offer every inducement to purchasers.

SPECIAL.

Those who, having applied for the Rural's present seed distribution prior to March 10th, have not yet received it, will kindly notify us by postal at once.

The seed packages for Canada subscribers have been expressed, to be mailed there and all should have received them by this time.

RAISING CALVES UNDER GLASS.

Is the idea absurd? Do we not start hardy plants under glass? Are they less hardy than those planted later? Is there so much difference between plant life and animal life that what will benefit one cannot be applied in growing the other? We recently saw some fine-looking calves that were being literally "raised under glass." The south side of a shed had been filled with ordinary sash. The calves were placed in this shed when two days old and given the benefit of a daily sun-bath. They were in splendid condition, fat and smooth and contented. We are told that calves raised in this way are perfectly hardy. They are certainly larger and of better shape than those tied in a dark stall or turned into a cold yard. All young animals should be made comfortable. It is a mistake to think that by exposure we can harden a tender and growing animal. Some parents pursue this course with their children. The little people are thinly clad and purposely sent out into the cold, in the hope that they will become tough. This system has produced many nervous and shattered men and women. As to the value of sunshine as an element of health, argument is not necessary. A warm sun-bath induces the hens to lay and gives evident comfort to the cow and horse. Without it health is impossible; with it medicine is hardly necessary.

EASTWARD RATES ON WESTERN MEAT.

The schedule of transportation rates on live stock and dressed meats, which went into force on the trunk-line railroads on the first of this month, appears to give satisfaction to nobody, and is to be "reconsidered" by the railroad "pool." All the railroads appear dissatisfied with it, except the Pennsylvania, which gets an undue share of the traffic, the Grand Trunk being especially discontented with it. The dressed-beef shippers have prepared for the Courts a "strong case" against the tariff; while the live stock shippers are preparing a case on the ground of unjust discrimination in favor of their opponents. The public have come to the conclusion that it is impossible at this late date, through any manipulation of rates, to change the course of trade in meat from the West to the East. For six years the movement has been steadily against the live stock shippers, as shown by the following table of relative shipments east:

	Actual tons.					
	1880.	1881.	1882.	1883.	1884.	1885.
Cattle	416,205	433,600	383,660	372,214	310,410	281,022
Dressed beef	30,705	43,774	65,775	149,640	184,993	231,634

Shipments of cattle from the West to the New England States, outside of Boston, have nearly ceased; while in the "Hub" itself, the receipts of dressed beef last year nearly equaled those of cattle. In New York, outside of this city, the dressed beef trade has shut nearly all the western live cattle out of the markets. Although this city was the last territory invaded by the dressed-beef men, the trade is rapidly increasing. With regard to the supply of meat from the West, the trade in New Jersey and Delaware is nearly all in the hands of the dressed-beef men. Just as Western wheat is now turned into flour at Minneapolis, so Western live stock must be turned into meat near the sources of supply. At present Chicago almost monopolizes the business; but there is no doubt whatever that points further west and south—nearer the great stock ranges—will ere long become local centers of the trade. The movement has already acquired no small consequence in Dakota, Montana, Nebraska and Texas, and there as well as in all the other great cattle-raising States and Territories, the business is sure to multiply and increase rapidly in importance.

BREVITIES.

First-class seed potatoes scarce and high with a lively demand.

Plant Sweet Peas. There are many new and beautiful varieties.

One of the greenest evergreen trees at the Rural Grounds during the Winter is Nordmann's Fir.

March 19, we sowed several small trial lots of so-called new oats. We have never as yet sown oats too early.

If we were to plant another hedge we should select the different colored varieties of the Japan Quince for that purpose.

After 12 years' experience with the Bird Cherry (Prunus padus) we have discarded it as unworthy of a place in ornamental grounds.

A fortune is patiently waiting the man who shall invent a potato digger that will work as satisfactorily as do some of our potato planters.

"I can see no philosophical reason for striving to raise the roots of any crop above the surface of the ground under ordinary circumstances, and my garden experience with all crops is opposed to the practice." See E. J. Brownell's article elsewhere.

There is a present for everyone of our subscribers who chooses to work for the R. N.-Y. in the way of raising clubs. Read the last page of the supplement. The *regular* premium-list as well as the $3,300 list of gift prizes and the Rural posters will be mailed free to all who apply for them.

Don't prune Forsythias, Japan quinces, lilacs, viburnums, thorns, Judas trees, weigelas, etc., in the Winter or Spring, unless you would deprive yourself of just so many flowers as the wood cut off would bear. As we have often advised our readers such shrubs should be pruned, if at all, as soon as they have bloomed.

Those who are interested in the potato reports from the Rural Ex. Grounds, will by them be enabled to judge somewhat as to which of the newer varieties it is well to try. The following kinds may be specially mentioned as worthy of trial: White Star, Empire State, Late Beauty of Hebron or White Elephant (they are *very* nearly alike), Rural Blush, Green Mountain—all for later crops—Early Maine, Pearl of Savoy, Thorburn and Beauty of Hebron for early.

By a misprint in the last report of the Connecticut Agricultural Experiment Station, the potash of kainit is quoted at wholesale in December of 1884 at less than one cent (.82) a pound. It should have been 2.82. But kainit at wholesale means the article in bulk on board of the vessels importing it. To this should be added, not only the bags and the cost of bagging, but the cost of lighterage, receiving and storing, cartage to point of shipment, etc., all of which items cost just as much in low-grade as in high-grade fertilizers. Figuring upon this basis, it appears that the cost of the actual potash in kainit during 1884 averaged somewhat higher than the potash in high-grade muriate.

The Cherokee Strip Live Stock Association procured a lease of the entire Strip from the Cherokees for $100,000 a year, and then, reserving some for their own use, sublet the rest for $500,000,, thus securing free grazing for their own stock and pocketing $400,000 a year by the job. Why are poor homesteaders excluded from this region or driven out at the point of the bayonet, while foreign and domestic cattle syndicates and kings are allowed to occupy it in violation of law; for it is a well settled fact that Indians cannot legally grant leases of their lands to white men, without the written consent of the Department of the Interior? Why was the President's proclamation expelling the cattle barons from the Indian Territory confined to the Cheyenne and Arapahoe Reservations? Was it because influential Senators and Representatives were pecuniarly interested in the leases of other parts of the Territory?

SECOND POTATO SPECIAL

OF THE

Rural New-Yorker.

CONTINUED FROM PAGE 200.

POTATO EXPERIMENTS AT THE RURAL EXPERIMENT GROUNDS.

O. K. MAMMOTH on *poor, light soil* yielded as follows:

	Bushels.
With no fertilizer—rate of	191.54
" 200 lbs. Lister's Fertilizer, per acre	252.04
" 600 " " " " "	483.54

WHITE STAR, under the same coudition of soil, etc.:

	Bushels.
With no fertilizer—rate of	231.88
" 300 lbs. Mapes's Potato Fertilizer	376.27
" 600 " " " "	352.88
" 1200 " " " "	231.80
" 300 " Lister's " "	332.71
" 600 " " " "	393.21
" 1200 " " " "	312.50

Single strong eyes gave a yield at the rate of 171.45 bushels; two strong eyes, 252 bushels; three stroug eyes 292.50; four strong eyes 322.86.

Two-eyed pieces of Queen of the Valley planted iu a spade-wide trench four inches deep, covered lightly with soil, the furrow nearly filled with cut straw with the fertilizer placed on the straw, yielded at the rate of 169.40 bushels to the acre. The same sized pieces planted under alternate layers of soil and hen manure, yielded at the rate of 405.83 bushels per acre.

With salt at the rate of 40 bushels per acre spread on the soil, the seed pieces rotted in the ground.

Two-eyed pieces of Peerless were first covered with soil lightly, then with salt at the rate of 15 bushels per acre, then with stable manure, theu with hen manure, at the rate of 30 bushels per acre, and finally with unleached ashes at the rate of 15 bushels. It was desired to learn (1) whether a surfeit of manure would increase the yield, and (2) whether the salt would prevent the depredations of wire-worms. The yield though at the rate of 226.83 bushels, was yet smaller than the yield of the same number of pieces when fertilized with stable manure alone. They were badly eaten by the wire-worms.

Potatoes tested in a rich soil, and shaded after 12 M., yielded at the rate of 390.30 bushels. The same variety, under the same conditions of culture, shaded until 2 P. M., yielded at the rate of 520.30 bushels. The afternoon sun, in this experiment, gave more potatoes of a smaller size.

It is more economical to mix Paris-greeu with plaster than with water. The water mixture is never perfect. A table-spoonful of the plaster will be needed to render a pailful of water effective, while the same quantity thoroughly mixed, will do the work for two pailfuls of plaster. Much of the water mixture falls to the ground and is lost. What falls upon the plant collects upon the ceuter of the leaves so that the bugs can eat the edges safely. The poisoned plaster settles upon all parts of the leaves, and the bugs are killed with comparatively little injury to the vines.

It will be hard to improve upon Paris-green as an insecticide. When properly applied it need not injure the leaves in the smallest degree. Mix on an unused floor, using an iron rake. Buy pure Paris-green, aud use enough to impart the first tint of green to the plaster.

London-purple is a powerful insecticide, but we find that it will not bear auything like so much extension as Paris-green. If used too strong, the leaves are at once scorched.

It does not pay to try and pick off the first potato beetles in the hope of saving work later on. If all the parent beetles could be destroyed, there would be no grubs, but at the time of picking, a large proportion of the beetles will be concealed under the ground, or be creeping about from place to place, so that it is impossible to destroy them all. Whenever this work has been attempted, we have still been driven to the use of Paris-green as in previous years, so that the work is thrown away.

A good-sized Peerless Potato was peeled so that but one strong eye was left at the middle with a narrow ring of skin about it. The design was to plant a single strong eye with the whole potato as a seed piece. The yield in rich soil was at rate of 806.66 bushels per acre. The same kind of potato cut to a single eye, at one end, with a narrow cylindrical piece running through the potato, cultivated in the same way, yielded at the rate of 211.75 bushels.

The quantity of flesh that should go with each seed piece is, theoretically, that which, without unnecessary waste, will support the eyes until, by the growth of roots, support from the flesh is no longer required. Repeated experiments alone can determine how much of seed nutriment may be needed. Difference in sorts or seasous, causing rapid or slower growth, must be taken into account in preparing seed.

On page 682 of the RURAL for 1884 will be found an elaborated statement of experiments with different fertilizers on potatoes in a "worn-out," saudy, loam soil. Twenty-seven different single fertilizers or combinations were used. The best yield was obtained with a mixture of 500 pounds of Mapes's potato manure and 50 pounds of kainit per acre with hay mulch. Ten tons of old farm manure gave fewer potatoes than 800 pounds of potato fertilizer, and a larger number were of marketable size.

At the rate of 40 bushels of uuleached ashes yielded 184 potatoes with 78 marketable, while at the rate of 55 bushels of heu manure per acre yielded 347 potatoes with only 47 marketable. Nitrate of soda, sulphate of ammonia, hen manure, coal ashes and ground boue gave the smallest percentage of marketable potatoes. Potash alone did no good. Dissolved burnt boue, which furuishes phosphoric acid only, did no good. Nitrogen increased the growth of the vines, which for want of potash and phosphoric acid iu the soil, gave no increase of tubers. Complete fertilizers in every case gave an increase of crop.

If you do not kuow what the potato land needs, apply complete fertilizers till you find out. A tou of potash might be spread upon the land without any result. Plants, like humau beings, need a complete food. On some soils a single element will make the food complete, while in others several must be applied. It does not pay to experiment upon the whole piece with a single element.

Barn manure, aside from its mechanical effects, is the same as the concentrated fertilizers except that it is less soluble. If we could burn the barnyard manure and preserve its nitrogen we should have what we apply as a chemical fertilizer.

Pieces cut from the seed end yielded at the rate of 118.96 per acre. Pieces from stem end with similar conditions of soil and cultivation, yielded at the rate of 164.20. Seed-end pieces appear above the ground first, but there is little difference in the time of maturity.

Drought aud lack of available food are the two great enemies of great yields of potatoes. The latter can be supplied by fertilizers. We cannot control the seasons. By means of mulching, we cau conserve moisture to be used by the plant duriug the dry season. It is evident that the tuber takes no part in the nourishment of the plant, but that it must be nourished by the plant and its roots. The tuber is so largely made up of water that any lack of supply checks the growth materially.

Experiment Grounds of the Rural New-Yorker.

TESTS OF NEW VARIETIES OF POTATOES CONTINUED.

SOIL, CULTURE, ETC.

SUBSCRIBERS should understand that these tests are made in a rich, moist, garden soil. The crop never suffers seriously either from drought or too much wet, as the land is well drained. Not only has farm manure been liberally supplied, but fertilizers of every kind have been used in abundance. Potatoes have been raised on this plot for six consecutive years. Trenches are dug one foot wide and six inches deep, and three feet apart. Two inches of soil are raked back in the trenches, and the seed pieces (two strong eyes each) are placed one foot apart. Two inches of soil are then raked over them, and the fertilizer is strewn evenly at the rate of about 1,000 pounds to the acre. The rest of the soil is then returned to the trenches as loosely as possible. The cultivation is then effected by hand cultivators, and hilling up is studiously avoided.

CHARLES DOWNING. Received from O. H. Alexander, of Charlotte, Vermont. Planted April 15; dug August 4. Four pieces yielded 44 potatoes, 36 marketable. None very small. Resembles Beauty of Hebron, except it may be a little earlier. Weight seven pounds. Best five weighed one pound seven ounces. This per acre would be 423.50 bushels. The cut of the Lake George Potato serves for this in every way.

LAKE GEORGE. Also from Mr. Alexander. Planted April 20; dug in early August. It is earlier than Early Rose—perhaps one of the earliest potatoes we have ever tested. Five seed pieces yielded 51 tubers, of which 39 were of rather small marketable size. Weight 7¼ pounds. Five largest weighed one-and-a-half pound, an average of 8¼ to a hill. This yield per acre would be 302.50 bushels. Eaten when dug. Flesh not so white as E. Rose; quality inferior. See Fig. 121 (p. 199).

GREAT EASTERN (Rand) from Thorburn & Co. Planted April 15. Late. Six seed pieces planted, which yielded 10 pounds of potatoes, 34 in number, of which 28 were marketable. Yield per acre at the rate of 403.33 bushels. Buff skin; eyes rather deep; shape variable. Eaten Dec. 1st. This seems to be of the Peachblow class, the quality of which is never good as raised in this soil.

WHITE LILY, renamed Early Standard, from George Nigh, of Piqua, Ohio, was accidentally mixed with others when dug. He says it is a cross between White Star and Beauty of Hebron, and 10 or 20 days earlier than any other, handsomer, a greater yielder, and equal if not superior in quality to any other potato grown in the world. Rather important claims certainly.

MURRAY'S GOLD FLAKE, from William Murray, Mount Gilead, Morrow County, Ohio, who says: "This is supposed to be a sport of the Mammoth Pearl. It was found among a lot while digging, the Fall of 1883. Its peculiar color, good shape and smoothness attracted my attention and I carefully preserved and planted them the Spring of 1884. They are as good as any of the much talked-of new kinds."

Six seed pieces were planted April 20, and yielded, August 15, 43 tubers, weighing 12 pounds, of which 29 were marketable. The best five weighed three pounds three ounces. The shape is broad, short, somewhat roundish, some flattened. Fig. 120 (page 197), presents the shape as nearly as we could determine it. Eyes not deep, but large. Skin of a russet or dull yellowish color. Distinct in appearance. The yield would be at the rate of 510.66 bushels to the acre. Eaten November 18. Flesh nearly white—quality not of the best as raised in this soil.

ROSE'S BEAUTY OF BEAUTIES.—From A. Rose (Peun Yan, N. Y.), who writes: "It is a seedling of the Peachblow." Nine seed pieces were planted April 20. It is a late potato. The yield was 16 pounds, 52 tubers, of which 37 were marketable. The best five weighed 3½ pounds. This yield would be at the rate of 428.50 bushels per acre. Yellow-buff skin; eyes medium in number, a trifle deep. Eaten November 3. Flesh yellow-white, soggy. Our illustratiou (Fig. 123, p. 197), shows the typical shape.

VERMONT FAVORITE, from O. H. Alexander, Charlotte, Vermont. Five pieces were planted April 21. Late. Yield 16¼ pounds—45 tubers, 29 marketable. Best five weighed four pounds eight ounces. The yield is at the rate of 786.50 bushels per acre. A chunky potato, usually smaller at one end and truncate at the other, as shown at Fig. 122 (p. 197). Eyes medium as to number and depression. A large, coarse potato. Eaten October 28. Wet and heavy.

POTATO FIGURES. We give below the potato production in the United States for the 14 years, from 1871 to 1884 inclusive. The largest average yield was 111 bushels in 1875. In this year the price averaged but 37 cents, while in 1881, when the average was but 53 bushels, the price rose to 91 cents. The average yield for the 14 years was 93 bushels, and the average price 49 cents, making the average product per acre for this crop $45.51. The average value of the corn crop for the same period, was, in round numbers, $12, and of wheat $13 per acre.

	Acres.	Bushels.	Value.
1871,	1,220,912	120,416,100	$72,249,660
1872,	1,331,331	113,516,000	68,109,600
1873,	1,295,138	100,089,000	74,249,660
1874,	1,310,041	105,981,000	72,067,080
1875,	1,510,041	166,877,000	65,082,030
1876,	1,741,983	124,827,000	93,334,000
1877,	1,792,287	170,092,000	76,541,400
1878,	1,776,000	124,126,650	73,234,723
1879,	1,839,800	182,626,400	79,914,736
1880,	1,842,510	167,659,570	80,476,593
1881,	2,041,670	109,145,494	99,322,399
1882,	2,171,636	170,972,500	95,804,844
1883,	2,289,275	208,164,425	87,849,991
1884,	2,216,800	190,263,668	75,302,480

Of the crop of 1884, the latest for which complete returns have been received, the New England States, with New York, New Jersey and Pennsylvania, produced 51,935,528 bushels, or about 27 per cent. of the entire product, with a value of more than $30,000,000. These States, with Ohio, Michigan, Illinois and Iowa, produced more than half the entire crop of the country. The average value of an acre of potatoes in New England was $49. In the Gulf States an acre of potatoes brought $68; in California $57; in Ohio $31. In 1884 Great Britain and Ireland, with a population of 34,872,566, had 1,373,835 acres in potatoes; or, with 67 per cent. of the population of the United States, the United Kingdom had only 60 per cent. of our potato acreage, though the average yield was larger.

CULTURE OF THE POTATO.

FRANK FORD.

THE varieties most extensively grown and found most profitable for market here are Burbank, White Star, O. K. Mammoth, and Orange County White. The White Elephant, Queen of the Valley, and Mammoth Pearl are raised to some extent. The State of Maine and Rochester Favorite are varieties that will be largely planted when better known. Both are of fine quality and very productive. Very few early potatoes are grown for market. Those mostly grown for our local market and home use are Lee's Favorite, Clark's No. 1, and Beauty of Hebron; all of the very best quality and good yielders. The Empire State did well last seasou and promises to be a leading variety. Its quality is excellent.

I prefer to plant on ground that was thoroughly enriched and planted to corn the previous year. Use no fresh manure: but, instead, Mapes's or some other fertilizer of about the same analysis. Next to corn ground I prefer clover sod. I would not plow until time to plant, and then I would as deep as the nature of the ground will admit without turning up too much poor soil. Pulverize the soil thoroughly. The Acme Pulverizer does good work, but is very hard on the team. Mark out the ground in *straight* rows three feet apart, and from three to five inches deep: plant deeper in light soil than in clay. Cut the potatoes so as to give to each piece enough substance to sustain the sprouts till they have grown enough to enable the roots to take nourishment enough from the soil to keep up a rapid growth, whether it be one, two, three, or more eyes to each piece. For very early planting of early varieties, plant medium-sized whole tubers for best results.

Drop the pieces about a foot apart in the row. Cover with the Planet Jr. Coverer. Planting begins here early in April and continues till the first of June. I prefer the middle of May. It is well to harrow the ground once or twice before the potatoes appear above the surface, but never afterwards. I have used Mapes's and Bradley's Special Fertilizers with splendid results, both in the drill and mixed with the soil before the potatoes were dropped, and by covering the seed about an inch and then scattering the fertilizer along the rows, the tubers are of more uniform size and less liable to be scabby—and the yield will be larger.

I hill the potatoes but very little, for I prefer flat culture as nearly as can be given, while using the Planet Jr. Cultivator often enough to keep the ground mellow, allowing scarcely a weed to start. I know of no way to avoid blight or rot, and know less about scab than I thought I did several years ago: but that fungus is the cause cannot be disproved by facts. Wire-worms eat into potatoes and make holes, but that is not scab.

We dig with forks, and the thousands of car-loads shipped from Portage County are mostly dug by hand either with forks or hooks. No potato digger that has been tried has given satisfaction. We sort and sack our tubers in the field, never allowing them to lie in the sun longer than we can help. They are carefully hauled to the cellar and put where they are to remain till used or sold. The cellar is kept dark and as cool as possible without chilling the potatoes. The small tubers are fed to stock, being never used for seed. I prefer to dig soon after the tops are thoroughly ripe, and before the fall rains have soaked the ground. I raise potatoes mostly for seed; but those who grow largely for ordinary market, think it pays best to sell from the field, even if the price is not quite as high as they wish, as it saves storing and a great deal of heavy work.

My ideal potato would be oblong and slightly flattened or oval, medium-sized with pink or flesh-colored skin, abundant and rather prominent eyes, denoting good yielders; flavor free from the old Peachblow taste, but so pure as to be really palatable without even salt as a condiment. I have now a very few such, and on fair farm soil they should yield not less than 250 bushels per acre, and should ripen early or medium early.

The average yield of potatoes in this vicinity is not over 100 bushels of marketable tubers per acre by the ordinary slovenly methods pursued. I think it a poor yield if I do not get over 200 bushels, and often run to 500 without any special amount of fertilizers or care. In growing potatoes, there are a few essential points that must be kept in view to insure a good yield—use a fair or liberal amount of seed; plant as deep as the nature of the soil will admit; keep the ground mellow; never allow a weed to grow, and make a judicious selection of varieties.

We conquer the Colorado Beetle with Paris-green—a small teaspoonful to a three-gallon can of water, or, if used with plaster, one pound to 200 pounds of the latter; this is quite

strong enough to be effectual, and it will not injure the vines.

Portage Co., O.

PREVENTING ROT.

FOR 20 odd years, I have used dry slaked lime in storing potatoes in the cellar, whether in a box, barrel or on the ground. We first sprinkle a layer of lime, on which we place a six-inch layer of potatoes; then comes another sprinkling of lime and so on till all are stored, when a good sprinkling of lime is made on top. When thus treated with one bushel of slaked lime to 40 bushels of potatoes, the pile is safe. Even though an occasional affected one should chance to get in, it won't rot those around it or impregnate the air of the cellar. Since we began the use of lime, no foul air has been detected in the cellar, and there has been no overhauling for rotten potatoes. PETER M. GIDEON.

Hennepin Co., Minn.

THE RURAL BLUSH AHEAD.

AFTER another season's trial with many varieties of potatoes, I find the Rural Blush greatly ahead of all others in productiveness, size, freedom from rot, and smooth, attractive appearance. It is almost equal to the best in quality. While most other varieties were scabby, this was entirely free. I think there are several causes of scab. In most cases fungus seems to be the predisposing cause. This attracts the wire-worms, and I have also observed on scabby potatoes small, white pin-worms about three-quarters of an inch in length. These I have often found in large numbers. In many cases the scab seems to be incipient rot.

The Blush had as competitors, the White Star, Beauty of Hebron, Early Maine, Clark's No. 1, Lee's Favorite, Mayflower, Magnum Bonum, Parson's Prolific and Dakota Red. I have discarded the Mayflower, Magnum Bonum and Parson's Prolific as being unworthy of further trial. The Blush outyielded them all. The potato beetles were numerous just as the plants broke through the surface of the ground, and as I was very busy at the time, I did not use an insecticide, and consequently many varieties were greatly damaged and some almost entirely destroyed. The Blush seemed to have an immunity from the destructive ravages of the pests, not being injured in the least. This I account for by its robust and vigorous habit of growth, whereby it got and kept ahead of the bugs' voracious appetites.

The land was moderately enriched with stable manure and the seed was planted in drills three feet apart and five inches deep. The pieces, cut to two eyes, were dropped one foot apart and covered with a one-horse, eight-inch plow, the ground being then dragged and harrowed. As soon as the sprouts could be seen above the surface, they were hoed by hand once and after that cultivated three and some of them four times, with the Planet Jr. horse-hoe and cultivator. For first early, I like the Early Maine the best. They are early, of good quality, very productive, smooth and handsome. The Blush yielded 350 bushels to the acre—a much larger yield than that of any other variety, nearly three times as many as White Star, which is generally considered a model of productiveness. The Blush has another favorable peculiarity—it is such a rampant grower, and the vines so completely cover the ground as to almost utterly extinguish weeds. And the tops die so late that there are scarcely any weeds to annoy in digging the crop. All my other varieties produced such immense crops of weeds, after the tops had died down, that the pests had to be mowed off. T. B.

Monticello, Ill.

THE RURAL'S MULCH-TRENCH SYSTEM.

My farm is hill land, a moist loam lying over clay. In my usual way of raising potatoes I manure lightly from the barn; plow and harrow; mark off drills three feet apart; sprinkle in the drills a small quantity of phosphate; drag a brush through the drills, drop in them the seed, cut not too fine, about a foot apart, cover with a hoe, and when they are ready for it, cultivate and hoe twice. Last Spring I made 20 drills in a patch about 100 feet long and 60 wide. The four middle drills I planted in accordance with the trench-mulch system in a rough way; that is, I ran a light plow both ways in each of the four drills, sprinkled in sawdust on the potatoes, then sprinkled the phosphate and then covered with a hoe without taking much pains to level the ground more than in the other 16 rows. The cultivation afterwards was the same. In the mean time I had to listen to a good many jokes about my new way of raising potatoes from sundry visitors, neighbors and my own workmen. I intended to weigh at digging time the potatoes in the four rows and in the four next on each side, but where we began to dig the land was richer and wetter than in other parts of the lot, and the potatoes had rotted badly for from 10 to 15 feet, and I thought they were a failure under both systems of cultivation; so I told the men to dig them all and pay no further attention to the systems; but after they had dug 10 or 15 hills they found the yield much better, and threw the tubers in between the rows and notified me, and I overlooked the picking up. The yield was very nearly 10 bushels in the four mulched and very nearly eight bushels in the four adjoining rows cultivated by the old system. I intend to try the RURAL'S system again next season in a more accurate and thorough way, for I am satisfied that the yield in this locality will be one-quarter more by using it. C. W. C.

Ferryville, Conn.

THE IDEAL POTATO.

My ideal of a perfect potato is one of medium size, with a clean, white skin (although any kind of color would not be objectionable, provided it possessed all the other qualifications), with very shallow or slightly raised eyes; flesh pure white, cooking dry and floury; without any earthy or other decided flavor, unless it should be a peculiar nutty taste, occasionally found in some sorts when grown under favorable conditions. The plant should be stout but not rank, and the tops should not be too spreading, while the yield of marketable tubers should be large, with very few or no small ones. It should be a good keeper, retaining its early good quality until late in the season. The tubers should grow compactly in the hill and be produced at a shallow depth, without any tendency to grow out of the soil. Moreover, it should be adapted to a wide range of country, retaining its size, quality, productiveness, etc. nearly everywhere, on an almost infinite variety of soils. Although we have hundreds of varieties, we have as yet no single potato with all the above qualifications. In order to bring about this desired improvement, there is evidently but one way—to save the fruit of sorts most nearly approaching the "ideal" in every particular (cross-breeding or hybridizing, if possible, kinds which together possess all that is desired), and plant the seeds from these fruits until the perfect ideal potato is obtained. E. G. M.

Otsego Co., N. Y.

RURAL'S TRENCH SYSTEM, ETC.

IN the Fall of 1883, I plowed about one-tenth of an acre of old Timothy sod—a dark loam, but loose, light and easy to cultivate. The following Spring it was cross-plowed and given a dressing of barnyard manure at the rate of about 20 wagon loads to the acre. It was then thoroughly harrowed and planted with Blue Victor Potatoes, two eyes to a piece, two pieces in a hill. The crop got good cultivation under the old hoeing and hilling-up plan. Yield 10 bushels, at the rate of 100 bushels to the acre. I think it was the poorest crop I ever raised. In the Fall the ground was again plowed and the next Spring (1885) cross-plowed and a light dressing of barnyard manure was well harrowed in. About one-twentieth of an acre was then selected for my experiment. Trenches five inches deep, over a foot wide at the bottom and about 3½ feet apart from center to center were then made, and the seeds, two eyes to a piece, were dropped, one piece in a place, about a foot apart in the row. They were then covered with about an inch of earth, then with a coating of, perhaps, half as much unleached hardwood ashes, and, lastly, with earth enough to fill the trenches. They were slow in coming up; but of the darkest, richest green, in striking contrast with the dark brown soil. As fast as weeds began to appear, I went through the patch with a hoe, this being all the cultivation given, and I found it light work.

My experiment having attracted the attention of neighboring farmers, and in their opinion, the time for hoeing having arrived, some came and watched the novel mode of cultivation, and put in remonstrances. "A good-enough way to plant potatoes, but a fool of a way to cultivate them," said one. "I should go through them with a plow and hill 'em up, anyway," declared another. And they predicted a clearly defined case of "dearly bought wit." However, I persisted in the RURAL'S plan, except mulching, which was unnecessary, the season being wet, and the vines soon completely covered the ground, so that it was impossible even to pass between the rows. At digging time, the result was all that could be expected or desired—yield, White Elephant, 18; Beauty of Hebron, 10, and St. Patrick eight bushels; total, 36 bushels, or at the rate of 720 bushels to the acre, all marketable, the small ones not being included.

During my experience as a farmer, I have usually been successful in potato growing, whether on light or heavy soil. I attribute my success to placing the manure *above* the seed, deep planting, thorough cultivation, and the free use of hard-wood ashes as a fertilizer. My usual method has been to break up clover sod after haying, cross-plow it the following Spring, give it a thorough harrowing, then a good dressing of barnyard manure, again harrow, then furrow out one way, three feet apart, and drop the seed crosswise of the furrows, two eyes to a piece and three pieces in each hill. I cover well and give good cultivation, beginning as soon as the weeds appear, and going through with a hoe whenever necessary, until we can no longer get among the vines without injuring them, hilling-up but lightly and "ashing" in the hill at the first hoeing.

With a slight difference in planting—that of first covering the seed with an inch or so of earth, then applying the ashes, then covering well with earth, and giving a more level cultivation—I think crops may be raised to more than equal those grown by the RURAL'S system. From past experience, I find that larger potatoes may be thus grown in hills, and I think that with proper management, remarkable results may be secured. As soon as they are ripe and the vines begin to die, my potatoes are dug, allowed to dry off, placed in boxes or barrels and covered till the following day, then carefully looked over. All affected ones are rejected and the good ones are placed in the cellar in bins holding from 10 to 25 bushels. I sprinkle slaked lime among them as stored in the bins. I think this a decided help in preventing rot in the cellar. As soon as a rotten potato is found in the bins, it is removed and burned; but with the lime, anything except dry rot is seldom seen.

With me the Snowflake is not a good yielder, and is unfit for boiling, except in its jacket, as it boils away so badly; but it is a fine baking potato. Sprague is large, a good yielder, in quality a trifle below the Rose. The White Elephant and Beauty of Hebron are both excellent and yield well. St. Patrick is in quality unsurpassed, scarcely equaled, and in yield hardly second to any of the best. A. V. V.

Ulster Co., N. Y.

VARIETIES—KEEPING QUALITIES, ETC.

THE last season for planting and growing potatoes was so wet that the crop was much damaged, and most varieties rotted very badly, especially on poorly drained clay land.

Dakota Red averaged twice as large and yielded three times the number of bushels per acre (under equal conditions) as any other variety. They are moderately long, with pretty deep eyes and free from rot. Though extremely large, none are hollow. I think they are the greatest improvement since the Early Rose was introduced, and the most productive I have tried. American Giant, a long, thin, pretty-looking potato; a moderate cropper, and poor keeper. Lee's Favorite, a poor thing every way. Early Mayflower is very little better. Big Benefit is the worst I have, being the poorest cropper and almost every one rotted under good care. Early Sunrise and Early Ohio are among the best croppers and the worst rotters. Beauty of Hebron was our favorite for the table, but a poor cropper and only a moderate keeper. Wall's Orange appeared pretty good when dug, but nearly all have rotted since. Magnum Bonum is a good large potato; a good cropper and keeper—among the best. White Star rather poor in every way. [This surprises us.—Eds.] Coljum's Superb, moderately good in every way. Irish Wonder, a pretty good cropper, but a poor keeper. Mammoth Pearl and Snowflake, medium sorts in every way, large. New Champion, a moderate cropper and poor keeper—a very bad-looking potato, ill-shaped and with deep eyes. Home Comfort, beautiful, indeed; of even size, long and pinkish red, a very good cropper and a moderately good keeper. White Elephant, a very heavy cropper, but bad keeper. Halton's Seedling, a moderate cropper; very small size, a good keeper. Rural Blush, a charming variety to every person who sees it, of even, moderately large size, about the shape and solidity of the old Peachblow. Rot is entirely unknown in it. It requires a season much longer than any of the others. Early Rose, pretty badly run out here; but it still yields a fair crop, and doesn't rot worse than the average.

We keep potatoes in small piles in the field where they grew until wintry weather is expected, and then (if not marketed) we store them in pits dug deep enough to keep them dry—say 12 to 18 inches. Bank the excavated earth on the edge of the pit; then pile in the tubers; cover well with dry straw, (being careful through all the digging and storing to keep them dry) and a few inches of earth; and as the weather gets colder, apply another layer of straw and a few more inches of earth; and if the weather gets extremely bad throw on a few wagon loads of stable manure.

We had no scab this year. I believe it is generally caused by worms. Our soil is a sandy loam. We find the best crops and cheapest culture, or, in other words, the most profit by the following system: "Get the best varieties for seed, and change the seed every few years. Start cutting the potato from the stem end, one or two eyes to the piece, until nearing the eye end, and then split the rest through the center of the bunch of eyes. Leave the seed a couple of days to dry after cutting. Then, in a rich, sandy piece of land, make furrows with a narrow plow—say three feet apart. Drop the pieces about 15 inches apart in the furrows, and cover with a plow about four or five inches deep. Then, just as they are growing out through the surface, harrow all over, thus killing the first and worst crop of weeds and giving the potatoes the start. After-culture depends much upon what implements are to be had; but I generally use a double-mold-board plow for hilling and digging, and I like it well. I find it generally pays best to market in the Fall.

Kent, Ontario, Canada. F. W. WILSON.

POTATOES IN COLORADO.

I PLANTED four acres of potatoes last year, and gathered 1,100 bushels. I plowed the ground in April and then manured it with about ten loads to the acre, and planted about the last of May, plowing the ground and dropping the "seed" in every third furrow. Varieties: Early Ohio, Bell, Mammoth Pearl, Peerless, White Elephant, Wall's Orange, Rural Blush, Compton's Surprise, Ruby and Snowflake. The Mammoth Pearl and Peerless (which I believe are the same) out-yielded all the rest. The Bell is very fine, did well and is excellent for eating. From the little Rural Blush I raised, the first year, six pounds; the next six bushels, and this year 175 bushels, and I did not plant all either. It is a very good eating potato, but very late. Wall's Orange is a humbug. E. H.

Fort Collins, Colorado.

GROWING POTATOES ON IRRIGATED LAND.

DID you ever wonder how potatoes were managed in a country where the soil and climate are so dry that from one to four irrigations are necessary to grow any kind of farm crop? I have successfully grown considerable quantities for some 10 years, and having for the greater part of the time had control of the moisture, I have learned by observation and experience the degree of humidity required by the potato plant at its different stages. Of these latter there are three—1, from planting to the beginning of the formation of tubers; 2, from then until the growth of the tuber is nearly completed; 3, from then until the tubers have matured. For moisture during the first stage we can safely depend on spring storms, which are usually not excessive, but sufficient to carry the plant along till it begins to blossom. No matter if the plant at this time looks sickly and wilted for want of water, let it struggle along till the tubers begin to form. Then we apply the water—soaking thoroughly, not by flooding over the surface, but through trenches between the rows. During the second stage the ground must not be allowed to get dry. Keep it damp three or four weeks. If rains fall during this time we irrigate less. After the tubers are grown, the ground will dry gradually till they ripen. No danger of the soil getting too dry then.

In the season of 1884 the Rural Blush took the lead. Last year it was an even thing between these and the Vermont Champion, planted side by side. In quality the latter was a trifle the better. Other varieties on different soils did finely, such as Early Beauty of Hebron, Early Ohio, Chicago Market, Lee's Favorite, Brownell's Best, Alexander's Prolific and several others. The very best, however, for Fall and early Winter is the Early Mayflower, quality considered. Rot we are seldom troubled with. Scab is worst in that part of the field that gets the most water, usually the upper end near the ditch, and here only when the ground has "soured" and becomes moldy by excess of moisture, C.

Longmont, Colo.

HOW TO PREVENT DISEASE.

IN preparing poison for my potato vines, I mix 100 pounds of plaster with three pounds of sulphur and one pound of pure Paris-green, if I can find it. I am inclined to believe that the sulphur prevents blight. I used this preparation on half an acre last season and did not have a diseased potato. In order to escape disease the following points are considered important: 1. Select well-matured, sound seed. 2. Plant, as far as possible, on

new soil or on ground which has not received an application of rich manure for several years. 3. Avoid all strong, partially decomposed manures. 4. Plow deep and thoroughly pulverize the soil; encourage the growth of the tuber rather than that of the stalk.

Chittenden Co., Vt. O. H. ALEXANDER.

SCAB.

IN the RURAL'S excellent Potato Special of January 16th, Prof. Caldwell appears to have not fully noticed all that Worthington G. Smith says of the potato scab. In addition to the portion quoted from his work on "Diseases of Field and Garden Crops," there will be found, under the head of "Smut on Potatoes," the form of the "smut," or scab, best known to me, the Tubercinia scabies. This is very prevalent in some seasons and is at times, in warm cellars, very destructive to the stored crop. Mr. Smith, on page 35, fully describes the species of fungus that causes one of the commonest forms of scab. The fact that it is described by Mr. Smith under the name of "smut" rather than "scab," is perhaps the reason why Prof. Caldwell failed to notice it. I do not doubt that the scab produced by the cracking of potatoes by their rapid growth when grown on a rich soil, is assisted also very materially by wire-worms. I have found that potatoes used for seed, that are scabbed by the Tubercinia, are apt to yield a crop more or less affected by scab, according as the season is warm and wet. I think Mr. Smith is correct in saying, "No potatoes showing a trace of smut, should be used as seed."

Philadelphia, Pa. ELI MINCH.

THE EARLIEST.

FOR Early Market the Early Ohio, I find by experiment, takes the lead of all the most prominent early potatoes. On April 19th, last year, I planted Ohios, one and two eyes to a piece, and on June 26 I marketed tubers the size of goose eggs, of which there were four to six in each hill—period 68 days. I have seen about 91 potatoes making a bushel of 60 pounds. Pearl of Savoy is two weeks later, but yields 12 to 15 marketable potatoes in each hill. C. HARRIS.

Franklin Co., Ohio.

THE POTATO QUESTION.

PRESUPPOSING that the soil is in average good condition and drained—either naturally or artificially—the discussion is narrowed to a consideration of improved methods and the application of labor-saving devices. Whether the land be in sod or stubble, the best kind of plow, with jointer attached, should invariably be used, in order that all refuse which might interfere with thorough and unobstructed working of the soil, may be completely buried out of the way. Plowing done, the pulverizer, in the shape of the Acme or some other equally good implement, should be put at work and kept at it until the soil is thoroughly reduced; after this I have found the following treatment uniformly satisfactory: Buy, hire, beg or borrow a Kemp manure spreader and drive to the compost heap.

For the benefit of this farmer's savings bank my barn and yard are so arranged as to save all excreta, solid and liquid, from all stock upon the farm. In addition, every bit of farm refuse is deposited there, to be drawn out in the Spring. With every load of barnyard manure two or three loads of muck have been composted, and to assist in decomposition, as well as to add in value, unleached ashes have been incorporated in the proportion of 600 pounds to as much manure as is desired upon one acre of land. To each 600 pounds of ashes 200 of raw bone were added, that the potash in the ashes might render the plant-food in the bone available. To the above mixture 100 pounds of air-slaked lime were added to assist the potash, and an equal quantity of gypsum to absorb the ammonia thus set free. The preparation of this compost heap has been a work and a study, but it has been a study of interest and a work of reward. The outlay I think justified, as the resultant benefit must be divided between several successive crops following the application of the manure.

Load up the Kemp, attach the markers and deposit the compost either broadcast or in drills. If in drills, follow with a light harrow lengthwise of the marks, to slightly cover the manure with soil, as the growing tubers are impatient of immediate contact with stable manure. Follow with the planter. As the plants are just about to break through the soil, harrow with a light, steel-tooth harrow, and kill millions of weeds and spare the hoe. Harrow again after a few days, and do it thoroughly and fear not. I have harrowed potatoes when a foot high, with uniformly good results. Use the cultivator and shovel plow, and when the blossoms show, stop: but be ahead of the blossoms in hilling up, if you do not favor level culture, and don't favor it unless you mulch the land. Discard the hoe, but drag the weeds to death. In the day of your reward, take your team and digger and turn out an abundant crop.

Wire-worms will not cause scab, but they will fill the crop with holes and rottenness. No remedy can be found for them equal to thorough underdrainage. Scab is undoubtedly caused by fungoid growth, and, as well as rot, appears to be beyond the control of the cultivator.

In Northern Ohio, the Snowflake is the standard of quality, and ranking near it are the Hebron and Rose. Burbank, Pearl and numerous others are greater yielders, while Burbank commands the highest price here. Of the more desirable sorts from 250 to 450 bushels per acre can be grown by the above methods in field culture, and the expense of production can be kept within 30 cents per bushel. If stored in a dark, dry cellar with a temperature as uniformly near to freezing as safety will permit, the remaining details of successful storage need little consideration. An affected potato will rot, even if varnished and insured. A. W. RUSSELL.

Cuyahoga Co., Ohio.

POTATO GROWING IN THE PROVINCE OF QUEBEC.

BY A MONTREAL MARKET GARDENER.

POTATOES may be grown on any kind of soil, but to grow them of the best quality, requires land of a sandy nature, well drained. To grow them for early market, plant the sets in hotbeds, as close together as they can be put, about 10 days before setting them out in the field so that they may have a growth of an inch or so in length. Some start them in boxes or barrels in a kitchen or warm room; but that is only when small quantities are wanted. Have the land plowed the Fall before, and in the Spring work it well with a pulverizing harrow. Draw the drills about 30 inches apart, putting the manure in the bottom at the rate of about 20 tons to the acre. It should be well rotted. Plant the sets in the drills, about 10 inches apart, sprouts upwards, handling them carefully so as not to break off any shoots, and covering them gently with a little earth with the hands or feet to keep them from being dried by the sun before they are covered in with the drill plow. Before covering with the plow, apply commercial fertilizer at the rate of about 400 pounds per acre, scattering it over the sets, using a fertilizer containing a good percentage of potash. By using fertilizers I have had potatoes 10 days earlier than some in the same field where no fertilizer was used. In a few days the vines will be through the ground; keep the weeds under by the use of the hoe and cultivator; when the plants are high enough, they should be moulded up with the drill plow. By this mode of cultivation I have had potatoes on the market by the end of June, bringing from two to three dollars per bushel.

For general crop, plow in the manure in the Autumn, putting on 25 to 30 tons to the acre, and using 300 to 400 pounds of a good fertilizer as for early potatoes. Manure put in the drills in the Spring, especially cow manure, tends to produce scabbed potatoes. Plant the sets immediately after making the drills, and cover them at once, for if the drills are made and left a day or two exposed to the sun, the hot earth scalds the sets so that they either never start, or come up weak and sickly. It is a good thing to pass the roller over the drills after covering in, as it makes the ground firm so that it holds the moisture. When the potatoes are on the point of coming up, pass a saddle, brush or Scotch harrow, turned upside down, along the drills. Keep the weeds down by hoeing and cultivating. Last year I had a crop at the rate of 450 bushels of marketable potatoes per acre by this mode of cultivation. Land that has been in clover or pasture for some time yields the largest crops.

The earliest potato I have grown is the Early Vermont, which has been ten days earlier than the Beauty of Hebron or the Rose. The former is a popular market variety, but was much affected by rot last year.

Last season I raised 200 bushels of Early Maine Potatoes, all marketable, besides some small ones, from 7½ bushels of seed on less than half an acre of land, but I did not compare them for earliness with the Early Vermont.

Farmers in this neighborhood go into potato growing pretty largely, some of them having from 50 to 75, or even 100 acres some seasons.

HOW I PLANT POTATOES.

I MANURE and plow the ground in the Fall, leaving the surface as rough as possible. I plow again in the Spring, harrow it well and then furrow it out, using a two-horse plow and going twice in a place, dead-furrow fashion. Spread the fertilizer in bottom of the furrow. Change the teeth on a Whipple spring-tooth harrow so that they will all run in the furrows, which will put the ground in fine order for planting, with the fertilizer well mixed with the soil in bottom of the trench. I next drop the seed-potatoes in drills or hills, as preferred. Then I prepare the spring-tooth harrow by removing the two center teeth, and going lengthwise of the row it covers the potatoes splendidly and leaves the ground in the most perfect order. Just as the vines are peeping through, I put on what additional fertilizer is desired, and go through with a one-horse plow, throwing the soil towards the rows and burying the potatoes. Two days afterwards I harrow well, which levels the ground and kills all the weeds. After this, I work with any good cultivator, and have no further trouble with weeds.

Franklin, N. Y. W. V.

EXPERIMENT WITH SCABBY POTATOES.

I TRIED an experiment with scabby potatoes during the season of 1885. My object was to learn whether they would perpetuate the disease, when used for seed. They were planted upon land that had not been used for growing potatoes before. The ground was a clayey loam, and had been a Timothy meadow once, and was turned over and planted with corn in 1884, and fitted up for potatoes in 1885 by plowing, harrowing and furrowing, and planted with Burbanks May 21st. From the seeds that were planted, enough scabby seed was saved to plant a row by itself in the middle of the field, the potatoes being so deformed by the disease that it would be hard to tell to what variety they belonged. Most of the field was planted with medium-sized potatoes cut lengthwise in halves; the scabby ones used for the experiment were left whole. The season was a little too wet; but all made a fair growth, considering the season.

After the vines were dead, and rather late in the Fall, they were all dug. Whatever may be the cause of scab on potatoes, the conditions were not favorable to perpetuate it in this experiment; all seemed free from the blemish. The men who dug and picked them up were asked to notice if there was any difference in the looks of the tubers from the two plantings, and they could see no difference, unless the potatoes from the bad "seed" were a little the larger. I noticed this peculiarity, and can account for it only on the supposition that the "seed" was so deformed by the disease that only a few vines grew to each hill. H. H. SPENCER.

Cuyahoga Co., Ohio.

[No doubt the scabby seed was caused in this case by wire-worms and not by a fungus —EDS.]

POTATO TESTS IN MICHIGAN.

IN the Spring of 1884 I planted, for experimental purposes, 18 varieties of potatoes on land very uniform in quality, 90 feet long north and south, and 55½ wide; soil a clay loam. The year before, it had grown corn, and had been top-dressed with barn-yard manure at the rate of eight two-horse loads per acre. It had been well plowed and harrowed and thoroughly mellowed. On May 20 furrows were made six inches deep and three feet one inch apart, and next day three-eyed seed-pieces, cut from tubers that would average five ounces each, were dropped 22 inches apart in the bottom of the furrows, and four inches of earth drawn over them. Just before the vines appeared, the ground was top-dressed with well-rotted yard manure at the rate of ten two-horse loads per acre well harrowed in. The ground was cultivated several times and kept quite flat until the last of July, when the crop was shovel-plowed to cover the tubers exposed to the sun. No hoeing. The vines were dusted twice with Paris-green and plaster, mixed at the rate of one pound of the former to 200 pounds of the latter per acre. The season was favorable. They were dug and weighed October 20th.

Name of Varieties.	Order of Yield.	Scale showing Vigor of Tops.	Scale showing Order of Ripening.	Pounds of Marketable Potatoes.	No. Pounds of Small Potatoes.	Aggregate Yield in Pounds.	Yield per Acre in Bushels.	No. of Pounds in 5 of the best Weighed.
White Star	1	8	7	121	16	137	385 20-60	4
Burbanks'dling	2	7	6	121	14	135	380	4
White Elephant	3	9	8	116	17	133	354 40-60	4 12-16
Mam'th Prolific	4	7	6	103	10	113	301 20-60	5 4-16
Rural Blush	5	9	9	100	11	111	296	4 13-16
Round Pinkeye	6	10	10	93	16	109	290 40-60	3 9-16
Imp. Peachblow	7	9	9	85	23	109	288	3 5-16
Mammoth Pearl	8	6	3	80	15	105	280	4 5-16
Late Rose	9	6	3	86	17	103	274 40-60	3 4-16
Blue Victor	10	7	5	80	15	95	253 20-60	1 7-16
Early Rose	11	3	2	72	15	91	250 10-60	3 4-16
Magnum Bonum	12	5	3	83	8	91	242 40-60	3 11-16
Beauty of H'br'n	13	4	3	70	17	87	232	2 10-16
Eureka	14	1	3	70	16	86	229 30-60	2 8-16
Snowflake	15	4	4	63	24	86	229 30-60	3 1-16
St. Patrick	16	7	6	80	3	83	221 20-60	4 4-16
Chicago Market	17	3	2	58	16	74	194	3 8-16
Triumph	18	1	1	47	17	64	170 40-60	2 10-16

In the scale showing the growth of tops, 1 indicates the smallest and 10 the largest and thriftiest. In the next column 1 denotes the earliest and 10 the latest.

The White Elephant is the best of the late varieties in quality. The Imp. Peachblow, White Star and Rural Blush come next, in the order named, the Round Pinkeye being the poorest. Of the medium-early kinds I consider the Snowflake the best, followed by Late Rose, St. Patrick, Mammoth Pearl, Mammoth Prolific, Magnum Bonum and Victor. Among the earliest I would place the Beauty of Hebron first, followed by Early Rose, Chicago Market and Eureka. Triumph is the poorest. I have grown the Ohio for two years and think it one of the best; it is certainly the earliest I have, but it is liable to become hollow when grown on strong land.

The yield was best on the fall-plowed land cultivated in the Spring. I could see no difference between that which was both fall and spring-plowed and that which was only spring-plowed. It will be seen by the table that the White Star yielded more than the Elephant. The Stars were planted along side of the Elephants in the main patch and out-yielded them, giving at the rate of 435 bushels per acre. Last Spring I planted the same kinds with nearly the same results, White Star yielding the most, but they were not as good as the Elephants. I also planted the following varieties besides those tried the year before: Queen Victoria, Early Vermont, Brocton, White Rose, Lady-finger and Late Beauty of Hebron. Queen Victoria was no better than the Blue Victor; the Vermont was about like the Early Rose; Brocton the same as Ohio; White Rose the same as the Snowflake, and the Late Hebron like the White Elephants. DAVID W. CRAIG.

Lapeer Co., Mich.

THE POTATO "PATCH."

THE potato is, decidedly, the poor man's crop. It is the most economical vegetable, and the most palatable, as it can be prepared in numberless ways. Turnips and cabbage are good for a "change," but we would quickly grow tired of either as a steady article of diet. Scientific men frequently attempt to prove that there is really very little "nutriment" in the potato, and that there are far cheaper and better foods for the poorer classes. Such men never practice their own theories. They have their choice of foods, they know little of the needs of poverty, or the effects of hard physical labor. Men who count the value of every penny, know that the potato is a valuable food. They would as soon think of beginning the winter with an empty potato bin, as with an empty flour barrel. In all the large manufacturing towns the sale of potatoes is enormous, and it actually increases from year to year. For a man with a small garden spot, the potato is about the most profitable crop he can raise. I proved this to my own satisfaction some years ago, while working in a manufacturing town in Michigan. I had a little sandy garden spot, that was with difficulty kept from blowing away in a strong wind. I tried raising small fruits on it; but my account book always showed that I could buy them cheaper at the store. My early vegetables were never early, and my corn never reached its full size. One year I determined to plant my full patch to potatoes as an experiment. The garden was too small to plow, so I dug it over with a long-handled spade. After digging, I raked the ground over with an iron rake, raking in two loads of horse manure. There was plenty of wood-ashes to be had for the asking, and I worked bushel after bushel into that little garden, till I fairly changed the color of the soil. I dug holes with my hoe and planted some small potatoes. I never knew what variety they were. The vines grew wonderfully. I cut down every weed that showed itself, and every morning and evening, in pleasant weather, I swung my hoe among those vines. The bugs came, but I hired the children to pick them off. We began to dig about the middle of August—just enough for table use each day. The potatoes were better than any I had ever seen; large and shapely and white and mealy. Perhaps they seemed better to me than they really were, but from the time those potatoes were large enough to eat, my bills for meat and fish were lessened. I had three boarders, all good eaters. We had those potatoes fried, baked, boiled and cooked in numberless other ways, and the more we varied the style of cooking, the more our boarders ate. In fact, they ate so many, that had we been obliged to buy them, there would have been a serious loss. When the vines died, I dug the whole patch. The ground seemed fairly alive with the tubers. I was too busy to measure them. I had to take half a day from my regular work for the digging, and I could not afford to experiment. I stored them in shallow boxes and bins in the cellar, and they lasted us all Winter. It was the most successful farming I ever attempted. Many workmen have a small garden spot in which they attempt to raise a great variety of vegetables. I believe it would pay them, in a majority of cases, to plant the whole patch to potatoes. That has been my experience, at least. S'RED MAN.

SUMMARY

OF THE RURAL'S SEED DISTRIBUTION FOR 1886.

A full description, with illustrations, was given in the R. N.-Y. of Nov. 14, and this number will be mailed (free) to all who apply.

The Nov. 14th Number also presents a full account of the

$3,300

worth of presents which are offered to subscribers (not to regular agents) for clubs.

N. B.—One package (six in all), will be sent to all REGULAR SUBSCRIBERS who apply, and to them only. A two-cent stamp should be inclosed in the application, except by those who subscribe for the R. N.-Y. in connection with some other journal which offers the seeds in connection with the combination. In that case, an application is unnecessary. The seeds will be sent without application.

FIRST.

The Alaska Pea.

It is claimed that this is the earliest blue pea; that it is the best of its class; that it has superior shipping qualities, the pods remaining green longer than those of any other variety. It has never been offered for sale.

SECOND.

The Best of the New Watermelons.

Comprising a few seeds each of Kolb's Gem, Mammoth Ironclad, Scaly Bark, Cuban Queen, and Pride of Georgia.

THIRD.

Angel of Midnight Field Corn

This proved last season the earliest field corn ever tested at the Rural Grounds, though it may not so prove again. The longest ears measured 14 inches. The ears were borne low, with often three to a plant. Plants short.

FOURTH.

Garden Treasures,

for our lady friends, being a packet of not less than 100 different kinds of flower seeds mixed together..

FIFTH.

THE BIRD CANTALOUPE

(From Colorado.)

Introduced by the R. N.-Y. Oblong in shape, thickly netted, deeply ribbed; flesh thick and light green, sweet and delicious. Very early. The largest specimens weigh 20 pounds, as grown in Colorado.

SIXTH.

Hackensack Valley Muskmelons.

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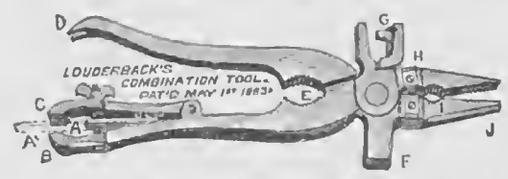
TWO SUBSCRIBERS.

Louderback's Combination Tools.

This little implement is a regular tool box of itself, as it contains ten very convenient and almost indispensable tools in one. We will point them out by reference to the illustration:



A, Adjustable Screw-driver; B, Hand Vise; C, Wrench; D, Nail Puller; E, Large Gas Pliers; F, Hammer; G, Leather Punch; H, Wire Cutter; I, Small Gas Pliers; J, Pincers.

Size No. 2 is nine inches long. The price is $1.25. We will give it for TWO SUBSCRIBERS.

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FOR FOUR SUBSCRIBERS.

Is used in the RURAL office, and thought to be by far the best Fountain Pen made. We guarantee it is as represented. Every farmer needs one, as it may be used at all times. It carries ink which, with continuous writing, will last at least 12 hours. The price is $4, and it can't be bought for less. Given for FOUR Subscribers. Send for full descriptive circular to the Ideal Fountain Co., L. E. Waterman, Manager, 155 Broadway, N. Y.

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Warranted by JONES OF BINGHAMTON, N. Y.

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THE BEST SEWING MACHINE IN THE WORLD!

An entirely new principle. It is nearly noiseless and the easiest-running machine in the world. We guarantee it in every way. In case of dissatisfaction it may be returned at our expense. We would respectfully impress it upon our readers that this must not be confounded with old machines or with those offered by other journals. Price $60. Given for only 40 subscribers. For descriptive circulars apply to the Avery Sewing Machine Co., 812 Broadway N. Y.

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THE RURAL NEW-YORKER

IS THE

LEADING NATIONAL JOURNAL

OF AGRICULTURE, HORTICULTURE, AND RURAL AFFAIRS.

It is not a TRADE paper, and has no interest in the SALE of any of the articles offered in its Premium-Lists.

Agents are wanted everywhere.

Indust'l Societies.

CORNELL FARMERS' INSTITUTE.

(RURAL SPECIAL REPORT.)

(*Continued.*)

"Close" feeding of stock; need of soil renovation; ensilage; the Jersey for the dairy; ration for milch cows; worthless cow in the dairy; Shropshire sheep; inoculation as a preventive of contagious diseases; a State Board of Agriculture; the Holstein-Friesian as a dairy cow; rations for milk and butter; the average farmer's cow; care of her; making and keeping a pasture.

Mr. W. B. Powell, of Springboro, Pa., would not think of feeding without exercise; it is unnatural, and stock so raised would certainly deteriorate. It is wrong to so teach the people. The meat so produced is not fit for food. Mr. Woodward said he had not spoken as a breeder, but as a feeder; not as an improver of horses or other domestic animals; but as a producer of meat from animals to be kept only a few months, and he knew that animals so kept were perfectly healthy and their meat sold for the highest prices. He is feeding for manure and money, and not for the improvement of the breeds; besides, he does not fancy the exercise cattle get standing in a barn-yard and shivering in the cold.

Col. Curtis said the keeping of animals confined out-of-doors in a close barn-yard is simply barbarous. Mr. Foster, of Tompkins Co., was convinced that close housing in warm barns is the best. Mr. Smith, of Syracuse, was in favor of warm housing, but would give exercise every day in the barn-yard. The cows belonging to his firm had shown by their milk production that this was the best way. Mr. Sibley, of Franklin, Pa., had found that when his stock needed exercise, the best way was to drive them actively about until they had had sufficient, and then at once to return them to the stables. He also warmed all the water needed for the stock.

Prof. Roberts does not believe in keeping cattle in close quarters; neither does he believe in exposure in open yards. He has an inclosed yard in which the cattle take ample exercise.

Prest. Adams said man cannot make any machine that will do more than convert one form of force into another. No portion of mother earth can feed us for an unlimited time unless we, in turn, feed it. The country once so fruitful as to be said to "flow with milk and honey" is now for the most part a barren waste. Rotation of crops is not enough to restore the fertility of the soil, though it might defer the evil day. England and the Continent of Europe have been learning these lessons, and profiting thereby. He cannot expect America to be exempt from the universal law; in fact, in the older States we have already thousands of acres too exhausted to be profitably tilled. He made a most earnest plea for more special schools for the education of the prospective farmers.

Prof. Roberts said that Cornell had succeeded in creating such a sentiment that students in agriculture and the mechanic arts are as much honored and respected as any in the institution. To the charge that farmers are not represented in the halls of legislature, he has only to say that the boys being now fitted in the agricultural colleges are not yet grown to be men and farmers.

Harris Lewis said that if a boy likes farming he will stay on the farm; if he does not, the sooner he goes away the better, for no one who hates farming can ever make a decent farmer. Mr. Woodward said the notion that a boy needs less education for the farm than for other callings is entirely erroneous. If we apply brains and science to the farm in such a way as to make farming pleasant and profitable there is no danger that boys will leave the farm. Nothing commands attention and respect like success.

Major Alvord, in considering silage, said it makes but little difference of what a silo is made so long as it is air and water-tight, and it will be all the better if frost-proof. It is now known that a silo may be filled rapidly or slowly at the convenience of the owner. The best time to cut corn for ensilaging is when it is approaching ripeness. Indian corn is the best crop; it costs in the silo not far from $2 per ton. An acre will produce four times as much silage as cured fodder; but the cured fodder will occupy eight times as much space. Silage should be fed only in moderate quantities—not more than one-third of the amount of forage needed. It is about one-third as valuable as hay per ton. He did not think silage could supplant the root crop; it might be used as an auxiliary.

Mr. J. C. Sibley read an able paper in favor of the Jersey as a model dairy cow, in which he gave records of over 950 pounds of butter in one year from single animals. He thinks the general introduction of the best blood of Jersey breeds would double the production of butter, and that no breed has ever shown such powers of digestion and assimilation as the Jersey. As a feeding ration for cows he recommends hay in the morning, 10 or 12 pounds of silage at noon, and corn fodder at night with two quarts of bran, one quart of linseed meal and three quarts of oat meal mixed and divided into two feeds.

Dr. Sturtevant discussed the value of milk for butter and cheese-making. Inasmuch as a cheese is, in round numbers, one-third each water, fat and caseine, it is absurd to claim that cows of any particular breed are good for cheese-making, because their milk is rich in caseine. It might as reasonably be claimed they were so because their milk contains an abundance of water. He had demonstrated that the milk of certain cows added nothing to the production of butter in a herd; but not only this, they were sometimes positively damaging. Some cows are so worthless that the dairyman would make money by giving them away. He recommended testing each cow separately.

W. B. Powell, in discussing the influence of climate, etc., on breeding, took the ground that the heavy Percheron or Clydesdale can be dwarfed to the size of the Shetland; in short, that the different breeds of animals and the different races of men are the results of selection and outside influences, hence the great importance of intelligence and care in breeding all our domestic animals.

J. L. Stone, in an essay on Shropshire sheep, claimed for this breed great prolificacy, superior mutton production, a fine grade of wool, early maturity and great hardiness. He claims that they spring from the old sheep of Shropshire and the Morfe Commons, and that the claim commonly made of an infusion of South Down blood is untrue. This breed was first known as Shropshire in 1848, and first recognized as a distinct breed by the Royal Agricultural Society in 1853, since which time they have rapidly gained in favor.

Dr. James Law, in recommending measures for restricting contagious diseases of domestic animals, said that although, under peculiar circumstances, an animal might have a second attack, yet inoculation is *almost* a sure preventive. He recommends treating animals when young and of comparatively little value. He suggests the following modifying conditions: 1, testing virus from mild cases; inoculation in some organ but little affected; for instance, lung plague should be communicated by inoculation in the tail, where there is but little lymphatic tissue; inoculation with virus weakened by passing through some other animal, or by long exposure to light and air; or by cultivation in an artificial medium, like some chemical solution; or by exposure to pure oxygen under pressure, or by heat (either of the latter means weakens the virus or entirely destroys it when carried far enough); inoculation with virus so diluted as to introduce but a single germ; inoculation into the veins instead of into the arteries. The Doctor said he was greatly in favor of the use of heat in destroying the virulence of the virus, as it could be carried to just the point desired. He is greatly impressed in favor of the chemical solutions, because with these there is no danger of infection, either to other animals or to the buildings or clothing.

Major Alvord offered the following: Resolved that it is the opinion of the farmers here gathered that there should be established by law in New York a State Board of Agriculture similar to such boards in other States, and that to this end the President of this meeting appoint a committee of 11 to consider the subject, mature a plan and take such action as they may deem advisable, and report when they shall deem it expedient. This met the approval of every person present, and was passed by a unanimous and rousing vote, which showed there was an urgent desire for New York to do something for her farmers' education. The President nominated as such committee, Major H. E. Alvord, Houghton Farm; J. S. Woodward, Lockport; J. McCann, Elmira; F. D. Curtis, Charlton; W. J. Smith, Syracuse; F. C. Stevens, Attica; J. P. Ray, Hemlock Lake; Frank S. Peer, Mt. Morris; Harris Lewis, Frankfort, and T. R. Proctor, Utica. It is to be hoped this committee may mature a good plan and be successful in getting such a law speedily enacted. There is urgent need of such an organization in this State.

W. J. Smith wrote up in an able manner the claims of the Holstein-Friesians as dairy cows. He claimed that they are the greatest milk producers in the world as well as superior for butter and cheese, and valuable meat producers in the end. His people feed, for milk production, from 10 to 16 pounds daily of mixture two-thirds bran and one-third ground oats with one feed a day of silage. For butter, the same quantity is given, made up of one-third each of bran and ground oats and one-sixth each of corn meal and linseed meal. He prefers clover hay to all others to feed with silage. F. D. Curtis, in discussing the cow for the average farmer and her care, said, "We need not expect large results from any cow without a corresponding consumption of feed. The best plan for any farmer is to weed out his poor animals, give those retained better care, and breed from some thoroughbred stock. Regularity in feeding is very essential. Cold water is not at all suitable for cows; it is often the cause of disease and abortion. They should be warmly housed. It is the most foolish thing a farmer ever attempted, to warm up his barnyard by keeping his cattle in it." He has calves and cows that have not been out once during all Winter, and they are healthy and happy.

Harris Lewis in telling how to make and keep a pasture, said we have the pasture as nature made it, we turn on too early in Spring, pasture too late in the Fall, and then growl because the pastures run out. He makes land designed for pasture very rich; covers it well with manure, which he works into the surface, and then, for fear he has not made it quite rich enough, he adds a few loads more, and then adds 400 to 600 pounds of bone flour. His grass mixture is, two bushels of Orchard Grass, two of Meadow Fescue, half a bushel of Kentucky Blue Grass, one-half bushel of Meadow Foxtail, and if the land is at all moist, one-half bushel of Red Top. This is an expensive seeding, but he makes his pastures permanent and can afford it. This gives a succession of grasses during the whole Summer. He turns on early in Spring, before the grass has become coarse, and turns off by the middle of October. It is poor policy to eat the roots bare so late in Fall, to save hay. Once in two years he top-dresses with manure, sows 200 pounds of bone dust and goes over the fields with the smoothing harrow. He prefers spring seeding and without growing a grain crop.

It was announced that Cornell would next year hold another Farmers' Institute with a more extended programme, and with a hearty vote of thanks to the President and Professors, the Institute adjourned, and thus ended one of the most entertaining and profitable meetings ever held in the State of New York.

J. S. W.

Miscellaneous.

CATALOGUES, ETC., RECEIVED.

ASPINWALL MANUFACTURING CO., Three Rivers, Mich.—An illustrated circular setting forth the merits of the Aspinwall Potato Planter, which we would advise our readers to examine. We have not seen or tried the machine, but from the character of the firm selling it and of the testimonials in its favor, we should judge it to be all that is claimed for it. It is said to mark, furrow, drop and cover. It is claimed that five acres per day can easily be planted; that the seed is planted in a perfectly straight line, admitting of close cultivation; that the planting is of uniform depth; that the machine will plant on inverted sod and cover well; that it may be adjusted to plant either cut or whole seed from 10 to 25 inches apart, and also at different depths; that it is light of draft and may be operated by a boy, etc., etc. A fertilizer attachment may or may not be purchased with the machine, as desired. There is also a corn-planting attachment. We presume it would scarcely pay any farmer having less than five acres to plant to buy one of these machines unless he cared to hire it to his neighbors.

BARTLETT & DOW, Lowell, Mass.—In this catalogue especial attention is called to the "Common-Sense Milk Pail" which is represented as the only *perfect* milk pail offered to the public. It is made of heavy XX tin highly polished. There are but two seams that come in contact with the milk. The strainer is perfectly fitted to the inside of the nozzle, making a smooth, air-tight joint. This strainer may be removed in an instant so that every part of the pail may be reached by the hand and thoroughly cleaned. The nozzle of the pail is the right size for pouring into milk cans, and is arranged with a button that catches to the top of the can so that it cannot slip off, however careless the man may be handling the pail. The price is $1.25. The catalogue also offers a goodly list of seeds of all kinds. Free.

SULKY PLOW ATTACHMENT.—Circular from the Elkhart Iron Works Co., Elkhart, Ind. This attachment is really a comfortable seat, on wheels, to which any common plow can be attached so that the plowman can avoid the wearisome walk behind the plow handles. The mechanism of the implement is certainly simple and strong. The plow is not attached *rigidly* to the sulky, but with a loose connection, which gives the plow an independent motion. Those who have used the sulky are positive that the weight of the driver adds nothing to the draft of the plow. We could not give all the facts regarding this useful implement without printing the entire circular. We believe a farmer can obtain more than his money's worth of ease and comfort by securing the implement. We advise our friends to send for the circular.

WOMEN'S SILK CULTURE ASSOCIATION.—This little five-page pamphlet is a statement of the work done by the above association, or rather an appeal for a continuance of the Government aid it has received in its efforts to make silk culture a profitable business in this country. This, of course, has not been done by it or by any other institution in the country; but it claims to have established a successful experimental station with the slim means at its command. The Congress of 1884-5 appropriated $30,000 for the advancement of the "new industry," and of this the association received, from March 1885 to January 1886, $3,245.62, which has enabled it to purchase some necessary appliances and to pay more promptly for the products of silk culturists. The association was formed in Philadelphia in 1880, and since then it has paid $6,015.49 for eggs, cocoons and reeling. The ladies composing the association have worked gratuitously, energetically and philanthropically, and although facts and figures are unsympathetically unfavorable to the profitableness of the "new industry" in this country, under the present conditions of labor, the members of this association, and especially its earnest President, richly deserve the encouragement and sympathy of the public.

CORRUGATED IRON.—An exceedingly well-prepared pamphlet from the Cincinnati Corrugating Co., of Cincinnati, Ohio. The use of corrugated iron for roofing, siding and ceiling purposes has been greatly extended of late years, and bids fair to become yet more popular. Iron roofing is lighter and more secure than slate, far more durable than shingles, and more easily kept in repair than tin. Persons who live in dry, hot countries where cisterns are indispensable find that iron roofing gives good satisfaction. Send for the catalogue. There are many items of value contained in it.

WILLIAMS, CLARK & CO., general office Cotton Exchange Building, Hanover Square, N. Y.; sales offices Boston, Syracuse, Rochester, Baltimore, Atlanta and Jacksonville.—A little treatise giving directions for using their standard bone fertilizers as well as reasons for doing so; a history of the progress of the firm; the value of a fertilizer; mixing fertilizers at home; notes on the application of fertilizers; analyses showing their value, etc., etc. Sent free to all who apply to the above firm.

HALSTED'S PERFECTED CENTENNIAL INCUBATOR.—A pamphlet from the Centennial Manufacturing Co., Rye, N. Y. The incubator is well described and many testimonials are given as to its efficiency. A considerable space is given to showing the pleasures and profits to be derived from the poultry business. Among other implements and appliances described are brooders, egg-testers, feeders and a portable hot-bed.

CATALOGUE OF THE WINONA STOCK FARM, from C. H. Warrington, West Chester, Pa. The stock kept at the Winona Farm consist of Chester White, Poland China and Berkshire Swine, Jersey Cattle and Bronze Turkeys. The catalogue shows that the compiler has made a study of the origin, characteristics and breeding of the animals he has for sale.

"SPEED THE PLOW."—An illustrated catalogue of Timothy B. Hussey's agricultural implements. The various plows, harrows, cultivators, road scrapers, etc., manufactured by this house are well described and illustrated. The catalogue can be obtained at North Berwick, Maine.

FAY'S BUILDING MANILLA.—Circular from W. H. Fay & Co., Camden, N. J.—This material is recommended as being cheap, effective and reliable. It is used for roofing or as a substitute for plaster. It is also used as a carpeting, for which purpose it is said to give good satisfaction. Well described in the circular.

AGRICULTURAL IMPLEMENTS.—Circular from B. & J. W. Belcher, Chicopee Falls, Mass. The two implements which are particularly noted are the "C. C. Brooks" Swivel-plow and the Mudgett Hay-tedder. Both implements are well described. There are plenty of testimonials from those who have used them.

AARON LOW, Essex, Mass.—A garden manual and illustrated catalogue (100 pages) of

seeds, etc. It is a sterling catalogue and will well repay an examination. The list of potatoes comprises all the best kinds, varying in price from three to four dollars the barrel. Free to RURAL readers.

HORSE SENSE.—A circular from C. S. Beebe, Racine, Wis., descriptive of the Beebe Carts. If we may believe this circular, one of these light carts on the average farm will save a vast amount of horse flesh and make trotters out of the colts.

THE CARE AND FEEDING OF INFANTS.—Doliber, Goodale & Co., 40 Central Wharf, Boston, Mass.—This treatise, which sets forth the advantages of the well-known Mellin's Food for infants, will be sent free to all who apply. It is both interesting and instructive.

Literary.

BOOKS.

"YOUNG PEOPLE'S HISTORY OF ENGLAND." By George Makepeace Towle. Lee & Shepard, Publishers, Boston. Price, cloth, $1.50.

This is a very readable book of 366 pages. It presents clearly and concisely the main facts in the history of England. To such as dislike statistical detail, this will prove a work of value and one of great interest.

"HAPHAZARD PERSONALITIES; CHIEFLY OF NOTED AMERICANS." By Charles Lanman. Lee & Shepard, Publishers, Boston, Mass. Price, cloth, $1.50.

A work in which the author states: "It has been my fortune to make many friends among the noted men of time, and it is to a portion of these that I have devoted this volume." Among the persons here referred to are Henry W. Longfellow, Washington Irving, William C. Bryant, Henry Clay, Edward Everett, Park Benjamin, James Brooks, Lewis Cass, Alex. H. Stephens.

THE MESSAGE OF THE BLUE BIRD TOLD TO ME TO TELL TO OTHERS. By Irene E. Jerome. Lee & Shepard, Publishers. Price, $1.00.

A beautiful illustrated Easter poem, charming in style and execution.

HARPER'S MAGAZINE FOR APRIL.

We are glad to see that this sterling magazine is devoting more and more attention to agriculture and kindred topics. This departure will be appreciated, as a great many readers of Harper's are more or less intimately connected with farm life. The article on "Cattle-Raising on the Plains" will be read with interest. It fairly bristles with facts and figures. The meat trade of our country is assuming such mammoth proportions that all are interested in its development. The Eastern farmer should study the situation that he may the sooner understand that nothing but better stock and better care will enable him to compete with the West. The literary features of this number are strong, including, "Their Pilgrimage," Chas. Dudley Warner; "Springhaven," by R. D. Blackmore, and "King Arthur. Not a love story," by the author of "John Halifax, Gentleman." Act iv. "She Stoops to Conquer," "Plebian and Aristocratic Pigeons," by F. Satterthwaite; are beautifully illustrated articles. There are several poems with the usual Editor's Easy Chair, etc.

Domestic Economy

CONDUCTED BY EMILY MAPLE.

FARM LIFE AND HEALTH.—II.

PHILIP SNYDER.

TWO FARM NUISANCES.

Two dangers which lurk about many farm homes, though sometimes causing virulent sickness or death, often receive little thought. They are the hateful and hideous barnyard and the family vault. Which is worst is hard to determine.

Usually most of the water from the barn roof is discharged into the barnyard, and there it stays until it either settles into the soil or is evaporated in the sun. Sometimes an open drain carries it off to some uncultivated spot; but that may be no improvement. Where it goes to nobody seems to know or care. It goes out of sight and that is supposed to be the last of it; but it isn't. Subsoils are not uniform in texture; there are often veins of sand or coarse gravel, and through them these barnyard decoctions may reach the family well or the drinking water of the livestock. Every now and then there is a case of typhoid fever in the country, and the light and joy of some family goes to a premature grave, and the case is regarded as "a bitter dispensation of Providence." But investigations generally show that there is a cause for fevers, with which Providence has little to do, except through the laws of Nature. Providence never designed that barnyard pollutions should go into the human stomach; nor is it easy to see that it approves highly of barnyards, the sort of cleanlines they maintain being a long remove from godliness.

This is also to be said of this domestic monstrosity known as the privy. Why is it that people who are scrupulously clean in other respects can tolerate, within a few feet or rods of the house, such a reeking abomination, when a little care and forethought would obviate all its objections? The subject is almost too repulsive to write about, and yet, —as Webster said about the Bunker Hill monument,—"there it stands" and generally it is a prominent object in the landscape. What it is in detail I will not try to describe now—what it should be is more agreeable.

In the first place, hide it if possible with a hedge, trees, vines or a corner of some building. In the second place, never, *never* dig a vault under it. Instead, put under it a movable water-tight box, of a size that one or two men can move, with a crowbar to assist; keep a long and narrow box of some deodorizer in the building, and at least once a day shovel some of this into the box. This may be dried muck, road dust, land plaster, coal ashes (never wood ashes), sawdust, finely cut straw, chaff, or almost anything that will absorb moisture and odors. Then there will be little about it to offend: and when the box is nearly full, move it back far enough to shovel its contents out into a cart or wheelbarrow, and dump them where they will "do the most good." Then no wells, or springs, or streams will be poisoned; no clothes will carry a perfume into the home; and no lungs will be filled with one of the vilest odors in creation. A death's head would be the proper sign to put over the door of most country vaults.

WHY REFORMS ARE SLOW.

The sewage problem is a great one for cities, where the danger from innumerable water-closets connected with many miles of underground sewers, must be guarded against to escape the pestilence which "walketh in darkness." In the country there is no serious difficulty about it, when plain, common-sense rules are observed. But away back in feudal days our revered ancestors were barbarians, brutal, shiftless and "nasty," and to wholly breed out their blemishes, wonderful patience and persistence are needed. But it is a matter for astonishment that a danger so easy to remedy and remove should linger so tenaciously, and that too in the face of such fearful results as mark the history of thousands of families and almost every neighborhood. The very existence of malignant fevers is a warning that something is wrong on the premises.

EATING TOO MUCH.

The average farmer and farm laborer are chargeable with two other failings, which injure health and shorten life, both heir-looms of the highly barbarous feudal ages just referred to. They eat too much and bathe too little. Some of the food is objectionable as to the quality, but the quality is less harmful than the quantity. The farmer's out-door life gives him a vigorous appetite, and not enough restraint is exercised against an excess. His table drinks too (which may be classed as part of his food) are also objectionable, being very generally strong tea and coffee. The drink failing is particularly prevalent among the females. When a person regards strong tea or coffee as an absolute necessity for a meal, it is, in itself, a bad sign. An appetite for an unhealthy stimulus is fastened on the stomach and the path to disease is short and easy. Nature's simplicity is gone, and in its place are nervousness, changing moods, and a tendency to enjoy other stimulants, such as the most highly seasoned foods and condiments, and, not infrequently, intoxicating drinks. Children yet in arms are brought up to tea and coffee and the whole range of condiments, along with pie and cake to any extent, and their tender stomachs are disorganized at an early age. Then when a dangerous disease sets in—dyspepsia, heart-burn, frequent colic, flatulency, nausea, etc., the child is "weakly," unable to work, and an early death is regarded as "an inscrutable dispensation of an all-wise Providence." There are thousands to-day half broken-down, prematurely old, complaining that "food does them no good," or that it "distresses them," and who are running after the doctor, or swallowing quack medicines, who could yet be cured by a proper system of diet. Some, it is true, are too far gone, and yet hardly one in a thousand will listen with patience to a kind remonstrance against his bad habits.

THE DELIGHT OF BATHING.

As to neglect of bathing, that is due to a non-appreciation of its great importance. The face and hands are washed with commendable regularity, but the body—well, how many times a year do the average farmer, or farmer's sons, or even his daughters, give themselves a sponge bath from head to foot in cold water, rubbing first with a towel and then with the hands until there is a glow. There is "no time," it will be said; perhaps "no need of it," and certainly there are not many conveniences. But nothing is better to guard against colds, which are the besetting danger of farm life, and which so often lay the foundation for consumption. If the face is enlivened and cleaned, and one's lassitude banished by a morning ablution, the body will be still more so, and admirably fitted for the day's work or exposure. After a day of severe toil, particularly if the work has been dusty, a bath before retiring takes away all outer impurities, as well as the stiffness out of the joints, and prepares one for delightful sleep. Begin with Summer and continue in the Winter, even if we must break ice in the pitcher, to get at the water. There is no danger of catching cold in such an exercise; it will inspire to lively work and that will soon bring a glow to the skin, and when one jumps into his clothes he feels like a new man. A narrow income is no excuse for neglect; water costs nothing; an old piece of carpet or several newspapers on the floor will absorb the little water that falls, and a towel or two, and then the hands will make a delightful finish to an exercise foolishly dreaded by thousands. Accustom the children to it, and teach them how to do it expeditiously. It is worth more than a life insurance policy, and costs next to nothing.

Vineland, N. J.

A DELIGHTFUL DINNER.

DAINTY TIDBITS TEMPTINGLY PREPARED.

MENU.

Soup a la Bonne Femme.
Boiled Bass Caper Sauce.
Sweetbreads with Cauliflower.
Roast Ducklings.
Salad.
Rice Cake with Peaches.

CUT a good-sized onion into very thin rounds and fry in a little butter or fat taken from the top of soups; do not allow it to brown and when half done throw in the finely cut leaves of a tender head of lettuce, a handful of sorrel also cut small; add pepper, salt and a little nutmeg, and keep stirring until the vegetables are nearly cooked. Then put in a teaspoonful of sugar and a cupful of veal stock; let this boil until it is reduced one-half, add a quart of veal stock; give one boil and keep warm until the time of serving. Meanwhile prepare a dozen and a half very thin slices of bread, about an inch wide and two inches long, taking care that they have a crust along one of their sides; dry these in the oven. Free the soup from fat; set it to boil, and then take from the fire and stir in the yelks of two eggs beaten up with a gill of cream. Pour the soup over the slices of bread, and serve. This extremely wholesome soup deserves to be better known in America. A French lady suffering from fatigue refreshes herself with sorrel soup. In all cases where eggs are added to a soup they must be well beaten and stirred in very slowly or they will curdle. Do not allow the soup to boil after they are in.

Pin your fish in a piece of clean muslin if you have no fish-kettle. Cover with cold water to which you have added a little vinegar and salt. Allow eight minutes to the pound after the water begins to boil; make some drawn-butter sauce, stir in a spoonful of capers or pickled nasturtium seeds, and send to table in a sauce-boat.

Sweetbreads are sometimes an expensive dish in the city, but a farmer who kills his own veal may enjoy the luxury cheaply. Trim the skin and cartilages from them and put over the fire in cold water containing salt and a little vinegar. As soon as the water boils, take them out and press between two plates with a weight on top. When cold, egg and bread crumb them, dip in beaten egg and cracker crumbs, and fry brown in boiling dripping. Dish them in a circle on a hot platter with a mound of cauliflower in the center; pour a cream sauce over all. If cauliflower is not in season, send green peas to table in a separate dish.

A very tasteful dressing for roast ducklings is made by frying a minced onion in butter, and adding half a cupful of thick stewed tomatoes and two cups of bread crumbs. If they are really ducklings, they will roast in from 30 to 40 minutes. Thicken the gravy in the pan and add the giblets which have been stewed and minced. Serve with currant jelly and green peas when in season.

Rice cake with peaches can be made with the canned fruit. Boil some rice, using half milk, and while it is hot stir in a tablespoonful of butter, two of sugar and one egg for each cupful of boiled rice. Butter a pudding dish, put in a half-inch layer of rice, then a layer of peaches and so on until the mold is nearly full. Bake for 20 minutes; turn out upon a dish and serve with wine sauce. PALMETTO.

ABOUT YEAST.

A FRIEND gave me some of her yeast. Never before did such a little deed so much lighten my work, and consequently do me so much good. She gave me what looked like a white potato ball. She said, "Mash as much more boiled potato fine, and mix with it; add one teaspoonful of salt, and two teaspoonfuls of sugar, let it stand a few hours, and your yeast is ready to use. Take half the yeast to make your bread; with the remainder start the yeast the same way again; keep it in a cool place in Summer, and where it will not freeze in Winter, and you will always have good yeast." It did not look like yeast, but it smelt nice and as my friend said it was good it must be so. I tried it and found the making of bread and the keeping of nice fresh yeast on hand a much easier task than it ever had been since I became a housekeeper.

One heaping coffee-cupful of the potato yeast and three quarts of warm water make my four-gallon bread-pan full of risen dough. I knead it (not too hard), at the first mixing in the evening and often bake breakfast biscuits from it. Like all other dough that is expected to rise, it must be kept warm, but not *too* warm.

I asked my friend where she got the yeast. "Oh, Mrs. Dash gave it to me," she replied. "She doesn't know who started it, so I tell folks it must have been made when the world was; and that's as far as I can go," she laughingly added. I have since found out how to start it, or it would be no use to tell of my yeast. Moisten some mashed boiled potatoes with baker's yeast, add one teaspoonful of salt and two of sugar and let it rise, divide it and add potato and sugar and salt as before, and after a time it will become as dry as if nothing but potato had been put in it. I prefer to use *nearly all* my yeast every time, for, as I bake only once in three or four days, a little yeast can raise the whole meantime, and it helps keep it sweet.

It seldom happens that I have to boil potatoes on purpose to renew the yeast; even cold, baked potatoes will do to use, the greatest objection being that they do not readily mash fine, but that is overcome by putting the yeast into some of the water and straining it through a colander into the flour. It makes no difference whether the yeast is used in that way or mixed dry with the flour. I have seldom added soda to my risen bread since I have used this yeast. When I was obliged to do it, it was because other work kept me from attending to the bread when it was light enough to put into the pans. Mrs. Stowe once wrote that "the bread should rule the kitchen." I have found that baby's claims are ahead there, and sometimes the bread must wait till the butter has had "the cool of the morning." Nearly every housekeeper finds the bottling of liquid yeast very troublesome. Those who do not live near a baker must keep their own supply of yeast, and I am sure no one can produce a more economical or satisfactory way of doing so than the one I have just written about. My friend makes a thin batter in the evening, and adds the rest of the flour in the morning, and the dough rises very quickly; but those who have a great deal of work to do find it a great help to have the bread made as nearly as possible in the comparative leisure of the evening. Bread made with this yeast does not require much kneading, at least not with our fine Colorado flour. I keep my yeast in a bowl with a saucer turned over it. S. E. H.

DOMESTIC RECIPES.

CROQUETTES.

PUT two tablespoonfuls of butter in a frying-pan, and when it is very hot, fry in it, until brown, a teaspoonful of chopped onion; stir this constantly to prevent scorching. Now rub in a tablespoonful of flour till it is smooth, add two cupfuls of chopped meat of any kind, pepper and salt, and a teaspoonful of minced parsley, or the same quantity of dried parsley rubbed fine. Stir this mixture about with a knife until nice and brown, add a teacupful of broth, a gill of cream, and a beaten egg; take at once from the hot part of the fire, and stir for a few minutes where it will keep hot without cooking. Flour a bowl and press the meat in firmly; set away to get cold; when wanted for use, mold them in a tiny cup or wine glass, roll in cracker dust or bread crumbs, then in beaten egg, again in the crumbs, and fry in boiling fat. Have the fat really boiling, and they will be dry and creamy inside. Lay them on a sieve turned bottom up before the fire, or in a warm oven for two or three minutes, put a folded napkin on a hot dish, and send to table. In cold weather they may be kept in a covered bowl for several days and be ready for frying at any time, which is a great advantage in case of unexpected company. M. M

VEAL CROQUETTES.

Scald half a pint of rich milk, and stir in a large cupful of dry bread crumbs, half a cupful of butter, and two cupfuls of boiled veal chopped very fine; season with salt, a quarter of a grated nutmeg, red pepper and a teaspoonful of grated onion. Take from the fire, and when slightly cool, stir in a beaten egg. Butter a dish and lay the mixture upon it in separate tablespoonfuls until quite cold; then roll in beaten egg and crumbs and fry. L. J. B.

FRYING AND SAUTEING.

To saute is to fry by immersion in boiling fat; in frying only a little fat in the bottom

Miscellaneous Advertising.

When Baby was sick, we gave her Castoria,
When she was a Child, she cried for Castoria,
When she became Miss, she clung to Castoria,
When she had Children, she gave them Castoria.

of the pan is used. In either case the great thing is to have the fat boiling before you put anything in it, to cook it quickly, and not to let the things stay in a minute after they are done. It is not always convenient in small families to have as large a quantity of fat on hand as is necessary to saute; in this case a skillful cook can try the article by using great care so as to have it as nice as if sauted. A croquette, potato-cake or chop can be fried brown if very little fat is used, provided that little be hot enough when the article to be fried is put in. When you do really saute anything, have no half-way measures, but put in enough fat to swim the thing to be fried. If all the fat from streaks, soups and the top of gravies is carefully collected in a family where a moderate amount of meat is used, a considerable quantity of nice fat will generally be on hand. Lard or cooking butter may be mixed with this dripping, but lard alone is not so nice. ELSIE.

EHRICH'S FASHION QUARTERLY for March contains some 170 pages, 24 of which are devoted to the fashions and literature, while the remaining pages bristle with illustrations and price lists of men's, women's and children's wearing apparel of every description; table and bed linen, upholstery, jewelry, stationery, china, silver-plated goods, etc. Those of our readers who are interested in such things will do well to send for this enterprising publication. Single copies 15 cents. Address The Fashion Publishing Co., No 18 Jacob Street, New York., P. O. Box 3491.

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Children feel the debility of the changing seasons, even more than adults, and they become cross, peevish and uncontrollable. The blood should be cleansed and the system invigorated by the use of Hood's Sarsaparilla. Give it a trial.

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E. E. BREWSTER, Holly, Mich.

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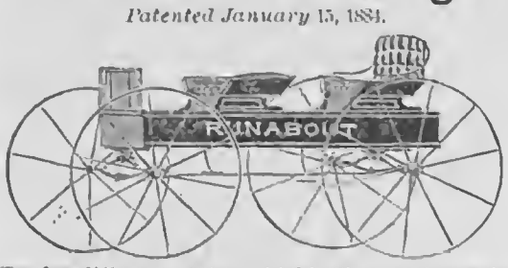
Patented January 15, 1884.



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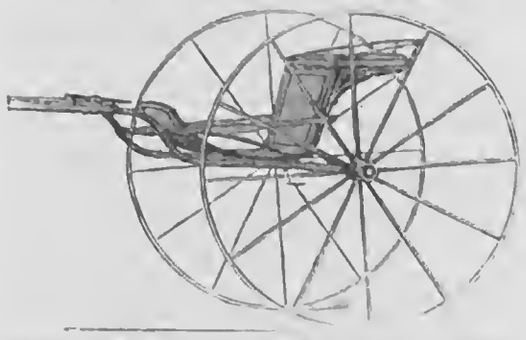

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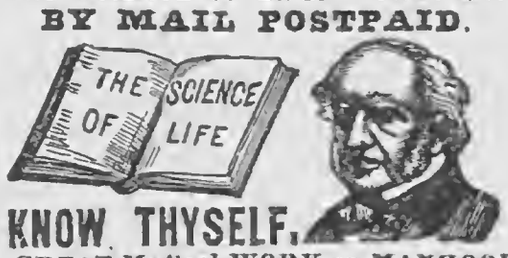

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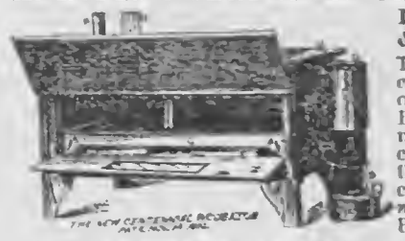

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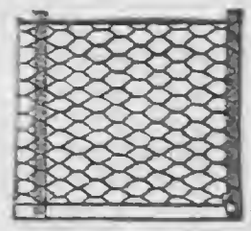

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W. M. MONTGOMERY, Jr., Bergenfield, Bergen County, N. J.

News of the Week.

HOME NEWS.

SATURDAY, Mareh 20, 1886.

W. S. Warner, an impecunious clerk of this eity, gained most by the frauds of Ward, the swindling partner of Grant & Ward. He was sued for the money he had fraudulently received, and judgment has been given against him for $1,255,361.24, the "profits," or the diferenc between what he "invested" with Ward, and what he drew out, with interest from May 6, 1884: total $1,395,752.54, to be paid over within 20 days. The transfer of property worth $578.56 by Ward to Warner on May 7, 1884, just before the collapse of the swindle became public, is declared fraudulent, and the property must be given up to the creditors of the concern, which is stated to have been bankrupt from the outset. It will be mighty hard to collect that judgment. The case will doubtless be appealed.....There appears to be a lull in the anti-Chinese crusade on the Pacific Slope. A powerful minority vigorously protested against it at a large meeting at Sacramento, Cal.: and at Portland, Oregon, a meeting of 1,500 "reputable citizens" declared that they "will not allow" intimidation or violent expulsion of working men, pledging their "means and lives to uphold these principles" .....The total arrivals of Celestials at San Francisco and other Pacific ports, in three years ending August 1, were 20,077, and the departures 41,322, showing a decrease of 21,245 in our Mongolian population. But while only 2,788 arrived in 1883; 6,042 came in 1884, and 5,568 in the first seven months of 1885. The increase was due to fraudulent immigration either on forged certificates or by traveling overland or by coasting vessels from British Columbia. Congress has given preference to a bill to indemnify outraged Chinese over one still further restricting Celestial immigration. ....The Duluth Board of Trade has "resolved" to indorse the bill of Congressman Weber, of New York, now before the House, for the permanent enlargement and improvement of the Erie and Oswego Canals by the General Government as regulators of freight charges from the West and consequently appreciators of products and land there. The West, and especially the Northwest, would be chiefly benefited by the measure, next to this city, and naturally it is popular there. Wednesday the New York Senate approved the bill by 17 to 3. As seven-eights of the Western States are benefited by the Erie Canal, the cost of improving it ought to be borne by the Federal Government. It is proposed to deepen the water and double the length of the locks.....Gold is still flowing rapidly to Europe. Tuesday morning $1,763,000 in gold bars were sent from this city to Paris. Every "steamer day" transatlantic exports are heavy from this and other ports also. Over $13,000,000 have left this port alone since the movement began in December.....Wednesday Apostle G. Z. Cannon having failed to respond when his case was called in court at Salt Lake City, forfeited $25,000 bail.....A House Committee is investigating the ownership of the Pan-Electric Telephone stock which has been generously distributed gratis "where it would do the most good" among Congressmen, by Rogers, father and son, the inventors of the system, and the disclosures are by no means creditable to some of those who accepted the gifts—a nasty business all round.....The report that Blaine's daughters have become Catholics is authoritatively contradicted from Augusta, Me. Like their father and mother, they belong to the Congregational Church.... ....After Cleveland's inauguration, Governor Murray, of Utah, placed his resignation at the President's disposal, and Secretary Lamar has just asked for it. Murray's removal is much regretted by the Gentiles of Utah, as he was strongly opposed to polygamy.....At Carrollton, Miss, on Monday, during a trial at which 20 negroes were present, 100 masked white men, armed with Winchester repeating rifles, rode up and fired through the court-house windows at the negroes, killing 13 and wounding all the others more or less severely. The assassins, unknown of course, then moved off. Some weeks ago in a "difficulty" between some negroes and a white man named Liddell, the latter was shot and wounded, and owing to his threats, the negroes swore out a warrant against him. The case was on when the shooting occurred.....Mr. Eaton and Mr. Trenholm have retired from the Civil Service Commission, the former for private business reasons; the latter to become Controller of the Currency, a better office. John H. Oberly, of Illinois, succeeds Trenholm, and Charles Lyman, of Connecticut, takes Eaton's seat.....Pres. Adams, of Cornell University, warns the public against a swindler operating in the West as a Professor of Cornell. The rascal assumes the names of various actual Professors of the University and solicits specimens and borrows money. All the Faculty are at the University now.....At Toledo, O., early last Monday morning, Varney, Taylor & Co.'s linseed oil mills, the largest in the country, was destroyed by fire—loss, $130,000. An explosion of a 100-barrel tank of naphtha, used in the "new process" of refining the oil, gave the city an earthquake, broke a multitude of windows and injured five men. .....A short time ago the House passed a bill to increase the pensions of widows and dependent relatives of soldiers and sailors of the late war, from $8 to $12 a month, with a proportionate increase for the relatives of officers. The Senate wished to give widows an additional pension of $4 for each child under 18; but as a number of other amendments were instantly added, and as it was feared that if it went back to the House for consent to them, it would be defeated, talked to death or pigeon-holed in Committee, all amendments were dropped last Tuesday, and the bill was passed just as it came from the House, and went straightway to the President for his signature. It will require an annual expenditure of a little over $6,000,000.....Ex-President Arthur has been troubled with dyspepsia and sleeplessness; but there is no other foundation for the needlessly alarming rumors lately circulated about his condition.... ....It appears from a speech in the Dominion Parliament, last Monday, that the first report of the medical commission sent to examine Riel as to his sanity, was suppressed by the Government (which "had determined to hang Riel right or wrong") and that a second and "cooked" report was drawn "to bear the Government out" in hanging him, and was presented to Parliament as if it were the only one!.....The funeral of each ordinary Senator or Representative dying at Washington, costs the nation about $5,000, on an average; that of Senator Miller, of California, will cost $20,000 on account of the long journey to the grave. There was a regular rush of Congressmen for a place on the House and Senate Committee that accompanied the body, all anxious to enjoy a free transcontinental trip, with free board of the very best kind, and unlimited etceteras—especially the etceteras.... ....Canada has commissioned the cruiser Lansdowne to protect her waters against American fishermen.....Mrs. George Bancroft, wife of the venerable historian, died at Washington, Monday night, aged 82..... Capt. Wadell, commander of the destructive Confederate cruiser Shenandoah, died Tuesday at Baltimore, aged 62. The Shenandoah destroyed 32 vessels and released six on bond. Value of captures, $1,159,000; but claims were made for $6,200,000.....Tuesday the House voted—195 to 44—to fix a day for the consideration of the Reagan Interstate Commerce Bill. This is not considered exactly an indorsement of the bill; but all or nearly all who voted affirmatively are pretty sure to vote for some bill to regulate railroad charges, so as to remedy the evils of over-charges and unjust discrimination, and to put a check on the present system of railroad management..... Same day a vote was taken on fixing the three next Saturdays for the discussion of Bland's Free Silver Coinage Bill. The vote in detail was—yeas, 179, of whom 133 were Democrats and 46 Republicans; nays, 87, of whom 16 were Democrats and 71 Republicans; not voting, or paired, 58, of whom 36 were Democrats and 22 Republicans. This vote demonstrates that a large majority of the House is in favor of the free coinage of silver—it was confessedly a test vote. The President, however, is sure to veto such a bill; and it is still doubtful whether the necessary two-thirds to pass it over his veto can be obtained. Banks and other moneyed institutions as well as capitalists are bitterly against it; the rest of the country are generally for it, ignorantly indifferent, or "on the fence."..... ....The Insurance Commissioner of Ohio is urging war on the "graveyard insurance companies" doing business in that State..... At one o'clock Sunday last conversation was carried on between this city and Washington —280 miles away—by a new telephone patented by Mr. Turnbull, of Baltimore. Voices more clearly heard than when conversation takes place by telephone between two places in this city. Widely separated places will soon be within speaking distance of each other.....The Pennsylvania R. R. Co. owns up that, last year, its gross earnings were $93,000,000! It moved an equivalent of 8,400,000,000 tons of freight for one mile, and carried 54,754,771 passengers!.....The "express" business of the country is likely to be revolutionized by a recent decision of the U. S. Supreme Court, that each railroad company has a right to operate its own "express" to the exclusion of all others. Already notice has been given the "Adams" to get off the Missouri Pacific, and to the "Wells-Fargo" to quit the Northern Pacific. The decision reverses the findings of all the lower courts..... ....Although Congress has already spent a great deal of time in talking about alterations in the tariff and in taking testimony for and against every proposed alteration, and a good deal more time will be used up in discussing every phase of the question, it is becoming a very general opinion that Congress will make no changes whatever in the tariff at this session.....At 4:30 last Sunday morning (March 14), the famous Cunard steamer Oregon, "the greyhound of the seas," which left Liverpool March 6, having on board 896 persons, of whom 641 were passengers, when within 15 miles of the southern shore of Long Island, was run into by an unknown, three-masted schooner, and sank at 1 P. M. All the passengers and crew were saved, so that the Cunarders may still boast that they "never have lost a passenger." Doubtful yet to whom the blame belonged. Schooner had "right of way" of all steamers; but had no lights displayed—it is said. She and all on board were instantly lost and absolutely no trace of her has been found among the floating wreckage. The Oregon was worth $1,250,000; cargo estimated at $500,000; personal property of the rich Cunard passengers as much more; while the mail must have contained a very large sum. Total loss is estimated at from four to six million dollars. There were 598 mail bags, 223 of which have been found among the wreckage. Some doubt the "collision" theory, and say the loss was due to a dynamite explosion.....The suit against the Bell telephone is to be definitely brought in Columbus, Ohio, in a few days; papers are ready; summary published not correct.....Stonewall Jackson's horse "Old Sorrel," said to be the last surviving horse of the Confederacy, died the other day, aged 32.....Archbishop Taschereau, of Quebec, and Archbishop Gibbons, of Baltimore, are to be made Cardinals on April 12.....A good deal of the money received from General Grant's publishers is used to pay some of the debts of Grant & Ward, in accordance with the General's last wishes, where investments were made through faith in the Grant family. One such debt of $25,000 is known to have been paid the other day with a certified check. .....The McCormick works at Chicago are again in full blast, 1,250 men being at work. The malcontents threaten that all labor organizations will boycott all who sell its machines.....Thursday, March 18, was the President's 49th birthday..... Congress is inclined to pass a bill introduced by Wise, of Virginia, authorizing the establishment of manufactories of tobacco exclusively for export, under Government regulations.....Just now it looks hardly probable that that arch-lobbiest, Capt. Eads, will be able to dine, wine and weedle Congress into a guarantee of big interest for 30 years on the capital to be invested in his ship-railroad scheme. There's a great deal of "kicking" even by the love-sick Senator—Jones of Florida.....The strikes on the Gould railroad system are in a fair way of being settled by arbitration and mutual concessions. Immense damage already done to business..... ....Labor troubles still continue unusually numerous. Strikes and boycotting common; here are a few: 250 boys and girls—cracker packers, 10 to 14 years old—have struck for for higher wages, in this city.....West of the Mississippi, farmers and store-keepers along the C. B. & Q R. R. are boycotting the road on account of excessive charges and unjust discrimination in local rates..... The boys attending St. Ann's R. C. school, Brooklyn, who pay 10 cents a week, if able, struck Wednesday for half that rate; but magnanimously offered to relieve the authorities of half the work by attending only three days a week. A policeman arrested two "pickets" while thrashing a "scab" who wished to go to school, and the strike ignominiously collapsed.....Everett & Aughbaug, who control the milling business at Waseca, Minn., and are largely interested in elevators, have been boycotted by the neighboring farmers on account of the low prices they offer for wheat .....A cat show at New Haven, Conn., was boycotted last week because its prizes were made by a firm under the ban of Labor.....The parsons of Minneapolis have "resolved" to boycott Sunday papers..... Excessive rate-cutting still continues on the transcontinental routes; but it is confined to them exclusively. Indications point to a speedy settlement....The prospects of serious labor troubles early in the season greatly unsettles business all over the country. Over 71,000 hands are now out on strike, chiefly railroad men in the Southwest, coal miners in Pennsylvania, and mill operatives in New England; but every part of the country has its strikes, big or little. Many contracts have been refused in all sections, as it was impossible to fix any price that might not be ruinous through the demands of labor.....

AFTER two years' trial, we unhesitatingly pronounce the Boss ZINC and LEATHER COLLAR PAD, the only durable and successful one that we have ever used. It retains its shape, is cooling, prevents chafing, and thereby keeps the horses' necks clean and healthy. HIRAM G. DODGE & SONS, Wood & Coal Dealers, Madison, Wis.—*Adv.*

AGRICULTURAL NEWS.

SATURDAY, March 20, 1886.

THE Chicago dressed meat shippers, through Armour & Co., have prepared a case for the courts against the railroad companies for discriminating against them. The live stock men are also going to law with the roads for a reason precisely similar. Have you ever heard of a "friendly move?".....Com. Colman and others interested in sugar making are urging Congress to grant $1,000,000 to provide for two machines for the manufacture of sorghum sugar by the diffusion process..... ....Two bales of cotton raised in 1861 by slave labor were sold the other day at Rock Hill, S. C., on the death of the owner, who had been offered for it 33⅓ cents a pound in gold. It was sold for 8½ cents—the lowest price touched by cotton since the bales were raised.....Dakota farmers are making plans to grow flax for fuel this Summer. It is said that a ton of flax straw is worth more to burn than a ton of soft coal.....Germany has eight schools of forestry, where five years' training is required of those who seek positions under the Government, although a course of study half as long may be taken by amateurs. France supports a single school at Nancy.....The Legislature of Kentucky instructs her Senators and Representatives not to permit hemp to be put on the free list..... .....For years past our average annual importation of horses from Canada has been 22,000 head. A few years ago the average value, per head, was $95; last year it was $140—improvement in the Dominion and a demand for better horses here.....Farmers about Toledo, Ohio, are greatly alarmed at the appearance of swarms of young grass-hoppers about half an inch in length.....The recent cold spell ruined all the plants on that Governmental South Carolina tea farm, and the experiment has been finally abandoned..... A beef factory is to be established here. Stables "after the most approved patterns" are to be built, and filled with prime cattle to be fed on corn silage, by which means beef, the promoters say, can be supplied at rates cheaper than those asked for Western beef... ....Dairy Commissioner Brown, of this State, gives the N. Y. Senate items of expenditure amounting to $53,403. There have been 263 actual prosecutions for selling adulterated milk and oleo products; as well as 50 civil suits for penalties, and evidence has been collected for over 200 more suits..... The Connecticut Legislature is thinking of exempting from State taxes for 20 years every farmer who shall plant a certain number of trees under specified conditions.....The Austrian Government is about to pass laws to protect the fair fame of Tokay wine from the disrepute brought on it by the spurious concoctions sold throughout Germany under that name. This is the only country where good, pure wine is made more valuable by bearing fraudulent labels of foreign vintages ..... The average farm wages in Michigan, last year, were $17 a month with board, and $29 without.....Secretary Lamar has reversed Commissioner Sparks's ruling that preëmptors cannot take up homesteads on payment of commutation fees. The Secretary says a preëmptor *can* commute a homestead. Joy among thousands in the Far West.....The farmers of South Carolina are to hold a State Convention at Columbia on April 29, as they are "farming towards dispair," and the Legislature, while "not corrupt," "is negligent of the public welfare." A farmers' ticket is feared by the politicians, and a similar movement is under way in Georgia.

DON'T FORGET.—When Chas. Ashley, of Ogdensburg, N. Y., offered a $45 Fairbanks Scale at the Ogdensburg Fair for the three best tubs of butter it was awarded to H. M. Atwater, of the Atwater Creamery. The same three tubs were also awarded the first premium. Mr. Atwater reported to the Society that they were all brought to their beautiful shade with Thatcher's Orange Butter Color.—*Adv.*

Brown's Bronchial Troches for Coughs and Colds: "There is nothing to be compared with them." —*Rev. O. D. Watkins, Walton, Ind.*—*Adv.*

MARKETS BY TELEGRAPH.

SATURDAY, March 20, 1885.

CHICAGO.—Compared with cash prices a week ago, "regular" wheat is ½c. lower; No. 2 Spring, ½c. lower; Corn, ¾c. lower. Oats, ½c. lower. Rye, ½c. higher. Barley, steady. Pork, 35c. lower. Cattle, shipping, 40c. to 80c. lower; stockers and feeders, 10c. to 50c. lower; cows and bulls mixed, 25c. lower; bulls, 5c. lower. Hogs, from 5c. to 15c. lower on all grades. Sheep, "Natives," 40c. to 60c. lower; western, unchanged; lambs, 60c. lower for highest class, steady for others; Texans, a trifle higher.

WHEAT.—Lower. Sales ranged; March, at 79@79¾c; May, 82¾@83½c.; June, 85¼@85¾c; No. 2 Spring, at 81½@82c; No. 3 Spring, at 71c@71¼c. CORN.—Dull; Cash, 35½@35¾c; March, 35½@35¾c; May, 38¾@39c. OATS—Dull; sales ranged: Cash, at 28¾@29c; March at 27¾@28c; May, 31½@31¾c. RYE—No. 2, 59c. BARLEY—No 2, at 60c. PORK.—Cash, quoted at $9 65@9 72½; March, at $9 55@9 72½; May, at $9 62½@9 85. LARD.—Quiet and steady; sales ranged; Cash, at $5 95@5 97½; March, at $5 95@5 97½; May, $6 00@6 02½. BULK MEATS, Shoulders, $3 90@4 00; Short rib sides, at $5 20@5 25; Short Clear sides, at $5 50@5 55. CATTLE—Shipping steers, $3 50@5 50; stockers and feeders, $2 50@4 50; cows, bulls and mixed, $1 50@4 00; bulk, $2 95@3 20. HOGS.—Rough and mixed, $3 80@4 10; packing and shipping, $4 15@4 35; light,

$3 60@4 20; skips, $2 50@3 75. SHEEP.—Natives, $2 50@5 40; Western, $4 00@4 60; lambs, $4 00@5 00; Texans, $2 50@5 40.

ST. LOUIS.—Compared with cash prices a week ago, wheat is quoted at ½c. lower. Corn, 1½c. lower. Oats, 1½c. lower. Rye, 6c. lower. Barley steady. Butter unchanged. Eggs 1½c. lower. Flax-seed, unchanged. Pork, 40c. lower.

WHEAT.—No. 2 Red, Cash and March, 90½c; May, 92½@92⅝c; June, 92¾c. CORN—No. 2, Mixed Cash, 31½@31⅝c; March, 31⅝c; May, 35¼c. OATS—No. 2 Mixed, Cash, 20½@20⅝c; March, 29¼c, May, 30⅜c. RYE, 60c; BARLEY—American, 60@80c. BUTTER—Quiet; creamery, 25@30c; dairy, at 18@26c. EGGS—Dull; quoted at 9c. FLAX-SEED—Quoted $1 08@1 10. PORK, at $10 25. BULK MEATS—Long Clear, at $5 25; Short Rib, at $5 25; Short Clear, $5 00. LARD—Firm at $5 80@5 90. CATTLE—Market slow and quiet; good to choice shipping steers, at $4 65@5 15; common to medium, at $3@4 75; butcher steers, $3 25@4 35; cows and heifers, at $2 25@3 80; stockers and feeders, $3 00@4 15. HOGS.—Market fairly active and steady; butchers' and choice heavy, $4 15@4 30; mixed packing, $3 75@4 05; light, $3 80@4 05. SHEEP.—Market steady on good sheep; common dull and lower; sales at $3 50@5 60.

BOSTON.—CORN.—Firm; Steamer Yellow, at 51c; do mixed at 50c; and no grade, at 49@50c. per bushel. OATS.—Dull Sales of No. 1 white and barley oats at 44@45½c.; No. 2 white, at 42½@43c.; and No. 3 white at 41½c. per bushel. RYE is 67@69c. per bushel. BRAN is firm at $18 75@19 for Spring and $19 25@19 50 for Winter; fine feed and middlings at $18 75@21 00, and cotton seed meal at $24 50 on spot and $23 75 per ton to arrive. HAY AND STRAW—Hay is plentiful at $18 50@19 00 ₱ ton for choice and fancy; fair to good, $17@18; fine, $16@17, and $13@15 for poor and damaged. Western choice $16@17, do fair to good $14@15. Rye straw is held at $19@20 00 for choice, and $12@14 for common to good. Swale hay, $11@12; Oat straw, $9@10 per ton. PRODUCE—BUTTER-Northern creamery, choice to extra, 23@30c; good to choice summer, 18@22c; western creamery, at 2/@33c, for choice to extra fresh made; good to choice held stock, at 15@20c; northern dairy 28@30c, for Vermont extra; 20@23c, choice, and 15@18c, for fair to good; Western dairy, 18@23c, for choice, and 13@15c, for fair to good; Imitation creamery at 18@21c, for good to extra; ladle-packed, at 24@25c, for choice CHEESE—New York choice to extra, 8½@10c. and common to good, 5@8c; Vermont choice to extra, 8½@10c and common, 5@7c; Western common to extra, at 4@9¾c, Sage, extra, 13½c, good to choice, 8@10c. EGGS—Cape and near-by, per dozen, at 16c; Eastern extras, 15½@16c; do, firsts, 15c; Northern, fresh, 15@16c; Western fresh, 16c; Provincial, at 15@15½c. BEANS.—Choice Northern hand-picked pea, $1 70@1 75 per bushel; do, do, New York, small, $1 50@1 55; do, do, screened at $1 15@1 20; medium choice, hand picked $1 35@1 40; do, screened, $1 15@1 20; Yellow Eyes, Improved, $1 45@1 50; do, choice flats, $1 35@1 40; Red Kidneys, $1 75@1 80. Canada peas, 65@95c, per bushel for common to choice. Green peas, Northern, at 90c@$1 00; do, Western, $1 20@1 25. Potatoes range at 55@80c, per bushel, as to quality.

PRODUCE AND PROVISION

NEW YORK, Saturday, March 20, 1886

STATE OF THE MARKET.—Compared with cash prices last week, flour is 5c, lower; Ungraded Winter Red wheat, is 1c, to 3c, higher; No. 2 Red wheat is ½c, lower; corn, No. 2 mixed is 1c. lower; oats ¾c, lower; pork, 35c, lower; lard, 3c, to 5c, lower; poultry, steady, with best call for live; cotton is 1-16c, higher; fruits, steady; vegetables steady, with good demand for potatoes.

FLOUR, FEED AND MEAL. FLOUR—Quotations: Fine at $2 85@3 05; Superfine, $2 85@3 40; Extra No. 2, $3 35@3 75; Good to Fancy Extra State, $3 95@4 25; Common to Good Extra Western at $3 35@4 00; Good to Choice Extra Western, $4 00@5 50; Common to Fair Extra Ohio, $3 35@3 75; Good, $3 80@4 20; Good to Choice, $4 25@5 20; Common Extra Minnesota, $3 35@3 75; Clear, $4 00@4 50; Rye Mixture, $4 00@4 25; Straight, $4 50@5 00; Patent $4 75@5 50; Bakers' Extra, $4 50@4 75; St. Louis Common to Fair Extra, $3 85@3 80; Fair to Good, $3 85@4 75; Good to Very Choice, $4 90@5 50; Patent Winter Wheat Extra, $4 50@5 50; City Mill Extra for West Indies, at $4 90@4 95; South America, $5 00@5 10. SOUTHERN FLOUR—Common to Fair Extra, $3 45@3 85; Fair to Choice do., $3 90@5 45. RYE FLOUR—Superfine, $3 05@3 50. BUCKWHEAT FLOUR, at $1 85@2 00. CORN MEAL—Brandywine and Saganore at $2 95. FEED—40 to 50 lbs. quoted at 87½@90c.; for 60 lb. at 80@82½c.; 80 lb. at 80@81½c.; 100 lb. at 95c@$1, and sharps at $1 05@1 10. Rye at 80@85c.

GRAIN.—WHEAT.—Ungraded Winter Red, 85c@$1 03; Ungraded Duluth Spring, at 96½c; No. 2 Red at 91½@91¾c.; No. 2 Red for March, quoted at 94½@94¾c.; do. for April, at 94⅝@95c.; do. for May, 95 9-16@95 15-16c; do. for June, 96½@96¾c.; do. for July, 96¼@96½c. do. for August, 96¼@96½c; do. for December, $1 01¾@1 01½. RYE—82@83c. for Western; 65@66c. for State. CORN—Ungraded Mixed, 42½@46c; Rejected, 43c; No. 3, 45½@45¾c.; Steamer Mixed, 44½@45c; do. Yellow, 45½c; do. White, at 45½c; No. 2, Mixed, 46@46¼c; No. 2 Mixed for March, 46@46¼c; do. for April, 46⅜@46¾c; do. for May, 46¾@47¼c.; do. for June, 47¼@47¾c. OATS.—No. 3 Mixed, 36½c; No. 2, 37@37½c.; No. 1, 39½c; No. 3 White, at 33@34c; No. 2 do. at 38½@40c; Mixed Western, at 35@39c.; White do., at 39@46c; White State, 41@44c; No. 2 Mixed for March, 37½@37½c; do. for April, 37@37¼c., do. for May, at 37c.

PROVISIONS.—PORK.—Mess quoted at $9 75@10 25 for Old and $11 00@11 50 for New; $10 75@$11 50 for Family Mess; $12 25@14 25 for Clear Back; and $9 75@10 for Extra Prime. BEEF.—City Extra India Mess, $15 00@17 00; Extra Mess, in barrels, $8 00@8 50; Packet, $8 50@9 00 in bbls.; Family Plate, $9 00. BEEF HAMS.—Quoted at $17 50. CUT MEATS.—Pickled Bellies, 12 lb, average, at 5½c; Pickled Hams, at 8¼c; Pickled Shoulders at 4½c.; Pickled Bellies, 12 lb, average, at 5¼c; Pickled Bellies, 10 lb, average at 5¾c; Pickled Shoulders, 4½@4¾c; Smoked do, 5@5¼c; Pickled Hams at 8¼@8½c.; Smoked do., 8½c. MIDDLES—Long Clear in New York quoted 5¾c. for Western delivery. Long Clear, 5¾c.; Short Clear, 5½c. DRESSED HOGS.—City Heavy to Light, 5½@5¾c; pigs, 5¾c. LARD.—Western Steam at 6.25@6.30c; April, 6.26@6.29c.; May, 6.28@6.31c.; June, at 6.33@6.31½c; July at 6.38@6.40c.; August, 6.41@6.46c.; September, 6.51@6.54c.; City steam, at 6.25c.; Refined Continent, 6.60c., and South American, 6.85c.

BUTTER.—Elgin Creamery, at 33c; Pennsylvania do., at 33c.; Western do., at 30c.; State Dairy half-firkin tubs, 21@30c.; Western Imitation Creamery, 18@25c.; Western Dairy, 10@17c. Western Factory, 14@22c.; rolls, at 8@12c. Old Butter.—Stale Dairy at 14@26c; State Dairies, firkin and tubs, 12@25c; Stale Dairy, firkins, 16@23c,

CHEESE.—State, at 8¾@10¾c.; Night Skims, 2@8c.; Western, 7½@10½c.

EGGS.—Heavy and lower, with a slow demand. State, at 13c.; Western, at 12½@13c.; Southern, at 12@12½c.

POULTRY.—LIVE.—Fowls, near-by lots, per lb, at 12@12½c.; do, Western, per lb, at 12@12½c.; do, State, per lb, 12@12½c; chickens, per lb, 10½@11½c; turkeys, per lb, at 11@12c.; ducks, western, per pair, at 50@75c.; geese, western, per pair, at $1.25@1.50; pigeons, per pair, at 40@50c.

POULTRY.—DRESSED.—Turkeys, per pound, 10@12c; chickens, broilers, 2½ to 3 lbs. to pair, at 26@30c. per lb; do. 4 to 5 lbs. at 20@23c.; do, State at 12@13c; do. western at 12@13c.; fowls, Pennsylvania, prime, at 12@13c; do. Jersey, at 12@13c; State and western, 12@12½c. Ducks, Jersey, at 15@16c; do. western, 14@15c Geese, Jersey, at 10@12c; do, western, at 9@10c.

POULTRY.—FROZEN.—Turkeys, per pound, at 10@12c.; Chickens, per pound, at 10@12c.; Ducks, per pound, 14@15c.; Geese, per pound, at 10@12c.

GAME.—Wild ducks, canvas, per pair, $2 25@2 50; do., red-head, per pair, at $1 25@1 75; do. mallard, western, per pair, at 60@75c.; do., teal, blue wing, 30@65c.; do. wood, at 30@40c.; do. common, at 25@30c.; Wild pigeons, per doz., at $2 00.

COTTON.—The quotations, according to the American classification, are as follows:

	Uplands.	New Orleans, and Gulf.	Texas.
Ordinary	6 9-16	6¾	6¾
Strict Ordinary	7	7 3-16	7 3-16
Good Ordinary	7 15-16	8⅛	8⅛
Strict Good Ordinary	8⅛	8 9-16	8 9-16
Low Middling	8¼	8 15-16	8 15-16
Strict Low Middling	9	9 3-16	9 3-16
Middling	9 3-16	9⅜	9⅜
Good Middling	9⅝	9 13-16	9 13-16
Strict Good Middling	9 15-16	10⅛	10⅛
Middling Fair	10 5-16	10⅜	10⅜
Fair	10 15-16	11⅜	11⅜

STAINED.

Good Ordinary	6⅜	Low Middling	7⅛
Strict Good Ord.	7 1-16	Middling	8⅝

FRUITS.—FRESH.—Quotations are: San Blas cocoanuts at $36@38; Baracoa cocoanuts at $31 00. Apples—Baldwin, per bbl., at $1 50@1 75; Greening, per bbl. $1 75@2. Grapes.—Catawba at 7@8c. per lb, in baskets. Cranberries.—Cape Cod, choice, per bbl., $3 50@4; do. fancy, $4 50; do. choice, per crate, $1 00@1 25. Florida oranges.—Fancy at $3 00@3 25; choice at $2 75@3 00; do. inferior at 75c.@$1.

FRUITS.—DRIED.—The quotations are as follows Apples—Fancy evaporated, 7@7½c; choice, 6¾c; do. prime at 6¼@6½c.; fancy North Carolina sliced, at 4@4¼c.; choice do. at 3@3½c.; choice Tennessee quarters at 2@2¼c.; State quarters at 3@3½c.; southern sliced prime at 2½@2¾c; do. common, 2c. Peaches—Peeled North Carolina, choice, 10@11c.; fancy, 12@12½c; extra fancy, 13@13½c; Georgia, choice, 10@11c; do. prime, 8@9½c; unpeeled halves, 2¾@3¼c; unpeeled quarters at 2¼@3c.; Delaware evaporated, peeled, 24@26c. Choice pitted cherries at 10½@11c. Evaporated raspberries at 15@16c; sun-dried do. 13@14c. Blackberries—Prime at 8½c. Whortleberries at 6½@7c.

PEANUTS.—Quotations at 6½@6¾c. for best hand-picked, and 4½@4¾c. for farmers' grades.

HAY AND STRAW.—Quotations are for; Choice timothy hay at 90@95c; good at 85c.; medium at 75@80c.; shipping at 70@75c; clover mixed at 70@75c.; Clover, 50@60c.; No. 1 rye straw at $1.00; short rye straw at 75@80c. oat straw at 40@50c; wheat straw at 60@65c., all per 100 pounds.

SEED.—Clover is unchanged; demands are of a jobbing character and fair; quotations are at 10½@11c. for best. Timothy is quiet and steady; quoted at $2 10@$2 20. Linseed quoted at $1 65@1 70.

TALLOW—Prime City quoted at 4½c,

VEGETABLES.—Potatoes—Rose, Maine, fancy, d. h. bbl., at $2 25; Nova Scotia per bbl., at 2 00@2 25; State, per 180 lb., $1 50@1 75; Burbank, State, bulk, per 180 lb, $1 62@1 75; Burbank, eastern and Nova Scotia, per bbl, $2 25@2 50; Hebron, do, do, do, per bbl, at $2 00@2 25; Hebron, State, bulk, per 180 lb, $1 50@1 75; Prolific and Goodrich, eastern and Nova Scotia, per bbl., $2@2 25; Peerless, bulk, per bbl., at $1 50@1 75; Magnum Bonum, Imported, 168 lb. sack, $1 75; Sweet potatoes, Delaware River, per bbl., at $2 50@2 50. Cabbages—Long Island, choice, per 100, at $7@8; do, imported, per 100, $6@8. Celery, per dozen bunches, $1 00@1.25. Kale.—Norfolk, Scotch, per bbl. $1 00@1 25. Onions—Bordeaux per case, $1@1 25; white, eastern, per bbl., $3 50; yellow, Connecticut, per bbl., $2.50@3.00; do. State and western, $2 00@2 50; do. red, Connecticut, per bbl. $2 75@3 25; do. choice, Orange County, $2.50@3 00; Inferior, per bbl, $1 50@2 25. Squash—Hubbard, per bbl., $1@1 25; Marrow per bbl., $1 00@1 25. Turnips—Russia, ₱ bbl., 50@75c.

LIVE STOCK MARKET.

NEW YORK, SATURDAY, March 20, 1886.

Total shipments for the week, 597 live cattle, 6,140 quarters of beef and 600 carcasses of mutton. BEEVES.—Total for six days 9,097 against 6,785 for same time last week. Two cars of little "Stockers" sold at $4@4 05, and very Ordinary to Good Steers at $4 25@5 75; one car-load of Lancasters bringing $5 80, and one pair of Ohio Cattle selling up to $5 90. Dry Cows and Mixed lots of Cows, Stags and Bulls sold at $2 50@4 00; Bulls at $3 00@4 00, and Old Oxen at $4 05@5 70. Pennsylvania stable-fed Steers, 1,390 lb, at $5 50; Oxen, 2,060 lb, at $5 75; do. to 1,280 lb, at $5 30; Ohio steers, 1,088 lb, at $4 75; do. 1,263 lb, at $4 75; Indiana Steers, Stags and Cows 1,285 lb, at $4 25; Pennsylvania oxen, 1,447 lb, at $5; Ohio cows, 1,091 lb, at $3 35; do. 1,100 lb, at $4 50; Bulls, 1,836 lb, at $3 25; Indiana do., 1,265 lb, at $3 25; Michigan steers, 966 lb, at $4 30; Ohio Oxen, 2,090 lb, at $5 90; Western bulls, 1,100 lb, at $3 25; Chicago steers, 1,208 lb, at $5 50.

SHEEP AND LAMBS.—Demand slack and trade slow, with prices weak. Common to Prime Sheep sold at $5 85@6 87½, and about three car-loads of Extra at $6 75; Ordinary to Choice Lambs sold at the range of $6@6 75. State Lambs, 76 lb, at 7¼c.; Western sheep, 85 lb, $5 35; State do. 91 lb, at 5¾c; do. lambs, 62 lb, at 6c; Kentucky sheep, 111 lb, at 5¾c; Michigan do, 89 lb, at 5¾c; Ohio do. 114 lb, at $6 75; do. lambs, 82 lb., 7¼c.

HOGS.—Total receipts for six days 26,140 head, against 33,007 head for the corresponding time last week. None alive for sale. Nominally steady at $4 40@4 50 per 100 lb.

PRODUCE COMMISSION HOUSE
ESTABLISHED 1865.
S. H. & E. H. FROST,
100 PARK PLACE, N. Y.
Shippers desiring to favor us will be furnished stencils, shipping cards, etc., on application. Promptness guaranteed. References, RURAL NEW-YORKER, Irving National Bank, etc.

THERMOSTATIC
INCUBATOR.
Send for circular. E. S. Renwick,
19 PARK PLACE, NEW YORK.

"The 'ACME' Pulverizing Harrow, Clod Crusher and Leveler is a capital implement for pulverizing inverted sod, in preparing for planting corn, as it goes down several inches in mellowing the freshly turned earth, while its slanting cut prevents tearing up the sod. For this purpose alone it is worth much more than its cost on any farm of moderate size."
See advertisement on page 199.

ECLIPSE
POST HOLE DIGGER.
The Greatest LABOR-SAVING tool ever invented for digging holes in the ground. This machine works on a new principle, and is unlike anything in the market. It is neither an Auger nor a Plunger, but is driven in the ground with a driving rod, which works in a pipe similar to a telescope. We claim for this tool:
1st. That one man can dig from 40 to three hundred holes two feet in ordinary ground in one day.
2nd. That it will dig holes any size or depth required.
3d. That it will work successfully in very hard or rough ground where other diggers and augers will not work at all.
4th. You stand up straight while using it, consequently no back-breaking work is required.
It will pay you to send for descriptive circulars and prices to COLE & FLEMING, Manufacturers, Springfield, O.

"SMOKE Your MEAT"
With Krauser's Liquid Extract of Smoke.
It is a liquid; you wash it on; it will keep it in a well preserved condition and free from insects; it is much more pleasant to the taste than meat smoked in the old way; it is done in less time, no trouble, and less expense. There is no danger from fire or of being stolen, as you can hang it in a more secure place than a smokehouse. Send for circular.
E. KRAUSER & BRO., Prop's and M'f's, DRUGGISTS, Milton, Pa.

ESTABLISHED 1822.
Joseph Breck & Sons,
Originators of the
PEARL OF SAVOY POTATO
750 Bushels Raised on an Acre in 1884
660 20/60 " " " " " " 1885
And conceded by all who have tried them to be the Earliest, Most Productive and Most Delicious Potato in Cultivation. AND THE
ANGEL OF MIDNIGHT FIELD CORN
123 10/56 BUSHELS SHELLED CORN
Were produced on an Acre in 1885.
It is pronounced by the
RURAL NEW YORKER
the Earliest Variety ever Tested on their Experimental Grounds,
$700.00
In Cash Premiums were paid by us in 1884-5 for the largest and best yields of these varieties. For particulars see OUR CATALOGUE and
GARDENER'S GUIDE
For 1886, containing over 170 pages; several Colored Plates; a comprehensive treatise on Grasses, Mowing Lands and Permanent Pastures and much other valuable information, which we will mail on receipt of five cents to pay postage.
Every Thing for the
GARDEN, FARM AND LAWN,
AT LOWEST PRICES.
JOSEPH BRECK & SONS,
Seed and Agricultural Warehouse,
51-53 N. MARKET ST., BOSTON, MASS.

LITTLE'S PATENT FLUID
NON-POISONOUS
SHEEP DIP
AND CATTLE WASH.
MORRIS, LITTLE & SON,
Manufacturers, Brooklyn, E. D., N. Y., Box 3, and Doncaster, England.

"MARCHMOOR FARM."
HIPPARCHUS No. 11672; Sire Orange Peel, P. 288; Dam King's Fertile, No. 22765. Service Fees, $100.
BRIGHTSON No. 11631, Sire Farmer's Pride P. 822; Dam Nellie Flanders, No 22761. Service Fees, $100.
PRINCE NERO Sire Nero, P. S. 249; Dam Mrs. Langtry, C. 3716. Service Fees, $100.
CHAS. R. HOE,
New Brunswick, N. J.

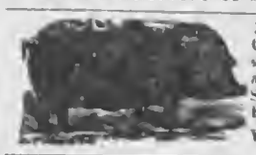
P. ROCKS AND WYANDOTTES. Pure, large, fine and well bred. Eggs and stock for sale cheap. Get my prices before buying.
E. C. BRINSER, Middletown, Pa.

Virginia-Bred Jerseys
No disease here; get the best. Bull and Heifer Calves Heifers in calf, and Bulls ready for service, of the Coomassie and other noted strains, and from the prize herd at West Virginia State Fair, 1885, and at Virginia State Fair for the past ten years. Shropshire Sheep, Berkshire and Jersey Red Swine, and Poultry of all the leading varieties. Address
ROWE & CO.'S CO-OPERATIVE STOCK FARM, FREDERICKSBURG, VA.

EVERGREEN STOCK FARM.—Holstein-Friesian Bulls and Bull Calves, bred from Stock winning first and second premiums at Penn. State Fair, 1885. Also, Jersey Reds, recorded in National Jersey Red Swine Breeders' Association.
H. W. AUSTIN, Woodstown, N. J.

HOLSTEIN-FRIESIAN CATTLE.
Imported and bred by J. N. ROBINS.
Beacon Farm, Northport, L. I.

HOLSTEIN-FRIESIANS.
CHAMPION BUTTER HERD.
5 Cows averaged..... 23 lbs. 7 oz.
12 " " ..... 21 lbs. 6⅝ oz.
29 Cows (9-2 years) averaged..... 17 lbs. 7½ oz.
Well worked unsalted butter in a week.
Best Milk and Butter Records in America.
The Bulls at the head of our Herd, and all Females in milk ten months, are entered in the Advanced Registry.
The BEST HERD from which to get "FOUNDATION STOCK."
Catalogues and records furnished.
T. G. YEOMANS & SONS, Walworth, N. Y.


JERSEY RED, POLAND-CHINA, Chester White, Berkshire & Yorkshire Pigs. Southdown, Cotswold and Oxford Down Sheep and Lambs Scotch Colley Shepherd Dogs and Fancy Poultry. Send for Catalogue
WALTER BURPEE & CO. Phila. Pa

1,517 Ohio Improved Chesters,
Sold in one year for breeders.
The only hog Not Subject to Cholera. Two weighed 2,806 lbs Send for description of this famous breed, also fowls.
E. T. SILVER, Cleveland, O.

EVAPORATING FRUIT
Full treatise on improved methods, yields, profits, prices and general statistics, FREE.
AMERICAN MAN'F'G CO.
Box P, WAYNESBORO, PA.

I WILL INSURE YOUR HOGS!
DR. JOS. HAAS'
HOG AND POULTRY REMEDY

[None Genuine without this Trade Mark.]
Is the only Practical Preventive of the so-called Swine Plague.
It has never been surpassed as an increaser of pork and general system tonic. Aiding digestion, stimulating the biliary organs, preventing torpor and engorgement of the liver, and regulating the bowels, it removes and prevents the formation of disease germs, and preserves to the well bred hog his natural constitution. Where it has been fed to such animals in the prescribed quantities, and other directions faithfully observed, it has proved a thorough preventive against swine disease.
AS AN EVIDENCE OF FAITH
In my remedy I make the following offer:
I will insure herds of swine of not less than one hundred in number against disease, at a small fee per head, provided they are fed my remedy under my direction, and prove upon examination prior to contract that they are in a healthy condition, and are neither in-bred, close-bred nor the progeny of such.
1. I will forfeit $100.00 to any breeder whose offer to examine for Insurance I decline, provided he forwards remittance to cover my expenses to and from location of hogs, or I fail to prove to the satisfaction of any disinterested party, that failure to respond to invitation is caused by prior engagement or by matters of at least equal importance.
2. I will forfeit $500.00 if I decline upon examination to insure such herds, if my judgment as to their condition of health is overborne by the result of an examination made by at least two properly qualified and graduated veterinary surgeons.
Facts are Better than Assertions.
Please read the following testimony:
GIBSONTON P. O., PA., Feb. 2, 1885.
Dr. Jos. Haas—Dear Sir: About a year ago our herd here numbered about 2,700 head. Disease broke out, and no remedy we had would arrest the trouble. Our losses were heavy and we had to give up feeding entirely for about two months. We then heard of your remedy and bought a trial lot, and began feeding again. We have used it constantly ever since. We have since April last received about 5,000 head of hogs into our herd and have not had a single death from swine disease. This is our experience. Our opinion is that the remedy has prevented disease, and we would not think of being without it. As an aid in fattening pork, we believe it to be good. On this point, however, we have not made an actual test, *as we would not risk feeding a pen of hogs without the Remedy.*
Yours very truly, WHITE & CO.
[N. B.—White & Co., since writing the above letter, have purchased $450 worth of the remedy.]
The remedy can be procured of all Druggists, or from my laboratory. Prices, $2.50, $1 25 and 50 cts. per package. 25 lb. cans, $12.50.
JOS. HAAS, V. S.
Member of Indiana State Veterinary Med. Associat'n
INDIANAPOLIS, IND.

80% PURE $3 PER TON
CAYUGA LAND PLASTER.
Contains Phosphate of Lime. Gives Plants an early start, improves quality, increases yield. Low freights to all points. Farmers' Memorandum Book sent FREE. Correspondence solicited.
CAYUGA PLASTER CO. Union Springs, N. Y

BAUCH'S $25 PHOSPHATE
TRADE MARK

Contains the Life and Essence of Animal Bones. We are now selling Bauch's Strictly Pure Raw Bone Meal, also Bauch's Ready Dissolved Pure Animal Bones at very low prices. It would surprise farmers to know how very low they can procure these brands direct from us. Send your name and address, and we will mail you our PHOSPHATE GUIDE.
BAUCH & SONS, 20 S. Del. Ave. Philada. Pa

TO FARMERS AND GARDENERS.
DRIED GROUND POUDRETTE NIGHT SOIL.
The cheapest and best fertilizer made. Can be used without offence in all drills. The article is first dried, then ground. No dirt is mixed with the soil. It is pure night soil only. Can be mixed with other ingredients to excellent advantage. Price, per ton, $20, in barrels, f. o. b. GEORGE S. PICKERING,
135 Fifth Street, Troy, N. Y.

THE BEST CATTLE FASTENING!
SMITH'S
SELF-ADJUSTING SWING STANCHION!
The only Practical Swing Stanchion Invented. Thousands in use. Illustrated Circular free. Manufactured by BROOKS & PARSONS, Addison, Steuben Co., N Y

SMALL'S CALF FEEDER

This NEW article is appreciated and approved by all progressive Farmers and Stock Raisers. The calf sucks its food slowly, in a perfectly natural way, thriving as well as when fed on its own mother. Circulars free. SMALL & MATTHEWS,
21 South Market Street, BOSTON, MASS.

WORTH KNOWING
Farmers will be glad to know a Fertilizer composed of Blood, Bone, and Animal Matter, having all the ingredients requisite for the soil and to insure a good crop, can be purchased for $25.00 per ton. Send for circular. H. B. GRIFFING,
70 Courtland St., N. Y.

STODDARD CREAMERY and REFRIGERATOR.

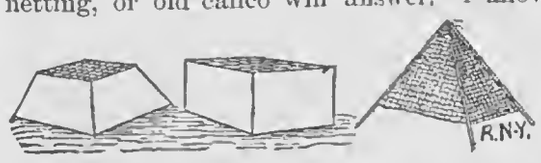
Patent Skimming Attachment.
LATEST AND BEST!
IT LEADS THEM ALL
Cream drawn off the milk. *No possibility of sediment being drawn with the cream.* No cream wasted. Milk or cream drawn at any time. *Cream separation made without use of glass pans.* Has thick walls and double air space. Has a perfect Refrigerator. Adapted to all dairies, *cream-gathering system*, etc. Used with or without ice. Stoddard Churn, Hog Powers, Butter Worker, Boxes, Prints, & Factory Supplies. For circulars, address Moseley & Stoddard Manf'g. Co., Poultney, Vt,
R. C. REEVES, Gen'l Agt., 185 Water Street, New York.

FERTILIZING SALT. Prepared
Send for "SALT SAYINGS." Write for Prices. Car Lots, on Car at your Railway Station. Address
E. S. FITCH, Bay City, Mich.

For the Young.

PLANTS AND SCREENS.

DEAR UNCLE MARK: I take much interest in your boys and girls department. I always like to read the letters from the Cousins. I don't know as you will admit a few lines into this department from an old gardener, but I thought perhaps a few suggestions on starting early vegetables might interest the Cousins, so I send you a few crude drawings of some of the contrivances that I use to start things early where they are to grow, by preparing the ground for the crop and planting the seed in the hill and using these screens. You can get almost anything a month earlier than in the open ground; the boys can construct them without much cost. A few thin pieces of boards, or some sticks such as they can cut in the woods, will do to make the frames for them. They may be covered with mosquito netting, or old calico will answer. I know



by experience that these screens will forward plants a month or more. I think many of the Cousins will be interested in making the screens and thus starting their plants earlier. To make the open screens all that is required are four straight sticks with holes in the end to tie them together at the top. Cover them with netting. They will keep all bugs away from the vines, and that is what we need to do. AN OLD GARDENER.

East Bridgewater, Mass.

LETTERS FROM THE COUSINS.

Letters have been received from George C. Brower; Lydia M. Bell; Clayton W. Wright; Clarence, John and Willie Coop; George H. Mack; Mary C. Cameron; Ethel Drummond; Eva Kirkham; Dora M. Barnard; Guy C. Barnard; Ada Yonger; Lizzie and Rosa Gillman; Olive McCarty; Gertrude Van Buskirk; Elsie Smelser; Casper Mikelson; Mattie Knapp.

Miscellaneous Advertising.

A DECISIVE VICTORY.

Two things frequently happen with a cold. First, entire neglect; and second, what is worse, trifling with it by using weak and vain remedies.

The same thing happens with a cough, which may be only the voice of a bad cold or solemn warning of the approaches of consumption. It is often neglected entirely or played with by foolish syrups and decoctions till it takes a fatal hold of the lungs.

Of catarrhs one need hardly speak. Everybody knows how they eat up the mucus linings of the nose and throat, and finally go down to the pipes and lungs, playing havoc as they go and undermining the system by inches.

So does everybody know how stubborn catarrhs are. Before the introduction of Cannabis Sativa, the East India Consumption Cure, such a thing as a cure for catarrh, if at all chronic, was not known. Since the introduction of that wonderful remedy for the entire class of diseases which begin with a cold and cough and end with true pulmonary consumption, it can be confidently said that a *cure* for catarrh exists.

Don't believe this because we say so. Think for yourselves one moment and see if it must not be so. Nothing in the world is better established than that Cannabis Sativa is master of consumption. It was the one secret specific of the mysterious and learned medical men of the East for thousands of years. It has been tried here since its introduction in hundreds of the most hopeless cases, and, as numerous certificates show, has made wonderful cures.

The reason is that it reaches and controls the consumptive conditions of the system. It restores functions of the vital organs, reproduces lost stamina, lifts the system above the depression of disease and gives nature a chance to win.

Now what is clearer than that if it conquers and cures the greater disease it will be *a very king* among the lesser diseases which are but the seeds and beginnings of consumption? What will reach and remove an effect will surely conquer a cause, or one of many causes. It is far easier to whip the seperate regiments of an army than to overcome them when they are combined.

This very point came up the other day in a conversation with Mrs. Vannaman, of 940 South Front street, Philadelphia. Speaking of colds, against which she had to guard herself carefully, she said: "I always keep the Cannabis Sativa remedy in the house and I never found anything to take right hold of a cold like it does. It has never failed to break up my worst colds by the second day."

This is just what is needed in a cold; something to "take right hold of it and break it up." No man or woman can afford to dilly-dally with a cold, and especially if he or she inclines to consumption. The heroic remedy is the best with every disease which threatens the lungs.

The Vice Consul at Casablanca, Morocco, Africa, Mr. J. Cobb, writes thus; "I took a violent cold and my cough became so severe as to cause me to pass sleepless nights. I compounded one package of your Cannabis Sativa and began to take it. It gave me relief at once, and before three days I could go to bed and sleep all night. At this writing I feel quite positive I have the remedy in hand that I have long needed."

The importance of Mr. Cobb's statement is increased by the fact that he had been previously troubled with an alarming cough, which a cold aggravated and rendered dangerous.

Just what you might expect with a cold was present with William R. Thompson, of Hightstown, N. J. He writes to say: "I have taken one package of your Cannabis Sativa and am clear of my cough, the soreness in my lungs and the asthma. For ten weeks I could not do anything. Now I am well and working every day. Thanks to you."

It was not the mere cough belonging to a cold that Mrs. S. B. Smullen, of 81 South High street, Baltimore, had. It was the cough that said consumption was coming, and sure. She writes: "Had a dreadful cough for two years and four months. I write with gratitude to say that one $5 package of your Cannabis Sativa has entirely cured me. I consider it a wonderful remedy and superior to anything I ever before heard of."

While space will permit we must pass from these strong and positive endorsements of Cannabis Sativa as *a cure* for colds and coughs, to those, even stronger, which prove its power over catarrh.

Mrs. Gaugler, of Wexford, Allegheny County, Pa., writes: "Cannabis Sativa has made a new person of me. It has done its work faithfully and cured me of obstinate catarrh."

How worrying and depleting catarrh is! It is long drawn agony and without a thing to stop it till the introduction of the Cannabis Sativa Remedy. It is always a terrible threat on the lungs which it may reach any time. R. Hall, of St. Paul, Minn., saved his. He writes: "Had suffered a long time with catarrh and throat difficulty—it had gotten down that far, mind you, and would soon have reached the lungs—and began to take your Cannabis Sativa. Used four packages, following directions closely. It is due to you to say that my catarrh is *entirely cured*, my throat much better and my general health greatly improved."

After curing himself of catarrh Mr. P. F. Cuttino, of Cuttino & Co., dry goods merchants, Newman, Ga., writes that he has recommended Cannabis Sativa to several others and that it is his belief that it is the only remedy which will *positively cure* catarrh.

V. T. McChesney, Esq., of Kearly & McChesney, attorneys at Canton, Texas., writes: "I have been using your Cannabis Sativa Remedy for two months. When I began I only weighed 125 pounds and was very feeble. I now weigh 143 pounds and am nearly as strong as ever. The remedy has wrought a wonderful change in me. My malady was what the doctors called nasal and bronchial catarrh. I am still rapidly improving and gaining in weight at the rate of two pounds a week."

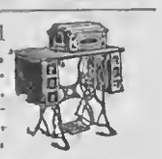
Catarrh won't stop of itself. It will make a wreck of the system. It will get to be consumption—slow consumption. All this is true if you don't stop it. As to how far it will go let Mrs. A. C. Sewell, of Clond County, Kan., tell. She writes: "You have been the means under God of rescuing me from the grave. I had given up hope and only waited death from nearly everything in the form of disease. The catarrh in my head was so bad that there was a continous gathering and breaking for four years. I had pains in my left side, night-sweats, palpitation, sinking spells, swelling of the limbs; in fact I was a wreck. Brother Perry brought me a double package of your Cannabis Sativa remedy—a distance of fifteen miles. I thought it of no use, for I supposed I was beyond medical aid. But I was prevailed upon to take it, and now I can say I am a well woman. Can do all my household work, for which I am thankful to God and you."

So we might number these free-will offerings of testimony till you tired of the reading. They would not make stronger the proof that in Cannabis Sativa I have a remedy that will speedily conquer colds and coughs and give you sure victory over that miserable and insidious disease, catarrh. Others have won; why may not you?

If you wish to know more of the great East India Consumption Cure, Cannabis Sativa, send for my treatise, which tells about it. It will cost you nothing and may save your life. W. A. NOYES, 149 Powers' Block, Rochester, N. Y.

ORGANS The most beautiful and finest toned in the world. Low prices, easy payment. Send for Catalogue. Address Weaver Organ & Piano Co., YORK, PA.

12 DOLLARS each for *New* and *Perfect* SEWING MACHINES. Warranted five years. Sent on trial if desired. Buy direct and save $15 to $35. Organs given as premiums. Write for FREE circular with 1000 testimonials from every state. GEO. PAYNE & CO., 47 3rd Ave. Chicago, Ill.



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Latest style; fine tone; made of best material, in the most substantial manner. Fully warranted. Send for Catalogue. Agents wanted.
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FREE SAMPLE to introduce THE GREAT Household Remedy, Dr. GORDON'S KING OF PAIN. I will send a sample free to any one sending stamp for postage. Agents Wanted. Address E. G. Richards, Sole Proprietor, TOLEDO, O.

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Warranted *absolutely pure Cocoa*, from which the excess of Oil has been removed. It has *three times the strength* of Cocoa mixed with Starch, Arrowroot or Sugar, and is therefore far more economical, *costing less than one cent a cup*. It is delicious, nourishing, strengthening, easily digested, and admirably adapted for invalids as well as for persons in health.
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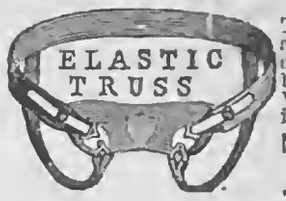

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VIRGINIA LAND AGENCY.
Cheap Farms. Splendid Climate. Short Mild Winters Good Markets. Descriptive Land List Free.
GRIFFIN & JERVIS, Petersburg, Va.

MARYLAND FARMS.—Book and Map free, by C. E. SHANAHAN, Attorney, Easton, Md.

500 FARMS for Sale, in TIDEWATER, VIRGINIA. Cheap and Rich Lands. Healthy and Mild Climate. Fish and Oysters in great abundance.
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Virginia Farms.—Mild Climate. Cheap Homes. Send for Circular. A. O. BLISS, Centralia, Va.

VIRGINIA HOMES. My free Journal contains a list of Blue-Grass Farms and other properties in the noted Piedmont Region, 2½ hours by rail to Washington. Parties wanting Virginia Horses will also communicate with H. W. Hilleary, WARRENTON, Fauquier Co., Va.

GREAT BARGAIN IN BRUNSWICK CO. VIRGINIA LANDS.
The Farm offered, contains 1850 Acres and is considered one of the finest stock farms in Eastern Virginia. It rents for a moneyed rental of from $400 to $500 per year and the taxes. Price $7,000. For particulars, Address C. T. REEKES, Boydton, Va.

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It connects in Union Depots with through trains from NEW YORK, PHILADELPHIA, BOSTON and all Eastern points. It is the principal line to
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For all points in Northwest, West and Southwest.
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PERSONALS.

WM. D. HOWELLS receives from $50 to $100 a page for his work in the Century and in Harper's, and his estimated income from his writings this year will be about $20,000.

GENERAL JOHN B. GORDON is said to have become a millionaire through his railroad management and speculations, and to be now a candidate for Governor of Georgia, with an eye to a seat once more in the U. S. Senate later on.

MR. ARNOLD MORLEY, the new whip of the Liberals in the House of Commons, is a young and singularly handsome man. He is a lawyer and has worked as diligently at that profession as though he were poor and friendless, instead of the son of a man whose income is $1,000,000 a year.

THE genial Dr. Oliver Wendell Holmes takes a deep interest in the movement for the protection of birds from slaughter. "I wish they could be protected by law," says he, "and if law cannot or will not do it, that public opinion would come between them and their murderers. Not less, certainly, do I feel the shame of the wanton destruction of our singing birds to feed the demands of a barbaric vanity."

CAPTAIN BOYCOTT, formerly of the British army, whose tyranical exactions while agent for an Irish estate, half a dozen years ago, made him detested by all around him who refused all intercourse with him, thus originating the term "boycott," has been appointed agent for the large estates of Lord Waveney, in Suffolk, England. Before he finally left Ireland he had changed his conduct and become quite popular.

Miscellaneous Advertising

Last week we requested you to "Watch this Space." Now, if you will send your address to Hallett & Co., Portland, Maine, you will receive, free, full information about work that you can do, and live at home, at which you can earn from $5 to $25 upwards daily. Some have earned over $50 in a day. Capital not required; you are started free. All is new. Both sexes—all ages. Snug little fortunes await all workers.

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PREMIUM PEARL OF SAVOY POTATOES, and ANGEL OF MIDNIGHT CORN.
Address STEPHEN HOYT'S SONS, NEW CANAAN, CONN.

LOW'S RELIABLE GARDEN SEEDS
MARKET GARDENERS' trade a Specialty.
CATALOGUE FREE. SEND FOR IT.
AARON LOW, Seed Grower, ESSEX, MASS.

Lang's Live SEEDS Flower, Vegetable & Field. Catalogue free. F. N. LANG, Baraboo, Wis.

Send stamp for sample.
Dietz Early Corn, Dietz Langberry Wheat, Dietz Fruit Dryer. New way of cutting fodder.
G. A. DIETZ, Chambersburg, Pa.

New Tested Radish, Magnum Bonum. 25 cts. packet or 6 for $1. A. C. MITTING, Newton, Kan., Box H.

O.K. SEEDS. High quality. Reduced Price. Inducements to gardeners. We are now giving away 19 kinds free to test them. Send for elegant Catalogue. Don't fail. J. A. EVERITT & CO. Seedsmen, Watsontown, Pa

GRAPE CONCORD, AGEWAM, SALEM, CATAWBA, DELAWARE, WORDEN, JEFFERSON, AMBER QUEEN, and other varieties. Also the CATAWBA SEEDLING, "MARY," a Red Grape originated in Oswego Co., N.Y. Early as Concord and as heavy bearer. Fruit has been kept until May. This Grape is new, has not been on the market before. I have just bought the entire stock of the originator, and shall have the entire control for some years of same. Prices of vines within reach of all. 1, 2 and 3 year vines. Send for list.
EVERETT BROWN, Bluff Point P O., Yates Co., N. Y.

NEW BRUNSWICK NURSERIES.
Raspberries, Strawberries, Grape-Roots, Cherries, Currants Gooseberries and general assortment of Ornamental Shrubbery.
Especially Fine and Large Lot of Maple and Shade rees at bottom prices.
Send for Catalogue.
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NORTHERN GROWN Seed Potatoes and Spring Wheat. Send for price-list, FREE.
S. FROGNER, Herman, Grant Co., Minn.

Marlboro Raspberry, *Ulster Prolific and Poughkeepsie Red Grapes.* Send for description and price to A. J. CAYWOOD & SON, Marlboro, N. Y.

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with the choicest Stock of their specialties, STANDARD APPLES, STD. and DWARF PEARS, PLUMS and CHERRIES, ever offered to the public, all young, thrifty and well rooted.
Also a very superior assortment of GENERAL NURSERY STOCK both FRUIT AND ORNAMENTAL including all the popular ORNAMENTAL TREES, SHRUBS, and ROSES.
All Nurserymen and Dealers are cordially invited to inspect this superior stock or correspond with us, before placing their orders for the coming Fall.
SMITHS, POWELL & LAMB, Syracuse, N. Y.
(When writing always mention RURAL NEW-YORKER.

BURPEE'S SEEDS, FARM ANNUAL FOR 1886
Will be sent FREE to all who write for it. It is a Handsome Book of 128 Pages, with hundreds of new illustrations, two Colored Plates, and tells all about the Best Garden, Farm and Flower Bulbs, Plants, Thoroughbred Stock and Fancy Poultry. It is the only complete catalogue of the kind published, and describes RARE NOVELTIES in VEGETABLES and FLOWERS, of real value, which can not be obtained elsewhere. Send address on a postal to
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FAIR AND SQUARE DEALING.
Believing that if a man has dealt squarely with his fellowmen his patrons are his best advertisers, I invite all to make inquiry of the character of my seeds among over a million of Farmers, Gardeners and Planters who have used them during the past thirty years. Raising a large portion of the seed sold, (few seedsmen raise the seed they sell) I was the first seedsman in the United States to warrant (as per catalogue) their purity and freshness. My new Vegetable and Flower Seed Catalogue for 1886 will be sent FREE to all who write for it. Among an immense variety, my friends will find in it (and in none other) a new drumhead Cabbage, just about as early as Henderson's, but nearly twice as large! James J. H. Gregory, Marblehead, Mass.

Off with the tariff on seeds! - - - - - - Relief for the people!
GREAT SUCCESS TO OUR NEW DEPARTURE IN THE SEED TRADE
SEEDS AT YOUR DOOR AT WHOLESALE PRICES.

In order to sell our seed crop—1885—direct to the planter, we make the following PROPOSITION: For 60 CENTS in postage stamps or money, we will send by mail post-paid, 19 PACKETS one each, of the following new and improved seeds:—Bastian's Early Blood Turnip Beet, the earliest and best for table use. "BEST OF ALL" BEANS most remarkable snap short bean in the world. Pods as tender and buttery in winter as in summer. Hawaii Sugar Corn from the Sandwich Islands; the sweetest sugar corn that grows. Early Etampes Cabbage, best and earliest of all early varieties. Sure Head Cabbage, best winter cabbage in cultivation. Wilson's Early Green Cluster Cucumber, good for early cucumbers or pickles. Golden Self-Blanching Celery, needs no banking up; excellent quality; keeps all winter. Perpetual Lettuce, tender and crisp all summer. Pride of Georgia Watermelon, none sweeter or better. THE SPANISH NECTAR a new muskmelon from the south of Spain. First premium at Penna. State Fair. Pronounced the best-flavored muskmelon in the world. New Red Rocca Onion from Italy. Grows large onions from seed first year. Tennessee Sweet Potato Pumpkin, none better for pies or custards. Abbott's Improved Sugar Parsnip. Ruby King Pepper, the largest and finest sweet pepper ever seen. Improved Long Scarlet Radish, best for early use. Half-long Strasburg Radish, good for spring or summer. New Brazilian Sugar Squash, sweetest and best-flavored, for summer or winter. Livingston's Favorite Tomato, large, smooth as an apple; productive; solid. Early White Egg Turnip, sweetest and best for table use. In all 19 PACKETS for 60 CENTS; TWO COLLECTIONS for $1.10; FOUR for $2.00. ANOTHER PROPOSITION To adorn your homes and make life pleasant, as we grow flower seeds by the pound, bushel, and by the acre, to give our lady friends the benefit of the wholesale trade, we will send by mail 18 PACKETS one each, of the following, for 30 CENTS Asters, fine, double, mixed. Balsams, extra large, double, mixed. Chrysanthemum (Paris Daisy), very fine. Mignonette, sweet scented. Double Rose-flowered Portulacca, nearly all double; all bright colors. Pansies, finest strain. Petunias, large-flowering. Phlox Drummondii, all bright colors. Verbenas, ten beautiful colors. Zinnias, large, double, bright colors. One fine Ornamental Grass. One splendid Climbing Plant. One beautiful Everlasting Flower. In all, 18 PACKETS for 30 CTS.; TWO COLLECTIONS for 50 CTS. *Directions for cultivating on each packet.* ONE COLLECTION OF FLOWER SEEDS AND ONE OF VEGETABLE SEEDS FOR 30 CENTS, OR TWO OF EACH FOR $1.50. Our Beautiful Illustrated Catalogue accompanies each order. No charges for boxing.
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FRESH IMP. MANGOLD SEED
Of the best kinds. Lucern and other grass seeds for mixture. I find that all the big tests of Jersey cows are the result of feeding large quantities of peas and oats. For prices address WM. CROZIER, North Port, L. I., N. Y.

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"MICHIGAN."
This Seedling originated in Washtenaw County, Michigan, by H. C. Clark, is a prolific, vigorous, blight-resisting variety, of floury texture, and delicacy of flavor unexcelled by any other variety. Season, medium late.
Planted alongside of ten other varieties this past Season where four-fifths of them rotted, there was no sign of blight or rot with it. Price, $1.00 per pound by mail, post paid; by express or freight, at purchaser's expense, ½ peck $2.00, peck $3.00, ½ bushel $5.00, bushel $8.00. Send all orders to H. C. CLARK, Lock Box 95, Ann Arbor, Mich.

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SEEDS. 8 packets Flower Seed, 10c. 5 packets Vegetable Seed, 10c. Postpaid. Catalogue Free. J. J. BELL, Windsor, N. Y.

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PEACH TREES. PEACHTREES.
20,000 First-Class Peach Trees now in our roots cellars can be shipped at any time. Also a general assortment of nursery stock at hard times prices.
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Don't Buy SEEDS
without writing for our Catalogue. Our prices DEFY COMPETITION, and Seeds are NEW, PURE, TESTED, RELIABLE.
FREE Catalogue, invaluable to all, of 136 pages, including Plants, Fruits, and price list, with 300 illustrations. Let us hear from you. Respectfully,
THE STORRS & HARRISON CO.
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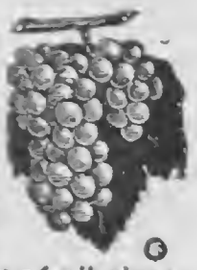
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One each of FIVE famous GRAPE VINES, WORTH $4.15 FOR $3.00 viz: NIAGARA, EMPIRE STATE, EARLY VICTOR, WYOMING RED, and GOLDEN POCKLINGTON.
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Potato Manure.

EXCELLENT FOR ALL VEGETABLES.

Not a Single Hollow or Decayed Potato---445 Bushels per Acre.---No Stable Manure used---Only the Mapes.

JOSIAH HAWKINS, the well-known Seed-Grower, Southport, Conn., December 23d, 1885, reports:

Crop—Potatoes, "Dakota Red."

Soil—Light, thin and gravelly.

Time of Planting—April 25th.

Fertilizer applied—1,200 lbs. of Mapes' Potato Manure per acre, sown broadcast and bushed in at time of planting. No other manure nor fertilizer used.

Cultivation—Hoed once and plowed three times.

Yield—Dug them the middle of September, they yielded 445 bushels of very large, handsome potatoes per acre.

Quality—Not a single hollow or decayed one. Qualtity and looks much like the "Early Rose," when they were first introduced. I am selling all the time for seed. Old farmers say they never saw such fine potatoes. I have 2,500 bushels of them. The quality of potatoes is of the greatest importance with me—and I generally grow eighteen acres.

Remarks—Last year, 1884, the yield of potatoes of the common varieties, upon the same ground with stable manure, was 115 bushels per acre. I have used many of the fertilizers offered for sale and have found that it pays me well to use your fertilizers and so say my neighbors. I have seen the analyses of your fertilizers repeatedly by our own and other State Boards (Experiment Stations) and I am fully convinced that all who want reliable, lasting fertilizers should have the Mapes. Your Corn and other Fertilizers have given great satisfaction.

Use of stable manure for Potatoes abandoned in this localitiy in favor of the Mapes Potato Manure.

W. F. ANDROSS, East Hartford, Conn., November 18, 1884, writes:

For the fouth year I have used the Mapes Potato Manure with continued and unvarying success. I raised upwards of 700 bushels of potatoes the past season, embracing 17 varieties, and mostly upon the Mapes Formula. I can report only in a general way, as my successes with your manures in past seasons led me to abandon further experiments with them, as I feel assured that I can depend on them every time for satisfactory results. I tried three other kinds of potato manure the past season under similar test conditions with yours, as far as regards soil, variety, and time of planting and harvesting. I find, as heretofore, that the "Mapes" does the best. As to stable manure for potatoes, the fact that its use is abandoned in this locality in favor of the "Mapes" is sufficient argument, that the farmers think yours insures the best results.

SEND POSTAL FOR DESCRIPTIVE PAMPHLET ON MANURES FOR POTATOES, CABBAGES, CAULIFLOWERS, FRUITS, FARM CROPS, ETC. Address

The Mapes Formula and Peruvian Guano Co.,
158 Front Street, New York.

WILLIAMS, CLARK & CO.'s
HIGH GRADE BONE FERTILIZERS.

Connecticut Experiment Station Valuations of Americus Superphosphate.

Analysis of 10 Samples, 1885, gave..$36.09
Americus Tobacco Fertilizer, 1885.. 38.09
Pure Bone Meal, 4 Samples, gave..... 35.04

Valuation in Massachusetts, 2 Samples Americus Superphosphate, gave 1885, $35.94, $36.88.

No Fertilizers selling at the same price show as High Valuations.

I have used your AMER[illegible] PHOSPHATE on my Corn and am safe in sayi[illegible] raised the largest crop ever raised in Connectien[illegible] the yield was 179 bushels and 28 quarts shelled cor[illegible] the acre.
T. B. W[illegible]AN, Greens Farms, Ct.

The above field of cor[illegible] visited by Hon. T. S. Gold, Secretary Board of Agr[illegible]re of Conn., and Prof. W. H. Brewer of Yale Coll[illegible] and both pronounced it the best field of Corn they [illegible]saw.

SEND FO[illegible] CIRCULAR,

P[illegible]AL OFFICE:
COTTON EXCHA[illegible] BUILDING, NEW YORK.

IP Roberts Cornell University

FEED YOUR LAND AND IT WILL FEED YOU.

SARDY'S
CONCENTRATED PLANT FOOD
A COMPLETE BONE MANURE FOR ALL CROPS.

GUARANTEED ANALYSIS.

*Available Phosphoric Acid,**	*8 to 9 per cent.*
Bone Phosphate (undissolved),	*4 to 6* "
Ammonia,	*2 to 2¼* "
Sulphate of Potash,	*4 to 5* "

Price $28 per Ton.
FREIGHT PAID TO YOUR NEAREST R. R. STATION.
Discount on orders for one or more car loads.

Every batch of this fertilizer is analyzed by *Messrs. STILLWELL & GLADDING*, Chemists to the N. Y. Produce Exchange, whose high reputation is abundant guarantee that the goods are equal to the analysis.

Buyers are invited to have samples drawn and analyzed by their STATE CHEMISTS, and the fertilizer is guaranteed to come up to the above standard by their tests.

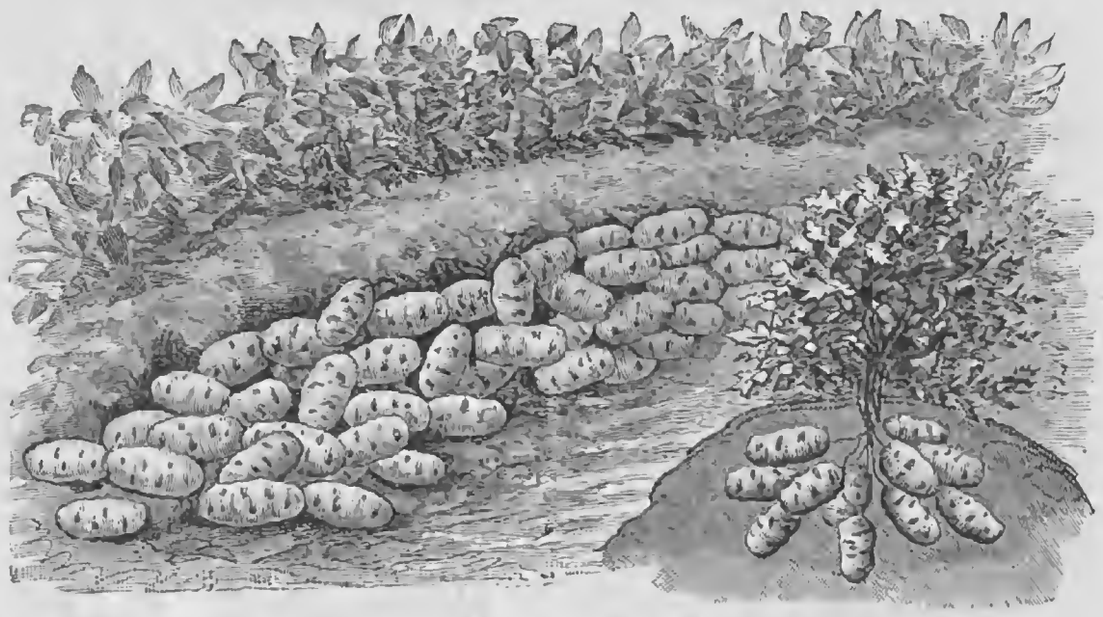
This Concentrated Plant Food is the result of 20 years' experience in the manufacture and use of chemical manures. It is a far higher grade than any fertilizer ever before offered to FARMERS for $28 per ton, PROPORTIONATELY cheaper than any higher or lower priced brand, and cheaper than farmers could buy the ingredients and make it.

It is warranted to contain no leather, shoddy, hoofs, horns, or similar material; all its fertilizing elements being in their most *available forms.*

Compare the analysis and price (*which includes freight*) with other brands.

A. L. SARDY, 10 BURLING SLIP, corner Water Street, New York.

STOCKBRIDGE POTATO FERTILIZER
661 Bushels per Acre.



PRIZE CROPS.

The prizes which we offered in 1885 were awarded as follows by the Vegetable Committee of the Massachusetts Agricultural Society, for the largest crop of potatoes grown on the **STOCKBRIDGE POTATO MAUURE.**

1st Prem.,	H. C. Pierson, Pitcairn, N. Y.	Yield on ¼ acre,	9920 lbs., or	**661**	**1-2**	Bush. per acre.
2d "	Stephen Hoyt's Sons, New Canaan, Ct.	" "	8523 lbs., "	**568**	"	"
3d "	Joel Burt, Sunderland, Mass.	" "	6392 lbs., "	**426**	"	"
4th "	G. W. Sherman, Smithfield, R. I.	" "	4800 lbs., "	**320**	"	"
5th "	G. S. Barber, South Kingstown, R. I.	" "	5461 lbs., "	**364**	"	"
6th "	J. W. Norton, Wolcott, R.I.	" "	4530 lbs., "	**302**	"	"

Mr. Pearson, who took the first prize, planted the crop on May 18, and harvested Sept. 24. Stockbridge Manure *alone* was used, at the rate of 1,000 lbs. per acre. The soil was a sandy loam. Potatoes were planted one piece in a hill, hoed three times, and weeded by hand.

Stephen Hoyt's Sons, who took the second prize, planted on 16th May, and harvested 23rd September. Stockbridge Manure *alone* was used, at the rate of 1,500 lbs. per acre. The soil had been used for nursery purposes, and had not been in turf for forty years. The fertilizer used on this crop was two years old, showing that these celebrated Manures do not lose their virtue by being kept over, as many farmers suppose.

BOWKER FERTILIZER COMPANY,
29 BEAVER STREET, NEW YORK, AND 43 CHATHAM STREET, BOSTON, MASS.

HOLSTEIN-FRIESIAN CATTLE!

LARGEST HERD AND LARGEST AVERAGE MILK RECORDS.
3 cows have averaged over 20,000 lbs. in a year.
5 cows have averaged over 19,000 lbs. in a year.
10 cows have averaged over 18,000 lbs. in a year.
25 cows have averaged over 16,000 lbs. in a year.
63, including 14 three-year-olds and 21 two-year olds, have averaged 12,785 lbs. 5 oz. in a year.

BUTTER RECORDS.
5 cows have averaged 20 lbs. 7 oz. in a week.
9 cows have averaged 19 lbs. 5½ oz. in a week.
11 three-year-olds have averaged 13 lbs. 2 oz. in a week.
15 two-year-olds have averaged 10 lbs. 8 3-10 oz. in a week.

This is the herd from which to get foundation stock. Prices low for quality of stock. **SMITHS, POWELL & LAMB,** LAKESIDE STOCK FARM, SYRACUSE, N. Y.

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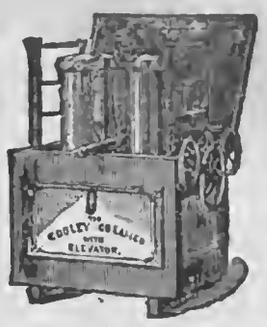

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Are used by more fine butter makers and stock breeders than any other apparatus, because they have proved to make the **largest quantity** and **best quality** of butter with **least labor** and **expense.** They surpass everything in the Cream Gathering System. Patrons realize from 3¼ to 4½ cents per quart for milk. Send for Circulars giving facts and references sustaining these claims. *Davis Swing Churns and Improved Eureka Butter Workers.*

Vermont Farm Machine Co., Bellows Falls, Vt.

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S–olidly Made.
T–one Unrivaled.
E–legant Finish.
Y–ears of Popularity.

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This race of handsome, high-stepping carriage horses, whose fine style, grand action, beauty and power have attracted the attention of all people who have visited Europe, will hereafter find a place at Oaklawn Farm, among the Percherons for which it has so long been famous. The Coach horse of France has been developed under Government patronage, and for every animal of this breed now owned at Oaklawn we have the Government certificate of breeding.

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THE RURAL NEW-YORKER

A JOURNAL FOR THE SUBURBAN AND COUNTRY HOME

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Pomological.

HOW TO GRAFT.

THE WHOLE STORY.

GRAFTING is one of the most important operations connected with practical fruit growing, and it is so easily learned and so very successful in changing trees of inferior sorts into those more valuable, that no fruit grower should fail to learn all the various ways of performing it.

The theory of the practice rests on the fact that when the cion is so placed in or on the stock that the cambium layers of the

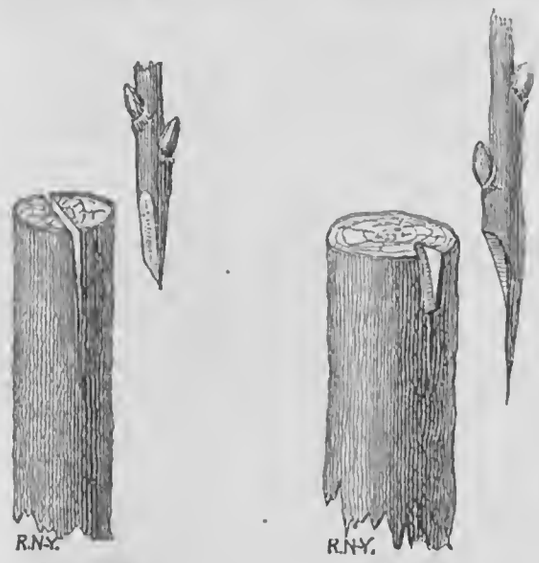


Fig. 126.

Fig. 129.

two are in contact, immediately on the sap's beginning to move, they unite, and the cion at once becomes part and parcel of the tree.

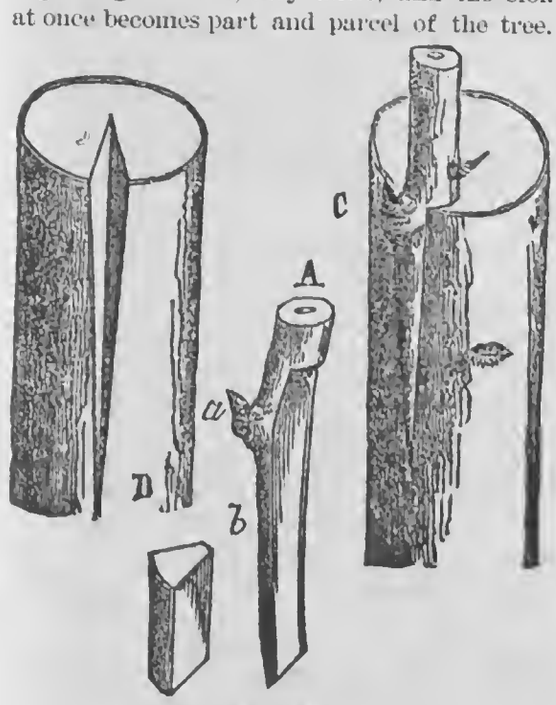


Fig. 127.

This union, however, is only of the growth made subsequent to the operation, and never extends to the wood existing when the grafting is done.

While most trees may, under very favorable circumstances, be successfully grafted, the apple, pear, plum and cherry are those in which farmers are most interested. And these can be grafted with success in the order named.

CLEFT GRAFTING, Fig. 126, is the form most commonly used, and is adapted for stocks from five-eighths of an inch in diameter to those of three inches. The stock or limb is sawed square off with a fine saw, and is then split, as shown, with a "grafting knife," which can be purchased for a small sum at most hardware stores. The cions are "whittled" so as to be wedge-shaped, having the wedge part longer or shorter according to the diameter, and a little thinner on the side designed to go toward the center of the stock, and are cut to such a length as to contain two or three buds. A "wedge," or the wedge part of the grafting knife, is drawn into the "cleft" or split of the stock, until it is open sufficiently to receive the cions, two of which are inserted, if the stock is one inch or more in diameter.

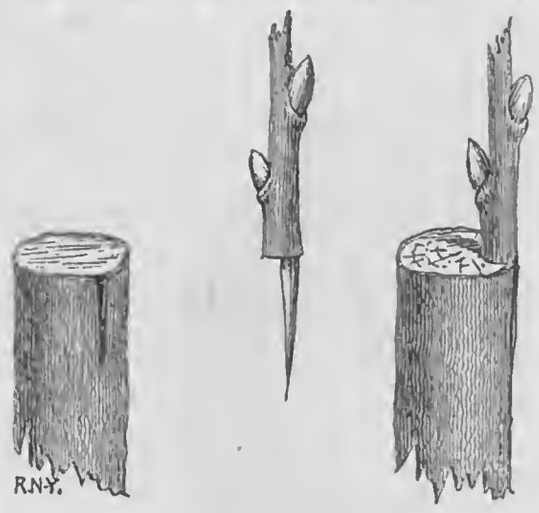


Fig. 128.

And here let us say that in all forms of grafting, care must be used in placing the cion so that the cambium layer (that part between the bark and wood) of it and the stock shall be in direct contact. After the cions are crowded down snug, the wedge is withdrawn, and the whole "waxed. In all styles of grafting, great care must be used that the ends of the stock and cions and the whole slit be fully covered with wax, so that no air can gain admittance to any cut surface.

GROOVE GRAFTING, Fig. 127, is another form that may be used where the stocks are so cross-grained or tough that they will not split with a smooth edge. It is also adapted to grafting grape-vines, etc. The groove shown at D is cut with a fine saw by taking out a V-shaped piece. The cion is whittled to the shape shown at A, and a small section at *b*, is made of such a size that, when driven into the groove by a few taps with a small mallet or stick, it will fit tightly when the

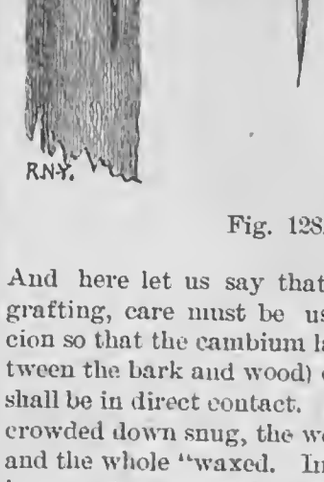


Fig. 130.

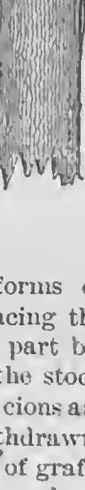


Fig. 134.

cambium layers are in contact. If the stock is large, two or more cions may be used, putting them on different sides.

SLIP GRAFTING, Fig. 128, is another form that may be used where the stocks cannot be smoothly split. It may also be used in connection with cleft grafting where limbs three or more inches in diameter must be cut. In this the bark is slit and slightly raised. The cion is cut half off square, the remaining portion is then cut slanting towards the bark to a point. This part is then inserted into the opening in the bark and crowded down till the square part rests upon the end of the stock. All of these features are shown in the cut, although this does not show the wedge part of the cion as large as it should be left.

BEAR'S-MOUTH GRAFTING Fig. 129, is still another form that may be used where the stocks are refractory. It has the advantage of having more of the wood of the cion left to resist high winds, which are sometimes destructive to young grafts. In this, the stock is sawed in two places nearly as wide apart as the cion is thick, and an inch-and-a-half down the side; this piece is then nicely cut out with a chisel or a narrow-bladed knife. The small cion

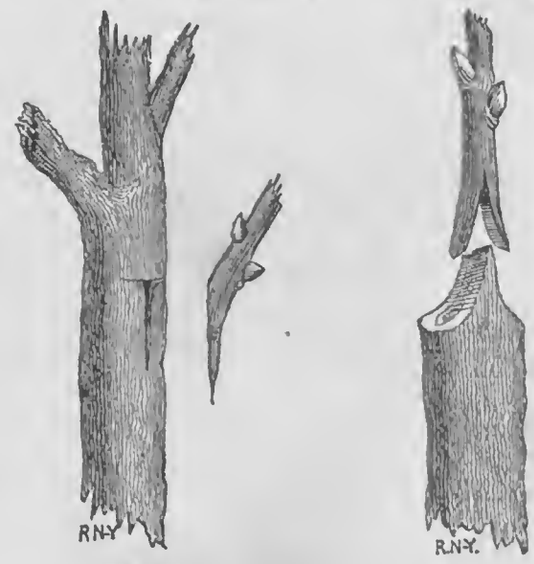


Fig. 131.

Fig. 133.

is slightly scarfed on the side, and cut half off with a slant that will fit into the "kerf". The remaining portion is then cut to a point with a long taper; the bark of stock is then slit below the kerf, and the point of cion is inserted and pushed down under it until the slanting portion of the cion is crowded down into the "bear's mouth."

WIRED GRAFTING, Fig 130, is an entirely new method of grafting, for a cut and description of which we are indebted to our good friend J. V. H. Nott, of Kingston, N. Y. It avoids all splitting of stock or rupturing of bark, and he says it has proved with him very successful, and far ahead of the old style of cleft grafting. The cions are cut squarely off, and holes are made in the center, and a piece of No. 18 wire, 1½ inch long, is forced into

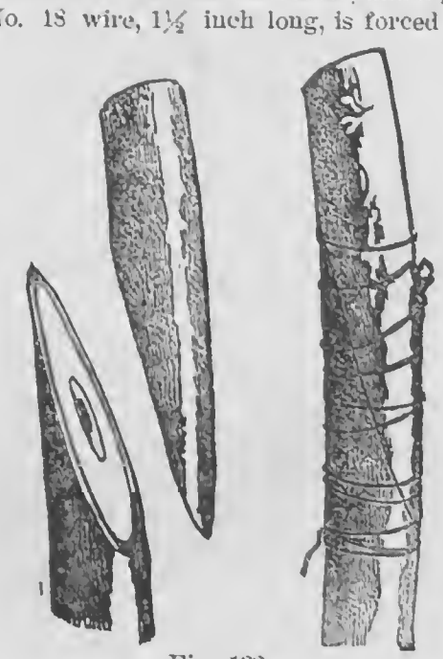


Fig. 132.

each, half an inch. One or more holes are then made in the end of the stock in such position that when the wires projecting from the cions are forced into them, the cambium layers of cion and stock are brought firmly into contact, and the parts are then well-waxed.

SIDE GRAFTING, Fig. 131, is successfully used whenever it is desirable to produce a limb on the side of a young tree, to balance the top, or for any other purpose. A cross is cut on the side of the tree, and a slit is made as if for budding. The cion, cut with a long slant, as shown in cut, is inserted and crowded firmly down, when the whole is nicely waxed. In this form, which is really a variation of budding, it is sometimes necessary, for a short time, to support the young growth by tying it up to the body or some higher limb.

The above are all forms of grafting, designed for large trees and for larger limbs. Where cion and stock are of nearly the same size some of the following methods are used.

SPLICE OR WHIP-GRAFTING, Fig. 132, is very nicely done where both cion and stock are of the same size. Here both are cut with the same length of slants, and are then placed together so as to have the combium layers in contact, and secured by tying with a string,

Fig. 136.

Fig. 135.

and the whole is covered with wax, or, more commonly, wound with waxed cloth.

SADDLE GRAFTING, Fig. 133, is used where the stock is from the size of the cions to two or three times as large. The upper end of the stock is whittled to a wedge, the cion is split, and each side cut to a point. It is then crowded firmly down upon the wedge, and secured by tying and waxing, or with waxed cloth.

TONGUE GRAFTING, Fig. 134, is mostly used by nurserymen for root grafts. It may also be advantageously used in grafting the small limbs produced where, for any cause, grafts set in large limbs, have failed.

In this method a long, even slant is made on both stock and cion. The knife is then reversed, a cut is made parallel with the grain; these are then caused to interlock with each other, and crowded well together and tied and waxed, or bound with waxed cloth. The figure shows the tongues raised as they would be after the parts had been crowded together and have remained so for some time.

SPLIT GRAFTING, Fig. 135, is also used by nurserymen where stocks only a little larger than the cions are to be used. In it the stock is split and the cion, whittled wedge-shape, is inserted and crowded down firmly, and the whole wound with waxed cloth, or bound with string and covered with wax.

CROWN GRAFTING, Fig. 136, is a little the best style of grafting where we wish to do an extra-nice job, and have the wound heal over in the least time and make the least scar. In this the stock is cut with a slant, the bark is slit and raised at both the apex, behind, and base of the slant, in front. The cion is split

in the middle and a distance equal to the slant on the stock added to the distance it is desired to have it extend under the bark below the slant; one half is merely cut wedge-shape at the point; the other is cut off an inch and a half long, and is whittled, from the inside, to a point. It is then applied to the stock as shown in the cut, the shorter end being inserted beneath the bark at the apex, and the longer end at the base-slit, and both are pressed home till the cion sets closely and firmly to the stock, when it is bound with the cloth, or tied with string and waxed.

Of course, in all these forms of grafting in which the cion or any part of it is to be inserted and slipped down beneath the bark, the operation must be deferred until the bark becomes more or less loose; the other methods may be practiced at any time from the opening of Spring till the trees are in bloom; for apples, pears, plums and cherries must be grafted very early or not at all, as after there has been the least circulation of sap, grafting is almost sure to fail. Split grafting and tongue grafting, when used in grafting apples or pears for nursery purposes, may be done at any time during Winter, and if the "grafts" are packed in damp sand, after being "worked," and kept in a moderately cool cellar, they will be found nicely united by planting time, and, if well cared for, scarcely one in a hundred will fail to grow.

GRAFTING WAX can be made according to various formulas. Four pounds of resin, two pounds of tallow and one of beeswax make a very good wax. Six pounds of resin, one pint of raw linseed oil and two pounds of beeswax also make a good article. Four pounds of resin, two pounds of beeswax and one-and-one-half pound of tallow make a capital, though rather expensive wax. In all cases the materials are to be melted together, thoroughly stirred and poured into cold water and pulled by hand until nearly white. To prevent the wax from sticking to the hands, the latter must be kept thoroughly wet and be occasionally greased with tallow.

WAXED CLOTH is made of any old calico or muslin, or may be made of rather tender new muslin saturated with a mixture of four parts of resin, two parts of tallow and two parts of beeswax, melted together. To saturate the cloth, it is torn into strips about 10 inches wide, and closely wound upon a small iron rod into a roll of any convenient size. These rolls are kept immersed in the hot mixture until fully saturated. The cloth is then drained of all surplus mixture, and unrolled and laid upon any wet surface to cool. In using, it is torn into strips a half inch wide, and these are wound upon the grafts, the bands overlapping each other so as to be air and water-tight. With this full description, none of our readers should have any difficulty in learning how to graft by any of these methods, and one worthless tree changed into some valuable sort, will in a single year pay many times the cost of the RURAL.

Rural Topics.

Experiment Grounds of the Rural New-Yorker.

TESTS WITH PEAS.

CARTER'S FIRST CROP OR RINGLEADER, planted April 20, gave the first picking June 16. There was no appreciable difference between it and other "First Crop" Peas.

PUGET SOUND, from A. G. Tillinghast, La Conner, Skagit County, Washington Territory. The average hight of the vines was two feet, branching just above the soil, forming an average of five stems to a plant. Each entire plant averaged 35 pods, covering seeds of the largest size, wrinkled and of fine quality. Pods in pairs. It is a splendid variety in every way. Fifty pods weighed 10½ ounces, contained 225 seeds, of the largest size, which weighed 5½ ounces.

BRECK'S EXCELSIOR, from Jos. Breck & Sons, Boston, Mass., planted April 20—first picking June 16. The plants are not so high by six inches as most other first-crop peas, while in other respects they are much the same.

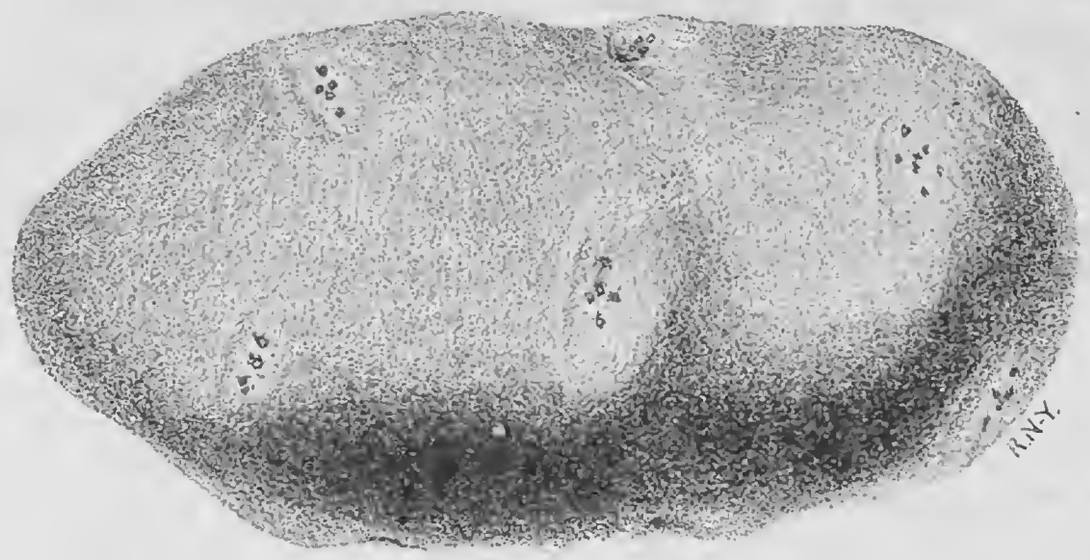
PRIDE OF AMERICA.—Seeds of this new pea were received from James Carter & Co., of London, England. This variety resembles the famous Stratagem, introduced by the same firm, though about 10 days later. Fifty pods weighed 14 ounces, contained 290 seeds which weighed 7¾ ounces, a large proportionate weight of seeds to full pods. The seeds were of the largest size. The quality is about the same as that of Stratagem.

BLISS'S ABUNDANCE.—This was tested here several years ago by numbers before it was offered for sale. We followed the instructions given us, viz., to plant the seeds six inches apart. This is well enough if every seed would grow; otherwise many gaps will occur. We should prefer to plant closer and thin out after a stand is insured. The Abundance is a good intermediate pea, the vines branching remarkably and bearing as many peas as could reasonably be desired. The pods are of medium size, the peas wrinkled, large and of good quality.

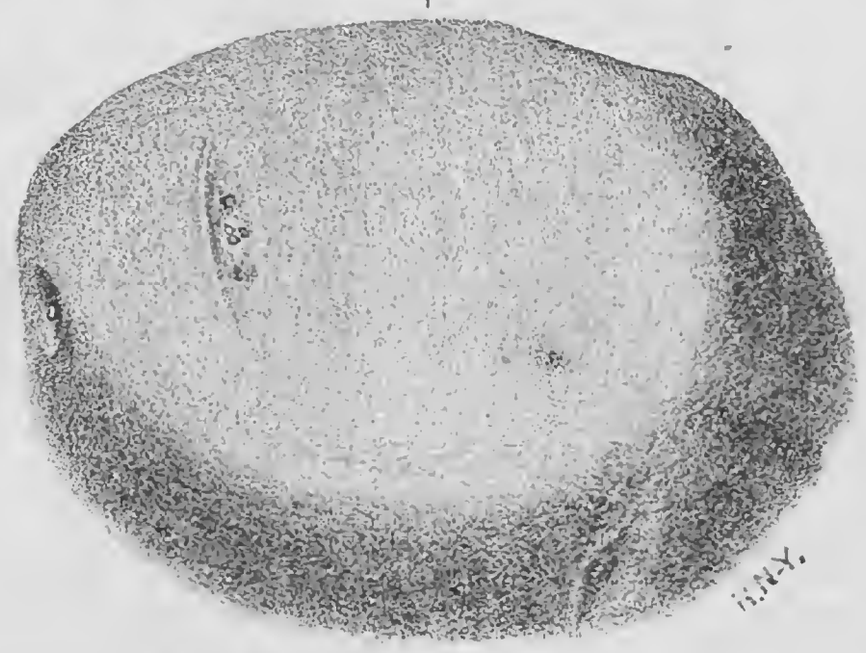
BLISS'S EVERBEARING is much like the Abundance, though the seeds are of the largest size and the plants blossom and mature fruit during a longer period. The quality is excellent; the vines grow about two feet high, and though they do not require support, are better for it. This pea has the same branching habit, each plant forming, in good soil, a little bush. Our readers will not regret a trial of both the Abundance and the Everbearing.

CABLE, from O. H. Alexander, Charlotte, Vermont, grows 18 inches high. It is a very prolific, branching pea, short-jointed, strong-growing, and needing no brush. The pods are often in pairs, and average a dozen to a stem. The seeds are large, though not uniformly so. Fifty pods weighed eight ounces, containing 260 seeds, which weighed four ounces. An intermediate.

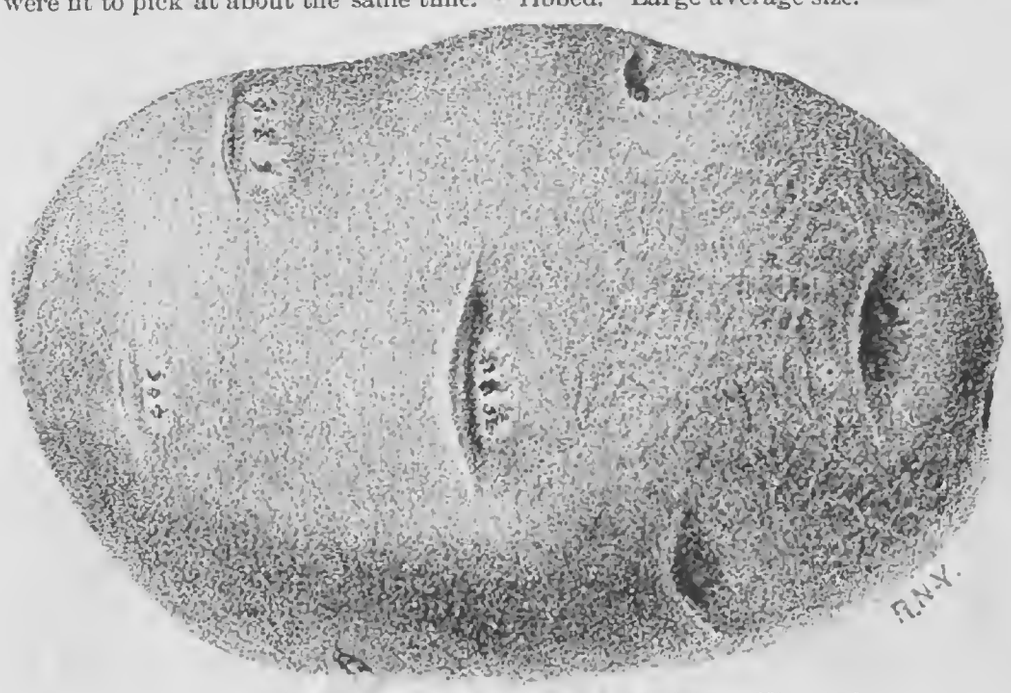
PROLIFIC, from same, did not grow quite so tall as the Cable; not so uniform in hight. They were fit to pick at about the same time. Fifty pods weighed 12 ounces, containing 337 seeds, which weighed six ounces. Seeds large, of fine quality.



VANCOUVER POTATO. From Nature. Fig. 137.



TROY POTATO. From Nature. Fig. 138.



EARLY PEARL POTATO. From Nature. Fig. 139

TOMATOES.

THE ECLIPSE of Sharpe & Co., England, seems to be merely the old Pear-shaped Tomato.

HOVEY is of medium size, firm, pinkish color, smooth and very productive.

CARTER'S ACME (England) is of a dull yellowish-red color, medium size, very firm and smooth.

EARLY MARKET (Johnson & Stokes, Philadelphia, Pa.) is of medium size, smooth, nearly Acme color, but lighter, smooth, firm, productive. This and the Hovey are much alike.

WONDER OF ITALY is a modification of the King Humbert or Pear-shaped Tomato, yellowish-red in color.

OPTIMUS, from D. M. Ferry & Co. We doubt if this has any superior at present. Color yellowish-red, very smooth, ripens all over fully, is never green about the stem. It is firm without cracks or unusual liability to rot, and ripens its main crop as early as any.

CHALLENGE, from Robert Buist, Jr., Philadelphia, Pa., is an immense yielder, yellowish-red in color, generally smooth, sometimes ribbed. Large average size.

PROLIFIC, from same, did not grow quite so tall as the Cable; not so uniform in hight. They were fit to pick at about the same time. Fifty pods wieghed 8½ ounces, containing 268 seeds, which weighed four ounces.

ATLANTIC, from same, averaged a little over two feet high. Fairly prolific, medium-sized pods in pairs; strong stems, healthy foliage. An average of 10 pods to a vine. Fair quality, half-wrinkled.

EARLY PARAGON was received from Charles Sharpe & Co., Sleaford, England. The vines grew five feet high, bearing very large pods (singly), which were not always well filled.

BELLE, from same, is firm large, shapely, rarely with prominent lobes or seams. It does not crack and is free from rot.

SELECT CARDINAL, from Moses Parker, M. D., Groveland, Essex Co., Mass., is firm, smooth, of medium size and good.

EXQUISITE, from same, is of medium size, orange color, firm, ripens fully, very prolific.

TOM THUMB, from R. & J. Farquhar 19 S. Market Street., Boston, Mass., has dwarf vines and curled leaves. Tomatoes lobed and irregular. It has no merits that we discovered.

SWEET CORN.

HERE are the results of careful comparative tests with sweet corn made at the Rural Ex. Grounds: Planted May 9; Early Narragansett and Minnesota were ready for the table July 20, though the ears were small and imperfect, those of the latter being more matured. The plants were four feet high to the tip of the tassel. Both kinds bear but one ear of from 8 to 12 rows to a stalk. They were the only kinds in use up to August 11. The Cory, according to accounts, will now take the place of these.

MOORE'S EARLY CONCORD was fit to eat August 11. It is more prolific than either of the above. The ear is generally 12-rowed, and six inches long. The stalks were slender and four-and-a-half feet high.

TRIUMPH was also ready with Moore's. This grows five feet high, generally one ear (12 to 14 rows) to a stalk.

TUSCARORA was also ready for the table August 11. Stalks six feet high. Generally two ears to a stalk. Ears long and from 8 to 10 rows, often widely separated. The kernels are large, oval, rather flat and perfectly white. They do not shrivel as do most kinds of sweet corn, and though tender are not sweet.

HICKOX grows six feet high. Boiling ears ready August 12. Generally eight rows, ears long and tapering, often two to a stalk, but there are more barren stalks than in Tuscarora.

ASYLUM grows five-and-a-half feet high, one ear to a stalk, ready for use August 11. The ears are 10 to 12 rows, regular and well filled out.

MAMMOTH ready for use August 16. Stalks seven feet high. The ears are large, 12 to 18 rows, one to a stalk.

BLACK MEXICAN was ready for use August 17. Stalks six feet high, leafy and slender. Often two ears to a stalk, generally 8 to 10 rows eight inches long. They are ready for cooking several days before they show color, though sweet and buttery for several days after.

STOWELL'S EVERGREEN. Stalks six feet high and heavy. Ears shapely, 14 to 20 rows, small kernels. Ready for boiling August 19.

EGYPTIAN or WASHINGTON MARKET ready to cook August 19. Stalks seven feet high. Often two ears to a stalk, about 14 rows, short, stubby, well filled out.

POTATO TESTS CONTINUED.

SOIL, CULTURE, ETC.

SUBSCRIBERS should understand that these tests are made in a rich, moist, garden soil. The crop never suffers seriously either from drought or too much wet, as the land is well drained. Not only has farm manure been liberally supplied, but fertilizers of every kind have been used in abundance. Potatoes have been raised on this plot for six consecutive years. Trenches are dug one foot wide and six inches deep, and three feet apart. Two inches of soil are raked back in the trenches, and the seed pieces (two strong eyes each) are placed one foot apart. Two inches of soil are then raked over them, and the fertilizer is strewn evenly at the rate of about 1,000 pounds to the acre. The rest of the soil is then returned to the trenches as loosely as possible. The cultivation is then effected by hand cultivators, and hilling up is studiously avoided.

POOR MAN'S FRIEND, from T. Bacon, Wauconda, Ills., originated with Geo. Vasey, Volo, Ills. Yield at the rate of 363 bushels per acre. not more than half of marketable size. Shape cylindrical, eyes rather deep. Flesh purple-streaked. Late. It "straggles" as much as any potato we have ever raised.

SWINGLEY'S PRIDE, sent by William Murray of Mt. Gilead Ohio, originated with Dr. Swingley of that place. The yield was at the rate of 403.33 bushels per acre, three-quarters of marketable size. Very irregular in shape. Deep eyes, pink skin. Late. Eaten Nov. 2. Nearly white flesh, not mealy.

VANCOUVER from Henry Hard, Middlesex Co. Conn. The yield of 14 pieces was 16½ pounds—65 tubers, 47 marketable. Best five weighed three pounds 6½ ounces. Yellow-buff skin. Medium long, often pointed at one end. Eyes medium in number and prominence Yield per acre 285.21. Eaten Nov. 21. White flesh, fine-grained. About the quality of Early Rose. Late. See Fig. 137.

MARKET GARDEN from O. H. Alexander, Charlotte, Vermont. This is an ill-shapen potato of no value as judged by this trial. Planted April 20—matured Aug. 13.

GEN. LOGAN from same. Nearly all small and of irregular shape.

CANADA RED from same. Five pieces yielded eight pounds, or at the rate of 387.20 bushels per acre. There were 18 tubers, of which 13 were marketable. Best five weighed four pounds 11 ounces. The largest potato weighed one pound 10 ounces. Deep eyes, irregular shape. Eaten Nov. 23, nearly white flesh, not very dry.

ST. JOHN from same. A small yield—late. Six pieces yielded four pounds—30 potatoes, 12 only marketable.

TROY from same. Intermediate. Four pieces yielded eight-and-one-half pounds, or at the rate of 514.25 bushels to the acre. There were 37 tubers, 29 marketable. Best five weighed two pounds. Shape oblong, truncated, flattened, smooth, shapely, few eyes. A handsome potato. Eaten October, 25. Mealy, white flesh, of the Early Rose kind. See Fig. 138.

FORT MONROE from same. Three hills were planted, and produced but 10 potatoes, six of which were of marketable size. Late.

EARLY PEARL, from J. A. Everett & Co., Watsontown, Pa., who speak of it in their catalogue in the highest, not to say extravagant terms Eight pieces were planted April 22, and dug August 31, yielding 17 pounds, 44 tubers, of which 40 were marketable, a high proportion certainly. Shape cylindrical, medium long, not much flattened. Skin buff white, Eyes medium in number and prominence. Best five weighed three pounds and 14 ounces. A substantial-looking potato. Eaten October 24, mealy, white flesh of good quality. The above yield would be at the rate of 514.25 bushels to the acre. Fig. 139, shows the typical form as nearly as it could be determined.

JUNKIS from L. Putnam, Cambridge, Vermont, who wrote at the time of sending the seed: "Be very choice of these tremendous yielders; quality unexcelled." Four pieces yielded seven pounds, 30 tubers, 21 marketable. Best five weighed two pounds two ounces. Shape rather long, flattened, generally tapering at one end, sometimes to a neck, which is an undesirable shape. Yield per acre at the rate of 423.50 bushels. Eaten December 28th. Quality very good, flesh white. Late.

CORRECTION.

IN our account of Rose's New Puple Blush, the yield per acre was stated as 536.25 bushels. It should have been 393.25.

ON page 104 my old friend Hovey has a very pronounced article on "Old Fruits under New Names." I wish to assure him that I am in hearty sympathy with him on this subject. This changing of old names is all wrong, and the reasoning on which it is based is entirely fallacious. Instead of simplifying nomenclature, it is making it a Babel. Briefly, neither the American Pomological Society nor any other society has the least shadow of right to alter these names. To concede such right to the society is to set at nought the hitherto universally acknowledged right of every introducer of a new fruit to give it whatever name he pleases; a right so just and proper in itself that it has come to have all the force of common law in the world of pomology, to say nothing of the sciences. If this right be given to one society, it will be claimed by others, and anybody can see where this will lead. The Pomological Society may very properly request, as President Wilder has done, that hereafter short, unobjectionable and expressive names be given to new fruits by those who introduce them. If, however, a long name will accomplish the purpose better, then I should favor the long name. I believe in taking time to do things well, which, as a people, we do not do in some very important matters.

* * *

The printer (p. 133) makes me say Thuja Canadensis. I wrote Tsuga. On the same page he makes me say Friesa refracta alba, whereas I was particular to write Freesia quite plainly, as I always try to do. Friesia belongs to quite another family. Freesia, I may add, is a proper name and should have a capital F.

* * *

What in the name of goodness does L. E. S. (p. 139) want to paint his cedar posts for? If he will paint them, let him paint them with oil. Better save the money, however, and buy a few more good grape-vines.

* * *

A subscriber is recommended to put his kerosene barrel in a brook or a pond to clean it. I would add to this the caution that, if the brook or the pond should contain fish, the oil would be pretty sure to kill them. So, too, it would be unsafe for cattle to drink from either. Hot lye or washing soda will remove the oil.

* * *

I am glad to see the editor so earnestly recommending the planting of the Japan Chestnut. Besides growing this chestnut, I have seen a good deal of it in different places, and heartily indorse all the editors say of it. Trees grown from the nut vary more or less, and the variation is striking enough when the Spanish Chestnut is substituted for the Japanese, which is sometimes done. Instead of raising seedlings, it would generally be better to buy budded trees from some reliable and careful nurseryman who has a good strain. I would by no means use the Spanish or American for stock to bud on, but Japanese seedlings.

* * *

The time is coming for cabbage, cauliflower, etc. The maggot is very destructive to these plants, and many remedies have been suggested, some good, but many worthless. I make a puddle of shell lime, leaf mold or light earth, and, when at hand, a little soot. I add water enough to make the puddle of the consistency of thin mortar. The roots are dipped in this puddle at the time of planting. This is one the best remedies I have used, and it has the merit of being simple and within reach.

* * *

When the Egyptian beet was first introduced the Bassano was disparaged and pushed aside. Next came the Eclipse, and the Egyptian was said to be a poor kind. Notwithstanding, the Bassano is still, for all eating purposes, one of the best early beets we have. When putting the Eclipse on its first trial, I could not help thinking, "Well, you may be everything that is lovely just now but wait a little while, and you too will be relegated to a back seat." Is it really necessary to disparage and utterly condemn a good old vegetable of any kind for the purpose of introducing a new one? I think there is a better way. If one should sow at the same time a row of the Eclipse, the Egyptian, and the Bassano, he would have a succession of really good beets.

* * *

I am a little disappointed in the William Bennett Rose. It is large, of handsome color, and beautiful in the bud; but not being a full double rose, there is not substance enough in the petals to keep up its character when fully expanded, though this may be owing somewhat to forcing. There can be no doubt, however, about its being a very fine and valuable rose for the use of the florist.

* * *

I think I have grown all of the large-leaved variegated abutilons, and I like Prince of Heilbron best. I once supposed, like most others, that it required the temperature of a hot-house to develop and maintain its handsome variegation; but grown in a cool greenhouse this Winter, it has maintained its markings remarkably well, though, of course, it has grown slower than it would with more heat. Its large and handsome flowers are produced freely. It is an easily grown plant worthy of a place in any collection.

* * *

Of the small-leaved abutilons, the variegated form of A. vexillarium is much to be preferred. Grown to a single long stem, or grafted four or five feet high, it makes a charming pendulous plant. It blooms very freely and the handsomely colored calyx adds much to its beauty. It needs only a moderately rich soil to make it everybody's plant, and has the additional merit of being one of the best of room plants.

Arboricultural.

THE JAPAN CHESTNUT—THE OTHER SIDE.

AFTER seeing the RURAL'S oft-repeated condemnation of the Kieffer Pear on account of its poor quality, I am surprised at its praises of the Japan Chestnut, which occupies among chestnuts the same position held by the Kieffer among pears, or the Champion among grapes; that is, it is hardy, vigorous, productive, bears early and is very profitable for market; but it is not fit to eat. Nine out of ten of the seedlings, on an average, will not be as good eating as acorns, while the best is inferior to the Spanish which is poor enough. Besides this, the kernel is surrounded by a skin fully as bitter as that of the Horse-chestnut, with the additional disadvantage of being astringent, like a persimmon. Yet the trees are very productive, there being from three to seven large nuts in each burr, and they sold readily at 40 cents per quart the past Fall. Their large size will sell them regardless of quality, and this fact, combined with their large yield, makes the Japan Chestnut one of the most profitable nut trees that can be planted. W. WILSON.

Burlington Co., N. J.

[Mr. W. Wilson's opinion as regards the quality of the Japan Chestnut is very different from that of many others. It is certainly

(Continued on page 220.)

Stock and Poultry.

TOULOUSE GEESE per trio, $10. Eggs $2 for 6 or $3 per dozen. R. C. White Leghorn and S. C. Brown Leghorn chickens, $1 each; eggs, $1.50 for 15. For sale by THEO. DAHM, Box 141. Great Bend, Kansas.

BLOOD WILL TELL.
Have bred fine Poultry for fifteen years and am selling a superior stock of Poultry and Eggs of the following varieties:
Plymouth Rocks, American Dominiques, Wyandottes, Single Comb White and Brown Leghorns, Silver Spangled Hamburgs, and Pekin Ducks. Am breeding from high-scoring birds that have won the highest honors in the show room. Price of Eggs: Wyandotte, $2.50 for 13; $6.00 for 40. All other varieties $2.00 for 13; $1.50 each for two or more settings. Eggs packed in new baskets to go safely any distance. Send for circular. Address JONES WILCOX, P. O. Box 10. East Chatham, N. Y.

High Class Plymouth Rocks and Wyandottes.
All high scoring birds. None better, and full satisfaction guaranteed. Eggs for setting of 13, carefully packed in baskets. Plymouth Rocks, $1; Wyandottes, $2.
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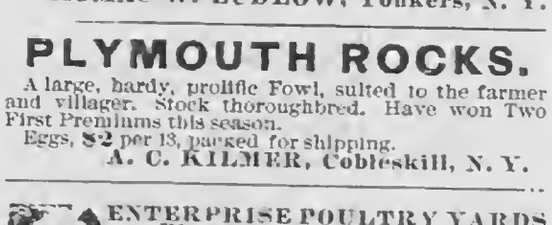
NAPKNOLL'S
PROGRESSIVE POULTRY COOPS FOR HENS AND CHICKS,
WITH BROODERS AND INCLOSED RUNS.
The favorite Excelsior Poultry Coop and Nest combined



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Gold and Bronze Medals were awarded at the Great Show of New York Fanciers' Club, February, 1886.
Have you anywhere else in the world seen Chicken Brooders and Inclosed Runs that may at pleasure be either attached to or detachable from the coop?
If you have not any such coops or brooders, send a two-cent stamp for one of the illustrated Descriptive Catalogues, with terms and Price List.
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At the Great N. Y. Poultry Show,
THE SILVER CUP.
value $50.00, offered by Reed & Barton for the largest percentage of chickens hatched was awarded to
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Games: Wyandottes: Houdans.
Exhib. Games, Andalusians, Jap. Bants., Malays, B. S. Polish: Eggs, $3; Brahmas, Cochins, Pit Games, etc.: 13 Eggs, $2. Embden Ganders for sale. Pekin Duck Eggs, $2.
Fifty First and Special Prizes last Winter.
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A large, hardy, prolific Fowl, suited to the farmer and villager. Stock thoroughbred. Have won Two First Premiums this season.
Eggs, $2 per 13, packed for shipping.
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Plymouth Rocks a Specialty.
Males and Females, '85 hatch, cheap. Eggs, $1.25 per 13; 25, $2. Stamp for reply.
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Mammoth Bronze Turkeys and Pekin Ducks, Prize Langshans, Wyandottes, P. Rocks, Houdans, Blk Javas, Leghorns, Polish, etc. Eggs for hatching a specialty—From Ducks and Chickens, $2 for 13. Fancy Pigeons. R. VANDERHOVEN, RAHWAY, N. J.

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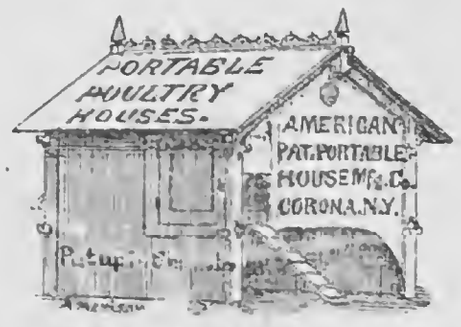

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Won Special on Highest Score and Third Premium on pair of Chicks at the New York Fanciers' Show in 1884.
Won First and Second on Fowls and First on Chicks at Middletown, N. Y., in 1884.
Won First on Breeding-pen of Fowls and First on Breeding-pen of Chicks, and First on pair of Fowls a Newburgh, September, 1885.
FOWLS AND CHICKS FOR SALE.
EGGS, $3 per 13; $5 per 26.
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Won first on Breeding Pen of Fowls, first on Breeding Pen of Chicks, first on Pair of Chicks and second on Pair Fowls, at
NEWBURGH, September, 1885.
Fowls or Eggs in Season.
EGGS, $2.00 per 13; $3.50 per 26.
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Pure Brown Leghorns.
I will furnish Eggs from pure stock, nicely packed in baskets, for $1.50 for 13; $2.50 for 26.
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EGGS FROM CHOICE STOCK.—$1.50 for 13; Hawkins Plymouth Rocks, Single Comb Brown Leghorns, Light Brahmas, Wyandottes, Houdans, Langshans, Silver Spangled Hamburgs, White Buff and Partridge Cochins.
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We exhibited a pen of Five Plymouth Rocks, averaging ten pounds each, at N. Y. Fanciers' Club Show, where we won First Prize on P. Rock Breeding Pen. Birds for sale at all times. Eggs, $5 for 13.
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N. T. LATTIN,
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BLACK AND MOTTLED JAVA FOWLS,
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Fowls, $5.00 each. Eggs, $3.00 per 15; $5.00 per 30.

LANGSHANS, all high scoring. One pen headed by Cockerel scoring 96. Eggs, $3 per 13; $5 per 26. Dark Brahmas, headed by Imported Cockerel. White Dorkings, Black Javas, Andalusians, and White Leghorns. All Premium Strains. Eggs, $2 per 13, or $3.50 per 26. Aylesbury Ducks—imported and as fine as there is in the country. Eggs, $3 per 11; or $5 per 22. Fowls for Sale. Correspondence solicited.
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KISCO MOUNTAIN Strain of fine Wyandotts Send for descriptive Catalogue and price list before purchasing either eggs or fowls. Address
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Extra Wyandotte Eggs.
Fresh laid from first class birds. Packed in nice baskets at $2 for 13; $3 for $5.
VERY LIMITED NUMBER OF
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All yard broke, fine blood. Price given on application.
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EGGS! EGGS! EGGS! EGGS!
P. Rocks and W. Leghorns, two yards, each $1; and $1.50 per 13. Wyandottes, two yards, $1.50; and $2 per 13. Now ready for shipment.
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Ducks, Pekins, Rouens. $1.50 for 11 Eggs. **Wyandottes,** $2.00 for 13 Eggs. **P. Rocks** and **White Leghorns,** $1.50. We have a very large stock raised artificial for practical use, the best Brooder known for $8.00.
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Breeder of Wyandottes and Plymouth Rocks. Four grand pens of each variety. Eggs from pens one and two, $3.00 for 13; $5.00 for 26. Eggs from pens three and four, of each variety, $2.00 for 13; $3.00 for 26.

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OUR SPECIALTIES.—St. Bernards, Eng. Mastiffs and Eng. Beagle Hounds. Imported Dogs in the Stud. Fees reasonable. Can furnish dogs of any of the popular breeds, at low figures, for quality of stock.
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MILL BROOK
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40 breeding pens of selected Wyandottes, Langshans, W. and Br. Leghorns, P. Rocks, Lt. Brahmas, R. C. W. Leghorns, B. B. R. Games, Pekin Ducks. Eggs, $3 for 13, $5 for 26, $7 for 39. Duck eggs, $2 for 11, $3 for 22. Nine hens and one male to each pen. *I guarantee a good hatch. Try me.*
Champion St. Bernard Dogs, Champion Scotch Collie Dogs. Young stock for sale at reasonable prices. Champion smooth c[illegible]erone," in the stud. Send for Catalogue.
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15 *GRAND BREEDING PENS FOR* 1886.
EGGS from Two Pens of First Premium Stock, headed by "Earl and Truston," at $5.00 per 13; $10.00 per 39. Eggs from 18 other pens of good breeding birds, carefully selected, and mated for best possible results, at $3.00 per 13; $5.00 per 26. Eggs from one pen each of fine Langshans, Light Brahmas, Plymouth Rocks and R. and S. C. Brown Leghorns at $2.00 per 13.
Elegant Wyandotte Chromos at 10 cents each. Large circulars with illustrations FREE to all.
GEO. A. PRESTON, Binghamton, N. Y., D. L. & W. R. R. Ticket Agent.

(*Continued from page* 119.)

better than the Spanish, and, as we think, nearly as good as the American. The skin is bitter, it is true.—EDS.]

DIFFERENCES BETWEEN THE WOOD OF THE JAPAN AND SPANISH CHESTNUT.

MR. J. J. HARRISON, of the Storrs & Harrison Co., Painesville, O., kindly sends us twigs of each of the above, and the differences will at once appear to the reader who compares our sketches. The shoots of the Spanish are thick and stubby (Fig. 140), and the buds are twice the size, while they are further apart as we near the base. The color of the bark is lighter, approaching a gray. The Japan shoot (Fig. 141) is slender. The buds grow

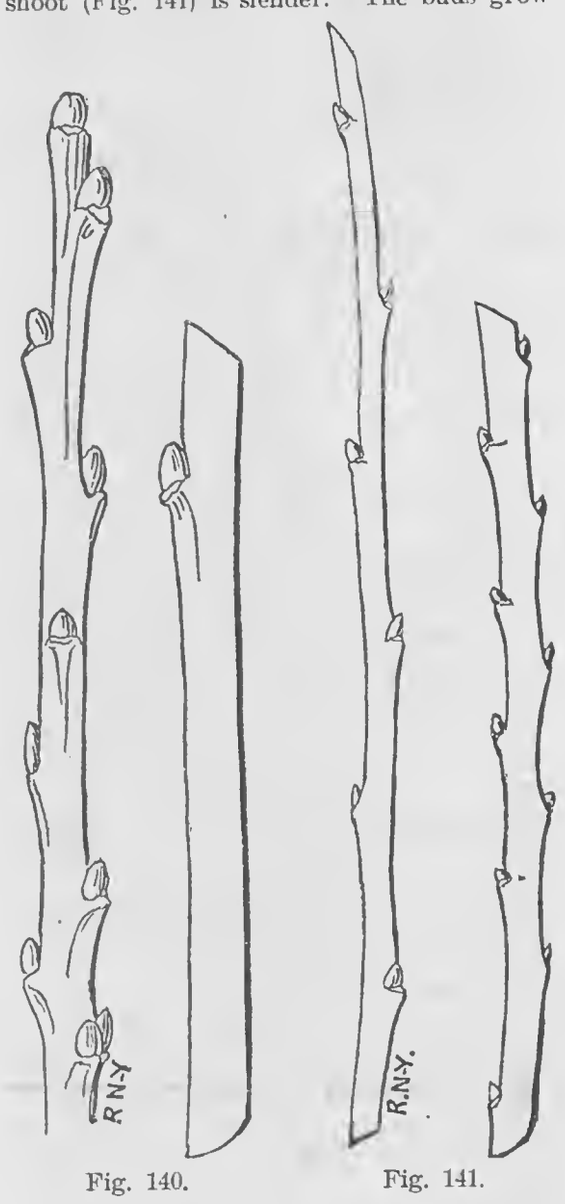


Fig. 140. Fig. 141.

closer as we near the base. The bark is thinner and of a chestnut color. If any of our readers have trees which they are uncertain about, our engravings should enable them at once to determine whether they are the Japan or Spanish. The stems have been cut in two to save space.

What Others Say.

WHICH MAY REMIND YOU.

IN the discussion of the last meeting of the N. J. H. S., Mr. Quinn remarked that he did not consider that we have made much progress in 25 years pomologically. He did not know of a good pear except Clapp's Favorite, and there is no strawberry to supersede the Wilson.

IN the talk about the disease known as yellows, potash and bone were commended as preventives and even as cures, using from three to four pounds of muriate of potash to four to five pounds of bone to each tree according to its size or age.....

PROF. COOK says that kainit has 12 per cent. of potash, while the muriate has 48 to 50 per cent. If kainit costs $10 per ton and muriate of potash $40, the cost of potash in either case is the same.....

MR. MINCH does not believe that peach seeds from trees having the yellows will produce unhealthy trees. From such seeds he agrees to grow fine, healthy seedlings. He deems the man who contends that it is a contagious disease is a dangerous character.....

P. M. AUGUR, of Conn., has an orchard of 1,800 trees. He has used large amounts of potash on it every year for years, but there are many showing signs of yellows. Other members of the society mentioned cases in which potash or potash and bone had not only prevented yellows but cured the disease .....

JUDGE PARRY remarked that size and beauty are the two essentials to make fruit sell well. It must please the eye or purchasers will not buy. We should bear in mind that the more beautiful the object that deceives us, the deeper and more lasting the impression.....

MR. QUINN thinks that 10 years hence, it will be necessary to present a chromo with every Kieffer pear tree sold. He deems the pear all one could ask as to size and color.....

THE Kieffer Pear has, however, friends in Southern New Jersey and Pennsylvania where it thrives; there are few pears better for canning, and occasionally the quality is tolerable when eaten out of hand.....

MR. WARD named for profitable pears Giffard, Clapp, Bartlett, Boussock, Seckel, Sheldon, Clairgeau, Anjou, and Hovey. It will not be long we think, ere the Frederick Clapp will become a favorite for October use, though where it will thrive best is not as yet known. We hope all who can afford to do so will plant this tree.....

WE are pleased to know that E. Williams, the hard-working Secretary of the New Jersey H. S. had a number of Kieffer pears sent to him last season and among them were one or two that he called good. Mr. Rogers also, in a lot sent to him, found "half-a-dozen or so that were good." Pres. Baker had eaten Kieffers which he pronounced "fine, melting and juicy."....

ONE thing is evident, it would appear, viz., that good Kieffers cannot be raised in Northern New Jersey .....

THE new Rose Celery is highly spoken of as a strong grower, stalky and of the best quality.....

THE Ruby King Pepper, Dr. Ward, the Chairman of the Vegetable Committee, said grows bushy, 18 inches high, producing the largest peppers he had ever seen.....

MR. CAYWOOD said the curculio took all his plums till he made a thorough application of slaked lime after every rain, from the time the fruit set till the pit hardened—and, ever since he has had tremendous crops. The same application to peaches resulted in smooth, perfect fruit. He thinks that lime will also save grapes from mildew and rose bugs.....

MR. CAYWOOD was better pleased with the Jewell Strawberry than with any other. Mr. E. Williams, the Secretary, remarked that there was no other so promising.....

THE Cohansey Strawberry was mentioned as a new variety of great promise. The R. N.-Y. will make an effort to procure a few plants.

MR. MINCH kept some of the above berries four days after ripe, and they were still sound and of good color.....

BUBACK'S No. 5 is another new strawberry of promise.....

THE RURAL'S advice, given years ago and since repeated, not to cultivate strawberries until after they bear fruit in the Spring, except, it may be, barely upon the surface, is strongly supported by many experienced growers. Others, however, raise the finest crops through cultivating up to three weeks of the ripening of the fruit.....

MR. WILCOX, in reply to a question by a member of the society, said that Meech's Prolific Quince is an old variety, and that it had been disseminated by three different parties from 15 to 20 years ago. Mr. Jones showed a picture of this quince as shown in Mr. Meech's circular, which was "reduced one-third in size." Mr. Jones, to show the absurdity of this claim, presented a picture *enlarged* one-third. It measured 18 inches in circumference. He asked Mr. Meech, who was present: "Is this true?" Mr. Meech made no response. Taking a large pineapple from the table, Mr. Jones showed that the size of the quince, as claimed by Mr. Meech, was larger than the pineapple. Other claims of Mr. Meech were disproved.....

SPEAKING of starting celery seeds, several members said that they should be sown in rich, mellow soil and not covered, but merely pressed into the soil with the foot or a board. Then keep moist.....

MRS. E. A. ROGERS, in expressing her views as to the low price of fruit, said that prices could be improved and the demand doubled by the prohibition of the liquor traffic, which would close the saloons.....

A MELLOW seed-bed; sow early one-and-a-half bushel of oats per acre, if the land is fertile. The Welcome or White Australian is one of the best varieties. The Schonen is good. The Black Tartarian is perhaps the best side oat, but late and light.....

PROF. BUDD says that in Russia the Duchess of Oldenburg Apple has been cultivated for hundreds of years and innumerable seedlings raised. They are in flavor from sweet to sour, and cover a period of three months in maturing their fruit. The Duchess therefore represents a family of apples, and not a distinct variety as in this country.....

MR. T. V. MUNSON, of Texas, says that the Niagara Grape shows unmistakable signs of foreign blood.....

YOU may prune evergreens until the buds begin to swell.....

THE new Giant Pera Cucumber is said to grow as long as 22 inches, and to be the finest for table use. W. Atlee Burpee says he has grown them to weigh over six pounds each. We shall try it.....

WE have a Gregory's Spruce that is at least 15 years old, and not over two feet high and nine feet in circumference. It is very compact and perfectly hardy at the Rural Grounds. Dwarf evergreens are not planted as much as they deserve to be.....

HENRY STEWART reminds the readers of the Times that we do not sow oats early enough. The land should be plowed in the Fall, and prepared as if the seed was then to be sown. Then in the Spring sow directly upon this soil as soon as the upper four inches are free from frost, and dry. This generally happens in March in the North. Then use the harrow across the furrows to cover the seed.....

OATS need the longest possible growing season, they like cool weather, and moist, well drained land. It is difficult to secure a large crop of oats from late sowing, and the grain is always light.....

OUR Summers leap from the lap of Winter, with scarcely any Spring, so that oats have little time to make growth. Let us provide against this as far as possible by sowing early.

OATS, as Mr. Stewart remarks, are a more exhaustive crop than many suppose, being, according to analysis, two-thirds as exhaustive as wheat.....

MUCH mischief is done by overfeeding brood sows nearly farrowed, in the belief that they will be better able to nurse their young brood. On the contrary, the food should be given very moderately before the litter appears, and afterward should be increased only as the growing demands of the nurselings call for it.

A FARMER who is noted among his neighbors for his fine pigs, feeds the sows a mixture of two bushels of buckwheat, and one of corn ground together, the meal being made into a slop. This food is given in moderate quantities only, apportioned so as to keep the sow in a somewhat thin condition and without making flesh or fat. Before farrowing, the sow is lightly fed, and if it can be avoided no grain is given. In this way the sow farrows safely and never feels inclined to molest the young pigs when they are dropped.....

SELECT young trees rather than larger or older ones. All things equal, the young tree will make a healthier growth than the old one.

WORK the soil carefully and thoroughly among the roots. Handle the roots tenderly. When covered, tramp the soil *firmly* over them, so that the tree will be firm by the support of the soil. Don't forget this.....

SUPERPHOSPHATES, fish guano and poudrette are characterized by the pamphlet of one firm as "incomplete, one-sided, stimulating fertilizers."

BELL'S Messenger says that all milk should be boiled before it is used for human consumption.....

DON'T be deceived in feeding corn-meal to milk cows, says the U. S. Dairyman. Feed freely, it at first increases the milk flow, but soon goes to fat and lessens the milk. Many a valuable cow has been injured by overfeeding in this way.....

IT is a pretty good rule to wait until the buds swell before grafting. . . Prepare for sowing earliest peas as soon as the soil will permit. Is your brush ready? . . . Give the grass plots a dressing of wood ashes and raw bone flour.....

SPEAKING of peach trees, Ellwanger & Barry remind their inexperienced readers that it should always be borne in mind that the fruit is produced on wood of last season's growth. Hence the necessity of keeping up a good supply of vigorous annual shoots all over the tree.....

THE plum stock is advantageous for peaches in stiff, clay, cold or damp soils.....

FOR a sure catch the Husbandman prefers to sow clover in February.....

(*Continued on page* 221.)

Miscellaneous Advertising.

FOR A DELICIOUS AND SATISFYING BREAKFAST

Nothing equals Griddle Cakes raised by means of the Health-preserving, Pure Vegetable Dry Hop,

Warner's Safe Yeast,

To be had of all Grocers.

AT 10 CENTS A BOX. 10 Cakes in a Box.

Insist that your Grocer keep it.

THE APRIL "CENTURY"

Contains one of the most attractive features ever published in a magazine,—the story of the naval duel between the "Kearsarge" and the "Alabama," told in three narratives by participants, with numerous illustrations, as follows:

LIFE ON THE "ALABAMA,"
By One of her Crew.
A narrative of the two-years' cruise,—the character of the officers and men,—and a thrilling account of the sinking of the "Alabama."

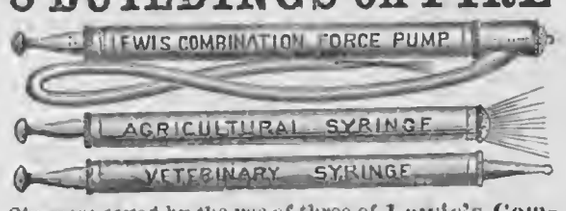
COMBATS OF THE "ALABAMA,"
By her Executive Officer.
Life on the ship as viewed from the quarter-deck—meeting the "Kearsarge"—rescue of Captain Semmes by the yacht "Deerhound."

THE DUEL BETWEEN THE "KEARSARGE" AND "ALABAMA."
By the Surgeon of the "Kearsarge."
The challenge—the fight in circles—the destruction of the Confederate cruiser.

OTHER FEATURES
Of the April CENTURY, many of them illustrated, include: **"Creole Slave Songs,"** by G. W. Cable; **"Italy, from a Tricycle"**; W. D. Howells's new novel, **"The Minister's Charge"**; short stories by Arlo Bates and Edward Eggleston; **"Toy Dogs"**; **"Glimpses of Longfellow in Social Life"**; **"Christianity and Popular Education,"** by Washington Gladden; **"Strikes, Lockouts, and Arbitration,"** etc.

Price 35 cents. Sold by all dealers.

8 BUILDINGS on FIRE



Six were saved by the use of three of **Lewis's Combination Hand Force Pumps.** For a description of said fire, and the saving of many other buildings by the use of the above Pump, send for my illustrated catalogue. **This Pump** makes **3** complete machines, (See cut). I have agents all over the U. S. who are making $10 to $25 per day selling them. I give their names and address in catalogue. *To introduce it, I will send a sample Pump, express paid, to any express station in the U. S., for* $5.50. Made of brass; will throw water from 50 to 60 feet and retails for only **$6.00.** Indispensable for spraying fruit trees. The Potato-Bug attachment is a wonderful invention. They sell rapidly. Agents wanted everywhere. Send at once for illustrated catalogue, price-list and terms. Address, **P. C. LEWIS, Catskill, N. Y.**

HENCH'S RIDING or WALKING Cultivators.
With double-row **Corn Planter and Fertilizer** complete in one machine. **Crowned with Medals since 1879. KING of the CORN FIELD**

Thousands are in use, giving satisfaction. Agents wanted. Catalogue free. Name this paper.
HENCH & DROMGOLD, York, Pa.

CHAMPION HARROW

A Corn Cultivator (cultivating two rows at once), **Potato Digger,** and **Spring Tooth Riding Harrow,** combined in one and sold at price of one. Sold on its merits and is the cheapest made.
New Victor Cultivator and **Horse Hoe** combined. Light and strong; easy to hold, and of easy draught. Six teeth.
Agents wanted. Send for circulars.
JOHN R. WHITTEMORE, Chicopee Falls, Mass.

JACKSON ARCHITECTURAL IRON WORKS.

Iron Work of all kinds for **Buildings.**

Office 315 EAST 28TH STREET, NEW YORK.

STABLE FITTINGS A SPECIALTY.

TO FARMERS. This simple invention is used in milking cows, particularly where there is any soreness. Made of solid silver, and sent by mail to any address on receipt of the price, 50 cts. Address The Milking Tube Co., 102 Friendship Street, Providence, R. I.

SEND postal card, costing **ONE CENT,** and ask price of **BOILER and ENGINE** size you are thinking of buying, to **SPONENBERGH & STERLING,** WATERTOWN, NEW YORK.

Reference, any Bank in Watertown.

SAVE Your POSTS and use SHAW'S WIRE FENCE TIGHTENER. Can be adjusted to any wooden post; can tighten or slacken, according to climate, with an ordinary monkey wrench. Price **$8** per doz. For full particulars, apply to
W. SHAW, Delaware, Ontario, Canada.
Agents wanted. Patent applied for.

More Men Wanted, At Good Wages.

For local and travelling Salesmen. Inclose stamp and write for terms to **E. B. RICHARDSON & CO., Kanadesaga Nurseries, Geneva, N. Y.**

Best Hatcher ON EARTH.
Hatches Ducks, Turkeys, Geese and Chickens. Received First Premium where exhibited. Send for Circular.
ANDREWS' Hatcher Co.
Elmira, N. Y.
Mention RURAL N.-Y.

12 DOLLARS each for *New* and *Perfect* SEWING MACHINES. Warranted five years. Sent on trial if desired. Buy direct and save $15 to $35. Organs given as premiums. Write for FREE circular with 1000 testimonials from every state. GEO. PAYNE & CO., 47 3rd Ave. Chicago, Ill.

(*Continued from page 220.*)

GIVE your hens (those confined) exercise by sprinkling a little wheat among straw of any kind.....

THE 1885 Report of the Connecticut Agricultural Experiment Station (Prof. S. W Johnson, Director), says that the best cotton-seed meal is that which is ground from the decorticated seed. It contains neither hull nor fiber, and has a nearly pure yellow color..

DAMAGED cotton-seed meal, originally good but injured by wet and mold, or ground from damaged seeds, often gets into the market at low rates, but is valuable only as a fertilizer..

COTTON-SEED meal made from the entire seed, after the removal of the cotton fiber as far as practicable, is another inferior grade, and may be recognized by the dark particles of hull it contains. A sample of this was analyzed by the Station and found to contain but 22 per cent. of protein, while the best decorticated seed meal contains 42 per cent. of protein, and is therefore worth nearly twice as much.....

COTTON-SEED contains considerably more nutritive matter than new-process linseed-meal, and is, therefore, much cheaper if the price of each is the same. The very concentrated nature of cotton-seed meal renders caution necessary in its use.....

CATTLE can stand only small quantities of it without digestive disturbauce.....

COTTON-SEED which is not perfectly sweet, is entirely unfit for food. Prof. Johnson thinks it not unlikely that the albuminoids which make up about half of the dry substance of cotton-seed meal, when they begin to decompose on account of dampness, may give rise to poisonous alkaloids similar in nature to those formed from nitrogeneous animal matter under like circumstances.....

PROF. COOK (Director of the N. J. Station), said, at the last meeting of the Horticultural Society, that in his experiments he could see no difference between the muriate and sulphate of potash. He has been trying these experiments for 12 years, and he doesn't see why we should pay seven cents a pound for potash in sulphate when we can get it for three cents a pound in muriate.....

SEVERAL experiment stations make no distinction between potash as a *muriate*, and potash as a *sulphate*, and yet it is well known, says Mr. Mapes, that the muriate of potash is worse than worthless on tobacco. He also states that the potash in the high-grade sulphate is commercially (and also agriculturally on many crops) worth some 70 per cent. more than muriate of potash.....

MR. W. H. BOWKER, at a late meeting of Massachusetts farmers, as carefully reported by the Mass. Ploughman, remarked that the curse of every business to-day is the credit system.....

MR. BOWKER further said that fertilizers, as a rule, are sold delivered all over the country. It seems a law of railroading that the longer the distance the lower the rate of freight. He can deliver fertilizers in Ohio as cheaply as he can in Springfield, Mass., and that is how he can sell delivered in various parts of the country at about the same prices.

MR. BOWKER, in another part of his address, said that there is no farmer to-day who will not admit that in raising a calf, if it is stinted for the first six weeks of its existence, it is stunted for life; so if a crop is stinted for the first 30 or 60 days, it is stunted for the rest of its growth. That being the case, it seems to him we should have plant-food in the most favorable condition, so that if the weather shall be right the crop will make the best possible growth during the first few weeks. This should be one reason in favor of commercial fertilizers.....

SPEAKING of S. C. rock, he said that it is urged by many that we apply South Carolina rock, in a fine ground condition, directly to the soil, and it will give good results; but he thinks that after a long trial the leading experimenters have come to consider that it is far wiser to dissolve it, especially for hoed crops, than to apply it in its raw state, for nearly all hoed crops make the greater part of their growth in 60 days, and plant food, to be of any value to these crops during this period, must be in a condition ready for them to absorb.....

MR. CURTIS (Glidden & Curtis) said that he had the idea that the greatest usefulness of commercial fertilizers was when employed in connection with barn-yard manure. Where barnyard manure is applied, it is necessary to cultivate the soil thoroughly. It is so done and the soil is very carefully pulverized. It is natural to suppose that if chemical fertilizer is used after that careful cultivation of the soil, it will have a great deal more effect and a quicker effect than if it is put upon soil that is not so carefully cultivated.....

Everywhere.

RURAL SPECIAL REPORTS.

Florida.

SAN ANTONIA, Herrando Co., March 18.—We are now shipping some very elegant strawberries, mostly Neunan Seedlings, not overlarge, but quite a nice size. Last Winter froze nearly all of our oranges, but did not hurt any of the large trees, though it injured some very small trees and buds in the nursery. The orauge trees are now full of bloom, with every prospect of a large crop. All small lemon trees were killed to the ground. There has been much improvement here in the last few years, with every inducement to stimulate labor. Crops are looking well. E. G. L.

Illinois.

HIGHLAND, Madison Co., March 14.—Gardeu Treasures very nice. Tomatoes good and very prolific; but those received the year before were better. Peas also good. The 50 crosses were all eaten by chinch bugs after harvest; but the Rural Union Corn is the best we have around here. Times are hard. We have had no good wheat crop since 1881. Last year this county—the second on the list of wheat-raising counties in the State—hardly raised enough for seed and flour. Wheat is worth now 85 cents; corn, 29 cents; oats, 27 cents; potatoes, 45 cents. A. Z.

Indiana.

GREENFIELD, Hancock Co., March 18.—The Rural peas did well. The King Humbert Tomato is a humbug. Did not like the Flageolet Beans. The corn is too small for this country. Sorghum halapense has not put in an appearance yet. Oue melon was splendid. Garden Treasures admired by all that saw them. "X."

New Jersey.

WASHINGTON, Warren Co., March 19.—This county is quite a place for peaches. Of peach buds 80 per cent. are now good on high ground; but on low land the buds are nearly all dead. Wheat is looking better than last week. The best peach we have is the two ** Yellow, which ripens after the Crawford Late. L. W. G.

New York.

CUBA, ALLEGHANY CO.—Many sudden and extreme changes of weather during the Winter, have been very severe on stock, winter grain, meadows, etc., yet all are, so far, in fair condition. Hay was a good crop, but much of it has been shipped, so that the price is likely to go up before grass. Now it brings $9 to $12 per ton. Potatoes rotted badly; some pieces were not worth digging; good ones are worth 60 cents per bushel. The RURAL corn has all been too late for this section. Some of the Stratagem Peas bore very large pods, but mildewed somewhat. The P. of W. did better. The tomatoes were the best I ever saw, except the King Humbert which were not good. Flageolet Beans were prolific and of fair quality. Johnson Grass grew almost three feet, and headed out, but didn't form seed. Garden treasures fine. E. W. M.

ROME, Oneida Co., N. Y., March 20.—Lambs are coming finely, and there are many pairs of twins. So far only one live lamb, when born, has been lost, and that a twin, and the cause, too much milk, and scours. Probably we fed the mother too much too soon after the birth of her lambs. The best pair of lambs we now have are from a small ewe; but she eats wonderfully, and the lambs could soon be made fit for early market if that was our business. I have lately visited the RURAL'S Western New York Farm, and seen the lambs there fitted for the New York market, the methods practised, etc. I had a good visit and was well pleased with my reception and what I saw there. J. T.

WEST SAND LAKE, Rensselaer Co.—The Rural peas grew and ripened well. Flageolet Beans great yielders—very fine for shelled beans. Tomatoes very productive; but the King Humbert doesn't deserve a royal name. Corn all stalk; too late for this section. The RURAL seeds pay for the paper every year. F. H. H.

Pennsylvania.

WOLF RUN, Lycoming Co.—The Thousandfold Rye did well. I had about a peck. The D.-M. Wheat came up well in the Fall, then rabbits ate it to the ground, but it started again and did finely. Very few peas and beans. Some of the corn ripened. The King Humbert Tomato was no better than varieties I already had. L. H. P.

Wisconsin.

LYNXVILLE, Crawford Co., March 15.—The RURAL wheat was splendid. If we had a spring wheat as good as the winter wheat sent out by the RURAL, we would have a variety of which none could complain. The potatoes too were deserving of great praise. The beans did well. The corn was in the form of roasting ears when frost came; but two ears were fit for seed. The Garden Treasures were delightful. Mold's Ennobled Oats do splendidly here; I don't intend to sow any others. W. D.

Miscellaneous Advertising.

Purify the Blood.

We do not claim that Hood's Sarsaparilla is the only medicine deserving public confidence, but we believe that to purify the blood, to restore and renovate the whole system, it is absolutely unequalled. The influence of the blood upon the health cannot be over-estimated. If it becomes contaminated, the train of consequences by which the health is undermined is immeasurable. Loss of Appetite, Low Spirits, Headache, Dyspepsia, Debility, Nervousness and other "little (?) ailments" are the premonitions of more serious and often fatal results. Try

Hood's Sarsaparilla

Sold by all druggists. $1; six for $5. Made only by C. I. HOOD & CO., Lowell, Mass.

100 Doses One Dollar

FIRE-PROOF! WATER-PROOF!
Gutta Percha Roofing.
Especially adapted to Hot or Cold Climates.
Cheap and Durable for Flat or Steep Roofs. Send for Catalogue.
EMPIRE PAINT AND ROOFING CO.,
1128 and 1130 Race St., Philadelphia, Pa.

TARRED FELT **ROOFING** BEST AND CHEAPEST
For Poultry Houses, Out-Buildings, etc., etc. OUR PRICES ARE VERY LOW. Send for Samples. Mention RURAL NEW-YORKER, and address PETER DURYEE & CO., 215 GREENWICH ST., N. Y.

Established FAY'S 1866.
MANILLA ROOFING!
Takes the lead; does not corrode like tin or iron, nor decay like shingles or tar compositions; easy to apply; strong and durable; at half the cost of tin. Is also a SUBSTITUTE for PLASTER at Half the Cost. CARPETS and RUGS of same material, double the wear of Oil Cloths. Catalogue and samples FREE. W. H. FAY & CO., CAMDEN, N. J.

CRIMPED & CORRUGATED
IRON ROOFING
W.G.HYNDMAN & CO.
SEND FOR CIRCULAR & PRICES ÷ CINCINNATI, O.

METAL ROOFING.

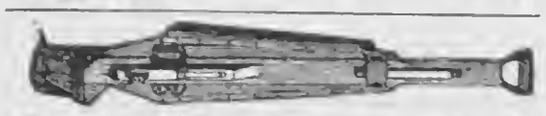
Makes handsomest, most durable, absolutely storm proof roof in existence. Send for particulars to
The National Sheet Metal Roofing Co.,
510 East 20th Street, New York.

WRITE THE **FOR IRON ROOFING!** CINCINNATI CORRUGATING CO
÷ CINCINNATI, OHIO. ÷

Halstead's Perfected Centennial
INCUBATORS AND BROODERS.
First, Foremost, Best. 50 Egg Machine, only $20.
Centennial M'f'g Co., Box 250, RYE, N. Y.

Hussey's New Steel Coulter Harrow.
These Teeth are made of spring tempered steel, always sharp, very light, strong, durable, and cheap.
Also sole maker of Hussey's Steel & "Hard Metal" Plows. Centennial Horse Hoe, &c. Address, T. B. HUSSEY, N. Berwick, Me.

Send for illustrated Catalogue and prices, free.

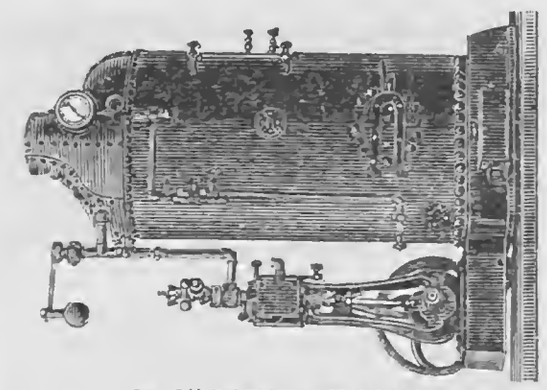


Macomber's Hand Planter, *for Corn, Beans, and Beet Seed.* The BEST in the world. Money refunded if it does not prove satisfactory, after a fair trial. Agents wanted. Send for circular and terms.
S. M. Macomber & Co., M'f'g's, Grand Isle Vt.
For Rhode Island address L. G. SHERMAN & CO., PROVIDENCE.

BATCHELLER BARREL CHURN.
THE CHEAPEST and BEST.
No iron rim in top for butter or cream to adhere to.
All sizes made up to 300 gallons.
Lever and Roller Butter Workers.
We also make BOX CHURNS FOR CREAMERIES.

HORSE POWERS AND DOG POWERS.
One Churn, or Horse Power, sold at wholesale price, where we have no agents.
All goods warranted as represented.
Send for Circulars.
H. F. Batcheller & Son, Box M, ROCK FALLS, ILL.

MOSELEY'S OCCIDENT CREAMERY AND REFRIGERATOR
Thick walls and Double Air Space.
Positively *no sediment* drawn with either cream or milk. ☞ No Lifting of Cans. No Skimming of Milk. SOLD strictly ON MERIT.
MOSELEY & PRITCHARD Mfg. Co.
Send for Circulars to the manufac'rs. CLINTON, Iowa.



Our "DAISY QUEEN"
Upright Boiler and Engine.
Just what you need. In two, four, and Six H. P.
REYNOLDS & LANG,
Write for circulars. Ithaca, N. Y.

THE MAN
WHO MAKES
5 Ton Wagon Scales,
Iron Levers, Steel Bearings, Brass Tare Beam and Beam Box, for
$60 and
JONES he pays the freight—for free Price List mention this paper and address JONES OF BINGHAMTON, Binghamton, N. Y.

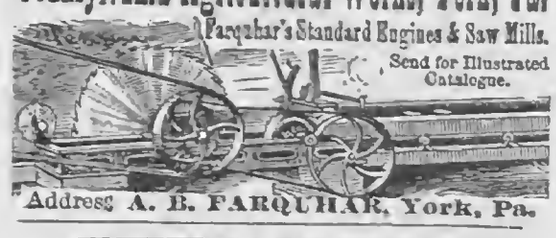
THE "COMMON SENSE" MILK PAIL.

This is the only *perfect* Pail made. There are no seams in the front to catch the dirt. It has a perfectly fitting strainer, which can be instantly removed, so that every part of the pail may be *quickly* and *thoroughly* cleaned. Should the strainer become foul or worn with use, we can furnish new ones at very little expense. The Pail is well made of heavy XX tin, and we offer it to the farmer at the very lowest price at which a really good article can be sold. *Send for special circulars.* Price $1.25 each. Discount to the Trade.

MILKING TUBES,
FOR MILKING COWS WITH SORE TEATS
This is the best Tube in the market. Sent, post paid, to any address on receipt of price. One Tube, 25 Cents. Five Tubes, $1.00. Send for special Circulars.

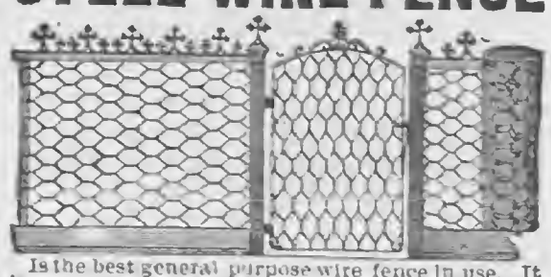
Send us your name and address and we will mail you, FREE, our
Seed Catalogue for 1886.
Choice New England Seeds. The very Best and Purest Stocks of Cabbage, Onion, Beet, Parsnip, &c. All grown by ourselves and sure to give complete satisfaction. TRY THEM.
BARTLETT & DOW,
LOWELL, MASS.
Please mention this paper.

Pennsylvania Agricultural Works, York, Pa.
Farquhar's Standard Engines & Saw Mills.
Send for Illustrated Catalogue.



Address A. B. FARQUHAR, York, Pa.

SEDGWICK STEEL WIRE FENCE



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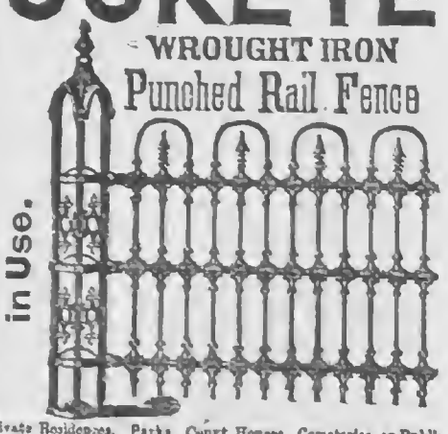
BUCKEYE WROUGHT IRON Punched Rail Fence



Acknowledged to be the Best Iron Fence now in Use.

Suitable for Private Residences, Parks, Court Houses, Cemeteries or Public Grounds—made either Plain or Ornamental. Also, manufacturers of the IRON TURBINE WIND ENGINES, BUCKEYE FORCE PUMPS, BUCKEYE LAWN MOWERS, ETC
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THE FARMER'S CLUB

ANSWERS TO CORRESPONDENTS.

[Every query must be accompanied by the name and address of the writer to insure attention. Before asking a question, please see if it is not answered in our advertising columns. Ask only a few questions at one time. Put questions on a separate piece of paper.]

HIP OR STIFLE LAMENESS IN A MARE.

E. L., Madison, D. T.—While harrowing, a mare, frightened by the report of a gun, sprang forward, and since then she has been lame in the left hind leg. She pulls and works all right; but when trotting she is lame, and in the stable she always rests on the other leg. No swelling is apparent. What is the trouble?

ANSWERED BY F. L. KILBORNE, B. V. S.

The injury is, most likely, a sprain of the hip joint, and tenderness may perhaps be found by pressure over the joint, midway between the anterior and posterior angles of the hip bone. If in no other way, you can probably locate the seat of the sprain by alternately moving the hip, stifle and hock joints, and also by closely watching the movements of the animal. There will be least movement in the affected joint. A long period of rest is the first essential in the successful treatment of such lameness—from three to six months. After ascertaining the exact seat of the injury, apply a cantharides blister over the region. An excellent blister may be made by thoroughly mixing two drams of freshly powdered cantharides, one ounce of lard, two or three drops of oil of peppermint or lavender, and five grains of camphor gum dissolved in five or 10 drops of alcohol. Cut the hair from the part and apply the blister by rubbing in well against the direction of the hair for 10 or 15 minutes. When the blister is well raised, wash off with castile soap suds, and smear the surface daily with vaseline or fresh lard. Tie the mare's head so that she cannot reach the blistered surface with her mouth. When the effects of the first blister have passed off, a second may be applied. If there is no improvement after a few weeks, it may be necessary to place her in slings at night to prevent her lying down. Do not work her until several weeks after a full recovery.

PUTTING SECTIONAL ROLLERS TOGETHER.

E. C. B., Cuckoo, Louisa Co., Va.—To put together land rollers having several sections, if of two sections, a frame is made having three pieces somewhat longer than the combined length of the sections, which pieces are morticed into end pieces of sufficient length to allow room for the sections to run between the two hinder pieces. The forward long piece should be 3x6 and placed edgewise up and down; the other long pieces should be either 3x3 or 3x4, according to the length of the roller. The sections have square iron plates 10x10 inches, and one-half inch thick, to which are cast either boxes to run on a shaft, or short bearings to run in boxes, and having half-inch holes in each corner for fastening them to the "heads" of the sections. If the sections are to run on a shaft, the shaft should be of 1¼-inch iron, and have a thread and nut on each end, or it may have in each end a key hole through which a key is put—the first is preferable. This shaft passes through the end pieces, and the center is supported by a piece of iron one-half inch by four inches, having in the middle a hole through which the shaft passes and its ends split and bent each way and bolted to the long pieces before and behind the rollers. Where the end plates have short cast journals, a box is bolted to the under side of each end piece and also to the iron passing between the section in the middle of the roller. We much prefer the shaft. Where three sections are used, place the forward two in a frame similar to the one above described, only long enough so that they shall be nearly as far apart as each is long. The third section should be placed in a frame of its own, and behind the center of the forward one so as to roll the space left by the forward ones. This frame is attached to the other by a chain about 13 inches long, from each corner.

TEMPERATURE IN A GRAPERY, ETC.

C. S. N., Lewiston, Mo.—To grow and ripen grapes successfully in a "hot house" or hot grapery (which yours seems to be,) the temperature will depend upon the time when the house is started, and how early you want the grapes to ripen. From 50 to 60 degrees is a good night temperature for a forcing house; and from 80 to 90 degrees for a day temperature when the sun is out. It should not go much below 80 degrees on cloudy days. When it reaches the highest point named, begin to ventilate at the top, and not at the bottom of the house. This should give you early grapes. For grapes a little later, a night temperature of about 50 degrees will do, and a day temperature of 75 to 80 degrees. Sudden changes in temperature should be avoided at all times. 2. The vines should be occasionally syringed in addition to wetting the ground. Do it gently. Suspend the syringing when the grapes are ripening off, as they will ripen better in a comparatively dry air.

SORE TEAT ON A COW.

Subscriber, (address mislaid).—One of my cows which dropped a calf two weeks ago, has on one of her teats a sore that looks like a ring-worm, and it is hard work to get milk out of that teat; what should be done?

ANS.—After each milking apply an ointment made of equal parts of almond oil and spermaceti, melted together. If this does not succeed alone, touch the whole sore with a stick of lunar caustic or with a chloride of zinc wash—one dram of zinc chloride to one pint of water. Milk carefully and keep the teats dry while milking. If there is much difficulty in milking, a milking tube to draw the milk will be necessary.

PARALYSIS OF HIND-QUARTERS IN PIGS.

S. H. W., Upper Falls, Md.—The paralysis in the hind-quarters of young pigs may be due to the breeding, feeding, exposure, straining or other injury. In general, remove the cause. Give a laxative—two ounces of castor oil. Apply a blister of one part of powdered cantharides and four parts of turpentine, to the loins, or send a current of electricity through the hind limbs and loins for 15 or 20 minutes daily. If the animals are very fleshy they may be too heavy for their limbs and should be fed less liberally, or perhaps, most profitably, sent to the butcher.

SORE EYES IN DUCKLINGS.

J. E., Duxbury, Mass.—Of 60 ducks hatched last June, I lost 31; the trouble seemed to be sore eyes; what should have been done?

ANS.—The ducks suffered from colds, probably due to exposure to air draughts Top ventilation often causes the difficulty. Keep them in a warm, dry place, and bathe the eyes and heads in a solution of a teaspoonful of boracic acid in a glass of water. It would not be out of place to examine the heads closely for the large red louse that often causes sore heads.

RAISING CELERY.

C. H. W., West Shoken, N. Y.—In spite of your recent failure to raise celery plants, you will never fail, provided you get good seed, and follow these suggestions: A friable soil mixed with vegetable mold and sand is necessary for a seed-bed. Pulverize it thoroughly; sow the seeds on the surface and merely sift a light sprinkling of the same soil over the seeds. Then cover with boards raised an inch or so, which will help to retain the moisture of the soil until the seeds sprout.

Miscellaneous.

D. C., Homer, N. Y.—1. Does pure water running over land enrich or impoverish it? 2. Is there anything new and true in the new system called "The New Agriculture?" 3. Of what value are ashes from hemlock tanbark? 4. If I have potash in wood ashes, would it pay to buy phosphoric acid and nitrogen to go with it, and, if so, where and in what shape can I get them cheapest? 5. Are the Red Canada and McIntosh's Red identical, and are they desirable for this section?

ANS.—1. No. *Pure* water contains nothing needed by the plant except the oxygen and hydrogen of the water; but where running over a piece of rich land it would both dissolve and carry along with it more or less of the fertilizing elements of the soil, and if then running on, and standing on other land, it would, no doubt, deposit these elements and thus enrich the land. 2. Yes, both; but "the new is not true, and the true is not new." We can see no new principle in this system. There is no doubt that certain lands are greatly benefited by underdraining; others by trenching, and in certain soils a little water might be retained by the ditches advocated in this system; but we should advise every one to go slow in investing money in it. 3. Very little indeed—scarcely enough to pay for drawing, if to be hauled any distance. 4. It would pay certainly, if your land needs it, and what land does not? We cannot say without knowing the facilities for obtaining them near you. In a general way, phosphoric acid may be got most cheaply in a very fine bone flour. Nitrogen can be had in hen manure, tankage, dried blood, sulphate of ammonia and nitrate of soda. 5. No. They are very distinct. We fear the McIntosh Red will spot badly in this country. It does so even in its native home, Canada. If not, it is a very beautiful apple and of good quality. Red Canada is also liable to spot in some countries. If they are not raised about you, get a few cions and try them in a small way.

J. A. L., Philadelphia, Pa.—What disease killed my hogs? Symptoms, they refused to eat; their ears turned to a dark purple; their bristles fell out; their bodies were inflamed all over; hearts unnaturally hard; lungs, spotted with black; livers, unnaturally dark and charged with clotted blood?

ANS.—The disease was swine-plague or hog-cholera. See article in the F. C., January 23, 1886. There is no known remedy that will cure severe cases, and even mild cases can rarely be profitably treated. Prevention is the better method.

F. C., Leominster, Mass.—My quinces are on wet land, and having been neglected, are not fruitful; what manure is best to make them so? Are horn shavings of any use?

ANS.—First drain the land so that water will not stand. Wood ashes, old farm manure of any kind are good. The horn dust is good, but very slow in acting. *Any* manure that is good for any fruit tree, for corn or cabbage, will be good for the quince.

"Friend," Holly, Mich.—The best incubators in the hands of a novice so often produce poor results, that we cannot advise any "beginner" to try so crude a device as a home-made incubator is likely to be. All the incubators advertised in the RURAL are favorites with many. As we have not tried them, we can not decide which is the best. Each claims special merits. Descriptive circulars of all will be furnished *gratis* on application. A sensible man after reading these would not be likely to err in selecting the machine best suited to his circumstances.

W. W. S., Vevay, Ind.—To get a railroad check for baggage, after paying your fare, show your ticket to any of the railroad porters about the station, and he will give or get you a check for it to the place to which you have bought a ticket, or to any intermediate point at which you may tell him you wish to "stop over." When you arrive there, you can get your baggage on showing your check to any of the porters in charge of the baggage, if you see it on the platform, or at the baggage room if it has been carried there.

H. T., Tyndall, Dakota Ter.—The insect eggs found in bunches on the branches of your apple trees, specimen of which you forward, are those of the tent-caterpillar (Clisiocampa Americana), or of its close relative, the Forest Caterpillar. The insect which has bored into the apple twigs sent, is, in its perfect state, a small beetle. Its manner of proceeding is much like that of the Currant Borer. We have never seen this insect in the East, and care should be taken not to introduce it.

Subscriber, Ellenville, N. Y.—1. The Russian Apricot is reported as having endured 40° below zero. The fruit is medium in size and of fair quality. We doubt if it is exempt from insect injuries. 2. *Some* kinds of Japan Chestnuts will bear in three years; others will not bear in eight years. This we know. Seedlings vary as much as our American Chestnuts. Some are hardier than others. See RURAL reports.

J. H. S., Three Rivers, Mich.—If the "Oriental Potato Bug Powder," which is reported to have been lately invented, proves as efficacious as the inventors say it is, it will soon be in the market and widely advertised. Until then, use the tried and well known insecticides.

G. W. W., New York City.—To remove lice from a horse, rub the animal all over with a mixture of kerosene and lard, equal parts, and after a day or two wash him to remove the grease. Of course, he must be kept warm while being washed and until fully dry.

E. J. W., Westford, Mass.—1. Saltpeter waste, at $13 per ton, would not be advisable as a dressing for grass land. 2. Neither would it and cotton-seed meal make a better fertilizer for potatoes, corn and beans than the cotton-seed meal alone.

A. N. Y., Frankfort, Kans.—Your gooseberry bushes "started three years ago from small sprouts," will not be benefited by pruning as yet.

DISCUSSION.

TREE PEDDLERS AND NURSERYMEN.

C. H. W, WEST SHOKAN, N. Y.—I have had the same experience as that related by Mr Morrill in a late RURAL, with regard to purchasing fruit trees. Those in one of my orchards were purchased from a man who went around soliciting orders, and they turned out first-class, and nearly all were true to name. The next year I set out another orchard on land joining. The latter I purchased direct from what was said to be the largest and most reliable nursery in the State, and I have not one-third of the varieties I ordered, and what I have are very inferior stock, some being absolutely worthless The number of trees and varieties were exactly duplicated, and now, after growing side by side for 20 years, what a difference in the trees and fruit! The nurserymen made no pretence of substituting other varieties; for the trees came labeled to conform to my orders. Now these men hold their heads very high, but they are no better than the worst swindlers. When I see in the newspapers the wholesale denunciation of the traveling tree agents, I think the writers do not know what they are writing about, or they knowingly misrepresent things. I think more than half the trees that are sold throughout the country are supplied through the so-called "tree peddlers." These have done and are doing a good work in calling attention to the choice fruits and inducing the setting out of trees. In this neighborhood nearly all the fine fruits in the last 20 years have been purchased through agents. Were it not for the facilities afforded by them very few of the farmers would be so well supplied with fruit. Writers say one has no redress when he buys from tree peddlers. I would like to know where my redress is. It takes nearly 20 years for an orchard to become established in good bearing condition, and it would be useless to try to recover damages from men who have become wealthy by such practices.

G. F. B., ALPHA, IA.—In connection with tree peddlers spoken of in a late RURAL, some years ago one of the ubiquitous race roamed through Northern Iowa. He had all sorts of trees that grow on the glaciers around both poles. Some we knew from the names were really iron-clad, and a few very hardy, and he succeeded in making a fine haul, by promising to replace every tree that would die within five years. The thought of doing so made him weary, however, and he sought another occupation—that of tomb-stone agent. Thinking lately that he was sufficiently forgotten, and hoping once more to take in his former dupes, he started through the scenes of his former deceptions. "Hello! Any one dead in your family? I'm selling splendid tomb-stones for a song; how many will you take?" was the way he usually started conversation. "Yes," was the general answer, "those trees you sold us are all dead, and you had better at once fix up some memorial slabs to perpetuate the memory of your former rascality. You can't get a dollar out of any of your former customers; but they all want to see you." He didn't "reciprocate," however, but for the good of his health, and to save his customers from a breach of the law, he took the first train for other scenes where his character would be more highly but less justly appreciated.

J. S. S., ROXTON FALLS, PROV. QUEBEC, CAN.—A late RURAL asks how peas are raised in the Dominion. Well, we sow them on clay land, not too rich, and if poor, we use land plaster by putting, say, half a bushel in a wash-tub with a bushel of peas, and just enough water to cover the peas and plaster. Stir well with a stick. The land plaster will adhere to the peas. Sow and harrow quickly and do not give the plaster time to dry before the peas are buried. The drainage must be perfect; for the crop will be lost if water is allowed to remain in the field. If peas are sown on sand, the land must be rich. Two-and-a-half bushels of peas, or two bushels of oats and one bushel of peas, well mixed, is the rule per acre. I like the last seeding greatly—peas and oats. When the land is rich, sow little Canadian peas, and if the land is moderately rich, or if poor and dressed with land plaster, sow large peas. They must be sown early, or not more than half the crop will ripen. If peas are sown on land badly infested by weeds, it will be greatly improved for the next crop. In the valley of the St. Lawrence and of the Nebelien River it is a common thing to obtain between 20 and 40 bushels per acre, and this yield is sometimes produced on poor land by the use of land plaster. Vermont has splendid land for pea culture, on mountain slopes.

B. H. F. H., UNION, N. J.—J. F. B., Manatee, Fla., who writes on page 153, was mistaken in abandoning orange culture. It has paid and is paying constantly. It is just as bad to "bear" as to "bull" the business.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING March 27, 1886.

J. C. R., potatoes received.—Uber, dewberry received.—W. P., strawberry plants received.—M. V.—C. L., thanks.—G. W. D., thanks.—H. A. Terry, thanks. T. W. L.—B. F. S. F. C.—G. P.—C. E. H.—K. S. H.—F. O. C.—S. J. L., thanks.—Pootatuck received without history.—B. W. C.—A. B. A.—O. H. A., seeds received.—J. H. Jr.—T. T L.—A. W.—A. J. B.—W. S.—S. K. O.—K. S.—H. S.—C. M. H.—P. M.—M. E. N.—A. W. W.—J. R. H., thanks.—T. M.—McA. K.—F. W.—J. G. C.—H. M H.—F. D. C.—T. H. H.—P. B. M.—E S. G.

Implements and Machinery.

$25 A DAY saved by using the **Little Giant Road Machine,** instead of making roads in the usual way. It is the cheapest and the best. Send for circular.
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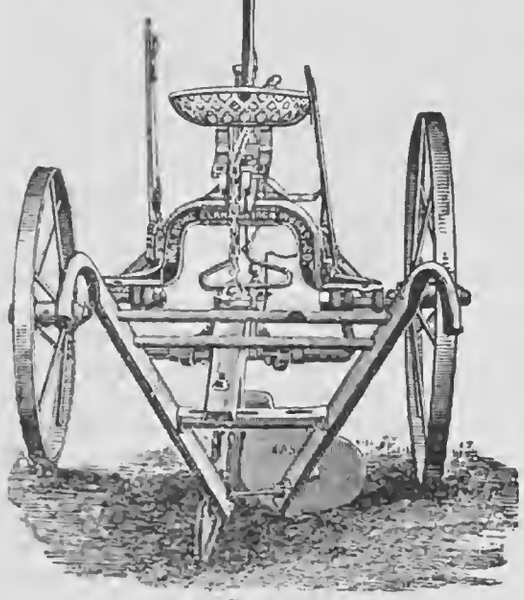

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We claim and GUARANTEE that a Plow attached to the Sulky and carrying the driver, is from five to 100 pounds lighter draft than the same Plow doing same work without the Sulky. Write for prices,

ELKHART IRON WORKS,
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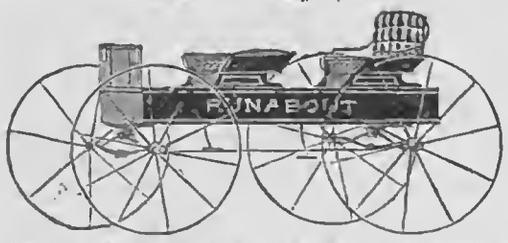
Mention Rural New-Yorker.

The Runabout Wagon.
Patented January 15, 1884.



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SUCCESS VEGETABLE SEED PLANTER,
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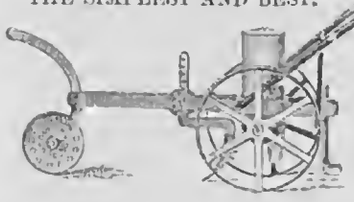
THE SIMPLEST AND BEST.



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NEW AND VALUABLE.

A SUCCESSFUL FERTILIZER DISTRIBUTOR.

Fills a long-felt want. Drops Corn, Beans, Peas, and all similar seeds, and distributes all kinds of Fertilizer in quantities to suit.

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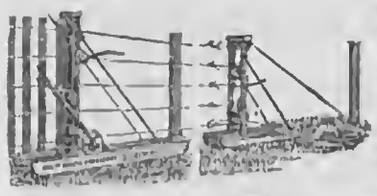
Mention this paper. MOLINE, ILL.



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The only practical machine in use that makes the fence in the field wherever wanted; makes the best, strongest, and most durable fence for general use and farm and stock purposes; weaves any size picket and any size wire. The fence will turn all stock without injury to same. For catalogue and full particulars address **M. C. HENLEY,**
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Send for circulars and price list to
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HAY and GRAIN ELEVATORS SLING and STACKER
BEATS THEM ALL.
Agents wanted. Send for circular. Mention this paper.
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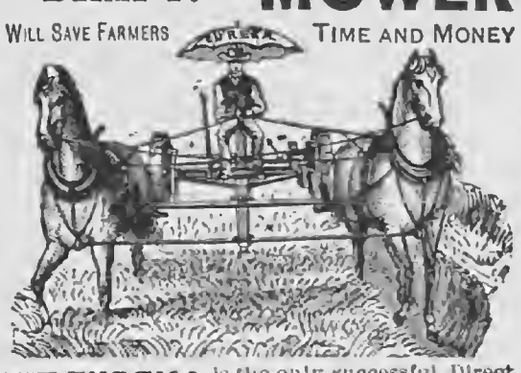
-THE-
Broad Cut Centre DRAFT. EUREKA MOWER
WILL SAVE FARMERS TIME AND MONEY



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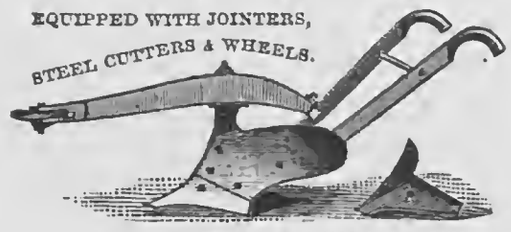
Steel, Cast, and Chilled PLOWS.
EQUIPPED WITH JOINTERS, STEEL CUTTERS & WHEELS.



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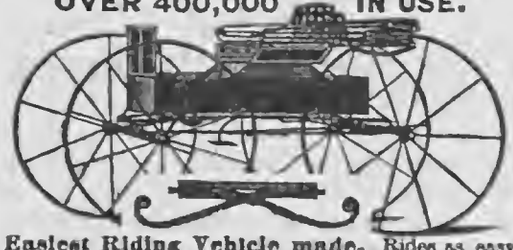

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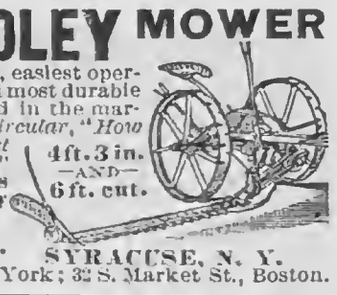

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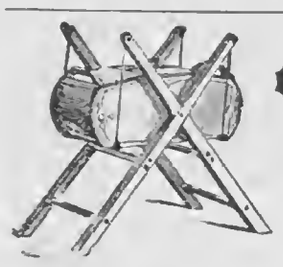

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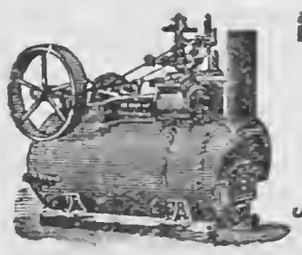

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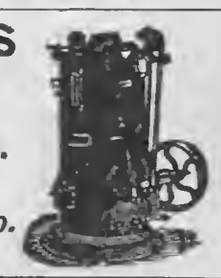

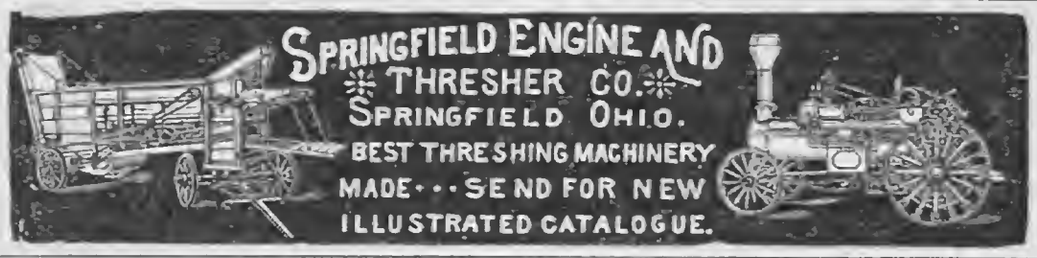

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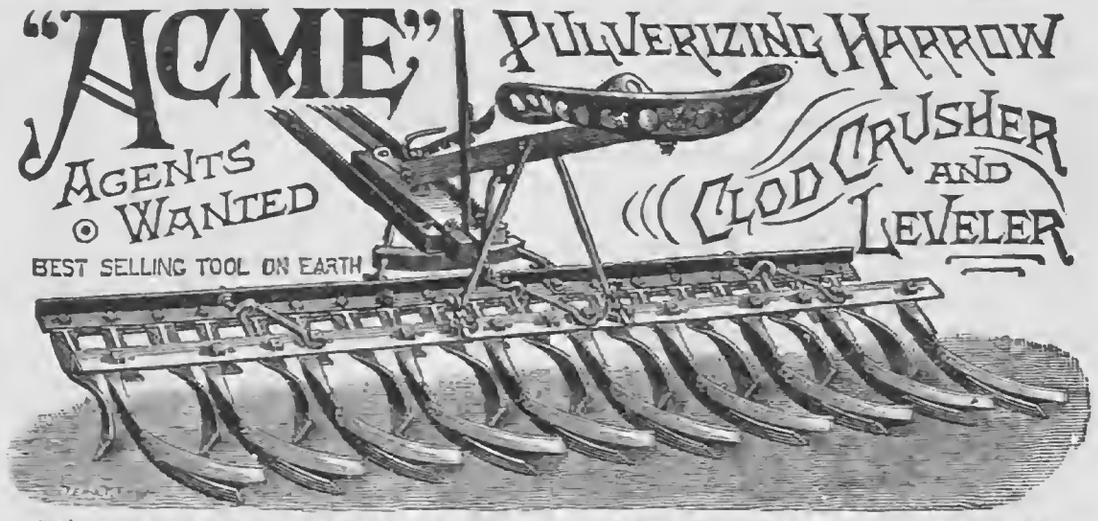

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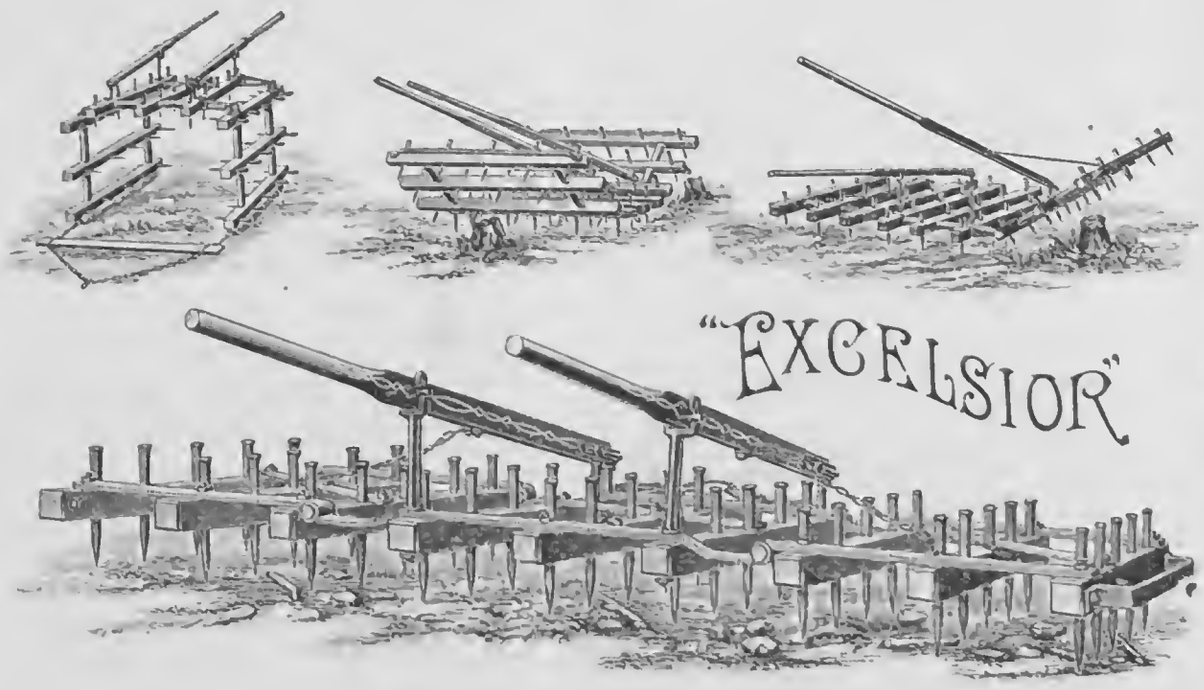

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THE
RURAL NEW-YORKER.
A National Journal for Country and Suburban Homes

Conducted by
E. S. CARMAN, Editor.
J. S. WOODWARD, Associate.

Address
THE RURAL NEW-YORKER,
No. 34 PARK ROW, New York.

SATURDAY, APRIL, 3, 1886.

A POULTRY SPECIAL NEXT.—It will appear in about one month.

IF the number on your address label is 1888, your subscription expires with this number; if 1889, next week; 1890, in two weeks, etc.

LEGISLATION in favor of the special interests of corporations and individual capitalists is the hardest legislation to kill. It may seem to have been buried under a cloud-capped mountain of public disapprobation and denunciation; but straightway it creeps up quietly or "bobs up serenely" in the same or some other form, and either glides unobtrusively or pushes its way jauntily through our legislatures. Senator Wilson's proposed legislation in the interest of the express companies appears to have been killed, or shorn of its most objectionable provisions, so far as agriculture and horticulture are concerned; yet we are glad to learn that farmers' clubs, farmers' alliances and Grange meetings are still protesting against the proposed outrage, and we strongly urge our friends to continue to remind their Representatives and Senators in Congress that it is their duty and to their interest to offer a vigorous and indignant opposition to any bill including such legislation, should it ever come up for consideration.

BY reference to Notes from the Rural Grounds, it will be seen that from the experiments there conducted, the following kinds of sweet corn may be selected for every day use from the middle of July until September 10, viz.: Early Minnesota, Marblehead, or (perhaps) Cory; Moore's Early, Triumph, Black Mexican, Stowell's Evergreen, if all are planted about May 20. It is worthy of remark that in the above trial the Early Minnesota, Moore's Early, Triumph and Black Mexican matured their pollen while the silk was receptive, while the Evergreen sheds its pollen generally before the silk appears. For small garden plots, it is probably as well to select those kinds whose tassels bloom and shed their pollen at the same time that the silk appears and is ready to receive it—otherwise many imperfect ears may be looked for.

THE N. Y. Tribune says that

Dr. William Trelease, of the Shaw School of Botany, while acknowledging the interesting character of figures cut in wood and published as evidence of the alleged "wheat-and-rye hybrids," thinks they cannot be accepted as conclusive evidence of an actual cross between these two grains either in America or England.

This work of the R. N.-Y. has now been before the public going on four years. Except that an account of it in the Century Magazine of last January did not mention the place or even the country where the crossing was effected, and that it has since been spoken of as having occurred abroad, we know of no attempted hybridization in England or elsewhere. If Dr. Trelease had visited the Rural Grounds and *examined the plants*, instead of the "wood cuts," perhaps he would not talk of "alleged," or about not "accepting them as conclusive evidence of an actual cross between these two grains." With all respect for Dr. Trelease's opinion, it sometimes occurs to us that it is possible to be too scientific for anything.

A STATEMENT appeared in the report of the N. Y. Ex. Station for 1884, that Hammond's Slug Shot was probably composed of a large quantity of gas-lime poisoned with London-purple. Mr. Hammond, as we have said, made an affidavit which was sent to the press and others, that it contained neither gas-lime nor London-purple. A circular recently received from the N. Y. Ex. Station states that the main substance is gypsum containing, according to an examination of one sample, about one per cent. of arsenious acid, of another two per cent. and of a third one-and-one-half per cent. The Director, commenting upon its composition, says that when it is considered that one grain of arsenious acid is a dangerous dose, and that a tablespoonful of any of the above samples would contain more than this quantity, the necessity for caution in its use will be evident.

SPECIAL.

Those who, having applied for the Rural's present seed distribution prior to March 20th, have not yet received it, will kindly notify us by postal at once.

The seed packages for Canada subscribers have been expressed, to be mailed there, and all should have received them by this time.

MIXED SEEDS FOR LAWNS.

WE have many times had occasion to advise our readers in making lawns to sow Red-top or Blue Grass (June Grass), or both, instead of the lawn mixtures sold by the seedsmen and, at this season of the year, advertised under various attractive names. Dr. W. J. Beal, of the Michigan Agricultural College, in a timely bulletin, presents the results of a careful examination of these lawn-grass mixtures procured from several of the leading seedsmen of the country. He finds most of them to consist largely of Blue or June Grass (Poa pratensis) and Red-top, with smaller quantities of White Clover, Sweet Vernal Grass, Perrenial Rye Grass, Orchard Grass, Timothy, Sheep's Fescue, Meadow Fox-tail, etc.; with traces of Chess, Plantain, Orchard Grass, Velvet Grass, etc.

While June or Blue Grass may be purchased for $2.00 per bushel at retail, and Red-top at $1.00, the price of the "lawn-mixtures" varies from four to five dollars per bushel. If, however, by their use, the lawn would prove more uniform, velvety or permanent, a reason would at once be found for selecting them, notwithstanding they cost twice as much. Such, however, in our view, is not the case.

We can not improve upon either Red-top or Blue Grass for lawns, and any additions of Timothy, Perennial Rye Grass, Orchard Grass, Red Clover, Meadow Fox-tail, etc., had better be left out, even though the additions *reduced* the cost. As we have often said, a little White Clover added to the Blue Grass and Red-top will do no harm.

POSSIBLE TROUBLE WITH CANADA.

THERE is prospect of a good deal of umbrage and recrimination, if not of serious international difficulties, between this country and the Dominion with regard to the fishery question. Canada claims for her citizens the exclusive right of fishing within three miles from the Canadian coast, including a line between the headlands at the entrance of harbors, estuaries and bays. This country concedes the three-mile limit, but disputes the other claim. The fishermen of New England are inclined to trespass on acknowledged Canadian waters, and to fish in the large bays anywhere beyond three miles from the shore. The fishermen of the Canadian Maratime Provinces, especially those of Newfoundland, exasperated at the duties imposed in this country on importations of their fish since the abrogation of the late treaty, are bitterly and belligerently opposed to the "enterprise" of the New Englanders. Hence, many unfriendly and some menacing demonstrations. A few days ago a Maine firm engaged 70 men in a Nova Scotia village for the Grand Bank fisheries; but the vessels for which they were hired were forbidden to call at any port of the Dominion to take them on board. The Legislature of Newfoundland is contemplating the prohibition of the sale of bait to Americans. Armed Canadian cruisers have already appeared on the most frequented coasts, under instructions to seize every American vessel found fishing within the three-mile limit. The only possible escape for the fishermen from outrage and for the country from international complications, appears to be the negotiation of a new treaty. "Let us have peace!"

THE JAPAN CHESTNUT.

WHEN a paper endeavors to popularize a new plant of any kind, it runs a risk of depopularizing itself with many who purchase the new plant, if it fails with them. We run this risk when talking up the Japan Chestnut. Scores of inattentive readers see only the favorable comments which appear, or are uninfluenced by the cautions which precede or follow. What we are striving to do is to aid in a dessemination of the best *varieties* of the Japan Chestnut known at present. We *know* that there are several varieties in New York, Ohio and Connecticut, that bear nuts nearly as good in quality as the American; while they are probably three times larger. We know that *some* of these trees bear as early as four years from the seed; that the trees are comparatively dwarf in stature and bushy in habit; that they will endure at least 20 degrees below zero unharmed. We also know of Japan Chestnuts that have been injured by 10 degrees below zero; that bear nuts scarcely larger than the largest American, and usually but one in a burr. We also know of some that are eight years old, that have not yet fruited.

How are our friends to get at these finest varieties? They cannot at present, so far as the R. N.-Y. is informed, except by chance, since they are not as yet offered for sale, though, no doubt, they will be in a year or so. Meanwhile our friends can purchase such trees as are offered for sale and take their chances, or they can plant the nuts and raise their own seedlings. We propose to gather all the information we possibly can on this subject for the guidance of all. But we have already investigated the subject far enough to be impressed with the belief that the introduction of the Japan Chestnut to all parts of the country, where it will thrive, will prove to be a good work, and we shall never shrink from having it known that the R. N.-Y. was the first journal to engage in it.

THE BUREAU OF ANIMAL INDUSTRY.

THE House Committee on Agriculture has unanimously reported in favor of a bill "to promote the export of live cattle" by increasing the powers of the Bureau of Animal Industry, and appropriating $250,000 to pay for cattle killed in order to prevent the spread of infectious and contagious diseases. In spite of the charges of jobbery, incompetence, exaggeration and general unfitness made by some parties against officers of the Bureau, the bill is very likely to pass the House by a considerable majority, and is hardly likely to meet any serious opposition in the Senate. Some minor alterations will probably be made; but doubtless the bill, substantially unchanged, will receive the President's signature ultimately. Before any of the appropriation can be spent in any State, the plans and methods of the Commissioner of Agriculture, under whose direction the Bureau is to act, must be accepted by the authorities, and the Governor must signify his willingness to act with the Commissioner. The sum to be paid for each slaughtered animal is limited to three-fourths of its value, and is not to exceed $150 per head for registered stock and $60 per head for all others. No compensation is to be paid for animals that contracted the disease in a foreign country, or for those whose owners have not taken reasonable care to prevent the spread of the disease.

When the Bureau of Animal Industry was first established, three years ago, we protested against the inadequate legislation and the niggardly appropriation made for stamping out contagious diseases of live stock through its action. Had its efforts not been hampered on this account, it is not unlikely that pleuropneumonia would have disappeared from among our herds, and that our cattle would by this time have obtained free admittance into the United Kingdom like those from Canada. At present, however, 455 herds, containing 60,000 animals, are reported to be affected; and of these 17,000 are sick. The experience of all countries has demonstrated that the disease can be effectually suppressed only by killing all infected animals. European countries have spent vast sums in maintaining quarantines and inspections without avail. The loss to American cattle-dealers by restrictions on importations of live cattle to Europe is from $10 to $15 per head. The capital at stake is $1,200,000,000, represented by 45,000,000 cattle. We cannot afford to run any risk with so great an interest through fear of a trifling risk of mismanagement of the appropriation.

POULTRY RAISING FOR PLEASURE.

WE should be glad if we could induce those of our lady readers who have never done so, to try raising poultry this Spring and Summer. Commence in a small way. A house eight feet square and seven high, with a slanting roof, will be about the right size for 10 hens and a rooster. A glass sash in front, three feet by seven, that can be raised when the weather is warm, will admit all the light and sunshine necessary during cold weather. Three perches made of any kind of wood two inches in diameter, may extend diagonally from any two sides. These should be not over two feet high, and it is well that a little ladder with two rungs should rest against the first so that the fowls need never be obliged to jump from the roosts to the floor. The nests (two will be enough) may be nailed to the sides of the house just above the roosts, or they may be placed on the floor. The house should be raised a few inches above the ground, so that a free current of air may pass underneath. The door should open towards the east or southeast. Such a building will cost about $8 complete. As an inclosure, nothing is better or cheaper than the wire netting now sold for about one cent a square foot, tacked below to a spruce base-board, and above to scantlings of suitable strength, with posts about eight feet apart. For a dozen hens, an inclosure of 20 feet square will be ample, provided the hens be supplied with gravel, bone-meal or oyster or clam shells, and an abundance of green food. The earth should be spaded up every week or ten days, and grain food strewn among straw or hay so as to induce the hens to exercise. Change their food freely, provide fresh water as needed, kerosene the perches and sides of the building every fortnight, sift a little sulphur in the nests, change the straw in them as often as it becomes soiled or dusty, never place more food before them than will be eaten up in half an hour, and if the RURAL may speak from its long experience in poultry raising, the hens will supply what we may call a maximum number of eggs; they will be healthy and contented. Next to the cultivation of flowers, we know of no out-door occupation more likely to please, to interest and to instruct the lady folks of the family. The sooner we set hens, the earlier they will begin to lay in the Fall, and we cannot now, therefore, begin too soon. If pure breeds be preferred, select Black Cochins, Langshans, Brahmas (Light or Dark), Wyandottes or Plymouth Rocks. Such breeds as Leghorns, Hamburghs, Games, etc., are not satisfactory as all-purpose fowls; neither do they thrive as well in confinement as the others. Our lady friends may be aided in making their selections of eggs by sending for the circulars of those who advertise them for sale.

BREVITIES.

OUR Japan Chestnut has passed the Winter in safety.

GRAFTING.—We aim to give a full, explicit and simple account of the whole subject.

ROSE-COMB Leghorns. If we were about to try Leghorns, we should select the Rose-comb.

THE Prunus Pissardii or Purple-leaved Plum does not, as yet, show signs of injury from the past Winter's severities.

OUR readers are still cautioned against buying Nature's Incubator, manufactured by the Company of that name in Quincy Illinois.

IN reply to many inquiries as to where eggs of certain breeds of poultry can be bought, we would respectfully call attention to our advertising columns.

WE have several accounts favorable to the Clydesdale Oats. We are preparing to sow four acres of them. Last year they reminded us of the Welcome or White Australian; but it seems they are not the same.

THOSE of our readers who are anxiously waiting for more about sheep husbandry from the Western New York Farm, will be gratified next week. A press of other matter has kept out these instructive articles of late.

WE learn from reliable sources that the Jewell Strawberry is thought to be the best strawberry for canning, because, first, it seems to retain its form and color perfectly, and, second, it holds the strawberry flavor better than others.

WE know of nothing more airy, refined and graceful in the way of green foliage to mingle with cut flowers or for table decoration, than the Climbing Asparagus. It may be used in vases with fine effect, if only it receives plenty of water.

MR. P. J. BERCKMANS, of Augusta, Ga., writes us: "I have two-year-old trees of the Japan Chestnut, and although transplanted last year, they produced fruit the same season, and this when only three feet high. I am favorably impressed with this fruit, but as the nuts were stolen before maturity, I am so far unable to say anything as to their quality."

AN effort is being made in the interest of pomologists to establish a Bureau of Pomology at Washington. The present Commissioner of Agriculture is in sympathy with the plan. If the proposed Bureau could be established now, there is strong ground for belief that it would be started right. All persons interested in this matter are requested to write to their Congressmen, urging them to confer with the Commissioner of Agriculture and to support legislation and appropriation to this end.

PROFESSOR C. V. RILEY writes us that he has been suffering from over-work for some time back, otherwise he would have stated in his recent article on Grape-vine Mildews, that it was published in advance from the Proceedings of the American Pomological Society. Indeed, he sent to us, with it, a statement that it was an elaboration of a shorter article written for the society. It was at first supposed that the more extended article could not be published in the Proceedings; but afterwards room was made for it.

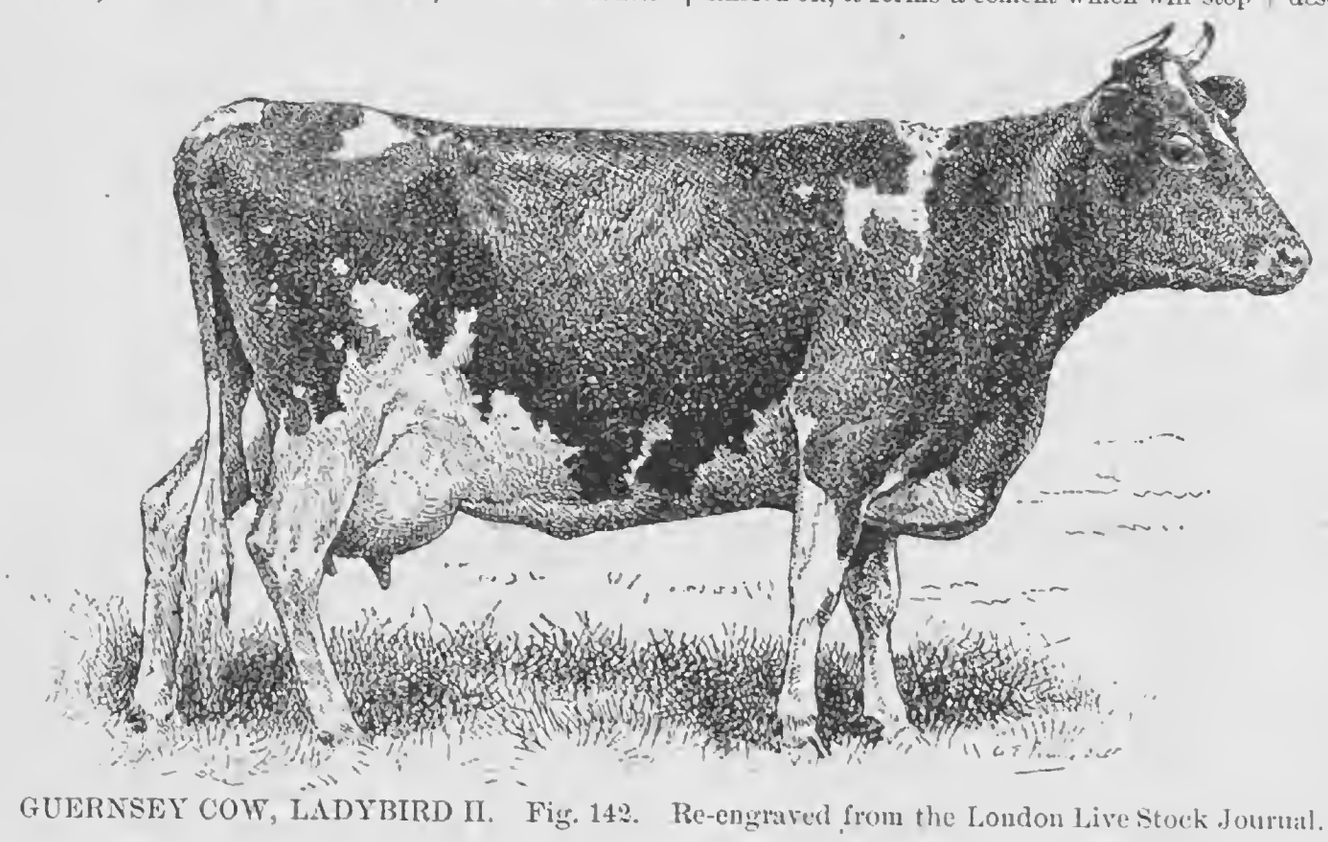
Dairy Husbandry.

GUERNSEY CATTLE.

Not many years ago all the cattle imported into this country from the Channel Islands were known as Alderneys, although it is probable that not a single animal ever came from the little island of Alderney, whose area of rock, furze, timber, tilled and grazing land amounts to only 1,962 acres. It is a mere dependency of its larger neighbor Guernsey, which has an area of 25 square miles. This and Jersey, with an area of 45 square miles, has always been the true source of supply of Channel Island cattle to this country and the rest of the world. Alderney, being nearer than the others to the English coast, was, long ago, the shipping point for all the Channel Islands, and hence gave its name to all the cattle from the other islands, as well as from the mainland of France. Although owing their origin probably to the same source—the cattle of the neighboring coast of Normandy—the Guernsey and Jersey are considered distinct breeds, and long before the opening of this century stringent laws were in force in both islands prohibiting the importation of cattle from any other country, in order to preserve the purity of the native blood; and during this century laws have been passed strengthening the time-honored custom at the islands. It is even forbidden to transfer cattle from one of these islands to the other; but the cattle of Alderney and Sark, which form part of the Bailiwick of Guernsey, have always been allowed to enter Guernsey and to compete at the Guernsey shows indiscriminately with those bred in the island itself. In their native homes the Guernseys and Jerseys have their own separate herd books; and even the cattle of Alderney and Sark find a place only in the Appendix of the "General Guernsey Herd Book," the first volume of which was published as late as 1881, though another publication called "The Guernsey Herd Book," imposing more stringent requirements for registration, was published in 1879. In this country the "American Jersey Herd Book" was commenced in 1866 by a committee of associated breeders; and in 1871 the first volume of "TheHerd Register" was published by "The American Jersey Cattle Club," which was founded nearly three years before—in 1868. It was not until 1879, however, that the "American Guernsey Cattle Club" published the first Guernsey herd book in this country—about the same time when the first work of the kind was issued in the original home of the breed. Guernsey contains about 5,000 animals, and exports about 1,000 annually, mostly to England, the export to this country being not much over 125 a year, though the importations have increased somewhat within the last few years. Although there are more Guernseys in England than in Guernsey, there are few distinctive herds, as Guernseys are used principally to color the milk and butter of other breeds, and so highly are they esteemed for this purpose, that very high prices are paid for choice animals. In America Guernseys are mostly to be met with in Pennsylvania, Maryland, New York, Connecticut and Massachusetts, very few having yet made their way to the South, West, or Canada. Jersey contains from 12,000 to 15,000 animals, and exports about 2,500 a year, a larger proportion to this country than to any other.

In their native islands the prices of average specimens of both breeds are about the same; but owing to the speculation produced by the Jersey "boom" here, and the craze for "solid color" and "fancy" points here, in England and the British Colonies, the best Guernseys sell for considerably less than the best Jerseys. While in their native homes the best Guernseys have sold for from $500 to $1,200 apiece; Jerseys of the best strains have brought as high as from $2,000 to $5,000 each. In this country, also, the same rule holds good: average Guernseys fetch prices quite as high as average Jerseys; though Jerseys of the most fashionable strains bring much more extravagant figures than the choicest Guernseys. Indeed, among the latter there are no families that can compare with the Alphea, Rex, Coomassie, Stoke Pogis and other "boomed" strains of Jersey blood. The number of Guernseys in existence is much smaller; they have never been the pets of English aristocrats for their beauty of form and deer-like appearance, or of American speculators for the money that could be made out of them by skillful manipulation of the market. While there are few phenomenal butter makers among them, it is contended that there are proportionately much fewer poor Guernseys than Jerseys. In contrasting the two breeds, the enthusiastic patrons of the latter claim, however, a greater quantity, a higher quality and a better flavor of butter; also that it is firmer in Summer and of finer grain the year round; and that the Guernsey butter is oily. The Guernsey men contend that the butter of their favorites is quite as great in quantity, as good in quality and (to put it mildly) as firm in warm weather as that of their more fashionable rivals, and that the Guernsey holds out in milking quite as long as the Jersey; while it is conceded that both her milk and butter products are of much higher color.

There is abundance of room and use in this country for all the good specimens of both of these fine breeds of dairy cattle, and there is neither sense nor policy in disparaging either by way of puffing the other. The Jerseys, of which there are now among us probably from 35,000 to 45,000 pure-bred animals, of which not over half are registered, have done a great deal for the American dairy, not only by contributing their own rich milk and choice butter, but, still more, by improving the products of the native dairy stock by grading it up. The Guernsey is equally valuable for both these purposes, and being coarser and hardier, is adapted to a wider range of country, being able to thrive in a climate too rigorous for the more delicate Jersey. The former has never been subjected to the coddling and petting enjoyed by the latter at home and elsewhere, nor has its constitution or milk capacity been tampered with by breeding to suit the whims of fashion, or feeding for phenomenal butter yields. The Guernsey cows are larger and hardier and more docile than the Jerseys, and the bulls are much less vicious and dangerous; while the calves are larger and can be more readily turned into veals. As to colors, those of the Jerseys are mostly light red or fawn, and black mixed and splashed with white, and "solid" colors are preferred as indicative of the most careful breeding; those of the Guernseys include white, red and black in any shade and mixture, except roan, no instance of which has ever occurred in pure-bred animals. Brindle is not uncommon, and the nose may be either black or white. As a rule, the Guernseys are lighter-colored than the Jerseys. There is considerable room for improvement yet in the former; certainly more than in the latter, which have been carefully bred for a much longer time for certain desirable points; and it is not generally denied that the breeders of Jersey are more intelligent, skillful and enterprising than those of the neighboring island.



GUERNSEY COW, LADYBIRD II. Fig. 142. Re-engraved from the London Live Stock Journal.

At Fig. 142 is presented (re-engraved from the English Live Stock Journal) a likeness of the Guernsey cow Ladybird II., 723 P. S., R. G. A. S., an excellent specimen of the breed. She is the property of the Express Dairy Company Limited, Finchley, England—one of the large associations which have lately begun to monopolize the business of supplying cities and large towns with milk, and, indeed, with most of the dairy goods produced on the island. She was calved in Guernsey in 1879, and was taken to her present home in March, 1885. She has had four calves, the last of which was dropped on August 10 last. At the dairy show in London last October, she was awarded the first prize for breeding points and general type, in a very strong class. Afterwards she proved her excellent qualities as a milk and butter producer by winning the first prize and silver medal in the milking competition over all Jersey as well as Guernsey classes. The Live Stock Journal says: "She represents the true type of the old-fashioned Guernsey, possessing a vigorous constitution, great size and depth, is straight on the back, square and deep at the hindquarters, and is of the wedge shape typical of a first-class dairy animal. Her udder is rather deep than long, with the teats well-placed, and long and prominent milk veins."

Miscellaneous.

CATALOGUES, ETC., RECEIVED.

Rossie Iron Ore Paint Co., Ogdensburg, N. Y.—This paint is made from ores mined by this company. It is a pure oxide of iron, the color being natural; that is, not being changed by heat or artificial means. It is claimed that this paint is the best and most durable for tin or iron; for shingle roofs, barns and all out-buildings, pumps, farm implements, etc. It will resist all kinds of weather and will form a firmer coat and heavier body and yet is more elastic than other paints, protecting surfaces from sparks and hot cinders. Owing to the small percentage of clay contained in the ore, it is said that Rossie paint requires one-third less oil to mix and spread it properly than any other metallic paint, while, owing to its strength of color, it will spread a greater surface. When properly mixed, it is claimed that one gallon will cover from 600 to 700 feet of old paint or rough surface, and from 800 to 900 of new tin. Mixed with linseed oil, it forms a cement which will stop leaky roofs, while it is as good as red lead for making joints in pipes. The company will send samples free for experiment to Rural readers.

Challenge Wind Mill & Feed Mill Co., Batavia, Ill.—All who propose to erect windmills should send for this catalogue, or examine the mill described. It is self-governing, so that the motion is said to be nearly as steady as that of a steam engine, being no greater in the most violent wind, than in a fair breeze. The power, however, may be increased by the operator, by changing the position of a weight upon a lever. It is claimed that the Challenge Wind-mill has in every case succesfully stood the test of the terrible storms which have swept over the country from time to time. For pumping water for stock or for irrigation; for dwellings or railroads; or for grinding or thrashing grain; sawing wood; cutting fodder, etc., the manufacturers claim it is unequaled, not that it is the lowest price but because it is the strongest, most powerful simple and durable. The catalogue discusses the improvements in Wind-mills, and finally gives many testimonials, some of which are from men who, like Prof. G. E. Morrow and M. W. Dunham, are well known to all. The catalogue also illustrates and describes the Challenge Feed Mill.

Deere & Mansur Co., Moline, Ills. J. B. Bare, 60 South Gay St., Baltimore, Md., Manager of the Eastern Office.—This is a circular of the well-known Deere One-horse Drill and the Moline One-horse Drill, the latter of which we have used for years at the Rural Farm for planting corn. As will be seen by the circular, the driving wheel is in front. The grain is cut off by an adjustable brush, the kernels being dropped approximately 12, 15 or 20 inches apart. The machine has a steel furrow opener and adjustable coverers. The fertilizer distributor is said to work perfectly. This we have never used, as our fertilizers are always distributed broadcast. The Deere Drill has a runner drill opener with either a flat or concave covering wheel. It drops ordinary-sized corn one kernel at once, 10, 15 or 20 inches apart as desired, this being regulated by the plates. There are special plates for planting beans, peas, etc. For further information regarding these labor-saving machines, send for the circular or apply to the above firm.

H. F. Batcheller & Son, Box M, Rocks Falls, Ills.—A catalogue of Improved Apparatus and Supplies for Creameries and Dairies. The Batcheller Churn is said to be the most easily operated, the simplest and cheapest, producing more butter and a better quality, with a perfect grain, than any other. This churn brings the butter by *concussion*, not by friction, as with dash churns, giving the cream direct and continuous blows. The continued swashing of the entire mass of cream rinses the sides at every revolution, which prevents the accumulation of half-churned cream on the sides. The arrangement for holding the cover on the churn makes an air-tight joint. The circular will be gladly mailed to all Rural readers who apply as above.

Thoroughbred Stock bred at the Halfway Brook Poultry Yards and Kennels; catalogue from Coffin, Zimmer & Co., Glens Falls, N. Y.—This reliable firm will need no introduction to our readers. We saw specimens of their stock at the late poultry show, and feel confident they are exercising the utmost skill and care in breeding. In the present catalogue Partridge Cochins, Wyandottes, Langshans, Plymouth Rocks, four varieties of Bantams, as well as geese and ducks, are briefly described. The special merits of each breed are given. Partridge Cochins are considered best for small inclosures. The birds are quiet and thrive well when confined. Wyandottes contain more good qualities than any other breed. Any person desiring a fowl of any kind would be more than pleased with Wyandottes. Langshans are considered hardy and the best layers of any of the large breeds. Plymouth Rocks are hard to beat as general-purpose fowls. Specimens of six breeds of dogs and some excellent Jersey cattle are also offered for sale.

Napknoll Poultry-yard Co., Goshen, Orange Co., N. Y.—Illustrated catalogue and price-list of the Patent "Excelsior" and "Acme" Poultry Coops with brooders and runs. The coops are illustrated and fully described. They are portable, made of the best material, are tastily painted, and may be carried from place to place. The brooders are also portable so that, when removed, the coop remains in order for separate use. These brooders can not be explained in a notice of this kind. Mr. Henry Hales, one of our most conscientious poultry authorities, says that the chicks and mother can be kept very warm and dry in cold or wet weather, and be cool and safely protected in warm weather. The coops, he says, are proof against minks, rats and vermin, and yet well ventilated.

Northrup, Braslan, & Co., Minneapolis, Minn.—A large, well arranged illustrated catalogue of seeds, etc. Particular attention is called to the new oat "Dakota Chieftain" which the firm has been testing for several seasons. It is claimed to be earlier than any other; to be enormously productive and to be very heavy. It is at present sold only in small packages by the pint or quart at a high price. The catalogue offers the Saskatchewan Fife (Spring) Wheat, Manshury Barley, Angel of Midnight field corn, and Dakota Dent Corn, a selection of Pride of the North and grown in Dakota, It *must* therefore be early. The catalogue is a good one, and the firm enterprising and trustworthy.

Champion Steel Walking Cultivator, manufacured by Hench & Dromgold, York, Pa.—The implement is described as "the Pride of the East, the King of the West, and Monarch of All." The new automatic spring pressure and hoisting device is said to work admirably. The spring hoe attachment is well known by those who have used the riding cultivators manufactured by this firm. This attachment is invaluable in working stumpy or rocky land. Those of our friends who are desirous of finding the best cultivator will do well to send for the pamphlet.

Havens' Climax Condition Powder.—Pamphlet from Wm. Rust & Sons, New Brunswick, N. J. This powder is said by those who have used it, to give good results. The pamphlet is filled with testimonials from reliable men. One of our friends has given the medicine to turkeys with excellent success.

Success! I. X. L.—Circular from L. C. Stalnaker, York, Pa., describing his planter

and fertilizer-distributing machine. The inventor claims to have reached the acme of perfection by reducing his implements to the simplest possible mechanism, and doing away with the many springs and valves which cause so much annoyance when out of order. The implements are cheap and serviceable. Send for the circular.

CATALOGUE OF THE EAGLE PENCIL Company, office 73 Franklin Street, New York.—An elegant pamphlet of 65 pages. We have all used the Eagle pencil. The fact that its use increases from year to year is a sure sign of its great merit. Since 1860 it has steadily won its way into favor. Testimonials as to the excellence of this pencil are printed from many of our best educators.

PERCHERON HORSES.—A circular from M. W. Dunham, of Wayne, Illinois, states that although his sales this season have been numerous and satisfactory, he has still on hand at his Oaklawn Farm, 90 imported, acclimated, tried and guaranteed Percheron stallions weighing from 1,600 to 2,000 pounds, and old enough for service.

STEPHEN HOYT'S SONS, New Canaan, Conn.—An illustrated catalogue (80 pages) of apples, pears, plums, cherries, grapes (foreign and native), small fruits of all kinds; trees, shrubs, etc., for ornament; hedge plants, roses, clematis, etc., etc. A valuable feature of this catalogue is that it gives the season when the fruits are in use. This is a good, old trusty firm. Catalogue free.

GAME FOWLS.—Pamphlet from E. T. Baily, Mount Kisco, N. Y., well arranged, condensed and practical. Sound advice as to the treatment of the more common poultry diseases is given. All who are interested in these belligerent specimens of the feathered race will find much to interest them in this pamphlet.

RIVER-SIDE POULTRY YARDS.—Circular from R. Vanderhoven, Rahway, N. J. Good fowls from prize stock. The specialties are Bronze turkeys, Rouen and Pekin ducks, Langshans and Leghorns. We also notice pictures of White-Crested Black Polish, Black Javas and Wyandottes.

HOVEY & CO., 16 South Market St., Boston, Mass.—An illustrated catalogue of seeds. Among a long list of novelties we see the Monarch Rhubarb, which, last year, gave at the Rural Grounds the largest stems we have ever seen. It is said to be of superior quality.

A new potato, raised by Mr. Brezee, the introducer of the Early Rose, is announced. It is said to be about as early as Early Rose, of fine quality and very productive. Catalogue free.

THE NAIL HIT ON THE HEAD.

WHILE the genuine butter-makers have just cause to claim the protection of the Government from fraudulent imitations, it seems to me that the unwitting and innocent consumers have infinitely greater claim and cause for the same protection, and if they would combine their efforts and demand their reasonable rights through the proper mediums, and, if necessary, lay siege to the iniquitious abomination of "oleo" with all its allies, it can be overthrown. E. C. P.

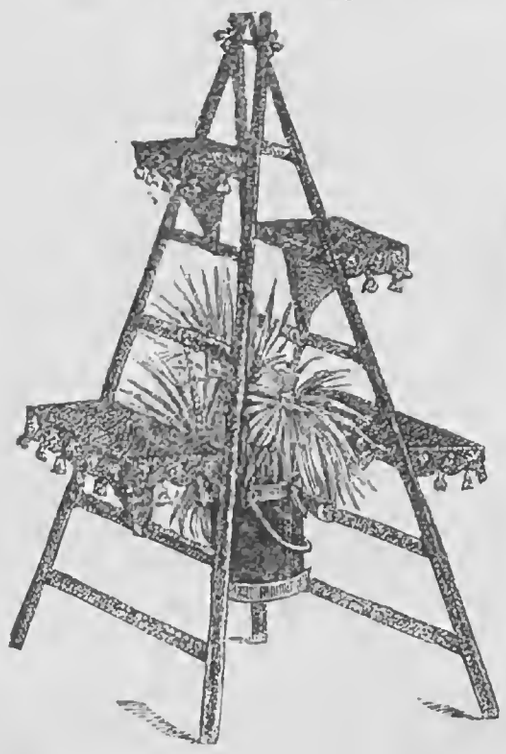
Rosemond, Ill.

For Women.

CONDUCTED BY MISS RAY CLARK.

ETAGÉRE.

A MODERN parlor without some article in it from the new schools of art is not to be thought of as finished. We do not advocate lining the walls with plush banners, plaeques, Christmas cards and such like, although a few of



such things can be used to good advantage if tastefully arranged; but because you have had a number of fancy articles given to you, do not feel under obligations to your friends to make a display of them all at the same time. Something new is always eagerly looked for, and we present our lady readers with what may be decidedly new to many, while at least it has the advantage in being of real service after it is made, which but few fancy articles can boast. This is an etagére for parlor or drawing room, and is in the form of a ladder, which is made of pine or white wood and covered with plush. It is an exceedingly nice piece of work to do this well, yet it can be perfectly done, and we suggest that there be no haste while doing it. A handsome shade of green plush is the prettiest, unless this color will not correspond with the other articles of furniture in the room; then, of course, select that color which will be best suited to them. Use the best white glue, and do not make it too thin, or it will moisten the plush too much. The top of the brackets look well if thickly studded with gilt or brass nails, or they may be covered with the plush also. A brass rod fastens the uprights at the top, where is tied two large bows of satin ribbon—yellow if green plush is used. A handsome art fringe is needed to finish the edges of the brackets, which can be put on with gilt nails.

A SURE WAY TO SUCCESS.

Prudence of the right stamp seeks the attainment of worldly objects by worthy and suitable means.
Old Maxim.

THIS old saying does not condemn the seeking after the good things of this world, but only to the use of unlawful or unworthy means in the attainment of them. The person who loves to stand in high esteem with those who know him, who seeks to elevate himself by decrying others of whom he is envious, for fear such a one may be in advance of himself in popularity, is using despicable means of elevating himself.

An office seeker, who to win a desired position tries to gain favor with those with whom the decision rests, by flattery or intrigue, displays no genuine prudence at all, but shows unmistakably his own unfitness to be trusted. Starting in life, the man who might truly be called prudent will not begin the foundation of a fortune by endeavoring to obtain an undue advantage over those with whom he deals, but will lay deep and strong the foundation of a character for uprightness, which will be worth more to him in the future than all his dishonest gains.

Success, to a well balaneed mind, means not the mere possession of abundant wealth, but the knowledge that no stain of unworthiness rests on the means by which they were won.

Motive determines the quality of an act, and a good man will endeavor always to act according to the rules of right, and will decline to profit by a promising opportunity, if to do so would be selfish or dishonest.

A conscientious lawyer will not throw the whole force of his talents on the side of a cause which he knows to be morally wrong; nor will an upright physician work on the fears or ignorance of a rich patient, with a view to making a large bill for attendance.

Men may try to excuse such conduct by pleading that everyone does such things who can, or that money is what people will work for, but it shows a low state of moral feeling in men when they do so.

A lawyer need not accept a client whom he sees is in the wrong, if he knows that another will be readily found who will accept the case. No man's prosperity depends on wrong doing, even if the world looks complaeently on such conduct. So, men should seek worthy ends by worthy means. SOLITUDE SWEETENED.

WORK AT SOCIAL GATHERINGS.

THE amount of work accomplished by the ladies of our sewing circle has been considerable.

At the time of our organization, the women were nearly all strangers to each other. They had come from almost every State in the Union, attracted by our healthful climate and our social and educational advantages, and also by the fact that our young city had been established with a temperance foundation that was as firm as that of older temperance cities in the country. So along with our first sewing came the task of getting acquainted with each other and a delightful task it was; for one might travel far and not be able to find another organization of women so earnest in purpose, so charitable and true as this sewing circle contained. Everything moved along with ease and harmony.

There being a scarcity of needy people in our thriving town and also a scarcity of domestic help, our work at once took the form of helping the different members out with their family sewing. The first year we tried sewing in the circle at 10 cents per hour each; but this proved unsatisfactory, and we changed the price of sewing to a given sum for each garment or piece. Sometimes a quantity of sheets and pillow-slips would be sent in to be made; again we had numberless garments for families of small children.

Numerous quilts and comforters were made for parties sending them in. We became quite proud of our reputation for quilting nice shell patterns, and for tacking comforters. Then we had chosen a woman for our president, who knew how to make all such things. Two sewing machines—second hand ones—were bought to help us along with the large amounts of sewing that we were called upon to do. These afternoons proved a great boon to the tired, worn-out mothers, giving them an opportunity for social life and that interchange of thought so dear to the heart of womankind. Work was planned at home so that the meetings could be attended. These meetings taking the place, in many instances, of social calls, for one afternoon at the sewing circle often proved as good as 20 calls, and the work seemed much easier amid the air of sociability than when done at home alone; and then the discussion as to ways and means were very suggestive and helpful. For instance, the question "Was it better to sew the seams of the sheets over and over, or stitch them up on the machine?" Some ladies had a way of always tearing off the selvage when it was to be hemmed, thus leaving it so elastic that there was no danger of the work drawing. Other discussions than sewing often engaged us. One afternoon, co-operative housekeeping in a town like ours was made to look quite feasible. The money received for this work proved quite a factor in defraying the expenses of the society. The supper hour, with hot tea and coffee prepared in the kitchen, was always thoroughly enjoyed; and when the baskets and packages of food were opened and the long tables set. The husbands came in at tea time to help eat this picnic supper. And now having kept up our organization for several years, we all feel that although the help to our household sewing is quite considerable, the chief good that these sewing circles accomplish is the promotion of social intercourse and that helpfulness, one to another, which such intercourse permits.

MRS. O. H.

Domestic Economy

CONDUCTED BY EMILY MAPLE.

HOUSEKEEPING IN CALIFORNIA.—III.

MARY WAGER-FISHER.

"CLANG" went the door-bell half a dozen times a day—the postman; a man with potatoes, apples, vegetables; a Chinaman with ready-made underwear; an artist with samples of his work to show; a woman wanting to know if we wanted lace curtains "done up;" a man to mend umbrellas and chairs—and so on, through a multitude of inquiring people trying to get "business." Although we were in the land of "a thousand fruits and flowers," the best fruit of all is still lacking to California—apples. One can buy imported apples at from one to two dollars the box—an enormous price—or he can buy very poor California apples for from 85 cents to a dollar. The first apple man to ring the door-bell had what he called Rhode Island Greenings—raised in California. He said they had been hand-picked, were sound and good, and would keep two months. They were very small, but had a "Greening" look, and I took a box; but I never pared those miserable little apples without a feeling of pity for the stunted things, while there arose before my mind's eye visions of the loaded apple orchards in Oregon—thousands of bushels going to absolute waste for lack of a market, besides all the cider and "evaporated jelly" annually made. Moreover, the "Greenings" rotted rapidly and had often to be picked over, just such apples as an Eastern farmer would think hardly worth feeding to his pigs, and costing here $1 the box! And still Californians claim that as good apples can be raised in the State in the mountain nooks as can be produced anywhere else. But the great apple grower has not yet arrived, although the first premium at the New Orleans Exhibition was given for apples raised in Santa Barbara County. Judging from the native apples one sees in the San Francisco and Oakland markets, one wonders how it ever so happened! We paid 85 cents for a sack of potatoes. Sweet potatoes cost 10 cents the pound. (?!) Coal was brought and delivered in sacks like potatoes. The best evaporated peaches cost 25 cents the pound, but ordinary dried peaches could be had from 15 cents up; prunes of excellent quality for 10 cents; nectarines and apricots from 15 to 20 cents; but I never found fruit of good quality, either natural or dried, cheap. Dealers say that growers of fruit do not get much for it, and that the prices go up in the hands of middlemen. Probably in the millennium, the "middlemen" will be no more, and the producer will deal directly with the consumer, or at least with no more than the green-grocer between to share in the profits.

AN EXQUISITE THANKSGIVING DINNER.

As Thanksgiving Day neared, the laddie remarked with assurance, that we must have a turkey, of course! Anaximander said turkey was not half as good as chicken, while I declared turkey would be very poor if I had to roast it! It very unexpectedly happened however, that some friends to whom we had brought an introductory letter, invited us on the previous day, to dine with them, very informally, on Thanksgiving, saying that they would be quite alone—and they were but two people, no longer young, but of large wealth and living in affluence. Of course, any one who has had much social experience knows that even an "informal" dinner requires nice attention paid to the toilet, and when any one is in doubt as to just how much or how little dress may be demanded, it is safer to strike a happy medium, if one can. I have often thought of the experience of a French lady of rank, who described her "feelings" upon going to a friend's house to an "informal" reception in a walking costume, to see, upon entering the room, every lady in evening dress. "I can assure you," she cried, "that I walked out at once and ordered my coachman to drive me home, where I quickly changed my frock! It is positively frightful to spend an evening burdened with the thought of being unsuitably attired—particularly when you are not one of those superior women who can always rise above their circumstances." Many French gentlemen always "dress" for dinner at home, putting on the inevitable white tie and swallow-tail coat. But the latter is not much worn as yet in California society; for at a large reception which I attended very soon after we reached Oakland, for which 700 invitations had been extended—400 accepted—only the gentleman in whose honor the affair was given, wore a swallow-tailed coat, and he was just from Boston!

Our friend's carriage came for us at half-past five, and after being ushered into the drawing room, we chatted for a quarter-of-an-hour, when at two strokes on a silvery bell, the hostess, who was in a gown of black velvet, arose and we went out to dinner. Not since we left the East had we sat down in so imposing a dining-room and at such a dainty table. I had previously cautioned the laddie as to his behavior, as is necessary 365 days in the year, since he is one of the irrepressibles who are continually breaking out in a new spot. Only a short time before we had accepted an invitation to "tea" at the house of comparative strangers, and the laddie, observing the bright look of the silver, held up a fork, and in his clear tone, said: "Mamma, do you think this is *solid* silver? It *looks* like it, but really I don't *think* it is—do you, Mamma?" True, there was no danger of his ever repeating *that* offence, the likelihood was that the next violation of "good manners" would be of an altogether different and unexpected character. But the little fellow behaved most beautifully, not even making a spot on the exquisite napery, which had been laundried ideally, in a way that the best launderer I ever had, never even approached. How such ironing was compassed I do not know—I can only say that for this establishment of two people, there was a laundry quite removed from the dwelling and probably a laundry "artist" employed in it. In the middle of the table was a large, but low vase of rare flowers, with smaller vases in colored glass at each side of it. At each plate there were double sets of knives and forks, a lovely little china plate with a piece of bread on it, and three glasses up-turned—for water, sherry, and claret. The host said that it was only since he had become so far advanced in years, that he had taken wine with his dinner, and he found that he required it. The claret was a California product, and he preferred it to the imported article. We had soup, then turkey with cranberry jelly, sweet and white potatoes, and mixed pickles were passed from the sideboard, all side dishes being similarly served and not left on the table. After this course was removed a platter of salad, brilliant with nasturtium blossoms, was placed before the hostess for her to serve, and a platter of sliced, cold, boiled ham was placed before the host to accompany the salad, which was of tender, crisp lettuce, celery, and ripe, fresh tomatoes, with some delicious dressing; and bread was passed, if anyone desired it. The dessert followed the salad course, and first we had a pie that was all something very like meringue—very delicious and dainty. Then came fresh strawberries and "Jersey" cream and cake; next grapes and other fruit; then nuts, some of which had been heated. Cheese had been passed after the salad. At last we had black coffee. When the dessert plates were brought there was a finger bowl set in

Miscellaneous Advertising.

When Baby was sick, we gave her Castoria,
When she was a Child, she cried for Castoria,
When she became Miss, she clung to Castoria,
When she had Children, she gave them Castoria,

each one with ad'oyley under, and floating on the water was a double fuchsia—and my hostess was the first person I had heard, on this coast, who pronounced the name of this flower correctly—*fooksia*.

An hour later in the parlor, tea was served in very dainty cups, on a tray, and the entire dinner service, with its variety of china was most beautiful and costly, too. But the chief beauty of it all was in its perfect ordering, the leisureliness of the courses, no crowding of dishes, no confusion, a perfectly trained waiting maid to whom not a single word had to be addressed, and the hostess as apparently unconcerned as her guests. This much could often be compassed by housewives of far less wealth, if they would but make a determined effort to better train the table waiters and carry the effort into effect. Some Chinese cooks will prepare a dinner and serve it in the most faultless way; but they often have more method, in the performance of their tasks, than have domestics who are not "haythens."

KITCHEN TALKS.

ANNIE L. JACK.

"I SHOULD think potatoes are getting scarce from the market prices," said the Family Provider the other day, as he laid down the newspaper.

"Really," said the Student, "they are a very unsatisfactory crop to raise. The market is glutted if the potatoes are plentiful and the crop well secured, and if the rot comes, as it did this season, they are a great trial to those who have worked hard to raise them."

The Amateur Cook stopped peeling and cutting the decayed pieces out, and said: "They seem to grow poorer in quality this season, as the Spring comes on. We used to be able to depend on the White Elephant for later use, but this year there is not one of the sorts better than another. I wish some one would send out a new variety that would be sound and firm in June—till we can have new ones fit to eat. As it is, we are glad to use rice, or hominy for a change from the poor, watery things, as soon as the days get warm."

"Doesn't it improve them to put them in cold water several hours before cooking," asked the Investigator, a new member of our household.

"Yes," said the Cook, "provided you find time to peel them 'hours before'."

The Family Provider brought home a quantity of oranges this season, and our kitchen economy endeavored to use them to the best advantage. As a dessert we found the orange Charlotte the best in our varied experiments, and it is not difficult to prepare it, being very suitable for dinner on a bright spring day. Soak one-third of a box of gelatine for two hours in half a teacupful of cold water. Take the grated rind of two oranges, and all the juice of six, one teacupful of sugar, and as much stale sponge-cake as will line a mold to hold nearly a quart when full. When the gelatine is soaked, add to it half a cupful of boiling water. It wants good stirring at this point, and should then be mixed with the juice and sugar. It must be all thoroughly beaten, and then a quart or more of whipped cream can be gradually added, stirring briskly the while. It will be thick enough to pour into the cake-lined mold, and can be set away to cool. At this season, when one has plenty of milk, a great deal can be done in the way of fancy cookery, and cream is not hard to whip. It greatly improves a custard to give this delicate addition, and with the aid of a box of gelatine one can make a dessert, under these circumstances, a series of surprises.

A WEEK AT MRS. HOMESPUN'S.

(WEDNESDAY.)

AFTER breakfast, Wednesday morning, while the helpful daughter washed up the dishes and finished the regular morning's work, Mrs. H. brought out the clothes-basket rounded full of clothes, and proceeded to sprinkle and fold them ready to be ironed. Starching and rolling up the fine ironing, she rolled them up in a cloth, and laid them on the top of the coarser clothes, covered the whole with the ironing blanket, and after putting her sleeping-room and adjoining closet in order, brought from the cellar two fowls that had been prepared and hung there the night before, washed them well and put them in an iron kettle to parboil, preparatory to baking them for dinner. It was a custom of long standing with her to have baked fowl whenever the dry bread accumulated enough to be troublesome. She used it for dressing, and as the whole family were fond of it, it was easily marketed in this way. To prepare it, she chopped the bread fine in a wooden chopping bowl, then moistened it with some of the liquor in which the fowls had been boiled; a piece of butter, a sprinkle of pepper salt and a little sage were put in, also the giblets, chopped fine. After the fowls had been taken from the kettle and had cooled a little, they were filled with this dressing, placed on the dripper, and some of the liquor put in the pan, and they were then ready for the oven; but an hour and a half was all the time required to cook them.

The business of ironing was next taken in hand. The hot flat-irons were rubbed over with beeswax and polished with a flannel cloth, which left them smooth and free from rust. The starched shirts and the fine pieces were ironed first, because Mrs. H. said she could do them so much better when she began to iron than she could later when her hands trembled with the heavy labor of the large garments.

A good three hours' work followed before the last article was hung on the clothes bars. It would always have a soothing effect on any true housekeepers' nerves to see Mrs. Homespun's clothes bars after they were hung full of the freshly ironed clothes. They suggested ideas of order and purity in domestic affairs in a very marked manner. At dinner, baked potatoes accompanied the baked fowls; and brown bread, pickled beets and tomatoes and an apple pie completed the bill-of-fare. After dinner, the sober matron sat down to her sewing, while the young lady amused herself and her mother by pasting leaves, vines and flowers cut from gay pieces of cretonne, in the inside of a glass ice pitcher. She touched the edges with mucilage, and when dry they adhered. After arranging these in a manner to suit her taste, she filled the pitcher with salt, and set it carefully on the shelf where it made a very pretty ornament.

At supper time, the children having come home hungry from school, relished exceedingly the remains of the cold fowl with the dressing, besides warm johnny-cake and pumpkin pie.

In the evening the boys helped their father to shell the seed corn which had been hanging braided up overhead in the kitchen. It was put in paper bags and stored in a dry place.

HINTS FOR HANDY HOUSEWIVES WITH NIMBLE FINGERS.

To make a pretty splasher for a washstand, bind a piece of cream matting with braid or velvet, and paint with water colors, a cluster of large flowers, or embroider them in with coarse wool. Put a bow of satin ribbon in one corner.

A half yard of white surah silk will make as pretty a baby cap as you can buy for two or three dollars. Fit a muslin or flannel lining nicely to the head, and cover with the surah shirred on in half-inch puffs. Put a stitching of silk floss in herring bone on each row of the shirring, and a frilling of Valenciennes lace inside. A bow and strings of white ribbon finish the dainty trifle.

A handsome card-receiver can be made from a small tin pie-plate. Cover the top with a piece of crazy patchwork done with very small pieces, one piece in the center, of pink, white or blue satin representing a card. Cover the bottom of the plate with silesia, and border the edge with velvet, or conceal the joining with a silk cord.

A pretty little footstool can be made from a small box. Cover the top with a piece of cotton-batting, and over this tack a piece of garnet velveteen, with the motto "Rest thy weary feet" embroidered on it in silk floss; the sides and ends should be covered with garnet merino. Any color will do, and it could be made from an old dress of one of the children.

Chicago, Ill. EMMA VERNON.

BAKER'S COOKIES.—DOUGHNUTS.

IT is very pleasant to take dinner or tea with our village sisters occasionally and learn some of their ways of cooking, which are necessarily different from ours. Mrs. C. gave me her recipe for making cookies, which were like those purchased at a city bakery. They were better when two or three days old than when freshly baked. Two cups of granulated sugar, two eggs, one cup of milk, three-fourths of a cup of butter, one ounce of ammonia dissolved in the milk; flour to make a soft dough, roll out and, when about a quarter of an inch thick, sprinkle a little sugar over the sheet of dough and roll lightly; cut in any desired shape and bake in a moderately quick oven. The ammonia comes in ounce cakes and costs from five to ten cents an ounce, according to the avariciousness of the druggist.

EVERYDAY DOUGHNUTS.

ONE egg, one cup of cream, one cup of buttermilk, one-and one-half cup of sugar, a teaspoonful of soda and a half teaspoonful of salt; flour as for biscuit, roll to half an inch in thickness, cut into strips and form into "twisters." The "youngster" thinks a good fluffy, fat twister is more than twice as good as the little rings and balls, "'cause there are several mouthfuls in one." Fry in hot lard.

MAY MAPLE.

Miscellaneous Advertising.

Pain in the Side

Is a symptom of disease. It may be caused by Rheumatism, or by Neuralgia, but it usually indicates a disordered condition of the Stomach, Liver, or Kidneys. Ayer's Sarsaparilla corrects the action of the vital organs, and removes every trace of disease from the system.

Last fall and winter I suffered from a dull, heavy, pain in my side. I did not notice it much, at first, but it gradually grew worse until it became almost unbearable. During the latter part of this time, disorders of the Stomach and Liver increased my troubles. I began taking Ayer's Sarsaparilla, and, after faithfully continuing the use of this medicine for some months, the pain disappeared and I was completely cured.—Mrs. Augusta A. Forbush, Haverhill, Mass.

Ayer's Sarsaparilla,

Prepared by Dr. J. C. Ayer & Co., Lowell, Mass. Sold by all Druggists. Price $1; six bottles, $5.

Mason & Hamlin

ORGANS: Highest Honors at all Great World's Exhibitions for eighteen years. One hundred Styles, $22, to $900. For Cash, Easy Payments or Rented. Catalogues free.

PIANOS: New mode of Stringing. Do not require one-quarter as much tuning as Pianos on the prevailing "wrest-pin" system. Remarkable for purity of tone and durability

ORGAN AND PIANO CO.

154 Tremont St., Boston. 46 E. 14th St. (Union Sq.), N. Y. 149 Wabash Ave., Chicago.

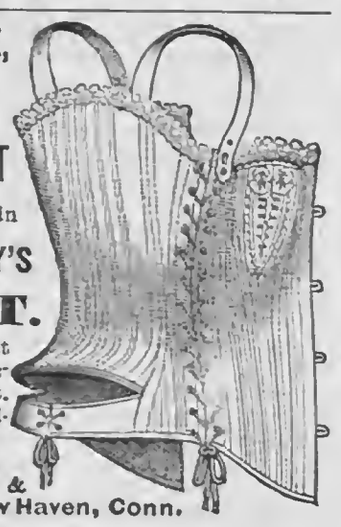
ALLEGER ORGANS you can get a strictly first class organ from $50 to $75, stool and book. Warranted 5 years. It will pay to send for circular before you buy. Address the manufacturer, H. W. ALLEGER, Washington, New Jersey.

ORGANS The most beautiful and finest toned in the world. Low prices, easy payment. Send for Catalogue. Address Weaver Organ & Piano Co., YORK, PA.

SONGS The Acme contains 114 American all WITH MUSIC, and is entirely different from any other collection. Also, 100 Songs of the Day, including "Wait till Clouds Roll By," "Spring Time and Robins have Come," "Climbing up de Golden Stairs," "Peek-a-Boo!" "When Robins Nest Again," "I'll Await My Love," etc. Both books, and catalogues of music, novelties, etc., free, on receipt of 15c. F. C. TRIFET, 408 Washington St., Boston, Mass.

ELEGANT SHAPE, HEALTH and COMFORT Perfectly Combined in MADAME FOY'S **CORSET.**

It is one of the most popular and satisfactory in the market. For sale by all leading dealers. Price by mail $1.30.



FOY, HARMON & CHADWICK, New Haven, Conn.

BLACK SILKS.

In Black Silks the various weaves, makes and qualities upon which reliance for satisfactory wear can be placed, are now offered by James McCreery & Co., at remarkably low prices.

They are also offering for combination with them a beautiful assortment of Rich Novelties in Chenille and Velvet Effects, with or without Jet, Cluny and Crochet Stripes and Figures and other Novel Effects.

An inspection of them is respectfully invited.

JAMES McCREERY & CO.,
Broadway and 11th St.
New York.

INVENTORS and MAN'F'RS. Send for large pamphlet containing U.S. PATENT Office rules for obtaining Patents. F. B. BROCK, Atty., Washington, D.C.

Notable & Significant Items

FROM THE

FORTY-FIRST ANNUAL REPORT

NEW YORK

OF THE

LIFE INSURANCE COMPANY.

A total income of over sixteen million one hundred thousand dollars, and payments to policy-holders of nearly eight million dollars.

Interest income, over three million dollars, being about 5¼ per cent. on average net assets, and nearly four hundred thousand dollars in excess of losses by death.

Market value of securities, over three million three hundred thousand dollars in excess of their cost.

Liabilities, both actual and contingent, provided for, and a Divisible Surplus by the Company's standard of over seven million dollars; Surplus by the State standard, over thirteen million dollars.

An increase of nearly two million dollars in income, over three millions in surplus, over seven millions in assets, and of over thirty millions of insurance in force.

SUMMARY OF REPORT.

BUSINESS OF 1885.

Received in Premiums	$12,722,103.03
Received in Interest, Rents, etc.	3,399,069.71
Total Income	**$16,121,172.74**
Paid Death-claims	$2,999,109.64
" Endowments	741,764.47
" Annuities, Dividends, and for Policies purchased	3,940,999.64
Total Paid Policy-holders	**$7,681,873.75**
New Policies issued	18,566
New Insurance Written	$69,521,452.00

CONDITION, JAN. 1, 1886.

Cash Assets	**$66,864,321.32**
*Divisible Surplus, Co.'s Standard	$7,064,473.13
+Tontine " " "	3,123,742.77
Total Surplus, " " "	**$10,188,215.90**
Surplus by State Standard,	**$13,225,053.94**
Policies in Force	86,418
Insurance in Force	$259,674,500.00

PROGRESS IN 1885.

Excess of Interest over Death-losses,	$399,960.07
Increase in Income	1,880,697.35
Increase in Surplus, State Standard,	3,313,707.48
Increase in Assets	7,580,567.75
Increase in Insurance Written	7,036,902.00
Increase in Insurance in Force	30,291,914.00

* Exclusive of the amount specially reserved as a contingent liability to Tontine Dividend Fund.

+ Over and above a 4 per cent. reserve on existing policies of that class.

THE SEVEN ADVANTAGES

OF THE

NEW YORK LIFE INSURANCE COMPANY'S

Nonforfeiting-Tontine Limited-Endowment Policy.

FIRST ADVANTAGE.—Insurance for a definite amount, or for an amount increasing with each premium paid, as desired.

SECOND ADVANTAGE.—A Definite Cash Endowment, and a Tontine Dividend, to Policies in force at the end of Endowment and Tontine periods, which periods correspond, and may be either Ten, Fifteen or Twenty Years.

THIRD ADVANTAGE.—Insurance for the full amount of the Policy, extended for as long a time as the value of the Policy will carry it, within the Endowment period, in case of discontinuance of payment of premiums after three years.

FOURTH ADVANTAGE.—A Grace of one month in the payment of premiums, during which time the policy-holder's security is unimpaired.

FIFTH ADVANTAGE.—Three valuable options, including cash value to policy holders who survive their Tontine and Endowment periods and keep their policies in force.

SIXTH ADVANTAGE.—Practical freedom of action with respect to occupation, residence and travel.

SEVENTH ADVANTAGE.—The payment of death-claims immediately upon the approval of the required proofs of death.

Do not insure until you have seen full particulars of this Policy. Do not fail to write the nearest Agent, or the Home Office, for such particulars—**at once.** The NEW-YORK LIFE INSURANCE COMPANY, **346 & 348** Broadway, New York City.

WILLIAM H. BEERS, President.
HENRY TUCK, Vice-President.
ARCHIBALD H. WELCH, 2d Vice-Presid't.
RUFUS W. WEEKS, Actuary.

THEODORE M. BANTA, Cashier.
D. O'DELL, Superintendedt of Agencies.
A. HUNTINGTON, M. D., Medical Director.

Brewster's Patent Rein Holder. Your lines are where you put them—not under horses' feet. One agent sold 12 doz. in five days; one dealer sold six doz. in 15 days. Samples worth $1.50 FREE. Write for terms. E. E. BREWSTER, Holly, Mich.

OUR BERRY BASKETS AND CLIMAX

berry crate are the best made. Indorsed by all leading berry growers. Illus'ted Catalogue free. DISBROW M'F'G CO., Rochester, N. Y.

OH, MY! 30 Imp'd, Gold Fringe and Chromo CARDS 10c. Sample Book, 2c. CARD CO., Essex, Ct

News of the Week.

HOME NEWS.

SATURDAY, March 27, 1886.

OF course, those negroes wounded and butchered at Carrollton, Miss., were the "aggressors;" Liddell's friends merely "retaliated," without receiving a scratch. Gov. Lowery says so, and that "everything is quiet," and no "executive interference" is needed.... ....Hon. Ward Hunt, Ex-Associate Justice of the United States Supreme Court, died at four o'clock Tuesday morning, in his 76th year.....In spite of repeated denials, rumors still prevail that another rebellion is soon to break out in the Canadian N. W. T... ... .The ore miners of Pennsylvania are working and starving at $3 per week..... Senator Logan wants the army increased from 25,000 to 30,000 men—that is 27,000 "effective men" instead of 25,636, the highest limit according to present regulations.....The Educational Bill is in danger of being "talked to death."....Matthews, the colored nominee for Registership of Deeds at Washington, has been reported adversely—ostensibly because a non-resident: really on account of his color. Cleveland not pleased.....The House Indian Com. will report favorably the Senate Bill opening to settlement 11,000,000 acres of the Sioux Reservation in Dakota..... ....There are over 7,500 bills before Congress; not more than 500 have ever been passed at any session; thus far fewer bills have been passed than in the same length of time by any former Congress.....Senator Don Cameron, of Pennsylvania, has introduced in the Senate a bill to admit to American registry the 10 foreign-built steamships of the Philadelphia line—and it may pass. A Pennsylvanian "betraying protection!" If 10, why not 100? If ships, why not ——?..... Everlasting muddles, legal and political, about fraudulent voting and registration in Chicago and Cincinnati. Several of the "fine workers" of both cities are now in jail; others on their way there; but it's hard to force them along, and hard to keep them in when there. .....An effort is being made before Congress to give women the right to vote in all the Territories. Woman suffrage has worked excellently in Wyoming and Washington, though Senator Edmunds proposes to abolish it in Utah as a "war measure" against Mormonism. Female suffragists have been busy holding State conventions during the week—much bitter denunciation, sweet approbation, high hopes and ardent aspirations marked the meetings.....The Central and Union Pacific R. R's. subsidized the Pacific Mail Steamship Co. for not cutting rates to the Pacific coast. In part-payment of advances, the Government gets 25 per cent. of the net income of the roads, after deducting "necessary operating expenses." Sec. Lamar decides the subsidy isn't included in these, and demands $354,000 from the U. P. and $500,000 from the C. P. for the Treasury's share of the earnings thus concealed for nine years.....Gov. Stoneman, of California, has appointed George Hearst, a mine, real estate and newspaper owner, a millionaire and "practical politician," as successor to Senator Miller..... ....Ohio has contracted to fund $2,250,000 of State indebtedness in new bonds bearing interest at 2.78, the loan to average only 10 years. This is the lowest rate of interest ever paid on a large loan—English Consols are now three per cent. Good for Buckeye credit!.... Capt. Crawford's death, just after he had hunted Geronimo and his band to earth, turns out to have been a deliberate assassination by Mexican troops. The Mexican authorities are investigating the matter with a view to punishing the murderers in compliance with the demands of the United States....The report that Geronimo had surrendered is untrue. Gen. Crook has gone to meet him, if possible..... Another "Tichborne claimant" has turned up in California. He has long been known as Ferris—Charles Ogden—under which name he has married twice and served in our army during the war. Is going to England to claim the great Tichborne estates.....De Lesseps, who has just reached Paris, maintains that the Panama Canal will be finished in 1889—as per promise..... .....There is a growing opposition in this State, begot of pride and independence, against Federal aid for improving the Erie and Oswego Canals. What is the pittance of $5,000,000 from the National Treasury to the Great and Wealthy Empire State!..... .....Washington is "agitated" about a "World's Fair" in 1892, to commemorate the fourth centennial of the discovery of America. So are Chicago, St. Louis, etc., etc.....Gov. Hill, of New York, has appointed five ladies notaries public for their respective counties in this State. "A great victory for the Women's Rights people," folks say. Well!.... .....At Pinconning, Mich., there is a case of sickness, which doctors say is exactly like Asiatic cholera. The patient, Smith, got from Valencia, Spain, a box of raisins which were "apparently fresh, probably of the crop of 1885." Asiatic cholera was raging about Valencia in 1885.....Brig.-Gen. Howard has been made Maj.-Gen. in place of Maj. Gen. Pope "retired for age." Gen. Schofield —senior Maj.-Gen.—will, at his own request, be transferred to the "Division of the Atlantic"—the smallest and least important—with headquarters in New York; Gen. Terry will have the "Division of the Missouri"—the largest and most important—with headquarters at St. Louis; and Gen. Howard will have the "Division of the Pacific," with headquarters at San Francisco. It seems that Terry was really confirmed Brig.-Gen. before Howard was nominated such; so no slight or injustice was done to the latter by the prior advancement of the former.....The five civilized tribes of Indians—Cherokees, Creeks, Chickasaws, Choctaws and Seminoles—have formed a compact pledging themselves not "to cede or in any manner alienate to the United States any part of their present territory." Provisions are made for the punishment of crime, restoration of stolen property, change of citizenship from one nation to another, and suppression of the sale of ardent spirits..... ....Sir John MacDonald, Premier of Canada, is seriously ill of sciatica, at Ottawa.....No peace yet for the transcontinental roads. Rates for freight and passengers still being cut—and cut. The Southern Pacific sold tickets from Los Angeles to Kansas City for $1 and to Chicago for $7! There are scarcely any rates from competing points west of the Mississippi—"No offer is refused." No prospect of immediate settlement..... The Dominion budget for the next fiscal year amounts to a little over $33,000,000, against $35,000,000 last year—no money wanted to suppress any rebellion next year. Expenditures upon public works, railways and immigration are to be reduced, while the charges for interest on the public debt, civil government and minor services will be increased.....Mormons reported jubilant over Murray's removal. They see "the hand of Providence" in it.....Mallard ducks were selling in Chicago last Monday at 60 cents a dozen—five cents each!.....Out of 49,000 fourth-class postmasters whose successors are to take office on appointment by the Postmaster-General without the consent of the Senate, only 8,635 were removed between March 4, 1885 (date of Cleveland's accession) and March 4, 1886, including 1,053 in New York, 255 in New Jersey, 100 in Connecticut, 127 each in Massachusetts and New Hampshire, 25 in Rhode Island, 128 in Vermont, 292 in Maine and 938 in Pennsylvania..... The railroad troubles on the "Gould system" are worse than ever. The mail and passenger trains are still allowed to run; but all freight trains have been stopped for three weeks, except an occasional one escorted by large numbers of heavily armed "specials." It is conceded that the strike—caused by the discharge of a single hand at Marshall, Texas—was started without adequate cause; but the men, now that they are out, insist that it is for "principle" they are contending. Vice-President Hoxie refuses to treat with the Knights of Labor as an organization, while willing to settle with the men as individuals. The efforts of the Governors of Missouri and Kansas to effect a compromise have proved ineffectual. The strikers are reported to be resorting more and more to violence; stopping and disabling trains, "killing" engines, burning bridges, tearing up tracks and switches here and there, and assaulting those who have taken their places. The trouble on the roads extends through six States. Owing to the stoppage of freight transportation, many of the places along the lines are short of fuel, flour and other articles of food. Thousands of workmen have been thrown out of employment, as materials could not be received or finished goods shipped. "Perishable goods" are being ruined for want of a market; stocks of some goods are exhausted in stores; trade is paralized; industry compulsorily idle; farmers unable to market their products or receive implements and supplies. Protests against the strike are rapidly increasing in number and loudness. The men threaten to extend the strike to the roads east of the Mississippi. Already the switchmen and other "yard" hands at East St. Louis, in Illinois, have struck, completely isolating St. Louis, whose trade with country places has fallen off over $750,000 a day. Men "obstinate;" railroad magnates "resolute;" militia under arms in many places—altogether a very deplorable muddle.....

AFTER two years' trial, we unhesitatingly pronounce the Boss ZINC and LEATHER COLLAR PAD, the only durable and successful one that we have ever used. It retains its shape, is cooling, prevents chafing, and thereby keeps the horses' necks clean and healthy. HIRAM G. DODGE & SONS, Wood & Coal Dealers, Madison, Wis.—*Adv.*

AGRICULTURAL NEWS.

SATURDAY, March 27, 1886.

Dressed meat shipments have not been wholly suspended, as threatened on account of the increase in freight since March 1; but they have decreased about one-half; the shippers merely wish to hold their trade till "something turns up."....Representative Miller, of Texas, has introduced into Congress a bill which proposes "to reserve from sale, settlement, pre-emption or location for 10 years, and to set apart for a National Live-stock Highway during that period the public lands in range number 41 along the east line of Colorado, it being a fractional range averaging about two miles in width." He expects it will pass during the present sessiod. Then what will the affected and protesting States do?.....A law enacted in Denmark last year compels all makers and sellers of adulterated, imitation and bogus butter to pack it in elliptical tubs, conspicuously marked "MARGARINE," and punishes infractions of the law by a fine of from 200 to 2,000 kroners (about $54 to $540). The enactment was forced by the agricultural element of the country, despite the opposition of the bogus butter people.....On Thursday morning the finest herd of blooded cattle in New England was burnt to death by an incendiary in the stables on the farm of Wm. H. Hopkins, East Providence, R. I. There were 61 Jerseys and three Ayrshires; 33 of the former, including Lemon Dandy, for which $2,500 were paid when three months old, belonged to one family. Value of stock $40,000; no insurance. Value of burnt buildings, $25,000; insured for $12,000. Two discharged farm hands are suspected..... ....Farmers' clubs and other organziations over the country are protesting against the discrimination against home-grown agricultural products in the Morrison tariff. There's some talk of substituting a more "acceptable" tariff bill by somebody else.....A St. Louis party is reported to be expressing oil from Indian corn, getting a gallon of clear, amber oil, worth 75 cents, from a bushel of corn, worth 35 cents, and the residue is said to be better animal food than any of the oil cakes now in the market. If this turns out true, there's a good time ahead for farmers—they can eat their cake and have it.....The Cotton Oil Trust, which controls every desirable mill west of the Mississippi and 60 per cent. of all in the country, is said to be a bantling of the notorious Standard Oil Company. The shining lights in the one are bright stars in the other..... The export of corn from St. Louis via New Orleans last month was 984,232 bushels, an increase of 240,305 bushels compared with February, 1885. No wheat was sent out either this year or last, so that "river transportation" of wheat for Europe, which made such a rumpus three or four years ago, has collapsed. .....Here are the prices of Texas cattle "for round lots of 1,000 and upwards, full ages, scalawags out, delivered near where raised:" Panhandle yearlings at $15; Western Texas yearlings, $14; two-year-olds, $19; Southern Texas yearlings, $8; two-year-olds, $12; Central Texas and Northern Texas yearlings at $10, and two-year-olds at $14; Eastern Texas yearlings and twos at $8 to $11." Smaller lots 50 cents to $1 cheaper per head; but the cost of "bunching" will offset this.....

H. J. BAKER & BRO. N. Y.

Gentlemen.—I used your Special for grass on good moist ground, about 400 lbs. per acre, season dry. I find it will insure a crop TWO YEARS WITHOUT ANY OTHER FERTILIZERS. I think it pays well for the investment.

WM. L. MUNSELL.

Sept. 21 st, 1885. Winchester, Conn.—*Adv.*

Crops & Markets.

SATURDAY, March 27, 1886.

On the basis of the crops of the last 10 years here are the average yields of the three leading cereal crops in the United Kingdom:

	Wheat.	Barley.	Oats.
Great Britain	28.80	34.02	39.04
Ireland	26.69	35.39	39.05
United Kingdom	28.07	34.13	39.04

How do these figures compare with those for your farm?

The Mark Lane Express of Monday says the general and timely changes in the weather had benefited clay lands. General outlook for growing crops favorable. Sales of English wheat during the previous week were 72,819 quarters at 31s. 1d. (92 cents a bushel), against 49,556 quarters at 31s. 11d. (97 cents a bushel) during the corresponding week last year. Little demand for foreign wheat; prices tending down.

The fruit production of California is marvelous. Fruit is sold there by weight, and last year the State produced 9,000,500 pounds of raisins—nearly three times as much as in 1884. She also marketed 1,500,000 pounds of prunes, 1,900,000 of peaches, 1,139,000 of plums, 650,000 of apricots, 1,250,000 of walnuts, 1,050,000 of almonds, and 1,823,000 of apples. Her apples are poor, however, and she draws her supply chiefly from Oregon. Just now, owing to the extraordinarily low rates of railroad freight, our Western States, especially Iowa, are shipping apples heavily to San Francisco, as the freight thither from Burlington, Ia., is somewhat lower than from Portland, Oregon. Vegetables, especially onions and potatoes, are also being shipped in quantity. Corn is also being shipped for feeding purposes from Western Missouri and Kansas.

The maple sugar men of Vt. all look for a good yield; season not extra early. Much complaint of low prices and of the unprofitableness of the business. Real new sugar can be bought for from 12 cents to 15 cents a pound, and some have sold, in advance, their whole crop for 10 cents, and even lower. It is predicted that 10,000,000 pounds will be made this season. It is charged by Western makers that a very large proportion of the maple sugar in stores is adulterated. . . The low price of sugar, due to the decrease of duty on the foreign product, and the enormous increase in the make of beet sugar in Europe, due to Government encouragement, has been disastrous to the sorghum sugar industry of this country. Germany, France, Austria and Russia, the great producers of beet sugar, tax the sugar consumed by the people of each, in order to increase the bounty paid to exporters. This diminishes home consumption, leaving more for export, while the exporters are enabled, owing to the home bounty, to sell very cheaply in foreign markets. The diffusion process was successfully practiced at Ottawa, Kansas, last Fall, and Com. Colman is trying to get $94,000 from Congress to buy a lot of "diffusion" machinery, which Prof. Wiley saw in successful operation in Germany, and to continue experiments in the manufacture of sugar from cane and sorghum by "diffusion." Under present conditions sorghum sugar-making is hardly likely to be profitable here, except at large factories supported by great capital—if cane enough can be secured within a "paying" distance of each. Kansas cane seems the richest in sugar and freest from impurities. Sorghum sirup-making has been profitable, however. For this no vacuum pan or expensive machinery is needed. Quick open-pan evaporation is found to give as good results. A cane shredder, to tear the cane before milling, permits freer feeding to the mill and secures more juice.

Nothing of consequence doing in hops. Prices have fallen 7s cents per cwt. in England. From September 1, 1885 to March 6, 1886 imports there amounted to 78,448 bales against 48,643 for the same time last year; but of late there has been a heavy falling off. Never was the sale of sets so small; hence fewer new hop gardens will be planted in Kent and Sussex. Hops are a "drug" at Nuremberg, Germany, the great hop market of the Continent. "Stagnation unparalleled." The Belgian markets are "weak." In some districts in Germany the Government is investigating with a view to reduce the hop area. There will be fewer "gardens" in 1886 than in any late year. Everywhere all old and unproductive plants should be rooted out; amateur hop growers should "quit;" and yards should be plowed up wherever hops are not generally profitable; for the crop thrives best in certain sections; elsewhere it is rarely profitable, and the aggregate of a multitude of poor crops hurts the general trade, while the poor crops are generally a loss to the growers.

Coughs and Hoarseness.—The irritation which induces coughing immediately relieved by use of *"Brown's Bronchial Troches"* Sold in boxes.—*Adv.*

MARKETS BY TELEGRAPH.

SATURDAY, March 27, 1885.

CHICAGO.—Compared with cash prices a week ago, "regular" wheat is 3c. lower (so is May wheat); No. 2 Spring, 3½c. lower; Corn, 1¼c. lower. Oats, 1½c. lower. Rye, 2½c. lower. Barley, steady. Pork, from 5c. to 7¼c. higher. Cattle, cows and bulls mixed, 25c. higher for medium and poor; 25c. lower. for prime; other classes from 40c. to 50c. lower. Hogs, from 20c. to 50c. higher, according to grade. Sheep, steady.

WHEAT.—Firm. Sales ranged; March, at 75¾@76¾c; May, 80¾c@81½c.; June, 82¼@83c; No. 2 Spring, at 70¾@75c; No. 3 Spring, at 69@70c. CORN.—lower; Cash, 35@35½c; March, 35¾@35¾c; May, 38¾@39c. OATS—Firm; sales ranged: Cash, at 27¼@27½c; March and April, 27c.; May, 31@31½c. RYE—No. 2, 56½c. BARLEY—No 2, at 60c. PORK.—Cash, quoted at $9 75@9 80; April at $9 75; May, at $9 75@9 85; June at $9 82½@9 92½. LARD.—Quiet and steady; sales ranged; Cash, at $6 00@6 02½; April, at $6 02½@6 05; May, $6 05@6 07½. BULKMEATS.—Shoulders, $3 90@3 95; Short rib sides, at $5 35@5 37½; Short Clear sides, at $5 60@5 65. CATTLE—Shipping steers, $3 90@5 60; stockers and feeders, $2 00@3 40; cows, bulls and mixed, $1 75@3 75; bulk, $3 00@3 30. HOGS.—Rough and mixed, $4 00@4 35; packing and shipping, $4 25@4 60; light $4 00@4 40; skips, $3 00@3 75. SHEEP.—Natives, $2 50@5 50; Western, $4 00@4 60; lambs, $4 00@6 00; Texans, $2 50@4 00.

ST. LOUIS.—Compared with cash prices a week ago, No. 2 Red wheat is 2½c. lower. Corn, ¾c. lower. Oats, ⅝c. lower. Rye steady. Pork, unchanged. Butter, steady. Cattle, considerably higher; but market fluctuating. Hogs, higher. Sheep about steady.

WHEAT.—No. 2 Red, Cash quoted at 88c; May, 89¾@90¼c; June, 90@90¾c.; July at 86c. CORN—Very quiet, but firm. No. 2, Mixed Cash, is quoted at 31c. April 31½c; May, 35¾@35¾c. OATS—No. 2 Mixed, Cash, 30c; April 29½c. bid, May, 30½c. bid. RYE, easy at 60c. HAY steady; prairie at $6@7 75; timothy at $11@14. BUTTER—Dull, but firm; creamery, is quoted at 25@30c; dairy, at 18@22c. EGGS—Firm at 10@10½c. WOOL.—Quiet and easy; washed at 27@35c.; unwashed at 16@24c. PORK, at $10 25. BULK MEATS.—Loose lots, long Clear, at $5 20; Short Rib, at $5 35; Short Clear, $5 50. Bacon steady; long clear at 5.75c; short ribs at 5.85@5.90; short clear at 5.95@6c. Hams steady at 8.50@11c. LARD—Steady at $5 87½. CATTLE—Market steady; fair to choice native shipping steers, at $4 80@5 80; butcher steers, $3 50@4 40; cows and heifers, at $2 50@3 75; stockers and feeders, $3 00@4 10. HOGS.—Light, $4@4 30, packing, $4@4 25; heavy, $4 30@4 45. SHEEP.—Market active at $3 75@5 50.

BOSTON.—CORN.—Easy; Steamer Yellow, at 50½c; do. mixed at 50c; and no grade, at 48@49½c. per bushel. OATS.—No. 2 white, at 42@42½c.; and No. 3 white at 41@41½c. per bushel. RYE is 67@68c, per bushel. BRAN is firm at $18@18 25 for Spring and $18 50@18 75 for Winter; fine feed and middlings at $17 00@20 00, and cotton seed meal at $24 50 on spot and $22 75 per ton to arrive. HAY AND STRAW—Hay is quoted at $18 50@19 00 ₱ ton for choice and fancy; fair to good, $17@18

fine, $16@17, and $13@15 for poor and damaged. Western choice $16@17, do fair to good $14@15. Rye straw is held at $19@20 00 for choice, and $12@14 for common to good. Swale hay, $11@12; Oat straw, $9@10 per ton. PRODUCE—BUTTER-Northern creamery, choice to extra, 27@32c; good to choice summer, 19@22c; western creamery, at 26@33c, for choice to extra fresh made; good to choice held stock, at 15@20c; northern dairy 28@30c, for Vermont extra; 20@25c, choice, and 15@18c, for fair to good; Western dairy, 18@23c, for choice, and 13@15c, for fair to good; Imitation creamery at 25@28c, for good to extra; ladle-packed, at 21@25c, for extra CHEESE—New York choice to extra, 8½@10c, and common to good, 5@8c; Vermont choice to extra, 8½@10c and common, 5@7c; Western common to extra, at 4@9¾c. Sage, extra, 13½c, good to choice, 8@10c. EGGS—Cape and near-by, per dozen, at 18c; Eastern extras, 15½@16c; do, firsts, 15c; Northern, fresh, 15@16c; Western fresh, 15c; Provincial, at 15@15½c. BEANS.—Choice Northern hand picked pea, $1 70@1 75 per bushel; do, do, New York, small, $1 50@1 55; do, do, screened, $1 15@1 20; medium choice, hand-picked $1 30@1 40; do, do, screened, $1 15@1 30; Yellow Eyes, improved, $1 45@1 50; do, choice flats, $1 35@1 40; Red Kidneys, $1 75@1 80. Canada peas, 65@95c, per bushel for common to choice. Green peas, Northern, at 90c@$1 00; do, Western, $1 20@1 25. Potatoes range at 51@80c, per bushel, as to quality.

PRODUCE AND PROVISION

NEW YORK, Saturday, March 27, 1886

STATE OF THE MARKET.—Compared with cash prices last week, flour is 10c, lower; Ungraded Winter Red wheat, is 2c, lower; No. 2 Red wheat is 2¼c, lower; corn, No, 2 mixed is ½c. higher; oats 1c, lower; pork, steady; butter a shade higher; cheese steady; eggs, ½c higher; poultry, ½c. lower; fruits, steady; vegetables steady; cotton is 1-16c, lower.

FLOUR, FEED AND MEAL. FLOUR—Quotations: Fineat $2 20@2 95; Superfine, $2 85@3 20; Extra No. 2, $3 25@3 70; Good to Fancy Extra State, $3 85@4 15; Common to Good Extra Western at $3 25@4 00; Good to Choice Extra Western, $4 00@5 40; Common to Fair Extra Ohio, $3 25@3 75; Good, $3 80@4 20; Good to Choice, $4 25@5 50; Common Extra Minnesota, $3 25@3 75; Clear, $4 00@4 50; Rye Mixtures, $4 00@4 25; Straight, $4 50@5 00; Patent $4 75@5 40; Bakers' Extra, $4 50@4 75; St. Louis Common to Fair Extra, $3 25@3 75; Fair to Good, $3 80@4 75; Good to Very Choice, $4 80@5 40; Patent Winter Wheat Extra, $4 50@5 45; City Mill Extra for West Indies, at $4 80@4 85; South America, $4 90@5 00. SOUTHERN FLOUR—Common to Fair Extra, $3 80@3 75; Fair to Choice do., $3 80@5 50. RYE FLOUR—Superfine, $3 05@3 40. BUCKWHEAT FLOUR, at $1 85@1 95. CORN MEAL—Brandywine at $2 80@2 85; Yellow Western at $2 65@2 85. FEED—40 to 50 lbs. quoted at 87½@90c.; for 60 lb. at 80@82½c.; 80 lb. at 80@87½c.; 100 lb. at 95c@$1, and sharps at $1 05@1 10. Rye at 80@85c.

GRAIN.—WHEAT.—No. 1 Northern at 92½c; Ungraded Winter Red, at 87c; No. 2 Red at 92¾c.; No. 1 Red $1 02; No. 2 Red for April, 92½@92¾c.; do. for May, 93¾@93¾c; do. for June, 93¾@94½c.; do. for July, 91½@95c; do. for August, 94½@95c; do. for September, 95¾@96c, do. for December, 90½@90¾c. BARLEY.—Ungraded Canada at 83c. CORN—Ungraded Mixed, 45@46c; No. 3, Mixed, 45¾c.; Steamer Mixed, 45@45½c; do. Yellow, 46½@46¾c; do. White, at 46½c; Yellow, 47½c; No. 2 Mixed for April, 46¾@47c; closing at 46¾c; do. for May, 47¼@47¾c.; do. for June, 47¾@48¼c. OATS.—No. 3 Mixed, 36½c; No. 2, 36¾@37c.; No. 3 White, at 38¾@39½c; No. 2 do. at 46¾@46¾c; No. 1, 43c; Mixed Western, at 37@39c.; White do., at 39@41c; White State, 41c.; No. 2 Mixed for March, 36¾c; do. for April and May, at 36¾c.

PROVISIONS.—PORK.—Mess quoted at $9 75@10 25 for Old and $11 00 for New; $10 75@$11 50 for Family Mess; $12 25@14 25 for Clear Back; and $9 75@10 for Extra Prime. BEEF.—City Extra India Mess, $15 00@17 00; Extra Mess, in barrels, $8 00@8 50; Packet, $8 50@9 00 in bbls.; Fancy Plate, $9 00. BEEF HAMS.—Quoted at $17 50. CUT MEATS.—Pickled Bellies, 12 lb. average, 5½c; Bellies, 10 lb. average, 5½c; do. Shoulders, 4¼@4½c; Smoked do., 5@5¼c; Pickled Hams at 8¼@8½c.; Smoked do., 9½c. MIDDLES—Long Clear in New York quoted 5¾c. for Western delivery. Long Clear, 4 45c.; Short Clear, 5 90c. DRESSED HOGS.—City Heavy to Light, 6@6½c; pigs, at 6¾c. LARD.—Western Steam spot at 6.32½c; April, 6.31@6.32c.; May, at 6.33c.; June, at 6.38@6.39c; July, at 6.44@6.45c.; August, at 6.50@6.52c.; September, at 6.75c.; City steam at 6.25c.; Refined Continent, 6.60c., and South American, 6.90c.

BUTTER.—Elgin Creamery, at 34c; Pennsylvania do., 33@35c.; Western do., 25@32c.; State Dairy half-firkin tubs, 21@30c.; Western Imitation Creamery, 18@26c.; Western Dairy, 10@17c; Western Factory, 13@23c.; rolls, at 8@12c. Old Butter.—State Dairy at 15@26c; State Dairies, firkin and tubs, 12@25c; State Dairy, firkins, 16@23c.

CHEESE.—State, at 8¼@11c.; Skims, 2@8c.; Western, 7½@10¼c.

EGGS.—State, at 14¼c.; Western, at 14@14¼c.; Southern, at 13½@14¼c.

POULTRY.—LIVE.—Fowls, near-by lots, per lb, at 11c.; fowls, Western, per lb, at 11c.; fowls, State, per lb, at 11c; chickens, per lb, at 10@11c; turkeys, per lb, at 10@12c.; ducks, western, per pair, at 60@85c.; geese, western, per pair, at $1.25@1.60.

POULTRY.—DRESSED.—Turkeys, per pound, 10@12c; chickens, broilers, 2½ to 3 lbs. to pair, at 28@30c, per lb; do. 1 to 5 lbs. at 20@22c.; do, State at 13@13c; do. western at 12@13c.; fowls, Pennsylvania, prime, at 12c; do. Jersey, at 12c.; State and western, at 11@11½c. Ducks, Jersey, at 14@15c; do, western, 13@14c. Geese, Jersey, at 10@12c; do, western, at 9@10c.

POULTRY.—FROZEN.—Turkeys, per pound, at 10@12c.; Chickens, per pound, at 10@12c.; Ducks, per pound, 14@15c.; Geese, per pound, at 11@12c.

GAME.—Wild ducks, canvas, per pair, at $2 00; do., red-head, per pair, at $1 25@1 75; do, mallard, western, per pair, at 30@50c.; do. wood, at 25@30c.; do. common, at 20@30c.

COTTON.—The quotations, according to the American classification, are as follows:

	Uplands.	New Orleans, and Gulf.	Texas.
Ordinary	6¼	6 11-16	6 11-16
Strict Ordinary	6 15-16	7⅛	7⅛
Good Ordinary	7⅜	8 1-16	8 1-16
Strict Good Ordinary	8 5-16	8⅛	8⅛
Low Middling	8 11-16	8⅞	8⅞
Strict Low Middling	8 15-16	9⅛	9⅛
Middling	9⅛	9 5-16	9 5-16
Good Middling	9 9-16	9¾	9¾
Strict Good Middling	9⅞	10 1-16	10 1-16
Middling Fair	10¼	10 7-16	10 7-16
Fair	10⅞	11 1-16	11 1-16

STAINED.

Good Ordinary	6 5-16	Low Middling	7 13-16
Strict Good Ord	7	Middling	8 9-16

FRUITS.—FRESH.—Quotations are: San Blas cocoanuts at $31@35; Barueon cocoanuts at $30@31, Apples—Baldwin, per bbl., at $1 50@1 75; Greening, per bbl. $1 75@2. Grapes.—Catawba at 7@8c. per lb, in baskets. Cranberries.—Cape Cod, choice, per bbl., $3 50@4; do. fancy, $4 50; do. choice, per crate, $1 00@1 25. Florida oranges.—Fancy at $3 00@3 25; choice do, $2 75@3 00; do. inferior at 75c.@$1. Strawberries—Florida at $1@1 50 per quart.

FRUITS.—DRIED.—The quotations are as follows: Apples—Fancy evaporated, 7@7½c; choice, 6¾c; do. prime at 6¾@6¾c.; fancy North Carolina sliced, at 4@4¼c.; choice do, at 3½@3¾c.; choice Tennessee quarters at 2@2¼c.; State quarters at 2¾@3¼c.; southern sliced prime at 2¾@2¾c; do, common, 2c. Peaches-Peeled North Carolina, choice, 11@11½c.; fancy, 12½@13c; extra fancy, 13½c; Georgia, choice, 10@11c; do. prime, 9@9½c; unpeeled halves, 2¾@3¼c; unpeeled quarters at 2¼@2½c.; Delaware evaporated, peeled, 24@27c. Choice pitted cherries at 10½@11c. Evaporated raspberries at 15@16c; sun-dried do. 13@14c. Blackberries—Prime at 8¼@8½c. Whortleberries at 6¼c.

PEANUTS.—Quotations at 6@6¼c, for best hand-picked, and 4¼@4¾c. for farmers' grades.

HAY AND STRAW.—There is a fair business in hay and more doing in straw. Prices are without change. The following prices are quoted. Choice timothy hay at 90c; good at 85c.; medium at 75@80c.; shipping at 70@75c; clover mixed at 70@75c.; Clover, 50@60c.; No. 1 rye straw at 90@95; short rye straw at 75@80c; oat straw at 40@50c; wheat straw at 60@65c., all per 100 pounds.

SUGAR.—Cut loaf, at 6¾; Crushed, at 6¾c; Cubes, at 6¾c; Confectioners' "A," at 6¼c; Powdered, 6¼@6¾c; Granulated, at 6¼c; Mould "A," at 6¼c; Standard "A," at 5¾c; Off "A," at 5½c; White Extra "C," at 5¾c.; Extra "C," at 5¼@5¼c; "C." at 5@5¼; Yellow, 4¾@5c.

TALLOW—Prime City quoted at 4 7-16c.

VEGETABLES.—Potatoes—Rose, Maine, fancy, d. h. bbl., at $2 50; Nova Scotia per bbl., at 2 00@2 25; State, per 180 lb., $1 50@1 75; Burbank, State, bulk, per 180 lb, $1 62@1 87; Burbank, eastern and Nova Scotia, per bbl. $2 25@2 50; Hebron, do, do, do, per bbl. at $2 00@2 25; Hebron, State, bulk, per 180 lb, $1 50@1 75; Prolific and Goodrich, eastern and Nova Scotia, per bbl., $2@2 25; Peerless, bulk, per bbl., at $1 50@1 75; Magnum Bonum, imported, 168 lb. sack, $1 75@1 85; Bermuda, per bbl., at $8@10. Sweet potatoes, Delaware River, per bbl., at $2 00@2 50. Cabbages—Long Island, choice, per 100, at $7@8; do, imported, per 100, at $6 00@8 00; do. Florida, per barrel, at $1 00@1 25. Kale.—Norfolk, Scotch, per bbl. 75c.@$1 00. Onions—Bermuda, per box, $1@1 25; white, eastern, per bbl., at $3 00@3 50; Connecticut, per bbl., at $2.25@2 75; do, State and western, $2 00@2 50; do. red, Connecticut, per bbl, $2 75@3 25; do. choice, Orange County, $2 25@2 50; Inferior, per bbl, $1 25@1 75. Squash—Hubbard, per bbl., $2 25@2 50; Marrow per bbl., $1 25@1 50. Turnips—Russia, ¾ bbl., 50@75c. Asparagus—Prime, per bunch, at $1. Beets—Bermuda, per crate, at 75c@$1 00. Tomatoes—Bermuda, per box, at $1@1 25; do. Key West, per box, at $1 25@1 75.

LIVE STOCK MARKET.

NEW YORK, SATURDAY, March 27, 1886.

Total shipments for the week, 716 live cattle, 7,238 quarters of beef and 680 carcasses of mutton. BEEVES.—Poor to Prime Bullocks sold at $1 40@6, with the bulk of the transactions at at $4 75@5 70 for Common to Good. Dry Cows ranged from $2 75 to $4, with an extra car-load from Chicago selling at $5 15. Bulls sold at $3 37½@4 00 (few for Export at $4 25@4 50), and Old Oxen at $4 00@5 75 per 100 lb. St. Louis Steers, 1,231 lb, at $5 35; do. 1,194 lb, at $5 20; Kentucy do., 1,310 lb, at $5 20; do., 1,166 lb, at $5 10; Bulls, 1,350 lb, at $3 55; Ohio steers, 1,675 lb, at $6; do, 1,630 lb, at $5 75; Pennsylvania Steers, 1,475 lb, at $6; do. 1,267 lb, at $5 40; Indiana bulls, 1,320 lb, at $3 35; do. 1,381 lb, at Ohio do., 1,360 lb, at $4. Pennsylvania do, 1,210 lb, at $3 20; Chicagosteers, 1,361 lb, at $6, do, 1,298 lb, at $5 40; Missouri Steers, 1,454 lb, at $5 90; Oxen, 1,500 lb, at $4 75; Buffalo steers, 1,053 lb, at $4 70; do, 1,027 lb, at $4 35.

CALVES.—Demand fair and prices steady at 5½@8c. for common to choice. Veals, 99 lb, at 5½c.

SHEEP AND LAMBS.—State Lambs, 74 lb, at 7c.; Western sheep, 65 lb, at 3½c; State do. 89 lb, at $6 30; do. 108 lb, at 6¼c; Western sheep, 65 lb, at 6¼c; State do. 106 lb, at 6¾c; Indiana lambs, 74 lb, at 7½c; do. 70 lb, at 7c.; Kansas do. 98 lb, at 6¼c; Kentucky do. 115 6¼c; Ohio sheep, 89 lb. 5½c.

HOGS.—Total receipts for six days, 25,977 head, against 26,140 head for the corresponding time last week. None alive for sale. Nominally steady at $1 60@4 80 per 100 lb.

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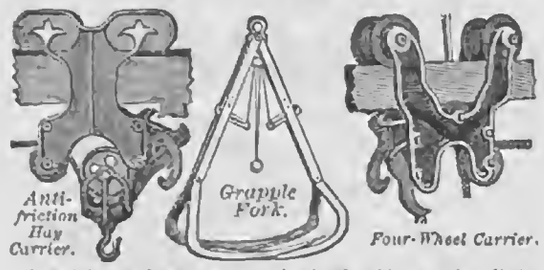

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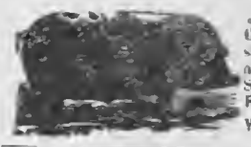

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CHAS. SPEAR, Jr., 83 West St., N. Y.

WORTH KNOWING
Farmers will be glad to know a Fertilizer composed of Blood, Bone, and Animal Matter, having all the ingredients requisite for the soil and to insure a good crop, can be purchased for $25.00 per ton. Send for circular. H. B. GRIFFING, 70 Courtland St., N. Y.

80% PURE $3 PER TON
CAYUGA LAND PLASTER.
Contains Phosphate of Lime. Gives Plants an early start, improves quality, increases yield. Low freights to all points. Farmers' Memorandum Book sent FREE. Correspondence solicited.
CAYUGA PLASTER CO. Union Springs, N. Y

BAUCH'S $25 PHOSPHATE
TRADE MARK

Contains the Life and Essence of Animal Bones. We are now selling Bauch's Strictly Pure Raw Bone Meal, also Bauch's Ready Dissolved Pure Animal Bones at very low prices. It would surprise farmers to know how very low they can procure these brands direct from us. Send your name and address and we will mail you our PHOSPHATE GUIDE.
BAUCH & SONS, 20 S. Del. Ave. Philada. Pa

TO FARMERS AND GARDENERS.
DRIED GROUND **POUDRETTE** NIGHT SOIL.
The cheapest and best fertilizer made. Can be used without offence in all drills. The article is first dried, then ground. No dirt is mixed with the soil. It is pure night soil only. Can be mixed with other ingredients to excellent advantage. Price, per ton, $20, in barrels, f. o. b. GEORGE S. PICKERING,
135 Fifth Street, Troy, N. Y.

For the Young.

ATTENTION!

I SHALL send the Cousins something this year that will surely please them. It is a package of sweet peas. These will make the most beautiful flowers imaginable. They will retain their freshness all through the Summer. These flowers are sure to be very popular and we shall have hard work to keep our friends supplied with seed after one season's exhibition. The vines are hardy and strong and make a heavy growth. For cut flowers they cannot be surpassed. Plant them early—as soon as frost is out of the ground—in drills two feet apart. Put the seeds about four inches apart. Tie up strings for them to climb on, and see if UNCLE MARK is uot right in saying that they make the most beautiful flowers.

THE SONG OF GRASS.

I work while other workers sleep
The rights of none molesting,
By night and day I slowly creep
And never think of resting.

Beneath the frost and snow I hide,
Far down in Earth's warm cover.
I hear the wintry tyrant ride,
The frost chained country over.

And yet I smile, for well I know
The summer sun is coming,
To tame the cruel cold and snow
And tune the wild wind's humming.

I creep from out the ground and grace
The rough scarred face of Nature,
With gentle, loving touch I trace
New life on each dead feature.

I creep and creep, and work unseen,
I feed the hungry cattle,
I cover with a wave of green
The ugly marks of battle.

I shine and sparkle in the sun,
I smile at every felter.
I see the seasons past me run,
I see the world grow better.

And so I creep and creep along.
I strive to do my duty,
I make my life a merry song
I clothe the land with beauty.

LETTERS FROM THE COUSINS

DEAR UNCLE MARK: I went to Pittsburg on a visit and saw the big-footed girl. Her foot was 19 inches long. That beats the stories we hear about the Chicago girls. I planted a peck of White Elephant Potatoes and got five bushels. We have stored about 30 tons of ice, so we shall be able to make lots of ice cream next Summer. I hope you will come and help us eat it. I wish some of the Cousins would write. G. F. MENGEL.

Freedoin, Pa.

[I like ice cream. It is no disgrace for one to have large feet or hands. It is more disgraceful to wear such tight shoes that we can't possibly walk with comfort. When I was a boy they used to tell me that a person's heart is always the size of his fist, and his brain the size of his foot. So when we worry about the size of our hands we make our hearts uncomfortable, and when we try to make our feet smaller we show that we are losing a little common sense.—U. M.]

DEAR UNCLE MARK: I have been reading the letters from the Cousins in the RURAL and enjoying them very much. May I join them? I am a girl 12 years old. I live on a farm two miles from North Platte. We have been living in town, but I like to live on the farm better. We have 160 head of thoroughbred Short-horn cattle, three horses, two mules, 70 chickens and two kittens. The kittens' names are Tiger and Smutty. We received the Seed Distribution this morning and were well pleased. Hoping I may join, I remain yours,

North Platte, Neb. SUE HINMAN.

[Yes, you may join. We would like to see the cattle.—U. M.]

DEAR UNCLE MARK: My little girl has made an *attempt* to write you. She is but six years old and dearly loves flowers and cultivates them too. She has had much to say about Uncle Mark ever since she could talk and about the Cousins' letters too. I think that no other uncle ever had so much affection lavished upon him by the little folks. I think I had better send you a *copy* of her letter. MRS. S. BALDWIN.

"DEAR UNCLE MARK: I would like to join the Y. H. C. The flowers were very pretty from seeds which you sent my Mamma. I am six years old. GRACE S. BALDWIN."

Howard Lake, Minn.

[I am glad Grace wrote. No matter how the letter looks. Uncle Mark appreciates all the good words.—U. M.]

Letters have been received from Dean Spray; Henry C. Anderson; Eugene C. L. Morse; Susie R. Ball; Ida Davidson; Gertie Blanchard; Dora Shepherd; Lewis W. Peterson.

Miscellaneous Advertising.

A WOMAN OF PLUCK AND WISDOM.

PASSING up Front street, Philadelphia, the other day, your correspondent saw the name of E. Vannaman on the sign over her store. The name struck me as familiar, and after a little study I recalled it as one I had often heard mentioned in connection with a very unexpected recovery from the dread disease Consumption. Being curious to learn the facts from her own lips, I resolved to stop a moment.

Entering the store, I found the lady herself in charge. She was a sprightly, fair-skinned, good conditioned woman, who could entertain a visitor without neglecting a customer.

Salutatious were passed, and in reply to a question she said, "Yes, it was a terrible time for me. My husband was a long time sick, and then died. The care of the store fell on me. This, together with my housework, my long watching, the grief and worry at his death, told fearfully on me. Exposure brought on a terrible cold which broke me up entirely."

"When was all this?" I asked.

"In 1883. Over two years ago now. I had to put my son into the store to tend for me. Could not even do my housework. Got into bed, and had to stay there for days at a time. Everyone who called said I could not live three months. Yes I had two doctors, and good ones, but they shook their heads and gave me no hope. The best they could do was relieve my cough temporarily. I began to lose heart too, for my mother and every one of my family had died of consumption, and it looked as if my time had come." Here she tripped lightly around the counter to wait on a customer. After depositing the money in the drawer, she returned and I said:

"I don't wish to appear inquisitive, Mrs. Vannaman, but would you be kind enough to to give a little more in detail the nature of your sickness—the symptoms, as the doctors would say?"

"The most distressing was my terrible, racking cough, which worried me night and day. It was on my chest. I had hard pain all down my breast bone, and savage pains in my shoulders, back and limbs. My appetite failed. Every night I was exhausted with fevers and night-sweats. My nervous system was all broken up, and I shook at times as if I had the palsy."

"Well, Madam, you don't look now as if you had ever been so sick. How in the world did you manage to bring about such a wonderful change?"

"Why one day my son read from a paper about the virtue of Cannabis Sativa, the great East India cure for consumption. He said, 'Mother, it seems to be just what you need; I wish you would try it.' I said, 'Well, I can't live this way; we'll get some, and I'll take it.'"

"And did it do you good?"

"Good? Well, now, let me tell you. I never watched the effects of any medicine so closely, and, as you may believe, with so much surprise. The first thing to go was my nervousness. In one week that began to disappear. I felt the improvement all through me, and was encouraged. Then my appetite came back, and I have had a good one ever since. My weakness left by degrees, and I got up and about. Soon resumed my household duties, and by and by the care of the store. The pains left my chest, body and limbs, and have never returned. I took on flesh and came up from a skeleton till I now weigh 133 pounds. My cough was the last to go, but it gradually diminished, and now I never cough except when I have a cold. My lungs are all right."

"Do you take cold easily?"

"Not more readily than other people. But I take care of myself and don't invite cold by unnecessary exposure. I work hard, am active on my feet, and can endure as well as I ever could. My age, you ask? Now you know ladies are the least bit sensitive on that point. However, as I don't intend to marry again, I'll tell you in confidence, I'm 51. Yes, I keep Cannabis Sativa in the house all the time, and use a little along as a precaution. When I catch cold I always use it in full doses. It takes right hold of my colds and never fails to break them up by the second day. I never took anything that acted so promptly with me. Nothing can be surer than this, that if I had not taken Cannabis Sativa when I did, and as I did, I would not be alive to-day."

After so wonderful a recovery one is not surprised at Mrs. Vannaman's faith and precaution. Yet it is not greater than that of Hon. F. Mathews, American Consul at Tangiers, in Morocco, Africa, who writes to his friend, Mr. Albert Simon at Dansville, N. Y., recommending Cannabis Sativa to him as a specific for lung disease. Mr. Mathews had cured himself of an alarming cough, and had also cured several cases of consumption with it in Tangiers. He not only advises his friend, Mr. Simon, to try it, but asks him, in case he comes to Tangiers for a change of climate, to bring five packages along for his, Mr. Mathew's, further use among consumptives there.

Rev. A. L. Morey, formerly pastor Hampton F. B. Church, now the President of Ridgeville College, Ridgeville, Ind., writes: "Expert physicians pronounced my wife in consumption and treated her for it. She was informed she could live but a few months. She coughed, bled from the lungs, and tried consumptive remedies without avail, till I secured your Cannabis Sativa Remedy. Gradually her cough subsided and the dread disease retreated."

Dr. H. H. Davis, Rosebud, White Co., Ark., is not such a stickler for his own remedies as to let a patient die when they fail. He writes: "Send me your Cannabis Sativa Remedy for Consumption for one of my patients. I tried it two years ago. *It will positively cure consumption.*"

Mrs. M. Allen, Academia, Pa., like Mrs. Vannaman, of Philadelphia, keeps Cannabis Sativa in her house all the time. She inherited weak lungs and is the only one left out of a family of six—all having died of consumption. Three years ago she fell into decline and thought her time had come. She writes: "Cannabis Sativa saved me after all hope was gone. Last summer I did more work and enjoyed better health than ever in my life before. I cannot be too thankful."

For further particulars about Cannabis Sativa, the greatest East India Consumption Cure, send for a treatise telling of its discovery, its action in disease and the record of its cures. It will be sent free on application to W. A. NOYES, 149 Powers' Block, Rochester, N. Y.

FAC-SIMILE.

FOR SHAVING.
The Genuine Yankee Soap.
Has never been equaled in the richness and permanence of its lather.
Especially adapted for heavy beards and a delicate skin.
Standard forquality in the U. S. Navy.
Has been counterfeited more than any other soap in the world. Notice the engraving and avoid imitations.

ALL DRUGGISTS KEEP IT. Trial Sample for 12 Cents.
THE J. B. WILLIAMS CO., Glastonbury, Conn.
Formerly WILLIAMS & BROS., Manchester, 1840.

THE MONTAGUE CURL CLASP.
GREATEST NOVELTY OF THE AGE!
Harmless, Tidy, Effectual, Cheap.

The most simple and perfect article ever invented for the toilet. By the use of The Montague Curl Clasp a perfect and lasting ringlet is quickly and easily obtained, without the danger resulting from the use of lead, or the inconvenience of curl papers. USE THEM YOURSELF and show them to your friends.
SAMPLE DOZEN mailed for 15 cents, 2 Dozen for 25 cents, 5 Dozen for 50 cents. AGENTS WANTED.
M. C. TRIFET, 408 Wash'n St., BOSTON, MASS.

EASIEST AND QUICKEST
to introduce where there's no Agent. One churn only at Wholesale, and Favorite Butter Worker free. First come, first served.
CORNISH, CURTIS & GREENE, Ft. Atkinson, Wis.

EPPS'S
GRATEFUL—COMFORTING.
COCOA

CHANNEL CAN CREAMERY.
Makes more Butter than any other process. Calls for less labor and ice. Will raise all the cream without ice. Automatic Butter-workers, Churns, etc. One at wholesale.
Agents wanted. Send for circulars.
Wm. E. Lincoln Co.,
WARREN, MASS., and FORT ATKINSON, WIS.

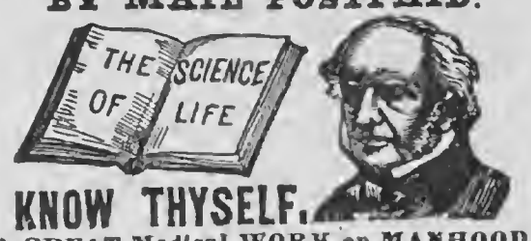
50 CARDS, Hidden Name, etc. 1 pretty ring, outfit and present, all 10c. 6 lots 50c. U. S. Brain Co. Bloomfield, Ct.

100 New Scrap Pictures and Agents' Samples for 1886, 5 cents. S. M. FOOTE, Northford, Conn.

50,000
PURE GERMAN CARP
Now ready for sale. Every farmer and every pond owner should raise carp for profit.
Send at once for circular and price list to
C. S. MEDARY.
145 Broadway, N. Y. City.

DYSPEPSIA Its Nature, Causes, Prevention, and Cure. By JOHN H. McALVIN, Lowell Mass. 14 years Tax Collector. Sent free to any address.

THE SCIENCE OF LIFE. ONLY $1.
BY MAIL POSTPAID.



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A GREAT Medical WORK on MANHOOD.
Nervous and Physical Debility, Premature Decline in man. A book for every man, young, middle aged and old. It contains 125 prescriptions for all acute and chronic diseases, each one of which is invaluable. So found by the author, whose experience for 23 years in such has probably never before fell to the lot of any physician. 300 pages, bound in beautiful French muslin, embossed covers, full gilt, guaranteed to be a finer work in every sense—mechanical, literary and professional—than any other work sold in this country for $2.50, or the money will be refunded in every instance. Price only $1 00 by mail, postpaid. Illustrated sample 6 cents. Send now. Gold medal awarded the author by the National Medical Association, to the officers of which he refers.
The Science of Life should be read by the young for instruction, and by the afflicted for relief. It will benefit all.—*London Lancet.*
There is no member of society to whom The Science of Life will not be useful, whether youth, parent, guardian, instructor or clergyman.—*Argonaut.*
Address the Peabody Medical Institute, or Dr. W. H. Parker, No. 4 Bulfinch Street, Boston, Mass., who may be consulted on all diseases requiring skill and experience. Chronic and obstinate diseases that have baffled the skill of all other physicians a specialty. Such treated successfully without an instance of failure.
HEAL THYSELF
Mention this paper.

PILES. Instant relief. Final cure in 10 days, and never returns. No purge, no salve, no suppository. Sufferers will learn of a simple remedy, free, by addressing C. J. MASON,
78 Nassau Street, N. Y.

CARDS! 60 Fancy Pictures and 25 Elegant Cards in Gilt Edge, Silk Fringe, Hidden Name, &c. 1 Songster, 1850 Prize Puzzle, and 8 Parlor Games, all for 10 cts. Game of Authors, 10c. IVY CARD CO., Clintonville, Ct.

300 FOR 10 C. GAMES, Puzzles, Parlor Magic, Conundrums, Songs, Album Quotations, Embroidery Designs, and pack of Name Cards, Gilt Edge, Silk Fringe, Hidden Name. TODD CARD CO., Clintonville, Ct.

CHEAPEST and BEST. Prices REDUCED.
HOLMAN'S NEW PARALEL BIBLES!
Over 2,000 pages. *Fully Illustrated.* Agents Wanted. Circulars free. A. J. HOLMAN & CO., Phila.

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HAIR REMOVED
From any part of the body in FIVE MINUTES, without injury to the skin, by UPHAM'S DEPILATORY POWDER. Mailed (*securely sealed*) for $1.00. Sealed pamphlet FREE. Procurable of Druggists. ASK FOR IT. Don't be put off with something else. S. C. UPHAM, P. O. Box 1297, Philada., Pa.

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NORTHWESTERN LAND AGENCY,
ST. CLOUD, MINN.

FOR SALE.
Improved grain, stock and dairy farms; unimproved lands, pine and hard wood timber; granite quarries. Location, soil and water unexcelled. 1st mortgage loans, town, city and school bonds negotiated. Descriptive lists free on application. Correspondence solicited.
BRUCKART, GILLIS & VINCENT.

FOR SALE.—A small farm of about 35 acres, situated one mile west of the village of Mt. Morris, N. Y. A sandy soil, well adapted to small fruits. Commodious buildings, abundant supply of pure water, soil in a good state of cultivation. Needs to be seen to be appreciated. 3 R. R's running through the town. Address P. SHELDON, Mt. Morris, N. Y.

FOR SALE.
FARM OF 283 ACRES IN HARFORD CO., MD.
Large Stone House; Switzer Barn, with Shedding for 40 Cattle adjoining; Granaries; Carriage, Smoke, Chicken and Ice Houses. A celebrated Wheat and Grass Farm. Immediate possession if desired.
Address WM. WINCHESTER,
P. O. Box 655, BALTIMORE, MD.

500 FARMS for Sale, in TIDEWATER, VIRGINIA. Cheap and Rich Lands. Healthy and Mild Climate. Fish and Oysters in great abundance.
E. C. LINDSEY & CO., Norfolk, Va.

FARMS Hotels, Stores, Mills, Business Chances. Country Seats or Lands for *Sale* or *Exchange*. Inclose stamp for Lists. W. S. Hotchkin, Real Estate and Traders' Exchange, Binghamton, N. Y.

VIRGINIA FARMS & MILLS For Sale & Exchange. FREE Catalogue.
R. B. CHAFFIN & CO., Richmond, Va.

Virginia Farms. Mild Climate. Cheap Homes. Send for Circular. A. O. BLISS, Centralia, Va.

VIRGINIA HOMES. My free Journal contains a list of Blue-Grass Farms and other properties in the noted Piedmont Region, 2½ hours by rail to Washington. Parties wanting Virginia Horses will also communicate with
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Send for Description and Maps of NORTHERN PACIFIC COUNTRY, the Free Government Lands and CHEAP RAILROAD LANDS in Minnesota, Dakota, Montana, Idaho, Washington and Oregon. The Best Agricultural, Grazing and Timber Lands now open to Settlers. SENT FREE. Address, CHAS. B. LAMBORN,
Land Commissioner, St. Paul, Minn.

PERSONALS.

CANON FARRAR offers $500 for proof of any case where drunkenness has been cured without total abstinence.

PASTEUR is suffering severely from over work. He has already had one dangerous paralytic stroke, and another is feared.

HENRY M. STANLEY is ill with partial paralysis of the stomach. The doctors are hopeful of his recovery, but it will be slow and probably not entire at the best.

AMONG the members of the United States Senate, Ingalls talks loudest, Edmunds most, Mahone least, while Evarts sits and muses quietly. Hoar looks most like a grandmother, and Gorman receives most callers and is a favorite of the pages, as he was once a page himself.

MONDAY was the 90th birthday of the Emperor William of Germany. He is still able to appear on all important public occasions, and seems in prime condition for a man of his years; but he has frequent fits of weakening, and the "inside circle" fear he may be "gathered to his fathers" any day or night.

IT is commonly remarked in France that if the Orleans princes were not so rich they would be the rulers of the nation; that is, if they had spent their money more lavishly they would have won a following strong enough to restore them to the throne. France is not the only country where thrift is unpopular, however.

Trees, Seeds and Plants.

FOR SALE.

PREMIUM PEARL OF SAVOY POTATOES, and ANGEL OF MIDNIGHT CORN.
Address STEPHEN HOYT'S SONS, NEW CANAAN, CONN.

BULBS Gladioli, Amaryllis. **PLANTS** Dahlias, Lilies, &c.
225 CHOICE ASSORTED KINDS FOR $3.75
A valuable collection for Spring planting, and Summer blooming, direct from the famous bulb-farms of
ANT. ROOZEN & SON,
Overveen, (near Haarlem) Holland,
delivered entirely free at Express Office in New York City during April and May. Satisfaction guaranteed. For descriptive Circular, address the Sole Agents for U. S. and Canada.
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LOW'S RELIABLE GARDEN SEEDS
MARKET GARDENERS' trade a Specialty.
CATALOGUE FREE. SEND FOR IT.
AARON LOW, Seed Grower. ESSEX, MASS.

Send stamp for sample.
Dietz Early Corn, Dietz Longberry Wheat, Dietz Fruit Dryer. New way of cutting fodder.
G. A. DIETZ, Chambersburg, Pa.

NORTHERN GROWN Seed Potatoes and Spring Wheat. Send for price-list, FREE.
S. FROGNER, Herman, Grant Co., Minn.

Marlboro Raspberry, *Ulster Prolific and Hough keepsie Red Grapes.* Send for description and price to A. J. CAYWOOD & SON, Marlboro, N. Y.

Two Plants each, postpaid, for $1.40, at Belmont, Sunapee Gt. Ontario and Henderson. **JEWELL**
The following, postpaid, for 20c. per dozen: 80c. per 100. Bidwell, Bright Ida, Capt. Jack, Conn Queen, Cornelia, Cunab, Triumph, Crescent, Crystal City, Dan'l. Boone, Downing, Fairy, Golden Defiance, Glendale, Hart's Minn., Iron Clad, Jersey Queen, Kentucky, Lacon, Longfellow, Manchester, Norman, Pantuxet, Photo, Prince, Primo, Ray's Prolific, Sharpless, Sterling, Vineland, Windsor Chief, Wilson.
How to grow STRAWBERRIES and other fruits, free
E. D. PUTNEY, Brentwood, N. Y.
Please mention this paper.

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My Annual Priced Catalogue is now ready, and mailed free to all applicants. It contains all the leading and most popular sorts of

VEGETABLE, FARM,
AND
FLOWER SEEDS.

Besides all the desirable novelties of last season, and nearly everything else in my line of business.

ALFRED BRIDGEMAN,
37 East 19th St., New York.

TREES. The best hardy Azaleas, Rhododendrons, Japanese Maples, Clematis, Chrysanthemums and other Choice Hardy Trees, Shrubs, Roses and Plants. Also the Best Fruits.
Catalogues on application.
Also Linden's Catalogue of Palms, Orchids, etc.
FRED. W. KELSEY,
208 Broadway, New York.

JOHN SAUL'S

CATALOGUE of New, Rare and Beautiful plants for 1886 is Now Ready
It is full in really good and beautiful plants as well as all the novelties of merit.
The rich collection of fine foliage, and other Greenhouse and Hothouse Plants, are well grown, and at low prices.
Orchids, a very large stock of choice East Indian, American, &c., also catalogues of Roses, Orchids, Seeds, Trees, &c.
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FOR SALE.—I have a fine lot of the celebrated Empire State Potatoes, pure seed, which I offer at $1.50 per bushel; $3.50 per barrel f. o. b. here. Address
E. D. COPP, Clifton Springs, N. Y.

BLACK WALNUTS. } **TREE SEEDS !!** { HICKORY NUTS.
All stratified and frozen, and 20 other varieties, all last season's growth, collected expressly for me, and warranted to grow. Forty varieties of Evergreens and Forest Trees. Prices lower than the lowest. Price Lists FREE. GEO. PINNEY, Evergreens, Door County, Wis

1,000,000 Crescent Strawberry Plants, $1.50 for 1,000, new bed, strictly pure. J. R. DUNHAM, Farlin, Ill.

BRIGHTHORN'S DUCHESS & BACCHUS grape vines. True to name, at lowest prices. Also general nursery stock.
J. W. BINGHAM, Marlboro Ulster Co., N. Y.

Trees, Seeds and Plants.

SEEDS, SEEDS, SEEDS

NEW BLOOD OF EXTRAORDINARY MERIT IN
THE THORBURN POTATO.
It is the Earliest of All.
$10 per barrel; $5 per bushel; $3 per half-bushel; $2 per peck; $1.50 per half-peck. Or by mail, one pound, 75 cts.; three pounds, $2.
Descriptive Circulars and Catalogues on application,
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IT IS IMPORTANT

That Seeds should be *new* and *true* to name. They should be bought of men who have had *experience* in the business. By sending to us you will get just what you order, and that which will give you satisfaction. We are importers and growers of Seed. Send for our Catalogue. Mention this paper.
L. G. SHERMAN & CO.,
Providence, R. I.

850,000 GRAPE VINES

100 Varieties. Also Small Fruits. Quality unsurpassed. Warranted true. Very cheap. 8 sample vines mailed for 15c. Descriptive price list free. LEWIS ROESCH, Fredonia, N. Y.

GREEN MOUNTAIN POTATO

Yields 1391½ Bus. per acre. Beautiful form and unsurpassed quality | The stock secured at the enormous price of $200 per barrel.

Being the introducers of some of the best potatoes in the World, and having earned the title of the "Champion Seed Potato Growers of America," we think we know whereof we speak when we say the **Green Mountain Potato** is the greatest potato in this country. This wonderful potato is a cross between the Dunmore and Excelsior. Its handsome form, white skin and large size recommend it everywhere. Flesh white and fine; cooks dry and mealy; vigorous vines, and the hills completely crowded with fine, large potatoes. Ripen in August, and are **marvelously productive.** *They are the coming potato.* See our beautiful catalogue for proof of large yields. Price, 1lb $1; 3 lbs $2; 4lbs $2.50 by mail, postpaid. Our New Early Potato

THE EARLY PEARL As Good As The Early Rose Ever Was. Is as early, as good and as productive as the Early Rose ever was. *We guarantee this,* because we know it to be a fact, and if they prove otherwise, we will refund your money (See our Catalogue, Page 12). Every person knows what a demand there was for the Early Rose when first introduced. The same thing will be repeated in the Early Pearl. It will fairly spring into popularity and those who get a start now will reap a rich harvest. Price, 1lb $1; 3lbs $2; 4lbs $2.50. Besides the above wonderful potatoes, our catalogue contains an offer of 10 different varieties of Seeds **Free** *to introduce them,* descriptions, illustrations and directions for cultivating all seeds, plants, etc., reduced prices, inducements to gardeners, and is a most complete work, valuable enough for the library, and handsome enough for the centre table. Mailed free with a copy of The Agricultural Epitomist, to all who plant seeds; to others, 10 cents. Mention this paper.
Address I. A. EVERITT & CO., Seedsmen, Watsontown, Pa

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with the choicest Stock of their specialties, **STANDARD APPLES, STD. and DWARF PEARS, PLUMS and CHERRIES,** ever offered to the public, **all young, thrifty and well rooted.**

Also a very superior assortment of **GENERAL NURSERY STOCK both FRUIT AND ORNAMENTAL** including all the popular **ORNAMENTAL TREES, SHRUBS, and ROSES.**

All Nurserymen and Dealers are cordially invited to inspect this superior stock or correspond with us, before placing their orders for the coming Fall.

SMITHS, POWELL & LAMB, Syracuse, N. Y.

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SCOTT'S ROSES

ARE KNOWN wherever planted for their STRONG and VIGOROUS GROWTH, their Fragrance and Beauty, and are ALWAYS TRUE to Name. **OUR INTRODUCTION BOX OF 12 ROSES** all colors, by express, first size, for **$1.50** by mail, 2d size, **$1.00.** Our Illustrated CATALOGUE, containing all the New and Rare Roses, as well as the FINEST STANDARD SORTS, with directions for growing, mailed FREE.
ROBERT SCOTT & SON, ROSE GROWERS, Philadelphia, Pa.

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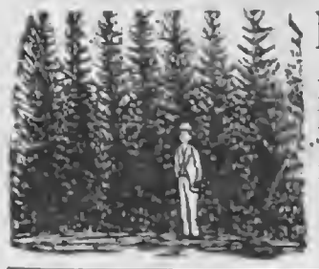

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Cauliflowers, Cabbages, etc.

Cabbages (15 *acres*), *Potatoes, etc.*

CHAS. COLLINS, Queens Co., N.Y., November 23, 1885, writes:

I used five tons of your Potato Manure and raised five hundred and thirty barrels of the largest and best potatoes that went into New York market. There is nothing in the market to beat your Potato Manure that I know of. I planted fifteen acres of cabbage, using one thousand pounds of Mapes' Cabbage Manure to the acre, alongside of stable manure, and using both pretty heavily. Where your manure was used, turned out the best cabbage. They were the largest and solidest. Your Corn Manure has given good satisfaction.

1,000 *barrels Cauliflowers from four acres.—Used Mapes' eight years.—Land improved.*

WM. H. TUTHILL, Suffolk Co., L. I., N. Y., November, 1885, writes:

I have used the Mapes Manures for eight years with uniform good results, having, when season is at all favorable, excellent crops. My potatoes are a very good crop this season. My cauliflower crop was very fine. I shall ship to my commission men over 1,000 barrels from 4 acres. Wherever Mapes' Manures have been used on my farm I always see, in after crops, the lasting effects, and firmly believe that my land has been improved by the use of Mapes' Manures.

921 *Barrels Cauliflowers* ($1,247) *from* 4¾ *acres.—"Believe if I had used the Mapes on the other ¾ acre, instead of another brand, that I should have realized* $100 *more from the piece."*

F. ASBURY TUTHILL, Suffolk Co, November, 1885, writes:

Used the Mapes Manure on potatoes and cauliflowers.

Used 3 tons of the Cauliflower Manure on 4 acres; had 4¾ acres in cauliflowers; on the ¾ acre used another brand; sold 921 barrels ($1,247) from the 4¾ acres; believe if I had used Mapes on the other ¾ acre, instead of another brand, I should have realized $100 more from the piece.

Have used the Mapes since they were first introduced here and have never failed to get a good crop since I used them. I am a strong believer in the Mapes Complete Manure for large profits and lasting results from their use.

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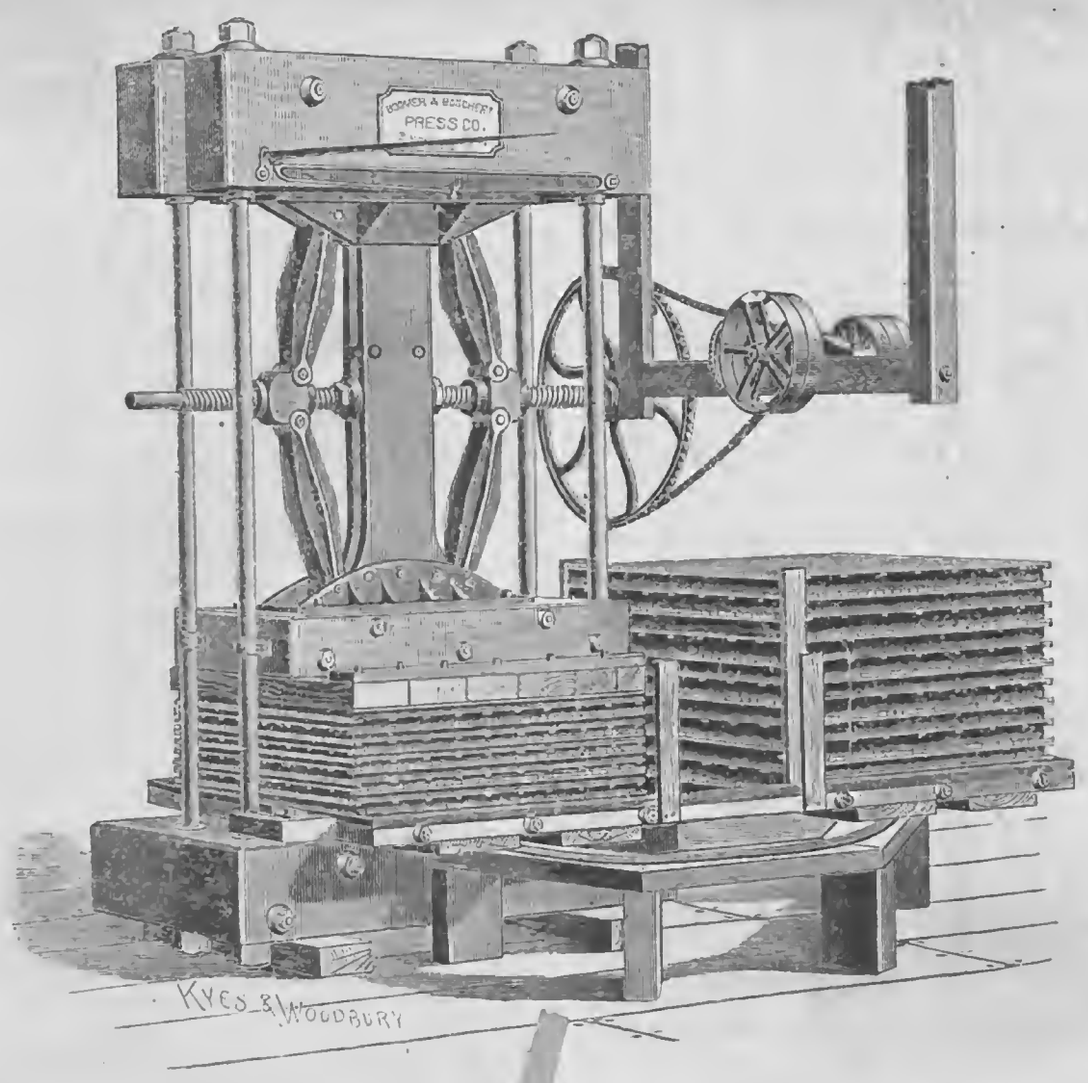

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Will protect roofs from sparks. Valuable for coloring mortar. Samples free. Ask prices of

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Will the farmers take a suggestion from a manufacturer on this point?

First,—Buy fertilizers according to *your* wants.

Second,—According to their strength,

Third,—According to their solubility;

for the strength, solubility and forms of plant food *best* suited to the crop which *you intend to grow*, have more influence on the crop for the first *sixty days* than at any other period of its growth.

A calf that is *stinted* for the first two months is *stunted* for life; so a crop which is *stinted* for the first few weeks by not having the right form of plant food in an available condition, is usually a failure.

Please read and compare the analyses of the following fertilizers. At the prices quoted, *one is as cheap as the other*, so far as strength is concerned, but in their adaptibility, cost of handling and applying, the *first* is cheaper than the *second*, and both are cheaper than the *third*.

STOCKBRIDGE MANURES,

(For Special Crops.)

Average Analysis, *all kinds:* **Price, $45 per ton.**

5 per ct. Ammonia. (All available and principally in the most costly form of chemicals.)
12 per ct. Phosphoric Acid. (Available.)
5 per ct. Potash. (Available.)

BOWKER'S HILL and DRILL PHOSPHATE, (For General Crops.)

Analysis: **Price, $38 per ton.**

3 to 4 per ct. Ammonia. (All available.)
12 to 14 per ct. Phosphoric Acid. (Nearly all available.)
1½ to 2½ per ct. Potash. (Available.)

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(For use where Ammonia and Potash are not wanted.)

Analysis: **Price, $25 per ton.**

12 to 14 per ct. Phosphoric Acid. (Available.)
14 to 16 per ct. Phosphoric Acid.

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Absolutely safe for delicate and nursing women. Taken eagerly by infants and children.

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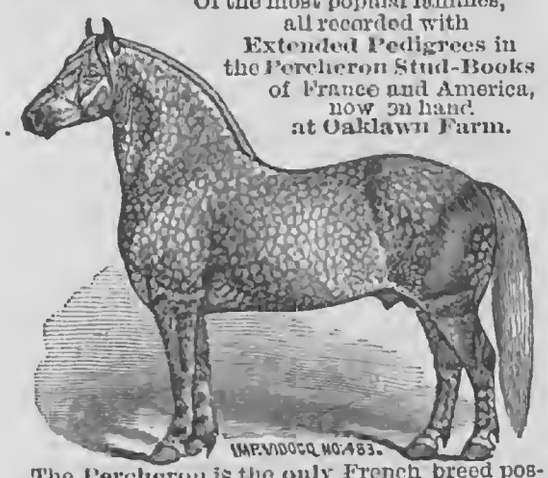

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Connecticut Experiment Station Valuations of Americus Superphosphate.

Analysis of 10 Samples, 1885, gave..$36.09
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Pure Bone Meal, 4 Samples, gave..... 35.04

Valuation in Massachusetts, 2 Samples Americus Superphosphate, gave 1885, $35.94, $36.88.

No Fertilizers selling at the same price show as High Valuations.

I have used your AMERICUS PHOSPHATE on my Corn and am safe in saying I raised the largest crop ever raised in Connecticut. The yield was 179 bushels and 23 quarts shelled corn to the acre.
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The above field of corn was visited by Hon. T. S. Gold, Secretary Board of Agriculture of Conn., and Prof. W. H. Brewer of Yale College, and both pronounced it the best field of Corn they ever saw.

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125 Head of registered Cattle. Contributed from the best NEW ENGLAND HERDS. Houghton Farm, Putney, Vt., H. O. Warner & Son, New Milford, Conn., Geo. L. Wells, Wethersfield, Conn., E. M. Washburn, Lenox Furnace, Mass., S. L. Warner, Lanesville, Conn. Hon. Wm. A. Russell, No. Andover, Mass.

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THE RURAL NEW-YORKER

A JOURNAL FOR THE SUBURBAN AND COUNTRY HOME

VOL. XLV. No. 1889. NEW YORK, APRIL 10, 1886. PRICE FIVE CENTS. $2.00 PER YEAR.

Entered according to Act of Congress, in the year 1886, by the Rural New-Yorker in the office of the Librarian of Congress at Washington.

Pomological.

THE HAWTHORNDEN APPLE.

THE Hawthornden, shown at Fig. 148, with a cross-section at Fig. 149, (p. 234.) is a well-known Scotch apple originating in the town after which it was named. The tree is a strong grower, upright, spreading, though somewhat pendulous while in bearing. According to the latest Am. Pom. Report, it succeeds fairly well in New Hampshire, Rhode Island, New York, Ontario, Michigan, Missouri, Nebraska, Kansas, Utah, California and Alabama. It has not, as yet, received double stars in any State. The fruit is somewhat flattened, tapering to the calyx, stem, seven-eighths of an inch long, slender, set in a small, deep, regular cavity which is nearly covered with a delicate russet. Calyx very small, firmly closed and deeply planted in a small, corrugated basin. Color, a beautiful waxen white nearly overspread with a faint blush, deepening to a bright red in the sun. The surface is studded with small, transparent dots which appear to show through the outer skin. The apple is very fragrant and a good shipper. Core small, with small brownish seeds, rather long and slender. Flesh white, tender, fine-grained, mild subacid, juicy, not high-flavored, but pleasant; quality good. Eaten Sept. 18th, in good order, but perhaps a little past its prime.

IOWA FRUIT LISTS.

PROF. J. L. BUDD.

Experience in different sections; gloomy reports; causes of mishaps; root-grafted trees perish; top-grafted on hardy stalks survive; experiments with hardiest Russian fruits.

THE RURAL asks for an approved list of the orchard fruits found hardy and profitable in Iowa. The query is a difficult one to answer. On the lacustrine soils of Southwestern Iowa such common varieties as Ben Davis, Willow, Roman Stem, Grimes's Golden, and in many cases even the Maiden's Blush, Jonathan, and Dominie were reported perfect in tree, and the yield of perfect fruit the past season was unusually good. Again, the portion of the Missouri slope farther north, and the loess soils in all parts of what is known as the central and southern districts, are favorably reported as to condition of fruit trees and the perfection of the fruit crop. With these exceptions, the reports from at least four-fifths of the counties are gloomy in the extreme, and the wholesale destruction of the varieties which have been recommended by our local societies, has extended not only over a large part of Iowa, but over an area of rich prairie in Wisconsin, Illinois, and even Indiana, large enough to make three or four of the small kingdoms of Europe. The present feeling of the orchardists north of the 42nd parallel in Iowa, may be guessed from the fact that the committee appointed to revise the fruit lists of what is known as the "North District," gravely reported, "We recommend for general culture, of the old lists, only the Duchess, Whitney's No. 20, and Tetofsky." The report from the prairie districts of the central and many parts of the southern districts are, in reality, not much better with regard to root-grafted trees.

As a rule, the trees in orchard and nursery were killed by rupture of the bark of the stems, while the terminal points of growth were often in good condition for use as cions. With less hardy varieties the damage included the whole tree. This state of things has created quite a boom in favor of top-grafting, as in every case the varieties killed by stem injury have stood well and borne fair to good crops the past season when top-worked on Duchess, Tetofsky, or Gros Pomier stocks. Our wholesale losses of root-grafted trees at this time on the rich prairie soils, where the same varieties stood perfectly on iron-clad stems, seem to support the well settled views on this subject, which we found common to all the rich prairie districts north and east of the Carpathian Mountains in Europe. The art of root-grafting is there well known; yet the universal practice is to top-graft, or bud all orchard fruits on stocks known to be exempt from sun-scald or other stem injury. Over large areas of the prairies many now believe orcharding may be made profitable in this way with a few of the old varieties.

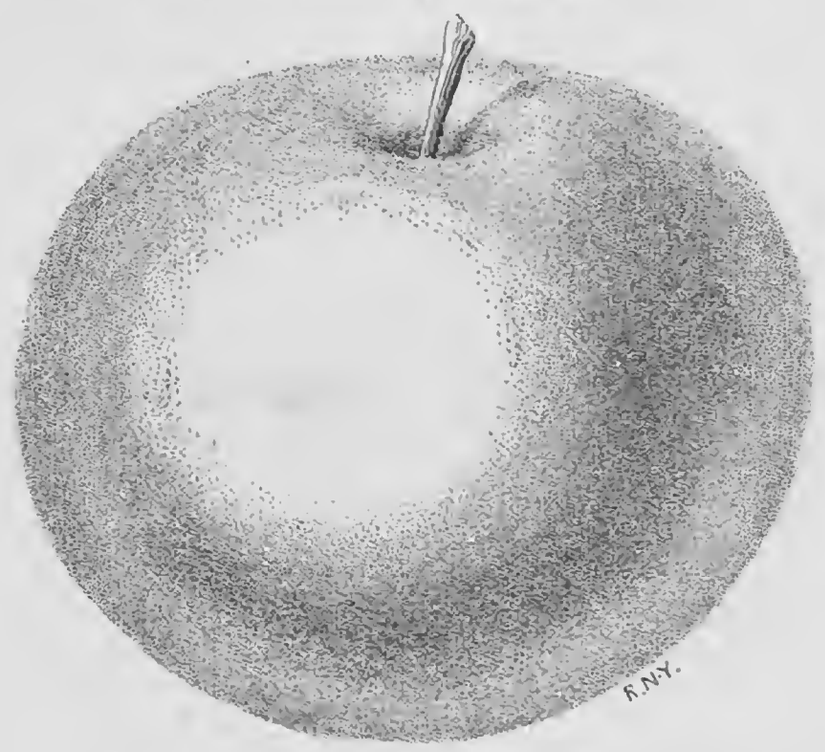
In the meantime, we are experimenting with the most promising results with the apples, pears, cherries and plums from the home of the Duchess. All of the inland varieties of Russia seem true iron-clads *as root grafts*, and the varieties fruiting with us are by far exceeding the fondest hopes of many in size, appearance, quality and varied season. Again, we are making every effort to secure crosses combining the hardiness of tree of the Russians with the quality of fruit of the Grimes's Golden or Jonathan. With the liberal aid of our Legislature we have just perfected the list of premiums for the encouragement of the production of seedling fruits. Already we have bearing trees of the hardiest known varieties from Russia, which will be pollenized this Spring in many places with our best late keepers.

Though we have had many reverses in our attempts to acclimate the fruits grown east of the lakes, we expect in the very near future to conquer the situation, and to raise the standard of fruit growing in Iowa as high as that of our sister State of Michigan, which is supposed to be on the right side of the great lake.

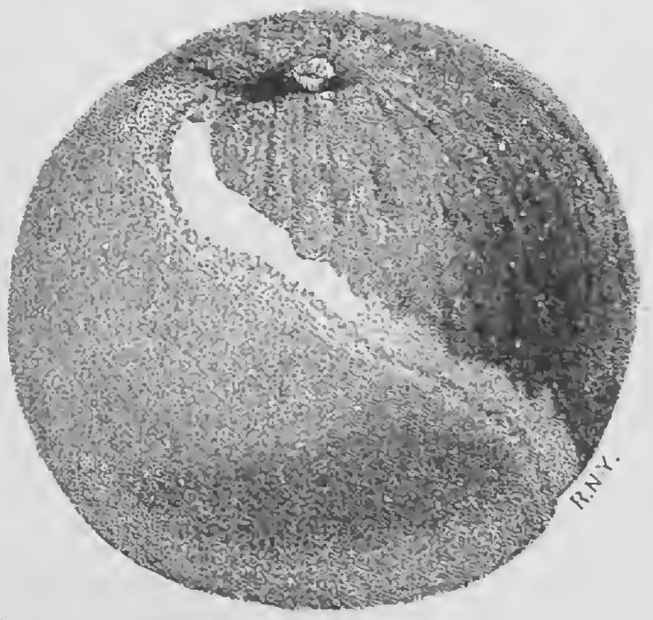
Ames, Iowa.

A POMOLOGICAL FREAK.

AT Fig. 143 is shown an apple, half Russet and half Canada Red. The apple from which our engraving was made came from C. L. Jones, of Newark, N. J., who received it last October from G. S. Eyre, of Vincenttown, in the same State, together with two others of the same kind. They all grew on a branch of a Canada Red, which interlocked with a Russet, and all three were distinctly marked as shown in the cut. The Russet marking was only skin-deep, however, for when cut, the appearance and quality of the fruit declared it to be a Canada Red.



HAWTHORNDEN APPLE. From Nature. Fig. 148.



HALF RUSSET APPLE. From Nature. Fig. 143.

THE PEAR FIGUE D'ALENCON.

A NUMBER of these pears (Fig. 150, with cross-section at Fig. 151, p. 235.) were sent to us by Gen. W. H. Noble, of Bridgeport, Conn. They were received in fine condition in December, as we remember. The fruit is obovate-pyriform or nearly Buffum-shaped. The variety originated in Alencon, France. The tree is vigorous and productive. The fruit averages large, and is greenish-yellow, sometimes with a brownish cheek partially russeted. The stalk, as shown in our illustration, is short and stout: calyx open; basin small, shallow and uneven. The flesh is greenish-white, juicy, melting, sweet and vinous. Its season is from October to December. As we ate these pears the question occurred to us, why is this pear cultivated so sparingly and so little known?

PROLONGING THE SEASON OF THE WINTER NELIS.

AN IMPORTANT SUGGESTION.

IN '82 I put cions of Winter Nelis into four pear trees that had been in bearing about 10 years. Three were Flemish Beauties, the fourth a Bloodgood. Last October I gathered about three pecks of fine Winter Nelis pears from the Bloodgood, and about a barrel from the Flemish Beauties. There was no perceptible difference in size or fairness, but those gathered from the Bloodgood were green, while the others were yellow-brown. The two sorts were kept separate. The Flemish Beauty Winter Nelis all ripened before the end of December. The Bloodgood Winter Nelis kept through January. In other words, the season of this delicious pear was prolonged a full month. In the grafting about one-third of each tree was changed. I had previously noticed that in a list of 25 varieties, the Flemish Beauty was the first to stop growth and drop its leaves, while the Bloodgood continues growing and holds its leaves very late. My experience, unless exceptional, points to an easy way of prolonging the seasons of choice late pears, and possibly of earlier ones.

Amherst College, Mass. A. D. MORSE.

THE RITSON PEAR.

THIS pear, see Fig. 146, (p. 235) with a cross-section at Fig. 147, is of Canadian origin, and is introduced by Stone & Wellington, of Toronto. The original tree still stands on the grounds of Mr. Wellington's grandfather, at Ossawa, 30 miles east of that city. It is from seed planted by his grandmother, 60 or 70 years ago, and bears good crops yet. Several other trees in the same neighborhood, grown from suckers of the Ritson, like the original bear large annual crops, and in no instance has any tree of this variety failed from disease, though other sorts planted beside them have, at one time or another, succumbed to blight or other maladies. The tree is a good, though not rank grower. It is quite hardy, iron-clad indeed, as, we are told no specimen has ever been injured by the severe Winters of the region. The fruit is of medium size, conic, resembling Tyson in shape, pyriform; skin a greenish-yellow, more or less russeted on one side towards the calyx end. Stalk, one inch long, slender, inserted in a fleshy protuberance, calyx open in a very small basin, very regular. Flesh fine-grained, melting, juicy, somewhat buttery, not of the highest flavor, though good and pleasant, sweet. Eaten Oct. 22, in good condition.

Horticultural.

NOTES ON 1885.

E. P. POWELL.

LAST year brought in a line of improvement in almost all products. Let us take the most notable in order.

GRAPES.

Empire State probably stands first, or as high as any of the varieties most recently pronounced upon by good judges, Mr. Campbell, of Ohio, whose judgment is always safe and carefully considered, says the variety cannot be too highly commended. It has stood every

test uninjured, and has more good points, without faults, than any new grape I have tested. Its color is white, tinged with yellow and covered with a thick white bloom. Its bunches are long, large and handsome. Flavor sweet, rich, sprightly; skin thin but firm. The fruit continues in good condition a long time on the vine. So far as at present tested, it is the nearest approach to the perfect grape, that I have yet tried. [We regret that the vine we purchased when this grape was first announced, nearly died, otherwise we should be able to report as to its merits and demerits.—EDS.]

The Dutchess may be said to be another grape that fully sustains itself wherever climate and soil give any vine a fair chance. Reports are often published of failures of vines of all sorts, from localities wholly unfitted for grape culture. With me the Dutchess gives abundance of fruit, bunches very long, fruit of delicious quality, ripening sufficiently early and keeping admirably. It is, says Mr. Campbell, a fine shipping grape. The vine has proved to be quite hardy, but is all the better for being laid down. [Our reports show that this variety is somewhat tender.—EDS.]

Lady is a third grape which we can say 1885 has raised in public estimation. It is extra-early, ripening in August. It is very prolific, a good white in color, bunches not large, but plentiful and of good shape. It is hardy and healthy. I have had no rot or mildew on this or Duchess or Pocklington, the last of which I rank close with the others, and much higher than on first acquaintance. It is also a superb keeper, and when well ripened the quality is very fine. [We have never seen a bunch of Pocklington that could fairly be called so.—EDS.]

The Vergennes supplies what we need, a superior light grape that will keep so well as to be fairly classed as a winter grape. The vine is absolutely hardy, full of vigor, and bears glorious crops of dark-red grapes that keep like winter apples. I feel sure that this grape will prove to be very profitable for market after all other grapes are well gone.

Jefferson is probably the standard of all our grapes in quality. It bears enormously of fine, large-shouldered bunches, and ripens very closely after the Concord. It will be best to lay the vines down in Winter; but, for all that, they are by no means to be classed as tender.

BERRIES.

We have, in our records of 1885, good reports of a new fruit for which we may be very grateful. I refer to the Lucretia Dewberry. Two years ago I got a few plants from the introducer, Mr. E. Y. Teas. Not expecting much, I gave them a poor location and no care. But last year I picked some really superb berries of excellent quality. Here we have a berry as large as the Kittatinny Blackberry at its best, and looking like a Wilson; its habit of trailing keeps it close to the ground and protects it in Winter. It is enormously productive. We have long needed a blackberry that we could rely on for a crop every year, and for sweet and large berries. Here we have it.

I believe Ellwanger & Barry have secured for us a very great advance in the way of a hardy, prolific, handsome, rich gooseberry which is sent out as the Industry. It has so far won only commendation. If we can get a berry that will make the growing of gooseberries what it is in England, it must be larger than Houghton or Smith, and absolutely free from mildew. The Industry seems to be a decided step in the right direction. The Wilson Jr. Blackberry is all well enough, except it is not hardy. But its canes are slender, and I have laid it down. We shall have to do this with any good blackberry that we yet have. The Golden Queen Raspberry is pretty sure to be a stand-by, and Marlboro as well. Rancocas is hardy, early and good; but we have nothing new equal to Cuthbirt, unless it be Golden Queen. For an early black, we have yet nothing to displace the very old, but quite good Davison's Thornless.

PLUMS, ETC.

Among new plums we have several that are very interesting indeed. Prunus Pissardii, the Purple-leaved Plum, proved all that was promised of it. The color of its leaves ranges from crimson to purple, and remains in good order all Summer. Prunus Simonii, an apricot-shaped plum from Northern China, proves to be entirely hardy, and the fruit is very handsome and good. Prof. Budd reports it to be hardy in Iowa. He says that young trees stood the Winter of '84–'85 as well as, or better than the Ben Davis Apple. In all respects it is a botanical curiosity. In color of bark and other points it resembles the peach. The fruit looks more like a flattish, brick-red tomato. In odor and flavor it resembles a nectarine.

The RURAL NEW-YORKER has "gone daft" on the Japan Chestnut, but its insanity is wisdom and method; for there has been of late no addition to our nut trees to compare with this. It bears when a mere bush, and yields profusely year after year a large and delicious fruit. The chestnut has so many good qualities that we must rank it almost or quite at the head of trees. Its timber is superior. Its beauty is hardly surpassed. Its fruit is profitable as well as a delightful addition to our crops for home use.

None of the new quinces seem to be all they are advertised to be in quality, and they are hardly worth the planting. We still need *very great* advance in the way of a large, rich-flavored, and perfectly hardy quince. This fruit is more tender here than it was 25 years ago. My father used to raise fine, large crops of 100 bushels where I can rarely get a peck.

SHRUBS.

Three or four of the new shrubs are worthy of special notice and should be generally planted. Among these are the Japan Snowball, the Japan Judas-tree, the Scarlet Willow, the Hybrid Purple-leaved Catalpas, and the Blood Japan Maple. There are also others of the older shrubs not yet appreciated, such as the White Fringe, the Weigela floribunda, the Variegated-leaved Weigela and the Variegated-leaved Althea. Among my hybrid catalpas, procured from Mr. Teas, I obtained not only very fine purple-leaved specimens, but some with rich golden foliage. Too much cannot be said of these grown as shrubs instead of trees.

Oneida Co., N. Y.

STARTING MELON SEED, ETC.

FOR the device for starting the seeds of melons, squashes, etc., shown at Fig. 153, we are indebted to our friend Thomas Paxtou, Clermont County, Ohio.

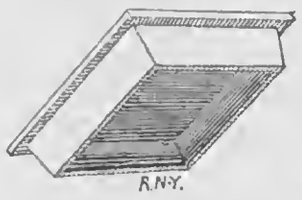


Fig. 153.

Occupying a farm which mostly faces the north—soil a strong clay loam—he found considerable difficulty in starting the seeds, and after several trials with other contrivances, found this box so satisfactory that he has been using it for over four years. It is made of inch stuff, and the sides are so cut that the bottom is slightly narrower than the top. It is four or five inches deep, and has a board cover projecting about an inch beyond the sides all round. When preparing for planting, the ground is slightly ridged, and the box is placed on the ridges. Then standing on it, the operator draws the earth up and around it, compacting it so as to make a neat hill. The earth should be pressed pretty firmly under the projection of the cover, so that when the box is removed, a neat impression of it remains. A glass cover from half to three-quarters of an inch larger than the top of the box, is then placed over the hole, and the job is complete. Before the box is placed on the ridge, some earth is drawn to the spot and lightly trodden down, so that the box will not be pressed down too far, and in order that the depression may be made to face the sun as much as possible. The planting of the seed and care of the young plants need no description.

PRUNING SAW.

The saw, Fig. 152, for pruning raspberry, blackberry and gooseberry bushes, is made of

Fig. 152.

No. 6 steel wire. One end is twisted as a handle; the other forged to the thickness of a saw blade, three inches long and three-eighths of an inch wide, teeth being filed in it as shown. A good one can be made by fastening a bracket saw-blade in the end of a split stick. The whole of the tool from which the drawing was made was 14 inches long.

THIS is the season when the seed catalogue appears, bristling with novelties. Very picturesque are the descriptions of such novelties, but we must give the palm in this direction to the "Manchoorian Ginseng," introduced by a prominent seedsman. This is the most costly drug in the Chinese *materia medica*, having a tuberous root, which sometimes assumes a curious likeness to the human form, like the old-time mandrake. The climate of the United States is well suited for its culture, consequently, as the ingenious introducer suggests, "there's millions in it." This remains to be proved, but it is a fact that we export considerable quantities of the American Ginseng (Panax quinquefolia) to China yearly, though it is not considered as valuable as the native article. However, Ginseng culture seems rather an uncertainty at present, and the average price of $100 per picul (120 pounds), in Hong Kong, may mean a very small return to the American grower.

Another revived novelty, which is to bring fortune to Southern growers, is the ramie plant (Bœhmeria nivea) yielding a fine, silky fiber, which is made into Oriental grass cloth. This plant is grown to a considerable extent in British India, but the difficulty in separating the fiber has prevented its culture in other countries, where labor is less cheap and abundant. We are told that there are several companies now being formed for the purpose of making up the fiber here; but the success of their projects is still uncertain. Until such possibilities become accomplished facts, it would hardly be wise for any one to embark extensively in ramie culture.

Our accomplished florists have forced in mid-winter, daises and buttercups and red clover—it only remained for them to force the meadow itself, and this seems likely to become an accomplished fact. At a flower show in the Opera House, New York City, held last week, there was, in the auditorium, a real grass lawn, forced—we suppose in sections—by a prominent florist. What next?

A prominent Philadelphia paper recently contained a learned editorial on the culture of hardy cocoanuts along the New Jersey coast. The intelligent writer had evidently read a paragraph descriptive of the Chili Pine, in which the fruit was compared with the cocoanut. The article was unconsciously one of the funniest things I have seen.

Among seed novelties this season is the "Tree Tomato of Jamaica," a shrubby solanum five or six feet high, with leaves 12 inches long. The fruit is described as a combination of gooseberry and apricot, the plants are raised from seed, and come into bearing in two years. The introducer does not say whether it is hardy or not.

This "Tree Tomato" seems to resemble the "Strawberry Tomato" (Physalis Alkekengi) in the quality of its fruit. The latter closely resembles the ground cherry of our sandy fields, an agreeable, though somewhat insipid little fruit.

It seems probable enough that the "novelty" is Solanum anthropophorum, a native of the Fiji Islands, whence it was introduced into England some years ago. E. L. TAPLIN.

NOTES AND COMMENTS.

I HAVE at one time or another grown most, if not all, of the principal varieties of watermelons in cultivation at present, and can recommend the following as being the best for amateurs: Phinney, Mountain Sweet, Ice Cream and Cuban Queen. With me the Phinney has always proved the best of all the early varieties, while for later use, none can equal the Cuban Queen. The Mountain Sweet and Ice Cream generally ripen after the Phinney and before the Cuban Queen, so that I find it necessary to sow equal quantities of each to insure a constant and uninterrupted supply.

Watermelon seed should not be planted until the weather has become warm and settled. In this vicinity about the middle of May is soon enough. Do not stint the quantity of seed; place from 16 to 20 in a hill, and when the plants come up, remove all but four of the most promising. Watch the young plants as soon as they begin to make their appearance, and if they appear troubled by any insects, dust them freely with soot, ashes or tobacco dust when wet with dew.

If large watermelons are desired for show or exhibition purposes, give the vines a very deep, well enriched soil, and do not permit more than one fruit to remain on a vine. Pinch back the leading shoots occasionally, and be very careful not to injure the vine in any way during its season of growth.

There are several varieties of leeks enumerated in seedsmen's catalogues, and if all were grown alike and under favorable circumstances, I do not think that much, if any, difference would be found between many of them. I always grow the Large Flag. It should be borne in mind, however, that if large leeks are desired, the ground cannot be made too rich or deep.

Horse-radish should be planted as early in the season as possible, or just as soon as the ground can be properly prepared, and if large roots are desired, the soil cannot be made too rich and deep. In planting, always use sets. These are the rootlets or branches of the main root, which are too small for table use. They are cut into pieces about four or five inches in length, and in such a manner that there will be no danger of setting the roots upside down. Sets planted upside down will never make good roots.

Some persons always insist on planting the crowns of horse-radish instead of sets; but I would not advise any one to do this, as it not only destroys the most valuable part of the roots, but the crowns produce only a mass of rootlets that are only fit for use as sets for another season's planting.

Horse-radish should be dug out in the Fall, and on no account should it be left over for another season. If this is done, the main root will become partially rotten, and assume such a woody texture as to render it entirely unfit for use.

The best varieties of lettuce for summer use are the Yellow Butter and the White Summer Cabbage. In a deep, well enriched soil they stand the heat well and remain for a long time in a condition fit for use. These varieties form large heads, and on this account are objectionable to some persons. Where a variety with smaller heads is desired, I do not know of any better than All the Year Round. This may be described as a very compact-growing variety, with small, close, dark-green, crisp and tender heads which remain in a condition fit for use for a long time.

The Early Prize Head Lettuce is a most excellent variety for spring and early summer use. The heads are of large size and remarkably crisp and tender. It is one of the best for home use, but I suppose unsuitable for market purposes, as the heads are so tender that they cannot be handled.

The best varieties of musk-melons for amateurs to cultivate for home use are the Hackensack, Montreal Market, White Japan, Christiana, Sill's Hybrid, Bay View, Casaba and Surprise. Musk-melons do best when grown in a moderately enriched, light sandy loam, although very satisfactory results will be obtained by growing them on any soil that has been deeply cultivated for a previous crop, providing it has been properly prepared and the growing crop well cared for.

Queens, L. I. CHAS. E. PARNELL.

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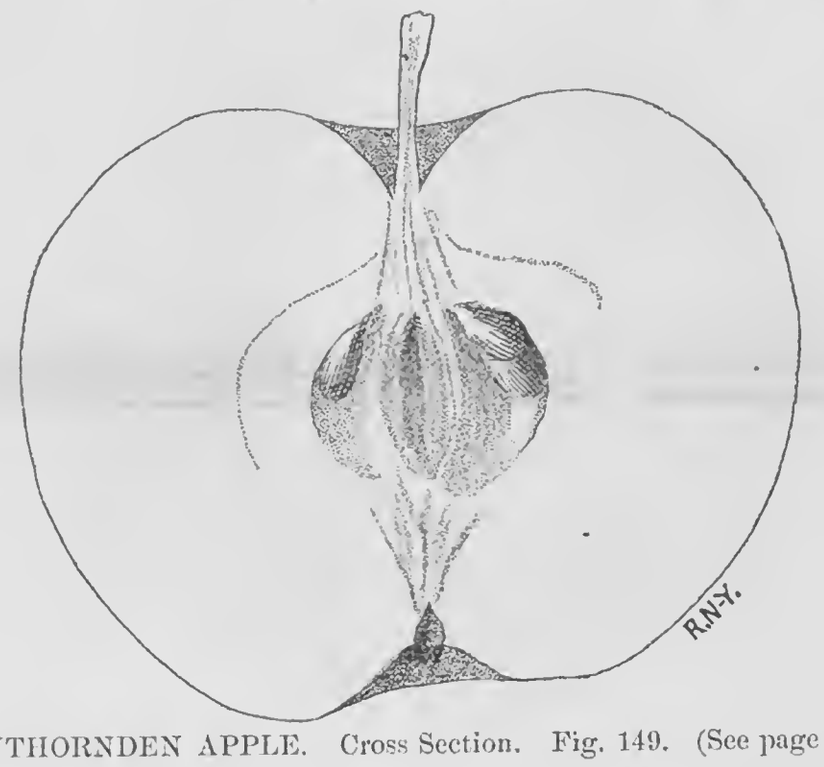


HAWTHORNDEN APPLE. Cross Section. Fig. 149. (See page 233.)

Field Crops.

A NEW NOTION.—A SUCCESS.

Sowing oats on snow in a wheat field; advantages of the practice; a success last year; spring wheat sown in the same way; the practice on wet land; sowing on top of manure.

COL. F. D. CURTIS.

To day, March 22d, seven bushels of oats have been sown on a part of a wheat lot. The snow was three inches deep. It fell the night before on top of the mud, and the frost is out of the field about six inches. My idea is that these oats will settle down into the ground, and as soon as the weather is warm enough, they will come on and grow up with the wheat. The wheat was not sown until October 17, and has all been killed down to the roots. I am afraid it will be thin, and the oats have been sown to make a good crop, and so save the use of the land without any further trouble. The grass seed will be sown on in a few days, and then I expect a good crop. The oats and wheat will ripen together, and make the best of feed for anything. The mixture can be fed to the horses whole, or it can be ground and make the very best kind of food for young pigs, or cattle or sheep. There is no theory about this plan except the extra-early sowing. Last year the same thing was done here, and it was a complete success. The oats were sown in April right in the mud, when there were big snow banks in the field. I have tried the experiment of an earlier sowing this year, to see how it will work. It is the right way to get oats in early, and to fill out the winter-killed spots in the wheat and rye fields, or to supplement the entire crop, if it is not promising enough. There never was a finer crop of oats on the farm than the wheat-oat crop sown last year in the mud when the frost was coming out of the ground. Where there was any wheat, it asserted its right and grew well, and where there was none, the oats took entire possession of the ground and stooled out wonderfully. The truth is, such conditions are best suited to oats; they want a mellow surface, and a firm under soil, lots of moisture and cool weather. When sown in the way I have described, they get the best part of the season for growth, and a gain perhaps of several weeks more than they would if time was taken to plow and fit the ground.

Spring wheat may be sown the same way, and it will grow and ripen with the winter wheat, and a crop be insured. It is quite a saving to get a crop in this way, so as not to lose the use of the extra surface manuring put on the wheat, and to get the grass seed put in as we desire, and not have to put it in with a later spring seeding. Sometimes the Timothy has been sown in the Autumn, and one dislikes to plow this up. I am certain that wet lands may be plowed and fitted for seeding in the Autumn and ditched out, and then left till Spring, and sown with oats or spring wheat, and that a better crop will be had and a much better seeding with grass seed than by putting the seed in when the ground would be in a fit condition. When I want to seed down a wet field, I shall most certainly fit it in the Autumn and sow the grain and grass seed on when the frost is coming out, and if there is a fall of snow, utilize that and so keep out of the mud.

The oats and wheat will grow when sown early, without covering with the soil, as the spring rains and the wetness from the frost coming out will keep the surface moist, and the grains will absorb enough of this moisture to cause them to germinate. First the root is sent out, and after this takes hold and strikes down into the ground, the blades will shoot forth. This new way of putting in grain might be carried to the extent of spreading manure in the Winter on the surface and sowing the seed in early Spring on top of it. The grain would be more apt to grow than when harrowed in with the manure, for in that case, it might not be able to penetrate through the manure; but, being on top of it, it would all be sure to grow and be nicely protected and enriched.

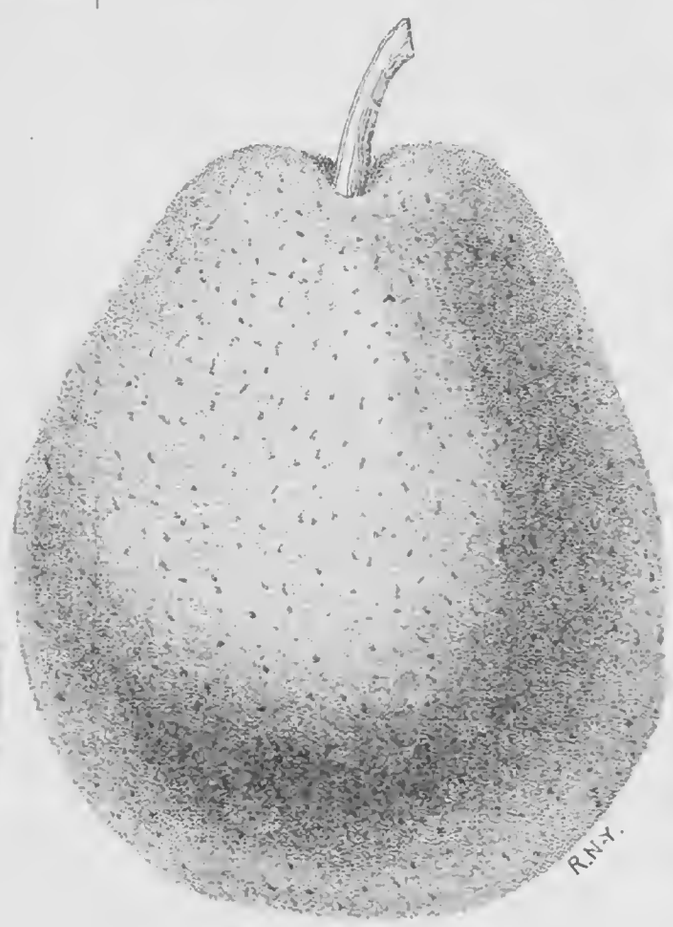
SPRING GRASS SEEDING.

I THINK it poor policy to sow grass seed at all in the Spring and particularly so with grain, because the chances are very much against it; for there is almost always a drought of longer or shorter duration in the fore part of the season, during which the grain, being stronger and growing faster, absorbs the moisture to such an extent that the grass, being small and tender, is nearly or quite destroyed. Even if it survives, it is never as clean and free from weeds and other foul stuff as it is when sown alone in the Fall. August would be a better time, or as soon as the oats or wheat or whatever else it may be, are taken off. Don't leave the job till September or October, but plow up the stubble immediately and sow the seed; then it will be there ready to start on the first rainfall that comes, which is very necessary in order to give it all the time possible to get a good root-hold and produce top enough to protect the tender roots from the frosts and snows of the succeeding Winter.

If the seed is sown alone in the Spring, it doesn't have time enough to mature a full crop, and to cut it before it matures is an injury from which it never fully recovers, and consequently there is a partial loss of the ground for the season; whereas, if one follows oats or any other grain, he gets a full crop of grain the current season, and a full crop of grass the succeeding one, so, all things considered, I think the extra work of plowing and seeding a stubble in the latter part of the season is fully paid for. CHARLES LEE.

Morris Co., N. Y.

RITSON PEAR. From Nature.
Fig. 146. (See page 233.)



FIGUE D'ALENCON PEAR. From Nature.
Fig. 150. (See page 233.)

THE ANGEL OF MIDNIGHT CORN.

I experimented last year with 18 varieties of corn. All claimed to be early. Last season was too wet and unfavorable for a rapid growth, and hence a very early maturity was not obtained with any; yet, as all received like treatment—four kernels to the hill, no manure, but thorough culture, cut when fully glazed—it would seem that the relative earliness of the different sorts ought to be maintained. By this test the Angel of Midnight is a late variety, being the sixth in order, and requiring in this latitude, 119 days to mature. My seed was obtained of the introducers, and was genuine. I also planted a peck of this corn on one acre in competition for a prize offered by the introducers. The ground was manured of course, and well cared for. Result:—Sound corn, 51 bushels; poor, 22 bushels; total, 73 bushels! I didn't get the prize. Three other parties, all reliable men, grew this corn to my knowledge, in this vicinity. The experience of two of them coincides with my own; while the third, upon high, warm ground, on a clover sod, obtained a fair crop of excellent corn.

The stalks, however, in no case, were small or short; but quite the reverse,—a characteristic undesirable, at least to corn-growers in this locality. By measure they averaged a little over eight feet in hight.

This statement of facts is designed to show what should be more fully recognized—that corn, unlike oats, cannot be grown outside of its own latitude without the "strangest behavior," commonly resulting in deterioration, the first year. L. W. P.

Cornwall, Vt.

ANOTHER COUNTERBLAST.

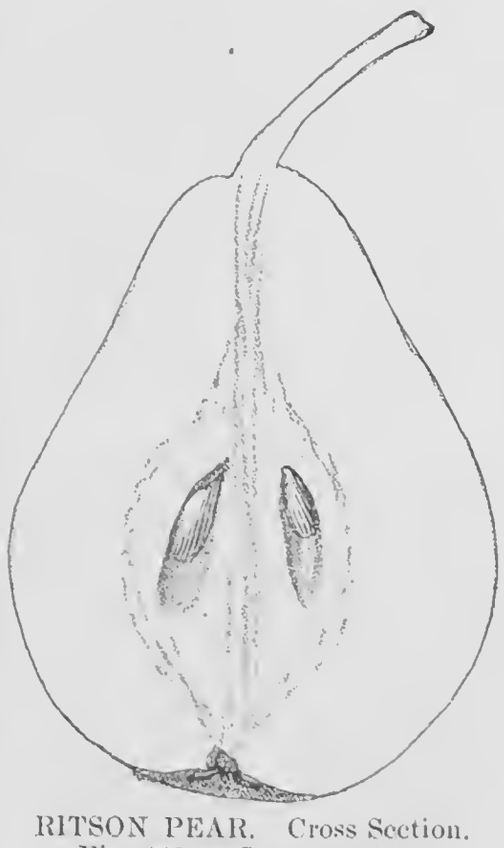
G. W. Davis, Litchfield County, Conn., speaking of some Angel of Midnight Corn obtained from the originators, Breck & Sons, and planted with Longfellow on the same sort of soil, and under similar conditions, says: "The Longfellow proved fully two weeks the earlier, and was cut up early in September, ripe and sound. The Angel of Midnight not being ripe, was topped and left till husking time; but it did not mature, a large proportion being unsound."

[The same kind of corn acts, as is well known, very differently in different soils and climates. But the A. of M. is strangely variable.—EDS.]

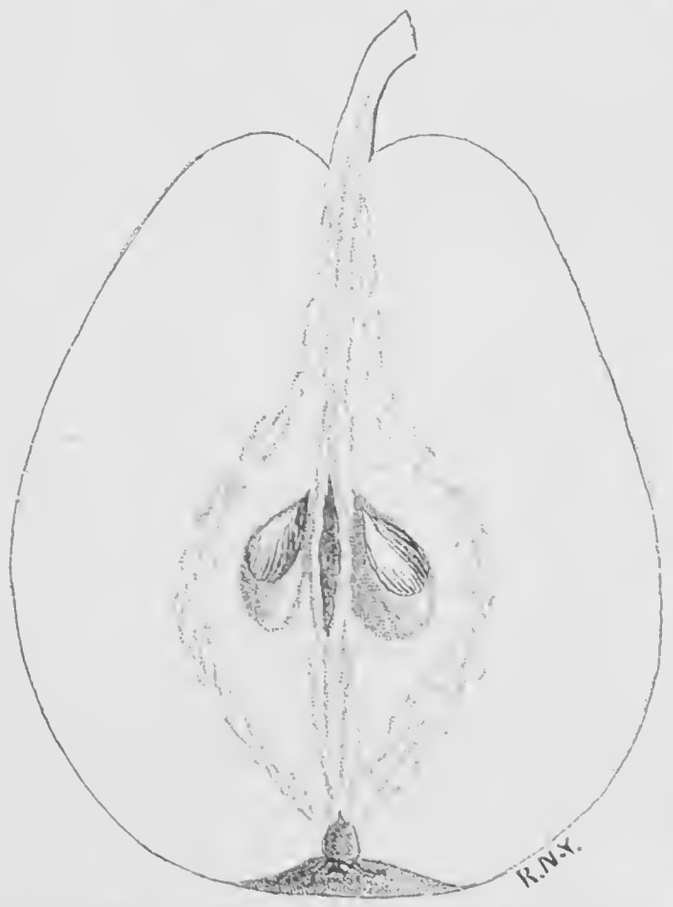
EXPERIENCE WITH ANGEL OF MIDNIGHT CORN.

LAST Spring I planted one quart of Angel of Midnight Corn. Part of it was not planted until the 15th of June. It all got ripe; but the late planted did not do as well as that planted earlier. Some ears were 14 inches. Nearly all the stalks had two large ears. I never planted a variety that cared better. I like it very much. I think the RURAL has made no mistake this time in placing this corn in its Free Seed Distribution. W. S. M.

Mt. Upton, N. Y.



RITSON PEAR. Cross Section.
Fig. 147. (See page 233.)



FIGUE D'ALENCON PEAR. Cross Section.
Fig. 151. (See page 233.)

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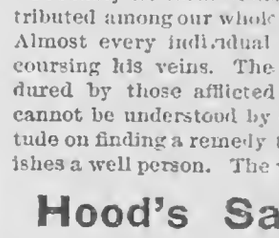

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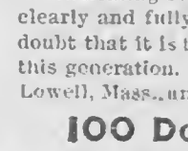

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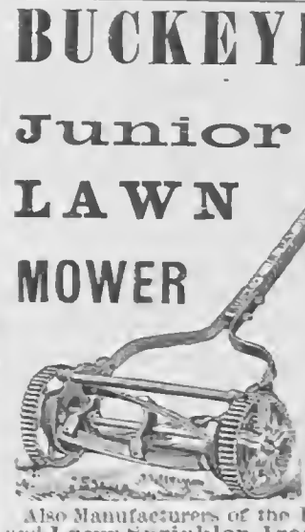

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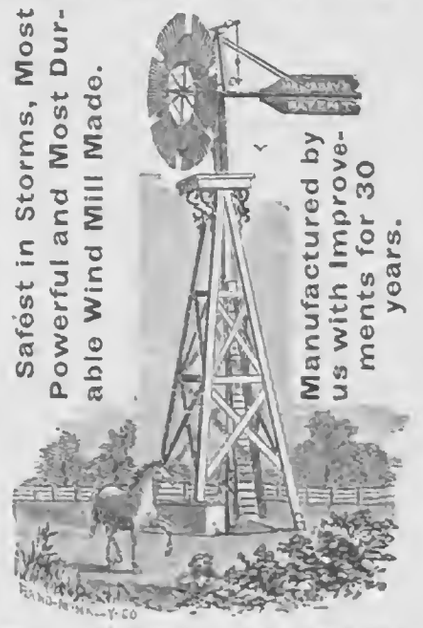

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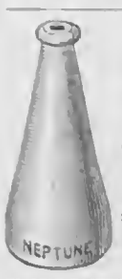

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RUSSELL & CO.'S ANNUAL for 1886. Sent free to all interested in Improved Threshing Machines, Horse Powers, Saw-Mills, and Engines for Farm and Plantation Use. Address RUSSELL & CO., Massillon, O. Name this paper.

What Others Say

THE AGRICULTURAL STATISTICS OF THE UNITED KINGDOM for 1885, which have recently been issued, show that in England, as compared with crops of 1884, there has been a decrease in wheat of 2,628,211 bushels, in peas, 1,336,558 bushels; in beans 210,783 bushels; in potatoes 544,099 tons; in turnips 6,522,497 tons, and in mangolds 87,809 tons. In Ireland on the other hand, there has been an increase of 197,016 bushels of wheat; 136,386 tons of potatoes; 43,859 tons of turnips and 60,253 tons of mangolds. There has been an increase of 5,338,519 bushels of barley in England, and one of 473,998 bushels in Ireland.

DEEP AND SHALLOW CULTIVATION OF COTTON. Experiments at the Alabama Experiment Station with deep and shallow cultivation for cotton, show the great superiority of the latter. The usual cultivation of the plant has been to run a plow by the side of the plants deep enough to cut off the lateral roots. A cultivation of one inch gave a gain of 109 pounds of seed cotton per acre over the old method. Prof. J. S. Newman estimates that this difference in cultivation, all through the Southern States, would make a difference of 1,308,000 bales, worth $58,860,000. It is strange that so little attention has been paid to improved varieties of cotton and improved methods of culture. The cotton crop is a necessity at the South. It cannot be entirely done away with. It will be wise to improve varieties and culture so that a smaller area could be made to produce the amount that is now taken from the entire farm.

THE RURAL'S LUNCH.

MANY readers of the RURAL NEW-YORKER are anxious to improve their seeds, and desire to test the novelties which are announced in current catalogues if they could be assured that their money would not be thrown away. The RURAL has already tested many of those announced this Spring, while those of any promise whatever have been sent for or are already sown under glass. With a view, therefore, of offering suggestions to our readers, and of answering many questions asked, we make the following notes.....

THE New Giant Pera Cucumber, offered by W. Atlee Burpee & Co., of Philadelphia, Pa., is certainly worthy of trial if it is not one of those long varieties that thrive only with the protection of frames. The advertisement represents it as growing to the length of 18 inches, while the flesh is said to be white-crisp, tender and with very few seeds.....

BURPEE'S Sweet corn is said to be two weeks earlier than Stowell's Evergreen, while the ears are fully as large, grains as deep and quality superior. "It is *sweeter* and *finer*, flavored than *any other* variety" are the words used.....

LAXTON'S Evolution Pea is said to bear from a single sowing as long as three months. The quality is said to be unsurpassed, while the vines which grow three feet high are immensely productive. We have received seeds of all the above from Burpee & Co., for trial, and shall report in due time.....

BURPEE'S Self-blanching Celery was tried at the Rural Grounds last year. It is a strong-growing variety, but the stems were coarse and stringy.....

STORRS, HARRISON & Co., of Painesville, present in one of their catalogues a list of new roses, such as W. F. Bennett, Sunset, Her Majesty, and a long list of newer chrysanthemums. Canna Ehemanni, Asparagus tenuissimus, the Zebra-striped Eulalia are plants that all will be pleased with. They also offer the Japan Chestnut, the Lucretia Dewberry and a full list of ornamental trees and shrubs.

PETER HENDERSON & Co., of New York, make specialties of Nichol's Medium Green Cucumber, unequaled as a pickle; the Palmetto Asparagus which, it is claimed, is superior in earliness, yield and quality; the new Summer Cabbage Lettuce and the new self-husking corn, claimed to be the earliest field corn in cultivation, and the Clydesdale Oats first offered last year. Our report may be referred to.....

THORBURN & Co. (New York), call special attention to the new Thorburn Potato; to the Bird Cantaloupe, Golden Perfection Melon, Mammoth Sandwich Island Salsify; to the Low's Champion Bush Bean, etc. Their catalogue presents the best list of hardy shrubs and tree seeds that we know of.....

JAMES VICK, of Rochester, N. Y., gives a prominent place to the new oat called American Banner. Sown on light, sandy soil, it yielded at the rate of 70 bushels per acre, outyielding the neighboring crops of Welcome, White Russian and Probsteier.....

D. M. FERRY & Co., Detroit, Mich., offer the highly prized spring wheat "Saskatchewan" and the Rhode Island Crease Back Bean which is said to give pickings of both snap and green shelled beans for from 30 to 40 days.

B. L. BRAGG & Co., of Springfield, Mass., are the first to offer for sale the remarkable "Top-over" Corn which has the smallest ear stalk of any variety known, while the kernels cover the tips and would cover the butts but for the pipe-stem stalk. We have raised this corn for two seasons.....

J. J. H. GREGORY, of Marblehead, Mass., speaks well of the Cory as a first-class sweet corn. Mr. G. says that the Longfellow Field Corn is the largest-kerneled variety of yellow field corn that he has ever found it safe to plant in the climate of Mass. On one measured acre his crop was last year 210⅝ bushels of ears. The Longfellow, as we know from experience 10 years ago, bears ears often 14 inches long. The cob is small.....

JOHN SAUL, of Washington, D. C., offers one of the best lists of pelargoniums we know of and for general bedding purposes or for house growth there is no plant to surpass them. Easy to grow, not troubled with insect pests, blooming freely, and easily propagated: all should have a selection of the best "geraniums." Mr. Saul's lists of bedding plants in general; of palms and tender plants are full. He offers the beautiful hybrid perpetual rose Marshall P. Wilder.....

JOS. BRECK & SONS, of Boston, Mass., are the originators of the Angel of Midnight Corn, which proved the earliest field corn last season ever tried at the Rural Grounds. Evidently, however, it has not so proved in some other places. Reports from the RURAL'S present seed distribution will settle it. This firm is also headquarters for the Pearl of Savoy Potato.....

BARTLETT & DOW, of Lowell, Mass., offer Spring Rye, Welcome and Triumph Oats. Their "Common-sense Milk Pail" is prized by those who are using it.....

PRICE & KNICKERBOCKER advertise the Rural Branching Sorghum, which we should be glad to have our newer readers try. If this is the true variety, and it is properly sown in good soil, it will not disappoint those who anticipate a fine yield of fodder. It will not seed in this climate, though it may be cut twice.....

HENRY DREER, of Philadelphia, gives prominence to his Early Golden Cluster Wax Pole Bean, which is said to be distinct in seed, color and habit. The pods are yellow, and about six inches long and retain their tenderness long after the beans have attained a large size.

THE Telephone and Stratagem Peas, tree seeds, tobacco seeds, bird seeds, poultry food, all sorts of insect destroyers are offered by Mr. Dreer.....

J. A. FOOT, of Terre Haute, Indiana, presents in his lists the Mammoth Long Rose Radish, the Prolific Tree Bean, the Rural New-Yorker Pea, several varieties of broom corn and sweet potatoes.....

ROBERT BUIST, of Philadelphia, makes a specialty of cabbage, and he thinks that his Improved Drumhead is the best in the market. We wish our readers would try the Drumhead Savoy and Early Dwarf Ulm Savoy. In quality there is no other variety to equal them.....

AARON LOW, of Essex, Mass., catalogues Waushakum, Longfellow, Chester Co. Mammoth and Blount's Corn; Low's Essex Hybrid Squash, the Golden Dawn Pepper; Low's Champion Bush Bean, which Mr. Low in all his experience as a market gardener finds unequaled, whether for the table, garden or market.....

HIRAM SIBLEY, of Rochester, N. Y., offers a well selected list of oats, millets, grass seeds; also Manshury Barley and Silver Hull Buckwheat.....

ROBERT J. HALLIDAY, of Baltimore, Md., presents many floral novelties, among which are new abutilons, carnations, chrysanthemums, coleus, crotons, begonias, dahlias, gladioli, clematis and roses.....

F. N. LANG, of Baraboo, Wis., praises the Badger Queen Oat in high terms as earlier and yielding better than the Welcome or Clydesdale. He kindly sends us a sample for trial.....

W. H. SMITH, of Philadelphia, Pa., thinks highly of the Chartier Long Scarlet Radish. It is crimson at top becoming nearly white at the bottom. It is tender and remains so some time after attaining its growth. He also offers the Leaming Corn, Smith's Half-dwarf Celery and Banana Muskmelon.....

CHAS. C. MCCOLGAN & Co., of Baltimore, Md., mentions as specialties the Upland Cress, the Pride of Georgia Watermelon, Horsford's Market Garden Pea, Red China Squash, Teosinte and Johnson Grass.....

JOHNSON & STOKES, of Philadelphia, claim to have the earliest cabbage—being 10 days ahead of any other kind. The Spanish Beauty Muskmelon is spoken of as the best of all the European varieties. King of the Mammoth Pumpkin, Bonanza Sweet Corn, the Rose Muskatel Tobacco are among the kinds to which particular attention is called.....

W. H. MAULE, Philadelphia, Pa., mentions the Mammoth Prize Long Red, Maule's Champion Yellow Globe and the Yellow Tankard Mangels as the best in cultivation.....

SAMUEL WILSON, Mechanicsville, Pa., mentions a new Australian millet. He thinks he has the true Leaming Corn. He thinks the new Brazilian Flour Corn will revolutionize the grain markets of the world. He says that when properly ground and bolted, it will make as good flour as that made from the best wheat. He claims that from four to seven ears grow to a stalk, averaging seven inches long. The cob is small, bearing white grains about half the size of ordinary field corn. For boiling, it is said to be equal to the best kinds of sugar corn. We shall try it.....

O. S. BLISS says, in the N. Y. Tribune, that winter laying is not an inbred characteristic of any breed or family of fowls. In the choice of a breed of fowls, he would not be governed in the least by any reputation claimed for them as winter layers. Winter eggs result from giving the fowls spring conditions—warmth, good air and plenty of food, without excess of fat.....

HE also says that the duck every little while is pushed to the fore. With proper accommodations, the duck certainly may be made to pay in flesh, feathers and eggs. But the duck is a water fowl and too much of a scavanger to do well in confinement or in large flocks. The eggs are rank and ill-flavored....

FOR an early flint corn, try the Longfellow.

ELLIS BROS., of Keene, N. H., present a list of the finest pelargoniums, carnations, fuchsias, roses, most of which are offered for 10 cents each in lots of $1.....

IF feeders would increase the palatability of their pork for the American taste, they must feed their pigs on something beside clear meal or corn. Milk, apples and roots from the farm, and wheat middlings from the markets, mixed with meal, will produce a better grade of pork, while at the same time the cost will be diminished. So says the N. E. Farmer.....

HARPER'S Magazine states that 1,000,000 female cattle have left Texas for the northern grazing grounds during the 10 years past, whose bones lie is disjointed, wolf-gnawed fragments on the arid, bunch-grass ranges, low-lying monuments of man's inhumanity to the dumb animals he has arrogantly assumed charge of.....

SLOVENLY and pernicious is what the Jersey Bulletin calls the habit of feeding cows bran, meal or cut feed in permanent mangers, with sharp angles to catch and retain the leavings until they sour, mildew, and in many cases become infested with maggots.....

MR. I. K. FELCH gives a formula for a chicken food, which he says will give a pound extra in 12 weeks, or a 20 per cent. gain in the egg basket. Twenty pounds of corn, 15 pounds of oats, 10 pounds of barley, 10 pounds of wheat bran, to be ground fine and well mixed.....

PROF. BROWN says that the experience of 30 years convinces him that of all animals on the farm the pig is the most free from dental irregularities; and the evidence of age, which a skilled inspector may obtain from a careful examination of the teeth, may be accepted as free from any suspicion of error.....

A WRITER in the Poultry Keeper keeps what he calls "home-made tincture of iron" in a bottle of water in which a handful of rusty nails has been placed. A little of this placed in the hens' drinking water adds greatly to their health, he thinks, but it may be doubted.....

FEEDING for manure will be one of the most important points in future agricultural science.

DR. HOSKINS insists that it is cheaper to buy hay than manure. The New England Homestead advises farmers to buy hay instead of phosphate.....

DR. W. J. BEAL of the Mich. Ag. College has tested for several years over 200 kinds of grasses and clovers, both native and foreign. He would sow, for lawn making, two bushels of seeds (in the chaff) of June or Blue Grass and two bushels of Red-top. This seems a large amount of seeds to sow. But the aim is to secure many fine stalks instead of a few coarse ones.

JAMES HUNTER, of England, in his manual on Grasses says: "Careful analysis of the

(*Continued on page 237.*)

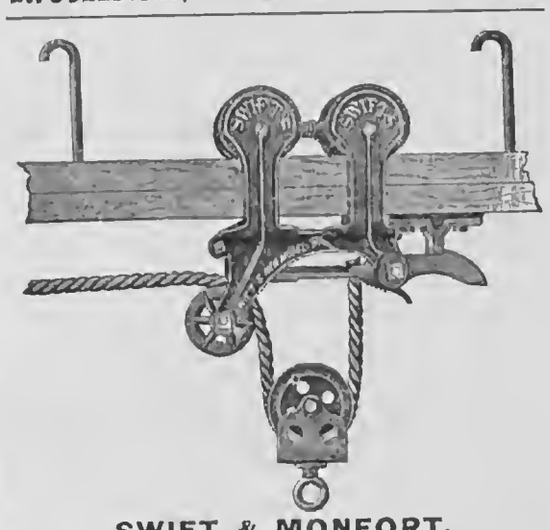
Miscellaneous Advertising.

Grain Threshers, unequaled in capacity for separating and cleaning.
Combined Grain and Clover Threshers, fully equal to regular grain machines on grain, and a genuine **Clover Huller** in addition.
Two Speed Traction & Plain Engines, 4 to 15 Horse Power, positively the most desirable for Lightness, Economy, Power and Safety. Boiler has horizontal tubes, and is therefore free from the objectionable features of vertical boilers.
Horse Powers, both Lever and Endless Chain. All sizes. Send for Catalogue. Address,

THE WESTINGHOUSE CO.,
Schenectady, N. Y.

THE WILLIAMS

Grain Threshers, Horse Powers, and Engines.
Highest prize awarded these machines at the New York State Ag. Soc.'s latest trial, over a large number competing. Ample warranty and opportunity for trial given. For full particulars address
ST. JOHNSVILLE AGR'L WORKS,
St. Johnsville, Montgomery Co., New York.



SWIFT & MONFORT,
MANUFACTURERS OF
SWIFT'S SINGLE AND REVERSIBLE
HAY CONVEYORS
Dealers in Forks, Ropes, Pulleys, and Agricultural Implements of all kinds. Send for circulars.
MILLBROOK, N. Y.

DEERE
Seed Drill and Fertilizer Distributor.
NEW AND VALUABLE.

A SUCCESSFUL FERTILIZER DISTRIBUTOR.
Fills a long-felt want. Drops Corn, Beans, Peas, and all similar seeds, and distributes all kinds of Fertilizer in quantities to suit.
Send for descriptive circular to J. B. BARE, General Agent, 60 South Gay Street, Baltimore, Md.; or
DEERE & MANSUR CO., MANUFACTURERS,
Mention this paper. MOLINE, ILL.

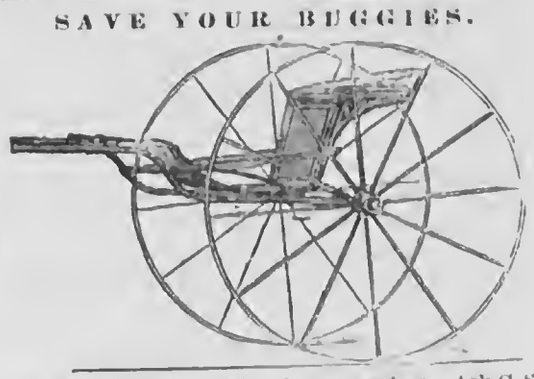
FARQUHAR KEYSTONE CORN PLANTER
Warranted the best corn dropper and most perfect force-feed fertilizer distributor in the world.

SEND FOR CATALOGUE. Address A. B. FARQUHAR, York, Pa.
SEND FOR LARGE ILLUSTRATED CATALOGUE.

"THE BOSS"
ROAD MACHINE.

SEND FOR CATALOGUE. AGENTS WANTED.
FLEMING MANUFACTURING CO.,
Mention this paper.] Fort Wayne, Ind.

SAVE YOUR BUGGIES.



Educate the colts, and enjoy yourselves. Ask C. S. BEEBE, Racine, Wis., about different styles of carts; he makes them.

RUSTLESS IRON WATER PIPE.
WM. T. WELLS,
7 to 9 Cliff St. New York
Send for Catalogue and Prices.

(*Continued from page 236.*)

mixed lawn grass seeds sold at high prices show they consist of from 40 to 50 per cent. of Rye Grass. Not a single seed should be included in any mixture for producing a lawn."

DR. BEAL strongly advises, as does the R. N.-Y., against purchasing the mixtures advertised in seed catalogues, as it will be both cheaper and safer to buy each sort separately, and only one, two or three sorts are desirable.

Sow the seeds before May without any "sprinkling" of oats, and as soon as the grasses get up a little and the straggling weeds get up higher still, mow them and keep mowing every week or two all Summer... .....

THE rarer grasses are mostly imported and generally possess low vitality, besides containing bad foreign weeds.

KEEP the heads of peach trees low—the trunks ought not to exceed three feet in hight. Cut back weak shoots and shorten the strong ones. Sickly shoots should be cut clean off...

E. & B. consider it of the first importance in planting peach trees to cut them back severely. Reduce the stem one-third and the side branches to one bud.....

Everywhere.

RURAL SPECIAL REPORTS.

Canada.

ST. CATHERINES, Ontario, March 29.—The RURAL seeds did exceedingly well. The corn is the best I have ever grown or seen. Flageolet Beans did well. The two kind of Peas were very good and productive. Tomatoes good to very good. The flower seeds did not do quite so well. Success to the RURAL, I think it is the best paper of its class published in America. I consider the Free Seed Distribution worth the price of the paper. W. S.

Delaware.

DOVER, Kent Co., March 23.—Some little plowing done; some oats sown. Peach buds are making some show for blossoms where two weeks ago it was thought all were killed, and we hope for a few after all. In some sections it is claimed that there will be a fair crop. Oats, 40 cents; clover seed, 13½ cents to 14 cents per pound; Timothy, $2.75 per bushel; potatoes, 40 cents to 50 cents; sweet potatoes, 50 cents to 60 cents; butter, 20 cents to 25 cents; eggs, 12 cents; chickens, 10 cents; pork, $5 to $6 per 100; lard, nine cents; fresh beef retails at eight to sixteen cents per pound. S. T.

Iowa.

BLOOMFIELD, Davis Co., March 26.—Almost all the RURAL'S seed proved a success. They were worth the price of the RURAL. The White Elephant is the finest potato I have ever ate—so say all who have eaten them. Rural Heavy Dent Corn too late for this climate. R. N.-Y. Peas fine and very early. We have already made most of our gardens, having planted onions, lettuce, radishes, peas and early potatoes. The RURAL is the best and most trustworthy agricultural paper it has been my lot to examine. Cannot do without it. W. T. G.

Kansas.

JEWELL CITY, Jewell Co., March 14.—The past Winter was the most severe of the last five; still stock is in fair condition. It is estimated that this county alone lost $50,000 worth of hogs within the past six months from various diseases grouped together under the name of "hog cholera," and $10,000 worth more in January through lack of proper shelter from the blizzards. Fall wheat has been badly killed in the eastern part of the State—according to the papers—still it is in fine condition now hereabouts; but the ground is very wet and it is hardly likely to be able to withstand the freezings and thawings yet ahead of it. On thousands of acres, last year's crop is still on the ground where it grew, and is consequently badly damaged. The Rural cross-bred corn was a failure through neglect. Beans fine; rye nothing extra. In spite of the chinch bugs' depredations I got a quart of D. M. Wheat, and am confident it will do well. From the R. F. S. D. I now have three varieties of wheat, three of potatoes, one of tomato, two of beans, one of peas, one of watermelon, and a fine lot of flowers. The immigration to this section is becoming immense. I. N. P.

Minnesota.

VIVIAN, Waseca Co., March 15.—Spring cold; Summer and Fall dry. Tomato seeds did not all come up. King Humberts bore well, but in flavor are not desirable. Prince of Wales Peas did well, and are of fair quality, not quite so sweet as Horsford's Market Garden. Stratagem the largest and best dwarf pea I ever grew. Garden Treasures fine. Wheat averaged about 12 bushels per acre; oats about 30; corn about 20. Tops of early potatoes died of what was called "mildew" before the advent of the potato rot, and consequently the crop was light. I could not do without the RURAL. S. K. O.

Montana.

FRIDLEY, Gallatin Co., March 18.—I came from Chenango County, N. Y., three years ago, and found upon living here that the country had been grossly misrepresented. I had supposed it was almost out of the world and that the climate was somewhat like that of Greenland; but I have found it very different. The real truth has been misstated by parties here who own large herds of cattle and horses; for if they had told the truth their profits would have been cut down, as people wishing to go into cattle raising would have come here instead of going to Texas, Colorado, Kansas, etc. The Winters are never over six weeks' duration. I speak of the valley and vicinity of the Yellowstone—Madison, Gallatin and Jefferson Counties. We have the finest of grasses, pure water and shelter for stock, and since I have been here the losses have been a mere nothing. I have for the past Winter not heard of the loss of even one animal from exposure, in the whole circle of my acquaintance, and in my vicinity are over 8,000 head. The cattle owners don't want settlers to come in, as every man that locates 160 or more acres they look upon as robbing them of so much pasture. For grain raising this section can't be beat; for instance, the wheat crop of Gallatin Co., for 1885, averaged over 40 bushels to the acre, and oats and barley were splendid crops. Vegetables of all kinds were a success last year and the year before, for in both years there was no frost from May till into September. People here have not tried fruit culture to any extent. Wild cherries, currants, strawberries and gooseberries are abundant, and I see no reason why cultivated kinds won't do well. Fruit ripened last year on a Catawba grapevine in a garden here. Some of the old resi-

(*Continued on page 238.*)

Stock and Poultry.

EGGS from W. Leghorns, P. Rocks, or Black-Red Games, $1 50 for 13. *Eggs from Choice fowls only.* Mention this paper. **C. E. RICK,** FAIRVIEW, PA.

WYANDOTTE EGGS, $3 per 13; $5 per 26. P. Rock Eggs, $2 per 13; $3.50 per 26. Nicely packed in baskets. From birds scoring 90 to 91 points. Order early. Address
E. B. Thompson,
Amenia, N. Y.

N. T. LATTIN,
Originator and Breeder of
BLACK AND MOTTLED JAVA FOWLS,
GAINES, ORLEANS CO., N. Y.
Fowls, $5.00 each. Eggs, $3.00 per 15; $5.00 per 30.

KISCO MOUNTAIN Strain of fine Wyandottes Send for descriptive Catalogue and price list before purchasing either eggs or fowls. Address
KISCO MOUNTAIN POULTRY YARDS!
Mount Kisco, New York.

Extra Wyandotte Eggs.
Fresh laid from first class birds. Packed in nice baskets at $2 for 13; 39 for $5.
VERY LIMITED NUMBER OF
IRISH SETTER DOGS.
All yard broke, fine blood. Price given on application.
E. T. BAILY, MOUNT KISCO, NEW YORK.

F. W. GAYLOR, Nassau, N. Y.
GAME BANTAMS
OF THE MOST FASHIONABLE STRAINS.

Ducks, Pekins, Rouens. $1.50 for 11 Eggs. **Wyandottes,** $2.00 for 13 Eggs. **P. Rocks** and **White Leghorns,** $1.50. We have a very large stock raised artificial for practical use, the best Brooder known for $8.00. **C. J. QUINBY,**
White Plains, N. Y.

TOULOUSE GEESE per trio, $10. Eggs $2 for 6 or $3 per dozen. R. C. White Leghorn and S. C. Brown Leghorn chickens, $1 each; eggs, $1.50 for 15. For sale by **THEO. DAHM,**
Box 141, Great Bend, Kansas.

High Class Plymouth Rocks and Wyandottes.
All high scoring birds. None better, and full satisfaction guaranteed. Eggs for setting of 13, carefully packed in baskets. Plymouth Rocks, $1; Wyandottes, $2.
W. L. LUNDY, METUCHEN, NEW JERSEY.

Games: Wyandottes: Houdans.
Exhib. Games, Andalusians, Jap. Bants., Malays, B. S. Polish: Eggs, $3; Brahmas, Cochins, Pit Games, etc.: 13 Eggs, $2. **Embden Gunders for sale. Pekin Duck Eggs, $2.**
Fifty First and Special Prizes last Winter.
THOMAS W. LUDLOW, Yonkers, N. Y.

EGGS! SEEDS!
EGGS! SEEDS!
For each $1 worth of Plymouth Rock eggs I sell this year, I give 25 cts. worth of Garden seeds. Eggs, $1 per 15. Over 9,000 shipped for setting in four years. Send for circular. **R. G. CRIST, New Market, Ind.**

Purdue's Light Brahmas.
My Birds won FIRST PRIZE on Chicks and SPECIAL on Cockerel, at New York, 1886, also four FIRST PRIZES at Philadelphia, the past season.
Eggs per setting, $5.
A few choice Cockerels and Pullets for sale.
GEO. PURDUE, *East Orange, N. J.*

Excelsior, P. Rock, L. Brahmas, & Wyandottes.
A SPECIALTY OF FOWLS FOR FARMERS.
We exhibited a pen of Five Plymouth Rocks, averaging ten pounds each, at N. Y. Fanciers' Club Show, where we won First Prize on P. Rock Breeding Pen. Birds for sale at all times. Eggs, $5 for 13.
SCUDDER & TOWNSEND,
Glen Head, N. Y.

POULTRY-CHOLERA AND GAPES
CURED EVERY TIME BY USING
HAVENS' CLIMAX CONDITION POWDER.
Five Years in Use and No Failures.
"It never fails to cure Poultry-Cholera and Gapes."—AUG. GUNTHER, Harlingen, N. J.
"I know it will cure Gapes. I never lost a single chick after I began to use it."—J. WESLEY STILLWELL, Freehold, N. J.
"I cannot raise turkeys profitably without it."—LISCOMB B. REED, Princeton Junction, N. J.
"These men are reliable."—W. S. STRONG, Mayor, New Brunswick, N. J. [City Seal.]
14 ounce packages, 25c. of Dealers; by Mail, 40c. "Our Successful Farmers," a pamphlet, free by mail.
Wm. Rust & Sons, P. O. Box 1201. New Brunswick, N. J.
Agents wanted. Ask your dealer, and show him this advertisement.

NEW POULTRY BOOK!

16 YEARS' EXPERIENCE In Artificial Poultry-Raising. This book will be found **worth many times its cost** to every one who keeps a flock of hens. Old poultry raisers pronounce it the **most remarkable contribution to poultry literature** ever issued. The author, Mr. James Rankin, is undoubtedly the best **practical authority** on the subject. For the **past 30 years** he has been engaged in **growing thousands of chicks and ducks** yearly. In this book he gives his **actual experience,** but advises nothing but **sound theory, confirmed by actual experiment.**
A FEW OF ITS VALUABLE FEATURES: Early Experience With Incubators. The Location, Management and care of Incubators. How to distinguish between fertile and infertile eggs, with **illustrations never before made** showing the **development of the chicks** and the **appearance of the egg** at different states of development. The chapters on these subjects are **each worth the cost** of the whole. **How to Make and Use Brooders is Fully Treated.**
DISEASES OF POULTRY. Particular attention is given to **describing these diseases,** so that the novice can **prevent them.**
RAISING EARLY DUCKS FOR MARKET is a chapter that will excite **intense interest.** This **exceedingly profitable** branch of Poultry raising is but **little known.** The **ducks are easier to raise than chicks,** not one per cent of fertile eggs failing to hatch, and the ducklings being very hardy. The cost of raising is only **26 cents per head,** leaving a **net profit of 75 cts. to $1.75** PROFIT OF $1 APIECE and **tells how he does it. How to make an Incubator** for $25 apiece. Mr. Rankin makes an average and brooders for $5 that will do the work of $100 machines is told for the first time by the man who has done it successfully for several years. **All fully Illustrated.**
WHAT THE POULTRY MEN SAY: It is the **most useful** of any work I have ever seen on the poultry business.—Geo. S. Hosie, Franklin, Mass.
It is the **best thing out** and if its suggestions are faithfully and practically carried out, will **not fail to insure success.**—D. J. Hathburn, Rockville, Ct.
It is the **most practical common sense** Poultry Book I have ever seen and should be in the hands of every poultry man or farmers whether they intend to use an incubator or not. The chapter on Testing the Eggs and Development of the chicks are **worth many times the cost** of the book.—F. A. Hanaford, Chicopee, Mass.
Price Postpaid, Only 25 Cents. Postage Stamps Taken. 5 Copies $1.
Mention this Paper. **THE PHELPS PUBLISHING CO., Publishers, Springfield, Mass.**

MILL BROOK
POULTRY YARDS
AND
KENNELS!
40 breeding pens of selected Wyandottes, Langshans, W. and **Br. Leghorns,** P. Rocks, Lt. Brahmas, R. C. W Leghorns, B. B. R. Games, Pekin Ducks. Eggs, $3 for 13, $5 for 26, $7 for 39. Duck eggs, $2 for 11, $3 for 22. Nine hens and one male to each pen. *I guarantee a good hatch. Try me.*
Champion St. Bernard Dogs, Champion Scotch Collie Dogs. Young stock for sale at reasonable prices. Champion smooth [illegible] erone," in the stud. Send for Catalogue.
WM. MONTGOMERY, Jr., Bergenfield, Bergen County, N. J.

PETER BEUERLEIN.
ENTERPRIZE POULTRY FARM,
Newtown, Long Island, New York.
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PRINCE GARIBALDI, from Italy.
Judges and breeders at above Show pronounce him the richest plumed bird on exhibition. Eggs from this strain, $3 for 13; $5 for 26. Also Breeder of B. C., B. and W. Leghorns, Wyandottes, Plymouth Rocks, Light Brahmas, and Pekin Ducks: Eggs, $2 per setting. Send for ill. circular. Eggs nicely packed and shipped.

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Eggs, $1 per 13; $7 per 26; $9 per 39. Packed in baskets to carry any distance. Send for circular—free to all. Address, with stamp,
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PLYMOUTH ROCKS.
Five first-class Breeding Pens. Eggs, $3 for 13; $5 for 26.
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Eggs, $2 for 12. Nicely shipped in baskets.
Send for circular. **EUGENE HILL,**
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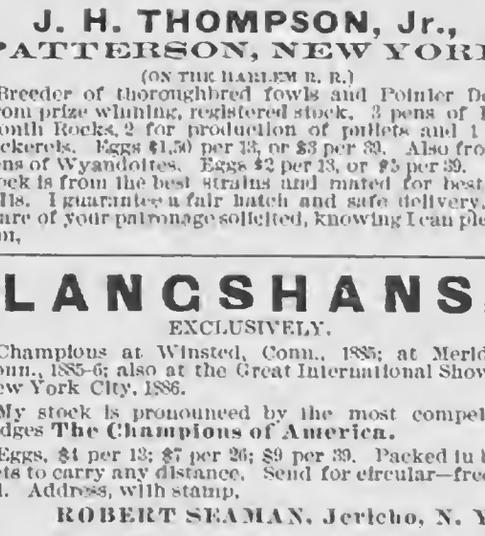
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A mixture of Pure Bone and Ground Oyster Shells. All poultry need it. 25 Pounds, $1.00; 50 Pounds, $1,50, by freight. Samples, .05c. mail.
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Partridge Cochins, Plymouth Rocks, Wyandottes, and S. S. Hamburgs. Per Setting, $3; Two Settings, $5.
Light Brahmas, Langshans, Brown Leghorns, and Pekin Ducks. Per Setting, $2.
Orders for Stock and Eggs may be sent to 38 Dey St., New York City, or direct to yards.
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WITH BROODERS AND INCLOSED RUNS.
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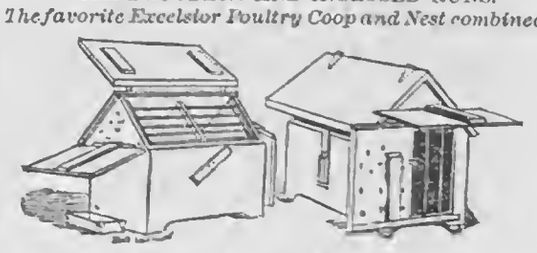
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Gold and Bronze Medals were awarded at the Great Show of New York Fanciers' Club, February, 1886.
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If you have not any such coops or brooders, send a two-cent stamp for one of the illustrated Descriptive Catalogues, with terms and Price List.
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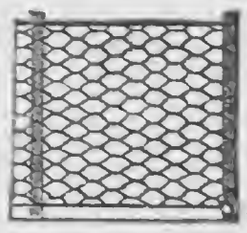
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Brockner & Evans,
(Formerly 422 West St.) 28 Vesey Street, N. Y.

(*Continued from page 237.*)

dents here have tried setting out apple trees, but with no success, as in the first place they were swindled by the fruit agent. I set out apple, pear and other trees on one of my places, and my daughter sent me five barrels of apples from those trees in the Fall. When I was bargaining with the fruit agent I told him I wanted trees that would bear while I was on earth, and got large trees. I never lose any trees, as I set them out right by giving them plenty of room for roots, and putting the ground in good shape. I don't think there is a more healthful country than this; the air and water are pure and there is plenty of both. Most of the time the wind blows from the south. The Yellowstone National Park is only 35 miles above here. B. P. V.

Nebraska.

ZEVEN, Sherman Co., March 25.—All the RURAL seeds did well except the Johnson Grass. Wheat, 57 cents; corn, 18 cents; potatoes, 35 cents; hogs, $3.40. Yield of corn equal to last year's, but quality poorer. Raspberry plants perfectly hardy. No seeding done yet. "X."

New York.

SHARON CENTER, Schoharie Co., March 26. Produce is very low. Hay, $13; oats, 35 cents; butter, new, 25 cents; eggs, 12 cents; cows, $35; clover seed, $6.50 to $7; potatoes, 50 cents. Hired help by the month and board from $12 to $20 as to quality. Stock has wintered well, and there is fodder enough to last till grass. S. L.

Virginia.

CHERLEMONT, Bedford Co., March 27.—After the most severe Winter for 29 years, we are enjoying a nice spell of weather. Wheat came through all right, being covered with snow during the hardest freezes. Farmers have nearly finished sowing oats, clover and grass seeds; a good deal of tobacco and corn land broken. Prices: wheat $1.00; corn 55 to 60 cents; oats, winter, 60 cents; spring, 40 to 45 cents; Timothy 95 cents; meadow hay 35 cents per 100 pounds; potatoes 60 to 75 cents; butter 15 cents, and eggs 8 cents per dozen. E. S. M.

LOVINGSTON, Nelson Co., March 23.—Wheat is looking well, and there is a larger area seeded than usual. Oats about all seeded, but area smaller than last year's. Plant beds for tobacco all sown. Stock of all kinds in better condition than for years at this season. Hogs very scarce on account of disease last year. Everything in our line cheap. Wheat, $1.00; corn, 50 cents; oats, 40 cents; eggs, 12 cents; butter, 20 cents for prime; beef, 8 cents; pork, 6 cents. Success to the RURAL! J. R.

THE FARMER'S CLUB

ANSWERS TO CORRESPONDENTS.

[Every query must be accompanied by the name and address of the writer to insure attention. Before asking a question, please see if it is not answered in our advertising columns. Ask only a few questions at one time. Put questions on a separate piece of paper.]

FERTILIZER QUERIES.

E. C. W., Thetford.—1. I have a lot of raw bones which I wish to use on a plot of ground for strawberries next Spring. I also have a No. 3 Wilson Bros. Bone Mill with which I will grind the bones, but it does not reduce them as fine as I desire, or as would make them immediately available as plant food; can I not mix them, after grinding, with wood ashes in deep boxes, and by keeping them damp fit them in time for early use? 2. Would it not be a good plan to burn a part of the bones and then grind them, as by this means I can get them much finer. 3. On five-eighths acre of corn ground that was rich enough to bear a good crop last year, I propose to put 30 one-horse loads of excellent stable manure; what shall I add in fine bone and wood ashes to produce the best results? 4. I can buy whole bones at $10 per ton; the grinding will cost $6 to $8 more; is not the product worth half as much as the fine bone which I buy costing from $40 to $45? 5. If the bone is used as proposed in No. 1, would it pay to use nitrate of soda?

ANS.—1. You can do no better, using about twice as much ashes as bone, and being careful not to use so much water as to leach the potash from them. 2. No. If the bones were ground and mixed with the ashes, they would soon be thoroughly decomposed and in the best condition for use. 3. It is a matter of trial, and no one could advise you correctly without experimenting. Try different quantities of the reduced bone and ashes, as described—from 400 to 1000 pounds per acre. Mark the plots and watch the results. 4. A ton of the bones bought at home, when reduced by grinding and the use of ashes, will be worth more than any ton of fine bones you could buy; besides, it will have the advantage of the ashes. 5. This also is a matter of trial. The bones would contain much nitrogen, and if used in connection with the stable manure, that would add much more, and still a moderate application of nitrate of soda in the Spring of the second or bearing year, say just after the main crop has blossomed, may add much to the yield. Try in a small way, using 200 pounds per acre.

SMALL FRUIT ANSWERS.

"Fruit Grower," Western, N. Y.—1. As to the direction of the rows of small fruits, those for grapes should run north and south; it makes no difference for berries. 2. The most convenient length of rows for picking is about 300 feet. 3. Having "enough plants for an acre of Wilson Strawberries," on a sandy loam soil, three other kinds would be enough for another acre—Crescent, Woodruff and Sharpless. 4. Tyler for early; Ohio for medium, and Gregg for late black raspberries are quite enough varieties, unless you wish to test a few new kinds. 5. Having enough Cuthbert and Shaffer to set an acre of each, Marlboro alone would be good on two acres more. No; it would not be advisable to set more Cuthbert; Marlboro is usually more profitable in your soil and location. 6. "A good yield of red raspberries, per acre," would be 50 bushels. 7. For planting on "a sandy loam, strong enough to raise a fair crop of corn," besides the Kittatinny Blackberry, of which you have enough, we would suggest that Taylor's Prolific is hardy, of good size and fine quality. 8. Victoria, Cherry and a few Fay's Currants would be advisable. 9. Downing and a few Industry Gooseberries. 10. Rows of black raspberries should be seven feet apart, and the plants two or three feet in the row. 11. Rows of red raspberries should be four feet apart; hills four feet apart each way. 12. Of blackberries the rows should be eight feet apart; plants three feet apart in the rows. 13. Of strawberries the rows should be three-and-a-half feet apart; plants one foot apart in the rows. 14. Currants should be set four to five feet apart both ways.

FERTILIZER QUERIES.

"Comanche," Comanche, Tex.—1. Although this section has a very rich soil, yet we need fertilizers. Barn-yard manure, unless thoroughly composted, does more harm than good in a dry season. What commercial fertilizers can be safely and economically applied? 2. In a soil naturally rich, is Peruvian guano enough for garden crops? 3. What is the best fertilizer for the first crop of cabbage?

ANS.—1. If the barn-yard manure is plowed in sufficiently early so that it may get thoroughly wet after plowing, it will hold the moisture nearly all Summer, and we can not see how it could do harm. 2. Bone dust, made very fine, would not have any caustic properties whatever. 3. Peruvian guano gives good results; but we doubt its being as cheap as some of the complete fertilizers. We should use barn-yard manure composted with the bone dust, and also apply wood ashes if we could get them, bone dust and potash in some form, either wood ashes, kainit or muriate of potash, with a heavy dressing of rotted barn-yard manure plowed in. Special fertilizers for cabbage are offered by the chief manufacturers of fertilizers.

HORSE IN "POOR CONDITION."

L. B., Bellville, Ohio.—It seems impossible to put flesh on a six-year-old horse. He has not eaten his hay or grain well all Winter. The hair has disappeared from the places touched by the harness, and elsewhere it looks dead. There are small pimples on his right side. What should be done for him? Drawing his wolf teeth did him no good.

ANSWERED BY F. L. KILBORNE, B. V. S.

That the horse is badly out of condition is very evident; but I cannot tell by the description what is the cause of this condition. I suspect, however, that the animal lacks both proper food and care. Feed more liberally. If the animal does not do well on whole grain, try ground feed. Mix equal parts, by measure, of corn meal and wheat bran, two parts of ground oats and one eighth part of oil-meal. Feed four to six quarts three times daily. Give the animal good, thorough grooming daily, not for five minutes, but for, at least, half of an hour. This will greatly improve the appearance of his coat and the condition of the skin. As a tonic, one-half ounce each of powdered gentian, ginger and sodium bicarbonate, and two drams of niter twice daily may be beneficial. We suggest that the next time you are "out-of-sorts" you employ a dentist to draw your wisdom teeth. You can expect to derive the same benefit from the operation that the horse did by having his harmless wolf teeth drawn.

FOREIGN GRAPES FOR A COLD HOUSE.

J. B. S., New London, Ohio.—What foreign grapes can be successfully grown under glass without artificial heat with good care?

ANS. In asking questions of this kind, it should always be stated whether the grapes are to be grown for market or for family use; and it would be well, too, to state the size of the house. The following kinds may be "grown under glass, without artificial heat, with good care:" Black Hamburgh, Muscat Hamburgh, Black Frontignan, Trentham Black, Welcome, Grizzly Frontignan, Royal Muscadine, (Chasselas de Foutainbleau,) White Frontignan. These are all excellent grapes for a cold house. If grown for market, take the Black Hamburgh alone. It would be unwise to attempt the Bowood Muscat or the Muscat of Alexandria in a cold house, except under very favorable conditions of exposure.

IMPERVIOUS TEAT ON A COW.

G. N. Y., Woodbine, Ia.—A cow's teat froze the past Winter; the end has healed over, leaving no aperture. How shall I treat her when she calves so as not to lose the teat?

ANS.—Make a small opening in the end of the teat, which shall communicate with the natural duct. Insert a small goose quill in the opening thus made, tie it in, and allow it to remain until the teat is healed. The quill should be first dipped in vaseline or a mixture of equal parts of spermaceti and almond oil, and the teat daily dressed with the same. It would be well to open the teat now and allow it to heal before calving. While healing in the first place something should have been placed in the opening to prevent its closing, thus avoiding the necessity of a subsequent operation.

ANASARCOUS SWELLINGS ON COLT.

V. M. L., Mill Village, Pa.—About six weeks ago an enlargement appeared back of each fore-leg of my yearling colt, extending the entire length of the belly, the two "ridges" meeting between the hind-legs, forming a large bunch. The urine is of a nasty yellow color, and the hair rough and unhealthy-looking. Appetite good and he is quite thirsty. Stupid when turned out. Feed and exercise plentiful. What's the matter?

ANS.—The swellings are anasarcous or dropsical. Give, three times daily, one dram chlorate of potash, two drams of niter, and three drams of sweet spirits of niter. After the swellings have gone down, give, twice daily, one dram each of powdered cinchona bark and niter and two drams of powdered gentian root. See Arasarca, in the Farmers' Club of Oct. 24, 1885.

Miscellaneous.

W. W. R., Lucas Co., Ohio.—For eight pear trees for family use in your climate, we would choose Angouleme, Anjou, Bartlett, Howell, Lawrence, Louise Bonne de Jersey; Seckel, Sheldon, Tyson, Winter Nelis. Winter Nelis might take the place of either Lawrence or Louise Bonne.

J. M. W., Calhoun Co., Mich.—No import duty can be levied in any part of Montana on wheat brought from any part of Dakota. To charge duty on any commodity taken from any State in the Union to any other is against the Constitution of the United States. Import duties are chargeable only on goods imported into the United States from some other country; and the same rates of duty on similar articles are charged on goods from all countries.

C. W. A., Falcon, Mich.—1. Do watermelons, musk-melons, cucumbers, squash, citrons, pumpkins, strawberries, etc., of different kinds mix when planted close together? 2. Do any of the above mix with one another when planted together; if so, which should be kept apart, and at what distance? 3. How can pear trees that grow upright be made to spread out?

ANS.—1 and 2. Yes; that is, the seeds will be mixed probably, or are liable to mix. Different varieties should be planted a considerable distance apart. It is very doubtful if the fruits of the current season are changed. The mixture will show itself only in the seedling progeny. 3. Cut back the tops of the branches. That is all you can do.

R. L., Newark, Ohio.—1. Bohemian Oats are "hulless" and in quality and yield about the same as the average run of oats. They are worth about the same price per bushel—perhaps a trifle more for those who fancy hulless grain. 2. No, they are not injurious for any sort of farm stock; and all will eat the grain and straw as well as those of any other varieties of oats. There is no sense in disparaging the grain because it has been one of the means by which swindlers have duped farmers in various States. Poor for milling.

A. M., Council Bluffs, Ia.—The hog fat from tankage (bone, blood, and fatty matter) has no fertilizing power. It will injure the solubility of the potash, nitrogen, phosphoric acid, etc., in the other ingredients.

DISCUSSION.

C. M. H., Boston, Mass.—A late RURAL says that it is a move in the right direction to say "geraniums, properly pelargoniums," but does not tell us why. Will it please do so? Because the geranium is botanically a pelargonium is no more reason it should go by the latter name than that the Mountain Ash should be called the Mountain Pear just because it is a pyrus. By and by, according to this rule, we can drop a great many names as superfluous: azaleas, for instance, are nothing but rhododendrons botanically, and our old favorite, the hollyhock, is properly a hibiscus; the lily of the valley, properly convallaria, and the pansy properly viola. While the London Garden is trying to popularize names, the RURAL goes in for scientific terms exclusively. I must admit I love old names and associations and would as soon think of calling the blue-bell a campanula and the foxglove a digitalis as to call the old geranium a pelargonium.

R. N.-Y.—No, no, we do not favor botanical names in familiar talks or writings. We are heartily with our good friend, the London Garden, and our esteemed correspondent, too. We have true pelargoniums—like those commonly known as Lady Washington Geraniums, for instance—and true geraniums, such as G. maculatum, G. sanguineum, which are hardy herbaceous plants. The botanical differences are marked. To call a pelargonium a geranium or *vice versa* is in this case, therefore, simply to confuse botanical with familiar names. It seems to us that pelargonium is as acceptable as a familiar name as geranium, and that there is really the same objection to calling pelargoniums geraniums as there would be to calling a rose a hawthorn, both belonging to the same order, but generically different. As to the apt illustration of our correspondent, we certainly do think that the Mountain Ash is an unfortunate name, and one that has often misled people in ordering trees from the nurseries.

E. B., DAKOTA.—An answer to an inquiry, in a late Farmers' Club, as to what shrubs would be likely to succeed in Nova Scotia, in latitude 45 degrees 35 minutes, recommended, among others, the Japanese Quince, the viburnums, Purple Hazel and deutzias. The Japan Quince is not at all satisfactory here—latitude 42 degrees—neither are the viburnums. The Purple Hazel is not hardy, and the deutzias must be protected in Winter. The list of desirable shrubs for the "cold North" can be expanded by judicious covering. The Snowball is not mentioned in the list, though it is a grand, vigorous, free-growing shrub. It is a glorified hydrangea. He who has induced a farmer to plant one of these has done well. The same issue recommends the Yellow Transparent and Wolf River Apples for Dakota, and rejects the Gros Pomier. Considerable observation in the Northwest convinces me that the Gros Pomier is hardier than the Wolf River; so is Plumb's Cider. In our dry air the Yellow Transparent lacks in vigor, and is troubled with "sun scald." Those who, in the cold North, will begin their orchards with Duchess, Gros Pomier and Wealthy will do well.

R. N.-Y.—The advice given as to the apples is that of Prof. J. L. Budd. Our friendly correspondent will agree with us that he is accepted as our first authority as to the adaptability of fruits to the N. W. As to not mentioning the Snowball; is not the Snowball a viburnum? Our friend probably refers to the Guelder Rose V. opulus.

A. D. M., AMHERST COLLEGE.—Will you please give the weakest solution of Paris-green which will destroy the canker worm; also the strongest which will not seriously injure the foliage?

R. N.-Y.—This question is submitted to our readers and contributors. We cannot answer.

T. H. H., NEWPORT, Vt.—The Primate Apple, spoken of in a late F. C., is about as hardy as the Baldwin, or, perhaps, a little hardier, and in Maine, New Hampshire and Vermont it succeeds only along the southern borders of those States. It is a fine apple where it does succeed.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING April 3, 1886.

E. B. D.—L. E. B.—E. P. P.—O. H. A.—E. P. P.—T. H. Y.—G. K. W., thanks.—W. J. M.—O. E. D.—C. W. A.—G. W. A. W.—E. S.—L. B. F.—W. W. F.—B. P. V. H. thanks.—W. S.—S. L.—W. S. M.—J. P., thanks.—C. H. M.—F. F.—G. M. C., the poultry number will be issued in less than five weeks.—McA. K., answer by mail.—J. M. B.—O. H. S.—B. H. B.—C. J. K.—W. H. M.—C. E. P.—A. D. M.—E. S. G., all right.—G. K. Wright, thanks.—J. J. H. G.—W. R.—T. T. L.—R. D.—H. S.—M. P. W.—D. J. F.—W. S.—C. W. G.—W. M.—F. W. C.—L. B. L.—P. T.—C. W. R.—E. W.—E. V. R. G. J. W. L.—F. H.—G. P.—B. C.—M. F.—B. C. U.—F. W. B.—M. M.—J. M. J.—J. G. V.—A. C.—L. P.—G. C. B.—F. S. W.—R. W.—F. L.—H. A.—A. L. W.—O. S.—R. E. C. J. C.—E. C. D.—B. M.—M. N. K.—L. C. B.—C. E. V. G. M. P.—F. E. S.—J. M. C.—M. G. K.—D. D.—F. D.—K. R.—R. B.—M. S.

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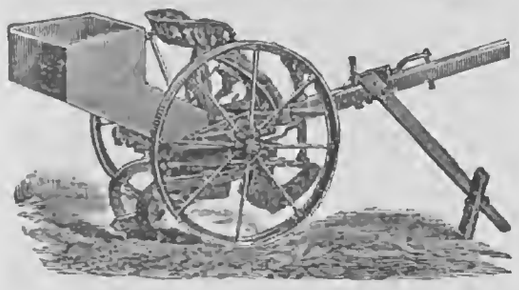

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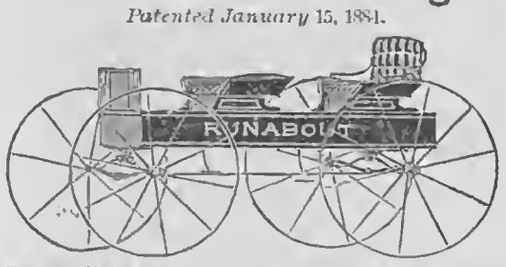

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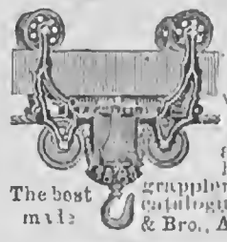

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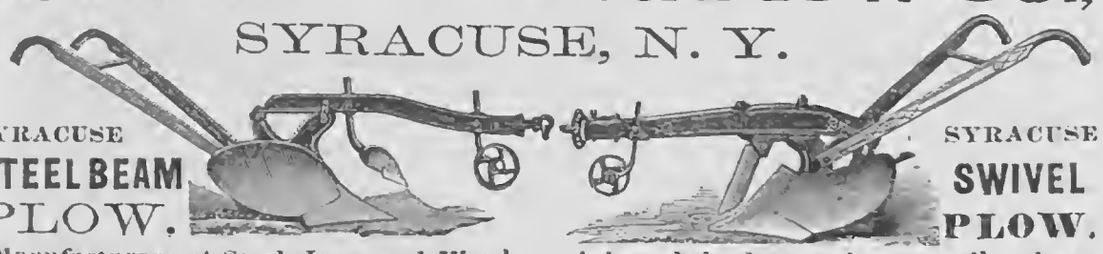

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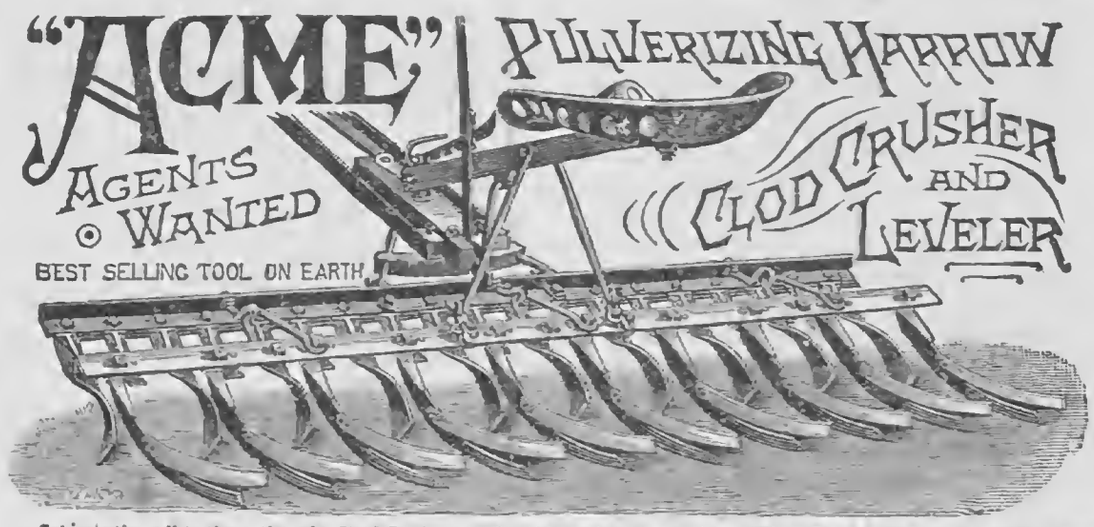

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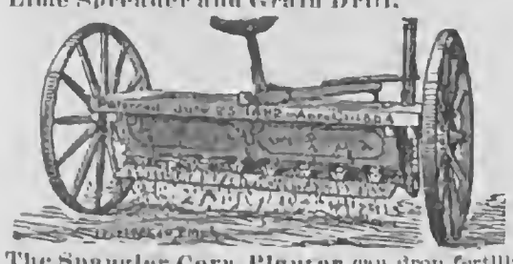

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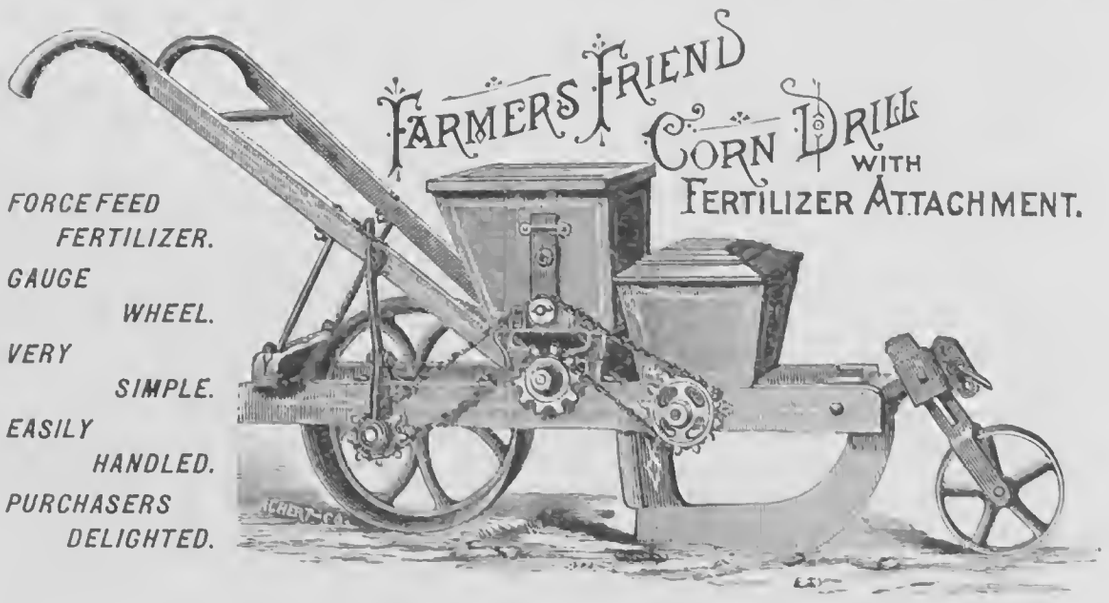

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RURAL NEW-YORKER.
A National Journal for Country and Suburban Homes.

Conducted by
E. S. CARMAN, Editor.
J. S. WOODWARD, Associate.

Address
THE RURAL NEW-YORKER,
No. 34 PARK ROW, New York.

SATURDAY, APRIL, 10, 1886.

IF the number on your address label is 1889, your subscription expires with this number; if 1890, next week; 1891, in two weeks, etc.

THE children at the Rural Grounds have been grafting the red-flowered Japan Quince upon the white, the white on the red, the variegated cornus upon the plain, etc. They may not "take," but really, friends, one can do worse than to interest the young people in such pursuits. Don't you think so?

Do you raise poultry for pleasure or profit? Do you raise poultry and yet feel that it is not worthy of special care, and so, beyond throwing the fowls in the morning a quantity of grain to last until the next morning, leave them to take care of themselves? Have you ever considered that it would pay you to confine your poultry? Whether it is worth while to see that the houses are preserved free from insects, and bright and clean? Does it pay you to keep 10, 50, 100, or 1,000 fowls? If it pays to keep 10, could it be made to pay to keep 1,000? Why not? What is the best breed for your climate and facilities? Are there any specifics for poultry diseases? If so, what are they? We design that our POULTRY SPECIAL shall answer such questions as the above. We shall be glad, during the next ten days, to receive any short poultry notes from any of our readers North, South, East and West.

A GOOD INVESTMENT.

SUPPOSE a miscreant were to destroy to-night every ornamental tree and shrub upon the finest private grounds of your neighborhood. How much would the market value of the place be diminished? Very well; if we agree upon this point, let us figure a little upon the cost of these fine trees and shrubs. Suppose there were a hundred of them, a rather large estimate, and that they cost, set out in the present positions, $1.50 apiece. This would make $150 dollars. The interest on this sum, say for 15 years, would amount to about as much more, which would make the whole cost $300. If they were all cut down and dragged off to-night, would the place be damaged more or less than $300 worth? Would it not make double this difference? If it would, then you have an opportunity to invest a few dollars where the money will pay you double interest, besides adding more to your comfort and self-respect, in the end, than it would in any other place you can put it. We have to apologize to our better nature for holding out such a niggardly motive for the improvement of our homes. We would far rather urge the planting of trees and shrubs, by appealing to our duty, to our children's interests, and the prospective comforts of old age. But, if we had talked in this strain, would we as well have engaged the reader's attention?

THE WAR AGAINST "OLEO".

There are half a dozen or more anti-oleomargarine bills now before Congress, one in the Senate, the rest in the House. Had the introducers consulted together beforehand, and agreed upon a single bill to be introduced simultaneously in both Houses, and combining the best features of all, it would have been better for the dairymen of the country, both because the product of so much combined wisdom would be more likely to be transcendent, and because there would then be no doubt among the advocates of anti-oleo legislation as to the bill which they should urge their Congressmen to support.

Last Wednesday representatives of the dairy interests of all parts of the country as well as of the butter trade in most of our large cities and other centers of the business, appeared before the House Committee on Agriculture in support of Congressional legislation against bogus butter. The general sentiment is that the bill introduced into the House by Representative William L. Scott, of Pennsylvania, placing the manufacture and sale of imitation butter under the control of the Department of the Interior, and taxing it ten cents per pound, is that which best promotes the interests of dairymen and which should receive their heartiest support. Let all producers interested in suppressing the fraudulent competition of bogus dairy products, as well as all consumers unwilling to pay for and eat counterfeit butter instead of the genuine article, and all the public desirous of fair dealing, write to their respective Senators and Representatives in Congress urging them to support this measure. Do it at once. Now is the acceptable time.

SPECIAL.

Those who, having applied for the Rural's present seed distribution prior to March 30th, have not yet received it, will kindly notify us by postal at once.

The seed packages for Canada subscribers have been expressed, to be mailed there, and all should have received them by this time.

WANT TO BE FARMERS.

WE receive many letters from young city men who desire a home in the country, where they can build up health and strength that city life has wasted. Most of these men know nothing of farm life, and would make poor hands at the manure pile or in the stable. They make a great mistake in supposing that farm work is simply a labor of the hands, and that brain work is unnecessary. Let them once get out of the city, and the truth will flash over them that it takes as much brain building to shovel dirt properly, as it does to measure a yard of cloth. The young men are right, however, in thinking that they can regain health and strength in the country. Cities make the greatest show, but the very brains that work out the wonderful development are produced from the farm-raised blood, bone and muscle. Spring brings to these young men a desire to push out into the world, and throw off the cramping conditions which city life has fastened upon them. The world would be much better off if more of them could be induced to go to the farm. They could save more money than they now save, besides enjoying health and contentment that at present they know nothing about. They would be awkward and almost useless at first, but if they could muster up the pluck to stick to the work, they would, in time, be far more valuable than many of our present farm laborers. For some unaccountable reason, thousands of our young men can see more dignity in a yard stick, than in a hoe or an axe, while many young women would sooner live in a state of semi-starvation in the city, than to handle milk and butter, or perform house work in some comfortable farm house. The city young man who desires to be a farmer, must carefully rid his mind of the idea that he needs no preparation for farm work, or that the members of the farming community are pining for his society.

ARBOR DAY.

ARBOR DAY approaches. No particular day common to all the States, can be named for this beneficent festival. Thanksgiving and Decoration Days can be celebrated at the same time from the Canada line to the Gulf, from the Atlantic to the Pacific. The period of flowers is so long that floral glories can honor the dead on the same day all over the country. Any day of the 365 is admirable for thanksgiving. Arbor Day, however, should fall in each State at the time best suited for setting out trees. Experience in several instances, has taught even politicians that a date at which frost is still in the ground in most of the State, is hardly suitable for planting trees. Ten States now have Arbor Days officially designated by the Governors, and in several others the duties of the day are observed, more or less widely, on some day named in advance by the patrons of Husbandry, Farmers' Alliances, farmers' clubs, village decoration societies, and district school boards. Originally instituted by the Prairie States, and still most widely and effectively observed in the West, the obvious benefits of the day have made it popular in other States also, and its observance is every year extending. Under the impetus given to tree planting by its recurrence, large areas have already been covered with trees in Dakota, Minnesota, Iowa, Nebraska and Kansas, and the aggregate of smaller efforts in other States has been quite extensive. In view of the rapid destruction of the forests in older States, and of the beneficial effects on climate and drainage, of an abundant growth of trees, as wind-breaks, hindrances to evaporation, and for storage reservoirs of moisture, every encouragement should be given, especially by farmers, to all excitements to tree planting. Let the children have a holiday. For the good it does and the training it gives, let each set out one or more trees in some suitable place, for nuts, for sugar, for ornament or utility, and for a memento in the brown Autumn of life of a good work done in its bright spring-time. Let the old folks, too, each set a good example to the little ones. Let each plant at least one tree. Let no one think this advice is like that heard from the pulpit on Sundays—excellent for his neighbors, but hardly applicable to himself.

WIDESPREAD STAGNATION.

THE farmers of Orange County, New York, are in great distress. The supplying of milk to this city is one of their chief industries. What cotton is to the South and wheat to the West, milk is to them—their great "money" product. Cotton is exceptionally cheap in the South, wheat is by no means dear in the West, and milk is ruinously low-priced in Orange County. Three years ago the farmers there got 40 cents per year, or an average of 3⅛ cents per quart; now the very best dairies can get no more than 35 cents, while ordinary dairies must be content with 32 cents. This means a decrease in their receipts of over half a million dollars. All grades of cows share in the shrinkage, commanding lower figures than for many a year, and in view of the increased and closer competition from more distant points favored by railroads, farmers are beginning to ask whether agricultural land near large cities is not held at too high a price in comparison with the value of cheaper lands elsewhere.

Similar complaints are heard in the neighborhood of other large cities—Boston, Philadelphia, Cincinnati, Chicago, St. Louis, and also less populous centers. The suppliers of milk to such places are everywhere discontented with prices. But what farmer is content nowadays with the prices of what he has to sell? Indeed the same question can be fittingly asked with regard to those engaged in every branch of business in every country in Christendom. This is an era of low prices everywhere. To what is the universal stagnation due? Is it to middlemen? Middlemen flourish best in the flushest times. Is it to overproduction? The world could readily use all that is produced. Is it to railroads? They can aggravate, but how can they cause it by increasing the facilities and cheapening the rates of transportation? Is it to the tariff? The distress is as great in free-trade England as in the protectionist United States and Germany. Out West it is widely attributed to the persistent contraction of values due to the policy of making gold (the production of which is steadily diminishing) the only standard of value, thus increasing its price and correspondingly decreasing the price of all that is to be bought with it. The true solution of the problem is a hard task; but it would be harder to get everbody to acknowledge it when worked out.

PROTECT THE BIRDS.

SPRING has arrived, and the song birds are coming north, how shall they be greeted? Vanity, gluttony and greed have already, within a few years, robbed the season of much of its joyousness of song and brilliancy of plumage. Shall these vices be permitted still more to silence the melody of our beneficent visitors in woodland, orchard, meadow and pasture, and rob our homes and walks of the charms of their flittings and the radiance of their wings? Shall the most destructive foes of the fast-multiplying myriads of insect pests that every year cause agriculture losses high among the millions—shall these best friends of the farmer and therefore of humanity at large, continue to be butchered to gratify a barbarous vanity, a gluttonous palate, a thoughtless caprice or the mean cruelty of greed?

Within the last four years so baneful has been the slaughter of orioles, bobolinks, blue birds, yellow birds, red-winged blackbirds and many other species whose gay plumage and gladsome warblings beautified and thrilled country places, that even if the destruction ceased at once, the man is not now living who would see the saddening effects of recent recklessness effaced. It is estimated by ornithologists that three generations must pass away before the evils wrought in the last half dozen years can be undone.

The thoughtless vanity of woman is chiefly blamable for this wholesale massacre; but man's gluttony has cruelly aided woman's vanity. Reed birds (the winter name for bobolinks), the most glorious songsters of our northern meadows and the most beneficent friends of the farmer, are now served up in all our fashionable restaurants, and that too just before the season of mating and nesting! Oh, the barbarism of dishing up a dozen such embodiments of beauty, beneficence and song, on toast; of destroying the music, grace and gladness of a hundred Summers to transitorily tickle an epicure's palate!

This slaughter of the innocents is more than a matter of sentiment; it is destructive of the crops of the country, of the food of the people, of the fullest happiness of mankind. It is a crime against the order of nature, the beauty of the world, the welfare of society. Public opinion should denounce it in every corner of the land; stern laws should forbid it in every State of the Union. It should be made a criminal offense to kill birds for any purpose, except game birds used for food, and the few birds needed for strictly scientific purposes. No farmer should permit the killing of birds on his land, and every farmer and every lover of nature should at once urge his representative in the State Legislature to insist on the prompt passage of laws to protect these beautifiers of the country and preservers of its crops. Every wing or bird on a woman's hat or dress is a token of cruelty done, of joy debarred, of loss incurred. Instead of a grace to her head, let such ornamentation be considered a reproach to her heart. Let the greeting be, not "Oh how pretty;" but "Oh how cruel!" Thoughtlessness has been the instigator of this wicked fashion; let reflection be its destroyer. Hundreds of good reasons for the protection of our melodious, graceful, beneficent friends appeal to the head and the heart; not one for their destruction can appeal to either.

BREVITIES.

ELLWANGER & BARRY are of the opinion that the Marshall P. Wilder Rose will prove, all things considered, the best of all hardy roses.

MARSHALL P. WILDER, at the late Mass. Hort. Exhibition, displayed one of his large azaleas "Exquisite," which measured around the head 21 feet, and stood seven feet high.

FOR the second time the Lady Washington Grape (Ricketts) has been killed to the ground. We have given this grape a trial of eight years, and now reluctantly give it up. It has some splendid qualities where it succeeds.

WE very much regret that we are so far behind in the publication of answers to questions. We have and do answer all questions as soon as possible, but we cannot find space for them at once, and our friends must be indulgent.

LAST year we planted 100 roses of the more tender varieties, such as Teas, Bourbons and Noisettes, commonly known as "ever-blooming or monthly roses." In early Winter the stems were laid over and covered with leaves, and upon these an inch or so of soil was placed. We now find that all are alive. This protection may be given with little trouble, and in this way we secure the delicate beauty, fragrance, range of color, and frequency of bloom of the everblooming roses, with the sturdier and somewhat more restricted charms of the hybrid perpetuals.

THE schedule adopted by the Connecticut, Massachusetts and New Jersey Stations for this year shows that potash in high-grade sulphate is 1¾ cent lower than last year, viz. 5½ cents per pound; potash in kainit is the same as last year, 4¼ cents per pound, and in muriate the same as last year, viz., 4¼ cents per pound. Nitrogen in ammonia salts and nitrates is 18½ cents per pound—half-a-cent higher than last year; in dried fish and fine-ground bone, 17 cents—one cent lower. Organic nitrogen, as in guano, blood, meat, cotton seed, linseed meal, bone, is about one cent lower. Phosphoric acid, soluble, is also about one cent cheaper per pound. Insoluble forms are much the same as last year.

AMONG farmers, as among other toilers, there is a disposition to complain of the very unequal distribution of wealth in the world, and consequently to sympathize with all the poorly paid wage-earners who are struggling to wring from capital a fairer share of the results of their labors. This source of sympathy with strikers in workshops, factories, mines and railroads is natural. But such strikes and any consequent increase of wages, are really against the interests of farmers. Under present conditions these cannot strike or otherwise combine to raise the prices of their products, while an increase of wages in workshops, factories, mines and railroads means higher prices for the goods they have to buy and higher rates of transportation.

Sheep Husbandry.

Notes from the Rural's W. N. Y. Farm

LAMB RAISING AND FEEDING LAMBS.

WATER AS ESSENTIAL AS FOOD.

It is a very common notion that sheep need very little water, some going even so far as to assert that they do best if entirely deprived of it when at pasture, and given but a scanty supply when kept on dry feed. Nothing could be more erroneous. Of every 100 pounds live weight, not less than 75 are simply water, and every particle of the solid part is taken up by the "absorbents" only as dissolved in water, and the process of digestion can be carried on only when the forage and grain are floating in water. The fact is, few animals drink more, in proportion to their weight, and none drink so often as sheep when the water is accessible. Even when fed two full rations of roots per day, they will be found, though drinking but little at a time, drinking many times each day.

THE WATER MUST BE CLEAN,

that is given for drink to any kind of stock to have them do their best. But while cattle, or even horses, can be so accustomed to dirty water, or that quite foul with the soakage of the manure piles, that they will temporarily drink it almost in preference to pure water, sheep will never become used to such water, and will absolutely suffer from thirst before they will drink even a limited quantity. They are quite as particular about the cleanliness of their drinking dishes. Let a sheep put merely its foot into one of these, or let the shepherd wash only his hands in one, or let the least particle of manure fall into it, and no sheep will do more than "snuff" the water until the vessel is cleaned and filled afresh. It is therefore essential that the drinking vessels should be so placed that no droppings can fall into them and that the sheep cannot put their feet into them, and at least twice each day every one should be looked at, and if in any way fouled it should be emptied, scrubbed out and refilled with clean water.

THE WATER SHOULD BE WARM.

It is a common practice to compel sheep to take what moisture they must have by eating snow, or by drinking water from ponds or troughs out-of-doors, and often containing ice, or frozen over. This is not only cruel, but foolish as well. Nothing taken into the system as food or drink can be appropriated or even digested, until it is warmed to the temperature of the stomach, which is full-blood heat or a little more. And as all the animal heat comes from the consumption of food, and at a great disadvantage in its generation, it seems absolutely foolish to pump water from wells (from which source most stock water is supplied) usually at a temperature as high as 60°, and allow it to cool down to 32° before it is drank by the lambs.

The rule, then, in watering feeding lambs is to give them plenty, to furnish it clean and in clean drinking vessels, and either to pump it directly into the troughs from the wells or to keep it in tanks in the barns, where it will remain at least as warm as it came from the well, and, better, if it could be artificially warmed to about 70 to 75 degrees before it is given to the lambs.

Mr. A. W. Morse, of Madison Co., N. Y., asks if we would not advise the sowing of flax-seed with oats or barley as a food for sheep, the crop to be used with and without thrashing. We certainly would not so advise, for two reasons: first, the flax straw is not only worthless as a food, but it rots so slowly that unless it is run through a cutting-box, it is a nuisance in the manure; second, flax seed contains altogether too much free oil to be a healthful food, except in very small quantities, and, further, the oil which it contains has a commercial value much higher than its feeding value, and the residue after the oil has been extracted, is worth almost as much as was the whole seed, and a ton of the residue is worth several times as much as a ton of the whole seed. We should prefer to raise the flax separately, sell the seed to the oil mills, and purchase cake in its place, and to sell the straw to the paper mills.

Another good friend at Orville, Ohio, asks if we are not mistaken in preferring a mixture of kerosene and lard oil or kerosene and fried meat fat to kill ticks in preference to a decoction of tobacco. We have tried both, and while we know that tobacco water will kill ticks and lice if put on strong enough, it nearly kills the animal as well, and, besides, it is nasty to apply, unless used by one who has already poisoned his system by its filthy use, and, further, the sheep cannot be safely dipped in cold weather. The other mixture is equally efficacious, much more easily applied, does not make either sheep or applier sick, and really increases the growth of wool.

We are receiving many letters asking if we are really keeping our stock as we describe in these notes; and if the writers may come and see. We answer that we would scorn to write anything for the press not based on our actual experience and knowledge, unless we so said. We not only invite all to come and see for themselves; but we ask the dozens who have come and who are constantly coming to see, to tell what they have seen. They are not only at liberty to expose us, but are urged to say if they have not found everything fully up to their expectations.

Dairy Husbandry.

A GOOD DAIRY.

About two years ago, I asked a reliable dairy farmer, Mr. Comfort, to weigh the milk from each of his cows separately. He had not been accustomed to keeping any milk records, but he agreed to do so, so that I might have the results for comparison. He is a reliable, honest and well-to-do farmer, who has been in the dairy business in Iowa for 15 years; and when moving from the vicinity of Palestine, Illinois, he left a dairy that had few superiors. He has the reputation of having the best dairy in Buchanan County. He feeds well all Winter, and usually sells about 500 pounds of milk per day for the season. He keeps about 20 to 23 cows on an average. His cows, Summer and Winter, are in fine condition, and ready for the block at any time he is compelled to sell because of a failure to breed, or for other reasons. I give below the figures obtained from him:

Lbs. Milk each cow gave, Feb. 1st, 1885.	Date of Calving.	Date of Service.	Wt. of Cow Lbs.	Escutcheon.
24	Oct. 27, '84.	Dec. 17, '84.	1100	Good.
20	Nov. 10, '84.	Dec. 26, '84.	1050	Fair.
23	Jan. 26, '85.	—	1000	Poor.
29	Jan. 26, '85.	—	1050	Fair.
10	June 10, '84.	—	1150	Good.
20	June 12, '84.	Dec. 30, '84.	1000	Verygood
8	March 9, '84.	June 24, '84.	1200	Good.
31	Jan. 29, '85.	—	1025	Verygood
24	Nov. 3, '84.	—	1110	" "
21	Nov. 20, '84.	—	1050	Fair.
6	May 9, '84.	June 30, '84.	1000	Good.
13	June 15, '84.	July 4, '84.	1100	"
16	May 1, '84.	July 2, '84.	1200	Verygood
23	Dec. 15, '84.	—	1000	Good.
29	Dec. 20, '84.	—	1160	Fair.
9	June 23, '84.	Aug. 8, '84.	1150	Verygood
305				

Of my own herd I keep weekly milk records the entire year, and am therefore enabled to make some interesting comparisons, from which the reader may draw his own conclusions.

Date of Calving.		Date Served.		Feb. 1, '85. Lbs. Milk.	
Comfort's.	Writer's.	Comfort's.	Writer's.	C's.	W's.
May 1, '84.	May 1, '84.	July 2, '84.	Sept. 24.	16	15½
Mar. 9, '84.	Mar. 3, '84.	June 24, '84.	June 13.	8	8
June 10, '84.	Mar. 31, '84.	Not bred.	Sept. 3.	10	10½
May 9, '84.	Apr. 16, '84.	June 30, '84.	July 27.	6	4

The No. 1. cow of Comfort's is a seven-year-old, and said by himself to be the best in his dairy. The writer's cow which calved at the same time, is a two-year-old and gave 9,192 pounds of milk for the year, which sold for $72.22, at the creameries where prices varied from 50 cents to $1.04 per 100 pounds. The remaining Comfort cows are also compared with two-year-olds. These figures certainly show that there is a remarkable difference in cows, and that in all well managed dairies, the greatest care should be used in making selections to fill vacancies. I am confident, having visited Mr. Comfort's dairy many times, that both herds were fed equally well, and that the comparison, though not strictly scientific, has an important practical worth to every reader. Both parties fed liberally of bran, and ground oats and corn the entire Winter, with all the good Timothy hay they would eat.

I am quite sure it does not pay to keep a cow that gives only 4,500 pounds per year, and yet hundreds of such are wintered year after year. Generally speaking, dairy cows are too small, averaging perhaps 1,000 or less. The size is due, of course, to the average inferior care of the heifers when young. The size as well as the quality of Iowa dairies generally needs improving by a mixture of other blood.

Jessup, Ia. J. N. MUNCEY.

MANAGEMENT OF COWS COMING IN MILK.

A large majority of the cows of the country are coming in milk during this season. Care should be taken to have them in a healthy, thriving condition; but not fat nor rapidly taking on fat. Such cows are liable to inflammations and fevers. A relaxing mess of feed now and then, just before calving, will be found beneficial. If the udder is excessively caked and hard, it is better to draw a little milk from it than to let it remain in this painful condition. It will help to ward off garget. More udders are spoiled, however, in drying off, than by inflammation created by an excess of milk secretion just before coming in. The evil comes from the secretion of more milk, when milking is stopped, than can be absorbed and gotten rid of by natural processes. Hence the bag, or a portion of it, may be spoiled, but the trouble will not be noticed until the cow comes in milk again. Care should be taken when drying off a cow, to see that the milk does not thicken in the teats, but constantly grows more and more watery. If the milk thickens, draw it off. In case the cow is thin and weak in the Spring before calving, feed her generously, but not excessively, and get her system in good tone. Avoid all heating foods, like corn-meal, except in small quantities. Less fattening but more strengthening and cooling diet is preferable. Wheat bran, middlings, oat-meal, and roots or moderate rations of sweet silage are good. Cows at this season should be carefully protected from sudden changes of weather. Give them freedom, and a chance to sun themselves on fair days. Avoid exciting them, or suddenly setting them in motion, or in any way hurrying or hustling them around. Last, give them a quiet place by themselves. T. D. C

Miscellaneous.

CATALOGUES, ETC., RECEIVED.

Sixteen Years' Experience in Artificial Poultry-raising.—By James Rankin, published by the Phelps Publishing Co., Springfield, Mass. This excellent little book is evidently the work of one who has handled and manipulated incubators. Mr. Rankin does not hesitate to say that his first experience with artificial incubation was unsatisfactory and unprofitable. It was only after he had carefully studied the matter in every detail that he could report even a fair success. We believe in this way of stating the question. Money can be made in the poultry business: in some instances wonderful profits have been secured. These were not made by any hap-hazard operations, but were the legitimate outcome of study, observation and experiment. The teacher who starts with this acknowledgement is likely to be reliable. We advise all those who think of procuring an incubator to secure this little book and study it carefully. Price, 25 cents.

American Patent Portable House.—Circular from the manufacturing company of the above name, office 31 Wall Street, New York.—The design of this company is to furnish houses made in sections so that they can be put together without the aid of skilled labor. The poultry and dog houses will be appreciated by those who have no time for building. The light houses for campers, sportsmen, etc., are said to be almost as cheap as tents, and as easily erected. Full explanations of the houses are given in the catalogue. Send for it.

T. C. Robinson, Owen Sound, Ontario, Canada. An excellent list of strawberries, raspberries, blackberries, currants, gooseberries and grapes. The Fay's Prolific Currant and Niagara Grape are well illustrated. Our readers know what we think of these. The Parry, May King and Jewell Strawberries are offered. The catalogue is well arranged and printed. Our Canadian subscribers will do well to note the address.

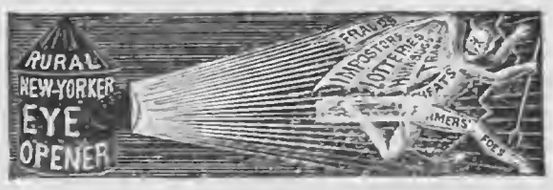
Enterprise Poultry Farm.—Circular from Peter Beuerlien, Newton, N. J. White Leghorns are put forward as the specialty of this yard. Brown Leghorns, both single and rose-comb, Plymouth Rocks, Wyandottes and Light Brahmas are also offered. The Enterprise Chicken Brooder is advertised as the simplest, cheapest and most easily managed brooder in the market.

Ant. Roozen & Son, Overveen, Holland. De Veer & Boomkamp agents, 47 Broadway, New York.—A circular of gladioli, dahlias, lilies, amaryllis, ranunculus, etc., etc. For $3.75 as many as 225 bulbs and plants are offered. Orders received now will be delivered during April and May. The firm is trustworthy and liberal in every way.

Berkshire Pigs.—Catalogue from Springer Bros., Springfield, Ill. The Berkshire Pig has wonderfully improved American pork. The animals noted in this catalogue are exceptional in breeding. South Down Sheep, Jersey cattle and Light Brahma poultry are also offered. A reliable firm.

L. G. Sherman & Co., Nos. 32 and 33 South Water Street, Providence, R. I.—An illustrated catalogue of seeds of all kinds, creameries, churns, agricultural implements, etc. Free to applicants.

Williams, Clark & Co., New York, send samples of their colored cards, illustrating the effects of the fertilizers sold by them The cards will be sent to those who apply.



We do not by any means recommend any dealings with T. S. Gardner of the "Farming World," Cincinnati and Chicago. By the way, what has become of that libel suit brought by him against an esteemed Western contemporary for its trenchant exposure of several of his "enterprises"? The most pestiferous schemer may bring a suit for libel against any one who exposes the "true inwardness" of his machinations; but such a fellow must either have some faith in his own projects or place great reliance on the gullibility of juries to carry the case to trial..... Editor Pond, one of the proprietors of *El Latino Americano*, a paper alleged to be published regularly in this city, was arrested the other day on the charge of carrying on a lottery in offering premiums for subscriptions to his paper. We have frequently denounced such practices not only for their immoral tendencies, but because in nearly every case the concerns offering such lures are sheer swindles. The value of the goods offered is grossly exaggerated; any thing of real worth is always sure to go into the hands of a confederate: most of the premiums are never sent at all; those that are given are worth less than the extra charges demanded for postage, packing, etc.; the papers that resort to the dodge are mere catchpenny affairs, which either collapse after the subscription season is over, or drag on a miserable, worthless existence until they can get another chance of gulling another set of dupes the following season. T. S. Gardner is accused of being an adept in this sort of "business." Not long since he started, in Chicago, a paper to which he gave the name of the "Chicago Farm Journal," prefixing the word Chicago to the name of our esteemed Philadelphia contemporary which has had an office in Chicago for some time. It is a common practice among sharpers to take for their "titles" the names of reputable concerns (making such slight alterations as to escape prosecution from forgery,) in the expectation that some of the unwary public will mistake the fraudulent for the honest..... Justice Butt, of England, has just decided that a divorce obtained in this country from a marriage performed in England is invalid. The courts in several of our own States, with regard to marriages performed in them, deny the validity of divorces openly and legally obtained in some of the other States. Investigations and exposures of late show conclusively that a very large proportion of the "divorces" procured "without exposure" by the fellows known as "divorce lawyers," are fraudulent and absolutely invalid. In thousands of cases the signatures of judges and court officers on the "divorce papers" were forgeries; while in a large number of cases the courts and judges, who were reported to have granted the "divorces," had absolutely no existence. Several prominent "divorce lawyers" in this and other cities and towns are now "fugitives from justice," on account of detection in such rascality. Frequently the divorced persons have married again and have had children; but such marriages are, of course, illegal and the children illegitimate. People who have had recourse to underhand means for divorce, however, deserve little sympathy for having been duped..... To Several Inquirers.—The Co-Operative Building Plan Association of this city, will send for cash the book they advertise.... There is absolutely no chance whatever of obtaining counterfeit money from the rascals who advertise "green goods," through the mails. The real "shovers of the queer" are too cautious to "give themselves away" in that fashion. These offers are *always* made by sharpers, who, from the outset, intend to swindle all the "suckers" who may be mean and dishonest enough to deal with them. Of course, their dupes, being engaged in an illegal business, have no right to legal redress, and having intended to swindle their friends and neighbors at home, are, most of them, too conscious of the turpitude of their own designs to publish their folly and rascality by "squealing."..... We do not, by any means recommend "Dr. Wells" of this city, or his "treatment" widely advertised through the mails.....A. L. Spencer & Co., Farm and Household, the Conn. M-f-g. Co., and the Hartford Card Co., are one and the same. The many-named concern is said however to be filling orders satisfactorily.... We do not recommend the goods advertised through the mails by F. Crosby & Co., chemists, this city..... T. P. Simpson, Patent Attorney, Washington, D. C., is reliable.....Be very careful about paying money to "claim agents" at Washington or elsewhere on account of pensions or any increase thereof, which they may say they are able to collect for you from the Government. Of course, if no pension can be due for "war services," the agents are either mistaken or trying to swindle you or Uncle Sam—and it is much easier to swindle you than Sam, however smart you may flatter yourself you are. Be still more careful if they say they have discovered a debt due to you by the Government, "not in the nature of a pension;" but about the true nature of which they are mysteriously silent. Even if they offer to collect the "claim" for a contingent fee, do not sign any power-of-attorney they may forward to you, without consulting a lawyer in your own neighborhood. If you do not consider the "chances" at Washington worth his fee, why bother your head at all about them, or run any risk from the sharpers and shysters that "fill the woods" about the national capital, and manage to swindle even the Washington boarding-house and hotel keepers?

For Women.

CONDUCTED BY MISS RAY CLARK.

REQUIREMENT.

JOHN G. WHITTIER.

We live by faith; but faith is not the slave
  Of text and legend. Reason's voice and God's,
  Nature's and duty's, never are at odds.
What asks our Father of His children, save
Justice and mercy and humility,
  A reasonable service of good deeds,
  Pure living, tenderness to human needs,
Reverence and trust, and prayer for light to see
The Master's footprints in our daily ways?
  No knotted scourge nor sacrificial knife,
  But the calm beauty of an ordered life,
Whose very breathing is unworded praise—
  A Life that stands, as all true lives have stood,
  Fast rooted in the faith that God is good.

GRANDMOTHER'S SOLILOQUY.

"I WONDER," said Grandmother, as she put on her spectacles and took her knitting, "I wonder what this world is coming to! I never saw such times! Why, when I was a girl, men worked out for 50 cents a day, and could support their families comfortably at that; and now, when a man earns a dollar and a half, they say his family suffer for the necessities of life! Provisions are as cheap now as they were then. Cloth is cheaper. I admit it does not wear as well as our homespun used to do, neither is it as thick and warm; but then it is cheap! I cannot understand why the times are so hard. Why, I can look back 50 years, and I really think people were happier and healthier and more sociable then, than now. Oh, people are changed! They are selfish, they do not care for their neighbors. Only think of a woman lying sick three weeks and dying, and the nearest neighbor knowing nothing about it. Not a soul called on her or ministered to her. Why it looks to me as if people were hard-hearted. Death is nothing outside of one's own household. When I was a girl, a death in a neighborhood cast a solemnity over the whole community. Now, nobody minds a death; it is nothing to them; it is none of their business, and they go on their way, just as unmindful of the grim messenger as if it would never come their turn to die. Yes, times are changed; everything has changed, and I don't believe folks are as happy as they used to be either. Such good times as we used to have—evening visits, quiltings, huskings, paring bees and all such jolly gatherings! They have all gone out of fashion, and you do not see your nearest neighbor once a month; and when they do come in, it is for a five minutes' call; they are prinked up with their best bib and tucker on, and look just like French dolls. All they talk about is the latest styles, the new clothes or hats such a one has got; and in five minutes they start out to making more calls. They cannot afford to dress up just for one call. Now there is no genuine sociability about such calls; it is all formality and show. I sometimes think that the human heart is different from what it was half a century ago. Nobody ever feels glad or sorry now-a-days. It is not genteel to make any demonstration of feeling. If you have any natural affection, it must all be kept out of sight. It is not fashionable to make any outward display of either grief or joy. I would give more to hear a good hearty laugh from a merry-hearted girl, or a shout from a laughter, loving boy, than to see the simpering smile that is stereotyped for every occasion by the young folks now-a-days. Talk of boys and girls! There are none. As soon as a boy gets out of his round-a-bouts, and a girl sheds her bib aprons, they are young gentlemen and young ladies, and expect to be treated with due consideration. The first thing a young lady thinks of is a beau, and the lads are flirting with girls before the down starts on their upper lips. Oh, what lots of fun and good times they lose by sprouting up into ladies and gentlemen so young. But all that buoyant jollity must be suppressed. Oh yes; crush it down, suppression is the fashion; suppress your fun, suppress your griefs, suppress your joys, suppress all natural affections! That is the style of the present generation. It is not thought to be genteel to laugh or to cry, so the voice of nature must be stifled, and the more stoical and rock-like a person is, the more genteel and polished they are considered. Well, everybody says each generation grows wiser, but I do not believe anybody will claim that they are happier or better. I know I am growing old, and old folks look backward instead of forward, and really I think the past held brighter prospects that the future holds. If knowledge and wisdom increases, happiness very evidently does not. There! my needle has slipped out, and the stitches are running down.

GRANDMOTHER.

A PLEA FOR BACK DOORS.

WHAT is the difference between a back door and a front door? Why should the back door be so persistently ignored, while the front door is kept spotless and shining? One is for visitors and holiday occasions, the owners of country houses will tell us. The other is for the passage of provisions, and the thousand and one articles of daily use, for ashes and dirt, debris and swill. It is easy to keep a front door tidy, but what housekeeper can find time and strength to be everlastingly scrubbing back doors, and picking up waste papers and strings, and bones, and the litter that has to accumulate somewhere? Yes, but that back door is very dirty. The finger marks, large and small, that have made a fresco of filth a yard square or more are enough to take away the healthiest appetite.

But what can be done with a door constantly used by your husband, children, and workmen, you ask? Your workmen would soon learn to use the latch or knob, if spoken to kindly a few times. It is not so easy to predicate about your husband, who perhaps feels himself privileged to make all the dirt he pleases. But the mother, who does not instruct her children to open and close doors by their handles, deserves to spend her life scrubbing finger marks.

Then why should you allow this back door yard to be littered? There would certainly be very little to pick up if nothing was thrown down.

Then about that swill barrel that blubbers in the summer sun? You have got to save your swill you say. That is not saving it. It is worse than wasting it. The leavings of your table, the food that you can eat yourself, without detriment, is none too good for your hogs. This pestering, fly-blown stuff not only poisons the neighborhood as it stands there, but it is sure to injure those who are fated to partake of the pork raised by such means. That swill barrel is almost as bad as a small-pox hospital next door. You shudder yourself when you lift the cover from this seething mass, and the great fat flies and the myriad swarms of tiny insects buzz round your ears. You admit it is nasty, but comfort yourself with the thought that it is necessary. You are mistaken. Pollution means sickness and death. Cleanliness, health and life. You are never quite well, but you haven't the remotest idea what is the matter with you. It is the pork in your cellar—ten to one—and the swill barrel at your back door. The very sight of the back door itself is enough to make you sick. So banish the swill, feed your hogs on decent food, scrub and paint the back door, and then save yourselves, and set an example for your neighbors. ELEANOR KIRK.

SNAPPY SPELLS.

WE asked a little girl of three or four one day, which she liked the best, her mother or her grandmother at whose house she spent so much of her time.

"My grandma," she answered promptly, to my great surprise. "I like my mamma very well, only she has such snappy spells!" I wonder if other little ones would not give a somewhat similar testimony about us mothers, if they should speak out of the abundance of the heart as did little Lizzie! A little girl sent away to pray over her bad temper was heard to add to her little prayer: "And please make my mamma better tempered, too." The listening mother stole softly away to ponder over the honest words.

Everything is catching with children, and measles and whooping-cough are not so much to be dreaded as the habit of cross speaking and feeling. "Snappy spells" in the mother are sure to be repeated in the children, unless they are indeed little angels only lent for a year or two. We have sometimes known a little one who bore with a wayward mother so patiently, though grievingly, that it seemed most fitting that it should be transferred to a home where all was love and brightness and all voices were sweet spoken. There is often a good deal of heartache left for a mother when the chances have gone by forever in which she could have spoken the loving words for which the little spirit so hungered.

Said a little one the day before he was taken down with a fatal sickness, as he gazed earnestly into his mother's face:

"Isn't I a good boy sometimes?" I think that mother can never forget that tone and look.

It is more a matter of habit, and perhaps of inheritance, this cross speaking, than of real provocation. "Trifles light as air" stir up the evil venom and embitter all the household. Even when the trouble is great one may lighten the skies for themselves even by speaking pleasantly, and how much more cheering for other people. By talking cheerfully after awhile one gets in the mood for it. Mr. Wesley says: "I no more dare to scold and fret than I would to curse and swear." If only all could cherish the same sentiment it would hasten the millennium of peace on earth.

OLIVE.

BABY'S HOOD AND CLOAK TRIMMING.

USE Shetland floss any desired color, and a medium-sized bone crochet hook. For the front make a chain of 30 stitches. Turn, and in the third stitch make two double crochet (by putting thread around the hook once); chain one, and make two more in the same place. This forms a small shell. Make a shell in every third stitch until the end of chain. There will be 10 shells. Turn the work and make a chain of eight stitches very loosely, and fasten between each shell. The third row is the same as first, making shells in the preceding shells. The whole work consists of these two rows, keeping the shells on the wrong side, and the long fluffy loops on the right. Make the strip long enough to go around the face, and allow for a cape. Then crochet a strip for the crown in the same way, and the same number of stitches, allowing for the length of cape in this also. Leave the crown square across the top, and sew in. Crochet a piece about eight shells square and place on the top of the hood letting a corner come over the front a little. Place a bow of ribbon at one side and at the back where it is shirred for the cape. A Cashmere cloak is pretty with trimming made to match the hood. A drab cloak with blue trimmings and blue hood or, a beautiful one can be made of eider-down cloth with white hood and trimmings.

FANNY FLETCHER.

THE fragrance of the alabaster box of ointment has come down through the centuries. The widow's mite is swollen perhaps to millions. But God would never have so blessed the mite, if it might have been a denarius.

IT will be sweet sometime if we may hear the King say to us, "Inasmuch as ye have done it unto one of the least of these, my brethren, ye have done it unto me." It will be worth everything to us, and how much to the souls we have helped in their struggles with sin, and saved for eternal life! ZEA MAYS.

Domestic Economy

CONDUCTED BY EMILY MAPLE.

KITCHEN TALKS.

ANNIE L. JACK.

"I DO not know why I cannot make as good puff paste as Auntie Jane," said the Amateur Cook discontentedly, as she rolled the butter in the flour and prepared it for the tarts. There was pathos in her voice, that implied more than mere dough, and it lay in the fact that a party of young friends were coming to visit us, who would test her cooking, which she very much desired should be first-class. Our old friend, Aunt Mabby, was sitting in the kitchen, busy helping me with some rugs. She looked up smiling. "There is a little secret in puff paste, dear," she said; "it is to make the butter waxy. You should always wash it in cold water, flatten it into wafers, and set on ice a few minutes to make it brittle. Then, instead of kneading it, work it in with a knife, flouring your hands when you are obliged to touch the paste. A very little salt and as much sugar make a great improvement if you wish light paste, and be very careful not to add too much water; for if the paste is too soft, it cannot be handled, and the working over in that condition makes it hard." The Cook thanked Aunt Mabby for her useful hints, and told her we often wished that she would go on the recipe book for the RURAL. And then the dear old lady put on an apron and made some apple custards that were really delicious. She put a crust on the plates, pared some juicy apples and sliced them thin till the plates were half full; then poured over them a custard, and baked quickly. The top was covered with whipped cream flavored with lemon, and it certainly was a pretty and dainty dish that our guests all seemed to appreciate fully.

The days lengthen, and busy housekeepers are anxious to get on with sewing and other work that can be better attended to before spring work comes in. The bright, sunny days reveal all the results of the Winter's smoke and wear, and make one long for house-cleaning time. But it is not best to begin too early, even when our fingers ache to turn over the hidden dusty corners, and investigate the stove pipes. Better to get all the sewing and mending done, give ourselves the needed rest, and make all preparations to begin the contest. As the sunny days render the wearing of furs unnecessary, it would be as well to put them away before moths find lodgment among them. Many things are recommended; but we all know that a little benzine sprinkled in among them, if the box is tight, is sure death to these pests.

NOTES AND COMMENTS.

IN looking over the RURAL of February 20, I noticed some experiences on "Winter Butter-making." I am not a very old housekeeper, but I have had several years' experience in butter-making, both in Summer and Winter, and have had but very little trouble, seldom churning more than half an hour and very often not more than 10 minutes, and the butter comes out yellow and solid. Neither am I among those who have patent appliances and regulators for making butter. I use the old-fashioned wooden dash churn and a wooden butter tray and ladle for working the butter.

My way of making butter in the Winter is to skim the milk while it is sweet, and when the cream jar is nearly full, set it by the stove for a day before I want to churn, so that it will sour just a little, and also get sufficiently warm to churn easily (I have never met with success in trying to make butter from sweet cream). I test the cream by dipping the tip of my finger in it and touching it to my face (I have no thermometer); when it feels just a little warm it will not take long to churn. I always wash my butter twice and sometimes three times, then salt and set away till the next morning, when I work it again, and I always have good, sweet butter. I did have two churnings two or three years ago, that seemed very refractory. I don't know why (it was in the summer time), but I put in boiling water till the cream was as warm as new milk and then the butter separated from the milk in a hurry. Of course, it was white, but I would rather have white butter than none at all. I have had no trouble since.

I like "Annie L. Jack's" method of washing on Tuesday. I prefer to soak my clothes overnight, and I don't think Sunday is the proper day to gather up clothes and get them ready for washing, so I seldom wash on Monday. The "Oxford Blue" in square packages I think better than the "Ball blueing."

"Alice Brown" tells us, in the RURAL of January 16, of a woman's conflict with her temper. She says: "She was a neat and careful housewife, and her husband and children gave her occasion for scolding every day, by carelessly leaving scattered about hats, boots, books and numberless other things, and she never failed to scold them sharply." At last her husband retorted that "she was growing to be as great a scold as Aunt Lizzie Riton." Then she tells us how the wife locked herself in her room, and "all day long looked over her shortcomings," and at last conquered her temper so that she could speak to her family without scolding. Now, while I admire the spirit that prompts one to govern an unruly temper, I also admire the spirit that prompts one to keep from ruffling another's temper. Why is it that some men must always throw their coats and hats on the floor or on chairs instead of hanging them up?—just as if a woman with a husband and children to work for did not have enough to do without picking up after her family. I think such a man deserves scolding, and more too. Then children always think they can do as Papa does, and it is very hard to train them to neat habits with such an example always before them. The husband ought to look over *his* shortcomings, too. I think if I had such a husband, I should throw my things on the chairs and floor and see how he would like that kind of housekeeping. CANADIAN.

SOME SUGGESTIONS AS TO COUNTRY WEDDINGS.

A WEDDING in the country where guests come from a distance and with their own conveyances, is more convenient early in the day. Noon is the best time; but on no account should it be later than 2 P. M., unless some come by rail and it has to be timed to suit the train. Neither would I have it earlier than 10 A. M., as wedding breakfasts are hard to manage and provide for. An evening wedding where the purse is ample, is, of course, brilliant and dazzling; but even then some of the elderly ones whose company is prized the most, will be kept at home, by the lateness of the hour.

The preparations, as far as possible, should be made before the appointed day. As country people seldom keep servants (in the house at least) but rely upon the assistance of their most intimate friends, every one that is expected to assist in any way should be informed so that he or she may come prepared.

The house may be decorated with autumn leaves and pressed ferns, if in Winter or Summer with flowers that are in season. A small table should be set in the hall or remote cor-

Miscellaneous Advertising.

When Baby was sick, we gave her Castoria,
When she was a Child, she cried for Castoria,
When she became Miss, she clung to Castoria,
When she had Children, she gave them Castoria,

ner of the parlor to receive the gifts. China and glassware that are to be borrowed should be in place before the guests arrive.

Although the bride's dress is foreign to the subject, I cannot refrain from saying a few words with regard to it. Let it be of some dark silk, if silk can be afforded. If not, some of the all-wool goods make up very rich and handsome, and are very reasonable in price. Let the color and style of making become the wearer. Unless in a very wealthy family, I think light silks and satins are very unbecoming for country brides. A handsome dress, of which no bride need be ashamed, can be made of dark American cashmere with plush to match. "B."

CRAB SALAD.

BEEFSTEAK SPANISH STYLE, AND SUNDRY GOOD THINGS.

At a wedding breakfast where the following salad was served, the pretty bride laughingly remarked that usually the bride was the principal attraction at a wedding, but that in her case it was the salad. We will not, therefore, advise its use on such occasions, but in the case of staid married people, where wives have learned to subordinate themselves to a good dinner and to be content with such crumbs of affection as may fall to them after their lords have been well fed, it is always policy to spread an attractive board.

To make this wonderful salad, then, pick out a pint bowlful of crab-meat—one of the mammoth crabs of the Pacific Coast is sufficient—chop it fine and mix with a small onion that has been grated or chopped very fine, and season the whole with pepper and salt. Put this in a neat mound in the center of a flat dish, place around it a circle of the small inner leaves of crisp lettuce, that have been washed and shaken dry in a towel. Take the larger leaves, pile them one on top of the other, and with a keen knife cut them across several times each way, and put them around outside the small leaves. Cutting the lettuce in this way will not bruise and wilt it as chopping would. Now for the very poetry of dressing: beat light the yelks of two eggs; add seven tablespoonfuls of good vinegar (a few drops at a time so as not to curdle the eggs), and one of sugar; mix with a little of the vinegar, two thirds of a teaspoonful of mustard, half one of salt and a quarter of pepper, and put all in a small saucepan set within another containing hot water; add butter the size of an egg, and stir constantly until the mixture thickens like very thick cream. Remove from the fire, and when cold stir in a cup of rich cream that has been whipped until just ready to turn to butter; it must be beaten longer than for Charlotte Russe. Pour this over the crab and lettuce, and garnish with nasturtium leaves and blossoms, or with cresses if the nasturtiums are not in bloom.

The following recipe for beefsteak cooked Spanish style is from the note-book of a celebrated caterer, and although a somewhat peculiar dish, is remarkably good as well as cheap:—Take a slice of round steak an inch thick, lay on a pie-plate, add a little water to baste it with, and bake for 30 minutes, take out and cover with a layer of sliced onions, and bake until the onions are tender; cover with a layer of sliced tomatoes and bake 20 minutes; sprinkle on two tablespoonfuls of grated cheese and place in the oven long enough to melt the cheese. During the baking it should be basted every 10 minutes.

In answer for a request for a recipe for pineapple pie I give the following, with this bit of unasked advice:—unless you are indifferent to the expense, wait until pineapples and eggs are cheap. Grate a pineapple, take its weight in sugar and half its weight in butter; cream the butter and beat it with the sugar and the yelks of five eggs, that have been whipped light; add a cupful of cream, the pineapple and the whites of five eggs beaten to a froth. Line pie-plates with paste and fill with this mixture, bake and eat cold.

Let anyone who is inclined to sneer at hash, try it made as below, and see if he does not find it a nice breakfast relish. Use the thin part of a cold rib roast where streaks of fat intersect the lean, and chop very fine three parts of meat with one of potatoes and a small white onion; season with salt and Cayenne pepper. Put in a frying-pan a bit of butter and a little gravy if you have it, if not, a gill of boiling water—this for a dish of hash for six persons—stir in a teaspoonful of flour wet with cold water add the hash, and stir with a broad-bladed knife until smoking hot. Trim the crust from six thin squares of toast, butter them and mound up the hash on each piece; lay around a delicately poached egg for each person, alternated with sprigs of parsley, and in the words of a charming writer on culinary subjects, "There's poetry in such a dish, and he who would decline it, 'is fit for treasons, stratagems and spoils. Let no such man be trusted.'" PALMETTO.

DOMESTIC RECIPES.

OYSTER PIE.

I would like the readers of the Rural to try the following for a delicious oyster pâté. It may be made in one large or several small pies. Line a deep dish holding about a quart and a pint, with a rich paste. It is most important that this should be good, so if you do not happen to have a well-tried recipe of your own, I give a few suggestions that will insure success. For anything approaching puff paste, never use lard or even a mixture of it. Butter, in the proportion of half a pound to a scant pound of flour, will give a very nice article of puff paste. Sift and weigh the flour and put it in an earthen bowl; sprinkle over it a teaspoonful of sugar, and stir in the yelk of a beaten egg mixed with a few teaspoonfuls of ice-water. Do this slowly, working it meanwhile with the tips of the fingers until you have a firm, smooth paste. Enough ice-water must be added for this purpose, but very gradually, lest the mass become too soft. Now roll out into an elongated square as evenly as possible, spread over it half or one-third of the butter as smoothly and evenly as possible; fold it from right to left, and repeat this process three times, the last time folding and rolling it without the addition of butter. The great secret of success in making puff paste depends upon having the oven very hot and the paste very cold, so you may put the latter on the ice or in a cold place, while you attend to the heating of the former.

Having lined your dish, fill it with stale bread, which may afterwards be used for breading, or if you have none on hand, lay in a clean folded towel. Butter the edges and fit on a neat cover of paste, pinching it down very lightly in several places. It should not require more than 15 minutes' baking; cover with a piece of paper to prevent burning. While it is in the oven, prepare the filling: put over the fire in their own liquor a quart of oysters, and just as they are beginning to simmer, skim them out quickly with a perforated ladle. In another sauce-pan, melt a lump of butter size of an egg, and stir in a heaping tablespoonful of flour, add to this, pouring slowly, a cup of boiling milk and the juice from which you have just lifted the oysters, season with salt and Cayenne pepper, add the beaten yelks of two eggs and the oysters, and when they are well heated, lift the top crust from the dish, fill and send to table. If there is too much to fill the dish, send part of the sauce to the table in a boat.

A few words will finish these somewhat prolix directions. In adding the yelks of eggs to any hot soup or sauce it is always best in order to prevent curdling, to pour a little of the hot liquid slowly into the bowl containing the beaten eggs and then to pour this gradually into the remainder. If by any mischance your dinner is kept waiting, do not fill the crust or put the oysters into the sauce until your guests or family are ready. A few seconds will suffice to reheat both oysters and crust. This recipe cannot be excelled, and I am quite sure that any of your readers who try it will give it a place among their standard recipes. MRS. L. M. C.

New York City.

WATERMELON CAKE.

One cup of white sugar, one-half cup of butter, one-half cup of sweet milk, whites of four eggs, one-half teaspoonful of soda, one of cream-of-tartar, two scant cups of flour, one-fourth cup of sour milk, two-thirds cup of pink sugar, one-fourth cup of butter, one-half teaspoon of soda, whites of two eggs, one teacup of raisins, flour enough to make rather stiff. First and second half of recipe to be made up separately, and mixed like marble cake before baking.

MOLASSES CAKE.

One cup of sugar, one of molasses, to be warmed a little, two eggs, one cup of milk, two teaspoonfuls of baking powder and four or five cups of flour.

YELLOW FILLED CAKE.

Two eggs, one cup of sugar, one-half cup of butter, two-thirds cup of sweet milk, two cups of flour, one teaspoonful of baking powder.

WHITE.

One-and-one-half cup of sugar, one-half cup of butter, two-thirds cup of sweet milk, whites of five eggs, two cups of flour, two teaspoonfuls of baking powder.

FROSTING.

One-and-a-half cup of sugar, five tablespoonfuls of water boiled to a sirup. Beat the yelks of five eggs 30 minutes, add to the sirup while boiling and stir rapidly until smooth. Flavor with vanilla.

MRS. W.'S COOKIES.

One teacupful of sugar, one-half cup of butter, two eggs, about one teaspoonful of saleratus. Mix hard enough to roll out.

AUNT RACHEL.

Miscellaneous Advertising.

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FOR MILKING COWS WITH SORE TEATS

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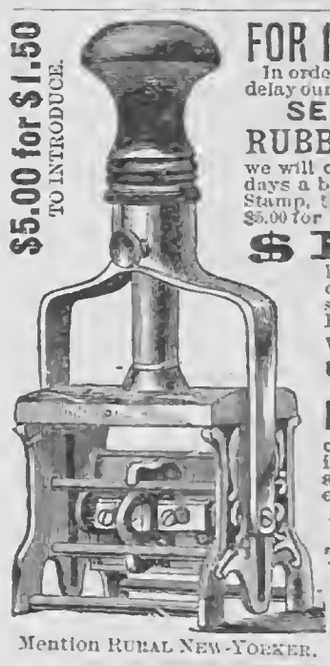

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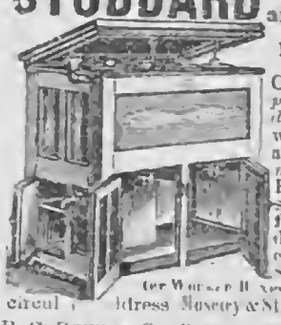

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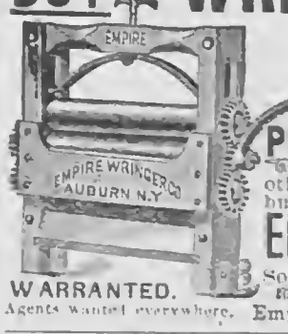

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News of the Week.

HOME NEWS.

SATURDAY, April 3, 1886.

Mr. Landrey's motion in the Dominion House of Commons to censure the Government for hanging Riel has been defeated by 94 majority—146 against 52—a very emphatic indorsement of the Government. Considerable race bitterness still exhibited. Members for the French sections, who voted against the motion, blacklisted at home..... The deficit in the Dominion income for the present year is estimated, by the Finance Minister, at $1,450,000, owing to the cost of putting down the Riel rebellion. Besides giving large land-grants, the Government advanced most of the money for building the Canada Pacific Railway, taking its own land-grants as security. This land it is now about to release, so as to enable the road to sell or otherwise raise money on it, and thus it will be able to pay $20,000,000 of its indebtedness to the Government by July 1.....American fish masters are chartering Canadian vessels to transport fishermen hired in Canada to their vessels beyond the three-mill limit. The cruiser Lansdowne has warned off a number of Yankee vessels that ventured within the "tabooed" league.....The Northern P. R. R has, at last, deposited with a St. Paul bank $1,173,383 survey fees for its lands in Dakota. After the lands have been surveyed the title will pass from the Government to the roads, and the land can be taxed. To avoid local taxes, all the land-grant railroads have for years allowed their land to remain unsurveyed and the titles to rest in the Government until the lands were actually sold. Congress and a late decision of the U. S. Supreme Court have stopped this tax-shirking trick. .,..... The inhabitants of Western Kansas claim theirs is the richest part of the State, and that the capital being hundreds of miles away, and all the State institutions along the Missouri border, their section is deprived of its due share of advantages; hence they are talking about making it a separate State..... .....Senator Sabin (Minn.) introduced a bill last Wednesday to declare forfeited to the United States all lands granted to any State or corporation to aid in the construction of railroads, that have not been earned by the construction of the roads..... .....Senator Vance (N. C.) is opposed to "official immortality" and wants the abolition of the Civil Service Commission, and "Civil Service" tenure of office. He is backed up by tens of thousands of "outs" who want to get "in," as well as by their friends, "practical politicians," "fine political workers," etc., etc. Early Civil Service rigor seems to be relaxing—just a trifle now, with a tendency to more..... ....The House Committee on Rivers and Harbors wants an appropriation of $15,164,200 for improvements in navigable waters. Some of the places to be "improved" wouldn't float a pleasure shell. The Senate is bound to make additions, to be allowed or cut down by a conference committee. Of the 15 members of the Com. on R. and H., one is from N. Y.; one from Pa.; and one from Mass.; of the other 12, five are from the West and seven from the South. The W. and S. "go in," in a big-handed way, for generous appropriations. The Mississippi claims $3,800,000; and the Missouri and Ohio, $1,200,000... Sheridan, like Logan, favors an increase of the army. "The savings on transportation bills in bringing troops from a distance to quell Indian outbreaks" would nearly pay for the increase.... .....The Pension Bill calls for $75,000,000 —$15,000,000 more than last year. The present pension outlay would be nearly doubled, if all the pension bills now before Congress were passed.....Mrs. Warner objects to the seizure of property by the sheriff, in accordance with the late judgments against her husband. Warner has disappeared with all the "portable property," and the rest is in the name of his wife—an "innocent holder"..... ....Reduction in public debt during March is estimated at $14,250,000.....A half-million-dollar hotel will soon be erected in Kansas City. Phew!.....The Western Silk Association in session, Wednesday, at Chicago, is to order an advance of 20 per cent. in manufactured silk—it is said. The American Silk Association, representing Eastern manufacturers, have formed a union with the Western men "to control the entire silk-producing industries of the country."..... ...Truly tropical rains early in the week in Alabama, Georgia, La., Tennessee, very heavy rains also in adjacent States—eight inches in two days were common in the Gulf States, and ten inches, in three. Hillsides badly "washed" and gullied; growing crops and garden truck greatly injured, or ruined in many places; rivers booming or flooding bottom lands; many mills and buildings near water-courses wrecked or engulfed or swept away; considerable loss of fences, stacked crops and live stock. Tornadoes, thunder showers, cloud bursts and local winds-storms reported. Melting snows, ice gorges and heavy rains are also booming rivers in New England, especially in Me., N. H. and Vt. Much property destroyed. The West, too, is suffering from or threatened with floods..... .....The whole surface of Lake Michigan is rising at the rate of four inches per year: surface now two-and-one-half feet higher than it was seven years ago Chicago likely to be submerged, to the exceeding great joy of St. Louis.....The Bureau of Statistics reports that the total values of our exports during the twelve months ended February 28, 1886, were $663,723,574, and during the preceeding 12 months $748,003,201, a decrease of $84,279,627. The total values of the imports for the twelve months ended February 28, 1886, were $607,711,701—and for the preceding twelve months $604,489,440, an increase of $4,222,261, a total difference of $87,501,888 between our exports and imports this year and last, against this year. Small wonder that while we imported gold from Europe last year, we are sending millions of it abroad now; nearly the whole difference is due to a decrease in our exports of agricultural produce..... ....A great fire at Key West, Fla., has burned up most of that little wooden, rock-based, sea-girt town; 4,500 inhabitants homeless—mostly "patriotic" Cuban cigar-and-cigarette makers, the principal part of the population of the broad-veranded, palm-and-palmetto-shaded place. Total loss about $1,500,000; famine staring the employment-less population grimly in the face..... .....What little chance Eads' ship-railway had ever had has been killed by the publication of his "jug-handled" concession from Mexico. The United States is to guarantee an annual income of $2,600,000; Mexico half as much. The U. S. is to pay cash; M. in 20 year bonds. "Americans" must pay freight in gold; Mexicans in silver. Mexican government vessels etc., etc., to be carried free; those of the U. S. to pay 75 per cent. of regular rates. The U. S. can't use the road at all at any time without the consent of M.; M. can size and appropriate the road in certain contingencies. In return for these "concessions" the U. S. becomes liable for $37,000,000, without any security, and all litigation must be carried on in Mexican courts!..... ....Of the Bell Telephone Company's capital of $10,000,000, only $3,000,000 are paid up: on this the dividends last year amounted to $1,500,000! The company convened at Boston the other day, and all were cheerful..... The Pan-Electric scandal is still being ventilated at Washington, and the disclosures of greed, cunning, trickery and unscrupulousness continues. Because one of these companies is as bad as the other is no reason why the public should allow itself to be oppressed or swindled by either.....General Master Workman Powderley, head-chief of the Knights of Labor, is very sick at his home in Scranton, Pa., where he called Wednesday on his way to St. Louis from his conference with Jay Gould here. He is troubled with sleeplessness, a sore chest and symptoms of typhoid fever. He has also quinsy, boils and fractured ribs. Absolute rest and no worry prescribed. He has been "winning golden opinions from all sorts and conditions of men."..... Strikes here and there all over the country are still "the order of the day." That on the "Gould railroad system" still continues stubbornly. Early in the week Master Workman Powderly, of the Knights of Labor, held an amicable conference with Jay Gould in this city, and it seemed agreed that arbitrators should be appointed to settle the matter. Orders were sent at once for resumption of work. Next day Gould declared that he had been misunderstood, and those of the men who had gone to work again "knocked off." The same thing has been repeated since then, owing to another "misunderstanding." The men refuse to return to work unless all are permitted to go back; the railroad officials will not permit the return of ringleaders or of those who have damaged property. A large number of freight trains are running on all the roads in charge of new hands. Strikers starving, exasperated and "ugly"—ready for violence to property and "scabs." Militia gone to Parsons, Kans., and Fort Worth, Texas, where the roads are blocked, armed strikers massed and serious trouble feared. The commerce and trade of the whole country are sufferiug; those of the tributary regions, of course, most severely; hopes of early settlement; fears of much bloodshed, great trouble and considerable delay..... Transcontinental rates are still being cut, passenger rates down to $6, last Wednesday, from the Mississppi to the Pacific. Freight rates still "ruinously" low; though the Union Pacific refuses to take first-class freight below $1.05 per 100 pounds, to San Francisco Other roads cut that class much lower, and all knock down rates on other classes. A settlement perhaps in May—then the Canadian Pacific will be open and claim a bite of the cherry... A bill introduced in Congress by Representative John J. O'Neil, of Missouri, Chairman of the Committee on Labor, provides for the voluntary submission of disputes between railroads engaged in interstate commerce and their employés to boards of arbitration, the members of which are to be chosen one by the employers, one by the employés, and a third by the two first chosen. These arbitrators are to have the powers and pay of United States commissioners, being empowered to subpœna witnesses, and compel them to answer under oath, and their salaries are to be paid by the Government. The bill in its present shape seems to have no compulsory features except what are included in the grant of commissioners' powers to the arbitrators. Much opposition is displayed, and many emasculating "amendments" are being pressed. Several States are also legislating with regard to arbitration between employers and employés....

After two years' trial, we unhesitatingly pronounce the Boss Zinc and Leather Collar Pad, the only durable and successful one that we have ever used. It retains its shape, is cooling, prevents chafing, and thereby keeps the horses' necks clean and healthy. Hiram G. Dodge & Sons, Wood & Coal Dealers, Madison, Wis.—*Adv.*

AGRICULTURAL NEWS.

SATURDAY, April 3, 1886.

The Ohio State Board of Agriculture asks from the Legislature $24,000 to help complete the new fair grounds, and is likely to get it.. .....Distinguished European arrivals in Boston from Glasgow last Wednesday: 9 Clydesdales, 13 Shetlands, 21 Aberdeen-Angus, and "the prize Hereford of all the world,".... Thursday the Ohio Wool Growers' Association argued before the Ways and Means Committee against any decrease in the tariff on wool.. ..The railroad troubles of the Southwest and the change in the freight scedule from Chicago so affected the supply of dressed beef sent to Philadelphia, that the price has been raised from $1 to $1.50 per 100 pounds.....In spite of oleomargarine, it is estimated that there are 1,516,410 milch cows in the State of New York, which produced the following quantities and values in 1885, viz.: 127,541,820 pounds of butter, worth $31,885,455; 136,223,664 pounds of cheese, worth $14,984,603; and 927,083,522 pounds of milk not counted for butter and cheese, valued at $11,563,531, in all $58,433,889.....There are 495,000 fewer sheep reported for taxation in 1885 in Kansas than in 1884.....Gov. Pattison, of Pa., has named April 16 as Arbor Day, the same as last year, although then the frost was still in the ground in most of the northern parts of the State.

Notice—All persons who have bought or intend to buy my 82 to 85-day Seed Corn. I offer $10 cash to one who raises most corn from one pound of seed, and $20 on best acre. This corn took 1st premium out of 60 varieties tested in Ohio. W. M. Woodworth, Irwin, Ohio.—*Adv.*

Crops & Markets.

SATURDAY, April 3, 1886.

The West is the great hog-packing section of the country, the number packed each year elsewhere being comparatively small. The packing year is divided into two sections—the summer, from March 1 to Nov. 1; and the winter, from November 1 to March 1. Summer packing first acquired importance in 1872, when 505,000 hogs were packed. Since then the business in the eight months has steadily increased, as may be seen by the following table, for which, with most of the other information here given, we are indebted to the careful compilations of the Cincinnati Price-Current:

1885	4,965,000	1878	3,878,600
1884	4,058,000	1877	2,543,000
1883	3,781,000	1876	2,307,000
1882	3,210,000	1875	1,262,000
1881	4,803,000	1874	1,200,000
1880	5,322,000	1873	1,063,000
1879	4,051,000	1872	505,000

Last summer there was a gain in the number packed each month except August, the heaviest inrush of hogs being in October, as growers were frightened by the prevalence of hog cholera, especially in Mo., Kans. and Neb. The approximate number of hogs packed in the 12 great Western packing States was:—

	1885.	1884.	1883.	1882.
March	375,000	285,000	200,000	330,000
April	530,000	345,000	310,000	470,000
May	765,000	690,000	585,000	590,000
June	870,000	730,000	640,000	485,000
July	640,000	510,000	480,000	525,000
August	675,000	490,000	420,000	275,000
September	440,000	425,000	425,000	265,000
October	870,000	680,000	630,000	470,000

Here are the lowest and highest prices for the summer months at Chicago, packers mostly buying at 20 to 35 cents per 100 pounds below the extreme range:—

	1885.	1884.	1883.	1882.	1881.
March	$4 00	$5 10	$6 40	$5 90	$5 10
	5 05	7 60	8 10	7 65	6 75
April	4 20	4 75	6 85	6 35	5 40
	4 85	7 10	8 15	7 80	6 65
May	3 50	4 90	6 65	6 90	5 45
	4 55	6 20	7 90	8 60	6 60
June	3 65	4 50	5 70	7 00	6 35
	4 35	5 90	7 25	8 75	6 30
July	3 80	4 60	4 70	7 40	5 70
	5 30	5 85	6 60	9 00	7 10
August	3 75	4 50	4 50	7 40	5 90
	5 35	6 90	6 50	9 50	7 05
September	3 40	3 50	4 35	7 50	6 00
	4 80	6 90	6 00	9 30	7 45
October	3 20	3 50	4 00	6 00	5 75
	4 35	5 90	5 40	9 25	7 40

The total number of hogs packed during the Winter is equivalent to 6,121,037 of the average weight of the Winter of 1884–85, making the decrease equal to 339,203 hogs, or 5¼ per cent. The following table of the number packed in the 12 States in the four winter months, with comparisons, is interesting and instructive.

States.	Number of Hogs Packed.		Average Gross Wt.		Cost, gross.	
	1885-6	1884-5	1885-6	1884-5	1885-6	1884-5
Ohio	499,095	559,003	265.16	267.08	$3 80	$4 43
Indiana	380,621	406,655	245.19	248.17	3 72	4 26
Illinois	2,532,139	2,526,743	263.01	277.11	3 70	4 37
Iowa	719,348	760,593	251.33	268.72	3 48	4 08
Missouri	1,180,139	1,198,092	256.47	262.41	3 66	4 21
Kansas	9,200	19,849	272.65	288.36	3 16	4 02
Nebraska	195,391	242,240	284.17	272.09	3 53	4 08
Minnesota	64,000	51,700	287.28	298.40	3 36	4 17
Wisconsin	392,240	397,393	244.82	258.43	3 67	4 23
Michigan	91,065	70,579	262.71	268.45	3 66	4 28
Kentucky	138,121	182,812	258.14	264.18	3 73	4 42
Tennessee	30,468	27,880	253.01	255.05	3 67	4 32
Miscel'ous	66,566	49,842	242.34	245.49	3 61	4 18
Totals, &c.	6,298,566	6,460,240	258.98	266.51	$3 66	$4 29

The total average yield of lard was 35.22 against 36.02 last year.

The following table shows most of the packing is done at Chicago and half-a-dozen other chief centers, that done at other places in the 12 States (clubbed together opposite "Interior") being comparatively small. The ratio is about the same for summer packing:

	Number of Hogs.	
Cities.	1885-6.	1884-5.
Chicago	2,396,052	2,368,217
Kansas City	656,109	606,787
St. Louis	369,130	442,087
Milwaukee	343,423	336,645
Cincinnati	332,696	385,435
Indianapolis	290,700	316,971
Louisville	122,261	164,912
Totals, etc	4,507,171	4,621,054
Interior	1,791,824	1,839,186
All points	6,298,995	6,460,240

The great rush of hogs in October lessened the amount of winter packing.

The January report of the Department of Agriculture assigns 28,280,949 hogs to the 12 "packing States," against 28,680,565 at the same time last year. The relative number of hogs in the several States reported, by percentages, is as follows, compared with 1884:

Ohio 99, Indiana 99, Illinois 97, Iowa 101, Missouri 99, Kansas 103, Nebraska 102, Minnesota 102, Wisconsin 99, Michigan 99, Tennessee 105.

The estimate of supply made by the Price Current from a multitude of reports, after March 1, is as follows: Ohio, 93; Indiana, 97; Illinois, 93; Iowa, 90; Missouri, 82; Kansas, 77; Nebraska, 80; Minnesota, 90; Wisconsin, 80; Michigan, 100; Kentucky, 95; Tennessee, 98. Applying these averages to the relative importance which each State maintains in the basis of supply, the general average is 89, or 11 per cent. decrease, in number of hogs, compared with last year—which would mean something over half a million in number. These exhibits indicate the larger decrease to be west of the Mississippi River—the average for Iowa, Missouri, Kansas and Nebraska being 84, and for the other States 94.

Editor Murray (whose forecasts generally approximate facts) is convinced that, in spite of these figures compiled from his reports, the chances favor a supply of hogs available for the coming Summer fully equal to last year's number, especially if growers should, later in the season see reasons for holding back their stock for November or later packing. Since March 1, the number of hogs sold is somewhat larger than in the corresponding period last year.

No Safer Remedy can be had for Coughs and Colds, or any trouble of the Throat, than *"Brown's Bronchial Troches."* Price 25 cts. *Sold only in boxes.—Adv.*

MARKETS BY TELEGRAPH.

SATURDAY, April 3, 1886.

Chicago.—Compared with cash prices a week ago, "regular" wheat is unchanged; No. 2 Spring, a shade higher. Corn, ½c. higher. Oats, 1⅝c. higher. Rye, ½c. lower. Pork, 50c. lower.

Wheat.—Quiet; sales ranged: April, 75¾@76¾c; May, 80¾@81¾c; June, 82¾@83¾c.; No. 2 Spring, 76@78¾c. Corn quiet, Cash, 34¾@36¼c.; April, 35¾@34¾c.; May, 38⅛@38¾c.; June, 33⅛@33¾c. Oats—Sales ranged: Cash, 29@29¼c; April 26¼c.; May, 30¼@30¾c. Rye.—No. 2 56c. Barley—No 2, at 60c. Mess Pork.—Cash, $9 25@9 30; May, at $9 25@9 35; June at $9 32½@9 40. Lard.—Quiet and steady; sales ranged: Cash, at $5 87½@5 90; May, $5 90@5 95; June, $6 00@6 02½. Bulk-meats.—Shoulders, $3 85@3 90; Short rib sides, at $5 20@5 22½; Short Clear sides, at $5 90@5 95. Cattle—Market steady. Shipping steers, $4 00@5 75; stockers and feeders, $3 00@4 50; cows, bulls and mixed, $2@3 90; bulk, $3 00@3 50. Hogs.—Rough and mixed, $3 60@4 30; packing and shipping, $4 20@4 45; light $3 80@4 25; skips, $2 90@3 70. Sheep.—Natives, $3 00@5 85; Western, $4 00@4 60; lambs, $4 85@6 12; Texans, $2 50@4 25.

St. Louis.—Compared with cash prices a week ago, No. 2 Red wheat is ½c. higher. Corn, ¾c. lower. Oats, ¾c. higher. Rye steady. Butter, from 1c. to 2c. higher. Eggs, from 1c, to 1½c. lower. Pork, 25c. lower.

Wheat.—Fairly active but weak; sales ranged; No. 2 Red, Cash at 88¼c; May, at 89@89½c.; June, at 89½@90c; July, at 85¾@86c. Corn.—No. 2 mixed at 33½@33¼c; April, at 33¼@33¾c; May, at 34¼@34¼c; mixed, Cash, at 30¼@30¾c; April, at 29c. bid; May, at June, at 31¾@34¾c. Oats—Dull and easy; No. 2 30c. asked. Rye—Steady, at 60c. Butter—Steady, and firm; creamery, is quoted at 27@32c; dairy, 18@23c. Eggs—Easy at 9c. Flaxseed—Steady at $1 09. Wool.—Quiet and steady; washed at 26@31c.; unwashed at 13@32c; Texas wool, at 9@22c. Pork—Steady at $10. Lard.—Firm at 5.80c. Bulk Meats.—Loose lots, long Clear, at $5 60; Short Rib, at $5 35; Short Clear, $5 20. Bacon—Firm; long clear at 5.50c; short ribs, 5.80@5.82½c; short clear, 5.87½@5.95c. Hams, firm at 8.50@11c. Cattle—Market dull; fair to choice native shipping steers, at $3 40@4 75; butcher steers, at $4 35@4 65; cows and heifers, at $2 50@3 75; stockers and feeders, $4 00@4 25. Hogs.—Light, $3 85@4 00; packing, $3 50@4 00; heavy, $4 15@4 25, Sheep.—Market dull at $3 75@5 50.

Boston.—Corn.—Steamer Yellow, at 50@50½c; do. mixed at 50c. per bushel. Oats.—Quiet, No. 2 white, in the elevators, at 42@42½c.; and No. 3 white at 41@41½c. per bushel, and barley oats range at 44@44½c. ₱ bushel. Small sales of Rye at 67@68c, ₱ bushel. Sales of bran at $17 50 for Spring and $18 00 for Winter; fine feed and middlings at $17 00@20 00, and cotton seed meal at $23 25 on spot and $22 25 per ton to arrive. Hay and Straw—Hay is steady at $18 50@19 00 ₱ ton for choice and fancy; fair to good, $17@18, fine, $16@17, and $13@15 for poor and damaged. Western choice $16@17, do fair to good $14@15. Rye straw is held at $19@20 00 for choice, and $12@14 for common to good. Swale hay, $11@13; Oat straw, $8@10 per ton. Produce—Butter-Northern creamery, choice to extra, 27@32c; good to choice summer, 18@22c; western creamery, at 26@33c, for choice to extra fresh made; good to choice held stock, at 15@20c; northern dairy 28@30c, for Vermont extra; 20@23c, choice, and 15@18c, for fair to good; Western dairy, 18@23c, for choice, and 13@15c, for fair to good; imitation creamery at 25@28c, for good to extra; ladle-packed, at 24@25c, for extra Cheese—New York choice to extra, 9@10½c, and common to good, 5@8c; Vermont choice to extra, 8½@10½c and common, 5@7c; Western common to extra, at 8@9½c. Sage, extra, 13½c, good to choice, 8@10c. Eggs—Cape and near-by, per dozen, at 15c; Eastern extras, 14½@15c; do, firsts, 15c; Northern, fresh, 14@15c; Western fresh, 14@14½c; Provincial, at 14@14½c. Beans.—Choice Northern hand picked pea, $1 65@1 77 per bushel; do, do, New York, small, $1 45@1 50; do, do, screened, $1 45@1 50; medium choice, hand-picked $1 30@1 35; do, do, screened, $1 15@1 30; Yellow Eyes, improved, $1 35@1 40; do, choice flats, $1 30@1 35; Red Kidneys, $1 65@1 70. Canada peas, 65@95c, per bushel for common to choice. Green peas, Northern, at 90c@$1 00; do, Western, $1 20@1 25. Potatoes range at 50@78c, per bushel, as to quality.

PRODUCE AND PROVISION

New York, Saturday, April 3, 1886

State of the Market.—Compared with cash prices last week, flour is 5c, lower; Ungraded Winter Red wheat, is 3c, higher; corn, ungraded mixed, 2c. lower; No, 2 mixed is ½c. lower, oats, No. 2 mixed, ¾c, lower; pork, 25c, lower; butter, steady on best lots; eggs, 1c, lower; poultry, 1c, lower; fruits, steady.

Flour, Feed and Meal. Flour—Quotations: Fine at $2 20@2 90; Superfine, $2 80@3 30; Extra No. 2, $3 25@3 65; Good to Fancy Extra State, $3 80@4 25; Common to Good Extra Western at $3 25@4 10; Good to Choice Extra Western, $4 00@5 30; Common to Fair Extra Ohio, $3 25@3 75; Good, $3 80@4 50; Good to Choice, $4 25@5 25; Common Extra Minnesota, $3 25@3 65; Clear, $3 90@4 50; Rye Mixture, $3 90@4 25; Straight, $4 50@5 00; Patent $4 75@5 30; Bakers' Extra, $4 50@4 75; St. Louis Common to Fair Extra, $3 25@3 75; Fair to Good, $3 80@4 75; Good to Very Choice, $4 80@5 30; Patent Winter Wheat Extra, $4 50@5 35; City Mill Extra for West Indies, at $4 30@4 85; South America, $4 90@5 10. Southern Flour—Common to Fair Extra, $3 35@3 75; Fair to Choice do., $3 80@5 10. Rye Flour—Superfine, $3 15@3 40. Corn Meal—Brandywine at $2 80@2 85; Yellow Western at $2 60@2 80; Saganore, quoted at $2 80. Feed—40 to 70 lbs. quoted at 82½@87½c.; for 60 lb. at 77½@80c.; 80 lb. at 80@82½c.; 100 lb. at 90@92½c; and sharps at 92½c.@$1. Rye at 80@82½c.

Grain.—Wheat.—Ungraded Chicago Spring, at 96c; White California, at 82c; Ungraded Winter Red, at 93c@$1 03¾; No. 3 Red at 92½c; and 91½ afloat; No. 2 Red for April, at 93¾@93c.; do. for May, at 93¾@91c; do. for June, 91@91½c.; do. for July, 94¾@94¾c; do. for August, 94¾@95¾c; do. for September 98½c. do. for December, 99¼@99¾c. Rye—Western, 62@63½c; State at 66c. Corn—Ungraded Mixed, at 45@46c; No. 3, 45c.; Steamer Mixed, 44¾@44½c; No. 2 Mixed, at 46c; Yellow, 47½c; No. 2 Mixed for April, 45¾@46¼c; do. for May, at 46¾@46¾c.; do. for June, at 47½c. Oats.—No. 3 Mixed, 35½@36c; No. 2, 36@36¼c.; No. 3 White, 38½@38¾c; No. 2 do. 39¾c; No. 1, nominal, 43c; Mixed Western, at 37@39c.; White do., at 40@45½c; White State, 41c; No. 2 Mixed for April at 36@36¾c; do. for May, 36¾@36¾c.

Provisions.—Pork. Mess quoted at $9 50@10 00 for Old and $10 50@10 75 for New; $10 75@$11 50 for Family Mess; $12 00@14 00 for Clear Back; and $9 50@9 75 for Extra Prime. Beef.—City Extra India Mess, $15 00@17 00; Extra Mess, in barrels, $8 00@8 50; Packet, $8 50@9 00 in bbls.; Fancy Plate, $9 00. Beef Hams.—Quoted at $17@17 25. Cut Meats.—Pickled

Bellies, 12 lb, average, 5¼c; Bellies, 10 lb, average, 5¾c; do. Shoulders, 4¼@4¾c; Smoked do., 5@5¼c; Pickled Hams at 8¼@8½c.; Smoked do., 9¼c. MIDDLES—Long Clear, 5 45c.; Short Clear, 5 70c. DRESSED HOGS.—City Heavy to Light, 6c. LARD.—Western Steam at 6.25c; April, 6.22@6.21c.; May, at 6.25@6.26c.; June, at 6.29@6.30c; July, at 6.36@6.37c.; September, at 6.19@6.50c.; City steam at 6.17c.; Refined Continent, 6.50c., and South American, 6.90c.

BUTTER.—Elgin Creamery, 31@33c; Pennsylvania do., 34@35c.; Western do., at 33c.; State Dairy half-firkin tubs, 26@31c.; Western Imitation Creamery, at 27c.; Western Dairy, 15@18c; Western Factory, 15@24c.; rolls, at 8@12c. Old Butter.—State Dairy at 15@26c; State Dairies, firkin and tubs, 12@25c; State Dairy, firkins, 16@23c.

CHEESE.—State, at 8½@11¼c; Skims, 2@8c.; Western, 7½@10½c.

EGGS.—State, at 12¼c.; Western, at 12½@12¾c.; Southern, at 12@12¼c.

POULTRY.—LIVE.—Fowls, near-by lots, per lb, at 18c.; fowls, Western, per lb, at 10c.; fowls, State, per lb, at 10c; turkeys, per lb, at 9@12c.; ducks, western, per pair, at 60@85c.; geese, western, per pair, at $1 25@1.50.

POULTRY.—DRESSED.—Turkeys, per pound, 10@12c; chickens, Philadelphia, 2 to 3 lbs. to pair, at 23@35c, per lb; do. winter, Philadelphia, 23@28c.; do, State at 12@13c; do. western at 12@13c.; fowls, Pennsylvania, prime, 12c; do. Jersey, at 11@12c.; State and western, at 10@11c. Ducks, Jersey, at 14@15c; do. western, 12@14c Geese, Jersey, at 10@12c; do, western, at 9@10c.

POULTRY.—FROZEN.—Turkeys, per pound, at 12@13c.; Chickens, per pound, at 8@10c.; Ducks, per pound, 14@15c.; Geese, per pound, at 11@12c.

GAME.—Wild ducks, canvas, per pair, $2@2 50; do., red-head, per pair, at $1 00@1 50; do. mallard, western, per pair, at 80@40c.

COTTON.—The quotations, according to the American classification, are as follows:

	New Orleans. Uplands.	and Gulf.	Texas.
Ordinary	6 9-16	6¾	6¾
Strict Ordinary	7	7 3-16	7 3-16
Good Ordinary	7 15-16	8¼	8¼
Strict Good Ordinary	8¾	8 9-16	8 9-16
Low Middling	8¾	8 15-16	8 15-16
Strict Low Middling	9	9 3-16	9 3-16
Middling	9 3-16	9¾	9¾
Good Middling	9¾	9 13-16	9 13-16
Strict Good Middling	9 15-16	10⅛	10⅛
Middling Fair	10 5-16	10⅜	10⅜
Fair	10 15-16	11⅜	11⅜

STAINED.

Good Ordinary	6¾	Low Middling	7¾
Strict Good Ord.	7 1-16	Middling	8¾

FRUITS.—FRESH.—Quotations are: San Blas cocoanuts at $3@3 5; Baracoa cocoanuts at $9@31. Apples—Baldwin, per bbl., at $1 50@1 75; Greening, per bbl. $1 75@2. Grapes.—Catawba at 7@8c. per lb, in baskets. Cranberries.—Cape Cod, choice, per bbl., $3 50@4; do. fancy, $4 50; do. choice, per crate, $1 00@1 25. Florida oranges.—Fancy at $3 00@3 25; choice do, $2 75@3 00; do. inferior at 75c.@$1. Strawberries—Florida at $1@1 50 per quart.

FRUITS.—DRIED.—The quotations are as follows: Apples—Fancy evaporated, 7@7¼c; choice, 6¾c; do. prime at 6½@6¾c.; fancy North Carolina sliced, at 4@4¼c.; choice do. at 3@3½c.; choice Tennessee quarters at 2½@2¾c.; State quarters at 2½@3½c.; southern sliced prime at 2¾@2¾c; do. common, 2c. Peaches-Peeled North Carolina, choice, 11@11¼c.; fancy, 12½@13c; extra fancy, 13½c; Georgia, choice, 10@11c; do. prime, 8@9½c; unpeeled halves, 2¾@3¼c; unpeeled quarters at 2½@3c.; Delaware evaporated, peeled, 24@27c. Choice pitted cherries at 10½@11c. Evaporated raspberries at 15@16c; sun-dried do. 13@14c. Blackberries—Prime at 3½@3½c. Whortleberries at 6¾c.

PEANUTS.—Without change in price under moderate dealings. Quotations at 6@6¾c. for best hand-picked, and 4¼@4¾c. for farmers' grades.

PECAN NUTS.—The quotations are: Extra large at 7½@8½c; large at 6½@7c; medium at 5@5½c; small at 4@4½c.

HAY AND STRAW.—Supplies are fair and freely offered. Prices are without change. Quotations are for: Choice timothy hay at 90c; good at 85c.; medium at 75@80c.; shipping at 70@75c; clover mixed at 70@75c; Clover, 50@60c.; No. 1 rye straw at 90@95; short rye straw at 70@75c; oat straw at 40@45c; wheat straw at 60@65c., all per 100 pounds.

GUNNY CLOTH.—A fair business is noted at full late quoted prices. Prices are as follows: 7c. for 1¾ lbs.; 7¾c. for 2 lbs., and 8½c. for 2¼ lbs.

TALLOW—Prime City quoted at 4½ c.

VEGETABLES.—Potatoes—Rose, Maine, fancy, d. h. bbl., at $2 50; Nova Scotia per bbl., at 2 00@2 25; State, per 180 lb., $1 50@1 62; Burbank, State, bulk, per 180 lb. $1 62@1 87; Burbank, eastern and Nova Scotia, per bbl, $2 25@2 50; Hebron, do, do, do, per bbl, at $2 00, Hebron, State, bulk, per 180 lb, $1 50@1 62; Prolific and Goodrich, eastern and Nova Scotia, per bbl., $2@2 25; Peerless, bulk, per bbl., at $1 50@1 75; Magnum Bonum, Imported, 168 lb, sack, $1 75@1 85; Bermuda, per bbl., at $10@12. Sweet potatoes, Delaware River, per bbl., at $2 50@2 75. Cabbages—Long Island, choice, per 100, at $6@7; do, Imported, per 100, at $6 00@8 00; do. Florida, per barrel, at $2 00@3 00. Kale.—Norfolk, Scotch, per bbl, 50@75c. Onions—Bermuda, per box, $1@1 25; white, eastern, per bbl., at $2 00@2 50; Connecticut, per bbl., at $2 00@2 25; do. State and western, $1 75@2 25; do. red, Connecticut, per bbl, $2 00@2 50; do. choice, Orange County, $2 00@2 25; inferior, per bbl, $1 75@2 00. Squash—Hubbard, per bbl., $2 25@2 50; Marrow per bbl., $1 25@1 50. Turnips—Russia, per bbl., 50@75c. Asparagus—Prime, per bunch, at 60@70c. Beets—Bermuda, per crate, at 75c@$1 00. Tomatoes—Bermuda, per box, at $1@1 25; do. Key West, per box, at $1 50@1 75. Beets, Florida, per crate, $1 50.

LIVE STOCK MARKET.

NEW YORK, SATURDAY, April 3, 1886.

Total shipments for the week, 539 live cattle, 6,288 quarters of beef, 155 live sheep and 610 carcasses of mutton. BEEVES.—Total receipts for six days 5,959 head, against 8,531 head last week. Common to Good Steers, sold at $4 90@5 90, a few Prime Bullocks and lots at 86@6 20 per 100 pounds. Old Oxen range from $4 50 to 5 75; Bulls sold at $3 50@4 50; and Dry Cows, Heifers and Yearlings at $2 75@3 70; Pennsylvania Stable-fed Steers, 1,347 lb, at $5 85; do., 1,570 lb, at $5 85; Chicago steers, 1,198 lb, at $5 46; do, 1,176 lb, at $5 40; Ohio do., 1,259 lb, at $5 55; Oxen, 1,300 lb, at $4 50; Bulls, 1,000 lb, at $3 50; Mixed Western steers, 1,103 lb, at $5 20; Buffalo steers, 1,234 lb, at $5 45; Pennsylvania bulls, 1,100@1,470 lb, at $4 25; Chicago do. 1,057 lb, at $3 60; Pennsylvania Dry Cows, 950@1,090 lb, at $3 50@3 70; Native "Stillers," 1,070 lb, at $5 10.

CALVES.—Very little demand and prices weak.

SHEEP AND LAMBS.—Receipts for six days, 22,194 head against 27,101 head for the same time last week. Average sales about the same as yesterday, with some sales of light Sheep at rather stronger prices. Ordinary to Choice Sheep sold at $5 25@7; Common to Prime Yearling Lambs at $6@7 60. Ohio Sheep, 84 lb, at 6¾c; Ohio Lambs, 86 lb, at $7 60; Michigan do, 69 lb, at $7 40; Jersey Ewes, 111 lb, average, at 5½c; Western sheep, 78 lb, at 5⅝c; State do. 86 lb, at 6¾c; Western lambs, 67 lb, at 6½c; State do. 77 lb, at 7¼c.

HOGS.—Total receipts for six days, 30,115 head, against 25,977 head for the corresponding time last week. None alive for sale. Nominally steady at $4 50@4 75 per 100 lb.

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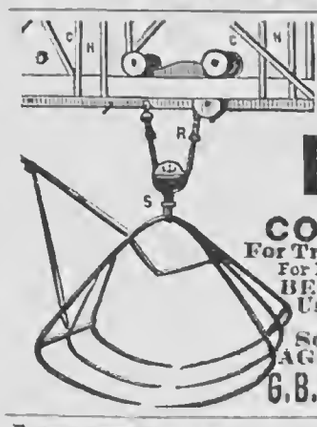
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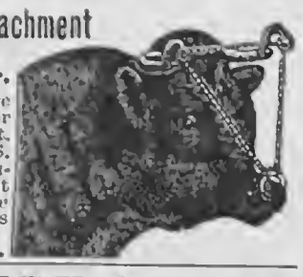
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CAYUGA LAND PLASTER.
Contains Phosphate of Lime. Gives Plants an early start, improves quality, increases yield Low freights to all points. Farmers' Memorandum Book sent FREE. Correspondence solicited.
CAYUGA PLASTER CO. Union Springs, N. Y.

BAUGH'S $25 PHOSPHATE
TRADE MARK

Contains the Life and Essence of Animal Bones. We are now selling Baugh's Strictly Pure Raw Bone Meal, also Baugh's Ready Dissolved Pure Animal Bones at very low prices. It would surprise farmers to know how very low they can procure these brands direct from us. Send your name and address, and we will mail you our PHOSPHATE GUIDE.
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ESTABLISHED 1822.
Joseph Breck & Sons,
Originators of the
PEARL OF SAVOY POTATO
750 Bushels Raised on an Acre in 1884
660 20/60 " " " " " " 1885
And conceded by all who have tried them to be the Earliest, Most Productive and Most Delicious Potato in Cultivation. AND THE
ANGEL OF MIDNIGHT FIELD CORN
123 10/56 BUSHELS SHELLED CORN
Were produced on an Acre in 1885.
It is pronounced by the
RURAL NEW YORKER
the Earliest Variety ever Tested on their Experimental Grounds,
$700.00
In Cash Premiums were paid by us in 1884-5 for the largest and best yields of these varieties. For particulars see OUR CATALOGUE and
GARDENER'S GUIDE
For 1886, containing over 170 pages; several Colored Plates; a comprehensive treatise on Grasses, Mowing Lands and Permanent Pastures and much other valuable information, which we will mail on receipt of five cents to pay postage.
Every Thing for the
GARDEN, FARM AND LAWN,
AT LOWEST PRICES.
JOSEPH BRECK & SONS,
Seed and Agricultural Warehouse,
51-53 N. MARKET ST., BOSTON, MASS.

Macomber's Hand Planter, *for Corn, Beans, and Beet Seed.* The BEST in the world. Money refunded if it does not prove satisfactory, after a fair trial. Agents wanted. Send for circular and terms.
S. M. Macomber & Co., M'f'g's, Grand Isle Vt.
For Rhode Island address L. G. SHERMAN & CO., PROVIDENCE.

WE WANT ACTIVE AGENTS
TO SELL THE
Renner Combined Alarm and Door Bell
In every County in the United States and Canada. Geo. C. Owens, Modesta, Cal., says: "I have canvassed one day and took 22 orders." In same letter he ordered two gross. Wm. McKim, of Grand Haven, Mich., says "he took 13 orders in 10 hours." Profit on Bell, $2.50. In our EXTRAORDINARY OFFER to Agents we agree to take back all Bells unsold if the Agent fails to clear $125 in 30 days. Illustrated Circulars sent free. Address
RENNER MANUF'ING CO., Pittsburg, Pa.

7,000 CHALLENGE WIND MILLS.

IN USE IN EVERY State and Territory of the U. S. It is a sectional wheel, has been made by us 15 years, and has never blown down without tower breaking, a record no other mill can show. MILLS SENT ON 30 DAYS TEST TRIAL. BEST FEED MILLS, CORN SHELLERS, ETC. GOOD AGENTS WANTED in all unassigned territory. Catalogues free. CHALLENGE WIND MILL AND FEED MILL CO., Batavia, Kane Co. Ill.

ECLIPSE
POST HOLE DIGGER.
The Greatest LABOR-SAVING tool ever invented for digging holes in the ground. This machine works on a new principle, and is unlike anything in the market. It is neither an Auger nor a Plunger, but is driven in the ground with a driving rod, which works in a pipe similar to a telescope. We claim for this tool:
1st. That one man can dig from two to three hundred holes two feet in ordinary ground in one day.
2nd. That it will dig holes any size or depth required.
3d. That it will work successfully in very hard or rough ground where other diggers and augers will not work at all.
4th. You stand up straight while using it, consequently no back-breaking work is required.
It will pay you to send for descriptive circulars and prices to COLE & FLEMING, Manufacturers, Springfield, O.

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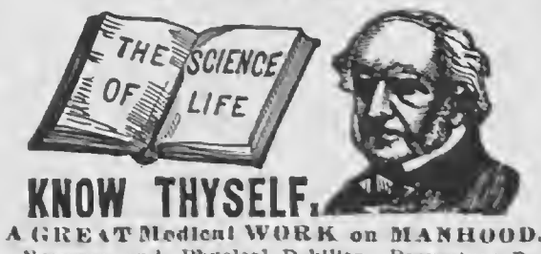
BY MAIL POSTPAID.


KNOW THYSELF.
A GREAT Medical WORK on MANHOOD.
Nervous and Physical Debility, Premature Decline in man. A book for every man, young, middle aged and old. It contains 125 prescriptions for all acute and chronic diseases, each one of which is invaluable. So found by the author, whose experience for 23 years in such has probably never before fell to the lot of any physician. 300 pages, bound in beautiful French muslin, embossed covers, full gilt, guaranteed to be a finer work in every sense—mechanical, literary and professional—than any other work sold in this country for $2.50, or the money will be refunded in every instance. Price only $1.00 by mail, postpaid. Illustrated sample 6 cents. Send now. Gold medal awarded the author by the National Medical Association, to the officers of which he refers.
The Science of Life should be read by the young for instruction, and by the afflicted for relief. It will benefit all.—*London Lancet.*
There is no member of society to whom The Science of Life will not be useful, whether youth, parent, guardian, instructor or clergyman.—*Argonaut.*
Address the Peabody Medical Institute, or Dr. W. H. Parker, No. 4 Bulfinch Street, Boston, Mass., who may be consulted on all diseases requiring skill and experience. Chronic and obstinate diseases that have baffled the skill of all other physicians a specialty. Such HEAL treated successfully without an instance of failure. THYSELF
Mention this paper.

I WILL INSURE YOUR HOGS!
DR. JOS. HAAS'
HOG AND POULTRY REMEDY

[None Genuine without this Trade Mark.]
Is the only Practical Preventive of the so-called Swine Plague.
It has never been surpassed as an increaser of pork and general system tonic. Aiding digestion, stimulating the biliary organs, preventing torpor and engorgement of the liver, and regulating the bowels, it removes and prevents the formation of disease germs, and preserves to the well bred hog his natural constitution. Where it has been fed to such animals in the prescribed quantities, and other directions faithfully observed, it has proved a thorough preventive against swine disease.
AS AN EVIDENCE OF FAITH
in my remedy I make the following offer:
1. I will insure herds of swine of not less than one hundred in number against disease, at a small fee per head, provided they are fed my remedy under my direction, and prove upon examination prior to contract that they are in a healthy condition, and are neither in-bred, close-bred nor the progeny of such.
1. I will forfeit $100.00 to any breeder whose offer to examine for insurance I decline, provided he forwards remittance to cover my expenses to and from location of hogs, or I fail to prove to the satisfaction of any disinterested party, that failure to respond to invitation is caused by prior engagement or by matters of at least equal importance.
2. I will forfeit $500.00 if I decline upon examination to insure such herds, if my judgment as to their condition of health is overborne by the result of an examination made by at least two properly qualified and graduated veterinary surgeons.
Facts are Better than Assertions.
Please read the following testimony:
GIBSONTON P. O., PA., Feb. 2, 1885.
Dr. Jos. Haas—Dear Sir: About a year ago our herd here numbered about 2,700 head. Disease broke out, and no remedy we had would arrest the trouble. Our losses were heavy and we had to give up feeding entirely for about two months. We then heard of your remedy and bought a trial lot, and began feeding again. We have used it constantly ever since. We have since April last received about 5,000 head of hogs into our herd and have not had a single death from swine disease. This is our experience. Our opinion is that the remedy has prevented disease, and we would not think of being without it. As an aid in fattening pork, we believe it to be good. On this point, however, we have not made an actual test, *as we would not risk feeding a pen of hogs without the Remedy.*
Yours very truly, WHITE & CO.
[N. B.—While & Co., since writing the above letter, have purchased $450 worth of the remedy.]
The remedy can be procured of all Druggists, or from my laboratory. Prices, $2.50, $1.25 and 50 cts. per package. 25 lb. cans, $12.50.
JOS. HAAS, V. S.
Member of Indiana State Veterinary Med. Associat'n
INDIANAPOLIS, IND.

1,517 Ohio Improved Chesters,
Sold in one year for breeders.
The only hog Not Subject to Cholera. Two weighed 2,806 lbs. Send for description of this famous breed, also fowls.
E. T. SILVER, Cleveland, O.

HOLSTEIN FREISIAN CATTLE
IMPORTED AND HOME BRED.
WHAT OTHERS SAY.
"The finest herd this season."—Dr. Farrington, U. S. Quarantine Station, N. J.
"As a herd, away up! up! up!!!"—Dudley Miller, Esq., Oswego, N. Y.
Young Cows; Yearlings with Calf, Yearling Bulls, and Spring Calves' Prime Stock. No fancy prices. We mean business. G. W. THOMPSON & SON,
Stilton, N. J., P. R. R.

"MARCHMOOR FARM."
HIPPARCHUS No. 11672; Sire Orange Peel, P. 288; Dam King's Fertile, No. 22765. Service Fees, $100.
BRIGHTSON No. 11671, Sire Farmer's Pride P. 322; Dam Nellie Flanders, No 22764. Service Fees, $100.
PRINCE NERO Sire Nero, P. S. 249; Dam Mrs. Langtry, C. 3746. Service Fees, $100.
CHAS. R. HOE,
New Brunswick, N. J.

HOLSTEIN-FRIESIAN CATTLE.
Imported and bred by J. N. ROBINS,
Beacon Farm, Northport, L. I.

JERSEY RED, POLAND-CHINA, Chester White, Berkshire & Yorkshire Pigs. Southdown, Cotswold and Oxford Down Sheep and Lambs Scotch Collie Shepherd Dogs and Fancy Poultry. Send for catalogue
W. ATLEE BURPEE & CO. Phila. Pa

Herd Register, *Guernsey & Jersey Cattle*; also thoroughbred & grade *Guernseys & Jerseys*, Lincoln, South down, & Hampshire down Sheep a specialty. *Chester White, Berkshire Yorkshire and Poland-China Pigs*, Scotch Collie Shepherd Dogs, and a variety of Poultry. Come see our stock and select for yourselves. Send for circular and prices. T. WALTERS & SON,

WEST CHESTER, Chester Co., Pa.

Newton's Improved COW TIE holds them firmly, draws them forward when lying down, pushes back when standing, gives freedom of head, keeps clean. E. C. NEWTON, *Batavia, Ill.*

LITTLE'S PATENT FLUID
NON POISONOUS
SHEEP DIP
AND CATTLE WASH.
MORRIS, LITTLE & SON,
Manufacturers, Brooklyn, E. D., N. Y., Box 3. and Doncaster, England.

THE BEST CATTLE FASTENING!
SMITH'S
SELF-ADJUSTING SWING STANCHION!
The only Practical Swing Stanchion Invented. Thousands in use. Illustrated Circular free. Manufactured by BROOKS & PARSONS, Addison, Steuben Co., N. Y.

For the Young.

BE careful about taking cold this damp and muddy weather. Spring is an unsettled season, with many sudden changes of temperature. It is a battle ground where the heat of Summer and the cold of Winter seem to fight. One day will be warm and pleasant, and the next will be cold and blustering. Keep on your warm clothing. Don't get angry because mother wants you to do this. She knows more about it than you do. Keep your feet dry. Be sure and wear your rubbers whenever the ground is damp. Let the boys keep their boots well greased.

Some of the boys may think they are a little too smart and manly to plant and tend flowers. Some boys seem to think that the growing of flowers is regular girl's work and not suited to men. They make a great mistake when they so decide. The great trouble with most of these men who seem so hard and stern and make work so monotonous is that they have never cultivated any of the finer and better feelings. They leave all such work to the "women folks" and then growl because their wives and daughters want flowers and other pretty things. I want my boys to make men of a different stamp. We want all the flowers and pretty places we can have. Never make fun of the girls for working in the flower garden. You will show yourself more of a man by helping them with the harder part of the work, or even tending a few flowers yourself. Some boys that I know have no sisters. Mother would like to have a flower-bed in front of the house, but father is too busy, sometimes, to do the work. Now boys, put yourselves on mother's side and see that the work is done this Spring. With a little extra work you can make the place so beautiful that father will notice it and wish he had done the work himself.

KANSAS STATE REFORM SCHOOL.

DEAR UNCLE MARK: Do not from the heading of my letter imagine me enclosed by high walls and surrounded by vicious youngsters; but on the contrary, in one of the brightest, happiest homes in the whole State of Kansas. As yet, the State supports no Reform School for girls, and the building is all too small even for boys alone. The present number of inmates is a little above 100, but as many more boys in the State would be here but for lack of accommodation. A few years ago I was utterly ignorant of the workings of reform schools, and had but a vague idea of them as something cruel and dreadful. Had I known even a year ago that I would eventually make my home in such an institution, I should have considered my days of happiness at an end, but not so has it proved. It is the aim of the superintendent and matron of this school to make a home for every boy under their charge while the employés are made to feel in every way that they are at home and may enjoy home privileges.

No strangers could come to our house without feeling at once that the work was done for the boys by some one who had an interest and care for them.

I cannot express what I would better than in these words of our superintendent: "We endeavor to make all our surroundings homelike and our discipline not coercion, but practicing obedience to law and duty until it becomes a fixed principle. To train the mind and body—in short, to make men of those who have erred is the object of the Reform School."

A majority of the boys sent here have had no home life of the right kind, and the lessons they learn in kindness and good manners will be of inestimable value to them, to say nothing of the practical education they receive in all the common branches. Just now a line of 50 boys passed out, and I can hear them laughing and shouting, enjoying their recess exactly as other boys do.

The arrangement of the institution is such that each boy attends school half of the day and works the other half.

In time we will have shops where the boys will work at their trades, but now their work is all about the house or farm, and we are as one large family, each member with special duties. Many of the boys working under ladies, are as neat and apt at house duties as girls of their age would be.

The Christmas holiday was made full of delights for all, and though I've spent a great many jolly Christmases, never one came up to the standard of this last. Every boy expressed himself, as having had the best time of his whole life, and if you could have seen the laurel and mottoes, candies and nuts, heard the music and entered into the spirit of the day, you could understand it all.

The farm contains 160 acres, through which Soldier's Creek flows in unaccountable turns and twists. New buildings are being erected, and within a year we will see great changes for the better. From the front of our building we have a good view of Topeka, two or three miles to the South, though the country is so level we can see but a small part of the city. The State house though incomplete, is the most prominent building, and may be plainly seen from our front door.

I really supposed when I left Ohio that I was coming West but it is all "Out West" here as it was at home, and the people are so like those I have always known, and so many are from Ohio, I cannot realize that I have not some-how brought the good old Buckeye State right along with me.

We have had a terrible Winter, as who has not? but Topeka and vicinity has not suffered. The poor and inexperienced on the prairies have had everything to bear, and hundreds, it is supposed, have frozen to death, while others have lost great numbers of cattle. After all, it is not to be wondered that we talk so much in our daily life of the weather, for it is a powerful agent in the universe.

Very truly yours, BERTHA KNOWLTON.

[We are glad to know about those boys. We all hope they will make good men. There is no reason why they should not, with such good influences around them. One great secret of success in life is the art of learning how to obey. No man or woman has any right to expect obedience from others, till he or she can obey the right. The easiest and best time to learn how to "mind" is when we are boys and girls. Remember that. Those who do not think so will find it out to their sorrow.—U. M.]

LETTERS FROM THE COUSINS.

DEAR UNCLE MARK: I will drop you a line, as the boy said when he went fishing. I am nine years old, and I live on a farm. We have five horses, eight head of cattle and many hogs and chickens. I like the horse best. I often ride our horses over the prairie. I tried to have a little garden last Summer, but I failed. The chickens hoed it too much. Pa is going to fence the yard, so I want to make a garden, where we can try some of the RURAL seeds. From your nephew,

CHARLES W. PRACOP.

[You dropped the line and caught a place "in print." I hope the other boy did as well. Fence out the chickens by all means. They have less business than weeds in the garden.—U. M.]

DEAR UNCLE MARK: I am a little girl 12 years old. I have never written a letter before, so I thought I would say a word or two for you and your nieces. We live on a farm of 33 acres. We have two cows and one Arabian colt that will be 30 years old next Fall. For pets, I have three cats. I have a flower bed, but not a very large one. I hope Cousin Annie Roberts will write a longer letter next time. I have five sisters who are married. I have two brothers; the youngest is 21 years old. I have 14 nieces and nephews. My youngest brother has a yoke of oxen. My grandpa lives with us; he is 83 years old.

Your niece, EMILY BLANCHE RHODES.

[That colt has seen considerable history. I hope your flower bed will be larger this year. —U. M.]

Letters have been received from George Greethurst; Ralph E. Swartz; Abram H. Prince; Hetta M. Hauser; Pressa Maud; Frankie Willoughby; J. G. Campbell; May Greethurst; William Heaton; Mattie E. Heaton; John E. Cory; Ada May Cory; Lizzie B. Lynn.

Miscellaneous Advertising.

THE UNITED STATES MAIL.

ON the end of a business house on Market street, Philadelphia, adjoining the new United States Post Office, there is an exceedingly suggestive picture, in two panels, giving the old and the new ways of delivering the United States mails.

The one indicates a very little to do, with leisure in which to do it. The other, much to do, for which haste is required. To one who is familiar with the growth of the postal service, this picture starts a very interesting train of thoughts. One of these brings back the old stage-coach and the horseback rider, and the fact that between these two the work of distributing the mails of the country was divided. Over against these come to mind the facilities of the present day, with the high rate of postage reduced to figures hardly more than nominal by comparison. From the external mechanical changes the mind turns to the contents of the letters both of the old time and the new.

One of the most engrossing topics in which people everywhere always have had, and always will have a common interest is the matter of personal health.

A large class of writers seeing in the public press the statement of cures by the Compound Oxygen Treatment, which has been so widely advertised, at once write to the references for fuller particulars. The patients who have been cured are so numerous, and they have so freely spoken of their restored health, that the divided task has been to many a light one. But one lady in Maine writes us that she has answered letters from nearly every State, and from some sections very many.

Hon. William D. Kelley, member of Congress, answers a very large number, saying that he owes the good health he has enjoyed for 10 years to the treatment. Hon. William Penn Nixon, Editor of the Chicago Inter-Ocean, receives hundreds of inquiries as to the genuineness of his testimonials, and as to the permanence of results. These he answers through the mail, as it was through a letter received from a relative in Boston that he learned first of the value of the remedy. Once in a while one too hard pressed finds it necessary to ask relief from part of the task, as in the case of a prominent member of the bar of Topeka, Kansas, Hon. H. P. Vrooman, whose title came through service in the courts for a term as judge. He is also prominent in temperance work, being Chairman of the State Executive Committee of the Prohibition Party of Kansas. In one of his letters he says, "I have been interrupted about 20 times since commencing writing." This brief statement gives some idea of the value of his time. The reason for his being called upon on this subject, and letters written to him, is found in a letter to Doctors Starkey & Palen, June 27, 1882, telling of the benefits his wife had received from their Compound Oxygen Treatment. We quote exactly: "In the interest of suffering humanity, I send you for publication an account of the *almost miraculous cure* which your Compound Oxygen performed in the case of my wife. Her condition was a very peculiar one. She had a complication of diseases, dyspepsia, torpid liver, or liver complaint, as her physicians have always called it, and general nervous prostration.

"If you will refer to my description of her case, when I made the first order for your Treatment, in December, 1877, you will see that she was suffering from severe attacks of colic and vomiting. These attacks first came once in two or three months, when she would vomit herself almost to death's door, and until she would raise a large amount of green bile. When her stomach was relieved from this she would become better at once. But as soon as a certain amount of bile would again accumulate, there would be another attack of colic and vomiting. Each time the attacks came at shorter intervals, and were more severe, until she became so weak and exhausted that *we are sure she could not have lived many days longer, had not your Oxygen Treatment come just as it did and saved her*, for the colic and vomiting had become almost perpetual, *and her strength and life were nearly exhausted.*

"*We could see a change in her condition from the first inhalation*, for she never had so severe an attack of colic afterward, and had more strength to endure the pain and retching. She continued to gain steadily, and for the past four years has had no severe attacks. If she is threatened with one, she takes an inhalation or two, and so escapes any severe paroxysms.

"We have used in all nearly five Home Treatments in four years. One of our boys, fourteen years of age, had an attack of inflammation of the bowels, which left him in a very bad condition. The Treatment did him nearly, if not quite, as much good as it did Mrs. Vrooman.

"I think it but right that we should make known to others what Compound Oxygen has done for us and therefore send you this statement for publication."

Such a statement of necessity attracted wide attention, especially among invalids, who naturally wanted particulars. These, Judge Vrooman has in all cases cheerfully given, so far as his time would permit. This he has continued to do for nearly four years, to the gratification of all who need such aid. At the same time his business engagements have made it desirable that a portion of the time thus occupied might be saved. This wish he expresses in a letter, dated February 24th, 1883. It is as follows:

"Since I sent you my testimonial, which you published in June, 1882, I have received scores of letters from all parts of the United States asking almost all kinds of questions about the Oxygen, etc.; but the main thing most of them wished to know was whether I do really exist, or whether I am a mere myth, and you only humbugging the people with fictitious names for the purpose of deceiving them.

"And now I wish to say to the public further (if you will publish it), to save my answering so many letters, that my wife has not been compelled to take any more treatment for nearly five years, since which time her health has been constantly improving, and she weighs more than she ever has before, and she has borne a fine, healthy boy, now almost four years old, who, of course, is smart, he being the seventh son.

"I impart this information to show the public that Compound Oxygen is not merely a temporary relief, but that it will permanently cure and give new life and vitality to the whole system; and if any are still solicitous to know whether I am or not, I will say in the language of Daniel Webster, 'I still live,' and may be found with my law sign still out at 155 Kansas Av., Topeka, Kansas.

"I hope what I have said may remove some doubts concerning the permanency of the cures performed by Compound Oxygen, and that afflicted ones may not delay too long in testing its efficacy."

The request that Judge Vrooman makes that we print his statement, we cheerfully comply with, and agree with his thought that what he has said should remove some doubts. What he has written to patients, has undoubtedly helped many to accept the evidence so freely and abundantly given of the curative power of Compound Oxygen. There are others coming forward to divide the task with him, and a very interesting letter just at hand, giving in one report the record of results in three cases, one thousand miles apart, will serve to show how this relief is coming. The writer, Rev. Isaac Leonard, of Sperry, Iowa, says:

"I have been able to labor in my old field beyond all my expectations. Some Sabbaths have four services, and some weeks preaching every evening.

"My old friends express their surprise that I appear so young and vigorous. For this I am largely indebted to your Compound Oxygen Treatment. My nephew, James L. Leonard, of Iona, N. J., writes me that he has been able to accomplish more the past season than for four years past, all owing to the Compound Oxygen.

"My sister, Mrs. Mary S. Leonard, has gone to Lake Worth, Fla., at the urgency of her physician. She writes me that she discontinued the Compound Oxygen Treatment on arriving there, but that she became so nervous that she could not sleep, and became so miserable that she hardly knew what she was doing. She then resumed the treatment, and in one week was quite comfortable again. I see many that need the Compound Oxygen, and am not slow in recommending it. You are at liberty to use my letter as you desire, with the hope that others may derive the same benefits that my friends and I have received from the use of the Compound Oxygen Treatment.

"P S.—Two of my friends whose address I enclose, have applied to me for your address; one in the State of Indiana, and one in Burlington, Iowa. They want to see your Treatise. Please respond."

These letters show the widespread interest in this method of treatment for diseases, and in the vivid light they throw on the freedom of communication between different parts of the country, give emphasis to the thought of how great an institution is our United States mail.

A Treatise of nearly two hundred pages, entitled "Compound Oxygen," its mode of action and results, giving full and interesting information, is mailed free to every applicant by DRS. STARKEY & PALEN, 1529 Arch St., Philadelphia, Pa.

PILES. Instant relief. Final cure in 10 days, and never returns. No purge, no salve, no suppository. Sufferers will learn of a simple remedy, free, by addressing C. J. MASON, 78 Nassau Street, N. Y.

CARDS! 60 Fancy Pictures and 25 Elegant Cards in Gilt Edge, Silk Fringe, Hidden Name, &c. 1 Souvenir, 1 850 Prize Puzzle, and 8 Parlor Games, all for 10 cts. Game of Authors, 10c. IVY CARD CO., Clintonville, Ct.

300 FOR 10 C. GAMES, Puzzles, Parlor Magic, Conundrums, Songs, Album Quotations, Embroidery Designs, and pack of Name Cards, Gilt Edge, Silk Fringe, Hidden Name. TODD CARD CO., Clintonville, Ct.

CHEAPEST and BEST. Prices REDUCED. HOLMAN'S NEW **PARALEL BIBLES!** Over 2,000 pages. *Fully Illustrated.* Agents Wanted. Circulars free. A. J. HOLMAN & CO., Phila.

WRITTEN CARDS. 13 cards, with your name elegantly written in various combinations, 25c. G. S. FOSMIRE, Meadville, Mo.

IT PAYS to sell our Rubber Printing Stamps. Samples free. J. M. Mitten & Co., Cleveland, O

100 New Scrap Pictures and Agents' Samples for 1886, 5 cents. S. M. FOOTE, Northford, Conn.

50 CARDS, Hidden Name, etc. 1 pretty Ring, and fit and present, all 10c. 6 lots 50c. O. A. Brainard, Higganum, Ct.

$5 A DAY AND EXPENSES GUARANTEED AGENTS WANTED IN EVERY COUNTY. Greatest Opportunity Ever Offered. Don't miss it. Will pay salary if preferred, and advance expenses. Outfit and full particulars FREE. Address at once, Standard Silver Ware Co., Boston, Mass.

Brewster's Patent Rein Holder. Your lines are where you put them, not under horses' feet. One agent sold 12 doz. in five days; one dealer sold six doz. in 15 days. Samples worth $1.50 FREE. Write for terms. E. E. BREWSTER, Holly, Mich.

PERSONALS.

THE Queen of Italy has astonished Europe by ordering a number of dresses from Dublin.

MISS GENENA ARMSTRONG, one of the teachers of music in Elmira (N. Y) College, has invented and patented a device for feeding and watering cattle while they are journeying in cattle cars.

NEW YORK is still the Empire State! Congressman Hiscock, one of her "favorite sons," received 110 votes in a beauty contest at a Washington photograph gallery recently, against 100 for Daniel, of Virginia, and 98 for McComas, of Maryland.

IT is said in Washington that Secretary Endicott is the most icily unapproachable man in public life there, largely owing to the fact that he is unable altogether to rid himself of a notion that he is still a Judge of the Supreme Court of Massachusetts.

SINCE his removal from office by the President, Governor Murray, of Utah, has been almost overwhelmed in a flood of letters from all parts of the country expressing regret at the event and appreciation of his work against the atrocities of Mormonism.

SENATOR JAMES INGALLS, of Kansas, is described as manly, faithful, eloquent, thoroughly American and thoroughly patriotic, scorning hypocrisy and destroying imposture. No Senator has a larger or more attentive audience He is witty, too, and ironical—especially ironical, and covertly sarcastic.

THE Cabinet is ailing: Sec. Manning has had a "stroke," is very sick, and can hardly resume official duties for a long time, if ever. Attorney-General Garland is in quite poor health—a bad cold, probably aided by Pan-Electric worry. Sec. Lamar has been unwell, but is getting better now. Sec. Bayard is recovering from the shock of his late double bereavement.

Real Estate.

NORTHWESTERN LAND AGENCY,
ST. CLOUD, MINN.

FOR SALE.

Improved grain, stock and dairy farms; unimproved lands, pine and hard wood timber; granite quarries. Location, soil and water unexcelled. 1st mortgage loans, town, city and school bonds negotiated. Descriptive lists free on application. Correspondence solicited.

BRUCKART, GILLIS & VINCENT.

FOR SALE.—A small farm of about 35 acres, situated one mile west of the village of Mt. Morris, N. Y. A sandy soil, well adapted to small fruits. Commodious buildings, abundant supply of pure water, soil in a good state of cultivation. Needs to be seen to be appreciated. 3 R. R's running through the town. Address P. SHELDON, Mt. Morris, N. Y.

FOR SALE.

FARM OF 283 ACRES IN HARFORD CO., MD. Large Stone House; Switzer Barn, with Shedding for 40 Cattle adjoining; Granaries; Carriage, Smoke, Chicken and Ice Houses. A celebrated Wheat and Grass Farm. Immediate possession if desired.
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FARMS Hotels, Stores, Mills, Business Chances. Country Seats or Lands for *Sale or Exchange*. Inclose stamp for Lists. W. S. Hotchkin, Real Estate and Traders' Exchange, Binghamton, N. Y.

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GREAT SUCCESS TO OUR NEW DEPARTURE IN THE SEED TRADE

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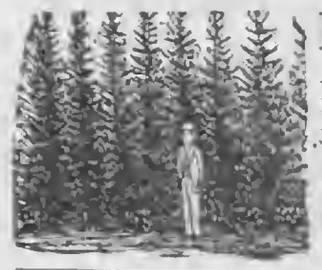

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Cauliflowers, Cabbages, etc.

Cabbages (15 *acres*), *Potatoes, etc.*

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I used five tons of your Potato Manure and raised five hundred and thirty barrels of the largest and best potatoes that went into New York market. There is nothing in the market to beat your Potato Manure that I know of. I planted fifteen acres of cabbage, using one thousand pounds of Mapes' Cabbage Manure to the acre, alongside of stable manure, and using both pretty heavily. Where your manure was used, turned out the best cabbage. They were the largest and solidest. Your Corn Manure has given good satisfaction.

1,000 *barrels Cauliflowers from four acres.—Used Mapes' eight years.—Land improved.*

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I have used the Mapes Manures for eight years with uniform good results, having, when season is at all favorable, excellent crops. My potatoes are a very good crop this season. My cauliflower crop was very fine. I shall ship to my commission men over 1,000 barrels from 4 acres. Wherever Mapes' Manures have been used on my farm I always see, in after crops, the lasting effects, and firmly believe that my land has been improved by the use of Mapes' Manures.

921 *Barrels Cauliflowers* ($1,247) *from 4¾ acres.—"Believe if I had used the Mapes on the other ¾ acre, instead of another brand, that I should have realized* $100 *more from the piece."*

F. ASBURY TUTHILL, Suffolk Co., L. I., November, 1885, writes:

Used the Mapes Manure on potatoes and cauliflowers.

Used 3 tons of the Cauliflower Manure on 4 acres; had 4¾ acres in cauliflowers; on the ¾ acre used another brand; sold 921 barrels ($1,247) from the 4¾ acres; believe if I had used Mapes on the other ¾ acre, instead of another brand, I should have realized $100 more from the piece.

Have used the Mapes since they were first introduced here and have never failed to get a good crop since I used them. I am a strong believer in the Mapes Complete Manure for large profits and lasting results from their use.

Now is the time to Top Dress Grass Lands and Lawns, Fruit trees—Strawberry beds.

Send postal for Pamphlet.

The Mapes Formula and Peruvian Guano Co.,
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Successors to S. PENNOCK & SONS CO., Kennett Square, Pa., and GEO. W. TAFT, Abington, Conn.

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Plymouth Rocks a Specialty.
Males and Females, '85 hatch, cheap. Eggs, $1.25 per 13; 26, $2. Stamp for reply.
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Incubators & Brooders

The *leading machines* throughout the *world*. Positively Automatic. Send 2-cent stamp for illustrated circulars to *Centennial M'f'g. Co.*, Bx. 250, Rye, N.Y.

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MACHINE KNIFE GRINDER.

Weighs but 18 Lbs.

Can be carried into the field and attached to Mowing Machine Wheel. Send for Descriptive Catalogue. Agents wanted in every County.

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A NEW BARLEY.

Imported from Denmark in 1883, where it yields from 80 to [illegible] bushels per acre; grown on my farm the past three years; I have found it to outyield all the common kinds three to one; it is a magnificent six-rowed variety; grows very tall, with extra large heads. Try it and you will find it superior to all other kinds. Price $1 per peck, or $3 per bushel. **S. A. Taylor,** LAKESIDE FARM, FITZWILLIAM DEPOT, N. H.

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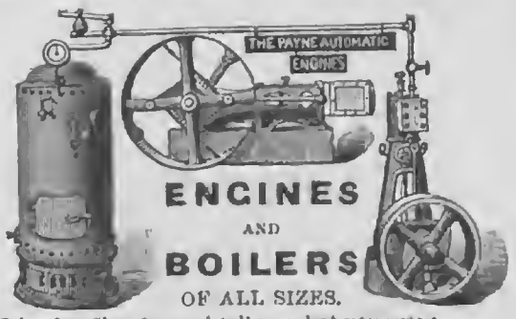

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Our Patented Vertical Boiler will not prime. No danger of burning flues.

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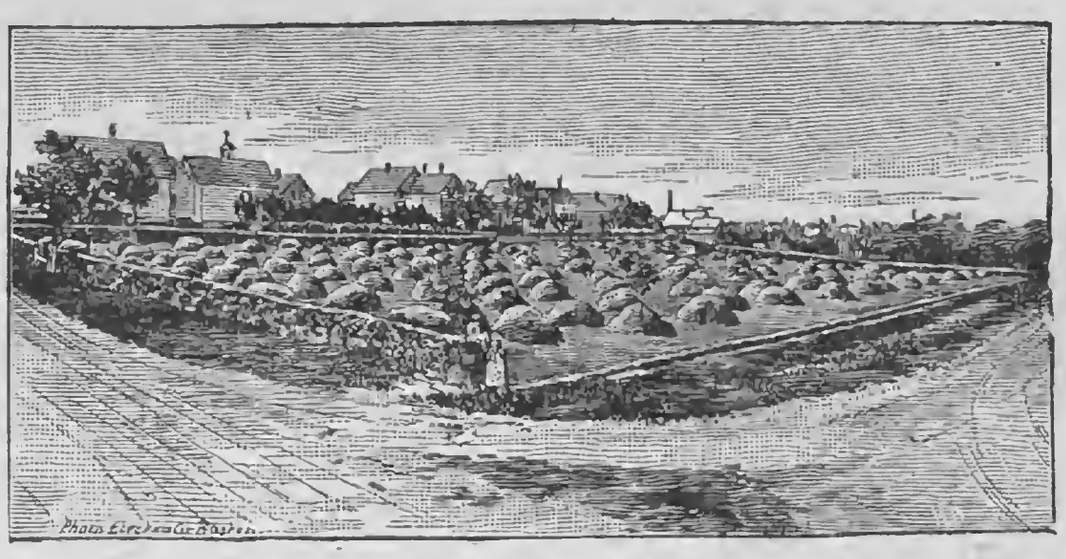

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IT COSTS FROM $4.50 TO $9.00 TO TOP-DRESS AN ACRE.

BOWKER FERTILIZER COMPANY,
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RUBBER ROOFING.

Cheapest—Best, Fire and Water Proof. Adapted for New or Old Roofs. Anybody can apply. Write at ONCE for Book. [Mention RURAL NEW-YORKER.] **INDIANA PAINT AND ROOFING CO.,** NEW YORK.

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TAKES THE LEAD!

Does Not Corrode like Tin or Iron; Nor Decay like Shingles or Tar compositions.

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CARPETS & RUGS

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Catalogue and Samples Free.

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LARGEST HERD AND LARGEST AVERAGE MILK RECORDS.

3 cows have averaged over 20,000 lbs. in a year.
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10 cows have averaged over 18,000 lbs. in a year.
25 cows have averaged over 16,000 lbs. in a year.
63, including 14 three-year-olds and 21 two-year olds, have averaged 12,785 lbs. 5 oz. in a year.

BUTTER RECORDS.

5 cows have averaged 20 lbs. 7 oz. in a week.
9 cows have averaged 19 lbs. ½ oz. in a week.
11 three-year-olds have averaged 13 lbs. 2 oz. in a week.
15 two-year-olds have averaged 10 lbs. 8 3-10 oz. in a week.

This is the herd from which to get foundation stock. Prices low for quality of stock. **SMITHS, POWELL & LAMB,** LAKESIDE STOCK FARM, SYRACUSE, N. Y.

WILLIAMS, CLARK & CO.'s HIGH GRADE BONE FERTILIZERS.

Connecticut Experiment Station Valuations of Americus Superphosphate.

Analysis of 10 Samples, 1885, gave..$36.09
Americus Tobacco Fertilizer, 1885.. 38.09
Pure Bone Meal, 4 Samples, gave..... 35.04

Valuation in Massachusetts, 2 Samples Americus Superphosphate, gave 1885. $35.94, $36.88.

No Fertilizers selling at the same price show as High Valuations.

I have used your AMERICUS PHOSPHATE on my Corn and am safe in saying I raised the largest crop ever raised in Connecticut. The yield was 179 bushels and 23 quarts shelled corn to the acre.
T. B. WAKEMAN, Greens Farms, Ct.

The above field of corn was visited by Hon. T. S. Gold, Secretary Board of Agriculture of Conn., and Prof. W. H. Brewer of Yale College, and both pronounced it the best field of Corn they ever saw.

SEND FOR CIRCULAR,

PRINCIPAL OFFICE:

COTTON EXCHANGE BUILDING, NEW YORK.

Prepared # FERTILIZING SALT.

Send for "SALT SAYINGS." Write for Prices. Car Lots, on Car at your Railway Station. Address

E. S. FITCH, Bay City, Mich.

THE RURAL NEW-YORKER

A JOURNAL FOR THE SUBURBAN AND COUNTRY HOME

VOL. XLV. No. 1890. NEW YORK, APRIL 17, 1886. PRICE FIVE CENTS. $2.00 PER YEAR.

Entered according to Act of Congress, in the year 1886, by the Rural New-Yorker in the office of the Librarian of Congress at Washington.

Rural Topics.

Experiment Grounds of the Rural New-Yorker.

POTATO TESTS CONTINUED.

In view of the near approach of the time to plant potatoes in the North, we hasten the reports of our last season's tests of new varieties, and, to save space, present them in small type.

EARLY OTOE from Dan'l Young. No address. (Our notes are missing.)

W. ATLEE BURPEE & Co., of Philadelphia, sent us a tuber (no name) that they had grown with good results for two years. They desire to know if we recognized the variety. Five large pieces were planted, though not until July 10. The vines made a fair growth, but, strange to say, not one tuber, large or small formed.

LATE VERMONT, from Myron C. Safford & Co., Mt. Safford Farm, Salem, N.Y., who wrote: "It is a sport from the Extra Early Vermont in 1879, and has been grown only by us. It has always yielded a large crop of choice potatoes. Late, red, oblong; likes a heavy soil; has produced three times as much crop as its parent alongside. Has proved better than White Star, White Elephant, Late Beauty of Hebron, etc."

The yield with us was 16½ pounds from five pieces planted. The largest five weighed 3 pounds 8 ounces. There were 83 tubers, of which but 40 were marketable, the others being too small. This would be at the rate of 708 bushels to the acre in our rich garden soil. Eaten Nov. 19. Flesh nearly white, mealy, of good quality. Buff skin, often reddish at one end. Shape as shown in our illustration, Fig. 157, but often cornucopia-shaped or curved, and smaller at the seed end.

EARLY DURHAM, from C. E. Allen, Brattleboro, Vermont. Six pieces were planted May 20. The yield was 18 pounds.—84 tubers, 38 of which were of marketable size. Best five weighed three pounds 10 ounces. Yield per acre at the rate of 726 bushels. Light skin, oblong shape, often rather small at both ends, as shown at Fig. 158. Eyes medium in number and not deep. Eaten Nov. 18. Flesh yellowish white, of the first quality.

SNOW QUEEN, from O. H. Alexander, Charlotte, Vt., Six pieces were planted April 21, and yielded six pounds, or at the rate 242 bushels per acre. Best five weighed two pounds 11¼ ounces. A sturdy-looking potato, roundish-cylindrical, not long, a little flattened. Eyes medium and few. There were 36 tubers, of which 22 were of marketable size. Eaten Dec. 29. White flesh, mealy, quite dry. Late. (Fig. 159, p. 251.)

CHAMPLAIN, from same. Five pieces were planted April 21. They yielded (guessing at it) at the rate of about 50 bushels to the acre. Egg shape, skin smooth, few eyes. Late.

SILVER SPRAY, from same. Five pieces planted April 21. The yield was 13¼ pounds, or at the rate of 653.40 bushels per acre. There were 105 tubers, 45 marketable. Best five weighed two pounds. No silvery color to skin. Claimed to be a cross between Silver Skin and Magnum Bonum. Late. Skin light buff; roundish and irregular in shape. Eyes sunken. Many small tubers. Eaten Dec. 6. Soggy.

ELBERON, from same. The yield was at the rate of 403.33 bushels per acre. Five best weighed one pound two ounces. Only one half marketable. Buff white skin, oblong or round flattened, few eyes and those on the surface. Eaten Oct. 19. White flesh, fine grain, mealy. A potato of the first quality. Planted April 21 matured August 13.

FROST, from same. Four pieces yielded seven pounds or at the rate of 433.50 bushels to the acre. Best five weighed one pound 10 ounces. There were 29 tubers, 27 marketable. Round, flattened, shapely. Eyes few and superficial. Skin buff white. Small average size. Eaten Oct. 18. Fair quality, white flesh, somewhat darkened by boiling. Intermediate.

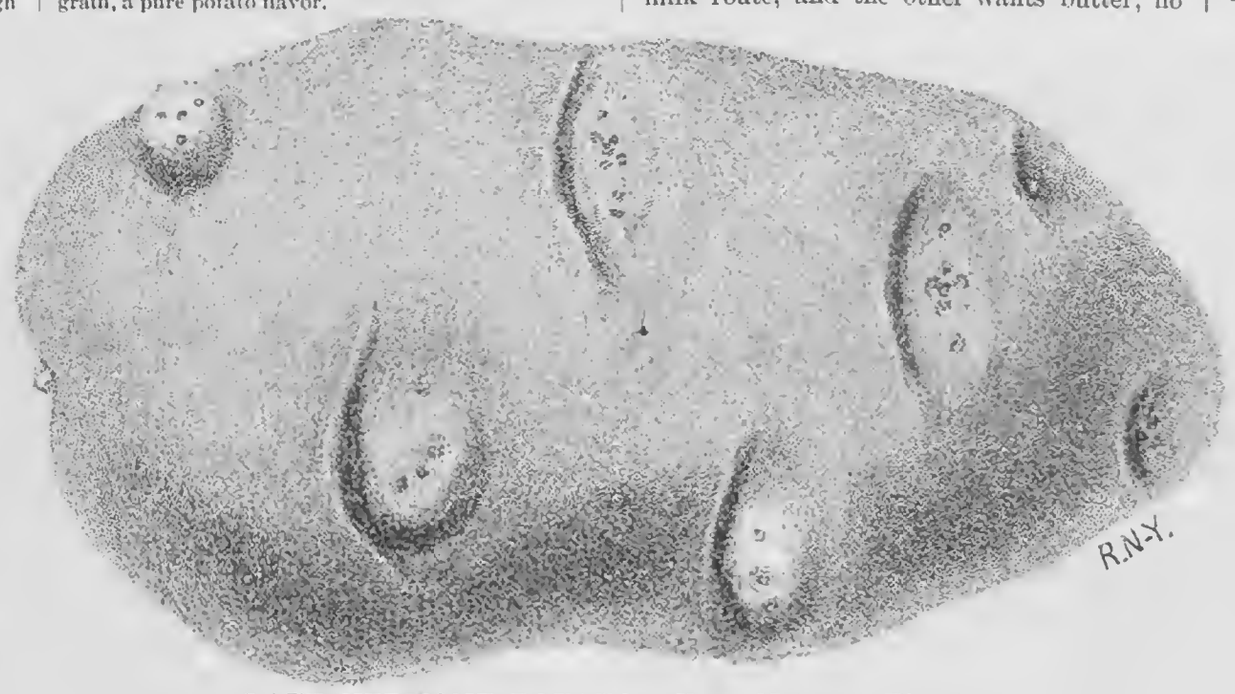
SEEDLING of the Early Vermont, from C. A. Gardner, Dimondale, Eaton Co., Mich. Planted April 22. Yield per acre, 363 bushels. Late. Marketable potatoes as 10 to 13. White buff skin. Shape roundish. Eyes medium in number and depth. Not eaten separately.

PRIDE OF CARLTON from A. M. Carlton, Carlton, Orleans Co., N. Y. "Seed from Whipple, sown in Spring of '83." Three pieces yielded three pounds, all small. There were 42 tubers, none marketable. Yield per acre, 242 bushels. Medium late.

BAKER SEEDLING (see Fig. 160, p. 251), from John Baker, Albion, Orleans Co., N. Y. Box 471. From seed of the old Peachblow." Planted May 4, matured Aug. 13. Two pieces yielded seven pounds. Five best weighed two pounds five ounces. There were 28 tubers, 21 marketable. This yield would be at the rate of 847 bushels per acre. Short, cylindrical. Eyes medium, light skin. Eaten Oct. 16, flesh nearly white, slightly yellowish, very mealy. This potato began to rot early. Mr. Baker wrote that he found it earlier than Early Rose or Beauty of Hebron. Planted May 4th, it matured here Aug. 13.

EARLY COBOURG, from James Haynes Cobourg, Ont., Can. He says "Four years from seed-ball. Fully 10 days earlier than the Early Rose. It yielded last year at the rate of 508 bushels per acre on land that was planted with potatoes 11 years with only a light coat of manure." "Two years ago" he continues, "the potatoes were planted on the 20th of May, and on the 1st of August there were potatoes as large as hens' eggs."

We always like to give the originator's account of his own seedling. We planted five pieces May 20, and they matured August 25. The yield was 11 pounds—75 tubers, 45 marketable. Best five weighed two pounds three-and-one-half ounces. This would be at the rate of 532.40 bushels per acre on our richest land. Buff-white skin, sometimes pinkish. Shape oblong. Eaten Nov. 26. Flesh white, of the first quality; mealy, fine grain, a pure potato flavor.



LATE VERMONT POTATO. From Nature. Fig. 157.

Dairy Husbandry.

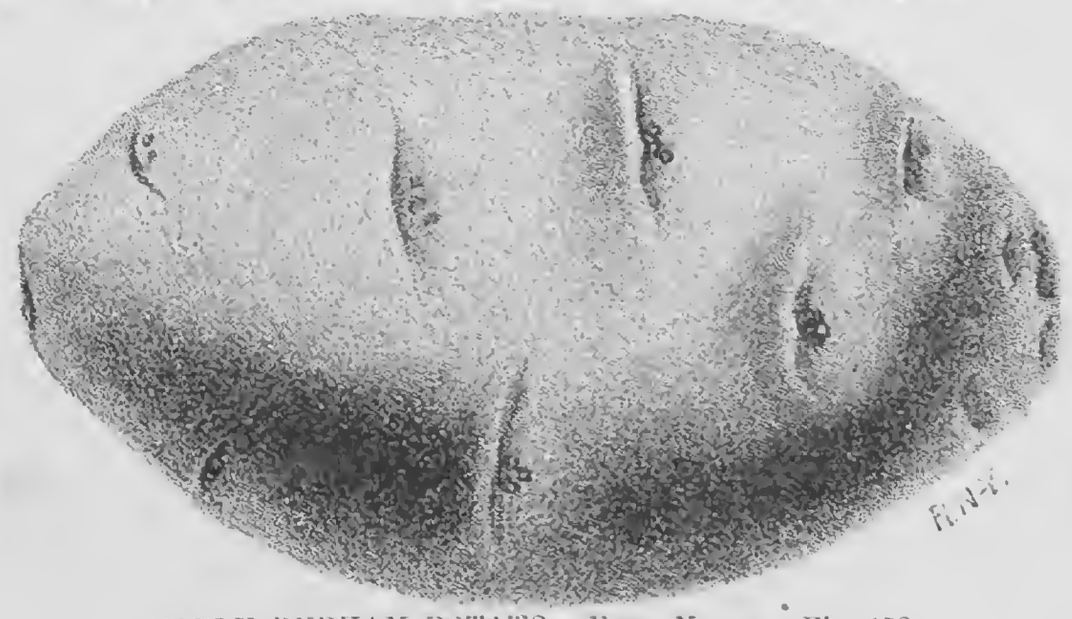
DAIRY NOTES.

CORN AND CLOVER.

THE one supplements the other. What better than clover to prepare the soil for a crop of corn, and what better than corn to follow a crop of clover? Clover is not only highly nitrogenous, but the king of plants in attracting nitrogen — whether from the soil or through the soil, or directly from the air, matters not. It supplies nitrogen to the soil. Early-cut, well-cured clover is strong feed for muscle and milk—especially cheese. Corn, the stalk and grain, is rich with fat-producing, heat-producing elements. The two—corn and clover—combined, make a well-balanced ration. Dairymen cannot do better than to grow and feed both.

THE GENERAL-PURPOSE COW.

A great deal of discussion has been going on during the past year over the question of the general-purpose cow. Of course, every disputant has given his own meaning of such a cow. One wants a beef carcass as a *finale*. He is therefore more of a beef-producer than a dairyman. Another is content with a cow that gives him a profit year after year as long as he keeps her in his dairy herd. The carcass with him is of minor consideration at the end. He is a dairyman. But there are two kinds of dairymen. One wants a large flow of milk to take to the cheese factory or to supply a milk route, and the other wants butter, no matter how small the mess of milk. Which of these three classes of cows is the general-purpose cow? The beef-grower will claim this distinction for his cow, and the milk producer for cheese and market will claim it for his. Each is right from his own stand-point, and the demand of his business. The butter-producer alone is the special purpose cow—she makes butter only, and has no value apart from it. Why wrangle about the distinction? Let every man select his own general-purpose cow to suit his own line of business.



EARLY DURHAM POTATO. From Nature. Fig. 158.

CONDITIONS OF DAIRYING.

For some years past, the impression has been abroad upon the public mind that dairying pays better than any other line of farming. While prices remained up, there was good ground for this impression. But the success was because dairying has made more progress and has been practised more systematically than most other lines of farming. Yet, dairying is far from being reduced to a scientific basis. This, however, no one has stopped to think about; but all who could scrape together a few cows—good, bad or indifferent—have gone into the business of dairying. The result is that there are thousands in the business to-day who are not fit for dairying and never will be good ones, and many who have not the farms adapted to it, nor the conveniences for its successful pursuit. All the old scrubs and ungainly animals of every breed have been retained in the business. They are now kept at a dead loss, and the sooner they are disposed of the better for their owners and the dairy community. Now is a good time for all the incompetent and unqualified dairymen to drop out. Some of them will be frozen out; all ought to get out. They never ought to have engaged in the business. Dairying at any time can be carried on successfully only under the proper conditions. The weeding out of all the poor cows and all the poor dairymen, just now, would be a public blessing. It would give more relief to the market than the suppressing of bogus butter. But while it is a good time for poor dairymen to drop out, there never was a better time for those who understand the business to stay in, spread their sails and get ready to take advantage of the propitious gales that are sure to follow. According to the Census Bureau, the increase in milch cows in 1885 was a fraction over 80,000.

T. D. CURTIS.

BOGUS BUTTER.

PROFESSOR J. P. SHELDON.

A good name for a bad thing; a pest in England, too; an injurious fraud there also; butter instead of candles; the fraud not in the things but in the pretense; anti-oleo legislation in England.

THERE is a good deal to admire in the vigorous phraseology which you in America employ in reference to things that vex you, and the term "Bogus Butter" is the most telling designation I have yet seen applied to the article which has done and is doing so much mischief to dairy farmers. We British are not as smart as you are in coining expressive phrases. We tamely call the stuff by such names as butterine, oleomargarine, or artificial butter; but we have not in use, and of our own framing, anything like so expressive and energetic a term as the one I have placed at the head of this article. All the same, we are quite as little in love—we farmers I mean—as you are with the stupendous fraud, which is injuring our dairy interests and deluding the public to a degree no one would have dreamt of a few years ago. Probably you have been angry with it longer than we have, and there are explanations to be given for this, and the measure of your anger is, no doubt, greater than ours; but we too are at last taking steps to protect ourselves. In a country like this, into which dairy products have poured in a continuous avalanche for many years past, it is not to be wondered that we were some time before we saw the danger and deceit that were embodied in bogus butter. We had long been unable to supply our people with enough butter of our own making, and we were at the outset rather inclined to welcome butterine as an adjunct that would be useful as a supplementary article of food, particularly for use in confections. During several of the first years, too, it did not appreciably affect the price of butter; or, even if it did, we could hardly bring the charge home to it. And so we tolerated it, and did not in the least interfere with it for several years, until at length w

that large quantities of it were being imported, and we found to our dismay that it had to a serious extent displaced our own genuine butter among the masses of the people, with the inevitable result of a serious drop in the price of the genuine article. It was discovered, too, that many retail provision dealers were selling it freely as butter, at a price with which butter could not possibly compete, and we saw then clearly enough that our dairy interests were in imminent danger of ruin from a competition which no one could say was honest.

With you the case was different. You had been exporting butter for a long time, and, when an imitation article began to be freely put on your markets, you at once saw it was an interloper where no sufficient cause could be given for its appearance at all. We wanted it, and you did not; that made all the difference. Animal fat made up into a form convenient for utilization in cookeries, was no doubt a legitimate enough thing, even in America, because such fat had to be utilized in some profitable manner if possible; but when it boldly came out as an imitation of butter, it was time that you took notice of it. It is not surprising, after all, that it should have had its inception in your country, for you are an eminently original and inventive people, great at innovations. Further, your petroleum wells were pouring out oil to light the world, and candles went out of fashion, and almost out of use; so that the fat which had aforetime been employed to light up your houses at night was no longer wanted for that purpose, for you burned paraffine instead. We may wonder, indeed, at what price butter would have been sold to-day, if gas had not been invented and petroleum never discovered. These two illuminants have set fat at liberty for other uses, and hence we have bogus butter in abundance.

I consider there is no room to complain of or condemn the utilization of animal fat for food, when it is not required for light. It is in itself a valuable thing and to waste it would be a crime. To employ it as food for the people is also a perfectly legitimate thing to do, for it is essentially an article of food, and always has been, and always will be, among most of the races of mankind. With this abstract statement of the case I fancy no one will be inclined to cavil; as, indeed, no one reasonably can. But when it is made up in a guise which is, to all intents and purposes, intended to imitate something else, and to impose on the public by means of the likeness it bears to butter; when, indeed, it is actually sold for what it is not, and a price over and above its market value is obtained for it by means of this misrepresention; then, in the name of all that's honest, we have a fair and just right to complain. It is, we contend, doing a great injury to dairy farming; but it is not for this reason, first of all, that we take up arms against it. The head and front of the offending lie in the fact that it does this injury, not by means of what it is, but by means of what it pretends to be; not by the help of its intrinsic value, the worth of which we freely admit, but by the simulation of something which is better and more attractive than itself.

We demand, therefore, not that bogus butter shall be prohibited, not that it shall not be made and sold; but that it should never be sold except under a name which fully and properly and honestly indicates what it is. In this demand there is nothing to which the bogus butter people can justly take exception; there is nothing prohibitive in it, nothing retaliative, nothing unfair. All we want is, that the public should not be deceived, and that dairy farmers shall not have to contend against a dishonest competition. Then the butterine manufacturers may make and sell as much of it as they can induce the public to swallow, and we shall have no further fault to find.

A bill to this end has been introduced into the House of Commons, and there is reason to believe that it will meet with a favorable reception. When this bill has become law, it will rest with dairy farmers to stand or to fall in competition with bogus butter; and, in order to stand, it will be necessary that they shall produce butter of a character superior to a great deal of what is now found in the market.

Surrey Co., England.

A FRIENDLY COUPLE.

ABOUT a year ago I bought a cow and her calf. We made veal of the calf as soon as possible, and the cow seemed not to get over the loss of her calf all Summer, being restless and fretful, so that sometimes I turned a neighbor's cow into the yard at night to keep her quiet. Late in the Fall I bought a pig, some three or four months old, and turned it into the same yard, merely for convenience. The cow and pig made friends with each other rightaway, and slept in the same shed at night, snuggled close as the weather became cold. During a severely cold term not long since, the cow dried off suddenly, but the boy was directed to strip her for the last drop twice a day to bring her back if possible, and we arranged to give a little more green food to "poor Bossy." Still no improvement. After a week or so, one evening the boy came to the house with his face in a broad grin, and said that he had caught the pig sucking the cow! Mr. Pig was shut up by himself, and now the cow frets the same as if it was a calf shut away from her. She can see the pig, and there she stands mooing for it till we all nearly die with laughter. We have set up our cream jar again, and have mush and milk for supper occasionally. R.

The Herdsman.

FROM CALF TO COW.

Raising calves for milch cows; breeding; care of cow and calf at birth; early feed of calf; "no crowding;" the "farmer's cow."

HERE is my method of raising calves for milch cows; it was practiced by my father long before he began raising pure-bred cattle. His invariable rules were, first, never to raise a calf (bull or heifer) from a poor or medium cow; second, never to breed from a bull, no matter how fine personally, that was not from the best of milking stock. As a result, neither he nor I have ever had more than three poor cows. An animal should not only be pure-bred, but of a superior milk and butter lineage. I would be even more particular of the breeding of a bull than of a cow. The breeder who will allow a poorly-bred calf to go from his herd is at least unscrupulous. Farmers make a great mistake in using scrub and picked-up bulls. At present a finely-bred bull calf can be bought for what he will sell for beef in three years, so that there is little economy in buying anything but the best.

I take the calf, as soon as born, to a warm stall, rub it with dry straw and cloths until thoroughly dry and warm; give it good bedding, and then if it is active, leave it alone for six or eight hours. Meanwhile the cow has been given a pail of water as warm as she will drink, and been milked, and the udder has been properly cared for. If my stables were cold, I should keep the cow blanketed for a few days. Many cows fed on dry feed, carry their "cleanings." To prevent this trouble, I feed very little corn meal or other feverish grains for several weeks previous to calving. For about four weeks, I give the cow, mixed with her bran, a small handful of unleached wood ashes once a day, having found ashes a great help in cases of abortion. When the calf is from six to ten hours old, the cow is again milked into a calf pail, and the calf is immediately taught to drink. Oftentimes it will drink at once, needing not even a finger; but generally this must be given two or three times. Don't give the calf too much, or its appetite will not be good next time. Don't crowd it at any time if you are breeding milking stock. Farmers intending to go into thoroughbreds, often start with a few calves. The desire is to keep these a little extra nice and fat. To them, above all, does this warning apply. Don't crowd them. If you do, I guarantee that in four years you will say that it doesn't pay to raise thoroughbred cows for their milk. I have seen calves that, when a week old, showed indications of turning out good milkers, so "crowded" that when a year old their nature seemed to have been changed, and they appeared fitter for beef than milk production. A change of this kind once effected cannot be undone. I have generally given my calves new milk twice a day until they are a week old, then I have substituted sweet skim-milk, warmed. From this I work them on to sour milk, and from this, if I must, to warm water containing a good handful of scalded finished middlings. This ration is increased to a pint at the age of six months, and kept up until they are turned out to grass as yearlings. This feed may be changed according to the quality of the dry feed given. Let the calf have plenty of room for exercise, plenty of light, and a warm, dry, soft bed; then it ought to prosper.

I seldom show my calves to people whom I do not know to be good judges of stock, because they have not that glossy, oily coat which characterizes a calf bred for beef. They are not poor, but are in what we call a good, healthy growing condition, and in this condition I strive to keep them until they are no longer profitable as milkers—then I crowd them.

The common farmer wants a cow that is hearty, strong, active, a good milker every year and 11 months of the 12. Fancy cows are for those dealers who, when selling under records obtained by inhuman crowding, defraud their customer as badly as any swindling concern in the country, and cause the early death of many of the tested cows. Make any good farmer a present of a cow with a record of 20,000 pounds of milk, under the stipulation that she shall have the same treatment of his other cows, and the chances are that she will fail the herd as his poorest cow. When record men will truthfully advertise not only the individual yields of butter and milk, but also the care and feed their stock have had, then we can tell what cow to buy. The cow that gives the most milk or makes the most butter is not necessarily the best cow, but rather the cow that does the most from a given quantity of feed. A Holstein would starve on the feed required to keep an Ayrshire in a good flow of milk. Give extra feed to the Holstein and she distances the Ayrshire perhaps. The question now comes home; Does the extra amount of milk pay a fair per centage of profit for the extra food required? D. P. S.

Auburn, N. Y.

RUTABAGAS POOR FATTENING FEED.

I NOTICE in a January issue of the RURAL, that Prof. Brown is credited with having said that animals cannot be fattened on roots without grain. My experience in feeding rutabagas, the past Winter to fattening cattle, confirmed this opinion. I was fattening two large oxen and two farrow cows, both giving milk and above the average size. From the middle of November until about the middle of January I gave each animal all the good hay it would eat up clean, three times a day; a certain amount of ground feed, composed of middlings and corn meal, and one bushel of rutabagas. The ground feed was put on the cut roots. About the middle of January my roots were frozen, and I discontinued feeding them, but in their stead I added two-and-three-quarters pounds of corn meal; otherwise the animals were fed the same as before, with what water they would drink once a day: when they had the roots I gave water in the same way. The cattle remained in the stable continually after I put them up in November. The weather for the second and third weeks in February was not so favorable as before, but they all put on much more flesh on the two-and-three-quarters pounds of extra corn meal than on the bushel of rutabagas per day, fed to them previously, and the cows gave more and a better quality of milk.

Is it possible that one bushel of rutabagas is not worth as much to feed to fattening cattle as two-and-three-quarters pounds of corn meal? This was my first experience in feeding rutabagas to fattening cattle; but from reading agricultural papers and books, and learning what great stress some writers put upon the growing of roots, I had concluded that rutabagas must have a feeding value of 15 or 20 cents per bushel, as compared with grain.

Hillman, Mich. J. H. S.

Field Crops.

DRILLING FIELD CORN.

Satisfactory figures; thorough preparation; drilling; cultivation; ear development.

LAST year I planted my corn with a Champion grain drill. The result was so satisfactory that I give below an extract from my books. We are in Northern Ohio:

The entire field averaged 100 bushels per acre, meaning a heaped bushel basket, of which 1⅜ make a bushel of shelled corn; price 45 cents, its value as feed, and less than its market price.

Debit.	
Plowing 6½ days @ $3.00	$19.50
" 2½ " @ 3.50	8.00
Dragging 5 " @ 3.50	17.50
Pulverizing 1 day @ 3.50	3.50
Drilling 1½ " @ "	5.25
Use drill	3.00
Seed corn, five bushels @ $1	5.00
Phosphate, 4,000 pounds @ 1½c	60.00
Seeds, squash, pumpkin, etc	1.75
Planting seeds	3.00
Replanting, one day	1.50
Cultivating, once in row, 2½ days @ $2.50	6.25
" twice in row, 8 " @ 2.50	20.00
Thinning, etc., 12 days @ $1.25	15.00
Cutting 1,513 shocks @ 1½c	22.70
Husking and cribbing 1,498 bushels @ 1½c.	67.41
Total debit	$259.36
Credit.	
1,498 bushels @ 27c. in field	$404.46
15 acres fodder @ $5.00	75.00
Load Hubbard Squashes	2.50
8 loads pumpkins @ $1.00	8.00
5 " " @ 50	2.50
20 bushels turnips @ 15	3.00
Total credit	$495.46
Balance	$236.10

The estimates for work are figured at the regular rates for labor in this section. The history of this crop proves conclusively that planting corn in drills is far superior to the old system of hilling. It has also convinced me that the most complete pulverization of the soil is necessary, and that extra work done at the beginning of the season pays well.

The field on which this crop was grown had been cultivated seven successive years and fertilized only with bone and superphosphate, though a clover sod had been plowed down once in beginning. The season was late and most unsatisfactory. The corn was not among the earliest varieties and was not planted until June 4th, as I delayed planting rather than give up a last dragging. After plowing and dragging thoroughly, the pulverizer was put at work and the soil completely reduced for the drill.

A common wheat drill was used, adjusted so as to drop more than four kernels to the hill, in rows three-and-a-half feet apart, each way. The fertilizer was deposited through three hoes of the drill for each row of corn, the seed being drilled into the middle row. This gave the plant a wider feeding ground, more nearly approaching the plan of broadcast distribution of plant food. Before the corn came up, a heavy rain formed a hard crust on the surface, which prevented the germination of the vine seeds; consequently a small crop of squashes and pumpkins resulted. To abate this trouble, the soil was diligently worked with a wing cultivator, running close to the rows, which had been made as straight as possible. Thinning was carefully carried out. This leads me to introduce what I consider one of the chief arguments in favor of drill culture. My observation goes conclusively to prove that fully 25 per cent more stalks will produce ears when the stalks are sufficiently apart than when they are crowded together in hills. In fact, it was a rare exception to find a stalk without at least one fully developed ear. Our aim should be to get one perfect ear to a stalk, before trying for more. Every variety of corn I have ever observed, produces, in embryo, one perfectly developed ear at each of four or five of the joints from near the ground up. And these miniature ears can be observed, by divesting them of their miniature husks, at any time before any ears have appeared above the enveloping leaf-sheaths, perfect in every particular, except as to maturity. Hence, it is safe to conclude that if we are to expect extra development of ears, we are to look for it through the medium of better cultivation, and such a seeking out of food rations for the growing plant as shall enable it to develop the possibilities which every stalk of corn displays. A further fact in this connection, is that such varieties as have been brought to produce a multiplicity of ears, rapidly deteriorate unless the best of methods are adopted in cultivation. It was a close shave for my crop to mature the single ear per stalk, in time to escape frost.

Cuyahoga Co., O. A. W. RUSSELL.

NEW ZEALAND GRASS FOR THE SOUTH.

WHY can we not utilize or reclaim the old Broom Grass fields of North Carolina and Virginia? I have had five years' experience there as a farmer, and I find peculiarities about the soil, which convince me that there is a good starting point to make it an important cattle or sheep country. Clover will not do well except on rich spots. It will not "catch," or it will bloom at four inches high and "starve out." Wheat and corn are poor crops. Tobacco very uncertain. My opinion is that some grasses can be imported that will revolutionize farming at the South. It is useless to tell a practical farmer what crops of grass signify—beef, mutton, hogs, wheat, corn, mills, immigration without solicitation, factories of all kinds, roads, fences, railways, good homes, education, tall church spires, in short, every comfort in life. My seven years' experience in New Zealand convinces me that the common Prairie Grass saved and made the country. Though as tough as wire, a horse goes a hundred miles a day on it better than on oats. I tended a flock of 25,000 sheep on it, and a flock near us numbering 100,000 never ate a bite of anything else in their lives. Why not try it here? If not successful, ransack the whole earth for a grass that can feed on the elements yet left in the soil. It only needs a little enterprise and a very small outlay by a few men to gain the prize. Try Australian Grass, Tasmanian, New Guinea, or any other that can be found. One will surely be found that will grow as well as Broom Grass which is almost useless, but might be utilized for manure, or if cut up fine for chopped feed with meal. J. C.

Petoskey, Mich.

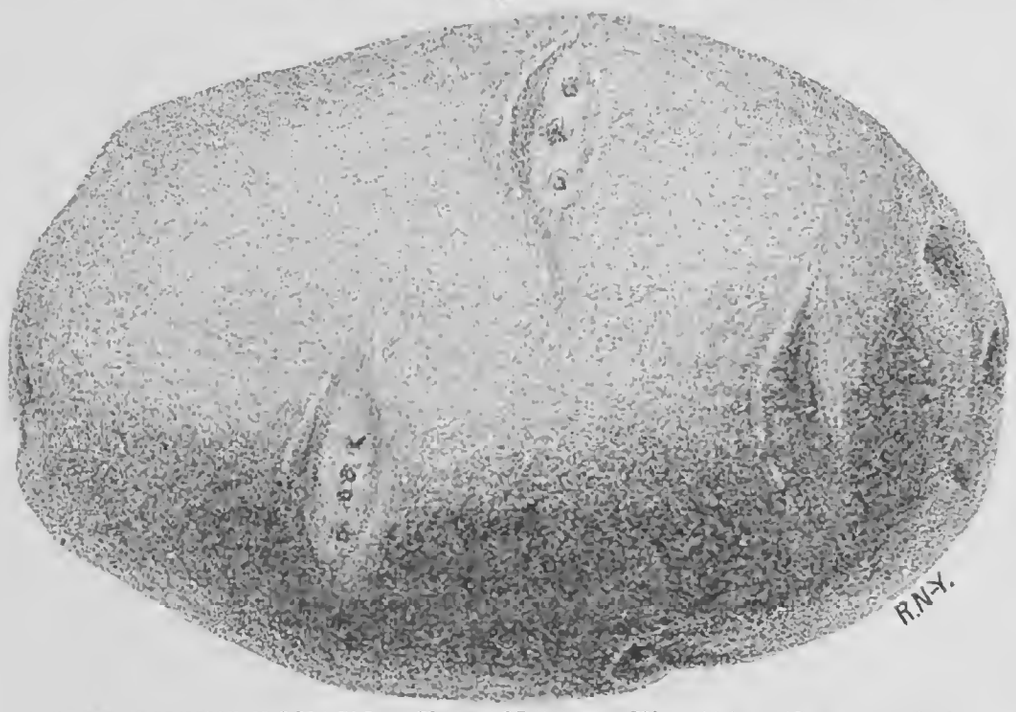
Farm Topics.

WHO?

THE number of words in the English language is enormous, and the expression of the same meaning by different words is a stumbling block to foreigners who attempt to learn

them. There are three words in common use by farmers that might well be dispensed with, viz., "Haw," "Gee" and "Whoa." Why should not a driver who wants his team to turn to the left, say so, or for short, "left!" instead of "Haw," and "right" instead of "Gee," The same objection may be made to "Whoa," when used instead of "stop!" Animals would learn the meaning of one as readily and as quickly as that of the other, and as readily obey it. They do not reason as to the derivation or meaning of words, but are governed by sound. I once had a horse brought from a brisk trot to a sudden stop by the voice of a large Newfoundland dog by the roadside, which saluted us in passing with a sound that was as near "Whoa" as a dog could make it.

Sailors might, with the same propriety, omit from their vocabulary Starboard and



SNOW QUEEN POTATO. From Nature. Fig. 159. (See page 249.)

Larboard or Port, and with the advantage that landsmen would know what they meant when they used "right" or "left" in place thereof.

Who will be first to train a team to be governed by the words "right," "left" and "stop?"

L. A. R.

BEST WAY TO FORCE YOUNG DUCKS.

Plant lettuce seed in one corner of a lot; when two or three inches high, cut it off; chop it up, and mix thick milk or corn meal with it. Give it to the ducklings, and open your eyes to see them grow. J. S.

Little Silver, N. J.

Horticultural.

THE FLAGEOLET BEANS.

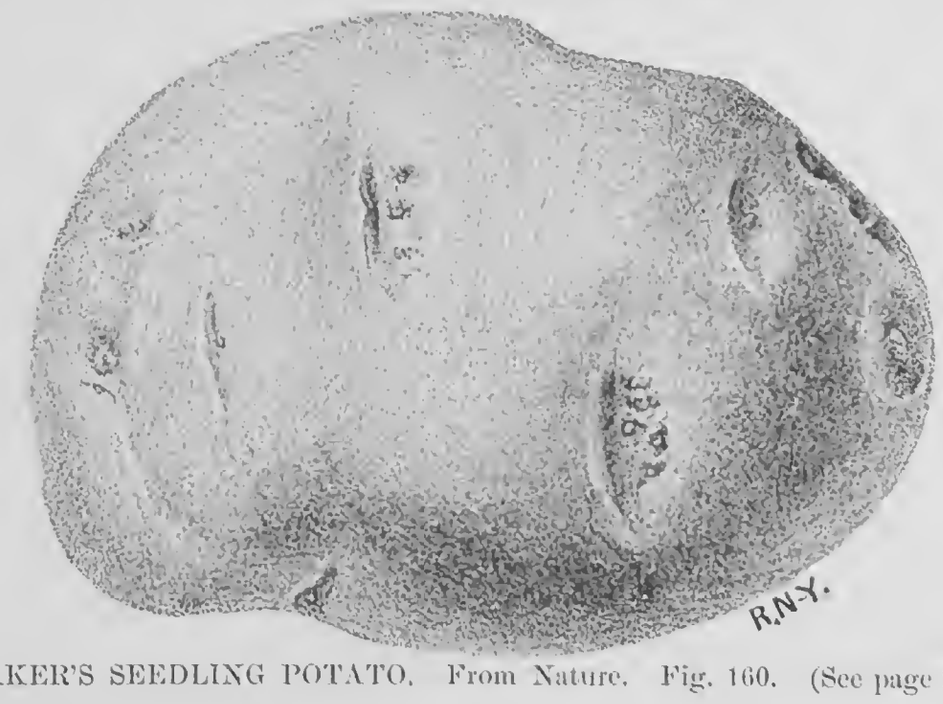
T. H. HOSKINS, M. D.

I notice in the RURAL that Mr. James Hunter, of Massachusetts, thinks that the Flageolet Wax Bean bears the longest pods of any of the wax beans, and he does not believe there is a finer wax bean in cultivation. I have been very much interested in this class or family of beans, and they certainly possess a great deal of merit. I do not see on what grounds, however, the so-called "Green-seeded Flageolet" received the name. There is no one in the whole list of garden beans, which is apparently farther removed in all characteristics from the large Flageolets than this little, strongly covered and round-podded, dark-green colored plant, with its particolored seeds.

A few years ago I received from a friend in Ohio, a quantity of "Flageolet Beans," in which I did not notice any particular difference when planting them, but which, in the two succeeding seasons, easily divided themselves into three distinct varieties, yet all were manifestly of the same family. They may be described as (a) red-seeded, with green pods; (b) red-seeded, with golden pods; (c) purple seeded, with golden pods.

The red-seeded variety of green pods differ but little, if at all, from the bean introduced by various parties as the "Canadian Wonder," or the "Rose Beau." It is a vigorous grower, and heavy yielder, perhaps the most so of the three: but is less delicate in flavor, either as a snap or shell bean, than either of the others. The red-seeded, with golden pods, is a bean of great merit, a good grower, productive, and with long, straight pods which have never spotted in the least with me. In fact, this is characteristic of all three, and is a point of much importance, especially to those who grow them for seed. Ferry's Golden Wax, which is no earlier, or better, spots so badly with me that only one or two pickings can be made before they are ruined. This red-seeded variety is distinguished from the succeeding (purple-seeded) by showing no red upon the seed until it begins to harden and color all over, while the purple-seeded shows a bright red eye almost as soon as the bean can be distinguished in the pod. By the seed alone, the two red-seeded varieties cannot be distinguished at any stage of growth.

In only one catalogue (and that a German one) have I seen the Purple-seeded Flageolet mentioned, and there as a valuable novelty. It is very distinct, being nearly if not quite as vigorous and productive as the red-seeded with green pods, in this respect being much in advance of (b). The plants are large with strong stems, which hold the long, straight, golden pods well up out of the dirt. It is difficult to imagine how any more pods could possibly grow on the plant, large and vigorous as it is. Quite a number of gardeners looked over my experimental patch, where 64 different varieties and strains of beans were grown last season, and all agreed that the Purple-seeded Flageolet for a dwarf, and the Mont d' Or for a pole "wax" (yellow-pod) bean, took the lead, and a long one, in their respective classes. The Flageolets have been recommended (by the RURAL I think, and also by others) as being nearest in quality, as a shell bean, to the Limas, of any in cultivation. I think they will bear out that recommendation, and yet they are not Limas. If we are ever going to get a bean equal to the Lima, but hardy and early enough for the northern tier of States, I think it will have to be produced by crossing the Lima upon the White Runner. They are evidently closely related, and it ought not to be difficult to unite, by crossing, the delicacy of the one with the hardiness of the other.



BAKER'S SEEDLING POTATO. From Nature. Fig. 160. (See page 249.)

ABOUT BLUEBERRY CULTURE.

MOST farmers in this section are vitally

(Continued on page 252.)

Miscellaneous Advertising.

That Tired Feeling

The warm weather has a debilitating effect, especially upon those who are within doors most of the time. The peculiar, yet common, complaint known as "that tired feeling," is the result. This feeling can be entirely overcome by taking Hood's Sarsaparilla, which gives new life and strength to all the functions of the body.

"I could not sleep; had no appetite. I took Hood's Sarsaparilla and soon began to sleep soundly; could get up without that tired and languid feeling; and my appetite improved." R. A. SANFORD, Kent, Ohio.

Hood's Sarsaparilla

Sold by all druggists. $1; six for $5. Made only by C. I. HOOD & CO., Lowell, Mass.

100 Doses One Dollar

FAC-SIMILE.

FOR SHAVING.

The Genuine Yankee Soap.

Has never been equaled in the richness and permanence of its lather. Especially adapted for heavy beards and a delicate skin. Standard for quality in the U. S. Navy. Has been counterfeited more than any other soap in the world. Notice the engraving and avoid imitations.

ALL DRUGGISTS KEEP IT. Trial Sample for 12 Cents. THE J. B. WILLIAMS CO., Glastonbury, Conn. Formerly WILLIAMS & BROS., Manchester, 1840.

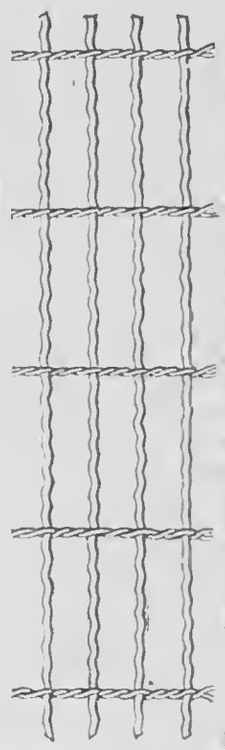
$25 A DAY saved by using the **Little Giant Road Machine**, instead of making roads in the usual way. It is the cheapest and the best. Send for circular. STRONG & PARKER, Vergennes, Vt.

RUSTLESS IRON WATER PIPE. WM. T. WELLS, 7 to 9 Cliff St. New York. Send for Catalogue and Prices.

FAY'S MANILLA ROOFING ESTABLISHED 1866

Takes the lead, does not corrode like tin or iron, nor decay like shingles or tar compositions, easy to apply, strong and durable at half the cost of tin. Is also a **SUBSTITUTE for PLASTER at Half the Cost. CARPETS and RUGS** of same, double the wear of oil cloths. Catalogues and samples free. W. H. FAY & CO., CAMDEN, N. J.

PATENT **CORRUGATED WIRE FABRIC,**



Suitable for Fencing in many locations, and for Railings, Window Guards, Tree Guards, and other purposes.

It consists of vertical pickets or bars, made of corrugated galvanized steel rods, oval in section, secured by horizontal cables, each composed of two strands of galvanized steel wire.

As a fence it is cheap, strong, durable, and easily erected; it is as effective as a barbed fence in turning cattle, and there is no risk of injuring either the animal or the fence; it requires no longitudinal rail to support it, as it carries itself from post to post as well as a plain wire or barbed wire fence; it can be seen as plainly as a regular picket fence; it can readily be taken down, rolled up and moved from place to place.

TRENTON IRON CO.,

Manufacturers of Wire & Fence Material,

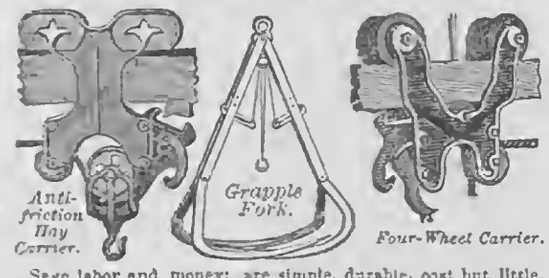
Trenton, New Jersey.

NEW YORK OFFICE: COOPER, HEWITT & CO., *17 Burling Slip.*

Send for circulars and prices.

NOYES' HAYING TOOLS.

For Stacking out in Fields or Mowing away in Barns.



Save labor and money; are simple, durable, cost but little. No trouble to get over high beams or to the end of deep bays. Thousands now in use. **Wood Pulleys, Floor Hooks, etc.** Send for circular and designs for tracking barns, to

U. S. Wind Engine & Pump Co., Batavia, Kane Co., Ill.

Also Manufacturers of the Celebrated **Halladay Standard Pumping and Geared Wind Mills, I X L Feed Mills, Stalk Cutters, Shellers, Horse Powers, Jacks, Tanks, Pumps, &c.**

FENCES FOR FARMERS

PRETTIEST, CHEAPEST, MOST DURABLE.

SOMETHING NEW.

Any one can make it at home and clear $10 to $25 per day. Full particulars with testimonials. Illustrated Catalogue Free. STANDARD MFG. CO. Cincinnati, O.

CORNISH ORGANS DIRECT FROM FACTORY TO CONSUMER

$45.00 Avoiding Agents and Dealers Profit. $100 12 STOP Organs Reduced to Only $45.00

SHIPPED ON 10 DAYS' TEST TRIAL BEFORE PAYMENT IS REQUIRED

STOOL, INSTRUCTION BOOK and delivery on board Cars here FREE. The "ORCHESTRAL ORGAN" has never before been offered for less than $100. We are now selling out all we have in stock AT LESS THAN ACTUAL COST TO BUILD

★ $45.00 Only. ★

READ DESCRIPTION GIVEN BELOW

5 Octaves, 12 Stops, Sub-Bass and 2 Knee Swells.

[MENTION PAPER WHERE THIS "AD" IS SEEN.]

CONTAINS 5 SETS OF REEDS, VIZ:

One Set Large Powerful	Sub-Bass Reeds.
One Set Exquisitely Pure, Sweet	Melodia Reeds.
One Set Rich, Mellow, Smooth	Diapason Reeds.
One Set Charmingly Brilliant	Celeste Reeds.
One Set Pleasing, Soft, Melodious	Viola Reeds.

Solid black walnut case, well and substantially made, and elegantly finished and embellished with fancy frets, carved ornaments and gold tracings. Patent Triple Upright Bellows, which are superior to any Bellows ever constructed, rollers, handles, lamp-stands, music-pocket, sliding fall with lock, and all the latest conveniences and improvements.

REMEMBER it is only necessary to send us references as to your responsibility and Organ will be shipped you on 10 days' test trial. If it suits you are to send us its price and pay freight; if it does not suit, you can return it and we will pay freight both ways.

PIANOS We have a limited number of Square, Grand and Upright Pianos in elegant rosewood cases, having every modern improvement, which we will sell at greatly reduced prices. These pianos are warranted for 6 years, and will be shipped on (10) Ten days' test trial before requiring payment.

NEW STYLES NOW READY AT REDUCED PRICES. LARGE ILLUSTRATED CATALOGUE FREE. Be sure and Write to us. We can save you Money

DIMENSIONS:—Height, 75 inches; Length, 48 inches; Width, 24 inches; Weight, about 375 lbs.

CORNISH & CO., Washington, New Jersey

SEDGWICK STEEL WIRE FENCE

Is the best general purpose wire fence in use. It is **a strong net-work without barbs.** Don't injure stock. It will turn dogs, pigs, sheep and poultry, as well as horses and cattle. The best fence for Farms, Gardens, Stock Ranges and Railroads. Very neat, pretty styles for Lawns, Parks, Schoollots and Cemeteries. Covered with rust-proof paint, or made of galvanized wire, as preferred. It will last a life-time. It is better than boards or barbed wire in every respect. Give it a fair trial; it will wear itself into favor. The **Sedgwick Gates** made of wrought-iron pipe and steel wire, defy all competition in lightness, neatness, strength and durability. We make the best, cheapest and easiest working **all-iron automatic or self-opening gate,** and the neatest cheap iron fences now made. The best **Wire Stretcher, Cutting Pliers and Post Augers.** For prices and particulars ask Hardware Dealers, or address, mentioning paper,

SEDGWICK BROS., Richmond, Ind.

EDWARD SUTTON, Eastern Agent, 300 Market St., Philadelphia, Pa.

(*Continued from page* 251.)

interested in blueberry cultnre, which is extensively practiced in this section. I grow three or fonr hundred bushels each year, and here is the result of many years' experience and personal observations for the benefit of RURAL readers:—

In spite of any assertions to the contrary, blueberries will not grow in cultivated ground, neither can they be grown from root-cuttings, nor can their tips be layered. The only possible way to transplant them is to cut a sod from a matted berry patch and transplant it into *sod* grouud. An old, worn-ont pasture makes the best berry land. A transplanted sod will spread, rapidly killing out all grass and weeds, but the vines surely stop spreading on reaching broken ground. When the berry pasture is once established, all the care it needs is to keep out trees and bushes, and burn the lot over every four or five years to get rid of the dead wood. Of course, that year's crop is lost; but a double one is produced the next year to pay for the loss. A good pasture will yield from 25 to 50 bushels per acre. Cattle will eat the blossoms from the vines, if they get a chance, but will not meddle with them otherwise. A few years ago berries were shipped in bulk in old boxes, butter firkins, etc., and, of course, brought very unsatisfactory prices. They are now sent in round quart boxes packed in open bushel crates. Nine-tenths of them are picked up by dealers from farmers who ship them to market, aud after taking out their expeuse and profit, divide what is left among their customers, according to the number of quarts received from them, irrespective of the quality of their berries. The remaining tenth of the growers own their own boxes and ship their own berries, and as they are interested in having their berries honestly picked, get more satisfactory prices. Pickers are hired on shares and during the season they flock to the pastures from city and town, from factories and from colleges, all eager for money and a good time. Boarding in farm houses, camping out in tents or shanties, they lead a healthy, hard-working, jolly, out-door life. A good picker will pick from one to two bushels a day. Althongh tiresome, it is fascinating work, and many of the same pickers will return year after year. I do not know where the New York market gets its blueberries; bnt Boston is supplied principally from Massachusetts, New Hampshire, Maine and Nova Scotia. The season lasts from the first of July till into September. S. A. H.

New Boston, N. H.

AN IMPROVED GARDEN LINE.

It is a common cotton cord about one-eighth of an inch in diameter, with knots 28 inches apart. It should be long enough for the rows intended to he planted, and can be sighted by the eye, when in use, till perfectly straight. By keeping the end knot in range with two poles at one end of the plot and always setting the plants on the same side of the line close to it, they will be nicely planted for working both ways, and if varieties of free-running habit are chosen, full beds can be grown in this way. In my own case, I set two runners from each plant in the row, keeping all others off, and secured splendid rows for next year's fruitiug. Some Crescents measured 28 inches across the plants.

With such a line knotted at proper intervals, cabbage, tomato or corn, and perhaps many other seeds, can be planted with satisfaction. The advantages claimed for this method are, that no horse is needed to mark out the lines; that the lines will be much straighter and the soil will be left in a better condition for after cultivation. When I first used such a line I marked it with ink; but this soon become colored with the soil, so that it couldn't be seen. "P."

Del. Co., Pa.

Entomological.

CODLING WORM HABITS AND RAVAGES.

The moth harmless; its progeny hurtful; habits and havoc of the larvæ; migration of the pests; mistakes of "scientists;" differences in habits of early and later broods; remedies.

THE codling moth (Carpocapsa pomonella) is powerless to puncture fruit as the plum weevil and some other insects do. Hence no blemish or injury is ever occasioned by it. The mouth parts of Tortrices or leaf-rollers, to which it belongs, are very rudimentary, and the insect takes but little, if any, food from flower or fruit during its winged life. It is the moth's progeny that work all the mischief charged against this most formidable of orchard pests, which infest apples, pears, quinces and even plums and peaches. The feeding of the worm in the calyx causes a fluted growth of the surrounding surface, and produces an apple of a flattened shape, changing a conical apple into a very oblate one, (Fig. 161).

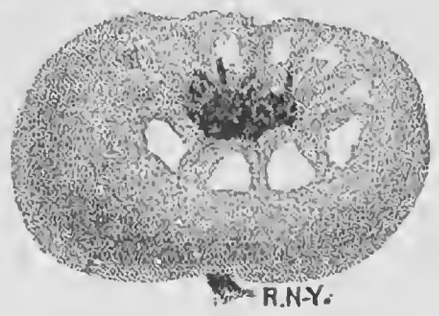


Fig. 161.

The injury induces premature ripening as well as the falling and decay of the fruit.

As a rule, in case of the early part of the first brood, the burrows of the larvæ are from the calyx to the core. With subsequent hatches, there is a decided difference of habit, as seen in fruit which attains full growth and comes to the pickers' notice. The young worm eats out a little cavity under the calyx towards the core. Very seldom does it pass to the core from the calyx. Harris relates that the larva burrows gradually from the eye to the core and through the apple in various directions, and to get rid of the refuse fragments, "it gnaws a round hole through the side of the apple, and thrusts them out of the opening." He represented the insect as remaining its whole larval life in the same apple and burrow, whereas exact observation shows that emigration is a very constant habit. This emigration theory was first advanced by the late S. B. Peck, of Michigan, who claimed to have made the discovery of this peculiarity in 1872, and he sturdily proclaimed it in several publications and at fruit meetings and in the RURAL of 1882, page 689, where it is shown that several experts accept his views. In a letter to me early in 1883, he asserts their natural disposition to wander, whether on tree or in fruit house. He notices that a worm may back out of a burrow before fairly in, and then gnaw a new passage into another apple. He claims, further, that a worm, after gaining half its growth at most, never remains over 48 hours in the same apple. Thus he reckoned that often a single worm visits a dozen apples. Emigration is a fact. The worms feed only a short time under the calyx where the egg hatched. They wander by night to the cheek of the same apple or to others, cutting grooves and passages into the fruit. They also gnaw many incipient burrows or shallow pits which I have found on July mornings freshly cut. This sort of injury partially heals up, though the bordering peel remains discolored; but the apple is not hastened in ripening by it. Finally, the worm cuts from the shelter of a leaf or even openly on the cheek a round passage *inwards* to the core, not as Harris says *outwards* from the core. The connecting thread-like passage between the slight excavations at the calyx and the large ones at the core, as shown at *b*, Fig. 162, cannot often be found in nature.

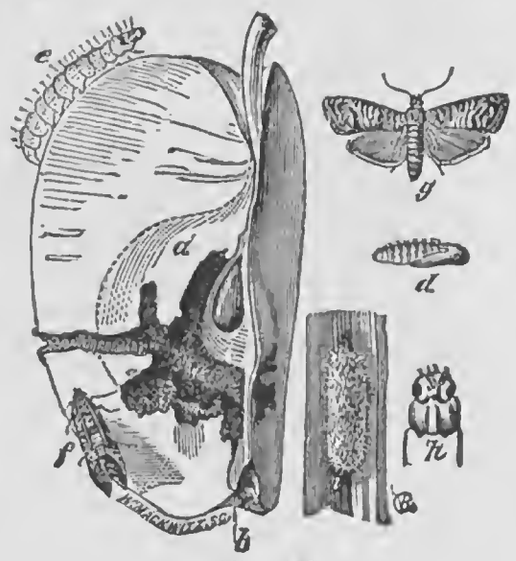


Fig. 162.

Mr. Newman, of England, was the first writer who represented the worm as remaining all the time in the apple, eating towards the core but not touching it till after it had cut a passage to the outer air. And he says, "it must be so constructed as to allow the power of gravity to assist in keeping it clear." Miss E. A. Ormerod, a foremost entomologist of England, has made a drawing of an apple, which, as it were, illustrates this error (Fig. 163) where an apple is shown as growing in this position on the tree—calyx up. She says as the worm grows, "it continues its gallery towards the stem or lower side of the apple, where it makes an opening through the rind, and thus is able to throw ont the pellets of dirt which could not be got rid of by forcing them upwards through its small entrance burrow." The forming of the large burrow as described, and the position in which the apple hangs, seem to be faulty. Besides, there is no need of using gravity, and the burrows do not conform to a use of this power, for the orifice is very often situated above the internal galleries. There is very little refuse or dirt to be disposed of. The worm resorts to the outer surface of the apple quite frequently by day if the opening is hidden by a leaf; otherwise it comes out during the

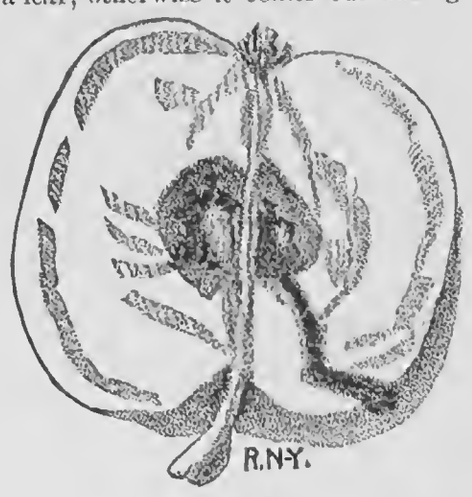


Fig. 163.

night. The castings there ejected adhere in part to the silken threads tied to the leaf or apple. A nearly full-grown worm cuts its burrow from the cheek to the core very quickly. And before the apple is ready to fall, the worm is obliged to crawl out. It can eat no more, and to complete its growth, must spin its cocoon in which to undergo its pupal change. It either drops to the ground by a silken thread, or crawls along a branch to some nook in the trunk.

The final cutting clear through into the core and pips, which always insures and hastens the fall of the fruit, shows that the habit of the worm is to fall to the ground in the fruit, and this is the rule of the first brood. With the later broods on summer fruit, an opposite and more serious dilemma occurs. There the eggs are laid on apples which very soon become ripe, fall, and decay before the worm gets its growth. I find that many harvest apples falling from ripeness, contain each a worm not half grown. These do not attain their growth in that year, but sustain a meager existence in the decayed apples, migrating from one to another. The decayed apples are reduced to mere scraps by last of the following May, and still the worms are feeding in them, sometimes three in a remnant, eating up the last particle, and often some of the pests are devoured by those which survive. These get on the wing very late, and form an intermediate brood, and thus extend the overlapping of the early brood. The last of the eggs laid from this retarded summer brood, bringing, the following year, summer moths, attain only one brood a year, and some of the regular first brood are also restricted to one, while it is quite certain some reach three. The last brood is found at October, picking, in a young stage of growth, in the calyx, or else in under a leaf resting on the fruit, or at the conjuncture of two apples, where the moth sometimes lays the egg. This brood disfigures larger quantities of fruit until then perfect.

Where sheep and swine are given the proper run of an orchard, marked benefits are always observed. Nearly all of the first brood fall to the ground in the fruit, and are devoured. The use of arsenical compounds has proved of great advantage. With the excellent spraying machine now in use, a fine mist of Paris-green water can be distributed to every apple and leaf, so it can be counted an effective remedy. At first it was thought to deter the moth from egg laying on fruit thus treated. Now, it is known egg laying continues as usual, but the minute worm is poisoned with its first morsel of apple peel, filmed as it is with Paris-green. This remedy was used in 1876, and, first announced to the public by Mr. J. S. Woodward, at a meeting of the Western New York Horticultural Society, at Rochester, N. Y. The moth's eyes resemble the butterfly's, and are exteriorly different from those of light-attracted moths, and it cannot be attracted even by an electric light. W. L. DEVEREAUX.

What Others Say.

SUNFLOWER SEED FOR STOCK.—Prof. E. W. Stewart says that sunflower seed is a valuable food for stock if fed properly. The best way to feed to calves is to remove the hulls in a hulling machine and then boil the meats to a jelly. It is, in this condition, a good addition to skimmed milk. Sunflower seed contains 23.6 per cent. of oil, while flax seed contains 37 per cent. The oil is a mild laxative and will keep the coat glossy. Fifty bushels of seed could be raised from 25,000 plants on an acre. This would allow one-half gill to a plant and place the plants in rows 20 inches apart and 12 inches in the row. From an acre of sunflowers we believe the birds would seed the whole township.

A FRENCH METHOD OF KEEPING POTATOES, practiced by country people with the stock for home use and also by hotel and restaurant owners, is described by *La Journal d'Agriculture*. A large vessel of water is placed over the fire and its contents raised to the boiling point. Washed potatoes are placed in a basket or net and quickly dropped into the water, where they are kept for four seconds. Before a fresh lot of potatoes is immersed, the water must be allowed to rise to the boiling point again. Each lot of tubers, as soon as lifted out, is spread on the floor in a well aired place to dry. When all have been treated in this way, they are stored away in a dry, cool place. There is no tendency whatever to germinate, and the potatoes will remain sound and well flavored all through Winter, Spring and Summer until the next crop comes in.

SLAG WOOL.—The production and industrial application of this article are largely increasing in Europe. By the action of strong jets of steam the slag from iron works is transformed into a fibrous, whitish, silicate cotton, which, being mineral, is incombustible, like asbestos. It is advantageously and extensively used in England, we are told by the Builder, in the construction of new houses, especially those with Mansard roofs, the space between the interior panneling and the exterior covering of zinc, slate or tin, being filled with slag wool, the effect being to afford protection from the rigor of frost in Winter, and from intense heat in Summer. It also prevents the freezing and bursting of taps, spouts and water-pipes covered by it, in severe weather. We have not seen any account of its use in this country, but if the claims made for it are true, it will doubtless be introduced here also.

THE UTILIZATION OF FEATHERS of various kinds until lately considered worthless has become a valuable industry in France, as we learn from the *Journal d'Agriculture*. Those obtained from ducks, chickens, turkeys and wild fowl or any birds killed as game, are trimmed from the stems, which may be thrown away. The plumes are then used to make feather cloth or blankets which are exceedingly light and very warm. When separated from the stems, the plumes are put in a bag which is tightly closed, and then they are subjected to rubbing between the hands, as in washing clothes. By this means the fibers are, in a few minutes, separated from each other, and form a perfectly homogeneous and very light down, which by a simple operation can be made into quite a variety of coverings and other household objects at a trifling cost.

BY THE SHORT WAY.

CARE AND MANAGEMENT OF FARM STOCK.—Warren Brown recently spoke to the farmers of New England, who meet every week in Boston, upon the subject of the care and management of farm stock. The Massachusetts Ploughman gives short-hand reports of the proceedings, from which we gather many valable items. Mr. Brown asks: How often shall stock be fed? In his boyhood it was the custom with some farmers to go early to the barn, say at four or five o'clock, and give their stock a small foddering of hay. This practice was followed throughout the day, and up to 10 or 11 o'clock at night, and the cattle were constantly kept eating. He thinks the best farmers feed but twice a day, and by this he means that they can be two or three hours eating, so that the cattle are filled twice a day. He likes to have it all eaten up. His practice has been to give his animals all they could eat. It has not been the question how little to make them eat, but how much. He believes that if cattle are fed plenty of food and then allowed to lie down and rest, it is more for the interest of the farmers than to keep them eating all the time. It is as important to have time to digest as to have time to eat. If they are allowed to lie down all night, they will be more comfortable and will have a better appetite for eating in the morning. But if they are half starved and are constantly expecting something, they are never easy, and in that there is a great loss. Feeding twice a day is a great deal more profitable way of feeding farm stock.....

THEN the cattle should be kept clean. They should stand upon a raised platform so as to be away from the droppings, and should be bedded with sand or sawdust or cut straw or something of that kind in order to keep them clean and give them a comfortable bed to lie upon..... .....

CARE should be exercised that the animals do not become covered with vermin. There is no gain where the cattle are thus covered.

It will take all the feed to keep the vermin. If you will keep infested cattle in your barn, your barn will become infested. Although you should take out the animals and put in others, still within a short time they will be infested like the first. It is a necessary rule with farmers to keep their stock clean. Mr. Brown has found nothing better than carbolic soap. He takes carbolic crystals and puts them in water. If you buy crystals you will get it stronger than you can get any in the market. Take a bar of soap and dissolve it, and put in these crystals, and allow it to become hard. That is as good a preparation as you can get for this use.....

Mr. Brown thinks that brewers' grains and malt sprouts are of great value for feeding stock, forming a very nutritious food. He is in favor of salt hay as a partial food.....

He thinks that the silo is destined to be firmly established and that those farmers that don't "catch on will probably get left."....

Mr. Brown was questioned as to his recipe for carbolic soap. He takes one ounce of carbolic crystals (60 cents a pound) to a bar of soap. He puts the soap (common bar soap) in boiling water and adds the crystals and allows it to cool, when it is ready for use. It will kill the eggs of insects and remove scurf and roughness. It is good for mangy animals and will kill fleas on dogs.....

Mr. Peabody remarked that some kinds of feed will do well for some animals, that will not do well for others.....

He tried an experiment to see the effects of cotton-seed meal. With the cow having two quarts of cotton-seed meal in the place of two quarts of cob-meal, there was an increase of two quarts of milk a day. The other cow did not yield any increase at all. The cob-meal did as well for her as the cotton-seed meal....

Mr. Hawkes said that all the different grains are fed in his section. Some of the farmers use rye and find it excellent feed for milch cows.....

Mr. Cheever was obliged to leave his home, and the care of his herd of 30 polled cattle was left to a hired man. When any cow had grain left he would give it to another. There was food before them all the time. They lost their appetite and became thin. Before Mr. Cheever had time to improve the cows by proper feeding, he was obliged to sell them. About two-thirds were in poor health and condition. He thinks it very necessary to give cows no more than they can eat with relish...

Mr. Brown thinks that there is little advantage in cutting hay unless it is both cut and steamed. He thinks the silo has taken the place of this method. He feeds malt sprouts steamed, in connection with silage and salt hay and nothing else .....

Mr. Ware commenced the use of silage when nothing was known about it. He fed a herd of thoroughbred Ayrshires two years in succession and they did not get any hay. He wanted to see whether the silage would kill or not. But the cows appeared to be in perfect health all the time.....

Mr. White made the remark that to be a true gentleman you must be a gentleman in the presence of your hens, cows and horses...

Mr. White mentioned the case of a farmer who lost three or four calves by premature birth. It was attributed to a broad stone, the surface of which was an inclined plane.....

Mr. N. Osborn, of Newington, Conn., reports in the N. E. Farmer, his success in bringing up poor land by the use of the Mapes fertilizer. Seven years ago the land would produce nothing but Pigeon Grass and dewberry vines. The profits on seven acres for six years figure up $685.85, beginning in '80 and '81 with a profit of $50 for each year, and ending in '85 with a profit of $220. Last year the piece yielded 18 tons of hay worth $15 per ton. The most fertilizer used in any one year was three tons, costing $150. Seven years ago the land was worth practically nothing; now it pays a dividend of 5 per cent on $4,000.....

San Antonio, Texas is one of the largest horse markets in the country, though the majority of horses handled there are from the ranges, and therefore, small, unbroken and shaggy, but with plenty of bottom. Last year the total number sold was 45,355, for which $1,133,965 were obtained—an average of $25 per head. It is probable the sales will be larger the present year; and the use of better stallions is steadily improving the stock.....

Farmers near Kankakee, Ill., have opened a farmers' club room, where they may come together and learn prices and compare notes. All the best agricultural papers are to be kept on file, and home and foreign crops and markets carefully bulletined. This is a good move. In such a room farmers can learn from the experience of others. It will be a much better place for waiting than the store. They can find out who has for sale, or wishes to buy, stock, seeds or other produce. It is a good move, and we hope to see other communities follow in the work.....

A lightning rod which does not go down into the ground far enough to reach perpetual moisture is worse than no rod at all.....

Never try to stimulate man or bird or beast. A hen filled with "egg producer", or a cow given more food than she can digest will go like a man kept on whisky. There will be brilliant, feverish work for a time, and then a grand collapse.....

Don't disfigure your grounds with laths or slats when wire netting is so cheap, says the Homestead. A netting inclosure is durable and will not be blown down in any wind.....

The hens are paying the rent on many a worn-out farm. They are calling people back from the factories to the deserted farm-houses. The American eagle will yet be a hen if solid worth is ever counted.....

A Connecticut farmer, quite unexpectedly, grew a tremendous corn crop last year. The land was in grass the previous year, heavily manured with horse manure after haying, and then plowed. It was manured in the Spring with hen manure and superphosphate. The idea was to fit the ground for a future onion crop, and not to particularly benefit the corn. But the corn stole more of the plant food than was expected. As the N. E. Farmer says, there is a valuable lesson here.....

Mr. Houldette says that nothing will give a fowl scaly legs so quickly as sitting down or walking over the droppings, which should be removed at least twice a week.....

Suitable food and lodging; regular hours of labor; freedom from nagging, ridicule and the annoyance from his employer's saucy children; considerate treatment generally; prompt payment of wages according to agreement, are the rights of the hired man, according to R. J. Fleming.....

If you feel murder in your soul and must kill something, attack the English sparrow. Thus quiet a deplorable inclination and help mankind at one shot.....

At the recent poultry meeting, well reported in the Ploughman, the general opinion seemed to be that the color of an egg, as well as its quality depends upon the food given to the hen. Corn will give a darker yelk than oats. Lobsters color the egg almost red. Green food will color eggs. Onions or sulphur will give their characteristic tastes. A good judge can tell from the taste of the egg what his fowls have been eating. Just as certain foods make poor butter, so some foods produce inferior eggs.....

Mr. Felch compares Brahma eggs to Jersey butter. He thinks five Brahma eggs will make as much custard as eight Leghorn eggs. As tested at his table the difference was quite evident. Mr. Hawkins thinks Mr. Felch has been brought up to like Brahma eggs, and therefore thinks he can tell them.....

A Prairie Farmer contributor proposes to keep moles in check by clean cultivation, and encouragement of hawks, skunks, owls, cats and dogs. Clean cultivation is good, but the next three members of the combination are as bad as the moles.....

If the hay ran short and the cattle are thin and poor, remember to use caution in letting them into rich pasturage.....

A fat, "puffy" bull is a nuisance. Don't let a bull over-feed. Give him plenty of exercise. He never will be fit for service if you pamper him. If you can fit up a harness for him, and make him haul out the manure and do other light jobs, you would be doing business-like farming .....

Sam Jones said he would assume dignity after he died. The N. Y. Tribune thinks he got this effective illustration from a contemplation of the New York State Agricultural Society.....

Too many fowls have to depend upon the contents of the wash-tub for drinking water. The dirty soap suds will be sure to cause disease. Give the hens pure water.....

Mrs. G. H. Hollister to induce hens to leave off sitting, makes them hunt their own feed. She makes them fast for 24 hours, and then forage. This plan works well. The third time seldom fails with the most motherly of hens. Better than tying by one leg, or making them stand over sharp nails.....

C. H. Parsons states, in the Homestead, that he hopes to feed 30 tons of cotton-seed meal. He sells his hay, and feeds corn-stalks and roots. The meal will not only make beef, but will leave its impress for a year upon his soil and crops.....

What is education? asks Dr. T. H. Hoskins. It is the "know how." Do farmers need education? Oh, no. Farming is such an easy business, and yields such immense profits, that ignorant men can get rich at it as easy as falling off a log.

SILKS & VELVETS.

JAMES McCREERY & CO.

are exhibiting complete representative lines of their SPRING IMPORTATIONS in BLACK and COLORED SILKS, VELVETS etc., with the latest and most select designs in Rich NOVELTIES to match for COMBINATIONS and GARNITURES. They also offer a great selection of Fancy Silks in Glace Checks Louisiennes, FOULARDS, TRICOTINE IMPRIMES, etc., at a very marked REDUCTION in PRICES; also a lot of Rich Silk and Silk and Velvet Novelties in various designs, at about half their cost of importation.

ORDERS BY MAIL

from any part of the country will receive careful and prompt attention.

JAMES McCREERY & CO.,

Broadway and 11th St., New York.

Stock and Poultry.

EGGS from W. Leghorns, P. Rocks, or Black-Red Games, $1.50 for 13. *Eggs from Choice Fowls only.* Mention this paper. C. E. RICK, Fairview, Pa.

N. T. LATTIN,
Originator and Breeder of
BLACK AND MOTTLED JAVA FOWLS,
GAINES, ORLEANS CO., N. Y.
Fowls, $5.00 each. Eggs, $3.00 per 15; $5.00 per 30.

KISCO MOUNTAIN Strain of fine Wyandotts Send for descriptive Catalogue and price list before purchasing either eggs or fowls. Address
KISCO MOUNTAIN POULTRY YARDS:
Mount Kisco, New York.

Extra Wyandotte Eggs.
Fresh laid from first class birds. Packed in nice baskets at $2 for 13; $3 for 26.
VERY LIMITED NUMBER OF
IRISH SETTER DOGS.
All yard broke, fine blood. Price given on application.
E. T. BAILY, MOUNT KISCO, NEW YORK.

HOUDANS.
Eggs, $3 for 13; $5 for 26. From Premium Stock.
C. E. ROCKENSTYNE, Albany, N. Y.

F. W. GAYLOR, Nassau, N. Y.
GAME BANTAMS
OF THE MOST FASHIONABLE STRAINS.

Ducks, Pekins, Rouens. $1.50 for 11 Eggs. **Wyandottes,** $2.00 for 13 Eggs. **P. Rocks** and **White Leghorns,** $1.50. We have a very large stock raised artificial for practical use, the best Brooder known for $8.00.
C. J. QUINBY,
White Plains, N. Y.

TOULOUSE GEESE per trio, $10. Eggs $2 for 6 or $3 per dozen. R. C. White Leghorn and S. C. Brown Leghorn chickens, $1 each; eggs, $1.50 for 15. For sale by
THEO. DAHM,
Box 141, Great Bend, Kansas.

High Class Plymouth Rocks and Wyandottes.
All high scoring birds. None better, and full satisfaction guaranteed. Eggs for setting of 13, carefully packed in baskets. Plymouth Rocks, $1; Wyandottes, $2.
W. L. LUNDY, Metuchen, New Jersey.

Games: Wyandottes: Houdans.
Exhib. Games, Andalusians, Jap. Bants., Malays, B. S. Polish; Eggs, $3; Brahmas, Cochins, Pit Games, etc.; 13 Eggs, $2. **Embden Ganders for sale. Pekin Duck Eggs, $2.**
Fifty First and Special Prizes last Winter.
THOMAS W. LUDLOW, Yonkers, N. Y.

Purdue's Light Brahmas.
My Birds won FIRST PRIZE on Chicks and SPECIAL on Cockerel, at New York, 1886, also four FIRST PRIZES at Philadelphia, the past season.
Eggs per setting, $5.
A few choice Cockerels and Pullets for sale.
GEO. PURDUE, *East Orange, N. J.*

Mammoth Bronze Turkeys and Pekin Ducks, Prize Langshans, Wyandottes, P. Rocks, Houdans, Blk Javas, Leghorns, Polish, etc. Eggs for hatching a specialty—From Ducks and Chickens, $2 for 13. Fancy Pigeons. R. VANDERHOVEN, Rahway, N. J.

Pure Brown Leghorns.
I will furnish Eggs from pure stock, nicely packed in baskets, for $1.50 for 13; $2.50 for 26.
H. W. BRINK, Middletown, N. Y. Box 161.

LANGSHANS, all high scoring. One pen headed by Cockerel scoring 96. Eggs, $3 per 13; $5 per 26. Dark Brahmas, headed by Imported Cockerel. White Dorkings, Black Javas, Andalusians, and White Leghorns. All Premium Strains. Eggs, $2 per 13, or $3.50 per 26. Aylesbury Ducks—imported and as fine as there is in the country. Eggs, $3 per 11; or $5 per 22. Fowls for Sale. Correspondence solicited.
E. P. & W. J. KIRBY,
EAST CHATHAM, N. Y.

WYANDOTTES.
Won Special on Highest Score and Third Premium on pair of Chicks at the New York Fanciers' Show in 1884.
Won First and Second on Fowls and First on Chicks at Middletown, N. Y., in 1884.
Won First on Breeding-pen of Fowls and First on Breeding-pen of Chicks, and First on pair of Fowls a Newburgh, September, 1885.
FOWLS AND CHICKS FOR SALE.
EGGS, $3 per 13; $5 per 26.
DR. E. W. DEYO,
Box 103, MONTGOMERY, Orange Co., N. Y.

DARK BRAHMAS.
Won first on Breeding Pen of Fowls, first on Breeding Pen of Chicks, first on Pair of Chicks and second on Pair Fowls, at
NEWBURGH, September, 1885.
Fowls or Eggs in Season.
EGGS, $2.00 per 13; $3.50 per 26.
Dr. E. Ross Elliott,
P. O. Box 267, MONTGOMERY, Orange Co., N. Y.

POULTRY-CHOLERA AND GAPES
CURED EVERY TIME BY USING
HAVENS' CLIMAX CONDITION POWDER.
Five Years in Use and No Failures.
"It never fails to cure Poultry-Cholera and Gapes."—Aug. Gunther, Harlingen, N. J.
"I know it will cure Gapes. I never lost a single chick after I began to use it."—J. Wesley Stillwell, Freehold, N. J.
"These men are reliable."—W. S. Strong, Mayor, New Brunswick, N. J. [City Seal.]
"One of our friends has given it to turkeys with excellent success."—Ed. Rural New-Yorker, April 3, 1886.
14 ounce packages, 25c. of Dealers; by Mail, 40c. "Our Successful Farmers," a pamphlet, free by mail.
Wm. Rust & Sons, P. O. Box 1201. New Brunswick, N. J.
Agents wanted. Ask your dealer, and show him this advertisement.

BLYTHECOTE FARM POULTRY YARDS.
THE BEST IS THE CHEAPEST! BLYTHECOTE STRAIN OF WYANDOTTES.
Obtained by breeding to the standard, and annual improvement sought by careful matings with birds selected from the best strains in America. One setting of choice Eggs will produce more first-class birds than ten settings from inferior stock. Eggs, $3 per Setting of 13; Two Settings, $5; Five Settings, $10.
Address J. D. TOMPKINS, Brainard, N. Y.

KNAPP BROS.,
FABIUS, N. Y. (Box 74.)
BREEDERS OF THE LEADING STRAINS OF
WHITE LEGHORNS.
Highest honors at all the leading exhibitions, winning the **Grand Special Prize** for the Best Breeding Pen and Pair of any variety at the late New York Show. Send stamp for our new Catalogue.

Half-Way Brook Kennels and Poultry Yards.
LOCK BOX 450. GLENS FALLS, N. Y.
OUR SPECIALTIES.—St. Bernards, Eng. Mastiffs and Eng. Beagle Hounds. Imported Dogs in the Stud. Fees reasonable. Can furnish dogs of any of the popular breeds, at low figures, for quality of stock.
IN POULTRY.—We breed the best and most popular varieties of land and water fowls. Stock for sale at all times. Eggs in their season. Send stamp for circular. COFFIN, ZIMMER & CO.

PRESTON'S WYANDOTTES!
15 *GRAND BREEDING PENS FOR* 1886.
EGGS from Two Pens of First Premium Stock, headed by "Earl and Trusion," at $5.00 per 13; $10.00 per 39. Eggs from 13 other pens of good breeding birds, carefully selected, and mated for best possible results, at $3.00 per 13; $5.00 per 26. Eggs from one pen each of fine Langshans, Light Brahmas, Plymouth Rocks and R. and S. C. Brown Leghorns at $2.00 per 13.
Elegant Wyandotte Chromos at 10 cents each. Large circulars with illustrations FREE to all.
GEO. A. PRESTON, Binghamton, N. Y., D. L. & W. R. R. Ticket Agent.

MILL BROOK
POULTRY YARDS
AND
KENNELS!
40 breeding pens of selected Wyandottes, Langshans, W. and **Br. Leghorns,** P. Rocks, Lt. Brahmas, R. C. W Leghorns, B. B. R. Games, Pekin Ducks. Eggs, $3 for 13, $5 for 26, $7 for 39. Duck eggs, $2 for 11, $3 for 22. Nine hens and one male to each pen. *I guarantee a good hatch. Try me.*
Champion St Bernard Dogs, Champion Scotch Collie Dogs. Young stock for sale at reasonable prices. Champion smooth coat "Cheerone," in the stud. Send for Catalogue.
WM. MONTGOMERY, Jr., Bergenfield, Bergen County, N. J.

(*For other Poultry advertisements see page* 261.)

Everywhere.

RURAL SPECIAL REPORTS.

California.

SANTA CLARA, Saratoga, March 24.—California orchards and vineyards seldom have a garden attached to them, sometimes not even so much as a common rose bush near the house. Vegetables are looked upon as a nuisance and an expense—a nuisance because they invite insects such as "Diabrotica 12-punctata," which were last year and again about six years ago, very destructive to the fruit. I am an advocate of vegetables in the orchard, among young trees or those of slim shape, like the pear. A garden would seem to urge one to cultivate well and manure the soil, and if carried on properly would be a benefit rather than an injury to the trees. And if bugs do come, is it not easier to destroy them on vegetables than up on fruit trees? The Italian fruit and vegetable gardeners travel all over this fertile valley every day of the week selling to every farmer and orchardist such "truck" as could and ought to be grown around every farm-house. Besides the vegetable garden for the "folks," I am growing corrots, mangels and turnips for the stock and poultry, and hope to succeed in making my neighbors do the same. I manage an orchard of 85 acres in full bearing. P. L. H.

Kentucky.

GREENVILLE, Muhlenberg Co.—The past Winter was the most severe ever known here—snow 15 inches deep on a level, and high wind all the time. Young stock injured; poultry on many farms all frozen to death. During most of the Winter the snow protected the wheat; but lately, after a severe thaw had exposed it more or less, alternate freezing and thawing injured it to some extent; but the outlook for a good crop is better than for years at this season. Peaches will be a failure, as a large proportion of the young trees were killed to the ground. So were raspberries and blackberries. Farm work going on lively. Tobacco is absorbin most of the farmers' attention. D. B. S.

Missouri.

ELDEN, Miller Co., April 1.—Although we have had some warm days, yet Spring can hardly be said to have fairly opened. Some oats have been sowed, but not all, although it it is getting late. Some garden has been made, and early potatoes have been planted. A few who sowed no oats have commenced plowing for corn. We will have very few peaches, but prospects are fair for other kinds of fruits. Winter wheat looks very well, and as the worst danger—freezing out—is past, the prospects are good for a fair crop. N. J. S.

New York.

APALACHIN, Tioga Co.—A heavy rain last night accompanied by high winds, has settled the ground to quite an extent. To-day the wind is still blowing, warm; and by next week the plow will be started on dry soils. Small fruits are looking well. Raspberries not killed back to any amount; but the heavy snow in the forepart of the Winter, broke down numerous bushes of the red varieties. Wheat begins to look green; prospects of a fair crop. Potatoes are the principal crop for farmers about here; price 40 cents, with quite a good many in growers' hands; there was a time in January, when farmers received 60 cents for their tubers, but that figure has not been reached since. Wheat, 90 cents; oats 40 cents; cows $30; horses $125 to $225. C. F. G.

Tennessee.

OAKLEY, Overton Co., March 22.—The cold the past Winter did more damage to growth in this section, than in any winter in my knowledge. Many young peach trees, as well as many kinds of perennial shrubs were killed. Not a peach bloom will probably appear in this section—Northeastern Middle Tennessee. T. W. C.

THE FARMER'S CLUB

ANSWERS TO CORRESPONDENTS.

[Every query must be accompanied by the name and address of the writer to insure attention. Before asking a question, please see if it is not answered in our advertising columns. Ask only a few questions at one time. Put questions on a separate piece of paper.]

GAS LIME.

E. R. G., Ballville, Orange Co.—1. The value of gas lime as a manure would depend a good deal upon the effect lime has on the soil of your farm and the price at which fresh lime can be bought. It is not worth more than one-fourth the price of fresh lime. 2. It is not to be recommended for mixing with hen or pig manure to be put in the hill with corn. If you have muck handy, it may be mixed with that to good advantage when it is being piled. As it comes from the gas works, it is poisonous to vegetation, and unless you have muck to mix it with, we would prefer to scatter it in Fall upon grass land to be plowed in Spring, or upon raw land to be harrowed or cultivated in Spring. Try it sparingly and watch its effects. The safest plan, however, is to expose it to the air for two or three months; thus weathered, it may be applied without injury.

ESCUTCHEON ON COWS.

Several subscribers.—The hairs just above the udder of cows grow transversely or upwards. This growth of hair Guenon calls the escutcheon, and he asserts that the more the upward growth of the hair extends outward from the udder and the inner parts of the thigh and the higher towards the urinary passage from the bladder, the better milker the cow is, and just as the upward growth of hair fails to extend upward and outward in these directions, so much the less likelihood that the cow will be a good milker. This is the principle of the escutcheon, but there are several modifying conditions, and a full discussion of the rather intricate theory would occupy too much space here. An illustrated little book fully explaining the matter, written by Willis P. Hazzard, is published by J. M. Stoddard, 627 Chestnut Street, Philadelphia, Pa., price 50 cents, in paper; 75 cents in cloth. "Gueuon on Milch Cows," 75 cents, another work on the subject, can be had through the American News Co., of this city. The regular dairy books, such as Willard's Practical Dairy Husbandry, and Sheldon's Dairy Farming, also discuss it at considerable length.

BLOOD SPAVIN AND RING-BONE IN A HORSE.

C. E. E., Canton, Ill.—1. For blood spavin in the hind leg of that afflicted young horse, in the early stages cold water persistently applied, followed by cooling lotions—equal parts of alcohol and rain water, or a pint of brandy to half a pint of water — will usually be enough. If not, apply an infusion of bayberry bark, using considerable friction in rubbing it in by the hand; use also either of the other remedies. This sort of spavin, if not connected with bog or bone spavin, is harmless. It is often, however, an indication of other diseases of the joint. 2. For ring-bone on the fore leg of the horse, engage a regular veterinary surgeon to fire and blister the affected limb at once, and give two months' rest—at grass as soon as the pasture is fit. If any lameness remains, repeat the operation. If there is no competent surgeon at hand, after clipping the hair short, apply the following ointment, with friction: Cantharides powder, half an ounce; lard, three ounces. Secure the animal so that he cannot get his mouth to the blistered limb. Give rest as in firing, and repeat if necessary.

DESTROYING CANKER WORMS ON APPLE TREES.

J. L. K., Rochester, N. Y.—1. If the canker-worms that have been thick on my apple trees for two years are not destroyed, will the trees be? What is the best way to get rid of the pests? It isn't easy to apply Paris-green to trees 20 feet high. How long will the rascals remain in an orchard? If trees are sprayed with Paris-grass, will not the grass under them be dangerous for grazing stock?

ANSWERED BY PROF. A. J. COOK.

The trees will soon be killed unless the canker-worms are put to route. The first year they injure the trees, which are often nearly or quite destroyed the second or third years. They usually remain in an orchard once attacked till the orchard is all destroyed. I have known many such cases. The Paris-green remedy is so much cheaper and more effective than others that I think it alone is worthy of adoption. By the use of this method, we will also kill the very harmful leaf-rollers, and also the worst enemy of the apple grower, the larva of the codling moth. The trees should be sprayed soon after the leaves show, as the canker-worms are but little behind the leaves in time of appearance. I use one pound of poison to 50 gallons of water. Place this in a barrel in a wagon, and syringe by use of a force pump and spraying nozzle. It is a sure remedy. Of course, some poison falls to the grass under the trees; but if stock is kept out of the orchard for two or three weeks, all danger will be at an end. I would keep stock out till after a heavy rain storm had occurred.

GRASS FOR A STEEP ORCHARD.

A. S., Beechwood, Pa.—On a southeast-facing hillside, a trifle too steep for cultivated crops, on which I intend to plant apple trees, what grass would be best, and what should be the treatment?

ANS.—It would be best to seed it down to June Grass (Poa pratensis) and White Clover without grain, and set the trees as much as possible in depressions that will catch the rain as it runs down the hillside. It is not necessary, or any way advantageous, to set the trees regularly on such a location. An orchard set in grass should be neither pastured nor mown for hay. The grass should be cut at haying time, or a little later, and raked up around the trees as a mulch. As this mulch, while greatly benefiting the trees, harbors mice, the trees should be protected by tying pieces of lath, or barrel-staves around each. These strips should be 1½ to 2 feet long. The lower ends should be pressed a little into the soil, and one turn of strong cotton twine near the top is enough. It is not necessary to remove them in the Spring, but in the Fall turn all the pieces inner side out, and tie again, so that the birds may clear them of the codling moth larvæ which harbor there in great numbers. In such an orchard there is no need of plowing the ground after it is once seeded, and it would be disadvantageous to do so, as it would favor the washing away of the best part of the soil in heavy rains.

LUMPS ON A COW.

J. D., Ivy, Kans.—Some time ago a small lump appeared on the neck of a cow; when ready to burst it was opened, and emitted considerable thick, yellow matter. Now there is in the place a wart-like excrescence the size of a hen's egg. There are several others also—one on the shoulder, three on the jaw, one on the other side of her neck, and some are beginning to resemble the early stage of the first: what should be done for her?

ANS.—Give internally, twice daily, one ounce each of the sulphate and bicarbonate of soda, and one-half ounce each of powdered gentian and ginger. The diet should be nutritious and laxative. Use the card daily, allow out-door exercise when pleasant, and at other times a clean, dry, airy stable. We would not care to use the milk except in a case of necesssity, although it is probably unaffected, and can be safely used.

A STARVING COW.

S. B., Pequanock, N. J.—For the last six weeks my ten-year-old cow has been falling off in flesh. She calved five months ago, and I have milked her since. She has had corn-stalks and second-quality hay, all she would eat, with a mess of corn-and-cob meal made into a slop, per day. I have just discovered that she is troubled with "wolf-in-the-tail"—the bone in half the tail appears to be all gone—is this the cause of the trouble? If not what is and what should be done?

ANS.—No. If the tail is relaxed or softer than usual it may be the result of disease, but it is *not* the *cause* of any disease. The symptoms would indicate nothing more than an insufficient quantity of suitable food. In other words, the cow is slowly starving. Feed more liberally. Mix equal parts of ground oats, corn meal, and wheat bran, add one-fourth part of oil meal. Feed six quarts twice daily. Read "Feed for milch cows" in the F. C., of March 6.

WATER-PROOF MUSLIN, ETC.

T. H. Y., Alexandria, Dak.—1. To make "factory" water-proof for cold-frames, thin unbleached muslin should be tacked tightly over a frame to fit closely to the hot-bed. Into a pint of linseed oil, unboiled, beat one egg thoroughly, and with a paint-brush, free from paint, give a coating to the top side of the muslin. At night, or when cold, spread an extra cover over the hot-bed. 2. We do not think that any mode of trimming melons will hasten ripening. Melons *must* have *heat* and in the absence of the needed amount, we do not believe that any manipulations will help them to ripen earlier. All we can do is to give them a warm situation, plenty of food, and be careful not to crowd the vines.

Miscellaneous.

E. G. B., Dover, Del.—1. Where can I get mineral paint? 2. What proportion of oil and drier should be mixed with it when dry? In mixing white lead, what proportion of linseed oil, Japan and turpentine to 100 pounds, is best for outside work? 4. Where in New York can I buy crude petroleum by the barrel? 5. Is the Leaming Corn good for Northern New Jersey? 6. How long will linseed and cotton-seed meal keep stored in a barn?

ANS.—1. At any paint store and at most grocery stores. 2. One gallon of oil to seven pounds of dry paint. No drier is required. We have tried cheaper oils than linseed, but would not advise their use. 3. About nine gallons of oil and one of turpentine. 4. Of J. Macbeth, 128 Maiden Lane, New York; or of the Prince M'f'g Co., 71 Maiden Lane. It is worth about 12 cents per gallon by the barrel. 5. The Leaming is good, but not so early as the Pride of the North, Longfellow or Angel of Midnight. 6. That will depend largely upon its condition and surroundings. If the temperature is high and the air moist, it will keep only a short time, while under favorable conditions it would keep a long time.

W. A. P., Brookfield.—We do not wish to give the names of dealers who buy the bodies or skins of dead birds for ornament. We are opposed to the traffic, and decline to help the traffickers, even at the solicitation of one "who approves the stand taken by the RURAL on the matter." A "little knowlege is a dangerous thing" now and then. "Do you ever grease the oats for the horses?" asked the priest, in the confessional, of "'Ostler Pat." "Faith, I don't; why should I?" said the penitent. "Because they couldn't eat them so well, and there would be more for you to steal and sell," said the priest. The very next time and every time thereafter the principal sin Pat had to confess was that of greasing the oats for the horses.

J. A. C., Birch Run, Mich.—Stumps are burned out, dug up by hand and by means of a machine, or blown out with powder or dynamite. The "best way" to remove them must depend upon the value of the land and the contents of the owner's pocket-book. A stump-pulling machine will be of little value when the work is done. Hand digging and burning can be done at seasons when other work is not pressing. Explosives make short work of the stumps, but they are rather expensive and considerably dangerous in the hands of anybody who is not accustomed to their use. We do not know of any book devoted to this subject. Several articles have appeared on it in back issues of the RURAL.

E. C. S., Taylortown, Va.—My three-year-old heifer had a calf when 13 months old, and has not been in heat since. She seems to be so; but will not let the bull approach. What should be done?

ANS.—When she appears to be in heat, hold her for the bull. Failing in this, you can do nothing.

J. M. V., Woodbine, Ia.—To get rid of lice on hogs, wash the animals all over with crude petroleum, and next day give a thorough washing with warm soft water and soap, using the scrubbing brush freely. This is just as good and easy a way to destroy lice on hogs as any of the 999 others.

DISCUSSION.

REMEDY FOR CABBAGE MAGGOT.

C. E. P., QUEENS, L. I.—IN the R. N.-Y for April 3d, page 219, I notice that "Horticola" offers a remedy for the cabbage maggot, and as this pest appears to be unusually destructive of late, I think its ravages should be prevented in time, and before it has had any opportunity to damage the crop, especially when the preventive can be employed before the crop is planted. The remedy I have to offer consists in scattering in the hills, and thoroughly mixing with the soil, a small quantity of any concentrated cabbage fertilizer. In this vicinity cabbage is very extensively and profitably grown as a market crop, and I have yet to see a field injured by the cabbage maggot, or by what is known as club-foot, where any good concentrated cabbage fertilizer has been employed, and but very few would think of planting cabbage unless they prepared the soil as above advised. No matter how rich the land or what amount or quality of stable or barn-yard manure is used for the crop, always use a little good fertilizer. It will not only prevent the attacks of many insect pests at the roots of the plants, but add very materially to the quality of the crop.

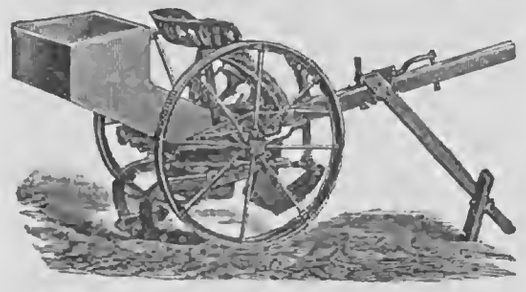
L. E. B., ROCKWELL CITY, IA.—At the Iowa State Agricultural College three species of Forsythias are grown. F. viridissima, as figured in the RURAL, is a fast grower, has shining, dark-green, lanceolate leaves; is not at all hardy, being killed to the snow-line each Winter. It has not borne any flowers. F. Fortunei makes a fair, healthy growth; is medium-hardy, and *might* be good in favorable locations. There is another, not figured in the RURAL, which is yet better than the two above mentioned. Its specific name is F. suspensa. The leaves are much like those of Fortunei except in being more broadly ovate and even. This species is quite hardy and makes a good, though straggling, growth. It is peculiar in that the lowest branches recline on the ground; the tips then push along a short distance and take root.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING April 10, 1886.

T. O. D.—W. H. M.—S. M. W.—M. E. S.—M. S.—F. D. C.—W. S.—J. R. L.—G. H. K.—J. M. H.—E. B. C.—H. S.—A. N. H.—E. S. N.—G. M. W.—J. C. L.—O. F. G.—N. J. S.—M. W. F.—W. W.—A. P. P.—J. M. S.—T. J. W.—I. H. R.—H. S.—E. A. W.—E. R. K.—M. W. F.—E. J. B., potatoes received.—E. D. B. S. F.—H. A. M., thanks.—C. V. M.—J. M. S.—I. W. L.—G. T. D.—Pictou.—J. H. C.—T. C.—R. L. H.—R. D.—H. S.—F. D. C.—E. A. W.—B. M. C.—J. G. S.—E. M.—T. T. L.—E. M.—An old subscriber.—A. C. K.—N. J. S.—W. B. T.—J. E. F.—E. A.—F. D. C.—G. A. P.—H. T.—W. S.—J. W. J.—R. W. C.—C. E. B., thanks.—I. K. F.—T. C., thanks for potatoes.—C. E. B., thanks.—E. M., thanks.—W. E. J.—G. P. M.

Implements and Machinery.

THE ASPINWALL POTATO PLANTER.



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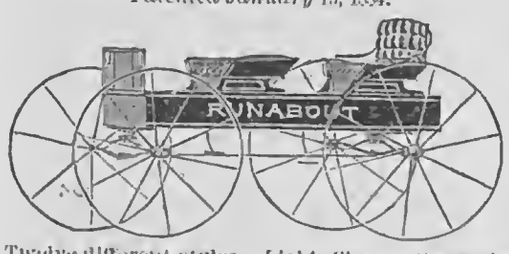

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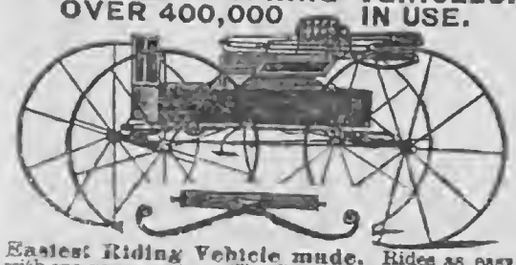

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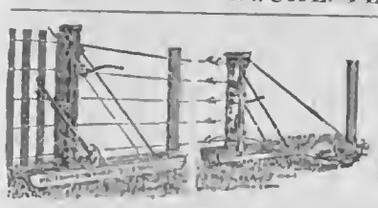

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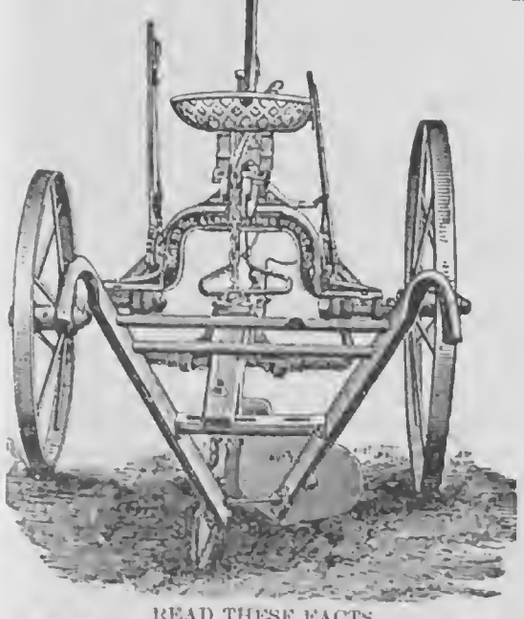

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We claim and GUARANTEE that a Plow attached to the Sulky and carrying the driver, is from five to 100 pounds lighter draft than the same Plow doing same work without the Sulky. Write for prices.

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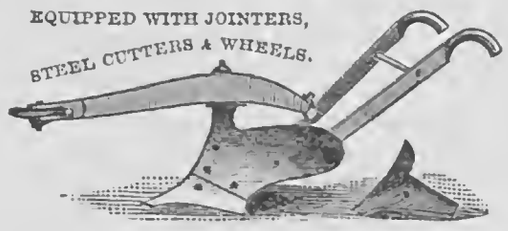

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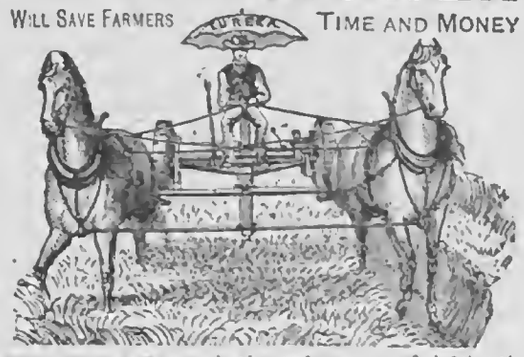
WILL SAVE FARMERS TIME AND MONEY



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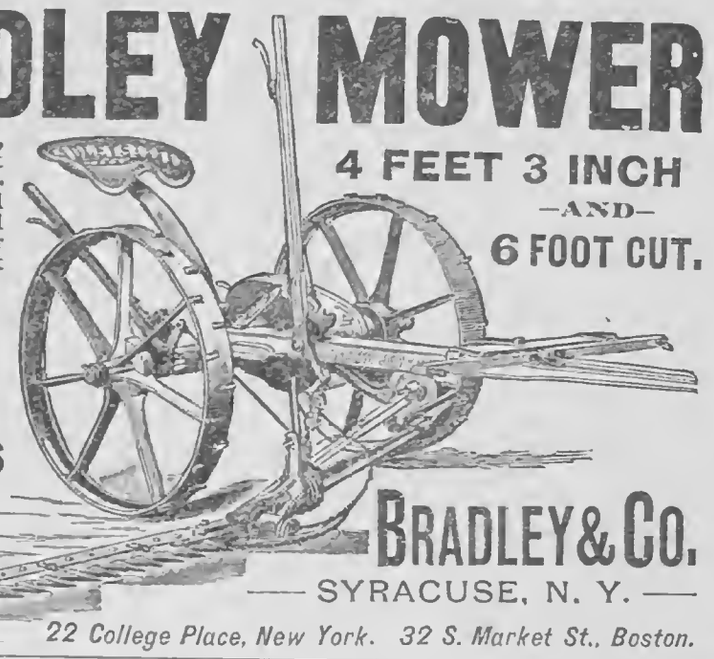

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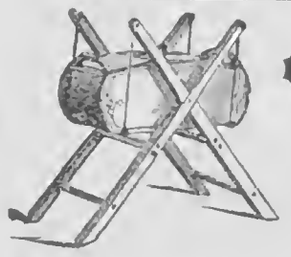

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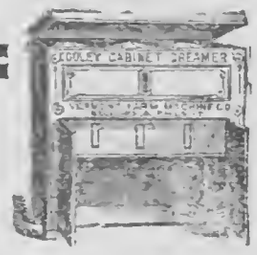

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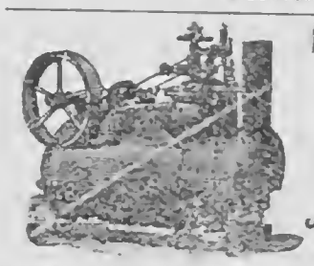

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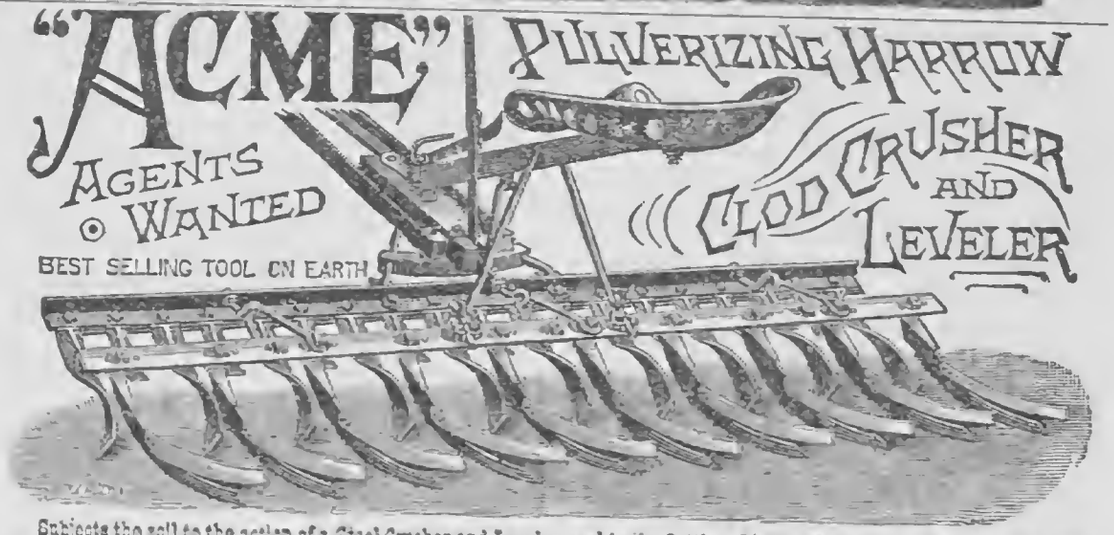

Subjects the soil to the action of a Steel Crusher and Leveler, and to the Cutting, Lifting, Turning Process of Double Gangs of Cast Steel Cutters. Immense cutting power. Crushing, Leveling and Pulverizing performed at the same time. Entire absence of Spikes or Spring Teeth avoids pulling up rubbish. Only Harrow that cuts over the entire surface of the ground. Sizes, 3 to 15 ft. wide. With and without Sulky attachment. We deliver free at Distributing Depots.

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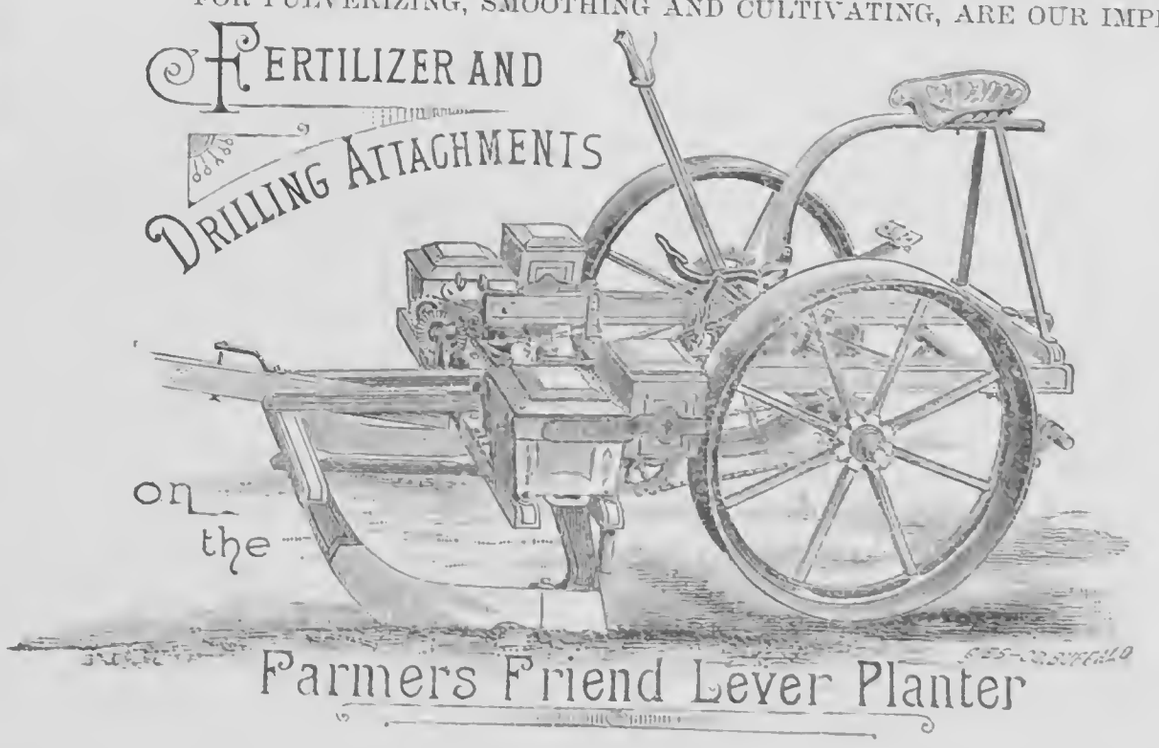

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THE
RURAL NEW-YORKER.
A National Journal for Country and Suburban Homes.

Conducted by
E. S. CARMAN, Editor.
J. S. WOODWARD, Associate.

Address
THE RURAL NEW-YORKER,
No. 34 PARK ROW, New York.

SATURDAY, APRIL, 17, 1886.

IF the number on your address label is 1890, your subscription expires with this number; if 1891, next week; 1892, in two weeks, etc.

MR. J. W. JOHNSON, of Ontario, Canada, writes that he harvested over 800 bushels of potatoes last season on less than one acre of land, grown by the RURAL'S trench-flat-culture system. "This is more than double any previous yield" adds Mr. Johnson. The kinds were Pearl of Savoy, Clarke's No. 1, White Star and Rural Blush.

WE shall not present many pictures in our Poultry Special. Portraits of nearly all the valuable breeds have been published and republished so often that we dare say our readers are familiar with them. Our aim is to give, in a condensed form, all needed information regarding the best breeds and the best management of poultry; to show whether poultry-raising is profitable; in how far, and under what conditions it is profitable.

WE do not intend that our Special Poultry Number shall be written in the interests of professional poultry dealers or fanciers, or to puff up any breed, incubator, patent contrivance, special foods, medicines or anything of the kind. What we desire is that it shall help the farmer to make poultry keeping more profitable. We have always thought that the average farmer does not give to his fowls the thought and care that he might give advantageously.

NOTICE.

ALL potatoes and living plants to be tested, should be sent to River Edge, Bergen Co., New Jersey, and not to this office.

WHEN complete chemical fertilizers are used without increasing the crop, this is no proof that the fertilizers were ineffectual. It is proof that the soil is already abundantly supplied with plant food—and "enough is as good as a feast." To test the effects of fertilizers, it is better to select a poor soil. Our first experiments were made at the Long Island Rural Farm years ago. We used every kind of fertilizer and every combination of them without ever ascertaining that one kind was needed more than another, or that they were needed at all. The reason, no doubt, was that the soil was already fertile. Upon the New Jersey plots, which have been impoverished by years of cropping without any adequate return of plant food, we cannot raise a profitable crop of anything without fertilizers or farm manure, and, so far as we can judge, the one answers just as well the other.

ON Wednesday, Senator Wilson's bill doubling the postage on fourth-class matter, received a contemptuous kick in its original birth-place—the U. S. Senate, where the Committee on Post Offices ordered an adverse report on it. This kills once more what was killed a month ago in the House. The "old-fogy" Senate is always much slower than the House in responding to public sentiment on all matters of public interest. It is the oligarchical representative of the States, not, like the House, the democratic representative of the people. Its members are, for the most part, either the paid attorneys of railroads, national banks, and other wealthy and unscrupulous corporations, or the direct representatives of such bodies, or millionaires who owe their seats more to their money than to their intellect or popularity. But even such a body, although only indirectly representing the people, could not venture to disregard the emphatic expression of public disappropation, even in a matter where the interests of corporations were in conflict with the interests of the people. After all, it is the people who still rule in this country whenever they leave no doubt as to their wishes in matters of legislation.

ANY of our readers may try this experiment without much trouble or expense, while it may prove of great service to them in ascertaining the effects of special fertilizers, or what kinds their soil most needs. Take, for example, two rows of corn. After the seed is planted and before it sprouts, sow upon them for any distance, say 30 feet (it may be less or more as desired), a quantity of wood ashes or sulphate or muriate of potash. Then, skipping six feet, sow fine raw bone flour for the next 30 feet. Again skipping six feet, sow upon the next 30 feet both of them. Upon a fourth 30 feet, add nitrogen to the potash and bone, forming what is known as "a complete fertilizer." This we have done at the Rural Grounds for several years with the result, as published, that the complete fertilizer gives us nearly twice as much grain as either the bone or potash or both combined. The nitrogen may be in the form of nitrate of soda, sulphate of ammonia or blood. We think that any of the leading fertilizer firms would furnish the ingredients in small quantities for such experiments.

SPECIAL.

Those who, having applied for the Rural's present seed distribution prior to April 6th, have not yet received it, will kindly notify us by postal at once.

How many farmers ever write to their Representative urging him to support or oppose pending legislation? Few we fear, yet we think the list could be very profitably increased. The common people make and unmake the legislator. It is well for the latter to keep this fact in mind. He is selected to execute the will of the people. When he gets tired of doing this and wants to put his own judgment against the wishes of those who have made him, it is well to let him try to re-elect himself. Never write to your Congressman about unimportant or trivial matters which he cannot possibly change or bring about. Find out what legislation will be likely to need his vote. If you see anything that is of special importance to agriculture, notify your "political agent" that you expect him to favor it. If he is on the right side when the vote is taken, remember him at the next election. If he goes against the measure, remember him still more carefully. Our political system needs cleaning. We can all help in the work. Begin with the Representatives. Let them understand that they are to stop working for themselves when they enter the employment of the people. A well cultivated memory taken to the ballot box a few times, will wonderfully help the cause of the farmer.

THERE are hundreds of workmen in our large manufacturing towns, so situated that they can do considerable gardening. A good mechanic is reasonably sure of a permanent job. In Summer he has a fair amount of time for himself. Any intelligent man can find far more pleasure and rest in the training and cultivating of fruits and flowers than in lounging about the town talking with his comrades. We know of mechanics, who, on their little garden patch, have raised plenty of small fruits for their own table and sold a considerable quantity to their neighbors. Better than this, they have originated new seedlings of great promise. There are hundreds who might profitably follow their example. There is an increasing demand among workmen for shorter hours of labor. If labor is to be shortened, the profitable disposition of the added hours of leisure will make an interesting study. What shall be done with our time? Intelligent workmen in the smaller cities and towns will be quick to appreciate the advantages offered by gardening, bee-keeping or poultry raising. Work in these branches will never interfere with their skill as craftsmen, while they will be able to reduce household expenses and increase the income by a trifle, and thus work into the sure track that leads up to a home of their own. Labor societies would do well to encourage this home building among their members. Manufacturers could do nothing more profitable than to surround their factories with a community of small land owners, who would have a double interest in the success of the town and its business. The true solution of the labor question will be found in just such a community.

WANTED—BRAINS AND PUSH.

HORACE GREELEY once said "There is something to do everywhere for him who knows how to do it." If this statement ever applies, it will apply now in these days of overproduction and starvation prices. What shall the farmer raise that will pay him a good profit? No! the case is not a hopeless one. There are still opportunities. All the oleomargarine, butterine and suine have not yet destroyed the market for genuine gilt-edged butter. A friend who lives more than 50 miles from any city, retails all the butter he can make on a 60-acre farm at 40 cents a pound. Hundreds of other farmers could doubtless do as well had they but the will and the skill. Many, if not all, of our large cities are as yet poorly supplied with that most delicious vegetable, the cauliflower. Brains, manure and a little land will produce this vegetable in abundance. The skill is not difficult to acquire where there is a determination to succeed. A few weeks ago a Massachusetts strawberry grower gave us some bits of experience. He had been in business, we believe, our seasons. His friends and neighbors all discouraged him at the beginning, insisting that there was no profit in strawberries. But he went to work with a vim. He used plenty of manure, and grew first-class fruit. He never allowed a poor berry to go to market, and never used a basket a second time. The result was that he soon gained a reputation for fancy fruit and had no trouble in disposing of his crop at fancy prices. This is not all that might be said. The rearing of lambs for the early market is proving profitable to those who understand it and attend to it thoroughly. The right man might make a fortune growing mushrooms near almost any of our large cities. After all, there is more in the man than in the business.

SHALL WOOL GO ON THE FREE LIST?

THE tariff bill of 1882 made such a reduction in the duty on imported wool that the sheep husbandry of the country, according to those engaged in it, has suffered severely ever since. Free-traders have all along insisted, however, that while the producers of manufactured goods are benefited by a protective tariff, the producers of raw materials, and more particularly of wool, ought to be benefited by free trade in the goods that compete with their own! The Morrison bill, introduced in the House a few months ago, had the negative merit that, while it did not raise the duty on wool as wool-growers desired, it made no material reduction in the duties imposed in 1882. The Hewitt-Morrison bill, a mongrel concern resulting from a union of certain provisions of a tariff bill lately introduced by manufacturer Hewitt of this city, with some of those of the old Morrison bill, places wool, hemp and flax on the free list, and the measure is likely to pass the House, but its success is doubtful in the Senate. There would be no doubt whatever about the defeat of the measure, if the farmers of the country would do their duty in urging the representatives from their States in both Houses of Congress to vote against it. This should be promptly done, not only by those personally interested in sheep husbandry, but by all others. "What affects one is the concern of all" is an excellent motto of the Knights of Labor; why shouldn't it be also applicable to farmers, whose interests, as affected by national legislation, are nearly all identical. Those who may be forced to abandon sheep raising, will have to take up some other business, and thus come into keener competition with those engaged in other agricultural vocations. No selfish consideration, however, should be needed to stimulate farmers to protect at so little cost of time, labor or cash, the threatened interests of their fellows.

THE RURAL'S WHEAT-RYE HYBRIDS.

IN a recent article in Science Dr. E. L. Sturtevant, the energetic Director of the N. Y. Ex. Station, states that the evidence of our having produced true hybrids between wheat and rye is open to "grave doubts." He does not question the "attempt at a cross." "The variability," he says, "is indicative of a foreign pollen." But he thinks that under the "stimulus of the rye pollen, *atavism* has resulted, whereby varieties dormant in the wheat plant have made their appearance."

Dr. Trelease, of the Shaw School of Botany of St. Louis, Mo., also expresses the opinion based on the *pictures* which he has seen of these hybrids, that evidence is wanting of an actual cross.

We would remark that heads of several of these varieties were sent to a number of eminent botanists several years ago, all of whom accepted them as actual hybrids. A few days ago we again sent a head to Dr. W. J. Beal, of the Michigan Ag College, our first authority on grasses who replies as follows:

Editor RURAL NEW-YORKER:

Your recent letter arrived containing a spike of your hybrid wheat and rye. You may remember that some time ago, soon after maturing, you sent four spikes, one of which was sterile, the others fertile.

I have been looking them all over.

I, of course, know nothing about how careful you were in removing the pollen before mature, and in isolating the flowers.

As I understand *atavism*, it is the recurrence of the original type of species in the progeny of its varieties, or the reappearance in animals or plants of traits belonging to their remote progenitors, which their immediate parents did not present. It is strange that your specimens, so many of them, should all of a sudden assume these forms, as they would if it were a case of atavism. Perhaps we do not yet know what a hybrid is, but from my stand-point, I cannot see why you have not as clear a case as anybody on record. If these are not good evidences of hybridism, then I know of no instances in the Vegetable Kingdom. I cannot see how any botanist can doubt it who looks over your specimens. It seems to me that your Armstrong seed was fathered by the rye, call it what you will.

W. J. BEAL.

Ag'l. Coll., Mich., March 29, 1886.

BREVITIES.

WE are asked to give an opinion as to whether different kinds of peas when planted and blooming together will mix. Our opinion is that they will not mix.

ARE stored potatoes still rotting in your neighborhood? Is the stock on hand large? What are the range and prospects for prices? A prompt answer would oblige many inquirers

SET an asparagus bed—or, sow the seeds. The latter is the cheaper way if one doesn't mind waiting a year longer. Seedling plants are always stronger and will produce larger shoots than sets from old plants.

WE hope that our readers who intend to transplant trees will bear in mind this one simple piece of advice: Don't expose the roots to the wind or sun for an instant, or any longer than is absolutely necessary.

THE laws of morality are the same in all places. What is a fraud in America is also a fraud in England. How one special form of fraud is regarded there is well told by Prof. Sheldon in his article on "Bogus Butter" elsewhere in this issue.

ALL of our subscribers who have not done so are requested to apply for the Seed Distribution at once. In previous years we have received many letters to the effect that it was not received. We hope that the present year may prove an exception.

WE have never been very successful in keeping our celery after the middle of March by the usual methods. One of our neighbors has been very successful this season by what to us is a new plan which we shall place before our readers in due time. Meanwhile we shall be glad to hear from our readers on the subject.

LAST year we planted 100 roses of the more tender varieties, such as Teas, Bourbons and Noisettes, commonly known as "ever-blooming or monthly roses." In early Winter the stems were laid over and covered with leaves, and upon these an inch or so of soil was placed. We now find that all are alive. This protection may be given with little trouble, and in this way we secure their delicate beauty, fragrance, range of color, and frequency of bloom, with the sturdier and somewhat more restricted charms of the hybrid perpetuals.

THE distress in Great Britain—agricultural and manufacturing—last year, caused a considerable decrease from 1884 in the drink bill of the "tight little Island." The bill paid, however, reduced as it was, still equaled the nation's outlay for bread, butter and cheese: was nearly the same as the total sum of all the rents paid for farms and farm houses; was three times the amount spent for tea, coffee, sugar and cocoa; and six times the amount spent on linen and cotton goods. Poor England, indeed—but, stop! What is that adage about dwellers in glass houses?

MR. WM. ROBINSON, the founder of the Garden and other papers, and author of half a dozen valuable horticultural works, has purchased 250 acres of land in East Crainstead, England, which will give him an ample opportunity, greatly needed we should suppose, of out-door work. It is time that Mr. Robinson relieved himself in this way. Upon his land is a beautiful and true Elizabethan house built in 1596. Mr. R. writes us, under date of March 15, that they have had a terrible Winter for work. "Not a kitchen garden seed sown, or a potato planted as yet. To-day the boys were skating on my lakes. Quite new for S. England in March."

THE House Committee on Post Offices has not only put its collective foot down very heavily on the bill increasing the postage on fourth-class matter; but, after thorough investigation, has reported a bill extending the "special delivery system," to all other classes of mail matter besides the first, to which it is now limited. Affixing an extra ten-cent stamp on a parcel of any kind will insure its immediate transmission and delivery, instead of being tardily forwarded and delivered as is the case by far too often at present. The speedy delivery of cuttings and other goods for field, garden and orchard, is often a matter of considerable importance. The bill should be passed, and will be if every one interested in postal reform would help it along by writing in favor of it to his Representative in Congress. If it becomes a law, the business of the corpulent express companies who sought to increase their gains, will suffer considerably. They went out for wool and are likely to come back shorn.

Pomological.

GRANDFATHER SMITH'S FAVORITE APPLE.

SPECIMENS of the apple shown at Fig. 164, with cross-section at Fig. 165, were sent to us last Fall by the Rev. Amos S. Baldwin, of Newton Hamilton, Mifflin Co., Pa. The original tree stands on a farm owned by him near Fort Littleton, Fulton County, Pa., which was formerly the property of his grandfather, the Rev. Amos Smith, after whom the apple is named. The tree is now about 75 years old, having been of good size and bearing fruit when a lady now that age was a little girl. According to her recollection, it was a seedling raised by her father, Mr. Ramsey. It is a large, flat-topped, wide-spreading tree, with an upright trunk, and is an annual and often a very productive bearer. The fruit is of good size, conical, flat and pointed at eye; stem very short, not over half an inch; very slender; planted in a deep, regular, but narrow, cavity; calyx large, open, and in a broad, shallow basin. Color a beautiful shade of red over a greenish-yellow ground, and running to a deep red in all places exposed to the sun, and the surface thickly splashed with deep maroon-red streaks, the whole surface studded with yellow dots. Core small and filled with very small, flat seeds. Flesh white, with a tinge of pink where grown fully exposed to the sun, tender, juicy, fine-grained, high-flavored, pleasant and aromatic. Quality best—as good as or better than the Vandervere. Eaten November 9, 1885. This apple is undoubtedly a seedling of the Vandervere and seems to have all its good qualities, without its tendency to scab. A superior dessert or table apple. Season from first of December to early January.

THE SHIAWASSEE BEAUTY.

PROF. A. J. COOK.

THE other night at tea, as we were all commenting on the delicious apple sauce, Mrs. Cook remarked that every family in the land ought to have one Shiawassee Beauty apple-tree. The sauce is of a beautiful pink color, and has a peculiar and delicate flavor that renders it a universal favorite. We are often asked what it is that gives the sauce the delicious flavor, and our reply that it is Nature's own flavoring stored up in the fruit, is often met with a very incredulous look.

This excellent apple is doubtless a seedling from the Fameuse or Snow, which it much resembles. The form and color, both of the skin and pulp, are quite like the same in the Snow. It is larger, however, than the Snow, and keeps much longer. We have kept it well into January—is much fairer, as the tendency to scab and deformity, so peculiar to the Snow, is entirely absent in this. But the greatest difference is in its spicy flavor. While the Snow is pleasingly tart, it is remarkably tasteless. The Shiawassee Beauty, on the other hand, is one of the most marked or radical in this respect, and its flavor is as delicious as peculiar. I have yet to find the person who does not esteem it highly. The tree is vigorous and spreading. Of several trees set out in my garden here in 1876, among which is a Duchess of Oldenburg and a Red Astrachan, none has made so large and fine a growth as this. It is not only vigorous, but it is very hardy. On my farm in Shiawassee County, Mich., I have trees of this variety that have remained vigorous and hearty all through the several hard Winters of the last 15 years. It is a very persistent bearer, equal to the Duchess of Oldenburg. My tree, set out in 1876, has borne every year for five years, and this year was a marvel of beauty, as it hung full of most beautiful apples, just such as I exhibited from it at Grand Rapids. I repeat the "*gude wife's*" words: "Every family ought to have one."

Ag'l Coll., Lansing, Mich.

Farm Economy.

A STRAW-BURNING FURNACE.

A GRIEVOUS source of expense, inconvenience and suffering to many in the blizzard-swept prairies of the West, where timber is scarce, coal mines remote, country roads bad, and railroad transportation scanty and expensive, is due to the scarcity of fuel. In hundreds of other places throughout the country, also, a convenient supply of fuel would add not only to the comfort of many a farmer and farmer's family, but also to the good man's bank account. Yet in these sections ample stores of excellent materials for fires are wasted in ignorance of the method by which they can be used in this way. The use of hay and straw for this purpose in suitable furnaces, was first introduced by the Russian Mennonites in Manitoba, Dakota, Minnesota, Nebraska, Kansas and other places in the West where these thrifty colonists settled in considerable numbers over a dozen years ago, having imported this, among other practices, from their old homes in Southern Russia. The plan was so evidently convenient and economical that it was widely adopted by their neighbors, who, with greater enterprise and inventive ingenuity, have improved upon the old devices, especially in the way of cheapness of construction and economy in the use of fuel. When the advantages of the method become better known, there is no doubt that it will be extensively employed in other parts of the country also.

In the RURAL for May, 18, 1878, we gave a couple of illustrations and a full explanatory description of a Mennonite furnace, and at Fig. 155, we present the ground-plan at 1, and a sectional view at 2, of an improved furnace, devised by our friend, Thomas H. Youngman, Hanson County, Dakota. Of it he says: "It is the greatest thing for comfort that I or my neighbors have ever seen. Wife says she would not take $500 for it, if she could not obtain another. Ten of my neighbors built similar furnaces as soon as they saw mine, and

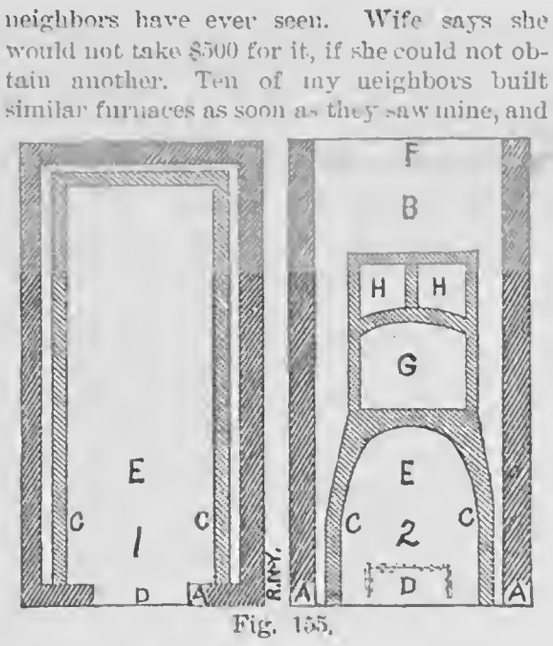
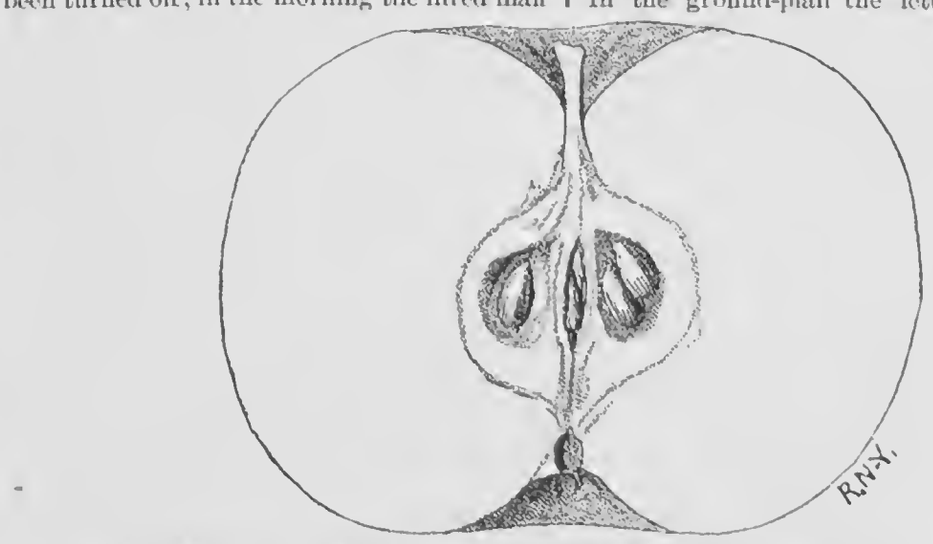


Fig. 155.

they all say, 'Well, this solves the problem of fuel in Dakota.' Daughter puts the breakfast on the 'cooker' at night after the heat has been turned off; in the morning the hired man fires up the furnace, turns the heat into the 'cooker' and by the time daughter comes from her room, the kettle is boiling, the potatoes are baked, and the breakfast is ready to be served. Six rooms in my house have been kept beautifully warm night and day even when the thermometer registered 30 degrees below zero. A hard-coal stove running at full blast in each room, would not have made us as comfortable, at a cost of $25 to $40 per stove; while if I had to buy all the straw I used for this furnace the outlay would not have been over $8 to $10. I burn wheat or flax straw or prairie hay, all of which are cheap in this section. Often we do not have to tend to the furnace oftener than three times a day. In spite of the arctic blizzards of Winter, my wife says she has been more comfortable in the house the past season than she ever was in winter time in Central New York with kitchen and parlor stoves. With this, too, there is no annoyance from dust or ashes in the room.

In explanation of the diagram, Fig. 155, sectional view, A A are stone walls a foot thick inclosing the furnace. Brick may also be used, or a mixture of one part of sand with two of clay—a style common among the Mennonites. B is an air-chamber extending to the ground on each side of the furnace. Cold air is admitted into this through a hole in the bottom of the outside wall. Some introduce the cold air through a pipe, but this is not necessary; if obtained from the cellar, the latter will be kept well ventilated. D is a cast-iron door 20x14 inches. E is the fire-box, six feet ten inches by six feet by three feet to the center of the arch. F, line of ceiling. G, oven on top of arch, with return flues H H. This is necessary in moderate weather, as the rooms become too warm when the fire is strong enough to bake in the heater in the dining-room. This heater or "cooker," is a double-walled, sheet-iron baker, the inner sides being two inches from the outer, the inner bottom six inches from the outer, and the inner top four inches from the outer. A pipe runs from the chimney at each end of the furnace to the west end and discharges into a drum in the sitting-room. A "register" opens into the sitting-room and a bed-room opens from the air-chamber. Upstairs in the "study" is placed a drum, through which passes the fire that has passed through the "cooker" in the dining-room. In the bed-room up-stairs is placed another drum, through which the smoke and fire from the drum in the sitting-room pass. The cost of the devices will be different in different localities. Here heaters cost $10 to $20, and drums $2 to $5, according to size. The furnace door costs $5 to $7. For building from four to five cords of stone and from 500 to 700 bricks will be wanted. Dakota clay mixed with from seven to ten parts of sand is very nearly as good as fire clay. Walls of less thickness than nine inches will do, but the thicker the walls the better the heat is corraled. The oven and return flues will aid materially in this work. In the ground-plan the letters indicate the same parts as the corresponding letters in the sectional view."



GRANDFATHER SMITH'S FAVORITE APPLE. From Nature. Fig. 164.

GRANDFATHER SMITH'S FAVORITE APPLE. Half Section. Fig. 165.

PLOW SHOE.

FRIEND C. C. Upton sends us all the way from Weld County, Colorado, the sketch of a plow shoe, shown at Fig. 154, which he finds very convenient when, in moving a plow from one field to another, he wishes to hitch directly to the plow. To make it, take a piece of hard wood 16x8x2 inches; bevel one end so as to make a good runner; then bore three-quarter-inch holes so that the distance between them shall be wide enough for the plow-point, their tops being closer, so that the point cannot rise between them. Another pin, near the land-side, will prevent the turning of the shoe.

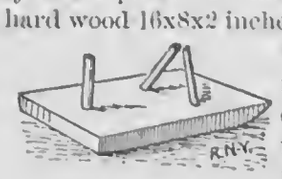


Fig. 154.

A VINE CUTTER.

FRIEND, G. E. TYLER, Cuyahoga Co., Ohio, is a grower of small fruits, and having only one arm, he couldn't use trimming shears in cutting out old canes of blackberries and raspberries, so he devised the tool illustrated at Fig. 156. The cut fully explains the nature of the implement, which any blacksmith can form out of an old file or other handy piece of old iron. Strips of leather may be tacked on the handle to keep the hand from slipping. In using it a person can stand upright and do the work with the greatest ease.

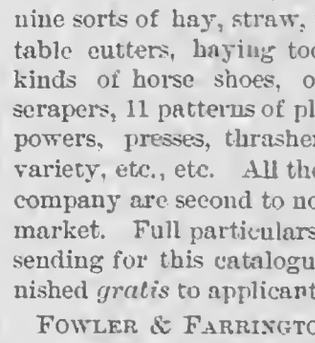


Fig. 156.

Miscellaneous.

CATALOGUES, ETC., RECEIVED.

BELCHER & TAYLOR AGRICULTURAL TOOL COMPANY, Chicopee Falls, Massachusetts.—Catalogue of the numerous agricultural implements made by this old, extensive and thoroughly trustworthy company, including bag-holders, barrows, iron castings, three kinds of corn shellers; eight sorts or modifications of cultivators, fan mills, nine kinds of harrows, nine sorts of hay, straw, stalk, root and vegetable cutters, haying tools in variety, four kinds of horse shoes, ox shovels or road-scrapers, 11 patterns of plows, potato planters, powers, presses, thrashers, tobacco tools in variety, etc., etc. All the goods made by this company are second to none of the kind in the market. Full particulars can be obtained by sending for this catalogue, which will be furnished *gratis* to applicants.

FOWLER & FARRINGTON, successors to Geo. H. Fowler, Taughannock Falls, N. Y.—Circular of the hay and grain elevator and carrier and improved plow sulky, manufactured and sold by this trustworthy firm. The pitching apparatus of carriers' fork, slings, pulleys, etc., is designed not only for pitching hay, but also for pitching and conveying bound grain, corn-stalks, etc. The fork or grapple, made of steel and malleable iron, will pitch anything a farmer has to mow or stack. The pulley has a wrought-iron frame, with a hard-maple frame two inches thick and five in diameter. All the important parts of the plow sulky are of wrought-iron or steel, rendering breakage difficult, and the implement is simple, neat and handy. Send for the circular for fuller particulars.

IMPROVED ROAD MACHINERY.—Pamphlet from the American Road Machine Co., Kennet Square, Pa.—The intelligence and public spirit of a community are measured by the condition of its roads. Good roads will increase the value of all adjoining farm property, and add greatly to the sociability and public spirit of any neighborhood. The improved road machinery described in this pamphlet will more than pay for itself in any township. The instructions given are complete and practical. The Spring is the best time for working roads, and these implements can hardly be improved upon. We advise all those who are seeking to improve the roads in their districts or townships to send for the pamphlet. It will pay them to study it.

A. H. REID, 26 S. 16th St., and 1631, '33 and '35 Barker St., Philadelphia, Pa.—Circulars of the excellent butter mold, tin tray butter shipping box, patent power butter worker and two-can creamery made and for sale by this thoroughly reliable house. The mold is very convenient and easily worked, and of the shipping box we can speak highly from personal experience. The many advantages of a butter worker and creamer have been frequently pointed out in these columns, and those offered by Mr. Reid are of superior design, materials and workmanship. The circulars will be promptly sent free on application as above.

MASSACHUSETTS STATE EXPERIMENT STATION.—The third annual report is more complete than either of the former ones. A great deal of work has been accomplished at the station. Many valuable analyses of fruits, feeding stuffs, fertilizers, etc., etc., are recorded, and the feeding experiments and experiments with potatoes and root crops are carefully reported. Farmers will find much to interest them in this report. It is time that they understood that these stations can be made to help them if they will only take interest enough in the work to see what is being done.

THE GREAT AMERICAN TEA COMPANY.—Circular describing the business methods pursued

by this house, as well as a list of the premiums given to those who purchase given quantities of tea. The teas offered are of excellent quality and are remarkably cheap. Those who desire to order their teas in bulk will do well to examine this circular. The firm is doing an enormous business, and will do what they promise. The circular may be obtained at 33 Vesey street, New York.

KEYSTONE POULTRY YARDS.—Circular from E. J. Chandler, Kennet Square, Pa. Descriptions of Plymouth Rocks, Light Brahmas, Wyandottes, White-crested Black Polish, Buff Cochins, White Cochins, Mottled Javas, Langshans, Bantams, White Guineas, American Dominiques, Toulouse Geese, Pekin Ducks and Mammoth Bronze Turkeys. Those who have not yet secured eggs for hatching should send for this circular.

STANDARD ROOFING.—Circular from A. F. Swan, 46 Cortlandt Street, New York. This roofing is excellent for use upon stables and poultry houses. Both the roofing and the tarred felt are impervious to water and air and are vermin-proof. The standard 3-ply roofing is said to make a thoroughly fireproof roof. Let all those who are interested in building, send for the circular.

For Women.

CONDUCTED BY MISS RAY CLARK.

MY BABY.

ONE year ago to-day I held thee first
Within my loving arms. Where art thou, sweet?
I see thee not; thy cradle empty stands;
And thou art gone; thy earthly home knows thee
No more. I cannot cause this human heart
To cease to long for thee. Was mother-love
Created changeless, deathless, but to have
Its tendrils rudely snapped, no more to be united?

This is thy birthday, and I
Thy mother, cannot take thee in my arms;
Upon thy lips no birthday kiss can press;
For thou, a little while ago, didst have
Another birthday; through thine own sufferings
Thou wast born into the realms immortal.
Why do I weep? What cause have I to mourn?
Thy little life has left no stain upon
Thy pure, sweet soul; a snow-white bud, thou canst
Unfold in Heaven's light, in loveliness
More lovely still for this thine early call.

Hadst thou staid here, my child, thou wouldst have been
Another tie to bind me to the earth!
But now thy little hands reach out to me
From that fair land, and still, a little child,
An angel child, shall lead me on.

Hast thou no need of me? Canst thou at once
Become content to live apart from thine
Own mother? At every turn I miss thy smile,
Thy merry shout, thy nestling head. Then in
My grief I pray that thou knowst not the pangs
Of parting; that to thee my place be filled.

One moment thou wast here, my baby, mine,
The next thou wast an angel babe, and yet
My baby still. And who shall say but what
To thee my loving, tender thoughts shall reach
And make thee glad, as did my fond caresses.
There is a pleasure in the thought, though none
May say that it is truth. The grief I know
Can never come to thee. My sorrow o'er
Thy grave hast spared thy sorrow over mine.
My thoughts are full of thee and thy new life.

—S. E. H.

WHAT TO READ AND HOW TO READ IT.

IV.

CONCLUSION.

"IT goes without saying," as we nowadays love to say, that in these very desultory and familiar talks, I have not attempted to lay down any definite course of reading, or, indeed, to do more than touch upon the confines of the great world of books well worth our study. Writing for busy and practical people, I have endeavored only to give them a few hints as to the employment of their rare hours of leisure, and to set their feet in better paths than those that lie among the literary weeds. If, however, any ambitious young girls can make the time for a course of study in history, I would recommend to them Freeman's historical series consisting of small and well written text books on England, France, Germany and other prominent nations. If any of my young readers are fortunate enough to have already a good grounding in the history of their own country and of England and France, they cannot do better than to study, with careful reference to maps and chart, an admirable series entitled "Epochs of History," each volume prepared by some historical specialist. A perfect chart of history is one published by A. S. Barnes of New York, and arranged by Miss Ida Whitcomb. A large page is devoted to each century or half century, and one sees at a glance all the contemporaneous monarchs and principal heroes. Blank spaces are left, wherein the student writes her own synopsis of each reign. I know of a class formed for the study of history, which proceeds in this way: the young women meet every fortnight; each one carefully prepares the history of 10 years of a certain country, one taking England, another France, etc. At a meeting of the class, she recites accurately her own lesson, and listens with all her energy to the recitations of the others. When 50 years have thus been studied, essays are written on the leading topics of the period, and are read at the class meeting. If, for instance, the period covered be 1450—1500, the topics might be commerce, literature, "Savonarola," "The French in Italy," "The Dawn of the Reformation," art, architecture, printing, etc.

I once belonged to an interesting class in English literature, in which we divided the literature into periods, following the division of "Collier's Literature." Then, omitting all the minor names, we selected the greatest men of each period, learned all we could of their history, and recited selections from their works, arranging our selections at each meeting for the next, so as to avoid repetition of favorite passages.

Still another class took the cities of Europe, proceeding as follows: London was first taken; one member of the class was appointed to write a brief history of London, telling about its foundation, its fires, its plague, its growth, its great events, etc. Another wrote an article on the churches of London, St. Paul's and Westminster Abby, being most fully treated. Another took the palaces; another the "Tower;" another the remaining public buildings; another the "Art of London;" another the "Literati of London;" another "In London with Dickens;" another "In London with Johnson," etc., almost *ad infinitum*. London alone occupied the class for a whole Winter.

This last plan of study involves more books of reference than the others; hence the difficulty of pursuing it in the country.

If, however, some of you girls will put by the endless fancy work, so tedious, expensive, and ugly, and will study together, history or literature, instead of crazy-quilts and splashers, you will accomplish a winter's work more beautiful and more durable than could ever be the result of all that busy idleness, which employs your fingers only. Give your undergarments a few neat tucks, instead of the hideous ornamentation of heavy, homemade trimming, and employ the active minds God has given you in learning something of His work in this wonderful world of ours. If you have any leisure in the Summer, there is an opportunity, with the aid of a simple textbook, of learning something of botany, geology, or natural history. If your home is too isolated to enter into any such plan of study as I have described, you will find delight and improvement in such books as Macaulay's and Jeffery's "Essays," Plutarch's "Lives," etc. Disraeli's "Curiosities of Literature" is a wonderful *omnium gatherum* of interesting things, and is the best book I know of for a "pick up." In my own country neighborhood it has been *the* book of the Winter; we have all been quarreling over the possession of the four volumes. If dinner table talk is very drawling and trivial, it would be a good plan for some such sister as "Charity Sweetheart," to have the book beside her plate, and to say, perhaps, "Just listen, father, to the wonderful things old people have accomplished!" After she has read Disraeli's page of the "Achievements of Old Age," the conversation will drift into another channel than the hired man and the potatoes! Another book, full of wisdom, a book to be read over and over again, is "Whately's Annotations of Bacon's Essays." It is not a volume of easy chat like the "Curiosities of Literature," but demands much careful thought. I don't see, however, why our intelligent farmers and their wives and grown children should not appreciate just such a book. The chapters on "Superstition," on "Riches," on "Studies," on "Youth and Age," are but a few among the many, that offer the richest food for thought.

"But," some of you will say, "where are we to get all these books?" Will you be astounded, if I reply: *Buy* them? To buy a book seems to me the last possibility that occurs to people in general; and yet, in no other way will a little money do so much. Two dollars for some luxury of dress or table is readily given, and two dollars will purchase for you a counsellor and friend for your life-long—a poet to lift you into a higher world, a philosopher to guide you through this one by nobler paths than you yourself could find. Of course, book-purchasing must be done little by little. No one knows better than I the limitations of a slender purse. But, if you can afford but a single book a year, that is a possession for your life. The "Life of Robertson," of which I wrote in a former paper, costs $2.00, and you will read his letters and lectures and addresses with increasing relish, as long as your mind grows and your character develops. Whately's "Annotations" costs, I believe, about $2.00—and it gives you the most famous words of the great Inductive Philosopher, illustrated by the condensed wisdom of one of the most celebrated modern thinkers and theologians. "The Epochs of History" are about 90 cents apiece; and you will have noticed how cheaply may be procured single volumes or whole sets of the standard poets and novelists. *Don't* buy paper backs! One durable book is worth a dozen of the perishable. And don't buy any ephemeral literature. Build up, no matter how slowly, a little library for yourselves, composed of the *best* authors in each department. Read these volumes over and over; read them so as to absorb all their great thoughts and high teachings, so as to appreciate all their delicate handling of our noble language, so as to make them almost integral parts of your own minds. Try sometimes to write from memory an abstract of your history or biography; learn accurately such passages of prose and poetry as most impress you. "Despise not the day of small things." Be content, if need be, to give only half an hour a day to your books—but give that *thoroughly*, and your life will be a perpetual growth. You cannot become petty household tyrants, or despicable gossips in such society. Every year will see you larger-minded, larger-hearted, better poised women—whose souls are full of sweet charities, from whose lips come words of gracious wisdom—women of each one of whom may be said: "Strength and honor are her clothing, and she shall rejoice in time to come." A COUNTRY HOUSEKEEPER.

DESIGN FOR MARKING TOWELS FOR GLASS.

ONLY A MOTHER-IN-LAW.

POETS and story-writers never tire of picturing a mother's devotion and self-sacrifice for her children's good. But the instant one of these children marry, what a change takes place. At once she is transformed into that terrible being, a "mother-in-law." She is the same woman still, with the same deathless love for her children, but she has "out-lived her usefulness" by the common verdict, and it is time she should "step down and out." The public press is responsible for much of this change of sentiment with regard to once honored parents. Its ceaseless slurs on the class referred to must have its evil effect upon the young. They quickly catch the tone and repeat the stale jests regardless of the hearts which they wound like poisoned arrows.

It is a very sad thing to see the son of a widowed mother marry a young girl, and bring her home to rule in his mothers' house. Instead of taking a daughter's place, she assumes that all a mother-in-law's possessions are hers by right and that she can use, or carelessly destroy them as she pleases, angry at any remonstrance, and ever ready to complain that a mother-in-law is so much in the way. Girls! do not accept such a position unless you are ready to take a daughter's place in the home. Weigh well the whole matter before hand. Half the troubles of life come from want of thought. Remember that what you bring to your new home is your own, subject entirely to your control, what belongs to your mother-in-law is exclusively hers, unless given to her son you may be allowed to use it as a favor, but always subject to her control. If you do not like such a view of the case, do not take upon you such a relation. But having assumed it remember to deal justly as one who must give an account to the Judge of the widow.

It is wisdom for those in health and strength to lay by in store for days of feebleness and old age, and then to hold the estate in their own hands while life lasts. A happy little grandmother of mine lived on to 77 years in her little home, renting out her farm, except the orchard and garden, and welcoming to her home her children and grandchildren, some of whom always lived with her, but setting her own little table to the last, even when a daughter's family occupied part of the house. Though often dining with them, she preferred to feel that she was a house-keeper still. She was one of the happiest old people I ever knew, and "the best company" for old folks or young.

OLIVE.

Domestic Economy

CONDUCTED BY EMILY MAPLE.

HOUSEKEEPING IN CALIFORNIA. IV.

MARY WAGER-FISHER.

ONE morning early in December, a lady took me in her carriage to visit Piedmont, a few miles out of Oakland—a beautiful section of high rolling country planted with groves of eucalyptus, and commanding very extensive and charming views. She had the carriage stopped at a handsome residence set in beautiful grounds, and she said the occupants of the villa were friends of hers, and had given her permission to bring me in to enjoy the views from the windows. Quite a party of people were out in the sunshine, guests at the house, who were to remain to luncheon. The owner of the place, Mr. R., a retired miner, gave us a cordial greeting and, excusing himself from his guests, took us into the house and later in a tour about the grounds. Upon entering, we met Mrs. R. in a lovely bright French frock—just the thing for morning and very elegant withal—but the house required fine apparel. She, too, was very gracious, and led us from room to room, all thrown open into each other, the sunniest, brightest, most charming rooms to be imagined, with great windows and large grates of coal fire which combined to give a sense of sunshine in every corner. So many grand houses are dark and shaded, but this was just the reverse, and still without glare. As we did not wish to trespass upon their luncheon hour, we cut our visit short, and I came away with a confused sense of having been in the most charming interior in the country! I remember some details—mantels—the whole finish of the fire-place—of California onyx, far more beautiful even than Mexican onyx. Mr. R. said it was found near Sacramento, but in a very limited quantity, which had already been exhausted. There were flowers everywhere throughout the house. Ceilings were beautifully frescoed; even the hard-wood finish of a small conservatory was decorated with painted vines. On the walls were fine paintings, chiefly of figure. "My landscapes," smiled the handsome, genial host, "lie out of the windows; no one can paint pictures equal to those." From every great window lay outspread a beautiful scene, and all different—scenes made up of mountains both near and far, a lake, the San Francisco Bay and Golden Gate, the Santa Clara Valley, the city of Oakland, the piers out in the water, the boats and ships, and all the nearer beauty. The furnishing of the house was perfect—such as wealth allied to taste can command. I noticed that the woodwork in one room was painted a pale silver gray, illuminated with bands of gilt, and it was very pretty. The lunch table was already laid—exquisite napery almost reaching to the floor, and exquisite china. Raw oysters, to begin with, laid on plates that might have compensated the bivalve for his slaughter, only that his own house is lined with pearl, which is still finer. From every side one could go out-of-doors down a broad flight of stairs, and the house, which was set on a wall several feet above the ground, was banked all around with a hedge of flowers in full bloom—orange, shrubs, mignonettes, datura, fuchsias, pelargoniums, roses, abutilons, carnations, lobelia—a multitude of plants. We

Miscellaneous Advertising.

When Baby was sick, we gave her Castoria,
When she was a Child, she cried for Castoria,
When she became Miss, she clung to Castoria,
When she had Children, she gave them Castoria,

walked out to the play house of the six-year-old daughter of the house—a charming little house with engravings on the wall, a little cook stove and all her playthings, where she could have her playfellows and cook their own dinners. The acacia trees were showing their coming bloom; but beautiful as this tree is, it seems to require great care to keep it from splitting down. I said to Mr. R. that the place was so delightful that I shouldn't think he would ever wish to go anywhere! He said that was true; he really found no spot to his eyes so lovely as the "Highlands," the name of the place. He quoted his little daughter, a quaint, mature child of old-fashioned ways, who upon a recent visit to Newport, which they found very beautiful, said: "Well, papa, I think the 'Highlands' will carry off the cake, after all." The place is seven years old. The many rich men in California use their wealth lavishly in making their houses marvels of loveliness, and their hospitality is of that large and gracious pattern that we imagine belongs to the country houses of the European nobility; while many of the former have vastly more money than have the latter. Although they are often people lacking culture, I doubt, from what I have heard of them, if they lack in intelligence, which, allied with a good, common education acquired early in life, fits them for almost any position they may find themselves obliged to fill. The rich Mrs. Mackey was the daughter of a barber, the wife of a dissipated druggist, and she had to earn her own living for a time and took in washing—which was then profitable. Another *grande dame* kept a boarding house, and another was an illiterate Irish woman. But, luckily, they all have good, native sense, and when in their own homes are in no danger of ever being mistaken for a chambermaid. Money can supply a first-class butler and a first-class housekeeper and artistic surrounding, but it is very difficult for money to put good English into the mouth, unless it has been acquired in youth, and nothing more quickly betrays good or ill breeding, than one's speech, and the care of the teeth! And the wise American youth—if wisdom could only come a few years earlier when one has not wise parents to pour it out of their experiences—will not mind mean dress, plain food, ugly, unfurnished lodgings, or obscurity, but they will study good conversation, master a good style of writing, so as always to be able to write a fine letter in every particular, keep erect, preserve a spotless reputation, and take the best care of the body. Then if wealth comes in later life, they will be ready to use it fittingly and not be made a fool by its possession. A very cultivated young woman here said to me one day when we were talking of the reckless expenditure of some rich Californians—one had built a $5,000 play house for his children, he afterwards failed—"The very *best* people in California are not rich, some even havn't enough for comfort. And rich Californians are chiefly hospitable to other rich people. It isn't their way to give dinners and receptions to genius and merit." Her strictures I thought a little harsh, although it is true, undoubtedly, that social lines are more closely drawn in California than in any other Western State. I have just room enough left to mention that at a reception we attended, nasturtium vines in flower were much used for decoration in the house. In the center of the large refreshment table, was laid a parallelogram of dark red velvet or plush, around the edge of which was laid a border of flowers, with an arrangement of the same for a center-piece. It was somewhat novel, but I did not think it very effective. One of the ice creams was pistachio—a bright green. The napkins were all Japanese, (paper) white, with small designs in colors, and very pretty.

A FARMER'S DAUGHTER'S DOMESTIC REVERIES.

CHARITY SWEETHEART.

"Go not far from me, O my Strength!
Whom all my times obey;
Take from me anything Thou will,
But go not Thou away,
And let the storm that does Thy work,
Deal with me as it may."

I repeated these words to myself the other day when I felt tired and beaten, after a little battle with Burt, who had been talking of girls as if they were all to be measured from his standpoint. I told him he was judging only from the newspapers and books that wrote against the sex as a hobby, and that he would find as serious, thoughtful and earnest workers, in whatever they took up, among girls, as among young men. But in my secret heart, I know that we lack the philosophy of the boy, the ability to whistle instead of scream, and the equanimity that can work out a problem without haste, or ill-done work; as a rule, girls are more patient, more enduring than men, and I told Burt that I suffered more every day from some ache or pain than he did in a year, and that a finger ache was enough to lead him to "make a fuss, want a nurse" and think himself a martyr. Then he said girls were always ailing; that if they took exercise they would be better—as if I did not get exercise enough. Why, I am on my feet from morning until night. People talk about saving their strength, but with a family of men and boys with only one pair of hands, it is impossible. But lately the boys have become more mindful of me, and careful not to dirty the house as fast as I clean it, which they once did. Burt is a thinking boy—when he was ever so little he used to stop suddenly in whatever he was doing, and say, "It's queer, isn't it?" and it was generally something that his puzzled brain could not understand.

Father has had a gentleman visiting him lately, the son of an old friend. He is a farmer, but of quiet, gentle manners, and quite unassuming. But he has been a student, and has not given his mind to stories of love and adventure in his youth, so has a natural desire for good reading. After hearing him talk awhile, so differently from the young men in our village, Burt came to me and said,—"Queer, isn't it?—he's a farmer, and a practical one, not a gentleman farmer, but a gentleman *and* a farmer." I was glad that he saw the difference,—the fact that a farmer need not be a clown. And if this could be better understood by our young men—that their manners need not be boorish because they are farmers—they would be less likely to sneer at girls who prefer refined manners to vulgarity. Country boys often pride themselves on their uncouthness as differing from foppishness; but it is a good thing when the happy medium can be reached.

Spring has come and the work must be once more begun of cleaning up, and preparing for Summer. My garden plots trouble me most. They are small and I cannot get them to look pretty all the year or rather all the flowering season. As soon as I get one lot blooming, the early flowers begin to look ragged and brown. Those who write on this subject generally do so for the people who have large gardens—and plenty of plants. When I cut up my geraniums, and set them round the bed, they all wither off and are just getting nice when Fall comes. I should like to have nice *pickable* flowers, but cannot afford to spend any more than will purchase a few seeds at the grocery stores with some of the egg money.

A WEEK'S WORK AT MRS. HOMESPUNS.

THURSDAY.

This was usually considered a resting day; visits were more apt to be planned for this time of the week, or any extra work that needed to be done was usually brought forward then. In the morning, after her daily round of household duties, such as comes to every working mistress 365 days in the year, was over, Mrs. H. announced that she intended to go to the church social in the afternoon, but she wished to make the forenoon count too, in some effective way, and she accordingly had her quilting frames brought in, and put on a quilt, or, speaking in modern style, a comforter. The material was of red cheese cloth, the top and bottom alike, and it was tied, or rather tufted, with white tying yarn. The tufts were strands of the yarn an inch or so long, five or six in a tuft. They were tied through the middle with white thread used double, and if they were uneven they were afterwards trimmed off a little.

It was tied sufficiently close to hold the thin layer of wadding securely in place. It was to be finished by working the edges (instead of binding or hemming) in button-hole stitch, the same material being used as for the tufts. The nimble fingers got it off the frame before dinner time, and the work was viewed with much satisfaction, being very ornamental for the amount of time spent on it.

In the afternoon Mrs. H. attended the social, where she took an active part in the proceeding, and found the change of scene very beneficial to her spirits.

DOMESTIC RECIPES.

NICE WAYS OF COOKING VEAL.

Take a fillet of veal, have it boned, then stuff it with a dressing made of bread crumbs moistened with boiling water. Add a generous supply of butter, season with salt, pepper, the grated rind of a lemon, and the juice of the same. Put your meat in the dripping-pan, sprinkle with salt and pepper, squeeze over it a little lemon juice, roast well, allowing fully 20 minutes to a pound. Make a rich gravy, and serve with sliced lemon.

VEAL STEW.

Take cold roast veal, cut into mouthfuls, add any gravy you may have left, season well, adding a dash of curry powder and some mace and a very little boiling water, stew for half an hour, then add a good half pint of milk, stew a while longer and serve. Jellied veal may be made the same as jellied chicken, and is most delicious. AUNT EM.

Miscellaneous Advertising.

Debility

Languor, and Loss of Appetite, are cured by the use of Ayer's Sarsaparilla. It removes that terrible sense of *Constant Weariness*, from which so many suffer, gives tone and vigor to the stomach, and restores health and strength more surely and speedily than any other medicine.

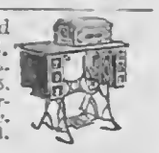
Three years ago I suffered from Debility and Loss of Appetite, the result of Liver Disease. After having tried various remedies, and consulted several physicians, without benefit, I was induced to take Ayer's Sarsaparilla. The first bottle produced a marked change, and the second and third accomplished so much that I felt like a new man. I have, since that time, taken about one bottle every year, and had no recurrence of the trouble.—William E. Way, East Lempster, N. H.

Ayer's Sarsaparilla,

Prepared by Dr. J. C. Ayer & Co., Lowell, Mass. Sold by all Druggists. Price $1; six bottles, $5.

ORGANS The most beautiful and finest toned in the world. Low prices, easy payment. Send for Catalogue. Address Weaver Organ & Piano Co., YORK, PA.

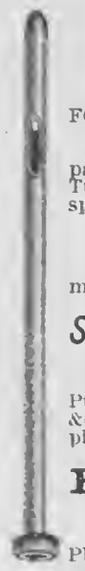
12 DOLLARS each for *New* and *Perfect* SEWING MACHINES. Warranted five years. Sent on trial if desired. Buy direct and save $15 to $35. Organs given as premiums. Write for FREE circular with 1000 testimonials from every state. GEO. PAYNE & CO., 47 5th Ave. Chicago, Ill.



THE "COMMON SENSE" MILK PAIL.

This is the only *perfect* Pail made. There are no seams in the front to catch the dirt. It has a perfectly fitting strainer, which can be instantly removed, so that every part of the pail may be *quickly* and *thoroughly* cleaned. Should the strainer become foul or worn with use, we can furnish new ones at very little expense. The Pail is well made of heavy XX tin, and we offer it to the farmer at the very lowest price at which a really good article can be sold. *Send for special circulars.* Price $1.25 each. Discount to the Trade.

MILKING TUBES,



FOR MILKING COWS WITH SORE TEATS

This is the best Tube in the market. Sent, post paid, to any address on receipt of price. One Tube, 25 Cents, Five Tubes, $1.00. Send for special Circulars.

Send us your name and address and we will mail you, FREE, our

Seed Catalogue for 1886.

Choice New England Seeds. The very Best and Purest Stocks of Cabbage, Onion, Beet, Parsnip, &c. All grown by ourselves and sure to give complete satisfaction. TRY THEM.

BARTLETT & DOW,

LOWELL, MASS.

Please mention this paper.

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COCOA

TO FARMERS. This simple invention is used in milking cows, particularly where there is any soreness. Made of solid silver, and sent by mail to any address on receipt of the price, 50 cts. Address The Milking Tube Co., 102 Friendship Street, Providence, R. I.

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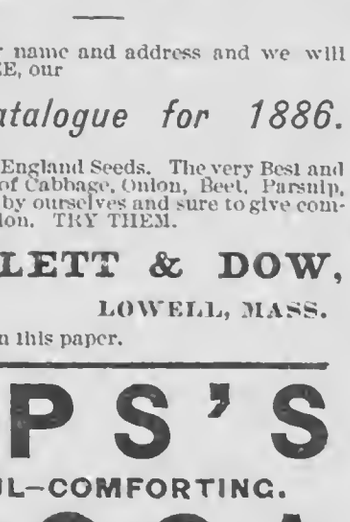
ELEGANT SHAPE, HEALTH and COMFORT

Perfectly Combined in

MADAME FOY'S CORSET.



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For Rhode Island address L. O. SHERMAN & CO., PROVIDENCE.

RINGS, RINGS, RINGS

WEDDING RINGS!

10 K.,	¼ in. wide, $4.00.	WARRANTED
14 K.,	5-16 in. wide, $6.50.	SOLID GOLD
18 K.,	⅜ in. wide, $9.00.	ALL THROUGH.

Flat Band Rings, same width and prices, when preferred. Send strip of paper cut to size of finger. Any of above sent by mail, on receipt of prices. Old Gold received in part payment, and Rings made to order from Old Gold. An old solid gold breastpin often makes a beautiful Ring. CHAPIN & HAAS, 1020 Arch Street, Philadelphia, Pa.

HONEY EXTRACTORS.

The simplest, best and most practical and durable in the world. Patented Feb. 9, 1886. Price only $2.50. Also new patent Ant, Mole, Gopher, Ground-Squirrel and

Prairie-Dog Exterminators.

Warranted to beat anything of the kind in America. Send for circulars. Address the Inventor and Manufacturer, J. C. MELCHER, O'Quinn, Fayette Co., Texas.

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SIMPLEST & BEST.

Agents Wanted

BUTTER WORKER

Most Effective and Convenient

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Capacity 10,000 lbs. per DAY.

BUTTER PRINTERS, SHIPPING BOXES, &c. *Send for circular.*

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5 TON WAGON SCALES,

Iron Levers, Steel Bearings, Brass Tare Beam and Beam Box.

$60 AND

JONES he pays the freight—for free Price List mention this paper and address JONES OF BINGHAMTON, Binghamton, N.Y.

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OCCIDENT CREAMERY AND REFRIGERATOR

Thick walls and Double Air Space. Positively *no sediment* drawn with either cream or milk. No Lifting of Cans. No Skimming of Milk. SOLD strictly ON MERIT.

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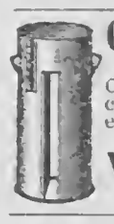
Send for Circulars to the manufac'rs. CLINTON, Iowa.



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EVAPORATORS.

$3.50, $6.00, and $10.00.

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SELECT FLAVORS.

OF THE **CHOICEST FRUITS AND SPICES.**

Their absolute purity unequaled strength and economy are winning friends everywhere, surprising and delighting families, and trebling sales for dealers.

Ask your grocer for them. Laboratory (Home Dep't) Westfield, Mass.

NO POSTPONEMENT.

SATAN IS COMING

To Govern the Entire World, June, 1886.

Great Christian Triumph Over Satan and Second Coming of Christ, 1890—Universal War and Great Financial Crisis Throughout the Entire World, June, 1886

For Sale—THE BOOK OF KNOWLEDGE—Contents: Arrival of the long-anticipated Jewish Messiah; Satan, the Chief Anti-Christ, time of his birth, incidents connected with Satan's birth, powers and advance skirmishers, Satan's Temple, Ten Commandments, Ensign and Inscriptions, what Satan says regarding his Ensign to all nations, etc. Price 25 cents. Stamps. Address AUGUST ROHE, St. Paul, Minn.

ALLEGER ORGANS you can get a strictly first class organ from $50 to $75, stool and book. Warranted 5 years. It will pay to send for circular before you buy. Address the manufacturer. H. W. ALLEGER, Washington, New Jersey.

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Chemically purified and WARRANTED pure as any in the market. Used by a great majority of the Dairymen of the country. Unexcelled for Butter, Cheese, the Table, and all Culinary purposes. Took Medal at Centennial "for purity and high degree of excellence." Dairy goods salted with it took first premiums at New Orleans World's Fair, N. Y. International Fair; Milwaukee Exposition, and always wins when there is fair competition. It is American, and *cheaper and better* than any foreign salt. Try it. Address

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PURE NATURAL LUBRICATING OIL

Guaranteed not to gum or chill in the coldest weather; the best oil in the market for all kinds of farming machinery, put up in ten gallon cans, and shipped to any address on receipt of five dollars. Try it. Address

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INVENTORS and MAN'F'RS. Send for large pamphlet containing U.S. **PATENT** Office Rules for obtaining Patents. B. B. BROCK, Atty., Washington, D.C.

News of the Week.

HOME NEWS.

SATURDAY, April 10, 1886.

Logan's bill increasing the army from 25,000 to 30,000 was defeated in the Senate, Wednesday—yeas 19, nays 31. Some see in the result the "fine hand" of Blaine jealous of the growing importance of Logan. All can see in it the effect of the bitter opposition of labor organizations and of all others who do not like to see the U. S. Army used as a police force in troubles between employés and employers. Logan earnestly protested that there was no connection between the advocates of the measure and Jay Gould; but just now a suspicion of such a connection would be enough to kill a ten-times-better bill....The following are the rates just established on the Northwestern railroad lines from Chicago to St. Paul and Minneapolis:—First class, 30 cents; second 20; third, 15; fourth, 12½; fifth, 10; class A, 12½; class B, C and D, 10; grain and flour, 12½.................................... All people in any way connected with the manufacture and sale of intoxicating fluids, being excluded from the Order of the Knights of Labor, a movement has been started in New England to form an Order of these "outcasts," for the purpose of raising money to support favorable and oppose unfavorable legislation, municipal, State and National, and to influence their patrons' votes to support grog-shop candidates. Whatever they may call themselves, the public have already dubbed them the "Knights of Liquor."........... More than 9,000 bills have now been introduced into this Forty-Ninth Congress—more than 7,200 of them in the House. There are no signs of an end to the influx till the end of the session in December. It is thought that not over 100 of all hitherto introduced will become laws. The others cause heavy expense in printing, block the files of the Committees and over-load the calendars—mere "bunkum" bills to please the introducers' constituents... ....The statement of the revenue and expenditures of Canada for the nine months ending March shows a revenue of $25,165,252, an increase of $1,916,173 over the corresponding period last year. The expenditures amounted to $23,699,676, an increase of $1,174,623 over the same period in 1885............. ....Total subscription to the Grant Monument Fund $119,216; to the Hancock Widow Fund $42,732........A bill has been introduced into the Canadian Parliament to create a court of railroad commissioners, who shall have the determining of railway matters and especially of differences of rates. These are now regulated chiefly by those of competing lines in this country..........The Senate has granted the Kansas and Arkansas R. R. the right of way through the Indian Territory—yeas 36; nays 8........The Bland Bill authorizing the free coinage of silver was defeated in the House, Thursday; yeas, 126; nays, 163. A motion to suspend the coinage of silver as at present, after July 1, 1889, unless in the mean time the nations of Europe in concurrence with the United States, should make silver a standard of value again, was lost; yeas, 84; nays, 201. The anti-silver men are jubilant at the first vote; the silver men at the second. We don't want more silver coinage, but we won't have less... ....Judge Baxter, before whom the Bell Telephone suit was to be tried at Columbus, Ohio, died April 1, at Hot Springs, Ark., aged 67. Earnest, peremptory, and independent, no decision of his was ever reversed on appeal. He was thought a "patent smasher." Much anxiety as to who his successor will be, among telephone men.........Near Deerfield, Mass., the Fitchburg R. R. at a curve runs along an embankment 130 feet above the Deerfield River. Tuesday night an express train bound east spead the track, the embankment crumbled and the train—baggage car, smoker, sleeping car and two passenger cars—rolled down to the river, carrying about 35 passengers and 10 employés. Some cars went into the river, others burned on the banks—dead, 11; wounded, 22; missing, two. A wonder that any escaped with life. Nobody's fault.. ....It is reported that the Imperial Government has decided to subsidize a new line of steamers between British Columbia and Hong Kong and Australia by paying £100,000 sterling annually for 10 years............In 1884 British Columbia passed an act to prevent Chinese immigration. It was disallowed by the Dominion Government as involving Dominion and possibly Imperial interests, and was referred to England. News has just arrived that the Imperial authorities say the Canadian Parliament has the right to regulate or prohibit Chinese immigration into the Dominion without "home" sanction. The Australian colonies have exercised the same right. The constitutionality of the act of the British Columbia Legislature, with reference to the Dominion Government, will soon be decided by the Imperial Privy Council.......... The new Chinese Minister to this country has been refused "the usual courtesies" on arrival at San Francisco, and forbidden to land till he showed his credentials. The Chinese Minister at Washington indignantly complains; State Department telegraphs for explanation to Collector of Customs at 'Frisco............ The hostile Apaches surrendered unconditionally the other day, and Gen. Crook has just started 75 of them to Fort Marion, St. Augustine, Fla. Geronimo, after surrendering, escaped from Lieut. Maus, and four days' hot pursuit failed to recapture him.............. Municipal elections in Ohio, Tuesday, favored the Republicans, who carried Cincinnati, the head-center of claimed frauds and ballot-box stuffing........Over two-thirds of the successful candidates in the municipal election at Chicago are also Republicans. New election law tried there for first time on Tuesday...... Canadians are bound to admit American vessels into their ports "for wood, water, shelter and repairs," and Congress is very likely to warn our neighbors that absolutely no other rights will be allowed Canadian vessels in our ports. New England fishmasters who oppose a renewal of the late treaty with the Dominion "in the interest of the American marine service," have to hire seamen in Canada. Although these would starve at home, Canada won't allow American vessels to ship them at good wages, and considerable expense is incurred in getting them to American ports or on board ships outside the three-mile limit. In the Maratime Provinces many live by selling bait; yet Canada says it must not be sold to Americans, though the French are welcomed to buy it. The Canadians got $5,000,000 from us for the advantages given our fishermen by Canada over those given Canadian fishermen by us, yet now the Canadian fishermen are eager to make an exchange on equal terms; but our fishermen are opposed to it. Bitterness growing on both sides............The Labor Arbitration Bill passed the House by a large majority, many who spoke bitterly against it, finally voting for it, through dread of the workingmen's votes. While it compels the production of the books and accounts of employers before the Commissioners, those of labor organizations need not be produced—law should be even-handed...................... ....The Chicago city government has adopted the eight-hour day for all city employés after May 1. A similar measure has been vetoed by Mayor O'Brien of Boston........The annual spring freshets, floods and down-pours have been unusually heavy, disastrous and widespread during the week, east, west, north and south. Mere mention here of the affected localities within this week, would fill a couple of columns. The Gulf States have hitherto suffered most, the losses in Alabama, alone exceeding $2,000,000.......Flame-swept, Key West begs for outside aid........The Mexican Pension Bill just passed by the House, gives $8.00 a month to all surviving soldiers of the Mexican war, and their widows, except unpardoned Confederate soldiers—Jeff Davis excepted........................... ....Cabel W. West, of Kentucky, 45, a country judge and hard-fighting ex-Confederate soldier, succeeds Murray as Governor of Utah.........Cols. Ruger and Potter of the 18th and 23d infantry, succeed Miles and Howard as Brig.-Gen'ls. because of their long-time meritorious services, and because they will soon be "retired for age," making room for the disappointed....Sec. Manning was allowed to sit up Wednesday; but he will probably soon carry the biggest brain in it out of the Cabinet. ....Pres. Diaz says the Mexican troops who shot Capt. Crawford couldn't believe the Indian scouts composing most of his force were friendly, for the treaty permits only the regular troops of either Republic to cross the line...................................... The Strike on the "Gould System" is growing more stubborn and vindictive. Double-dealing charged against Gould in his conference with representatives of the Knights of Labor in this city; insolence and disdain charged against his representative, Vice-President Hoxie, in his interview with the men in St. Louis. He virtually refused to take on any K. of L., and is fast discharging all who remained in the employment of the roads of the "system.".........A collision between deputy marshals and strikers at Fort Worth, Texas, resulted in the killing of four of the former and one of the latter. First shot attributed to both parties. Men ambuscaded a moving train; but a deputy fired first, it is said, at a striker who tried to get on the train. State troops heavily massed in the town; armed strikers congregated there in great numbers............Fighting also at Laredo, Texas. Details not to hand yet........Yesterday afternoon at East St. Louis (on the Illinois side of the Mississippi, opposite St. Louis), the terminus of all the Eastern trunk lines and of several to the north and south, a crowd of strikers moving towards the railroad yards was fired into with Winchesters by 15 hired roughs acting as deputy marshals, and six men and one woman were killed, all, except one striker, innocent lookers-on. Crowd grew furious; deputies fled across bridge to St. Louis for their lives; one reported captured and pounded to death; others in jail "for protection" in St. Louis. Bloody riot and immense destruction of property prevented only by impassioned appeals of the leaders of the K. of L. Three fires reported in the railroad yards at two o'clock this morning. Powderly says that now the strike must be carried on to the end. Vast numbers joining K. of L. everywhere. Over $3,000,000 ready to support strikers; much more easily collectable. Claims of railroads that all freight trains are running emphatically denied. Comparatively few running and those more than half empty. More bloodshed and destruction probable, and the end by no means in sight.......Other strikes numerous in all parts of the country.

AFTER two years' trial, we unhesitatingly pronounce the Boss ZINC and LEATHER COLLAR PAD, the only durable and successful one that we have ever used. It retains its shape, is cooling, prevents chafing, and thereby keeps the horses' necks clean and healthy. HIRAM G. DODGE & SONS, Wood & Coal Dealers, Madison, Wis.—*Adv.*

AGRICULTURAL NEWS.

SATURDAY, April 10, 1886.

CONSULAR returns now show that actual purchases of wool this season for America from Melbourne, Sydney and Adelaide, aggregate 25,419 bales.............It is stated that the entire Ohio Congressional delegation is pledged against any effort to reduce or destroy the tariff on wool..............A market for horse flesh has been created in this and several other large cities, by feeding horse meat to the wild beasts in the various zoological collections. The carnivora are said to thrive better on horse flesh than on beef................. In the New Jersey Senate yesterday, the bill allowing a bounty for the encouragement of sugar production in the State, was so amended as to limit the term of the bounty to one year, instead of four......................... One of the results of the cheap transcontinental freights is the shipment of flour from San Francisco to St. Louis and *vice versa*, both flours crossing each other on the road. California flour is better for pies, cakes, sweetmeats, etc., as it is much "shorter," requiring less lard, sugar, etc.............There's a bill now before the New York Legislature imposing penalties for killing small birds, except the English sparrow. The informer should get a share of the fine, to make the bill effective........Iowa women, in convention at Des Moines, have humanely resolved that "hereafter we will abstain from buying any plumage where the life of the bird is sacrificed to obtain the ornament."...........Audubon societies are being formed in many places to protect birds from slaughter; ornithologists are busy in the same line............The Iowa Assembly has passed a bill prohibiting alien non-residents from acquiring title to land..... ......Strawberries are arriving here from Florida in 28-quart ice-boxes, by freight, icing done every 24 hours—railroad freight about 18 cents a quart....................The Iowa Legislature has just provided severe penalties for all attempts to sell fraudulently bogus for genuine butter..........In April, 1885, Land Commissioner Sparks declared that gross frauds had been committed in making entries under the Homestead and Preëmption Acts, and took away from settlers in the West the right of "perfecting" the titles to the land taken up under these acts, until the entries could be investigated. Over 40,000 "claims" were affected in 12 States and Territories. Sec. Lamar, with the approval of the President, has overruled the Commissioner's ruling, and allowed the titles to be perfected, so that the lands can be sold or mortgaged as the property of the settlers. Sparks says a great deal of fraud has already been prevented by his action, and much good to honest settlers has resulted, while some hardships were inevitable from a rule covering so many cases. Advices from the Far West say Sparks's ruling was a salutary check to frauds, and a boon to honest settlers in general, though some of these suffered temporarily from it...........

TWICE AS MANY MERCHANTABLE POTATOES.

H. J. BAKER & BRO., N. Y.

Gentlemen—I used your Potato Manure at the rate of 600 lbs. per acre. Where it was used I harvested about the same quantity as on land fertilized by other brands, but yours produced more than TWICE as many MERCHANTABLE Potatoes. ISAAC BROOKS,

Chester Co., Penn.—*Adv.*

Crops & Markets.

SATURDAY, April 10, 1886.

The export trade in live cattle is still comparatively small; but only choice animals are exported, as freight charges on others would be as heavy per head, while the price would be lower, and consequently the proportion of expense to cost greater. The number of really choice cattle still produced here for the butcher is not large—pure-breds are generally more profitable for breeding purposes. Exports, therefore, have much influence on prices of choice stock in our home markets, and the figures for choice stock influence those for inferior animals. Prices for superior cattle are always steadier in our markets than those for others. In England, however, the prices for American cattle have ranged from one extreme to another of late, having, within the last six months, reached the highest and also the lowest figures for the last three or four years. These extreme fluctuations have somewhat lessened shipments, and consequently weakened the prices of choice cattle here. Just now prospects for the summer trade are not very bright across the Atlantic.

The total number of hogs handled by Western packers from March 1 to date approximates 500,000 compared with 475,000 last year. At Chicago prices are about 30 cents per 100 pounds lower than those of a year ago, $2.50 per barrel lower on pork, 90 cents per 100 lower on lard and 60 cents per 100 lower on sides. There appears to be no prospect of a speedy advance in prices.

There has been a very considerable increase in the price of mutton sheep of late, especially in the West, owing to the supply falling short of the demand. Of late weeks the market has been steadily rising, until now prices are better than a year ago. There is a considerable increase in marketable lambs, probably because for the last year or two there was little profit in other branches of sheep husbandry. Owing to the greater number of lambs, prices, though still quite profitable, have fallen closer to those for mature sheep. Probably the agitation about admitting wool duty-free will induce flockmasters to give much more attention to the production of mutton sheep in the East for local markets and in the West for Eastern sale. Should the present rise in mutton sheep continue the probability will become a certainty.

A year ago broom corn was worth about $80 per ton; now it is worth from $160 to $240, and it may go higher. Seed which ordinarily sells for $2.50 to $3 a bushel, sells for $10, and there isn't enough of it at that. Most of the broom factories have shut down in this State and the West, owing to the scarcity and high price of stock. Several years ago so many went into broom-corn raising that the market was glutted and prices were unremunerative; then there was such a stampede out of it that last year not more than one-third of a crop, was produced, and collecting seed was neglected. Speculators soon "cornered" the short crop and at once began putting up prices, which could be done all the more easily as the old stock was exhausted. The high prices now are inducing so many to go into the business that the markets would soon be again overstocked were it not for the scarcity of seed.

The Mark Lane Express, in its weekly review of the British grain trade, said, last Monday: Trade in native wheats in London is very much depressed. In the Provinces the markets are irregular. The sales of English wheat during the week were 61,240 quarters at 30s 5d (92⅝ cents per bushel), against 51,983 quarters at 32s 5d (98½ cents a bushel) during the corresponding week last year. Flour is freely delivered. Prices are maintained, however, owing to the increased consumption arising from the scarcity of vegetables. Barleys are in buyers' favor. Trade in foreign wheat is without feature; sellers are firm and buyers are apathetic.

Brown's Bronchial Troches for Coughs and Colds: "I do not see how it is possible for a public man to be himself in winter without this admirable aid."—*Rev. R. M. Devens, Pocasset, Mass.—Adv.*

MARKETS BY TELEGRAPH.

SATURDAY, April 10, 1886.

CHICAGO.—Compared with cash prices a week ago, "regular" wheat is 3⅝c. lower; 2 Spring, 3c. lower. Corn, ⅝c. lower. Oats, 1c. lower. Pork, 5c. lower. Cattle, from 20c. to 30c. higher. Hogs, 5c. lower. Sheep, from 10c. to 30c. higher.

WHEAT.—Unsettled; sales ranged: April, 72¼@73c; May, 77@77¼c; June, 78⅜@79⅜c.; No. 2 Spring, 72¾@75¾c. CORN quiet, Cash, 33⅝@36¼c.; April, 33@33⅛c.; May, 37⅛@37⅝c.; June, 37⅝@38⅛c. OATS—Sales ranged: Cash, 28@28⅛c; April 28⅜c., May, 29⅛@29⅜c. RYE.—No. 2, 55½c. BARLEY—No 2, at 60c. MESS PORK.—Cash, $9 20@9 25; May, at $9 25@9 52; June at $9 32½@9 40. LARD.—Quiet and easier; sales ranged; Cash, at $5 90@5 92½; May, $5 90@5 92½; June, $5 95@6 97½. BULK-MEATS.—Shoulders, $4 00@4 10; Short rib sides, at $5 30@5 32½; Short Clear sides, at $5 65@5 70. CATTLE—Market strong. Shipping steers, $4 20@6 00; stockers and feeders, $2 75@4 50; cows, bulls and mixed, $2@4 20; bulk, $3 00@3 25. HOGS.—Rough and mixed, $4 00@4 25; packing and shipping, $4 25@4 50; light, $3 95@4 40; skips, $3 00@3 85. SHEEP.—Natives, $3 00@6 15; Western, $4 00@4 60; lambs, $4 85@6 12; Texans, $2 00@4 00.

ST. LOUIS.—Compared with cash prices a week ago, No. 2 Red wheat is 2½c. lower. Corn, steady. Oats, unchanged. Pork, steady. Cattle, some classes higher, others lower; best strongest. Hogs, from 20c. to 50c. higher. Sheep, 25c. lower. for poor stock; 50c. higher for best.

WHEAT.—Dull; sales ranged; No. 2 Red, Cash at 85¾c; May, at 85¼@85⅝c.; June, at 86½c. CORN.—Dull; No. 2 mixed Cash, at 33¼@33⅜c; April, at 33⅜c; May, 33⅞c. OATS—Dull; No. 2 mixed, Cash, at 29⅞@30c; April, at 29c.; May, at 29⅜c. bid. RYE—Steady, at 60c. BARLEY—American, 60@80c. BUTTER—Quiet; creamery, 27@32c; dairy, 18@26c. EGGS—Firm at 9⅛c. FLAXSEED at $1 09@1 10. HAY—Steady. Timothy, $11@14; Prairie, $6@8. PORK at $10. BULK MEATS.—Long Clear, at $5 35; Short Rib, at $5 45; Short Clear, $5 60. LARD.—Firm at $5.80@5 82½c. CATTLE—Market firm; fair to choice native shipping steers, at $4 00@4 75; butcher steers, $4 50@4 61; cows and heifers, at $2 50@3 75; stockers and feeders, $3 00@$4 20. HOGS.—Light, $4 10@4 30; packing, $4 00@4 20; heavy, $4 30@4 50. SHEEP.—Market dull at $3 50@6 00.

BOSTON.—CORN.—Steamer Yellow, at 50½c; do. mixed at 50c. per bushel. OATS.—Firm. No. 2 white, 42@42½c.; No. 2 mixed, at 41½c., and barley oats at 44@45c Small sales of Rye at 67@68c. ℔ bushel. Bran is firm at $16 00 for Spring and $17 00 for Winter; fine feed and middlings at $17 00@20 00, and cotton seed meal at $23 25 on spot and $22 25 per ton to arrive. HAY AND STRAW—Hay at $18 50@19 00 ℔ ton for choice and fancy; fair to good, $17@18, fine, $16@17, and $13@15 for poor and damaged, Western choice $16@17, do fair to good $14@15. Rye straw $19 00@20 00 for choice, and $12@14 for common to good. Swale hay, $11@12; Oat straw, $9@10 per ton. PRODUCE.—BUTTER.—Northern creamery, choice to extra fall, 30@32c; good to choice summer, 18@22c; western creamery, at 32@33c, for choice to extra fresh made; good to choice held stock, at 15@18c; northern dairy, 28@30c, for Vermont extra; 20@23c, choice, and 15@18c, for fair to good; Western dairy, 18@23c, for choice, and 13@15c, for fair to good; imitation creamery at 25@26c, for good to extra; ladle-packed, at 21@23c, for extra. CHEESE—New York choice to extra, 9¾@10½c, and common to good, 5@8c; Vermont choice to extra, 9@10c, and common, 5@8c; Western choice to extra, at 8@9c. Sage, extra, 13½c, good to choice, 8@10c. EGGS—Cape and near-by, per dozen, 14@14½c; Eastern extras, 13@13½c; do, firsts, 12½@13c; Northern, fresh, 13@13½c; Western fresh, 12@12½c; Provincial, at 18c. BEANS.—Choice Northern hand-picked pea, at $1 65@1 70 per bushel; do, do, New York, small, $1 45@1 50; do, do, screened, $1 15@1 30; medium choice, hand-picked $1 30@1 35; do, do, screened, $1 15@1 25; Yellow Eyes, improved, $1 35@1 40; do, choice flats, $1 30@1 35; Red Kidneys, $1 65@1 70. Canada peas, 65@95c, per bushel for common to choice. Green peas, Northern, at 90c@$1 00; do, Western, $1 20@1 25. Potatoes range at 50@73c, per bushel, as to quality.

PRODUCE AND PROVISION

NEW YORK, Saturday, April 10, 1886

STATE OF THE MARKET.—Compared with cash prices last week, flour is unchanged. No. 2 Red wheat, 1½c. lower; Ungraded Winter Red 2c, lower; pork, 75c. higher; butter and cheese steady; eggs, 1c, higher; poultry steady; fruit higher on best grades; vegetables steady.

FLOUR, FEED AND MEAL. FLOUR—Quotations; Fine at $2 20@2 90; Superfine, $2 80@3 30; Extra No. 2, $3 15@3 50; Good to Fancy Extra State, $3 75@4 25; Common to Good Extra Western at $3 20@4 00; Good to Choice Extra Western, $4 00@5 25; Common to Fair Extra Ohio, $3 25@3 75; Good, $3 80@4 20; Good to Choice, $4 25@5 00; Common Extra Minnesota, $3 20@3 50; Clear, $3 75@4 25; Rye Mixture, $3 80@4 10; Straight, $4 25@4 80; Patent $4 65@5 25; Bakers' Extra, $4 25@4 75; St. Louis Common to Fair Extra, $3 20@3 75; Fair to Good, $3 80@4 75; Good to Very Choice, $4 80@5 25; Patent Winter Wheat Extra, $4 40@5 30

City Mill Extra for West Indies, at $4 70@4 75; South America, $4 80@4 90. SOUTHERN FLOUR—Common to Fair Extra, $3 30@3 75; Fair to Choice do., $3 80@5 30. RYE FLOUR—Superfine, $3 25@3 45. CORN MEAL.—Dull; Yellow Western at $2 60@2 85; Brandywine at $2 80@2 85. FEED—40 to 50 lbs. quoted at 80c.; for 60 lb. at 70@72½c.; 80 lb. at 70@75c.; 100 lb. at 72½@80c; and sharps at 85@ 90c. Rye at 80c.

GRAIN.—WHEAT.—Ungraded Winter Red quoted at 88@90c.; No. 2 Red at 90¾@90¾c; No. 2 Milwaukee, 91¼c.; No. 2 Red for May, 90½@91¾c.; do. for June, 91¾@92¼c.; do. for July, 91¾@92½c; do. for August, 91¾@92½c; do. for September 92¾@93¼c, do. for October, 94@94¼c; do. for November, 93¾@95¾c; do. for December, 96¾@97¾c. RYE—Western, 60@63c; Canada at 64@65c; State at 65@66c. CORN—Ungraded Mixed, at 42@44c; No. 2, 44¼c.; Steamer Mixed, 44¼@44¾c; No. 2 Mixed, at 45¼c; Steamer White at 44¼c.; Yellow, 46½c; No. 2 Mixed for April, at 45¾c; do. for May, at 46@46¼c.; do. for June, at 46¼@46½c.; do. for July, 46c.; do. for August 48c. OATS.—No. 3 Mixed at 35½c; No. 2, 36c.; No. 3 White, 39@39½c; No. 2 do. 40c; No. 1, nominal, 43c; Mixed Western, at 38@39c.; White do., at 39@41c; White State, 40c.; No. 2 Mixed for April at 35¾@35⅞c; do. for May, 35⅝@35¾c.; do. for June, 35¼c.

PROVISIONS.—PORK.—Mess quoted at $8 50@10 00 for Old and $10 50@10 75 for New; $10 75@$11 50 for Family Mess; $13 00@14 00 for Clear Back; and $9 50@9 75 for Extra Prime; City Extra India Mess, $15 00. BEEF.—City Extra India Mess, $15 00; City Extra India Mess, $15@17; Extra Mess, in barrels, $8 00@8 50; Packet, $8 50@9 00 in bbls.; Fancy Plate, $9 00. BEEF HAMS.—Quoted at $17 25@17 50. CUT MEATS.—Pickled Bellies, 12 lb, average, 5½c; Bellies, 10 lb, average, 5¾c; Clear Bellies, 15 lb average, at 5¾c; Pickled Hams at 8¼c.; 8 bbds Pickled Shoulders, 4¾c; Pickled Shoulders, 4¾c; Western Pickled Hams, 16 lb average, 9c; Pickled Bellies, 12 lb, 5½c; do. 10 lb, 5¾c; Pickled Shoulders quoted at 4½@4¾c; Smoked Shoulders, 5@5¼c; Pickled Hams, 8¼@8½c; Smoked do., 9½c. MIDDLES—Short Clear, 8 70c.; Long Clear in New York, 5¾c. DRESSED HOGS.—City Heavy to Light, 5@5½c. Pigs, 6¼c. LARD.—Western Steam spot, 6.25c; May, at 6.22@6.23c.; June, at 6.26@6.28c; July, at 6.32c.; August, 6.39c; September, at 6.46c.; October, 6.51@6.53c.

BUTTER.—Elgin Creamery, 31@33c; Pennsylvania do., 34@35c.; Western do., 26@33c.; State Dairy half-firkin tubs, 24@31c.; Western Imitation Creamery, 20@27c.; Western Dairy, 15@18c; Western Factory, 15@21c.; rolls, at 8@12c. Old Butter.—State Dairy at 15@26c; State Dairies, firkin and tubs, 12@25c; State Dairy, firkins, 16@23c.

CHEESE.—State, at 9@11¼c; Skims, 2@8¾c.; Western, 10¾c.

EGGS.—State, at 13@13¾¼c.; Western, at 13¼c.; Southern, at 12¾@13c.

POULTRY.—LIVE.—Fowls, near-by lots, per lb, at 12c.; fowls, Western, per lb, at 11¼@12c.; fowls, State, per lb, at 12c; turkeys, per lb, at 9@12c.; ducks, western, per pair, at 60@90c.; geese, western, per pair, at $1,25@1.75.

POULTRY.—DRESSED.—Turkeys, per pound, 11@13c, chickens, Philadelphia, 2 to 3 lbs. to pair, at 30@37½c, per lb; do. winter, Philadelphia, 25@32c.; fowls, Pennsylvania, prime, 12c@13c.; do. Jersey, at 12@13c.; do State and western, at 11@12c. Ducks, western, 13@14c. Geese, Jersey, at 10@12c; do. western, at 9@10c.

POULTRY.—FROZEN.—Turkeys, per pound, at 12@13c.; Chickens, per pound, at 8@11c.; Ducks, per pound, 14@15c.; Geese, per pound, at 11@12c.

GAME. — Wild ducks, canvas, per pair, $2@2 50; do., red-head, per pair, at $1 00@1 50; do. mallard, western, per pair, at 30@40c.

COTTON.—The quotations, according to the American classification, are as follows:

	Uplands.	New Orleans and Gulf.	Texas.
Ordinary	6⅝	6 13-16	6 3-16
Strict Ordinary	7 1-16	7¼	7¼
Good Ordinary	8	8 3-16	8 3-16
Strict Good Ordinary	8 7-16	8⅝	8⅝
Low Middling	8 13-16	9	9
Strict Low Middling	9 1-16	9¼	9¼
Middling	9¼	9 7-16	9 7-16
Good Middling	9 11-16	9⅞	9⅞
Strict Good Middling	10	10 3-16	10 3-16
Middling Fair	10⅜	10 9-16	10 9-16
Fair	11	11 3-16	11 3-16

STAINED.

Good Ordinary	6 7-16	Low Middling	7 15-16
Strict Good Ord.	7¼	Middling	8 11-16

FRUITS. — FRESH. — Quotations are: Apples,—Baldwin, per bbl., at $1 50@ 1 75; Greening, per bbl. $1 75@2 00. Grapes. — Catawba at 7@8c. per lb, in baskets. Cranberries. — Cape Cod, choice, per bbl., $3 50@4; do, fancy, $4 50; do. choice, per crate, $1 00@1 25. Florida oranges.—Fancy at $3 00@3 25; choice do. $2 75@3 00; do. inferior at 75c.@$1. Strawberries—Florida at 40@60 per quart.

FRUITS.—DRIED.—The quotations are as follows: Apples—Fancy evaporated, 7c; choice, 6¾@6¾c; do. prime at 6¼@6½c.; fancy North Carolina sliced, at 4@4¼c.; choice do. at 3@3½c.; choice Tennessee quarters at 2@2½c.; State quarters at 2¾@3¼c.; southern sliced prime at 2½@2½c; do. common, 2c. Peaches—Peeled North Carolina, choice, 11@11¼c.; fancy, 12½@13c; extra fancy, 13¼c; Georgia, choice, 10@11c; do. prime, 9@9½c; unpeeled halves, 2¼@3¼c; unpeeled quarters at 2½@3c.; Delaware evaporated, peeled, 24@27c. Choice pitted cherries at 10@10½c. Evaporated raspberries at 15c; sun-dried do. 12@12½c, Blackberries—Prime at 8@8¼c. Whortleberries at 6¼c.

PEANUTS.—Quotations at 6c. for best hand-picked, and 4¼@4¾c. for farmers' grades.

PECAN NUTS.—The quotations are: Extra large at 7½@8½c; large at 6½@7c; medium at 5@5½c; small at 4@4½c.

HAY AND STRAW.—The following quotations are for: Choice timothy hay at 95c; good at 85@90c.; medium at 80c.; shipping at 75c; clover mixed at 75@80c; Clover, 50@60c.; No. 1 rye straw at 90@95; short rye straw at 75@80c; oat straw at 40@45c; wheat straw at 60@65c., all per 100 pounds.

VEGETABLES.—Potatoes.—Maine, fancy, d. h. bbl. at $2 25; Nova Scotia per bbl., at 2 00@2 25; State, per 180 lb., $1 50@1 75; Burbank, State, bulk, per 180 lb, $1 62@1 87; Burbank, eastern and Nova Scotia, per bbl, $2 00@2 25; Hebron, do, do, do, per bbl, at $2 00; Hebron, State, bulk, per 180 lb, $1 50; Prolific and Goodrich, eastern and Nova Scotia, per bbl., $2 00@2 25; Peerless, bulk, per bbl., at $1 50@1 75; Magnum Bonum, imported, 168 lb, sack, $1 50@2 00; Bermuda, per bbl., at $2 50@2 75. Cabbages—Long Island, choice, per 100, at $6@7; do, imported, per 100, at $6 00@8 00; do. Florida, per barrel, at $1 00@2 50. Kale.—Norfolk, Scotch, per bbl. 35@50c. Onions—Bermuda, per crate, $4@4 50; white, eastern, per bbl., at $2 00@2 25; Connecticut, per bbl., at $2 00@2 50; do. State and western, $1 75@2 25; do. red, Connecticut, per bbl, $2 00@2 75; do. choice, Orange County, $2 00@2 25; Inferior, per bbl, $1 75@2 00. Squash—Hubbard, per bbl., $2 00@2 25; Marrow per bbl., $1 00@1 25. Asparagus.—Prime, per bunch, at 10@15c. Beets.—Bermuda, per crate, at 75c@$1 00. Tomatoes.—Bermuda, per box, at $1@1 25; do. Key West, per box, at $1 25@1 50. Beets, Florida, per crate, $1 00@1 25.

LIVE STOCK MARKET.

NEW YORK, SATURDAY, April 10, 1886.

Total shipments for the week, 638 live cattle, 6,356 quarters of beef, 100 live sheep and 412 carcasses of mutton. BEEVES.—Poor to Prime Steers, sold at $1 70@6 12½ per 100 pounds, with general sales at $5 00@5 00 for Common to Good. Old Oxen range from $4 80 to 5 70; Bulls sold at $3 50@4 40; and Cows at $3 00 and $5 00 per 100 lb. Three cars of little Long Island Stillers brought $4 90@4 95; Chicago steers, 1,368 lb, at $6 12½; do, 1,403 lb at $6 12½; Pennsylvania Stable-fed Steers, 1,311 lb, at $6 10; do., 1,354 lb, at $6 10; Oxen, 2,200 lb, at $4 90; Bulls, 1,350 lb, at $4 25; Cows, 860 lb. at $4. Indiana steers, 1,352 lb, at $6 00; Cincinnati do., 1,312 lb, at $5 85; steers, 1,312 lb, at $4 95; Buffalo steers, 1,352 lb, $5 50; bulls, 1,403 lb, at $4 15; Western stockers, 886 lb, at $4 75; Dry Cows, 1,013 lb at $3 00; State Dry Cows, 1,490 lb at $5 00.

CALVES.—Veals, 135 lb, at 5c; 105 lb, at 5¼c; 123 lb, at 7c; 95 lb, at 5c.

SHEEP AND LAMBS.—Receipts for six days, 22,423 head against 22,191 head for the same time last week. Demand urgent and sellers named the prices. Something over a car-load of Clipped Sheep sold at 6@6¼c.; Poor to Prime Unshorn do. at 6@7¼c.; and 25 head at 8c. A bunch of Jersey Spring Lambs brought $7 per head. Texas sheep (Poor), 61 lb, at 6c; Colorado do., 85 lb, at $7 45; Western sheep, 71 lb, at 7¼c; Western lambs, 71 lb, at 7¾c.; State Sheep, 81 lb, at 6¾c.

HOGS.—Total receipts for six days, 28,897 head, against 30,415 head for the corresponding time last week. None alive for sale. Nominally steady at $4 80@5 00 per 100 lb.

DYSPEPSIA AND INDIGESTION

Are very prevalent in America, and it is not a matter to be wondered at that it is so. The American people eat a great deal of Bread. Much of the bread, while light and attractive in appearance, is injurious, because of the inferior elements used in the yeast.

Warner's Safe Yeast

is guaranteed to be Pure and Wholesome, *Health Preserving*, and Efficient.

Insist that your Grocer keep it.

SEND TEN CENTS IN POSTAGE STAMPS TO

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WANTED.—PRACTICAL WORKING FARMER to manage. General Farming, Fine Stock, and Trucking. Address **PABST,** PROSPECT HILL FARM, Leonardtown P. O., St. Mary's Co., Md.

PEA MEAL, Pea Feed, Oil Meal, Cotton Seed Meal, Oatmeal, Rice Meal, Ground Oats, Middlings, Bran, Ground Feed, Corn Meal, &c. R. K. BUCKMAN, Agt., *Grain Commission Merchant,* 119 WEST ST., NEW YORK.

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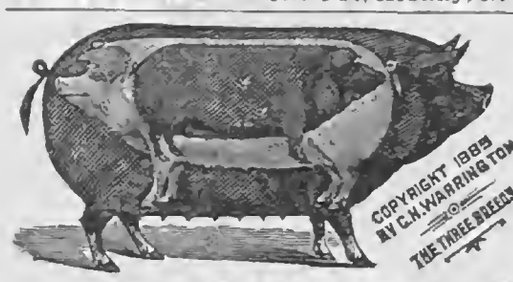

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The proprietor of one of the leading agricultural papers in New England wishes to contract with some competent person to furnish each week a column of fresh, readable and reliable Poultry Notes, which will give in brief the poultry news of the time, and such information on poultry as may be of value to all interested in the subject. Send samples and price to

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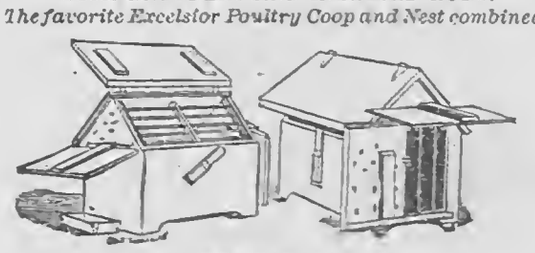

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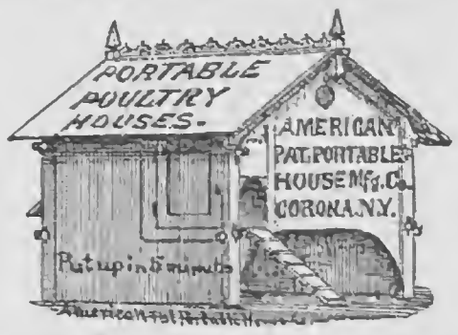

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HATCH The CRAIG Folding Incubator and Brooder (combined) will hatch from 1,200 to 1,500 chicks per year, worth as broilers from $4 to $12 per dozen. No cost or experience to operate. Holds 100 eggs. Price $12.00 An absolute success. Perfect imitation of the **CHICKS BY** hen. No lamps to explode. Ten hens will pay $200 profit per year. Send 4c. for new 36-pp. book on poultry, incubators, etc. F. D. CRAIG, North Evanston, Ill. **STEAM**

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First, Foremost, Best. 50 Egg Machine, only $20.

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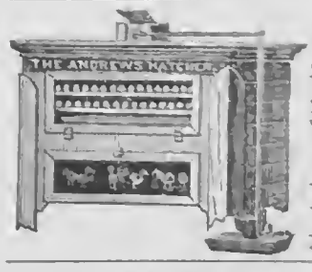

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Hatches Ducks, Turkeys, Geese and Chickens. Received First Premium where exhibited. Send for Circular.

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SHELLBONE for POULTRY.

A mixture of Pure Bone and Ground Oyster Shells. All poultry need it. **25** Pounds, **$1.00; 50** Pounds, **$1.75**, by freight. Samples, **.05c.** mail.

T. H. BOCK, Crisfield, Maryland,

For the Young.

FLOWERS.

THOUGH there is snow on the ground to-day, it will not be long before the ground will be covered with nice, fresh, green grass; the trees will have on nice green coats, and the birds will be singing their songs. Then it will be time to see that our flower beds are made and seeds sown. Have you thought of it my Cousins? I am going to tell you about my first attempt at raising flowers. When Papa sent for garden seeds, he also sent for a dollar's worth of flower seeds. I made up my mind that I would have some flowers that year; at least there was nothing to hinder my tryiug to raise them. I was obliged to make my own flower beds, as Papa and Mamma were too busy to help me or give me any information on the subject. So I got my tools together, consisting of a wheel-barrow, spade and hoe. I spaded up places as large as I wished to have my beds. I then took my wheel-barrow to the wood-pile and got some nice rich chip dust which I mixed with the dirt just dug up. I next got some fresh loam which I mixed with that already on the bed. After the beds were nicely rounded up, I carefully broke all the hard lumps with my hands, leaving the beds smooth and mellow as any flower seed could wish.

The shapes of my beds differed. For my pansies I made a bed around a small evergreen tree, where it was nice and shady. For my cypress I made a round bed, in the center of which I placed a pole with cross-pieces nailed on the top to which I could attach strings. My sweet peas were given a round bed with three poles tied together at the top, to climb on. The other beds were square and rectangular. My dahlias had been planted in the front of the house, where they had the benefit of the sun. At an east door I had planted four o'clocks, and every morning as the door was opened, whiffs of scented air would enter, making the morning more delightful. How nice they would be at one's bed-room window. In one of the beds at the side of the path I had planted gladioli. They did very nicely. In the opposite bed were seen weeds instead of poppies. My small bed of portulaca was covered with blossoms. I also had a rectangular bed of a miscellaneous collection—balsams, batchelor-buttons, petunias, etc. They were all very nice until my family of ducks found the bed. Ducks make very nice ornaments for a barn-yard, but not for a flower-bed. My pansy bed was the nicest of all my flowers; they were perfect beauties, so large and handsome. In fact, I think I made a success of my flower raising. I hope the Cousins will have as good luck. Will some of the Cousins tell me how they save pansy seed: how to take care of hyacinth bulbs after they blossom? They never do anything for me after they once blossom. E. M. D.

LETTERS FROM THE COUSINS.

DEAR UNCLE MARK: I thought I would give you a little history. We are now living on a farm and we have 30 head of cattle and five head of horses. We are now milking five cows. My brother and I have two calves apiece. Pa is a great hand to take care of his stock, and he has got some rye in. The other Cousins are writing about cats, so I will write about our dog. His name is Tige. Tige can dance, waltz, laugh, shake hands, and speak for grub. He is a full-blood Shepherd. He is a very pretty dog and a very good dog to drive cattle. We think everything of him and would not sell him. IDA DAVIDSON.

Parker, Col.

[I hope you give Tige plenty of reasons for laughing and not one for crying. Most of us are like him in speaking for our dinner. I wish I could see him dance.—U. M.]

DEAR UNCLE MARK: I shall be 12 years old this month. I live in the center of Block Island on a small farm. My Papa is purser on the steamer George W. Danielson, which carries the mail to Newport three times a week. In the Summer I go to carry Papa to the steamer every morning and go to bring him home nights. I can harness a horse and drive one. I wonder if many of the Cousins can do that. We have four oxen, four cows, four calves, four pigs, one horse and a flock of about 60 Plymouth Rocks. I have a little sister Florence seven years old; she wants to join, but she cannot write. I will write more next time about the Island, if you wish me to.

Yours truly, SUSIE R. BALL.

Block Island, R. I.

[Florence can join too. Every farmer girl should know how to harness a horse, just as every farmer boy ought to know how to mend his mittens. Your Papa must be proud of his little girl.—U. M.]

LETTERS RECEIVED FROM Maggie Sharpless; E. Emery; John C. Hicks; Florence Wood; Josie A. Johnson; Rozetta Bartley; A. C. Micklliban; Edward B. Kelly; Anna P. Pareus, Willie Wilkin; Florence L. Hoffman; Patrick H. Donovan.

Miscellaneous Advertising.

TWO CASES IN VIRGINIA.

IN 1884 the mails brought to Philadelphia a grateful lettter from a gentleman of Lynchburg, Va., who told the story of the cure of his daughter by the use of the Compound Oxygen Treatment after being a sufferer from Inflammatory Rheumatism, beginning in her fourth year and lasting nine years. His letter was as follows:

"DRS. STARKEY & PALEN. Dear Sirs:—My daughter has been using your Compound for five weeks. Within a week, she began to show signs of improvement; since then her recovery has been remarkable. I have never seen anything to equal it. The action of the heart is quiet and soft; there has been no sign of rheumatism; she sleeps sweetly all night; has a fine appetite; has gained many pounds of flesh, and has considerable color; can walk all about the house, and has paid two or three visits in the neighborhood.

"Very respectfully, C. V. WINFREE."

About the time this young lady was finding relief from her inflammatory rheumatism, another lady suffering from consumption began the treatment. She had tried other remedies without success, and the prospects for her future were gloomy indeed.

In addition to her lung troubles she was a sufferer from curvature of the spine. Now, she can write herself a comparatively healthy woman, and the happy wife of the mayor of that city. Her story is told partly by her husband and partly in a letter from herself. We give her husband's letter below:

MAYOR'S OFFICE, LYNCHBURG, Dec. 15, 1885.

DRS STARKEY & PALEN, Dear Sirs—In stating what your Compound Oxygen treatment has accomplished for my wife, I am discharging a debt which I feel I owe to suffering humanity.

My wife has long been in delicate health, and since her seventeenth year has been suffering from a curvature of the spine. This greatly weakened her and occasioned much pain and excessive nervousness. Notwithstanding this she further exhausted her strength and prostrated her health by the usual round of pleasures of the fashionable world: late hours, parties, operas, and above all the german. The result of this course was that her health was completely prostrated, her vitality exhausted, and when on a Nothern trip in the summer of 1882, she contracted a deep cold, it settled on her lungs, and consumption was soon after the result.

During the early fall of 1882, she began coughing considerable, and finding that she was fast losing her strength and flesh, early in January, 1883, Mrs. Manson, then Miss Field, set out from her home in Culpeper, together with her aunt and Dr. Rixey, for Philadelphia. She was then excessively nervous, could not speak louder than a whisper, and was unable to sleep at all. She saw one of the leading allopathic physicians of Philadelphia, who told her she had consumption, and that she must leave at once for Aiken, S. C. By the middle of the month she was on her way there, and did not return until May. Though seemingly benefited for some considerable period during her stay, she had repeated spells which threw her back so much that when she returned she was much worse than when she left home. Soon after her return she went on to New York and consulted an eminent physician there, who advised the phenic acid treatment, which she continued to use during the following summer, notwithstanding its extreme, severity for some time with apparent success, though in the fall it seemed to lose its effect and she discontinued its use, returning to Aiken about the Middle of November, 1884. It was then she first used the Compound Oxygen, and when I went to see her at Christmas I found her considerably improved. I was prejudiced against the remedy, and advised her discontinuing its use, which in a great measure she did. From the beginning of the year 1884 she lost ground, till by February she was ill. I was telegraphed for and found her suffering greatly from billousness, fever and great weakness, I returned home to attend to attend to some business after a six days stay, only to be again telegraphed for. When she returned in May she was distressingly weak and thin, and though she improved some during the summer, she never was half so well as she had been the year before, and about the middle of September she took a violent cold, which confined her to her bed and promised very speedily to end her life. Indeed for one or two days we thought she would not live to see another; she did however, rally slightly, and towards the end of the month insisted on going to Philadelphia to try the Compound Oxygen treatment. I opposed the plan because I thought she could only live a very little while longer, under any circumstances, and a trip to Philadelphia would only wear out the sooner her little remaining strength; besides I did not think the Compound Oxygen had done her any good at home, and I did not think she stood any better chance by going there, but she clung to the idea as though it were her last hold on life. Finally I consented to her going only because I thought she would be better satisfied, and not because I had the slightest hope of her improvement. In her first letter after seeing Dr. Starkey, (it was only a few lines scrawled with a pencil) she wrote me that Dr. Starkey said she would have to stay there two weeks before he could say whether the treatment would benefit her. Before the time had elapsed she was feeling much stronger, and her appetite was far better, and by Christmas she could walk a dozen blocks. She remained in Philadelphia till April, having during that time but one bad turn, which, however, threw her back considerably. Since her return my wife has used the Home Treatment with continued benefit. Her weight in January, 1884, when she had been with you three months, was ninety-five and a half pounds, and that was a great improvement on her condition when she went to you. The last time she was weighed here her weight was one hundred and fifeen pounds. When she went to Philadelphia she could scarcely walk across the floor without assistance: she can now walk a mile and ride horseback for five miles. She then coughed nearly all the time, with a good deal of expectoration. Her cough is now much better, though it still clings to her, and the quantity of expectoration is comparative small.

Her great improvement seems to me almost miraculous, and I attribute it to the Compound Oxygen, aided by a systematic, prudent life, and the abandonment of drugs.

I fear I have written much more fully than you desired I should, but I have hoped that what I have said would be of some benefit to suffering humanity. With kindly remembrance, I am

Very truly, your friend,

N. C. MANSON, JR.

There are very many people interested in the treatment which has done so much for these two ladies in Virginia. If you wish fuller information send to DRS. STARKEY & PALEN, 1529 Arch Street, Philadelphia, for their treatise, which is sent free to every applicant.

PILES. Instant relief. Final cure in 10 days, and never returns. No purge, no salve, no suppository. Sufferers will learn of a simple remedy, free, by addressing C. J. MASON, 78 Nassau Street, N. Y.

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E. E. BREWSTER, Holly, Mich.

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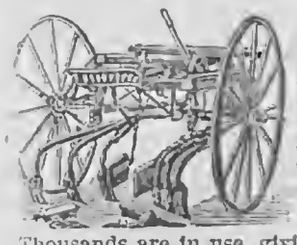

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Market value of securities, over three million three hundred thousand dollars in excess of their cost.

Liabilities, both actual and contingent, provided for, and a Divisible Surplus by the Company's standard of over seven million dollars; Surplus by the State standard, over thirteen million dollars.

An increase of nearly two million dollars in income, over three millions in surplus, over seven millions in assets, and of over thirty millions of insurance in force.

SUMMARY OF REPORT.

BUSINESS OF 1885.

Received In Premiums	$12,722,103.03
Received In Interest, Rents, etc.	3,399,069.71
Total Income	**$16,121,172.74**
Paid Death-claims	$2,999,109.61
" Endowments	741,761.47
" Annuities, Dividends, and for Policies purchased	3,940,999.64
Total Paid Policy-holders	**$7,681,873.75**
New Policies issued	18,566
New Insurance Written	$69,521,452.00

CONDITION, JAN. 1, 1886.

Cash Assets	**$66,864,321.32**
*Divisible Surplus, Co.'s Standard.	$7,064,473.13
†Tontine " " "	3,123,742.77
Total Surplus, " "	**$10,188,215.90**
Surplus by State Standard,	**$13,225,053.94**
Policies in Force	86,418
Insurance in Force	$259,674,500.00

PROGRESS IN 1885.

Excess of Interest over Death-losses,	$399,960.07
Increase in Income	1,880,697.35
Increase in Surplus, State Standard,	3,313,707.18
Increase in Assets	7,580,557.75
Increase in Insurance Written	7,036,902.00
Increase in Insurance in Force	20,291,914.00

* Exclusive of the amount specially reserved as a contingent liability to Tontine Dividend Fund.

† Over and above a 4 per cent. reserve on existing policies of that class.

THE SEVEN ADVANTAGES

OF THE

NEW YORK LIFE INSURANCE COMPANY'S

Nonforfeiting-Tontine Limited-Endowment Policy.

FIRST ADVANTAGE.—Insurance for a definite amount, or for an amount increasing with each premium paid, as desired.

SECOND ADVANTAGE.—A Definite Cash Endowment, and a Tontine Dividend, to Policies in force at the end of Endowment and Tontine periods, which periods correspond, and may be either Ten, Fifteen or Twenty Years.

THIRD ADVANTAGE.—Insurance for the full amount of the Policy, extended for as long a time as the value of the Policy will carry it, within the Endowment period, in case of discontinuance of payment of premiums after three years.

FOURTH ADVANTAGE.—A Grace of one month in the payment of premiums, during which time the policy-holder's security is unimpaired.

FIFTH ADVANTAGE.—Three valuable options, including cash value to policy holders who survive their Tontine and Endowment periods and keep their policies in force.

SIXTH ADVANTAGE.—Practical freedom of action with respect to occupation, residence and travel.

SEVENTH ADVANTAGE.—The payment of death-claims immediately upon the approval of the required proofs of death.

Do not insure until you have seen full particulars of this Policy. Do not fail to write the nearest Agent, or the Home Office, for such particulars—**at once.** The NEW-YORK LIFE INSURANCE COMPANY, **346 & 348** Broadway, New York City.

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HENRY TUCK, Vice-President.
ARCHIBALD H. WELOH, 2d Vice-Presid't.
RUFUS W. WEEKS, Actuary.

THEODORE M BANTA, Cashier.
D. O'DELL, Superintendedt of Agencies.
A. HUNTINGTON, M. D., Medical Director.

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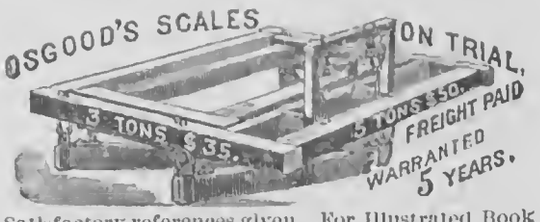
Delaware, Ontario, Canada.
Agents wanted. Patent applied for.



Satisfactory references given. For Illustrated Book address **Osgood & Co.,** BINGHAMTON, N. Y.

PERSONALS.

THE son of General Robert E. Lee, General W. H. F. Lee, just appearing on the horizon of national politics, is 50 years of age, a farmer, and bears a strong personal resemblance to his father, and is called "Runy" Lee, a name coming down from nursery days.

JOHN BRIGHT said to a lady who spoke complainingly of Mr. Gladstone: "Have your children ever seen Mr. Gladstone, madam?" "No," said the lady, wonderingly. "Then," said he, "I should advise you to improve the earliest opportunity to show them the greatest man England has ever produced."

"How many girls are there here to-day," asked Sam Jones of his Chicago audience for women only, "who were never saucy to their mothers? Stand up." "A woman," notes the reporter, "who was a girl 60 years ago, arose in one of the front seats and looked admiringly at the evangelist."

ATTORNEY-GENERAL GARLAND, who goes "no where," lives in a shabby-looking, old-fashioned frame house, back from the street, in a bare, dismal yard. His little, old-fashioned mother keeps house for him and explains her supreme self-possession, before high functionaries, by saying: "My dear, at my age there are no great men."

QUEEN VICTORIA strongly discountenances the slaughter of birds for the adornment of women. Women decked out, in savage fashion, with the skins of butchered birds, are frowned on at royal parties and receptions. The Princess of Wales, gentle and humane as usual, is the president of a society for the protection of birds, and several other ladies of the royal household, as well as a large number of titled personages, are also "patrons" of such beneficent organizations, whose membership is increasing rapidly in the United Kingdom.

Real Estate.

FOR SALE.—One-half my Farm of 480 Acres. A Bargain worth looking after. Apply on premises, or address A. N. RUSSELL, Mound Valley, Labette Co., Kan.

TO PRACTICAL FARMERS.—To Let on Buzzards Bay, Massachusetts, in live town, furnished homestead, barn, farm, fishing, oysters, ready market for produce. Rent, $80. Address NEWMAN, 68 West 35th St., New York.

FOR SALE.—A small farm of about 35 acres, situated one mile west of the village of Mt. Morris, N. Y. A sandy soil, well adapted to small fruits. Commodious buildings, abundant supply of pure water, soil in a good state of cultivation. Needs to be seen to be appreciated. 3 R. R's running through the town. Address P. SHELDON, Mt. Morris, N. Y.

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FARM OF 283 ACRES IN HARFORD CO., MD. Large Stone House; Switzer Barn, with Shedding for 40 Cattle adjoining; Granaries; Carriage, Smoke, Chicken and Ice Houses. A celebrated Wheat and Grass Farm. Immediate possession if desired.
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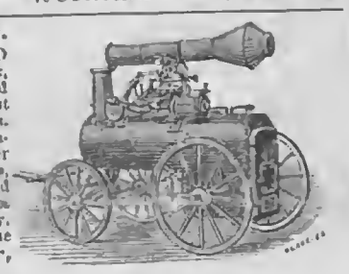

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The Percheron is the only French breed possessing a Stud-Book in both France and America where eligibility to entry is based on authentic pedigree. I have a few imported Stallions of individual excellence (but not eligible to entry in the Percheron Stud-Book) which I will sell at half the price of pedigreed animals of equal appearance. 100-page Catalogue, illustrated with engravings sketched by Rosa Bonheur, sent free. Address, **M. W. DUNHAM,**
Wayne, Du Page Co., Illinois.

CORN AND TOBACCO.

SECOND YEAR'S USE OF MAPES ON SAME TOBACCO PIECE.

Probably Largest Yield of Tobacco (Seed Leaf) in Mass. or Conn.

8,114 lbs. on less than three acres.—Cured well.—Quality good.—No stable manure used for seven years.—Havana leaf, 1,500 lbs. per acre on turf ground.

THREE ACRES, HAVANA LEAF, SEASON 1884.—SEED LEAF, 1885.

RILEY MAYNARD, South Deerfield, Mass., December 22d, 1885, reports:

I send you my report on my tobacco raised with your fertilizer the second year.

Last year (1884) I raised Havana Leaf on about three acres of *turf* ground. I used the Mapes' Tobacco Manure (Conn. Brand). I used about fifty dollars worth per acre and got 1,600 lbs. Havana Leaf to the acre.

This year (1885) on the same piece I set out Seed Leaf and applied the same Conn. Brand (Mapes'), 5,400 lbs., on the three acres (less 15 rods). I set out twenty-one thousand plants, or 7,000 plants per acre.

The crop cured well. I finished stripping it yesterday (December 21st.) It weighed 8,114 lbs.—over four tons on less than three acres. This is, probably the largest yield in Mass. or Conn. If there be any other Fertilizer that can beat it, I want to know it. There has been no stable manure on the ground for seven years.

I sowed the fertilizer, Mapes' Complete Manure for Tobacco (Conn. Brand,) on broadcast, plowing-in one-half, and harrowed-in the other half. I used Phosphate in the hill.

ONE ACRE, TURF GROUND, HAVANA LEAF.

I also raised one acre of Havana on turf ground, using one ton of the Mapes' (Conn. Brand). I got 1,500 lbs. of fine tobacco.

More Corn at less than one-half the cost as compared with stable manure.

[Extract from *Our Country Home*, February, 1886, Greenfield, Mass.]

Stable Manure vs. Complete Chemical Manures.—Experiment at our Country Home Grounds.

Experiment A.—Corn—In a field of 3 acres of Pride of the North corn, 2 plats of ¼ acre each were marked off. Soil, light and sandy. No. 1 received an application of 1½ cords of stable manure, costing $8 per cord on the ground, or $12 for the ¼ acre. Product, 19 baskets sound, and 2¼ baskets soft corn, or 76 baskets sound and 9 baskets soft corn per acre. No. 2 received 200 lbs. Mapes' Corn Manure, costing $5.25 for ¼ acre. Product, 22½ baskets sound and 1¼ baskets soft corn, or 90 baskets sound, and 5 baskets soft corn per acre. The stable manure was spread broadcast and harrowed-in with a wheel-harrow, as was 100 lbs. of the Mapes Manure. The other hundred lbs. was sowed when the corn was one foot high and cultivated-in. In all other respects the treatment of the two plats was exactly alike. The corn on stable manure produced a little the heaviest fodder, while that on the Mapes' averaged one week earlier in ripening. Both plats withstood a severe drouth well; $21 worth of Mapes' produced 14 baskets more of sound corn than $48 worth of stable manure.

E. A. JAMES, Superintendent.

Mr. James reports: "The Mapes' Corn Manure gave us most satisfactory returns. We used it also on one acre in comparison with stable manure (also one acre), same quantities as above, with same difference in favor of the Mapes' Corn as in the above experiment.

Now is the time to Top Dress Grass Lands and Lawns, Fruit Trees, Strawberry Beds.

Send postal for pamphlet on Manures for Onions, Tomatoes, Melons, Corn, Corn Fodder, Hungarian Grass, Turnips, etc., etc

The Mapes Formula and Peruvian Guano Co.,
158 Front Street, New York.
☞ **Chemicals for Mixing a Specialty.**

WILLIAMS, CLARK & CO.'s HIGH GRADE BONE FERTILIZERS.

Connecticut Experiment Station Valuations of Americus Superphosphate.

Analysis of 10 Samples, 1885, gave..$36.09
Americus Tobacco Fertilizer, 1885.. 38.09
Pure Bone Meal, 4 Samples, gave..... 35.04

Valuation in Massachusetts, 2 Samples Americus Superphosphate, gave 1885. $35.94, $36.88.

No Fertilizers selling at the same price show as High Valuations.

I have used your AMERICUS PHOSPHATE on my Corn and am safe in saying I raised the largest crop ever raised in Connecticut. The yield was 179 bushels and 28 quarts shelled corn to the acre.
T. B. WAKEMAN, Greens Farms, Ct.

The above field of corn was visited by Hon. T. S. Gold, Secretary Board of Agriculture of Conn., and Prof. W. H. Brewer of Yale College, and both pronounced it the best field of Corn they ever saw.

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PRINCIPAL OFFICE:
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None genuine unless stamped with the above TRADE MARK.

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Don't waste your money on a gum or rubber coat. The FISH BRAND SLICKER is absolutely *water* and *wind* PROOF, and will keep you dry in the hardest storm. Ask for the "FISH BRAND" SLICKER and take no other. If your storekeeper does not have the "FISH BRAND", send for descriptive catalogue to A. J. TOWER, 20 Simmons St., Boston, Mass.

Prepared **FERTILIZING SALT.**

Send for "SALT SAYINGS." Write for Prices. Car Lots, on Car at your Railway Station. Address
E. S. FITCH, Bay City, Mich.

THE RURAL NEW-YORKER

A JOURNAL FOR THE SUBURBAN AND COUNTRY HOME.

VOL. XLV. No. 1891. NEW YORK, APRIL 24, 1886. PRICE FIVE CENTS. $2.00 PER YEAR.

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The Vineyard.

CAYUGA GRAPE.

We received last Fall, specimens of the Cayuga Grape (Fig. 167), from the originator, D. S. Marvin, Watertown, N. Y. Bunch long, not shouldered; berries black, with a heavy bloom, adhering firmly to the peduncle; from half to five-eighths of an inch long. Skin thick, tough, but pleasant, even when eaten close. Seeds one to two, rarely three in number. Pulp soft, tender, juicy, sweet, vinous and of high flavor, separating easily from the seeds. Eaten October 10—in fine order.

Pomological.

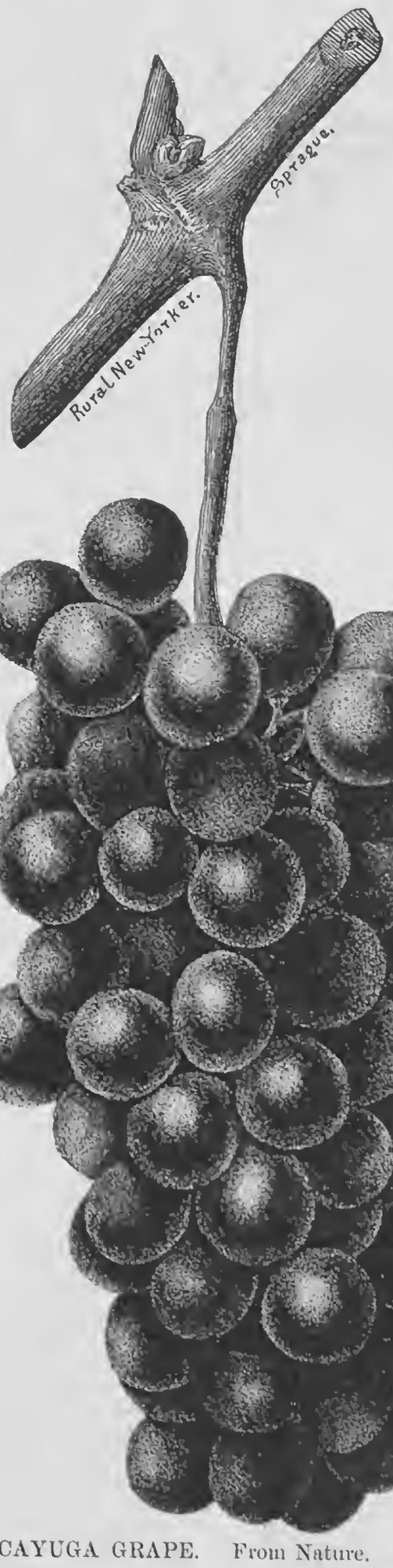
OLD FRUITS UNDER NEW NAMES.

It was with considerable surprise that I read the article of C. M. Hovey under the above heading, in the RURAL of Feb. 13th and 20th last, and I am still more surprised that so usually discreet and careful a correspondent as Horticola should accept (page 219) the same premises and conclusions. My surprise is not that they reverence old and honored names—we all very naturally do so—but that they reason and draw conclusions from the unwarrantable assumption that the American Pomological Society claims the right to dictate a change in such names; and is, in fact, doing this through its Committee on Revision of its Catalogue, and perhaps otherwise. As I understand the matter, the utmost that the society or its committee does or can claim is, that its duty in this direction is to register the decisions and practices of the pomological public, so far as names of fruits are concerned; and, as leading and influential pomologists, to indicate, in their transactions, the most effective means of giving system, dignity and something of science to the nomenclature of fruits. In doing this, the fact has become patent that there has been such free and inappropriate use made of certain words, such as Pippin, Beauty, Favorite, Belle, Beurré and many others, that they have, in part, if not wholly, ceased to possess significance as attachments to the names of fruits, and, as a natural sequence, there is a notable and obviously increasing tendency on the part of the public to lop these off as needless excrescences. The Revising Committee seems to have noted and acted upon this fact, but in so conservative a degree that the late Charles Downing, in a letter to the writer, remarked that they might properly have gone even further.

I understand the mission of the American Pomological Society, in this matter, to be precisely identical with that of the orthoepist, in the spelling, defining and pronunciation of words—to register the practices of the best writers and speakers, and I fail to see that the practice objected to has in any case transcended this rule. The rules of the society declare explicitly the right of the originator to name his origination; but, nevertheless, the society declares that if an objectionable name be bestowed, it will refuse to recognize or consider the same, until the objectionable feature shall be abated. So the public constantly and freely exercises the same right. In common parlance, Duchesse d' Angouleme is simply Duchess; Williams' Boncretien is, and doubtless always will be, Bartlett; Hovey's Seedling and Wilson's Albany Seedling are Hovey and Wilson; Stump the World is Stump, while Miner's Great Prolific is simmered down to Miner, and so *ad libitum*.

This nuisance of long, sensational names has grown with the growth of pomology, too often of late apparently for deceptive purposes, till it has become irksome to the public, who are vindicating their power, if not their right, to lighten the tiresome incubus.

South Haven, Mich. T. T. LYON.



CAYUGA GRAPE. From Nature. Fig. 197.

JAPAN CHESTNUTS.

In a late RURAL, we are told "to be careful about commending the Japan Chestnut too highly." That is a safe rule to apply to all new fruits. A variety of circumstances, such as soil, climate, location and treatment, will affect either favorably or otherwise a new or untried kind. If those who have grown the true Japan Chestnut would tell us their experience through the RURAL, a large amount of information as to the soil, climate and location where the trees succeed would be accumulated. Their growth and productiveness have been satisfactory here. We have imported young seedling trees direct from Japan, some of which bore very large, handsome nuts, while others were smaller. We also imported grafted trees, the fruit of which also varied much in size, quality and time of ripening.

From those which bore the finest and best fruit, we cut cions and grafted them into common American chestnut trees about eight feet from the ground, and in three years they produced some very fine fruit. We have imported direct from Japan some very large and fine nuts measuring five inches and upward. These we planted in the greenhouse in three-inch pots. They grew finely and were one foot high by the time the weather was mild enough to transplant in open field, and three years afterwards they bore a dozen or more to a tree, large nuts which ripened earlier and sold for a higher price than the Spanish and French sorts, bringing 50 cents per quart in market, while the others sold for 25 cents. From this it would appear that there must be several varieties in Japan not all of uniform size and quality. We have succeeded best by planting large seeds of the best quality, or grafting from the best trees, as the seedling trees that we have imported have not always produced very large fruit. WILLIAM PARRY.

Burlington Co., N. J.

THE BEST APPLE FOR NEW ENGLAND, AND WHY.

Almost every locality has some variety of apple which is most profitable and has the largest run in the market orchard. Thus in New England it is the Baldwin; near Philadelphia Smith's Cider; in the Mississippi Valley, Ben Davis. The law of adaptedness must settle which has the pre-eminence. In New England, the Baldwin unquestionably is the market apple. Why? 1st. It is a good grower, making a well-shaped tree. 2d. It is quite productive in alternate years, and with high culture and proper thinning every year. 3. The fruit keeps and ships well, and is also desirable in shape and color. 4th. It is a variety widely and favorably known in the markets of the world. P. M. A.

Middlefield, Conn.

Horticultural.

HARDINESS OF PISSARD'S PLUM, ETC.

In a late RURAL, Mr. F. K. Phœnix reports that Prunus Pissardii was killed by the cold last Winter at Bloomington, Ill. This is nothing remarkable, as I think it will be found killed the present Winter all over the northwestern prairie country. I had some fine specimens two years old, that I neglected to protect, and they are killed to the ground. It is called perfectly hardy by Eastern nurserymen, who offer it for sale; but I do not think there is a live specimen in Iowa or Northern Illinois that has stood out the present Winter unprotected. So far as it has been tested here, it is no hardier than an ordinary peach tree. Prunus Simonii is hardy here, as is also the double-flowering plum Prunus triloba. The RURAL asks as to the severity of the climate of Bloomington, Ill., in comparison with that of Painesville, Ohio, or Rochester, N. Y. Bloomington is in a prairie country, while Painesville and Rochester are not, and when the "blizzards" come over the prairie, and the mercury falls to, say, 30° below zero, it is much more severe on trees, shrubs and plants than it is when the air is still, even if the degree of cold is the same. Another reason why it is more severe in the West is because of the lack of snow, for if we have a heavy snow it does not lie still so that it affords any protection to plants: but it blows into drifts, and the ground freezes as hard and deep as if we had no snow. The peach winter-kills in all the prairie region of Iowa, Northern Illinois, Wisconsin, Minnesota, etc., while in the same latitude in Ohio or New York, it is grown with considerable success. I have not tried the Japan Chestnut, and do not believe it would be hardy here. H. A. T.

Crescent City, Ia.

THE EARHART RASPBERRY.—I have scanned and sifted all the statements I have

found about this new wonder, and managed to draw out some chunks of eaution. For instance, is is stated that 16 gallons of berries were picked about Sept. 1st from two rows six or eight rods long, in this neighborhood. That is more than I have ever picked at any season from the same amount of ground. And then we are informed that one man here frequently borrowed a horse and buggy to go after a few berries for a sick child, proving they were not on the market, although there is more than an acre of plants. Moreover, personal inquiry elicits the fact that no berries were ever marketed out of season from that patch, and the knowledge of this has saved me $3 at least. C. P.

Kirksville, Mo.

Arboricultural.

THE HARDY CATALPA.

Its hardiness—value; proof that it is distinct from the Eastern Catalpa; history of Mr. Douglas's connection with it.

READERS of the RURAL NEW-YORKER are well aware that we have both the common Catalpa and the Hardy Catalpa (C. speciosa) at the Rural Grounds. On page 717 of the RURAL for 1884, we gave careful illustrations of the flowers of each, and pointed out the differences between the flowers, time of blooming, leaves, habit and hardiness of both kinds. The following interesting and instructive letter from the veteran Robert Douglas, of Waukegan, Ills., to our friend T. T. Lyon, of Mich., is presented to our readers with the permission of both gentlemen.—EDS.

"I have often felt like getting out of patience with some of the Eastern writers for their prejudice against this Western tree; but when I consider that there are only three writers, and they are all my personal friends, and know that they are all perfectly honest in their convictions, and are really friends of the West as much as of the East, I am convinced that local prejudice does not enter into their minds at all. I have traveled long journeys with two of them in the West (Meehan and Hoopes), climbed the mountains and slept on the plains with them, and it is a common saying in the West that you never know a man till you have camped with him on the plains.

The third writer, A. S. Fuller, I am not acquainted with, but I should like to show him, near his old home in Wisconsin, a Western Catalpa standing on a bleak knoll, where it has stood 12 or 15 years, and have him count the years' growths and see how it has stood the terrible Winters; while the so-called iron-clad apple trees have died outright. After that, with friends Meehan and Hoopes, we might go down to Princeton, Illinois, and put a measure around a Western catalpa tree, grown from seeds collected by Arthur Bryant at New Madrid, and they would find that it measured over three feet in diameter; stump high. They would also learn that Eastern Catalpas were planted freely in Princeton, and that many years ago they had all succumbed to the severe Winters. I would take them to St. Louis, where Eastern men all visit Shaw's Garden: at the end of the street ca track on our journey thither, I will show them a street planted with the Eastern Catalpa, where they can see how the poor misshapen trees have suffered from killing back during severe Winters.

I will give you a short history of my connection with the Western Catalpa: During February and March, 1877, I received letters from E. E. Barney, of Dayton, Ohio, Dr. Warder, of Ohio, Suel Foster, of Iowa, and Prof. C. S. Sargent, of Massachusetts, all urging me to grow the Catalpa speciosa in large quantities, believing it to be the most valuable tree. They did not all call it Speciosa, although Dr. Warder had given it that name in 1883. Mr. Barney called it the Early-blooming Catalpa, owing to its flowering three weeks earlier than the common sorts. [The Hardy Catalpa blooms at the R. G. while the common is in bud.—EDS.] Suel Foster called it the Hardy Catalpa, for the reason that his partner came into the office one morning in Spring and told him they had two kinds of Catalpa. Mr. Foster dissented; they went into the nursery, and found that one lot was uninjured and the other lot killed to the ground, and that the uninjured had come from Indiana; the tender ones from the East. I traveled weeks with Dr. Warder studying the two trees. I confess I was surprised when I saw the marked difference, and wondered how botanists had failed so long to make a distinction. It seemed to me that any man that could distinguish the difference between the bark on a White Elm and an American Beech could not help seeing the same difference in these two trees.

Mr. Bryant went with us (Dr. Warder and myself) to examine a grove of a few acres near the Illinois Central Railroad down in La Salle County, Ill. The Doctor said he had not seen a plantation in Europe or America that would compare with it. The owner told us that he had sent down to South Indiana and had the seeds collected in the woods, and was growing them for fence posts, as he found that oak posts rotted. We went home with Mr. Bryant, and then went through Illinois, Iowa and Nebraska, wherever we could learn that the trees were growing. I left Dr. Warder in Nebraska, he going to Wyoming and through Kansas and Missouri, studying these two trees. I found the Eastern kind showing the effect of severe Winters. I met Mr. Barney by appointment in Chicago the week after I left Dr. Warder. He told me how he labored to introduce this tree, and the importance he attached to it, and I had previously learned from Dr. Warder how Mr. Barney had spent both time and money lavishly without any pecuniary interest in it. I started the next week with one of my sons for South Indiana, Western Kentucky, etc. We explored the woods. We hired Germans, Irishmen, poor whites and negroes, and saw the the seeds taken from the native trees. We remained as long as we could possibly endure the hardship, and then grew the trees by the millions, advertising them as hardy up to 42 degrees north latitude. About three years ago, finding them hardy further north, we advertised them as hardy up to 43 degrees. When I was East last Summer, two letters followed me with an article clipped from the N. Y. Sun, telling how Western men were flooding the West with this tree which is not hardy. I confess I was annoyed, as both these letters were from Eastern men expressing sympathy with the poor unfortunate West, and kindly sending me a copy of the article.

Many of our Eastern friends do not understand the West. The East proper, covering only a limited space set among hills and cities and lakes and rivers and adjoining the seaboard, is all nearly alike, and what is hardy in one part of it is comparatively hardy in all. Not so in the West; and this is why they make what seems to us most glaring mistakes. It might be said that there is no tree hardy in the West! True, there are a few species, notably the Red Cedar, the Box Elder and the Black Cherry which grow from Florida far up into the Northwest, the two first named up into Northern Montana and beyond. But do any of our Eastern friends think that seeds of these trees collected in Florida would produce trees that would be hardy here? Let us not be severe on them if they do. I had lived a quarter of a century in the West before I knew to the contrary. I made the first discovery when I purchased 10 bushels of Red Cedar berries from the South. They germinated freely and exceeded our Northern seedlings in growth; but killed back in the Winter. I sold them at half-price to a nursery-man that had a Southern trade; but when we shipped them at three years old, they showed so badly that we sent them to him only charging him for the boxes. Another case out of several I will mention. We bought a large lot of Black-walnuts, grown at Makanda, in our own State. They were planted side by side with a lot collected in our own locality. In the Autumn, standing side by side, the Makanda seedlings were double the size of ours. The next Spring ours were alive to the terminal buds; the Makanda plants were killed to the ground.

Mr. Josiah Hoopes will not admit that there are two species of Catalpa. Mr. Fuller says, in his work on forestry, that the question whether our Western tree is a species may well be left for scientists to decide. Surely Mr. Fuller must know that it has been decided by a scientist who stands in the front rank both in this country and Europe: Dr. George Engelmann, has decided it, and named the hardy Western species Catalpa speciosa. Mr. Fuller in his new work, referring to this "so-called Western Catalpa," does not even notice the difference in the bark, although he has seen both trees when of large size. I have a letter from Richard Sykes, owner of the large plantations at Larchwood, planted by the veteran Jesse Fell, and in it he says: "The Catalpa speciosa trees seven years old, flowered and bore seed which ripened thoroughly; the pods were 18 inches long. This is a good showing for latitude 43 deg. 30 min." I have a letter from F. W. Woodward, of Eau Claire, Wis., former editor of the Horticulturist, in which he says: "Catalpa speciosa planted in '84, is seven feet high and 2½ inches in diameter. The ends of the shoots were killed back last Winter (45° below zero) about three inches only. I think I can report it as hardy here. Norway Spruces were so severely injured alongside of the catalpa, that they made no growth the past Summer; presenting only a rosette of buds at the ends of the branches." Surely no tree ever had such an introduction in seven short years as the Catalpa speciosa of Warder. We have flattering reports of it from the East Indies, China, South Africa, Australia and Europe."

SHRUBS SUITABLE FOR HEDGE PLANTING.

Requirements for a suitable hedge plant; the Japan Quince; the sweet briar; the barberry; the honeysuckle and deutzias; the privet; an easily made hedge.

ONE practical way of multiplying and conserving leafiness, and so of remedying the serious faults about which even jocose Dr. Holmes speaks seriously (see RURAL of October 24, page 711, foot of first column), would be the general planting, along permanent lines of wire fence, of hedge plants of some easily grown and kept and enduring sort which, even if left untrimmed, will not sprawl or sucker or attain over 10 feet in hight. It need not be thorny, or so stiff as to stop breachy animals, as one barbed wire within it will do this perfectly, if stretched 30 to 35 inches above the ground. Yet a certain stiffness is necessary, or pigs, dogs and poultry may push through at the base. A wire near the ground will help to prevent this, and if the plants are either set close or headed down close to the ground until thick with shoots, there will be no trespass of the sort. Even breachy boys or men will go far around and resist much temptation before undertaking to get over a thin 4½ foot hedge that has a barbed wire in its heart.

Other requisites in an ideal hedge-plant are that it be not liable to be browzed by cattle, that its stems be firm and permanent, and its leaves evergreen, or nearly so, to give better shelter to the land and its workers on each side. Ease of propagation and ready growth are important essentials. Beauty of foliage and trimness of growth are also worthy of consideration. Hardy shrubs that combine more or less of these requirements are the common privet, the barberry, the sweet briar, the Japan quince, the shrub honeysuckle and the taller deutzias. They have merit in about the order named. The Japan quince is exceedingly handsome in flower, and it flowers well even where closely trimmed. Its leaves, too, are of a rich green. But its stems are straggling, very pliant and short-lived individually. It is also liable to be cut off by the borer, and it suckers occasionally. It is also rather expensive.

The sweet briar has its merits? of thorniness, and of very agreeable fragrance, and very numerous stems; but it is liable to lose its leaves in hot, dry weather, and they are pallid in color.

The barbery is handsome, dense, enduring, and will grow and live in the poorest, driest soil. It is prickly too. It is doubly handsome in flower and fruit; but trimming checks its flowering and robs it of beauty. It, and the sweet briar can be grown from seeds, but not with certainty, and they require some years to make a full hedge.

The honeysuckle and the deutzia are best adapted for fancy hedges—to contrast with a dark bank of evergreens, or to dot into a hedge here and there for pleasing variety, brightening up a dark line.

The privet posesses the most points of merit, indeed all of the essential ones. It grows as well and as surely from cuttings as any willow. The plants should be pushed down firmly into the soil in Spring—it having been well cleaned and mellowed in the Fall—and at any distance apart under eight or ten inches in the line of the hedge. Its cost is, therefore, very little. It is nearly evergeen, and hardy throughout the North, grows up rapidly but stops at about ten feet. The Californian, or oval-leafed privet has leaves still more glossy and of lighter green; it is rather less hardy.

A friend here completed a good chicken-proof hedge of common privet within one week. He stretched three wires about eight, 16, and 30 inches from the surface, the upper one barbed. Then, having plenty of young rods of privet in a hedge-row, which had been headed down close and then purposely left to make a full growth without any trimming, he cut quantities of these, from two to four feet long, and pushed their somewhat sharpened ends about six inches down into the well mellowed, and cleaned soil along the line of the hedge, first passing them through the wires from alternate sides, so as to have a weft like that of a basket. They were put in about two inches apart, to debar young chickens from getting through. It was an effective hedge at once, and was soon "a thing of beauty," as well as of use. The shelter afforded by such hedges is worth many times their small cost, while they are one of the greatest of landscape adornments, and essential to cozy comfort about a country home in our climate.

Tyrone, Pa. W. G. W.

Sheep Husbandry.

Notes from the Rural's W. N. Y. Farm

FEEDING LAMBS.

HOW OFTEN SHALL WE FEED?

IT is claimed by some that twice a day is sufficiently often to feed; that by feeding the hay and grain near together, and these feeds as nearly 12 hours apart as possible, the lamb has ample time to re-chew its food and the stomach time to rest before the next meal, and that the lambs will both gain faster and make a larger gain for the food consumed. This is a fallacy that works to the injury of every one who may follow it. Ruminating animals are seldom without food in some of the compartments of their stomachs, unless fed on starvation diet, which no one would recommend, at least for fattening animals, and no matter how often fed, the food, as a rule, does not pass into the fourth or digesting stomach until after it is chewed the second time. And if the lamb is fed, as it should be, at least seven times, it will not spend over seven or eight hours in eating, leaving at least 16 hours for rumination and rest of the stomach, which is ample. And as the interval between the evening and the morning feeds must necessarily be not less than 10 or more hours, the first feeding should be not later than six o'clock (five would be better), and the shepherd will be very sure to find the lambs alert and showing by their greediness that they have had ample rest and are ready for a good, "square meal." We prefer hay for the first feed, so that it may be quickly eaten, the stomach quickly filled and the coarser food ready to mix with the grain ration and returned with it for remastication. If the hay is good and only a proper amount be given, it will be eaten in one hour, and the sheep will be ready for their grain. After this is given, the water troughs should be looked after and replenished, if empty, and the lambs then left in quiet until half-past nine, at which time roots should be fed; these should have been made very free from dirt and cut fine, but cut into irregular pieces or cubes in preference to pulping or being cut into slices. We use a cutter with circular knives, which in cutting the roots break them into pieces the size of hickory nuts.

At noon the racks should be filled with good, bright straw. If grained as high as is advisable, they will eat a large proportion of this; especially is this true if the straw has been barn-housed, for no matter how bright it may be or how well kept in the stack, they will not fail to detect the difference, and will show their preference, by the larger consumption of that barn-kept. The troughs should now be looked over and refilled with water, and the lambs be left undisturbed until (where roots are fed, as they should be, twice daily,) three o'clock when the second feed should be given. At five P. M. the racks and grain trough should be swept out, and the second grain ration given, and at six the racks should be filled with hay, or, if desirable to feed corn fodder, that should be given at this time. If the second feeding of roots be omitted, which we do not by any means advise, the afternoon grain-feed may be given at half-past four, and followed with hay or other forage at half-past five.

Thus it will be seen that we have marked out seven distinct feeds each day, and have provided for keeping the shepherd busy and "at his post." That lambs will eat more when fed often we have not the least doubt, but that they will make a gain corresponding to what they eat, and more, too, we have proven by careful experiments more than once, and this course will, by the more rapid gain of the lambs, more amply repay the shepherd whose heart is in the work and who begrudges no labor if he can see the lambs "doing their best."

Our friend J. F. Kenelig, of Cumberland Co., Pa., wishes to know why sheep lose their wool, it commencing to loosen around their necks and along their bellies? There is only one cause of this. The sheep at some time have been losing flesh, and they are now gaining. The great difficulty with most sheep-keepers is in allowing the sheep to run too long at pasture without grain. After a severe freeze the grass has but very little substance, and although the sheep may fill themselves so as to look full, they are rapidly falling away, and when put into winter-quarters and well kept, they begin to thrive and this starts the wool more or less. There is no remedy only to grain a little while they are at pasture, or put them into the barns sooner.

Our good friend M. M. Willson says he followed our directions in papering and sheeting the outside of his barn, and still when the mercury went 10 degrees below zero, the wa-

ter froze solid in the troughs, and he asks if a barn 40x60 with weather-boarding well preserved with paint, cannot be made warm enough, with tarred paper and an extra boarding over that, not to freeze. It certainly can, though we should try putting on one thickness of tarred paper, then furring out with inch strips over the joints of the paper, and over these, if necessary to keep the cold out, putting on a second thickness of the paper, and over this the weather-boarding. It is certainly much cheaper to shut the cold out than to try to warm the barn with the sheep after the cold gets in. We suggest that, no matter how closely or warmly the sides may be covered, unless there be an air-tight ceiling overhead, it is impossible to keep the stables sufficiently warm. Was not that the trouble with the place in which the sheep are now kept?

As we sit writing, we see two men going by with manure that cost them 75 cents per load. One-third is shavings and it must be hauled three miles from the stables where made to the fields on which it is to be used. These men both use tobacco, it costing each not less than $6.00 per year, and yet neither takes or reads the RURAL, because "it costs so much," and he can't afford it. And then neither believes in "high-pressure farming," as he calls our method. We wonder if the time will ever come when farmers will spend half as much to feed their brains as to minister to a depraved appetite.

Dairy Husbandry.

COST OF MILK AND OTHER FIGURES.

J. N. MUNCEY.

DURING the past two years I have kept a set of double-entry farm books, and, aside from this, endeavored to determine by weighing hogs and calves, just how many pounds of beef and pork were made. Having these exact figures, and knowing the feed consumed by calves and the number of pounds of pork made from a bushel of corn, I can readily approximate the quantity of feed consumed by the cows, and in this way obtain a quite reliable figure on the cost of milk.

I summarize what has required considerable work in reviewing the entire "Produce Account" from my ledger:

Corn consumed, Meh. 5, '84, to Jan. 1, '85	417 bu., at 28c		$116.76
Oats consumed (approximate)	121 "	at 20c	24.20
Off-meal consumed	1,647 lbs.		20.29
Bran consumed (actual),	26,722 "	at $10 per ton,	135.00
Hay " (estimated),	28 tons, at $4 "		112.00
Total			$408.25

Pounds milk made from Meh. 5, '84, to Jan. 1, '85	135,719
Days' milk of one cow for that period	6,019
Average number pounds per cow per day	22.4
" " cows for time mentioned	20
Number acres Timothy pasture	40
Rent value per acre here	$2 to $2.50
Pounds increase in live weight of cows	1,700
Value of increase per lb., 3½ to 2c	2½ average.

Deduct $42.09 as the increase in beef value of the cows, and add $80 for pasture, and there remain $457.40 as the cost of 135,719 pounds of milk. This is about 33 cents per 100 pounds. The cows are grades, natives and full-bloods. They were fed bran all Summer. Some of the new milk was fed to calves, some used in the house and the remainder sold to the creamery; 112,137 pounds sold for $804.60, and the return skim-milk (80 pounds for every 100 delivered) was worth about 25 cents per 100 pounds. I have made no allowance in these figures for cases of abortion, damaged udders, or deaths by disease or accident. I omit purposely the cost of labor, because every man can approximate that for himself. I have had four cases of abortion in two years. One of that number was more properly a case of premature birth, the calf being raised and sold for veal.

The average weight of the cows is, 1,190 pounds. During the Summer the cows received a moderate allowance of bran only. This saved many hours' labor in driving them from the pasture. Very rarely was it necessary to go after them. During Winter they were fed liberally in a barn, the temperature of which is 18° to 22° above zero when the thermometer is 35° below outside. I hardly think the average temperature in the barn would exceed 35° F. for December, January and February. They were turned out only a few minutes during the very coldest weather. They were watered three times a day—that is best. The water was not warmed; but it ought to have been. Its temperature was not much above 40° on an average, I think. The feed was not always mixed in scientific proportion. From these figures and facts, one is enabled to get a more definite idea than experimental reports contain, because of the short time the experiments are conducted. To obtain any practical benefit from notes of this kind, each farmer should do a little private figuring to learn what his own herd is really doing and how it compares with this.

Jessup, Ia.

The Herdsman.

JOTTINGS AT KIRBY HOMESTEAD.

COL. F. D. CURTIS.

SALT FOR STOCK.

I AM satisfied that the system of spasmodic salting, as practiced by most farmers, is a mistake. Too much is eaten at a time, and then a fearful thirst is caused. It seems to me that any person who has ever eaten a great deal of salt meat and then drank the well dry, would realize how a lot of salt now and then would affect stock. It is liable always to cause diarrhea, as it is an irritant in the stomach, and there must be a spasmodic effort of nature to throw it off. The large amount of water drank afterwards, if it can be had, is also injurious, and in winter time must chill the whole system. Many people think all of the old brine must be put through the cows somehow, either by mixing their food with it or sprinkling it on their provender. This is a most foolish thing to do, as it is liable to cause abortion, and the brine is worth more on the asparagus bed, or to kill thistles, or in the compost heap, than it can possibly be for stock. It is a doubtful question whether stock or people require salt at all, and if they do, it is a *very little* at a time—only a lick or a pinch, as the case may be.

OH, FOR MORE MILKERS!

Milking is getting to be a lost art. Hired girls don't know how, or are above it, and hired men won't. It will not be long before we shall have to do all of our own milking. In strictly dairy districts everybody milks; but where mixed husbandry is followed it is almost impossible to hire a good milker. Milking is an art. Families and races may be born to it, but to make a good milker out of common talent is hard work. Where time is given to the hired man, *after tea* and *before* sundown, to do the milking, there should be no grumbling. Young people ought to understand that on the farm to be able to milk well is really an accomplishment, and one who can and will milk can always command better wages. A good milker can get one-third more wages where a nice lot of cows are kept, and he will more than make it up. A poor, slow milker will spoil cows, however good. With skill there should be a kindly manner, as a spiteful, mean person about cows is a curse to cows and owners. It won't be long before we shall have to import milkers, just as skilled labor is sought for in the mechanical arts, or for special work.

FEED FOR WORK HORSES.

Twelve quarts of oats a day is as much as any horse needs or can digest well for work on a farm. With this the horse wants only half the hay usually fed. He will do better and do more work on a small amount of hay than when given all he will eat. Cut food with meal is the most economical, and horses will do the hardest work on this food and keep in better condition than on oats. Grain is much cheaper in this section than hay, and if plenty of bran be mixed with the grain very little hay need be fed. Horses will do well on oats and bran, or on clear oats. I have a horse which has been doctored for the heaves, which has lived all Winter on 12 quarts of oats. He looks well and feels fine. My father once worked a "heavey" horse a whole Spring on nothing but oats soaked in water, and he gained all the time. When fed hay, he could hardly walk, the disease was so bad.

HINTS ON FEEDING.

I have found out that there is no money in trying to fatten old cows or sheep, or in attempting to winter them unless they are specially valuable for breeding. I fed an old cow, and did not get half pay for the meal and oats she ate. I have wintered some old sheep to get one more lamb, and they have been fed to keep them in as good condition as possible. I found the barn was too cold, and moved them to the pig-house which is much warmer, and here they improved. I doubt if they would have stood the cold. Two of them now have lambs, and when these were born they were fat and strong. It was oats, wheat bran and roots which made them so. The mothers had plenty of milk and no cake in the udders. If they had been fed corn enough to have kept them up, and to have developed such udders, they would have been feverish, and the udders would have been swollen and sore. Two years ago I was taught a valuable lesson in regard to feeding corn plentifully to ewes which were going to have lambs. It won't do. In some cases the milk would not start at all, and in others the lambs died because, although the ewes owned them all right, which deceived me, they would not let them suck, as their udders were so sore. In many cases the ewes had to be held whenever they got any milk, and it was some days before they would stand for them.

Horseman.

TYING UP A HORSE'S TAIL.

FIGURE 175 shows how our friend, Frank H. Rood, of Wyoming County, N. Y., ties up a horse's tail so that it looks as if it had been docked. With a brush separate the short hairs at the root of the tail from the long ones,

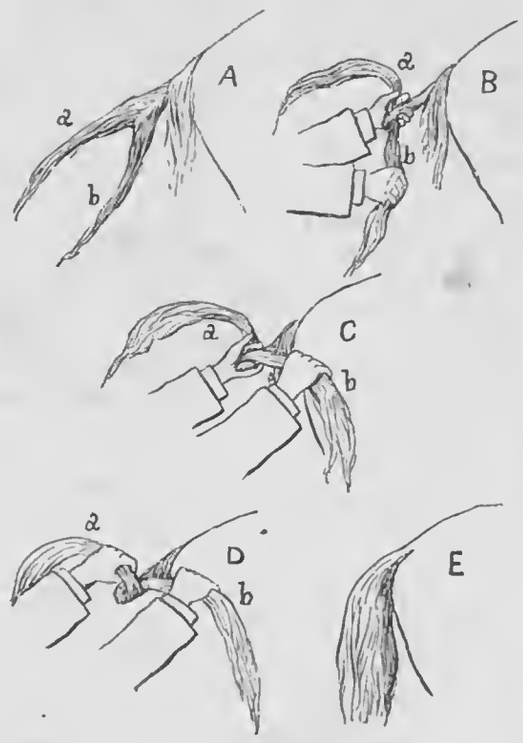


Fig. 175.

so that half will fall on each side of the dock. Then divide the long hairs into two equal parts, as shown at A. Turn part *a* up the dock towards the tail and hold as shown at B. Now bring *b* around under the dock and between it and the left hand, and over, as shown at C. Next bring *a* under the dock and over part *b*, as shown at D. Take hold of *a* and *b* with the hand close to the dock, as in D, and don't let go until the parts *a* and *b* have been wound up and the dock tied. Wet the ends of the hairs and tie two knots or a double knot: now brush the short hairs over the dock and you have a bob-tailed horse, and a much better-looking tail than one that is tied up sore-thumb fashion—and it is out of the way of the mud, too.

Field Crops.

CORN CULTURE.

THE best corn-grower in this community never fails to make a good crop. Sometimes his crop is much better than at others. This is due to the seasons, his cultivation being always the same. If the field he wishes to put in corn is weedy or sod land, he breaks it the Fall before, and then again the following Spring, deeper than the first time, as early as he can plow. Just before planting, he breaks it the third time still deeper, harrows, rolls and thoroughly pulverizes the soil to the depth of 10 or 12 inches. The land is then laid off four or 4½ feet each way and planted. The growth is thinned to two stalks in the hill when hand-high. When it is three or four inches high, he plows both ways deep and close to the corn. Two or three weeks later, when the corn is 10 or 12 inches high, he cultivates it shallow both ways, and then leaves it to the mercy of the seasons. In giving it the last cultivation he endeavors to leave the ground as perfectly level as the implements at his command can make it.

He never allows a plow to go in his corn field after the corn has got knee-high. If weeds appear here and there they are chopped out with a hoe, disturbing the soil as little as possible. His theory is this: Thorough and deep preparation of the soil, that the moisture may rise easily by capillary attraction, when most needed, and that the young roots may be able to spread out in every direction in search of nutritive food. The first plowing may be deep, because at that stage of the corn's growth the young roots have not spread far enough to be disturbed by the plow. The last plowing should be shallow that the roots may not be molested. The ground should be left as level as possible that the spring and summer showers may moisten the soil uniformly; besides, the crop suffers much less from drought when the surface is smooth and level.

There is nothing difficult about this method. It is plain and simple, and will give to those who test it very satisfactory results. The man lives on a poor farm, yet in corn growing he excels his neighbors who own very fine land. The old farmer who has been in the habit of putting in the double-shovel up to the beam, while both plowman and horses were nearly suffocated beneath the heavy blades of corn already in tassel, will read the above with some degree of misgiving. Such men are undivorcibly wedded to their idols. They believe that corn and potatoes ought to be planted in the "dark of the moon;" that the worm of a rail fence should be laid in the "light of moon;" and that the "sign" must be right to perform surgical operations on pigs, calves and colts; otherwise the animals will die. They forget that this is an era of enterprise and progress.

SUBSCRIBER.

PEPPERMINT—ITS CULTURE, ETC.

J. B. L., Hudson, Mich.—Peppermint requires a warm, rich soil; the land is laid off in furrows 15 to 24 inches apart, and sets or parts of old plants, are planted thickly in rows; the plants are kept free from weeds until they cover the ground. The harvest begins early in August and continues until October. The first crop of the field is the best, the second and third being less. The fourth year the field is plowed, and the crop springs up from the broken roots. The yield of the fifth year is about equal to that of the second, and after this the land is diverted to other uses. The first year's crop is the best, not only because the plants are young and vigorous, but the mint is then free from a weed which is apt to spring up later, and which also yields a volatile oil, which is bitter and pungent and deteriorates the product. This is called mare's-tail, fire-weed and by several other names; botanically it is Erechthites hieracifolia, and somewhat resembles lettuce in appearance. The mint is cut with a cradle having two fingers, and raked into cocks, where it remains 12 hours to wilt before it is distilled. The still is a wooden vat of heavy staves hooped together with iron, 4½ feet deep and six feet in diameter. The wilted mint is packed into it by treading it close with the feet until the vat is full, when the lid is fastened down steam-tight. A pipe entering the lower part of the vat conveys steam from the boiler, and another from the top of the vat connects with a worm, as in an ordinary still. The steam being let on, the oil from the mint is volatilized, and its vapor, mixed with steam, is condensed in the worm. The mixed oil and water are collected in a receiver, where they separate by their difference in specific gravity—the lighter oil rising to the top. The oil is packed in cans holding 20 pounds each, and a large share of the product is exported. It is used chiefly for flavoring confectionary, and in the preparation of essences, cordials and the like. "Essence of peppermint," a popular "carminitive" for expelling wind and curing colic and flatulence, is a solution of the oil in alcohol, of a strength proprotionate to the price. "Peppermint water" is prepared like other "waters," by first rubbing up the oil with carbonate of magnesia, slowly adding water and filtering—a fluid dram of the oil to a pint of water. The use of the magnesia is to finely divide the oil and expose a large surface to the water. Peppermint culture in this country was at one time confined exclusively to Massachusetts, Western New York and some counties in Ohio; but later it was taken up by the farmers in Southwestern Michigan, where some years from 2,500 to 3,500 acres are devoted to it. St. Joseph County, Mich., and Wayne County, N. Y. have a reputation for producing the best quality, owing to the greater care they bestow on raising and handling the crop. The price of the product is subject to extreme fluctuations, as the trade in it is liable to fall into the hands of speculators. At one time the whole production of the country was controlled by a single firm, who, to diminish the supply, contracted with growers to discontinue the cultivation for five years. The price is now quite high and very profitable. 2. Some parts of Sir J. B. Lawes's land, at Rothamsted, England, have been kept in a high condition of fertility, yielding heavy crops, for over 40 years, by the exclusive use of commercial fertilizers—nitrogen, phosphoric acid and potash in various combinations—and what can be done in one place can be done in another. Land can, therefore, be kept quite fertile by the exclusive use of such fertilizers. The quantity will depend on the condition of the land, the nature of the crops, etc., so that no particular amount or proportion can be mentioned without a knowledge of these.

THINNING POTATOES.

I HAVE long been in the habit of thinning my potatoes to one stalk in the hill; and a few years ago my 13-year-old boy, who did the thinning, complained that it was hard on his back, and thought it did not pay. At that time we had an acre of Peerless ready for thinning, so I told him to leave one row through the center of the patch without thinning, and we would note the result. We had a fair crop and I ordered my men who dug them to carefully measure the potatoes in the unthinned row, and also in the rows on each side of it. The result was that each of the three rows made about the same amount in

bulk; but at least one-third of the tubers in the unthinned row were too small for market, while of those in the thinned rows almost every one was large and smooth. We should no more expect large tubers from a hill with too many plants, than large ears of corn from a hill in like condition. D. C. A.

Girard, Ill.

Farm Economy.

A HOME-MADE CORN CULTIVATOR.

Although farm implements are now made of all designs by the regular manufacturers, and are sold at such low figures that they are within easy reach of all farmers, still home-made tools will always be popular because they can be made, at a trifling cost, of odds and ends otherwise useless about the farm, and at times when other work is slack or interrupted by bad weather. Moreover, they can be fashioned to suit the fancy or needs of each maker, and there is always a good deal of satisfaction in the use of an implement made by one's-self if it works well. The illustration of such devices is useful not only to farmers in general, but also to manufacturers of agricultural implements, as they are often suggestive of improvements in old devices or even of new combinations or designs.

A sketch of the corn cultivator shown at Fig. 173, was sent us by friend A. P. Freeman, Oakland County, Mich., who says: "It is the best thing of the kind I ever used or saw, as

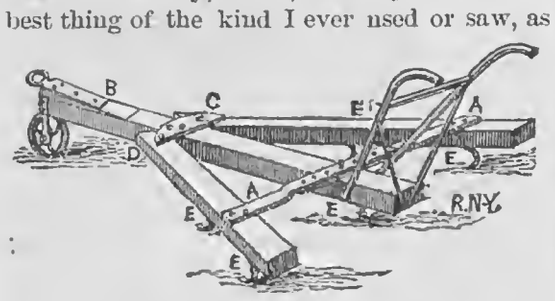


Fig. 173.

there is no jerking on man or horse. It is made of 2x3 inch stuff; the side-pieces are 2½ feet long, and the middle piece is three feet. The five teeth were obtained from an old spring-tooth float harrow, and are put on as shown at E. E. E. E. E., those at the ends of the side pieces being three inches from the ends, the others 14 inches farther along, and that in the middle piece five inches from the end. For the handles I used a pair from a cast-aside Gale plow. The middle piece projects 15 inches ahead of the side-pieces. At A. A., two pieces of half-inch by one-and-three-quarter-inch iron, each 18 inches long, form a cross-bar from one outside piece to the other, and are so arranged as to spread or narrow the cultivator, by inserting a peg through holes bored in them and the middle piece. The bend or crook is three inches from the end. At B., is a wedge-shape piece spiked on the projecting end of the middle piece to make the draft come right. It should be about an inch through at the thickest end and a foot long. At C. is a plate for binding the three pieces together, and a similar one is on the under side. The bolts through these and the side-pieces have nuts at the bottom and are somewhat loose in the holes so as to permit the spreading or narrowing of the cultivator. Heavy band iron will answer for the plates. The forward corners of the side-pieces are rounded a little, as shown at D."

A HANDY POLE-DRIVER.

The ordinary method of driving stakes is, of course, to strike them on the upper end with an ax, mallet, or some other heavy implement; but with hop or bean poles this would be impracticable. With the device shown at Fig. 174, (for a sketch of which we return thanks to friend M. D. Earle, of this city,) they can be driven down very conveniently and quickly. It consists of a piece of tough wood a foot long and four or five inches square at the top, tapering downward wedge-shaped, as in the cut. The part next the pole is hollowed out somewhat so that the pole can rest snugly in it. An ordinary trace chain is wound tightly around the block and pole at a convenient hight in latter, and hooked in place. Then a few heavy blows on the top of the block will drive the pole quickly and firmly into the ground. very blow tightens the grip of the chain on the pole. To prevent the chain from falling to the ground when unfastened from the pole, it should pass through a hole bored in the block. Quite large stakes can be driven down in this way.

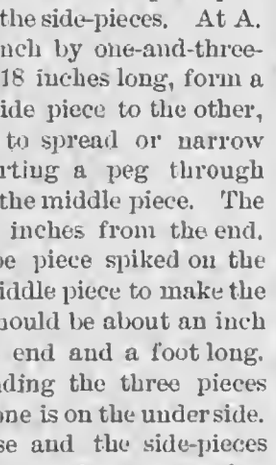


Fig. 174.

A HOME-MADE ROAD SCRAPER.

For the design of the home-made road-scraper, shown at Fig. 172, we are indebted to our friend S. S. Matthews, Chemung County, N. Y. D is a piece of tough, naturally crooked wood, seven feet long and hewed seven inches. B is a four-inch brace, notched at the tongue, C, to which it should be bolted and also bolted to the ends of the beam. D is a wrought-iron or steel bar four inches wide, spiked to the beam, so as to project 1¼ inch below it.

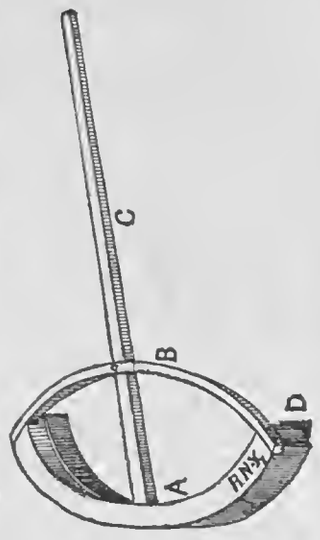


Fig. 172.

A CONVENIENT HOME-MADE HARROW.

The cut of the harrow shown at Fig. 171, was sent us by friend M. Bingenheimer, Osage

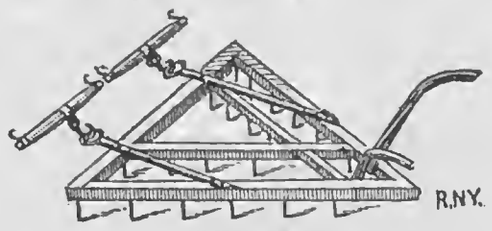


Fig. 171.

County, Kansas. He made his of old rails; but a similar one can, of course, be made of any timber at hand. It was designed for the first cultivation of corn; but was useful for other purposes also. By means of the handles at the small end the implement can be held in the right position. The engraving fully explains the mode of construction.

Entomological.

FIGHTING THE CODLING MOTH.

PROF. A. J. COOK.

Mr. Springer, a subscriber to the Rural from Santa Clara Co., California, requests that I explain my method of fighting the codling moth (Carpocapsa pomonella) with the arsenites, especially in his State, where the pest is becoming a very serious enemy to the apple.

I have found by very careful and pains-taking experiments repeated annually now for several years, that Paris-green and London-purple—white arsenic would serve as well, but owing to the greater liability of its being mistaken for some culinary article, and so becoming a poison to men and not to insects, I never use or recommend it—if mixed with water and put on to our trees in the form of a fine spray, is sure to kill this arch enemy of our most valued fruit. I have found that if a pound of the poison be mixed with 100 gallons of water and kept well mixed, it is still effective to kill the larvæ, as they seek to enter the apple. The watery mixture can be made in a barrel and drawn in a wagon through an orchard, when by use of a force pump and the cyclone nozzle, the poison is quickly, easily and economically applied to the bearing trees. It destroys not only the codling larvæ, but canker-worms, leaf-roller larvæ and various other caterpillars that seem especially to relish the young, tender apple foliage. The expense is very light, and the good results are very great. I find that one application, made two weeks after the blossoms fall, will usually thin out the insects almost to extinction. Some of our critical entomologists have argued that this will kill the first brood only; but if the first brood are all killed, where will the parent moths come from to generate a second brood? The truth is, even our winter fruit is usually almost freed from the destruction of this insect by the use of this remedy. Mr. Springer says there are three broods in California, which would make this remedy still more valuable there.

In applying the poison, I have always worked the force pump by hand, finding the Whitman Fountain Pump very excellent for treating a few trees, and one of the large force pumps made fast to the wagon, the best thing for a large orchard. In Western New York they improve my method by an attachment to the wagon wheel, which does the pumping.

Mr. Springer asks if in his State, where there is no rain, there would not be danger in such use of the arsenites.

If he has read my reports he will see that the wind soon scatters the poison. I found that young cabbages under shelter, or even in a closed room, soon lost the fine powder which was applied to the plants, as shown by analysis and by close examination with a high-power microscope. I have no doubt that apples, treated just after blossoming, would be free of all traces of the poison long before harvest. Having lived in California three years, I know well that though in the fruiting season of the apple there may be not a drop of rain, there are always refreshing breezes, which are often far more than gentle. Yet, in such an important matter I advise great caution. Let Mr. S. use the arsenites, and then get some good microscopist to make a careful examination a month after the poison is applied, and see if a grain of it is to be found on the fruit. Such a test is crucial, and I have not a shadow of doubt but that it will show that the poison has done its work and fled. This disappearance is not so surprising. If wall paper may part with the incorporated Paris-green, which furnishes the rich, beautiful green tints, so as to poison people, why should not the loose powder be swept from the apple?

What Others Say.

Sewage as Manure.—We learn from the *Journal d'Agriculture* that a German chemist has succeeded in extracting organic matter in solution from sewage by means of chemical precipitation, in such a way that it is obtained in a solid form for the purpose of being utilized as a manure with the rest of the residuum. The discovery has been successfully applied to the sewage of houses in Berlin. The sewage is allowed to pass through a tank in which, by means of cheap chemical ingredients, the manurial matter is separated from the water, leaving the latter to flow off clear, while the former is forced into an apparatus where it is converted into a dry powder. As the demand for fertilizers increases, fresh sources of them are being constantly discovered. The original discoveries of Liebig, Ville and Lawes and Gilbert with regard to ordinary commercial fertilizers, have of late been supplemented by the discoveries of German potash salts at Stassfurt, of phosphatic rock in South Carolina and of apatite in Canada; and should this new mode of utilizing sewage prove cheap and efficient, what a vast supply of fertility will be available in every inhabited part of the world.

Corn Culture.—B. P. Ware, speaking on corn culture before the Massachusetts Agriculture Society, said if the Pilgrim Fathers had not been fortunate enough to discover this golden grain the first Winter after they landed on our shores, the condition of this country at the present time would be doubtful. Corn can give us more grain per acre than any other cereal, and more fodder than any of the other grasses, and its influence on the prosperity and wealth of the United States is greater than that of any other cultivated plant. We have thousands of acres of plain, light land, producing less than a half ton of hay per acre annually, that could be profitably devoted to corn without interfering with the other operations of the farm. But we must adopt the newer methods of culture, and use the improved labor saving implements adapted to large fields. The speaker recommended plowing in the Fall, but he would cultivate thoroughly just before planting, to destroy weeds and fine the soil: 1000 pounds of suitable fertilizer applied annually will produce good crops of 50 bushels per acre, and two tons of fodder. He prefers to plant in drills 3½ feet apart with horse corn planter, dropping the kernels about five or six inches apart in the drills, or thick enough to allow an average of one stalk to each square foot on the whole surface. Before the corn comes up he drags the field with a smoothing drag of plank, having a two-inch strip of inch-board nailed underneath for a pulverizer. After the corn comes up he uses the Thomas harrow three times, at intervals of a few days, to kill the weeds, after which the cultivator or horse hoe, run two or three times between the rows, will do all the work of cultivation and leave nothing for the hand hoe.

RURAL'S LIFE NOTES.

The Gardener's Monthly expresses the opinion that the Berckmans Grape will have "a wild run, after another year, in the North." It is, the G. M. says, as hardy and as free-growing as the Clinton, one of its parents, while the quality is very little below the Delaware. Mr. Meehan regards it as one of the best of all of the late Dr. Wilie's hybrids.....

At every cattle convention held in the West this year the question of providing shelter for cattle has been brought up. There has never been but one decision in the matter. All are agreed that it pays to shelter stock, and yet a large proportion of cattle are shivering in the cold. Unfortunately, the owners of such cattle are not the men who attend conventions and intelligently discuss the question.....

Mr. C. S. Plumb, Assistant Director of the New York Experiment Station, says, in Country Home, that the Bessarabia Corn, largely advertised several years ago, is the same as the Common Maryland White. Several different kinds, however, are sold for Bessarabia. He also states that Blount's Prolific is the old Prolific of Tennessee. This surprises us. About the time that we distributed this corn among our subscribers, we wrote to Mr. Blunt (as he was then called) as to its origin. The reply was, "It is the result of science and cultivation," or words to that effect.....

Mr. Plumb finds White Novelty and White Zealand the same as White Russian Oats.....

He also finds Golden Drop, California Blue Stem, Lancaster, Red Amber, Scott and Tasmanian Wheats the same. Also Fultz, Finley and Heighe's Prolific. He also finds Silver Chaff and Treadwell the same—a surprise to us, though we do not remember ever to have raised the Treadwell as Treadwell.....

In allowing water to stand in the stable over-night during the Winter, Mr. C. S. Plumb has found that simply covering the pails with bagging or cloth of any kind, will prevent freezing in the coldest weather. He has kept water from freezing by this method, when if the water were exposed, it would freeze hard over the top, as well as at the sides of the pail. This he mentions in Our Country Home.....

Mr. Plumb advises every farmer to have vaseline on hand. He knows of nothing more healing and antiseptic for wounds, sores and inflammations.....

The Editor of the Phil. Weekly Press holds that Timothy should be added to either Blue Grass or Red-top—not that Timothy is good in itself as a lawn, or that a good lawn can be made of it alone, but because it gives an immediate effect.....

The N. Y. Tribune gives good advice when it says: "Cut down the garden to the smallest space consistent with the needs of the family. Then take *good care of it.*".....

An acre of onions, says Joseph Harris, in the Weekly Press, will afford hoeing and weeding enough to keep the boys and girls out of mischief—and money enough to lessen the cares and anxieties of the mother and father. Onions want rich land, but 750 pounds of nitrate of soda per acre, and 400 pounds of superphosphate will make any of our ordinary land richer, for the first crop of onions, than 75 tons of barn-yard manure. This is true, no doubt, as far as it goes. But how about the potash?.....

The best vine to cover an old stump or a low trellis is the Honeysuckle—preferably Hall's.....

Everywhere.

RURAL SPECIAL REPORTS.

Alabama.

Grand Bay, Mobile Co., April 3.—On March 15 we had a slight frost, and on the 27, 28 and 30 cold rains. Last three days sunny, but such vegetables as are up look very much as if Winter had the upper hand. Beans look sick; cucumbers killed; second plantings just coming up; a large proportion of the tomatoes set in field have vanished; corn three to four inches high, but not thrifty. I made first shipment of strawberries yesterday; last year I sent off the first lot April 7th and the year before on March 28th. Potatoes planted on Rural plan up and looking well. I was very much interested in reading the Rural's last Special on potatoes. Potatoes are raised very extensively in this country for spring shipment west and north. The great drawback, however, is the excessive railroad freight charges, so that unless they sell for rather high prices, a very small margin of profit is left for the farmer, and the same rule holds good for all sorts of vegetables grown here for distant markets, so that many growers have nearly or quite quit the business, or have turned their attention to such productions as will put a larger value in smaller bulk, like dairying and small fruits.

C. C. W.

Canada.

Belmont, N. S.—Times very dull. A warm Winter with very little snow. Farmers had hark work to get fire-wood and fencing. Potatoes, 90 cents per barrel; flour, $4.50 to $5.50; beef, $6 to $10; pork, $6.50; hay, $12 per ton; oats, 45 cents per bushel. L. DEA.

Illinois.

Pleasant Valley, Jo Daviess Co., April 8.—Although last season was very wet here,

still as the country is quite rough, our crops were not drowned out as they were in the flat, low parts of Ia. and Ill. But lots of low-lying meadows were overflowed by two of the biggest floods ever known here, ruining hay and making it high-priced now. Cattle looking well; but times have been hard on calves, as scours appear to be epizootic around here. Potatoes rotted badly last season; worth now 75 cents to $1. Acreage of both winter and spring wheat uncommonly light. Tobacco raisers rather discouraged by low prices—six to seven cents per pound. W. S.

Kansas.

PARSONS, Labette Co., April 5.—The world has heard from Parsons in the last few days, and nothing to its credit. The State Guards—eight companies—arrived here simultaneously on two branches of the Gulf Road, and are now quartered in the machine shops of the M. P. R. R. A year ago when the railroad company thought of making a second reduction of wages, farmers, merchants and professional men were in unison against the measure as there seemed no justice in it. To-day they are so much against the strikers that the writer has not heard a single justification of the strike, except from the strikers. On Saturday the first freight train, in just a month, moved southward and was followed by numerous trains during the day and night. The tracks in the city were lined on both sides by the Guards, and each moving engine had four to six Guards sitting on the caboose. The day was sleety and windy, and all the Knights one could see were waiting their turn to get at the paymaster. The company owed them for February, and also for five days in March. At noon 209 had been paid, but the company out of this number paid 95 in full, and "let them out," the remainder were paid as usual, for February, with the option of returning to work. Thus the company will rid itself of the leaders, and will probably resume operations in the shops ere long. The merchants hailed the arrival of the pay car, but on Saturday evening they were very blue. The payments made them for current supplies by the operatives were not more than one-tenth the usual amount. It was noticed, too, that the checks given by the company were being cashed by the banks, indicating, as the merchants say, a disposition to evade them. The outlook now is that the leaders will slide and that the military will be quartered upon us till complete order shall again take possession of our beautiful town. All the company has to fear are the guerilla attacks that may be made upon their tracks and bridges. Farmers have been interrupted by not being able to get seeds, but the weather has been too raw for the past two weeks to make much progress in planting. Three-fourths of the plowing is done. Oats are sown and some corn is planted. The web-worm's ravages resulted so badly last year on the corn crop that we had to bring corn on from the central portion of the State. S. B.

Ohio.

BLOOMVILLE, Seneca Co., April 7.—Wheat looks well on bottom lands; but on the clay uplands it is badly killed. Feed plentiful and stock of all kinds in good condition. Success to the RURAL! G. M. M.

Wisconsin.

LA FARGE, Vernon Co.—From the small Blush Potato I got three years ago, I have now enough for a full crop. Where other sorts rot, the Blush escapes injury. We cannot ask for a better variety, and I shall make it my standard crop. The mixed corn was cut in June by a hail-storm, which left only enough for trial next year. Flageolet Bean yielded well and ripened first of all I had. Last Fall I sowed two acres of Fultzo-Clawson Wheat—the best of all I have tested. The Garden Treasures were highly prized by the "fair" part of the family. J. W. S.

THE FARMER'S CLUB

ANSWERS TO CORRESPONDENTS.

[Every query must be accompanied by the name and address of the writer to insure attention. Before asking a question, please see if it is not answered in our advertising columns. Ask only a few questions at one time. Put questions on a separate piece of paper.]

GRUB-IN-THE-HEAD IN SHEEP.

G. W. H., Rochester, Mass.—1. What are the symptoms of grub-in-the-head in sheep? 2. What is the remedy? 3. At what season is the trouble greatest? 4. Is there any preventive?

ANSWERED BY F. L. KILBORNE, B. V. S.

1. Grub-in-the-head of sheep is due to the presence, in the nasal sinuses, of the larval form of a small bot or gad-fly—Œstrus ovis. The fly, which is rarely seen, is considerably smaller than the well known horse bot-fly—Œstrus equi—is of an ashen or grayish color, with the abdomen more or less marbled with yellow and white. There are no very marked symptoms except when there are quite a number of the grubs or larvæ present. They then cause much irritation with redness of the nasal mucous membrane, more or less white muco-purulent discharges from the nose, a falling away in flesh, dullness, giddiness or staggers, and rolling of the eyes. The larvæ are rarely present in sufficient numbers to cause death; but the loss in flesh and wool is often very considerable. 2. By trephining the bones of the face, on each side between the front of the eye and the median line of the face, so as to enter the sinus of each side (the head of a dead sheep can be easily examined to determine the exact locality for the trephining), the larvæ may be washed out with a gentle stream of tepid water, and the opening allowed to heal, like an ordinary wound. During the later part of Winter or early Spring the larvæ may sometimes be removed without a surgical operation, by confining the sheep in a warm building to entice the larvæ into the nose, and then introducing snuff or solutions of salt or tobacco into the nose to kill the larvæ or cause their expulsion by sneezing. 3. During the Winter and Spring. The embryos that are to become the larvæ are deposited by the bot-fly about the margin of the nostrils of the sheep in late Summer. The embryos then crawl up into the sinuses where they attach themselves, and remain during the following Winter and Spring until the larval development is completed. In early Summer the now fully developed larvæ make their way out through the nose, drop to the ground and crawl into the soil where they pass into the pupa state, and in a few weeks emerge as perfect flies to torment the sheep while depositing the embryos of that season. 4. An excellent method for preventing the attacks of the flies is to feed the sheep salt from two to three-inch augur holes in logs or timbers, the borders of the holes being kept smeared with tar so that the noses of the sheep get a dressing of tar whenever they eat the salt. Another method is to turn a deep-furrow across the sheep pasture in various directions, in which the sheep may stand with their noses at the bottom of the furrow when attacked. By watching the sheep during late Summer and Autumn, they may be seen running wildly about, trying to bury their nostrils in the dust, or collecting in groups with their heads to the ground to avoid the attack of the flies. Then is the time to take measures to aid the sheep in preventing the attack and deposition of the embryos by the flies.

ROOTS WITH OTHER FEED FOR MILCH COWS.

C. & L. G., Waynesboro, Pa.—From each of 15 cows we are making an average of 4½ pounds of butter per week. Their feed daily is 6½ quarts of half wheat bran and half corn chop. Timothy, clover hay and corn fodder are fed dry all they will eat without any waste. Average price of butter 25 cents per pound. We have favorable conditions, viz., strong bottom soil (alluvial), and can irrigate at pleasure for growing beets. In preparing for next Winter, will it pay us to grow beets or mangels to provide additional daily rations? Why will it pay?

ANSWERED BY HENRY STEWART.

The results derived from the use of mixed foods are relative and reflex; that is, one acts upon another and so produces better effects than either alone. The use of beets or mangels in the Winter, with hay and mixed corn meal and bran, increases the effect of the latter upon the milk product, and thus every dairyman should test mixtures of food to learn by experience the gain that may be made. No precise law can be laid down, because animals differ very considerably; but it is a fact that mangels or sugar beets, or even apples in the season, fed with the meal, increase the product of butter by adding to the quantity of the milk. This is the most important thing to know, as a food that is apparently deficient in fat, and supposed to have no direct influence upon the product of butter, may yet, by increasing the flow of milk, actually stimulate the secretion of fat and so produce more butter than the food given with it would have done without it. This is one of the surprising reflex results of mixed foods, which are ascertained only by direct experiments, and cannot be predicated by a mere knowledge of chemical analyses of food substances. A great number of experiments made for some years past have, however, made this very clear, and hence the use of mangels or sugar beets have been found exceedingly valuable and profitable. One peck per day, fed at noon, cut fine and mixed with two quarts of mixed feed, as

(*Continued on page 270.*)

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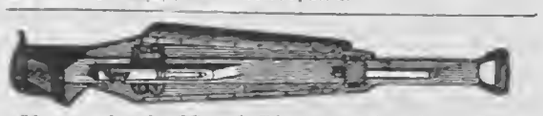

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(*Continued from page* 269.)

finely ground corn meal and coarse middlings, is a proper ration, and in the apple season the same quantity of ripe apples (no other kind will do) is equally useful. It will undoubtedly pay. Another fact might be noted in this connection, which is pertinent, viz., that the cutting of hay or fodder, wetting it and mixing the meal with it, has always been found to add to the product of milk and butter both; the reason in both cases being that the prepared or mixed food is better eaten, and being more palatable, is more thoroughly salivated and is consequently better digested: the salivary fluid having quite active solvent and digestive properties.

MANURING "NEW LAND."

J. B., Pilot, Neb.—Beyond the fact that you live in a "new country," where manure is not used by farmers who think their land rich enough without it, we know nothing about your farm, its soil, location or the crops you wish to raise. It is certain, however, that every crop removed from the farm carries with it more or less of the fertility of the land. Some, of course, remove more than others of all kinds of plant food, and some more than others of particular kinds, some being specially exhaustive of potash, others of phosphoric acid, etc. The cultivation given will also have considerable effect in the same direction. It is only a question of time, crops and culture, therefore, when some one or all of the three great essential elements of plant growth—nitrogen, phosphoric acid and potash—will be exhausted or reduced in quantity so as to be insufficient for profitable crop production. It may be five or it may be 50 years before this condition is reached, but reached it will be, unless an equivalent for the fertility removed shall be returned to the soil. If this is partly done from the outset, the date of exhaustion will be proportionately deferred; if it is wholly done, it will never arrive. It is more than doubtful whether "virgin soil" is naturally so rich already, that artificial enrichment would not increase crops grown on it. Applying manure to such land therefore, is sure to defer or prevent the era of infertility, and pretty sure to increase the production from the outset. It would be well to get the manure on the land as soon as possible, however, and at the lowest expense. Whether the outlay for the extra labor will be repaid, will depend on the cost of labor and other local conditions; not knowing these, we can state only general principles. Some object that it is not economical to feed a man before he is hungry, or the soil before it needs plant-food; but abundant food one day will not prevent a man from being hungry next day, but will prevent the soil from being hungry next year. It is seldom foolish for a man starting in farming, or for a farmer just starting in a new section to follow the customs of the most successful of his neighbors.

SOILING CROPS.

W. S., Beanseitle, Can.—What crops should I sow for half soiling milch cows next Summer? Soil a clay loam with some gravel, most of it plowed the first time last Fall. I also plowed some alluvial land on which the washings from the hills have settled for a foot or more—soil very rich-looking. What should I sow on each. In a late RURAL Prof. Edwards says immature corn-stalks are very objectionable for milch cows whether fed green, cured or as silage; is he correct?

ANS.—Evidently our friend has neither a field of winter rye nor of clover, as the regular dairy farmer should have. This being the case, we see no possible way to tide him over to the time when he can utilize a soiling crop, except by feeding a little hay, well-moistened, and mixed with a liberal feed of bran and oatmeal, till the first available soiling crop can be grown. This would be oats or millet, or both. On a farm in the condition he describes, fodder corn would be his next available soiling crop; and as to the time of feeding it, Prof. Edwards is good authority, as it is probable that the feeding of immature corn-stalks either from the field, or after having been siloed, has thrown more discredit on soiling and the use of silage, than all other causes combined. The suggestion that bran and oatmeal be liberally used to piece out short, or even very short pastures, need appall no one who is in the dairy business; for it is one among the latter-day truths that there is a manurial as well as a feeding value in them, that is equal, or very nearly so, to their cost. The investment is returned at once, through the milk and butter; and later on, the farm has the manurial deposit to draw from. Given the cows, and the limited pasture our correspondent speaks of, he need have no hesitation in thus feeding his cows till he has his farm in correct rotation; that is, in corn, either field or ensilage, winter-rye, oats or barley, and clover. We judge the land he describes is all right for almost any crop his cows would consume, that he can put upon it, but it is probable that it would be well to sow oats on his alluvial soil, and get it seeded well to clover for his principal soiling crop for 1887, till his corn of that year is ready.

GRUBS ON THE BACKS OF CATTLE.

S. J. D., Olean, N. Y.—"Grubs on the backs of cattle" are the larvæ of the cattle gad-fly which lays its eggs on the backs of cattle about August when the flies abound. They abound also less numerously during all the summer months, as is indicated by the sight of cattle galloping furiously about the pasture with up-lifted tails, evidently in great fear and excitement. The fly pierces the skin and deposits its egg in the orifice. Soon a small swelling appears which grows larger as time passes. The tumors, sometimes the size of a walnut, have small openings through which pus is discharged immediately before the larvæ are ready for dismissal. The grubs usually escape from the tumors in June and fall to the ground into which they enter to undergo their proper changes. Where not very numerous they do not call for special treatment, as they do no permanent injury, though they worry the affected animals. They can be readily dislodged by pressure of the fingers and a pair of tweezers, and on falling to the ground, should be killed. They are generally called "warbles," "wormils," "wormils," or "wourmils" in England where country people in different sections use a multitude of dialects so different from each other and from the language of educated people that it is often no easy matter for an "outsider" to even guess correctly the drift of what they are saying.

FERTILIZERS, ETC.

M. H., Askport, N. Y.—1. Yes, sulphate of copper is bluestone or blue vitriol. 2. Copperas is sulphate of iron or green vitriol. Formerly it was synonymous with vitriol and included green, blue and white vitriols, or the sulphates of iron, copper and zinc. 2. Kainit is the crude sulphate of potash from the Stassfurt mines in Germany. It contains about 12.5 per cent. of actual potash, equivalent to 22¼ to 23¼ per cent. of sulphate. Besides this, it contains 50 per cent. of chloride of sodium or common salt. On some soils it produces good effects on crops: but unless it can be placed on the farm cheap, it is better to substitute sulphate or muriate of potash. 3. Muriate of potash is somewhat like common salt, and is a combination of potash with muriatic acid. It also comes from the Stassfurt mines where it is so mixed with soda, magnesia, sulphur, etc., that in preparing it for use as a fertilizer 6¼ tons of raw material are required to make one ton of muriate containing 80 per cent. of pure muriate of potash, or 50 to 54 per cent. of actual potash. 4. "Where ashes cannot be had," muriate of potash is probably the cheapest form in which potash can be obtained. 5. We cannot see what manurial effect either lime or salt would have upon potatoes, beyond, perhaps, rendering more available some of the fertility already in the soil.

CHRONIC COUGH IN CALVES.

P., Cornwall, Vt.—My calves have every day had a husky cough for several weeks, with a swelling or bunch under the chops, a dry, warty appearance of the skin in places, especially at the joints. The skin inside the knee has cracked and bled a little in one or two places; what's the matter?

ANSWERED BY F. L. KILBORNE, B. V. S.

We suspect the calves have a chronic cough and perhaps sore throat, due to exposure during the Winter. Take one part of solid extract of belladonna and four parts of pulverized saltpeter, mix with sirup or honey, to form a thick paste. For yearlings a lump as large as a butternut three or four times daily, to be placed upon the back teeth and slowly swallowed as dissolved. Steam the nostrils every evening by feeding a hot bran mash, made by pouring boiling water on to two or three quarts of wheat bran, and let the animal eat it from a bucket while cooling. If the cough and swelling do not improve in a week or two, apply a mild blister, of strong ammonia one part, and sweet oil two parts, over the region of the throat. Any costiveness should be relieved by one-half-pint doses of castor oil.

ABOUT PLUMS.

T. O. D., Spencerville, Md.—1. The best plums for your section are the improved native varieties, such as Wildgoose, Newman, Quaker, De Soto, Forest Garden, Moreman, Golden Beauty, Wayland, etc. By planting several kinds of this class in close proximity to each other, an annual, profitable crop is as certain as, if not more so than, with any other of the tree fruits. Most of the native varieties are proterandrous—that is, the stamens are precocious in the performance of their natural duties, and shed the pollen too soon for fertilization. This defect is remedied by having different varieties planted together. 2. No. Plum is not as good as peach stock. The latter is emphatically the best on which to propagate any of the native varieties, and for any of the European kinds that will succeed on it, that are intended for planting in your section. Some of the European class, however, do not unite solidly with the peach, such as Jefferson, Washington, Lombard, etc; but Richland, Coe's Golden Drop, Pond's Seedling and many others succeed as well on peach as on any other stock; but for profit none of this class is worth consideration.

CUT IN MARE'S KNEE.

H. S. C., Gaines, Pa.—1. My mare slipped on the ice and cut a three-inch gash on her fore-leg just below the knee-cap; simple remedies do not make it heal; what will?

ANS.—The edges of the wound should have been brought accurately together and stitched with white silk, then with perfect rest of the limb "simple remedies" should have effected a cure in a few days. It is necessary that the animal should be kept quiet to prevent movement of the lips of the wound by the action of the knee-joint. This movement may prevent healing indefinitely. It may even be necessary to apply a splint to the limb for a few days to keep the knee-joint immovable. The wound should be kept clean with tepid castile soap-suds and dressed with carbolated vaseline or other simple ointment. If the wound has become unhealthy, carefully wash it out with a weak solution of zinc chloride, one-half dram in a quart of water.

EPILEPSY IN A HORSE.

J. A. S., Denver, Col.— My 10-year-old horse eats, works and looks well, but never lies down in the stable. When standing his lips and head twitch nervously, and he has fits—usually in the stable. He falls down and is liable to go right through the side of the building, usually cutting himself badly. Although bled freely, he recently had a bad fit while in harness; what ails him?

ANS.—The animal evidently has epileptic fits, due to some unknown source of irritation to the nerve centers. It would be necessary to have the animal under our immediate care for a length of time to ascertain, if possible, the cause of the irritation before we could tell what to do for him. In many cases very little or nothing can be done, beyond avoiding excitement, and attending to the general health of the animal. The diet should be laxative and easily digestible, and the bowels should be kept freely open with purgatives if necessary.

SOME CROPS FOR SOILING.

N. P. G., West Newton, Mass.—1. Oats for soiling should have strong, rich land, well prepared by careful plowing. Four bushels of the heaviest and soundest seed to be had will be none too much. Sow on the furrow before harrowing, and if peas are to be grown with the oats, sow two bushels after the oats are sown, and before harrowing. The crop should be got in as soon as possible. It is in the best condition for feeding when oats are in the milk. The common Canada pea is the best for this use. 2. If the land can be cleared and got ready early in July, a crop of Hungarian can be grown after the oats and peas. Fodder corn (some early sweet) will make a good growth if there are no frosts in September and the season is otherwise favorable. For the best results with these second crops, sow 400 pounds per acre of a good complete fertilizer with the seed.

KEEPING ANTS OUT OF BEE-HIVES.

E. M. C., Pittsburg, Kans.—Usually ants cluster about hives in Spring for warmth, seldom doing any harm. They may be brushed away or poisoned with Paris-green or alcohol applied to the places they frequent. If the poison is sweetened to attract the ants, then to prevent the possibility that the bees might eat some of it, it would be best to put the sweet poisonous mixture in a box with a hole large enough for the ants, but two small for the bees. Or the ants' nests can be hunted up, and pierced with a crowbar. Then if an ounce of bisulphide of carbon is put in the hole and this is quickly plugged up, the liquid will kill all the ants, Of course, this should be done when all the ants are in the nests.

INDIGESTION IN CALVES.

R. K. P., West Hartford, Mo.—What caused the death of several calves in fine condition? They were well sheltered and watered and had all the shelled corn they would eat with good Timothy hay. First they lost appetite, refused to drink, became constipated and tender about the kidneys: yet they moved about freely, didn't throw up their food, had no fever, and lived for nine days after they were attacked. A post-mortem showed food undigested and the stomach full of water.

ANS.—The calves were probably killed by eating too much corn. The remedy is very simple. Feed less corn, which should be supplemented in part by wheat bran, middlings, or oil meal. For those that are costive, give one-fourth pint of castor oil.

FEED FOR BUTTER.

G. W. S., Parishville, N. Y.—1. An excellent feed for cows for a butter dairy is made by mixing 300 pounds of fine corn meal, 200 pounds of fine bran or coarse middlings, and 100 pounds of cotton-seed meal or new-process linseed meal. Of this, eight pounds a day may be given mornings and nights in a feed of five pounds of hay cut fine, wetted and mixed with three pounds of the meal, and two pounds of the meal given dry at noon with five pounds of long hay. A feed of a peck of mangels, cut fine and mixed with the noon meal, is very useful.

Miscellaneous.

M. H. K., Salisbury, Vt.—1. What is the percentage of potash and soda in corn-cob ashes? 2. Is the Japan Chestnut hardy enough for Central Vermont? 3. Will the Pocklington and Empire State Grapes ripen here? 4. From the seed-ball which produced a single stalk, I raised, last season, 26 potatoes that weighed 3½ pounds, the three largest weighing a pound; was this an extra-large yield?

ANS.—1. Air-dry cobs give five per cent. of ash, of which 2.4 per cent. is phosphate and and 1.10 of one per cent. soda. 2. We don't know, but are a little inclined to doubt it. 3. The Empire State may—doubtful as to the Pocklington. 4. If the plants were one foot apart in drills and the drills three feet apart, this would give 14,520 plants to the acre. Your yield would, therefore, be 50,820 pounds, which, at 60 pounds to the bushel, would make 847 bushels to the acre.

L. W., Ametia, Ohio.—1. Tomatoes are inclined to root here on heavy oak soil, when stable manure is used in the hill; when it is scarce what fertilizer should be used instead of or with it for tomatoes? 2. What's the best fertilizer for corn and strawberries on the same soil?

ANS.—1. Unless the soil is very poor we do not approve of using much manure for tomatoes. It induces much vine and little fruit. Hen manure is good; ashes and bone are excellent. 2. Not knowing the needs of your soil, we can only recommend a complete fertilizer or, in other words, one that contains potash, phosphate and nitrogen—blood, ashes or sulphate of potash and bone. Send for the circulars of trusty fertilizer manufacturers.

W. R. M., Hume, N. Y.—For several months the eyes of a valuable mare have been sometimes swollen and weak, and then they have discharged water freely. At intervals of several days they are in excellent condition; but soon the trouble sets in again. What should be done?

ANS.—The animal is evidently suffering from repeated attacks of periodic ophthalmia. For treatment of the disease see the F.C. for March 27. If the animal is very valuable, we suggest you consult a competent veterinarian, since a cure may be possible.

J. C. S., Bath, N. Y.—A callus has formed where "scratches" healed on the back of the ankle below the fetlock of a young horse; the ankle is somewhat enlarged and the callus sometimes cracks; how should it be treated?

ANS.—Whenever it cracks keep the parts clean and apply a tar dressing daily. The application of tincture of iodine every four or five days for a few weeks to the swelling and callus may partially or entirely remove them. This failing, the callus can best be removed with the knife, if at all.

W. N. J., Montrose, Cal.—My hogs stagger as they walk, sometimes falling over behind while keeping on their fore legs. They fall off very fast, and all have sore, running eyes. Some of them have also bad fits; what is the trouble?

ANS.—Probably swine plague or hog cholera. Read the article on this subject in the F. C. of Jan. 23.

M. E. P. W., Jersey, Ohio.—Judging from the specimens at the Rural Grounds, the Russian Mulberry strikes us favorably as a summer wind-break. How well it will bear cutting back to adapt it as a hedge plant, we can not say. It certainly will not turn animals of any kind.

G. H. C., Gravelly Valley, Cal.—We know of no way of preventing gophers and moles from injuring the roots of plants except by trapping or poisoning.

P. S. R., Flatbrookville, N. J.—Consult a competent veterinary surgeon. Such cases cannot be satisfactorily treated through brief correspondence.

J. R., Lovingston, Vt.—Nothing but cultivation will eradicate garlic or wild onions?

Emil Anderson.—We doubt it.

DISCUSSION.

"WARBLES" IN CATTLE.

E. B. C., PARMA, Mich.—Whenever warbles have been removed from the backs of cattle, I have never known the same animals or even

their calves to be again molested, even when running with hundreds of "warbly" cattle. I used to remove the pests by squeezing them up about one-sixteenth of an inch with one hand, and pulling them out (tweezer fashion) with the thumb and finger nail of the other, when a little more than half grown. The puzzle to me is how do they propagate.

R. N.-Y.—As warbles are the larvæ, or grubs, of the cattle gad-fly, and this pest is quite "numerous" each Summer, we really cannot see how animals that have been attacked once can possess immunity from attacks thereafter, and still less how their calves can be equally fortunate. Even if the flies that had found a resting place as larvæ in the back of any particular animal were mindful and considerate enough not to plague it or its offspring, for the sake of "auld lang syne," others would have no such reason for grateful recollection. An attack of small-pox, whooping cough, scarlatina, or measles, it is true, renders the subject "proof" against all subsequent infection, probably by effecting such changes in some sensitive part or property of the human system as either to remove it altogether or render it callous or unsusceptible to future forms of infection, in the shape of either spores, bacilli or other scientific terrors; but this is the case only in infectious and contagious diseases, and "warbles" have not hitherto been placed in this category. As to their mode of propagation, see "Grubs in the Backs of Cattle," elsewhere in this department.

YELLOWS IN THE PEACH.

ELI MINCH, SHILOH, N. J.—A late RURAL quotes me as saying that I do "not believe that seeds from trees having the yellows will produce unhealthy trees," and that from such seeds I agree to grow fine healthy seedlings; also that I deem the man who contends that the "yellows" is a contagious disease, a dangerous character. The quotation is correct. I will do what I agree to do as therein stated. There is no trouble if the soil and climate are favorable—that is, if the latter is not too severe, and the former not too wet for growing healthy peach seedlings from seeds of trees affected with the yellows. The use of sufficient potash and bone will grow healthy trees in all cases, as I know from a thorough trial in growing the peach. So much is said about the contagious nature of the yellows, without any foundation, and so many are scared thereby so that they are deterred from growing peaches, and thus rob themselves of one of the most delicious fruits, that I must contend that those who maintain the contagiousness of the yellows are not only mistaken, but dangerous by their teachings. After a vast deal of trouble with the yellows, practical experience has taught me that by the use of proper fertilizers there is no trouble in growing peaches from the seeds of diseased trees, and I guarantee to grow healthy trees from seeds from the fruit of trees affected with the yellows.

T. T. L., SOUTH HAVEN, Mich.—On page 220, Mr. Minch is made to say, "he does not believe that peach seeds, from trees having the yellows, will produce unhealthy trees;" and that "he deems the man who contends that it is a contagious disease a dangerous character." I will not pretend to know what Mr. Minch calls "yellows;" but, as it is known among Michigan orchardists, the man who, in the face of our experiences with it, would question its contagious character, would be considered proof against the evidence of facts. My observation has shown that seeds of peach trees badly diseased with yellows, rarely, if ever, contain germs; and of course will not grow. A few years since, I saved a bushel or more of seed from what appeared to be a healthy tree. The seed was planted the following Spring, and made but feeble growth, with abundant indications of yellows; and during the same season the parent tree produced a crop of fruit unmistakably diseased. This satisfied me that the disease had been latent in the tree the previous season, and had imparted the contagion to the seed of the previous year, but failed of outward manifestation till the following year.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING April 17, 1886.

C. P.—T. T. L.—J. M. Moss, thanks; glad to hear from you again.—W. K.—F. W. W., thanks.—T. B. Z.—N. B. B.—J. W. G.—A. A. H.—W. W. G.—C. S. C., thanks.—J. S. B.—J. H.—F. M. H.—J. W. K.—P. B.—L. M. L., many thanks.—G. M. W.—W. S. C.—L. G.—N. P. W., thanks.—E. G. B.—A. C.—A. S.—W. M., thanks.—J. B. McC.—S. S. C.—W. E. P.—C. C. W., thanks—G. W.—B. A. K.—E. J. N.—R. M. A.—W. H. M.—E. L. G.—G. M. M.—W. D. S.—R. S. S.—C. S. C.—G. P.—J. B.—G. W. D., thanks.—B. B.—J. W. F.—J. R.—J. D. S.—H. H.—W. M., thanks.—T. T. L.—H. S.—A. R.—T. H. J., thanks.—S. & T.—E. H. U. & Bro.—T. H. H.—L. M. M.—J. S.—A. C. K., thanks.—H. S.—H. C. C.—M. P. W.—S. M. S.—E. E. S.—J. H. H.—T. W.—A. A.—W. A. B.—A. G. A.—F. L. K.—P. M. G.—M. O. C. A.—A. P. C.—T. H. H.—H. M. E.—W. R. S.—P. H. J.—M. J. H.—A. C. S.—P. H. J.—E. H. U.—A. H. R.—E. J. B. E. C. B.—F. S. W.—T. T. L.—P. B. M.—E. B.—W. A. B.—J. H. V. N.—J. B. D.—R. W. W., thanks.—J. S. H.—H. W. V. N., Johnson Grass is not the thing.—A. W. H.—A. G. C.—S. W. H.—D. T. G.—W. F. B.—J. D. S.—H. S. B.

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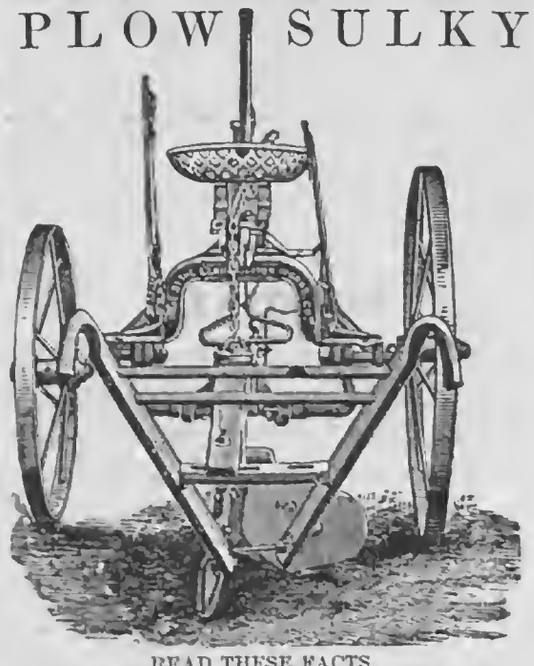

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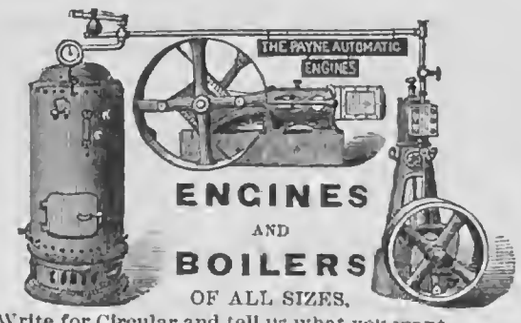

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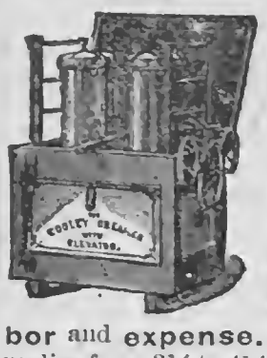

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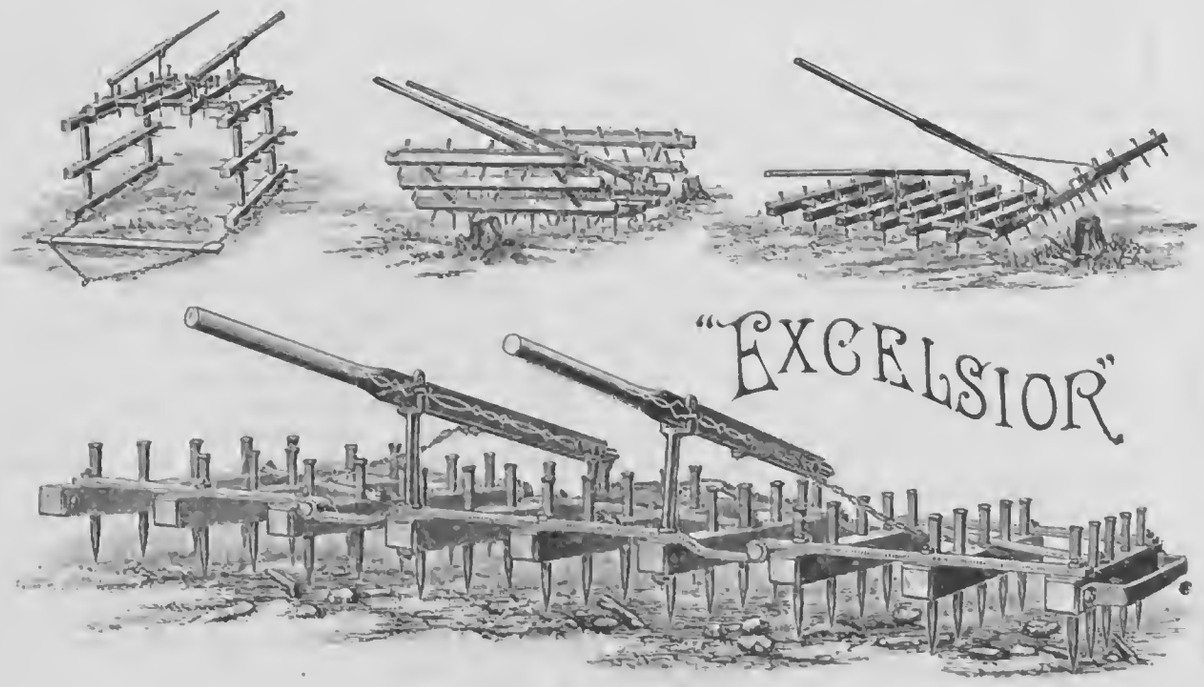

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J. S. WOODWARD, Associate.

Address
THE RURAL NEW-YORKER,
No. 34 Park Row, New York.

SATURDAY, APRIL, 24, 1886.

Subscribers of the RURAL *need never take the trouble to write us to "stop" the paper. It is invariably discontinued at the expiration of the subscription term, except by oversight, in which case it is our loss.*

If the number on your address label is 1891, your subscription expires with this number; if 1892, next week; 1893, in two weeks, etc.

If any of our Canada subscribers have not received the seed distribution, please notify us at once.

Thos. H. Jolliffe, of Natick, Mass., writes us: "The Japan Chestnut stood a temperature of 22° below zero this Winter, with only an inch or two of the tips injured."

The Poultry Special will be issued a a few days after May 1st. Many of our friends are showing a deep interest in the subject, and the Number promises to be as valuable as any of the Rural Specials.

If any subscriber of the RURAL NEW-YORKER *has not received the paper regularly, he will confer a favor by notifying us. We are anxious to extend the time far enough to make up for all mistakes or neglects.*

In the course of a year or so or more, we have little doubt that our contemporaries will take up the advocacy of the Japan Chestnut. We have certainly done our share during the present season—a share that will be forgotten by the many, but remembered by the few, and gratefully remembered, too, as we confidently believe.

Mrs. A. E. M. Carman, the wife and constant encourager and helpmate of the Editor of the R.N.-Y., in all of his work, will hereafter assume entire charge of the Domestic Economy Department. She will gladly welcome appropriate notes and articles from our lady readers.

Tornado-swept St. Cloud and Sauk Rapids, Minnesota, ask for help from the generous benevolence of the country. Both are in a comparatively newly settled section. The agriculture of the surrounding country afforded support to both before their misfortune; let the agriculture of the whole nation afford them help in their terrible affliction. The aggregate of many small contributions would make a generous sum. The mayors of both towns will make the best use of donations.

The first National Convention of Woolgrowers held the other day at St. Louis, had for its principal object the organization of the wool-growers of the country, so as to enable them in the future to influence national legislation with a view to protecting their industry against foreign competition. Resolutions were unanimously adopted urging the restoration of the tariff of 1867 or its equivalent, and denouncing the Morrison-Hewitt bill lately reported by the Ways and Means Committee of Congress, admitting foreign wool free of duty.

Twelve years ago two companion Hemlock trees were planted at the Rural Grounds. Both were injured the second year afterwards and cut back, one of them more than the other. Both are now beautiful, shapely trees. The one that was cut back the most is now a foot taller than the other. It is a pity that the effect of judicious pruning or disbudding evergreen trees while young is not better understood. In this way the White Pine may be made to assume any shape and to clothe itself with its lithe foliage as may be desired.

From year to year one's estimate of the beauty and value of trees changes. If we were asked to-day which of our evergreen trees we most value, we should at once answer Abies Alcocquiana. Our only tree was planted 12 years ago, and is now about 12 feet high. More graceful, less rigid than the Norway, it never has been injured in the least by sun or frost. One of its charms is the color of its leaves. Underneath they are covered with a gray or blue bloom, like the skin of a grape, while they are green above. The two colors blend so as to give a changeable effect that is as distinct as it is pleasing to the eye.

Beginning March 19, and finishing April 2d, we have sown short rows of the following kinds of oats. The older kinds have often been sown before, but for the purpose of comparison, it is necessary to have them side by side:—Welcome, American Banner, Badger Queen, Virginia Winter, Clydesdale (of this we have four acres), Hopetown, Russian White, American Beauty, Race Horse, White Belgian, White Schœnen, Triumph, Probsteier, Yankee Prolific, Improved Swiss, Improved Challenge, Dakota Chieftian, and half a dozen supposed distinct varieties without names. Several of those mentioned the Rural has already classed as the same. All of the above are high enough to mark the drills at a distance.

NOTICE.

THE PRESENTS

FOR SUBSCRIBERS who shall have sent us clubs will be positively awarded May 10th. We think that a pleasant surprise awaits them.

The most senseless "boom" is that which certain speculators are trying to work up about Alaska. Don't believe them! Because potatoes grew to a large size in a garden at Sitka and a few Alaskan hens did double duty, is no reason why a poor man should go there. You can raise larger potatoes and more productive hens within a dozen miles of where you now live. The mining interests of Alaska may develop, but such development will require vast capital. As a summer resort the country will be a success; as a farming community, never. Rural readers who have read Mrs. Fisher's articles know enough to keep away from Alaska. Turn yourself into an emigrant only as a last resort. Be contented and do your best on the old farm. You cannot imagine how much sorrow it will cost you to pull the old friends, old memories and old associations up by the roots. Make the best of what you have.

A mild, June day with scarcely wind enough to stir the leaves. The soil was moderately dry. We are speaking of April 14th, when, from seven in the morning until five in the evening, we (three of us) planted 30 plots of the same kind of potato, each with a different fertilizer or different combinations. It is, in part, a repetition of the series of experiments made two years ago, with important additions. The plots are in the same field upon a different part that has received neither fertilizer nor manure in many years, though it has been cropped every year. The stillness of the air and the pleasant day enabled us to distribute the fertilizers and to do the entire work in a most satisfactory way. A second series of experiments will be started in a week or so in the same impoverished field.

For the first time since the beginning of the present agitation about the tariff on wool, in 1882, the House Ways and Means Committee are distinctly divided on the question, the majority, headed by Morrison of Illinois, and Hewitt of New York, both Democrats, urging the placeing of wool on the free list, and the minority, headed by McKinley, of Ohio, and Reed of Maine, both Republicans, declaring in favor of a restoration of the tariff of 1867. The minority report well says that the arrangement of the free list is peculiarly an assault on the agricultural interests of the country, as out of 4,000 articles in the tariff, the leading products of agriculture are singled out for injury or ruin by unrestricted competition from abroad. Wool has been on the dutiable list since 1824; most of the other articles on it have been placed there since the beginning of the late war; yet it is now proposed to remove therefrom what over a half a century's experience has demonstrated should be there, and to allow other things to remain on it, though placed there avowedly to meet the temporary demands of war. The manufacturers of the country are beginning to realize that in removing "protection" from the agriculture of the nation, there is a great and growing danger that "protection" may, ere long, be also removed from its manufactures. If the farmer is to enjoy none of the advantages of the tariff, why should he suffer from all its disadvantages? The farmers' votes are decisive in tariff legislation, if once the farmers can combine on any particular policy.

TROUBLE IN THE BARBED-WIRE FENCE MONOPOLY.

Probably the most grasping and oppressive monopoly that now vexes the farmers and stockmen of the country is the Washburn & Moen Company. For years it has been buying up all the patents on barbed-wire fencing until now it controls over 100, and insists on a "broad claim" on the manufacture of every rod of barbed-wire fence made in the country. Successive suits at law and contests with makers have greatly reduced its extortions in the form of "royalties;" but it still exacts 15 cents per 100 pounds from all other manufacturers. Joliet, Ill., is the chief center of manufacture, most of the large and a large proportion of the small licensees being located there, and the annual "royalty" these have to pay amounts to from $250,000 to $300,000. The arch-monopolist is the most extensive manufacturer, and stringently insists that all the wire must be sold at a uniform price. The business is exceptionally dull just now. In competing for the unusually small demand, wholesale cutting of prices is charged. A telegram from Joliet on Monday says Washburn & Moen threaten "to paralyze the sale and monopolize the manufacture of the product on account of alleged cutting of prices, scalping and moonshining of the licensees." The latter claim that this threat is only a pretext or excuse for cutting by the patent holders who desire to monopolize in their own shops the whole barbed-wire fence business, and fleece the licensees. The cost of plain wire, these say, is $3.16 per 100 pounds; cost of barbing, 40 cents; royalty, 15 cents; total, $3.71. They maintain, however, that Washburn so controls the manufacture of plain wire that from the margin on that they have to pay 66 cents per 100 pounds to him. They are reported as threatening "to pool their product, refuse to pay royalty, manufacture their own plain wire, put 2½ cents per 100 pounds into a litigation fund, and fight to the bitter end." We hope they will. When a certain class disagree, honest men are likely to get their rights.

SPECIAL.

Those who, having applied for the Rural's present seed distribution prior to April 15th, have not yet received it, will kindly notify us by postal at once.

BOGUS BUTTER IN CONGRESS.

A fortnight ago the Rural, in speaking of the number of anti-"oleo" bills before Congress, said that had the introducers consulted together beforehand, and agreed upon a single bill combining the best features of all, it would have been better for the dairymen of the country. The House Committee on Agriculture has come to the same conclusion; for last Tuesday it appointed a Sub-Committee, consisting of Hatch, of Missouri; Green, of North Carolina; and White, of Minnesota, to draw a new bill "to regulate the sale of oleomargarine, butterine and other imitations of dairy butter." It is intended to combine in it the best points in all the other bills.

What is wanted is a bill that, first of all, cannot possibly be upset, in whole or in part, by the United States Supreme Court; for it is certain to be ultimately subjected to the decision of that tribunal of final arbitrament. Those interested in the manufacture and sale of bogus butter have too much at stake not to contest to the bitter end any form of legislation which shall discriminate against or in any way hamper or regulate their business. The manufacturers alone own to a yearly profit of $5,000,000; and the aggregate profits of those who sell the concoctions for what they are or as genuine dairy products, vastly exceed that amount.

Already they have a powerful lobby in Washington, fighting in their behalf. Special care should be taken to prevent any of these in the guise of a friend of the dairymen or an enemy of the oleo-men, from treacherously securing the insertion of any provision which might upset or endanger the validity of the Act. The National Government has a right to levy a general tax for revenue purposes on any line of manufacture. It taxes whiskey; why shouldn't it tax all imitations of, or substitutes for, dairy products? A tax of ten cents a pound would, it is thought by those thoroughly acquainted with both the dairy and "oleo" business, bring the cost of bogus butter up to that of the poorer makes of genuine butter, and while leaving a fair margin of profit to the manufacturers and retailers, take away from both the alluring temptation of palming off on the public the false for the real.

It should also be provided that all packages containing the goods must be plainly marked with large-sized letters indicating the nature of the contents; and that they must be kept within sight of purchasers until the contents of each package have been disposed of. Is there anything in the Constitution of the United States which forbids legislation prescribing a particular color for any particular line of products? If not, it should be provided that bogus butter should all be colored of some particular tint; if there is any doubt on the constitutionality of such legislation, it would be imprudent to endanger the Act by insisting on it. Provisions should be made for the stringent enforcement of the law; and to this end a part of each fine for any violation thereof, should go to the informer. Something of this kind we consider essential to the best results from any anti-oleo legislation. Officials may be bribed to neglect their duty or to shut their eyes to offences; but no swindling dealer or manufacturer is likely to run the risk of detection by the multitudinous and ubiquitous informer, whose interest in the results will make him press for a trial and devise the best means of securing a conviction.

The researches of the Department of Agriculture with regard to the anti-oleo legislation of the various States and the decisions of different Courts on various phases of it, should be an aid to the Sub-Committee in framing a law which, while affording adequate protection to the producers and consumers of genuine dairy goods, will not be unjust towards the manufacturers of, and dealers in, any healthful product which may honestly and openly compete therewith.

BREVITIES.

Plant the Red-flowering Horse-chestnut; the White Double-flowering Horse-chestnut. Plant the Purple Beech, Schwerdler's Maple.

Referring to our first-page cut of the Cayuga Grape, it may be said that a single vine was received from H. S. Anderson, of Union Springs, N. Y., May 30, 1885. It is a seedling of the Eumelan we believe. The vine has made a fair growth.

A farmer in Orange County, New York, has been prosecuted by Dairy Commissioner Brown for selling adulterated milk, and fined $100. Four others charged with the same offence, settled by paying $100 apiece. Excellent! But how many sellers of bogus butter in this State, have been forced to pay any fine through the efforts of the Commissioner?

Let us all work together to protect the birds. The agricultural press are a unit in favor of such protection. We want the help of every farmer and every farmer's family. The ladies can and will discountenance the wearing of feathers and plumes. The boys can stop the robbing of birds' nests and the killing of young birds. We want every farmer to put up a sign warning every "sportsman" and bird killer off the farm. We want your help. Can we not have it?

The time will come, when—war and pestilence being reduced—a vast population will crowd upon the soil and every available foot of it will be wanted for the yield of provision for human sustenance; then even the weedy plants will have full share of studious attention in all country common schools. Their seeds will be on exhibition and will be made familiar, and also themselves as leafy plants, and their habits. They will be necessarily scarce in fields and gardens then, for their destructive presence will not be tolerated.

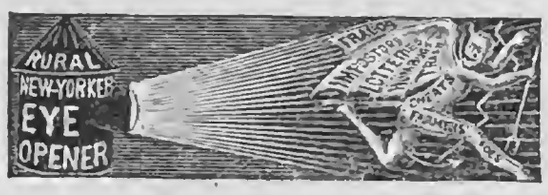
Early in the week a telegram from Portland, Oregon, told the world east of the Rockies that an English, German and Chinese syndicate had made a contract with the Mexican Government to send 600,000 Chinese to Mexico within a year, the Mexican Government agreeing to give each Chinaman 20 acres of land. That would be 12,000,000 acres. Mexico has no such area of cultivatable public land for gift or sale, even in widely separated regions. Perhaps the amount could be made up of such land that the more one owned, the poorer he would be—but even that is doubtful. Then fancy an immigration of 50,000 pig-tailed Celestials a month! The report is a hoax or a monstrous exaggeration.

Just at this season, before the leaves come out, an inspection of young apple and pear trees which have been making but little growth, will very likely show little white spots on the bark, which easily scale off when the thumb nail or a knife is used, leaving a reddish smear. The scale, like a tent covers the eggs or progeny of a female scale louse, which will, in June, invisibly to common eyes, begin to run about, seeking the new growth on which to feed. They drain this of the sap which should make new wood, or of some of its essentials; for the wood on which they exist on the bark is always very brittle, open, and imperfect, and very little of it forms. A brushing with coal oil before the buds open, destroys these vermin even under their scales; it is not a safe application on leaves or young growth, but can be freely and safely used on the firm bark before the buds swell.

Architecture.

A CHEAP COTTAGE.

For the plan of the neat, convenient cottage shown at Figs. 168, 169 and 170, we are indebted to our friend A. J. McDermid, Marion County, Ill. Fig. 168 shows the front elevation with a stone foundation; bricks or even posts would answer the purpose, where, as in some prairie sections, stones are scarce. Fig. 169 shows the ground-floor and the arrangement of the rooms, etc. At Fig. 170 is seen the second floor, and a study of the three illustrations will enable anybody to construct a similar building. The cost will depend, of course, on the size and finish of the house, and the price of materials where it is built. That shown here cost only $850.

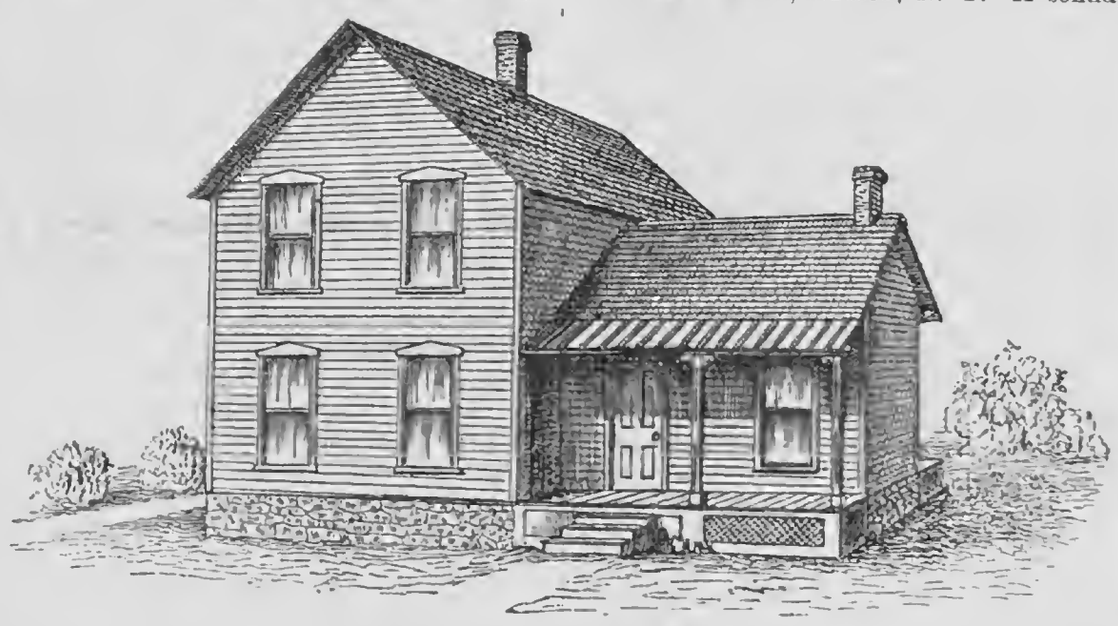


The old lottery swindle at St. Stephen, New Brunswick, Canada, has awakened from a godless sleep or risen from the dead frauds of the recent past. The vampire has changed its name a trifle; but it still preys upon the public as of old; but, of course, the modern vampire applies its suction powers to the pockets instead of to the veins of its victims. It used to cheat as the Royal New Brunswick Cash Gift Distribution; now it cheats as the Royal Dominion Cash Gift Distributions. The other was and this is a disgrace to the people of St. Stephen, who permit it to exist among them, and to the Government of the Dominion which should at once have suppressed so barefaced a swindle. Simpson was the name of the rascal who worked the former fraud; Beckwith is the scoundrel who runs this; but he was also a "co-partner" in the other. There is no difference between the *modus operandi* of both—tickets are sold for 25 cents each, 20 for $5, and the dupes are assured that every packet of 20 is sure to draw several prizes. Of these 5,231 are promised, amounting to $116,000. The Dominion Government made a "kind of a sort" of an investigation into the counterpart of this over a year ago, and found that of all the prizes ever offered, *not one* had gone to a subscriber. A prize went now and then to a confederate for advertising purposes: but no attempt had ever been made to hold a "drawing," and no prizes had ever been distributed according to promise. After paying postage on advertising circulars (amounting to about $40,000 a year), and other expenses, the swindlers cooly pocket the rest of the money sent in by their dupes.

"Nature's Incubator Company," of Quincy Ill., is a humbug, and its representations of the incubator it offers are "meant to deceive." The large number of complaints we have received leave no doubt on these points. Here is a specimen letter, from Sterling, Illinois:—"My daughter bought a 'Nature's Incubator' last February. It is a perfect clap-trap fixing—nothing at all like what the 'Company' represent it to be. From correspondence I have had with the concern since, I am convinced the company is even a more monstrous sham than its incubator. Although the humbug acknowledges that 'owing to the rush of business,' it sent out 'a large number of incubators that were improperly made,' yet it refuses to replace these with others 'properly made,' or to return a cent to those who received the worthless things." Other letters make it quite plain that the machine would have to be altered altogether before it could do good work.

Have absolutely nothing to do with the "new seed oats" offered by a certain seed company of Western New York. It is of the same stripe as the Hulless & Bohemian Oats tricks which the Eye-opener has been denouncing for the last seven years, and by which the farmers of many of the Western States have been swindled out of tens of thousands of dollars. Every man who engages in such an "enterprise" is sure to turn out a swindler or a dupe; do you want to be either, especially as the chances are ten to one that you will be the latter in spite of notes given, bank deposits made or other means of quieting the consciences, or lulling the suspicions of the tempted?

To Several Inquirers.—The principal Florida "land frauds" which have been widely advertised and have succeeded in gulling the public most extensively, are Sarasota Bay, Palma Sola, Marion City, Grant Park, Parkersburg, Parkersville, De Witt, Belmore City, Silver Springs Park and Bertram. In the Rural of December 19, 1885, the Eye-opener denounced nearly all these from personal acquaintance with the locations, and several times since then the frauds have been exposed here. There really are such places; but the representations with regard to the number and character of the population, buildings and business enterprises as well as with regard to the nature of the locations and the surrounding country, and of the industrial resources and work in the neighborhood and the travel and traffic facilities, are all either sheer fabrications or, at best, gross misrepresentations. The places are very nice on paper; but the streets, public buildings, most of the stores and private residences can be found nowhere else. "Lots" in these "paper cities" are generally offered for sale for more than the price paid for acres by the sharpers (mostly Northern men) who engineer the swindles. The orange groves which delight the eye and flatter the hopes in the prospectuses and advertisements, are in the future; all in the present consist at most of a few lately planted trees set out as a foundation for misrepresentation by the original schemers, or as an experiment by some of their dupes. Generally the surrounding country is either swamp land or sand too poor to produce any profitable crop. There is a good deal of really excellent land in Florida; but all the choice locations have already been taken up and are now held at high prices. . . . . We do not recommend the goods advertised by the Dennis M'f'g Company, *alias* Dr. M. D. Dennis. . . . . We cannot answer inquiries about the standing of local insurance companies conducted on the "mutual" principle. Some of them are excellent; others are swindles. The authorities of Penusylvania have lately suppressed a dozen or so of the latter kind which preyed chiefly upon the country people of the Keystone State; the authorities of Indiana are now engaged in a similar praiseworthy untertaking. The best way to find out about such concerns is to apply to the Superintendent of Insurance at the capital of the State. . . . . We cannot recommend the Lee Seed Co., *alias* the Dandelion Bitter M'f'g Co., *alias* the Kennel Rose Co., *alias* etc., etc., of Southington, Conn. . . . . Yes, the Monarch Lightning Saw Company, of Chicago, Ill., is, in one way, a "responsible" concern—it is responsible for much profanity and anger caused by the worthless character of the goods it sends out. We have had a great number of indignant complaints with regard to this concern. . . . . We do not recommend the "Harris Remedy" of St, Louis.



A CHEAP COTTAGE. Fig. 168.

Miscellaneous.

CATALOGUES, ETC., RECEIVED.

The Dog in Health, Habits and Disease. A pamphlet of 105 pages, from R. C. Hartranft, Philadelphia, Pa.—A well arranged and very readable book. The general habits of the dog, description and history of the various breeds, how to breed and feed and how to handle the common diseases, are all treated in a condensed and practical manner. To all those who are interested in the training and breeding of dogs this little work will be of value. It would be well if more interest could be taken in the breeding of good dogs. The common curs and mongrels of the country are so plentiful that they sadly injure the reputation of the really valuable dogs. The fact is that no animal makes a greater return, in intelligence and usefulness, for care bestowed upon his training and breeding than does the dog. We should seek to exterminate only the curs and worthless animals.

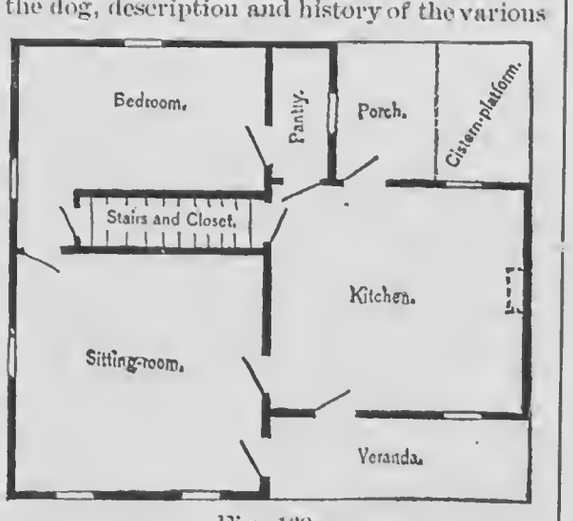


Fig. 169.

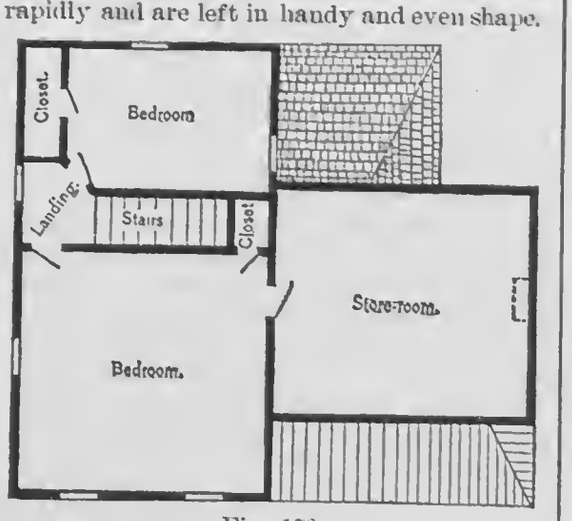


Fig. 170.

Stoddard Creamery and Refrigerator.—A full list of circulars from the Moseley & Stoddard Manufacturing Co., Poultney, Vermont. The Stoddard Creamery and churn are known wherever dairying is practiced. In this circular these implements are so well described that a child could understand their use. Many a long dairy article contains less practical information than is to be found in the Directions for Making Granulated Butter. If dairymen would follow these instructions, there would be much less complaint about bogus butter. Besides the creamery and churn, this house furnishes dairy scales, butter packages, butter prints, Monitor milk pails, lever butter-workers, patent milk strainers and dog powers, all of first quality. The circular headed "Why" gives the reasons why these goods should be used far better than we can. Send for it.

Henley's Monarch Fence Machine.—An elegant new catalogue from M. C. Henley, Richmond, Ind., describing and illustrating this celebrated fence machine. Beautifully printed and well arranged. Our friends will go far before finding a catalogue containing more common sense on the art of fence building than this one contains. The fence made by the use of this machine is cheap, durable and handsome. Where fences are to be used—and few communities have reached a state of civilization that will justify them in doing away with strong boundary lines—these three essentials should be included. Send for the catalogue.

High-Grade Fertilizers.—Circular from John M. Pearson, Hudson, N. Y. A sound, sensible and readable circular. It will pay any farmer to read the conversation entitled, "Fertilizers—Pro and Con," and the article on Soils and Plants. The use of good commercial fertilizers increases from year to year. Each year deserters come over from the ranks of those who have heretofore objected to "poisoning" or "burning" the land. Time makes clearer and clearer the truth of the Rural's assertion, that if we could burn barnyard manure and still retain its nitrogen, we would have, in the ash, a "complete" commercial fertilizer.

The Concave and Curved Potato Knife, from Humphrey Bros., Wakeman, Ohio.—As before stated in the Rural, this little implement gives excellent satisfaction. It will pay even those who plant a small patch to procure one of these knives. The seed pieces are cut rapidly and are left in handy and even shape. Where the seed is to be prepared for an Aspinwall planter, this little tool will give excellent satisfaction. It is improved this season. Price by mail 35 cents.

Circular of High-Class Poultry, from Jones Wilcox, East Chatham, N. Y.—First-class specimens of Wyandottes, Plymouth Rocks, Langshans, Hamburgs, American Dominiques, Leghorns and Pekin Ducks are used for breeding stock. It is unnecessary for us to speak of the characteristics of the various breeds; they are so well pictured and described in the catalogues of fanciers that but little more can be said concerning them.

Cornish Organs and Pianos. Circular from Cornish & Co., Washington, N. J.—A description of the various organs and pianos manufactured by the above firm. All styles are represented, from the "Gem," costing $50, to the Pipe Top Grand Organ, costing $160. There are plenty of homes in the country yet that are not supplied with music.

For Women.

CONDUCTED BY MISS RAY CLARK.

THE FARMER'S LIFE.

AN OLD SONG.

The farmer's life is a life for me,
I own I love it dearly,
And every season full of glee,
I take its labors cheerily.
To plow or sow, or reap or mow,
Or in the barn to thrash, sirs,
All's one to me, I plainly see,
'Twill bring me health and cash, sirs.

The doctor's styled a gentleman,
But this I hold but humming;
For, like a tavern waiting-man,
At every call he's coming.
Now here, now there, must he repair
Or starve, sirs, by denying:
Like death itself—unhappy elf—
He lives by others dying.

The lawyer leads a harrassed life,
Much like the hunted otter;
For twixt his own and other's strife,
He's always in hot water.
For foe or friend his cause defend,
However wrong, must he, sir,
In reason's spite, maintain his right
And dearly earn his fee, sir.

Then let me live a farmer's life,
Obtaining while I lead it,
Enough for self and some to give
To such poor souls as need it.
I'll dredge and fence, nor grudge expense
To give my land good dressing,
I'll reap and sow, or drill in row,
And hope for Heaven's blessing.

SKETCHES OF GERMAN LIFE.

BERTHA A. ZEDI WINKLER.

THE COUNTESS.

Some people carry romance in their faces, some in their disposition, and some in their real life. But I have never met with one and the same person so thoroughly romantic in all respects as the daughter of the Count who was the subject of my last sketch.

In the days of barbaric Germany, she might have been a beautiful seeress, like Velleda; in the Middle Ages, the championed lady of the noblest knight that ever sat at King Arthur's Round Table; now, in the real present, she simply carried about her the essence of these storied ages, animated in her beautiful person, and realistic in the conduct of her life, so full of strange reverses, so unaltering in cheerfulness, charity, sympathy, and withal truly royal dignity.

What her life was amid the gayeties and splendors of a court, no one in that little village knew. That she had been there was enough to fill their simple minds with awe. If she loved her life there, it was a rude shock to be transferred to the loneliness of a forest border and the society of unsophisticated inferiority, for which she had the people's delicate, unspoken sympathy. But her glad smile, her active interest in the life around her, never betrayed the sadness that may have been within. She was an aristocrat within and without; proud in her misfortune as she was proud of her lineage, which no king's frown could destroy. But that pride of ancestry was never obstrusive or offensive; it was never a claim or an assertion; it was a possession which needed no calling attention to. Men instinctively felt it an honor to doff their caps to her, and the women did not have to tell their children to kiss her hand as they had to when the pastor called and benevolently patted them on the head.

I shall never forget the first time I laid my eyes upon her and the beautiful incident that endeared her to me. My mother, when I was only seven years old, had occasion to leave the city in which we were born, and take up her abode in that little village. The distance from the railroad station to E was four miles, no short walk for a frail woman carrying two children on her arms and the third one trudging beside her and holding on to her skirts. We were very tired and had been resting several times by the wayside, when a figure dressed in a tight-fitting gray hunting habit issued from the woods followed by a large dog. I hid from the dog behind my mother, and peeped inquisitively at the stately woman. She nodded to my mother with a half anxious and questioning look at the crying babe in her arms.

"If you are going to E——, madam, I should

be so glad to relieve you somewhat of this beautiful babe."

Without waiting for an answer she had taken my younger sister from my mother's arms and was walking beside her. I lagged just far enough behind to observe her and listen to her thrilling voice, without being noticed doing so. She looked so different from the people we had hitherto met—so grand in her hunting garb that I thought she must be some great fairy come suddenly out of the woods to my mother's relief, and was sure she would vanish at the village entrance. So I drew timidly towards her as we neared it.

"Give me your hand, little one, you must be tired." Oh! what music there was in that voice; and all the while she was talking to my mother I held on to that gloved hand of hers with a throbbing heart. For if she was a fairy she would be going soon and I wanted all the reality in that dream that I could get.

When, however, all along the road hats were doffed to her, I began to realize that she was a real and great person, and that it might be disrespectful to hold on so tight to her hand. It was not till my mother thanked her, however, and called her "Grafin," and "Your Grace," that I knew she was a countess.

To describe her personal appearance without being able to convey the sound of her voice, the light of her eyes, and her various attitudes of inimitable grace called forth by the occasions and the moments, is like describing music with which you have been thrilled—you can give an idea of it, but you cannot produce the effect.

So I think it best to let glimpses of the beauty of the Countess be mingled with its traits of the woman as she moved among the lowliest, and made new the old old story of Jesus, by her glowing word-pictures of Biblical lore, and by a dignity with all which made her look most beautiful, when she sat on the grass in the midst of a crowd of barefooted, eager-faced children.

The Sunday-school founded and managed by the Countess was the resort of young and old. And, though the children had the front seats, and her attention was entirely directed to them, parents went home sometimes thinking more about that explanation of the lesson by the Countess Ida, than about the preacher's sermon. There were no tedious firstly's and secondly's. She gave them every day illustrations; and made Bethlehem as familiar to them as their own village, and Christ as a Saviour who might be stepping into their midst, at any unexpected moment. The stories in the gospels were strangely new after her reading.

On pleasant Summer days, Sunday-school was held in the open air. Those were days to which we looked with especial longing. We made Sabbath excursions into woods, the fields, and the hills wherever the subject of the Bible lesson for that day seemed most likely to meet with the objects for illustrating it. How really we seemed to wander in Bible lands; when with our books under our arms we followed the stately Countess to the vine-clad hills, and there sang our hymns, and read its lesson of the fig-tree, or of the vineyard and the vintners, and were transported in imagination to the hills of Judea. Our hearts were filled and running over with religious enthusiasm. We thought ourselves a younger set of disciples, and the holy gentle influence of such a day was with us all the week. Our evening pastime was often just sitting in a cosy group, to talk about our Sabbath-school and our teacher.

The Countess was seldom accessible to anybody on week days. One might meet her accidentally on the road with her knitting and her great Newfoundland dog, but then it was only a pleasant greeting from her, and the vision would be past. This was what made her all the more precious to us. She was never a familiar object. In spite of her hearty participation in our joys, she was always a great Countess to whom we looked up as to a higher being. We never even ventured to touch her skirts or walk nearer to her than at arms' length unless encouraged by her kindly smile. Once I remember climbing a steep hill to get the first wild rose of that early Spring; when I handed it to her, flushed with gladness, she stooped and kissed me. That was the most delirious moment of my life, and I can yet see her great dark eyes beaming with love into mine. That was the first and last time she showed any partiality to my knowledge; and it seemed with her as much an impulse of the moment as the bringing of the rose was with me.

THE STARVING HEART.

"I AM a bride no longer, scarcely a wife, *only a servant*," and the speaker finished with a tearless sob which went to my heart. It was no querulous, weak woman who said this, but one who had great intellect, with a loving, sensitive nature; but the constant strain of responsibility, care, and work, had made the woman's heart speak out. It longed so much for the loving, protecting care of him who had bestowed it so lavishly at first, when she needed it much less than now. The unused piano, unread books, untouched fancy work, all told the sad tale of her present life. She who was by nature so refined and cultivated, and who was made to enjoy the beautiful, had come to live where "his folks" thought all tastes, aside from bone labor, were foolishness in the extreme. Her husband was neither heartless nor cruel—only as far as he was thoughtless and careless. He did not intend to sap the life of her whom he had so proudly brought to his home. But he forgot that she was of different mold from his own tough, wiry, hard-working, yet never tired, family.

I am not one who thinks that men are always to blame in such cases, because I know they are not, but why do they not open their eyes and see what is before them? In this case the sad facts remain. Although straining every nerve to do what each day brings for her, she is not willing to acknowledge even to herself how slowly, but surely she is declining.

Time passes on and she is laid away on the hillside, leaving her little one to the care of strangers. His folks say: "Poor thing! she was so incapable and had not much ambition."

The world jogs along just the same as though that little grave did not cover a broken and starved heart. But we shall know why these things are so sometime. ANON.

Domestic Economy

CONDUCTED BY MRS. AGNES E. M. CARMAN.

A RENOVATED ROOM.

"A PERPLEXED FARMERINE" asks an oft-echoed question, how she may remodel an old-fashioned room, so that it may be like that of Madame Arachne, "the prettiest little parlor that ever you did spy." Doubtless she is not the only one in like position, so we cheerfully give her an open letter in the columns of the RURAL.

The parlor we are to modernize has light paper with a scarlet border, a large-figured carpet, with scarlet as the predominant hue; black hair-cloth furniture, marble-top table, a handsome mirror, and lace curtains. All good, and but little worn. Having cleared the decks for action, our first thought is about wall and ceiling. Light-colored wall paper, like the Chinese, must go—we should substitute a warm brown, with a small pattern of gold and fawn, or some similar mixture, having, of course, some harmonious border. The old paper being well scraped off, "Farmerine" could doubtless re-paper the room with her own nimble fingers. This work, though requiring dexterity, is not so difficult as it appears, and is much simplified when two can engage in it, one to hang, and the other to paste and wait upon the hanger. The ceiling is probably kalsomined, a work which might also be done by the presiding genius. We should recommend a tinted greenish-gray kalsomine as preferable to white. Next comes the question of carpet, and this is indeed a "crusher," as Mr. Swiveller would say. The present floor covering is large in patterns, but little worn, says Farmerine. If the exchequer would permit, it might be relegated to a bed-room, to make room for a more modish article. But as the Lord High Everything Else says, "it is our duty to see that a due economy be observed," such expenditure must be out of the question. Or we may alter the carpet by the addition of a sober-hued border. The border is not expected to fit into any little recesses or odd angles—these should be covered with the carpet itself—but it should edge all the central square, giving the impression of a large rug covering the floor. Or we may tone down the coloring with dark rugs; but in any case we should find that the dark wall-paper makes a very noticeable difference, rendering the carpet much more subdued in effect.

Now for the furniture. It is not, says the writer, old enough to be fashionable, but being covered with black hair-cloth, is doubtless strong and well made. Our advice in this direction is brief enough—cover it. The household reconstructionist will not find this so difficult a matter as it seems; the old covers carefully removed, will serve as patterns both for shape and manner of work. Of course, measurements should be taken beforehand, to find how much stuff will be required, the material being two yards wide. A very nice furniture covering is a brocade or brocatelle of jute, much resembling raw silk; it wears excellently, and may be bought for $2 a yard. Rep will, of course, cost less than the brocatelle, and though not so handsome, it is very nice-looking and certainly less funereal than the hair-cloth. The covering is fastened on with upholsterers' nails and finished at the edges with gimp; the latter is put on with upholsterers' tacks, which are small enough to be scarcely noticeable. It is not at all necessary that all the furniture should be covered alike. Indeed, parlor suites are now quite out of date, a great boon to housekeepers of small means, since the present fashion allows them to purchase odd pieces from time to time. So, should "Farmerine" desire, she might cover her sofa or easy chair with brocatelle, the remainder with rep, or *vice versa*, taking care that the colors contrast agreeably. Shades of brown and olive, with a touch of gold in the brocatelle, would harmonize nicely with the wall paper. Crimsons should be avoided, as, although they are charming in upholstery, the scarlet in the carpet would kill such a hue. "Farmerine" may possess some article in her "seven years' trunk," suitable for covering a single piece. We have heard of an old felt piano cover being dyed and used to upholster an arm-chair. The marble-top table must have a scarf thrown over it; olive-brown felt would be charming, the ends decorated with an outline design in gold tinsel. Single-width felt would probably be wide enough; it costs 45 cents a yard in New York.

Next come the windows—the architect, liberal soul! has favored the room with four of these, so we may be sure of health-giving sunlight in abundance. Our friend mentions lace curtains, but says nothing of shades. These are, of course, necessary; our own taste leans decidedly towards Scotch holland, which comes in tan and ecru shades, giving a soft and agreeable light to the room. Such shades, of good quality, trimmed with fringe, and having spring rollers, all complete, cost $1.40 each.

The question of lambrequins is rather difficult to decide without seeing the style of window. We may unhesitatingly say that the best thing to do would be to purchase curtain-poles; they need not necessarily be expensive. You can buy nice-looking poles of stained wood with brass rings for 35 to 50 cents: poles with wooden rings are more expensive, beginning at about 60 cents. These are five feet long. The lace curtains, being, our correspondent says, of good quality, and little worn, would not look at all out of date when hanging from poles. In this case, no lambrequin would be necessary. But should "Farmerine" incline to a lambrequin, this should be placed on the pole instead of the curtain; it should be a straight breadth of stuff three-quarters of a yard deep, hanging from the rings in straight folds. Felt, similar to the table-scarf, would be handsome; it must be some thick stuff. Cotton plush—otherwise double-faced canton flannel—is not by any means to be despised for this purpose. With the lambrequin, the lace curtains should, of course, be fastened beneath, in ordinary fashion. The newest style of mantel lambrequin has the drapery hanging from a pole, after the style of a window curtain, differing only in that it hangs flat, rather than in folds. The pole is the length of the mantel, fastened 15 inches above the shelf; the lambrequin, hanging from the rings, is caught at the back of the shelf by invisible tacks, to prevent it from sliding forward, and falls over the edge of the shelf in front for the depth of two inches; at the ends it hangs 12 inches deep, and is finished with embroidery.

"Farmerine" tells us that she possesses books, pictures, and fancy-work, so there is little doubt that with the expenditure of a little money, and more time and ingenuity, her sunny room will be a joy forever to its deft-handed presiding genius.

DISHES FOR A LATE SUPPER.

DELICACIES TO TEMPT WHEN THE CLOCK STRIKES TWELVE.

THE following modest and economical supper ménu I hope will meet the requirements of those who are fond of giving little evening entertainments:

Jellied Chicken. Salad Rolls.
Ham and Sardine Sandwiches. Lobster Salad.
Compote of Strawberries. Punch Jelly.

Dress a pair of fowls as for roasting; omit the stuffing, and boil in as little water as possible until they are so tender that the meat drops from the bones. Cut the meat in small pieces and season with salt and white pepper, and the least bit of grated nutmeg and lemon-rind. Line a mold with slices of hard-boiled eggs, place next a layer of chicken, and so continue with alternate layers of hard-boiled eggs and chicken until the mold is two-thirds full. Reduce by boiling the water in which the chickens were cooked until not more than half a pint remains. Season this and pour it over the contents of the mold, and set over-night in a cold place. If the weather is very warm, take the precaution of adding a tablespoonful of soaked gelatine to the stock for fear of its not being stiff enough. Garnish the dish on which you have turned the contents of the mold, with light-colored celery leaves, dark-green parsley and bright-red beets cut in fancy shapes.

In order to make good salad rolls you must know how to make Mayonnaise, or you may use a dressing given in a late number of the RURAL for crab salad. Cut in dice some cold chicken or turkey with a little tongue or celery, and mix with enough Mayonnaise to moisten it; cut bits from the tops of small rolls, remove the crumb from the inside, and fill with the above mixture. This is not a costly dish, if you will take the precaution of having poultry for dinner a day or two beforehand. A very little meat that may be left, with the mixture of tongue and celery, will be sufficient to fill two or three dozen rolls.

Ham sandwiches are not new, but this way of making them may be new. To a half-pound of minced, boiled ham add half a teaspoonful of oil, half as much lemon-juice, and a little dry mustard powder and Cayenne; mix thoroughly with the ham, and spread it on bread, buttering the slice before cutting it. Trim off the crust, and cut into little squares, and put two pieces together.

For the sardine sandwiches, bone and skin some sardines, pick them fine, season with lemon-juice, pepper and salt, and a little anchovy essence if you have it.

For the lobster salad, cut the meat of a cold boiled lobster into dice, and lay it aside while you prepare the dressing. Rub the yelks of two hard-boiled eggs smooth with the coral—if any—and one teaspoonful each of mustard, salt and white sugar; add two tablespoonfuls of oil slowly, and moisten with vinegar as they stiffen until a smooth cream is the result. Finish with Cayenne and lemon-juice. Pour this over the minced lobster and toss up well with a silver fork. Put it in the center of your salad bowl, lay a ring of the slices of the eggs around it, and outside of this cool, white lettuce hearts.

Compote of Strawberries. Put a pound of sugar in a porcelain sauce-pan and simmer over a slow fire for ten minutes, skimming the while. Select large, firm berries; drop them carefully into the sirup, and at the first sign of boiling remove them from the fire. Let them remain in the vessel until cold; place them on a compotier, one by one, points up, in the form of a cone, and pour the sirup around the base.

Punch Jelly. Soak a box of gelatine in a pint of cold water for an hour; pour over it a pint-and-a-half of boiling water; stir till it is all dissolved; add the strained juice of one orange and three lemons, one gill of strawberry juice, a pound of loaf sugar and a small stick of cinnamon. Let this boil rapidly for two minutes and strain through a jelly-bag; add a gill of good brandy, another of Jamaica rum; pour into molds and put on ice.

PALMETTO.

WALL PAPER.

IF people living in the country, who are intending to have rooms papered, would take the trouble to go to the nearest town or city and select their own paper, instead of depending upon the taste of the village paper-hanger, they would save themselves many a heart-ache. The walls of a room and the floor are the most conspicuous parts, and, therefore, too brilliant coloring and patterns should be avoided. There are so many cheap but pretty papers of soft and neutral tints, that there is no need to cover your walls with scarlet peacocks, or blue and yellow morning glories as big as sunflowers. There is a plain gray paper that is very restful to the eye, and forms an excellent background for pictures. For a room that is to be used as a library, or one with an open fire-place, a paper with a good deal of red and gilt and a dado of dark olive shades gives a very rich effect. I have seen a sort of frieze of small Japanese fans used on a white or dull-colored wall, that made a very pleasant relief, but if you are not quite sure of your taste in the matter, you had better not attempt any great amount of decoration with these fans. I have seen rooms that resembled nothing so much as a doll's house, and which were rendered positively absurd by the excessive use, without any taste, of Japanese decoration. B. B.

CHILDREN'S TOYS.

I HAVE found that a box large enough to hold all the children's playthings, and low enough to slip under the table or lounge, is a great help in keeping a room neat. If a child is taught that he must never go out, or to a meal, or to bed, without first picking up his toys, he will soon take great delight in doing it neatly, and it will be as much play to him as anything else. "Now I've dot tu dit my wort done," is a saying that I hear from my little three-year-old 20 times a day, and as many times he will proceed to "straighten up" the room. Blocks are the cleanest toys and seem to furnish the most fun. Mechanical toys that are always getting out of order, only

Miscellaneous Advertising.

When Baby was sick, we gave her Castoria,
When she was a Child, she cried for Castoria,
When she became Miss, she clung to Castoria,
When she had Children, she gave them Castoria,

make a child ill-tempered, and the very ease with which he can pull them to pieces, teaches him to be destructive. If you paper the box inside with a remnant of wall-paper, and cover it on the outside with a bit of old dress goods, it will not be unsightly. If you are a good carpenter, or if Jack is, fasten the cover on with a pair of hinges, and stuff and cover it, and when closed it will make a nice foot-stool. MOTHER.

SCENT BAG.

THIS is a very pretty conceit for a parlor or sleeping room. Take two pieces of surah silk of contrasting colors, about 10 inches long and not quite so wide. Sew them together the longest way, leaving the ends open. Fringe the ends and fill with a piece of cotton on which you have sprinkled violet sachet powder. Tie shut three inches from the ends with narrow ribbon, leaving a handle by which to suspend it from the back of a chair. In a few minutes the whole room will be exquisitely perfumed. J. B.

SOFA AFGHANS.

IN answer to an inquiry in regard to these, a very pretty one is made of alternate black and Roman strips. The black strips are handsome knitted in plaids: knit eight stiches plain and then purl eight; continue this for eight rows, and then reverse. For the Roman strips select your colors judiciously, with a bit of Roman ribbon for a guide. A pound will knit a small one, but they are generally made larger, and are very much used at present to throw over a bed in the day-time. M.

DOMESTIC RECIPES.

CREAM PIE.

FOR the crust make a cheap sponge-cake with three eggs, one-and-a-half cup of sugar, two of flour, half a cup of cold water, and one heaping teaspoonful of baking powder sifted through the flour. Beat the eggs and sugar together, add the water, then the flour. Flavor with lemon, and bake in two deep pans. When cool, split in two with a sharp knife, and fill with cream. For this put a pint of milk in a vessel and set it in another of hot water. Beat together two eggs, one scant cup of sugar, half a small cup of flour, and a little salt until light and smooth. When the milk boils, stir it in and cook 20 minutes, stirring often. Flavor to suit. The pint of milk must be a generous one. A SUBSCRIBER.

INDIAN PUDDING.

Scald a cup of Indian meal with one cup of boiling water, add a cup of molasses and a teaspoonful of salt and a quart of milk. Spice to taste with cinnamon, nutmeg and cloves, and bake one hour, stirring it three times meanwhile. Serve half cold. Cheap, but good. ANNIE.

POTATO CHOWDER.

Cut half a pound of salt pork into thin slices and fry slowly a light brown, add five large sliced onions. Let them color slightly. Put a layer of pared and sliced potatoes in the soup kettle, then a thin layer of pork and onions, season each layer with salt and pepper, and dredge with flour. When all the ingredients are used, cover with two quarts of water, let it come slowly to the boiling point, and cook 40 minutes, or until the potatoes are done. About two quarts of potatoes will be needed. Any herbs, such as parsley or young celery tops, may be used also. FARMER'S WIFE.

CLARA'S COOKIES.

One cup of butter, two of sugar, three of flour, four eggs, one-half teaspoonful of soda, three teaspoonfuls of milk. May be varied by using two eggs and one tablespoonful of milk.

CREAM COOKIES.

One cup of cream, one of sugar, one egg and one small teaspoonful of soda.

MRS. J.'S COOKIES.

Three cups of flour, one of sugar, one of butter, two eggs three tablespoonfuls of sour milk, one even teaspoonful of soda, one spoonful of lemon.

MRS. W.'S COOKIES.

One teacupful of sugar, one-half of butter, one teaspoonful of soda, two eggs. Mix hard enough to roll out.

MRS. P.'S COOKIES

One cup of butter, one of cream, three eggs, one-and-two-thirds cup of sugar, one teaspoonful of saleratus. Very rich and good.

GINGER CAKES FOR BREAKFAST.

One cupful of New Orleans molasses, one of sugar, one of butter, two teaspoonfuls of soda. Put half a cup of hot water on the soda, pour this on the butter, mix soft, roll out, and cut like cookies. Bake in a quick oven. Use ginger to the taste.

ONE-EGG CAKE.

One egg, three-fourths cup of sweet milk, butter size of an egg, one cup of sugar, two-and-one-half of flour, two teaspoonfuls of baking powder. Flavor to the taste.

AUNT RACHEL.

Miscellaneous Advertising.

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This is the only *perfect* Pail made. There are no seams in the front to catch the dirt. It has a perfectly fitting strainer, which can be instantly removed, so that every part of the pail may be *quickly* and *thoroughly* cleaned. Should the strainer become foul or worn with use, we can furnish new ones at very little expense. The Pail is well made of heavy XX tin, and we offer it to the farmer at the very lowest price at which a really good article can be sold. *Send for special circulars.* Price $1.25 each. Discount to the Trade.

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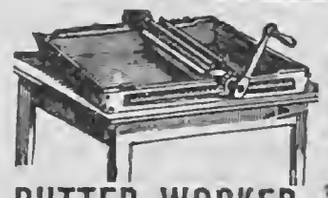

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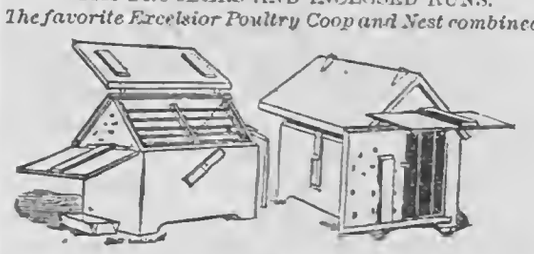

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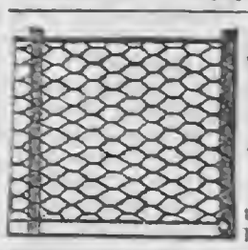

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WM. MONTGOMERY, Jr., Bergenfield, Bergen County, N. J.

News of the Week.

HOME NEWS.

SATURDAY, April 17, 1886.

THE authorities of Montreal have begun a crusade against the nude in art. Action is to be taken against one of the wealthiest gentlemen in the city, for keeping in his house copies of the Venus of Milo, the Venus di Medici, Canova's Venus, Power's Greek Slave, the Lacoon, and other works.....St. Cloud, Minn., is several miles back from the west side of the Mississippi, 75 miles north of St. Paul; population about 6,500. Sauk Rapids is three miles above on the other side of the river; population about 3,250. Wednesday about 4 30 P. M, a southwestern tornado struck both, clearing a swath 600 yards wide, and leveling 150 to 200 houses in St. Cloud. According to latest advices, 4 killed and 125 wounded in St. C.; 34 killed and 90 wounded in S. R. Great destruction of property; much mourning and distress.....Same day, a tornado at Burlington, Mo., did much damage, and another at Monroe, Mo., killed three passengers, injured several others, "destroyed dwelling-houses, barns and out-houses, killing thousands of dollars worth of stock".....Another in Wise County, Texas, "swept everything before it, injuring 12 persons, and destroying a number of houses and other property.".....A wirlwind in Jamestown, Dak., destroyed a brewery, but did much damage to offset the good deed.....A tornado at Exira, Ia., blew down over 50 houses and did a world of mischief...The U. S. Senate performs "executive business"—confirming or rejecting Presidential nominations, discussing treaties with foreign countries, etc, etc.—in "secret session," from which all except Senators are excluded. Senators and the few neccessary attendants are bound by honor and oath to tell nothing of the doings in such sessions; but such information always leaks out, especially if of an important nature. That all disenssions should now be open is a growing opinion among Senators, and a very decided conviction among newspaper men who would then find considerably more materials for their columns. Many Senators are therefore urgent for the abolition of "secret sessions," and, of course, all the newspapers unanimously insist on the wisdom of the change, and on the old-fogyism, folly, stupidity and "total depravity" of all who dare cling to the time-honored custom. Of course, the "press"—the Third House—is right....For the first time, under the new suffrage law, women voted for city officers, last Wednesday, in New Brunswick, Canada.....The iron and copper mining districts of Michigan "are preparing for an exodus of miners and speculators" to Alaska, on the representations of a number out there already.....The Senate, by a vote of 35 to 10, has rejected the President's recommendation of a Joint Commission for the settlement of the fishery question with Canada. Ice and bait, being articles of commerce, American fishermen have a right to buy them in Canadian ports, under British and American law, as Canadians have a right to buy them in our ports. It is also maintained that American fishing vessels have just the same rights as other American vessels in Canadian ports, and remonstrances against Canadian action have been sent to the Imperial Government.....The subscription list for the $20,000,000 Canadian Pacific Railway bonds closed in London Tuesday. It is reported that the applications reached $30,000,000.....Sec. Manning is improving and will resume his official duties soon," say some. Daniel E. Lockwood, of Buffalo, N. Y., has received from the President a tender of the Treasury portfolio in view of the disability of Secretary Manning," say others.....The report of divers settle that the plates of the wrecked Oregon had been driven *in* by collision from outside, not *out* by a dynamite explosion among the cargo, as alleged. The hole was six feet high: three broad, vessel broken nearly amidship; nearly all the cargo recoverable.....The Senate has voted to admit Washington Ter. as a State.....The House is still wrangling over the admission of Dakota as a State. One bill divides the Territory, east and west, on the 46th parallel; another, north and south, on the line of the Missouri, and there are several other propositions. Conflict of plans excuses delay of action.....Rhode Island has passed a prohibition Constitutional Amendment "by an overwhelming majority." Liquor men dumbfounded; others jubilant...In Iowa, the House Committee investigating Judge Hayes, charged with rendering decisions effectually nullifying the Prohibitory Law, reports that the charges are sustained, and recommends the censure of the Judge, and such other action as the House may deem best. .....Strikes of school boys for shorter hours and less work are becoming rather common. Five reported in different parts of New York and Pennsylvania, this week. Collapse in all cases, mostly owing to mothers formidable with slipper, or shingle, or the terrors of a dark closet, or a supperless early bed.....John H. Noyes, founder of the Oneida Community, near Utica, N. Y., died Monday. .....Fifteen State Commissioners were present at the 16th annual meeting of the American Fishery Association held at Chicago Monday.....A Senate bill raises the salaries of U. S. District Judges from $3,500 to $4,000. The 12 Police Justices of this city, petty lawyers or third-rate politicians, get $8,000 a year apiece. ..Collector of the Port Hager, of San Francisco, says the new Chinese Minister was not insulted. He wasn't allowed to land, however, till his credentials were shown.....The House Committee on Territories, will report adversely all bills relating to the proposed Territory of Oklahama.....Chicago declines to be submerged even to gratify St. Louis, and declares the report that Lake Michigan is rising the folly of a would-be-funny nincompoop,.....The strike on the Gould system continues; but most of the trains are reported by Vice-President Hoxie to be running regularly, and carrying all the freight offered. Letter-writing and mutual reciminations between Gould and Powderly, with much good sense on the side of the latter, but a better style of argument on the side of the former—a 100-millionaire can always command the best of logic, language and brains. The K. of L. everywhere and other labor organizations are preparing to systematically support the strikers with contributions, the sums now aggregating about $2,500 a day. Hoxie has refused an opportunity of arbitration offered by the merchants and other citizens of St. Louis. In spite of all talk, the strike appears to be a failure It has done much injury to the *prestige* of the K. of L. and to the trade, manufacture and agriculture of a large part of the country; but a gigantic struggle for a fairer adjustment of the relations of Labor and Capital is inevitable, and this seems the beginning. Occasional acts of violence here and there; no great out-breaks. Other strikes quite numerous in all parts of the country against reductions in wages, or for higher wages, or shorter hours for the same or even higher wages, and also through sympathy or a desire to help other strikers in the same line, or to compel the discharge of obnoxious foremen or non-union operatives, or for various other causes. Mutterings still heard of a vast strike in May for a "work day" of eight hours. The general public seems to be getting a trifle tired of so many strikes on all sides; and especially of the multitude of boycottings and their attendant parades, remonstrances, threats and denunciations..... Friday the Dominion Government was sustained by Parliament in its management of the Northwest rebellion, the vote of censure pressed against it being lost by a decisive majority.....The Massachusetts House of Representatives divides 77 for and 128 against the bill allowing women to vote in municipal elections.....A strong Mormon lobby at Washington and the peaceful slumbers of the anti-Mormon bill in the House Committee on the Judiciary, lead some to fear that it is a violent case of cause and effect..... John Welsh, Ex-Minister to England, and head of the Centennial Exposition at Philadelphia, died in that city last Saturday..... The average indebtedness of Canada is nearly $58 per head, which is more than twice the per capita of the indebtedness of the United States.....The Cigarette Act has just been published in Massachusetts, and whoever, not being a parent or guardian, gives tobacco or snuff to persons in that State under 16, or whoever sells the same to persons under 16 is liable to a fine of $50..... Gross mismanagement of Soldiers' Orphans' Schools of Penn., in the interests of an unscrupulous, atrociously cruel "ring," has for some days been under investigation, and as a result Gov. Pattison, on Thursday, demanded the resignation of the Rev. R. E. Higbee, State Superintendent of Public Instruction, whose neglect of duty permitted the atrocities to continue so long. He also summarily removed Rev. J. W. Sayres, male Inspector of Soldiers' Orphans' Schools, and Mrs. E. E. Hutter, female Assistant Inspector. The testimony, he says, "shows a most pitiful, cruel and inhuman neglect of the children; a want of the commonest necessaries of decent living, and insufficient moral and religious training. A sadder or more shameful story of deliberate human cruelty could not be exhibited." The rascals starved the little orphans and stuffed their own pockets with the money that should have filled the stomachs of their charges.

AFTER two years' trial, we unhesitatingly pronounce the Boss ZINC and LEATHER COLLAR PAD, the only durable and successful one that we have ever used. It retains its shape, is cooling, prevents chafing, and thereby keeps the horses' necks clean and healthy. HIRAM G. DODGE & SONS, Wood & Coal Dealers, Madison, Wis.—*Adv.*

AGRICULTURAL NEWS.

SATURDAY, April 17, 1886.

RECENT exposures of enormous frauds under the Pre-emption, Timber-culture and Desert Land Laws have aroused a great deal of indignation against the legislation which made them possible, and unlimited distrust of the official machinery which permitted or aided them. It is, therefore, proposed by the Public Lands Committee to abolish all three laws by one Act. If the extent and flagrance of the frauds were fully known to the public, the demand for some prohibitive and punitive legislation would be so loud all over the land as to drown the clamorous remonstrances of the conscienceless land-grabbers and their tools, as well as the feeble complaints of the few honest settlers who might be injured thereby.....The House Committee on Commerce has agreed to report Congressman Dunham's bill to provide for the inspection of live stock, dressed meats, hog products and other purposes. Mr. Dunham represents the Chicago meat-handling trade in this measure, and probably hopes to do something to restore our pork products to good standing in Germany and our live stock to admission to Great Britain. The bill provides for inspectors, and punishes severely the importation of adulterated articles of food or drink. It is said that it lacks provisions for penalties upon the manufacture of adulterated or unwholesome food for exportation..... France proposes to raise the duty on foreign maize.....According to the February report of the Department of Agriculture the number of horses has increased from 11,564,-572 head, in the United States in 1885 to 12,-077,656 head in 1886, an increase of 513,-085 head. The average value was given last year at $73.70 per head, while this year it is given as $71.29 per head, a decrease in value of $2.43 per head, or about three per cent. Mules have decreased from $82.38 to $79.66 per head, about the same percentage as horses. Prices of horses range higher in New Jersey than in any other State, where the average value is given as $118.17. The next highest is given in Pennsylvania, where it is $117.33. In Ohio the average value is placed at $100.80..... "N. Y. parties" are prosecuting the "Produce Dairy Company," manufacturers of butterine in Providence, R. I., for royalty of one cent a pound on the stuff they are turning out. Who can prosecute the concern for the misrepresentation in its name and the fraud in its goods?.....Thirteen million sheep are said to have died in New South Wales within the last three years for want of water..... The soil of Northern Virginia, upon which occurred so many battles, is now so poor that it does not furnish pasturage, and cattle raising there has been abandoned..... The April Report of the Dept. of Ag. shows an increase in the prevalence of hog cholera and a loss of 6,000,000 of swine from all causes, or 14 per cent. The losses of sheep are reported at seven per cent.: of cattle four per cent. The losses of horses are small, only seven-tenths of one per cent. Losses of cattle are heaviest in the Southern States and on the ranges, from four to eight per cent., while in the farm regions, where shelter is provided, the loss is only two per cent..... .....Since January 1st, Chicago has been shipping eastward nearly 50,000 hogs a week, mostly for consumption.....Auction sales of cattle promise to be unusually numerous, heavy and important this Spring.....The number of horned cattle in Illinois last year was 2,166,059, the number marketed 497,586, the average live weight 1,101 pounds, and the average price $3.95 per 100 pounds. The assessed number of hogs was 3,858,030, the number marketed 3,202,145, the average weight 239 pounds, and the average price $3.50 per 100 pounds.....Out of a cargo of 65 full-grown ostriches recently shipped from Africa to California, only 36 survived the passage Ostrich farming has been so overdone in South Africa, that several of the largest "farmers" have burst up, and others are making little or nothing. Feathers low; birds selling for less than one-fourth of their price four years ago..... ..The following are the officers elected at the first National Sheep-shearing and Wool-Growers' Convention held at St. Louis, Mo., the other day:—President, Columbus Delano, Ohio; Secretary, C. D. N. Campbell, St. Louis; Treasurer, C. W. Simmons, St. Louis, with Vice-Presidents representing nearly all the States in the Union.....The Prussian Minister of Agriculture says the Government does not at present think it expedient to increase the import duties on grain and cattle; and that imposts on wool are out of the question. The agricultural distress is as great, he says, all over the Continent as in Germany.....The importation of French wines into England is enormous, owing to the expectation that the Government, in their forthcoming budget, will propose an increase in the duties on wines.....

The Throat.—"*Brown's Bronchial Troches*" act directly on the organs of the voice. They have an extraordinary effect in all disorders of the throat.—*Adv.*

Crops & Markets.

SATURDAY, April 17, 1886.

THE Department of Agriculture's report for April makes a reduction of winter wheat area of 3,500,000 acres from the breadth seeded two years ago, and five per cent. reduction from the area seeded a year ago. On the Atlantic coast there has been very slight reduction, and none on the Pacific coast. The largest decrease is in Illinois, Kansas and Missouri. Comparative areas seeded in principal States are: New York, 97; Pennsylvania, 98; Ohio, 99; Kentucky, 95; Michigan, 99; Indiana, 95; Illinois, 85: Missouri, 92; Kansas, 84; California, 99; Oregon, 103. In comparison with the breadth *harvested* last year, there is an increase. A moderate degree of protection by snow has been enjoyed, though the covering has been neither heavy nor continuous. Winds have laid bare exposed surfaces and covered valleys deeper. Winter-killing in patches is therefore reported to some extent, while it is generally found that brown and apparently lifeless plants have roots uninjured. The general average of condition is 92½, against 76 last year (the lowest ever reported) and 94 two years ago. The average of 1883 was 80, and that of 1881 was 88. Condition of States is as follows: New York, 98; Pennsylvania, 99; Ohio, 94; Michigan, 93; Indiana, 96; Illinois, 86; Missouri, 94; Kansas, 88, and California 100. The condition of the soil for autumn seeding was favorable in four-fifths of all counties. The exceptions are more frequent in districts of small production. In the Ohio Valley and in the Middle States the seed-bed was in good condition in nine-tenths of the area. In Missouri and Kansas there was a larger proportion of dry areas, and one-fifth of the reports were unfavorable. In Virginia and the Carolinas, one-sixth of the area seeded was not in good condition; in Georgia, one-third; in Texas, three-tenths. In at least five-sixths of the entire breadth of winter wheat, the condition of soil was favorable for seeding, germination and early growth. Damage to wheat by the Hessian fly is indicated in scarcely one county in twenty in the winter wheat. The presence is deemed worthy of mention in 16 counties of Indiana and eight of Illinois. In Ohio, Indiana, and Michigan, and also in Pennsylvania and New York, it is respectively reported in four to six counties. The damage has not been serious.

The wheat market has been heavy, with good weather at the West and an unwillingness on the part of the United Kingdom and France to buy in advance of requirements, in spite of the many calculations that Indian and Russian surpluses are low, and that exports from the United States prior to August 1 must materially exceed those in the first quarter of the year. Cash wheat, No. 2 Red, at New York, advanced 1½c. in the week. Wheat clearances from the Atlantic ports this week promise to aggregate nearly one million bushels, or double late averages. Ocean freights are lower for grain. The strike at the West so prevented shipments hither that rates went off to get freight.

The fruit stands and markets are red with Baldwin apples. There are some Russets and Greenings, but the Baldwin is decidedly the favorite. Apples have shown very little increase in price since January; at present they are cheaper than in any year since 1881. The quality is reported excellent and the fruit is in good condition. Reports from Western New York say apples are exceedingly low-priced. In Alleghany Co., Pa., Baldwins are reported to have been sold the other day at public sale for one cent per bushel!

Heavy receipts of butter and a light export demand for cheese have induced concessions in prices of those products.

Wool market inactive and weak. What with large receipts of foreign wool and the anticipated arrival of a new clip, most manufacturers are disposed to wait for something to turn up. Arrivals of California spring wool are looked forward to in the Eastern markets, and buyers are already off for Texas. Low and medium grades are relatively firmer than finer sorts, the latter being considerably depressed. Present condition of market less satisfactory than one year ago. The new clip in California appears to be of good quality. Very little interest is taken in the tariff discussion, inasmuch as the trade is generally agreed that there is small prospect for legislation this Spring. No one expects the Morrison-Hewitt bill to pass the Republican Senate, should it even pass the Democratic House, in which a considerable minority of the Democrats are protectionists.

The market for Western tobacco was dull during the week, and the total sales were only 150 hogsheads, of which 100 hogsheads were for export. A more hopeful feeling prevails in the trade owing to the proximity of the time when the foreign contracts are awarded. In many of the tobacco-growing sections the low prices for the weed and the continued competition with Sumatra tobacco have a discouraging effect, and other crops will be substituted by a considerable number; but it is likely enough new ground will be planted to make good this falling off. Prices in Lancaster Co., Pa., are barely remunerative. Farmers have all prepared their seed-beds. The favorite variety will again be Havana seed, but an increased amount of seed leaf will be put out. Leaf tobacco at Louisville is easy to weak for grades. The weather is favorable for handling tobacco and also very favorable for plant beds. Tobacco at St. Louis is in improved demand, but transactions are light because of deficient offerings.

MARKETS BY TELEGRAPH.

SATURDAY, April 17, 1886.

CHICAGO.—Compared with cash prices a week ago, "regular" wheat is 3c. higher; No. 2 Spring, 4c. higher. Corn, 3½c. higher. Oats, ⅝c. higher. Pork, 15c. lower. Cattle, steady or a decline for poorer sorts: an advance for superior animals. Hogs, a shade lower. Lambs steady. Sheep, from 10c. to 50c. higher.

WHEAT.—Strong; sales ranged: April, 75½@76¼c; May, 76¾@78¼c; June, 78½@80⅝c; No. 2 Spring, 76¾@77c. CORN.—Firm; Cash, 36¼@36⅜c; April, 36⅛@36⅜c; May, 37¼@37⅝c; June, at 37¾@38c. OATS—Sales ranged: Cash, 25¾@25⅞c; April, 25¾c; May, 29⅛@29⅝c. RYE.—No. 2, 60c. BARLEY—No 2, at 60c. MESS PORK.—Cash, $9 05@9 10; May, at $9 05@9 17½; June at $9 10@9 27½. LARD.—Quiet and higher; sales ranged; Cash, at $5 85@5 87½; May, $5 85@5 90; June, $7 02½@7 05. BULK-MEATS.—Shoulders, $4 00@4 10; Short rib sides, at $5 17½@5 20; Short Clear sides, at $5 55@5 60. CATTLE—Market lower. Shipping steers, at $4 00@6 25; stockers and feeders, $2 75@4 50; cows, bulls and mixed, at $1@4 00; bulk, at $2 50@3 00. HOGS.—Market lower; Rough and mixed, $4 00@4 30; packing and shipping, at $4 20@4 40; light, at $3 45@4 30; skips, at $2 90@3 75. SHEEP.—Market steady; Natives, $2 50@6 00; Western, $4 50@5 50; lambs, $4 85@6 12; Texans, $3 50@4 25.

ST. LOUIS.—Compared with cash prices a week ago, No. 2 Red wheat is 2½c. higher. Corn, steady. Oats, steady. Pork, 40c. lower.

WHEAT.—Active; sales ranged; No. 2 Red, Cash, and April, 87¼c; May, 87¾@87⅞c; June, 87¾c. CORN.—Firm; No. 2 mixed, Cash, 33¼@33½c; April, 33¼c; May, 33½c. OATS—Dull; No. 2 mixed, Cash, at 29½@29⅝c; April, at 29½c; May, at 30¼c. RYE—Weak at 56c. BARLEY—American, 60@80c. BUTTER—Quiet; creamery, 25@30c; dairy, 20@25c. EGGS—Firm at 9½c. FLAXSEED at $1 02@1 03. HAY—Steady. Timothy, $11@11; Prairie, $6@8. BRAN, 58½c. PORK, $9 60. BULK MEATS.—Long Clear, $5 20; Short Rib, at $5 30; Short Clear, $5 50. LARD.—Steady at $5 75@5 80c. CATTLE—Market active; fair to choice native shipping steers, at $4 10@4 50; butcher steers, $3 50@4 40; cows and heifers, at $2 50@3 75; stockers and feeders, $3 00@4 15. HOGS.—Light, $3 85@4 00; packing, $3 85@4 00; heavy, $4 10@4 25. SHEEP.—Market steady at $3 50@5 75.

BOSTON.—CORN.—Steamer Yellow, at 50½c; do.

mixed at 50c. per bushel. OATS.—Firm. No. 2 white, at 42c,; No. 3 white, at 41c., and barley oats at 44@45c. Small sales of Rye at 67@68c, ₱ bushel. Bran is firm at $15 75 for Spring and $17 00 for Winter; fine feed and middlings at $16 00@19 00, and cotton seed meal at $23 25 on spot and $22 25 per ton to arrive. HAY AND STRAW.—Hay at $13 50@19 00 ₱ ton for choice and fancy; fair to good, $17@18, fine, $15@17, and $13@15 for poor and damaged, Western choice $16 @17, do fair to good $14@15. Rye straw $19 00@20 00 for choice, and $12@14 for common to good. Swale hay, $11@12; Oat straw, $9@10 per ton. PRODUCE.—BUTTER.—Northern creamery, choice to extra fall, 30@32c; good to choice summer, 18@22c; western creamery, at 32@33c, for choice to extra fresh made: good to choice held stock, at 15@18c; northern dairy, 28@30c, for Vermont extra; 20@23c, choice, and 15@ 18c, for fair to good; Western dairy, 18@23c, for choice, and 13@15c, for fair to good; imitation creamery at 25@28c, for good to extra; ladle-packed, at 24@25c, for extra. CHEESE—New York choice to extra, 9½@11c. and common to good, 5@8c; Vermont choice to extra, 9@11c, and common, 5@8c; Western choice to extra, at 8@10c. Skims, extra, 13½c, good to choice, 9½@10½c. EGGS—Cape and near-by, ₱ dozen, at 14½c; Eastern extras, at 13¾@14c; do. firsts, at 13c; Northern, fresh, at 13½c; Western fresh, at 13c; Provincial, at 13c. BEANS.—Choice Northern hand-picked pea, at $1 65@1 70 per bushel; do, do, New York, small, $1 45@1 50; do, do, screened, $1 15@1 30; medium choice, hand-picked $1 20@1 35; do, do, screened, at $1 15@1 30; Yellow Eyes, improved, at $1 35; do, choice flats, $1 30@1 35; Red Kidneys, $1 65@1 70. Canada peas, 65@95c, per bushel for common to choice. Green peas, Northern, at 90c@$1 00; do, Western, $1 20@1 25. Potatoes range at 45@70c, per bushel, as to quality.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, April 17, 1886.

STATE OF THE MARKET.—Compared with cash prices last week, flour is steady; Ungraded Winter Red, 5c. lower; corn, ½c. higher; oats, 1c, higher; pork, unchanged; butter, a shade lower; eggs, steady; fruit, a trifle higher; potatoes, steady.

FLOUR, FEED AND MEAL. FLOUR—Quotations: Fine at $2 20@3 00; Superfine, $2 80@3 35; Extra No. 2, $3 15@ 3 55; Good to Fancy Extra State, $3 70@4 25; Common to Good Extra Western, at $3 15@4 00; Good to Choice Extra Western, $4 00@5 10; Common to Fair Extra Ohio, $3 15@3 75; Good, $3 80@4 20; Good to Choice, $4 25@5 00; Common Extra Minnesota, $3 15@ 3 50; Clear, $3 60@4 20; Rye Mixture, $3 50@4 00; Straight, $4 25@4 75; Patent $4 50@5 10; Bakers' Extra, $4 00@4 75; St. Louis Common to Fair Extra, $3 15@ 3 75; Fair to Good, $3 80@4 75; Good to Very Choice, $4 90@5 00; Patent Winter Wheat Extra, $4 35@5 15; City Mill Extra for West Indies, at $4 60@4 75; South American, $4 70@4 85. SOUTHERN FLOUR—Common to Fair Extra, $3 30@3 65; Fair to Choice do., $3 90@5 25. RYE FLOUR.—Superfine, $3 25@3 45. CORN MEAL.—Yellow Western at $2 60@2 85; Brandywine at $2 80 @2 85. FEED—40 to 50 lbs. quoted at 80c.; for 60 ℔. at 70@72½c.; 80 ℔. at 70@75c.; 100 ℔. at 75@80c.; and sharps at 85@ 90c. Rye at 80c.

GRAIN.—WHEAT.—Ungraded Winter Red quoted at 81@81c.; No. 2 Red at 93½c; No. 1 Northern, at 95c.; No. 2 Red for April, at 909½c; do. for May, at 913/16@91½c.; do. for June, at 913/16@913/16c.; do. for July, 913/16@91½c; do. for August, 915/16@92½c; do. for September, at 935/16@93c, do. for October, at 935/16@91c; do. for December, 963/16@963/16c. RYE—Western, 60c@62½c; Canada at 63@64c; State at 65@66c. CORN—Ungraded Mixed, at 41½@44c; Rejected at 41c; No. 3, 45@45½c.; Steamer Mixed, 45@45½c; No. 2, at 45½c; No. 2 White, 47c; No. 2 Mixed for April, 45½c; do. for May, 46@46½c.; do, for June, 46¾@46¾c; do. for July, 47c. OATS—No. 3 Mixed, 36½c; No. 2, 37c; No. 3 White, 41c; No. 2 do. 42c; No. 1, nominal, 45c; Mixed Western, at 37@39c.; White do., at 40@46½c; White State, 44½c.; No. 2 Mixed for May, 36c.; do. for June, 35½c.

PROVISIONS.—PORK.—Mess quoted at $9 50@10 00 for Old and $10 50@10 75 for New; $10 75@11 50 for Family Mess; $12 00@14 00 for Clear Back; and $9 50@9 75 for Extra Prime. BEEF.—City Extra India Mess, at $15@17; Extra Mess, in barrels, $8 00@8 50; Packet, $8 50@9 00 in bbls.; Fancy Plate, $9 00. BEEF HAMS.—Quoted at $18 50. CUT MEATS.—Rib Bellies, 12 ℔. average, 5½c; Pickled Hams at 8¾@9c.; Pickled Bellies, 10 ℔. average, 5½c; do. 10 ℔ average, at 5½c; Pickled Shoulders quoted at 4½@4¾c; Smoked Shoulders, 5@5½c; Pickled Hams, 8¼@8½c; Smoked do., 9½c. MIDDLES—Long Clear in New York, 5¾c.; at the West, Long Clear, 5.35c; Short Clear, 5.60c. DRESSED HOGS.—City Heavy to Light, 5¾c; Pigs, 5¾@6c. LARD.—Western Steam, 6.17½@6.20c; April, at 6.18c.; May, at 6.18@6.18c.; June, at 6.19@6.20c; July, at 6.20c.; August, 6.32@6.33c; September, at 6.37c.; October, 6.44@6.45c; City Steam, 6.05c; Refined quoted Continent 6.40c.

BUTTER.—Elgin Creamery, at 33c; Pennsylvania do., 32@33c.; Western do., 26@32c.; State Dairy half-firkin tubs, 24@30c.; Welsh tubs, 26@29c; Western Imitation Creamery, 18@20c; Western Dairy, 15@18c; do. Factory, 15@21c.; rolls, 8@12c. Old Butter.—State Dairy, 15@26c; State Dairies, firkin and tubs, 12@25c; State Dairy, firkins, 16@23c,

CHEESE.—State, at 9@11¼c; Skims, 2@8¾c.; Western, 8½@10½c.

EGGS.—State, at 13c.; Western, at 12¾c.; Southern at 12¼@12¾c.

POULTRY.—LIVE.—Fowls, near-by lots, per ℔, at, 15@16c.; fowls, Western, per ℔, at 14@15c.; fowls, Southern lots, per ℔, at 14c; turkeys, per ℔, at 12@14c.; ducks, western, per pair, at 70c.@$1.00; geese, western, per pair, at $1..75@2.00.

POULTRY.—DRESSED.—Turkeys, per pound, 11@13c.; chickens, Philadelphia, light weights to pair, 40@50c. per ℔; do. winter, Philadelphia, 25@28c.; fowls, Pennsylvania, prime, 14c.; do. Jersey, at 14c.; do State and western, at 13½@14c. Ducks, Jersey, per ℔, 14@ 15c; do. western, 13@14c. Geese, Jersey, at 10@12c; do. western, at 9@10c.

POULTRY.—FROZEN.—Turkeys, per pound, at 13@15c.; Chickens, per pound, at 5@12c.; Ducks, per pound, 14@ 15c.; Geese, per pound, at 10@12c.

GAME.—Wild ducks, canvas, per pair, 75c@$1 50; do. red-head, per pair, at 75c@$1 00; do. mallard, western per pair, at 30@40c.; do. teal, 20@30c; do. widgeon, 20 @40c; English snipe, per doz., $2 50; Plover, Western, per doz., $1 75@2 00.

COTTON.—The quotations, according to the American classification, are as follows:

	Uplands.	New Orleans and Gulf.	Texas.
Ordinary	6⅞	6 13-16	6 3-16
Strict Ordinary	7 1-16	7¼	7¼
Good Ordinary	8	8 3-16	8 3-16
Strict Good Ordinary	8 7-16	8⅝	8⅝
Low Middling	8 13-16	9	9
Strict Low Middling	9 1-16	9¼	9¼
Middling	9¼	9 7-16	9 7-16
Good Middling	9 11-16	9⅞	9⅞
Strict Good Middling	10	10 3-16	10 3-16
Middling Fair	10¾	10 9-16	10 9-16
Fair	11	11 3-16	11 3-16

STAINED.

Good Ordinary	6 7-16	Low Middling	7 15-16
Strict Good Ord.	7⅛	Middling	8 11-16

FRUITS.—FRESH.—Quotations are: Apples.—Baldwin, per bbl., at $1 50@1 75; Greening, per bbl. $1 75@2 00; Russetts, Roxbury, per bbl., $1 50@2 00; do. Goldens at $1 25@1 50. Grapes.—Catawba at 4@5c. per case. Cranberries.—Cape Cod, choice, per bbl., $3 75@4; do. fancy, $4@4 25. Florida oranges.—Fancy at $3 00@3 25; choice do. $2 75@3 00; do. inferior at 75c.@$1. Strawberries—Florida at 40@50 per quart for best; do. poor at 25@30c.

FRUITS.—DRIED.—The quotations are as follows: Apples—Fancy evaporated, at 7c; choice, at 6½c; do. prime at 6@6¼c.; fancy North Carolina sliced, at 4@4½c; choice do. at 3@3½c; choice Tennessee quarters at 2@2¼c.; State quarters at 2½@3¼c.; southern sliced prime at 2@2¼c; do. common, 2c. Peaches—Peeled North Carolina, choice, 11@11½c; fancy, 12½@13c; extra fancy, 13½c; Georgia, choice, at 10c; do. prime, 9@9½c; unpeeled halves, 3¾@3¼c; unpeeled quarters at 2½@3c.; Delaware evaporated, peeled, 24@ 27c; unpeeled do., at 12@13½c. Choice pitted cherries at 10@10½c. Evaporated raspberries, at 14@15c; sundried do. 11½@12c. Blackberries—Prime at 8@8¾c. Whortleberries at 6½c. Plums, at 6@6½c; do, California, evaporated at 11c.

PEANUTS.—Quotations at 6c. for best hand-picked, and 4½@4¾c. for farmers' grades.

PECAN NUTS.—The quotations are: Extra large at 7½@8½c; large at 6½@7c; medium at 5@5½c; small at 4@4½c.

HAY AND STRAW.—The following quotations are for: Choice Timothy hay at 95c; good at 85@90c.; medium at 80c.; shipping at 75c; clover mixed at 70@75c; Clover, 50@60c.; No. 1 rye straw at $1 00; short rye straw at 75@80c; oat straw at 40@45c; wheat straw at 60@65c., all per 100 pounds.

VEGETABLES.—Potatoes.—Maine, fancy, d. h. bbl. at $2 25; Nova Scotia per bbl., at $2 00@2 25; State, per 180 ℔., $1 50@1 75; Burbank, State, bulk, per 180 ℔, $1 62@1 87; Burbank, eastern and Nova Scotia, per bbl, $2 25@2 50; Hebron, do, do, do, per bbl, $2@2 25; Hebron, State, bulk, per 180 ℔, $1 50@1 75; Prolific and Goodrich, eastern and Nova Scotia, per bbl., $2 00@ 2 25; Peerless, bulk, per bbl., at $1 50@1 75; Magnum Bonum, imported, 168 ℔. sack, $1 80@2 00; Bermuda, per bbl., at $18 00. Sweet potatoes, Delaware River, per bbl., at $2 50@3 00. Cabbages—Long Island, choice, per 100, at $6@7.

LIVE STOCK MARKET.

NEW YORK, SATURDAY, April 17, 1886.

BEEVES.—Total shipments for the week, 9,840, against 7,947 head for the same time last week. Very Ordinary to Choice Steers, sold at the range of $4 75@6 25 per 100 pounds, and four cars of Extra Bullocks bought in Chicago, cost laid down here about $6 50. Dry Cows sold at $3 50@4 50 (including four cars of still-fed sold mainly at $4 25@4 50). Bulls ranged from $3 50 to 4 50; and Old Oxen from $4 60 to 5 60, Chicago steers, 1,458 ℔, at $6 25; do, 1,226 ℔, at $5 85; do., 1,176 ℔, at $5 70; do, 1,144 ℔, at $5 65; Ohio do, 1,955 ℔, at $6 25; do. 1,296 ℔, at $5 88; do, 1,158 ℔, $5 85; Cincinnati do., 1,084 ℔, at $5 50; do, 1,125 ℔, at $5 50; Indiana do, 1,297 ℔, at $5 88; Kentucky do, 1,199 ℔, at $5 57½; Ox, 1,570 ℔, at $4 60; do, 1,615 ℔, at $5 60; Bulls, 1,360 ℔, at $4 50; do, 1,380 ℔ at $3 50. Pennsylvania Stable-fed Steers, 1,339 ℔, at $5 85; do, 1,235 ℔, at $5 65; do, 1,174 ℔, at $5 60; Ohio steers, 1,180 ℔, at $5 40; do, 1,412 ℔, at $5 95; State do, 948 ℔. at $4 75; Mixed Western steers, 1,539 ℔, at $6 10; do, 1,378 ℔, at $5 88; do, 1,362 ℔, at $5 70; do, 1,127 ℔, at $5 36¼; do, 1,042 ℔, at $5 22½; State do, 1,092 ℔, at $5 15; do, 1,004 ℔, at $5.

CALVES.—Veals, 108 ℔, at 4½c; 105 ℔, at 6c; 141 ℔, at 6¼c.

SHEEP AND LAMBS.—Total receipts for six days, 28,970 head against 22,423 head for the same time last week. The market ruled dull and trade was limited with prices barely steady. Poor to Prime Unshorn sheep sold at $4 15@6 75, with a car-load of Extra Heavy Wethers, bringing $7 37½. Yearling lambs sold at 6¼@8c, per pound.

HOGS.—Total receipts for six days, 35,392 head, against 28,897 head for the corresponding time last week. None alive for sale. Nominally steady at $4 60@4 85 per 100 ℔.

AN ANNOYING and perplexing loss of memory even of ordinary things indicates, in general, impoverishment of the blood and consequent failure of the brain. This impoverishment is caused by the excess of uric acid in the blood, which can be neutralized and removed by Warner's safe cure only.

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Awarded FIRST Premium and Gold Medal at World's Fair New Orleans, over 12 leading Wind Mills. The EUREKA, after a trial lasting 4 mos. was pronounced the best over all and to-day stands at the head of all competitors. Sizes, 10 to 18 ft. diameter of wheel, either for Pumping or Power Mills. *Perfect in all parts and warranted.* Estimates on application. Also Mfrs. of the Adams Direct Draft Barn Floor Horse Power. *Live Agents Wanted.* Address Mfrs., SMITH & WOODWARD, Kalamazoo, Mich.

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CLEVELAND, O., Oct. 30th, 1885.—From the time I was 18 years of age, I was almost a confirmed invalid with liver and kidney trouble. Confined to my bed three weeks out of four. Face covered with a dirty eruption. Never expected to get well. Have taken fifty-three bottles of Warner's safe cure. Can do my work, marketing, walking any distance without any fatigue. Warner's safe cure saved my life, for I was a complete wreck.—MRS. LOUISA DEMOOY.

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FOR HORNED ANIMALS,
Or Bull Conqueror.
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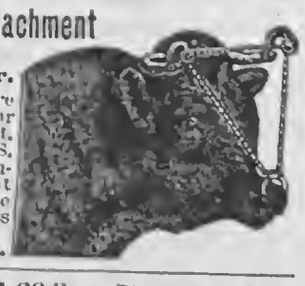

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To the Kainit Trade.
ROBERT S. CARR,
Admiralit Ætstrasse 52.
TELEGRAMM-ADDRESSE.....ROBERT CARR.
HAMBURG, 1st of January, 1886.
The undersigned has the honor to inform all those interested in the KAINIT TRADE that he has been appointed by the STASSFURT SYNDICATE OF KAINIT WORKS, consisting of KÖNIGLICH PREUSSISCHES SALZWERK, STASSFURT, (The Royal Prussian Saltmine); HERZOGL. ANHALT. SALZWERK, LEOPOLDSHALL, (The Ducal Anhalt Saltmine); SALZBERGWERK NEU-STASSFURT, LOEDERBURG, (The Saltmine New Stassfurt); KALIWERKE ASCHERSLEBEN, GEWERKSCHAFT, ASCHERSLEBEN, (The Kaliworks Aschersleben), as their SOLE AGENT for the sale of this article to the United States of North America and Canada. As such, any orders will be carefully and promptly executed at the shortest notice and lowest possible current cost.
The demand for Kainit is steadily increasing, and the agricultural public, in becoming more acquainted therewith, is rapidly realizing the fact that the small cost of the article (it is the cheapest article for agricultural purposes) compares favorably with the results arrived at. As a standard Kainit is guaranteed to contain no less than 23 per cent. Sulphate of Potash and assuring all importers of the greatest care in executing orders entrusted to the undersigned, he is always ready to quote by cable or letter in reply to inquiries made direct or through his agents. Representatives for Baltimore; Messrs. PRIOR & VON COLLEN, 25 S. Gay Street, Baltimore. ROBERT S. CARR.

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NON POISONOUS
SHEEP DIP AND CATTLE WASH.
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80% PURE $3 PER TON
CAYUCA LAND PLASTER.
Contains Phosphate of Lime. Gives Plants an early start, improves quality, increases yield, Low freights to all points. Farmers' Memorandum Book sent FREE. Correspondence solicited. CAYUGA PLASTER CO. Union Springs, N.Y

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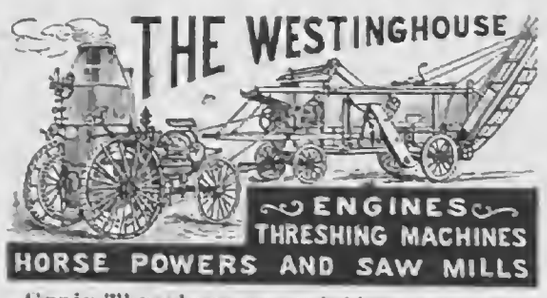

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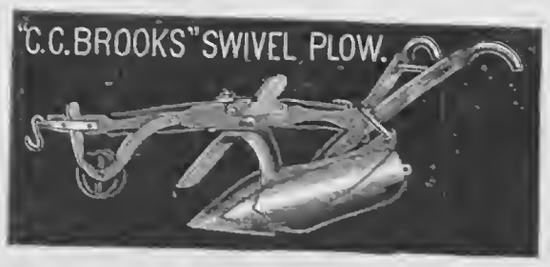

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AS AN EVIDENCE OF FAITH

in my remedy I make the following offer:
I will insure herds of swine of not less than one hundred in number against disease, at a small fee per head, provided they are fed my remedy under my direction, and prove upon examination prior to contract that they are in a healthy condition, and are neither in-bred, close-bred nor the progeny of such.
1. I will forfeit $100.00 to any breeder whose offer to examine for insurance I decline, provided he forwards remittance to cover my expenses to and from location of hogs, or I fail to prove to the satisfaction of any disinterested party, that failure to respond to invitation is caused by prior engagement or by matters of at least equal importance.
2. I will forfeit $500.00 if I decline upon examination to insure such herds, if my judgment as to their condition of health is overborne by the result of an examination made by at least two properly qualified and graduated veterinary surgeons.

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Yours very truly, WHITE & CO.
[N. B.—White & Co., since writing the above letter, have purchased $450 worth of the remedy.]
The remedy can be procured of all Druggists, or from my laboratory. Prices, $2.50, $1.25 and 50 cts. per package. 25 lb. cans, $12.50.
JOS. HAAS, V. S.
Member of Indiana State Veterinary Med. Associat'n
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I will SELL, on or about the 20th of April, FOUR IMPORTED SHETLAND PONY MARES and one COLT. Trained. Have been handled by children.
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Young Cows; Yearlings with Calf, Yearling Bulls, and Spring Calves' Prime Stock. No fancy prices. We mean business, G. W. THOMPSON & SON, Stilton, N. J., P. R. R.

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HIPPARCHUS No. 11672; Sire Orange Peel, P. 288; Dam King's Fertile, No. 22765. Service Fees, $100.
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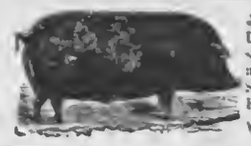

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For the Young.

OW many of the Cousins have ever seen the Mayflower or trailing arbutus? Not many, I fear, for it is only found throughout New England, along the coast, and along Lake Michigan and a few other places. To my mind, it is the most beautiful of all the spring flowers. It is such a modest little thing, and comes pushing its way up through the brown leaves just at the time when we need flowers and beautiful things. It comes crowding over the gray old hills of New England, filling the air with the most beautiful perfume. No hot-house flower raised with all the skill that art can ever bestow can compare with this sweet little wanderer. It was the first flower that the Puritans saw after that long and terrible Winter at Plymouth. It must have been very dear to them, hard and stern though they were. I have seen some pretty rough men that you never would think capable of showing any feeling, pick Mayflowers and put them in their buttonholes. City people are very fond of these little wild flowers. The boys and girls in the country along the Old Colony Railroad make considerable money every Spring at picking Mayflowers for the Boston florists. Uncle Mark used to do this work himself years ago. It was far more profitable than picking huckleberries. We would gather the flowers in great baskets and bring them home, when the girls would make them up into small bunches. The girls could always beat the boys at this work, and we were glad enough to admit it. In the morning, we would send great boxes of these bunches of fragrance up to Boston, where they would gladden the hearts of the city people for many a day. I often think that some of the best hours of my boyhood were passed on those gray old hills hunting for Mayflowers. I wish all the Cousins could see them.

On the dreary fields of the cold, bleak North,
Where the snow lies long on the barren hills,
You fill all the air with a perfume rare
Like a breath from Heaven—a touch that thrills.

You come with smiles though the fields are dead
And the barren hillside broods and grieves,
From the hills of gray that look far away
O'er the sea, you gladden the dead brown leaves.

The gloomy Puritan, years ago,
The soldier marching with sword in hand,
Passed smiling at you so tender and true,
With a feeling they never could understand.

You bring us back from the long ago,
A life we dropped as the stern years swung,
When life was new and as sweet as you,
And Care hung back with a palsied tongue.

LETTERS FROM THE COUSINS.

DEAR UNCLE MARK.—I would like to join the Y. H. C. I am a little girl, nine years old. My father takes the RURAL and we all like it very much, but I enjoy reading the letters the best. I have a little kitten; its name is Pinkey. It will play very nicely. I have six sisters and two brothers; I am the youngest of them all. I have five rabbits, three white ones, one black one, and a brown one. I like to crochet very much. I wish that the Cousins would send me some patterns. I have a dolly; her name is Maud. Well, I must stop, or my letter will be too long for print.

From your Niece,
Mayfield, N. Y. MATTIE KNAPP.

[Who can send the patterns? I wonder what color Pinkey can be? U. M.

DEAR UNCLE MARK: It is nearly a year since we wrote our last letter. Since then we have traded our farm for another of 110 acres. The Cedar River runs through it. There are quite a good many fish in it. The fish will soon begin to run and we will get some of them. They will be pickerel mostly. Pa is going to give John and I a quarter of an acre of ground for garden. I am going to plant some corn, potatoes, beans, onions, parsnip, radish, lettuce and cabbage. I am going to raise some cabbage plants to sell. Two years ago we sold a lot of plants. I will write and tell you how we succeed with our garden.

CLARENCE, JOHN and WILLIE CROOP.

[Pickerel are very good to eat. I hope you will have a good garden.—U. M.]

DEAR UNCLE MARK: I am a little girl, 13 years old. I live on a farm in Trempealeau Co., a mile and a half from town. I like living on a farm very much. We have a silo and make ensilage for the cattle, and Papa thinks it is worth double its cost for stock. I have a little pet dog; he is three years old, and his name is Cute. I did have two canaries, but they got away last Summer. Our farm is most too large; there are 520 acres. We have 50 hens, two dogs, 36 head of cattle, 65 pigs, and five horses. There are two railroads running through our farm. Oh! I almost forgot to ask you if I might join the Y. H. C.? but I won't make this letter too long, for if I do, you won't want me to write again. JESSIE MARSH.

[Yes, you are now a Cousin. Your farm is pretty large. I am glad the silo is such a success.—U. M.]

DEAR UNCLE MARK: I had two stands of bees of my own. They were very weak in the Spring, but had increased so by the middle of July, that I expected them to swarm, but they did not, and I swarmed them artificially by taking all the frames of comb and bees out, and shaking the bees down in front of the hive and letting them run in on empty combs. I then removed my other hive of bees to a new location, and placed an empty hive in its place. The returning bees entered the hive as they knew of no other place to go to. I neglected to say that I did this when the bees were hard at work. I then placed my combs from the other hive in the new hive and gave them a queen, I had before purchased. I then had another stand of bees. I obtained 205 pounds of honey from my bees, for which I received from 17½ to 15 cents a pound. I hope I am not crossed off the list of Cousins for not writing before. I will try to do better next time. Your affectionate Nephew,

HERBERT GREEN.

[Bee keeping is very nice and pleasant work. It requires a great deal of thought and study. The business has greatly changed in the time that has passed since I was a boy. I can remember that we used to have two or three old hives of bees standing on a platform out in the orchard. They never used to give us much honey. We used to blame them, but now I know it was our own fault. We did not give them comfortable quarters, or help them work. They would sting the cattle, or even the bad boys who used to steal our apples. One year we put them under the best apple tree, so that our fruit would be protected, and it surely was protected, for the bees were so savage that none of us dared to go and pick up apples, and we missed our apple sauce and baked apple. In the Spring when the bees swarmed, what a time there was! We would pound upon tin pans, and make all manner of noises until the swarm settled down upon a tree. Then the old man with whom I lived, with a great bundle of mosquito netting over his head, and great gloves on his hands, would cautiously place the empty hive under the great brown bunch of buzzing bees and strike the limb with his stick. Once each season he was sure to fall down while running away, and then the bees had him at their mercy. How they did sting him! I can remember how he used to look, after the battle, sitting in his arm chair in the kitchen, with his face and hands all swollen, telling how much better the bees were when he was a boy. So I never used to think much of bees when I was a boy. But I have changed my mind since I came to see how pleasant and profitable the work can be made by careful attention. I can go and stand right among them without any danger of being stung. There ought to be a few good hives on every farm, and the boys and girls could help father and mother, and make better men and women of themselves too, by learning how to care for bees. Honey is the healthiest and best of all sweet foods. I wish farmers would use three times as much of it as they now do. U. M.

DEAR UNCLE MARK AND COUSINS: I do not get much time to write or study, because my little sister Edith hinders me very much. When I sit down she gets up beside me and tries to help write too, and you know she don't help much: she is only two years old. She tries to do all kind of house-work and is so cute and cunning that we cannot be cross with her, so I go and play with her when she wants me to. I want Uncle Mark to send me some seeds, for Papa says we can have all the ground for a garden, and all the seeds we want to plant in it. Papa made me a birthday present of Uncle Tom's Cabin. When I am reading it I have to have my geography with me all the time to see where George and Eliza went to Canada, and Uncle Tom went to New Orleans. That institution of slavery was horrid, wasn't it? Glad we don't have it now. I never saw but one negro, but I have seen lots of Indians and a few Chinamen. Papa takes ten newspapers.

Como, Montana. CARRIE E. HARLAN.

[Of course you can't scold that little baby. I am glad you stop and play with her. I like Uncle Tom's Cabin. I am glad, indeed, that slavery has been abolished. Let us be careful that we do not form habits that will make slaves of us.—U. M.]

LETTERS RECEIVED FROM Leslie R. Bridgman; Amy M. Underwood; Sadie E Wright; William Jackson Jr.; Ettie J. Nixon; Retta M. Avery; Annie H. Lonsdale; Walter C. Eberly; Willie B. Munson; Maggie Johns; Albert A. Marshall; Ira and Ernest De Armond; Hattie Cross; Clare Nichols; Laura Godfrey; W. H. Whitcome; Annie Davis; Amy and John Mahan; Grace Prosser; Maggie Armour; Peter Kersah; Mary C. Murphy; Orris French; Grace B. Kelly; Mag Kelly; Rosy Stockwell; May Stockwell.

Miscellaneous Advertising.

THE OLDEST METHODIST MINISTER IN PHILADELPHIA.

"I AM the youngest old man in New York" said the Hon. William E. Dodge, a short time before he died. Mr. Dodge was indeed one of the sprightliest of old gentlemen. He was as most men of fifty, although he was about seventy-five. Up to the time of his death, which came very suddenly, he was able to accomplish more work in a day than almost any of his partners or clerks could get through with.

In Philadelphia lives another "young old man," one of the most venerable of Methodist ministers. He is as active, as hearty and as cheery as was Mr. Dodge. He is the Rev. Anthony Atwood, honored and beloved not only by Methodists, but by good people of every persuasion. Mr. Atwood might pass for a man of about sixty, but he is eighty-five. About 15 years ago he told the writer that he hardly expected to do much more work, and that he thought a man of seventy might be considered to have rendered all the effective service he would be capable of. Yet, since that time Mr. Atwood has done more ministerial work than many a younger man has accomplished. Some years ago he had a partial stroke of paralysis, which for a while disturbed his general health. He also suffered from a bronchial difficulty which threatened to be serious. From both of these disabilities he has now entirely recovered. With his snow white hair in its ample fullness, and his clear and ruddy complexion, he is the picture of a model patriarch, both in health and good nature. Although it is some time since Mr. Atwood has been in pastoral charge of a church, he preaches frequently, and is regularly at the Green Street Methodist Episcopal Church on Communion Sundays, taking part in the sacramental service.

The writer recently called on this venerable clergyman at his home, No. 809 North Seventeenth street, Philadelphia, and found him as cheerful and vivacious as in former years.

"Well, Mr. Atwood, it looks like old times to see you looking so vigorous and hearty; but years do not seem to make you an old man; and you appear to enjoy quite as good health as most of the younger men."

"My health," said Mr. Atwood, "is all I can expect, considering my age, which is now close to eighty-five. Since the stroke of paralysis, which I had several years ago, I have not been able to preach with my former vigor. I find that I am not capable of a prolonged pulpit effort as of old. Words do not follow my thoughts as quickly as they used to. But with this exception I am about as well as I have been for many years."

"When I had that stroke of paralysis," continued Mr. Atwood, "I resorted to a treatment which I found had been of great value to many others who were similarly affected. I had for many years known Dr. Palen, of Messrs. Starkey & Palen, who have done so much good with their Compound Oxygen, and I consulted him in reference to my case. I took the treatment at the office, which was then in Girard street. At once I began to receive benefit. For some time I visited the office regularly and frequently. I took inhalations of the Oxygen until my health was so fully restored that I was in no further need. It gave me a new vitality, restored my general health, and put my whole system in renewed good order."

"You had some bronchial difficulty, did you not, Mr. Atwood?"

"Yes; I had an irritation in my throat which was quite troublesome, and threatened to be more so. I tried Compound Oxygen for this also, and was surprised not only to find the completeness of the relief it afforded me, but the readiness with which it acted. I procured a "Home Treatment" in order to cure this bronchial trouble at my leisure; supposing the irritation would be slow to go away, as it is in the case of many clergymen, who, after long years of pulpit service, are attacked with soreness of the vocal organs. But I had occasion to use only a small portion of what was contained in the "Treatment." My throat became so much better that I had no occasion again to resort to the use of Oxygen."

"And have you, since your recovery, had much occasion to use this remedy, Mr. Atwood?"

"Not a regular thing, at all; only at long intervals. Once in a while, if I need a general toning up of my system, I call at the new office of Drs. Starkey & Palen—which, by the way, is an exceedingly beautiful and convenient place—and I take a few inhalations. From this I always receive benefit and strength."

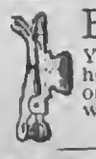
"You are, then, a firm believer in this method of treatment?"

"Yes, very, very firm. You may say that I most heartily and thoroughly approve the treatment and endorse Drs. Starkey & Palen as gentleman whom I have known for years, physicians of repute and ability, in whom I have entire confidence. They have done incalculable good with Compound Oxygen. I am glad that so many invalids have been brought to health by this means. I am glad, too, that people are becoming more generally acquainted with it."

The experience of Mr. Atwood is an evidence that the virtues of Compound Oxygen are not only for the advantage of the young and those in middle life. There are many other instances on record in which persons advanced in years have received, by means of this great vitalizer, renewal of health and prolongation of life. For further reference to these and for better acquaintance with the merits of Compound Oxygen write to DRS. STARKEY & PALEN, 1529 Arch St., Philadelphia, Pa., for their pamphlet-treatise, which will be freely mailed to any address.

WOMAN, do you suffer from painful periods? If so, it is wrong, and Warner's safe cure will, by restoring the delicate organs to their proper condition, soon remove it and give you health.

PILES. Instant relief. Final cure in 10 days, and never returns. No purge, no salve, no suppository. Sufferers will learn of a simple remedy, free, by addressing C. J. MASON, 78 Nassau Street, N. Y.



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Your lines are where you put them—not under horses' feet. One agent sold 12 doz. in five days; one dealer sold six doz. in 15 days. Samples worth $1.50 FREE. Write for terms.
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SAVE Your POSTS and use SHAW'S WIRE FENCE TIGHTENER. Can be adjusted to any wooden post; can tighten or slacken, according to climate, with an ordinary monkey wrench. Price $8 per doz. For full particulars, apply to
W. SHAW,
Delaware, Ontario, Canada.
Agents wanted. Patent applied for.

SPAIN'S CHURNS. Star Churns, Rapid Ice Cream Freezers, Improved Tree Tubs, all made of CEDAR. Send for illustrated circular and prices. Clement & Dunbar, Philadelphia, Pa.

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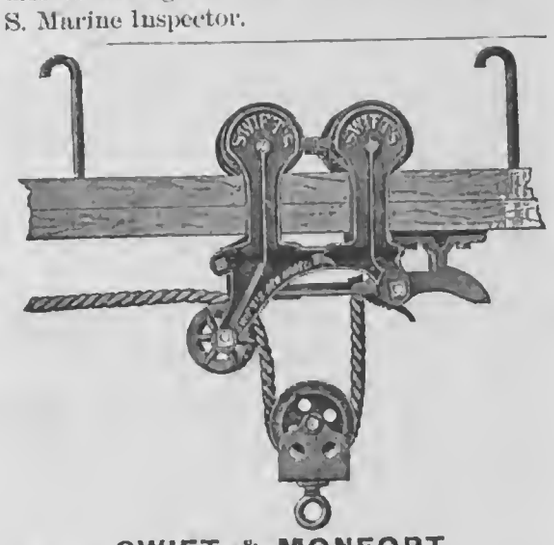
The best and lightest draft Plow that ever turned soil. For circulars, descriptive, illustrative, demonstrative, logical, philosophical, irrefutable, convincing, sensational, astonishing, amusing, comical, but all true when they describe the merits of the pioneer Three-wheel plow, the FLYING DUTCHMAN, address,
MOLINE PLOW CO.
Moline, Ill.

The Wrong Place for Scales.

BUFFALO, N. Y., Feb. 6, 1886.—In the spring of 1881, had a slight eruption, particularly on the hands, itched intensely. Spread to my face and my eyes swelled, and nearly closed. Face and hands covered with scales. Consulted physician with no relief. When I had given up hopes of recovery, took twenty bottles of Warner's safe cure, which completely cured me. It is one of the greatest remedies of the age.—CAPT. W. B. ROBINSON, U. S. Marine Inspector.



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MANUFACTURERS OF
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Dealers in Forks, Ropes, Pulleys, and Agricultural Implements of all kinds. Send for circulars.
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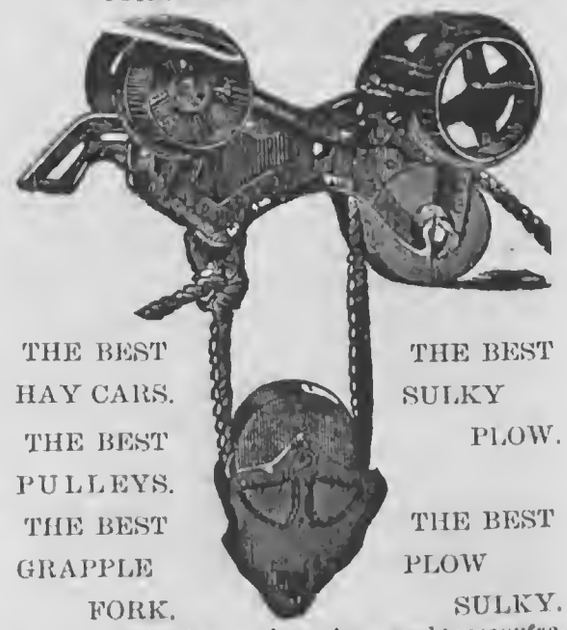
UCCESSORS TO GEO. K. FOWLER.



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If your dealer does not keep them, send to manufacturers for lowest cash prices.
Fowler & Farrington, TAUGHANNOCK FALLS, N.Y.

RUSTLESS IRON WATER PIPE.
WM. T. WELLS,
7 to 9 Cliff St. New York
Send for Catalogue and Prices.

PERSONALS.

THE Presidency seems to "agree" with Cleveland; he has gained 42 pounds since entering the White House.

SEC. L. Q. C. LAMAR has gone to Macon, Ga., "they say" to marry Mrs. Holt, widow of Gen. Holt. They were engaged in their youth, *on dit*, but were parted by "some trivial cause."

"EX-PRESIDENT ARTHUR has been very ill; but not with Bright's disease, as reported. He is is rapidly improving, and hasn't lost much flesh"—in spite of the reports that he has lost 125 pounds. Authority—"An intimate friend" on Wednesday last.

SAID Senator Palmer, of Mich., last Wednesday in the Senate, "To-day half a dozen gentlemen in Wall St. could meet together, and, by a piece of financial jugglery, dictate the profits or losses of thousands of men and of many communities."

WEDNESDAY was the 76th birthday of Senator Morrill, of Vt, and a congratulatory reception at his home in Washington was attended by nearly all the Senators, Justices of the Supreme Court and many other prominent officials and private persons.

SENATOR HOWELL E. JACKSON, of Tennessee, has been nominated by the President, and and at once confirmed by the Senate as U. S. Judge of the Sixth Circuit to succeed the late Judge Barter: salary, $6,000. He has accepted, and resigned his seat in the Senate. The Bell Telepone case will be decided by him. He is said to favor neither side.

THE newspaper men seem bound to marry Pres. Cleveland—now to Miss Frances Folsom, of Buffalo, who is in Europe with her mother who has written to Buffalo friends about the engagement of her daughter to the President. Marriage to take place "quietly in the White House in June," according to a confidential letter from Miss F. herself to a lady friend who "must never, never tell!"

Miscellaneous Advertising.

HOT AND DRY SKIN, frequent chills and fever, burning patches upon the skin, scanty dark colored water which contains sand or mucous, indicate that the system has been attacked by extreme kidney disorder, which can only be cured by Warner' safe cure.

BRICK AND TILE MACHINERY AND CLAY CRUSHERS, BEST IN THE WORLD

Address J. W. PENFIELD & SON, Willoughby, O. P. O. Box 3

ECLIPSE POST HOLE DIGGER.

The Greatest LABOR-SAVING tool ever invented for digging holes in the ground. This machine works on a new principle, and is unlike anything in the market. It is neither an Auger nor a Plunger, but is driven in the ground with a driving rod, which works in a pipe similar to a telescope. We claim for this tool:

1st. That one man can dig from two to three hundred holes two feet in ordinary ground in one day.

2nd. That it will dig holes any size or depth required.

3d. That it will work successfully in very hard or rough ground where other diggers and augers will not work at all.

4th. You stand up straight while using it, consequently no back-breaking work is required.

It will pay you to send for descriptive circulars and prices to COLE & FLEMING, Manufacturers, Springfield, O.

Beats the WORLD.

TILE and BRICK MACHINERY. STONE-SEPARATING CLAY-CRUSHERS

Illustrated Catalogue free. H. BREWER & CO., No. 154 Mill St., TECUMSEH, MICH.

Satisfaction Guaranteed.

THE UNION HORSE-POWER

Has the Largest Track Wheels, DOUBLE GEARED, NO ROOS, CHILLED BEARINGS, and LEVEL TREAD.

ILLUSTRATED CATALOGUE FREE

UNION Thresher Separator and Cleaner, Premium Farm Grist Mill, Feed Cutters, &c. W. L. BOYER & BRO., PHILADELPHIA, PA

$250 WILL BUY

THE BEST SAW MILL Yet offered for the money.

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Purify the Blood.

We do not claim that Hood's Sarsaparilla is the only medicine deserving public confidence, but we believe that to purify the blood, to restore and renovate the whole system, it is absolutely unequalled. The influence of the blood upon the health cannot be over-estimated. If it becomes contaminated, the train of consequences by which the health is undermined is immeasurable. Loss of Appetite, Low Spirits, Headache, Dyspepsia, Debility, Nervousness and other "little (?) ailments" are the premonitions of more serious and often fatal results. Try

Hood's Sarsaparilla

Sold by all druggists. $1; six for $5. Made only by C. I. HOOD & CO., Lowell, Mass.

100 Doses One Dollar

Golden News from the Golden Gate.

SAN FRANCISCO, Cal., June 13, 1885.—While in New Mexico, I contracted a severe case of catarrh of the bladder, from exposure to cold. Passed blood continuously, until I could not walk. Warner's safe cure with Warner's safe pills used, according to directions, for nearly a year, saved my life.—W. D. SOUTHWORTH.

HUMPHREYS' Homeopathic Veterinary Specifics for HORSES, CATTLE, SHEEP, DOGS, HOGS, POULTRY. Used by U. S. Govern'm't. Chart on Rollers, and Book Sent Free. Humphreys' Med. Co., 109 Fulton St., N. Y.

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NO TAR ESTABLISHED 1866

Takes the lead, does not corrode like tin or iron, nor decay like shingles or tar compositions, easy to apply, strong and durable at half the cost of tin. Is also a SUBSTITUTE for PLASTER at Half the Cost. CARPETS and RUGS of same, double the wear of oil cloths. Catalogues and samples free. W. H. FAY & CO., CAMDEN, N. J.

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DUTTON GRINDER

Perfect Mowing MACHINE KNIFE GRINDER. Weighs but 18 Lbs. Can be carried into the field and attached to Mowing Machine Wheel. Send for Descriptive Catalogue. Agents wanted in every County. R. H. ALLEN CO., 189 Water St., New York.

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7,000 CHALLENGE WIND MILLS.

IN USE IN EVERY State and Territory of the U. S. It is a sectional wheel, has been made by us 14 years, and has never blown down without tower breaking, a record no other mill can show. MILLS SENT ON 30 DAYS TEST TRIAL. BEST FEED MILLS, CORN SHELLERS, ETC. GOOD AGENTS WANTED in all unassigned territory. Catalogues free. CHALLENGE WIND MILL AND FEED MILL CO., Batavia, Kane Co., Ill.

$6.50 for Boss Plow WITH 3 DIFFERENT SIZE MOULDS.

Gives farmer Four Plows for price of one.

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NEPTUNE Flexible Spray Hose Nozzle.

All Rubber. Indestructible. Requires no packing. Solid stream instantly changed to mist or spray, widely diffused or concentrated, by compressing soft rubber tip. Best for Gardens, Window Washing, etc. For washing carriages, will not scratch paint. By mail, post-paid, 50 cents. Trade supplied. Hartford Rubber Mills, Hartford, Conn.

IT PAYS to sell our Rubber Printing Stamps. Samples free. J. M. Mitten & Co., Cleveland, O.

$25 A DAY saved by using the Little Giant Road Machine, instead of making roads in the usual way. It is the cheapest and the best. Send for circular. STRONG & PARKER, Vergennes, Vt.

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NEW BLOOD OF EXTRAORDINARY MERIT IN THE THORBURN POTATO.

It is the Earliest of All.

$10 per barrel; $5 per bushel; $3 per half-bushel; $2 per peck; $1.50 per half-peck. Or by mail, one pound, 75 cts.; three pounds, $2.

Descriptive Circulars and Catalogues on application.

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IT IS IMPORTANT

That Seeds should be *new* and *true* to name. They should be bought of men who have had *experience* in the business. By sending to us you will get just what you order, and that which will give you satisfaction. We are importers and growers of Seed. Send for our Catalogue. L. G. SHERMAN & CO., Providence, R. I.

Mention this paper.

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The old and Reliable! SYRACUSE NURSERIES Come to the front For the Fall of 1886

with the choicest Stock of their specialties, STANDARD APPLES, STD. and DWARF PEARS, PLUMS and CHERRIES, ever offered to the public, all young, thrifty and well rooted.

Also a very superior assortment of GENERAL NURSERY STOCK both FRUIT AND ORNAMENTAL including all the popular ORNAMENTAL TREES, SHRUBS, and ROSES.

All Nurserymen and Dealers are cordially invited to inspect this superior stock or correspond with us, before placing their orders for the coming Fall.

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HALF A MILLION GARDENS ARE ANNUALLY SUPPLIED WITH SEEDS Peter Henderson's PLANTS

EVERYTHING FOR THE GARDEN

Our Seed Warehouses, the largest in New York, are fitted up with every appliance for the prompt and careful filling of orders.

Our Green-house Establishment at Jersey City is the most extensive in America. Annual Sales, 2½ Million Plants.

Our Catalogue for 1886, of 140 pages, containing colored plates, descriptions and illustrations of the NEWEST, BEST and RAREST SEEDS and PLANTS, will be mailed on receipt of 6 cts. (in stamps) to cover postage.

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The largest and most complete assortment of Nursery Stock in New England. Orders will receive prompt attention. Address STEPHEN HOYT'S SONS, NEW CANAAN, CONN.

OUR SPECIALTIES.

Jewell Strawberry, Ostheim Cherry and *Prunus Simonis*, or Apricot Plum. Also all the standard berries, vines, and plants, together with a very choice lot of seed potatoes. Send for catalogue. A. C. SABIN, Glenwood, Iowa.

GRAPE VINES 100 VARIETIES! Best quality! Low prices! One each, Empire State, Niagara, Golden Pocklington, Lady and Delaware, post-paid, $2. Also Worden, Elvira, Iona, Ives, Catawba, Brighton, Vergennes, Early Victor, Moore's Early, Rogers' Hybrids, etc. 60,000 No. 1 Concords, $2 per 100; $12 per 1,000. Raspberries and other small fruits. Catalogues free. Address GEO. W. CAMPBELL, DELAWARE, OHIO.

For Sale--300 Bus. Fresh OLIVER BROS., Lockport, N. New York. APPLE SEED

FOR SALE.

PREMIUM PEARL OF SAVOY POTATOES, and ANGEL OF MIDNIGHT CORN. Address STEPHEN HOYT'S SONS, NEW CANAAN, CONN.

Send stamp for sample. Dietz Early Corn, Dietz Longberry Wheat, Dietz Fruit Dryer. New way of cutting fodder. G. A. DIETZ, Chambersburg, Pa.

Marlboro Raspberry, *Ulster Prolific and Fough keepsie Red Grapes.* Send for description and price to A. J. CAYWOOD & SON, Marlboro, N. Y.

FOR SALE.

I have about Seventy-five Barrels of BURPEE'S EMPIRE STATE POTATOES, which I will sell—single barrels at $3.50; ten-barrel lots, $3, f. o. b. here. Address E. D. COPP, CLIFTON SPRINGS, N. Y.

Strawberry Plants for Sale, during the Spring. 1886.—Henderson, $2 100; $15—1000. Parry, 75 cts. 100; $5—1000. May King, 50 cts. 100; $3—1000. Garrettson, $1.50—100. Prince Berries, 50 cts. 100; $4—1000. Old Iron Clad, $2—1000. Cornelia, $1.50—100. By freight or express. JAMES LIPPINCOTT, JR., MOUNT HOLLY, N. J.

E. B. Underhill, POUGHKEEPSIE, N. Y. "BERRY LEAF" for Spring now ready. It is four-leaved, fresh, full and free. It tells of all the old and new, cheap and dear BERRY PLANTS. Please send for it to-day. Get the Best.

A NEW BARLEY.

Imported from Denmark in 1883, where it yields from 80 to 100 bushels per acre; grown on my farm the past three years; I have found it to outyield all the common kinds three to one; it is a magnificent six-rowed variety; grows very tall, with extra large heads. Try it, and you will find it superior to all other kinds. Price $1 per peck, or $3 per bushel. S. A. Taylor, LAKESIDE FARM, FITZWILLIAM DEPOT, N. H.

WANTED By the Chase Nurseries, Honest and Energetic Men to solicit orders for their Nursery Stock. The business easily learned. Full instructions given. Permanent Employment and Good Pay. State age and previous occupation. Name this paper. New England applicants address us at Boston; York State and West, at Geneva, N. Y., Penn., N. J., and South, at Phila. State age. R. G. CHASE & CO.

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SAMPLE FREE ROSE OR GRAPE VINE with Cat-log, postpaid, 15c. WM. B. REED, Chambersburg, Pa. Mention paper.

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DAKOTA RED	$1.25 Bu.	$2.50 Bbl.
WHITE STAR	1.00 "	2.25 "
WALLS ORANGE	1.00 "	2.25 "
RURAL BLUSH	1.00 "	2.25 "
EARLY MAYFLOWER	1.25 "	2.50 "
WHITE ELEPHANT	.75 "	1.75 "
BURBANK'S	.75 "	1.75 "

An assortment of 50 kinds. One tuber of each, correctly labeled, $5.00. Delivered at freight or express office. C. L. HAWLEY, HORNELLSVILLE, N. Y.

10,000 Two-year-old APPLE TREES, 6 to 7 feet; strong. Baldwins and all the leading varieties. Send for prices. BROCKSBANK & ALLEN, *Nurserymen*, Hudson, N. Y.

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EVERGREENS by the MILLION, all NURSERY GROWN, at ELGIN NURSERIES Established 1854.

No agents employed. All stock sold direct from Nurseries. We sell more Evergreens of better quality, for less money, than any other firm in America. Send for our Catalogue for 1886, compare our prices with others, then order where you can do the best. Address E. H. RICKER & CO., ELGIN, ILL.

Please mention this paper.

Real Estate.

FOR SALE.—One-half my Farm of 480 Acres. A Bargain worth looking after. Apply on premises, or address A. N. RUSSELL, Mound Valley, Labette Co., Kan.

TO PRACTICAL FARMERS.—To Let on Buzzards Bay, Massachusetts, in five town, furnished homestead, barn, farm, fishing, oysters, ready market for produce. Rent, $400. Address NEWMAN, 68 West 35th St., New York.

500 FARMS for Sale, in TIDEWATER, VIRGINIA. Cheap and Rich Lands. Healthy and Mild Climate. Fish and Oysters in great abundance. E. C. LINDSEY & CO., Norfolk, Va.

FARMS Hotels, Stores, Mills. Business Chances. Country Seats or Lands for *Sale* or *Exchange*. Inclose stamp for Lists. W. S. Hotchkin, Real Estate and Traders' Exchange, Binghamton, N. Y.

Virginia Farms.—Mild Climate. Cheap Homes. Send for Circular. A. O. BLISS, Centralia, Va.

CORN AND TOBACCO.

SECOND YEAR'S USE OF MAPES ON SAME TOBACCO PIECE.

Probably Largest Yield of Tobacco (Seed Leaf) in Mass. or Conn.

8,114 *lbs. on less than three acres.—Cured well.—Quality good.—No stable manure used for seven years.—Havana leaf,* 1,500 *lbs. per acre on turf ground.*

THREE ACRES, HAVANA LEAF, SEASON 1884.—SEED LEAF, 1885.

RILEY MAYNARD, South Deerfield, Mass., December 22d, 1885, reports:

I send you my report on my tobacco raised with your fertilizer the second year.

Last year (1884) I raised Havana Leaf on about three acres of *turf* ground. I used the Mapes' Tobacco Manure (Conn. Brand). I used about fifty dollars worth per acre and got 1,600 lbs. Havana Leaf to the acre.

This year (1885) on the same piece I set out Seed Leaf and applied the same Conn. Brand (Mapes'), 5,400 lbs., on the three acres (less 15 rods). I set out twenty-one thousand plants, or 7,000 plants per acre.

The crop cured well. I finished stripping it yesterday (December 21st.) It weighed 8,114 lbs.—over four tons on less than three acres. This is, probably the largest yield in Mass. or Conn. If there be any other Fertilizer that can beat it, I want to know it. There has been no stable manure on the ground for seven years.

I sowed the fertilizer, Mapes' Complete Manure for Tobacco (Conn. Brand,) on broadcast, plowing-in one-half, and harrowed-in the other half. I used Phosphate in the hill.

ONE ACRE, TURF GROUND, HAVANA LEAF.

I also raised one acre of Havana on turf ground, using one ton of the Mapes' (Conn. Brand). I got 1,500 lbs. of fine tobacco.

More Corn at less than one-half the cost as compared with stable manure.

[Extract from *Our Country Home*, February, 1886, Greenfield, Mass.]

Stable Manure vs. Complete Chemical Manures.—Experiment at our Country Home Grounds.

Experiment A.—Corn—In a field of 3 acres of Pride of the North corn, 2 plats of ¼ acre each were marked off. Soil, light and sandy. No. 1 received an application of 1½ cords of stable manure, costing $8 per cord on the ground, or $12 for the ¼ acre. Product, 19 baskets sound, and 2¼ baskets soft corn, or 76 baskets sound and 9 baskets soft corn per acre. No. 2 received 200 lbs. Mapes' Corn Manure, costing $5.25 for ¼ acre. Product, 22½ baskets sound and 1¼ baskets soft corn, or 90 baskets sound, and 5 baskets soft corn per acre. The stable manure was spread broadcast and harrowed-in with a wheel-harrow, as was 100 lbs. of the Mapes Manure. The other hundred lbs. was sowed when the corn was one foot high and cultivated-in. In all other respects the treatment of the two plats was exactly alike. The corn on stable manure produced a little the heaviest fodder, while that on the Mapes' averaged one week earlier in ripening. Both plats withstood a severe drouth well; $21 worth of Mapes' produced 14 baskets more of sound corn than $48 worth of stable manure.

E. A. JAMES, Superintendent.

Mr. James reports: "The Mapes' Corn Manure gave us most satisfactory returns. We used it also on one acre in comparison with stable manure (also one acre), same quantities as above, with same difference in favor of the Mapes' Corn as in the above experiment.

Now is the time to Top Dress Grass Lands and Lawns, Fruit Trees, Strawberry Beds.

Send postal for pamphlet on Manures for Onions, Tomatoes, Melons, Corn, Corn Fodder, Hungarian Grass, Turnips, etc., etc.

The Mapes Formula and Peruvian Guano Co.,

158 Front Street, New York.

☞ **Chemicals for Mixing a Specialty.**

WILLIAMS, CLARK & CO.'s HIGH GRADE BONE FERTILIZERS.

Connecticut Experiment Station Valuations of Americus Superphosphate.

Analysis of 10 Samples, 1885, gave..$36.09
Americus Tobacco Fertilizer, 1885.. 38.09
Pure Bone Meal, 4 Samples, gave..... 35.04

Valuation in Massachusetts, 2 Samples Americus Superphosphate, gave 1885, $35.94, $36.88.

No Fertilizers selling at the same price show as High Valuations.

I have used your AMERICUS PHOSPHATE on my Corn and am safe in saying I raised the largest crop ever raised in Connecticut. The yield was 179 bushels and 23 quarts shelled corn to the acre.

T. B. WAKEMAN, Greens Farms, Ct.

The above field of corn was visited by Hon. T. S. Gold, Secretary Board of Agriculture of Conn., and Prof. W. H. Brewer of Yale College, and both pronounced it the best field of Corn they ever saw.

SEND FOR CIRCULAR.

INCIPAL OFFICE:

COTTON EXCHANGE BUILDING, NEW YORK.

☞ Crops Increased! Labor Reduced!

Every farmer who does not already own a **Kemp Spreader** should immediately investigate its advantages. The entire pile goes much further when it is finely pulverized and evenly distributed so that each plant will get its share and not too much. The KEMP SPREADER does this better than is possible by hand, and discharges a load *inside of two minutes.* Our four-wheel Spreader reduces the draught one-third by the improved manner of attaching forward wheels; and for Strength and Durability it has reached a degree of perfection in manufacture whereby breaks seldom occur.

Thousands of these Spreaders are in use, and we can furnish good references in every State. Send for Illustrated Catalogue and Book of References. **KEMP & BURPEE MFG. CO., Syracuse, N. Y.**

BOWKER'S HILL AND DRILL PHOSPHATE

WITH POTASH.

A General Fertilizer, rich and reliable, made from BONE and CHEMICALS, and may be used alone or with Stable Manure, in the hill or drill or broadcast

Send for Pamphlet.

BOWKER FERTILIZER CO.
BOSTON & NEW YORK

BOWKER'S PURE GROUND BONE

Dr. Z. A. Gilbert, Inspector of Fertilizers for Maine, says of this Bone: "The stock from which our sample was taken, was well ground, being fine and even; the high percentage of Phosphoric Acid shows it to have been prepared from pure bone, of good quality."

Send for Price List.

BOWKER FERTILIZER CO.
BOSTON & NEW YORK

HOLSTEIN-FRIESIAN CATTLE!

When writing mention RURAL NEW-YORKER.

LARGEST HERD AND LARGEST AVERAGE MILK RECORDS.

3 cows have averaged over 20,000 lbs. in a year.
5 cows have averaged over 19,000 lbs. in a year.
10 cows have averaged over 18,000 lbs. in a year.
25 cows have averaged over 16,000 lbs. in a year.
63, including 14 three-year-olds and 21 two-year olds, have averaged 12,785 lbs. 5 oz. in a year.

BUTTER RECORDS.

5 cows have averaged 20 lbs. 7 oz. in a week.
9 cows have averaged 19 lbs. ¼ oz. in a week.
11 three-year-olds have averaged 13 lbs. 2 oz. in a week.
15 two-year-olds have averaged 10 lbs. 8 3 10 oz. in a week.

This is the herd from which to get foundation stock. Prices low for quality of stock. **SMITHS, POWELL & LAMB,** LAKESIDE STOCK FARM, SYRACUSE, N. Y

Prepared FERTILIZING SALT.

Send for "SALT SAYINGS." Write for Prices. Car Lots, on Car at your Railway Station. Address **E. S. FITCH, Bay City, Mich.**

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GOOD NEWS TO LADIES.

Greatest inducements ever offered. Now's your time to get up orders for our celebrated Teas and Coffees and secure a beautiful Gold Band or Moss Rose China Tea Set, or Handsome Decorated Gold Band Moss Rose Dinner Set, or Gold Band Moss Decorated Toilet Set. For full particulars address

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SELF-ADJUSTING SWING STANCHION,

The only Practical Swing Stanchion Invented. Thousands in use. Illustrated Circular free. Manufactured by BROOKS & PARSONS, Addison, Steuben Co. N. Y.

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Grain Threshers, Horse Powers, and Engines.

Highest prize awarded these machines at the New York State Ag. Soc.'s latest trial, over a large number competing. Ample warranty and opportunity for trial given. For full particulars address

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Mention this paper.] **Fort Wayne, Ind.**

SMALL'S CALF FEEDER

This NEW article is appreciated and approved by all progressive Farmers and Stock Raisers. The calf **sucks** its food **slowly,** in a *perfectly natural* way, thriving as well as when fed on its own mother. Circulars free. **SMALL & MATTHEWS,**
21 South Market Street, BOSTON, MASS.

Ensilage. Silo Governor Certificate.

The undersigned, having made and fed ensilage for several years, believing that we have arrived at certain and uniform success, offer to those who are in doubt the following

CERTIFICATE.

This certifies that we are making ensilage without heat or fermentation in air-tight silos, cutting the corn in ¼ to ¾ inch lengths, weighting 100 lbs. to the square foot, and with this pressure getting one foot or more of juice in the bottom of the silo. We remove the air from the silo by using Colcord's Silo Governor, which causes a heavy vertical with very little lateral pressure; we obtain as uniform results cold, moist, soft and pulpy ensilage of the natural color of the corn, without offensive odor, imparting no odor to the silo, barn, hands, or clothing, but often of a bright, sweet smell, and sometimes the odor of nice, dry, corn fodder. We feed an average of sixty pounds daily to each cow, and our cattle eat it all without any waste.

We regard Mr. Colcord's system as the true, if not the only true method of ensiloing green forage crops, and recommend it as sure, uniform, economical, and less troublesome than any other. By using this system with the Governor according to directions, any one may be sure of success with ensilage.

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T. E. RUGGLES, Milton, Mass.
C. L. COPELAND, Milton, Mass.
C. A. DAVIS, Natick, Mass.
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April, 1886.

USE

STEARNS' STANDARD FERTILIZERS.

Splendid returns to the farmer for money invested. Permanent fertility to the soil.

STEARNS & CO., Manuf.,
149 FRONT STREET, N. Y.

Valuable Farmers' Handbook on application. Agents wanted where we have none established.

PEARSON'S FERTILIZERS.

High Grade. Reliable. Lasting.

Manufactured in dry condition, thereby assuring full weight of fertilizing material. Most flattering results where used side by side with other preparations. Where there are no agents for these Fertilizers, orders direct to the manufacturers will receive prompt attention. **JOHN M. PEARSON, Hudson, N. Y.**

Send for catalogue.

THE GRANGER FAMILY FRUIT & VEGETABLE

EVAPORATORS.

$3.50, $6.00, and $10 00.

Send for Circular. EASTERN M'F'G Co., 268 So. 5th St., Phila., Pa.

THE RURAL NEW-YORKER

A JOURNAL FOR THE SUBURBAN AND COUNTRY HOME

VOL. XLV. No. 1892. NEW YORK, MAY 1, 1886. PRICE FIVE CENTS. $2.00 PER YEAR.

Entered according to Act of Congress, in the year 1886, by the Rural New-Yorker in the office of the Librarian of Congress at Washington.

Rural Topics.

Experiment Grounds of the Rural New-Yorker.

THE LAST OF THE POTATO REPORTS FOR THIS YEAR.

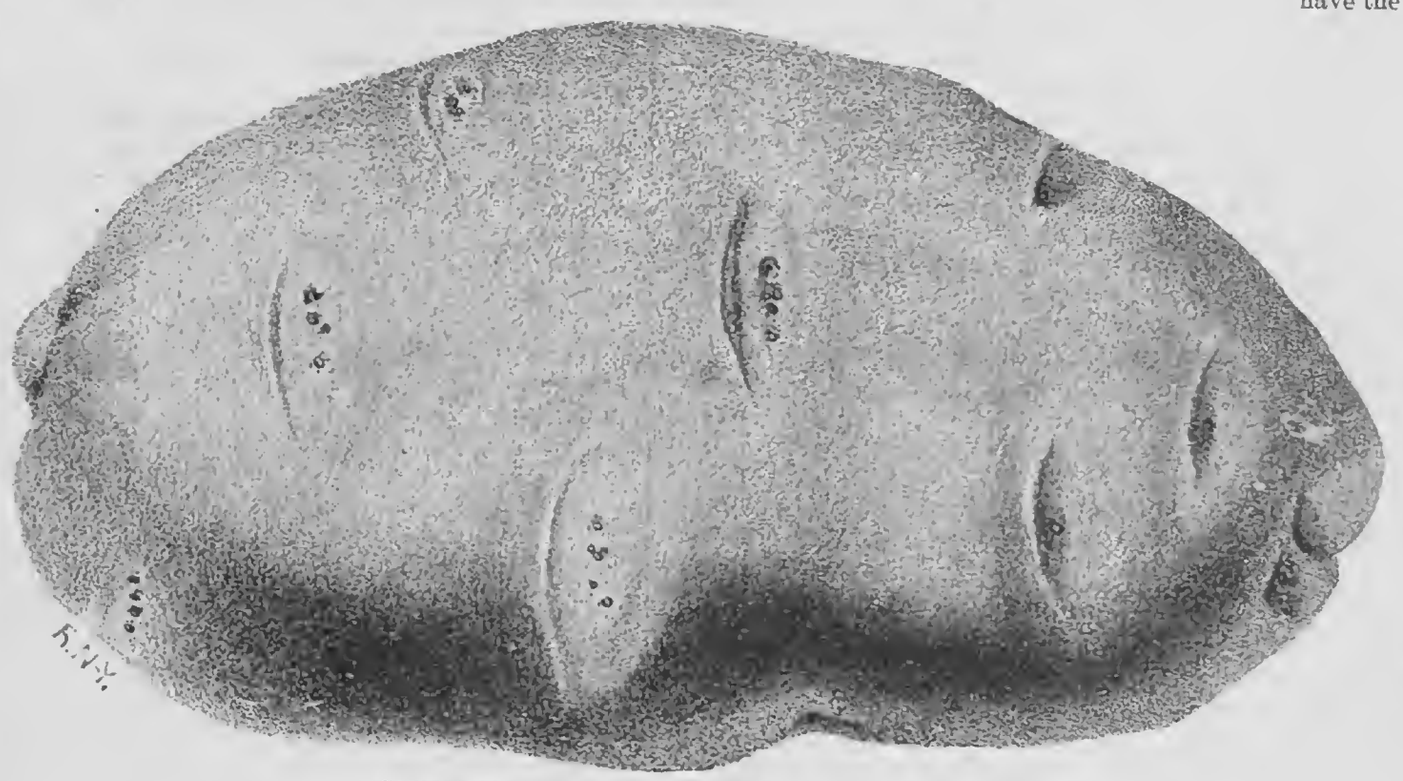
ELECTIVE, from Peter Henderson & Co.—The only note that we have is that it is earlier than Early Rose. It was overlooked in some way.

ECLIPSE, from O. H. Alexander, Charlotte, Vt.—Five pieces yielded nine pounds. Best five weighed 2 pounds 8 ounces; 31 tubers, 21 marketable. At the rate of 435.60 bushels to the acre. Reddish streaks in flesh. Irregular in shape, oblong. A bulky potato. Eyes medium as to number and prominence. Late. Eaten Dec. 2. White flesh, of only fair quality as to mealiness and flavor.

WHITE SWAN, from same.—Five pieces yielded 9¼ pounds; 22 tubers, 21 marketable, best five weighing four pounds—rate of 471.90 bushels per acre. Buff skin, shape cylindrical, medium-long, tapering at one end. Eyes rather deep. Eaten Nov. 17. Nearly white flesh. Not a first-class potato in quality.

GARLAND, from E. E. Stine, Cuyahoga Falls, Ohio.—"Seed from Early Rose. The best late potato," he writes. Two pieces yielded four pounds; 21 tubers, 10 marketable. Yield per acre, 484 bushels. Late. Straggle badly. The irregular shape, deep eyes and straggling habit condemn it.

SUMMIT, from same.—This gave us the largest yield of any potato tried last season. Mr. Stine says "It is the best early potato." Two pieces yielded 10 pounds; 21 tubers, 18 marketable. Best five weighed 4 pounds 11 ounces. At the rate of 1,210 bushels per acre. Fig. 175 shows the typical shape. Buff skin; eyes medium for so large a potato. Eaten Dec. 10. Fairly dry and mealy; white flesh. We find it rather a late potato.



SUMMIT POTATO. From Nature. Fig. 175.

ESSEX, from O. H. Alexander.—Five pieces yielded 10½ pounds—or at the rate of 508.20 per acre. There were 36 tubers, 22 marketable. Best five, 3 pounds 10 ounces. Long, pointed at both ends. Eyes few and not prominent. Eaten Dec. 29; white flesh, mealy. The shape kills it. Late.

MT. WASHINGTON, from same. Five pieces yielded 13½ pounds; 35 tubers, 29 marketable. Best five weighed 13½ ounces. Yield per acre, 653.40. Buff skin; eyes rather deep. Shape long cylindrical, flattened sometimes. Eaten Nov. 13. Flesh white and mealy outside, rather firm within. Perhaps they were not cooked enough. See Fig. 176.

ALBANY MARKET—Late. Yielded at the rate of 181.50 bushels per acre; 29 tubers, six only marketable.

DEW DROP, from O. H. Alexander.—Four pieces yielded nine pounds, or at the rate of 544.50 bushels to the acre; 44 tubers, 33 marketable. Eaten Oct. 12. Flesh nearly white, not dry. Eyes few.

SARATOGA, from same.—Five pieces yielded 8¼ pounds; 31 tubers, 20 marketable. This is at the rate of 399.30 bushels to the acre. Best five weighed 3 pounds 12 ounces; many very large. Shape broad, truncate at one end. Eyes rather deep. Skin buff. Most of them prongy, perhaps from the effect of drought. Not mealy or dry.

ANOTHER EXPERIMENT TO ASCERTAIN WHETHER THE SEED-END YIELDS AN EARLIER CROP THAN PIECES FROM OTHER PARTS.

TIPS.—Fifteen pieces of the tips or seed-ends of the Rural Calico yielded 32 pounds; 139 tuber 120 marketable. Best five weighed 2 pounds 10 ounces. Yield per acre, 516.27 bushels.

SEED from other parts—that is, the stem-end or middle. Fifteen pieces yielded 29 pounds; 124 tubers, 100 marketable. Best five weighed 2 pounds 13 ounces. Yield per acre 466.88 bushels.

REMARKS.

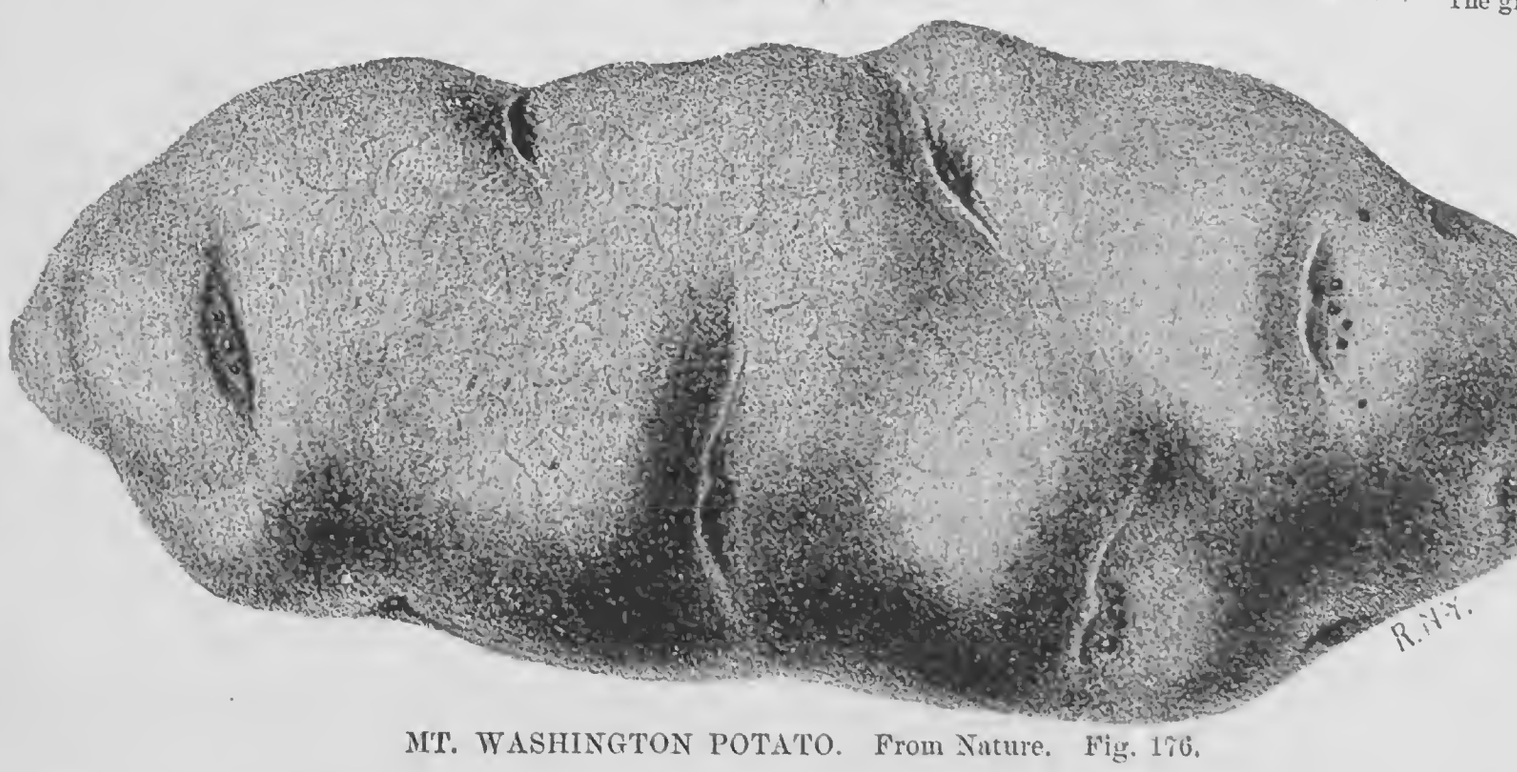
Both lots *matured* at the same time. The seed-end pieces sprouted first and appeared above ground about three days before the others.

We have seen it stated many times that seed-end pieces will give a crop one week or more in advance of pieces cut from other parts of the potato, but our experiments do not support such statements.

Field Crops.

SPRINKLING POTATOES WITH PARIS-GREEN.

MR. J. H. MITCHELL sends us the sketch shown at Fig. 177 (p. 282). This method of applying liquid poisons works well with him. The hind wheels of the wagon are used with a long reach for a tongue. A small frame made of 4x4 scantling is set on the axle with a step behind, as shown in the cut. To this frame the barrel of poison is firmly lashed. A faucet with seven feet of soft, ⅝-inch rubber hose, with a fine lawn sprinkler attached, is arranged as shown in the illustration. The barrel holds about 40 gallons of Paris-green and water. The water is strained so that the sprinkler will not become clogged. Three rows are sprinkled at each trip; one under the wagon and one on either side. It is well to stop the wagon every six feet, as the frequent stopping and starting keeps the poison well mixed. The beauty of this arrangement is that one man can apply 40 gallons of the poison at a much quicker rate than several persons could do it by hand. With a good team which will follow the rows, and not turn over the plants, one man can work this machine successfully. At the ends of the rows the hose can be laid over the barrel and the team turned and started again.



MT. WASHINGTON POTATO. From Nature. Fig. 176.

THE PECAN POTATO.

THIS potato I raised from seed given me by C. G. Pringle, Charlotte, Vt. He had crossed and raised it the season before, and after planting all he wanted, he gave me the rest—about 20 varieties. Several were good; but the Pecan had all the good qualities of the others in addition to some peculiar to itself, so, after awhile, the others were discarded. It originated the same year as the Snowflake. The plant is a stronger and healthier grower than the latter. The variety is a little later and more liable to produce small tubers.

N. Ferrisburg, Vt. L. M. MACOMBER.

Horticultural.

EXPERIMENTS WITH FERTILIZERS FOR STRAWBERRIES.

I HAVE been experimenting with fertilizers on strawberries, but have not been to any great extent successful either in increasing the size or improving the quality of the fruit. Sulphate of ammonia increased the growth of plants. The leaves were large and dark-colored. Muriate of potash did not seem to have the same effect. The showing in fruit was not so good as the showing in foliage. A plot upon which no fertilizer was used produced as much and as good fruit as any of the fertilized plots near it. This has been the result of my experiments for five years.

A few years since Mr. Hale, of Connecticut, strongly recommended a heavy application of bone-dust, two parts; ground fish, two parts, and muriate of potash one part. He said, in substance: "If you want a good crop use 1,200 pounds to the acre; if you want a better crop, use one ton to the acre; and if you want a big crop, put on all you can afford. Then shut your eyes and put on as much more, and *it will pay every time.*" Early in the Spring of 1882 I prepared one-tenth of an acre, carefully measured and staked off, and applied 400 pounds of the above mixture—at the rate of two tons per acre. It was thoroughly harrowed in after plowing, and plants were set three or four weeks later. There were six rows running lengthwise of the plot. Three rows were kept in hills and three allowed to form matted rows. The plot was a part of one acre set at the same time, and all were treated alike as to cultivation, etc. Variety, Wilson. Great was my disappointment when I found, after repeated trials in the picking season of 1883, that the rows not fertilized produced as many and as good berries as the fertilized plot.

The growth of the plants was a little stronger on the fertilized plot than on the rest of the ground. In 1884, however, the plants seemed to have got hold of the fertilizer, and there was quite an appreciable increase in the size of the fruit; but the extra price was not enough to render the extra fertilizing profitable. I have used stable manure with like results.

My method of growing strawberries has usually been to plant on ground that has been used for sweet potatoes for a year or two and well fertilized, and to use no fertilizer at the time of planting. In this way I get fair crops. For several years we have had a "dry spell" in June, during strawberry picking; such was the case the past season, and this undoubtedly, will account for the inaction of some of the fertilizers. Nitrogen, however, in whatever form I have used it, always tells on the foliage, soon after an application.

Vineland, N. J. F. S. N.

A BARREL CUCUMBER PATCH.

LAST year I raised from one hill 1,200 cucumbers, and had it not crowded on to a grass plot, the yield must have been more, for, as it was, fully two-thirds grew on one-half the hill. To do this I take a cheap barrel with one good head, fill it two-thirds or more with manure, bore holes around above the middle, sink it a little into the ground, throw dirt up around it nearly to the top—say six inches above the holes, so that it will not settle below them. I sow the seed freely and leave about 12 of the best plants. The vines will grow 10 to 12 feet. Into the barrel I run a pipe from the sink, but fixed so that a surplus of water runs into another hill. The cucumbers sometimes were very small when picked. I think the seeds were marked Boston Cluster. G. W. S.

Addison, N. Y.

EXPERIENCE IN PRESERVING TOMATOES.

THE first frost of the past season fell here about the middle of November. The previous afternoon we could notice that it was coming and pulled up our tomato vines, leaving all the fruit on them. We piled them up in the garden and covered them with a cloth, leaving them there for three days, so that the

Fig. 177. (See preceding page.)

vines might wither and not break in re-handling. Then we separated the branches which bore the finest tomatoes, tied them in bunches and hung them up in a spare room, opening the door so that the sun would shine in on pretty days. From that time we gathered from these vines more and nicer tomatoes than we ever got before, and our table was well supplied with ripe tomatoes, raw, cooked and in soup, every day till well into the present year. T. J. S.

Fort Worth, Texas.

FOR FIGHTING THE SQUASH BUG, take four pieces of board six inches wide, and from two to three feet long, according to the size of the hills. Nail them together in the shape of a box. Cover this with fly netting—two thicknesses will not be too many. Set the box over the hill, and be sure it fits close to the ground. I have tried this, leaving the box on till the plants have reached the netting: after that the bugs do not seem to trouble them. This protection will also keep off a light frost. Those thus protected alone lived last year, the others having been killed by frost.

Ipswich, Dak. H. T. D.

The Herdsman.

CROSS-BREEDING.

THAT crossing in animal life has proved beneficial in many cases, is no doubt an incontrovertible fact, and yet the chances are rather with a pure-breed than a cross. If I had a dairy of Short-horn cows, I would at once buy a Hereford bull and introduce him to my cows, expecting to improve my stock. But I should not do this calculating my mixed stock would be equal by any means to full-bred Herefords. That this cross will improve the Durhams is a well established fact, and why it is not more extensively practised is passing strange. The progeny of the Short-horn cow bred to a pure Hereford bull can no doubt be put on the beef market at three years old as ripe, and with as great weight as a four-year-old Short-horn. This saving of 12 months in the care and feed of a bullock would give a reasonable profit where a loss would be incurred with a pure-bred Short-horn.

[R. N.-Y.—That a cross of the Hereford and Short-horn often produces excellent results for beef, is shown by the number of prize-winners containing Hereford and Short-horn blood in the "Class for Grades and Crosses," at the Chicago and Kansas City Fat Stock Shows in this country, as well as at the great Smithfield Show in England; but that a dairy herd of pure-bred Short-horns of a milking strain (and no other should be kept for dairy purposes) can be improved for the dairy by an admixture of Hereford blood in the progeny is much more than doubtful. Whatever advantage there might be in the cross for beef purposes, it is more than likely there would be a falling off in milk, as the Hereford cow is a poor milker at the best, and a Hereford bull should not be used on dairy cows unless one intends to change from milk, butter or cheese to beef production. It is hardly likely that a Hereford-Short-horn cross would mature a year earlier than a pure-bred Short-horn with the same feed and care.]

I should adopt the same plan with a flock of small-boned sheep, taking care, of course, not to make too great a departure at once, gradually breeding up until I had a good mutton sheep that would come to an early maturity, the ewes raising at least two lambs apiece.

[R. N.-Y.—It has taken years and a great deal of study, intelligence and experience, to produce our present breeds of mutton sheep, and it is hardly likely that our friend could produce a better kind by the course he thinks he would follow. The ewes of none of our present excellent breeds average "at least two lambs apiece"—that is, in one season.]

So with the swine. The small kinds ripen early; but are not so profitable as those of medium size. But the largest require too long a time to bring them to maturing; consequently should be abandoned as unprofitable.

Erie Co., Pa. A. C. RHODES.

[R. N.-Y.—Each of the well-known breeds is found profitable in certain sections and under certain conditions, and no general assertion as to the profitableness or unprofitableness of any is correct.]

Dairy Husbandry.

PASTURE FOR COWS.

"FIRST a feast and then a famine" doesn't work well with stock, and especially with cows. On this account many dairymen open the whole summer range into one, and let the cows graze on it all. I doubt if this is best. It saves fixing up interior fences and the trouble of looking after things; but "looking after things" is a good business. It is better to have the range divided into at least three separate pastures, and then to change the cows as often as the bite gets short or begins to do so. The field which has the most coarse grass should be used first, and, when this has been well eaten over, the cows should go into the next, and so on, passing a week in each. This would give a nice start to the field fed off first, and allow the grass to be washed clean and present a most inviting bite to the cows. They certainly will eat with more avidity in a fresh pasture. Changing from one to another during the day is a bad plan, as it keeps the stock uneasy and they will lose time waiting to go out. Sometimes it is necessary to allow them a large range on account of water, as this may not be available except in one field. Old farmers often have said that they had rather have poor pasture and plenty of water, than plenty of pasture and a scanty supply of water. In Summer stock will drink a great deal, especially cows, and they will not do well without a full supply.

FEED FOR BUTTER AND CHEESE.

If you want cheese, give the cow food which will make the most cheese: if butter, food which makes the most butter. This is what Mr. Fuller did when he made the last test of the Jersey cow Mary Anne of St. Lambert. This cow had been fed up to the time of the beginning of the test—in five to seven feedings daily—20 imperial quarts of ground oats, 10 of pea meal, three quarts of ground oil-cake, and two quarts of wheat bran. At the beginning of the test this was increased up to 50 quarts. She also had a small quantity of roots, cabbages and apples each day. She ran in a small lot of withered grass. Most farmers expect a few corn-stalks, or poor hay will make the butter for their cows, and if they are dissappointed, they blame the cow.

Saratoga Co., N. Y. F. D. CURTIS.

Farm Economy.

HYDRAULIC RAMS.

THE principle of the hydraulic ram was discovered in 1771 by some plumbers working at a hospital in Bristol, England. The water for the hospital was conveyed in a pipe from a tank on a hill at a little distance. This pipe would burst when the water was suddenly turned off by a stop at the lower end, and to relieve it, they ran a pipe up the side of the hospital until it was as high as the tank on the hill. After this was done, they found that the water would run out of this whenever the water was used and suddenly turned off below, and the pipe was lengthened until it was twice as high as the tank above the outlet of the pipe. Even this would not stop the water from spurting out of the relief pipe, and a tank was put in the building and the end of the pipe turned into it. Then, whenever the stop at the bottom was opened and suddenly closed, a little water would run into the tank.

A Mr. Whitehurst, a watchmaker of Bristol, used an arrangement like this with an air-chamber on it, and patented it in 1772, calling it the "Whitehurst ram." This was not automatic, and was not of much value. About this time, Joseph Montgolfier was experimenting in hydraulics and invented an automatic ram which he claimed he had conceived before he had heard of the Whitehurst ram. This ram was patented in England, Dec. 13th, 1797, by Mr. Boulton, of the celebrated firm of Boulton & Watt. The adaptability of this invention to a practical use was lost sight of until within the last 50 years. As far as is known, the ram was first used in this country in Chester Co., Penn., in 1843, and since that time the construction of such devices has been very much improved. At the present time there are several thousands in use, and there is no doubt that if the principle and usefulness of the contrivance were better known, the number would be greatly increased.

The principle of the single and double ram may be compared with the blow of a hammer. It is not merely the weight of the hammer that drives the nail, but it is the momentum it acquires in falling. In the ram, it is the momentum obtained by suddenly stopping the flow of water in the feed pipe, which raises the water. It is necessary, therefore, in order to obtain the greatest momentum, that the feed pipe should be, first, smooth inside; second, laid straight with a gradual fall from the spring to the ram; and, third, of such a length as to keep the force from being expanded through the upper end of the feed pipe and yet not so long as to increase the friction unnecessarily.

There are at present several manufactures of rams, but all are essentially of the same principle, the only difference being in the construction. Fig. 182 represents a single ram,

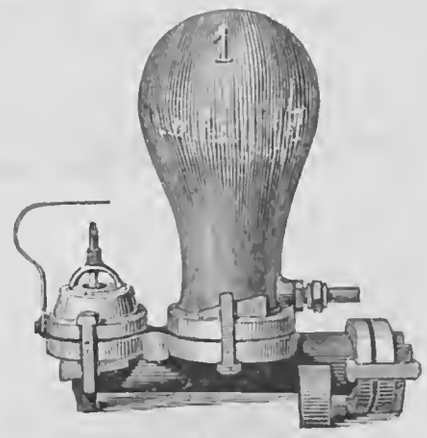


Fig. 182.

so made that it can be taken apart with a hammer. The outlet valve on the left is merely an automatic arrangement for alternately opening and closing the lower end of the feed pipe. It is necessary to have at least four feet fall from the spring to the ram, and 2½ gallons of water per minute, to run a small ram. The larger sizes require more water, but three-quarter-inch pipe is the smallest feed used, and it is much better to use a larger size. The amount of water a ram will raise depends, first, on the fall; second, on the amount of water used per minute; third, on the elevation; and, fourth, on the distance which the water is to be forced. The elevation is seldom over 200 feet.

Fig. 183.

Fig. 183 represents a regulator which is intended to be screwed on the upper end of the feed pipe. In many springs, the flow of water is not the same at all times of the year. Usually for two or three months, the springs will not give more than half the amount they usually do. When the supply to run a ram falls short, and the air enters the feed pipe, the ram stops and will not start again even when the supply becomes as great as at first. It is then necessary for some person to start it. To avoid this trouble the regulator may be used, and, when the supply runs low, it stops the ram by closing the upper end of the feed pipe until the water accumulates at the supply box; it then starts it again.

Figs. 184 and 185 represent the double ram.

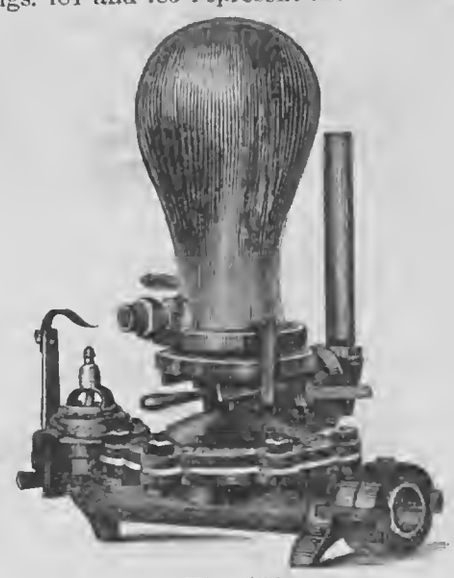


Fig. 184.

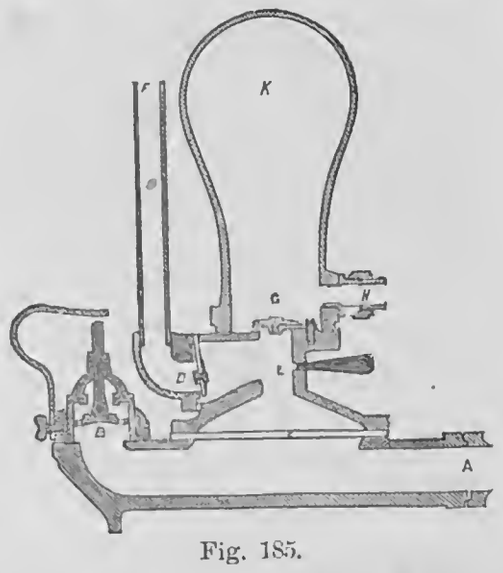


Fig. 185.

With this, impure "run" water may be used to raise spring water without the two being mixed or being brought in contact. The principle is the same as in the single ram. *A* is the inlet for the "run" water; *B* the outlet valve; *C* a solid rubber diaphragm; *D* the inlet valve for spring water; *G* the air-chamber valve; *H* the outlet for the raising pipe to the house; *K* the air-chamber. When the outlet valve, *B*, rises and stops the flow of the water in the feed pipe, *A*, the diaphragm is forced upward, and it thus transmits the force to the spring water. The pipe from the spring is turned into the stand pipe, *F*; but is not connected tightly, so that the spring water not used may overflow. The double rams may be used wherever there is enough fall, water, etc., for the single ram.

Fig. 186 shows the manner in which a ram should be set. There is no cheaper or simpler way for raising water than by the hydraulic ram, nor is there any machine which requires less attention. The first cost and also the cost of maintenance are less than in any other arrangement. There are very few working parts, and hence very little cause for repairs. It does not even require oil. There are thousands of people who can testify to the efficiency and durability of the hydraulic ram. C.S.G.

FODDER CUTTERS.

MUCH has been said in the RURAL and other journals about cutting feed for stock. I believe in it, and my experience has taught me it is the best and cheapest method that can be adopted. One Winter I kept one horse and two cows when corn meal was $1 per 100

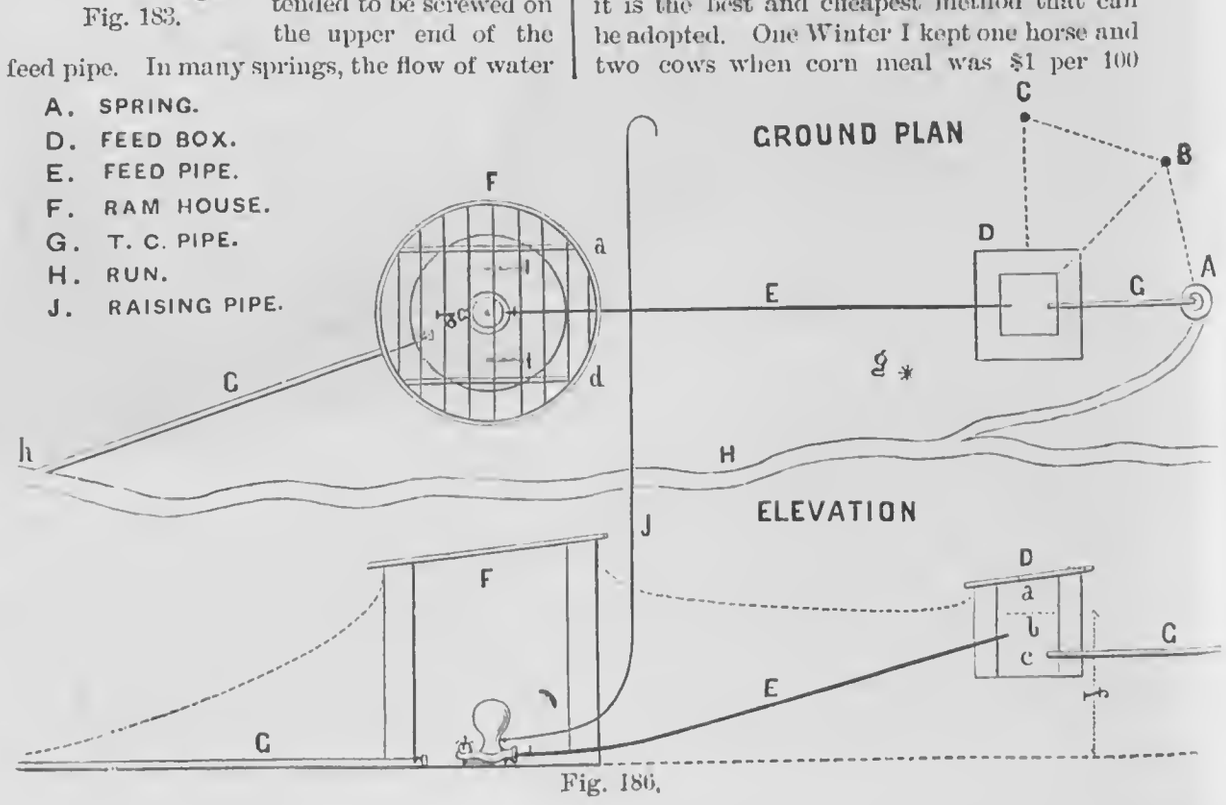


Fig. 186.

pounds, in fine condition for exactly $1 per week, or 33⅓ cents per head. The cows gave a good mess of milk until nearly their time to come in. My rule is to stop milking four to six weeks before calving. The fodder used was good rye straw only. But to cut feed, of course, requires a machine, either hand or power, and here we have to pay from $25 to $40 for a machine that would cut, say, in one or two hours, enough for six to ten head of horses or cattle per day. It is true we can get hand-lever machines for from $8 to $12, but all who have used such for two hours per day, say it is very slow and very hard work. I speak from experience.

Now I fully believe that any manufacturer should have a fair return for all the capital he invests in his business and be able to pay just wages to all his employés, but is it necessary or justifiable to demand such prices for these machines? It will be said these prices are demanded by the retail dealers. True, yet they assert that they cannot sell them for less and get a fair return for their investments, and that the figures are "manufacturers' retail prices." I dare say the last statement is true. I have before me the wholesale price lists of such machines made in and out of this State, and when freight is added to first cost, I think the retailer could not do much better than he actually does. Cannot a good feed-cutter, that will cut, say from half-inch to one-inch long, with one or more knives, as may be best, and with good balance-wheel, crank and self-feeder, to cut in one or two hours all the feed per day for six to ten head of cattle, be manufactured for a large per cent below the present wholesale prices, and be made well and of good material? I have talked with many farmers and hardware dealers on this subject, and all agree that this can be done, and many say "I cannot get a machine at such prices and make it pay." Most of the iron, in fact nearly all used in them, is cast, and much of it is of poor quality. The knives alone are of steel. I have no doubt that those who have a large number of stock and use power cutters, can afford to get them at present prices, as the saving to them is large. It would be well to ventilate this matter as the sewing machine business has been. C. S.

Plover, Wis.

R. N.-Y.—A thorough discussion of the actual cost of all implements would be instructive, and decidedly tend to bring about a decrease of any excessive profits of manufacturers or dealers. The chief causes of such excessive profits, however, are the monopolies created by patents. Patent holders can charge for their goods all the public will pay, as they have no fear of competition, unless they raise the price so high as to make the profits on the goods so great, that it will pay others to risk suits for infringment, etc., by making them without "license," or under some infringing patent, or surreptitiously—a hard thing to do with large implements. The late fall in the prices of sewing machines was due, not so much to the discussion of the actual cost of them—that had long been known—as to the expiration of the Howe, Singer, and other onerous patents. Where anything can be freely made by all manufacturers who wish to do so, competition will always prevent any excessive profits.

Farm Topics.

SAVING MANURE.

THE RURAL has often urged its friends to give their views of any improvements in their mode of farming, which would benefit other farmers. Now, I think my mode of saving manure would be a benefit to all the farmers. I keep four or five cows and two horses, and throw the manure out of the stable windows, as almost all farmers do; but in the first place, I have dug a pit about two feet deep and 20 by 30 feet in area at the end of my barn, and into this I throw all the manure, thoroughly distributing it therein. Then I have, under my stable floor a hole that will hold about a dozen pails of urine, which I dip out and pour on this manure about once a week, and I find the manure worth about twice as much as manure standing in a conical pile through the Winter. It is pretty well rotted and ready for distribution in the Spring. It is but very little work to so dispose of it for the Winter. With larger quantities the pits could be made larger, so that none need be wasted. Then, to protect it from the weather, I have set up some posts and laid on some three-quarter-inch scantlings, and covered the pit with boards, so that it is thoroughly protected from the snow or rains. When I empty it in the Spring it is ready for another batch, and, as I keep my horses and one or two cows up through the Summer, I fill the pits again. If a man has a large amount of stock and a barn, and an underground room where he keeps nothing but manure, he will not, of course, need such conveniences; but for so small a stock as I keep a great saving is made thereby. My land about the barn is hard-pan, so that the urine does not waste by leaching. C. H. H.

R. N.-Y.—This is a "reinvention" of an old method of saving manure, in use in England for years—the pit and covered yard. The great object of the pit or depression in the ground for the manure is to save the leaching and washing away of much of the fertility by water running to some neighboring stream. The roof shuts off heavy rains and aids to the same end, while preventing the excessive soaking and "drowning" of the manure in the pit. Where the soil is loose, the pit is usually lined with clay, to a greater or less depth, to prevent the percolation of the liquid manure. The urine is even more valuable than the other manure; and one of the best ways of disposing of it is here mentioned. In England it is usually distributed over the manure from the pit in which it is collected, by means of a pump and hose. In most parts of this country the construction of such expensive covers, etc., as are often seen on the other side of the Atlantic, would not pay; but where manure is needed and high-priced, it would certainly pay to make cheap arrangements for saving the large amount of valuable fertility now generally allowed to run to waste.

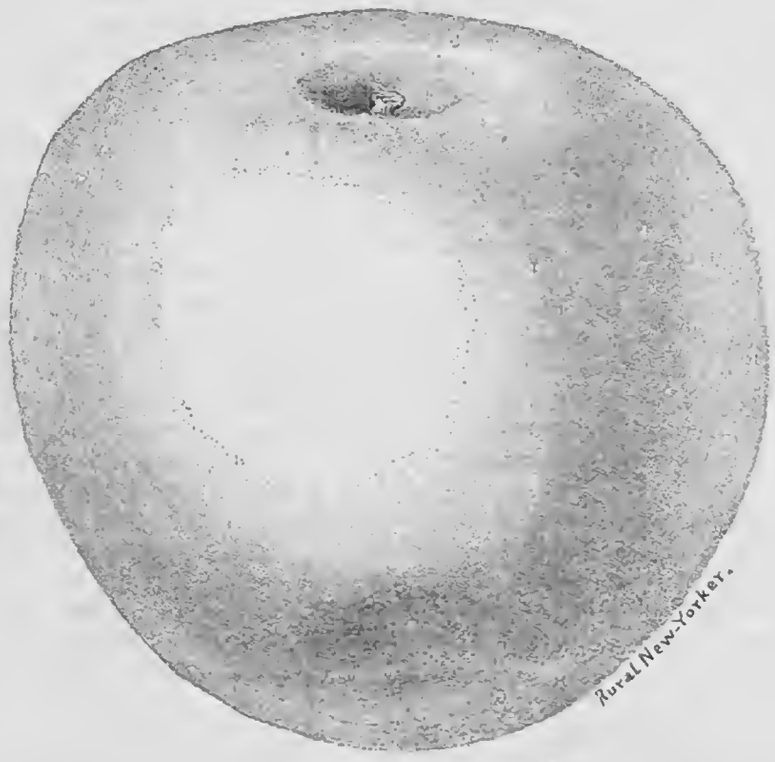
HUMAN FÆCES AS MANURE.

How do agricultural chemists explain the reduced manurial effect of human fæces after they have been kept for some time in dry earth? Do they actually loose any of their manurial elements, or are these only rendered more slowly available? The Chinese, who depend almost entirely on human excreta for manure, as they keep few or no cattle, and excel in producing crops from all sorts of soils, are said to use the material fresh, mixing it with water, so as to apply it as liquid manure. We find it a good deal tidier to divide it with some drying or friable mixture, using it as poudrette. This, like the liquid division, exposes more surface to the digestive powers of the soil and of roots, just as in the case of bones when ground, or of dough, which we permeate and open up with some gas (yeast) in order that every particle may be sooner reached by the gastric juice in the stomach. The added water, however, of course aids the immediate effect of three most important elements of manure—phosphoric acid, potash and nitrogen. The first two seem to find a perfectly secure savings' bank in the soil; but the nitrogen is so flighty in its ways, that the doctors seem to disagree to this day, as to whether it is a first essential, or of secondary account; and whether in its winged form of ammonia, it is liable to fly off and leave plants without their needed daily supply of freshly made nitrates, or not. But I adhere to my preference for the earth closet—or I may say, in my case, sawdust closet—both for tidiness, and its sanitary safety; and because I think that the dried contents, scattered on the soil, if not immediately manurial, will have their full effect in the course of time. "G"

Pomological.

HOLT COUNTY SEEDLING APPLE.

THE Holt County Seedling Apple, shown at Fig. 178, with a cross-section at Fig 179, originated with L. A. Goodman, of Westport, Mo., Secretary of the Mo. Pom. Soc. Shape conical; color greenish-yellow, shaded on the sunny side with a light brick-red, gradually shading away till lost. Stem ⅝ of an inch long, slender, placed in a small, very deep cavity. Cavity a little irregular and partially covered with russet. Calyx *very* small, closed, in a very small, quite shallow, slightly corrugated basin. Core small, with small, plump seeds. Flesh fine-grained, quite firm, juicy, sub-acid, yellow white, very good. We should think this apple a good shipper and splendid for drying. Eaten September 16; in good order.



HOLT CO. SEEDLING APPLE. From Nature. Fig. 178.

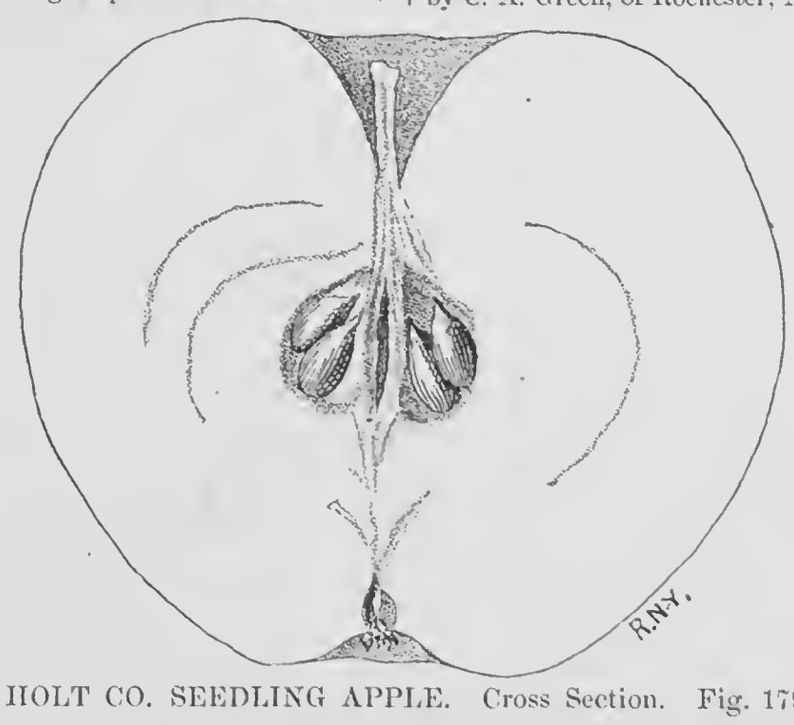
HARDINESS OF FRUITS.

T. T. LYON.

AT the meeting of the American Pomological Society at Grand Rapids, Mich., a short paper on the above subject was presented by C. A. Green, of Rochester, N. Y., in which he starts out with the query, "By what process does a variety become hardy, and how is it that we expect hardiness in a variety originated North, and do not expect it in a variety originated South."

First, as to the latter clause of the query:—More than 30 years since while indulging, to a considerable extent, in testing varieties of apples, I collected some hundreds of varieties mostly of Northern origin, among which were perhaps a hundred or more kinds originating in the region south of the Ohio River, including a considerable number from the extreme South. These were planted and grown to fruiting in the same orchard rows with others, natives of New England, New York, Pennsylvania and other northern and eastern localities, under the same conviction announ-

(*Continued on page* 284.)



HOLT CO. SEEDLING APPLE. Cross Section. Fig. 179.

Stock and Poultry.

Choice Eggs.—Langshans, S. S. Hamburgs, B. Leghorns & White Bantams, 13 for $1. A. RAPP, Holland, N. J.

Try SKILTON'S BROWN LEGHORNS. Perfect beauties and prolific layers. $1 for 1 doz. Sure hatch. **J. Skilton**, Lock Box 13, NORTUBORO, MASS.

PEKIN DUCK EGGS.
ONE DOLLAR PER SETTING, OF THIRTEEN.
W. IRISH, Poughkeepsie, N. Y.

EGGS from W. Leghorns, P. Rocks, or Black-Red Games, $1 50 for 13. *Eggs from Choice Fowls only.* Mention this paper. **C. E. RICK**, FAIRVIEW, PA.

EGGS from Strictly Pure High-scoring Fowls of leading varieties. Bronze Turkey Hens, 18 to 21 lbs. Gobblers, 38 to 40 lbs. Eggs, $5 per 13. Send for circular. E. J. CHANDLER, Kennett Square, Pa.

WYANDOTTE EGGS, $3 per 13; $5 per 26. P. Rock Eggs, $2 per 13; $3.50 per 26. Nicely packed in baskets. From Prize Birds scoring 90 to 94 points. Order early. **E. B. THOMPSON, Amenia, N. Y.**

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Lt. Brahmas, P. Cochins, and Wyandottes—Eggs, $1 50 per 13. P. Rocks, White and Brown Leghorns—$1 per 13. Fowls for sale at all times.
R. T. PATTERSON, BRIDGEPORT, CONN.

DORKINGS, Silver Gray—Eggs, $1 for 13.
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FOWLS for Sale. **JOHN L. RICE.**
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KISCO MOUNTAIN Strain of fine Wyandotts Send for descriptive Catalogue and price list before purchasing either eggs or fowls. Address
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Eggs, $3 for 13; $5 for 26. From Premium Stock.
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GAME BANTAMS
OF THE MOST FASHIONABLE STRAINS.

Ducks, Pekins, Rouens. $1.50 for 11 Eggs. **Wyandottes**, $2.00 for 13 Eggs. **P. Rocks** and **White Leghorns**, $1.50. We have a very large stock raised artificial for practical use, the best Brooder known for $8.00. **C. J. QUINBY, White Plains, N. Y.**

High Class Plymouth Rocks and Wyandottes.
All high scoring birds. None better, and full satisfaction guaranteed. Eggs for setting of 13, carefully packed in baskets. Plymouth Rocks, $1; Wyandottes, $2.
W. L. LUNDY, METUCHEN, NEW JERSEY.

Pure Brown Leghorns.
I will furnish Eggs from pure stock, nicely packed in baskets, for $1.50 for 13; $2.50 for 26.
H. W. BRINK, MIDDLETOWN, N. Y. Box 161.

"BROWN LEGHORNS."
Seven year's experience with this novelty; a range of 40 acres; "none better if as good." Eggs in season, $2 for 13; $3 for 26. Neatly packed and shipped in baskets—order early and send 2c. stamp for circular. Address **C. A. PETERSON, Troy Road, Albany, N. Y.**

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ALL EGGS GUARANTEED.
Partridge Cochins, Plymouth Rocks, Wyandottes, and S. S. Hamburgs. Per Setting, $3; Two Settings, $5.
Light Brahmas, Langshans, Brown Leghorns, and Pekin Ducks. Per Setting, $2.
Orders for Stock and Eggs may be sent to 38 Dey St. New York City, or direct to yards.
CLARK & BROWN, Proprietors.
Mention this paper.] **Franklin, Essex Co., N. J.**

Purdue's Light Brahmas.
My Birds won FIRST PRIZE on Chicks and SPECIAL on Cockerel, at New York, 1886, also four FIRST PRIZES at Philadelphia, the past season.
Eggs per setting, $5.
A few choice Cockerels and Pullets for sale.
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PETER BEUERLEIN.
ENTERPRIZE POULTRY FARM,
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Breeder of Prize-winning Single Comb White Leghorns. My score at Great National Show, at Madison Square Garden, 1886—96½ on Pullet, the only one on exhibition with perfect comb. Eggs, $2 for 13.
My Imported Brown Leghorn Cock,
PRINCE GARIBALDI, from Italy.
Judges and breeders at above Show pronounce him the richest plumed bird on exhibition. Eggs from this strain, $3 for 13; $5 for 26. Also Breeder of R. C., B. and W. Leghorns, Wyandottes, Plymouth Rocks, Light Brahmas, and Pekin Ducks; Eggs, $2 per setting. Send for Ill. circular. Eggs nicely packed and shipped.

BLOOD WILL TELL.
Have bred fine Poultry for fifteen years and am selling a superior stock of Poultry and Eggs of the following varieties:
Plymouth Rocks, American Dominiques, Wyandottes, Single comb White and Brown Leghorns, Silver Spangled Hamburgs, and Pekin Ducks. Am breeding from high-scoring birds that have won the highest honors in the show room. Price of Eggs: Wyandotte, $2.50 for 13; $3.00 for 30. All other varieties $2.00 for 13; $1.50 each for two or more settings. Eggs packed in new baskets to go safely any distance. Send for circular. Address
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Breeder of thoroughbred fowls and Pointer Dogs. From prize winning, registered stock. 3 pens of Plymouth Rocks, 2 for production of pullets and 1 for cockerels. Eggs $1.50 per 13, or $3 per 39. Also from 2 pens of Wyandottes. Eggs $2 per 13, or $5 per 39. My stock is from the best strains and mated for best results. I guarantee a fair hatch and safe delivery. A share of your patronage solicited, knowing I can please you.

PALISADE POULTRY YARDS.
C. S. COOPER,
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Breeder of Wyandottes and Plymouth Rocks. Four grand pens of each variety. Eggs from pens one and two, $3.00 for 13; $5.00 for 26. Eggs from pens three and four, of each variety, $2.00 for 13; $3.00 for 26.

(*Continued from page 283.*)

ced by Mr. Green in the above query: but on coming through some of the very trying Winters of that period, I was not a little surprised to find those of Southern origin entirely unharmed; while those from our own latitude suffered more or less injury. Indeed, the facts fully warrant the statement that in Michigan, in a latitude and climate essentially identical with those of Western New York, very few Northern varieties wholly escaped injury; while not a single variety coming from south of the Ohio River, betrayed even the slightest apparent harm. Even those originating in Pennsylvania and New Jersey, manifested something of this increased hardiness, although clearly in a less degree. Even the Shockley, a variety of extreme Southern origin, entirely bears out these statements; although its fruit proves utterly worthless, while the same is mainly true of the fruit of other southern winter and late Autumn sorts.

These results were, at the time, very surprising to me, and put me upon the consideration of the thought embodied in the former clause of Mr. Green's query, "By what process does a tree become hardy?" To my apprehension this experience tallies perfectly with the observations of Messrs. Budd and Gibb, in Eastern Europe, and leads force to the theory of the former, that hardiness, in the case of Northern fruits, is largely, if not mainly, a question of the ability of the foliage to withstand the exactions of the summer climate, with the result of fortifying the woody tissues against the exactions of the coming Winter. Seedlings at the far South, as doubtless on the steppes of Eastern Europe, are probably weeded by the sun and drought of Summer so that those only of more coriaceous foliage survive, while in a milder northern climate this is in a less degree true. This, moreover, may, in part at least, account for the obvious average superiority of the fruits of northern origin; since, as a rule, superior excellence in one particular, as, for instance, in the fruit, may be expected to be coincident with a deficiency in others; perchance in that of foliage.

South Haven, Mich.

WESTERN EXPERIENCE WITH FRUIT.

My experience with new fruits the past year is as follows:—Downing's Everbearing Mulberry was killed root and branch by the Winter. The Japanese Mikado Pear lost half its head by genuine blight, the bark turning suddenly black and shrinking somewhat; while the foliage remained green for some days. It is three years from bud or graft, had on one fruit, the quality of which was about equal to that of a poor turnip; character of the flesh very similar, though I think the specimen was a poor one. The Sha-li, Chinese Sand Pear, has not blighted; but is winter-killed each year. Petite Marguerite Pear bore half a dozen fruits. Bears young. Fruit small, but good. Kieffer blighted to the ground, where I cut it off, and let a sucker start for a new tree. Le Conte lost one branch by blight this second year from planting. My garden slopes gently to northwest and the soil is clay loam with clay subsoil. The Pratt and Waterloo and Wager Peach trees passed the last two Winters unhurt except as to fruit. We have not had a peach here for four or five years. The Wheatland was nearly killed by the Winter.

Caywood's Marlboro Raspberry made a good growth of healthy plants, but as the red spider took every cane last Summer I had no fruit this year. His Poughkeepsie Red Grape has made a good and healthy growth of vine, for the last two years, but will not stand this climate without protection. The Ulster Prolific is perfectly hardy with me, a strong grower of short-jointed cane. It fruited with me this year. I was well pleased in every way. I was agreeably surprised at the good qualities of the fruit on first taste.

His Black Delaware made but a small growth, but I am sure on account of injury. Shaffer's Raspberry merits all the praise I can give it for the first year with me. A wonderful grower. Fay's Prolific Currant I think should be in every garden on trial. Lee's Prolific Black Currant has not shown any good qualities yet. C. W. K.

Leavenworth, Kansas.

FIGUE d'ALENCON PEAR.

A MISTAKE CORRECTED.

UNDER this name the RURAL, in the issue of April 10, describes and gives an engraving of a pear. There is evidently some mistake in consequence of similarity of names or some other cause. There is an old pear called the Figue, and sometimes, to distinguish it from another Figue, it is called Figue d'Alencon. This is figured in the Magazine of Horticulture for 1848 page 66, simply as the Figue, so named because it is almost exactly like a fig in shape, tapering into the stem. There is also a pear known as the Doyenné d'Alencon, one of the older kinds, somewhat resembling an Easter Beurré, ripening from February to May. This is the pear the RURAL describes and figures. It is quite unlike the Figue in shape, color, and period of maturity, and is a very fair variety cultivated here for 40 or 50 years, but, like the Easter Beurré, it does not generally attain full maturity, and consequently does not keep well, and does not sell well in the market. I have a bushel now just in eating; but their dull green color is not prepossessing. Under high culture and a favorable climate, like that of California, it proves to be a fine variety, as it is double-starred in the list of pears recommended for general cultivation for that location. The Figue, though a very good pear, is too small and inferior in appearance, to induce cultivators to grow it. The Doyenne d'Alencou is worthy of trial under favorable conditions. C. M. HOVEY.

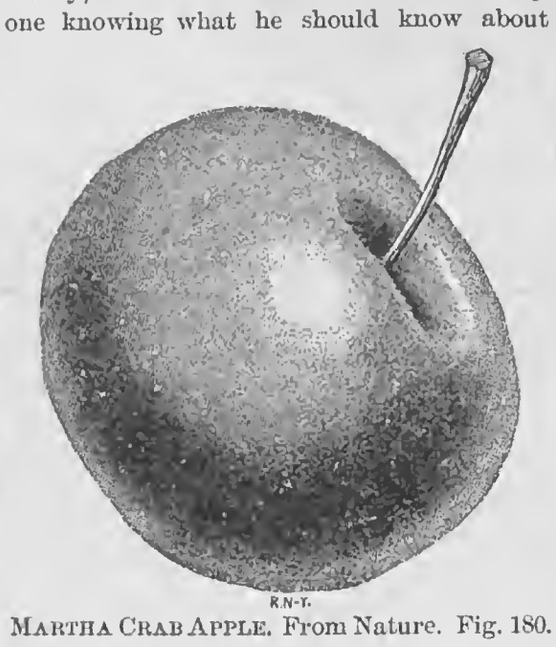
THE OTHER SIDE.

CHANGES IN FRUIT NOMENCLATURE.

A LATE RURAL contained an article from C. M. Hovey, criticising the American Pomological Society, and especially its venerable President, for shortening the names of some fruits in the catalogue.

Having had a hand in making the changes, I wish to appear in defense of the progressive ideas of President Wilder, whose suggestions have to some extent been followed in the revision of the work. If friend Hovey is unable to get out of the old ruts, he of course is at liberty to carry along as many of the superfluous appendages to names of fruits as he chooses; but progressive men in this age will not waste time in unnecessary writing or printing or even talking in matters of business.

Suppose a man must write 1,000 or even 100 labels for Doyenné du Commice, or Hovey's Seedling; by writing simply Commice or Hovey, half the time would be saved. To any one knowing what he should know about



MARTHA CRAB APPLE. From Nature. Fig. 180.

fruits, the short name would be as intelligible as the long one.

But friend Hovey fears that enthusiastic cultivators would be deprived of the honor if the word "seedling" were not attached to the name of the originator. Then, why in suggesting a name for the Concord Grape, did he not prefix the name of the originator, instead of depriving him of the honor about which he seems to have so much anxiety? The public, however, is sufficiently posted on that point without having had to utter for many years the name Bull's Concord Seedling, instead of simply Concord. There is probably no strawberry that gained so wide a reputation in so short a time as the Sharpless, and who does not know that it is a seedling, and that Mr. Sharpless is the originator? In short, all fruits were seedlings (except such as have been produced by sprouts), and it seems folly to waste time, type and ink on unnecessary prefixes and appendages, and I trust progressive horticulturists as well as pomologists will heartily aid in simplifying and shortening names as far as possible.

Friend Hovey seems to have great reverence for names of fruits by French authorities. Americans have been too long admiring everything French. Is it not high time that we, and especially pomologists, should abbreviate some of the French prolixity by which so many fruits have been encumbered? I am glad that an American is leading in the reform of nomenclature of fruits. It seems there should be very few who will not agree with Pres. Wilder and other eminent pomologists, that one word should, if possible, suffice to name any fruit. In many cases it is not advisable, but where confusion would not be caused, let us prune off all unnecessary words. As to the coming fruit cultivators, we need have no fears that Young America will not adapt itself to circumstances in fruit nomenclature as well as to other changes which are continually occurring. H. M. ENGLE.

Marrietta, Pa.

THE NEW NOMENCLATURE.

I WAS much pleased to see Mr. Hovey's defence of the names of the grand old fruits in a late RURAL. For months I have been trembling for the fate of the ancient names, as one by one they have fallen before the ax of the "Nomenclateurs."

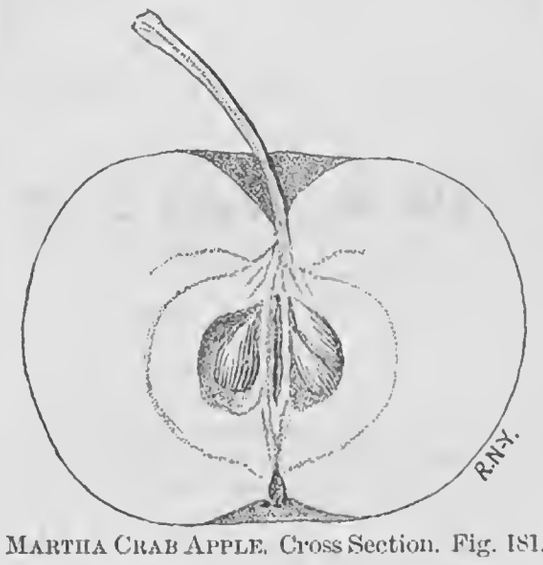
To be sure it is well to stem the tide and change the present direction of name-making, but when I read a few weeks since that the good old Seek-No-Further was to be beheaded, it seemed like revoking the past, or depriving our ancestry of their honored name. To obliterate the fanciful story of its connection with Adam in the Garden of Eden, seemed to call for a protest on the part of all the lovers of that good old apple. (By the way, this is not supposed to be the forbidden fruit.)

But, after all, what is to be done for appropriate names? If the present increase in new varieties continues, the supply will run short, and the choice will be between outrageous names on one hand and a monotonous repetition of more common ones on the other, after the manner of the Missouri family, who, as related to me by the census taker, after having exhausted all the names on the older members of the family, concluded to call the remaining three Big Babe, Little Babe and Baby.

Would it not be well to appoint a committee to bury many of the new fruits before they are fairly christened? DR. F. BIRD.

MARTHA CRAB APPLE.

THE Martha Crab, shown at Fig. 180, with a cross-section at Fig. 181, is quite flat and shaped much like the Lady Apple. Color a faint red, nearly covered with a bright carmine shade, varying a little in shaded places; surface thickly dotted (on one side much more thickly than on the other) with bright yellow dots. Stem 1 1-16 inch long, very slender, and planted in a broad, shallow cavity; a little russeted. Calyx *very* small, open, in a very shallow basin, the color of apple going to the bottom. Core medium, with small, plump, brown seeds. Flesh a pinkish-white, fine-



MARTHA CRAB APPLE. Cross Section. Fig. 181.

grained, firm, quite acid, but pleasant in quality, much like that of the Transcendant; good. A handsome little crab. It originated with P. M. Gideon, of Excelsior, Minn.

THE TYSON PEAR.

IN a late RURAL, Mr. Parnell says of the Tyson Pear:—"I regret to say that I cannot advise any one to plant it, on account of its being so tardy in coming into bearing." I have lived to see two trees direct from the nursery, come successively into bearing. When I was a young man my father bought a tree of this variety, and it grew wonderfully, but did not bear. In the fore part of August next year, he tied a knife to a pole and cut off all the top branches. Next year it blossomed and bore. The clipping was repeated and it bore ever afterwards. Fifteen years ago I came to this State. On a new farm I planted a dozen pear trees, among others a Tyson. It made a rapid and healthy growth. When it was large enough, I clipped the outer limbs and it has continued to bear to this day. Were I to start a pear orchard, one of the first varieties selected would be a Tyson; and when it was large enough I would cut it back, and expect fruit every, or nearly every year. It is much too good a pear to be left off the list of desirable sorts.

Hubbardston, Mich. G. A. S.

Floricultural.

EIGHT OBSCURE ANNUALS.

JOHN N. DICKIE.

OBSCURITY is no evidence of mediocrity. We have a number of obscure flowers not generally cultivated, which should be better known. When I glance at the ordinary flower garden, and see the gaudy colors of the salvia, geranium, dahlia, zinnia, and numberless others of the same class, with so few of the chaste and delicate beauties to relieve the monotonous glare, I wax indignant, if not eloquent. The following eight varieties found in any catalogue, I deem the peers of many of those vaunted flowers which hold their position by might, and not by right. First on the list is

THE ASPERULA.—This is a hardy annual, growing from six to eight inches high. The flowers are light blue—a color rarely found in our gardens. It is a constant bloomer, and of compact habit, growing readily in any fair garden soil. For a small bed by the side of the house, along the fence, or in the border, nothing is better. It is also excellent for rustic baskets and rock-work. For bouquet making, our lady readers will find it all that can be desired. Raise the plants in boxes in the house, thinning well. Set out in May and they will bloom the latter part of June, keeping up a constant succession of flowers until after hard frosts.

THE ANAGALLIS is another desirable annual, but is not so good for bedding as the asperula. In planting flowers in the permanent flower garden, we should select those which will bloom the whole season. This the anagallis will not do save in large baskets or rustic work, where it is watered regularly. The seed-pods should be picked off and the soil made fine and rich; then we possess something of permanent beauty. The flowers are of various colors, but the blue is especially desirable. Planted in beds, it blooms profusely for about four weeks; after that the plants "straggle" out and give but few blossoms. Directions given for growing the asperula will also apply to the anagallis.

THE BROWALLIA is for sale at many greenhouses, but it is of limited cultivation. For a single plant you will have to pay 15 cents; but for a nickel you may own a paper of the seed and raise from 50 to 100 plants, which will bloom the first of July, increasing in size and beauty until frost. They will grow two feet high in rich soil. The flowers are small, blue, blue and white, with a pure white variety. Blue, however, is the prevailing color. The seeds are very small and need care in sowing. Scatter them on the surface and press them in with a piece of shingle. Moisten with warm water and cover with moss. This rule should be followed in starting any minute seeds, as the sudden drying of the soil will destroy the tender shoots in an hour's time. The moss must be removed as soon as the plants break ground. The Browallia is tender and should not be planted out before May 20. It is a greenhouse perennial and may be cut back in the Fall and potted for winter blooming.

THE SWAN RIVER DAISY is catalogued as Brachycome iberidifolia—a name considerably larger than the flower—grows from six to 12 inches high, according to the richness of the soil. The foliage is finely cut, the flowers single, of good size, on long, slender stems. It has one bad fault—liability to rot off at the surface of the ground. It is an especial favorite of mine, but I invariably lose half of my plants. I am afraid I pet them too much. Next season I propose to avoid watering it, merely keeping the ground well stirred. I think I have given it too much watering.

THE CENTRANTHUS.—Reader, I shall be almost vexed if you grow this flower and do not think as well of it as I do! I distinctly remember the first time I planted it—some 20 years ago, when seedsmen were rare, and catalogues few and far between. I purchased it at a venture, and when it came into bloom I went into the most unfashionable ecstacies. That is just what I want you to do, friends. Act a little silly just once, please, and know what a luxury it is to be a child again! The seed of centranthus may be sown in the open ground where the plants are to flower, as it is rather difficult to transplant. The stems are almost transparent, of a light green, and, I regret to say, are a little clumsy; or, in other words, there is rather too much handle for the flower. But the blossom will make up for any such little shortcoming. Colors, pink and white. Blossoms continuously from June to November.

THE PHACELIA is a hardy annual, and not at all suitable for the flower garden, from the fact that the seed-pods are too conspicuous, and the habit of the plant slovenly and ungraceful. It is excellent for bouquets, however, and I generally grow it in some retired corner, visiting it regularly with the scissors. The blue is the best, although there is a white variety. Sow in the beds where it is to bloom.

THE SALPIGLOSSIS is a rare, but beautiful, half-hardy annual. The blossoms are peculiarly rich, pencilled in the most beautiful manner by the hands of the Divine Artist. Grows from two to three feet high. Sow in boxes in the house, and set in a single row 18 inches apart. Few flowers will attract the attention of the visitor more than this. In my experience, out of 100 who see it in bloom, not a half dozen ever noticed or heard of it before.

THE WHITLAVIA.—If ever a modest flower bloomed, probably this is it. The foliage is

delicate, the clusters of flowers drooping, bell-shaped, blue and white. The blue is especially desirable. It will thrive well only on the north side of a building or tight fence. It will stand any amount of cold, wet weather, but the hot sun and drying winds will soon put an end to it. Select a place, therefore, where the sun will not strike it, save in the morning and evening. Keep it well watered and you will have the best of success. Fuchsias treated in the same manner bloom most beautifully during the summer season.

As a rule, it does much better to sow seed of all flowers, unless difficult to transplant, in boxes, seed beds,or, better still, in the hot-bed. You can then set the plants the required distance apart, and are much surer of their germination.

Crawford Co., Ohio.

Arboricultural.

VITALITY OF NUT SEEDS.

HERE is my experience with regard to the vitality of different sorts of nuts:—Some years ago I procured in the Spring some of the Western Shellbark Hickory nuts that had been dry all Winter. They were placed, one at a time, in a vice and the screw was turned very carefully until a slight cracking was heard, when the nut was removed. When they were all thus "cracked," they were placed in water for two or three days, then planted, and nearly every one grew. Two of the plants are now alive; the others died on being transplanted. They are entirely hardy here. Again I procured, in the Fall, some almonds, pecans, English walnuts and filberts, all of which were dry. They were placed "uncracked," in water for two or three days, then buried out-of-doors. In the Spring many of the almonds, one English walnut and some pecans were sprouted; the filberts did not grow. The almonds and English walnut are still growing, the former having been bent to the ground and covered in Winter; the latter winter-killed a little the past two seasons. The pecans were planted in a fence corner and came up nicely—with the aid of squirrels.

I was told that the seeds of the Honey Locust must lie in the ground a year before they would grow. Passing a tree by the roadside one Winter, I picked up a pod of seeds and took it home, and whittled just through the outer covering of the seeds and planted them in pots, and in a few days they were up. I whittled the seeds of Clianthus Dampieri, and they came up in four or five days. If boiling water is poured over canna seeds and immediately poured off, plantlets will come up in a few days. Pear seeds that have been dry for months will grow if soaked in water a day or two. J. T. MACOMBER.

Grand Isle Co., Vt.

TIMBER CULTURE IN RELATION TO ORCHARDS.

THERE is much being said in our agricultural papers nowadays about hardy fruit trees, and discussions are being carried on as well as experiments, on the merits of many of our new, as well as some of our oldest varieties of fruits, with the view to finding some varieties that are absolutely hardy. This is all very good and must result in good to the country at large; but while we are doing this, let us at the same time remember that it is almost as easy to make a climate that will allow our fruit trees to live, as to make a fruit tree that will live in our climate.

Twenty-five years ago when Southwestern Iowa was new, one often heard the expression, "Oh it's no use to try to grow fruit here, it will never amount to anything." What is the state of affairs there to-day? There is an abundance of fruit there, and some of it is the finest, and the fruit that took the grand sweepstake premium at New Orleans, came from this very locality. What is the reason of this? It is largely due to the fact that every farm has a more or less extensive grove which has done much to modify the climate, by lessening the force of the wind, and also in equalizing the temperature so that the rainfall has been less at a time, but has come oftener. What has already been done in this line is very good, but we should not stop here. Much more remains yet to be done, and while we are trying to get trees that will live in our climate, let us at the same time make a climate in which our trees will live.

Plymouth Co., Ia. M. VINCENT.

Subscribers of the RURAL *need never take the trouble to write us to "stop" the paper. It is invariably discontinued at the expiration of the subscription term, except by oversight, in which case it is our loss.*

Miscellaneous Advertising.

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Will make this week a Special OFFERING of the following makes and qualities of Black Dress Silks:

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Samples sent on application.

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Broadway and 11th St., New York.

What Others Say.

THE HAT AND HAIR IN HEALTH.—Dr. Dio Lewis says that the beard about the mouth and nose saves the lungs. The back of the neck should be protected in cold weather. The hair alone can do this perfectly. The present practice of shingling off the hair at the back of the head may be fashionable, but it is unphysiological. Eight men suffer from catarrh where one woman has the disease. Men keep their heads in a sensitive condition from the moisture and heat of the hat. A woman's hair is an abundant protection. A man thinks he must always have his hat on while out in the air. There are a few professions where a bald head is desirable, but a remarkably small percentage of men ever get into them. Most of the bald heads in the country might be used as tomb-stones to chronicle a murder by the fashionable hat. To copy from Shakespeare, we might say, strange that man should put that upon his head which steals away his hair. The difference between the temperature under the hat and in an ordinary room is about enough to give a weak man a cold. The hair below the hat is seldom lost. It is natural to suppose that if we keep the hair under the hat nearer the conditions, as regards heat and moisture, to that below it, the growth will be stronger. Ventilation should be supplied by means of holes punched through the sides and top of the hat. There is not half the danger in keeping the head cool that there is in keeping it hot. We never could see how the modern stiff hat ever came to be made so extensively. It is cold and clumsy, and simply murders the hair.

FULL AS A TICK.

ACCORDING to Bulletin No. 6, issued by Prof Latta, of Purdue University of Indiana, drilled-in oats yielded an average of nearly two bushels of oats more than those sown broadcast................................

(Continued on page 286.)

Stock and Poultry.

(Continued from page 283.)

SMITH & WALKER, Lee, Mass. Breeders of twelve varieties of high class standard Poultry. Eggs cheap. Send for circular, free.

P. Rocks, Wyandottes and R. C. White Leghorns. We won every first and special on P. Rocks at Dalton, Mass., as well as first at every county fair where exhibited, first class certificate of merit at New York Show. High honors on Wyandottes and R. C. White Leghorns where ever known.
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Won Special on Highest Score and Third Premium on pair of Chicks at the New York Fanciers' Show in 1884.
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Fowls or Eggs in Season.
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INCUBATORS AND BROODERS.
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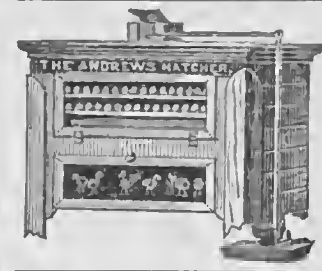

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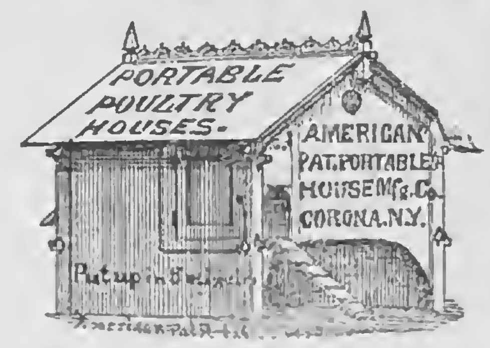

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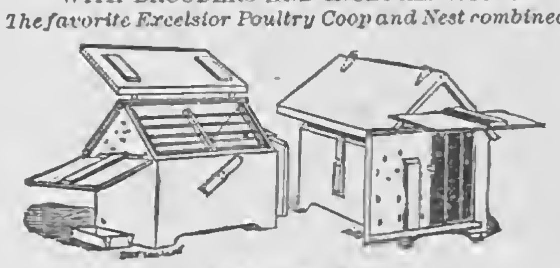
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Obtained by breeding to the standard, and annual improvement sought by careful matings with birds selected from the best strains in America. One setting of choice Eggs will produce more first-class birds than ten settings from inferior stock. Eggs, $3 per Setting of 13; Two Settings, $5; Five Settings, $10.
Address **J. D. TOMPKINS, Brainard, N. Y.**

Half-Way Brook Kennels and Poultry Yards.
LOCK BOX 450, **GLENS FALLS, N. Y.**
OUR SPECIALTIES.—St. Bernards, Eng. Mastiffs and Eng. Beagle Hounds. Imported Dogs in the Stud. Fees reasonable. Can furnish dogs of any of the popular breeds, at low figures, for quality of stock.
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EGGS from Two Pens of First Premium Stock, headed by "Earl and Truston," at $5.00 per 13; $10.00 per 39. Eggs from 13 other pens of good breeding birds, carefully selected, and mated for best possible results, at $3.00 per 13; $5.00 per 26. Eggs from one pen each of fine Langshans, Light Brahmas, Plymouth Rocks and R. and S. C. Brown Leghorns at $2.00 per 13.
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HAVENS' CLIMAX CONDITION POWDER.
Five Years in Use and No Failures.
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"I know it will cure Gapes. I never lost a single chick after I began to use it."—J. WESLEY STILLWELL, Freehold, N. J.
"These men are reliable."—W. S. STRONG, Mayor, New Brunswick, N. J. [City Seal.]
"One of our friends has given it to turkeys with excellent success."—Ed. RURAL NEW-YORKER, April 3, 1886.
14 ounce packages, 25c, of Dealers; by Mail, 40c. "Our Successful Farmers," a pamphlet, free by mail.
Wm. Rust & Sons, P. O. Box 1201, New Brunswick, N. J.
Agents wanted. Ask your dealer, and show him this advertisement.

(*Continued from page 285.*)

JOSEPH COOK thinks if a man had a dog which was in the habit of chewing, smoking and expectorating tobacco anywhere and at all hours, the animal would have a short life. Yet the same man never thinks of killing himself for the same offence.....

UNCLE ESEK, in the Century, says that indolence is a disease of the soul, laziness of the body.....

HE says that the great struggle for life is first for bread, then butter on the bread, and at last sugar on the butter. This is the best any of us can do.....

HE says that all cunning men are dishonest, or will be the first good chance they get.....

HE says that he does not believe in special providence. When a mule kicks a man and knocks him anywhere from eight to twenty feet off, he doesn't lay it to the Lord; he says to himself "that man got a little too near the mule".....

AMONG dwarf peas, there is no better kind than the American Wonder. It is within three days as early as the earliest tall smooth peas. The quality is best.....

A WRITER in the N. E. Homestead says that a succession of cabbage may be gained to some extent by different settings, but better by varieties. The later and more desirable kinds are not early enough, even if set early, to insure maturity for the earliest and best market. He considers that three varieties are sufficient to meet all demands, in the order of succession—the Early Winningstadt, Henderson's Summer, and Fottler's Improved Brunswick. Some gardeners prefer the Jersey Wakefield to the Winningstadt for the very earliest; some set the Newark Early Flat Dutch in preference to Henderson's Summer.

THERE is, however, very little difference or choice between the two better varieties. As soon as the Hendersons come to market, which will be a little later than the Winningstadt and Wakefield, they supplant these kinds, and they will in turn have to give way to the larger and more showy Brunswick, but at about the same price. There is no doubt that the French Early Etampes is as early as any, and that it is of superior quality, but it is more shy, is apt to spot, and will not bear transportation, or keep fresh as long as the other early kinds mentioned.....

WE find the following in our respected contemporary, the New England Homestead: "A single neighborhood on Long Island sends 300 to 500 live birds a week to the New York stores. One New York village ships 50,000 to 80,000 during a Summer." Think of this! If ever the farmers of our country should make their voices heard on any question, they should speak out against this suicidal, unexcusable, inhuman vanity which makes the slaughter of our little birds profitable.....

THERE are a good many people who are going to keep a sharp eye hereafter upon the politicians who are willing to sell themselves to a league of rum-sellers, and help to promote their shameful and deadly designs, says the Homestead. May their numbers rapidly increase!.....

DR. CLAWSON, of the Edinburgh Asylum for the Insane, is disposed to substitute milk for stimulants in hospital practice. In very acute cases, both of depression and maniacal exaltation, when the disordered working of the brain tends rapidly to exhaust the strength, he relies more and more on milk and eggs made into liquid custards.....

W. H. BOWKER thinks that S. C. "floats" will furnish phosphoric acid for future generations, but that the man who wants to harvest his crop in September had better let them alone.....

MR. HENRY BILL says that millions of dollars' worth of manure are buried in the muck swamps of Connecticut. Its value will never be realized until it is hauled out to the hills and exposed to the sun and air.....

YOU would have cause for genuine happiness if you knew there were 100 loads of good muck in your barnyard, over which the cattle had been tramping all Winter.....

AT the Michigan Agricultural College it is proposed to set a huckleberry plantation next Spring.....

Is there any reason why a sheep cannot be made to work a light dog-power for running the churn? Here is a good chance to make capital out of the surplus energy of the old ram.....

How do you strain your milk? If you use a cloth, how often do you wash it? Too much of the impurity of milk comes from the strainer.....

PROF. L. H. BAILEY well says the adornment of rural homes should be considered a necessity rather than a luxury. As the country becomes older, and natural windbreaks are destroyed, it is imperative that we plant for protection. The attractions of farm life for our sons and daughters are largely determined by the character of the arrangement and exterior adornment of the home and farm premises.....

Everywhere.

RURAL SPECIAL REPORTS.

California.

CARPENTERIA, Santa Barbara Co., April 14.—There has been plenty of rain all through the past Winter. Just now it appears to be clearing away after the biggest rain in April since I came here. Grass and feed for stock never larger and greener at this time of year. Much of the early-sown grain is prostrated by the late storm. Have had almost 24 inches of rain for the season. Most of the corn and "bean" land was in fine condition for the seed, but this storm will put the farmers at work to mellow up the soil and kill the new crop of weeds. The prospect is fine for a good harvest of most products of this section.

O. N. C.

Indiana.

PENDLETON, Madison Co.—There has been a rapid advance all along the line in breeds of stock. Twenty years ago the native scrub cattle were in large majority; and were ready for market at four years, with an average weight of 900 pounds. Short-horns had been introduced and intermingled; and ten years ago steers were sold at four years, weighing 1,100 to 1,200 pounds. Now a majority are high grades, and it is not unusual for a two-year-old to weigh as much and often more. Herefords, Galloways, and Aberdeen-Angus have since been introduced and the effect they will have on beef cattle of the State, remains to be seen. I predict that hornless cattle will be in a majority before ten years. Domestic cattle have no more use for horns than pigs or sheep.

S. W. H.

New Jersey.

HARBOURTON, Mercer Co.—Wheat and grass much better than at this time last year. Prospects for all kinds of fruit fair. Prices low—wheat, 98 cents; corn, 40 cents; oats, 35 to 40 cents; butter, 30 cents; eggs, 22 cents; potatoes, 65 cents.

D. J. B.

New York.

JOHNSTOWN, Fulton Co., April 20.—Some RURAL seed have done very well. The Johnson Grass did not come up. The Thousandfold Rye was partly destroyed by cold, but I saved about two quarts, which I sowed again, and it looks very well. Potatoes rotted very badly in our neighborhood, and are very high in price now—75 cents a bushel. The Blush did not rot at all.

G. M. P.

WILLOW CREEK, Tompkins Co.—Not many potatoes on hand. They have rotted and frozen quite badly. Prices about 33 cents, tending upward.

A. B. W.

HORNELLSVILLE, Steuben Co., April 19.—Potatoes in this section—a heavy potato district—have been mainly picked up, and the warehouses at Arkport, the main center for this vicinity, are nearly empty. What few are left are in good keeping condition, but prices are low—only 35 to 40 cents the extreme figures offered—but as inquiries are being made for seed, it looks as though they might be higher. Kinds preferred here—Burbanks, Star and Late Hebron (W. E.). The Rural Blush is thought highly of as a first-class table potato, and very hardy, with no signs of rot. Similar reports from Liberty, Avoca, Wallace, Cohocton Valley in this county, another large potato district.

C. J. P.

Vermont.

CHARLOTTE, Chittenden Co.—Stored potatoes not rotting in this section. Stock on hand not large. Snowflakes and Garfields were 75 cents a bushel, when other varieties were only 50 cents for the Boston market. White Elephant, Burbank and that class are now fetching 37 cents, while Snowflake and Garfield bring 55 cents. I am quite sure potatoes will advance in this section after planting time.

O. H. A.

THE FARMER'S CLUB

ANSWERS TO CORRESPONDENTS.

[Every query must be accompanied by the name and address of the writer to insure attention. Before asking a question, please see if it is not answered in our advertising columns. Ask only a few questions at one time. Put questions on a separate piece of paper.]

KEEPING SHEEP "ON SHARES."

A. S. Q., Hope Church, Pa.—In the Fall of 1884, a neighbor got me to allow two of his sheep to run with mine. In the Spring both had twins. He wants to take them home; ought he or I to have the increase.

ANS.—The usual arrangement by which sheep are kept for an owner is that the keeper takes half the produce yearly; that is, half the wool and half the increase. In this case, it is supposed that the keeper had the wool last Spring; if they had no lambs then, half their wool should belong to the owner, and to make the matter even now, the two years' wool and lambs should be divided evenly, which would be fair to both parties. A great many sheep are kept in this way.

ABOUT RASPBERRIES AND STRAWBERRIES.

O. E. D., Hampton, Ia.—1. Canning factories usually pay about six cents to eight cents for black raspberries and eight to ten for red. 2. For strawberries they generally pay from four cents to six cents. The price varies in different locations, and in different seasons in accordance with the relations of supply and demand. 2. The average yield per acre of raspberries ranges from 2,000 to 3,000 quarts; strawberries from 3,000 to 4,000 3. The average cost per acre of raising each is about $75 for raspberries, and $100 for strawberries, including picking. 4. One-quart glass cans cost $7 to $8 per 100; two-quart cans, $9 to $10. 5. Cost of picking raspberries, 1½ to 2 cents per quart; strawberries, 1 to 1½ cent.

COW-PEAS.

P. P. W., Milford, Del.—The Southern cow pea will grow upon any good soil; 25 to 30 bushels per acre is a usual crop. It is a valuable grain for stock and, when ground with corn, makes a perfect grain food. It is really a species of bean (Dolichos), and is more nutritious than peas; the haulm is also exceedingly good fodder. The seed—two bushels per acre—is sown about corn planting time. For cows, this grain should be ground as above, and an equal quantity of bran be added to it. If cut green, it is an excellent soiling crop, but is more valuable for the grain. There are about a dozen kinds; the "Whip-poor-will" and the Clay varieties are the most popular.

Miscellaneous.

A. T., Sprague, W. T.—1. Are the improvements, such as breaking, fencing, etc., on a homestead before "proving up," and while, therefore, the title is still in the United States, taxable? 2. My hens suddenly appear drooping for a few days, and then all at once, drop dead. On opening them I find the liver swollen, and on it and the heart are small cancers; what's the matter?

ANS.—U. S. lands cannot be taxed. Any improvements belonging to the real estate, as houses, fences, orchards, etc., are, therefore, not taxable until the owner gets his patent. 2. There is no cure for this disease, which is anthrax or intestinal fever, and it affects the liver and heart, as in this case, as well as the intestines. It is quite often caused by overfeeding, and is contagious. The only cure is prevention.

S. R. C., Bellefontaine, Ohio.—I have a piece of ground 300x240 feet. My water supply is at the middle of the other end. I wish to use a hand force pump, laying the pipe down the center, how many feet of lead pipe will be needed, and how many feet of hose will throw water to each side of the plot?

ANS.—If the pipe is laid in the middle of the plot for 200 feet, and a connection made at 100 and at 200 feet, and a hose 70 feet long is used, the water need only be thrown 50 feet, which can be done with a good force pump. Lead pipe is dear, and the new rustless iron pipe made by W. T. Wells, 7 Cliff St., New York, is even more durable and less costly than lead, and is, moreover, perfectly healthful. Pipe 1¼ to 1½ inch would be large enough. The larger the pipe, the less friction, but the more expense.

N. L. K., S. Dansville, N. Y.—1. On dry, gravelly soil would Mapes' fertilizer be a good application with farm manure? How much per acre? What would be the best kind for potatoes? 2. Which are the better farm scales—Jones's or Osgood's?

ANS.—1. Yes; Mapes or any other brand as good. If you use more farm manure, use less fertilizer. As a rule, in using chemicals with farm manure, we should use more bone and less potash and nitrogen. For potatoes, however, a larger quantity of potash should be added. Now, if 20 tons of farm manure are spread per acre, then we should add about two bags of bone flour to one bag of sulphate of potash, or, say, four bags of kainit. For potatoes we deem it most desirable to turn the farm manure under in the Fall and to sow the chemicals in the Spring. 2. Get either, and you will have no cause for grumbling.

R. R., Bloomingburgh, N. J.—The great-grand sire of my calf was a registered Jersey; its great granddam a half-blooded Ayrshire. Its granddam the result of this cross; the grand-sire a registered Jersey; its dam was the offspring of the foregoing cross and its sire a registered Jersey, what is the calf and is it eligible to registry.

ANS.—The calf is seven-eighths Jersey. It has 87½ per cent. of Jersey blood. Its granddam took 50 per cent. of Jersey blood from its sire. Its mother took 50 per cent. from the sire and 25 per cent. from the dam, thus having 75 per cent. of Jersey blood. The calf took one-half its blood from the sire and one-half from the dam, figuring as is usual in such cases. This gives 50 per cent. Jersey from the sire and 37½ from the dam. It is not elegible to registry. 2. H. C. Carter, New York.

G. T., Dodge Centre, Minn.—My horse's hind leg swells from the fetlock to the hock. When he stands for a time without exercise it swells to twice its regular size. The front of hock-joint is cracked, and there is an oozing from it. It is warm. Swelling goes down with work.

ANS.—Apply to the cracked skin an ointment made of equal parts of spermaceti and almond oil. For the stocking of the legs see "Stock Leg in a Horse," in the R. N.-Y. for Feb. 20, 1886. In connection with medicinal treatment, daily exercise is very important.

Subscriber (address mislaid).—1. Can potatoes be so chilled that, although they have not been frozen, they will not grow? 2. If hen manure is mixed with muck or loam and applied to corn in the hill, should the manure come in direct contact with the corn?

ANS.—It is hard to say where the dividing line between a chill and a freeze would come in. As a rule, chilled potatoes which have been kept at a temperature close to freezing for a long time lose their vitality. 2. It is safer to interpose a thin layer of earth to prevent the possibility of "burning" the seed.

G. H. R., Big Rapids, Mich.—On a sandy gravelly soil, some of which has been in grass for a while and some in corn, on which oats is to be sown this Spring, with clover seed, Orchard Grass and a little Timothy, how much seed per acre should be sown, and should there be any addition to the mixture?

ANS.—Orchard Grass does not always do well with oats. Sow 2 to 2½ bushels. Afterwards sow 10 quarts of clover. Timothy is considerably later than Orchard Grass.

C. A. P., (no address).—To break a mare of the habit of carrying her tongue out of her mouth, try other forms of bit to make sure that it is not due to the particular one in use. Otherwise we can only suggest that you make a sling for the tongue. A small sack placed over the free end of the tongue, with a string from each side to pass back and be tied behind the ears, will answer the purpose.

W. M., Springer, N. M.—Two of my horses became weak in the back, dragged their hind legs. There was a stoppage of urine. Both died in a few days. What was the matter?

ANS.—The symptoms would indicate some disease of the urinary organs, but they are too brief to enable us to say definitely or to recommend any treatment.

G. T. D., East Randolph, Vt.—"Young plum trees that made a very rank growth last season" should be cut back, as much or as little as one chooses; generally the less the better unless the branches interfere. Prune now. 2. The Woodason Bellows for blowing pyrethrum powder, etc., on insect-infested plants, are the best. All leading seedsmen sell them. Price $1.00 to $1.50.

"Subscriber," Dansville, N. Y.—Opinions differ as to the best kind of roosts for poultry. We prefer low roosts, not over 18 inches high, and made so broad at the top as to give the hens' feet full rest and support. Any wood that will not splinter is suitable.

J. E. W., Utica, N. Y.—For grinding bones Wilson's patent bone and corn mill is an excellent device. Different sizes are sold at different figures. Send for circulars to Wilson Brothers, Eaton, Pa.

O. B., South Haven, Mich.—The Great American is one of Durand's best varieties of strawberries, but it thrives only under the most favorable conditions, and we advise you to try it in a very small way.

An Old Subscriber, Mospeth, L. I.—1. We have little confidence as to the curative properties of the plant inquired about. 2. "Copying" requires skill. One in a hundred may make a little at it; the 99 will fail.

J. D. T., Brookside, N. J.—The better way to "lime" low meadow land intended for crops, is to do so before plowing. Then harrow. This would be our way, though many would differ.

T. A. P., South Bend, Ind.—So far as we know the Jewell Strawberry is not tender in the bud "like the Sharpless."

O. H. S., Franklin Forks, Pa.—Downing's Everbearing Mulberry is probably the best for your climate.

A. B. C., Maple, Mich.—The watermelon

seeds of the F. S. D. can be distinguished only by their color and general appearance.

DISCUSSION.

BOILED TO DEATH.

T. H. H., NEWPORT, Vt.—Recently in replying to the question of a correspondent in one of our Vermont hill towns, where hay can often be bought in the field for six or seven dollars a ton, while stable manure cannot be bought at all, and commercial fertilizers have to be hauled long distances, I said that it was more profitable for such farmers to buy hay, and feed it to dairy cows, than to buy fertilizers. The Homestead boiled this advice (which was given with reasons at some length) down to a stickful, omitting the qualifications. The RURAL evaporates the Homestead's concentration to dryness (and falsity) by baldly stating that "Dr. Hoskins insists that it is cheaper to buy hay than manure." Allow me to say, Messrs Editors, all, that you are running this business of "boiling down" into the ground. No man can live, physically, on beef extract, neither can the human mind be nourished on evaporated facts. The facts escape in the process, and naught but a worse than worthless residuum remains.

MULLEIN FOR COLDS, ETC.

C. W. B., LOS ANGELES, Cal. —A short time back I noticed a clipping from the RURAL NEW-YORKER, speaking well of mullein for consumption. Here is my experience with it: In 1882 my wife was afflicted with a very bad cough. It got worse and worse, and no medicine I tried afforded any relief. At last, hearing of the good effects of mullein and rock candy, I went into the fields and pulled up a lot of young mullein plants, washed the roots, placed them with the tops in the kettle, poured water over them, and boiled the whole down to a sirup, which I put in large bottles, adding rock-candy and brandy enough to keep it from spoiling. My wife used it as medicine, and in one week was well and sound. I have no doubt whatever that medicine of this kind will have excellent results in ordinary cases of lung troubles, colds, etc., whatever be its effect in cases of pronounced consumption.

R. N.-Y.—A decoction of mullein has long been used in domestic medicine to allay coughs and other irritations of the air passages and vessels, and externally as an emollient for relieving soreness, inflammation, swelling and pain in cases of tumors, piles, etc. On account of its use in lung troubles of cattle, one of its common names in England is bullock's lungwort. Rock-candy has often a soothing effect in colds. Instead of keeping the mixture "from spoiling," many would think it would be "spoilt" by the addition of brandy; but, like several other "poisons," brandy is often beneficial taken medicinally.

FLAGEOLET BEANS.

C. E. P., QUEENS, N. Y.—In the RURAL for April 17th, I notice an article on the Flageolet Beans, and as it may possibly lead to a decided increase in their cultivation, I desire to offer a few remarks regarding their proper table use. I have at one time or the other grown most, if not all, of the different varieties of dwarf or bush beans in cultivation, and as far as my experience has extended, I have found that all of the varieties known as Flageolets are entirely unfit for use as a snap or string bean, being tough, stringy and inferior in quality. As a shell bean used in either the green or dried state, they deserve all that can be said in their praise. I consider the Green Flageolet the best of all for amateurs to cultivate. I also think Dreer's Improved the best of the Limas for general cultivation. I tried the Challenger Lima last season, and was very much disappointed with it. Not only did the flowers set very sparingly, but in most cases the pods contained only one or two beans.

L. M. M., N. FERRISBURGH, Vt.—When a small boy I watched one season 20 robbins' nests, and only in two or three were the young raised. Having often noticed the conflicts between the robbins and the crows, I concluded that the latter were the cause of the destruction. I found that the ground sparrows and other field birds suffered equally. Would not the little birds that are thus destroyed, if they were allowed to live, have benefited farmers more than the crows? In a short plea for the crows in a late RURAL, we are advised to scatter a little corn for them. Yes, let's do so; but put a little strychnine in it.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING April 24, 1886.

G. W. T.—G. W. S., plants received.—R. J., plants received.—D. C. A.—S. Frogner, potatoes received.—G. W. T.—O. H. A.—J. R.—J. A. B.—W. H. B.—D. R. T.—P. H. J.—J. J. H. G.—H. R. H.—T. W. L.—G. S.—John McLean, corn received, thanks.—S. M. T.—G. H. J.—Wm. Murray, potatoes received.—W. H. Byram, potatoes received.—S. C. Ashland, raspberry received.—F. H. C.—A. P. P.—E. A. Y.—F. E. S.—H. A. C., plants received.—W. T.—J. M. M.—T. T. L.—W. C.—R. McE.—E. J. E.—R. W. S.—J. B. A., thanks.—B. C. M.—H. R. H.—J. G. O.—B. S.—F. G.—S. W. G.—I. S.—N. C., thanks—R. C. K.—H. C.—A. R.—C. A. R.—L. E.—C. W. S.—J. F. H.—O. N. C.—C. S. N.—S. G. M.—G. S.—G. C. S.—L. M. L.—K. B. C.—E. C.—M. C. G.

Miscellaneous Advertising.

Dyspepsia

Does not get well of itself; it requires careful, persistent attention and a remedy that will assist nature to throw off the causes and tone up the digestive organs till they perform their duties willingly. Among the agonies experienced by the dyspeptic, are distress before or after eating, loss of appetite, irregularities of the bowels, wind or gas and pain in the stomach, heart-burn, sour stomach, etc., causing mental depression, nervous irritability and sleeplessness. If you are discouraged be of good cheer and try Hood's Sarsaparilla. It has cured hundreds; it will cure you.

Hood's Sarsaparilla

Sold by all druggists. $1; six for $5. Made only by C. I. HOOD & CO., Lowell, Mass.

100 Doses One Dollar

Q. WHAT IS THE opinion of standard medical authorities on kidney disease?

A. That the blood vessels and tubes of the kidneys have become paralyzed by repeated and long neglected congestion and, having no nerve power to control their action, the albumen, the life of the blood escapes, while the uric acid and waste remains in and destroy the blood. This sometimes results in dangerous blood poisoning; the only true scientific blood tonic, before which these symptoms and diseases rapidly flee away, is Warner's safe cure.

Improved HYDRAULIC RAMS.
Send for Circular and Price List. Address
ALLEN GAWTHROP, Jr.,
WILMINGTON, DEL.
Awarded Medal and Diploma at the Centennial Exhibition, Philadelphia.

TO FARMERS. This simple invention is used in milking cows, particularly where there is any soreness. Made of solid silver, and sent by mail to any address on receipt of the price, 50 cts. Address The Milking Tube Co., 102 Friendship Street, Providence, R. I.

Macomber's Hand Planter, *for Corn, Beans, and Beet Seed.* The BEST in the world. Money refunded if it does not prove satisfactory, after a fair trial. Agents wanted. Send for circular and terms.
S. M. Macomber & Co., M'f'g's, Grand Isle Vt.
For Rhode Island address L. G. SHERMAN & CO., PROVIDENCE.

But Little Credit to the Profession.

DETROIT, Mich., Nov. 6, 1885.—Three years ago, I suffered much from enlarged prostrate gland. Had to have my water drawn. The more I doctored, the worse I got. Was completely broken down. Almost out of my head. Have used 102 bottles of Warner's safe cure, and am perfectly and entirely relieved.—SOLOMON WESLEY, 354 Grand River Avenue.

Implements and Machinery.

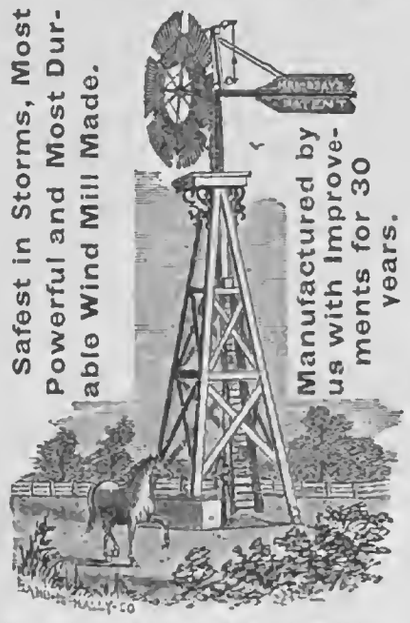
MYER'S FORCE PUMP.
The only double acting Force Pumps with Expansive Plunger Bucket and GLASS VALVE SEAT. The only Successful Drill Well Pump.
Simple, durable, powerful, easy to operate. Never affected by frost.

MYER'S DOUBLE LOCK REVERSIBLE HAY CARRIER

A perfect reversible carrier. New Myer's iron and wood track carriers the simplest carriers made. Double and single harpoon hay forks, pulleys, grapplers, etc. Illustrated catalogue free. F. E. Myers & Bro., Ashland, Ohio.
The best made.

THE OLD RELIABLE HALLADAY
STANDARD WIND MILL.

GUARANTEED THE BEST REGULATING, Safest in Storms, Most Powerful and Most Durable Wind Mill Made. THE BEST IS THE CHEAPEST.



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17 Sizes, 1 to 40 Horse Power; adopted by the U. S. Government and Leading Railroads.
Also the Celebrated **IXL Feed Mill, IXL Stalk Cutter, IXL Sheller, Horse Powers, Wood and Iron Pumps, Tanks, Noyes' Haying Tools, etc.**
For Catalogue and Price List, address
U. S. Wind Engine and Pump Co., Batavia, Ill.

THE DANA
CENTRIFUGAL-GOVERNOR
WINDMILL
Is the best working and most powerful Wind-Engine in the world, because it is the only one which unites the most perfect form of wind-wheel with the most perfect method of regulation. Geared Mills a specialty.
For Descriptive Circulars apply to
THE DANA WINDMILL CO.,
FAIRHAVEN, MASS., U. S. A.

EMPIRE POWER and SEPARATOR
BEST, CHEAPEST and MOST IMPROVED in the market.

We also manufacture Mowers, Reapers, Twine Binders, Rakes, Field Rollers, Plows, Feed Cutter and Crusher, Hand and Power Corn Shellers, etc. Send for Illustrated Catalogue and Price List. **S. S. MESSINGER & SON,** Stockertown, Pa.

THE GRANGER FAMILY FRUIT & VEGETABLE **EVAPORATORS.**

$3.50, $6.00, and $10 00.
Send for Circular. EASTERN M'F'G Co., 268 So. 5th St., Phila., Pa.

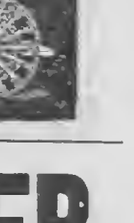
MAST, FOOS & CO.
SPRINGFIELD, O.
Manufacturers of the

THOUSANDS IN USE.

IRON TURBINE WIND ENGINES
Strong and Durable, will not Swell, Shrink, Warp, or Rattle in the Wind.

BUCKEYE FORCE PUMP
Works easy and throws a constant stream. Has Porcelain lined and Brass Cylinders. Is easily set. Is the Cheapest and Best Force Pump in the World for Deep or Shallow Wells. Over 90,000 in use. Never freezes in Winter. Send for Circulars and Prices, giving depth of well. Also manufacturers of the **Buckeye Lawn Mower, Buckeye Iron Fence, Buckeye Hose Reel, Lawn Sprinkler, etc., etc.**

A CHILD CAN USE THEM.



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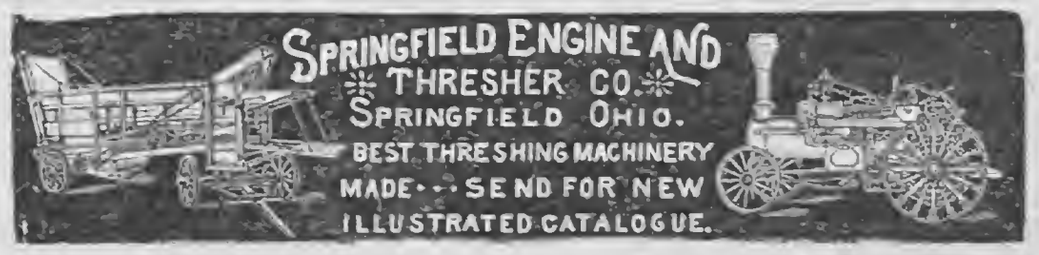
SMITH & WOODWARD, Kalamazoo, Mich.



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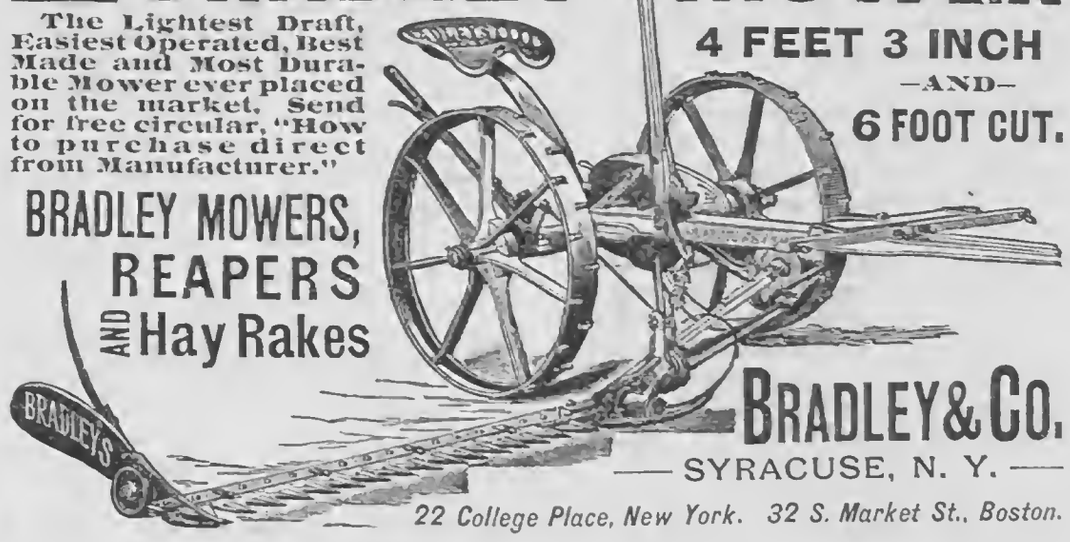
The Lightest Draft, Easiest Operated, Best Made and Most Durable Mower ever placed on the market. Send for free circular, "How to purchase direct from Manufacturer."



4 FEET 3 INCH —AND— 6 FOOT CUT.

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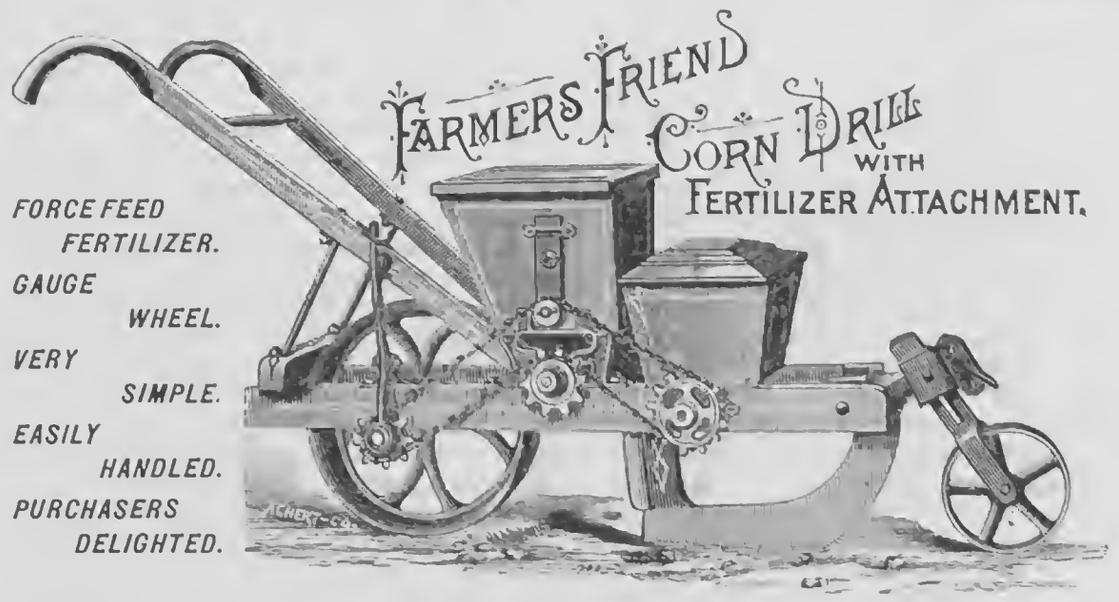

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2-Horse Corn Drills,
Fertilizer Corn Planters,
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1-Horse Corn Drills,
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Our Planters and Corn Drills are recognized as the best in all the Corn States.
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DAYTON, O.

THE
RURAL NEW-YORKER.
A National Journal for Country and Suburban Homes.

Conducted by
E. S. CARMAN, Editor.
J. S. WOODWARD, Associate.

Address
THE RURAL NEW-YORKER,
No. 34 PARK ROW, New York.

SATURDAY, MAY 1, 1886.

THE POULTRY SPECIAL next.

IF the number on your address label is 1892, your subscription expires with this number; if 1893, next week; 1894, in two weeks, etc.

THE Poultry Special will be mailed May 3d—20 pages. The next Special thereafter will be devoted to the crop prospects of the entire country.

TWELVE years ago, as well as we can recall, the first Blue Spruce was planted at the Rural Grounds. Its botanical name, after having been changed several times, is now settled upon as Abies pungens, or, according to the new nomenclature, Picea pungens. Pleased with the gray or steel color of its leaves, with its hardiness and form, we have talked of it in these columns for the past 10 years, every year praising it more highly. It is still a rare tree; but other journals are now discovering its beauty, and there is little doubt that its merits will ultimately insure it a place upon every lawn to the exclusion of the popular, though far less meritorious, Norway Spruce and Balsam Fir.

Again, good readers, forget not that we would beg you to plant Alcock's Spruce which for six years at least, though more persistently of late, we have pressed upon your attention. This is another rare conifer, and, as we have remarked, were we confined to but one evergreen tree, this would be our first choice; while were we confined to two, the Blue Spruce would be selected second.

SEVEN years ago a notorious woman at Paris appeared at a semi-disreputable ball with stuffed birds as ornaments. Since then the feminine beauty, piety, homeliness, vanity and thoughtlessness of Christendom have servilely followed the fashion thus started by a wanton profligate. Entomologists estimate that the annual loss in food and fiber plants due to insect pests, amounts in this country to fully $300,000,000. At the lowest estimate 5,000,000 birds are butchered by us every year to satisfy the demands of a barbarous fashion. It is estimated that the death of every insect-eating bird causes an actual and consequential loss equivalent to four bushels of grain. When the enormous fecundity of insect pests, and the number daily destroyed by their feathered foes are considered, the estimate will not be considered greatly exaggerated. The decrease of birds by ordinary accidents, depredations and mortality, nearly counterbalances their increase; and such special havoc as that made of them for feminine vanity's sake, upsets the balance of Nature, and leads to the speedy extinction of whole species. This is an excellent time to change this fashion inaugurated by vice and maintained by recklessness, cruelty, and vanity. Let the flowers that bloom in the spring-time, take the place of the birds that die the year round.

AN abstract of the anti-oleomargarine bill of the House Committee on Agriculture is given in our news columns. It embodies the suggestions made here last week, with regard to the tax on "oleo," the packages for it, and the giving of a part of the penalty to the informer. These are the cardinal points in a national law. Such a law should contain as few provisions as possible for an effective enactment. With the increase of provisions, the risk of invalidity increases in more than geometrical progression. Let the General Government tax the product, as it undoubtedly has the right to do, and effectually provide for the rigid collection of the tax, branding the packages as it brands or stamps those for whiskey, and let the various States make laws regulating minor details of its sale, as they do in the case of intoxicants. The bill will doubtless be bitterly opposed both in the House and Senate, and no doubt some alterations will be made in it. Introduced at so late a date, and certain of the vigorous and persistent antagonism of concentrated capital, it can be passed only by an equally vigorous and persistent pressure from the people—producers and consumers—on their representatives in Congress. The effectiveness of such pressure was admirably illustrated by the fate of Senator Wilson's postage bill. All can now concentrate this popular pressure on their Congressmen in favor of the Committee on Agriculture's Oleomargarine Bill.

In several States there is a demand for summer Farmers' Institutes. The meetings of the Winter have been remarkably successful. There is a desire to hold these meetings at the time when nature is at her best. In Winter the mistakes or successes of agriculture are hidden away under the snow. In Summer, the story of the year lies spread over the land like an open book. The summer meetings must of necessity be short and practical. The time is too valuable to spend in theorizing or "passing compliments." One fact has been learned from the experience of the past Winter—it pays to advocate mixed husbandry with a mixed programme. In the West the Farmers' Institutes are greatly helped by local literary and musical societies. Music and recitations do much to render the programme attractive. Interest the ladies and the boys and girls by giving them something to do. A company of farmers, each one of whom feels that he knows more than the speaker about the subject under discussion, will not make the ideal Farmers' Institute. Make the programme attractive enough to bring out the crowd; when you get the people in the hall, show them that farming is something beyond a mere hoe exercise.

NOTICE.

THE PRESENTS

FOR SUBSCRIBERS who shall have sent us clubs will be positively awarded May 10th. We think that a pleasant surprise awaits them.

Now that the season of cyclones and tornadoes has fairly opened, would it not be well for those living in regions where these destructive visitations are likely to occur with the greatest violence, to construct "cyclone cellars"? In an emergency such a structure conveniently at hand, would often be the safety of the family, and anyhow its cost would be amply repaid by the reassuring feeling that at the worst one would always have a place of refuge for himself and those dear to him whenever whirling destruction should threaten. During the havoc wrought at St. Cloud, Sauk Rapids and Rice's Station, Minn., a little over a week ago, many who perished would have had ample time to find safety in such places had they existed. A hole in the ground or in a hill-side under or quite close to the dwelling, is what is needed. It should be excavated from an ordinary house cellar so that those in it could not be crushed by falling walls or timbers, as they might easily be in an ordinary cellar. A small brick-lined room excavated from an ordinary cellar, with an arched brick roof some distance beneath the surface of the ground, would be the safest and best protection. Where even remote danger threatens the lives of all that are dear, neither the prospect of a trifling outlay of cash or labor, nor the smallness of the risk, nor the fear of the neighbors' ridicule will deter a prudent man from taking every precaution. Although few such storms occurred last year before August, yet 111 lives are known to have been lost by them. In 1884, in February and March alone, 678 lives were lost by this cause, and in 1883, 509 were lost, the worst storms occurring in April and May.

SMALL-POX and flood-afflicted Montreal held a jubilee Thursday over the news from Ottawa that the Government had reduced the canal tolls to enable grain going to that place for shipment to Europe to compete with that brought from the lakes to this city on the Erie. The reduction is 18 cents a ton on the Welland and 13 cents on the Lachine Canal, leaving the charges only two cents per ton as the through rate, with a local rate of two cents. Goods passing through the Welland are not charged on the Lachine. Montreal merchants think the reduction will enable them to get a large share of the grain trade from our Northwestern States and Territories. Anyhow, the closer competition thus caused will benefit the farmers of the Northwest. Over a year ago the Erie was made "free,"; in last year's canvass, both political parties pledged themselves to improve the State canals; the proposition to obtain a Federal appropriation for the work has met with little encouragement in the State, and it is to be hoped, therefore, that the deepening and widening of these checks to railroad extortion may not be neglected by our lawmakers at Albany. The Erie opens on May 3, and now that the ice is breaking up in the Straits of Mackinaw, allowing free navigation between the Lakes, the largest grain fleet that ever sailed from any port in the world, consisting of 148 vessels loaded with 6,460,000 bushels of grain, has started eastward from Chicago. Of this vast amount of agricultural produce 1,986,000 bushels are wheat and 3,980,000 bushels corn, and 4,689,000 are for Buffalo, the western terminus of the Erie. This grain has been held back chiefly on account of the high railroad charges, and its shipment as soon as water transportation opens is a strong argument in favor of the advantage of water-ways as regulators of freight charges.

THE "POCKET PISTOL".

A WHISKEY saloon in this city bears upon its front what we consider to be a very appropriate sign:—"Take home a pocket pistol of sour mash whiskey." Who but the man engaged in the wretched business of burning up the souls and bodies of his customers could seriously advise the taking of liquor into the home? "Home, Sweet Home" is a mockery to such fellows. They would willingly tear down the purest and tenderest of all safeguards for the sake of adding to the sale of their wretched stuff. There are dumb brutes in this world, who could show more manhood than that. There is something grimly appropriate in this calling a bottle of whiskey a "pocket pistol." Of all cowardly and useless weapons the pistol is the worst. No one but a moral coward or a man going into the most desperate danger would think of carrying one. Yet he who would advise his friends to hang up a loaded revolver in his home would be a safer guide than he who invites his customers to take home a bottle of whiskey. The rum interests are settling upon this land like a black curse. There are few readers of the RURAL who cannot point to some dear relative whose life has been blackened by this wretched evil. If the demons of drink, or barkeepers, have our city governments under their feet, we must fight them in the pure, strong country homes, where in all the world's history the bravest and surest legislation has been formed. See to it that no son or daughter of yours can ever look upon a whiskey seller with any other feeling than they would have in regarding a man afflicted with some loathsome disease.

SPECIAL.

Those who, having applied for the Rural's present seed distribution prior to April 25th, have not yet received it, will kindly notify us by postal at once.

HARDINESS OF SMALL FRUITS.

YEARS of experience scarcely increase our knowledge as to what constitutes *hardiness* in some kinds of plants. The Niagara Grape is uninjured by the past Winter. Duchess within ten feet of it is nearly killed. Next to this (within ten feet) Early Dawn is dead. Next to this Moore's Early and one of Rieketts's Seedlings (240 A.) are unharmed. Then Cayuga is killed to the ground. Brighton is seriously cut back, and Wilder killed. Herbert is killed to within two feet of the ground, Amber Queen killed back one-half, while Woodruff Red is uninjured. On the same trellis the Rural New-Yorker (Marvin) and Jessica have escaped damage. Worden, F. B. Hayes, Cottage, Ulster County Prolific, Lady, Florence, Victoria, Carlotta, Rockingham, Early Victor, Pocklington, Concord and El Dorado are alive to the tips.

It is just as hard to account for the different degrees of injury sustained by raspberries. Superb is uninjured. Next to this variety one bush of Marlboro is badly hurt; in another some of the canes are killed while others are unharmed. All have suffered more or less. Reliance is unharmed, Crimson Beauty very little, Hansell not at all. One bush of Caroline is half-killed, another unharmed. It is the same with Turner. Shaffer's Colossal is hurt but very little, while Souhegan is nearly killed. We are surprised to find that Macomber's white seedling of the Antwerp is very little injured. Rancocas, Imperial (claimed by some to be Crimson Beauty) have escaped injury. Ohio, Earhart and Carman are alive to the tips.

Blackberries have not suffered much. Taylor and Snyder are alive in every part. A few Kittatinny bushes have been killed back a little. Only the tips of Crystal White are dead. It was not supposed this variety would stand our climate. The Lucretia Dewberry is all right, but was somewhat covered with straw. Early Harvest was cut back somewhat. Early Cluster is sound and lively. Wilson Jr. has been injured considerably—more perhaps than any other. Some of the canes, however, are not harmed.

It will appear by a comparison of the above notes with those of last season published at about the same time, that several kinds of grapes and raspberries, which were then reported as having passed the Winter with safety, are now more or less killed back, and *vice versa*. And this piece of history has repeated itself at the Rural Grounds for 12 years, from which the important conclusion may be drawn that "hardiness" is a relative word, and should not be used in a positive sense without caution and experience.

BREVITIES.

Is your early sweet corn planted?

WE estimate this Spring as one week earlier than the average Spring at the Rural Grounds.

MONEY sent in letters for subscriptions to the RURAL NEW-YORKER is at the sender's risk. Our terms are invariably $2.00 a year in advance.

WE have no sympathy for strikers and boycotters who make their head-quarters in beer saloons. The "shackles of slavery" are not "knocked off the souls of men" in any such places.

THE weather is beautiful. Spring has come. Winter has run towards the pole. We are thankful, yet the following seed report from Louisiana makes us thoughtful, "Peas in bloom; corn up; potatoes fine; strawberries ripe!"

PREST. WILDER attributes the comparative ignorance, on the part of the present generation, of many old and good fruits, to the fact that the mania for something new has almost blotted out the recollection of many fine old sorts of much superior merit. A fruit is not good simply because it is new, nor do years of service take away the merits of old fruits. Read the plan suggested in regard to certain new fruits, in another column.

WOULD it be too much trouble to sow in one trench, 33 feet long, two pounds of potato fertilizer, and then at harvest compare the yield of potatoes with 33 feet in which farm manure was used? A third trench might be planted without either fertilizer or manure. Two pounds to 33 feet (if the trenches were three feet apart) would be at the rate of 880 pounds to the acre. We want to say all we can to induce our readers to experiment more. Such little experiments as that suggested above would cost the farmer a mere nothing, while they might prove of great service.

THAT was a sensible act of Gov. Abbet, of New Jersey. Over a week ago he issued a proclamation naming yesterday as Arbor Day. It was represented to him that the day named was Good Friday, and that in some parts of the State the ground was still a trifle unfit for tree-planting, and on Thursday he changed the day to April 30. Gov. Pattison, of Pennsylvania, was less wise, as he stuck to his proclamation naming the middle of April for Arbor Day, though the frost was still in the ground in a good deal of the northern and upland parts of the State. When farmers take official positions, or politicians learn something about agriculture and horticulture, such blunders will be things of the past.

THE industrial growth of the South is exceptionally lively just now. During the first three months of the current year the amount of capital invested there, including stock of new companies, money in mining and manufacturing associations, enlargement of old "plants" and building of new mills, etc., is figured up at $36,557,000, against $21,000,000 for the corresponding period last year. Divided among the States the principal figures are Kentucky $9,648,200; Arkansas, $6,110,000; Virginia, $4,502,500; West Virginia, $3,486,800; Alabama, $3,345,500; Tennessee, $2,324,000; Maryland, $2,215,500; Texas, $1,091,000; North Carolina, $715,200; Louisiana, $579,000, Georgia, $530,000; Florida, $485,000; Mississippi, $135,000; and South Carolina, $90,000. Success to the South and to all other sections!

BRILLIANT Senator Ingalls, of Kansas, has introduced into Congress a bill providing that no person or corporation shall own more than 640 acres of land, and that all held contrary to this limitation after three years shall be forfeited to the Government. Excellent as far as it goes; but it doesn't go far enough. Why not limit the number of horses, cattle, sheep, pigs and poultry to which each shall be entitled? Then, some outrageously rich in this world's goods, actually own as many as a dozen coats, vests and pairs of pants, and twice that number of shirts, white and colored, and a still greater number of pocket-handkerchiefs, collars, cuffs and stockings; while others haven't a decent rag to their backs or feet. Away with all such unequal distribution of this world's goods!! An amendment is in order, brilliant Senator from Kansas.

THERE are a few trees that we delight in calling attention to at this season, when they may be transferred from nursery, field or woods to beautify our own homes. One is the Liquidambar. It is not generally known that, if cut back from year to year, this tree assumes a luxuriance of foliage never seen when it has been left to grow naturally. The branches, also, become covered with the irregular, corky ridges, to an extent never seen in natural trees. The Golden Oak is another tree which for the lawn is much improved by being cut back for a year or so after it has attained the hight of six feet or more. The leaves in early Spring are a pleasing yellow which, though lost in a few weeks, again reappears in early Fall.

Architecture.

A HANDSOME COTTAGE.

At Figs. 187, 188 and 189 we present to our readers plans of a handsome cottage, designed by H. G. Knapp, Architect, 120 Broadway this city. At Fig. 187 is shown the elevation, 30 feet front by 40 feet in depth. Fig. 188 is the plan of the first floor: the parlor is 13 feet 8 inches, by 20 feet 8 inches; dining-room 14 by 15 feet, exclusive of bay window; library 9 by 9 feet; kitchen 11 by 11 feet; hall 14 by 16 feet. Fig. 189 is the second floor. Here the chamber over the parlor is 14 feet 6 inches by 18 feet 6 inches; chamber over dining-room 14 feet 6 inches by 16 feet; chamber over library 7 feet six inches by 11 feet 6 inches; chamber over hall, 10 by 14 feet; bath-room 7 feet 6 inches by 10 feet. There are also three commodious rooms in the attic. The first story is built with brick walls, thence up the construction is frame, with double outer sheathing and back plastering. The exterior finish is, as shown in the sketch, with shingles and clapboards. The house is heated throughout by furnace, and is finished in first-class style, with modern improvements. Its cost will, of course, vary with different localities and circumstances, but should not exceed from $3,500 to $4,000.

Miscellaneous.

SHORT PITHY PARAGRAPHS.

Profit in Farming consists in devoting most of your land to grass and stock; in making large quantities of manure, and applying it to a small portion of cultivated land, giving high cultivation. In this way more grain, roots, etc., will be raised one year with another than can be raised on the whole farm by the usual skimming and half cultivating process. Here is success in a nutshell; your farm and pocket will grow fat: no mistake about it!

Profit in Stock-raising comes from giving the best care and shelter with full feed from the beginning. In breeding use only thoroughbred males; half-breds produce only mongrels and scrubs. One pound of sulphur to 20 of salt will prevent disease, and keep your animals healthy. Always salt the hay in the mow. One is apt to neglect giving salt in Winter. Add sulphur as it prevents hay from molding and keeps it sweet.

Boiled Linseed Oil should be applied to all the wagons, carriages and farm implements at least once a year, especially to the wagon wheels; then the tires will not get loose and they will last five times as long. If the plow or cultivator teeth get rusty, clog and will not scour, apply nitric acid; go right to work and the rust will soon disappear. Boiled linseed oil is the best furniture polish in existence. Try it, see how new and fresh everything will look.

To Paint Fences and out-buildings, use water-lime and skim-milk; mix a small portion at a time; apply with a brush; add any color you wish—a very nice, cheap and durable paint.

Cut-worm ravages in corn or tobacco fields, may be made good by getting a few hundred or thousand two-inch flower pots—price about four dollars per 1,000. When you plant corn, plant at the same time four kernels in each pot, and where a hill is missing, lift a hill out of one of the pots and replace it. Transplanting out of the pots, does not check the growth. The transplanted hills will come right on with the rest. With tobacco, transplant into pots at the time you plant in the field; then fill up from the pots; it is better to start all your tobacco and cabbage plants in pots; they can be transplanted anytime with safety, without checking growth.

For Cabbage Worms use pyrethrum or insect powder, or, what is better, place dishes of sweetened water and vinegar, and catch the millers before the eggs are laid.

To Keep Water Cool and fresh when carried to the field, wrap up the jar in a woolen cloth. It will then keep fresh and cool six hours. Keep the cloth wet.

To Keep off Squash Bugs, place a cob soaked in coal oil by the hill.

To Raise Two Crops on the same ground in one year without exhaustion, in every third row of potatoes, plant every fourth hill to squashes or punpkins; the vines will not bother till after the potatoes have been cultivated; put a shovelful of well rotted manure in the squash hills.

To Avoid Sunstrokes get plenty of sleep; sleep in the morning if possible: don't get out too early while the air is filled with malarial poisons. Sunstrokes do not occur where nights are cool, and people get plenty of sleep to keep up vital force. Be temperate, just and honorable in all things. Haul your manure directly from your horse stable during Winter, and scatter it thinly and evenly over your wheat; this will prevent winter killing, and give the wheat a good send-off next Spring.

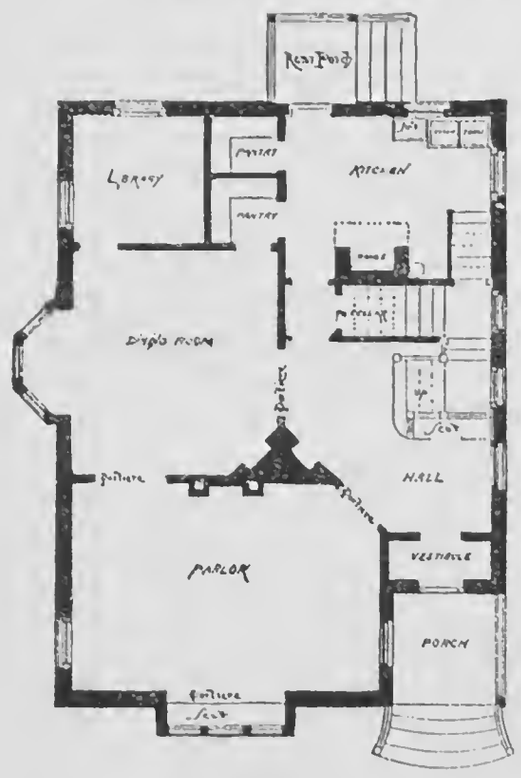
Morrow Co., Ohio. C. W. CARPENTER.

CATALOGUES, ETC., RECEIVED.

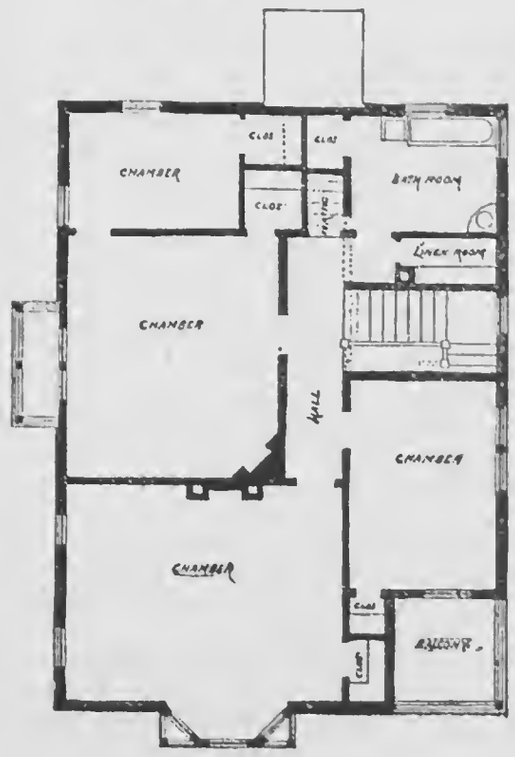
The Home Acre.—Rev. E. P. Roe, has selected an exceedingly happy title for the series of papers he is writing for Harper's Magazine. The picture he paints of the ideal rural home, is one well calculated to appeal to the heart of the over-worked city man. Those who follow his directions, will surely fence in "an acre of paradise." To our mind these bright, crisp, little articles are as readable and strong as anything in the famous magazine. There is grace of diction, and at the same time an earnestness and practicality about them that leave an admirable impression on the memory. Those who view, on their own tables, fruits and vegetables—the product of their own exercise and thinking—will highly appreciate the idea that those who patronize stalls and peddlers' wagons, can buy but dead and dying things. It's a decidedly happy thought to speak of a light, thin sandy soil as a spend-thrift, that never can be kept rich, no matter how much you give it, or to call a stiff, heavy clay, a miser that hates to part with its stolen fertility. Roots are called levers. It is only when they rest against a deep fertile soil, that they can lift condensed sunshine into our hands. The chapter in the May Harper's, is given up to a talk on the garden portion of the "acre." More than one-half of the space is devoted to the cultivation of the vine. No attempt is made to deal with technical or scientific details, but the reader is told which varieties to procure, how to locate his vineyard, and how to watch and care for it. The articles are just the kind needed to make a city man homesick, and to cause him to long for a real home of his own. This home building, and the idea of drawing men away from the noise and excitement of the city, is the most timely and important subject discussed in the magazine.

The Practical Fruit Grower, by Prof. S. T. Maynard, published by the Phelps Publishing Co., Springfield, Mass.—This little book is designed to help beginners in fruit culture. It will be of great value to those who have no time to study through the whole range of pomological literature, and yet desire to master the rudiments of the science. It is evident that such a book is needed. No department of the farm needs to be stirred up and improved as does fruit culture. The ordinary farmer cannot and will not be induced to read long articles full of scientific terms and matters of interest only to professional fruit-growers. This book ought to be in the hands of every farmer in the country. The farms and homes would be better off for such a distribution. Nearly one-half is properly given up to the apple. Its value, origin, propagation, how to market, how to graft, its insect enemies, etc., etc., are all briefly treated. The blackberry, cherry, currant, grape, gooseberry, plum, quince, raspberry, strawberry, pear and peach are all described and treated. The illustrations are frequent and timely. Among other articles we notice one on Fruits for the Cold North, by Dr. Hoskins, which appeared in the Rural last year. Send for the book. Price, 25 cents.

A NEAT COTTAGE. Fig. 187.



First Floor.
Fig. 188.



Second Floor.
Fig. 189.

Kemp's Manure Spreader. Catalogue from the Kemp & Burpee Manufacturing Co., Syracuse, N. Y.—Machines for preparing the soil for a crop, or for securing the crop at the end of its life, are plentiful. Those for applying fertilizers, giving the crop its life, are few. The manure pit is truly the farmer's bank. We need machines for properly handling and conserving manures, for farm manure will long continue to be the chief fertilizing element on the majority of farms. No machine has, of late years, given more universal satisfaction, in its peculiar field, than Kemp's Manure Spreader. The more offensive and laborious work is, the greater is the pleasure in discovering a machine that will take away hand labor. The principle of the machine is that of a substantial cart or wagon with broad-tired wheels, the floor of which is a revolving apron, operated by suitable gearing or machinery, and when machinery is in gear, the apron moves to the rear, carrying its load in contact with a swiftly revolving toothed roller that picks the material finely to pieces and scatters it uniformly over the land, broadcast or in drills, as fast as the team moves along, nearly doubling the value of the manure by pulverizing and evenly spreading. The speed of apron or floor is so accurately controllable that we may put out a heavy or a light coat as may be desired without paying any attention to the speed of team, the farmer knowing just the amount he is using without measuring his field or manure pile. The machine will give satisfaction. Send for the catalogue and study it.

Halladay's Standard Pumping and Geared Wind-Mills.—Catalogue from the U. S. Wind Engine and Pump Co., Batavia, Ills. No intelligent man in this age thinks of questioning the fact that wind power is practical and cheap. For pumping water on stock and dairy farms, for irrigation and other uses, a good wind power is hard to excel as a cheap yet powerful agent for work. The vast amount of labor spent at hand pumping water for stock, might be employed with much greater profit at other work, if the wind could be made to do the pumping. The object of this catalogue is to show the good points of the Halladay Wind-Mill, and to prove that it is the best one made. It is certain that the special advantages of the machine are tersely and strongly described, and that no one can read the few pages of description without understanding why it is expected to do good work. The catalogue will set many a farmer to thinking about the unnecessary labor he has performed at the pump handle. The pictures on the cover well illustrate the difference between "old-time" agriculture and farming of the present day. On the one hand a farmer is lifting water from his well with an old-fashioned sweep. Near-by the remainder of the family are laboriously pitching hay with hand forks. On the other page a beautiful Halladay wind-mill raises water for the stock, while the load of hay is being unloaded by means of hay carriers at comparatively little expense of labor. The catalogue should be read by every farmer.

Whitman Agricultural Company.—Catalogue from the above firm, located at St. Louis, Mo.—A pamphlet of 110 pages in which more than 100 machines are illustrated and described. The hay presses, corn shellers, feed mills, horse powers, cider mills, feed cutters, road scrapers, etc., etc., which are made by this house are so well known that it seems like a "twice told tale" to call attention to them. We are confident that any of the implements described in this pamphlet will give good satisfaction. The many medals and prizes which the machines have won at fairs and other exhibitions, were given for genuine merit. Farming has improved so rapidly of late that a good outfit of machinery is an absolute necessity to those who farm for business. We can do no better than to advise those of our friends who desire to invest in new machinery to send for this catalogue and study it carefully.

Clapp Wagon Co., Auburn, N. Y.—An illustrated circular and price list of the farm, freight, lumber, coal, and business wagons made by this well-known firm. The illustration show the leading kinds. Superiority to other wagons is claimed in many ways. The axles are uniform and exact, so that the spoke stands precisely plumb. The spokes are made of the best quality of White Oak butts. The ironing is smoother, of a better finish, the irons being rolled from the best quality of scrap and forged to form by heavy power drops in solid pieces. The tires are placed in a revolving furnace and subjected to a heat which is uniform and so regulated that no injury is done to the felloes by burning in setting the tire. An equal and uniform dish is secured. The company invites a careful comparison of its wagons with others by personal inspection. The circular will be sent to all applicants.

Mark's Artificial Limbs. From A. A. Marks 701 Broadway, New York.—This book is an argument, if such a term may be allowed, in favor of artificial limbs; that is, it shows how easily such limbs may be secured and how comparatively comfortable they are. It is well known that artificial eyes and teeth can be made so true to nature as to deceive even a close observer; but it is quite surprising to know that there are persons in our midst, wearing artificial legs and arms, who

very seldom betray their unpleasant secret. This book is interesting and well written. Such a work would be incomplete without the old song "The Cork Leg," a parody on which is given in full. We hope none of our readers will ever have the misfortune to lose a limb. Should they be so unfortunate, we can only hope they may secure as comfortable a substitute as those described in this book.

BUCKEYE IRON FENCING.—Pamphlet from Mast, Foos & Co., Springfield, Ohio. Iron fencing becomes more popular with each year. Its use is not by any means confined to cities. Iron crestings, railings, verandas, window guards, vases, hitching posts, etc., are largely in use. The Buckeye fence is constructed of extra heavy and strong materials. It is shipped in panels so that it may be set up without trouble. Twenty-two different styles are shown, from the plain and simple picket fence to the elaborated and highly ornamented panel. The wrought iron used in this fence is made specially to order, while the malleable iron used for ornamenting is from the best air furnace iron. In addition to the fencing, the Iron Turbine Wind-Mill, Buckeye Lawn Mowers, and Buckeye Force Pumps are described in the catalogue.

STEARNS' STANDARD FERTILIZERS. Circular from Stearns & Co., 149 Front St., New York.—The reasons why farmers should use these fertilizers are tersely given. Many good testimonials are printed. With the information that stares from the pages of fertilizer pamphlets, farmers ought to know something about agricultural chemistry by this time. The catalogue contains many valuable tables of facts and figures, and will be sent free to applicants.

For Women.

CONDUCTED BY MISS RAY CLARK.

ELIAKIM GRAVES'S WOOING.

PART I.

"MOTHER, I have resolved to marry!" and having made this unexpected communication in the short, abrupt manner so peculiarly his own, Eliakim Graves reached up and placed the Doddridge's Expositor he had been reading on the mantel-shelf, and sitting yet more erect in his straight high-backed chair, gazed solemnly into the fire.

The Widow Graves, a little, wiry, black-eyed woman, sitting opposite in another high-backed chair, started as though a bombshell had exploded in the quiet room, dropping three stitches in the striped mitten she was knitting. Pushing her iron-bowed spectacles high up on her wrinkled forehead, she looked at her son with a swift, sudden doubt of his sanity, chilling her heart and exclaimed:

"For the land's sake, Eliakim! What under the sun, moon and stars ever put that idee into your head that you should want to bring some creature here to upset us all with new-fangled ways and notions?" And then as though fearing she had perhaps unconsciously failed in motherly care and devotion, added half appealingly, "Don't I make you comfortable, my boy?"

"Yes mother," replied Eliakim, "I am comfortable. But you are getting old. The Bible says 'it is not good for man to be alone.' I am used to your ways. I desire to bring a woman here that you may teach her so that when you are gone there may be no change." And Eliakim Graves's gaze wandered around the room. Each article of furniture stood in precisely the same place which it had occupied in all the forty and two years of his life. The narrow-leaf table between the two west windows, the chest of drawers with their brass rings, opposite. The high-rounding bed with curtains of large flowered chints, the spindle-legged stand at the southeast corner of the huge fire-place with the big Bible on it, the blue-dye pot, in the southwest corner, and the little crock containing the batter for the buckwheat cakes on the mantel. These were the household gods he had worshipped in his childhood, revered all his life, and it would go hard with him to see them cast down from their thrones or desecrated by careless hands.

"And the woman—who is she?" questioned his mother.

"I have made no selection," replied Eliakim. "The Lord will undoubtedly direct me." And taking off his home-spun coat, he hung it upon its accustomed peg, and mounted the creaking stairs which led to the room above. Here he was wont to stretch his angular six-feet frame upon an orthodox bed of genuine live geese feathers, which had softened the slumbers of several generations of his honest upright ancestors. From the tiny window of this room, he could look out upon every acre of the well tilled farm, which by virtue of being an only child, had come into his possession of his father. Eliakim Graves was a worthy descendent of the old Puritan stock, stern, rigid, strict in the performance of all religious duties, he "kept the letter of the law," although he missed much of the sweetness pertaining to the Christian faith. He had succeeded his father to the office of deacon in the church, and was always at his post at all times and in all weather. Never, in all his life, had there been the least indication to warrant the supposition that Eliakim had thoughts of matrimony. Consequently to his mother, whose fears of being supplanted in her son's affections, had long years ago subsided, the revelation was most startling. With Eliakim, to resolve, was to act; and straightway he began to weigh the merits of the various single ladies of his acquaintance. Finally, all things considered, his choice fell upon Miss Desire Hopkins, as the one most suitable to occupy the position he proposed to offer.

Miss Hopkins was a spinster of some 35 years, a healthy, plump, brown-eyed, little body, tidy and neat, with always a cheerful smile and a pleasant word, and a communicant in the church with which he was connected. She was a tailoress by trade, industrious and economical withal, to which excellencies of character the neat little sum, counting up into the hundreds which had been from time to time accumulating in the village bank, bore testimony. Another item which had great weight with the Deacon was, that Desire Hopkins was alone in the world For, he reasoned, "many a man's nose has been kept constantly on the grindstone by the lengthy and oft-repeated visits of a numerous tribe of relatives."

It was in the petulant month of April that we picked up the thread out of which to weave our little story, and gentle May had well nigh reached the end of her flowery journey, when Eliakim Graves selected a Thursday evening on which to pay the object of his choice a visit. He was far too strict a disciplinarian to take a Saturday or Sunday evening for such a worldly purpose. He intended to make her a point blank offer, as he considered time spent in courting worse than wasted. Besides, he wished to have the matter settled before the busy harvest season. The frequent dwelling of his thoughts upon the various virtues and attractions of the lady, had started a little, feeble flicker of affection in his heart which was to eventually burst forth in a roaring, all-consuming flame.

Desire was at this time engaged in the house of Brother Drake, getting ready the summer plumage for the father Drake and the large brood of ducklings. The distance was about three miles by the public highway, but Eliakim proposed to shorten it by taking a cut "cross lots."

Now, although our hero was strictly honest, and to a certain degree charitable, he was also exceedingly saving — "parsimonious," some called him. He aimed to make things last as long as possible, hence, while about his work looks were of small importance. He followed his plow and drag bare-footed, in warm weather, and hoed his corn and raked his hay in the same simple and childlike costume. And on this momentous evening, after arraying himself in his carefully preserved "Sunday best," he took his shoes in his hand with the intention of putting them on when near his destination. His way led through a piece of woods, and as the moon was not yet up, he received several bumps and scratches. At last he ran into the slivered stub of an old oak tree and hurt his great toe. "Oh, the dogs!" he exclaimed, with a groan, as he hobbled to a grassy knoll there to sit down and nurse the bleeding member. "It's Providential I didn't have my shoe on. I should, in all probability, have knocked a hole in it."

MY VISIT TO THE CITY.

HARVEST and the fruit season brought extra work: I was tired and really needed a little change. "Oh," I thought, as I sat upon the step of my vine-draped piazza, "In the city there's breadth and life mentally—music, lectures, church privileges; in the country its work, work, and nothing else."

"To-morrow, Sally, you shall go to the city for a long visit with Cousin Mary," said my husband, as he sat down beside me, heated and perspiring; even the beautiful moonlight caught him working at something.

Next morning I went to Cousin Mary's, who lived in the suburbs of a large city 20 miles from our farm. Tom packed a basket and put it in the baggage car, in spite of my objections.

"Why Tom, you forget that they live in a place of plenty; beefsteak, oysters, fine fruits, ice cream, etc. I don't care to take butter and pickled pork to Mary."

But Tom had his way, and that afternoon found me in the pretty little parlor, chatting to Mary, who was looking more worn out than myself.

Mary's dress was cheap and plain, she seemed her old bright self, though she sighed often, as I told her of my summer's work.

"How thankful you should be Sally, that your lines are cast in such pleasant places."

"I! thankful Mary? For what? Hard work and mental starvation?"

"I mean that you should be thankful for mental rest and the knowledge that you have a home and a comfortable support secured."

"You have more Mary, and leisure to enjoy life as it flies. I can not but contrast the lives of city and country women, in favor of the former."

"Sally, Sally! do you know that hundreds of mechanics, clerks and laborer's wives are almost beside themselves from worry; fearing want in different forms? I have spent hours casting about in some way to help Will. Our home is not paid for and we are about to lose it all. We try to be economical, and have dispensed with articles which really were needed. We have had so much company; persons who visited us just because it was convenient; they praised my cooking, and thought how nice it was to live in the city amidst such plenty, not dreaming, we could illy afford to buy beefsteak and fresh fruits for them. We lack only a few dollars upon this last payment, but it seems as though we never can get them. Now don't think I mean you dear Sally, I need you to talk with, and cheer me in these gloomy times. you cannot know how much I appreciated Tom's basket of good things, and the thoughtful heart which prompted the act. I've been so tired of the struggle and have longed in the spring time to come to you. Suppose you do work hard, there's a beautiful picture spread before you, done in nature's coloring; green fields, sweet, fragrant blossoms white and pink; if you are tired or sick you can take time to "rest." Life isn't one hard, daily grind from early morn until late in the night."

"But the concerts and lectures in the city!" said I.

"Poor men's wives are usually too far away to attend evening amusements, or too tired, and if they are ambitious to dress well, they cannot afford to spend the money for amusements. Church-going is never neglected by me, as on Sunday I gain fresh strength for the coming week's struggle. Sally, the country woman with a good home and husband ought to be the happiest woman in this great, glad, wide world."

I started back home after making my visit, ashamed of my murmurings and dissatisfied spirit. I had a good home and a good husband; one who did all in his power to make me happy and content. I took up my work again with a light heart, resolved never to allow myself to envy another's position in life, but to keep my home as neat and cheery as was possible. ELLA GUERNSEY.

Domestic Economy

CONDUCTED BY MRS. AGNES E. M. CARMAN.

HOUSEKEEPING IN CALIFORNIA—VI.

MARY WAGER-FISHER.

SINCE writing my last "Housekeeping Letter" I have attended an Art Reception in San Francisco, where I was so charmed with the decorations that I cannot let the opportunity pass without making a note of them for the RURAL. The occasion was in honor of a ladies' exhibition of pictures—the work of California women—and the decorative effect of the rooms was, of course, due to women. I was told that the arrangements were chiefly due to a lady who was a decorative artist; but that she did not paint pictures. She had the faculty of taking an old worn-out basket and converting it into a "thing of beauty." The materials made use of were old shawls of crêpe and silk, Roman scarfs, bits of gay silks and ribbons, dried and fresh grasses and stalks of grain, dried seed-pods of many kinds, including dock, which is a rich, dark maroon in color; branches of orange and Japanese persimmon loaded with red and yellow fruit, ferns and branches of the pepper tree, door-high; coarse baskets hung on the wall filled with grasses, peacock feathers, old-fashioned and new-fashioned bowls on brackets, or suspended from hooks filled with chrysanthemums, roses, or gay marigolds, with long, down-hanging clusters, formed by tying bunches of the flowers close together—called Makart bouquets, I believe. Not a really expensive article was used—only what often is to be found in an attic and its chests; but so grouped and arranged as to produce a wonderfully fine effect.

The door-way leading into the supper room was draped about the top on both sides, pendent wreaths of orange-colored flowers falling against dark maroon drapery on the inner side, while on the outer lichen-grown twigs and branches revealed their delicate tracery against loopings of silk shawl. Over the mirrors disposed about the room and those on the side boards, were hung boughs of golden fruit, which were reflected in the glass. The refreshments were very simple, but so daintily served as to enhance their value—lemonade in tiny glass cups with handles—one slice of peeled, seedless lemon served in each glass; ice cream with small round cakes about as large as a half dollar, and some kind of punch, I believe. Unless one has the gift to see and appropriate the beauties in field and wood, it is a lesson in decoration to see what can be accomplished with the very things that are ordinarily ignored. It is quite worth one's while—particularly when one gives entertainments—takes down the beds and turns the whole house in so many connecting rooms for a "great party," to lay in a stock of grasses grains, and some of the multitudinous spikes and stalks of vegetation that Nature herself often so beautifully dries for interior decorations. How well brilliant-hued apples would adhere to branches cut off and hung up to dry, I do not know, but berries often dry on stalks and in clusters, which are decorative and raspberries at that. Grasses and flowers artificially dyed, are never pretty, and it should not be forgotten that there is beauty of form as well as of color, that dried golden rod and boughs or cones are not to be despised for their lack of brilliancy. Of course, in an exhibition of this kind, there was much decorative work—painted china, screens and mirror frames. The prettiest decorated frame, to my taste, was a profusion of pink roses on a black-ground—the wide frame being black, with an outside border of dull gilt—a succession of knobs like large nail heads. The roses were nearly alike in color, but differed in variety and were painted from all points of view.

I was in a large Japanese store one day, where screens were being painted by Japanese, sprawled on the floor, with the screens lying flat down—they work like the Indians, without seats. Two of the Japanese "artists" were painting portraits from photographs of San Francisco women on the screens, and covering the upright figure with a Japanese gown in gorgeous colors. For a screen portrait gotten up in this fashion $30 were charged. In the way of photography, the Japanese do wonderful work, and color the photographs with equal skill and taste, quite surpassing any American work that I have ever seen. They make rain coats of a material resembling broom corn, overlapping the "broom" on a quilted lining, as feathers overlap on a fowl, and over this is fastened a gauzy netting, which holds it in place.

Christmas week was rainy, but gay—stacks of shapely evergreens for Christmas trees, bunches of holly, Christmas and New Year's cakes, and plum puddings, boiled in England and sent over in sealed packages to be steamed here, and served piping hot. The Germans are very fond of cake on New Year's, and often send an elaborately decorated one to a friend. California is full of foreigners—Germans, Portuguese, Japanese, Chinese, French, English and European peasants. The Germans are very thrifty and oust Americans from business. The Chinese excel the Germans in industry and economy, and in turn oust them in a way, and the sons of the Fatherland howl wildly over the sharp rivalry. It was our second Christmas away from home, and the laddie was wondering as before if Santa Claus would know where to find him! He had been hoping for a bag full of oranges, but as at Christmastide three dozen oranges cost but 25 cents, he concluded it was hardly worth while for S. C. to burden himself with them, and I suggested a lag of obedience instead, and for several days, what a bag of obedience would do was much discussed.

WOOLEN SUMMER GOWNS.

E. L. TAPLIN.

THOUGH the pretty cotton and muslin frocks before described may be worn for the most part through the summer months, there are many cool days in this erratic climate of ours which make some light stuff gowns an absolute necessity. Again, such a gown would be required for traveling, or for driving on the dusty country roads. Suitable materials are plentiful enough. We should eschew cashmere, unless we were selecting a black gown for an elderly woman. Cashmere is not at all a fashionable material now, except in mourning, unless it is an expensive grade of this material used in a combination suit. This Spring light qualities of homespun are much worn, but for a general utility costume we would advise either camel's hair or pressed flannel. For a young girl, nothing could be prettier than the ever-useful navy-blue flannel. Lighter colors in flannel are rarely pretty, excepting only cream or ivory white. Light shades in camel's hair are both pretty and serviceable, as this material sheds dust, but light shades must be selected with great care, or they are not becoming. Though fawn and gray are becoming to most people, it must be the right fawn and the right gray. A clear and decided gray may be worn by most florid people; but if there is the slightest suspicion of yellow in the complexion, the gray must have a leaning toward fawn, like mastic or putty color.

A camel's-hair summer suit may be made

Miscellaneous Advertising.

When Baby was sick, we gave her Castoria,
When she was a Child, she cried for Castoria,
When she became Miss, she clung to Castoria,
When she had Children, she gave them Castoria,

of the one goods, or trimmed with a little velvet of a darker shade. For one who expects to make her suit do duty several seasons, it is always more prudent to make up the goods alone, leaving any further embellishments until it is made over. The new gown requires only good workmanship to make it attractive, whereas a made-over garment often needs more elaborate trimming to hide signs of wear.

Suppose we decide on a fawn camel's-hair as our ideal summer costume. We should buy eight yards of the material as it is double width. If we decide on having a loose wrap to match, for spring and fall wear, we should buy two yards extra.

The bodice would be very short in the back, with little tails, instead of having a lot of fullness in the tails made into pleats, the center seam might be left open to the waist, the bodice being faced up to the waist with the material. If the wearer inclined to *embonpoint*, the front of the basque might slope down to be a little longer than the back, jacket-fashion. Even if front and back are of the same lengths, the full back drapery makes the back appear much shorter. This basque would be very pretty with a diagonal flap sloping from the shoulder towards the waist, ornamented with a row of large buttons. Of course, these large buttons do not really fasten the basque; it requires one set of small, flat buttons in the usual place, beneath the flap and another row of invisible buttons or hooks to fasten the flap. If the wearer is not particularly plump, or, better still, if she happens to be narrow-shouldered, those military cords looped across the breast, with epaulette on the left shoulder, will be very becoming. It is always a mistake for a very plump woman to wear a much trimmed bodice, while a slim or undeveloped figure must be corrected with pleats, folds or braids. In making the skirt we must remember that little, cut-up trimmings are out of date; large, graceful folds and flowing draperies are fashionably as well as aesthetically correct.

Though genuine, uncompromising hoop-skirts are not worn, fashionable women are now wearing large and often exaggerated back drapery, the skirt being held out by steel springs. These springs come in sets of three; the shorter one is 12 or 14 inches from the waist, slipped into a band of the lining across the back breadth; the two others, graduated in size, go beneath at the same distance from each other as the first is from the top. They are held into a bow shape by tapes. Back drapery this Spring has just the same long, pointed form that obtained two Winters ago, hanging down perfectly straight on one side and pleated up on the other. At the top it is pleated in very deep, straight side pleats into a space of about eight inches. This draping sets out very full over the springs, and is extremely graceful. The bottom of the skirt might be finished by a fine knife-pleating only two inches deep.

We have a very wide latitude in selecting our front drapery, but whatever it is, it should not unnecessarily cut up the stuff; we must always keep before us the possibility of making over the gown. We might have a pointed drapery, similar to that in the back, the straight side being at the right, and covering the underskirt to the back seam. The left side, looped high, should come under a box-pleated panel 12 inches wide at the bottom, sloping to half that width at the top. The side of the panel towards the front should be trimmed with a row of large buttons, similar to those on the basque.

This same style may be made in flannel for a young girl, while a little taste and study may vary the draping indefinitely. If the wearer feels that the light color unrelieved is not becoming, it may be varied by putting collar, cuffs, diagonal flap, and, if desired, the panel on the skirt, of dark velvet. Dark brown on fawn, or black on gray, dark-blue, myrtle-green or wine color on either, would be very effective.

Navy-blue flannel for a young girl is most effective trimmed with black or white Hercules braid; this costume with a Harvard hat of dark blue rough straw, trimmed with gulls wings, is very picturesque and becoming, while its durability makes it most desirable for all sorts of picnics, excursions, and all the summer amusements of a country life.

MODERN MIRRORS.

The pretty deeply beveled modern mirrors can be framed handsomely and inexpensively at home. The broad flat frames can be covered in almost any material, and decorated in every variety and style. They can be made in cheap white wood and ebonized, or in ash, or stained wood and painted in oils. An extremely handsome one is made of polished pine, with a design of birds in flight scattered over the frame, while one with upraised wings seemed to be poised lightly on the glass itself. In order to paint upon glass, trace the design with a lithographers pencil, and carry it out in oil colors. Sprays of ferns, tendrils, berries and falling blossoms begun upon the frame, may be carried across the mirror with the most charming results. In decorating with oil paints, it is necessary to have old, well-seasoned wood. When a covering is prefered there is scarcely a limit to the material suitable for the purpose. A most effective background for flower-painting, is white velvet. Plush, satin and satin de Lyon, are all used. The mirrors which are generally perfectly square, are hung from one corner, so that the design should accord with this position.

Chicago. MRS. A. J. ALLIS.

WINDOW PLANTS.

AUNT EM. writes as to her success with house plants: "A cyclamen which was given me last November, has bloomed constantly; a box of yellow oxalis has cheered us with its delicately perfumed flowers. A fire-cracker plant which I took up last Fall, never even wilted, but has blossomed profusely ever since. Several of my begonias have bloomed all Winter, and a carnation has rewarded my care with its sweet flowers, but I believe the gem of my collection is a plant of Kenilworth Ivy. It has completely hidden the pot, drooping below the shelf, and is covered with tiny lilac flowers."

DOMESTIC RECIPES.

VEAL LOAF.

Two pounds of veal, scant one-fourth of a pound of pork, two eggs, one-half cup of sage tea, two-and-one-half cups of bread-crumbs and nutmeg, salt, pepper, butter and gravy or water. Make into a loaf, cover with bread-crumbs. Bake one-and-one-half hour, basting often.

SPANISH BUNS.

One pint of sugar, one scant pint of flour, one cup of sweet milk, one-half cup of butter, four eggs, one teaspoonful of soda, two of cream-of-tartar, one of cinnamon, nutmeg and cloves. Bake in square tins. Cut in two inch squares when done, and frost the top and sides of each piece with cooked frosting.

CREAM PUFFS.

One cup of hot water, one-half cup of butter. Boil water and butter together and stir in a cupful of dry flour while boiling; when cool add three eggs not beaten. Mix well and drop by the spoonful on buttered tins. Bake in a quick oven 25 minutes. This makes 15 puffs.

CREAM FOR THE PUFFS.

One cup of milk, one-half cup of sugar, one egg, three tablespoonfuls of flour, beat egg and sugar together, add the flour and stir into the milk while boiling. Flavor when cool. When the puffs are cool fill with cream.

LEMONADE ICE.

To a quart of lemonade add the whites of six eggs beaten to a froth, and freeze. M.

DOUGHNUTS AND COOKIES WITHOUT EGGS.

The rule for doughnuts given in the RURAL of April 5 seems all wrong. A little cream added to my rule—just a little—sometimes ruins the whole by making them soak fat, and even my buttermilk is too rich to be used for doughnuts, so how can anyone fry them when a cup of cream and butter-milk, too, enters into the composition of them? The following old and tried recipes may be useful in time of a scarcity of eggs to those who think they can not make anything good without them.

CREAM COOKIES.

One cup of thick, sour cream, one cup of sugar, one teaspoonful of soda, one teaspoonful of salt, flavor to taste; add as little flour as will make it possible to roll, cut out and bake.

DOUGHNUTS.

One cup of sweet milk, one cup of sugar, one small teaspoonful of soda, and one of salt; grate in a little nutmeg; flour sufficient to roll; fry in hot lard. These will not "soak fat." S. E. H.

PREPARATORY TO HOUSE-CLEANING.

SPRING work will soon commence in earnest, both in-doors and out, and I think that a great help to this work is to plan ahead and prepare for it. Anticipate house-cleaning by taking a day now and then and overhaul trunks and closets and find out what garments put away in them through the Winter are worth making over and altering. Put these by themselves, then sort over those which might be useful to some poor person, and lastly those only fit for rags. AUNT EM.

TO CLEAN A NURSING BOTTLE.

I always found it hard to keep baby's nursing bottle sweet until I began to use stale tea leaves and it makes them clear as crystal and removes every particle of milk with very little labor. Put a few leaves in the water, pour into the bottle, shake, then rinse out with clear water. Put the rubbers in salt and water to sweeten them. I never use the tubes as I do not consider them safe for the baby's health.

TEA MUFFINS.

One egg, one-half cup of sugar, shortening the size of an egg, one quart of flour, one-half teaspoonful of salt, two teaspoonfuls of baking powder wet with milk. Bake in a hot oven in muffin rings for about 20 minutes. They are very nice. P. A. M.

Miscellaneous Advertising.

Catarrh

Is frequently an indication of a Scrofulous taint in the system. Ayer's Sarsaparilla purifies the blood, and thus restores health to the affected membranes. It also stops the nauseous catarrhal discharges, and prevents the infection from reaching the lungs and stomach. Catarrh should be treated as a blood disease.

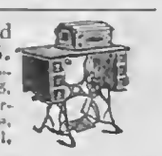
I suffered for years from chronic Catarrh. My appetite was very poor, and I felt miserably. None of the remedies I took afforded me any relief until I commenced using Ayer's Sarsaparilla, of which I have now taken five bottles. The catarrh has disappeared, and I am growing strong and stout; my appetite has returned, and my health is fully restored.—Susan L. W. Cook, 909 Albany st., Boston Highlands, Mass.

Ayer's Sarsaparilla,

Prepared by Dr. J. C. Ayer & Co., Lowell, Mass. Sold by all Druggists. Price $1; six bottles, $5.

AN UNNATURAL shortness of breath, with unusual disposition to pluerisy and bronchial affection, indicate that the blood is full of uric acid poison, which can be removed through the kidneys by means of Warner's safe cure.

12 DOLLARS each for *New* and *Perfect* SEWING MACHINES. Warranted five years. Sent on trial if desired. Buy direct and save $15 to $35. Organs given as premiums. Write for FREE circular with 1000 testimonials from every state. GEO. PAYNE & CO., 47 3rd Ave, Chicago, Ill.



THE "COMMON SENSE" MILK PAIL.

This is the only *perfect* Pail made. There are no seams in the front to catch the dirt. It has a perfectly fitting strainer, which can be instantly removed, so that every part of the pail may be *quickly* and *thoroughly* cleaned. Should the strainer become foul or worn with use, we can furnish new ones at very little expense. The Pail is well made of heavy XX tin, and we offer it to the farmer at the very lowest price at which a really good article can be sold. *Send for special circulars.* Price **$1.25** each. Discount to the Trade.

MILKING TUBES,

FOR MILKING COWS WITH SORE TEATS

This is the best Tube in the market. Sent, post paid, to any address on receipt of price. One Tube, 25 Cents. Five Tubes, $1.00. Send for special Circulars.

Send us your name and address and we will mail you, FREE, our

Seed Catalogue for 1886.

Choice New England Seeds. The very Best and Purest Stocks of Cabbage, Onion, Beet, Parsnip, &c. All grown by ourselves and sure to give complete satisfaction. TRY THEM.

BARTLETT & DOW,

LOWELL, MASS.

Please mention this paper.

An Ex-Lt. Governor's Successful Risk.

SYRACUSE, N. Y., Jan. 1st, 1884.—Three years ago I felt tired and worn out. Had nausea, occasional retchings, sense of weight and fullness in the lower part of the body. Feverish, hot and chilled. Seemed to be giving out. Unable to obtain relief. Determined to take my case in my own hands. Used Warner's safe cure. Am completely restored to health. Nothing like it for diseases incident to declining years.—T. G. ALVORD, Ex-State Lieut.-Gov.

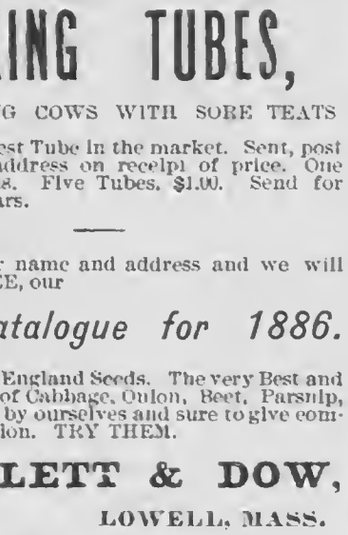
ELEGANT SHAPE, HEALTH and COMFORT

Perfectly Combined in

MADAME FOY'S

Skirt Supporting

CORSET.



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ALLEGER ORGANS you can get a strictly first class organ from $50 to $75, stool and book. Warranted 5 years. It will pay to send for circular before you buy. Address the manufacturer. **H. W. ALLEGER, Washington, New Jersey.**

A FREE SAMPLE.

To introduce the great household remedy, **Gordon's King of Pain**, into every family, I will send a sample free to any one sending address. Agents wanted. Address **E. G. Richards**, sole proprietor, Toledo, O.

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Notable & Significant Items

FROM THE

FORTY-FIRST ANNUAL REPORT

NEW YORK

OF THE

LIFE INSURANCE COMPANY.

A total income of over sixteen million one hundred thousand dollars, and payments to policy-holders of nearly eight million dollars.

Interest income, over three million dollars, being about 5½ per cent. on average net assets, and nearly four hundred thousand dollars in excess of losses by death.

Market value of securities, over three million three hundred thousand dollars in excess of their cost.

Liabilities, both actual and contingent, provided for, and a Divisible Surplus by the Company's standard of over seven million dollars; Surplus by the State standard, over thirteen million dollars.

An increase of nearly two million dollars in income, over three millions in surplus, over seven millions in assets, and of over thirty millions of insurance in force.

SUMMARY OF REPORT.

BUSINESS OF 1885.

Received in Premiums	$12,722,103.03
Received in Interest, Rents, etc.	3,399,069.71
Total Income	**$16,121,172.74**
Paid Death-claims	$2,999,109.64
" Endowments	741,764.47
" Annuities, Dividends, and for Policies purchased	3,940,999.64
Total Paid Policy-holders	**$7,681,873.75**
New Policies issued	18,566
New Insurance Written	$69,521,452.00

CONDITION, JAN. 1, 1886.

Cash Assets	**$66,864,321.32**
*Divisible Surplus, Co.'s Standard	$7,064,473.13
†Tontine " " "	3,123,742.77
Total Surplus, " "	**$10,188,215.90**
Surplus by State Standard,	**$13,225,053.94**
Policies in Force	86,418
Insurance in Force	$259,674,500.00

PROGRESS IN 1885.

Excess of Interest over Death-losses,	$399,960.07
Increase in Income	1,880,697.35
Increase in Surplus, State Standard,	3,313,707.48
Increase in Assets	7,580,597.75
Increase in Insurance Written	7,036,902.00
Increase in Insurance in Force	30,291,914.00

*Exclusive of the amount specially reserved as a contingent liability to Tontine Dividend Fund.

† Over and above a 4 per cent. reserve on existing policies of that class.

THE SEVEN ADVANTAGES

OF THE

NEW YORK LIFE INSURANCE COMPANY'S

Nonforfeiting-Tontine Limited-Endowment Policy.

FIRST ADVANTAGE.—Insurance for a definite amount, or for an amount increasing with each premium paid, as desired.

SECOND ADVANTAGE.—A Definite Cash Endowment, and a Tontine Dividend, to Policies in force at the end of Endowment and Tontine periods, which periods correspond, and may be either Ten, Fifteen or Twenty Years.

THIRD ADVANTAGE.—Insurance for the full amount of the Policy, extended for as long a time as the value of the Policy will carry it, within the Endowment period, in case of discontinuance of payment of premiums after three years.

FOURTH ADVANTAGE.—A Grace of one month in the payment of premiums, during which time the policy-holder's security is unimpaired.

FIFTH ADVANTAGE.—Three valuable options, including cash value to policy holders who survive their Tontine and Endowment periods and keep their policies in force.

SIXTH ADVANTAGE.—Practical freedom of action with respect to occupation, residence and travel.

SEVENTH ADVANTAGE.—The payment of death-claims immediately upon the approval of the required proofs of death.

Do not insure until you have seen full particulars of this Policy. Do not fail to write the nearest Agent, or the Home Office, for such particulars—**at once**. The NEW-YORK LIFE INSURANCE COMPANY, **346 & 348** Broadway, New York City.

WILLIAM H. BEERS, President.
HENRY TUCK, Vice-President.
ARCHIBALD H. WELCH, 2d Vice-Presid't.
RUFUS W. WEEKS, Actuary.

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A. HUNTINGTON, M. D., Medical Director.

SALT, ONONDAGA E. F. SALT. SOLE MANUFACTURERS, American Dairy Salt Co. (Limited.)

Chemically purified and WARRANTED pure as any in the market. Used by a great majority of the Dairymen of the country. Unexcelled for Butter, Cheese, the Table, and all Culinary purposes. Took Medal at Centennial "for purity and high degree of excellence." Dairy goods salted with it took first premiums at New Orleans World's Fair, N. Y. International Fair; Milwaukee Exposition, and always wins when there is fair competition. It is American, and *cheaper and better* than any foreign salt. Try it. Address

J. W BARKER, *Secretary*, Syracuse, N. Y.

50 CARDS, Hidden Name, etc. 1 pretty Ring, outfit and present, all 10c. 6 sets 50c. O. A. Brainard, Higganum, Ct

News of the Week.

HOME NEWS.

SATURDAY, April 24, 1886.

STRONG agitation starting in New York State in favor of a Prohibitory Constitutional Amendment. Tuesday a resolution in favor of it was ordered to a third reading in the Assembly by a vote of 61 to 36. Six Republicans and five Democrats were absent. All Democrats present voted against it except Wood, of Wayne; 13 Republicans voted against it—Berry, of Fulton; Binder, Windolph and Charles Smith, of New York; Dennis and Dickson, of Rensselaer; Donald, of Saratoga; Gallagher and Kraus, of Erie; O'Brien, of Albany; Pratt, of Monroe; Storm, of Dutchess—the rest for it. At least five more votes for it wanted—no one knows where they are to come from.....Very exciting Prohibition agitation in W. Va..... For the second time a jury trying Gen. Alex. Shaler, in this city, for accepting a bribe of $9,000 for using his influence in selecting a site for a military armory costing nearly $250,000, disagreed—four "guilty;" eight "not guilty." Hardly likely to be tried again..... ....The House has refused to name a day for the consideration of the Hennipen Canal bill—hardly likely to pass, therefore, at this session, if ever. Late exposures show a rise of 628 feet in 186 miles, requiring a multitude of locks; route now considered "one of the worst."..... .....The partnership of Cleveland & Folsom is now considered certain in June. He 48; she 23.....A reservoir dam burst near East Lee, Mass.—13 persons drowned by the flood; much farming and town property swept away.....The first train from ocean to ocean, on the Canadian Pacific Railway, will be sent off May 24—the Queen's birthday .....Lamar's visit to Macon, Ga., is said to have been entirely social—nothing matrimonial about it.....Last Sunday conversation over ordinary telegraph lines, by means of the Turnbull long-distance telephone, was "fair" between New York and Chicago, over 1,020 miles of wire; and "perfectly free" between N. Y. and Cleveland, Ohio, over 631 miles of wire.....The first list of killed and wounded by that Minn. cyclone was mixed up; here is the correct account, after the dead have all been found, and the agony of excitement has abated: Killed at St. Cloud, 21, wounded, 80; killed at Sank Rapids, 39, wounded, 100; killed at Rice's Station, 15, wounded, 33. Total, killed, 72, injured, 213. Property destroyed, $300,000. Several other deaths and injuries were inflicted in country places along the track of the cyclone..... .....The opponents of the Morrison-Hewitt Tariff bill claim all the 139 Republicans in the House will vote against it, except White, Wakefield and Nelson of Minn., as that State is strongly for "free-trade;" of the Democratic votes they claim 11 from Ohio, 7 from N. Y., 6 from Pa., 3 from La., 2 from N. J., and one each from Cal., Md., and W. Va., making, in all, 32. Deducting these from the 183 Democrats vote, and adding the three Republicans and Weaver, Greenback-Democrat, there will be 155 for, against 169 against—139 Republicans, 32 Democrats and Brumm of Pa.. Greenback-Republican. It is thought that the passage of the bill would be the beginning of the breaking down of the entire protective system. .....Canada is negotiating with the Imperial Government for power to make her own commercial treaties.....All the lower part of unfortunate Montreal, along the St. Lawrence, was flooded for nearly a week before Wednesday last, owing to a solid ice blockade of the river which caused the heaviest backwater flood ever known. Water often 10 feet deep in some of the chief business streets. Losses estimated all the way from $2,000,000 to $3,000,000. Much distress among poor and working classes compulsorily idle as all manufacture and business had to stop..... ....The strikes in the country are more aggravated than at this time last week, there being at least 43,000 strikers reported among the bituminous coal miners, chiefly in Pennsylvania: the railways, chiefly on the Gould system; the textile, boot and shoe trades, chiefly in New England, and miscellaneous strikes of bricklayers, masons, carpenters, musicians, street-car drivers and conductors etc, etc. On April 16th the number "out" was estimated at 31,000. In addition to this great number voluntarily idle; the National Labor Bureau estimates the number compulsorily idle through lack of work, injuries or diseases of workmen, at fully 1,000,000..... The increase is chiefly among street railroad, sewing machine and miscellaneous industrial employees. Over in Brooklyn 5,000 employees in the great sugar refineries are on a tumultuous strike. Refined sugar has gone up one cent a pound in consequence. There is also an advance at New Orleans and San Francisco of from 5-16 to ¾ cent respectively. Raw sugar has felt none of the advance. The strike on the Gould system still drags on. Powderly before the Congressional Committee investigating the trouble, swears the Knights of Labor do not number over 500,000. Other labor organizations in the country, however, have an aggregate membership of over 2,250,000, and the vast bulk of these give sympathy and help to the K. of L. Of these not over 9,000 are "out" on the "Gould system." Money is flowing in upon the managers in St. Louis at the rate of over $10,000 a day just now, from all over this country, Canada and even Europe. The aggregate of a multitude of small contributions is wonderful, and, then, who hasn't marveled at the generosity of the poor!..... ....Occasional tumults chiefly in St. Louis, East St. Louis, and large towns on the various roads; no systematic violence: "dogged obstinacy" on part of the "bands;" "resolute determination" on the part of the "bosses," "More than the usual number of trains running, and doing more than the usual amount of business," say the latter. "Short trains and half-empty cars," say the former. Much of the freight for the "system" roads goes by competing lines where possible. Wages of new hands high, and work inferior. Likely the strike will "petter out" slowly. Boycotting the road and its managers begun. Men striking in works that supply the "system" with goods.....Big strike of switchmen at Chicago on the Lake Shore Road just compromised: freight cars running again after a tie-up of nearly a week..... .....E. Remington & Sons, Ilion, N. Y., have failed.....Yarmouth, N. S, is sending bait to Eastport, Me., where it "eagerly bought" by American fishermen who are not not allowed to buy it in any port of of the Dominion..... ....Complaints grow louder of the suspicious dilatoriness of the House Judiciary Committee to take any action with regard anti-polygamy legislation. Until action is taken, the Senate's Anti-polygamy Bill rests in "innocuous desuetude." There's a rich and handsome male and female Mormon lobby in Washington..... ....The House has appointed a Labor Investigating Committee to find out the "cause of the unrest and disturbance which now exists in the country." It has just been examining Powderly and other prominent labor chiefs, and Gould and Hopkins of the "Gould system. The President has sent to Congress a special message on the subject..... John Bigelow, the American representative at De Lesseps' late Canal "Convention" at Panama, says it is impossible to tell when the canal will be finished or what it will cost. Labor scarce; 90 cents a day at the start, now $2.50, with that of white mechanics at $5.00. Country terribly unhealthy. Tasks ahead not impracticable, but difficult and expensive. A "wet-blanket" report. De Lesseps cables it is "absurd," and that the canal, at sea level, will be opened from Gulf to ocean in 1889..... Col. Cozzens, father of Phœbe, has been continued by the President as U. S. Marshal at St. Louis, in spite of the urgent protests of hungry spoilsmen. Mostly his smart lawyer daughter's work.....A strong opposition against Senator Edmunds is developing in Vermont, because he is supposed to have been lukewarm in the Blaine campaign..... Evidence taken by an Ohio legislative committee goes strongly to prove that the election of H. B. Payne, as U. S. Senator, in January, 1884, was secured by bribing some of the State legislators by strong Payne men—but, of course, the bribe money wasn't theirs. Payne is one of the brighest lights of the Standard Oil Company and a several-times millionaire..... .....Ex-Lieutenant-Governor Pichback, of Louisiana; ex-Congressman; ex-representative of the colored race; ex-Collector at New Orleans; etc., etc., and always a "lucky" hand at poker, has been admitted to the New Orleans bar at the age of 50.....Natural gas for manufacturing purposes is coming into extensive use. All manufacturing towns in and near the Pennsylvania well regions use it, and it is being piped and pumped to distant places. Cleveland, Toledo and even Detroit now think they must have it.....A reduction of 267 clerks in the U. S. Treasury, saving $232,000 a year, since March 4, 1885..... It seems likely the Senate will compromise on "open sessions," by making public everything except the speeches.....The "Educational Bill" is likely to be smothered in the House Committee by the Democrats.....Congress has voted itself a very expensive new library. The cost will be known only after years when the building is completed.....A part of the Libby Prison at Richmond, Va., occupied by the Southern Fertilizer Co., collapsed, Thursday, "from overburdened floors."..... Tuesday in municipal elections in Illinois, "licence" and "high licence" against "no licence" or "prohibition," were successful in most of the large towns; and "no licence" in most of the small places.....The Canadian Government intends to extend the volunteer militia organization to the Northwest Territory.....A bill granting the right of way to an adjunct of the Northern Pacific Railroad through the northern part of the National Yellowstone Park, has received the unanimous recommendation of the House Committee on Public Lands on the pretext of building a road to the Clark's Forks mines. The mine to which the railroad really wants access is, not Clark's Forks, but the broad expanse of Yellowstone Park.....

AGRICULTURAL NEWS.

SATURDAY, April 24, 1886.

THE following is the gist of the anti-oleo bill to be pressed by the House Committee on Agriculture, as a substitute for all the others. It defines "butter" as the product exclusively of milk or cream, or both, and "oleomargarine as oleo, oleomargarine-oil, butterine, lardine, suine and neutral, etc. It imposes a special tax of $600, on manufacturers of "oleomargarine;" $450 on wholesale dealers; and $48 on retailers, and imposes a fine of $1,000 to $5,000 on all manufacturers; $500 to $2,500 on all wholesalers; and $50 to 500 on all retailers, who neglect to pay the especial tax. The manufacture must be conducted under surveillance of the Commissioner of Internal Revenue. "Oleo" must be packed in new wooden packages, "marked, stamped and branded," and containing not less than 10 pounds. Retailers must sell only from the original stamped packages in quantities not over 10 pounds, and shall put it in marked wooden packages under penalty of not less than $100, or more than $1,000, with imprisonment of not less than six months, or more than two years. Under penalty of $50 manufacturers must label every package with the name of the manufacturer. A tax of 10 cents a pound must be paid by the manufacturer, and a part of a pound is taxed as a pound. All imported "oleo" has to pay an additional 10 cents a pound. The Commissioner of Internal Revenue is to appoint analytical chemists and microscopists, to enable him to determine what is to be taxed, and his decision is final. He is also to determine whether any "oleo" is injurious to public health, but an appeal lies to the Surgeons-General of the Army and Navy, and the Commissioner of Agriculture. Any person willfully removing or effacing the brands, etc, on the packages, is to be fined $100 to $2,000, and be imprisoned from 10 days to six months. "Oleo" exported is not to be taxed; but packages must bear, in half-inch letters, the word "Oleomargarine." All fines and forfeitures may be recovered in any court of competent jurisdiction, and half the fine or penalty, when paid, is to go to the informer..... The N. Y. Senate voted unanimously, Tuesday, to investigate Dairy Commissioner Brown, who challenges investigation.....N. J. and Conn., have lately passed stringent anti-oleo laws. The former is to have a Dairy Commissioner with a salary of $2,000 a year; the latter, one drawing $1,500..... .....Stone, Secretary of the Chicago Board of Trade, completed his annual report, Tuesday. It shows that the receipts of grain for the year amounted to 132,200,000 bushels, as against 137,200,000 bushels for the year ending 1884, and reducing flour to wheat, the receipts were 156,408,228 bushels as against 159,561,474 bushels, showing a decrease of 3,153,246 bushels. The number of cattle received for the year is 1,905,718; of hogs 6,937,535, and of sheep 1,003,598, showing in the aggregate an increase over the corresponding figures of the year 1884 of 1,875,587.....A convention of the viticulturists of the U. S., according to a "call" issued in February, will be held at the Dep't of Agriculture's buildings at Washington, opening May 18, and continuing four days. There will be a fine exhibition of fruit. All exhibits from east of the Rockies should be addressed to Charles Vander, 909 Seventh St., Northwest, Washington, D. C. A number of interesting addresses by prominent men will be made. It will be quite an interesting and instructive convention for grape-growers..... .....Constance S., the famous Holstein heifer of the "Record Farm" herd, Philadelphia, died on April 21 of rupture of the stomach. She was owned by William H. Singerly, of The Philadelphia Record, and was valued at $5,000. Her record of 83 pounds of milk in one day has never been equaled by any two-year-old.. About 300 Montana stock growers, representing over 3,000,000 cattle and $125,000,000, made Miles City, Montana, lively early in the week. They favor rigid precautions to keep contagious diseases out of the Territory, and a liberal National appropriation for stamping them out. About 25,000 cattle will be shipped from Washington Territory and Oregon into Montana this season, against 40,000 last year. Decrease due to advance of prices on the Pacific Coast. Shipments east from Montana estimated at 125,000 head. A strong movement under way to make St. Paul's, Minn., the great live-stock market for the extreme Northwest.

Crops & Markets.

SATURDAY, April 24, 1886.

The Chicago Farmer's Review's report on the condition and prospects of the winter wheat is summarized as follows:—The growing winter wheat enters the second of the spring months under conditions scarcely if ever better. Kansas appears destined to have nearly a repetition of the short crop of last year. Only two of the counties embodied in the latest report make favorable returns. In Michigan many of the fields are looking brown and dead, but there is still promise of a fair average yield in that State. The reports from the remaining winter wheat States are uniformly good. On the Pacific Coast the prospect is that not to exceed five per cent. of the acreage sown in the Fall, but will show that it has passed through the Winter safely, with the additional prospect of a full average yield.

The Cincinnati Price Current says: "If the present area is approximately 25,000,000 acres in winter wheat, and the average condition equal to a prospective yield of 11½ bushels, the outlook may be formulated into an indication of a crop of 287,500,000 bushels of winter wheat. Favorable conditions through to harvest may enlarge this to fully 305,000,000. A favorable season for the spring crop will mean approximately 150,000,000 bushels. The chances for the entire crop now may be measured as from 425,000,000 to 450,000,000 bushels." All estimates, for some weeks yet, cannot be much better than guess-work, and we can make better use of this space than by filling it with even the briefest abstracts of the multitude of such estimates that are sure to appear. Our own full report will be in ample time for all useful purposes.

In all our home markets wheat has gone up considerably during the week, the rise amounting here to 1¾ cent a bushel for No. 2 Red, and to from two cents to three cents at Minneapolis for Spring. In other markets and other grades the difference has varied. It has been due chiefly to a large increase of export demands; reports of possible, or rather not improbable, hostilities in Europe; notable decrease in the visible supply, and speculation. Receipts of wheat at Minneapolis increased over 100,000 bushels during the week. At Duluth grain is coming in with a rush in anticipation of the opening of navigation. As soon as Lake Superior opens there will be a great clearance. The Minneapolis mills produced 110,600 barrels of flour and shipped 102,000 barrels last week. Seeding in the Northwest is progressing rapidly and will be well advanced in another week—only a slight variation in acreage probable from last year's area.

With the rise in wheat corn has become firmer. Last week the decrease in the visible supply was 1,252,839 bushels. The uncertainty of railroad freight traffic has made the market dull, and decreased the supply. Prices of oats are tending upward, and holders are quite firm. Stocks in sight fell off 448,830 bushels last week, owing mostly to the causes that affected corn.

Large supplies of all kinds of butter, especially of choice creamery, have broken this market and lowered prices in others. Reports of more to come add to the depression. Holders refuse no decent offer. Export trade light.

In the cheese market there has been new make on offer with a fair outlook for an immediate increased make. Exporters are acting very cautiously, with easier feeling all round.

Wool is weaker; reports make it one cent lower than a week ago, in some parts of the country. The trade is pretty sure to be dull until the new clip comes into market. Wool dealers are, of course, now using "bear" talk, as their chief aim at present is to get this year's clip at the lowest possible price. Having accomplished this, they will talk "bullishly," to sell at the highest possible price to the manufacturers. The latter are buying with the utmost caution—just enough to satisfy present requirements. The uncertainty of labor, and the fear of strikes among their hands add to their usual caution.

A slight cold, if neglected, often attacks the lungs. BROWN'S BRONCHIAL TROCHES give sure and immediate relief. *Sold only in boxes.* Price 25cts.—*Adv.*

MARKETS BY TELEGRAPH.

SATURDAY, April 24, 1886.

CHICAGO.—Compared with cash prices a week ago, "regular" wheat is 3¾c. higher; No. 2 Spring, 3¼c. higher. Corn, ⅜c. higher. Oats, ⅞c. higher. Pork, 10c. lower. Cattle, somewhat higher. Hogs, from 5c. to 20c. lower, averaging about 15c. Sheep, 25c. to 50c. lower.

WHEAT.—Active; sales ranged: April, 79@79⅛c; May, 79¾@80⅜c; June, 82¾@82⅝c.; No. 2 Spring, 79@79¼c. CORN.—Strong; Cash, 36¾@37¼c; April, 36¾@37¼c; May, 37¾@38⅛c; June, at 38¼@38½c. OATS—Sales ranged, Cash, 29½@30c; April, 29½c, May, 30@30½c. RYE.—No. 2, 61c. BARLEY—No 2, at 59c. MESS PORK.—Cash, $8 95@9 00; May, at $8 97½@9 02½; June at $9 07½@9 12. LARD.—Quiet and steady; sales ranged; Cash, at $5 87½@5 90; May, $5 87½@5 90; June, $5 92½@5 95. BULK-MEATS.—Shoulders, $4 00@4 10; Short rib sides, at $5 22½@5 25; Short Clear sides, at $5 55@5 60. CATTLE—Market lower. Shipping steers, at $4 20@5 90; stockers and feeders, $2 75@4 75; cows, bulls and mixed, at $1 75@4 25; bulk, at $2 70@3 10. HOGS.—Market weak; Rough and mixed, $3 75@4 15; packing and shipping, at $4 00@4 35; light, at $3 60@4 25; skips, at $2 75@3 40. SHEEP.—Market weak; Natives, $2 00@5 50.

ST. LOUIS.—Compared with cash prices a week ago, No. 2 Red wheat is 1¾c. higher. Corn, ½c. higher. Oats, ¼c. higher. Butter and eggs, steady. Cattle, much higher for shipping steers: steady or lower for other sorts. Hogs, unchanged. Sheep, 50c. lower.

WHEAT.—Active; No. 2 Red, Cash, at 89@90¼c, April, 89c; May, 89@89½c; June, 89¾c. CORN.—Firm. No. 2 mixed, Cash, 35⅝@35¾c; April, 33½c; May, 33½c. OATS—Dull; No. 2 mixed, Cash, at 29⅝@29¾c; April, at 29½c; May, at 29½c. RYE—Quiet at 59c. BARLEY—American, 60@80c. BUTTER—Quiet; creamery, 25@30c; dairy, 20@25c. EGGS—Weak at 9½c. FLAXSEED at $1 02@1 03. HAY—Steady. Timothy, $11@14; Prairie, $6@8. BRAN, 65½c. PORK, $9 60. LARD.—Long Clear;

$5 25; Short Rib, $5 35; Short Clear, $5 45. LARD—Steady at $5 75@5 80c. CATTLE—Market strong; fair to choice native shipping steers, at $5 00@5 50; butcher steers, $3 25@4 40; cows and heifers, at $2 50@3 75; stockers and feeders, $3 00@$4 20. HOGS.—Light, $3 85@4 00; packing, $3 85@4 05; heavy, $4 10@4 15. SHEEP.—Market steady at $3 00@5 25.

BOSTON.—OATS.—Fancy white, at 46½@47½c. per bushel: No. 2 white at 43@43½c; No. 3 white at 42@42½c; No. 1 mixed, at 41@42c; No. 2 mixed, at 40@41c, as to quality. HAY AND STRAW.—Hay.—Northern and Eastern, choice, at $19 00@19 50 ₱ ton; fair to good, at $17 00@18 00; fine, at $16 00@17 00, and $13 00@15 00 for poor and damaged; Western choice, $17 00@18 00; do fair to good $13@14. Swale hay, $11@12. Straw.—Rye, choice, at $20 00@21 00, and for common to good, $13@14. Oat straw, at $10@11 per ton. PRODUCE.—BUTTER.—Western creamery, extra firsts, at 32@33c, ₱ lb; do, firsts, at 27@30; held stock, at 15@18c. Northern and Eastern creamery, extra firsts, Eastern, at 30@32c; extra seconds, Northern, at 23@25c; seconds, at 18@22c. Northern dairy, extra New York and Vermont new milk, at 28@30c; do, extra firsts, at 25@27c; do, firsts, old, at 20@23c; do, seconds, old, at 15@18c; do. thirds, at 10@14c. Western dairy, firsts, at 18@23c; do, seconds, at 13@15c. Imitation creamery, extra, at 27@28c; extra firsts, at 25@26c; ladle-packed, extra, at 24@25c; do, extra firsts, at 21@23c; do, firsts, at 17@20c; do, seconds, at 12@16c; do, thirds, at 8@10c. CHEESE.—New York extra, Sept. and Oct., at 11@11½c, per lb; do, firsts, at 9½@10c; do, common to good, 5@8c; do, night skims, choice, at 6@7c; Vermont extra, at 11c; do, choice, at 9½@10½c; do, seconds, at 5@8c; Western extra, at 10c; do, choice, at 8@9c. Sage, extra, at 13½@14c, per pound. BEANS.—Choice Northern hand-picked pea, at $1 65@1 70 per bushel; do, do, New York, small, $1 45@1 55; do, do, screened, $1 15@1 20; medium choice, hand-picked $1 20@1 25; do, do, screened, $1 15@1 20; Yellow Eyes, Improved, $1 35@1 40; do, choice flats, at $1 25@1 30; Red Kidneys, $1 60@1 65. PEAS.—Canada, choice, at 90@95c, per bushel; do, common at 67@70c. Green peas, Northern, at 90c@$1; do, Western, $1 15@1 20. POTATOES.—There has been a continued liberal supply of potatoes, and prices are lower. Aroostook Co., Maine, Rose, at 63c; do, Central Maine, at 58@60c; do, New Hampshire, at 55@58c; do, New York, at 55c; Maine, Hebrons, 63c; do, Northern, at 55@58c; Burbank, seedlings, at 55@60c; Prolifics, Eastern, at 60c. per bushel. Sweet potatoes, Jersey, at $3@3 25 per barrel. VEGETABLES.—Cabbages, native, per 100, at $8@10. Squash.—Hubbard, at $50@60. Onions, native, yellow, at $3@3 50.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, April 24, 1886.

FLOUR, FEED AND MEAL. FLOUR—Quotations: Fine at $2 25@3 00; Superfine, $2 60@3 40; Extra No. 2, $3 25@3 60; Good to Fancy Extra State, $3 70@4 25; Common to Good Extra Western, at $3 25@4 00; Good to Choice Extra Western, $4 00@5 25; Common to Fair Extra Ohio, $3 25@3 75; Good, $3 80@4 20; Good to Choice, $4 25@5 00; Common Extra Minnesota, $3 25@3 50; Clear, $3 80@4 20; Rye Mixture, $3 50@4 00; Straight, $4 25@4 75; Patent $4 50@5 25; Bakers' Extra, $4 00@4 75; St. Louis Common to Fair Extra, $3 25@3 75; Fair to Good, $3 80@4 75; Good to Very Choice, $4 80@5 10; Patent Winter Wheat Extra, $4 50@5 50; City Mill Extra for West Indies, at $4 60@4 70; South American, $4 45@4 85. SOUTHERN FLOUR—Common to Fair Extra, $3 25@3 70; Fair to Choice do., $3 75@5 30. RYE FLOUR.—Superfine, at $3 25@3 45, latter for choice. CORN MEAL.—Dull. Yellow Western at $2 60@2 85; Brandywine, at $2 80@2 85. FEED.—40 lbs. at 72½@80c, for Spring and Winter; for 60 lb. at 70c; 80 lb, at 70@72½c; 100 lb, at 80@90c. Sharps at 95c.@$1 00. Rye feed 75@80c.

GRAIN.—WHEAT.—Quotations are: Ungraded Red at 70c.@$1; Ungraded White, 83c; No. 2 Red for April nominal at 92½c; do, for May, at 93¾@94¼c; do, for June, at 93¾@94¼c; do, for July, 93¼@94c; do, for August, 93¼@93¾c; do, for September, at 91½@91¾c, do, for December, 97½@98¼c. RYE—Western, 51@53c, Canada at 61@64½c; State at 65@66c. BARLEY.—Ungraded Canada at 82½c. CORN—Ungraded Mixed, at 43@46c; Rejected at 42c; No. 3, 44½c; Steamer Mixed, 45@45¾c; No. 2, at 46@46¾c; Yellow, 48c, In store. No. 2 Mixed for April, 46½c; do, for May, 45¾@47c; do, for June, 47c; do, for July, 47¾@47½c; do, for August, 48¼c. OATS—No. 3 Mixed, 39c; No. 2, 39@40c; No. 3 White, 41½@42½c; No. 2 do. 43@44c; No. 1, nominal; Mixed Western, at 40@42c; White do., at 43@47½c; White State, 44@46¾c; No. 2 Mixed for April, 38@38½c; do. for May, 36¾@36¾c; do. for June, 36@36½c.

PROVISIONS.—PORK.—Mess quoted at $9 50@10 00 for Old and $10 25@10 50 for New; $10 75@$11 50 for Family Mess; $12 00@14 00 for Clear Back; and $9 50@9 75 for Extra Prime. BEEF.—City Extra India Mess, at $15@17; Extra Mess, in barrels, $8 00@8 50; Packet, $8 50@9 00 in bbls.; Fancy Plate, $9 00. BEEF HAMS.—Quoted at $19 00. CUT MEATS.—Rib Bellies, 12 lb, average, 5½c; Pickled Hams, 9c; do. Shoulders, 5c; do. Bellies, 12 lb, average, 5½c; do. 10 lb average, 5¾c; Pickled Shoulders quoted at 4½@4¾c; Smoked Shoulders, 5@5¼c; Pickled Hams, 8¼@8½c; Smoked do., 9½c. MIDDLES—Long Clear in New York, 5¾c; at the West Long Clear, 5.35c; Short Clear, 5.60c. DRESSED HOGS.—City Heavy to Light, 5¾@5¾c; Pigs, 5¾@6c. LARD.—May, at 6.15c; June, at 6.20@6.21c; July, at 6.27c; August, 6.33c; September, at 6.39@6.40c; October, at 6.46c. City Steam, at 6c; Refined quoted Continent 6.45c. South American, 6.75c.

BUTTER.—Elgin Creamery, 26@29c; Pennsylvania do., 25@26c.; Western do., 20@25c.; State Dairy half-firkin tubs, 20@24c.; Welsh tubs, 20@21c; Western Imitation Creamery, 15@21c; Western Dairy, 16@19c; do. Factory, 15@20c.

CHEESE.—Prices show no radical change. State, at 8@11¼c; Western, 7@10c; Skims, 1¾@8¾c.

EGGS.—State, at 13c.; Western, at 12¾@13c; Southern at 12@12½c.

POULTRY.—LIVE.—Fowls, near-by lots, per lb, at 15@16c.; fowls, Western, per lb, at 14@15c.; fowls, Southern lots, per lb, at 11c; turkeys, per lb, at 12@14c.; ducks, western, per pair, at 70c.@$1.00; geese, western, per pair, at $1.75@2.00.

POULTRY.—DRESSED.—Turkeys, per pound, 11@13c.; chickens, Philadelphia, light weights to pair, 40@50c. per lb; do. winter, Philadelphia, 25@28c.; fowls, Pennsylvania, prime, 14c.; do. Jersey, at 14c.; do State and western, at 13½@14c. Ducks, Jersey, per lb, 14@15c; do. western, 13@14c. Geese, Jersey, at 10@12c; do. western, at 9@10c.

POULTRY.—FROZEN.—Turkeys, per pound, at 13@15c.; Chickens, per pound, at 8@12c.; Ducks, per pound, 14@15c.; Geese, per pound, at 10@12c.

GAME.—Wild ducks, canvas, per pair, 75c@$1 50; do. red-head, per pair, at 75c@$1 00; do. mallard, western per pair, at 30@40c.; do. teal, 20@30c; do. widgeon, 20@40c; English snipe, per doz., $2 50; Plover, Western, per doz., $1 75@2 00.

COTTON.—The quotations, according to the American classification, are as follows:

	Uplands.	New Orleans, and Gulf.	Texas.
Ordinary	6⅝	6 13-16	6 3-16
Strict Ordinary	7 1-16	7¼	7¼
Good Ordinary	8	8 3-16	8 3-16
Strict Good Ordinary	8 7-16	8⅝	8⅝
Low Middling	8 13-16	9	9
Strict Low Middling	9 1-16	9¼	9¼
Middling	9¼	9 7-16	9 7-16
Good Middling	9 11-16	9⅞	9⅞
Strict Good Middling	10	10 3-16	10 3-16
Middling Fair	10⅜	10 9-16	10 9-16
Fair	11	11 3-16	11 3-16

STAINED.

Good Ordinary	6 7-16	Low Middling	7 15-16
Strict Good Ord.	7⅛	Middling	8 11-16

FRUITS.—FRESH.—Quotations are: Apples.—Baldwin, per bbl., at $1 50@1 75; Greening, per bbl. $1 75@2 00; Russetts, Roxbury, per bbl., $1 50@2 00; do. Boldens at $1 25@1 50. Grapes.—Catawba at 4@5c. per case. Cranberries.—Cape Cod, choice, per bbl., $3 50@4; do. fancy, $4@4 25. Florida oranges.—Fancy at $3 00@3 25; choice do, $2 75@3 00; do. inferior at 75c.@$1. Strawberries—Florida at 40@50 per quart for best; do. poor at 25@35c.

FRUITS.—DRIED.—The quotations are as follows: Apples—Fancy evaporated, at 7c; choice, at 6½c; do. prime at 6@6¼c.; fancy North Carolina sliced, at 4@4½c.; choice do. at 3@3½c.; choice Tennessee quarters at 3@2½c.; State quarters at 2½@3¼c.; southern sliced prime at 2@2¼c; do. common, 2c. Peaches—Peeled North Carolina, choice, 11@11½c; fancy, 12½@13c; extra fancy, 13¾c; Georgia, choice, at 10c; do. prime, 9@9¼c; unpeeled halves, 2¾@3¼c; unpeeled quarters at 2¼@3c.; Delaware evaporated, peeled, 24@27c; unpeeled do., at 12@13¼c. Choice pitted cherries at 10@10½c. Evaporated raspberries, at 14@15c; sun-dried do. 11½@12c. Blackberries—Prime at 8@8¼c. Whortleberries at 6¼c. Plums, at 6@6¼c; do. California, evaporated at 11c.

PEANUTS.—Quotations at 6c. for best hand-picked, and 4¼@4¾c. for farmers' grades.

PECAN NUTS.—The quotations are: Extra large at 7½@8½c; large at 6½@7c; medium at 5@5½c; small at 4@4½c.

HAY AND STRAW.—The following quotations are: for Choice Timothy hay at 90@92½c; No. 1 at 85@90c.; No. 2, 77½@80c; clover mixed at 70@75c; Clover, at 60@70c; shipping at 70c; Prairie, at 55@60c. Straw—Long rye, at 90@95c, short rye at 70@75c; oat, at 40@50c; wheat, at 40@65c., all per 100 pounds.

VEGETABLES.—Potatoes.—Maine, fancy, d. h. bbl, at $2 25; Nova Scotia per bbl., at $2 00@2 25; State, per 180 lb., $1 50@1 75; Burbank, State, bulk, per 180 lb, $1 62@1 87; Burbank, eastern and Nova Scotia, per bbl, $2 25@2 50; Hebron, do, do, do, per bbl, $2@2 25, Hebron, State, bulk, per 180 lb, $1 50@1 75; Prolific and Goodrich, eastern and Nova Scotia, per bbl., $2 00@2 25; Peerless, bulk, per bbl., at $1 50@1 75; Magnum Bonum, imported, 168 lb, sack, $1 80@2 00; Bermuda, per bbl., at $2 50@3 00. Sweet potatoes, Delaware River, per bbl., at $2 50@3 00. Cabbages—Long Island, choice, per 100, at $6@7.

LIVE STOCK MARKET.

NEW YORK, SATURDAY, April 24, 1886.

Shipments for the week, 1,616 live cattle, 10,040 quarters of beef, 165 live sheep and 50 carcasses of mutton. BEEVES.—Receipts for six days 10,231 head against 9,810 head for the same time last week. Outside of a few little "stockers," which sold at $4 30, the range for Common to Choice Steers was from $4 75@6 25 per 100 pounds. Bulls sold at $3 25@4 12½ (low for export at $4 25@4 62½) and Dry Cows at $2 37½@4 25, and Old Oxen at $4 40@5 25 per 100 pounds. Pennsylvania Steers, 1,466 lb, at $6 25; do, 1,325 lb, at $5 90; Ohio do, 1,344 lb. at $5; Michigan do, 1,158 lb, $5 35; Pennsylvania Oxen, 1,735 lb, at $5 25; Ohio do., 1,660 lb, at $4 50; Cows, 1,200 lb. at $1; do, 970 lb, at $3; Bulls, 1,820 lb, at $4 50; St. Louis Steers, 1,362 lb, at $6; do., 1,208 lb, at $5 55; Chicago do, 1,077 lb, at $5 15; do, 1,135 lb, at $5 35; Cincinnati do, 1,166 lb, at $5 12½; Mixed Western steers, 1,511 lb, at $6; do, 1,324 lb, at $5 75; Ohio Oxen, 1,560 lb, at $4 80; do, 1,490 lb. at $4 40; Bulls, 1,492 lb. at $3 60; Western do. 1,330 lb, at $3 80; Ohio steers, 1,156 lb, at $5 35; Pennsylvania do, 1,363 lb, at $5 85; Pennsylvania Bulls, 1,700 lb, at $4; Cows, 785 lb, at $2 50.

CALVES.—Demand active and prices ½c higher. Ordinary to Prime Veals sold at 4@6½c; Choice at 6¾@7c. Dressed Calves in active demand and from ½c to 1c. per pound higher. Best City Dressed sold at 10c, and best Country Dressed at 8½@9c; Veals, 130 lb, at 6½c; 100 lb, at 4c.

SHEEP AND LAMBS.—Prime Clipped Sheep sold at $5 12½@5 50; Poor to Choice Unshorn sheep at $4 75@5 65; Clipped Yearlings at $6@6 25, and a few Unshorn do, at 7@7½c; Spring lambs sold at $4@7 50; Clipped Western Sheep, 83 lb, at 5½c; Unshorn Nebraska do, 108 lb, at $6 50; Kentucky do, 108 lb, at $5 50; Indiana do, 113 lb, at $6; Western Yearling lambs, 73 lb, at 7½c; Clipped Ohio Sheep, 87 lb, at $5 30; Virginia Spring Lambs, 44 lb, at 8c; Unshorn Kentucky Ewes and Bucks, 90 lb, at 4½c. Unshorn State Sheep, 65 lb. at 5c; Spring Lambs at $4 per head; Unshorn Michigan Sheep, 101 lb, at 6¼c; do, 102 lb, at $6 65.

HOGS.—Total receipts for six days, 25,338 head, against 35,392 head for the corresponding time last week. None alive for sale. Nominally steady at $4 40@4 60 per 100 lb.

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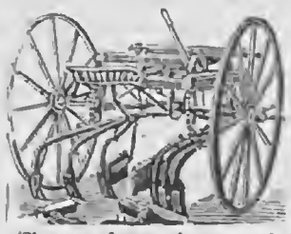

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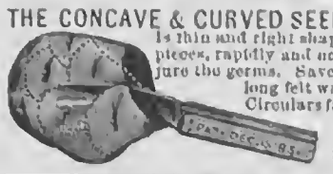

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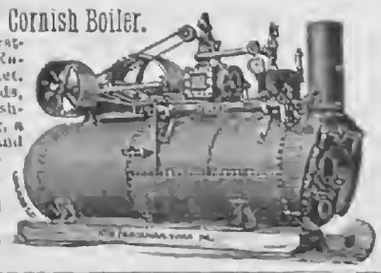

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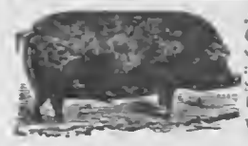

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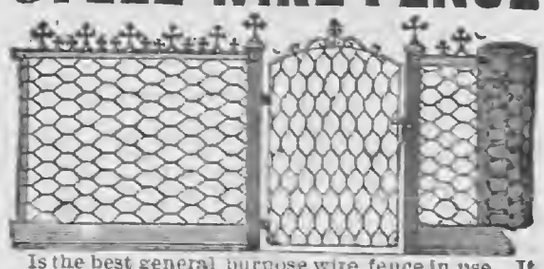

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Agents will be supplied with canvassing outfit on application.

Entered at the Post-office at New York City, N. Y. as second-class mail matter.

For the Young.

CLINTON CHILLED PLOW.

Now examine these three words carefully. They contain just 18 letters. The letters are divided as follows: *c* 2; *l* 4; *i* 2; *n* 2; *t* 1; *o* 2; *h* 1; *e* 1; *d* 1; *p* 1; *w* 1. After making sure that these numbers are correct, read the following letter.

DEAR UNCLE MARK:

We are interested in your boys and want to set them to thinking a little, and at the same time make one of them a present. We will give one of our new Iron Beam Plows, complete, to the boy under 16 years of age, who will send in the greatest number of words formed from the letters contained in Clinton Chilled Plow. The plow will be delivered free on board cars at this place. It will be worth its weight in silver. We hope the boys will make things lively with the dictionary and plow out all the words they can find. D. WOODWARD & SON.

Clinton, Michigan.

Now boys, here is a good chance for you. The plow will be given June 1, so you have a good chance to hunt up words. We will take Webster's dictionary as the standard. Each list must be sent to me before June 1, with the name of the boy who composed it. I am not going to say that father or mother must certify that they have not helped in the work. I have confidence enough in my boys to know that they will be honest in the matter. I am going to include the girls in this offer too. To be sure they won't have much use for a plow—I hope none of our girls will ever have to do such hard work as plowing—still, girls are pretty smart at spelling, and they will all have some one who will use the plow for them. If any girl wants to help her brother and will let me know before the lists are sent in, I will count all the words they may make together. It is understood though, that the girls are to have full credit for all the words they make up. Now then, all put on your thinking caps and go to work. Boys, don't let the girls beat you. Girls, show the boys that though they can use a plow, it will take a girl to win it.

One of the Cousins writes to ask what Uncle Mark thinks about temperance. I could answer that quickly enough if I could only find words strong enough to tell how I hate liquor and liquor selling. To my mind there is nothing so dreadful in this world, as the thought of a person deliberately tearing out his brain. That is what a drunken man does. Whenever I see a drunken man, I never feel like laughing at him. No one could laugh at a man who cuts off his hand, yet how much more dreadful it is to dull the mind and spoil the brain. I never could see how any man or boy who had any regard for his mother or sisters could drink. I would rather hear that my boys were dead, than to learn that they were drunkards. That is just what I think about temperance, boys, and I wish every one of you could feel the same way.

I notice a great many little girls in the city "jumping rope" as I go home. No doubt many of our girls are doing the same thing. It is good exercise. I like to see strong girls with red cheeks, and bright eyes. The trouble with such exercise lies in carrying it too far. We want to jump a greater number of times than anybody else has done, and the first we know the head begins to get dizzy, and the side begins to ache. Always stop in time, even if somebody beats you. By keeping strong and well, you can beat them in time.

I suppose some of our boys are playing base-ball. I must say I like that game. I believe I could pitch such a curved ball that most of you would strike out. Let me give you base-ball boys a word of caution though. Don't ever get so interested in the game that you can't get it out of your mind. Many a good lesson, and many a fine piece of work have been spoiled by the memory of a base ball match. It is exciting, I know boys, but don't let the excitement run away with you. There are very few people who can make a living at playing ball. It is far more honorable to saw wood for a living.

LETTERS FROM THE COUSINS.

DEAR UNCLE MARK: Is there room in the circle for another little niece? If there is, I would like to crowd in. I am nine years old. I have two big brothers and a little baby brother. The baby's name is Ernest, and he has dark blue eyes and nice dark hair. We live on a farm of 55 acres and have five horses, four cows and some young cattle and sheep. We have a pair of twin steers. Their names are Blaine and Logan. They are just exactly alike, only Blaine is a little the larger. My Papa cut 55 loads of hay last Summer and we had lots of corn and oats and wheat. I have a canary and two cats. One of the cats is 11 years old and weighs 11 pounds. He took care of me when I was a baby, or at least he thought he did. He is yellow and white, and his name is Zooterzer. We call him Zooty, except when he is doing wrong, then we speak his full name and he lays his ears back and stops right off. The other cat is leather color, and we call him The Preacher. He has but one eye. My Papa told me a year ago that if I was a good girl and helped Mamma all I could, he would get me a nice organ for my tenth birthday; and I am trying hard for it. I sweep and wash dishes and set table and take care of my little brother. But then, I would help all I could without the promise. EVA LENA WAITE.

Brunswick, Ohio.

[That's right; never try to be good just because of a promised reward. Be good for the sake of being good. I hope you will get the organ though. Those steers are well named. I wish I could see them. That name is about enough to frighten any cat. I knew a boy once named Shearjabub Smith. That Preacher is to be pitied I think.—U. M.]

DEAR UNCLE MARK: I wrote once before and it was not published, but I thought I would try it again. I want to join the Y. H. C. if you will let me. Last year I planted a pint of peanuts and got about a half bushel of shells, but half were false. I planted 20 hills of Netted Gem Cantaloupes and sold $3 worth from them. I have a scroll saw and make things to sell and have sold enough to pay for the saw and more too. We have 16 lambs and one is as black as jet. Peach trees are in bloom. I am 12 years old and work on the farm some. I have one brother. One of your nephews.

ABRAM H. PRINCE.

Henderson, Vance Co., N. C.

[I am glad you were not discouraged. You are getting to be quite a business man. I hope there is no "black sheep" in our family. —U. M.]

DEAR UNCLE MARK: I am a girl of 11 years old. My father and mother are living. I have two sisters and one brother. We have a lot of little lambs. We have a dog and a cat and lots of chickens. We have two cows and two calves. I would like to join the Y. H. C. I go to school at Spring Valley and I am in the Fifth Reader. I like to go to school very much. We have two pigs; one is black and the other one is white. I have a sheep and lamb and a bantam hen. She is very tame. We have a little dog; his name is Prince, and a cat; his name is Jocko. I have four pigeons, they are very nice. We have a large pond. We catch fish in Summer and it is very pleasant. I have never been to New York yet; but I am going in the Summer, if nothing happens. I would like to go very much. We have plenty of pears and apples in the Summer. I had a little black kitten, but it died. I was very sorry. My sister gave me a doll for my New Year. I like it very much. My mother gave me a writing desk and my brother gave me a little trunk. I keep my doll's clothes in the trunk.

Papa has received the Rural seeds you sent him, and he is going to plant them. The flower seeds I am going to plant. We have no flowers. We have three turkeys. I do not like turkeys very much. I was at Ocean Grove last Summer with Papa. I think it is a very nice place. I have been to Coney Island too, but I do not like it as well as Ocean Grove. I live at Saddle River.

GERTRUDE VAN BUSKIRK.

[We all like turkeys at Thanksgiving. Hope the flowers will do well.—U. M.]

DEAR UNCLE MARK: I have been intending to write to you a long time, but always felt shy about it. I am a little girl 11 years old and I have two little brothers; one is 5½ years old and the other is three. We raised a great many Plymouth Rocks last year. I have five little chickens just hatched and expect a great many more soon. I have a pet dog and his name is Tip. I had two, but the cat killed one. I received a package of your seeds and am going to make a garden soon, and I am going to try to get your prize. I have six Pekin ducks, and I get four eggs every day. We have a fine beach and we go in bathing in the summer time. Mamma teaches us at home and I read in the Fourth Reader. Papa has a large crop of cabbage, 10 acres of spinach, 10 acres of kale 12 acres of blackberries, 15 acres of strawberries, one acre of lettuce, an acre-and-a-half of onions, and is planting 25 barrels of Irish potatoes.

Good-bye. Yours truly,
Sewells Pt., Va., EVA G. KIRKHAM.

[You musn't feel shy about writing to me. That was a bad cat. Your Papa will raise vegetables enough for the whole Club, I guess.—U. M.]

Miscellaneous Advertising.

LOTTA—PHILADELPHIA'S FAVORITE.

It was always a marvel to the amusement loving public how Lotta could be so sick that the Chestnut St. Opera House, Philadelphia, was compelled to be closed for one week, about two years ago, and that at the end of that time she was well enough to resume her play of "Nitouche." More than this it was noticed that her voice had acquired fresh volume, and in "Nitouche," which is a singing play, she could be heard ensemble as well as in solo. Among all the gifted ladies who adorn the stage Lotta is decidedly the pet and favorite. Her intense vitality, her beauty, and the versatility of her talents draw all classes to see her. She has been on the stage since her eigth year and in all that time the breath of scandal has never once assailed her. She is a phenominally devoted child to her mother, in whose society she is found at all times. Can it be wondered at that this little lady returned so soon to her labor at the Opera House, when we remember that this speedy restoration was due to the inhalation of Compound Oxygen? A press correspondent writes: "It was at the residence of Mrs. James H. Heverin, of Delancy Place, (wife of the eminent counsellor) that I obtained a brief interview with Lotta in reference to the treatment of Drs. Starkey & Palen, which prevented her a great pecuniary loss. The little comedienne was spending the day there, and as she answered my card she came bounding into the parlor, throwing herself into a luxurious arm-chair, and as soon as the formalities of a visit were complied with, I at once broached my subject.

"I hear you have tried Compound Oxygen treatment, Lotta?"

"Oh, yes! You remember the terrible sore throat I had two years ago—that it baffled the skill of my New York physicians? After burning my throat and positively prohibiting my appearance before an audience for unlimited time, I was promised great things if I would try the "Oxygen" so I immediately came to Philadelphia and put myself under the care of Drs. Starkey & Palen."

"Did you experience relief immediately?"

"It was evident from the first inhalation that I had done the right thing, for it seemed to bring the whole trouble under immediate control."

"Then you do not favor burning the throat or any of the methods usually resorted to?"

"No. I think it a harsh and cruel treatment and it cannot be long before Compound Oxygen will come to the rescue of all the profession."

"Drs. Starkey & Palen claim that the health obtained by the Compound Oxygen treatment is as genuine and permanent as one's original health. Does your experience confirm that opinion?"

"Yes, it most certainly does. I have not been sick an hour since I used the Oxygen. My mother has also been greatly benifited by the use of the Oxygen and is as great an enthusiast as I. It seems to invigorate the whole constitution and imparts fresh life to every part of the body. In my profession I am always studying from nature. I observe the expressions, gestures and ways of the various people with whom I meet, and find that my power of observation has grown more acute and discriminating since my treatment with the Oxygen. In the voice alone there is a most perceptible gain. Long and sustained notes have become easy and whether talking or singing I find it now no labor. Persons who sing or talk much on stage or platform feel a certain amount of exhaustion at the end of the season and to them the use of the Compound Oxygen would be of great value. I wonder these gentlemen have not brought it to the notice of the acting profession before. It is just what we all need."

"Do you think it would have the same effect on the system as change of climate?"

"Yes, and without the disadvantages of long journeys in pursuit of health, such as the loss of home comforts and the interference with regular business pursuits."

"Did you have any unpleasant sensations while taking the Oxygen?"

"No, on the contrary, the sensations were pleasant."

"Do you give your full consent to make this public?"

"I certainly do. You are at liberty to say I said so."

Miss Lotta is one of the busiest little ladies in the world. Her engagements are continuously requiring her presence in the cities each season. She owns theatres and real estate in America and Europe, and large tracts of wooded land in the Northwest, indeed she is one of the wealthiest ladies of the stage. Lotta is modest about her own merits. She believes the test of talent is public appreciation. Surely no one has passed this test with greater eclat than this gifted lady, who is still young and fresh. Now if the Compound Oxygen can bring back to the stage each year this favorite and pet, in prime health, the public can but thank Drs. Starkey & Palen. Any who may desire to know more of the treatment of which so kindly words are spoken, should write to the office of the physicians, 1529 Arch St, for the literature on the subject, which is mailed free to all applicants.

A GRADUAL FAILURE of strength, with extreme pallor of face, fullness under the eyes, prostration, swelling of ankles and legs, indicate unmistakably a deranged condition of the kidneys, which should remove all this water from the system; if they do not, you certainly need the great kidney specific, Warner's safe cure.

PILES. Instant relief. Final cure in 10 days, and never returns. No purge, no salve, no suppository. Sufferers will learn of a simple remedy, free, by addressing C. J. MASON, 78 Nassau Street, N. Y.

Brewster's Patent Rein Holder.

Your lines are where you put them—not under horses' feet. One agent sold 12 doz. in five days; one dealer sold six doz. in 15 days. Samples worth $1.50 FREE. Write for terms.

E. E. BREWSTER, Holly, Mich.

EPPS'S

GRATEFUL—COMFORTING.

COCOA

I HAVE SHAVED MYSELF

For over 30 YEARS always using the

GENUINE YANKEE SOAP.

It has no equal."
R. MILLER, P. M.,
W. Farmington, O.

For FIFTY YEARS unequaled as a Shaving Soap. Standard for quality in U. S. Navy. Avoid imitations. Obtain it of your Druggist, or send 12c. in stamps for full size trial cake to the

J. B. WILLIAMS CO.
Glastonbury, Conn.

Form'ly Williams & Bros Manchester, 1840.

Flying Dutchman Jr.

The best and lightest draft Plow that ever turned soil. For circulars, descriptive, illustrative, demonstrative, logical, philosophical, irrefutable, convincing, sensational, astonishing, amusing, comical, but all true when they describe the merits of the pioneer three-wheel plow, the FLYING DUTCHMAN, address,

MOLINE PLOW CO.
Moline, Ill.

MOSELEY'S OCCIDENT CREAMERY AND REFRIGERATOR

Thick walls and Double Air Space. Positively no sediment drawn with either cream or milk. No Lifting of Cans. No Skimming of Milk. SOLD strictly ON MERIT.

MOSELEY & PRITCHARD Mfg. Co.

Send for Circulars to the manufac'rs. CLINTON, Iowa.

Made Short Work of It.

OFFICE OF DAYTON *Journal*, DAYTON, O., Nov. 11, 1885.—In April, of 1883, after doctoring for four months, for kidney trouble, began taking Warner's safe cure. In one week I was relieved of a stone as large as a peanut, followed by sediment that indicated dissolution of the stone.—W. H. ROUZER, foreman of job-room.

THE GIBBS PATENT "IMPERIAL"

Steel, Cast, and Chilled PLOWS.

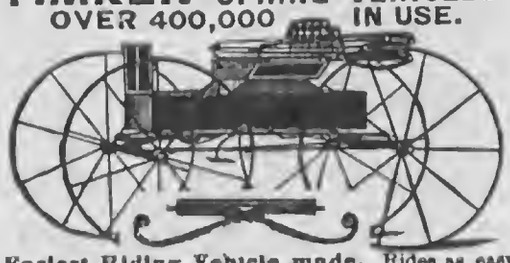
EQUIPPED WITH JOINTERS, STEEL CUTTERS & WHEELS.

MANUFACTURED BY

BUCHER, GIBBS & CO., CANTON, O.

TIMKEN SPRING VEHICLES.

OVER 400,000 IN USE.



Easiest Riding Vehicle made. Rides as easy with one person as two. The Springs lengthen and shorten according to the weight they carry. Equally well adapted to rough country roads and fine drives of cities. Manufactured and sold by all leading Carriage Builders and Dealers.

THE MAN

WHO MAKES

5 Ton Wagon Scales, Iron Levers, Steel Bearings, Brass Tare Beam and Beam Box, for

$60 and

JONES he pays the freight—for free Price List mention this paper and address JONES OF BINGHAMTON, Binghamton, N. Y.

PERSONALS.

JAY GOULD eats grapes of his own raising in January, strawberries from his own hot-houses in December and peaches from his private conservatory in April.

SENATOR KENNA, of West Virginia, is an amateur photographer and amuses himself in the Summer by tramping over the mountains of his State taking views.

AMELIA, the 14-year-old daughter of G. P. Morosini, the several-times millionaire ex-partner of Jay Gould, was bitten by a "mad" dog over a week ago, and her father has taken her to Pasteur.

"MR. CONKLING," said Henry Ward Beecher, in Chicago the other day, "is now making $50,000 or $60,000 at his law, but it is not for himself. He is paying off indorsements made for friends to the extent of several hundred thousand dollars."

MR. HENRY PHIPPS, Jr., of Allegheny City, Pa., has just given $25,000 for the establishment of plant houses in the new parks in that city with condition that the houses shall be open to the public on Sunday.

WASHINGTON C. WHITTHORNE, 61, lawyer, ex-member of both Houses of the State Legislature and of Congress for five consecutive elections, has been nominated, by Gov. Bates, of Tennessee, to succeed Senator Jackson, who succeeds U. S. Circuit Judge Baxter.

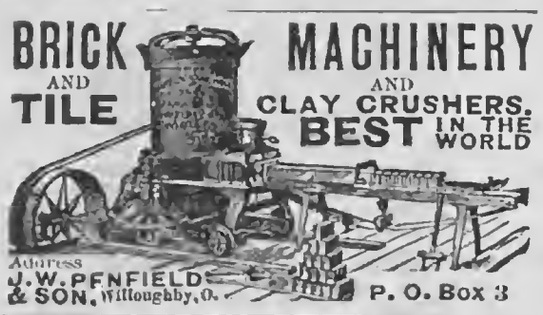
VIRGINIA THOMPSON, a bright, sparkling widow, daughter of Rev. Dr. Campbell, founder of the Campbellites, to whom Garfield and Black belonged, who has given much satisfaction as Postmistress at Louisville, Ky., for eight years, has been renominated for the position by the President for four more. Thirty prominent politicians wanted the place—howls, of course.

Miscellaneous Advertising.

Life Gets the Better of Death.

LOUISVILLE, Ky., Nov, 18, 1885.—For eleven years I was a confirmed invalid, suffering all the agony a person could stand. Was several times pronounced dead. Two best physicians pronounced my trouble female complaints. Used Warner's safe cure. I passed a large stone. Am well to-day as when a girl. It was a miracle in my case.—MRS. J. T. RITCHEY, 562 4th Avenue.

BRICK AND TILE MACHINERY AND CLAY CRUSHERS. BEST IN THE WORLD

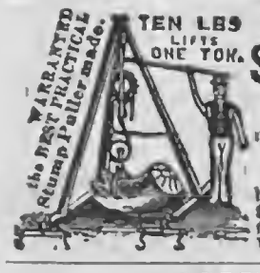


Address J. W. PENFIELD & SON, Willoughby, O. P. O. Box 3

THOMPSON'S CLOVER & GRASS SEEDER

WHEEL-BARROW

The only machine that will successfully sow Clover, Timothy, Hungarian, Millett, Red Top and Flax. Indispensable in windy weather when impossible to sow by hand. Send for circular describing latest improvements. Man'f'd by O. E. THOMPSON, Ypsilanti, Mich.



BENNETT'S IMPROVED STUMP PULLER

Received Centennial Medal.

Is now in use in Canada and nearly every part of the U. S. LIFTS 20 TO 50 TONS. Stands on runners, worked by two men. Prices, $25 to $70. Circulars free. Manufactured by H. L. BENNETT, Westerville, Franklin Co., O.

AMERICAN ROAD MACHINE CO. KENNETT SQUARE, PA.

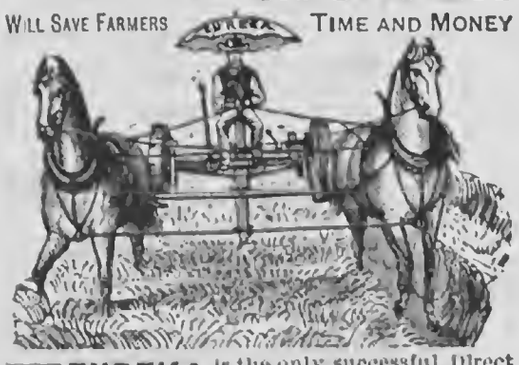
Successors to S. PENNOCK & SONS CO. and GEO. W. TAFT.

IMPROVED ROAD MAKING IMPLEMENTS FOR CITY, TOWN AND COUNTRY.

☞ Machines sent on trial, and satisfaction guaranteed. Purchasers are assured of immunity from law suits. Circular and colored cuts FREE.

—THE— Broad Cut Centre DRAFT. EUREKA MOWER

WILL SAVE FARMERS TIME AND MONEY



THE EUREKA is the only successful Direct Draft Mower manufactured. It will do at least, one third more work than the side-cut machines with same power. As the cut [illegible] is untrampled, hay will cure quicker, and [illegible] for more money. Don't fail to see the Eureka before buying. Send for new 1886 catalogue. Mention this paper.

EUREKA MOWER CO., Utica, N. Y.

MUFFINS

Are not necessarily bad; on the contrary, they are never bad when raised with

WARNER'S SAFE YEAST

The Housekeeper's Friend. It is Pure, Wholesome, and Health Preserving.

Insist that your Grocer keep it.

10 cts a Box, 10 cakes in a box, enough to raise 10 loaves of bread.

WE CANNOT too strongly impress upon our readers the fact that most diseases are caused by irregular action of the kidneys; and this is true even though you do not feel any pain in them, for they are deficient in nerves of sensation and give forth pain only *in the last stages of disease*. It is an undeniable fact that for all diseases of the kidneys caused by excess of uric acid in the blood, Warner's safe cure has no equal.

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Takes the lead, does not corrode like tin or iron, nor decay like shingles or tar compositions, easy to apply, strong and durable at half the cost of tin. Is also a SUBSTITUTE for PLASTER at Half the Cost. CARPETS and RUGS of same, double the wear of oil cloths. Catalogues and samples *free*. W. H. FAY & CO., CAMDEN, N. J.

CRIMPED & CORRUGATED IRON ROOFING W. G. HYNDMAN & CO. SEND FOR CIRCULAR & PRICES ÷ CINCINNATI, O.

FIRE-PROOF! WATER-PROOF! Gutta Percha Roofing. *Especially adapted to Hot or Cold Climates.* Cheap and Durable for Flat or Steep Roofs. Send for Catalogue. EMPIRE PAINT AND ROOFING CO., 1128 and 1130 Race St., Philadelphia, Pa.

IRON ROOFING

Send for prices and Illustrated Catalogue of CINCINNATI (O.) CORRUGATING CO.

$6 50 for Boss Plow WITH 3 DIFFERENT SIZE MOULDS. Gives farmer Four Plows for price of one. Agents Wanted. H. B. GRIFFING, 70 CORTLANDT ST., NEW YORK.

$25 A DAY saved by using the Little Giant Road Machine, instead of making roads in the usual way. It is the cheapest and the best. Send for circular. STRONG & PARKER, Vergennes, Vt.

$5 A DAY AND EXPENSES GUARANTEED AGENTS WANTED IN EVERY COUNTY. Greatest Opportunity Ever Offered. Don't miss it. Will pay salary if preferred, and advance expenses. Outfit and full particulars FREE. Address at once, Standard Silver Ware Co., Boston, Mass.

Trees, Seeds and Plants.

300 BUSH. BURPEE EMPIRE STATE POTATOES.—For sale at $1 bush.; $3.25 bbl.; 10 bbl. $3 bbl. J. J. SNYDER, VICTOR, ONT. CO., N. Y.

STRAWBERRIES Send as many cents to C. Weckesser, Marshallville, O., as you wish plants for, and see what a nice collection he will send you. Name the varieties you have and prefer. BEES CHEAP! *Circular free.*

Marlboro Raspberry, *Ulster Prolific and Poughkeepsie Red Grapes.* Send for description and price to A. J. CAYWOOD & SON, Marlboro, N. Y.

PEARL OF SAVOY POTATOES. Earliest of all. Per bushel, $1.00. Lakeside Farm, FITZWILLIAM DEPOT, N. H.

FOR SALE. PREMIUM PEARL OF SAVOY POTATOES, and ANGEL OF MIDNIGHT CORN. Address STEPHEN HOYT'S SONS, NEW CANAAN, CONN.

Send stamp for sample. Dietz Early Corn, Dietz Longberry Wheat, Dietz Fruit Dryer. New way of cutting fodder. G. A. DIETZ, Chambersburg, Pa.

FOR SALE. I have about Seventy-five Barrels of BURPEE'S EMPIRE STATE POTATOES, which I will sell—single barrels at $3.50; ten-barrel lots, $3, f. o. b. here. Address E. D. COPP, CLIFTON SPRINGS, N. Y.

HERRICK'S GEM COLLECTION.—Ten varieties of Flower Seeds for 25c. One packet each Asters, Balsams, Sweet Allyssum, Pinks, Mignonette, Calendula, Petunias, Pansies, Phlox, Verbenas. *Herrick's Eureka Collection* includes 30 packets choice Flower Seeds, and 10 healthy plants, namely: 2 Carnations, 2 double Geraniums, 4 Roses, 2 new Chrysanthemums, for $1. The above FREE by mail, at prices quoted. Send for illustrated catalogue. Mention RURAL NEW-YORKER. Address N. J. HERRICK, SPRINGFIELD MASS.

SEEDS, SEEDS, SEEDS

NEW BLOOD OF EXTRAORDINARY MERIT IN

THE THORBURN POTATO.

It is the Earliest of All.

$10 per barrel; $5 per bushel; $3 per half-bushel; $2 per peck; $1.50 per half-peck. Or by mail, one pound, 75 cts.; three pounds, $2.

Descriptive Circulars and Catalogues on application.

J. M. THORBURN & Co., 15 JOHN ST. NEW YORK.

IT IS IMPORTANT

That Seeds should be *new* and *true* to name. They should be bought of men who have had *experience* in the business. By sending to us you will get just what you order, and that which will give you satisfaction. We are importers and growers of Seed. Send for our Catalogue. L. G. SHERMAN & CO., Providence, R. I. Mention this paper.

NURSERY STOCK---FALL 1886.

The old and Reliable! SYRACUSE NURSERIES Come to the front For the Fall of 1886

with the choicest Stock of their specialties, STANDARD APPLES, STD. and DWARF PEARS, PLUMS and CHERRIES, ever offered to the public, all young, thrifty and well rooted.

Also a very superior assortment of GENERAL NURSERY STOCK both FRUIT AND ORNAMENTAL including all the popular ORNAMENTAL TREES, SHRUBS, and ROSES.

All Nurserymen and Dealers are cordially invited to inspect this superior stock or correspond with us, before placing their orders for the coming Fall.

SMITHS, POWELL & LAMB, Syracuse, N. Y.

(When writing always mention RURAL NEW-YORKER.

HALF A MILLION GARDENS ARE ANNUALLY SUPPLIED WITH SEEDS Peter Henderson's PLANTS

EVERYTHING FOR THE GARDEN

Our Seed Warehouses, the largest in New York, are fitted up with every appliance for the prompt and careful filling of orders.

Our Green-house Establishment at Jersey City is the most extensive in America. Annual Sales, 2½ Million Plants.

Our Catalogue for 1886, of 140 pages, containing colored plates, descriptions and illustrations of the NEWEST, BEST and RAREST SEEDS and PLANTS, will be mailed on receipt of 6 cts. (in stamps) to cover postage.

PETER HENDERSON & CO. 35 & 37 Cortlandt St., NEW YORK.

GRAPE VINES

Also other SMALL FRUITS, and all old and new varieties GRAPES. Extra Quality. Warranted true. Cheap by mail. Low rates to dealers. Illustrated Catalogue FREE!

Headquarters and General Agent for *New White Grapes*—Empire State and No Niagaras genuine without seal: N. W. G. C. NIAGARA ☞ Special Terms to Agents. T. S. HUBBARD FREDONIA New York.

J. T. LOVETT LOVETT'S GUIDE TO FRUIT CULTURE 1886 LITTLE SILVER, N. J.

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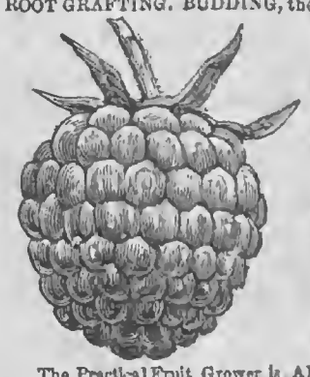

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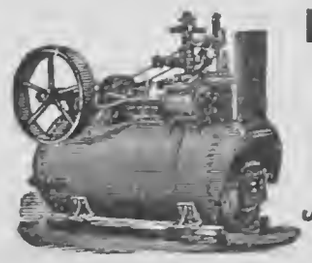

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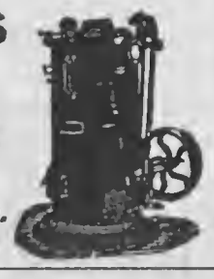

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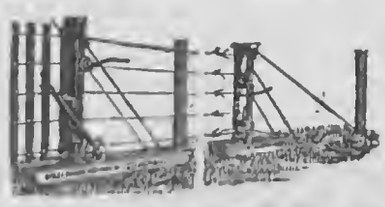

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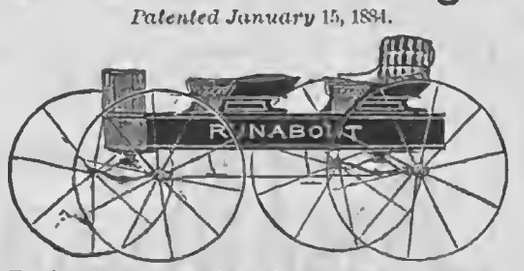

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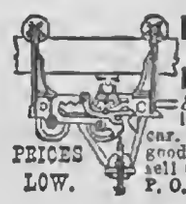

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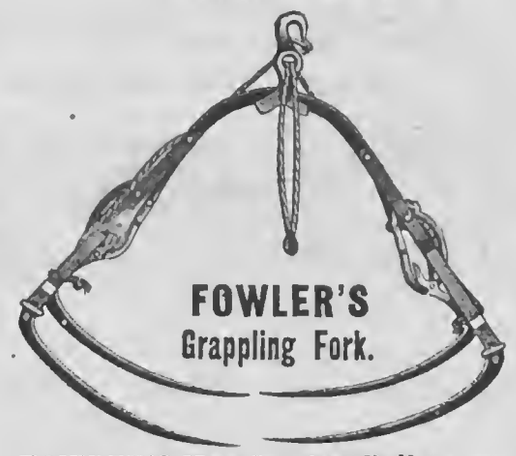

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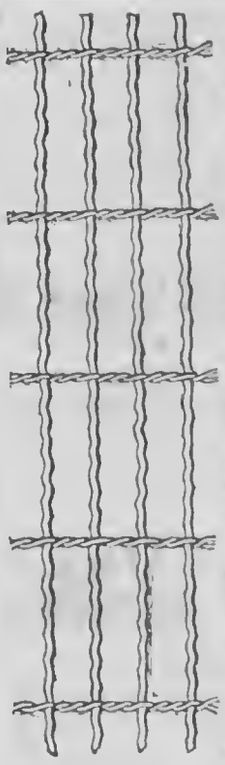

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VOL. XLV. No. 1893. NEW YORK, MAY 8, 1886. PRICE FIVE CENTS. $2.00 PER YEAR.

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Poultry SPECIAL

OF THE

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BEST BREEDS FOR THE NORTH, SOUTH, EAST AND WEST.

OBJECTIONS to the VARIOUS BREEDS.

COMPARATIVE MERITS.

Asiatics, Americans, French, and Spanish.

WHEN POULTRY IS PROFITABLE.—HOW TO MAKE IT PROFITABLE.

POULTRY IN CONFINEMENT.

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CARE AND MANAGEMENT.

CARE OF EGGS TO BE SET.

NUMBER OF HENS TO A MALE.

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WINTER LAYERS AND THEIR MANAGEMENT.

THE MEDICINE CHEST.

Turkeys, Ducks, and Geese.

SHORTCOMINGS OF BREEDS.

HENRY HALES.

Objections; Polish; Hamburgs; Dorkings; Dominiques, Spanish; Minorcas; Asiatics; Leghorns; French Breeds; Plymouth Rocks.

NATURE universally divides her favors. The truth of this saying is illustrated in our domestic animals: a fast running horse is not a good work horse; cows that produce the most and best beef are not the best for making butter. The same rule holds good with poultry; the best breeds for laying are not the best table fowls, and the best table fowls are not the best layers. Although all our domestic poultry are one species, singular enough, every time selections are made for any peculiar form and color and persevered in till a strain or what is commonly termed a "breed" is made, different characteristics appear, and each of such breeds retains these peculiar characteristics.

So much is said and so often, on the wonderful properties of this breed by one person, and on the perfection of that breed by another, that it is well to take a retrospective glance at the several varieties of poultry, and give a few of their shortcomings (I cannot call them failings) as well as of their merits. In times when fowls receive so much attention, many people are asking, Which is the best breed? Why is not this as good as that? It will therefore be a benefit to many to learn some of the reasons why one breed is likely to give more satisfaction than any other under certain conditions.

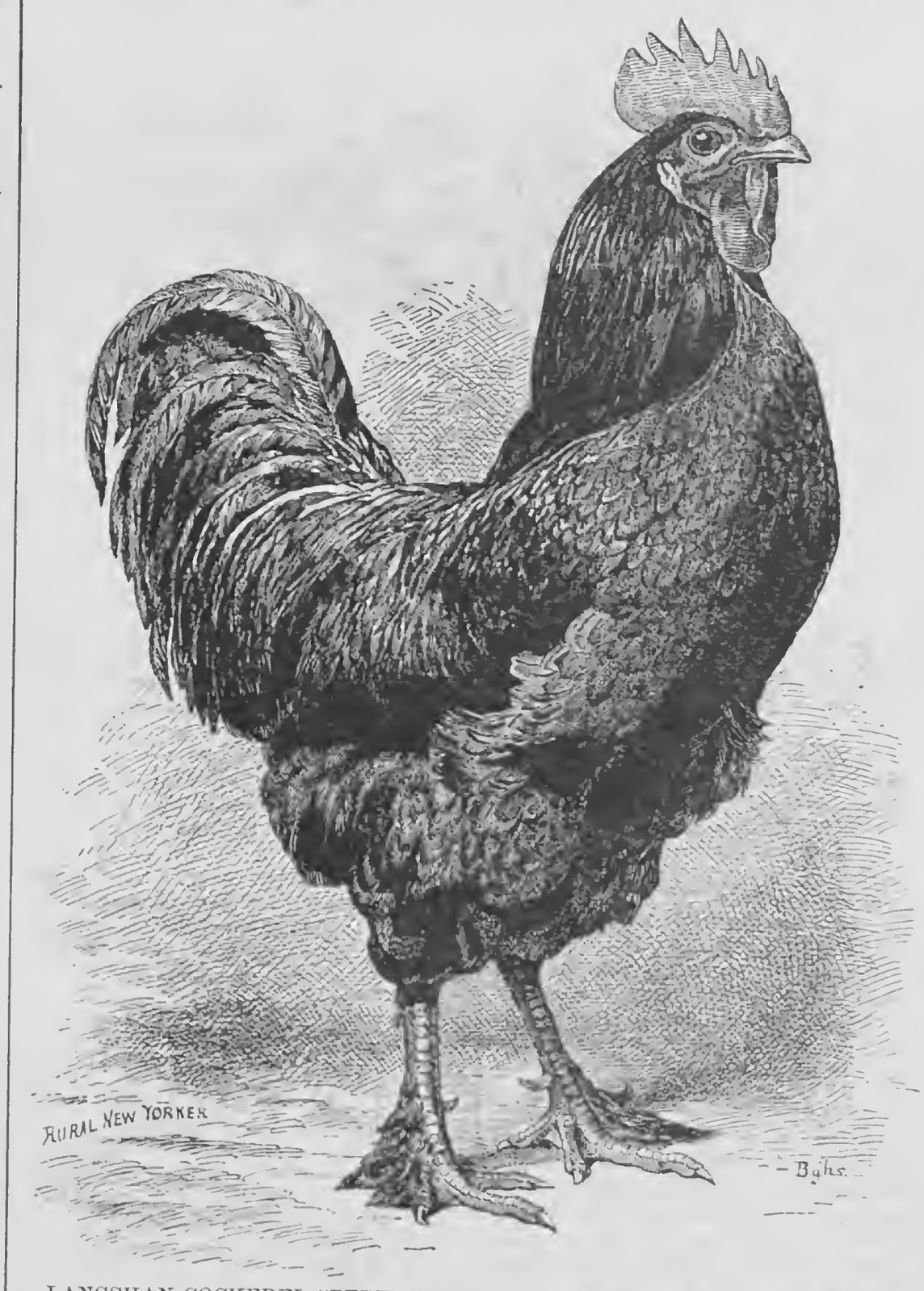
Let us commence with the old Games, as they are the nearest in type to the original progenitors of our domestic poultry. Although fine-flavored for the table, doing their own hatching, excellent mothers, and beautiful in shape and plumage, their eggs are rather small; they themselves are not the best of layers, and are not easy to raise in large flocks for the market. They are valued more for beauty or for their fighting qualities than for the profit to be got from them for eggs or the table. Some of our next earliest known breeds are the Polish, as they appeared centuries ago. Very beautiful indeed! but their top-knots are a decided objection on a farm or wherever else enemies of any kind can reach them, as they cannot see well enough around these tufts to escape like most other fowls, and their flesh is poor. As chicks, too, they are not very easily raised.

The Hamburgs rival any breed for lovely forms, exquisite colors and pencillings. Moreover, they are excellent layers, but like the last, they are non-sitters, the eggs, as well as the birds, are quite small; the flesh of poor quality, and the skins and legs dark. As in the case of the previous breed, there are several varieties of the Dorkings. Although they are large birds and the finest of table fowls, besides being very fair layers, doing their own hatching and being good mothers, they are not very hardy in our cold Winters, and require plenty of room and warm houses. The old Dominiques are also good table fowls, but moderate layers. Next come the Black Spanish and Minorcas, both excellent layers of very large eggs, very good birds for the South; but in our Northern States they are very tender to the Winter's cold. Flesh poor: skin and legs dark.

Asiatics may be divided into two classes—Cochins and Brahmas. Of these the Brahmas are probably the best layers. All of them are slow in growing to maturity, and are great eaters. Although they lay well in Winter, their eggs are rather small in comparison with the food consumed. They are all inveterate sitters and fair table fowls when young. Leghorns are among the most valuable as great layers; but are non-sitters. Rather small in body; flesh only medium. They require plenty of room and high inclosures, as they are great flyers, especially the Brown. The eggs of this breed are smaller than those of the White. The French breeds are scarcely hardy enough for our climate, except the Houdans, and these are not particularly hardy. They are only moderate layers, although fine table fowls. Crevecoeurs and La Flèches, particularly the latter, lay immense eggs; but are entirely too tender for America, at least for the Eastern and Middle States. There are a few more breeds that do not require any particular mention, not being generally known, and their merits and demerits are much the same as those of the allied varieties mentioned.

We come now to the later productions, or recently made breeds. The Plymouth Rocks are a cross between Asiatic and Dominique, receiving the latter's color. As both are sitting varieties, the Rocks are also strong sitters. They are pretty good feeders, but lazy layers, and are inclined to be be egg-eaters. The latest breed, the Wyandottes, are bred between a non-sitting variety, the Hamburg, and the Asiatic. This was expected to be a better laying variety, and so it is; the birds have small, double combs, well adapted to resist frost, lay early, are fairly hardy; but many of the eggs are small, especially the pullets' or first eggs. So, it will be seen all the best points cannot be obtained any better in any one breed of poultry than in any one variety among other kinds of domestic animals. The man who intends to embark in the poultry business, should well consider which varieties are best suited to his circumstances.

Bergen County, N. J.



LANGSHAN COCKEREL "PERFECTION." From Nature. Fig. 190. (See page 303.)

THE SEVERAL BREEDS AND THEIR USES.

P. H. JACOBS.

The largest breeds; Asiatics; American; English; French and Spanish; important characteristics; advantages and objections; the best breeds for the North and Northwest; for the East; for the South.

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By strict adherence to a standard of points and careful selection of the best individuals, the breeders have succeeded in classifying fowls into various breeds, each possessing peculiar characteristics, and answering some special purpose for which it was originally intended. As our country is diversified in soil and climate, the introduction of new breeds has been productive of great benefit to the poultry interests, enabling a profit to be made where formerly but little interest was manifested. With the advent of the Shanghai, Chittagong, and Brahma-pootra came a spirit of rivalry in the production of the largest birds, size taking the preference over quality and merit. Scientific breeders, however, made wonderful improvements in the progeny of the original ancestors, and as the thoroughbred cattle, sheep, and swine of today have departed from their ancestral type, so have the domestic birds.

Including all classes of Games, there are several hundred breeds of fowls, but those which are most popular and best known are classed as Asiatic, American, English, French and Spanish. The Asiatics are feathered on the legs; the Americans are clean-legged; the English and French are compact (the favorite breeds possessing five toes), a[illegible] are non-sitters. No pa[illegible] all the desirable qualities [illegible] tion. Though excelling i[illegible] breed many be deficient in others. [illegible] is adapted to certain climates, soils, and [illegible] of management. The best breed de[illegible] upon the purposes for which it is intended, [illegible] distance from market, the quarters, the range [illegible] the fences, and the color of its carcass when dressed.

In an examination of the breeds the Asiatics may be divided into Light Brahmas, Dark Brahmas; Partridge, Buff, White, and Black Cochins, and Langshans. The Light and Dark Brahmas differ in appearance only in plumage, though the Lights have been bred more carefully for utility than the Darks. They have stood the test of several decades, and are as great favorites to-day as at any previous period. The advantages possessed by the Brahmas are pea-combs and short wat-

tles, which fit the heads closely and enable the birds to endure exposure without being subjected to frosted combs and wattles—a great advantage in a cold clime. They are also heavily feathered, being protected with short, fluffy down on every portion of the body, while their powers of digestion enable them to consume large quantities of food, and thereby not only create a sufficiency of animal heat but also to lay during the cold season under disadvantages that would be fatal to some breeds. Hence many persons, while admitting the Brahmas to be excellent layers, do not approve of their capacity for eating a large amount of food, which, however, is really an excellent and necessary qualification instead of being a cause of objection. As they cannot fly, low fences easily confine them, while they also usually lay dark-colored eggs. The Brahmas, however, are heavily feathered on the legs and to the ends of the outer toes, even the middle toe being covered. This is objectionable where the ground is damp and muddy, often causing the feet to become frozen. Some care is also necessary in feeding them, as they readily become fat, after maturity, and then cease to lay. They seldom begin laying before they are eight months old, but if feed judiciously, they lay well at all seasons. As market fowls their yellow legs and skin, as well as their bodies, render them very attractive, and when crossed upon other breeds they always effect an improvement.

The Cochins differ very little from the Brahmas, so far as hardiness and general market purposes are concerned; but they are more compact in body, and have single combs, yellow legs and skin, are feathered probably even more heavily on the shanks and toes than the Brahmas, and can be easily kept in confinement. The different varieties of Cochins are alike in nearly all respects but color, the Partridge being exceedingly beautiful. The Cochins are the best sitters and mothers of all breeds, though their large size is often a disadvantage to them where the eggs used for hatching are thin-shelled.

The Langshan is the latest addition to the Asiatic breeds, and is the only one that has not been changed by the breeders of Europe and America, as it is the same in form and characteristics as when first brought from China. The fowls greatly resemble the Black Cochins, but an observer may notice that the Langshan, though nearly as large as the Cochin, can fly over a high fence, while the Cochin cannot leave the ground. The Langshan has white, *thin* skin, pinkish webs between the toes, legs the color of those of the turkey, long sickle feathers, and it lays when from six to seven months old. It is not an attractive market fowl, its dark legs and white skin being objectionable; nevertheless, it excels as a table fowl, and as layers the Langshans are said to be intermediate between the sitters and the non-sitters.

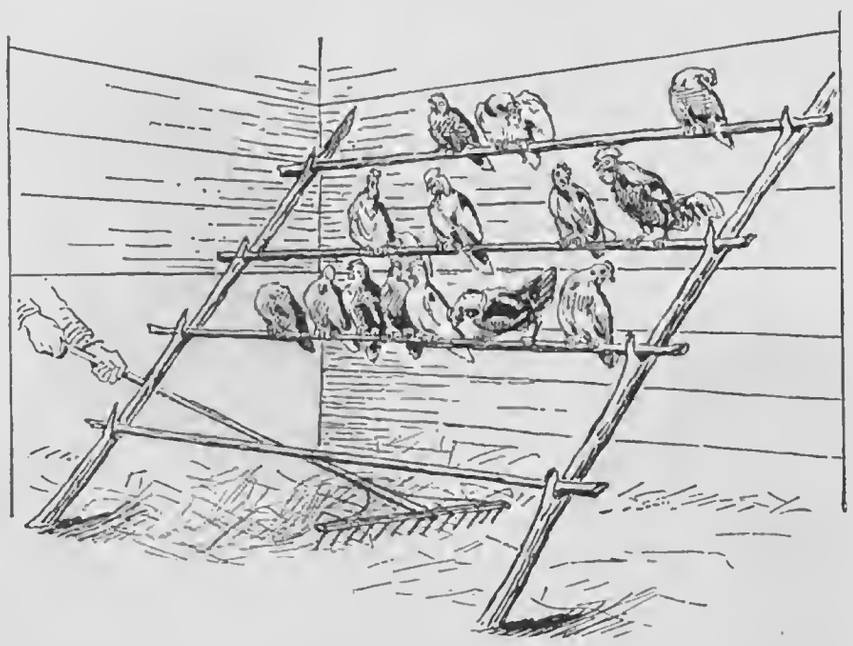
The American breeds are the Plymouth Rocks, Dominiques, Javas and Wyandottes. They are all clean-legged, with yellow shanks and skin. Their popularity is due to their hardiness, medium size, and adaptation to nearly all climates. They combine partially the heavy feathering of the Asiatics, with the long duration of the laying season of the non-sitters. They are not only easily kept in confinement, but also make excellent foragers when running at large. They also lay eggs darker in color than some breeds, which, added to their early maturity, considering their size, is one of their desirable qualifications. The Plymouth Rocks and Wyandottes are struggling in rivalry for popularity; the Dominiques have the objection of small size, while the black or mottled color of the Java is not preferred by many, as they are in other respects very similar to the Plymouth Rocks, some classifying them as Black or Mottled Plymouth Rocks, though they are really distinct.

Of the non-sitters the Houdans (a French breed) are the largest, and they are excellent table fowls; but their dark legs are [illegible]t, while their crests [illegible] roup in damp weather. [illegible]s one of the old-established [illegible] a favorite; but breeding [illegible] a white face has taken away their [illegible]ctness, and injured them in vitality. [illegible] Leghorns are the best layers, and are [illegible]ardy, while the Hamburgs are considered by others as possessing an excellent merit in the rose comb. All the non-sitters lay white legs, and all mature early and are good flyers. Hence, while they are inveterate layers, and will even lay well in Winter if kept warm, they feather quickly when young and are therefore not as easily raised as are the larger breeds. Their heavy combs and wattles are not in their favor in Winter, while they, like all other breeds, cease laying at certain times, both for the purposes of moulting and recuperation.

The only English breed known to me is the Dorking, which is compact in body, possesses five toes, and makes an excellent market fowl in England, but is not a favorite here. The Houdan holds the same position in France that the Dorking does in England. Both are grand table fowls; but, unfortunately, Americans sacrifice all the desirable table qualities for the golden skin and legs, though the best breeds for the table have, like the turkey, white skin and dark legs. It may be also stated that the muscles of the breast are increased by exercise, and it should not surprise those who make a specialty of Brahmas and other large breeds for market to be told that the birds that fly the highest have the most breast meat. The Crevecœur, La Flèche and other French breeds have not proved hardy in this country.

Of the new breeds now being introduced the Minorcas, which are claimed to be the best layers of all, even excelling the Leghorns, may be mentioned as being of the same size as the Black Spanish; but more compact. There are three varieties—Black, White and Red. They have not been tested as yet in this country; but as they are non-sitters and of fair size for that class, and are also considered hardy, they are likely to become favorites. The Games are not considered fully up to the average as layers, but in proportion to weight they possess less offal and more breast meat than any other breed, and stand at the head of the list for the table. Crossed on large Asiatic hens, the Game produces the finest of market poultry, while the largest and choicest capons are the result of a Dorking cock and Asiatic hen.

The breeds best adapted to the Northwest, where the temperature gets below zero, and there remains, are the Brahmas and Cochins, the former being perhaps the better layers and the latter more suitable for hatching young turkeys and ducks; but where there are good markets for the sale of poultry and eggs, the Wyandottes and Plymouth Rocks are excellent if they can have out-door exercise.



CLEANING THE POULTRY HOUSE. Fig. 195. (See page 302.)

The Asiatics, if not fed too heavily, can be kept under shelter with contentment; but other breeds are liable to vices of feather pulling if confined too closely. The Asiatics may be used for crossing upon the common breeds; but the crossings should be continued till the stock is three-fourths Asiatics, and the last cross should be Brahma, in order to secure the small pea-comb as a protection against severe cold.

In the East, or where the Winters are not as severe as in the Northwest, the American or Spanish breeds may be used, while the Asiatics would not be out of place. On wet soils avoid feathered legs, and where there is much rain in Spring, crested breeds often suffer. There are but few breeds that cannot be adapted to the Eastern and Middle States, a warm, dry poultry house compensating for many disadvantages.

The best breeds for the Southern States are the Leghorns for eggs, and the Plymouth Rocks and Wyandottes for market, as the winters are mild, and these breeds, being active, have a longer season for foraging. But, where one is not partial to the keeping of breeds in their purity, many advantages may be secured by crossing, provided pure-bred males only are used for that purpose. It may be safely said that any of the breeds may be kept, in any section of the country, if properly managed, there being greater distinction between those kept under confinement or roaming at large than in climate, though it is best to avoid as many objections in each breed as possible.

SEVERAL POULTRY TOPICS.

I. K. FELCH.

Will hens do as well without males? Eggs will keep longer. Experiment. How many hens to a male for breeding purposes? Will it pay to confine poultry?

I AM of the opinion that hens will lay fully as many eggs if kept to themselves as if they have the company of cocks. This has been an accepted fact ever since I was a boy; but whether founded upon careful experiment I cannot say. Fowls that have had no male escort will be found to show a desire to incubate much oftener when penned with males. This fact may be the source from which has sprung the belief that hens lay more eggs when penned with no male companions.

I certainly should not have penned with surplus stock more than one male to a pen, no matter what number I had, and in producing eggs for the market, if I were keeping hens in flocks of 40 or 50 I should keep no male.

That an egg will keep longer admits of no argument; for an egg not impregnated will come out from under a hen at the end of three weeks' incubation clear; while one that is impregnated, if set on 48 hours and then taken out, will at the end of three weeks surely be of bad odor: while an egg not impregnated may be sat upon 12 days, and then be used for all cooking purposes, and prove as good as the common run of store eggs. The other day I boiled 12 eggs taken out of an incubator, after 12 days' incubation; 10 were clear; two showed the germ to have started, and death at an apparent age of two days. The result was the two impregnated eggs when cut open, had an unpleasant odor, and the white was tarnished, while the yelk had a brassy-white tinge, and the dead germ was not hardened by boiling. Of the other 10 that showed no signs of impregnation, I ate four, and they were to all appearances and to the taste as good as those boiled 12 days old, that had been kept in the pantry. When an egg that has never been in an incubator is broken, the albumen adheres more closely together, and does not run over so large a surface as will that of the eggs which have been subjected to the heat of the incubator for 10 days. This seems to be all the difference. From this fact, is it not safe to say, hens will lay more eggs; wish to sit less frequently, and their eggs will keep much longer, when they are allowed no male escort.

For breeding purposes, how many hens should be associated with a male? If the male is to be penned with the hens, I should say, for Cochins, seven to twelve hens; for Langshans and Brahmas, eight to even fifteen; for Plymouth Rocks, 15; for Wyandottes, 15; for Hamburgs and Leghorns, 20. But care should be taken to put enough so that copulation should result from an invitation from the hen. Such service is four times as effective as in the case of coercion by too vigorous a cock

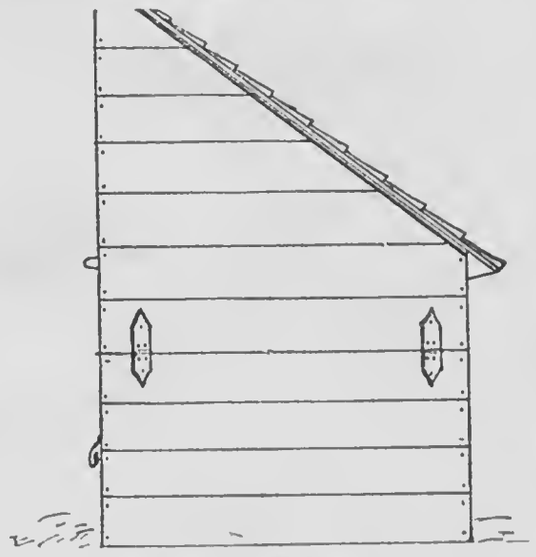


Fig. 194. (See page 302.)

in a pen of a few hens. I have had eggs hatch poorly from a pen of seven females and one male; and the eggs nearly all hatched as soon as the number of hens was increased to 15. There are in all flocks with a single male, more or less hens which will not mate with him, or whose eggs will not hatch. Of late years I have run my pens in this way: I put two males with 25 females, and the eggs hatched well. The hens then selected their own mates, and the results are better.

Will it pay the average farmer to confine his poultry in yards? I say no; but build the poultry houses here and there about the farm, and give perfect liberty to the flock, and in one of these isolated houses pen 25 of the best with two fine males from which to breed the yearly stock, or pen two such lots of birds so as to properly mate the following year. The houses built here and there about the farm for flocks of fifty birds each, with no males, will be a source of income few will concede until they have tried the experiment.

Natick, Mass.

WHY POULTRY KEEPING IS APPARENTLY NOT PROFITABLE.

Profits large in proportion to amount invested; causes of mismanagement; labor well repaid; keeping account; mistakes.

BUT few fail to realize a profit from poultry, though often it is supposed that a loss occurs. In fact, it is almost impossible to incur loss under good management, and it requires but very little management to give a profit. If one should invest $10 in a flock, including food and other expenses, and realize $11, or only $1 more than the outlay, it would give a profit of ten per cent. Yet, but few would be satisfied to expend $10 for food and receive but $11 from the hens, although in some branches of business the proportionate profit from investments is smaller.

Familiar as some are with barn-yard fowls, yet they know nothing of the merits of the different breeds. A "chicken is a chicken," and the very fact that they are of so many colors, shapes and sizes, assists in this delusion. There are at present two classes of poultry raisers, the one giving no care at all, and the other pampering the flocks to an unnatural condition. Mismanagement arises in the one case from not regarding the poultry as being of sufficient importance to receive care, while in the other it is due to overfeeding and deprivation of exercise.

Yet we must include labor as an element in the cost of keeping poultry, and the excess derived over and above the expense is not all really profit; but it is safe to claim that all labor rightly bestowed will be amply repaid if the flock is a large one. Small flocks are proportionately more profitable than large ones, because they utilize much of the waste of the house; but by a correct knowledge of the proper conditions for keeping poultry there is no reason any number should not be kept. Heretofore the drawbacks have been the desire to keep too many together in order to economize room, which entails competition and inequality in allowance of food to each individual. Then there is the failure to supply meat, plenty of water and warm quarters, to say nothing of neglect in cleaning the houses and yards. When the hens are as carefully attended to as the cows and pigs, both as regards regularity of feeding and labor of cleaning the houses, they will give better results.

A large number who do not keep accounts would be surprised at the value of the eggs and carcasses consumed in the family compared with the expense; yet, because a large proportion of food has been purchased, the hens are regarded as unprofitable. A strict account of all receipts and expenses would show a gain of 100 per cent. in many cases. The profit from poultry does not depend upon the gross amount, but upon that produced over and above the outlay, and such profit may be but a small sum, yet be a large percentage on the amount invested. The markets should be watched in order to secure the highest prices, and business methods should prevail.

The reason why poultry keeping is sometimes apparently unprofitable is because the average poultryman is not familiar with the breeds; does not feed a variety, uses no precaution against cats, rats, hawks and other enemies; does not keep the houses and yards clean; does not provide plenty of water; feeds too much concentrated food, and keeps the hens in an unhealthy condition. When these evils are remedied and the poultryman will compare his investments with those of people engaged in other pursuits, the comparison will be in his favor. H.

LANGSHANS.

Equaled only by the Dorking; best food; method of feeding.

WHICH is the best breed of poultry is a hard question to answer to the satisfaction of all. But from my own experience of many years in the breeding of pure-bred poultry, it is my candid opinion that for all purposes the Langshan is the best fowl we have in this country. "Why?" They are large; the pullets mature and lay as early as the Leghorns; they will lay as many eggs in a year as the best laying

strains of Leghorns; they are very hardy, quiet, easily confined, and while not inveterate sitters, they make excellent mothers. As table fowls they are not surpassed by any, and are equaled only by the Dorking. They are bright and active, with small bones, white flesh and thin skin. They are natives of the coldest part of China, and are perfectly hardy even in our coldest climates. I believe pure-bred Langshans have more good and less poor qualities than any other breed.

My experience is that good, sound wheat is the cheapest egg-producing food of all the small grains. In the morning I give a warm feed of scalded oats and corn ground together; at noon, whole wheat, sometimes oats; and at night sifted, cracked corn with, of course, cabbage and other vegetables added two or three times a week.

The feed and care of chicks while growing have much to do with the size and hardiness of the mature fowl. Young chicks should be allowed a free range, with plenty of food of all kinds, and, above all, with plenty of pure, fresh water. The best way to improve farm poultry is to use thoroughbred males and change them every year; use large, vigorous birds and select the best chicks raised each year.

Place the eggs for hatching in a cool, dry place in pans partly filled with oats or bran. Set them the small end down, and do not keep them longer than one week before setting. Although eggs will hatch after having been kept for four weeks, the chicks will never be so strong as those hatched from eggs not so old.

There is no farm stock that will pay as well as thoroughbred poultry or give quicker returns for the money invested.

Windsor Co., Vt. A. A. HALLADAY.

POULTRY CULTURE.

H. A. MANSFIELD.

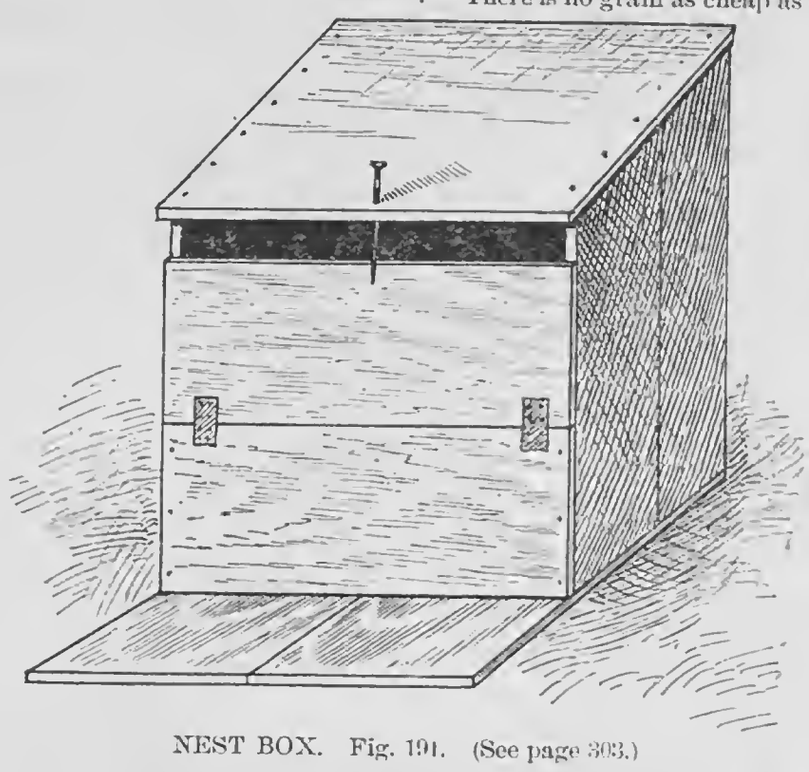
The best breeds; farmers should keep fairly large breeds; perches; damp houses; kill when about 18 months old; profits.

I THINK the safest rule is not to keep more than 40 or 50 fowls in one house. The yards should be so large that there will always in season be a supply of green grass for them, or they must be let out each day for an hour or two to graze. An orchard with plenty of shade is the very best location. The better the land the better the fowls that are raised on it. Everything in the house must be perfectly dry, with no floor but the bare ground that is dry enough for a dusting bath. Keep the premises clean. Always have clean, pure water before them, and feed so that they are anxious for more, and success is certain.

The kind one keeps is immaterial, there are many good varieties which are profitable if well cared for. I keep Dark Brahmas and find them satisfactory; but Plymouth Rocks, Light Brahmas, or the old American Dominiques are all as good. For farmers it is well to keep a fairly large fowl for two reasons: when killed there is more meat, and all large varieties are better winter layers than the small breeds. I am quite sure more fail on account of over-feeding, and having damp quarters than from all other reasons combined. Many fix the perches too high and make them too small. For the largest fowls it would be as well, or better to have no perches at all; provide leaves, chaff or straw for them to sit on, and they will do quite well. Of course their nests should be movable, so that they can be cleaned and occasionally white-washed. Cheese boxes are as good as anything, where one is not particular to fancy fixtures. For farmers, the best way is to kill everything when about 18 months old, supplying their places with chickens hatched the last of the preceding Spring. The man who cannot make, on an average, a net profit of $2 per hen from his flock, must manage very poorly. I have made $3 per hen a year clear on a flock, estimating everything at ordinary market prices of eggs for table use; to say nothing of the value of the fowls for the block. I recently killed a year-old cockerel that dressed 8¾ pounds, and would be worth $1.75 if I had bought him at the market. The same bird weighed as much last November, and would have sold then for over $2, so that if then sold, his winter feed would have been saved. If a man raises 200 chickens, and half are cockerels, he can kill and sell these, when six or seven months old, for enough to leave him the pullets for nothing just when commencing to lay, and this they will continue to do all Winter if hatched in April.

The best fowls for farmers are undoubtedly Light or Dark Brahmas and Plymouth Rocks, all being large, hardy and good winter layers. Of all things, keep the fowls where they cannot eat filth. Hens that run in a hog pen lay eggs that no one can enjoy. Let any doubter boil one, break it and see how it smells. Fried, the odor is not so noticeable. Farmers should get a few good fowls that they like; take good care of them, and increase the number after the owners see that they are the best paying stock on the farm. They will eat the small potatoes boiled, mashed with wheat bran; drink the skim-milk, and return more for them than pigs twice over.

Middlesex Co., Mass.



NEST BOX. Fig. 191. (See page 303.)

FEED FOR SPRING, SUMMER, AUTUMN AND WINTER.

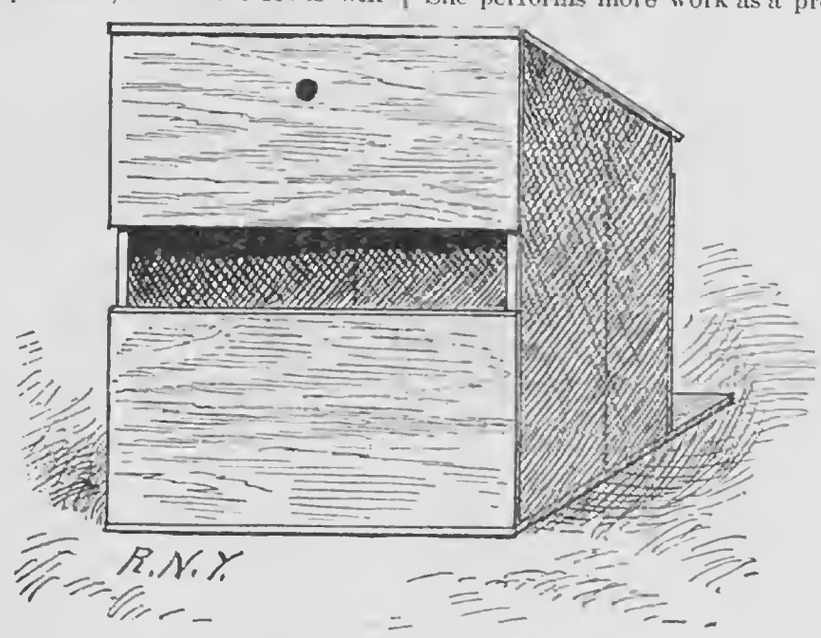
The laying hen not a market fowl; corn is an expensive food for laying hens; variety; do not feed corn in Summer; food for moulting hens; fowls for market.

FEEDING in Spring is to make allowance for change in temperature, and as the fowls will require less food for the creation of bodily heat, and a large proportion of that which is essential to egg production, the poultryman must arrange his methods of feeding accordingly. It may be stated, however, that any mode of feeding that keeps the fowls in health will answer for all the seasons, and the great obstacle most frequently met with is overfeeding. With the advent of poultry literature came an improvement in the management of poultry, but in a majority of cases the neglect and ill treatment of former years have been supplanted by an extreme in the other direction.

The first lesson for the beginner to learn is that the laying hen is not a market fowl; that is, she should be fed differently from one that is intended for sale. Poultry for market should be fat, and as heavy as possible. The laying hen is by no means at her best when very fat, and often cannot lay, while soft-shelled eggs, weak legs, infertile eggs, and liability to bowel diseases are also to be contended against when she is in that condition.

There is no grain as cheap as corn; but it is very expensive feed for laying hens when fed almost to the exclusion of other grains. The hen in her natural condition is compelled to work. She not only travels over a large space in search of food; but scratches industriously for it, and as she feeds on both animal and vegetable substances her range for procuring food is very wide, and she requires a variety. She performs more work as a producer than any class of animals, for while the cow requires months for the development of its young within the body, the hen stores up the necessary material for the development of the young chick in a few hours. Hence she requires not only a large amount of food, but that which consists of all the elements essential for the purposes to be achieved; and, it may be added, above all substances, she requires plenty of drinking water, as an egg is 95 per cent. water.

The same mistake is made in feeding hens that is made in feeding swine. Too much concentrated food is given, and not enough of that which is bulky. Grass, vegetables (either raw or cooked), and insects (or meat) are the best for laying hens, with a grain ration, once



NEST BOX. Fig. 192. (See page 303.)

THE RURAL IN A NEW "ROLE." Fig. 194. (See page 303.)

Stock and Poultry.

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Seven year's experience with this novelty; a range of 40 acres; "none better if as good." Eggs in season, $2 for 13; $3 for 26. Neatly packed and shipped in baskets—order early and send 2c. stamp for circular. Address **C. A. PETERSON,** Troy Road, Albany, N. Y.

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PLYMOUTH ROCKS, WYANDOTTES, LANGSHANS, W. C. B. POLISH, G. S. POLISH } EGGS, $2 per setting of 13.
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Mention this paper.

(Continued from page 299.)

a day, as an accompaniment. Corn may be fed in Winter to laying hens (if the weather is very cold); but it should be discarded in Spring and Summer. In the Fall hens usually begin to moult, which compels them to have food of the richest quality, as the shedding and renewing of the feathers is very weakening. A proportion of corn may, therefore, be their feed in order to protect their naked bodies as the season becomes cooler.

In the morning, early, the hens may be given soft food. An excellent mess, and one that is very nourishing, is to cook a piece of rough beef, or the lights and livers of steers or sheep, until quite done, and if finely chopped so much the better. One part bran, one of middlings, and one of ground oats may be added, with potatoes, until the mess is thickened. It should be so fed that the hens will be rather hungry than full, or they will not take exercise. No other food should be given during the day except chopped cabbage or onions in Winter, or grass in Summer. At night give plenty of wheat. Cheap messes may be made by cooking potatoes or turnips for them. If the fowls have plenty of range, a warm mess of cooked meat and potatoes will answer for them in the morning; but they should have all the wheat they can eat at night. Ground bone, lime in any form, and plenty of gravel should be provided, and all the soft food should be salted to taste. The art in feeding is to give the hens a variety at all times, but not to allow them to become fat. They must be made to scratch in something for the whole grains. Such active birds as the Leghorns seldom become too fat, which partly explains why they lay so well; but all the large breeds will fatten readily after reaching maturity. Winter feeding demands some corn; Spring and Summer a large proportion of bulky food; while Autumn calls for food rich in growing material, as there is then a preponderance of young stock and moulting hens. Fowls intended for market should be kept separate from others, and be allowed all the corn they will eat.

GENERAL-PURPOSE FOWL.

Roomy yards; care of eggs to be set; number of cocks; green food.

For a general-purpose fowl I would select the Light Brahma for crossing on the common stock, because the offspring is a large, well-developed, handsome fowl, very hardy and free from disease. Moreover, it fattens readily and always brings the highest price in the market. Such birds are very docile, and the hens are good layers of large eggs.

Fence poultry in rather than let them spoil the garden; but don't confine them in small pens. Make roomy yards for them and they will do better than when allowed to roam about at will, always seeking an opportunity to do mischief. I have never noted any difference between the eggs from birds on high and dry land, and those from others or the same on low and damp ground; but I would not advise any one to buy fowls and transfer them from very dry to very low land. Place the eggs under a careful hen as soon as convenient after they have been received from the dealer. If you cannot set them immediately, unpack them carefully and place them in a broad vessel, only one layer in depth, and keep them in a cool (not cold) room. Turn them every day, so that the yelk may not settle to one side. In this way they may be kept good for several days.

I do not find any difference in the shape, size, quality or number of eggs, whether cocks are kept with the flock or not; but if I were keeping hens for the production of eggs only, I would not keep many (if any) cocks, as they would consume considerable food and give no return whatever for it.

In Summer nothing equals grass as a green food, either for poultry or for anything else. In Winter anything that comes the nearest to grass would undoubtedly be the best. For the [who] keeps only a moderate-sized flock, [cab]bage, potatoes, etc., from the [table] and fed to the fowls is, in [the] most *economical* and the best [food].

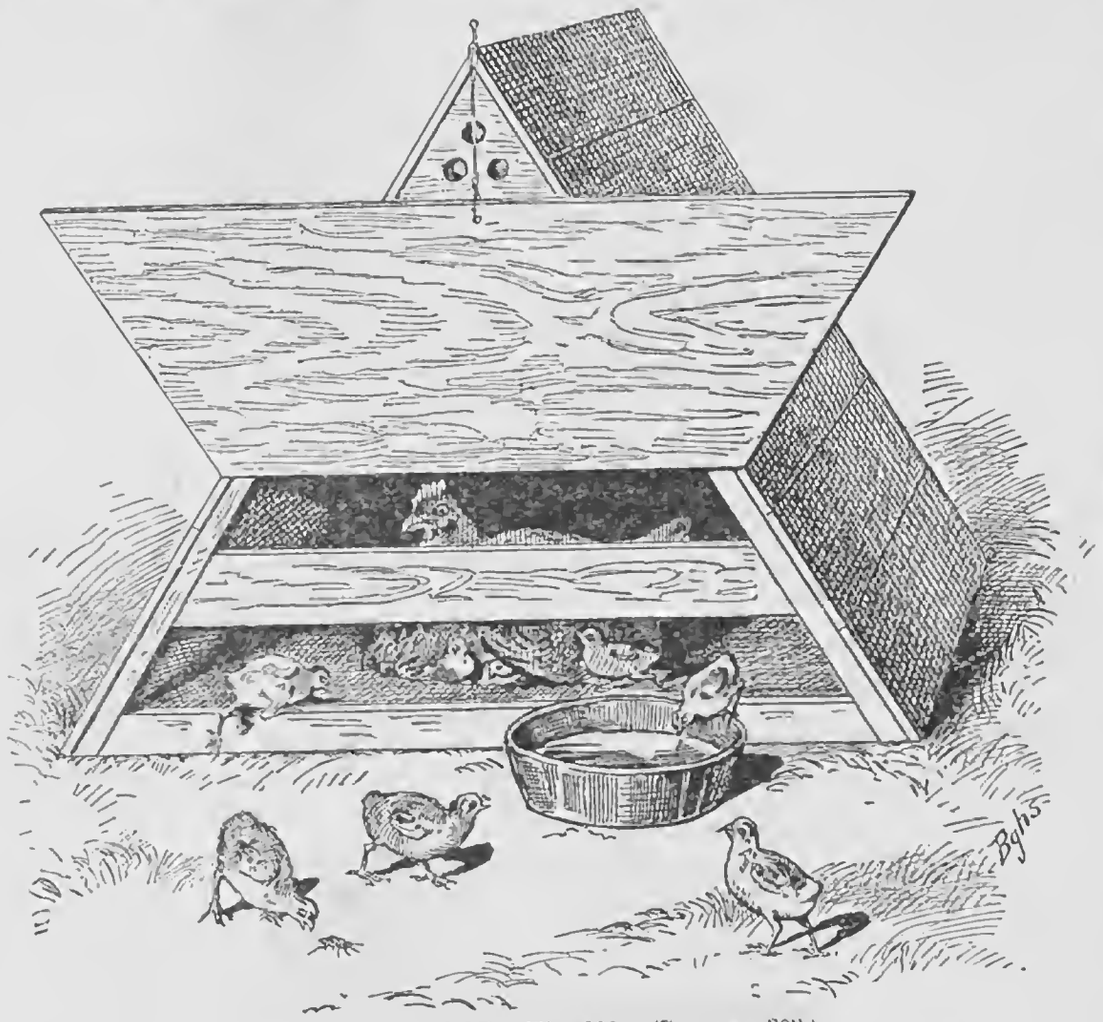
[Whe]re the hens of the desire to sit, shut [them] up in a small coop, giving plenty of [wa]ter and feeding sparingly, though by no means starving them. E. H. UPSON.

Noble Co., Indiana.

THE POULTRY FANCIER'S MEDICINE CHEST.

DR. HENRY STEWART.

As a rule, I believe in Mr. Macbeth's idea: "Throw physic to the dogs—I'll none of it," and prefer prevention to the best cure. But then, I also believe that the most important office of "physic," or medicine, is to prevent diseases, and to know how to do this is the great skill and art of the physician. When a young man and a student, I became acquainted with a most wise and effective system in vogue among French physicians, which I mention here incidentally, because it might be introduced among us with very great advantage; this is, to contract with the family physician to pay him for preserving the family in health for a regular stipulated monthly fee, the payment being suspended whenever any of the family is sick, and as long as the sickness continues. The advantage is obvious. This would be an excellent thing for all owners of live stock to do, to engage veterinary surgeons to regularly visit their stables and keep the animals in health and restore them when sick as quickly as possible. And this system should be practiced in the poultry yard.



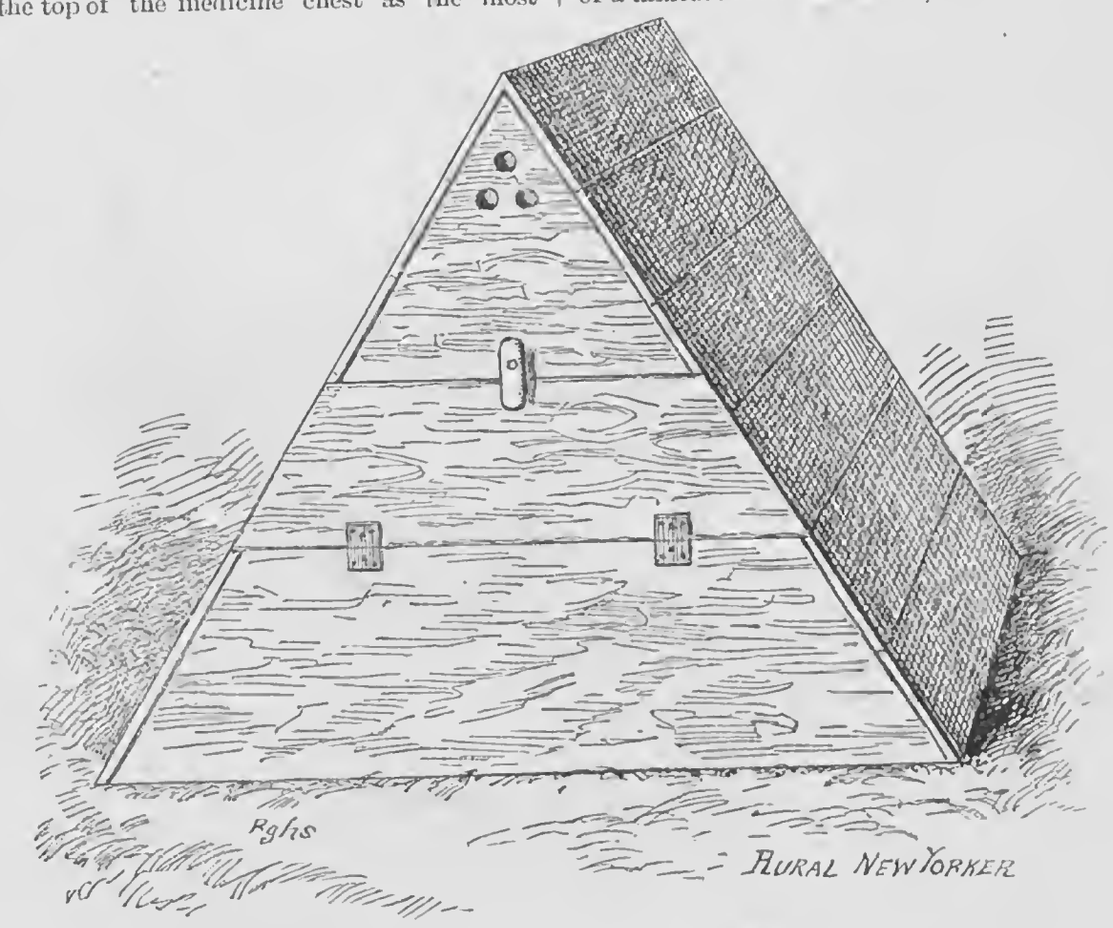
A HANDY COOP. Fig. 200. (See page 303.)

The greatest cause of sickness and death among poultry is overfeeding. The common practice is to give the fowls all they will eat, as if fowls were wiser than hogs and knew when they had enough. Fowls and hogs, and even cows and horses, when they can get at a meal bin, never know how to stop until they are gorged full to the top of the throat, and then trouble begins. First, there is indigestion, then fever, then cholera or fever and gangrene of the intestines, or inflammation of the mucous membrane, which is catarrh or roup; or anthrax, which is black comb, and other fatal disorganizations of the muscular tissues and the liver. In these cases medicine is of little avail, and the only remedy is a sharp little ax, which might justly be fitted in the top of the medicine chest as the most effective remedy for most of the diseases of poultry.

The next great fault is the want of perfect cleanliness, which includes pure water, pure air, a clean floor, a clean run for the chicks, the utter absence of vermin, and a wholesome variety of food. No medicine whatever can cure the evil results of this want, except the ax aforesaid, and the deep burial of the virulent contagion produced by this second grand mistake. During the last three years I have not had one sick fowl, nor have I lost one chick which has been safely hatched, and this comfortable result has been due to the exercise of these precautions and the costly experience of previous losses which I could have avoided had I learned how. But it takes years and years to learn how to do this, and in the mean time some help can be gained through simple medicines.

The second article of special need for the medicine chest is a barrel of lime kept in an open, dry shed where it will become air-slaked into a fine, dry, pungent powder. This is to be liberally dusted over the floor, the perches, the nests, and the walls of the house two or three times a week after it has been cleaned thoroughly of all the droppings; and just at sun-down when the fowls are about to go to roost. The fine dust is breathed and makes the fowls sneeze and wheeze, and clears out their throats and nostrils, destroys gape worms, and cures any possible irritation of the nasal and bronchial membranes. I consider this "a great popular remedy" worth a million boxes of roup pills, catarrh and cholera specifics, "eggine," egg powders, and all the other quack nostrums offered for 50 cents a pound, and very much cheaper. It also keeps the scab mite, which produces the unsightly scaly leg, at a distance, and chokes off lice, fleas and red mites.

Something, however, may usefully be kept in readiness for accidents, and I find a bottle of a mixture of raw linseed oil, with one-fourth part of kerosene oil and a fortieth part of creosote, is handy as a complete remedy for scaly leg; and also for all the small vermin, when it is liberally applied to the perches, especially in every crevice where they may hide. A solution of one ounce of chlorate of potash in a pint of water, applied with a clean feather or one of the little squirt fillers used for stylographic pens, to the nostrils and throat, a little also being sent down the throat to the stomach, is a sure cure for croup, diphtheria, sore throat, pip or scaly tongue, a sore purulent discharge from the eyes. I have cured every case of cholera, or the green and yellow discharges, which happened for two or three years before I learned how to prevent them, with one teaspoonful of a solution of one ounce of hyposulphite of soda in a pint of water, and this is the last item of my list of medicines for poultry.



A HANDY COOP. Fig. 201. (See page 303.)

As a warning against spending money uselessly, I might refer to the various preparations and mixtures sold as poultry powders and egg-producing food. One of the most highly recommended of these was once analyzed and found to consist of wholly useless and very cheap materials, with a little Cayenne pepper to give it flavor. All these are useless and I believe do harm, and just as the quack medicines for infants and older people are to be avoided, these should be, with the costly crushed shells which are at the best indigestible and which are not nearly so good as fresh bones broken up with a hammer on a block in the yard, and which furnish all the lime required, in a digestible form.

NOTES ON THE COMMON DISEASES OF POULTRY.

F. L. KILBORNE, B. V. S.

FOWL OR CHICKEN CHOLERA.

The most important disease, causing the greatest loss of animals, is *fowl cholera*. This is a highly contagious, bacterian disease, very fatal to all fowls and birds, and due to the presence in the system of a living microscopic organism or bacillus. The disease cannot be produced, as is very commonly supposed and so stated by some writers, by filth, want of care, or any other unhealthy condition, except this germ of the disease is present. Then it is that the above unhealthy conditions greatly favor its spreading and increase its mortality. The germs are generally taken in with the food or drinking water, and then find their way to all parts of the system, while the disease is readily spread by contact with diseased animals or any of their products.

The symptoms, like those of most other diseases of poultry, are not altogether satisfactory. There is usually dullness, ruffled feathers, drooping of head and wings, unsteady gait, a greenish-yellow diarrhœa, sometimes frothy, and later frequently bloody. The comb and wattles become very dark-colored or black. The fowls seek the sunshine or crowd listlessly together to keep warm. With a clinical thermometer an elevation of two or four degrees in temperature (108°—110° F.) is usually found. Any or nearly all of the above symptoms are absent in some cases. But whenever the fowls are dying rapidly without apparent cause and fowl cholera is in the neighhood, it may be suspected, and precautions be taken accordingly.

Treatment is rarely desirable on account of the very contagious nature of the disease, although a considerable number may recover, especially after the disease has prevailed for some time.

Its "stamping out" and prevention are very simple and comparatively easy if thorough measures are at once adopted and carried out. First kill or isolate all diseased fowls, and burn or bury very deeply—at least three feet—all dead animals and their products. Then thoroughly disinfect the whole interior of the hen house and the runs by washing or freely sprinkling with a solution of sulphuric acid—acid one pint, water eight gallons. Where the fowls are allowed to run at large, it will be necessary to confine them to smaller quarters, so that the whole may be disinfected. Watch the healthy flock carefully, and remove any showing symptoms of disease. Use the disinfectant generally three or four times a week and daily on the droppings as long as cases of the disease continue to occur. A few drops of the acid in the drinking water will also act as a preventive. Where the fowls were running at large when the outbreak occurred, it will be safest to keep them confined for three or four months after the disease has all disappeared, so that the germs that may be lying hidden about the place will have time to die out. Fowl cholera, like most other contagious diseases, will die out of itself when there are no suitable animals for it to prey upon.

GAPES.

Another contagious affection of fowls is known as gapes, or as it is sometimes called "pips." It is a disease especially of young birds with which it is very fatal, and is due to the presence in the trachea—windpipe—and bronchi, of the Syngamus trachealis, a small red worm, three to five-eighths of an inch in length and apparently forked near one end. The old birds frequently harbor the worms, but with them they rarely prove fatal. The symptoms are very characteristic. The young bird will occasionally open wide its mouth and gape or gasp for breath. Breathing gradually becomes more difficult, the animals

gape more frequently and finally droop and die.

Various methods of treatment are in vogue, all of which are more or less successful, but none entirely so. Turpentine or strong camphor placed upon the outside of the throat, to be inhaled, is relied upon by many, and is very successful. A few drops of either may also be placed in the food. Another method is to place the chicks in a covered box, in the bottom of which is a layer of air-slaked quick-lime. The box is shaken to "raise a dust," which the chicks are forced to inhale for one or two minutes—not longer. Either method should be repeated on any of the birds showing the first indication of gaping. The worms may be partially or entirely removed with a small twisted loop of horse hair or with a hen's feather stripped of its plumes except near the tip. The mouth being well opened by an assistant, the loop or feather is to be carefully introduced into the opening seen in the middle of the back part of the tongue, and pushed gently down the windpipe to its lower end, a distance of two or three inches; then twist it around several times as it is gradually withdrawn. If successful, one or more of the red worms will be removed. The operation may be repeated two or three times, and again at intervals whenever necessary. The chicks must be handled very carefully or the treatment will be worse than the disease. If the loop or feather is dipped in camphor, turpentine, salt or tobacco solution the worms not removed may be killed and later coughed up by the chicks. [Turpentine has succeeded with us.—EDS.]

To prevent the spread of the disease, burn all of the worms found and also the dead animals, or at least their respiratory orgaus. Move the young birds to new quarters and saturate the ground of the old quarters with a strong solution of salt, coal oil, kerosene or turpentine. In generally infected localities it may be necessary to keep the young fowls indoors or on a concrete floor or platform outside. This is an effectual preventive on the worst infected places, if care is taken that no infected food or water is supplied. Pure rain or spring water should be used, otherwise the water should be boiled. Small, infected yards may be made safe by soaking the ground with one of the above solutions.

ROUP OR CROUP.

The usual causes of roup are cold, dampness, wet, and exposure. Although apparently contagious, the outbreak and spreading of the disease are probably due primarily to the surroundings instead of being transmitted from fowl to fowl as in the cholera.

The symptoms are, loss of appetite, dullness, ruffled feathers; the breathing becomes rapid accompanied by a wheezing or crowing sound. There is a discharge from the nose and mouth, at first thin and later thick and fetid. The head and eyes frequently become swollen. Yellowish-white fibers and raw sores appear upon the tongue or in the mouth and throat. The nostrils are frequently swollen shut so that the animal is obliged to breathe through the mouth. Red swellings and false membranes also frequently appear on the face, about the eyes and on the combs and wattles. Diarrhœa usually sets in later.

In the treatment of this disease a change of food is usually desirable. Feed green or cooked food—vegetables and puddings of rice, oat or corn meal. The false membranes may be removed with the forceps and the swellings and raw sores bathed with a solution of nitrate of silver—15 to 20 grains in a wine glass of water. Dissolve a dram of chlorate of potash in each pint of the drinking water. If the head is much swollen, bathing two or three times daily with water acidulated with vinegar or boracic acid will afford relief. If there is diarrhœa give a grain of sulphate of copper, a teaspoonful of quinia wine or brandy twice or three times daily. A little Cayenne pepper may be advantageously mixed with the food. Provide the sick fowls with a comfortable, dry, warm, sunny place.

LOUSINESS.

Lousiness is very largely due to want of care, and filthy surroundings. In order to keep clear of the lice, the hennery and yards should be freely white-washed at least once in three or four months. At all seasons of the year, but especially in Winter, the fowls should have free access to a large, shallow bin or box in a light, dry place, preferably where it will be in the sunshine, in which should be three to six inches of a mixture of dry road-dust and wood ashes or air-slaked lime. Whenever it becomes damp it should be replaced, but this will rarely be necessary if placed a few inches above the ground and the hennery is covered with a tight roof. Further treatment should rarely be necessary; but in extreme cases the fowls may be sprinkled with wood-ashes, snuff, flowers of sulphur, or Persian insect powder, or rubbed with sulphur ointment—flowers of sulphur one part, lard or oil four parts—or whale oil. Water saturated with coal oil or kerosene is also an effective wash for lice on any of the domestic animals. For very young fowls, any pure oil or lard to which may be added a little sulphur, may be applied on any warm day. Sitting hens should always be examined and treated when necessary a few days before hatching. The nests should be sprinkled with ashes, sulphur, fine tobacco or snuff.

LEG WEAKNESS: LOSS OF FEATHERS.

Both conditions are not uncommon and are due to want of proper care, insufficient, inferior food, unhealthy surroundings and old age, or more rarely to too high feeding in close quarters. Being due almost or entirely to faults in management, the proper course of treatment suggests itself. Correct the faulty conditions, and thus remove the cause. Feed the animals moderately good, wholesome food, with an occasional change. See that they have light, dry, airy quarters, such as you would provide for the horses or cattle. Usually no medicinal treatment is needed.

DIARRHŒA AND COSTIVENESS

are symptoms of disease rather than diseases of themselves. They also frequently occur from improper diet, cold, wet, or otherwise unhealthy conditions. Their treatment for the most part consists in seeking for and removing the causes. In most cases this is all that will be necessary. In severe cases of diarrhœa, wet the food with lime water, and give a teaspoonful of quinia wine or brandy in the morning to each fowl until relieved. If this does not succeed, take one dram each of prepared chalk and powdered rhubarb, and one-fourth dram Cayenne pepper; mix with the food for twelve or fifteen fowls. It must be remembered the fæces of fowls are normally very moist, and that it takes but a very slight change to cause apparently a severe diarrhœa. A looseness for a few days in a fowl otherwise healthy, does not call for medicinal treatment. It is only where it is very fluid and continues for some time that such interference is demanded except in particular diseases, and even then it is best to check the diarrhœa gradually by improved diet and care when possible. Costiveness may be treated by mixing with the food a little castor or linseed oil, and feeding green food or vegetables.

ANTHRAX, BIRD-POX, TUBERCULOSIS.

Are all contagious diseases due to specific disease germs. Fortunately they are not common in this country, although occasional outbreaks occur. Treatment is never desirable. The diseased animals should be destroyed and the disease "stamped out" by thorough disinfection.

INJURIES.

Fowls frequently sustain severe injuries, but their wounds heal very readily and rapidly with simple treatment if the animal can be kept quiet in a comfortable place.

In general, with proper management, except where contagious diseases are introduced among the fowls of the farm, little or no medicinal treatment should be required. What then constitutes proper management? In the first place we may mention cleanliness. Wherever you find cleanliness you will usually find care. Filth is an indication of the want of care, and always breeds disease. By "clean" we not only mean free from dirt in the ordinary sense, but also free from foul odors; in other words, wholesome. This condition is easiest secured about the hennery and yards by the free use of the white-wash. Next, the fowls should have warm, light, dry, airy houses, preferably with a southern exposure. Too many farmers appear to think that any place from a close, damp, foul cellar to a 4x6 hennery, so-called, or the shade trees about the buildings, is quite good enough for the poultry. In fact, they seem to think the poultry not worth their attention. Certainly in too many cases they receive none.

The feed should be wholesome, regular, and frequently varied to give the best results. The drinking water should be pure and fresh daily.

When any disease appears among the poultry it should receive prompt attention. Unfortunately the symptoms of diseases in poultry are so general and nearly alike in many cases that it requires considerable experience to readily distinguish the particular disease at the outset. But it is always safe to immediately remove any sick animals from the flock and confine and watch them closely. When several animals die in succession, something is wrong and the farmer should carefully look after the feed and management.

If properly managed and cared for, the poultry of the farm will bring better returns for the capital and labor invested than any of the other farm stock.

Bureau of Animal Industry, U. S. Dep't of Agriculture, Washington, D. C.

(*Continued on page 302.*)

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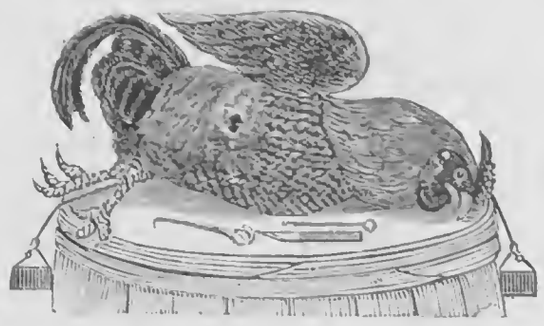

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(*Continued from page* 301.)

POULTRY ON THE FARM.

FARMERS should purchase fowls rather than eggs. Let every farmer who wishes to improve the quality of his poultry visit the nearest Plymouth Rock or Wyandotte breeder (I prefer the Rocks by all odds to the 'Dottes), and then select one, two or three cockerels, as his needs may require. One vigorous, hardy cockerel, not cock, is sufficient for 20 females, when allowed full liberty, which most farmers' fowls have. Let him take them home and at once make mince-meat of his old stock of males, or, better still, let him kill the old males before purchasing his fresh stock.

Such birds can always be bought for about $2.50 each. The second season purchase one or two more cockerels and kill off all the old stock of hens. In-and-in breeding, when kept track of, is of advantage. The great trouble with most farmers when they inbreed is that all the earliest, most vigorous and finest specimens are killed for the market, while the farmer from year to year reserves for his breeding stock of another season the scrub and stunted August and September-hatched chicks that the itinerant butcher won't buy at any price. Every man who ever made a success of breeding fancy poultry has practiced and does practice in-and-in breeding to a greater or less extent: but all who are successful keep track of their lines of blood.

Some farmers will say, "We have no time for such nonsense." All right; but let each keep some little idea in his head as to how his male birds are bred, and that will be enough to answer the purpose. The best specimens, however, should be kept for home use, and the poorer sent to market. The breeder of Plymouth Rocks must have his eight-months pullets average 6½ pounds and his cockerels eight pounds. What farmer's flock, to your knowledge, will average the same weight at the same age?

I do not believe that a rolling or a level country will in any way influence the general development of poultry. But high, well-drained land is always preferable to a low, swampy situation. I would advise farmers to purchase from breeders whose yards are located on a well-drained soil, with a tendency to gravel—such birds having been free from dampness and moisture all their lives, will be free from roupy affections. But I do not believe that poultry are improved in flavor of flesh or in general table properties as are sheep and cattle by being in a flat or hilly country. Given a good, clean, clear gravel soil, thoroughly drained and free from fogs and atmospheric dampness, poultry will do as well on a plain but ten feet above tide-water as upon a tableland 1,000 feet above. In sending away eggs, I prefer baskets for small orders, boxes for large. My method for both styles of packing is to place a layer, about two inches deep, of finely-cut hay or straw (as a sort of cushion) in the bottom of the package; then three or four thicknesses of newspaper; then a layer of bran; then a layer of eggs stood on their small ends in the bran; another layer of bran carefully pressed all about the eggs. (In cold weather each egg should be wrapped in a separate piece of paper and the basket should always be lined with paper to keep out the cold. This is not absolutely necessary.) Then I put on three or four more sheets of newspaper to prevent the eggs in the upper layer from working down to the lower through the bran; then a layer of bran, eggs on the small ends again, etc., finish-

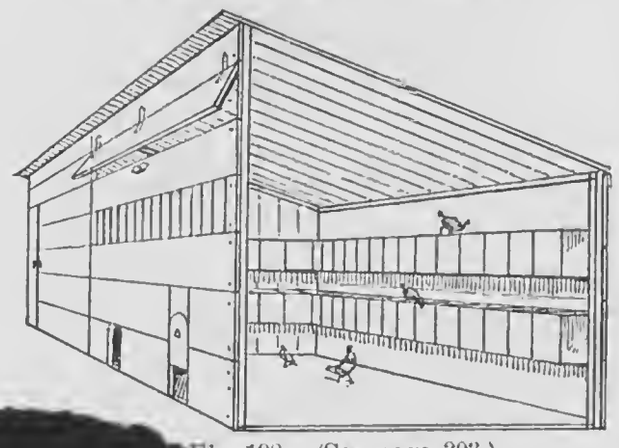


Fig. 198. (See page 303.)

with a cushion of cut hay. The always be screwed on to the boxes. round, hard-shelled eggs, of medium ld be selected. Long, narrow, very or very small eggs had better be eaten. gs should not be kept over ten days before etting, and never be set after 15 days.

Queens Co., L. I. P. H. SCUDDER.

HEREDITARY TRAITS IN POULTRY.

THE question is often asked, "Have the environment and habits of parents any effect upon the offspring?" As a matter of course, this question carries with it the presumption that only such characteristics as the offspring has at its birth are meant, and not the habits which it acquires from its parents during infancy.

This is not merely a topic for idle discussion, but it has an important and practical bearing. If it be true that natural characteristics are transmitted from parents to offspring, we cannot examine too carefully into the pedigree of the animals we purchase or raise for breeding. For example, if this be true, the foal of a mare living in a hilly section, would have those muscles required for ascending and descending hills more fully developed than one whose parents lived in a level country, and would consequently be more valuable to a dweller in such a country. Or a calf whose parents were rustlers, compelled to seek their own living on the plains or along the hedges, would be better for a dweller on a poor farm than the dainty offspring of a St. Lambert.

With poultry this subject is of equal, if not greater importance than with other animals. If eggs from hens accustomed to a warm climate do not produce as hardy chicks as eggs from hens accustomed to the cold and storms of the North, it is important that farmers and fanciers should know it. Birds whose parents have never seen mankind with a gun or other weapon, have no more fear of him than of any other large animal; while our local birds, although they never saw a man or the effects of a gun, will not permit us to come within even shooting distance. This must be either a hereditary trait or communicated from parent to offspring. The former is the more probable. Last Spring I purchased a setting of Wyandotte eggs, set them under an ordinary hen, and in due time they were hatched and followed their step-mother in a very natural way. At the same time I set a number of ordinary hens on their own eggs, which also hatched in due season. I soon noticed that the Wyandotte would not associate with the ordinary chickens, and as soon as their foster-mother left them, they went off by themselves to roost. It was really comical to see them avoid their plebian cousins; they would walk away in the most approved aristocratic fashion when the commonplace chickens appeared.

These peculiar traits must have been inherited; they could not have been the result of education; neither could they have resulted from the difference in the natural characteristics of the breeds or from any distinction in their treatment. A brood of chickens which have "come by chance," will sometimes, by reason of the surroundings, habits of roosting, etc., remain separate from the rest of the flock, but in the case under consideration the surroundings were the same, except as the high-toned Wyandottes made the distinction.

J. W. G.

BANTAMS.

AT Fig. 204, 5, 6, and 207, illustrations are given of handsome specimens of the newer strains of Bantams. It is true that farmers seldom indulge in feathered pets, and yet why should not the farmer enjoy the beautiful and rare in nature as well as the merchant or professional man? Would not these little beauties add some life, some variety, and enough beauty to the farmer's home surroundings to pay for the little room and feed necessary to keep them? If you want to please the boys, and make them happy, give them something to care for, and thus teach them valuable points about poultry culture, and those habits of care and thoughtfulness which ownership always brings.

The Silver Sebrights (see Fig. 204) are an

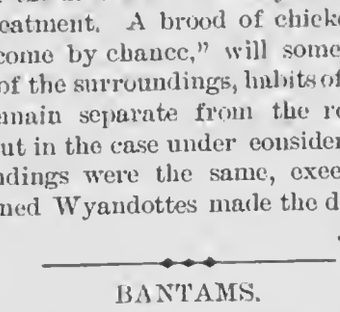


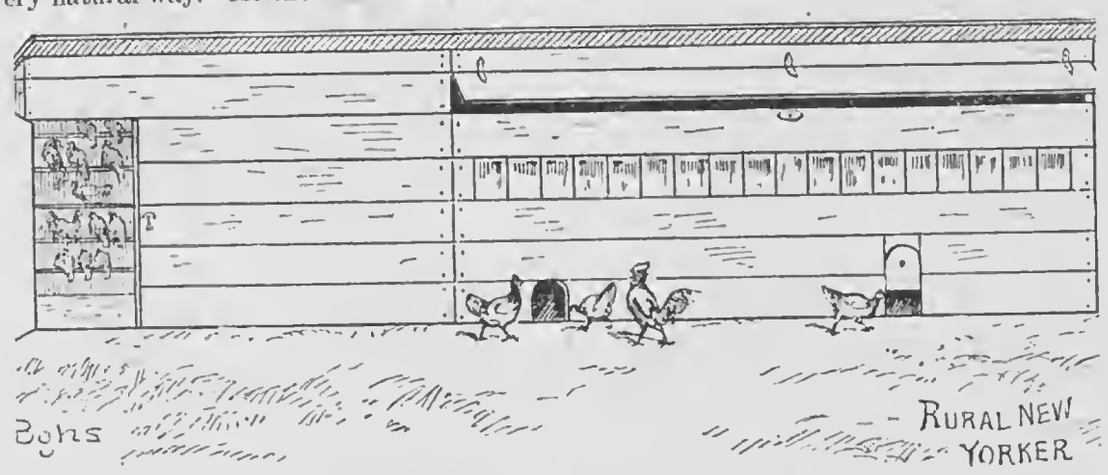
Fig. 204.

English importation and the result of nearly a lifetime of experiment in crossing by Sir John Sebright, and are the perfection of beauty in the fine, clear lacing of black around the edge of their white feathers, so even and true as to astonish us when we remember that they are entirely an artificial fowl. Their combs are rose, legs dark blue, and the cocks are the only males in the chicken kingdom having no sickles, but tails exactly like the hen's. Pekin Bantams (see Fig. 205) are of "Heathen Chinee" origin, and were first brought to England by an English officer, who took them from yards in the Emperor's palace grounds at Pekin, China, when that city was sacked by the French, in 1861. The pair we illustrate were imported from Shanghai, China. Except being relatively more compact, shorter in body and legs, they resemble Buff Cochins. The cocks, however, are richer in color, many being of a lustrous mahogany hue. Their combs are single and their legs and feet completely hidden with feathers.

Fig. 205.

If you are at all familiar with the oddities of things Japanese, you will not be surprised to learn that the grotesque little white fellows with black tails are Japs. "Mikado" and "Yum-yum" are the pair we illustrate at Fig. 206; both are imported. The stock all came from Japan a few years ago, and is the only contribution from

Fig. 206.



CHEAP HEN HOUSE. Fig. 197. (See page 303.)

that country to our list of fowls. Their wings often sweep the ground, so short are their legs. The tails are black; the sickle feathers of the cock are laced with edging of white; otherwise the feathers are pure white, except a few of the flights in wings.

The White Polish (see Fig. 207) is truly

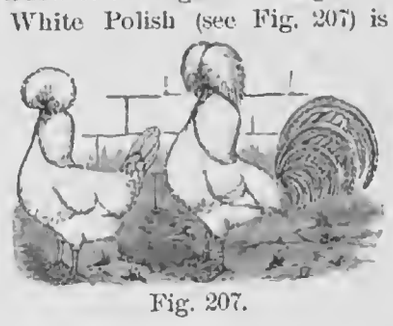


Fig. 207.

and entirely an American breed, and the result of perseverance in special breeding. They are miniature copies of the large, white Polish fowls, and have only of late years been introduced to the public, but they are still so rare as to command the highest prices. Bantams are easily raised, stand close confinement, and are generous in the supply of eggs, that are nearly all yelk, and especially rich and valuable for invalids.

Bantams are naturally tame, making the most delightful pets, and are always loved by their owners and admired and coveted by visitors. As we should not devote all our money and time to the severely practical, we think these beautiful birds have their place and their use.

THE USE OF AN ARTIFCIAL BROODER.

A YOUNG chicken needs only warmth for the first 24 hours after its birth from the egg. More chickens are lost by being crushed or chilled in the nest than by any other fatality. Every chick of a brood may be saved by the use of a very simple brooder in which the newly hatched nestlings or even the chipped eggs may be placed as they are taken from the nest, and kept at a temperature of 90 degrees until the whole brood are out, when they can be given to the hen in a coop. Incubators are not for the poultry rank and file. They may do for the professionals who have nothing else to do but watch the thermometer and sit up nights to keep the lamp trimmed and save the eggs from baking or chilling. But every one who has a dozen fowls should have a brooder, if only to avoid the misery of seeing poor weaklings crushed flat under the big foot of the fussy but well intentioned hen. And this is the way it is made.

A box (see Fig. 196) 16 inches square each way, is lined with flannel or carpet or hair boiler felt; it is covered with several thicknesses of the same material outside, and then

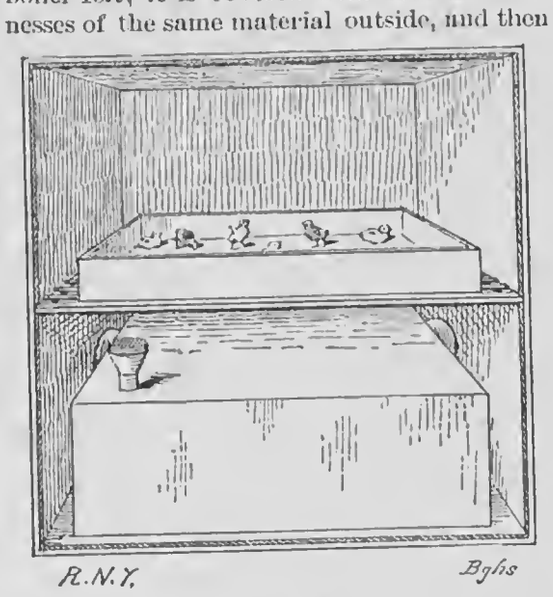


Fig. 196.

with an outer case like a second box. This is to retain the heat. A thick door is made for it, and a shelf is put across it half way. It then appears as in the drawing, the door not being shown. The door has a window in the upper part. The shelf is made of laths to let the heat up, and a nest-box, covered, for cleanliness, with paper, is placed on the shelf. Below is a tin box with a screw capsule, which is filled with boiling water. It is wrapped in a piece of blanket and is put in the lower part, and the heat is regulated by the use of more blankets over the heater to retain the heat, or by ventilating holes, closed with corks to keep the temperature at 90° or at 80° or 70° as the chicks get strong. I have kept a brood in such a warm closet for several days waiting for another one to come out, to double up the two in one coop, with one hen; and the chicks could just as well have been kept until they were able to be put into a coop by themselves. The chicks begin to pick crumbs of cracked wheat before they are six hours old, but they need to be taught to drink by taking one in the hand and dipping the bill in a little saucer of water, after which it will drink and the others will imitate it. There is nothing else that I know of that will so much please the young folks, even the baby, as one of these brooders, which may be kept on a stand in the sitting room, with its little family of chicks in it which amuse us by their cunning ways and funny tricks; nor is there anything that will tend more to make careful and successful young poultry fanciers. H. S.

CLEANING THE POULTRY HOUSE.

A GOOD way to manage daily cleaning of the poultry house, especially during the snowy weather, is to have the perches ranged along one side of the building, the floor under them strewn with straw enough to keep it clean, and that wall of the poultry house which is in the rear of the perches, fitted with a hinged shutter, opening outwards, the entire length of the perches. When this shutter is raised and fastened with hooks to staples above, a garden rake passed through the opening and manipulated with a little care usually brings the whole bedding, droppings and all, at one pull. An armful of clean straw is thrust in and spread under. With an old broom I sweep thoroughly along the edges of the opening, drop the shutter to, hook it on each end, and

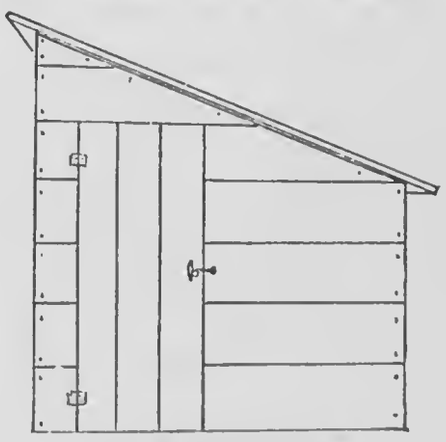


Fig. 199. (See page 303.)

my hen-house is cleaned, freshly strawed and ventilated in less than five minutes, and hardly a chicken is sufficiently disturbed to leave the roost.

My poultry house was originally made with boards nailed on up and down, but it took the carpenter only an hour and a half to tear the boards off that side, nail them crosswise, hinge and cleat the shutter and put on the hooks and staple, as shown at Fig. 194, p. 298, the hooks were made of old pail bails, and the staples were left over from the wire fence recently put up. The hinges were not mates, being old ones, two in number. The perches, of three stout poles, were arranged as shown at Fig. 195, p. 298. The place is always clean. In warm weather

he shutter is left open during the middle of the day. MRS. E. S. BINCOLN.

La Crosse Co., Wis.

CHEAP HEN-HOUSE.

THE hen-house shown at Fig. 197, p. 302, is cheap and convenient. The design us by Mr. J. S. Bennett. Where one can do the carpenter work himself, the house can be put up for $12. The building is 26 feet long and six wide, six feet five inches high in front, and four feet high at back. It is framed, 4x2 inch scantling being used. There are two rooms; the first, shown at Fig. 198, being 16 feet long and used for a place for laying, with nests arranged as shown in the illustration. The door opens at the end, as shown at Fig. 199. A ventilator, 1x16 feet, is hinged at the top. A row of glass panes, 12x10 inches, is fastened into grooved boards to admit sunlight. Two small outlets permit the hens to run out into the yard or to enter the laying room. The smaller room contains five roosts. There is a partition between the two. This house is made with ordinary boards with a board roof. It would pay better to make the walls double, with tarred paper lining, and to shingle the roof. Whatever adds to the comfort of poultry adds to the profit. It is not necessary to build a brown-stone front house for the hens, but it is necessary to keep them warm.

PERFECTION.

AT Fig. 190 (first page) is shown an admirable picture of the fine Langshan cockerel "Perfection." This bird was bred and owned by Robert Seaman, Jericho, L. I. At the late poultry show held in this city Perfection won first prize in "pair of chicks," also first in "breeding pen" and four special prizes. He is certainly a fine specimen of this promising breed. The RURAL has presented illustrations of the various breeds so frequently that we refrain from repeating them in this issue. In fact, the work of picturing and describing the various breeds has been so well done by breeders, that nearly all are familiar with them.

NEST BOX.

THE nest-box shown at 191 and 192, p. 299, answers admirably for either laying or hatching hens. It can be made of any size, of light, planed half-inch stuff. When in use for a hatching nest, as in Fig. 191, the door may be put up and fastened by a nail which is dropped through the edge of the roof, which extends about an inch over the front, as shown in the illustration. When it is to be used for laying hens, the door is dropped. Fig. 193 shows the back. The hole is bored with a ¾-inch augur and through it a nail is driven into the wall; so that the box hangs securely at a short distance from the floor. The spaces left in black are designed for ventilation. This nest is 14 inches square, the back 18 inches high, and the front platform eight inches wide

A HANDY COOP.

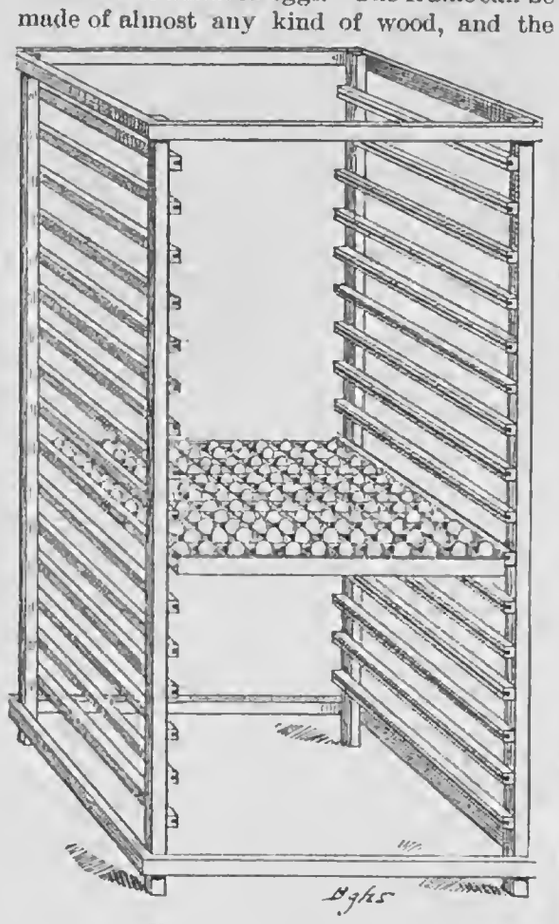
THE coop shown at Figs. 200 and 201, p. 300, requires but little explanation. It is 30 inches square at the base and 24 inches high. The frame is made of inch stuff about three inches wide. The lower part of front can be raised and fastened to a nail at the peak, as shown at Fig. 200. At Fig. 201 is shown the rear of the same coop. In this the door comes at the middle; it is six inches wide and held at the top by a wooden button. The coop is light and durable, has no bottom, and is easily constructed.

THE RURAL IN A NEW "ROLE."

WHY should a man pay money for an implement he can make himself? That was the thought which inspired the arrangement shown at Fig. 193, p. 299, for which we are indebted to Mr. T. H. Youngman, of Dakota. The paper is rolled carefully so that an egg will hardly go into the end. Hold the egg in place with the left hand, the little finger on the egg, the other three fingers on the paper. Hold the paper to the eye, and the testing is easy. Where eggs cost $5 per dozen with $2 added for express, it pays to look them over during incubation, and we think the above arrangement will answer. It will pay any man who makes anything of a business of raising chickens to examine the hatching eggs during every day of incubation. A few minutes spent each day at this work will quickly enable him to determine which egg to remove from the nest. Such a course will enable him to form a better set of rules than he can get from any book. Incubation is a delicate and rapid work. What more interesting study can there be than the formation of this little life.

A HANDY EGG-RACK.

THE sketch of the egg-rack shown at Fig. 202, was sent us by M. D. Earle, of this city. A convenient size is two feet in width and depth, and four in hight. Such a rack will hold several hundred eggs. The frame can be made of almost any kind of wood, and the



EGG RACK. Fig. 202.

egg tray may be either of strips of wood far enough apart to allow a resting-place for the eggs, or of paper divisions like those in ordinary egg cases. Heavy or "hardware" wrapping paper tacked on all around the outside, will exclude the air, and make it like a closet, a piece in front, one side of which should be left loose, will answer the purpose of a door. The eggs should be placed on end in the trays, and there should be an extra empty tray on which the eggs should be turned over now and then.

Miscellaneous Advertising.

That Tired Feeling

The warm weather has a debilitating effect, especially upon those who are within doors most of the time. The peculiar, yet common, complaint known as "that tired feeling," is the result. This feeling can be entirely overcome by taking Hood's Sarsaparilla, which gives new life and strength to all the functions of the body.

"I could not sleep; had no appetite. I took Hood's Sarsaparilla and soon began to sleep soundly; could get up without that tired and languid feeling; and my appetite improved." R. A. SANFORD, Kent, Ohio.

Hood's Sarsaparilla

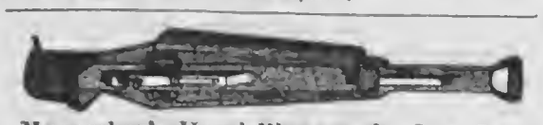
Sold by all druggists. $1; six for $5. Made only by C. I. HOOD & CO., Lowell, Mass.

100 Doses One Dollar

THOUSANDS of business men are surprised because they suddenly break down; a catastrophe that would not happen to them were the blood kept pure and the kidneys in working order by Warner's safe cure.

Improved HYDRAULIC RAMS. Send for Circular and Price List. Address ALLEN GAWTHROP, Jr., WILMINGTON, DEL. Awarded Medal and Diploma at the Centennial Exhibition, Philadelphia.

TO FARMERS. This simple invention is used in milking cows, particularly where there is any soreness. Made of solid silver, and sent by mail to any address on receipt of the price, 50 cts. Address The Milking Tube Co., 102 Friendship Street, Providence, R. I.



Macomber's Hand Planter, *for Corn, Beans, and Beet Seed.* The BEST in the world. Money refunded if it does not prove satisfactory, after a fair trial. Agents wanted. Send for circular and terms. **S. M. Macomber & Co.,** M'f'g's, Grand Isle Vt. For Rhode Island address L. G. SHERMAN & CO., PROVIDENCE.

Batteries Attached to His Legs.

COLUMBUS, O., Nov. 4th, 1885.—Six years ago I was confined to the house. Doctor visited me three times a day, and often at night. Whole system uprooted. Pain in back and kidneys. Slept every night with galvanic batteries attached to legs. Medicine had not the slightest effect. Spent thousands of dollars. Was in this terrible condition two years. Took fifty bottles of Warner's safe cure and Warner's safe pills, gained 44 pounds and felt like a new man.—W. H. RHOADES.

DR. HUMPHREYS' Book on all Diseases RICHLY BOUND IN CLOTH and GOLD MAILED FREE. Humphreys' Homeopathic Medicine Co., 109 FULTON ST., N. Y. HUMPHREYS' HOMEOPATHIC SPECIFICS Sold by Druggists, or sent postpaid on receipt of price.

Stock and Poultry.

EGGS for sitting from Prize winning Wyandottes. B. L. HURD, Scuylerville, N. Y.

Wyandotte Chromo Free—Circular of leading varieties, Fowls, Ducks, Turkeys. Address with stamp. C. C. PAINE, East Bethel, Vt.

SMITH & WALKER, Lee, Mass. Breeders of twelve varieties of high class standard Poultry. Eggs cheap. Send for circular, free.

WYANDOTTE. P. Rock and Brown Leghorn Eggs, 10 cts. apiece; Bronze Turkey Egg, 3 for $3. Money Order Office Belvidere, N. J. A. LEDIA, Delaware, N. J.

PREMIUM WHITE LEGHORNS, COLORED DORKINGS and WYANDOTTES. Fowls and Eggs for sale. *Circular free.* S. K. WILCOX, P. O. Box 500. Smyrna, N. Y.

EGGS. Finest strain in the U. S. of Brown Leghorns. Price $1.50 for 13. FLEMMING BROS, Pittsburgh, Pa.

SILVER GRAY DORKINGS. First on Fowls and Chicks, New York Show, Feb., 1886. A few good Birds for sale. Eggs from pen No. 1, $3 per setting; two settings, $5.00. No. 2, $1.50. **WYANDOTTES AND CAYUGA DUCKS.** No circulars. Address, with stamp, HENRY HALES, Ridgewood, N. J.

PLYMOUTH ROCKS. A large, hardy, prolific fowl, suited to the farmer and villager. Stock thoroughbred. Have won Two First Premiums this season. Eggs, $2 per 13, packed for shipping. A. C. KILMER, COBBLESKILL, N. Y.

P. Rocks, Wyandottes and R. C. White Leghorns. We won every first and special on P. Rocks at Dalton, Mass., as well as first at every county fair where exhibited, first class certificate of merit at New York Show. High honors on Wyandottes and R. C. White Leghorns where ever known. Eggs $2 for 13; $5 for 40. SHAYLOR BROS., GOLDEN HILL POULTRY YARDS, LEE, MASS.

Poultry Raising Pays. Send stamp for *Illustrated CATALOGUE* describing **INCUBATORS,** *Poultry Appliances, and How to Succeed in the Poultry Business.* **L. N. CLARK & SON,** 38 Dey Street, New York.

POULTRY PRIZES.

One hundred dollars in prizes for two-column articles on poultry, to be published in the MIRROR AND FARMER, of Manchester, N. H. For particulars send for sample of the paper, which will be sent free.

PEDIGREE PLYMOUTH ROCKS. Pens headed by HANK WHITE BOYS, and ONTARIO CHIEF, with high bred females.

HULL WYANDOTTES. Pens headed by COL. LEB, LEBANON LAD, and COL. PURE. Send for circulars. BRADLEY BROS., LEE, MASS.

WYOMANOCK POULTRY YARDS. BREEDER OF Pure Wyandottes, Hull Strain. Langshans, Croad's Strain. I have a choice lot of each for sale in pairs, trios or breeding pens. Prices low for quality. Will give satisfaction. I won second on Wyandottes, third on Langshans, at N. Y. State Fair, 1885. Eggs, 3.00 per 13; $5.00 per 26. Try me. GEO. DELAVAN, New Lebanon, N. Y.

WYANDOTTES. Won Special on Highest Score and Third Premium on pair of Chicks at the New York Fanciers' Show in 1884. Won First and Second on Fowls and First on Chicks at Middletown, N. Y., in 1884. Won First on Breeding-pen of Fowls and First on Breeding-pen of Chicks, and First on pair of Fowls a Newburgh, September, 1885. FOWLS AND CHICKS FOR SALE. EGGS, $3 per 13; $5 per 26. DR. E. W. DEYO, Box 103, MONTGOMERY, ORANGE CO., N. Y.

DARK BRAHMAS. Won first on Breeding Pen of Fowls, first on Breeding Pen of Chicks, first on Pair of Chicks and second on Pair Fowls, at NEWBURGH, September, 1885. Fowls or Eggs in Season. EGGS, $2.00 per 13; $3.50 per 26. **Dr. E. Ross Elliott,** P. O. Box 267, MONTGOMERY, ORANGE CO., N. Y.

HULL STRAIN OF WYANDOTTES, ORIGINATED AND BRED BY **GEO. F. HULL,** NEW LEBANON, COL. CO., N. Y. At the recent New York Show the 20 birds in my four pens scored as follows: 91½, 93¾, 94, 93¾, 93¾, 87½, 92½, 93½, 92¾, 92½, 90, 93½, 93½, 93½, 92¾, 87½, 91½, 92½, 91, 92. Total 1843¾. Eggs, one setting, $1.00; two settings, $1.00; three settings, $10. This variety exclusively since 1872.

EGGS for HATCHING 24 VARIETIES. 32 separate flocks of Land and Water Fowls. Mated to produce best results. Large and handsomely illustrated catalogue free. ☞Mention this paper. J. L. MOCK, SOUTH HIGH ST., COLUMBUS, O.

J. H. THOMPSON, Jr., PATTERSON, NEW YORK. (ON THE HARLEM R. R.) Breeder of thoroughbred fowls and Pointer Dogs. From prize winning registered stock. 3 pens of Plymouth Rocks, 2 for production of pullets and 1 for cockerels. Eggs, $1.50 per 13; or $3 per 39. Also from 2 pens of Wyandottes. Eggs, $2 per 13; or $5 per 39. My stock is from the best strains and mated for the best results. I guarantee a fair hatch and safe delivery. A share of your patronage solicited, knowing I can please you.

Philander Williams, TAUNTON MASS., ORIGINATOR and BREEDER of the World-renowned Autocrat Strain. **LIGHT BRAHMAS.** "Improved Drake's Strain" PLYMOUTH ROCKS. "Imperial Strain" WYANDOTTES. EGGS—per Setting, $5; Three Settings, $10. Send for circular.

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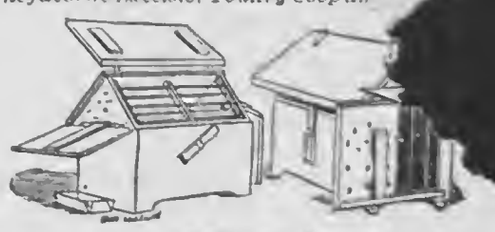

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THE
RURAL NEW-YORKER.
A National Journal for Country and Suburban Homes.

Conducted by
E. S. CARMAN, Editor.
J. S. WOODWARD, Associate.

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SATURDAY, MAY 8, 1886.

POULTRY SPECIAL.—20 pages.

WE count ordinarily on rye heads May 1st. This year the first rye heads appeared April 24.

MANY excellent articles from our best practical poultry writers are crowded out of this number. They will all appear later.

ALL poultry questions received to date, will be found answered under the Farmers' Club pages 308 and 309.

IF the number on your address label is 1893, your subscription expires with this number; if 1894, next week; 1895, in two weeks, etc.

MUCH depends upon which breed the male comes from. A Brahma cock mated with a Leghorn hen, produces a different fowl from that of a Leghorn cock and Brahma hen, though the blood in both crosses is the same.

NEVER cross two non-sitters. The progeny will sit. Remember this rule, which is that, no matter what the breeds used for the purpose may be, a hen produced by crossing any two breeds will always prove a sitter.

A HOUSE 10x10 will accommodate a cock and ten hens, or 15 hens alone, if the eggs are not intended for hatching purposes. It is safe to estimate that one dollar per head will be the cost for material of the poultry house. Hence, a house for 10 hens may be built for $10.

AFTER a pretty full consideration of the poultry contents of this paper, modified by the writer's experience of at least 15 years we desire to offer this bit of caution to those who propose to engage in poultry raising: commence in a small, economical way and extend the business only as a knowledge of the business increases and justifies additional expenditures.

WE believe that instead of using a feather or horse-hair loop to remove the worms from the trachea of a chick with the gapes, it is safer and more efficacious to wet the end of the feather with kerosene and not attempt to *remove* the worms at all. The kerosene will kill them. The feather should be very slender and inserted with great care. Turn it around once and then withdraw it.

IN the neighborhood of the Rural Ex. Grounds (New Jersey) the Leghorns are a popular breed for eggs. Most of the eggs are sold in the Paterson market, where a white shell is preferred. Leghorn eggs average large. On the 10th of April we weighed 13 Leghorn and 13 Wyandotte eggs. The Leghorns weighed one pound 14 ounces, or 30 ounces; the Wyandottes weighed one pound eight ounces, or 24 ounces. Such differences show that eggs should be sold by the pound.

THE advice given by all poultry writers is to whitewash the houses periodically as a guard against lice. The advice is good—but since we have adopted the plan of spraying our houses now and then with kerosene, there seems no reason for con-ing to whitewash them. A Wooda-me other spraying bellows (sold dsmen) will last for years. The them is very fine and pene-ry crevice. A house 10 feet an be sprayed in a minute or so.

IT is a great pity that poultry fanciers have not bred poultry with the object of increasing the egg production, by the selection of hens which lay the largest eggs, and the greatest number, instead of breeding only for certain markings. If any persistent effort in this direction has ever been made, we are not aware of it. There is no room for doubt that the egg product might be increased in this way just as surely as the milk production has been increased by the careful and long-continued selection of the best milk-producer among cattle.

THE suggestion made by several of our writers in this number, that it is better to have glass windows in the east and west ends of the poultry building, rather than in the south, seems to us a good one. The hens then get the early morning and late afternoon sun, when they *most* need it, while they get no sun at midday, when it is least needed. Equalization of temperature is the first requisite. Southern windows during bright sunshine raise the temperature in the buildings very high from ten A. M. until two or three P. M., while earlier and later the thermometer may sink below zero, thus subjecting fowls daily to the most violent changes.

ENTHUSIASTIC poultry fanciers are apt at times to overdo the business of inducing farmers to spend money in poultry. Such absurdly wild stories as are frequently printed concerning poultry profits do great harm. They bring into poultry culture the very people who ought to keep out of it. They drive away the practical farmers who see nothing but nonsense in the glowing statements. Why not be reasonable? Poultry keeping will never make up for poor farming, laziness, or bad management. The farmer who turns his whole farm into a hen yard will fail in nine cases out of ten. The hen will save no country or section; but she will help to save. Her proper place on the farm among the stock is as a helper and not as a principal. The egg product of the country can safely be increased by 50 per cent. without greatly reducing the price. The more prime poultry offered, the greater the demand. Farmers and their wives frequently complain to visitors of the difficulty of securing fresh meat in the Spring and early Summer. While they complain, a few poor hens are standing about the yard utterly unable, by reason of their owner's heedlessness, to supply the needed food. There are two things in the poultry business that are absolutely sure: no hen of any breed will lay when eggs are wanted, unless she is taken care of; the descendants of a hen that has been carefully bred for a special purpose will do far better work than any collection of scrubs.

"To kill two birds with one stone" might have been, with some appearance of justice, considered a praiseworthy feat in the Dark Ages, when the saying originated about the reign of Richard II. England was then thinly settled, and covered to a great extent with timber; stones were the chief missiles against birds, which multiplied greatly in a sparse population and a thickly timbered country where there were but a few crude devices for their destruction. Now deadly gun-powder has succeeded stones; the population here is much denser and timber much scarcer than in the England of those days. Then, how heavy is the aggregate destruction due to light-houses, electric and other lights, telegraph wires, pot-hunters, cockney sportsmen, and other bird-killing agencies unknown in the Dark Ages! Some years ago rural France was cursed with swarms of dandy "sportsmen" from all the large towns and cities and squads of imitators from smaller places. In spite of bad markmanship, the birds suffered severely at the cost of much gun-powder. The crops, too, soon suffered so disastrously that the Government had to intervene, and now stringent laws provide for the safety of the feathered friends of the farmer from one end of France to the other. A like experience has produced similar results in Germany. Is there not wisdom or business gumption enough in this country to learn a salutary lesson from the bitter experience of others?

THE introduction of yet another oleomargarine bill in Congress is threatened. The Bureau of the Internal Revenue seems to think it can improve on all the bills hitherto introduced by providing a general law applicable to all other adulterations and food compounds as well as to the "oleo" tribe. Outside of the agricultural papers, the general impression appears to be that no "anti-oleo" legislation will be passed at the present session of Congress. If this supposition proves true, the omission will be in great part due to the professed friends of such legislation—the men who, without consultation with other Congressmen, introduced, one after another, so many bills on the subject as to beget divided support, recrimination and confusion. To curry favor with their agricultural constituents these men have created a general impression that the dairymen of the country really know not what they want. Then, instead of all uniting in support of one measure, the dairy support is divided between the various bills introduced. Unless a prompt, united, vigorous and persistent pressure is brought to bear on Senators and Representatives alike, no anti-oleo bill will pass this session. We strongly urge all, therefore, to unite at once in support of the oleomargarine bill of the Committee on Agriculture.

SCALE OF POINTS.

THE guide in breeding the pure breeds of poultry is the "Standard of Excellence," which, however, describes only their forms, color, and outward peculiarities. This system is being abandoned by breeders of horses, cattle, sheep and swine, who recognize merit as belonging to certain strains or families, without regard to "outward points." While the Standard is useful in distinctly separating the breeds, and affixing to each those particular points in which it should excel as badges of purity, yet the highest scoring birds may be inferior, in a utilitarian sense, to others that may be deficient in beauty. A slight twist of the comb, a small speck of white on a black plumage, or the shade of a particular feather, may consign a really meritorious bird to oblivion.

The time has arrived when the poultry shows and agricultural associations should recognize true merit. A scale of points should be arranged for judging not only the live market fowls, but the dressed carcasses, and encouragement should, with those objects in view, be given to the crossing of the different breeds. It would be difficult certainly to decide upon the merits of individual hens as superior layers year after year, but this is the only way we could establish breeds of layers superior to any now known. We must select the most prolific hens and breed them to cocks that come from good layers. This will inevitably lead to the desired results just as the pit Games are bred for courage and endurance by ignoring the Standard and selecting only those that have been tried and tested. We can not see that the Standard of Excellence has ever aided in increasing good qualities of breeds in any way. There is now nothing in the score of a high-priced trio but beauty; still, without some kind of a standard, the breeding of pure-bred poultry would be impossible.

SPECIAL.

Those who, having applied for the Rural's present seed distribution prior to May 1st, have not yet received it, will kindly notify us by postal at once.

THE QUESTION OF THE TIMES.

FROM time immemorial the man on horseback has looked down on the man on foot; the man who toiled not for a living has contemned the man who "earned his bread with the sweat of his brow," according to the grim primordial curse. It was only after woeful centuries of suffering and blood that labor emerged from slavery to villainage and serfdom, and in only a few of the most advanced nations is the toiler of to-day on a par before the laws with his "betters." Ever since the parable of Lazarus and Dives the poor have been kept more or less contented with their wretched lot by the hope of reward for themselves and punishment for their taskmasters in another world. The school-master has been abroad, however, and the poor have to a great extent lost the simple faith that consoled their forerunners in their wretchedness. They yearn and clamor for some happiness in this life even at a sacrifice of a part of the hoard awaiting them in the next. "All wealth is the creation of labor," say the workmen, "but Labor has always been unjustly deprived of a fair share of its own creation. This injustice must end." The struggle to secure this fairer measure of justice has taken a more definite form of late than at any former time in the world's history. Never before was free labor so consolidated; never before was immense capital so concentrated in individual hands, and so organized by the league of vast corporations and plutocrats. The relation of labor and capital is the great question of the time. The struggle for a fairer adjustment will outlast the present and many future generations; but is bound to continue to agitate the nations until some satisfactory and just solution shall be wrought out after many blunders, bitter sufferings, heavy losses—but let us hope no bloodshed.

BREVITIES.

EVERYTHING in a hen-house should be as dry as a chip.

FOR low, damp soil, one should never select Brahmas or Cochins.

ONE objection to the Brahmas is that there is too little light meat.

MR. MANSFIELD tells the RURAL that the old American Dominique is as good a breed as any.

AS a part of our Poultry Special, the Domestic Economy Department must not be overlooked.

THOSE who have never fed purslane to their chicks are requested to try it as a succulent green food.

THERE are many city markets in which a higher price is paid for white-shelled than for dark-shelled eggs.

CLEAN saw-dust with a little sulphur sprinkled in it, is as good as any material for the nests of sitting hens.

IT will be seen that some of our experienced poultry raisers prefer not to have perches at all than to have them too small or placed too high.

THE RURAL NEW-YORKER was the first farm journal to praise the Plymouth Rocks and Wyandottes as all-purpose fowls, and this, too, as a result of experience.

WE have two ways of breaking a hen from sitting. One is to confine her in a small, dark box, three feet square, for two days, giving her fresh water only. The other is to place her in a small yard with a harmless dog.

APRIL 30. Among our entire collection of strawberries, Amateur, Parry and Iron-clad are the first to bloom, though May King is probably the earliest. Thus, it will be seen, it is not the first bloom that makes the first fruit.

MR. MANSFIELD expresses it, in another column, thus tersely: "The kind one keeps is immaterial." He is quite sure that more fail on account of over-feeding and giving damp quarters than from all other reasons combined.

AT the Rural Grounds we have fed our poultry bone meal (the pieces average nearly the size of wheat kernels) for four years. We never have soft-shell eggs. This is more digestible than broken shells, is more nutritious and furnishes more available shell material.

JUDGING from the Langshan eggs received last year and this for hatching, they will weigh scarcely more than those of the Plymouth Rocks. The color averages a little darker. Last year the eggs were sent to us during a cold snap, and none hatched. We hope to be more fortunate this season. We have tried nearly every other breed.

MR. T. B. HOOVER, a poultry raiser of long and careful experience, writes us that his Plymouth Rock pullets did not begin to lay as early last year by six weeks as the Winter before under the same treatment. His Crested Golden Polish have been laying well since the middle of February. We have tried this beautiful breed in a small way, but they do not seem quite hardy enough for our trying climate

If your hens are infested with insects, blow Buhach, Pyrethrum powder or Persian Insect Powder (they are about the same thing) among their feathers. Do this two or three times every week. We believe it to be the easiest, simplest and safest method of ridding the hens of this pest. Go into the hen house after nightfall and, taking them one by one in a gentle manner, blow the powder among their feathers through a Woodason bellows, or the little insufflators sold by most seedsmen; or, rub the powder under their feathers about the head and body.

THERE are farmers who always wait till the very last moment before ordering their farm implements. This is very poor policy. Such men always find fault. They will not take the fact into consideration that it takes time to do business. They wait until the time for using the implement and then order it sent "immediately." For any delay in freight or expressage, and such delays are frequently unavoidable, they blame the manufacturer. A little planning and "head work" would prevent all the trouble. We will venture to say that there are farmers at this time who have not secured their tools for the season. Order them at once. Never be caught behind-hand again.

SENATOR EVARTS has been receiving a severe lashing from the agricultural press because he was reported as saying that when a man made a failure he could only "go to a better world or come down to farming." The sentence may be taken either as an insult or a compliment. If the speaker meant that any "poor stick" who makes a failure of anything he puts his hand to, can by securing a farmer's outfit gain a farmer's dignity, he uttered a mean and unpardonable insult. If he meant that a man, beaten at every point in business, must come back to the farm for renewed health, strength and courage to enable him to make a new fight, the speaker used sound common sense.

THERE are two principal ways of accumulating competence—by making and by saving. Some make but little and slowly, yet by avoiding waste they eventually attain independence. When there is abundance, there is a propensity to waste. In most branches of business, men learn that dollars are made by taking care of the pennies; but the farmer, often burdened with the profusion of his crops, loses his profits through losing the odds and ends, or by the decay of produce not properly or timely stored. His work and care differ from those of most others, because of his dependence upon the condition of the weather, and in no occupation is there such constant occasion for forethought, and for adaptation of plans to exigencies as they arise. It is that farmer who keeps everything in trim, who completely finishes whatever he begins, and who anticipates leakage and decay, that sails along safely to the harbor of Prosperity.

POULTRY SPECIAL.

(*Continued from page 309.*)

Notes from the Rural's W. N. Y. Farm

POULTRY KEEPING IN ORCHARDS.

POULTRY AS INSECT DESTROYERS.

In consideriug the subject of poultry keeping, little is credited to them as insect destroyers. While all know that they are large consumers of auimal food, and that in Summer the principal part of this is composed of worms and insects, no attempt is made to turn this habit to good aecouut. While hogs or sheep kept in an orchard will destroy many insects and greatly help to keep them in check, they do so only incidentally, and for the sake of getting the infested fruit in which the insect may be lodged. Not so with an old hen and a brood of young chicks or ducks. They are ever on the alert, no iusect escapes their quick eyes, and they eat the "varmint" for its own sake, and no insect but is agreeable to their taste. One such family will destroy more insects than a hundred sheep or double that number of swine. In fact, very few have considered their great value for this purpose or have ever thought of making use of their potent help, and fewer still have made any systematic attempt to use them for this purpose, and yet, with a little thought, they can be so used as to be very efficient and be made a source of profit.

CHICKENS MAKE FAIR FRUIT.

We have for several years made use of this means, and we find the fruit of that part of the orchard in which they are kept very much fairer and freer from insects than that produced on other parts. So much have we been impressed with this fact that we are extending the system to the whole orchard. In order to have them all over the orchard we have constructed a number of high, cheap and warm houses. They are 8x12 feet; eight feet high on one side and five on the other. The sides and ends are made of matched lumber nailed to sills and plates of 4x4 stuff. The roof is made of strips on which shingles are laid. The whole of the inside is double-sheeted with tarred paper—the under part of the roof as well as the sides. A large window is in the south side and a door is placed on one end. Each is provided with roosts and nests and made in every way as comfortable as possible. Twenty-five pullets are placed in each very early in Spring, or they may be wintered there, and if desirable for breeding, a cock as well. As soon as one becomes broody, she is furnished with a clutch of eggs, either hen or duck, as desired, and when they are hatched she is cooped in or near the house until the younglings are a couple of weeks old, more or less, when they are allowed to run at large. Each night, at egg-gathering time, each lot of old fowls are fed a proper allowance of whole corn. This insures their "coming home to roost" and makes them so contented and happy that they never mix, even where the houses are not more than 20 rods apart. Of course, the chicks when young are fed oftener and on suitable foods.

LITTLE TROUBLE MUCH PROFIT.

All this takes but a small amount of time each day; while the results are very satisfactory in more ways than one. We get many hundreds of dozens of eggs, while the price is comparatively high. We raise from one to several tons of poultry which, by watching the markets, we sell at good prices, and which in reality have paid a fine profit, beyond the cost of raising, by the decrease of insects and the increased fairness and value of the apples.

By selecting the earliest hatched pullets for wintering over, we always have a large yield of eggs to sell during the scarcity and consequent high prices of Winter. While we make use of all the means to us known for reducing the number and depredations of insects, we know of no one means so perfectly and cheaply effectual as the keeping of poultry in the orchards.

After trying very many of the newer breeds of fowls at the farm, we have now fairly settled down to the conviction that none is in all respects equal to the Plymouth Rocks. They combine more of the following good qualities than any other breed we have ever tried—hardiness, early maturity, quietness, great prolificacy of good-sized eggs, even in Winter, and size of carcass. We think this emphatically a general-purpose fowl.

We select each year about 25 to 30 hens, in every way models, and with these we mate a cockerel as nearly perfect as we can find and as remote as possible in blood. In this way we have secured fowls as like as peas, the hens averaging about eight pounds, and the cocks nearly 12. In fact, it would be hard to find a finer show of this superior breed.

Winter eggs are produced from food and care. The hen simply acts as an agent. A perfect egg is a combination of warmth, contentment, cleanliness, clean food and drink and plenty of lime. With any one of these essentials omitted, the egg yield will be diminished. We think this states the matter fairly. A successful "chicken business" is but the careful elaboration of these propositions.

The conservation of warmth in the poultry house in Winter is an important problem in Northern latitudes. We are not speaking of the men who allow their poultry to roost in an old house overrun with vermin and searched by every cold wind. Problems never trouble such men, for no problem can exist without thought. There is no problem about the estimated profits of the live cold-storage poultry business. It is reduced to an axiom. Men who treat their poultry in a business-like way wish to find the most economical, yet warm, poultry house. We do not think it pays to keep poultry in the barn cellar. Dampness is death to fowls. The average barn is very poorly drained. What with the steam from the manure and breath from the cattle there is constant moisture. These old cellars are filled with little corners where vermin love to congregate. The fowls are worthy of a place of their own. The use of tarred paper for lining ought to revolutionize the life of farm poultry. A window is necessary. Ventilation must be secured. In the far North, a house built on the principle of an ice-house, with two walls, the space between which is filled in with saw-dust, is found to work well. Do one of two things before next Winter—kill off all your poultry at the first cold weather, or build a comfortable house for them.

We do not wish to give our readers the "poultry fever." We want to keep disease out of the family. You can't make your fortune at any business until you study it out, and oftentimes the mastery of the business is the only fortune you will see. There is money in the poultry business for those who "know how." There is no place on the farm where care and attention will bring so much ready cash as at the hen house. The point we make is this: there is a wider difference in usefulness between common poultry and improved and thoroughbred stock, than there is between scrub cattle and graded or thoroughbred cattle. No part of the farm stock can be so easily, cheaply and quickly improved as can the poultry. It requires years of waiting and a direct cash outlay to improve the farm cattle. In the poultry yard, care and observation can take the place of much of this cash. The want of cash stands in the way of many farm improvements.

It will pay to inclose farm poultry. They will be kept out of the garden. Fewer hens will be required. You can keep closer watch of them, and thus pay more attention to their improvement. You will save yourself the trouble of hunting eggs. The hens will be unable to foul the hay, the mangers or the door-yard. You will gain some respect for your poultry. You have no right to keep stock on your farm, that you cannot respect. If you could have movable coops and yards that could be easily moved about to different parts of the farm, you would gain in two ways—the summer food for the hens would cost less, and you would have less manure to haul out in the Spring. When the crops are out of the ground, the hens can have more liberty. Let them out on the plowed ground.

Tameness pays. You ought to have your hens so tame that you can pick them up as you would a cat. Bring them into such a state, and they will lay more eggs and put on more flesh to pay for it. Think of chasing a rooster half a mile, or running him down with a dog! We have seen intelligent men do these very things. Avoid it by gentleness and common sense.

Lice will gather in the laying nests if anywhere. Make the nests as simple as possible so that they can be easily taken apart and cleaned. Take out the old straw or hay every week or so and burn it up. Why nail a box together tightly and thus make cracks and corners where lice can congregate? Why not place boards loosely together on a shelf in the form of nests? Make the nests so that they can be taken apart at a moment's notice and thoroughly cleaned. At the South, boxes of cotton-seed are used as nests. They answer the purpose admirably.

Use care in selecting eggs for setting. Do you know which are your best hens? You could probably guess at it, but can you tell which of them lay the most eggs in a year? See if you can find out. If you can, pick out their egg for setting. Sort their eggs carefully. Reject all pointed eggs, all narrow eggs or those that are very large or very small. Aim to pick out "egg-shaped" eggs. Breed from your best hens. Would you raise a calf from your poorest cow?

How do you build your roosts? We want our roosts low, so that a hen can reach them without flying. It is not the business of a hen to fly or to run. We can make more by breeding any desire to perform either operation out of them. We want a roost at least two inches thick, oval at the top; the shape of bottom is of no consequence. We want the hen to rest comfortably without being obliged to clutch the roost so desperately.

Milk is one of the best of poultry foods. Mixed with the other food, given sweet as a drink, or fed sour and thick, it gives excellent results. It will take the place of meat to a great extent. A gallon of milk fed to the hens will give better results than the same amount fed to pigs.

The best breed? What would suit one would not suit another. We believe that location, means, characteristics of the farm, and the aims of the farmer must be taken into consideration. The different breeds of cattle seem specially adapted to different locations and farms. Experiments with the different breeds can be easily and cheaply made. In a few years one can decide which breed or cross is best suited to his wants.

Set the hens in a place by themselves. See that the nests are clean and free from lice before they go in. Give the hen all the eggs she can cover. Let her off every morning to eat and drink. Don't poke food in to her nest. Place a dust box near at hand, fill this with plain dry sand. Take a piece of chalk and write over the nest the date of the setting. Let the hen alone. Don't let the children plague her. Don't use a hen with scaly legs. As a rule old hens make the best mothers. Never pick out a hen that is naturally quarrelsome.

Poultry pay well in orchards. The shade is good for them. They pick up numberless insects and fertilize the soil effectually. In a plum orchard poultry will more than pay their way. There is no surer remedy for the curculio. Large hens are best for orchard work. They are less inclined to fly into the trees. With portable fences of wire netting the flock can be easily secured. The wire netting fences are becoming very popular. They are cheap, durable and sightly.

The best way to improve the common stock of the farm? The weight of opinion seems to rest in favor of buying fowls rather than eggs. It will be necessary to kill off all the old roosters. It would pay, if only one thoroughbred rooster was bought to confine him with the best hens, and use their eggs alone for setting. One thing is certain; if you will not take better care of the hens, it is useless to try and improve them. If you buy thoroughbred eggs or fowls, and think by putting the one under a hen or turning the other into the yard, the work is done, you will be worse off than before. You will not only lose your money; but you will be disappointed. Thoroughbred stock needs thoroughbred care. That is the "old, old story" of stock breeding. It is truer of poultry than of any other farm stock. Remember that while poultry can be more rapidly improved than any other stock on the farm, they will also most rapidly degenerate when neglected.

Never train roosters to fight. They will do enough of it without help. Still, if we were to kill off all but one, we should prefer to keep the master of the yard. There are too many roosters in the average farm yard. A single rooster confined with the best fifteen hens will insure eggs for hatching at the season when they are needed.

Grass is the best green food for summer use. It may be cut with a scythe and thrown into the yards, or, better still, there may be two yards, where grass can be growing in one while the hens are feeding in the other. Purslane is good for hens, and they relish it. For winter feeding, cabbage is hard to improve upon. Carrots, turnips, beets and lettuce are excellent. Chopped clover-hay is as good for the hens as it is for the cattle. One-hundred hens will make short work of a bushel of it. Feed onions sparingly. Apple parings, squash and pumpkin will help the hens.

Find out by your own experiments the best food ration for poultry. You have time enough in the Winter to notice which foods or food combinations produce the most eggs. Different breeds, in different localities appear to have different rations, each of which is claimed as the best. This shows that no one combination can be relied upon for all. Wheat must enter into very good egg ration, with green food of some kind. What is better for the morning feed than mashed potatoes, meal and milk and chopped clover? The potatoes can be boiled with those for your own breakfast. Feed whole grain at night. Give plenty of charcoal and burnt bone. Scatter whole grain on the ground, in different parts of the yard where the hens will have to work to get it. Feed soft food in a long narrow trough placed against the wall, so that the hens can eat from but one side, and not stand in the food. Scald this trough out every few days.

You can't tell from the outside of an egg, whether it will produce a rooster or a pullet. It wont pay you to try and form a set of rules on the subject. You won't make any more money, and you will know less about it when you finish, than you did before you began.

Hens need shade in Summer. Little chicks need it more than the old hens do. Have the water warm in Winter, but cool in Summer. Don't leave the drinking vessel out in the hot sun. Replenish it frequently and wash it out every day. This advice is not for those who wish to save work, but for those who want eggs and chickens.

The most contemptible man in all agriculture is the man who says poultry are of no use, lets his wife and daughter do all the work at raising chickens, and then puts the "egg money" into his own pocket. No wonder he is ashamed to enter the society of respectable hens. A man with a fair amount of common sense will appreciate the fact that the "women folks" can beat him at poultry raising. He will show his intelligence by encouraging them all he can, by eating his fried eggs and custards with a thankful heart, and letting the "egg money" go where it belongs.

A home-made incubator will give very poor results. The farmer will have very poor success with any incubator. These machines are for those who desire to go into chicken raising on a large scale. The average farmer cannot do this. His aim is to make the most he can out of his flock of 30 hens. He will find that the old hen will watch thermometers, turn eggs and keep lamps trimmed a great deal cheaper than he can.

Don't be barbarous with a broody hen. Don't tie her up by one leg or make her stand on sharp nails or in a pan of water. Put her in a coop raised a few inches from the ground with the bottom made so that she will have to roost on poles. Put her in a pen with a restless dog or calf that will frighten her into respectable ways, or let her go without food till she gets hungry, and then make her hunt her own living.

Cholera germs are taken into the system through the mouth. It is cheaper to kill the germs than it is to cure the hens. Think of eating eggs laid by hens suffering from cholera! One ounce of sulphuric acid in a gallon of water sprinkled about the yard and feeding places, is recommended to kill the germs.

Begin to fatten the Thanksgiving turkey on the day he is hatched. Don't wait till two weeks before the festival and then shut him into a coop to lay on a mass of blubber. Feed well.

Caponizing is a cruel operation at the best. Without doubt it pays well. The birds are made larger and of better shape, and the meat is improved in quality. There is all the difference between a rooster and a capon that there is between a bull and a steer. But the operation is cruel and useless to the ordinary farmer. Shame on the man who would experiment so cruelly on a live chicken. If you want to learn the process, study the anatomy of a dead chicken till you know where the parts are located. If you make bungling work of your first attempts, be merciful and wring the chicken's neck.

Eggs contain 12.5 per cent. of protein; three per cent., and corned beef 11.3 [illegible]

If you want flowers near the hen [illegible] sunflowers. The seeds are excel[illegible] in small quantities. Cut the he[illegible] the Fall, before the birds have a cha[illegible] plant the garden

Make your own whitewash and don't [illegible] afraid to use it on the inside of your henhouse: take a peck of salt dissolved in water, one-half bushel of well-burned, fresh quick-lime, and two buckets of boiling water. Place the water, the lime and the salt into a barrel and put on a cover to keep the steam inside. Make the wash about as thick as thin cream, and strain through a cloth. Soak a pound of glue in cold water. Add three pounds of rice flour and mix. Add this to the lime wash and put

in enough hot water to make the mass of the right consistency. Apply hot. It will be death to vermin and disease.

The houses should be sprayed with kerosene.

POULTRY STATISTICS.

In 1880 the number of poultry in the United States was 125,507,322. These produced 456,-10,916 dozens of eggs. Of this great flock 102,272,135 are classed as ordinary barnyard fowls, and 23,235,187 as improved or thoroughbreds. The disposition among the various States was as follows:

Alabama	3,017,698	Louisiana	1,490,907
Arizona	22,559	Maine	998,741
Arkansas	2,711,562	Maryland	1,457,725
California	1,510,167	Massachusetts	922,968
Colorado	128,804	Michigan	4,087,014
Connecticut	782,687	Minnesota	2,268,385
Dakota	302,491	Mississippi	2,907,733
Delaware	364,809	Missouri	10,966,153
Columbia	6,982	Montana	60,304
Florida	544,080	Nebraska	1,839,092
Georgia	3,442,583	Nevada	43,635
Idaho	86,021	New Hampshire	506,810
Illinois	11,525,071	New Jersey	1,473,765
Indiana	6,858,011	New York	6,945,292
Iowa	8,539,711	North Carolina	2,969,456
Kansas	4,397,482	Ohio	9,939,927
Kentucky	5,976,065	Oregon	490,895
Pennsylvania	7,360,856	Vermont	567,828
Rhode Island	269,759	Virginia	2,647,157
South Carolina	1,417,62-	Washington	147,129
Tennessee	5,404,721	W. Virginia	1,607,201
Texas	4,295,867	Wisconsin	3,815,726
Utah	222,616	Wyoming	10,167

The number of fowls to each inhabitant was about three, or nine dozen of eggs. Illinois is the great poultry State, having 11,525,917, yet this vast number gives but 230 to every square mile, or four fowls and 12 dozen of eggs for each inhabitant. Ohio produced the greatest number of eggs, 43,092,291 dozen. The New England States, where one would suppose the poultry business would be made the most of, had only some 37 per cent. of the fowls in the single State of Illinois, yet they produced nearly 80 per cent. of the number of eggs. Rhode Island had but 269 fowls on each square mile, or a trifle over six dozens of eggs for each inhabitant.

It is somewhat surprising to learn that the great bulk of our poultry lies in the West, and that it can be raised so cheaply there that dealers can ship to the East and realize a fair profit. In the space bounded on the south by Tennessee, the west by Kansas and Nebraska, north by Canada, and east by the Ohio River, may be found 50 per cent. of all the fowls in the country, while 43 per cent of the eggs were produced on the same area, which contained 14 per cent of the total area of the country, and 32 per cent of the total population. These facts are contrary to general belief. If western fowls were, as a rule, as productive as fowls in New England, or if New England had the fowls that are found in the single State of Illinois, one can readily see what the result would be upon our markets.

In the single State of New York, in 1880, there were 6,946,292 poultry; 610,358 horses; 1,437,655 milch cows; 901,866 other cattle; 1,715,180 sheep, and 751,907 swine. She produced 111,932,423 pounds of butter; 8,362,590 pounds of cheese, 31,958,739 dozen of eggs; while 231,965,533 gallons of milk were sold or sent to butter or cheese factories. There were 241,058 farms, and a population of 5,083,-810. This gives an average to each farm of 20 poultry, five cows, four beef cattle and three swine, or a trifle over one head of poultry, six-dozen of eggs, 22 pounds of butter, 10 pounds of cheese and 46 gallons of milk for each inhabitant through the year.

The value of the hen manure from a single bird for one year has been quoted at 15 cents. This is, we think, a very low estimate, and yet, even at this rate, the total value of the manure from all the poultry in the country in 1880 would be $19,000,000. The total values of the fertilizers manufactured during the same year was $23,650,795.

If we allow one egg every two days for each adult, and one egg every four days for each child, we would have with the population of 1880, as a basis, a home consumption of 650,-000,000 dozens, so that our home product must be increased nearly 50 per cent, in order to supply our own wants. We must increase the number of the present stock of poultry, or increase the productiveness of the present stock [illegible]proved blood and better care. The [illegible]tion of eggs rapidly increases from [illegible]ear. The carelessness and neglect [illegible]wners of farm poultry, prevent [illegible]ading increase of stock. The egg [illegible]never be adulterated. There is as wide a [illegible]stinction growing between fresh and stale eggs as there is between "gilt-edged" and common butter. What department of the farm offers better returns for care and enterprise?

At the Rural New-Yorker Farm on Long Island, we aim to keep about 75 head of poultry. These are allowed to range about the farm during the cold season, and during the growing season are confined in a yard 200 by 50 feet. In this there are a dozen dwarf apples (true Paradise stock) and 20 dwarf pears. A heavy mulch of the weeds which grow along the lanes and hedges is thrown in every Fall. This plan works very well.

What Others Say

POINTERS.

Pres. Needham stated before the meeting of farmers held a month or more ago in Boston and fully reported in the Massachusetts Ploughman, that he was talking with a young lady, a little time ago, and was astonished by her telling him that she had 50 hens, and that she could show him the figures by which it was demonstrated that she had netted $1.50 from each of these hens, on an average, within the last year. She is a lady of culture, a lady of a great deal of broad reading, and devotes herself to poultry as a matter of pastime and not as a matter of business.....

J. K. Felch, of Natick, Mass., said that Light Brahmas make as large broilers at nine weeks as other birds do at 12 weeks, and give the largest number of pounds for food consumed at the age of eight months, the most profitable time to kill them for roasters.....

The late hatch, he thought, would pay a better profit for winter feeding, and in March commanded a higher price for heavy weight poultry than any other breed. As winter layers, Mr. Felch gives them the first place. No other eggs rule as high in price, their large size and dark-colored shells commend them...

Mr. Felch rates the Plymouth Rock the second in merit of all breeds. Its first merit is as broilers. He says that this breed is a fair producer of eggs, and with good care in small flocks will give 132 eggs a year. The greatest drawback, he thinks, is the death rate among laying stock.....

The Wyandottes are susceptible to disease, Mr. F. thinks, far beyond the Asiatics. They may, however, be destined to rival Plymouth Rocks because their skin is more yellow, their bodies more plump and they carry more breast meat, which is appreciated in a broiler. The egg is as yet too small.....

Partridge Cochins, the most gorgeously attired in plumage of all the Cochins, are good winter layers, if not allowed to get too fat.....

Mr. Felch's formula for preparing meal for rearing chickens is, 20 pounds of corn, 15 pounds of oats, 10 pounds of barley and 10 pounds of wheat bran, to be ground fine and well mixed. He asserts that feeding this to chickens will give a pound extra weight in 12 weeks.....

Mr. Felch reckons that a bushel of corn expended in a variety of food will produce nine to 11 pounds of live poultry.....

He further says that to make the production of broilers a business, the incubator becomes indispensable. But for all that, to say incubators up to this time have been successful, is not a fact, and the greatest drawback in their success has come from the manufacturers of them, in that they have sold to whomsoever would buy, without regard to the purchaser's conveniences or ability to run them. They have asserted that any woman or child could run them. As the result of such want of suitable contrivances to care for the chicks when hatched, and want of experience in the operator, four-fifths of them have failed and to-day there are hundreds of incubators abandoned and stowed away among the rubbish of unused machinery.....

To run an incubator successfully the operator must become master of the machine. He or she must learn how to control the evaporation to secure the requisite amount of moisture; he must learn to run it with the lowest flame that will secure absolute control between 98 and 103 standard degrees of heat. If the machine constantly fluctuates to a degree far below or rises much above, the chickens hatch in a weak condition. If the machine reaches 115 degrees during incubation, the "death rate" will be from five to 60 per cent. as it varies in heat from 106 to 115, while this high temperature may give as good a hatch..

Brooders for from 150 to even 500 have been in use; these are being abondoned, and 50 is the largest number recommended to be reared together.....

Houses so arranged as to be cut up into small rooms, 5x12 feet, with open runs, that the chicks may go into the open air each and every day, must be furnished, even if they are not out five minutes. To try to raise them on the floor and wholly indoors is to fail.....

Mr. Felch predicts that a woman who will give her time and attention to become an expert in the management of an incubator and the care of the chicks, securing them in a healthy, growing condition to the age of eight weeks from this time on can secure a salary larger than she can secure in any other calling. He hopes that the ladies will read this subject up and act in accordance with this suggestion. He is often written to to secure such help and wishes he knew such experts to whom he could refer. Then, and not till then, will artificial incubation and the rearing of chickens become a success.....

During the interesting poultry talk among the farmers of New England, so well reported in the Massachusetts Ploughman, Mr. Hawkins asked Mr. Felch what size his Light Brahma broilers usually attain at nine weeks of age? Mr. F. replied that a pair would usually weigh four pounds. Mr. Hawkins said that he had broilers from Plymouth Rocks and Wyandottes last season that at 10 weeks old would dress 5¼ pounds to the pair. He asks if Light Brahmas make more desirable broilers as regards breast meat at that time? Do not the Wyandottes and Plymouth Rocks have fuller breasts all the way down from five to ten weeks of age? The Light Brahma can be killed for broilers when nine weeks old, but from the time they weigh two pounds, they have rather long legs and are thinner in the breast. Plymouth Rocks and Wyandottes at that age are very plump, with short legs and clean from feathers.

Mr. Felch agreed with Mr. Hawkins's statement that the Light Brahma can never be profitably killed during a falling market when from three to six months old; but the Plymouth Rocks and Wyandottes can be killed any day and profitably sold in the market. Oftentimes these breeds when four months old will bring more money than Light Brahmas at five months. But Mr. Felch insisted that no other breed is more profitable to keep through all seasons than the Light Brahmas..

If Mr. Hawkins could have all his chickens hatched in one week, he would select the first week in April. Then by the time they are nine or ten weeks old—say the 20th of June—they will bring 45 to 50 cents a pound dressed. He believes they can be raised for 20 cents a chicken, and if they will weigh 2½ pounds each they will bring 75 cents per chicken easily.....

Mr. Hawkins's best food for chickens is composed of corn and oats ground together and cooked in milk and broken crackers soaked in milk, using one-half of each. He gives this in a rather moist condition with no drink whatever for four weeks.....

Mr. Felch says that one Leghorn is on record as having laid 301 eggs in a year. He knew of one Leghorn that laid 159 days in succession. Mr. Felch commends the White Leghorn for warmer, more equable climates—California for example. The moment we strike the small breeds, unquestionably, Mr. Felch says, the Leghorn is the best breed for eggs, but in the cold North they are not good winter layers.....

Mr. Houdlette estimates that $1.25 to $1.50 is a liberal allowance for the cost of keeping one hen for a year where everything is purchased of the best quality and at the highest price. This is in confinement.

If he cared only for eggs, he would cross a Wyandotte cock on Plymouth Rock hens. A friend of his has kept that cross for several years with the most remarkable results. Most of the pullets of this cross are a lustrous black and the best layers he knows of. They have clean, dark legs, yellow skin and plump bodies.....

Mr. Houdlette favors also a cross of White Leghorn cock on Light Brahma hens. He would always use females of the larger variety. The fancy for yellow skin and yellow shanks is purely American and without any good reason; the white-legged and white-skinned Dorking is the English standard, you know. The Dorking, Houdan and Game are admitted the world over, when cooked, to have no superiors. Yet neither has yellow skin or legs.....

Eggs are as sensitive as butter or milk, and as easily affected by the food or water. Feed your hens onions to-day, and to-morrow's eggs will have the onion flavor and odor. The same occurs when hens feed on the manure pile and drink barnyard water.....

Mr. H. A. Mansfield is surprised that young men do not secure small farms, that can be purchased at a moderate cost, a short distance from market, and engage in poultry culture, instead of crowding into stores and factories.....

Mr. Mansfield further said that chickens can be raised with incubators and brooders, but it takes an expert to make a success of it. For farmers, he has no doubt that the cheapest, safest and best way is the old hen. Anybody can *hatch* chickens with an incubator, but it requires skill and eternal vigilance to raise them.....

Mr. James Rankin who has used incubators with success, said that there are a great many incubators in the market that claim to hatch chickens with perfect success. But they do not work well, and, hence deceive the public. Mr. Rankin commenced the poultry business over 30 years ago, and has given a deal of time to it. He can average $1.50 apiece clear profit on his hens. Since he has been using machinery in his chicken business, he finds he can double his profit from the same number of hens.....

Mr. Rankin's experience has taught him that, in growing poultry artificially, a yearly profit of 100 per cent. can easily be made on all capital invested in the shape of buildings, machinery, stock, etc. He has grown annually for the last 10 years from 3,000 to 5,000 ducks and chickens, for the early market, all of which has been done in connection with, and supplementary to other farm work. No other part of farm industry, he thinks, can compare with it in profitable returns.....

The first 20 years of his poultry experience were confined to the natural method, using hens alone—the next ten years hens and incubators were used side by side in the same building. The first part of that decade the hens were victorous; the latter part of the time mentioned, the machines took the lead and kept it. For the past six years machines have been used exclusively, the hens being kept entirely for egg production.

If he could make more money by using hens, he should do so. If he could not afford to raise 6,000 to 8,000 ducks and chickens by machinery, rather than by hens, he should use the old-fashioned way.....

Below is Mr. Rankin's balance sheet for the year ended September 1, 1883, on chicks alone as we find it in the Mass. Ploughman of March 20th.

Stock on hand September 1, 1882:

314 pullets at $1.25 each	$392.50
Supplies and food of all kinds	754.31
95 gallons oil	7.60
Total expenses	$1,154.41

Stock on hand September 1, 1883:

634 pullets and chickens	$ 536.50
1616 dozen eggs sold	533.28
302 hens sold	314.75
1434 chickens sold	1400.01
Total receipts	$2,784.54
Net profit	1,630.18

This showing gives a clear profit per hen of $5.20. The labor of caring for them is not charged, nor is the manure credited. The care of this poultry devolved entirely on Mr. Rankin. While his men were milking and feeding stock in the barn, he cared for chicks and machines, and seven o'clock found him at work in the field. With the exception of a half hour in the middle of each forenoon and afternoon devoted to feeding chicks, he did his share of field work with the others.....

Mr. Rankin then gives an account of his duck venture for 1885, which is a trifle more startling than the other:

Stock on hand January 1, 1885:

42 ducks and drakes at $1.50 each	$63.00
Feed of all kinds consumed	334.52
68 gallons oil at 8½ cents per gallon	5.78
Total expenses	$493.30

Stock on hand December 1, 1885:

206 ducks and drakes at $1.50 each	$309.00
Ducks sold	1503.71
72 dozen eggs sold	61.00
121 lbs. feathers sold at 50 cents	60.50
Total receipts	$1,934.21
Net profit	$1,530.91

Mr. Rankin has some 16 or 18 cows in his barn, and the neighbors call them good ones. The milk is sold at reasonable rates at a village some three miles distant at remunerative prices. He tries to run the thing economically and superintend it himself. He runs it as economically as possible, and yet he can clear more money with one-tenth of the labor and capital from each duck than from the best cow that he has in his barn.....

Mr. Rankin concludes that whereas poultry growers make only a profit of $1.00 to $1.50 per hen in the old way, by the proper use of artificial means they can make from $3.00 to $5.00 per hen, not including the cost of labor. Mr. Rankin alludes to a batch of ducks which came out in mid-March. There were over 400, and 98 per cent of all the eggs hatched.....

It should be borne in mind that Mr. Rankin has given 30 years to his work. He is an expert. Anyone working with him for a season or so, as Mr. Felch stated, might learn his methods and afterwards do as well.....

In the opinion of Mr. Houdlette, nothing will give fowls scaly leg so surely as sitting down or roosting or walking over their droppings. Gather the droppings every few days.

Is it profitable to keep the same hens over a year or two for laying purposes? Mr. Rankin's practice is to kill every hen the first of June. They then bring better prices than they would later or earlier. He prefers to kill them before they moult. Keep pullets only to produce the largest number of eggs...

Mr. Williams thinks that Asiatics become too fat after the first year. If you feed Brah-

mas all they want, they will not lay the second Winter. They grow too fat.....

PROF. COOK, of the Michigan Agricultural College, kept Brown Leghorns and Light Brahmas. He found the Brahmas superior as winter layers. Taking the whole number of eggs in a year, the Leghorns might excel a very little. If we count by weight, then the Brahmas are ahead. As to eating qualities, the Leghorns are smaller and their flesh is insipid .....

DUCKS, according to Mr. Felch, grow in ten weeks to weigh seven pounds and over. They seldom die. They can be kept in grass inclosures and fed four or five times a day with bread and corn meal, with ten per cent. ground scraps, and allowed to graze, they will weigh as above stated. They need not have water to swim in. They enjoy their food in a sloppy condition.....

MR. WARREN never kills his Leghorns as long as they lay, because they are worth more to lay than to kill. They will lay well until they are three or four years old. The best rule seems to be to kill all birds before one year old, or in June or July.....

TOO much glass was condemned by the leading speakers of the New England farmers' meetings. It causes sickness: the change of temperature between midday and night is too great. During warm, sunny, winter days, the thermometer will show 100 degrees of heat, while the nights may be below zero.....

MR. FELCH says that if we feed celery to ducks a week before they are killed, a flavor similar to that of the canvasback ducks will be imparted to the flesh ....

MR. RANKIN says, in the Poultry Keeper, that he has found the growing of ducks (artificially) for market, fully as profitable as growing young chicks, for as many pounds can be put upon a duck when nine weeks old, as on a chick at 19 weeks. Ducks, he says, can be grown at a cost of five cents a pound.....

A BUILDING 75 feet long and 12 feet wide, with a quarter of an acre of land, will be ample room room for 1,500 ducks. Mr. Rankin feeds the same as for chicks, with the exception of a little more animal food. He does not feed cracked corn or hard food of any kind until after they are five weeks old. The ducklings should be confined in a small run, with only room enough to exercise, and given just water enough to drink. They will readily fatten treated this way. He likes the Pekins best of all, as they are the best layers and mature the earliest. They will always lay their eggs in nests when given the opportunity. Their feathers also are by far the most valuable of any, as they readily command 50 cents per pound at wholesale. His chicken and duck buildings are 75 or 80 feet long and 10 feet wide, with no artificial heat. He uses just enough glass to heat the buildings when the sun shines, thus avoiding extremes. His yards occupy about two acres of land. The yards are subdivided by wire netting into small compartments of about 10x80. Into one of these yards he puts about 100 ducklings. The ducks are ready for market when nine or ten weeks old. They should then weigh from nine to eleven pounds per pair. He keeps ducklings in brooders about three weeks in early Spring, when the weather is cold, and about 10 days during the warmer part of the season.....

THE N. Y. Tribune calls attention to an incubator miscalled "Economy"—an aggravated sample of all the rest, so far as its knowledge goes. The Poultry Keeper says, "It is a worthless affair." An Ohio Farmer correspondent, after losing all his oil and eggs in repeated trials, declares it a complete failure and fraud, and cites experience and opinion of other victims to the same effect. This machine has been advertised and distributed by "H. S. Waldo, Quincy, Ill.," a name and address to beware of. This is the same rascal who sent out the Nature's Incubator denounced several times of late in the RURAL.....

INCUBATION BY IRRIGATION.—Mr. O. S. Bliss says, in the N. Y. Tribune, that a man had watched a setting of choice eggs with much solicitude till the 23d day of incubation, and still there was no sign of their hatching. Seeking advice at this stage he was told to put them into a pan of warm water, and leave them till they began to dance and then return them to the nest. Five hours afterwards he came with the joyful tidings that every egg had hatched. He said the moment they were in the water they danced like puppets. The lining of the shells had become so dry and tough that but for the wetting not one of the chicks would have been able to break the shell. Eggs in that condition absorb the necessary moisture almost instantaneously though they will not suffer injury from remaining in the water several minutes. Care should be taken to return the hen to the nest with the eggs to prevent the too rapid cooling from atmospheric exposure and evaporation.

THE FARMER'S CLUB

ANSWERS TO CORRESPONDENTS.

[Every query must be accompanied by the name and address of the writer to insure attention. Before asking a question, please see if it is not answered in our advertising columns. Ask only a few questions at one time. Put questions on a seperate piece of paper.]

IMPREGNATION OF EGGS.

J. D. N., New Brunswick, N. J.—Are all the eggs of the common hen impregnated by one effort of the male before the hen begins to lay, or are the eggs impregnated singly while she is laying? With a turkey hen, I know one "tread" of the cock impregnates the whole clutch.

ANS.—The matter of impregnation has received much attention from breeders, and the experiments made give no results forming conclusions. We have known eggs to hatch from hens that had been separated from the males for 10 days, and again, on changing to cocks of a different breed, the influence of the previous male has ceased on the third day. By using a White Leghorn cock, and a Houdan for comparison, the difference in the chicks may be easily noticed. The turkey fertilizes the whole clutch at a single meeting, which has been proved satisfactorily. Regarding the cock and hen, the accepted theory is that something depends upon whether the hen is served a few days before beginning to lay, or during the laying period—that is, there are times when a number of the eggs may be fertilized together, while at others the positions of the different eggs allow of only one to be fertilized. It is a broad field for future experiments. That the impregnation of the eggs from the first coupling influences all subsequent progeny is denied by some and affirmed by others. In viviparous animals or mammals there is an arterial circulation between the fœtus and the mother, but there is no such connection between the hen and the contents of the egg. The circulation of blood takes place within the egg shell and unconnected with the body of the hen. The young of mammals are hatched and nourished within the body.

ABOUT AN INCUBATOR.

G. C. C., Shespequin, Pa.—Where can the hard rubber expansion rods for incubators be had? 2. What is a thermostatic incubator? 3. What are a "pyrometer" and a "regulator."

ANS.—1. The hard-rubber expansion bars are usually made to order; but may be procured of any rubber dealer. L. N. Clark & Son, 38 Dey St., New York, sell them. No regulators are sold by any one to fit miscellaneous incubators; but they are made and sold as parts of special machines. 2. The Thermostatic Incubator is made and sold by E. S. Renwick, 19 Park Place, New York City. They will send circulars describing it. 3. A pyrometer is simply intended to take the place of a thermometer where a very high degree of heat is to be measured. It is sold usually at first-class opticians' or at other places where telescopes, thermometers, etc., are sold. If you have been so fortunate as to secure 93 chicks from 106 eggs, you would be unwise to attempt to use a regulator, as the best incubators are those that compel the operator to depend upon himself. Please send us a sketch and description of your incubator and brooder.

LEG WEAKNESS IN POULTRY: HENS EATING EGGS.

M. C. S., Centerville, Can.—1. My hens lose the use of their limbs. Sometimes they recover in a day or two; what causes the weakness? 2. Why do hens eat their eggs?

ANS.—1. Leg weakness or paralysis is occasioned by various causes, such as constitutional feebleness, sometimes from inbreeding; poor food; damp surroundings, etc. We know of no permanent remedy, as it generally recurs after one attack. Fowls need sound wheat and corn. Broken oyster shells and crushed bone are good to keep fowls in health, especially growing chickens. 2. Hens very rarely, if ever, eat properly shelled eggs. Animal food in the shape of scraps from lard-melting places, hazlets, etc., with the shell and bone as above, will generally assist in making strong shells, and prevent the vice.

ROUP IN CHICKENS.

J. H., West Granby, Conn.—My chickens breathe hard and fast and move as if they had the rheumatism; their appetite, however, is good; what ails them?

ANS.—The hoarse breathing is a form of "croupy" roup, due sometimes to draughts (perhaps from top ventilation) of air. It also occurs during long-continued damp weather. A good remedy is to subject them, until nearly suffocated, to the smoke of burning wood, tar and turpentine, after they are on the roost at night. A few drops of kerosene oil, forced down their throats from a sewing machine oil can, is usually efficacious. The weak legs may be due to dampness, too much fat, or rapid growth, if the fowls are young. Warmth and dryness are the best remedies.

KEEPING EGGS.

S. S., Delphos, Kans.—For "keeping eggs in warm weather," a dry process is to pack them in a box, using a layer of fine ashes between the egg, no eggs touching. Keep them in a cool place, pack none but fresh eggs, and be careful to turn the box twice a week. Eggs from hens not in company with roosters will keep twice as long as those that are fertilized. The wet process is to pack the eggs in a firkin or barrel, and cover them with a saturated solution of salt (strong brine) mixed with lime to the consisteney of cream. Another good and better mode is to add half a pound of salt and an ounce of salycilic acid to a gallon of strong lime-water. The eggs must be kept entirely immersed in the solution.

Subscriber (no address).—1. A cockerel was taken sick in September and died in February. His droppings were green striped with white, or yellowish green. He seemed hearty, but food did no good, and no remedy availed. What ailed him? 2. I hatched 12 ducks, but lost every one of them. They were all well till taken with a spasm, when they threw their heads around nearly behind them and fell on their backs. They would recover, but the attacks always returned until they died. What was the matter?

ANS.—1. The cockerel, most likely, died from consumption—a lingering sickness common to chickens. A tonic medicine will sometimes cure them if taken in time. 2. It is hard to tell what caused the death of the ducklings. If very young, sometimes a cold rain will cause such symptoms, or finding some uncongenial food in their rambles.

B. H. T., Union, N. J.—Is there any experience on record as to the inter-breeding of Plymouth Rocks and Gray Dorkings?

ANS.—Very seldom is a record made of crossings in poultry. The above cross would, no doubt, produce strong, large chickens.

T. W. L., Verona, Ill.—Corn-and-cob meal will not be objectionable feed for chickens; but corn should not be fed in any shape during the warm season, and only sparingly in Winter, especially to mature fowls, as it induces a tendency to become fat, which is detrimental to good laying. One part corn-and-cob meal with one part bran and one part middlings, is better. Wheat and oats should always be fed in preference to corn.

RANGE FOR SHEEP HUSBANDRY IN THE SOUTH; AVERAGE RATION FOR HORSES AND COWS; A "CORD OF MANURE," ETC.

R. H. Y., New York City.—1. How about sheep husbandry in Central Florida and in the same latitude elsewhere? 2. Given 20 work horses and as many milch cows, stable-fed and soiled, with no pasture, what should be the average consumption per head, per day, including a liberal supply of all kinds of feed? How near would 50 pounds per day come to it? 3. What is the average of wheat, rye, oat and bean straw and of corn-stalks per acre? 4. What is a cord of manure? 5. Is there any work which tells the various weights and measures of farm products and bye-products, etc.?

ANS.—1. Florida is not a desirable locality for sheep-herding. The heat and dampness of the Summer and the want of the right kinds of food will always be a bar to any extensive enterprise in this way. There are some sheep in Florida; but it cannot be called a sheep country. The Wire Grass region of Georgia; the southeastern counties; the southern mountain region, including Western Georgia; South Carolina, North Carolina and Eastern Tennessee, are remarkably favorable in locality and climate for sheep both for wool and mutton. 2. Fifty pounds of green fodder are quite inadequate for the sustenance of a horse or cow. The rule is 30 pounds of dry hay per day for 1,000 lbs. of live weight for simple maintenance; 50 lbs. of green fodder are equivalent to only 12½ lbs. of dry matter. The usual consumption of soiling fodder is 80 pounds per day for an ordinary cow weighing 800 pounds; and 120 pounds for a large cow. A horse cannot be kept in working condition on a sufficiently large quantity of green fodder, on account of his small stomach, and the larger part of his food must be grain; 25 or 30 pounds of green food and 20 pounds of grain are required for full feeding of a horse; 12 pounds of grain and 60 pounds of soiling will supply a cow of 800 pounds. 3. About 1,500 pounds of straw is the yield of the grain crops mentioned; 2,000 pounds per acre is a large yield of the grains and 1,000 pounds of bean straw. 4. A cord of ordinary manure weighs about two tons, and strawy manure that is not water-soaked will not weigh so much. A cord of solid cow manure weighs from 4,500 to 5,000 pounds. The weight depends very much upon the dryness or wetness of the manure. A car-load of horse manure containing, 600 cubic feet, well trampled, weighs 10 tons actual measure and weight, which is equal to nearly five cords and two tons per cord; 25 cords per acre is only very moderate. Mixed barnyard manure would easily weigh 25 per cent. more. Sixty to seventy-five tons of manure per acre are only a moderate quantity for a market garden and 100 tons are often used. 5. There is no such book. The information is contained in a number of works. Harris's Talks on Manures gives the weights of manures; but no rule can be given because manure varies so much in character.

ABOUT THE COMPOSITION OF MILK.

J. M. S., Watertown, N. Y.—1. What is the relative composition of milk for the different seasons of the year in regard to cream? 2. What is the effect in cheese making? 3. Does the quantity or quality of milk vary with the quality of food, or does the amount of cream remain nearly the same for a given amount of milk from the same cow? 4. Does the composition of milk change materially if a cow becomes farrow from what it would be if she had dropped a calf?

ANS.—1. The milk grows richer in cream as the fall season approaches and the feed becomes drier and more concentrated. If cows come to milk in the Fall, by feeding roots, silage, or other succulent food along with good Orchard Grass or clover hay, or a mixture of Timothy and clover, or with bright corn-stalks, milk very like that of June may be produced. If the feed is dry and concentrated, the flow will be less and the milk richer in cream. More depends on the feed and shelter than on the season. To get the best results, cows must be kept warm and have plenty of good, nutritious food. 2. As the milk grows richer in cream, it makes a richer cheese. Hence the custom in many cheese factories of letting patrons skim the night's milk after September. But this reduces the quality and value of the cheese. Perhaps buyers do not properly discriminate and make difference enough in price between cheese poor in fat and that which is very rich. The latter is the more digestible, and hence the more nutritious. A certain proportion of fat is necessary to aid in the digestion of the caseine. 3. Yes, most decidedly. Rich food—that is, food rich in nitrogen, with a proper proportion of carbon—makes rich milk. Watery food makes thin, poor milk. The relative proportion of solids to liquids may be greatly varied by the feed. But the relative proportion of fats to caseous matter can be changed but little, if any. Milk rich in cream is also rich in caseine; where the variation is caused by feed, both are increased or diminished in equal proportion. There is a difference in the proportion of fats to caseine in the milk of different cows, and no kind of feeding can vary this proportion to any material amount. 4. Yes, very materially. The fat globules grow smaller and the proportion of albumen is probably increased, making the milk more viscous and the cream more ropy. The change is sometimes so great that no butter can be churned from either the milk or the cream of a farrow cow. On the contrary, when the cow first drops her calf, the fat globules are the largest, the milk is the most limped and the churning most easy.

GRAIN RATION AND CUT FEED FOR HORSES.

C. O. U., Highland Lake, Col.—1. What is a proper grain ration for a 1,200 pound farm horse? 2. Is it advisable to feed grain alone for a midday ration? 3. Is anything gained by cutting the hay and mixing the grain with it, wetting the whole?

ANS.—1. No definite rule can be given for such a grain ration. No horseman orders the same rations for all of his horses. On the contrary, he carefully watches the needs of each animal and feeds accordingly. Much depends upon the general make-up and constitution of the animal, whether at work or idle, the care received, the surroundings and climate, and also the quantity of the ration of corn fodder as well as of the grain. In general, two to eight quarts three times daily may be taken as the extremes. While oats are probably the best and most natural grain for the horse when fed alone, it is much better to supplement the oats in part by some of the other grains. Any of the other cereals may be fed for the sake of a variety, the choice usually being determined by the kind at hand or the cost in the local market. An excellent method is to feed oats once or twice daily, and a ground mixture for the other ration. 2. It is better to feed a little hay or other coarse fodder first, especially if the grain is unground. The hay will take the edge off the appetite so

that the animal is not so likely to bolt his grain. Of course the grain alone is better than no ration, taking care to give ground feed when the animal does not well chew his grain. 3. We consider this one of the best methods of feeding the horse. Less hay will be fed and the horses will be kept in better working condition. This is especially true of "barrel or round-chested" horses and those that are inclined to be heavey or wind-broken. Farmers' horses during the Winter and at other times when partially or entirely idle, are very frequently fed too much hay. We make a practice of feeding no more hay (which should always be of good quality) than the horse will eat in one or two hours. Never fill a chute and allow a horse to eat all he can hold. It is both wasteful and injurious. When the horses are idle we recommend feeding clean bright straw and no hay, with a little extra grain. The cost will be practically the same. When the hay is cut, a bushel-basketful with which the ground feed has been well mixed and the whole then dampened (not wet) is ample for any horse of 1,200 pounds or under. An excellent ground feed for this purpose is prepared by thoroughly mixing two parts of ground oats, one part each of corn meal and wheat bran and one-eighth or one-fourth of one part of oil meal.

COLIC, BOTS, ETC., IN A HORSE.

H. K., Onawa City, Ia.—1. What is the best remedy for colic in a horse? 2. How can bots be got rid of? 3. One of my horses snagged his right fore foot two years ago, and ever since he can hardly travel on hard ground; but he goes along all right on soft ground. How should he be treated?

ANSWERED BY F. L. KILBORNE.

1. Much depends upon the cause of the colic. In general give ginger (one to two ounces) or peppermint oil (10 to 20 drops) with ammonium carbonate (one ounce) or one to two drams of sulphuric ether in one-half pint of oil. Belladonna (two ounces), aconite (30 drops), or chloral hydrate (two ounces) are excellent to relieve the pain of the spasms. Also one to three grains of morphine dissolved in pure water and given as a hypodermic injection. This is one of the best agents, since it will act in a few minutes when thus given. Common cooking soda is frequently given with success, but unless cautiously used is liable to cause rupture of a distended stomach by the sudden addition of gas, which is formed when the soda comes in contact with the gastric juices. Rectal injections of blood-warm water (two to four gallons) are very beneficial. Slow walking exercises, rubbing at the belly, or both, also afford great relief. In nearly all cases a dose of four to six drams of Barbadoes aloes should be given early, or at the outset, to aid in the removal of the cause of the colic. An excellent method is to give the aloes at the outset with the ginger or peppermint, and the belladonna or the hypodermic injection of morphine with rectal injections of warm water, followed by exercise or rubbing of the belly. Even after an attack has passed off, if the aloes have not been given, it is well to give a dose to carry away the irritant and thus avoid a second attack. 2. There is practically no cure, except to wait the pleasure of the bots to pass out, which they will do during the Summer. In Autumn while the larva are young and tender, they may sometimes be removed by any active vermifuge. Oil of turpentine (two to four ounces) diluted in oil or milk is one of the best. Later in the Winter they become encrusted with a hairy coat, and are then able to resist any agents that can safely be given to the horse. The introduction of the bots may be largely prevented during late Summer by trimming off the long hairs from the throat and fore limbs, and daily washing the limbs, throat and breast with strong soap-suds so as to remove the eggs there deposited by the bot-fly before they hatch and fall into the food or are removed by the horse when he licks himself. 3. Without knowing the extent and locality of the injury, we cannot prescribe.

WHEY FOR COWS.

G. W., Williamston, N. Y.—1. Is whey from a cheese factory a proper thing to feed to cows? 2. What kind of grain feed would be the best to mix with the whey for profit, and how much should be fed per day? 3. Would the whey affect the milk if fed to the cows clear in large quantities?

ANS.—1. Ordinarily, no. It is sour and contains little nutriment. If fed sweet—perfectly sweet—in small quantities, it might do no harm. 2. Wheat bran would be as good as anything to mix with whey. The quantity would depend on the need of the cow for additional feed, and on her condition. Two to eight quarts a day, or even more, would do no harm. The bran would be good for her at any time without the whey. Warm water would be about as good as sweet whey to convert the bran into a mash. 3. Yes, very seriously, if sour and stinking, as it usually is when it comes from the vat. It would give the milk and the butter or cheese made from it a whey flavor. Feeding whey to cows works much like feeding simple sirup or glucose to bees. The latter store up the sirup and glucose very little changed. The milk given by cows fed heavily on whey is little else but whey. Of course, the milk secretions are mingled with it, but it is poor stuff for milk. There is but little in whey but water and sugar which soon becomes acid and worthless. The sugar is carbonaceous, and helps keep up the animal heat. Cows secreting milk need nitrogenous food from which to elaborate it. Not only the casein, but the fats in the milk require nitrogenous food for their production. Hence the value of wheat bran, which should not, however, be the exclusive grain feed. It is better mixed with equal weight of corn-meal.

KNOTS ON APPLE TREES.

P. B., Sherwood, W. Va.—The trees in my apple orchard, just coming into bearing, are covered with knots towards the ends of the branches—something like those on cherry and plum trees, except that they are not black; what's the matter?

ANSWERED BY T. T. LYONS.

The description is very vague and imperfect; quite too much so to warrant a positive opinion as to the source of the trouble. The knots, or protuberances mentioned, may, and probably will, prove to have resulted from the attacks of the Woolly-louse of the Apple—Schizoneura lanigera (Hausm). Should this prove to be the cause, an examination last Fall would have shown, at the axils of the leaves and in the forks of the branches, patches of a woolly substance beneath which the insect might have been discovered. Its food is the sap of the tree, which it obtains by suction through punctures in the bark. It is, therefore, impervious to poisons; but may be destroyed by a vigorous use of a strong alkaline preparation applied and well rubbed in with a scrubbing brush, which must, of course, be done late in Autumn, or before the appearance of the foliage in Spring. The same insect, under a somewhat different form, often attacks the roots of the apple, beneath the surface of the soil, producing similar excrescences upon them. This enemy, although originally imported from Europe, is frequently spoken of as the American Blight.

DIARRHŒA IN COWS.

W. S., St. Catherine, Ont., Can.—Since diarrhœa is a symptom of disease rather than a disease of itself, the treatment should be directed to the disease or cause producing the diarrhœa. In general, carefully examine the feed and drinking water, and make sure that both are pure and wholesome. A change of feed is also frequently desirable. Medicinally, at the outset give one-half or three-quarters of a pound, according to size of animal, each of castor oil or raw linseed oil and Epsom salts. If there is no purgation in 24 hours, repeat the dose. In simple cases this will often be all the treatment necessary. While this mode of treatment may seem rather paradoxical to many of the readers of the RURAL, almost any physician will tell them that it is the proper course to pursue. In severe cases, gum-arabic, linseed, slippery elm, or oak-bark tea are excellent, given in the drinking water. If these do not succeed, give two to four drams each of powdered opium, catechu, prepared chalk and ginger, twice or three times daily, the size and frequency of the dose to be regulated by the severity of the case. Cease giving this medicine as soon as the diarrhœa is checked, and do not give it at all until after the oil and salts have been given.

BURNING STRAWBERRY BEDS.

M. D. S., Chews Landing, N. J.—What is the cheapest and best way to burn strawberry beds after picking? Last year the cost of straw and labor for burning, proved greater than the outlay for clearing the land in the usual way.

ANS.—If burning is resorted to, we would do as follows: Supposing the land to be free from stones, set the mower so as to cut close, and run over the rows lengthwise, leaving the cut foliage right on the rows; there let it dry sufficiently to burn readily. If that be insufficient, strew along the rows enough of the cheapest combustible matter available; chose a time when the wind blows lengthwise of the rows, and beginning on the windward ends, light all and burn over at once. The advantages of burning are to destroy weed seeds and insects. However, we prefer one good crop of large berries, and then to *rotate*, turning under the old vines; the second and subsequent crops are usually inferior in size and quality.

CYNTHIANA GRAPE.

J. M. T., Brick Church, N. J.—The Cynthiana Grape resembles Norton's Virginia closely, and is regarded by some as the same. It is said to be the best grape for red wine, which opinion appears to be confirmed by the fact that it was awarded the first premium as the "best red wine of all nations" at the Vienna Exposition. Bunch medium, compact, shouldered; berry medium, black, with blue bloom, sweet and vinous, with dark red juice, moderately juicy, very rich. Specific gravity of must, 118°. Vine a good grower, healthy and hardy; does not grow readily from cuttings, and will not bear much before the third year, when it becomes very productive. Not liable to any disease. Will bear best on spurs on old wood. We know not why it should not succeed with you.

SMUT IN OATS.

A. K., Hickson, Canada.—1. If smutty seed oats are sown, will the crop be likely to be smutty? 2. Would smutty oat straw be injurious to cattle? 3. Are white oats as liable to smut as black?

ANS.—All seed grain that was smutty last year should be steeped in a solution of a pound of sulphate of copper in four gallons of water; this is enough for five bushels of seed. The seed is put into a barrel or tub, and the pickle poured slowly over it. After standing an hour, the barrel is emptied on the floor, and the seed is shoveled over until all the pickle is evenly absorbed. 2. The oat-straw will not be injurious, as the smut is scattered and blown out in the thrashing, but it is advisable to cut the straw and wet it with salt water, and mix a little meal with it, and so feed it. 3. All oats are liable to smut if they are not treated to the copper solution above mentioned.

ABOUT OAT CULTURE.

H. M., Wabaunsee, Kans.—1. Should oats be run over with a smoothing harrow when they are four or five inches high? 2. How would you go to work to raise a very large crop of oats on a small area, without much regard to cost?

ANS.—1. It is hardly necessary to harrow oats in the Spring. Fall grain is benefited by a harrowing which breaks up the hard crust, loosens the soil and invigorates the young plants, besides furnishing an excellent seed-bed for grass seed. 2. To get a good crop of oats, we should plow in a liberal quantity of manure, sow the seed on plowed ground; harrow lengthwise of the furrows, and when the oats were well up, give a dressing of 100 pounds of plaster per acre. With this treatment and 2½ bushels of good seed per acre, we have raised 70 bushels to the acre.

SYNOVIAL SWELLING OR THOROUGH-PIN.

S. T. H., Eau Clair, Mich.—Shortly after weaning her colt my brood mare became lame. Both above and below the knee the left fore leg is swollen in bunches, which are soft like a wind puff: what should be done for her?

ANS.—Judging from the location, the swellings are not dropsical, but either synovial swellings or thorough-pin of the knee, due to a sprain. Apply a cold wet bandage loosely until soreness disappears. Then draw off the liquid with a fine hypodermic syringe, and apply the bandage tightly with pads on the swellings. A dry bandage with gradually increased pressure (the pressure should be slight in beginning) may be used without drawing off the liquid. With many blistering is a favorite method and is usually successful. Tincture of iodine applied twice a week will frequently reduce small swellings.

ASHES, ETC., FOR POTATOES.

A. F. H., Dansville.—Would hard-wood ashes, land plaster and salt, be a good application to sod land plowed last October, and intended for potatoes in May.

ANS.—The ashes will do good, but the land will also need bone and nitrogen. The land plaster and salt may do good—they may not. Except that the plaster contains lime, neither can be considered a plant food. As much plaster may be applied as you chose. It will do no harm. We should not use over 12 bushels of salt to the acre. The distance apart for potatoes, should be measured by the variety planted, and the richness of the soil. Rank-growing kinds in rich soil should not be planted less than three feet apart.

A. S., Tioga, Pa.—1. Having no manure or fertilizer and wishing to improve gravelly-loam, well-drained land by turning under a green crop in Summer, how should I proceed? 2. Would the pecan be likely to prove hardy here where the mercury sometimes goes down to 20° or 30° below zero? 3. Can the Japan Chestnut be grafted on the American, and where can cions be obtained? 4. Are apple seeds as good for nursery planting when taken from grafted as from natural fruit? 5. How can dried raspberries be prevented from getting wormy after being heated and put in air-tight cans? 6. How can Quack Grass be destroyed?

ANS.—1. Having but the few months of one Summer for the growth of the crop wanted, you must choose some annual, and it will only be able to supply some soft blades and stems in the brief time. Plants like clover, rye or common grass, which grow almost the whole year through and store up much solid matter, are much the most fertilizing. Probably either oats, buckwheat, or millet will serve you best. In turning them down avoid burying them very deep, especially if your soil is a heavy loam, as they are then liable to mold or sour, and become injurious to the roots of your crop. 2. If the tree would survive, it would not be likely to bear fruit. Still, we hear that trees are hardy fully as far north. 3. The Spanish Chestnut grafts on the American as readily as apples take on each other. Probably the Japan will prove equally facile. For cions send to Storrs, Harrison & Co., Painesville, O. The nuts should be fresh for planting. 4. In Europe they have an inherited objection for any other stocks for standard apple trees than seedlings of wild trees (wildings). Here it is found that the fewer and larger seeds of cultivated apples yield the thriftiest stocks, varying in hardiness just as all apple trees do. 5. The worms can issue only from deposited nits, and these should be killed by the heat applied to the fruit immediately before sealing up. 6. Turn it down in May or June—preferably the latter. Plow only deep enough to turn up all the white creeping stolons. Cultivate off every blade as soon as blades show themselves. A rake-like scarifier that will comb out the stolons and leave them exposed to the hot, drying, August sun, will finish them. Otherwise some of them may retain an ability to germinate, and make a weak show the next season.

G. H. B., Herne, Texas.—My mare was "covered" eight months ago; and since last Summer she has been discharging from the vagina a whitish matter not unlike buttermilk. She doesn't seem to be with foal, and does not keep in good condition. The least exertion or strain causes the discharge. What is the matter?

ANS.—The mare has a chronic catarrh of the vagina or womb. She is probably not with foal, and cannot become pregnant as long as the discharge continues. With the aid of a catheter or other small tube, draw off any liquid there may be in the organ, and then inject luke-warm water until the water comes out clear, draw off any remaining water, and inject the following solution, first making sure the zinc is well dissolved:—One dram sulphate of zinc, one-half glass of glycerine and one pint of water. Repeat the injection once daily, until all discharge ceases. Also give internally night and mornings one dram each of sulphate of iron and Barbadoes aloes, and one-half ounce each of powdered gentian and ginger; make into an oblong ball with sirup or honey, and administer by placing the ball well back on the tongue, and holding up the head until swallowed. Should the discharge fail to cease in a week or two, replace the zinc sulphate by one-half dram zinc chloride.

L. C., Omaha, Neb.—1. There is no necessity for sowing Blue Grass in the Spring. It would be far better to put the land in thorough condition and wait until August and sow the seed then, than to try to clear the land of timber and underbrush in time to sow it this Spring. 2. A stall three feet wide is rather close quarters for a cow. We give 3½ feet; if the cows are in stanchions three feet is a good distance, as it serves to keep the cows straight on the floor. 3. Which is the more profitable "to retail milk from house to house at six cents per quart, or deliver it at three or four places at 15 cents a gallon," where labor cost "$20 to $25 per month and board," will depend upon the distance the houses are apart. If it takes six hours to deliver 100 quarts of milk, the difference in price is quite lost, and the wholesale delivery is preferable. There is also a loss of about 10 per cent. in measuring out pints or quarts of milk from a can on a milk route. This is from actual experience of the writer.

T. H. B., Dudley, Wis.—1. How and when should grape seeds be planted? 2. What is the best chestnut for Northern Wisconsin.

ANS.—1. The best time is when the grapes are ripe, if one has greenhouses or sunny windows and a suitable temperature. They may, however, be planted at any time. If allowed to become dry, they are often several months in sprouting. You may plant grape seeds in the open ground as soon as the frost is out. A suitable protection will carry the young plants over winter.

Subscriber (address mislaid).—The expression "casting of the withers" in a cow owes its origin to the mispronunciation or corruption of the Latin word *uterus*—womb—by English country folks. "Wethers" or "withers" was the nearest they could come to the correct pronunciation! Hence "casting of the withers" means "casting of the womb" or "inversion of the womb," according to the common way of speaking. The common causes of it are violence or injury at parturition or in the removal of the afterbirth; sloping of the stalls backward; a relaxed condition of the pelvic organs, as from hot or unhealthy stables, digestive disorders, or other diseases.

(*Continued from page* 303.)

POULTRY AND POULTRY RAISING.

C. S. COOPER.

The best breeds: why? feed and feeding; how best to grade up; henneries; incubators, success with.

THE question as to the best breed is difficult to answer satisfactorily—about as difficult as selecting a wife. There may be 50 girls in a neighborhood, and a young man will select for his wife one that many others have passed by, because she suits his fancy: so it is in selecting a breed of fowls, each person has his favorite. Leghorns are generally kept by most farmers. Ask them why these are selected, and they will tell you they are the best paying birds on account of their great laying qualities. Are they not mistaken? First, they are not good poultry for table use; second, unless kept very warm and given daily nursing, they will not lay many eggs in Winter, when eggs are worth most; third, when fatted for market, they will weigh at the same age one-third less than many other varieties; consequently there is a loss of one-third in cash from the number of pairs sold. It is an admitted fact that half the chicks raised are cockerels, and they must be disposed of as market poultry with the aforenamed loss in weight. During my 29 years of farm life, I have given several varieties a fair trial, taking quality and defects into consideration. I have endeavored to obtain a breed of hardy constitution; these will lay most eggs in Winter. I believe in pure-bred stock; but if I were to cross, I should do so with either the Wyandotte or Light Brahma, preferably the Wyandotte for the following reasons: they are as docile and as easily confined as the Brahma, lay many more eggs under confinement, are ready for the spit at any time, are more toothsome, and mature much earlier.

My adult fowls are kept mostly on wheat; but two or three days out of seven, they are kept on oats, except the morning feed, when they get mashed potatoes. I also feed wheat bran, corn-meal and ground beef scraps on alternate days. A sprinkling of Cayenne pepper I find beneficial. My young stock I keep on corn and wheat mixed while they are growing, giving as much as they will eat without wasting. They are generally in a condition for market after they have been confined and thus fed for a week.

To grade up his stock at a small cost, a farmer can always procure at a reasonable cost one or more cockerels of pure breed; or, better still, he can procure two settings of eggs that will give him all the cockerels he needs for crossing, and have some pullets of pure blood to breed from. New breeds can only be produced by crossing. It is of slow progress, requiring from 12 to 20 years to breed true to feather.

In establishing a hennery, I would advise that dry land be taken—sandy or sandy loam, if possible. Chickens thrive best on such soil. Mud and pools of water generally produce disease and death. A hennery built on an eastern or southern slope, with the rear walls in the bank, is much warmer in Winter, and should be on soil naturally dry, or well underdrained. I prefer raising my chicks early in the season. They grow much larger; the culls can be sent to market, and command a larger price; they begin to lay eggs before Winter, and during cold weather eggs pay best. I have now about 250 as fine-looking chickens as can be found.

I raise nearly all my chickens with an incubator and brooders. Eleven days ago I removed 128 chicks from my incubator, and in the interval I have lost only four of the lot. They were weakly on leaving the eggs; now they are robust. Four days ago, I put 30 chickens with hens; now there are left only 18 of the 30. One of my hens hatched seven chicks on the same day I took the 128 from the incubator; now she has only five, and they are not so large as those brought up in the brooders. Evidently as "mothers," the brooders are better than the "biddies."

Bergen Co., N. J. C. S. COOPER.

BREEDING AND FEEDING.

THE Plymouth Rock or Wyandotte is the best fowl to use in crossing on the common stock of the country; because they are hardy breeds; are of good size; have clean, yellow legs, with plump bodies, and dress a golden yellow. They mature rapidly; are good layers, and are the two best general-purpose breeds living.

How shall we improve farm stock? is a hard question; but I would advise buying fowls instead of eggs to obtain birds to improve the original stock, or to embark in pure-bred poultry; because with ordinary care one has no chances to run, such as broken or bad eggs, poor hatches, etc. Yes, thoroughbred poultry will pay on the farm (providing birds or eggs are purchased from good, reliable breeders), as it costs no more to keep and care for such fowls than for common stock, while they will lay as many or more eggs, are handsomer and are always in demand at better figures.

We have found that winter laying is largely the result of good care, warm quarters, and early hatched pullets. There is no one food that is best suited for producing eggs. A variety is what fills the egg basket. In cold weather give a warm morning meal of three-fourths corn and oats, and one-fourth wheat middlings, seasoned with salt and occasionally some Cayenne pepper or eggine, with wheat, oats, buckwheat, or screenings of any grain, scattered among the straw on the floor in the henhouse to keep the hens busy through the day, and reward their labor with a good feed of corn just before they go to roost. I find this way of feeding very satisfactory while the birds are confined in winter-quarters. Besides this, they should have gravel, ground shells, and a feed of meat in some form every two or three days, if the very best results are expected. Hens are like all other farm stock—they will manage to survive on poor rations and in poor quarters; but if extra returns are expected, extra care must be given, and the large profits come with extra care. F. B. ZIMMER.

Warren Co., N. Y.

CARE OF TURKEYS.

THE turkey is tender when young, but hardy when matured. The greatest difficulty with young turks is when they are feathering: then they need an almost unlimited supply of food of the best quality, and variety. They feather so rapidly that they are soon able to fly, but this progress is made at the expense of a great loss of vitality. They cannot endure confinement, even when young, and the poultryman must, therefore, not only give them their liberty as soon as possible, but must not subject them to the loss of a single meal. The turkey hen is a very persistent sitter, requiring 28 days for incubation. She is a careful and attentive mother, and remains with her young until they voluntarily forsake her.

For the first 24 hours the young turkeys should be kept in a close box, quiet and undisturbed, in order to allow them to rest and appropriate the food derived from the yelks, which they absorb. They should then be fed on finely chopped eggs every two or three hours, for the second day, and after that time, a mixture of soaked wheat bread and milk, mixed with eggs and finely chopped onions will be excellent. Do not feed eggs longer than three or four days, but vary the food to mashed potatoes, cooked oatmeal, chopped onions, chopped meat and cracked wheat or corn.

Keep the hen confined in a roomy coop for the first week, and allow her to take her brood out for exercise; but she should be watched carefully, in order that the young ones may be fed as often as convenient, making meat and ground bone a special object in their meals. The young turks cannot endure the slightest dampness, and under no circumstances should they be allowed out of their coops until the ground is perfectly dry.

As a single union of the cock and hen fertilizes all the eggs of the latter for the season, the former will be serviceable for a dozen hens if judiciously managed. Turkeys cannot be kept under confinement or restraint, and require plenty of room for foraging. They will go over the highest fences and stray off for miles, and can therefore be raised only on large farms, or where there is room for them. The best variety is the large Bronze, which sometimes attains the weight of 40 pounds when two years old, though such weight is rather an exception. A cross of the wild and Bronze gives a very hardy turkey, and if the eggs are hatched under common hens with a few chicks as companions, the little turks can be encouraged to roost with the other fowls, and will lose much of their inclination to wander.

Turkeys are always profitable, as they require no care after they have passed the critical period, and although the strictest attention is necessary with them when they are young, when matured they endure greater cold and exposure than any other class of poultry; yet they give the best results when properly cared for. They are subject to both roup and cholera, but as they are in the fields the greater portion of their time, they do not come so frequently as other poultry in contact with filth and other causes of disease. While large flocks cannot be conveniently kept by every one, yet a few should be raised on all farms. P. H. J.

MANAGEMENT OF GEESE.

GEESE are great foragers, and although they are partial to ponds and streams, yet they should have an open range with plenty of grass. The goose seldom lays before she is a year old, and often the eggs from young geese do not hatch well. If the eggs are removed from the nest, she will sometimes lay as many as 40, but a smaller number is usually the rule. It requires about a month for the incubation of the eggs, and when the goslings are out of the shells, they must be kept in a dry, warm place for a few days, when they may be allowed in the fields; but under no circumstances should they be allowed near the water, as, contrary to the old adage, "water is not good for young goslings or ducklings." If this precaution is observed, there will be less loss. After they are 20 days old, they may be allowed to go with the old ones anywhere they prefer.

The food of young goslings should be rather bulky and soft. An excellent mixture is ground meat scraps, corn meal, bran, midlings, and ground oats, scalded and mixed with the same quantity of mashed potatoes or turnips, with chopped onion or grass added. A little bone meal or milk will also be of assistance, and when a month old they will require nothing from the owner but a feed of mixed grain at night.

The Chinese geese lay the largest number of eggs; the Toulouse are the largest, and the Embden the most attractive. The latter being entirely white, their feathers are preferred to those from the others. A cross of the Toulouse gander and Embden goose gives the best bird for market. Only young geese are able to realize the highest prices, but as the old ones are best for breeding purposes, age is no disadvantage.

Geese are profitable only when there is unlimited range, for they will not thrive in confinement. They are usually self-dependent, and being grass-feeders and not very choice in the selection of their food, they will not cost the poultrymen a large sum. A pot of turnips or chopped clover, with plenty of drinking water, and a feed of grain in Winter, will be all they require. They may be plucked twice a year, though some perform the operation oftener; but it is injurious, entailing upon them loss of vitality. They should have an open shed for shelter at night, and be protected from their enemy, the fox. H.

RAISING DUCKS FOR PROFIT.

DUCKS are very hardy when young, and grow faster than any other class of young stock. They require but very little brooding, and if fed all they will eat, with plenty of drinking water, they can be made to attain the weight of five pounds in ten weeks from the time they are hatched. They require mixed food, which should consist of meat scraps, mashed potatoes or turnips, and scalded bran, meal, and midlings. They come into market after the prices for early chicks begin to decline, thus extending the season for securing the highest prices. It is best to hatch chicks early and then follow with young ducks.

The favorite breeds are the Pekin, Aylesbury and Rouen. The first are easily kept in confinement, and require no ponds of water. The adults should have a large trough of fresh water, but ducklings should not get their bodies wet from the time they are hatched, till they are marketed, although until recently it was supposed that a pond of water was necessary.

The Pekins lay when five or six months old, and the favorite month for laying by all the breeds, is February. Plenty of nests should be provided, as ducks usually lay very early in the morning. In feeding, the cheapest mode is to give them plenty of bulky food. A lot of clover hay, chopped fine, scalded and mixed with mashed turnips, and thickened with bran and ground oats makes a delicious meal for them; but they should have meat once a day. Duck eggs command at the present time double the price of those from hens, and as they will lay as many as 140 a year, they are capable of yielding a fair profit for all that may be invested in them. The feathers are also salable, and usually pay for the labor of killing and picking them for market. The best crosses are the Pekins and Aylesburys. The Muscovy drake and Rouen duck produce a large and elegant carcass for market, but the produce is sterile, and a second cross cannot be made from it. When roaming at large, a pond and plenty of grass, with a good feed at night and warm, dry quarters, will keep the adult ducks thrifty and productive. J. H. P.

DUCKS.

IN regard to ducks the principal objection to all breeds is the grossness of their appetites. All the larger breeds, as the Pekin and Rouen, are gross feeders, and their eggs are but little, if any, larger than those of the Aylesbury. The latter will not come home at night as well as Pekins, nor are they quite as hardy. Rouens are not as good layers as either of the above; nor are they any better flavored, nor are any as fine-flavored as the Black Cayuga, which are a little smaller on the average, though their eggs are of about the same size; although they are the quietest, still, they are objectionable in color of plumage, not being easily found when straying away at night, as most ducks are apt to do at times. H. H.

CHICKEN NOTES.

THE cheap drinking fountain noted in recent RURAL, suits me exactly. I had one made from the illustration. I furnished the can and the tinman charged me 30 cents. I recently cured a hen of roup and another of blind staggers by giving two teaspoonfuls of alcohol in a little water three times per day, and forcing soft, warm food down their throats. F. C.

Leominster, Mass.

LANGSHANS AS WINTER LAYERS.—I have three Langshan pullets and one rooster that I raised the past year. I separated them from my other chickens on February 28, and from that day to March 18—28 days—they laid 67 eggs. Then one of them began to sit. All the house they have had is a dry-goods box about three feet square. Considering the weather we have had, I think this is doing pretty well. Seven eggs weighed a pound. G. B. C.

WYANDOTTES IN COLORADO.—Our friend Will D. Sawyer, of Greeley, Colorado, sends us the following practical poultry note: "I obeyed the RURAL and bought Wyandottes. When a neighbor drops in and tells about getting eight or ten eggs per day from a flock of 50 or 75 hens, I tickle him a little by telling him how I get four and sometimes five eggs from only six pullets about nine months old. First egg December 1; since then, 81 days, 196 eggs."

Miscellaneous.

CATALOGUES, ETC., RECEIVED.

RIVERVIEW POULTRY YARDS.—Circular from A. C. Hawkins, Lancaster, Mass. Pictures of the Wyandottes which won the prizes at the New York poultry show are given, as well as of the splendid Plymouth Rock cockerel Perfection 2d. The "Hawkins Strain" is a famous one. The fact that it is advertised in many of the poultry catalogues is the best recommendation it could have. Send for the circular, and read the list of prizes won by members of this famous flock. The eggs are high-priced, but they come from prize fowls.

HOW TO SUCCEED WITH SMALL FRUITS AND POULTRY.—Pamphlet from Rob't. Coates, Norwood Park, Ill. A neatly arranged book of 110 pages, well illustrated and printed. The design of the book is to show that small fruit culture and poultry raising can be profitably combined on the same farm. This design is well carried out. The 40 pages given up to poultry, their feeding, breeding and disease, contain much sound advice. The book is sold at 35 cents.

HIGH-CLASS STANDARD POULTRY.—Circular from Smith & Walker, Lee, Mass. Wyandottes, Plymouth Rocks; Light and Dark Brahmas; Langshans; Hamburgs; Dominques; and Brown and White Leghorns are pictured and described. It is claimed that the Wyandottes; Brahmas and Plymouth Rocks are all of fine strains.

MAPLE LAWN POULTRY YARDS.—Circular from Wesley B. Barton, Pittsfield, Mass. Poultry and Scotch collie dogs are offered at fair prices. Agent for the "Simplicity Brooder," Wyandottes, Plymouth Rocks, Leghorns and Pekin ducks. An effort is made to deal squarely and fairly with customers. All eggs are guaranteed to be fertile, and all infertile eggs will be replaced. Send for the circular.

SILVER GRAY DORKINGS.—Circular from John L. Rice, Rensselaerville, N. Y. A short description of Dorkings and reasons why they should be secured. It is claimed that the Dorking produces the best and finest of all poultry meat, that the hens are fair layers, good sitters, good mothers and not roamers.

SAYBROOK VALLEY POULTRY YARDS.—Circular from Orson Winans, Oak Hill, Greene Co., N. Y. Wyandottes, Plymouth Rocks, S. C. White Leghorns and Bronze Turkeys are offered. The breeds are described and some space is given to methods of handling and shipping eggs.

MILL BROOK POULTRY YARDS AND KENNELS.—Circular from Wm. Montgomery, Jr., Bergenfield, N. J. Plymouth Rocks, Wyandottes, Langshans, Games, Leghorns, Houdans and Scotch Collie and St. Bernard dogs.

FORD BROOK POULTRY YARD.—Circular from A. F. Williams, Bristol, Conn. Light Brahmas, Langshans, Plymouth Rocks, Leg-

horns, Houdans, Wyandottes and Pekin ducks. The Langshans and Rose Comb Brown Leghorns are said to be particularly fine.

HIGH-CLASS POULTRY.—Circular from S. K. Willcox, Smyrna, N. Y. White Leghorns, Wyandottes and Colored Dorkiugs are the specialties. For list of premiums won, prices and testimonials, send for circular.

ELM TREE POULTRY YARDS.—Circular from R. H. Shumway, Lebanon Springs, N. Y. Besides the more common breeds, Silver Gray Dorkiugs and White-faced Black Spanish are offered. Agent for the Diamond Egg Basket.

THE PRACTICAL POULTRY BOOK, published by the Associated Fanciers, Philadelphia.—A little book of 100 pages given up to a description of the various breeds, and short hints as to breeding and feeding.

WATNONG VALLEY POULTRY YARDS.—Circular from Eugene Hill, Littleton, N. J. Plymouth Rocks and Pekin Ducks. The prize Plymouth Rock cock, Watnong Chief, is at the head of flock.

HIGH-CLASS POULTRY.—Circular from R. G. Buffington, Fall River, Mass. Erminettes, Wyandottes, Plymouth Rocks, White Leghorns, Light Brahmas and Pekin ducks.

BRADLEY BROS., LEE, MASS.—Plymouth Rocks and Wyandottes of first-class strains. The neatly printed card shows the excellence of the birds at the head of this yard.

WALNUT STREET POULTRY YARDS.—Circular from H. F. Ailing, Newark, N. J. Plymouth Rocks; Light Brahmas, and Brown, Black and White Leghorns.

WHITE AND BROWN LEGHORNS.—Circular from C. A. Peterson, Albany, N. Y. Pictures and descriptions of these famous "egg machines" are given.

BLACK JAVAS. Circular from N. T. Lattin, Gaines, N. Y.—Send for the circular and read the good points claimed for these promising fowls.

MERIDEN POULTRY ASSOCIATION, Meriden, Conn.—A well established association. Eggs and birds of all kinds in season.

BEES AND QUEENS, STRAWBERRY PLANTS.—Circular from C. Weckesser, Marshallville, Ohio.

ILLUSTRATED CATALOGUE of seeds from the Shakers' Seed Company, Mount Lebanon N. Y.—A well printed pamphlet of 80 pages containing a list of seeds for sale by the Shakers, as well as brief directions for planting and caring for gardens. The good standing of this company is generally recognized.

MACOMBER'S HAND CORN, BEAN AND BEET PLANTER.—Circular from S. M. Macomber & Co., Grand Isle, Vermont. It is claimed that this planter is the "simplest and best in the world," and that with proper care it will last a life-time. We have used it with excellent satisfaction, and can recommend it to our readers as a first-class article. The highest testimonials have been given as to its usefulness. The manufacturers state that in case the implement does not give satisfaction they will refund the money in every case where it fails to perform all that is claimed for it.

For Women.

CONDUCTED BY MISS RAY CLARK.

THE "LAY" OF THE INCUBATOR CHICKEN.

'Twas in an Incubator that
I first saw light of day,
Where I with many others
In my narrow egg-shell lay.

For one and twenty weary days
I boiled in slumber deep,
Till on the twenty-first I burst
My shell and 'gan to "peep."

Then 'neath a cheerful "brooder,"
Warmed by a coal-oil lamp,
They put us all so wet and small,
Out of the cold and damp.

'Tis fitly called a "brooder,"
For in it you may brood
On the fate that lies before you
When you're "ripe" enough for food.

You're fattened in this brooder
Instead of in a coop,
Until your crop's so full of food
You've got a case of "roup."

If haply you survive the ills
With which young chicks abound,
A full-fledged "broiler" you become,
Worth eighty cents the pound.

So little chicks, take warning now
While yet there's ample time,
And so you may escape the fate
Which I've here set to rhyme.

As soon as you are old enough
Fly off somewhere or other,
So that your young ones may not have
A "brooder" for a mother.

LADIES AS POULTRY KEEPERS.

BY ONE OF THEM.

IN many country places, ladies can try their hand at keeping poultry profitably. On the farm we find many things to do; we have much of the home-making to look after, all the things that add so much to the enjoyment and happiness. I think many who wish they had some way to have things to adorn and beautify the home, and a little independent income to spend as they like, can have it by keeping poultry. I would not advise making this all one's business, but taken as a part, adding gardening in all its nice variations, which makes a good companion for out-door work, and gives a fine profit on all investments. As a child, I loved the chickens, and late years have tried raising thoroughbred fowls of different varieties with very good success. I am a constant reader of the best magazines on this subject. My earnest attention has been given to it, and I believe that head, heart and hands, working together, will bring reward in all life's work, even though it be only rearing chickens. After making up my mind I could make money raising chickens, I looked up varieties to see what would do best here; after several trials, I found the rose-comb and pea-comb varieties seemed better adapted to this section of the country, as we have cold Winters, and a frosted biddie cannot give eggs. I have fair markets, but the greatest profit comes from selling eggs in the cold months. By my experiments, I find May-hatched pullets will not moult in the Fall, and they all will usually be laying by December, and be broody by April. So I hatch my chicks generally from middle of April to middle of June. March-hatched and sometimes April birds will moult late in the Fall, but the young cannot make a new feathering and lay eggs at the same time, so they make poor winter layers, are broody late, giving late chickens the next season, and these rarely lay well in Winter, but make good summer layers when a year old. I find this is not best here, because eggs are twice as high in Winter as in Summer. It is said one dollar will keep a hen a year, and a really good hen of any breed will lay two dollars' worth of eggs yearly. At this estimate, every hen gives one dollar profit, beside all the chicks raised from the flocks. After the fertilizer is bought, the market fowl and sale of feathers will pay for all the care. Purchase Leghorns in pens of 10—a cockerel and nine hens. I find the rose-comb gives the most eggs in the cold months, and as good in Summer. I have had the best strains of each and do not know of a better breed for eggs. The Light Brahmas I now have are giving perfect satisfaction in their egg record, and are superior market fowls. But there are Brahmas and Brahmas, I have found. There is a great difference in strains of the same breed. Many have selected what they admire most, and bred them until their idea of that variety of fowls becomes fixed, and so the strains are obtained. I bought some handsome Light Brahmas a few years ago, that had been bred to be non-setters, which they were, and the next thing to perfect non-layers—a hen that does not lay will not become broody. I cannot say that I have ever been satisfied with any single-comb variety of fowls. I have tried several standard varieties, and have a few nice Plymouth Rocks of noted strains; but they do not come up to my wishes or expectations. I should say for this State, the Light Brahmas for a large fowl; the rose-comb Leghorns for eggs; a cross between the Leghorn males and Brahma hens, never reversed, are a first-class, general-purpose fowl. They are called Diamonds, are good size, small rose-combs, prettily marked in some, pure colored in other crosses, excellent layers of large eggs, good broilers and fine poultry. With these two thoroughbred breeds and their cross-breed I can make money on a farm keeping poultry. Some like only one breed, but until we find that "ideal," one will not do for everything with me. I have also had some experience with turkeys; but the cholera has pretty well cleared them from this State. I like the Pearl Guineas, and keep a trio. They prove a good guard, giving the alarm to all when danger is near. I have also a trio of Rouen ducks; they do well. Many are trying their luck with ducks of the large breeds in this section. The dear, tiny Bantams make up my collection of fowls. It takes much study and patient watchfulness to become thoroughly posted on all points in poultry culture. I treat my birds with loving, gentle care, for I admire them and try to have them the very best of their kind.

Merrimack Co., N. H.

Domestic Economy

CONDUCTED BY MRS. AGNES E. M. CARMAN.

POULTRY PITHS.

DON'T feed poultry for a day before killing.

The lower end of the breast bone of a *young* turkey will be soft and easily bent.

Geese are not fit for cooking after they are three years old—they are at their best when only one year old.

The meat of an old fowl is richer than that of a chicken, and is, therefore, better for boiling, for salads, and for made dishes.

When dressing poultry be careful not to break the gall-bag. It is situated near the upper part of the breast bone, and is attached to the liver.

Always add a minced onion to the stuffing of a goose or duck.

Young Guinea fowls are good, eaten either roasted or stewed.

Put a teaspoonful of soda into the water used for washing poultry.

A small pair of tweezers is an excellent instrument for removing pin-feathers.

When picking feathers from a fowl that has been scalded, place it with its head towards you, pulling the feathers away from you.

According to Marion Harland, there is no direr disgrace to our Northern markets, than the practice of sending whole dead fowls to market.

The secret of having a juicy, tender, roast turkey or fowl, is in basting it often and cooking it enough.

The cleaner the diet of poultry the more delicate the flavor.

"Green geese" are young geese that have been well fed and killed when from two to four months old. They are delicious eating.

Chicken feathers if properly treated will make pillows which are almost as light as those of geese. Use only the downy, entire feather, stripping all of the others from their shafts. To kill the rancid odor, wash through a warm water to which you have added chloride of lime—a spoonful to a gallon of water—and dry in an open oven.

The practice of dry-picking poultry while they are suffering their death throes, seems to us unnecessarily cruel.

A CHICKEN TALK.

ANNIE L. JACK.

ONE of the students of the family has just returned home from his winter session at school, and we had some fowls cooked in his honor. "Oh, turkeys!" he said, at which we all laughed for they were Plymouth Rocks, though larger than one or two of the turkeys we had used through the Winter. I like the above mentioned fowls better than any we have tried yet as a table fowl; but have often proved by experience that the good quality of a chicken depends as much on feeding as on breed, and a great deal depends upon the method of cooking. Fed upon grain and clean scraps from the kitchen, they will be better in flavor than if carelessly tended, and coarsely fed.

In our household we enjoy chicken fried, as is customary at the South. Cut into pieces, dip each piece into water, then sprinkle with flour in which salt and pepper have been mixed. Have plenty of lard in your pan and fry, with a cover over them, arrange on a hot dish when done and pour over the gravy, to which has been previously added a little cream thickened with flour. Pour this over the chickens and serve hot. Another method of using up boiled chicken, which is generally very tasteless, is to afterwards cut in pieces and broil; then make a sauce of mustard, vinegar, Worcester sauce, in proportions to suit the taste, boil together with a small bit of butter, and pour over the dished chicken. Some people prefer macaroni, and use rice with the chicken. And, again, it is put into the shape of lamb chops, egged and bread-crumbed and fried in boiling lard.

I think there is nothing that can be made into so many varied dishes as poultry, from the egg to the aged hen, that can be *slowly* cooked tender, if *stewed*, without any hurry. Farmers' wives who neglect to have early spring chickens, miss one of the very daintiest dishes, with which to treat their households in the summer months. With green peas or cauliflower, or any of the early vegetables, this meat is a delicacy, and it is something within the reach of all country people with the knowledge that they are fresh and good.

POULTRY FOR WISCONSIN.

THE breed of poultry which we have found to be the most desirable for table use as well as for eggs, is a cross between the Plymouth Rock and the native fowls. I suppose that stockmen would call them grades. The pure breeds seem to be too tender to flourish with the care that ordinary farmers can give them.

MRS. B. C. DUNLAP.

DAINTIES FOR THE DELICATE.

CHICKEN broth may be given to a patient recovering from a fever. Cut a fowl weighing three pounds into pieces, put into two quarts of cold water, and cook until the meat falls into pieces. Strain it, skim off every particle of fat, add two tablespoonfuls of rice and a little chopped parsley; if the patient is very ill, omit the parsley; simmer until the rice is done and the broth reduced to three pints. Never season too highly a soup intended for a sick person.

Mutton broth can be made in the same manner, allowing a pound of neck of mutton for each pint of broth. Put thin wafer crackers in the oven for a moment and serve them with these broths.

A very nutritious jelly is made with chicken and Ceylon moss. Make a chicken broth as above, adding four ounces of the moss when it is first put over the fire. Omit the rice and parsley, skim off the fat, season only with salt, and strain through a jelly strainer into small cups and eat cold.

A very tempting dish is made by reducing a quart of chicken broth to less than half that quantity by slow boiling; strain into a plain mold, and let it stand while you broil a neat fillet that you have reserved from the breast of the chicken. Season this, and put it into the mold of reduced broth, which must be placed on ice until it hardens. Turn out on a small oval dish and decorate with parsley.

PALMETTO.

BONED TURKEY.

IN answer to Mrs. V. as to how the above is prepared, we will republish the plain directions given in RURAL of Oct. 21, 1882. We would suggest that the novice make her first attempt upon a chicken, and judging from our own experience, she will have occasion to call into practice the good old saw "If at first, etc." "Get a turkey that has not been frozen—freezing makes it tear easily. See that every part is whole: one with a little break in the skin will not do. Cut off the legs in the joints, and the tips of the wings. Do not draw the bird. Place it on its breast, and with a small, sharp, bowing knife, cut in a straight line through to the bone, from the neck down to that part of the bird where there is but little flesh, where it is all skin and fat. Begin at the neck and run the knife between the flesh and the bones until you come to the wing. Then cut the ligaments that hold the bones together and the tendons that hold the flesh to the bones. With the thumb and forefinger press the flesh from the smooth bone. When you come to the joint, carefully separate the ligaments and remove the bone. Do not try to take the bone from the next joint as that is not in the way when carving, and it gives a more natural shape to the bird. Now begin at the wish-bone and when that is free from the flesh, run the knife between the sides and the flesh, always using the fingers to press the flesh from the smooth bones, as, for instance the breast-bone and lower part of the sides.

Work around the legs the same as you did around the wings, always using great care at the joints not to cut the skin. Drawing out the leg-bones turns that part of the bird inside out. Turn the bird over and proceed in the same manner with the other side. When all is detached, carefully draw the skin from the breast-bone, then run the knife between the fat and bone at the rump, leaving the small bone in the extreme end, as it holds the skewers. Carefully remove the flesh from the skeleton, and turn it right side out again. Rub into it two tablespoonfuls of salt and a little pepper and fill with dressing. Sew up the back and neck and then the vent. Truss the same as if not boned.

Take a strong piece of cotton cloth, and pin the bird firmly in it, drawing very tight at the legs as this is the broadest place, and the shape will not be good unless this precaution is taken. Steam three hours, then place on a buttered tin sheet, which put in a baking-pan. Baste well with butter, pepper, salt and flour. Roast one hour, basting every ten minutes and twice with stock. When cold, remove the skewers and strings, and garnish."

DOMESTIC RECIPES.

FRICASSEED CHICKEN.

JOINT your chicken nicely, put into a pot and nearly cover with boiling water, adding salt and pepper, allow one-fourth of an hour for each pound, and boil slowly. When done, thicken the gravy with flour wet with cold water, boil a minute or two longer, then serve on a platter lined with nicely toasted home-made bread. If a nice biscuit crust is added

Miscellaneous Advertising.

When Baby was sick, we gave her Castoria,
When she was a Child, she cried for Castoria,
When she became Miss, she clung to Castoria,
When she had Children, she gave them Castoria.

about one-half hour before serving, you will have a delicious pot pie.

JELLIED CHICKEN.

ANY meat which may be left over makes a nice relish treated thus. Pick all the meat from the bones and chop fine, add the gravy left and season well, simmer for one-half hour, If you think it will not jelly, add some gelatine, first soaking it in a little cold water; boil a little longer, then turn into a nicely shaped dish or mold, which has been wet with cold water, put it in a very cold place or on ice to harden, when ready to serve, turn it on to a platter or plate; if you have parsley, garnish it with a few leaves. AUNT EM.

A GOOD WAY TO COOK AN OLD AND TOUGH FOWL.

CLEAN and divide, and put into a sauce-pan with a half pound of lean salt pork cut into pieces. Just cover with water, and cook slowly two hours. Then stir in a large minced onion, a half spoonful of powdered sage, a little parsley and pepper to taste, adding salt if needed. Continue the slow stewing, adding water to prevent burning, until tender. Then add a teaspoonful of brown sugar and a tablespoonful of browned flour, previously wet with cold water. Boil up and serve.

FARMER'S WIFE.

FRIED CHICKEN.

DRESS and cut up the fowls, and parboil them, until they are nearly done, then drain from the liquid and fry in good butter, turning them often until they are of a nice light brown and tender, when they are ready for the table. The liquor in which the fowls have been boiled (which should be previously seasoned with salt and pepper), may be thickened with some butter rubbed into a little flour for gravy. A few biscuits made of half cream and half buttermilk, baked, and while hot split open and put in the kettle of gravy about five minutes before it is served, make an excellent accompaniment to the chicken. All but the cook who is a born genius, will have better success with this than with hot pie dough cooked in the liquor. The biscuit will always be light, and the general result very satisfactory. AUNT RACHEL.

A SIMPLE WAY OF PREPARING BONED TURKEY OR CHICKEN.

BOIL a turkey or chicken in as little water as possible until the bones can easily be separated from the meat. Remove bones, gristle and skin, cut into small pieces, mix the light and dark parts, and season with pepper and salt. Boil down the liquid in which the fowl was boiled, skim off the fat and add a small spoonful of gelatine that has first soaked in a quarter of a cup of cold water. Boil up and turn over the meat, press into a bowl and set aside until firm. Serve cut into thin slices. One must use a very sharp knife.

MRS. A. VAN D.

BROILED CHICKEN.

NEVER attempt to broil an *old* chicken. Unless you *know* that the chicken is young, it is best to make sure of its being tender by giving it a preliminary cooking in the oven. Fill a dripping-pan with boiling water, place two or three sticks or a wire broiler without a handle on top of the pan, and place the chicken over the hot water. It should be carefully dressed and split down the back. Cover with a pan and steam half an hour, then transfer from the oven to the gridiron. Broil about half an hour, turning several times. Butter, pepper and salt, and send to table smoking hot. TOM'S WIFE.

CHICKEN PUDDING.

CUT up into small pieces and parboil with seasoning until almost tender. Take out on to a platter to cool, and set aside the liquid in which the chicken was boiled for the gravy. Make a batter of a quart of milk, three cups of flour—sift two teaspoonfuls of good yeast powder through the flour—three spoonfuls of melted butter, a little salt and four eggs well beaten. Put a layer of chicken in the bottom of a bake dish, barely cover with the batter, then another layer of chicken, and more batter until the dish is full. The batter must form the crust. Bake an hour in a moderate oven. Remove the fat from the liquid set aside, thicken with a little flour made smooth in water, add more seasoning if needed, and turn into a gravy boat. Chopped parsley, minced pickle or hard boiled eggs cut into slices may be added to the gravy if liked.

MARY B.

FRICASSEE AND FRIED CHICKEN.

AFTER the chicken is nicely dressed and washed, it is cut into pieces and put into clean, cold water, with a small handful of salt thrown in, where it stands for an hour or more. When it is desirable to put it over to cook, a quart or more of water is put into the kettle, with the chicken, and when it comes near to boiling all impurities are skimmed off, and then it is allowed to cook as rapidly as possible. If it is a young fowl, it will be tender in an hour. (If an old one it will take much longer, require more water, and will be greatly improved by adding a half teacupful of vinegar when first put over the fire.) There should be but a few spoonfuls of the liquor left in the kettle, when the chicken is cooked. A lump of good butter the size of an egg with about three tablespoonfuls of flour, are worked into a smooth paste, then a little warm water is added, so that the paste will pour or mix readily with the rest of the ingredients. Put into the kettle with the chicken about a quart of rich creamy milk, and when it begins to boil, pour in the butter paste, and stir carefully till it thickens. Have some nice hot biscuits split open and spread upon a platter, and upon these arrange pieces of chicken, over all pour some of the gravy, and take to the table hot, with a dish of nice mashed potatoes.

Sometimes we roll the pieces of chicken in flour (after boiling till tender), and fry in butter, till a nice brown; then make brown gravy, and serve the latter separately; some of the family like this way best. MAY MAPLE.

ROAST DUCKS.

CLEAN and wash very carefully. To a dressing of crumbed bread add, with butter, pepper and salt, a little powdered sage and a minced onion. Stuff and sew up as usual. Baste well while roasting. Skim off the gravy before thickening. Stew the giblets in a little water, when tender, chop and add to the gravy. Accompany with currant jelly.

MRS. B. STORMS.

ROAST GOOSE.

PREPARE for stuffing the same as you would a chicken. Add to fine bread crumbs, two eggs, butter, pepper, salt, a good-sized onion chopped fine, half a tablespoonful of powdered sage and two spoonfuls of minced fat-pork. Stuff very full and sew up. It will take from two to three hours to roast a goose. Cover towards the last with a piece of thick paper which you have greased. Add a little lemon juice to the gravy. MRS. I. D. K.

OMELETS.

IT has always seemed to me that the reason so many cooks fail in making an omelet is that the pan for cooking is not hot enough at the start, and that too much egg is put in at one time. I never attempt to cook more than four eggs at a time. The eggs are beaten light; a small spoonful of salt is added with two tablespoonfuls of milk. Heat the pan you are going to use very hot, put in a spoonful of butter, and when melted, pour in the egg. Shake over the hottest part of the stove until the egg begins to thicken, then let it stand a few minutes to brown. Run a knife between the sides of the omelet and the pan, fold and turn on to a hot dish. You must serve at once. A cheese omelet is made the same as plain omelet with this difference, that as soon as it begins to thicken you sprinkle over the top three or four tablespoonfuls of grated cheese.

ASPARAGUS OMELET.

USE the tender tops only of cooked asparagus, mince and season and stir into the eggs when it is ready to go into the pan.

TOMATO OMELET.

Just before doubling over a plain omelet, spread stewed tomato over the surface, double and serve.

CHICKEN OMELET.

Before folding, spread over the top a cupful of cooked chicken cut rather fine and warmed in a little cream sauce.

JELLY OMELET.

Make the same as for plain omelet, and when the egg has set, spread with currant-jelly. Fold quickly and serve at once. Very nice for dessert. MRS. B. FOSTER.

CREAMED EGGS.

Boil eight or ten eggs hard. Throw into cold water, and carefully take off shells. Put into a deep dish and cover with a drawn butter sauce made of a pint of milk, butter the size of an egg, a small spoonful of corn starch for thickening and a little salt. A very nice tea dish, and one easily prepared for unexpected guests.

DROPPED EGGS.

"How do you manage to have your eggs retain their shape; have you a dish especially for cooking them in this way?" Are the questions often asked of me when eggs are brought upon my table cooked in this way. The secret is in having the water boiling hot when the eggs are dropped in, and then to set the pan on the back of the range where the water cannot boil. I usually grease the bottom of the pan with a little meat drippings before pouring in the water. It is imperative, too, that the pan is not moved until the whites have become set. Salt is added to the water, and bits of butter, more salt and a dash of pepper to the eggs when taken out. A pan-cake turner is best for lifting out of the water. MRS. ECONOMY.

Miscellaneous Advertising

Clergymen

Lawyers, Actors, and Singers, are often troubled with loss of voice, resulting from a slight cold, weakness of the vocal organs, or inflammation of the throat, and in all such cases may be promptly relieved by the use of Ayer's Cherry Pectoral.

I would not be without Ayer's Cherry Pectoral on any account. It is an invaluable remedy in Bronchitis and Lung Complaints, and speedily relieves Hoarseness or Irritation of the Throat, caused by public speaking.—Rev. E. Bethune, Janesville, Tenn.

I have been so much afflicted with Bronchitis that I should be unable to perform my clerical duties without the use of Ayer's Cherry Pectoral.—A. G. Kirk, Pastor Baptist Ch., Hillsville, Pa.

Ayer's Cherry Pectoral,

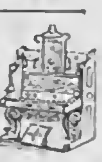
Prepared by Dr. J. C. Ayer & Co., Lowell, Mass. Sold by Druggists. Price $1; six bottles, $5.

FIVE THOUSAND DOLLARS reward for proof that any statement made by the patients of H H. Warner & Co and published with original signatures by H. H. Warner & Co., ought to be a satisfactory guarantee to the entire public, that these wonderful testimonials to the merits of Warner's safe cure are genuine.

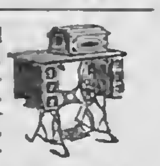
TABER ORGAN.

Latest style; fine tone; made of best material, in the most substantial manner. Fully warranted. Send for Catalogue. Agents wanted.
TABER ORGAN CO., Worcester, Mass.

ORGANS The most beautiful and finest toned in the world. Low prices, easy payment. Send for Catalogue. Address Weaver Organ & Piano Co., YORK, PA.



12 DOLLARS each for *New* and *Perfect* SEWING MACHINES. Warranted five years. Sent on trial if desired. Buy direct and save $15 to $35. Organs given as premiums. Write for FREE circular with 1000 testimonials from every state. GEO. PAYNE & CO., 47 3rd Ave. Chicago, Ill.



THE "COMMON SENSE" MILK PAIL.

This is the only *perfect* Pail made. There are no seams in the front to catch the dirt. It has a perfectly fitting strainer, which can be instantly removed, so that every part of the pail may be *quickly* and *thoroughly* cleaned. Should the strainer become foul or worn with use, we can furnish new ones at very little expense. The Pail is well made of heavy XX tin, and we offer it to the farmer at the very lowest price at which a really good article can be sold. *Send for special circulars.* Price $1.25 each. Discount to the Trade.

MILKING TUBES,

FOR MILKING COWS WITH SORE TEATS

This is the best Tube in the market. Sent, post paid, to any address on receipt of price. One Tube, 25 Cents. Five Tubes, $1.00. Send for special Circulars.

Send us your name and address and we will mail you, FREE, our

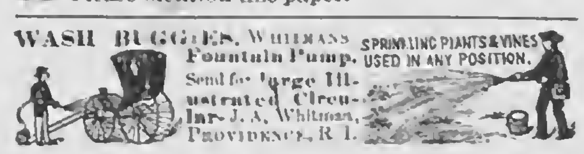
Seed Catalogue for 1886.

Choice New England Seeds. The very Best and Purest Stocks of Cabbage, Onion, Beet, Parsnip, &c. All grown by ourselves and sure to give complete satisfaction. TRY THEM.

BARTLETT & DOW,
LOWELL, MASS.

Please mention this paper.

WASH BUGGIES. Whitman's Fountain Pump. Send for large Illustrated Circular. J. A. Whitman, Providence, R. I.



Too Much Business.

BATAVIA, N. Y., July 15th, 1884.—Two years ago my health failed, which I attributed to pressure of business. I grew worse. Confined to my bed for two months. Warner's safe cure cured me —C. D. DEWEY, president Johnston Harvester Co.

PRESERVE JARS.

Made of Clear White Glass.

Prices lower than the common green jars.

No Metal.

Much handier.
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Agents wanted.

Grind your own Bone, Meal, Oyster Shells, GRAHAM Flour and Corn in the $5 HAND MILL (F. Wilson's Patent). 100 per cent. more made in keeping poultry. Also POWER MILLS and FARM FEED MILLS. Circulars and Testimonials sent on application. WILSON BROS., Easton, Pa.

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Send for Circulars and Price List of The BARNES PAT. IRON FENCE, the cheapest and most durable fence in the world. Address
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BUCKEYE Junior LAWN MOWER

Made in Four Sizes: 10, 14 and 16 inch cut. Most r... Mower in use. Easy to work. Strong and Durable.

Also Manufacturers of the Buckeye Hose Reel and Lawn Sprinkler, Iron Turbine Wind Engines, Buckeye Force Pumps and Buckeye Iron Fencing. Send for Illustrated Circulars to MAST, FOOS & CO., Springfield, O.

AHEAD OF ALL COMPETITION 1886.

THE PHILADELPHIA LAWN MOWER.

FOURTEEN SIZES FOR HAND USE.
Weighing from 21 to 51 Pounds.
THREE SIZES FOR HORSE POWER.

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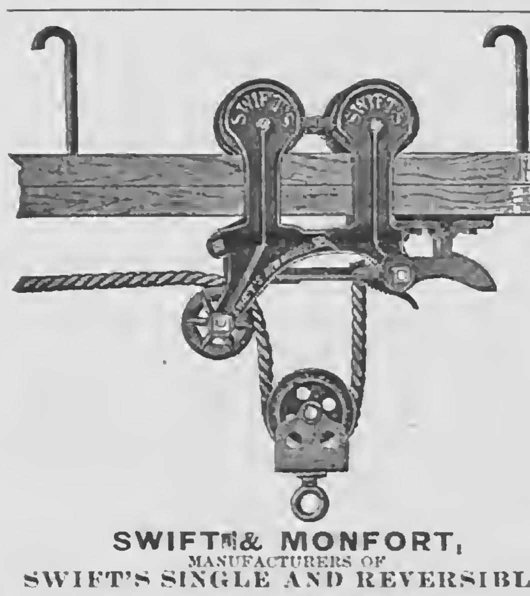

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Dealers in Forks, Ropes, Pulleys, and Agricultural Implements of all kinds. Send for circulars.
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HAY CARRIER Mallory Trackless HAY ELEVATOR, best in the market for filling a barn with hay. Better than any track carrier. Easily put up and taken down. Price only $5. Warranted to give satisfaction or money refunded. Best hay fork in the market, $2.25. Write for catalogue and terms to agents.
HERBERT BAKER, 93 Erie St., Toledo, O.

The Runabout Wagon.
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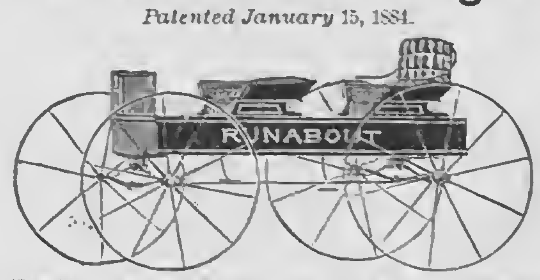

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DUTTON GRINDER

Perfect Mowing MACHINE KNIFE GRINDER.
Weighs but 18 Lbs.
Can be carried into the field and attached to Mowing Machine Wheel. Send for Descriptive Catalogue. Agents wanted in every County.
R. H. ALLEN CO., 189 Water St., New York.

50 CARDS, Hidden Name, etc. 1 pretty Ring, outfit and present, all 10c. 6 lots 50c. O. A. Brainard, Higganum, Ct.

Boys and Girls. *"The Dawn of Day,"* a handsome illustrated paper (size Youth's Companion) sent 3 months on trial for only 10c. silver, and a lovely set of cards *free*. *The Dawn of Day*, 127 7th St., Detroit, Mich.

IT PAYS to sell our Rubber Printing Stamps. Samples free. J. M. Mitten & Co., Cleveland, O.

SPAIN'S CHURNS. Star Churns, Rapid Ice Cream Freezers, Improved Tree Tubs, all made of CEDAR. Send for illustrated circular and prices. Clement & Dunbar, Philadelphia, Pa.

It Pays to use a STRADDLE ROW CULTIVATOR. Send for Circular to W. R. Andrews, Newark, N.J.

News of the Week.

HOME NEWS.

SATURDAY, May 1, 1886.

STRIKES are even more numerous now than at this time last week, as a large number have just been started for eight hours' work but ten hours' pay. The most extensive of these are in Chicago, where several lines of manufacture have already yielded; but most are resisting. The agitation for shorter hours of labor is pretty general in all the labor centers. Some lines of manufacture cannot allow their expensive machinery to be idle 16 hours out of the 24, as interest on the capital invested in the works would be lost. A majority, perhaps, would allow shorter hours for smaller pay; so the principle of paying by the hour instead of by the day is growing in favor. As predicted here, that strike on the Gould system has virtually collapsed; abundance of new hands can be had; the K of L, will "order off" the boycott and close the strike if the roads will take on all the strikers for whom there is room. The "Citizen's Committee" of St. Louis are negotiating to this end. Gould & Co., boast a great deal; but no doubt the strike still hurts the roads. It will die out quietly most likely.....Here a fortnight's obstinate strike of street car drivers, conductors and stablemen on the Third Avenue line—the largest on the Western Continent—is just collapsing, the strikers' places having been taken by newcomers from as far south as Washington; north as Boston, and west as St. Louis. The men are still obstinate; but will have to seek employment elsewhere for the most part. There's a regular mania for strikes just now; and the general public are getting a good deal tired of them, and the accompanying boycotting. Several of the leaders have been arrested here and in St. Louis, and held for trial; but it will be hard to get a jury to convict them. All expenses will be fully paid by the labor organizations, and the arrested will become "heroes" or "martyrs."....Capitalists everywhere are combining to resist the demands of labor. Cotton and woolen mills in New England, representing $50,000,000, have formed such a union; so have brass manufacturers hereabouts representing $10,000,000; so have various other lines of manufacterers in the West, notably furniture makers.....Mr. Brooks, of Phelps, N. Y., has just discovered a new comet in Cassiopeia..... At last the New Orleans Exposition is in the hands of a receiver—bankrupt.....The total interest bearing-debt of the United States, according to the last official statement on the 31st of March, 1886, was $1,240,681,462, including the $64,623,512 of the bonds issued in aid of the Pacific railroads. These roads are now urging Congress to allow them 70 years more to clear off principal and interest, at the rate of $4,000,000 a year.....Mail bags from the sunken Oregon are being still picked up; one containing printed matter, and another 4,500 letters were received at the Post Office here Thursday. Hitherto 275 bags have been received out of 598 dispatched..... ..The original Eads' ship railway scheme called for a total U. S., guarantee of $37,500,000; a new bill calls for $7,500,000. The guarantee is too hold good for five instead of 15 years. Several other amendments are made in the way of lighter charges on American vessels than on those of other countries.....The President and the new Chinese Minister, Cheng Yen Hoon, made very civil speeches to each other Thursday. There is considerable fear that the Celestials at home will take vengeance on resident Americans for the injuries their countrymen have suffered here. There is no mob more cruel and blood-thirsty than a Chinese..... .Wednesday, Jefferson Davis, from the steps of the State Capitol, Montgomery, Alabama, the exact spot on which he received the acclamations of the people on his inauguration as President of the Confederacy in 1861, floridly landed, as usual, the "Lost Cause," and its justice, while bewailing its fate. Audience enthusiastic and sympathetic. Stars and Bars floating gaily—yes, and Stars and Stripes, too.....Friday he was received at Atlanta "with the wildest enthusiasm, the whole population turning out to honor the Confederate Chief."....Considerable enthusiasm for the late "unpleasantness" reported in many parts of the South. Some enthusiastic singing of "We'll hang Jeff. Davis" etc., in several places in the North..... .....Floods reported at several points along the Lower Mississippi—the worst just now at Helena, Arkansas. Mississippi State hitherto the worst sufferer. River expected to continue rising for two or three days more. As the rise goes south, more leaks in the levees expected. Two negroes hung near Helena, Thursday, for cutting the levee.....The transcontinental railroads have been so overcrowded with freight and passenger business of late, owing to the severe cutting of rates, that they have not had facilities for doing all the business offered, even after they had hauled out old cars and used cattle cars for passengers in some cases. Over 75,000 have visited California, a large number of them for permanent settlement. The roads—most of them—have put up rates to half the old-time charges; but as "scalpers" invested heavily in tickets at bottom rates, people can still go from the Mississippi to the Pacific for from $50 down to $10, according to their cuteness in getting tickets.....Last Winter Virginia passed a "local option" law. A large State Convention has been held at Lynchburg; a number of towns and cities have already voted on the question, the larger places generally for license, the smaller places against it. Monday Richmond gave 5,681 majority out of a combined vote of 12,201 for the "wet" ticket. Liquor prohibition promises as lively a time as debt readjustment for some months in the Old Dominion.....Prohibition is observed more or less stringently in 115 out of the 137 counties in Ga.....Senator Payne, of Ohio, says all the bribery talk is "baseless gossip and scandal." "Unproved" is suggested for "baseless."....The general impression is that there will be no tariff bill passed at this session of Congress. If passed by the House, the Senate would kill or pigeon-hole it.....Of 2,156 nominations sent in by the President, the Senate has hitherto rejected only eight.....Some say Congress will adjourn in August; others, in the middle of July. What has it hitherto done except gabble, chiefly "to make political capital" for one party or the other?.....Lovesick Jones, of Florida, will return to Washington if the other Senators won't tease him..... ....Of 180 Mormon recruits that arrived here from Europe Tuesday, about 50 were children; 200 more will arrive in a few weeks..... Receipts of the Government for the first nine months of the present fiscal year (ends June 30) were $7,000,000 more, and its outlay $16,000,000 less than for the corresponding period last year.....The Carrollton (Miss.) Grand Jury has failed to bring in a single indictment for the murder of those 15 "niggers" in the court-house; but it examined 165 witnesses.... Ferhydric gas, "the best illuminating gas known," "invented" by Col. McCarthy, it is said, can be sold for three cents a 1,000 feet—we are paying $1.75 for coal gas. This hydrogen gas is over 2½ times hotter than coal gas. If claims are true, it must soon come into general use.....Sec. Manning is well enough to drive out.....Ex-President Arthur is again reported to be a very sick man in spite of all denials.....Geronimo and those of his band who escaped with him from Lieut. Maus, the other day, have begun another series of horrible murders and atrocities in Arizona. Gen. Miles is now after them, Gen. Crook's headquarters having been transferred to Omaha, Neb.....Several of those injured by that Minnesota cyclone have since died. Sauk Rapids has been "wiped out."..... Congress is asked to give $2 a day for the period of his confinement to each union soldier put in a Confederate prison at any time during the war. About 25,000 such ex-pensioner are supposed to be living. The Committee on Invalid Pensions think $4,000,000 would be required; others say $10,000,000.....Another project is to pension for life everybody captured and confined in a Southern prison.....

AGRICULTURAL NEWS.

SATURDAY, May 1, 1886.

REPRESENTATIVE W. H. Hatch, of Mo., Chairman of the Committee on Agriculture, last Wednesday, introduced into the House the Committee's oleomargarine bill.....The Minnesota Knights of Labor have purchased 600 acres in Crow Wing Co., and will establish thereon a co-operative colony. The land is to be held in common forever; but the profits are to be divided yearly among the workers..... ....For the five months ending March 31, exports of beef, pork and dairy products aggregated $31,661,164, against $41,186,331 in the same time a year before.....England exported only 35 pure-bred Short-horns in the last quarter of 1885, 15 animals going to the Argentine Confederation, 10 to Denmark, seven to France and one to Russia.....A Total of 1,740 Short-horn cattle were sold at public auction in England last year, at an average of $172.68. In 1884 the average was $227.12 for 1,666 head. The year 1883 was between the two, and 1882 and 1881 were below 1885.....The imports of live stock and dressed meats from American and Canadian ports at Liverpool in January, February and March, 1885, amounted to 20,810 cattle, 2,055 sheep, 121,370 quarters of beef, 16,535 carcasses of mutton and 880 hogs. This year the totals were 11,518 cattle, 2,147 sheep, 101,612 quarters of beef, 6,403 carcasses of mutton and four hogs.....About 60,000,000 pounds of imitation butter were sold in this country last year.....The shipment of American apples abroad for the season, now concluded, aggregates 805,848 barrels..... .....Of the wheat imported by Germany last year, Russia furnished 56 per cent., Holland, 11 per cent', Austro-Hungary, 8 per cent., Belgium, 7 per cent., and the United States, 5 per cent.....Last year this country imported 509,447 bushels potatoes from Canada, 99,264 from Scotland, and 33,834 bushels from Bermuda. We exported 173,344 bushels to Cuba, 36,337 to Sandwich Islands, 43,492 to Canada, and 119,295 to other foreign ports. Imports, 642,545 bushels; exports, 302,468 bushels.....The farms of America comprise 837,628 square miles, an area nearly equal to one-fourth of Europe, and larger than the four greatest European countries put together (Russia excepted)—namely France, Germany, Austria and Hungary and Spain..... ....The Agricultural Society of France, with 5,000 members, will establish a French draft-horse stud book to "secure a disinterested and reliable registration" of the "Race Francaise de Trait"—French draft-horse race. It will admit Percherons, Normans, Bonlonnais and Breton and other local kinds, not as distinct breeds but merely as strains of the grand race of Francaise de Trait. Proof of purity of blood essential.....Arbor Day was widely celebrated in Massachusetts last Saturday, and is being celebrated in Ohio today.....The celebrated trotter Gen. Butler is dead at the age of 30.....The butchers of the country in convention assembled during the coming week at St. Louis, will talk of monopolies by dressed meat shippers, and of Western cattle kings. They will be especially bitter against the Chicago shippers, and will advocate Eastern butchers' boycotting of Western dressed beef.....For the year ending March 1, the Armour Packing Co., at Kansas City, slaughtered 62,575 cattle, and three other firms a total of 25,260, making an aggregate of 87,835, against 80,292 for 1884-5, and 58,856 for 1883-4....."Butterine" imports into the United Kingdom for the first three months of 1886 were 29,587,904 pounds, while the quantity of butter imported was 42,605,920 pounds. Not unlikely some "butterine" stole in as butter..... The sudden arrival of warm weather has been disastrous to the maple sugar crop of Wisconsin.

Crops & Markets.

SATURDAY, May 1, 1886

THE London wool sale closed April 21. The total amount offered during its progress, was 276,000 bales. Of these 112,000 bales were bought for Great Britain, 116,000 for the Continent and 2,000 for America. The remainder, 46,000 bales, will be offered at the next series. A comparison with the prices prevailing at the previous series shows the Australian and New Zealand, greasy, averaged 1½ cent and two cents lower than the previous series; do. fleece and scoured, two and three cents lower; and do. snow whites, two cents lower.

In Richmond, Va., the tobacco trade is dull. There is a disposition to keep leaf home for a better demand; storage and insurance very low, $1.25 per hogshead for four months; extra storage and insurance range three-fourths to one-and-three-fourths per cent. New bright West Virginia tobacco offering freely at low figures. Little interest in Kentucky and Western tobacco. A rebate of 90 to 100 per cent. on all imported ingredients entering into the manufacture of tobacco is sought whenever the tobacco is exported.

We give below the comparative wholesale prices in this market for various products during the past year. These prices are those given for the first of each month. The highest prices are quoted for butter, with a fair average price for the others. The pork and poultry were dressed, the beef alive. The articles are all quoted by the pound, except the eggs.

	Eggs.	Poultry.	Butter.	Pork.	Beef.
January....	27	12	30	4½	4.35
February...	22½	10	35	5¼	5¼
March.....	22½	12	34	5¾	5
April.....	12¼	12	35	6	5½
May.....	13	12½	29	5¾	5½
June.....	14	13	19	6	5½
July.....	13	12	20	5⅛	5
August.....	14	12	19	6	5
September..	16	13	23	6½	5½
October.....	21	12	23	5½	5
November..	28	14	29	5½	5
December..	23	14	28	5¼	4¾

Many tons of poultry were sold at 35 to 90 cents per pound to special customers, and many hundred dozens of eggs were sold at from 40 to 75 cents per dozen the year round. These fancy markets are generally secured by personal solicitation or through city friends, and are maintained only by constant care and attention. White Leghorn eggs sell for best prices in this market, though there is less distinction made here than there is in Boston. The great proportion of eggs come from the West and Canada. Fresh "near-by" eggs are generally sold to private customers. Eggs are packed in patent egg cases, or in barrels partly filled with cut straw. The most profitable season for egg production is from October to March. Live fowls find extensive sale among the lower classes. They are shipped in coops and boxes; the wire netting coop gives best satisfaction. Probably the Plymouth Rocks sell best alive. Their clean, neat color attracts attention at once. Most of the live poultry sent into this market are of no regular breed—common farm yard fowls. Dead fowls must be drawn. It is against the law to offer undrawn poultry here. Jersey State and Pennsylvania fowls command from two cents to three cents more per pound than Western stock. This is mostly due to the fact that the first-named stock appears in better condition, and presents a cleaner and neater appearance. The appearance of poultry has much to do with its sale. Rough, torn and discolored lots always find poor sale. The best selling poultry comes packed in boxes, breast down, with long straw or clean cloths between the layers of birds. As a rule, small shipments of poultry, live or dressed, will hardly pay unless one has special customers. It will probably be cheaper to sell small lots to the local dealers where cash prices can be obtained. In shipping poultry or eggs for the first time, write to any good commission merchant, or, better still, go and see him, and make a distinct bargain before sending; care and cleanliness will always be rewarded if persevered in. No distinction is made in the general market between thoroughbred and common fowls, except that a plump, yellow carcass will always command the best price.

"I have been afflicted with an Affection of the Throat from childhood, caused by diphtheria, and have used various remedies, but have never found anything equal to BROWN'S BRONCHIAL TROCHES.—*Rev. G. M. P. Hampton, Piketon, Ky.* Sold only in boxes.—*Adv.*

MARKETS BY TELEGRAPH.

SATURDAY, May 1, 1886.

CHICAGO.—Compared with cash prices a week ago, "regular" wheat is 2¾c. lower; No. 2 Spring, ⅞c. lower. Corn, ¾c. lower. Oats, ¼c. lower. Pork, 7½c. lower. Cattle, shippers, 20c. lower: stockers, etc., steady. Hogs, from 5c. to 20c. lower. Sheep, lower grades 90c. higher; others, 90c. lower.

WHEAT.—Sales ranged: April, 77¾@78¼c; May, 77¾@78¼c; June, 79¾@80¾c.; No. 2 Spring, 78½@78¾c. CORN.—Cash, 36¼@36½c; April, 35¾@36¼c; May, 36¼@36¼c; June, at 37¼@37½c. OATS—Active; Sales ranged, Cash, 29@29½c; April, 29c; May, 29@29½c. RYE.—No. 2, 62c. BARLEY—No 2, at 59c. MESS PORK.—Cash, $8 85@8 90; May, at $8 87½@8 90; June at $9 05@9 07½. LARD.—Quiet and steady; sales ranged; Cash, at $5 87½@5 90; May, $5 87½@5 90; June, $5 95@5 97½. BULK-MEATS.—Shoulders, $4 00@4 10; Short rib sides, at $5 17½@5 20; Short Clear sides, at $5 55@5 60. CATTLE—Market steady. Shipping steers, at $4 20@5 60; stockers and feeders, $2 75@4 80; cows, bulls and mixed, at $1 75@4 00; bulk, at $2 75@4 75. HOGS.—Market firm; Rough and mixed, $3 50@4 10; packing and shipping, at $3 85@4 20; light, at $3 45@4 15; skips, at $2 70@3 35. SHEEP.—Market weak; Natives, $2 60@5 60.

ST. LOUIS.—Compared with cash prices a week ago, No. 2 Red wheat is 2½c. lower. Corn, 1¼c. lower. Oats, ⅛c. lower. Cattle, from 5c. to 25c. lower. Hogs, a shade lower. Sheep, from 25c. to $1.00 lower.

WHEAT.—Fairly active; No. 2 Red, Cash, at 86¼c. May at 87⅛@87½c; June at 87¼@87⅝c; July at 83@83¼c; August at 82¾@82¾c. CORN.—Firm; No. 2 mixed Cash, 32⅝c; May, 33½@32½c; June at 33¼c; July, at 33¼@34⅜c. OATS—Very dull and easy; No. 2 mixed, Cash, at 29¼c; May, at 29¼c. RYE—Firm at 80c. BARLEY.—No market. BUTTER.—Choice to fancy creamery, 20@23c; choice to fancy dairy, 16@18c. EGGS—Dull at 10c. FLAXSEED.—Firm at $1 05. PORK.—Weak at $9 25@9 50. BULK MEATS.—Steady; loose lots unchanged; boxed lots long clear at $5 30; Short Rib, $5 85; Short Clear, $5 50. LARD—Easy at $5 79@5 75c. BACON.—Steady and unchanged. HAMS.—Firm at 9 50c. CATTLE—Fair to choice native shipping steers, at $5 10@5 80; native butcher steers, $3 50@4 65; cows and heifers, at $2 50@4 00; stockers and feeders, $3 00@$4 40. HOGS.—Light, $3 85@4 00; packing, $3 80@4 00; heavy, $4 10@4 15. SHEEP.—Market firm at $2 50@5 00.

BOSTON.—CORN.—Steamer mixed at 51c.; steamer Yellow, at 50½c; and no grade at 48@50c. per bushel. OATS.—No. 2 white, at 44½@45c.; No. 3 white, 43½@44c, and fancy white at 46½@48c. Rye at 67@68c, ₱ bushel. Bran is $15 50@16 for Spring and $17@18 for Winter; fine feed and middlings at $15 50@16 00 and cotton seed meal at $23 25 on spot and $23 25 per ton to arrive. HAY AND STRAW.—Hay is in good demand at $19@20 per ton for choice and fancy; fair to good, at $17 00@18 00; fine, at $17 00@18 00, and $13 00@15 00 for poor and damaged; Western choice, $17 00@18 00; do fair to good $15@16. Swale hay, $11@12. Straw.—Rye, choice, at $20 00@21 00, and for common to good, $13@14. Oat straw, at $10@11 per ton. PRODUCE.—BUTTER.—Northern and Eastern creamery, extra firsts, Eastern, at 23@23c; Northern, at 20@22c; Western creamery, extra firsts, new, to extra, new, at 23@26c; firsts, 20@23c; Northern dairy, 20@24c, for Vermont extra firsts to extra, new; firsts, at 19@19c; thirds to seconds, at 10@17c; Western dairy, 15@16c; seconds, 9@13, imitation creamery, 21@21c, for extra firsts to extra; ladle-packed, 16@21c, for extra firsts to extra; firsts, at 14@17c; seconds, at 10@13c; thirds, at 6@9c. CHEESE.—New York, choice to extra, 9½@11c, per ℔; and common to good, 5@8c; Western choice, to extra at 8@10c. Sage, extra, at 13½@14c, per pound. EGGS—Cape and near-by, ₱ dozen, at 14½c; Eastern extras, at 14c; do, firsts, at 13½@13¾c; Northern, fresh, at 14c; Western fresh, at 13½@13½c; Provincial, 13½c. BEANS.—Choice Northern hand-picked pea, at $1 65@1 75 per bushel; do, do, New York, small, $1 50@1 60; do, do, screened, $1 15@1 30; medium choice, hand-picked $1 30@1 35; do, do, screened, $1 15@1 20; Yellow Eyes, improved, $1 35@1 40; do, choice flats, at $1 25@1 30; Red Kidneys, $1 60@1 65. PEAS.—Canada, common to choice, at 85@95c, per bushel. Green peas, Northern, at 90c@$1; do, Western, $1 15@1 20. POTATOES range at 45@68c, per bushel as to quality.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, May 1, 1886.

STATE OF THE MARKET.—Compared with cash prices last week, flour is 25c. lower; ungraded winter red wheat 3c, lower; No. 2 Red, 2c. lower; corn, 1c. lower; oats, ¼c. lower; pork, 25c. lower; butter, 2c. to 4c. lower on best lots; cheese, steady; eggs, ¼c. lower; fruit steady; vegetables, a shade higher for seed potatoes.

FLOUR, FEED AND MEAL, FLOUR—Quotations: Fine at $2 25@3 10; Superfine, $2 60@3 40; Extra No. 2, $3 25@3 65; Good to Fancy Extra State, $3 70@4 25; Common to Good Extra Western, at $3 25@4 00; Good to Choice Extra Western, $4 00@5 20; Common to Fair Extra Ohio, $3 25@3 75; Good, $3 80@4 20; Good to Choice, $4 25@5 00; Common Extra Minnesota, $3 25@3 60; Clear, $3 60@4 20; Rye Mixture, $3 50@4 00; Straight, $4 25@4 75; Patent $4 50@5 20; Bakers' Extra, $4 00@4 75; St. Louis Common to Fair Extra, $3 25@3 75; Fair to Good, $3 80@4 75; Good to Very Choice, $4 80@5 10; Patent Winter Wheat Extra, $4 10@5 25; City Mill Extra for West Indies, at $4 60@4 65; South America, $4 70@4 85. SOUTHERN FLOUR—Common to Fair Extra, $3 25@3 65; Fair to Choice do., $3 70@5 30. RYE FLOUR.—Superfine, at $3 25@3 45, latter for choice. CORN MEAL.—Yellow Western at $2 60@2 75; Brandywine, at $2 75, quoted at 2 70@2 75. FEED.—Market heavy and lower, 40 lbs. at 72½@75c, for Spring and Winter; for 60 ℔. at 70c; 80 ℔. at 70@72½c; 100 ℔. at 80@90c. Sharps at 95c.@$1 00. Rye feed nominal at 80c.

GRAIN.—WHEAT.—Ungraded Winter Red at 89¾@97½c.; No. 2 Red at about 91½c; No. 2 Red for May, at 90⅞@91⅝c; do. for June, at 91⅜@92 9 16c; do. for July, 92@93¾c; do. for August, 92½@93¾c; do. for September, at 92⅝@93¾c, do. for October, 91@91½c; do. for December, 96½@97¾c; do. for May, $1 01⅝@1 02. RYE—Canada at 63c; Western, 60@62c; State at 64@65c. CORN—Ungraded Mixed, at 40@45c; Steamer Mixed, 43½@43¾c; Yellow, 46½c; No. 2 Mixed for May, 45¾@46 1-16c; do. for June, 46¼@46¼c; do. for July, 46¾@46¾c; do. for August, 47½@47¾c. OATS—No. 3 Mixed, 38¼@39½c; No. 3 White, 39c; No. 2 do. 41@41½c; Mixed Western, at 38@42c; White do., at 43@48c.

PROVISIONS.—PORK.—Mess quoted at $9 25@9 50 for Old and $10 00@10 25 for New; $10 75@$11 50 for Family Mess; $12 00@14 00 for Clear Back; and $9 50@9 75 for Extra Prime. BEEF.—City Extra India Mess, at $15@17; Extra Mess, in barrels, $8 00@8 50; Packet, $8 50@9 00 in bbls.; Fancy Plate, $9 00. BEEF HAMS.—Quoted at $20 00. CUT MEATS.—Pickled Bellies 5 3-16c; Pickled Hams, 8c. MIDDLES—Long Clear in New York, 5¾c; at the West Long Clear, 5.35c; Short Clear 5 60c. DRESSED HOGS.—City Heavy to Light, 5¾c; Pigs, 5¾c. LARD.—Western Steam spot part, 6.20c; Grade, 6@6.05c; May, at 6.12@6.13c; June, at 6.15@6.30c; July, at 6.27c; August, 6.31c; September, at 6.10c; October, at 6.17c. City Steam, at 6.05c; Refined quoted Continent 6.10c, South American, 6.75c.

BUTTER.—Elgin Creamery, 23@24c; Pennsylvania do., 23@24c.; Western do., 19@23c.; State Dairy half-firkin tubs, 17@23c.; Welsh tubs, 17@20c; Western imitation Creamery, 14@20c; Western Dairy, 10@18c; do. Factory, 13@18c.

CHEESE.—State, at 7@10½c; Western, 7@9c; Skims, 1¾@1¾c.

EGGS.—State, at 12¼@12½c.; Western, at 12@12½c; Southern at 11@11½c.

FRUITS.—FRESH.—Quotations are: Apples.—Baldwin, per bbl., at $1 50@1 75; Greening, per bbl. $1 75@2 00; Russetts, Roxbury, per bbl., $1 75@2 00; do. Goldens at $1 50@1 75. Cranberries.—Cape Cod, choice, per bbl., $3 50@4; do. choice, per crate, at 50c.@$1. Strawberries—Florida at 35@45c, per quart for best; do. poor at 15@25c; Charleston, per quart, at 25@45c.

POULTRY.—LIVE.—Fowls, near-by lots, per ℔, at 10c.; fowls, Western, per ℔, at 10c.; fowls, Southern lots, per ℔, at 9½@10c; turkeys, per ℔, at 11@13c; ducks, western, per pair, at 75c.@90c.; geese, western, per pair, at $1.25@1.75.

POULTRY.—DRESSED.—Turkeys, per pound, 11@13c.; chickens, Philadelphia, light weights to pair, 45@50c. per ℔; do. winter, Philadelphia, 20@22c.; fowls, Pennsylvania, prime, 10@11c.; do, Jersey, at 10@11c; do State and western, at 10@11c. Ducks, Jersey, per ℔, 13@14c; do, western, 12c. Geese, Jersey, at 10@12c; do. western, at 9@10c.

POULTRY.—FROZEN.—Turkeys, per pound, at 12@11c.; Chickens, per pound, at 9@11c.; Ducks, per pound, 12@14c.; Geese, per pound, at 9@10c.

HAY AND STRAW.—The following quotations are: for Choice Timothy hay at 85@90c; No. 1 at 80@85c.; No. 2,

75@80c; clover mixed at 70@75c; Clover, at 60@65c; shipping at 70c; Prairie, at 50@55c. Straw.—Long rye, at 90@92½c. short ryo at 70@75c; oat, at 40@50c; wheat, at 40@55c.

SEED.—Clover, 9½@11½c; for jobbing lots, and Timothy $2 10@2 25; jobbing trade pretty good.

TALLOW—Prime City quoted at 3½c.

VEGETABLES.—Potatoes.—Maine, fancy, d. h. bbl. at $2 25; Nova Scotia per bbl., at $2 00@2 25; State, per 180 lb., $1 50@1 75; Burbank, State, bulk, per 180 lb. $1 82@1 87; Burbank, eastern and Nova Scotia, per bbl. $2 25@2 50; Hebron, do, do, do, per bbl. $2@2 25; Hebron, State, bulk, per 180 lb, $1 50@1 75; Prolific and Goodrich, eastern and Nova Scotia, per bbl., $2 00@2 25; Peerless, bulk, per bbl., at $1 50@1 75; Magnum Bonum, imported, 168 lb. sack, $1 80@2 00; Bermuda, per bbl., at $6@10; Florida, per bbl, $6@9; Sweet potatoes, Delaware River, per bbl., at $2 50@3 25. Cabbages per 100, at $5@7; do. Florida, per barrel, at $2 00@4. Kale.—Norfolk, Scotch, per bbl. 40@60c. Onions—Bermuda, per crate, $2; white, eastern, per bbl., at $2 50; Connecticut, per bbl, at $2.50@3 00; do. red, Connecticut, per bbl, $3 00@3 50. Asparagus.—Prime, per bunch, at 25@35c; do, colossal, 55@65c; do. North Carolina, 25@35c. Beets.—Bermuda, per crate, at 50@60c. Tomatoes.—Bermuda, per box, at 75c.@$1; do. Key West, per box, at 50c.@$1. Beets, Florida, per crate, $1 00@1 50. Beans, Florida, round, per crate, $2@3; do. Florida, per crate, $1@2. Cabbages, Eastern, per bbl, $1 25@1 50. Peas, Southern, per crate, $1 25@1 75; Radishes, North Carolina, per 100 bunches, 25@75c.

LIVE STOCK MARKET.

NEW YORK, SATURDAY, May 1, 1886.

BEEVES.—Poor to Choice Bullocks ranged from $4 40@6 15, with general sales at $6 for Ordinary to Prime. Old Oxen and stags sold at $4 25@5 60; Bulls at $3@4 (few at $4 25@4 75), and Dry Cows at $2 25@3 60.

CALVES.—Veals, 138 lb, at 6c; do. 156 lb, at 6¼c; do, 130 lb, at 5¾c.

SHEEP AND LAMBS.—Total for six days, 29,000 head, against 24,389 head for the same time last week. Fair to Choice Clipped Sheep sold at $5 05@5 75; Unshorn at $6@7; Clipped Yearlings at $6@6 50, and Unshorn at $7@8 per 100 lb.; Clipped Ohio Sheep, 91 lb, at $5 75; Ohio Yearlings (Unshorn), 74 lb, at 8c; Unshorn Pennsylvania Yearlings, 69 lb, at 7c; Jersey Spring Lambs for $80; Clipped Ohio Lambs, 89 lb, at 6½c.

HOGS.—None alive for sale. Nominally firmer at $4 50@4 70 per 100 lb.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING May 1, 1886.

J. N. B.—N. E. & Son.—P. H. J.—V. B., corn not yet received.—L. H. R., peas and potatoes received.—P. & W., raspberries received.—G. M. C., Cohansey received.—Grace S., thanks.—J. J. H. G., peas received.—T. B. H, —E. S.—J. T. H.—C. A. T.—R. W. S.—S. D. N., thanks.—V. Briggs, corn received.—N. B., send all live plants to Ed., River Edge, Bergen Co., N. J.—F. E. S., thanks. —H. P., thanks.—R. P.—A. H. F.—E. S.—W. K.—Wm. F. S., potatoes received.—C. L. B., thanks—A. J. E.—E. S. G.—T. C. D.—T. E. S., glad to receive such accounts. —Too late for Special. Thanks.—A. L. C.—J. L. P.—W. W. H., raspberry plants received.—T. C., registered potatoes received.—T. B. A., thanks.—Mary E. W., thanks.

PRODUCE COMMISSION HOUSE
ESTABLISHED 1865.
S. H. & E. H. FROST,
100 PARK PLACE, N. Y.
Shippers desiring to favor us will be furnished stencils, shipping cards, etc., on application. Promptness guaranteed. References, RURAL NEW-YORKER, Irving National Bank, etc.

THERMOSTATIC INCUBATOR.
Send for circular. **E. S. Renwick,**
19 PARK PLACE, NEW YORK.

3,000,000 SWEET POTATO Plants.—Early Golden, and all leading kinds. By mail, $1 per per 200; by express, $1 per 500; $1.75 per 1,000. Nansemond, $1.25 per 1,000. Write for circular. **W. W. Ruthbone,** MARIETTA, O.

HIRES' IMPROVED ROOT BEER. Packages, 25 cts. Makes 5 gallons of a delicious, sparkling and wholesome beverage. Sold by all druggists, or sent by mail on receipt of 25 cents. C. E. HIRES, 48 N. Delaware Ave., Philadelphia, Pa.

Walling-ford's Garget Cure
J. C. CHUTE, Windham, Me., had a cow whose bag was badly swollen. She gave milk from two teats only. He used *Wallingford's Garget Cure*, and two doses cured her. She has had no trouble since. Mr. Chute will endorse it as a good thing.
Send for circular.
W. W. WHIPPLE & CO., Prop'rs, Portland, Maine.
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C. P. JORDAN,
12 years a breeder of *Standard White Leghorns*. I have won hundreds of first and special premiums. No strain of this variety have won more first premiums for the number of times exhibited. Only two exhibits this season. At Meriden, Conn., every first second and special offered. At Stofford Springs, every first premium. At both shows had strong competition.
PEKIN BANTAM. I have three Breeding Pens, 6 birds in each; they are beauties; no breeder in America owns a better lot; all out of imported stock.
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LANGSHANS.
EXCLUSIVELY.
Champions at Winsted, Conn., 1885; at Meriden, Conn., 1885-6; also at the Great International Show in New York City, 1886.
My stock is pronounced by the most competent judges **The Champions of America.**
Eggs, $1 per 13; $7 per 26; $9 per 39. Packed in baskets to carry any distance. Send for circular—free to all. Address, with stamp,
ROBERT SEAMAN, Jericho, N. Y.

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Its membership in Connecticut and neighboring States includes breeders of nearly every variety of pure bred poultry.
Send for By Laws. Roll of Members and Breeders' Directory free.
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WILL BE HELD
THE LAST WEEK IN DECEMBER.
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Silver Queen Strain WYANDOTTES. Seven prizes in January, 1886 in Wooster Show.
Eggs, $3 for 13; $5 for 26; $7 for 39.
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LIGHT BRAHMAS.
Several Breeding Pens of Light Brahmas for sale cheap. Send for 13th Annual Catalogue.
RIVERSIDE FARM, EAST BALDWIN, ME.

Mottled Javas, Brown Leghorns.
Pure Blood. None better. Eggs, $2 for 13; $3.50 for 26.
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ESTABLISHED POULTRY YARDS
In successful operation near New York, will sell half interest. Address "BROILERS."
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PECK & RIGGS.
PRICE OF EGGS REDUCED. Will sell for the balance of the season from Prize Winning P. Rocks. $2 for 13. Address 345 ELM ST., NEW HAVEN, CONN.

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Seven years' experience of a MARKET POULTERER, on THE JOHNS HOPKINS UNIVERSITY FARM. Enclose ten cents to **CHAS. C. BUCK & CO.,** Cor. Howard and Franklin Sts., BALTIMORE, MD.

Send us your orders for EGGS from Langshans, Wyandottes, Houdans, Rose Comb, W. and B. Leghorns, also for Italian Bees and Queens, and Poland China Pigs. Stock all No. 1, and strictly pure bred. Safe arrival and satisfaction guaranteed. Instructive Circular free. Mention the Rural.
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POULTRY SUPPLIES.
Fresh Ground Beef Scraps, Granulated Bone, Crushed O. Shells. Also PURE GROUND BONE for Fertilizer; it is a special for Grapes and Small Fruits.
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Breeder of Thoroughbred Light Brahmas. First prize awarded on Breeding Pens at Meriden, in 1883, 4, and 5. Second on Cockerel and Pullet, and Special for the highest scoring pair owned in Meriden. Eggs, $3 for 13; $5 for 26. Stock for sale in September.
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BROWN LEGHORNS.
This variety has been bred by me for over ten years with great care.
Eggs from May 1st at $2 per dozen.
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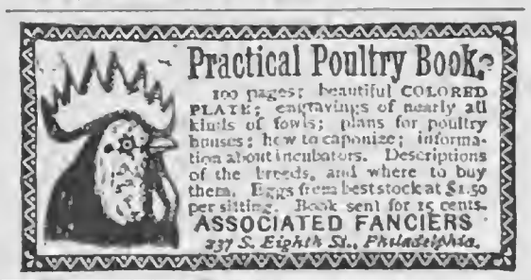
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A mixture of Pure Bone and Ground Oyster Shells. All poultry need it. 25 Pounds, $1.00; 50 Pounds, $1.75, by freight. Samples, .05c. mail.
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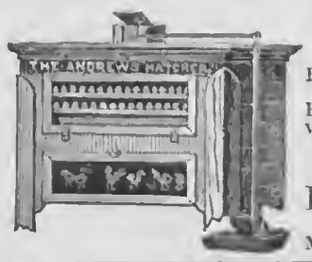
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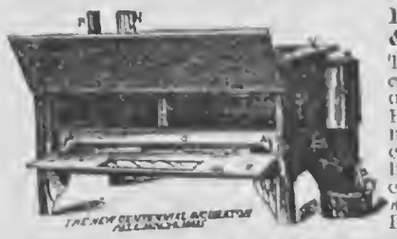
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To the Kainit Trade.
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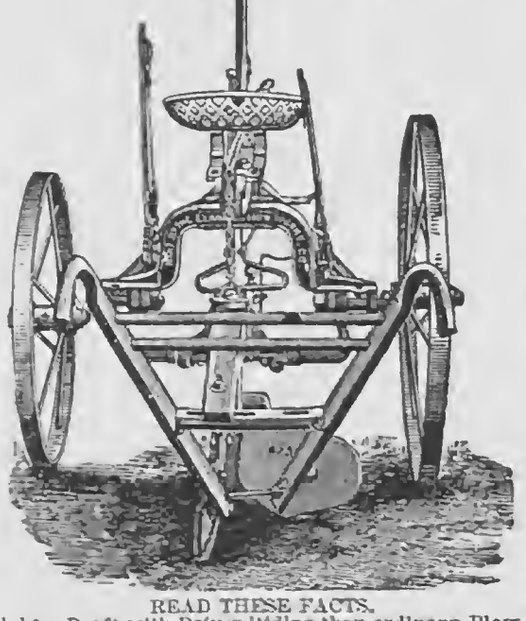
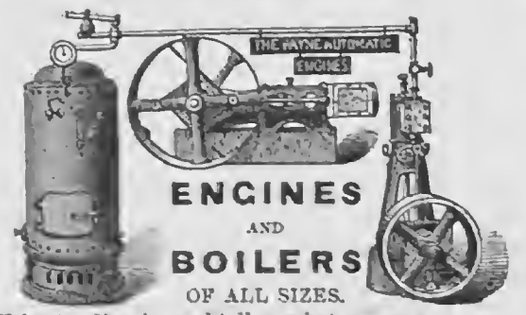
TELEGRAMM-ADDRESSE.....ROBERT CARR.
HAMBURG, 1st of January, 1886.
The undersigned has the honor to inform all those interested in the KAINIT TRADE that he has been appointed by the STASSFURT SYNDICATE OF KAINIT WORKS, consisting of KÖNIGLICH PREUSSISCHES SALZWERK, STASSFURT, (The Royal Prussian Saltmine); HERZOGL. ANHALT. SALZWERK, LEOPOLDSHALL, (The Ducal Anhalt Saltmine); SALZBERGWERK NEU-STASSFURT, LOEDERBURG, (The Saltmine New Stassfurt); KALIWERKE ASCHERSLEBEN, GEWERKSCHAFT, ASCHERSLEBEN, (The Kaliworks Aschersleben), as their SOLE AGENT for the sale of this article to the United States of North America and Canada. As such, any orders will be carefully and promptly executed at the shortest notice and lowest possible current cost.
The demand for Kainit is steadily increasing, and the agricultural public, in becoming more acquainted therewith, is rapidly realizing the fact that the small cost of the article (it is the cheapest article for agricultural purposes) compares favorably with the results arrived at. As a standard Kainit is guaranteed to contain no less than 23 per cent. Sulphate of Potash and assuring all importers of the greatest care in executing orders entrusted to the undersigned, he is always ready to quote by cable or letter in reply to inquiries made direct or through his agents. Representatives for Baltimore; Messrs. PRIOR & VON COLLEN, 25 S. Gay Street, Baltimore. **ROBERT S. CARR.**

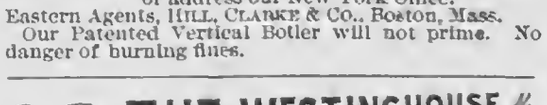
THE WILLIAMS

Grain Threshers, Horse Powers, and Engines.
Highest prize awarded these machines at the New York State Ag. Soc.'s latest trial, over a large number competing. Ample warranty and opportunity for trial given. For full particulars address
ST. JOHNSVILLE AGR'L WORKS,
St. Johnsville, Montgomery Co., New York.

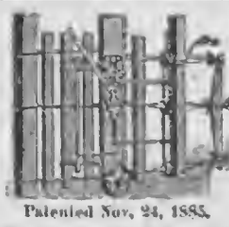
THE ELKHART PLOW SULKY

READ THESE FACTS.
Lighter Draft with Driver Riding than ordinary Plow with Driver Walking. Turns square corner without backing. It is wholly constructed of iron except tongue and front lever.
We claim and GUARANTEE that a Plow attached to the Sulky and carrying the driver, is from five to 100 pounds lighter draft than the same Plow doing same work without the Sulky. Write for prices.
ELKHART IRON WORKS,
ELKHART, IND.
Mention Rural New-Yorker.



ENGINES AND BOILERS OF ALL SIZES.
Write for Circular and tell us what you want.
B. W. PAYNE & SON, Drawer 106, ELMIRA, N. Y.
or address our New York Office.
Eastern Agents, HILL, CLARKE & Co., Boston, Mass.
Our Patented Vertical Boiler will not prime. No danger of burning flues.



Grain Threshers, unequaled in capacity for separating and cleaning.
Combined Grain and Clover Threshers, fully equal to regular grain machines on grain, and a genuine **Clover Huller** in addition.
Two Speed Traction & Plain Engines. 4 to 15 Horse Power, positively the most desirable for Lightness, Economy, Power and Safety. Boiler has horizontal tubes, and is therefore free from the objectionable features of vertical boilers.
Horse Powers, both Lever and Endless Chain. All sizes. Send for Catalogue. Address,
THE WESTINGHOUSE CO.,
Schenectady, N. Y.


Patented Nov. 24, 1885.
RICHMOND CHAMPION FENCE MACHINE
Surpasses all other wire and picket fence machines, for making strong and durable fences in the field, that no stock will break down. On rough, hilly ground, it keeps pickets perpendicular which no other machine will do without constant adjustment. It is easy to handle, uses any kind of pickets, and any size of wire. Write for circular and price.
WAYNE AGRICULTURAL CO., Richmond, Ind.

I WILL INSURE YOUR HOGS!
DR. JOS. HAAS'
HOG AND POULTRY REMEDY

[None Genuine without this Trade Mark.]
Is the only Practical Preventive of the so-called Swine Plague.
It has never been surpassed as an increaser of pork and general system tonic. Aiding digestion, stimulating the biliary organs, preventing torpor and engorgement of the liver, and regulating the bowels, it removes and prevents the formation of disease germs, and preserves to the well bred hog his natural constitution. Where it has been fed to such animals in the prescribed quantities, and other directions faithfully observed, it has proved a thorough preventive against swine disease.
AS AN EVIDENCE OF FAITH
in my remedy I make the following offer:
1. I will insure herds of swine of not less than one hundred in number against disease, at a small fee per head, provided they are fed my remedy under my direction, and prove upon examination prior to contract that they are in a healthy condition, and are neither in-bred, close-bred nor the progeny of such.
2. I will forfeit $100.00 to any breeder whose offer to examine for insurance I decline, provided he forwards remittance to cover my expenses to and from location of hogs, or I fail to prove to the satisfaction of any disinterested party, that failure to respond to invitation is caused by prior engagement or by matters of at least equal importance.
3. I will forfeit $500.00 if I decline upon examination to insure such herds, if my judgment as to their condition of health is overborne by the result of an examination made by at least two properly qualified and graduated veterinary surgeons.
Facts are Better than Assertions.
Please read the following testimony:
GIBSONTON P. O., PA., Feb. 2, 1885.
Dr. Jos. Haas—Dear Sir: About a year ago our herd here numbered about 2,700 head. Disease broke out, and no remedy we had would arrest the trouble. Our losses were heavy and we had to give up feeding entirely for about two months. We then heard of your remedy and bought a trial lot, and began feeding again. We have used it constantly ever since. We have since April last received about 5,000 head of hogs into our herd and have not had a single death from swine disease. This is our experience. Our opinion is that the remedy has prevented disease, and we would not think of being without it. As an aid in fattening pork, we believe it to be good. On this point, however, we have not made an actual test, *as we would not risk feeding a pen of hogs without the Remedy.*
Yours very truly. WHITE & CO.
[N. B.—White & Co., since writing the above letter, have purchased $450 worth of the remedy.]
The remedy can be procured of all Druggists, or from my laboratory. Prices, $2.50, $1.25 and 50 cts. per package. 25 lb. cans, $12.50.
JOS. HAAS, V. S.
Member of Indiana State Veterinary Med. Assoc'n
INDIANAPOLIS, IND.

"MARCHMOOR FARM."
HIPPARCHUS No. 11672; Sire Orange Peel, P. 288; Dam King's Fertile, No. 22765. Service Fees, $100.
BRIGHTSON No. 11671, Sire Farmer's Pride P. 322; Dam Nellie Flanders, No 22764. Service Fees, $100.
PRINCE NERO Sire Nero, P. S. 249; Dam Mrs. Langtry, C. 3746. Service Fees, $100.
CHAS. R. HOE,
New Brunswick, N. J.

HOLSTEIN-FRIESIAN CATTLE.
Imported and bred by **J. N. ROBINS,**
Beacon Farm, Northport, L. I.

JERSEY RED, POLAND-CHINA, Chester White, Berkshire & Yorkshire Pigs. Southdown, Cotswold and Oxford Down Sheep and Lambs Scotch Colley Shepherd Dogs and Fancy Poultry. Send for Catalogue
W. ATLEE BURPEE & CO. Phila. Pa

HOLSTEIN FREISIAN CATTLE
IMPORTED AND HOME BRED.
WHAT OTHERS SAY.
"The finest herd this season."—Dr. Farrington, U. S. Quarantine Station, N. J.
"As a herd, away up! up! up!!!"—Dudley Miller, Esq., Oswego, N. Y.
Young Cows; Yearlings with Calf, Yearling Bulls, and Spring Calves' Prime Stock. No fancy prices. We mean business. **G. W. THOMPSON & SON,**
Stilton, N. J., P. R. R.

SMALL'S CALF FEEDER

This NEW article is appreciated and approved by all progressive Farmers and Stock Raisers. The calf sucks its food slowly, in a *perfectly natural way*, thriving as well as when fed on its own mother.
Circulars free. **SMALL & MATTHEWS,**
21 South Market Street, BOSTON, MASS.

THE BEST CATTLE FASTENING!
SMITH'S
SELF-ADJUSTING SWING STANCHION,
The only Practical Swing Stanchion Inveuted. Thousands in use. Illustrated Circular free. Manufactured by BROOKS & PARSONS, Addison, Steuben Co. N. Y.

LITTLE'S PATENT FLUID
NON POISONOUS
SHEEP DIP AND CATTLE WASH.
MORRIS, LITTLE & SON,
Manufacturers, Brooklyn, E. D., N. Y., Box 3, and Doncaster, England.

PEARSON'S FERTILIZERS.
High Grade. Reliable. Lasting.
Manufactured in dry condition, thereby assuring full weight of fertilizing material. Most flattering results where used side by side with other preparations. Where there are no agents for these Fertilizers, orders direct to the manufacturers will receive prompt attention. **JOHN M. PEARSON, Hudson, N. Y.**
Send for catalogue.

For the Young.

NEVER STOP TO CROW!

I saw a Bantam rooster
  Strutting foolishly around;
He was just the valuest fellow
  That could possibly be found.
With his feathers all a-ruffle
  And his head held high in air,
He was just a feathered handful
  Of importance, I declare.
As he strutted through the garden
  With a step both high and firm,
On the mellow soil below him
  Lay a fat and toothsome worm.
All the other mighty roosters
  Had been hunting all in vain
For the prize which little Banty
  Felt himself about to gain.
But the foolish little fellow
  Thought that he must stop and crow,
Just to celebrate his smartness,
  That the other folks might know.
So he threw his small head backwards
  And he opened wide his beak,
And to him the sound was mighty,
  Though to me it seemed a squeak.
While the little chap was crowing
  All his foolish breath away,
Came a wise old hen and gobbled
  Up the fat worm where it lay,
So that when he stopped his crowing
  There was nothing to be found;
He had won a barren triumph,
  He had lost it all in sound.
Now remember, when Dame Fortune
  Puts her chances in your way,
Never stop to brag about it
  While you let them idly stay.
Be not like the foolish Bantam,
  Work with patience long and well
Then no need to crow your triumph,
  For the years themselves will tell.

—UNCLE MARK.

BROWN LEGHORNS.

The champion layers of the world. These are the birds of my choice on account of their beauty and their value as layers. When I began I bought the best stock I could find, and having taken great care in breeding, I think I can now say that my Brown Leghorns are as fine as any in the State of Connecticut. The first importation of Brown Leghorns into this country, of which we have any record, was about 50 years ago. They were called Red Leghorns and had combs and wattles larger than any seen before in this country. The pullets would commence laying when about four months old, and their reputation for prolificness became established beyond a cavil. This reputation has been kept up so that at present no one pretends to have fowls that will excel Brown Leghorns in the production of eggs. They are small, lively, erect of carriage, have large wings, are good foragers, small eaters, and turn what they eat to good account. They require a warm house in Winter on account of their large combs, but in my warm house, many a day in the past Winter I have brought in 15 or 16 eggs from a flock of 18 hens. Brown Leghorns have been improved, and it is easier to-day to find standard birds of this breed in the United States than in Italy.

Hartford, Conn. HOWARD A. GIDDINGS.

[Leghorns are the birds for eggs undoubtedly. It is not so much the bird, though, as it is the care that produces the eggs.—U. M.]

MONEY IN POULTRY.

I raise ducks only for fancy—Rouens and Dark Muscovas. I raised about 50 last year. The eggs hatched well in the incubator. I raised them in a brooder without any heat. Gave them soft feed, corn meal, stale crackers soaked in milk, and did not lose but one by weakness. They had good clean water three or four times a day. I do not think that a pond is absolutely necessary, but they want a place to wash when they begin to get feathers. I want to tell you something about my chicken house and the profits. I will give you facts without dollars and cents. Any one can make that out for themselves. I started Nov. 1, 1884 to build a house. I had 56 very good Plymouth Rocks and $20 in the bank. December 20 I had my house 24x26 feet ready for the chickens. Now for what I have done. I have increased my stock to 180 hens, with two fine breeding pens of Plymouth Rocks from the best in the country, and one very fine pen of S. C. B. Leghorns. I have paid for most of the feed I used. Paid $65 for incubators, fixed my house all over and now it is 24x58 feet, and I am now in debt about $20, with an income of 90 eggs a day. I ship 21 dozen per week to customers in New York City, for which I get 36 cents per dozen. I raised about 500 chickens last year. I used brooders that I made myself. They cost me 94 cents, besides the lumber and labor, which is very small.

Coxsackie, N. Y. JAY B LAMPMAN.

[Well done! That is good business. Who says chickens will not pay now? Won't you send us a description of your brooder?—U. M.]

LETTERS FROM THE COUSINS.

Dear Uncle Mark: I am not a little girl, but a little old woman, 61 years old. I want to tell the Cousins how I feed my chickens. Last Summer I raised 50 chickens, nine bantams and eight ducks. I never had a single sick one. A mink killed eight in one day, but the men soon killed the mink. I mix all the dough with milk, and put a very little salt, black and red pepper and soda in it. Chickens want plenty of good water in hot weather. In cold weather I take the corn in the house and heat it in the oven. We give water warm in cold weather too. We get our oats and corn ground together for the cows, so I mix some of that once or twice a week and put in it a pinch each of pepper, salt and soda. Our hens have been very healthy and have laid a great many eggs. Some of the hens got to eating their eggs. I took an egg-shell and filled it with dough very strong with red pepper. Since the hens started to eat that I have had no more trouble with them. AN OLD FRIEND.

Dear Uncle Mark: We have 10 Plymouth Rocks; eight of them are hens. We got them January 22d. One commenced laying January 28th, and laid 24 eggs before she quit, and she has commenced to lay again. They have altogether laid about 150 eggs. We have 37 Plymouth Rock chicks hatched; some of them two weeks old. Two of the hens wanted to sit; one was easily induced to lay again, but the other we could not stop from sitting. We would take her out and put her on the ground, but she would sit the same. At last we made her a nice nest and gave her 17 eggs. She is sitting well. We children love to hunt the eggs. We cultivated a plant last year and the year before last that we thought was one of the Garden Treasures. It made a large plant with large coarse leaves, square stem, and had a great many small greenish-brown flowers, and had a drop of honey in each flower. In the Fall it had a great many little green seed pods. We now think it is Figwort. The bees worked on it constantly. All of the members here have received their Sweet Peas but myself, but we have enough and I will help cultivate the Garden Treasures. Your niece,

Abingdon, Va. GRACE B. KELLY.

[I am glad the girls like poultry raising. I have always thought they could care for fowls as well as the boys, if not better.—U. M.]

Dear Uncle Mark: I am a little girl seven years old; and would like to join the Y. H. C. I have two sisters, Mary and Anna. Mary is 12 years old and Anna not quite three. We live on a large farm in Birmingham, Chester Co., Pa., three miles from West Chester. We keep a great many cows and hogs. We have six horses, two of them are carriage horses. We have chickens, turkeys and guineas. We live on "Historic Ground." The battle of Brandywine was fought near here, and the British marched right by this place. Birmingham Meeting House, where the wounded were taken, is only a mile away, and some of the soldiers are buried in the graveyard. We go to meeting close to it. Some of the hardest fighting was in what is now my Papa's woods, and some years ago, when they sawed into a tree, they found one of the bullets. My Papa was born here where we live, and my grandfather owned the farm, and great-grand-father too. We are going to have some flower beds this summer. We have a truck patch, and will have strawberries, raspberries, grapes and vegetables. We have a chestnut tree my Papa planted 40 years ago, when he was a little boy; and last year we sold $25 worth of chestnuts off it. We have other trees, but keep the nuts at home. Papa had a play-house built for us, it is beautiful yellow pine, and is a real house, we play "keep house" in it. It has two windows. I cannot read. Mamma does not care for us to learn too young. My sister Mary reads to me sometimes. So do Mama and Aunty. I like to have the letters in the Rural read to me. I am going to help feed chickens and hunt eggs this summer, for I am to be out as much as possible, as I am not strong. If you will have me for a member of the club, I will write again next Fall, and tell you how we make out with our flowers, chestnuts, chickens and turkeys.

MAGGIE SHARPLESS.

Birmingham, Chester Co., Pa.

[We are glad you wrote, Maggie. We are glad enough that there are no battles to be fought on your Papa's farm now. We hope you will get strong and well again this Summer. I am glad you are not in a hurry to learn how to read. There will be plenty of time for that.

Maggie's Papa writes that the chestnut tree is a Spanish seedling, nuts, medium sized and very early.—U. M.]

Letters Received from S. P. Shull; Ursa Major James H. Fregemba; Lou Hall; Effie Smith; Maude F. Wright; Eula Cox; Jimmie B. Bokaw; Arthur Smith.

Miscellaneous Advertising.

ANOTHER HOUSEHOLD NECESSITY.

Mr. Wild, the Inventor of Linoleum, notes a Discovery as Valuable as his Own.

Fifteen or twenty years ago it was found that a floor-covering could be made, looking like oil-cloth and lasting as long if not longer, and yet without that coldness to the tread which is one of the peculiar characteristics of oil-cloth. The new article was made of very finely ground particles of cork, mixed with linsed oil and other substances in mysterious ways which need not here and now be described. "Linoleum" was the name selected for it. At first it was put before the public on a very small scale. But its merits created a great demand for it, and is now a household institution, both in this country and in England. At the head of the Linoleum business, in this country, is the well-known house of Joseph Wild & Co., of 84 Worth St., New York.

The senior partner of this firm is Joseph Wild, Esq., a resident of South Brooklyn, and one of the most hearty looking gentlemen of his age anywhere to be seen. He is considerably over seventy, with snow-white hair, erect form, and a very cheerful countenance. To look at him one would suppose he never had suffered a day's illness in his life. Yet there was a time when Mr. Wild was an invalid, worn by active attention to business, and seeming to be on the verge of total nervous prostration. Concerning his invalidity and his restoration to health one of our correspondents recently had little conversation with him at his store.

"They tell me you were considerably run down in health, Mr. Wild!"

"It is very true, sir. I was not bed-ridden, nor was I entirely laid aside from business, but I had given myself very closely to my business affairs, and my duties in connection with the church and some of the Baptist benevolent societies had weighed upon me. A younger man than I might not have felt these burdens as I did, but at my time of life they began to make their mark on my constitution. I felt a lack of vitality and realized that my nerve power was about to fail me. My appetite was not as it formerly had been and my digestion was somewhat disordered. I needed in fact, revitalization. About this time I heard of Compound Oxygen, and I made inquiry of Dr. Turner, in charge of the New York office of this remedy, to see if it could be applicable to me. Learning from him that others who had been run as down I was had been benefited by the the Compound Oxygen. I procured a 'Home Treatment' with considerable doubt as to whether or not it would do me any good. This was about two years ago. Since that time I have been taking Compound Oxygen, not all the time, but frequently at intervals, when I have felt the need of it."

"Then you received decided benefit from it at the outset?"

"Very soon after I began to inhale I found that I was receiving new strength. And I was glad to note that it was real strength and not a mere stimulus. I noted also the steadiness of my improvement. There was no falling back but a constant and reliable advance. Daily I could feel an increase of vitality. My spirits were better and my power of action was greater. I was able to attend to my business and to all my other duties with far less strain on me than I had for some time previously experienced."

"And so you now find yourself as well as ever, and beyond the necessity of medicine?"

"For a man of my years I am as hearty and vigorous as I can expect. I am free from disease and pain and am attending to as much detail of business as if I were only fifty years old. As to medicine, I have no use for it, drug-medicine I mean. I do not call this Oxygen exactly a medicine; certainly not in the sense that drugs are medicinal. I regard it as a wonderful vitalizer and invigorator. And it as such that I even now occasionly resort to it when I feel the need. I keep it in the house and intend to continue doing so."

To the many gentlemen of advancing years who are over-worked and weary, and who feel themselves in need of revitalization, Compound Oxygen is, as in Mr. Wild's case, a valuable helper. The late T. S. Arthur, of Philadelphia, was brought almost from the grave by this means when he was quite an old man, and by it his life was prolonged for a number of years. The Hon. William D. Kelley, of Philadelphia, who is beyond seventy, attributes to Compound Oxygen, his recovery from from what had been pronounced a fatal disease. He still uses the Oxygen as a vitalizer and is in vigorous condition, attending to his legal and congressional duties as actively as of old.

For a valuable treatise on what Compound Oxygen is and what it does, write to Drs. Starkey & Palen, 1529 Arch Street, Philadelphia. The treatise will be mailed free of charge,

Because uric acid in the blood causes most human ailments is why Warner's safe cure restores to health so many people suffering from so many apparently different diseases. It neutralizes and removes the uric acid.

I START MEN
OF SMALL MEANS in the New lucrative business of "HOME PHOTOGRAPHY."
By the recent great discovery of substituting a Dry Gelatine film for Wet Collodion, the entire material is now prepared in large Photo. Factories, and sold READY FOR USE, similar to Cartridges for a Gun; Enabling Men or Women with **no experience,** to produce superior Photos to what formerly required long years of difficult practice; costing less than **50 cts.** for one dozen large photos, that sell for **$4** to **$6.** Is paying big with **other business** in *stores* or *shops,* or at **home,** or from *house to house.* The novel surprise of a man with complete apparatus, appearing at the door ready to photo. anything, Persons, Groups, Buildings, or Animals, secures profitable orders in nine out of ten homes; Affords **Steady Work** and pays **300 per cent.** profit.
To EARNEST applicants (one only) of *Process Illustrated,* Free, Sample Photos. **10** cents. FRANKLIN PUTNAM, M'f'r & Dealer in Photo. Apparatus, **483, 485** Canal St. N.Y.

PILES. Instant relief. Final cure in 10 days, and never returns. No purge, no salve, no suppository. Sufferers will learn of a simple remedy, free, by addressing C. J. MASON, 78 Nassau Street, N. Y.

Brewster's Patent Rein Holder.
Your lines are where you put them—not under horses' feet. One agent sold 12 doz. in five days; one dealer sold six doz. in 15 days. Samples worth $1.50 FREE. Write for terms.
E. E. BREWSTER, Holly, Mich.

GOLD MEDAL, PARIS, 1878.
BAKER'S
Breakfast Cocoa.
Warranted *absolutely pure Cocoa,* from which the excess of Oil has been removed. It has *three times the strength* of Cocoa mixed with Starch, Arrowroot or Sugar, and is therefore far more economical, *costing less than one cent a cup.* It is delicious, nourishing, strengthening, easily digested, and admirably adapted for invalids as well as for persons in health.
Sold by Grocers everywhere.
W. BAKER & CO., Dorchester, Mass.

TELEPHONES SOLD.
Don't pay exorbitant rental fees to the Bell Telephone Monopoly to use their Telephones on lines less than two miles in length. A few months' rental buys a first-class Telephone that is no infringement, and works splendid on lines for private use on any kind of wire, and works good in stormy weather. It makes home pleasant; annihilates time; prevents burglaries; saves many steps, and is just what every business man and farmer should have to connect stores, houses, depots, factories, colleges, etc., etc. The only practicable and reliable Telephone that is sold outright and warranted to work.
Chance for agents. No previous experience required. Circulars free. WM. L. NORTON, Buffalo, N. Y

BEST TRUSS EVER USED!
ELASTIC TRUSS
Improved Elastic Truss. Worn night and day. Positively cures Rupture. Sent by mail everywhere. Write for full descriptive circulars to the
NEW YORK ELASTIC TRUSS CO.,
744 Broadway, N. Y

Flying Dutchman Jr.
The best and lightest draft Plow that ever turned soil. For circulars, descriptive, illustrative, demonstrative, logical, philosophical, irrefutable, convincing, sensational, astonishing, amusing, comical, but all true when they describe the merits of the pioneer three-wheel plow, the FLYING DUTCHMAN, address,
MOLINE PLOW CO.
Moline, Ill.

What is a Navy Bean?
Morgan, Tex.,—I was afflicted with gravel, and could only get temporary relief from physicians. Pain excruciating. Used three bottles Warner's safe cure and passed a stone as large as a navy bean, giving me complete relief.—Dave Gillis, Organ and Sewing Machine Dealer.

NEPTUNE
Flexible Spray Hose Nozzle.
All Rubber, Indestructible. Requires no packing. Solid stream instantly changed to mist or spray, widely diffused or concentrated, by compressing soft rubber tip. Best for Gardens, Window Washing, etc. For washing carriages, will not scratch paint. By mail, post-paid, 50 cents. Trade supplied.
Hartford Rubber Mills,
Hartford, Conn.

DELAWARE COUNTY
CREAMERY
Write at once for circulars and special offer to first purchaser. Address
Delaware County Creamery Co.,
BENTON HARBOR, MICH.

REID'S
CREAMERY
SIMPLEST & BEST
Agents Wanted
BUTTER WORKER
Most Effective and Convenient
Also Power Workers
Capacity 10,000 lbs. per DAY.
BUTTER PRINTERS, SHIPPING BOXES, &c. *Send for circular*
A. H. REID,
36 S. 10th St., Phila., Pa.

PERSONALS.

SAMUEL J. TILDEN is reported to have made $1,250,000 out of a Lake Superior iron mine. It is thought that this isn't much over one-tenth of the old man's "bar'l."

THE stalwart form of Roscoe Conkling is getting to be a familiar figure in the streets and public places here. He has grown quite stout and lost somewhat of his old-time grace of movement. His hair is quite gray and his short beard snow-white.

SENATOR DOLPH, of Oregon, is regarded by the ladies as the handsomest man in the Senate. He is tall and broad-shouldered, speaks with a rich, deep, bass voice, and has a magnificent full beard, which falls to the middle of his waistcoat. He has a striking face and majestic bearing, both of which attract attention.

CHARLES A. DANA is 66 years old, but looks fully 10 years younger. He goes to the Sun office at 11 in the morning and leaves at four in the afternoon. All his editorials are dictated to a stenographer. When dictating he allows no one to interrupt him, though usually accessible to all persons, thus preserving his line of thought unbroken. His office is plainly furnished, the walls being covered with photographs of dead friends. His health is almost perfect.

Miscellaneous Advertising.

7,000 CHALLENGE WIND MILLS.

IN USE IN EVERY State and Territory of the U. S. It is a sectional wheel, has been made by us 15 years, and has never blown down without tower breaking, a record no other mill can show. MILLS SENT ON 30 DAYS TEST TRIAL. BEST FEED MILLS, CORN SHELLERS, ETC. GOOD AGENTS WANTED in all unassigned territory. Catalogues free. CHALLENGE WIND MILL AND FEED MILL CO., Batavia, Kane Co. Ill.

Buy the Best. THE EUREKA

Awarded FIRST Premium and Gold Medal at World's Fair New Orleans, over 12 leading Wind Mills. The EUREKA, after a trial lasting 4 mos. was pronounced the best over all and to-day stands at the head of all competitors. Sizes, 10 to 18 ft. diameter of wheel, either for Pumping or Power Mills. *Perfect in all parts and warranted.* Estimates on application. Also Mfrs. of the Adams Direct Draft Barn Floor Horse Power. *Live Agents Wanted.* Address Mfrs., SMITH & WOODWARD, Kalamazoo, Mich.

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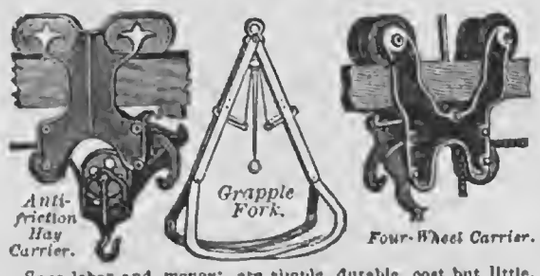
For Stacking out in Fields or Mowing away in Barns.



Save labor and money; are simple, durable, cost but little. No trouble to get over high beams or to the end of deep bays. Thousands now in use. Wood Pulleys, Floor Hooks, etc. Send for circular and designs for trackling barns, to

U. S. Wind Engine & Pump Co., Batavia, Kane Co., Ill.

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POST HOLE DIGGER.

The Greatest LABOR-SAVING tool ever invented for digging holes in the ground. This machine works on a new principle, and is unlike anything in the market. It is neither an Auger nor a Plunger, but is driven in the ground with a driving rod, which works in a pipe similar to a telescope. We claim for this tool:

1st. That one man can dig from two to three hundred holes two feet in ordinary ground in one day.

2nd. That it will dig holes any size or depth required.

3d. That it will work successfully in very hard or rough ground where other diggers and augers will not work at all.

4th. You stand up straight while using it, consequently no back-breaking work is required.

It will pay you to send for descriptive circulars and prices to COLE & FLEMING, Manufacturers, Springfield, O.

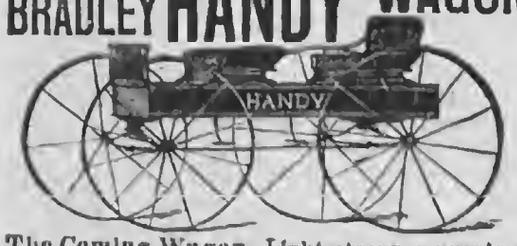
THE BIRDSALL CO.'S

Patent Variable FRICTION FEED CIRCULAR SAW-MILL.

Send for Circular "D."

Address THE BIRDSALL CO., AUBURN, N. Y.

THE BRADLEY HANDY WAGON



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OVER FOUR hundred grains of a deadly poison are taken out of the blood every day by the kidneys, if they are in health; if not, they can be fully restored when everything else fails by Warne's safe cure.

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NOT TAR. ESTABLISHED 1866

Takes the lead, does not corrode like tin or iron, nor decay like shingles or tar compositions, easy to apply, strong and durable at half the cost of tin. Is also a SUBSTITUTE for PLASTER at Half the Cost. CARPETS and RUGS of same, double the wear of oil cloths. Catalogues and samples free. W. H. FAY & CO., CAMDEN, N. J.

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W. G. HYNDMAN & CO.

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URBANA Ill.—I had a severe fall upon my right kidney. Caused a great deal of soreness, but thought I would wear it out. Was running express engine, 212 miles, with four trips a week. The strain and jarring came near killing me. Cannot describe my suffering. Physicians pronounced it catarrh of the bladder. After using thirty bottles of Warner's safe cure, I am now a well man.—A. S. HAMPTON, ex-Chief Engineer, Div. 143 Bortherhood of Locomotive Engineers.

$6.50 for Boss Plow

WITH 3 DIFFERENT SIZE MOULDS.

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NEW BLOOD OF EXTRAORDINARY MERIT IN

THE THORBURN POTATO.

It is the Earliest of All.

$10 per barrel; $5 per bushel; $3 per half-bushel; $2 per peck; $1.50 per half-peck. Or by mail, one pound, 75 cts.; three pounds, $2.

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The old and Reliable! SYRACUSE NURSERIES Come to the front For the Fall of 1886

with the choicest Stock of their specialties, STANDARD APPLES, STD. and DWARF PEARS, PLUMS and CHERRIES, ever offered to the public, all young, thrifty and well rooted.

Also a very superior assortment of GENERAL NURSERY STOCK both FRUIT AND ORNAMENTAL including all the popular ORNAMENTAL TREES, SHRUBS, and ROSES.

All Nurserymen and Dealers are cordially invited to inspect this superior stock or correspond with us, before placing their orders for the coming Fall.

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Send stamp for sample. Dietz Early Corn, Dietz Longberry Wheat, Dietz Fruit Dryer. New way of cutting fodder. G. A. DIETZ, Chambersburg, Pa.

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WHITE STAR	1.00 "	2.25 "
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RURAL BLUSH	1.00 "	2.25 "
EARLY MAYFLOWER	1.25 "	2.50 "
WHITE ELEPHANT	.75 "	1.75 "
BURBANK'S	.75 "	1.75 "

An assortment of 50 kinds. One tuber of each, correctly labeled, $5.00. Delivered at freight or express office. C. L. HAWLEY, HORNELLSVILLE, N. Y.

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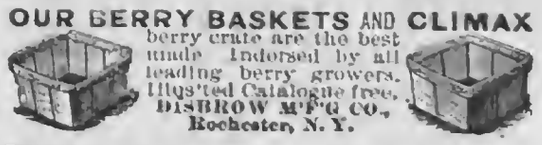
Planted alongside of ten other varieties this past Season where four-fifths of them rotted, there was no sign of blight or rot with it. Price, $1.00 per pound by mail, post paid; by express or freight, at purchaser's expense, ½ peck $2.00, peck $3.00, ½ bushel $5.00, bushel $8.00. Send all orders to H. C. CLARK, Lock Box 95, Ann Arbor, Mich.

SAMPLE FREE ROSE OR GRAPE VINE with Cat-log, postpaid, 15c. WM. B. REED, Chambersburg, Pa. | *Mention paper.*

OUR BERRY BASKETS AND CLIMAX



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FARMS Hotels, Stores, Mills. Business Chances. Country Seats or Lands for *Sale* or *Exchange.* Inclose stamp for Lists. W. S. Hotchkin, Real Estate and Traders' Exchange, Binghamton, N. Y.

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CHICAGO TO DENVER,

Either by way of Omaha, Pacific Junc., St. Joseph, Atchison or Kansas City.

It connects in Union Depots with through trains from NEW YORK, PHILADELPHIA, BOSTON and all Eastern points. It is the principal line to

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It traverses all of the six great States of ILLINOIS, IOWA, MISSOURI, NEBRASKA, KANSAS, COLORADO with branch lines to all their important cities and towns.

From CHICAGO, PEORIA or ST. LOUIS, it runs every day in the year from one to three elegantly equipped through trains over its own tracks between

Chicago and Denver,
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Chicago and St. Joseph,
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St. Louis and Omaha,
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Kansas City and Denver,
Kansas City and St. Paul,
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For all points in Northwest, West and Southwest.

Its equipment is complete and first class in every particular, and at all important points interlocking Switches and Signals are used, thus insuring comfort and safety.

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Orders by mail or express filled without delay.

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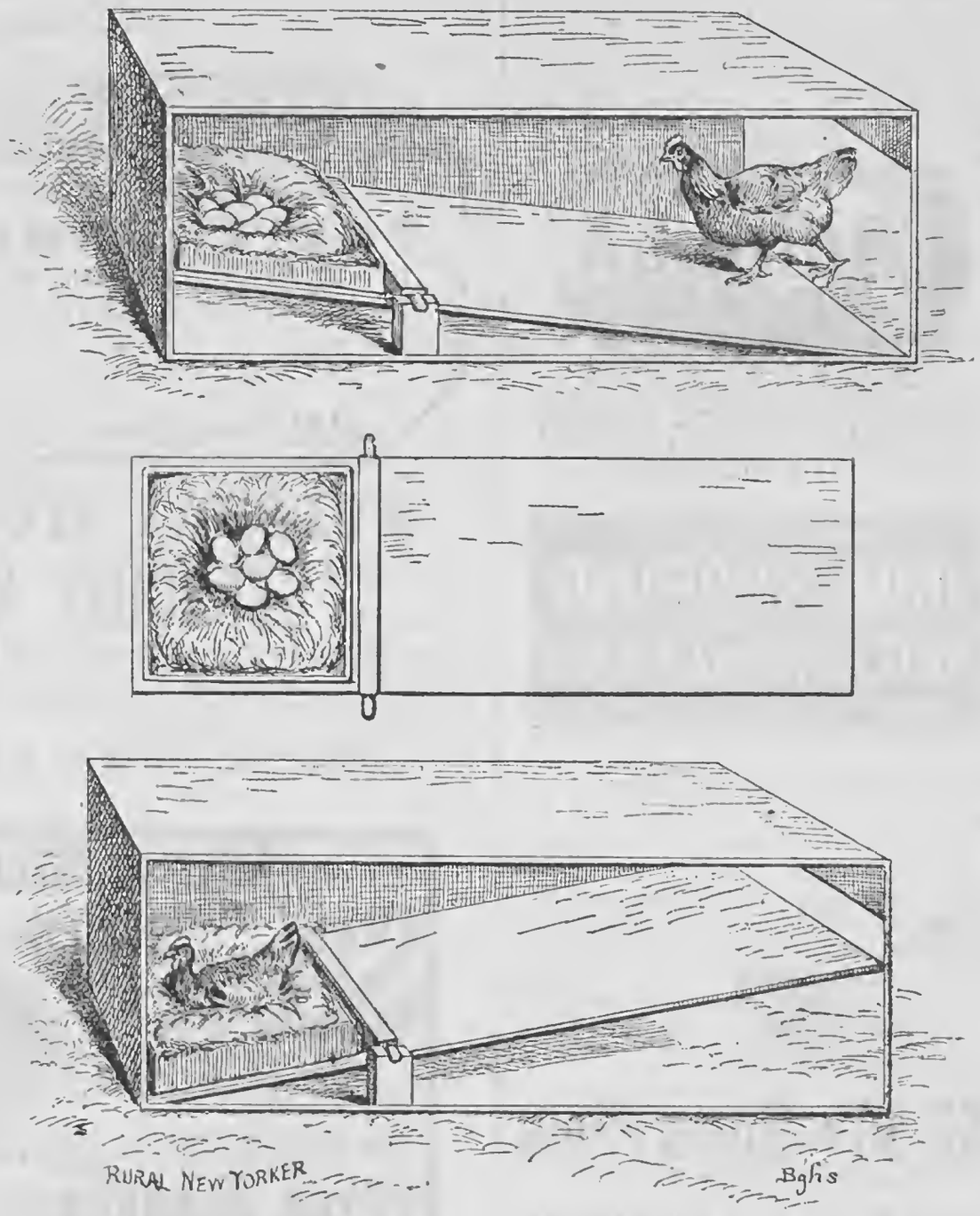

SELF-CLOSING NEST. Fig. 203.

MR. H. S. CHAPMAN saw, in a former RURAL, a description of a self-closing hen's nest. He has one which he likes much better. It is shown above at Fig. 203, and so well drawn that it requires but little explanation. It is made out of an old boot-case. The nest board is two inches narrower than the box, so that it can play up or down. It is balanced on the blocks of wood, as shown in the drawing. The nest is made by using an old tin pan or a box filled with straw. The weight is regulated so that when left alone the box will be open. On the entrance of Mrs. Wyandotte, the nest drops so that the opening is closed, and will not open as long as she stays on the nest. It is a bad plan to let hens crowd into a nest together. They will be apt to quarrel and break eggs. Why would not this arrangement work well with sitting hens?

DAIRY THERMOMETERS!

Every farmer should have one. Sent safely by mail for 50c.

Send for Catalogue of Thermometers, Lactometers, Creamometers, and Thermometers for Incubators.

W. M. McALLISTER, Optician,
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Greatest inducements ever offered. Now's your time to get up orders for our celebrated Teas and Coffees, and secure a beautiful Gold Band or Moss Rose China Tea Set, or Handsome Decorated Dinner Set, or Gold Band Moss Decorated Toilet Set. For full particulars address

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Manufacturers of Sectional Geared and Sectional Pumping Mills, etc. All work guaranteed.

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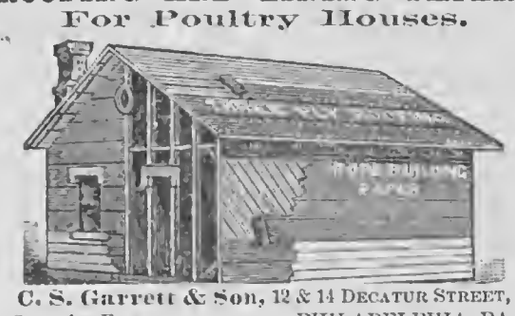
For Poultry Houses.



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E. D. CLAPP WAGON CO. (LIMITED),
Send for circular. AUBURN, N. Y.
Mention this paper.

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STEARNS'
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FERTILIZERS.

Splendid returns to the farmer for money invested. Permanent fertility to the soil.

STEARNS & CO., Manuf.,
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Valuable Farmers' Handbook on application.
Agents wanted where we have none established.

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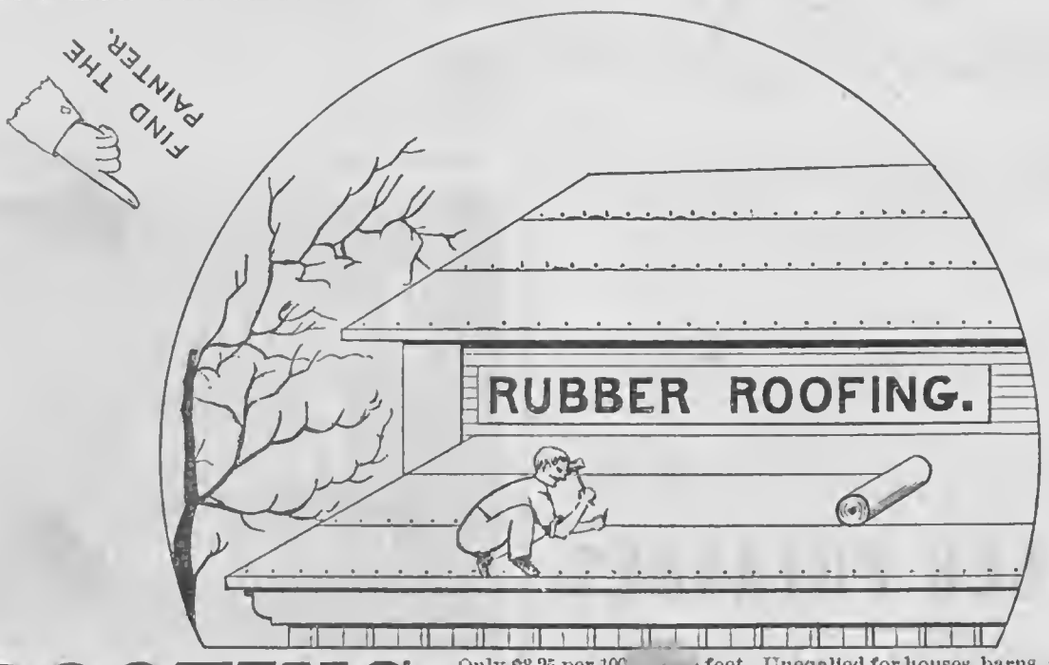
LOWEST PRICES. AGENTS WANTED.



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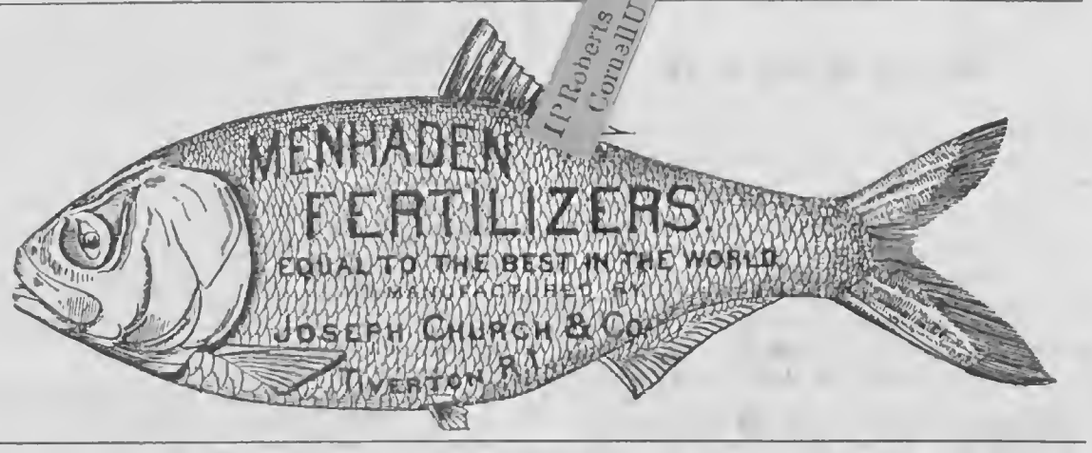
Only $3.25 per 100 [illegible] feet. Unequalled for houses, barns, and ALL buildings. Anyone can apply on steep or flat surface. WRITE FOR BOOK CIRCULAR.

INDIA PAINT AND ROOFING CO.,
NEW YORK CITY.

Samples free if you mention RURAL NEW-YORKER.



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LARGEST HERD AND LARGEST AVERAGE MILK RECORDS.
3 cows have averaged over 20,000 lbs. in a year.
5 cows have averaged over 19,000 lbs. in a year.
10 cows have averaged over 18,000 lbs. in a year.
25 cows have averaged over 16,000 lbs. in a year.
63, including 14 three-year-olds and 21 two-year olds, have averaged 12,785 lbs. 5 oz. in a year.

BUTTER RECORDS.
5 cows have averaged 20 lbs. 7 oz. in a week.
9 cows have averaged 19 lbs. ¼ oz. in a week.
11 three-year-olds have averaged 13 lbs. 2 oz. in a week.
15 two-year-olds have averaged 10 lbs. 8 3-10 oz. in a week.

This is the herd from which to get foundation stock. Prices low for quality of stock. SMITHS, POWELL & LAMB,
LAKESIDE STOCK FARM, SYRACUSE, N. Y

STOCKBRIDGE CORN FERTILIZER.

First Prize -- 113 1-8 Bush. Per Acre.

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On May 16, 1885, we planted one acre of land that had been used as a nursery ground, and had *not been plowed for forty years*, with 12 quarts Angel of Midnight Field Corn. Stockbridge, alone, was used as a fertilizer at the rate of 1,200 pounds per acre. The yield from this piece was 6,335 pounds shelled corn harvested Sept. 7, 1885.
STEPHEN HOYTS' SONS.

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Successors to S. PENNOCK & SONS CO., Kennett Square, Pa., and GEO. W. TAFT, Abington, Conn.
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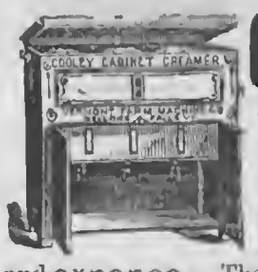

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LARGELY IMITATED, BUT NOT EQUALED.
THEY HAVE A PATENTED PROCESS
WHICH NO OTHERS CAN USE.

Are used by more fine butter makers and stock breeders than any other apparatus, because they have proved to make the **largest quantity** and **best quality** of butter with **least labor** and **exponse.** They surpass everything in the Cream Gathering System. **Have both Top and Bottom Skimmers.** Cream drawn FIRST or LAST. *No danger or sediment.* Thick walls with dead air space. Used with or without ice.

SIX GOLD Medals and SEVENTEEN SILVER Medals awarded for superiority of process and product. Send for circulars giving facts and references sustaining these claims. DAVIS SWING CHURNS, EUREKA and SKINNER'S BUTTER WORKERS, CARRIERS, PRINTS, and a full line of Creamery supplies.

VERMONT FARM MACHINE CO., Bellows Falls, Vt.

THE RURAL NEW-YORKER

A JOURNAL FOR THE SUBURBAN AND COUNTRY HOME

VOL. XLV. No. 1894. NEW YORK, MAY 15, 1886. PRICE FIVE CENTS. $2.00 PER YEAR.

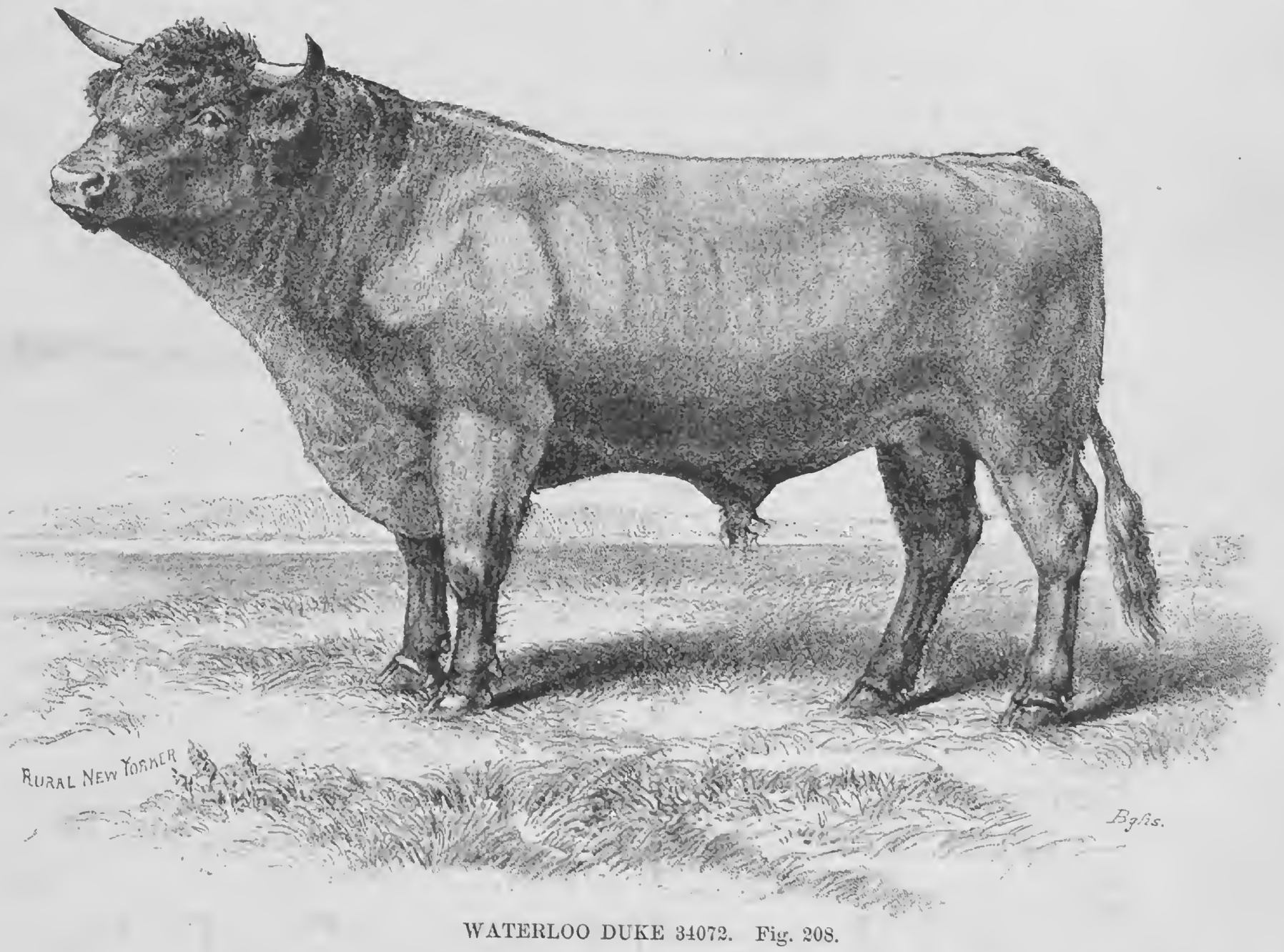
Entered according to Act of Congress, in the year 1886, by the Rural New-Yorker in the office of the Librarian of Congress at Washington.

The Herdsman.

WATERLOO DUKE 34072.

THE fine Short-horn bull shown at Fig. 208 is owned by Prof. A. J. Cook, and is held for service at his stock farm near Owosso, Michigan.

Waterloo Duke was bred by the Canada West Farm Stock Association of Brantford, Canada, Ontario. He was sired by imported Fourth Duke of Clarence, and is out of Oxford's Waterloo 5th. He is half brother to Clarence Kirklevington, the premium steer at the Chicago Fat Stock show of 1884. He is a wonderful stock getter, his superior excellence being transmitted to his progeny. His present weight is 2,500 pounds. The Waterloo tribe is famous in Short-horn literature, being considered one of the best of the Bates tribe. The picture is taken from an inferior photograph and is a trifle faulty in the fact that it makes the animal appear lighter in the hindquarters than he really is; otherwise the likeness is excellent. Prof. Cook is to be congratulated on securing this fine animal to head his excellent herd.



WATERLOO DUKE 34072. Fig. 208.

Sheep Husbandry.

Notes from the Western New York Farm.

LAMB FEEDING.

ARE ROOTS A NECESSITY?

WHEN chemistry shows roots so largely composed of water and of such low nutritive value, can we not substitute water to good advantage by wilting or soaking the dry food? We have received many letters of late, of which the above gives fairly the gist. We have by far too much respect for science and the agricultural chemists to belittle in any manner the one or to slight the deductions of the others, and yet we must be excused if we say we would much rather have the practical results of feeding a half dozen sheep with and without roots to the closest deductions of any chemical tests. The chemist when he analyzes the hay made from the growing grass, tells us that it contains, in a concentrated form, all the growing and feeding value of the grasses; but we all know that an old cow will make much more milk and butter when eating the succulent grass, though really taking much less actual nutriment. This is true, even though the hay were to be cut, soaked and steamed. There is some peculiar influence which this succulent food exerts upon the animal's mechanism, of which the chemist as yet can take no account, but which every feeder has, time and again, proved to be real. We have on many occasions fed different pens the same dry ration and, one with another, without roots, and in not a single instance have the roots failed to produce a better result, many times over paying the cost of production. Not only this, but as we have before said, the liberal use of roots will enable the sheep to eat and digest, profitably, a much larger proportion of dry forage and grain. If roots are mostly water, we would almost as soon think of keeping our sheep and lambs without forage as without a liberal supply of roots.

MANGELS AT FIVE CENTS PER BUSHEL.

Can they be raised for this, and, if so, how? More than 20 people have asked these questions. Let us consider the answer:—We raise, each year, from six to ten acres, and we have very seldom had a crop yield less than 1,000 bushels per acre, and we have had over 1,600 bushels. We think 1,200 no more than a fair average yield on good land, so that if we can raise and harvest the crop for $60 per acre, we get the roots at five cents per bushel. The way we secure such a crop is as follows:—We prefer a good, strong loam, and a one-year-old clover sod is first-rate, though a piece of corn or potato ground answers a good purpose if it was manured for the crop the previous year. We had a fair crop last year on a clover sod, and we shall plant this year on the same kind of fitting. In the Fall or early Winter we apply 15 loads of our rich barn manure spread from the wagons or sleighs. As soon as the barley and oats are sown—or sooner if in proper condition—this should be plowed and at once rolled and harrowed to prevent its becoming lumpy. In a couple of days, more or less, it should be again cultivated, rolled and harrowed until the surface is smooth and fine and the under soil fairly compact. The seed should be sown at once,—the earlier the better, after May 1st—with a common grain drill, using every fourth or third tooth, as they are seven or nine inches apart, thus placing the rows 28 or 27 inches apart. In sowing, we apply 200 pounds of some good brand of superphosphate per acre, letting it all be distributed by the tube sowing the seed and the one on either side of it, which should be so tied as to run within five or six inches of the one sowing the seed. It is the poorest kind of economy to scrimp in the seed. The books all say, sow four pounds; we never sow less than six. We buy our seed of a hardware firm here, who import it directly from England and charge from 20 to 25 cents per pound, the price varying with the variety. By using an extra two pounds the extra cost is from 40 to 50 cents per acre, and we would need to get from eight to ten bushels extra in the crop to pay this; but by using so much seed we insure a full stand and get from one to several hundred bushels more. About one-fourth of our crop is of the Mammoth Long Red; the rest of the Yellow Globe or Golden Tankard. The Mammoth Long Red is a good yielder, and is in good feeding condition earlier than the others; but the others yield fully as well, are less troublesome to harvest and keep much better for later feeding.

As soon as the rows can be nicely seen, run a hand cultivator (we prefer the Planet, Jr. as close to the rows as possible; if this is properly done, not more than an inch-and-a-half will be left uncut. In a week give a working with a horse and cultivator; and a couple of days afterwards go over them again with the hand cultivator and then "chop out." This is done with a common hand hoe ground sharp. Leave six inches of the row and cut out one foot, and again leave six inches, thus leaving hills six inches along the row and one foot apart. As soon as the leaves of the young mangels are three inches long they should be weeded and thinned. In doing this, use the hoe and fingers, and leave from three to five plants in each hill. This gives a greatly increased yield and prevents the mangels from becoming so very large and coarse, as they will when thinned to single plants. After this they should be cultivated often, and any strong weeds that have been left should be pulled.

HARVESTING.

In this latitude it is not safe to leave the mangels in the ground later than October 15,

as they are quite sensitive to a hard frost, and one hard enough to cause the skin to blister greatly injures their keeping quality. It is better to remove them to the cellars or pits on dry days, and it is most cheaply done by having several teams and wagons and two men in the field to pull and load and one at the cellar or pit to unload. We have the wagon driven by the side of the growing mangels; the driver pulls one row, and each of the other men pulls two rows. Each has a leather "harvest mitten" with one finger on his right hand, and pulling the mangles he places the finger of the mittened hand about the top, and with a slight twist removes the root completely and at the same time throws it into the wagon. As soon as the wagon is loaded, the driver starts for the cellar, another wagon taking the place. He goes to the cellar where a man has an empty wagon, unhitches his team, hitches to the empty wagon and starts for the field. The unloader has a rack or slide eight or ten feet long, 30 inches wide and made of slats 1x2½ inches, placed two inches apart and having sides four inches high; by allowing the roots to roll the whole length of this they are freed from nearly all adhering dirt and are put into good order for feeding.

STORING.

Whether stored in pits or cellars, mangels must be fully protected from frost, by which they are fully as easily injured as are potatoes. They must also be made dry before being stored in large quantities. When keeping in pits, we always place ventilators, such as drain tiles, or tubes made by nailing four boards each three or four-inches wide together, so that they project four-inches above the covering and down among the mangels. When putting on the final covering these should be removed, and the holes be stuffed full of straw.

THE COST PER BUSHEL.

Last year the account per acre was as follows:

Interest on land $150 per acre	$9.00
15 loads of manure, one-half charged to crop	7.50
200 pounds phosphate, one half charged to crop	2.00
Plowing	2.00
Fitting	3.00
Seeds, six pounds Tankard, 25 cents	1.50
Cultivating	6.00
Chopping out	1.25
Weeding	4.00
Harvesting	14.00
Total cost	$50.25

It will be seen that we have charged a large interest on the land; but it is good land, and as we would not sell it for less than the price mentioned, we have charged full interest, but as the crop was fully 1,300 bushels per acre, the cost per bushel was a little under four cents.

We have never seen such a sudden change from Winter to Summer. Three weeks ago, April 6th, it snowed all day, and the snow was a foot deep. Now—April 27th—wheat and grass are ankle-high, trees are beginning to leaf out. We are losing our Springs altogether. Wheat came through the Winter well, and now promises fair for a large crop. Our field of hand-picked Diehl-Mediterranean, on which we sowed only one bushel per acre, is as thick as a mat, and is as fine a field of wheat as we ever saw.

We have also a plot of the same cross as the Diehl-Mediterranean, and like it in every way—growth, width of leaf, color of straw, chaff and appearance of wheat—except that it is a perfectly bald wheat. We only had a single head of this, in the beginning, and have only just begun to realize its worth, and shall try to increase the quantity.

Our trial plot of some 60 varieties is now showing nicely, and among the number are several of the RURAL crosses which promise remarkable things. We shall say more of these bye and bye.

The Poultry Yard.

POULTRY NOTES AND SUGGESTIONS.

Love of poultry; poultry raising an avocation; feeding chicks; yards; buildings; cures; caution.

I DO not think it possible for any one to raise poultry and receive any great profit therefrom unless he takes pleasure in the business. When asked by those who, having little or no experience, wished to raise poultry for profit, whether I thought it would pay them to raise poultry as the whole or a part of their occupation, my first question has always been, "Do you love birds? Would you take great comfort in having them around you from morning till night?" If the person had no great liking for fowls, my answer was always, "No;" but if he had a real love for birds, and could make up his mind to give them the best care and attention, then my answer was "Yes."

If one has other means of support for a few years, or until he can make the business support him, and has common sense, let him get a few of the kind he thinks he would like best; take several poultry and agricultural papers that pay attention to poultry; use his best judgment to pick out the grain of good advice from the quart of chaff, and go ahead, increasing his stock as he gets experience, and he will be successful; but it is only now and then that one drops all other business for poultry raising. For the highest success, however, it should be carried on by itself.

Will some one who raises poultry and yet feels that it is not worth special care, and so, beyond throwing the fowls in the morning a quantity of grain to last till next morning, leaves them to take care of themselves, and who has kept an honest account of the outlay and income, give the figures showing the profit or loss? I am sure that in all cases where more than a very few fowls are kept, a loss well be shown.

Chickens should be fed at least four times a day till they are at least 12 weeks old, and for the next few weeks three times a day. Then separate from the rest all the pullets and as many of the best cockerels as will be needed for breeders, and feed them and the old fowls twice a day. The remaining cockerels should be allowed to range only in a good-sized yard, and should be still fed three times a day. If possible to avoid doing so, never feed corn meal clear, but mix with it one-half its bulk of shorts or fine feed. For chickens the finer the feed the better. If it is wet with hot water and allowed to cool before feeding, it is best. Feed corn, oats, oat-meal, cracked corn, wheat, etc. Do not feed chickens wheat till they are at least five or six weeks old. In cold weather, or when fowls are confined, feed plenty of scraps, shell, ground bone and cut hay. Let the last stand in water several hours after being cut before feeding. Chopped beets, cabbage, boiled turnips and potatoes are excellent.

A great many poultrymen say, "Don't get your fowls too fat." Good advice; but, "Don't let them get too lean," is as good at all times, and better during moulting. Do not feed young chickens on good, fresh eggs boiled, as very often advised. It will not pay. Sell the eggs; one seldom gets less than 12 cents per pound for eggs, and he can buy good, fresh shanks for three or four cents per pound. Boil them well, use the water to wet the feed, chop the meat, give a small quantity each day for a week or two, and it will answer the purpose as well as boiled eggs, if not better.

If one is keeping a small number of fowls, or as high as 100 or more on a farm, he should not confine them more than necessary. But if one is keeping large numbers, or where they can destroy crops, etc., they should be confined in flocks of about 50 to a yard. Better to have two yards to each flock than to have all in one. Then let them into one yard first, and then into the other for a few days at a time. I have and do keep larger numbers in one fair-sized yard, and take care to supply all they need as nearly as possible, and have them do well. I have kept breeding fowls in small yards, and by giving extra care have done fully as well as if they were at large.

Seeing that the houses are kept free from insects and are bright and clean is, I believe, the main point in successful poultry raising. Poultry buildings, need not be very costly or elegant; but they must be warm, tight, fairly well lighted, and placed where the ground will not get soggy, and where water will not stand around them in wet weather. If one wishes a dirt floor (but I advise a board floor in all cases), fill in with dirt at least four inches above the ground outside, and when you scrape up the droppings, be sure to take a thin layer of earth. When the earth layer has nearly all been removed in this way, fill up again with fresh earth. A board floor is easy to keep clean, if a little sand is scattered over it as soon as the droppings are scraped up.

When fowls are confined in cold weather the houses should be cleaned every morning. When they are at large, twice a week; when in yards, once in two days. Rub a little of some kind of grease or oil on the roosts once in awhile. Put fine tobacco or sulphur in the nest. Good dust boxes, plenty of dry earth or road dust thrown in all cracks and corners, will keep poultry free from lice.

I have never kept over 150 fowls over Winter; but whatever number I have kept I have found they paid a fair profit when rightly handled. As a rule, where keeping 100 fowls would pay, keeping 1,000 would not, because it would be more work to tend to all their needs, market the eggs, etc., than one man could possibly do. With the help of a stout boy he might accomplish the work, however, if he understood how to make the most of his time.

Where buildings are extra warm and sheltered, and eggs are desired more than meat, the Leghorn is the best breed here; but for hardiness and for both meat and eggs, the Light Brahmas and Plymouth Rocks; but the progeny of a cross of both with Leghorns would be better; preferably with White Leghorns.

The hatchet and block are the best cure as soon as there is a sign of disease. But fowls that are kept from drafts in their buildings, free from lice, fed wholesome food and kept from getting wet, and supplied with pure water, will be almost entirely free from disease.

To all new beginners, or those with but little experience, let me say: Use the hen for an incubator and brooder; but if you must have an incubator and brooders, do not buy or build an incubator that will hold over 100 eggs, and then it would be best not to fill it more than half the first two or three times, as that will be enough eggs to lose. When you have learned to get a fair hatch by taking the right kind of care of the eggs in the incubator, and of the chickens in the brooder, and want to increase your business, buy more rather than larger incubators.

Poultry raisers should not be so fond of bragging about the vast number of eggs per hen they get every year, or of the big profits they get from the eggs and dressed fowls; for they really deceive nobody except the ignorant; and sometimes some of these, inspired by such exaggerations, rush into poultry raising as if there were a bonanza in the business, and soon lose all they have been perhaps years in saving.

A PRACTICAL POULTRYMAN.

Providence Co., R. I.

MANAGEMENT OF WINTER LAYERS.

Leghorns; ventilation; sheds; exercise.

THE past Winter has given an opportunity for testing the merits of the different breeds as winter layers, and in so doing many theories have been overturned. Although the temperature has seldom been below zero, yet it has been far enough from the freezing point to injure all hens with large, single combs. The truth of the supposition that the Asiatic breeds are the best winter layers depends upon how the hens are managed. In every case where the Leghorns have been comfortably housed, they have given as good results as they usually give during the Spring and Summer. A very important matter in the winter keeping of hens is ventilation, and it is one of the most difficult of all the problems to solve. The majority of poultrymen recommend some kind of opening near the roof of the poultry house for the escape of impure air; but as the impurities are heavier, as a rule, than the atmosphere, and especially in cold weather, they sink to the floor instead of ascending, and the so-called ventilators near the top, instead of allowing the impurities to pass off, simply permit the escape of heat and admit cold currents, which invariably occasion colds and roup.

As the hens are partial to an open shed, it has been found an advantage to so construct the poultry houses that they will serve as open sheds during the day while the fowls may be protected from the winds and severe cold at night. This is done by placing the roosts at the rear, with a hinged board or door falling in front to inclose the fowls while on the perch. During the day the hens exercise by scratching in the open houses, and deposit their eggs in nests under the roosts. This is the true condition for keeping fowls—allowing them a covered space open to the air and sun—and they keep in excellent health under such a system. Every poultryman knows that hens are not fond of a closed poultry house during the day, and will abandon one that is warm and comfortable in order to have the benefit of any kind of shelter that is partially open, as by nature they prefer plenty of light and fresh air. Hence, though fowls should be kept warm and comfortable at night, when they are inactive, yet to secure the best results they require exercise in the open air during the day. This exercise keeps the blood in circulation, increases the appetite, works off the surplus fat and conduces to reproduction.

During the Winter all fowls that have fully matured are liable to become very fat, unless made to exercise, and it is safe to assert that more disappointments result from the hens being too fat than from any other cause. It is best to feed them well so long as they have plenty of exercise; but it is an injury to do so when they are shut up. Hence, in order to induce them to work, they should be allowed only a partial meal in the morning, thus forcing them to seek the remainder of their feed during the day by scratching in cut straw, leaves, or some other suitable material, giving them all they can eat before going on the perch in the evening. If the roost is in a close poultry house, ventilation may be best secured by a tube or pipe beginning within an inch of the floor and terminating through the roof, with a cowl over the top if convenient. So far as the use of open sheds is concerned, something depends, of course, upon the locality and the severity of the climate; but it is not necessary to suggest any particular plan for combining a warm place at night and a shed during the day, as each person interested may conceive of special plans; but a shed 15 feet long, 10 deep, five high at the rear, and eight in front, with a portion closed at one end, say five feet for the roost and nests, thereby leaving a space 10x10 for a shed, will be cheap, and it should accommodate at least 15 hens, the general rule being to allow one hen to every foot of the front, which affords ample room and prevents crowding. A SUBSCRIBER.

ROUP.

Nature of the ailment; progressive symptoms; treatment.

ROUP is nothing more or less than a severe cold in the head and may be either acute or chronic. Any cold is liable to develop into roup. Catarrh is another form of the same thing. Many claim that canker is a form of roup; but I have frequently had cases of canker without any sign of roup, and *vice versa*. I never lost a hen from canker; but I cannot say that of roup by any means. The first symptoms of roup are a heavy breathing, noticed by the distending of the throat as the fowl inhales, sometimes accompanied by a cough. Later there is a fœtid discharge from the nostrils. As fowls breathe habitually through their nostrils, the obstruction in the passage-way causes them to open their mouths to breathe—hence the gasping. Later the discharge dries upon the nostrils and prevents further running off, consequently the quantity of matter increases. Having no outlet it flows under the eyelids, causing them to distend, sometimes to the extent of blinding the birds, and death issues from starvation. Sometimes a froth appears at the corner of the eye, caused by the air passing up the tear duct, and making little bubbles. As the disease advances fever sets in, the bird loses its appetite and will stand and drink until the water runs from its mouth whenever it lowers its head, thereby polluting the water and spreading the disease, which is highly contagious. The feathers soon lose their glossy appearance and the birds stand moping in a corner, evidently in great pain.

As treatment, first of all remove the bird to warm, dry quarters; feed a variety, with plenty of green food—onions preferred—and give a little Douglas Mixture in the water. Give also a pellet of the following mixture every morning and evening for three days:—One teaspoonful each of Cayenne, ginger, saffron, chlorate of potash and powdered rhubarb; one teaspoonful of tincture of iron; three tablespoonfuls (about 1½ ounce) of hyposulphite of soda and one ounce of powdered assafœtida. Powder and mix well.

I got the above receipe several years ago, and have lost but few fowls since. I once bought a few fowls that caught the roup in transit, and it spread, through my neglect, until 52 of my flock had severe attacks, yet I lost but two. If the eyelids are swollen, bathe in camphorated oil. The scab should be removed from the nostrils as often as possible. A slight pressure of the finger at the back of the roof of the mouth will cause the matter to flow abundantly. Kerosene and Cayenne will sometimes cure light cases. Many prominent breeders recommend it highly; but I have found nothing that is absolutely sure in the later stages of the disease. The only true way to treat it is to prevent it by careful attention to the minor details and by proper housing in bad weather. A. R. CROWELL.

Middlesex Co., Mass.

POULTRY OBSERVATIONS IN THE SOUTH.

WITH proper care, fowls are as productive at the South as they are at the North, and are decidedly larger. There is a perceptible difference in size between Southern and Northern specimens of the same breed. The White and Brown Leghorns seem to be best adapted to a warm climate. Light Brahmas and Plymouth Rocks do well here. A cross of Light Brahmas on our native fowls will give the healthiest chickens we have. So far as I have observed, fowls in a warm climate, with good care, are as healthy as they are in a colder climate. To improve the farm poultry, I would advise buying eggs of thoroughbred fowls, hatching under the common hens, and crossing upon the native stock. The best flock of hens I ever saw in this country was made up in this way by securing a sitting of Light Brahma eggs and letting the chickens run in with the common poultry. No man has any business to keep poultry, who will not put a fence between them and his garden. It

would be much cheaper and better to have a yard for the hens. It is cheaper to fence them in than to fence them out. We can sow Burr clover in their yard, and thus secure good green pasture for the hens. N. B. BRIDGES.

Starkville, Miss.

BRIEFS.

CELERY—As usual, I find that Boston Market has kept better than any other variety, white or red. For winter use, celery should be sown about the end of April, or early in May. Sow in the open ground or a cold-frame, and merely shade a little from warm sunshine.

WITLOOF is a large-leaved form of chicory, and a capital winter vegetable for use in salads. Sown in May or June in rows like carrots, it forms strong roots before Winter, and is not liable to run to seed. We lift it at the same time we lift our other roots in the Fall, store the roots in sand in the cellar, and, as we pack a lot together heads up, in moist earth in deep boxes, and bring them into a warm, dark place, growth soon begins, and heads of yellow leaves are pushed up. These are the parts we eat.

SNAP BEANS—For the very earliest and latest I like White Flageolet, not because it is the best bean (for it isn't); but because its pods are about fit to eat by the time most other sorts come into bloom. Mohawk and Valentine among green-fleshed sorts are my stand-bys. The stereotyped advice is "sow once every two weeks during Summer for succession." Well I don't go by that advice; instead, I sow twice every week from the end of April till the first of September, and I am never without beans from June till October anyway, and I always have them brittle and tender.

SUCCESSION SOWINGS.—Take peas or beans or corn, for instance: many people sow the mid-season and late varieties of any of these at the same time, and in this way secure a succession. Well, this is an easy way of doing it, but a very uncertain one. Take peas, for instance. My plan is to sow Alpha twice a week from the end of March till into May, and Champion from early April on. My May Alphas will come in in time to catch on to the April Champions, and so on.

MANY VARIETIES, except or experiments sake, are a nuisance. When you have determined what variety best suits your land, stick to it. Take corn, for instance; you don't want an extra-early variety, an intermediate, and a late. If you think a gain of three or four days in earliness worth growing an extra early variety, then well and good; if not, sow but one variety, and each succeeding week till August put in a few more seeds of it, and it will give you an uninterrupted supply of corn from July till October. No corn that I grow gives me better satisfaction than Concord. Now, neighbor Lucas complains that it isn't as good with him as are some other kinds.

ASPARAGUS.—I began cutting April 21st, and shall continue to cut till the first of July. Asparagus is the farmer's vegetable. As a farm crop it is one of the surest, most marketable and profitable that he can grow. For home use there is nothing better. Once set out, the plantation is good for 20 years, and we can cultivate it entirely by horse power. It comes in in Spring when we have very little other, if anything, in the way of fresh, green vegetables. Spinach in the open ground does not always winter well, neither do German greens; the cabbages stowed away over Winter are about used up, or have begun to rot, and the early cabbage won't be in for some time yet. Unlike peas or beans that last so short a time, asparagus lasts in good cutting condition for nine or ten weeks, and we needn't bother about successions. Asparagus comes in at the time when we are busiest with our other crops, and then all the care it needs is to cut and eat. Before the asparagus season is over we have cabbage and cauliflower, peas, beans, spinach and other vegetables.

Farmers needn't growl about bother with garden truck so far as asparagus is concerned. It is cheap enough to begin with. A thousand two-year-old plants cost only $8 to $10, and a thousand plants would set out a row 700 yards long, or seven rows 100 yards long. He may sow the seed and raise his own plants. Plants at three years old will yield a fair cutting; at four years a full crop.

Long Island, N. Y. WILLIAM FALCONER.

I HAVE found that fall-sown spinach is easily killed with kindness. The books tells us to give the young plants a slight covering of leaves or other litter for winter protection. Three years ago, I covered a large bed after the most approved method, and every plant winter-killed. Some plants that came up by accident outside of the bed were saved. Since then I have not protected fall-sown spinach, and almost every plant has survived.

THE rules of horticulture do not always hold good. For instance, I read not long ago, an article on ferns, written by one of our best florists, in which the writer said that it was utterly impossible to grow ferns without thorough drainage of the pots; still a lady of my acquaintance succeeds admirably in growing different species of this beautiful plant in large sea-shells, which have not the shadow of an aperture for drainage. Again we are told that it is useless to try to keep squashes through the Winter except in a dry, and moderately warm place. As a matter of fact, however, I have kept the past Winter a sample of the Hubbard Squash in a room connected with the greenhouse, in which the atmosphere has often been so damp that the condensed water has run down the walls, which are now much mildewed. This squash remained sound until after the first of April.

WHY is not the celeriac more esteemed? I regard it as one of the best vegetables we have for late winter and spring use. The flavor is more marked and delicate than that of celery, and it lacks the stringiness that the latter vegetable has when cooked. Packed in sand during the Winter, the roots remain plump, and the flavor becomes more delicate the longer they are kept. It may be grown without hilling up, and is as easily kept as beets or parsnips.

WHAT is the objection to covering the bulbs of onions with earth while they are growing Last season I made the experiment of hilling up the rows of a small plat of extra early red onions when the bulbs were about half grown. I could not see that the size of the bulbs was diminished, while the quality was certainly better than in the same variety grown in the usual way. The bulbs were more tender, sweeter and milder. They were slightly soft, but kept nearly as well as those not hilled up.

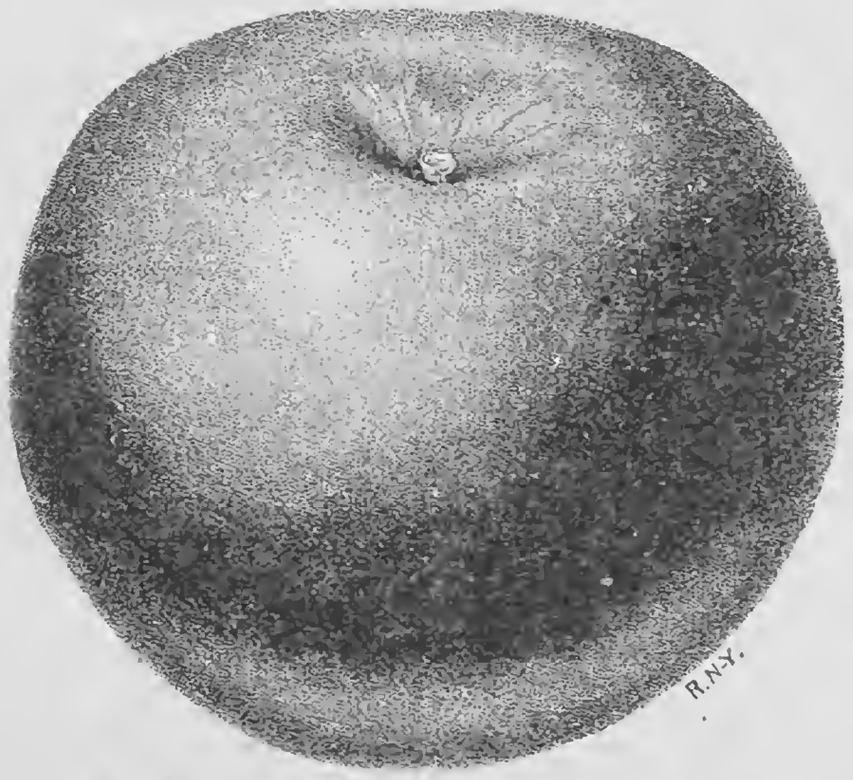
I AM glad to note that public opinion is being aroused against the wholesale destruction of the smaller birds to gratify the demands of fashion. By the way, what has become of the barn swallows? I can well remember when the eaves of my father's barn were lined with a row of the large mud nests of this interesting bird. But for several years past, I have not seen a single swallow's nest, either on my father's barn or elsewhere. It seems to me that the almost total disappearance of the swallow from our barns within so short a period, is a very strange circumstance.

THE neatest covering I have ever seen for benches in a green-house is moderately fine sifted gravel. It has a singular appearance, and the additional advantage that the roots of plants, creeping out of the bottom of the pots, do not attach themselves to it, as they do to sand or earth. E. S. GOFF.

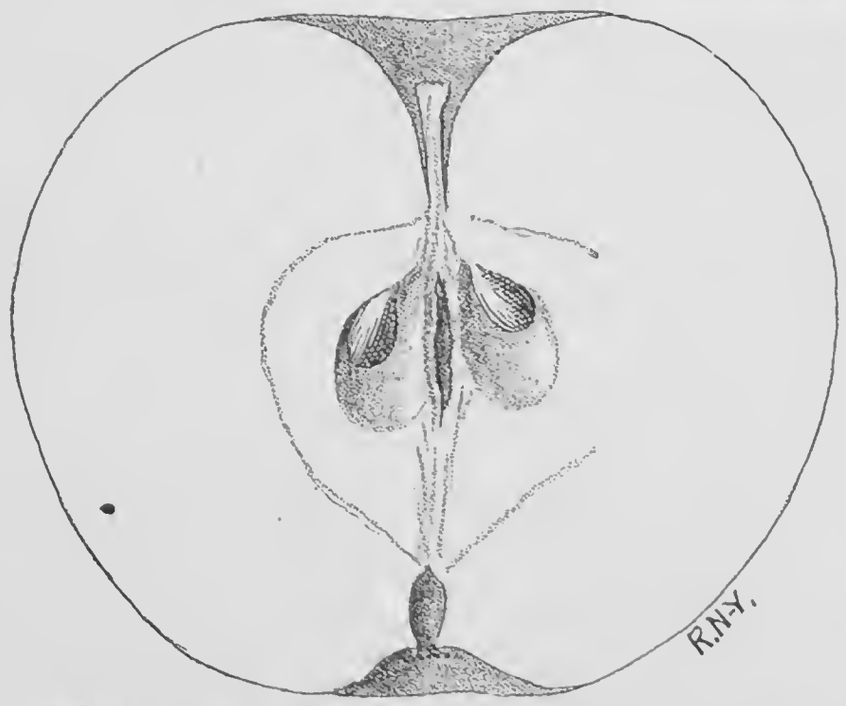
Pomological.

THE ARKANSAS BLACK APPLE.

SPECIMENS of the Arkansas Black Apple, illustrated at Fig. 209, were brought to this office by our friend, J. B. Rogers, of Essex Co., N. J., who got them during a visit to St. Louis. The apple is large, conical, a little one-sided and very heavy. Indeed, it is the heaviest apple of its size we have ever seen. Stem medium, three-quarters of an inch long, slender, planted in a narrow, regular cavity of medium depth. Calyx small, closed in a small, shallow, uneven basin. Color a dark red, shading on the sunny side almost into black, the whole surface irregularly marked with light-yellow dots. The cavity is a little inclined to have russety patches in it. Skin the densest and most resisting we have ever seen on an apple; where broken or cut the edges are almost as sharp as a knife. Core small and having few seeds a yellowish shade of white. Flesh very firm, fine-grained, breaking and juicy, and though so hard, by no means tough. Quality very good. Flavor pleasant, something like that of the King. A desirable market apple.



ARKANSAS BLACK APPLE. From Nature. Fig. 209.



ARKANSAS BLACK APPLE. (Cross Section.) Fig. 210.

Dairy Husbandry.

BUTTER MAKING AS A BUSINESS AND AS A CHORE.

WHILE I am a farmer and interested in the welfare of every branch of farming, it seems to me that the RURAL is over-zealous in its defence of butter against oleomargarine. For my part, I consider the "oleo" much better than the RURAL paints it, and the butter—the bulk of it—much worse. As between "oleo" and average butter, I prefer the oleo, and am confident that a large majority of those people who are limited to one or the other, have the same preference. To clear myself of any suspicion of perverted taste or pecuniary bias on the subject, I will say that I, farming in Kansas, buy my butter of a dairy in Michigan, and have it sent me by express, a tub at a time, as I need it. Does the RURAL realize what disgusting stuff country butter often proves to be, or how carefully the best oleo is prepared? The ingredients of the latter are no secret—they are nothing but good butter, tallow and lard. What better is the fat that comes out of a cow's udder than the suet of her loins, or how is good lard, so manipulated as to be palatable, more objectionable *on* the biscuit than *in* the biscuit?

Let me outline the history of that grade of butter which suffers most from competition with oleo. It is manufactured in small lots by tired housewives, ignorant of the best methods, provided with inadequate appliances, having no ice in Summer, no spring-house, no "milk room" but a tin safe in the kitchen. This meager product, prepared at such a disadvantage, by hands perhaps already over-tasked by other work, is sold or traded to the "store," where it is packed with other lots from the neighborhood, of all colors, streaked, yellow and pale; the over-salted, under-salted, milky, hairy and bald all go together, and the mixture is consigned to the city commission merchant. The bulk of that butter goes to the "bull butter" men; who mix it, rework it, wash it, churn it in sweet milk (as oleo is churned by the way) sweeten it, color it uniformly and make it quite presentable. They put it in a neat package, just as oleo is packed, and mark it with a lying brand "Rock Spring Dairy"—when, in truth, it had its second birth in a sub-cellar of the city. Both oleo and "bull butter" are improvements: they are frauds only when they pretend to be what they are not.

There are cheats in all goods; shoddy cloth, paper leather, chicory coffee and oleo butter. I should like to see everything sold on its merits, and marked with its true name; but I have no expectation that butter can be given exceptional immunity in this respect, or be freed from imitation by laws. The greatest possible help for it would seem to be in the hands of the butter-makers themselves, and would be simply to make all the butter "gilt-edged"! Then where would the oleo come in? Why, the dairymen in their independence of it could emulate the farmers of Colorado who are said, by irrigation, to carry their indifference to rain to the point of making faces at the clouds.

Is there anything chimerical in the suggestion that all the butter that is made might just as well be made good? No appreciable additions would be required to the "plant;" the same cows would do, the same pastures, the same feed and even less labor—and compared with all these the expense of necessary fixtures would be a bagatelle. The principal requirement would be to bunch the cows into dairies large enough so that butter-making would become a business instead of a chore.

Is it not the case that where people make a business of butter-making, they commonly make it good? Is it not also the case that where they commonly make it as a "chore," they commonly make it poor? The man who makes my butter doesn't care whether oleo is branded at all, or colored green or brown, or given away. His clientage is secure. His goods are uniform, reliable, gilt-edged. He gives his mind to his business and finds enough in it.

Wyandotte Co., Kans. EDWIN TAYLOR.

R. N.-Y.—The RURAL has never uttered a single word in excuse of poor butter; it has printed numerous columns urging improvement in the manufacture of butter, and telling how to accomplish it. It has never denied the existence of a vast deal too much miserable stuff, deserving the name of grease rather than of butter; but how can the manufacture of a genuine article be improved by the fraudulent substitution of a counterfeit commodity? This poor stuff generally comes from people who must make that or nothing, because they have neither the time, conveniences nor, above all, the knowledge and skill to turn out a better article. The low prices they get for their butter, owing to the competition with counterfeit products, instead of stimulating them to improvement, discourage them and lead to greater carelessness. Since the introduction of bogus butter has the production of inferior genuine butter decreased beyond what might naturally have been expected from progress in dairy education, the introduction of improved dairy appliances, and the extension of the creamery system? Had bogus butter never been invented, would not all these agencies for improvement have been just as active and effective as they are now?

We hear a great deal of the merits of the production from those interested in the manufacture and sale of bogus butter. They claim that it is as healthy as the best butter and much more palatable than a large part of the "rancid stuff" sold by grocers. Why, then, hasn't one of them come boldly into the market with this "healthy, superior product" in its natural state, and sold it for what it is on its own merits? Had this been done from the outset, dairymen might have been injured by the competition, but they would certainly have had no just cause to clamor for repressive legislation. Had it been offered for sale for what it really is, and in such a guise that no purchaser or consumer could be defrauded in obtaining or using it, who can for a moment think that the present outcry would be raised, not only from one end of this country to another, but in every other nation where the fraudulent concoction has been palmed off on the public for genuine dairy butter, and this has been done from first to last wherever it has been offered for sale.

The processes for making the concoction are patented, and there is no secret about its preparation. The principal manufactories in this country are cleanly, and pains are taken to deodorize the product, and get rid of all disagreeable tastes and smells; but, at the best, a discussion of the manufacture is not a pleasant theme for those troubled with squamish stomachs. We are constantly referred to the unexceptionable products of the large, clean manufactories; but which of the friends of the concoction ever refers to the multitude of little dark, filthy holes wherein all sorts of foul, rancid, deleterious fats from all kinds of animals are manipulated by frowzy, dirty workmen to produce an article that can be sold for a price as much under that asked for prime oleomargarine as the latter is under that for which good genuine butter can be offered?

The fact is that little, if any of the stuff could be sold for table use were it duly labeled, and were the entire operation legibly printed on the inclosing package. A little cream or butter is stirred into it to give it a butter flavor and annatto is used to give it a butter color, simply to enable the dealers to sell it for genuine butter. The manufacturers, big and little, are aiding in this fraud. They are turning out an article made of common fat from the carcasses of dead animals, compounded with gastric juice "made from macerating the stomach of a sheep or pig," and coloring and flavoring it to imitate butter, with the sole object of enabling dealers to impose on the public. Hotel and boarding-house keepers, and other large purchasers may know what they buy; but these, for gain, dishonestly palm it off as genuine butter on the consumers. Even if the manufacturer sells the dealer every pound of it for exactly what it is, he has made it for a fraudulent purpose, and knows that the consumer will be cheated, and is therefore morally as guilty as if he had stamped on every package of it "Pure Orange County Butter" and peddled it as such at his own door. The truth is that if the elements of fraud were eliminated, the entire business would collapse. Away, therefore with all the talk about persecuting the manufacturers of a healthy product from the fat of dead animals "with a view of destroying an important American industry." If the manufacturers were to leave out from their dead animal fat, only what is added purposely to cheat the consumer, they might fry out every dead carcass from Canada to the Gulf, apply to it all the gastric juice found in the stomachs of all the dead pigs in the country, and however large the sale they might obtain for their pale product, the clamor for anti-oleo legislation would be reduced to a growl from a few still disgruntled dairymen, and a murmur from the many sanitarians who might fear ill-effects from a product into the composition of which so many unwholesome substances might enter without much risk of detection.

AN ANTI-SELF-SUCKING DEVICE.

A NUMBER of our subscribers have written us of late that their cows had become addicted to sucking themselves. It has been proposed to apply various bitter preparations to the cows' teats, so that the taste would break off the habit. These remedies rarely have the desired effect. They must be applied every day, and there is danger of contaminating the milk. A leather strap fitted with sharp nails, fastened around the nose, is effective, but the safest treatment after all is to place the cow in such a position that she cannot reach the teats. A device which will work well is shown at Fig. 218. The drawing was sent us by Mr. T. H. Staplin, Jefferson Co., N. Y: *a* is a wooden yoke; *c*, a leather band; *b*, is a strap fastened to *a* at *d*, and to *c* again on the other side.

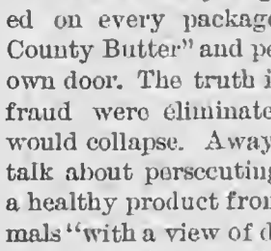


Fig. 218.

Horticultural.

HORTICULTURAL BOYCOTTING.

ONE would suppose that in these days of "boycotting," all the attempts to apply it to business purposes were quite sufficient without introducing it into scientific matters. Its odious character has, as it should have, the contempt of every intelligent man. Yet the RURAL'S respected correspondent, T. T. Lyon, in a late RURAL, comes out flat in favor of the principle as applied to pomological matters, and, like the great railroad magnates, declares he will not recognize anybody or thing which does not do as this or that society prescribes. Thus, with regard to the wholesale change of the names of fruits by the American Pomological Society he says: "The rules of the Society declare explicitly the right of the originator to name his origination; but, nevertheless, the Society declares that if an objectionable name be bestowed, it will refuse to recognize or consider the same until the objectionable feature shall be abated."

Possibly any cultivator who might happen to raise the finest fruit of any kind—apple, pear, grape or strawberry—ever produced, would not care a fig what a pomological or any other society might declare about the matter. It is the great public he wishes to reach, and though he certainly would hope to have the good wishes of such an association, designed to promote pomological information, it would in no way be essential to, or detract in any way from the importance and excellence of the variety. Neither coercion, prohibition nor boycotting will avail much in such a case. If Mr. Lyon rightly interprets the declaration of the American Pomological Society to be what he says, we can only regret any such action.

In the article alluded to by Mr. Lyon, I stated distinctly that the remarks of the President of the Society represented precisely my own views, so far as the recommendation to adopt only plain, characteristic or appropriate names. That was all we could do. There is not and could not be any law to prevent any originator of a new fruit from giving it a name, no more than for denying him the right to name his own children.

But it was not in regard to the future but to the past, that I object to these "new" names, and not because of any particular reverence for them as such; but because of the endless confusion the change is likely to create. Because Mr. Downing thought the Revising Committee "might properly have gone even further" in the list of revision, does not justify their action, or add anything to their authority to do so. There is no objection to nicknames, and nurserymen and cultivators who have no time to write them in full, could abbreviate as much as they please. Because it is not very important whether a pear is a Duchess d'Angoulême, a Duchess of Orleans or a Duchess of Bordeaux, Duchess is enough; or whether it is a Doyenné Blanc, a Doyenné Rose, a Doyenné Gris, a Doyenné Boussock or any other Doyenné. Either or all will do for a report or a label; but when we come to pomological works intended to promote the science, we want the entire and only name by which the variety has been, and I hope will continue to be known until it shall disappear by age, decrepitude, or unfitness for cultivation.

And this leads me to embrace the opportunity to thank my old friend "Horticola" for his hearty indorsement and support of the principles I laid down in regard to the alteration of old and authorized names. Those who never looked beyond a catalogue or one or two fruit books to learn the names of fruits, may think it needless to retain old names; but to one who has searched carefully through every English, French and Belgian work he could possibly procure, in order to obtain a knowledge of all the leading fruits known or introduced for nearly two centuries, to cultivate the greater part of them, to identify them and discover all their numberless synonyms, such attempts to change our nomenclature are simply discouraging to all progress, and lead us to believe that our pomology is nothing more than empiricism trying to become a science.

C. M. HOVEY.

Boston, Mass.

REFORM IN FRUIT NOMENCLATURE.

I NOTICE with pleasure the discussions that are now going on in regard to the proper naming of fruits. The RURAL exerts a powerful influence, and I hope it will aid this most important work so that hereafter we shall have no more improper, vulgar or superfluous names attached to some of our most beautiful fruits. Think of the more than two hundred varieties of pears that have Beurré prefixed to them. How useless the term Butter to Diel, Superfin, Hardy and most of the others of this class. But there are some exceptions which we cannot control, and must let Beurré Gris, Doyenné Gris, with some few others of a similar character, stand as they are. But if any one desires to retain the indecent and ridiculous names which some of our fruits now bear, out of respect to orthography or antiquity, let him do so; but let us no longer cumber or disgrace our catalogues by a continuance of them. "OLD DIGGER."

A HINT TO FRUIT GROWERS.

THE Wagner Apple is one of the best grown in California, for all purposes. It is fine for marketing—red, with yellow flesh, tender, juicy, large, a long keeper (till March), and very late to put forth blossoms. At this date, April 9, a month after other sorts began to blossom, the Wagner shows no signs of life in its branches. They are apparently as dead as last year's brush. For all regions subject to late spring frosts this habit renders the tree a sure bearer, and invaluable. Grafting may be done without hesitation, by transferring the same day from the Wagner into another tree. This is my experience. Try it.

Cloverdale, Cal. J. B. A.

A NEAT PEA TRELLIS.

FRIEND L. H. Turney, Fairfield County, Conn., says with regard to the pea trellis illustrated at Fig. 211, that it is made of two-inch-mesh wire netting. Two 12-inch strips are used four inches apart and eight inches from the ground, so that the top is 36 inches high. The 12-inch width is preferred simply because it is cheaper than meshes of

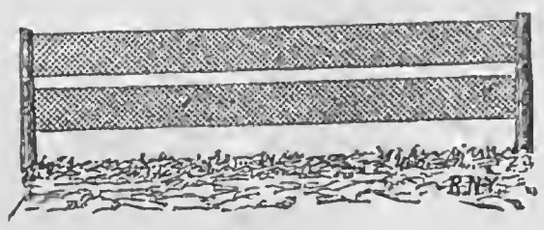


Fig. 211.

greater width. A strong stake is set at each end of the row of peas, and the wire is then drawn taut. He thinks this a decided improvement on the old bush method of supporting peas, as the crop can be cultivated with a minimum of trouble, and picked much more easily with this support than with the other.

Farm Topics.

THE SOURCE OF NITROGEN IN CORN.

SIR J. B. LAWES, BART., LL. D., F. R. S.

THE evidence derived from experiments in the United States is of such a conflicting character that it is impossible to draw any conclusion from it in regard to the source of nitrogen in corn. Inasmuch as it is a plant of the same natural order as the other grain crops, we might reasonably expect that corn would derive its food from the same sources, subject, however, to the great difference in its habit of growth.

At the present time there is hardly any one who doubts that nitric acid—either liberated from organic nitrogen existing in the soil, or as applied directly to it in manure—is the main source of the nitrogen of wheat, oats and barley. If these crops were sown at the same time, and, further, ripened at the same time as corn, we might expect that they would get a larger supply of nitrogen from the soil, and so be less dependent on a supply from artificial sources, as it is during the hot summer months that the nitrification of the soil is most active. The cultivation of corn in the States bears a strong resemblance to the cultivation of the root crop in this country; and the great increase in the growth of roots by the application of phosphates, has given rise to the idea that these broad-leaved plants derive much of their nitrogen from the air. This idea is not confirmed by our experiments.

At Rothamsted, in one field under continuous mangels, the land which receives abundance of mineral manures, but no nitrogen, grows five to six tons per acre of roots; but by the addition of rape cake, salts of ammonia, or nitrate of soda we can grow a crop of 20 to 30 tons per acre. In the next field, where Swede turnips are grown under experiment in an ordinary rotation of crops, once every four years, the crop manured with superphosphate only, rarely exceeds seven tons, while when the crop is grown with rape cake and ammonia it will, in a good season, reach 22 tons per acre.

It is quite useless for me to attempt the growth of corn as a crop; but I have grown some plants in one of my experimental fields, and have satisfied myself that—as regards the influence of manures—corn possesses all the characteristics of a cereal crop, and none of those of a leguminous crop. The effect of salts of ammonia, and nitrate of soda, was to increase largely the vigor of the plant, the breadth of the leaves, and—what is of special importance—the color of the leaf. There is something remarkably beautiful in the color of the leaf of a corn plant when abundantly supplied with ammonia or nitrates; but while we find that the application of nitrogen—as ammonia or nitrates—influences the color of the maize, as well as that of all our other grain crops, we do *not* find that these manures influence in any marked degree the color of the leaves of leguminous plants.

We have 12 to 14 leguminous crops growing in one field. Part of these are manured with salts of ammonia and nitrates, but as no one going over the experiments would be able to distinguish where these manures had been applied, I cannot admit that corn and leguminous plants have properties in common in regard to the sources of their nitrogen. It appears to me that all the evidence points to nitric acid as being the source of the nitrogen of corn, and the only way to disprove this would be by growing continuously very large crops of corn by means of mineral manures alone.

Rothamsted, England, April 20, 1886.

Farm Economy.

A CONVENIENT SACK-HOLDER.

FOR the home-made sack-holder shown at Fig. 213, we are indebted to Mr. W. D. Sawyer, Weld Co., Colo., who finds it very useful where there is only one to do the work usually performed by two. The design is original, and infringes on no known patent. It is made of a piece of board, A, 2x8 inches and 30 inches long, and two pieces of scantling 1x2 inches and 42 inches long planed smooth. For half the length of these, holes an inch apart are bored large enough to admit a nail, as seen over C. C. Four pieces, B. B. B. B., of two-inch stuff fasten the uprights C. C. to the board A., 17 inches apart, as shown. Two pieces 1x2 inches, and 10 inches long, and two others 1x2 inches and 4 inches long, are then nailed together so as to leave a hole 1x2 inches in the middle. Into each of these drive two headless wrought nails. Sharpen these and bend them upwards; put these "heads" on the uprights as shown at D., and in each bore a hole to correspond with the holes in the uprights; insert a nail; hang the sack on the nails; and lower or raise the "heads" to suit your convenience or the length of the sack.

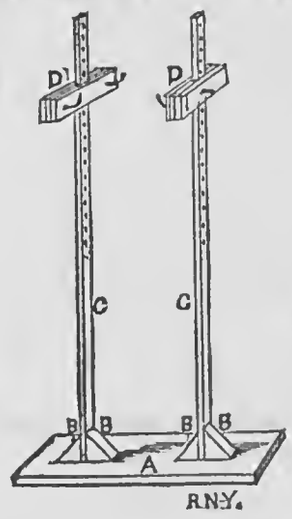


Fig. 213.

TO RAISE A WAGON BOX.

THE arrangement shown at Fig. 219 is in use in a two-story wagon and light tool shed recently built by Mr. G. E. Capel. The shed is 16x20 feet with 10-foot posts. Two wagons stand side by side, and above them can be put away plows, cradles, hoes and other light tools. It frequently happens that it is necessary to change the wagon-box in a great hurry. The hands are all busy and there is no help to be had. In such a case the design shown in our illustration will be valuable. A tarred rope is securely fastened to the joists over both ends of the wagon-box. This rope can be easily passed down in a loop under the end of the box and up through a pulley where it will hang down within reach. A hook is fastened to the end of the rope, which, when the box is pulled up, will just reach to a ring fastened in the rope, into which the hook is placed. When one end has been drawn up, the driver steps to the other end and pulls that up by means of a similar contrivance. When not in use the rope is drawn down, so the loop will be out of the way. No stock will chew the dangling rope, as it is heavily tarred.

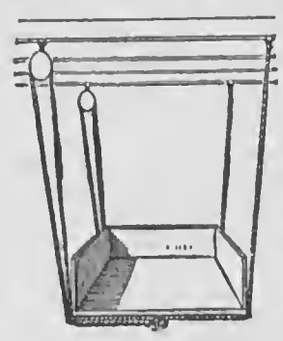


Fig. 219.

A CHEAP CISTERN.

THE "cheap cistern," recommended by our friend George Pettan, Sauk Co., Wis., is shown at Fig. 212. Any handy number of water-tight barrels are arranged alongside of a guttered and spouted building. The spout discharges the rain-water from the roof into the first of these, and when this is nearly full a tin spout conveys the surplus water to the

next barrel, and so on till all are filled. It would be well to have the first barrel a trifle higher than the next, and so on with the

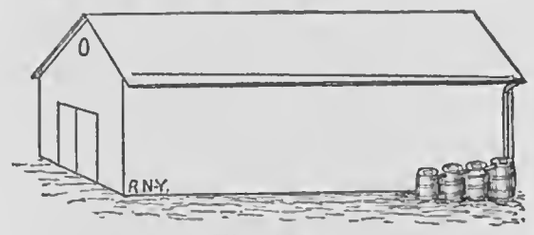


Fig. 212.

others; but as this can be effected by piling earth under the barrels, there is no reason why they should diminish in size, as shown in the cut. Indeed, as water seeks its own level, if the connecting spouts were horizontal, the water would flow along easily from one barrel to the next, as soon as it had reached the level of the spout in the discharging barrel.

What Others Say

MORGAN HORSES.—The Mass. Ploughman is deserving of credit for the accuracy of its short-hand reports of the excellent proceedings of the Farmers' Meetings held in Boston weekly. Some weeks ago John E. Russell, Secretary of the Massachusetts Board of Agriculture, talked about horses. The Morgan was a remarkable family of horses. It was not a breed or a race, but a family. It was descended from one little horse, named Justin Morgan, that was taken by a Vermont creditor for a debt. This horse was taken from West Springfield, or certainly from Hampden County in Massachusetts, where he was bred, into the State of Vermont, and fortunately retained an entire horse, and was the progenitor of that splendid family of horses that we all of us know, and that so many of us remember as the Morgan stock of Vermont, as, indeed, of all New England. That little family of horses brought into the State of Vermont more reputation and more money than any other thing, unless it was the Merino sheep, and probably more than these. Sec. Russell, as a boy, remembers those short-coupled, short-jointed, full-breasted, fine-headed, pointed fox-eared horses, weighing from 950 to 1,000 pounds, rarely more than 15 1-4 hands high, not quite high enough, but of splendid and enduring qualities, with a domesticity of character that he has never seen or known equaled in any family of horses. What has become of them? In the first place, it was a family of horses in which the blood was all in the male line. There was no re-inforcement of anything to keep that family running over two or three generations. The foal from the first cross is one half Morgan. The second cross is ¼; the next, ⅛; the next, 1-16; the next, 1-32; the next, 1-64; the next, 1-128; the next, 1-256 part. Where is your Morgan stock after it has gone through so many changes? Your name is there, but your blood is gone. The blood of any popular sire, where there is nothing but a family and not a race, is gone. We have heard of the old English stock, but we have not got the blood of any original progenitor. It is divided up and lost in the crosses. So it is with the Morgans. The blood has not had any re-inforcement and, therefore, the family never could run beyond a very short time without giving out.

BUSH'S MESSENGER.—Pedigrees in our road horses, when they go back 25 years, are as mystical as the history of the heathen gods. There is a name that has been made much of in the pedigree of horses brought from Maine, viz., "Bush's Messenger." This was a horse owned by Philo Bush, from whom he was named. Bush cared little for road or trotting horses; he was a trainer of thoroughbred race horses, and 20 years ago had charge of the race horses belonging to Mr. Leonard Jerome. He said that the horse called "Bush's Messenger" was named "Messenger" by him, and he had not the least knowledge of the horse's origin, nor a high opinion of his value; yet this horse was for years considered the last repository of the blood of imported Messenger, and his name is a red letter in many of the trotting pedigrees.

PERCHERONS.—Mr. Russell paid a well merited tribute to Mr. M. W. Dunham of Illinois, who has imported from France so many of the Percheron breed. This is one of the most important breeds of horses raised in the known world. They are very much like our Morgan horses of 40 years ago, except that they are two or three sizes larger. They look just as the Morgan horses would if they were of ideal size. They have their quick action that no other family of large horses that he knows of have had. These Percheron horses are of immense utility in farm work. They are of very early maturity. They can be put to work without fear of injury when they are from 18 months to two years old. These horses now bring fair prices and are selling for farm work for from $160 to $200—the horses being four or five years old. Now there is no farmer in Massachusetts, Mr. Russell thinks, who can raise horses and take the risk on one or two colts for any such price as that. He has raised a good many colts, and cannot raise a colt in Massachusetts and pay the interest on the money and the municipal taxes and all the burdens that lie so heavily upon agricultural shoulders, unless he can get from $300 to $500 for a colt when he is four years old. Farmers don't get high prices for anything, but they have to pay high prices, even if they don't get high prices for their own products.

BUYING HORSES.—In buying horses, one of the old troubles of the buyer was that he was liable to buy an old horse. In Mr. Russell's time that was the thing to be guarded against. You were almost certain, in going to market, to be stuck with a horse that somebody had turned off either on account of his temper or age, and did not want him any longer. This is not the case with horses brought here from the West to our farmers for sale. They are young horses almost invariably, and have not lived long enough to have their temper spoiled. That is a very great advantage. In the first place, they are young, because the breeders do not want to pay for keeping any longer than necessary; and in the next place they are sound, because they have been examined once already. Those who have bought them are very careful about running the risk of buying unsound horses and paying the freight here where they are to be sold again; so that you have the advantage of first-class judgment on those horses already on the part of the horse buyer. But there is another thing which you must look out for. You must be sure that you don't get stuck with a young horse—although that is only a temporary defect. Mr. R. has examined horses that were offered for sale in Boston as six years old when they were only three. He has seen splendid animals offered for coupe purposes, for a single heavy carriage, that were actually just coming three years old this Spring. Youth is a defect, however, that is very easily remedied. There is nothing that is so readily cured by time. That applies as well to horses as to boys, and if you give them time they will get over it. Many times have young horses been put to work just at the period when digestion and their whole system are affected by the fact that they must change their set of teeth. For a horse does not get a full set of permanent teeth until he is five years old. Consequently he should never be put to continuous hard labor until he has reached that age.

CARE OF COLTS.—When a colt is born on a farm every farmer ought to know how to treat his mare so as to increase her flow of milk. He should give the colt all the nutrition that is possible, and keep it growing as well as he can while it is still upon the dam's udder. Many of these old mares are poor milkers, and all that can be done is to increase the flow of milk, and that is a matter that all farmers understand thoroughly in dealing with their cows. The same thing that produces a good flow of milk in a cow will produce a good flow in a mare. If the mare is put where the colt can get at the feed, within two or three weeks the colt will be eating freely of bruised oats and sweet hay. Foals should come in April or May, or late in the Fall after fly time. Young things need to grow and to sleep. The flies in one of our summer pastures torment a young foal beyond endurance. There is no more distressing sight than a young foal at pasture in August or September. If a foal is dropped at that time it may be kept with its dam in a loose box or dark stable during daylight, otherwise it will make a poor start in life. There is no pedigree or royal line of equine blood that can stand the torment of flies. It is an old English proverb that half a horse goes down his throat. You must have a good appetite in the animal if you ever expect to have stamina and vigor of constitution. A colt wants to be kept eating and growing and exercising and anything except fattening, as long as he has a time assigned him by Nature to grow. You can starve an old horse. You can turn him out somewhere upon a barren pasture or a rough hill-side to fight the flies in the Summer and battle with the elements, and if you bring him back in the Fall and put him into the barn and give him good keeping, you can get him in good condition again, and Nature will restore the waste and make him a strong horse again. But if you stint a young animal during the growing period of life, you have lost the precious time that will never again come to you. This opportunity lost is never regained. When you have once made a stunted animal, you can never again make the bone and stature that Nature would have allowed if you had given generous feed.

FARMERS SHOULD NOT TRY TO RAISE "TROTTERS."—When the colt is three years old, it occurs to our farmer to see what horsemanship can do for him, and he generally sends him to some local trainer to be broken and "developed for speed." But usually the most practical thing about the trainer is his bill, and his time is the least valuable of anything which he has to give. Usually before the trainer begins the farmer thinks that the colt will be worth about as much as Maud S. or Dexter, but by the time he is through and the bills are paid, he finds that $150 is all he will bring, or $250 at the outside. If a farmer is a sufficient horseman he will give up the idea of breeding that phenomenal creature which is known, not as a horse, but as a trotter. There are two or three kinds of horses. One is a trotter, but that is not merely a horse. It is an animal that has an aptitude to learn a certain trick which is called trotting. It is not natural especially, any more than it is natural for dogs to be born with stumpy tails. If the roads are smooth enough, and if the wagon or sulky is light, and if the weights on the feet are properly adjusted, and if the animal at the other end of the reins has got the right sort of hand and won't give it away to somebody else, the horse may make a phenomenal record. But this is not one of the pursuits of the farm, and any farmer or farmer's boy that links himself in any way with the business has deviated from the true and straight course that belongs to legitimate agriculture or husbandry.

HANDLING THE COLT.—There must be no jerking, no loud words, nothing quick in the movements about the colt, but everything slow in motion. There must be no loud shouting or anything of that sort. The horse has got to be gradually familiarized with the work which he has to do, and his muscular strength must be developed at the same time. With young horses there is no better plan for breaking them than to put them at work before the plow. Mr. Russel thinks that there is no way in which the horse's temper can be better developed than by putting him on the plow when he is about three years old, and teaching him how to be patient of the obstacles that have to be met in that work. That is the way he trains his colts, and they know how to step into the furrow or out of it when they are told, and they recognize "Haw" and "Gee." With this practice they get a splendid training, and it affects the whole after life of the horse. They expect that obstacles will be met when they are in the carriage, and they realize that they are to be quiet. For instance, when the plow strikes stumps, or roots, or stones, and brings everything up suddenly, the young horse, expecting something of that sort, will stand until the trouble is righted and everything starts smoothly again. They will remember this. He would not allow his family to use carriage horses that were not familiar with the plow, and that would not mind "Haw" and "Gee" in the carriage, if necessary. His wife's carriage horses, when they are lightly worked, are occasionally put upon the plow and made to do a few hours' work. The result of this experience is that they are not alarmed at noises behind them and the sudden bringing up at a root or concealed stone; they become more attentive to the voice of the driver, and every way wiser and safer.

EXAGERATING POULTRY PROFITS.—O. S. Bliss says, in the New York Tribune, that a specialist located in a densely populated section of country, in close proximity to numerous manufacturing and commercial cities where every egg and chick he raises is in quick demand at fancy prices, with no commissions, no freights, no breakages or other losses, real or constructive, to be deducted from the account of sales, can unquestionably net $2 per hen from a flock kept for the production of eggs, chickens and fowls, leaving entirely out of question all fancy stock breeding. But when such a man in a meeting of farmers deliberately asserts that "every farm of 70 or 100 acres can carry 100 hens or upwards at a net profit of $2 per hen, the assertion is misleading and harmful. If the average farmer, remote from local retail markets, and compelled to sell his products through the regular channels of trade, as the great majority of them are, can net $1 per hen he does well.

THE NATIONAL SEED DISTRIBUTION.—The city of Washington, says Ben Perley Poore in the Cultivator, is just now a great seed establishment. In the entryway of every hotel and boarding-house where a Congressman lodges, are large mail-bags filled with packages of seeds, each done up in a great quantity of brown paper, and securely tied with strong twine. Go to the room of a Senator or a Representative, and you find whole stacks of these bundles of seeds, varying in size from those which hold several quarts of grain, down to the dainty little package of flower-seeds. These packages are directed to favorite constituents, franked to secure their free transmission through the mails, and strewn broadcast over the land, with the expectation that each one will bear at least one vote. There are grave objections to this free distribution of seeds, Mr. Poore is well aware, especially those of seedsmen, who fancy that their sales are interfered with. But he thinks this is a mistake. Many a man who would not have a vegetable patch or a flower-garden, is economically moved to cultivate the seeds sent him, rather than to have them wasted. It is a pleasant thing for a farmer living almost out of civilization to receive these remembrances from his Senator or Representative at Washington. They cost a good deal of money, he admits, but the seed purchased is mostly grown in this country, the paper and twine are made here, and the poor women and boys who put up the packages are often thereby enabled to keep families from starving.

THE LATEST AND BRIEFEST.

IT seems that M. Pasteur has treated about 800. Of these 38 persons had been bitten by wolves—the others by dogs. Of those bitten by dogs only one died. Three of those bitten by wolves have died of hydrophobia. M. Pasteur is of the opinion that there is no difference in the poison of the mad wolf and mad dog; but the severity of the wolf bite is far greater.....

A WRITER in the American Garden suggests that early peas and tomatoes may well be grown together. The peas may be gathered before the tomatoes have made much growth.

MR. PARKER believes that by spraying apple trees with London-purple, they may be rid of the codling moth and the "whole crowd of insects" that infest them. He prefers London-purple to Paris-green because it is much cheaper and because it does not settle in water, needing one person to stir it as one drives along with the force-pump. Mr. Rathbone who has experimented a good deal finds that half a pound of the purple to 60 gallons of water is plenty. The purple should be wet, forming a paste, before putting it in the barrel. Then it will mix readily and not float on the water.....

THE Farm Journal wants farmers' wives to strike for fewer hours of labor and better pay. Good! If they would boycott the dinner table a few times, there would be a sudden call for an "arbitration meeting."....

A COUNTRY Gentleman writer tried the experiment of hauling manure from the barn-yard in Winter, and placing it in heaps on a steep hillside to see how much of the value would be washed out of it by rains. The result was that the increased growth of the grass from the washing did not extend five feet below the heaps. The winter spreading of manure has given excellent satisfaction with us—but our land is level.....

L. F. ALLEN finds a dairy cow quite to his satisfaction in a cross-bred Guernsey, the progeny of a Guernsey bull and a Shorthorn cow. Such animals are of good size and flesh, and gentle and kind. Their yield of milk is continuous and the percentage of cream is quite equal to that of the Jersey.....

MR. JOSEPH HARRIS wants to know why it is necessary to make the land so rich for onions, and, also, why early sowing is absolutely essential to success? Mr. E. S. Goff answers, in the American Garden, that the roots of the onion occupy far less space in the soil than those of any other vegetable. The roots take complete possession of the soil beneath them, forming a circle about eight inches in diameter and for a depth of but 10 inches. Hence it is that the soil *must* be rich. Hence it is that we may grow them so closely together. Hence it is that early sowing is necessary. The roots must be made before the summer drought occurs.....

JAMES RANKIN says breeding for the Standard is one thing and breeding for the market is another and quite a different thing. Many of the "points" so-called, required by the Standard are worthless when breeding for the market.....

HE might use as an illustration the feathers on the second toe of the Light Brahma, or the black tail of the Wyandotte.....

HE says a cross between a Plymouth Rock cock and a Light Brahma hen produces the best chickens for the early market, giving early maturity with plump bodies and meat of excellent quality.....

HE has not, however, been able to successfully perpetuate the cross, as the produce deteriorates rapidly, and a large proportion of the eggs prove infertile.....

PHILANDER WILLIAMS says that one breed of poultry is about all any man can success

fully breed. Other varieties may be tried as an experiment, but a man must become identified with a breed before he can secure the confidence of purchasers and obtain fanciers' prices.....

He says it is usually more satisfactory to sell chickens or fowls, than eggs.....

Prof. Shelton says that while most of the students at the Kansas Agricultural College are sons of farmers, many of them get their first lesson in hauling manure a-field on the College farm. The Kansas College is doing good work. The students will take the lessons they have learned home with them. The value of the education will show on the farms of Kansas.....

R. M. Littler, the Secretary of the National Butter Cheese and Egg Association, says that farmers who do not cast their ballots in accordance with their own wishes, and for the promotion of their own welfare, have no business to be free men.....

The Farm Implement News says that a sharp knife in a mowing machine saves time, team, labor and temper. Right, successful hay-making begins with good tools.....

The Western Rural thinks many men are handicapped with accomplishments. Their step is too delicate; their touch too soft; their boots too polished and their gloves too fine. These are not the kind of men who have aided civilization.....

Sprinkling eggs in the nest during incubation is often recommended, but it is immeasurably better to thoroughly wet them by dipping. Mr. Bliss's practice for several years has been to wet all the eggs about the 19th or 20th day. If the hen be taken from the nest so that the eggs are in full heat, which is much better than to take the eggs after the hen has gone off and they have become partially cooled, the water should be at a temperature of 100° F. If they are cooled the water should be tempered accordingly, so as not to suddenly heat up the shells. The eggs at this stage will endure considerable change of temperature if it is not too rapid, but it is better to avoid it altogether.....

Experiments made at the Massachusetts Agricultural College to ascertain what distance apart corn should be planted, the variety being a medium-sized, early, yellow dent, show that rows three feet eight inches apart and 11¾ inches apart in the row, yielded the most. The next heaviest yield was from 13 inches, the lightest from 15½ inches, which was the lightest stand.....

The straw of the Welcome Oats was weak, that of White Russian stiff. We doubt if the oats were true to name. At the Rural Farm, the straw of the Welcome is fully as strong as that of the Russian.....

In another series of experiments, 19 inches apart in the row, the rows being the same, gave the lowest yield, and 13 inches gave the greatest. The best yields may be said to have been obtained from one foot apart in the row.

A hot-bed heated with a home-made coal furnace was constructed last Fall at the Michigan Agricultural College. This has worked well. Prof. Bailey thinks it will prove to be a cheaper hot-bed than the manure beds in common use.....

Everywhere.

RURAL SPECIAL REPORTS.

Canada.

Cornwall, Ont.—The season is more advanced than ever before known in this section of Canada—fully three weeks ahead of the average. Trees are just coming into leaf, and the weather is mild and genial. Wheat, as a rule, has wintered well, and the farmers are well on with their spring work. Sugar-making is an extensive industry, and the quantity and quality of the product is unusually good this year. Maple sirup sells readily for $1 a gallon, and many farmers make several hundred gallons. Y.

Connecticut.

South Glastonbury, Hartford Co., April 19.—We are having a very favorable Spring here, and the season is about two weeks earlier than last year. J. H. H.

Dakota.

Mandan, Morton Co., April 30.—Last Summer hail destroyed all our crops. The weather has been very cold since April 25, the ground on two mornings being frozen an inch deep. Farmers are about through seeding. There is a large acreage of grain. Wheat looks first-rate. I picked the first prairie flowers to-day on land that was burned over last year. G. W. G.

Illinois.

Leaf River, Ogle Co., April 29.—General farm work began April 12. We had weather hot enough for June the first few days, but it is cooler now. The frequent spring rains have delayed the getting in of crops. No corn will be planted for a week. Grass is growing nicely. Farmers in general have had bad luck with young pigs, having lost 40 per cent. This is our year for fruit. D. E. K.

Marion Co., April 26.—Last year's strawberry crop was too large for the demand. We all as fruit growers lost money. The vines for the coming crop are looking well at present, and are covered with blooms, and prospects are grand for an abundant crop this year. T. H. McC.

Louisiana.

Pottarville, East Baton Rouge, April 27.—Crop prospects for this section are gloomy. The cross-roads store loafers (who are such only on rainy days) declare this season to be the most backward of any within their remembrance. The excessive and long-continued cold weather, with the superabundance of rain, has delayed planting, and crops generally are from three to four weeks late. Very little oats passed the Winter in safety, and few planters put any in this Spring. Corn is just being worked the first time; usually it is from three to five feet high at this season. Cotton seed is scarce, and planters are buying from the oil mills, as a great deal of land has to be entirely replanted. Plant cane looks well on the highlands, but the stubble was mostly killed. Early potatoes looking well. Last night a heavy hail-storm passed over this section, leveling fences and blowing trees down. The hail ruined garden vegetables, breaking tomato vines, cabbages, beans, peas, etc. The cotton which was up suffered severely, but it will be several days before we can find out whether replanting will be necessary. Corn and potato vines were riddled. R. G. B.

New Jersey.

Hightstown, Mercer Co., May 1.—Wheat and grass look better than at this time last year. Peaches look well: one-third killed. Cherries killed very badly indeed—over one-half. Prospect for all other kinds of fruit fair. Prices low: wheat, 95; corn, 45; oats, 40; butter, 25; eggs, 12; potatoes, 70 cents per bushel. J. S. B.

New York.

Apalachin, Tioga Co., April 27.—The warm weather of the past two weeks has brought vegetation forward rapidly; there is need of rain at present. Wheat looking fair, with the exception of some places which were winter-killed in spots. Oat seeding about over—about the usual area. Potato ground is being fitted as rapidly as convenient. Dakota Reds, Burbanks and White Stars are the principal varieties that will be planted. Potatoes selling at 35 to 40; oats, 28; wheat, $1; veal calves, 4 to 5 cents alive; butter, 20 cents; eggs, 12 cents; other things in proportion. C. F. G.

Sharon Centre, Schoharie Co., April 30.—The weather has been unusually fine for the last half of April. Sowing is very nearly all done, although we expected grass to be badly winter-killed, we have never had as good a growth in April as now. Clover sown last year looks very fair. I have 16 acres that would make very fine feed now. Fruit and forest trees are leafing out very fast. Plum and cherry trees in blossom in April have hitherto been unheard of in old Schoharie; but we have them now. Should we have a late frost, much injury will follow. This is a great hop section and a great many vines have been killed by the open Winter. A good many will be plowed up. Some whole yards were killed; those that are alive are very uneven, some large enough to tie, while others have not started; poor prospects for a crop. S. L.

Union Spring, Cayuga Co., April 24.—Wheat, grass and clover are looking very good. Farmers are busy plowing and fitting ground for barley, of which a great deal is raised in this county. We have had very good spring weather for two weeks; vegetation is two weeks in advance of last year. O. L. C.

North Carolina.

Shore, Yadkin Co., April 24.—We have a grand prospect for fruits in most parts of the State. Peach buds were killed in a few low places; but in general a good crop is expected. N. W. C.

Ohio.

Mt. Blanchard, Hancock Co., May 1.—Rural New-Yorker, Stratagem and Prince of Wales Peas are now up. They are excellent. The Flageolet Beans are the best we have ever tasted, and are as good in Winter as in Fall. Very few farmers hereabouts value a hot-bed. My lettuce is ready for use, while most of my neighbors are just sowing their seed. My first ripe tomatoes of the Rural's seed were picked on July 14 last year. The Plymouth Rocks are my favorite hens for a small flock, though I mean to try the Wyandottes. Weather beautiful. Spring work never so well advanced. Fruit prospects could not be better. Pasture already good. J. S.

Shreve, Wayne Co., April 28.—Times hard. April was snowy, muddy and disagreeable up to the middle; since then like Summer. Vegetation is coming forward faster than I ever knew it to come at this season. Fruit prospects good. I never knew mosquitoes so numerous in this month before. H. M.

Texas.

Evant, Coryell Co., April 16.—Farmers are up with their work; only about half as much land under wheat as last year, and what was planted was partially frozen out during Winter; but what came through looks fine. Oats a large area and looking fine. Early planted corn froze out in the latter part of March; corn generally up. Cotton planting is the order of the day. The peach crop was thinned out by the late freezes, and in some places completely ruined. Prices, corn, 40 cents per bushel; wheat, 75 cents; oats, 25 cents. In spite of the freeze at the end of March, the R. N.-Y. Peas are now loaded with bloom and young peas. Pulaski Peas planted March 10 are now in bloom. G. J. B.

Houston, Harris County.—Corn about two feet high and in bloom; rather small; good strong stalks. Crop prospects good. Our market is well supplied with new Irish potatoes, cucumbers, dewberries, strawberries, peas, snap beans, cabbages and everything in the vegetable line at very low prices. Cotton, corn and sugar-cane look well. A great many cattle died last Winter. Of Short-horns I lost 15 head. They won't do for this country. Success to the Rural! T. B.

Vermont.

Bakersfield, Franklin Co., April 29.—Weather cool and dry; no rain for two weeks. Farmers busy putting in crops. Sugar season short—about two-thirds of a crop. Sugar is worth from 5 to 7 cents. Potatoes plentiful at 50 cents; butter, 18 to 20 cents; wheat, $1; oats, 50 cents; hay, $12 to $15 per ton; cows, $30 to $35 apiece. M. S.

THE FARMER'S CLUB

ANSWERS TO CORRESPONDENTS.

[Every query must be accompanied by the name and address of the writer to insure attention. Before asking a question, please see if it is not answered in our advertising columns. Ask only a few questions at one time. Put questions on a seperate piece of paper.]

SILAGE FOR FATTENING CATTLE, ETC.

L. M. L., Cortland, N. Y.—Would it be a good investment to build a silo and fill it with silage for fattening cattle through the Winter? Just before Winter most farmers have heifers which they wish to stable instead of inferior dairy animals, such as farrow cows, light milkers and old scrubs. They haven't room for all, and at weeding time the Bologna sausage man alone wants to buy, so that prices are very low, and many a young cow in fair condition goes at "scrub" prices, because she is not wanted in the dairy, and the dairyman as a rule, does not raise much grain and cannot fatten her profitably, buying the grain to do so. I have this Spring seen cows fat enough to butcher, that have been fed on silage and milked all Winter and were coming in, and the owners said they had had very little grain; now if silage increases the flow of milk and fattens breeding cows, ought it not to fatten a steer or dry cow very fast?

Ans.—The feeding of cattle for the market upon farms is necessarily becoming a most important matter for farmers to consider, and the methods of growing feed and of feeding deserve careful study. As regards the questions put by our friend, we have to say that silage is an excellent food under special circumstances; that nothing is gained in the process in the feeding value of the fodder; but that some loss occurs through the fermentation. This loss, however, is reimbursed by the more palatable and digestible condition of the fodder when ensiloed. Corn fodder so prepared is therefore a better winter feed for fattening cattle than dry corn-stalks; but it is not so nutritious as hay. But again, this difference against the fodder vanishes when it is known that 20 tons of green, succulent feed, equivalent to five tons of hay, can be grown upon an acre of land which would not produce more than two tons of hay. As 80 pounds of silage per day will fully feed a fattening steer with a proper allowance of grain, the 20 tons grown upon an acre would feed a herd of cattle for five months, and there is no doubt that the cattle would do better on this ration than on an equivalent quantity—20 pounds—of hay. No more grain would be required to be fed with silage than with hay; eight pounds of corn meal and two pounds of cotton-seed meal would be sufficient for a medium-sized—a 1,500-pound—animal. The succulent condition of the fodder would tend to make the digestion of the meal easier and more complete and the animal would therefore gain more on such feeding than on wholly dry fodder. This effect of succulent food is well known in regard to the value of roots for winter feeding, the results attained being more favorable when these are given along with the dry hay and meal. The manure question as connected with feeding fattening animals, is one of the highest importance, as it relates to the enrichment of the land under this system of winter feeding. Straw and all other kinds of fodder can be used for feed, and all sorts of absorbents that can be gathered may be made available in place of the straw. Swamp muck dried and forest leaves are the most valuable: hardwood sawdust is next in value; but from an extended experience with soft-wood sawdust we should decidedly caution farmers against its use. It is too dry and heats freely, and although it might serve for cattle fed on succulent food, better than for horses, yet it contains so little fertilizing matter and decays so slowly that anything else, even sand, would be preferable. The profit of feeding cattle is at present quite small; but the indirect profit in the shape of manure is always sufficient to pay the farmer for the labor, while the fodder and grain, although this latter may be purchased, are repaid for at better prices than they could be sold for in the market. The profit made, however, is always in proportion to the skill employed in the feeding and in the economical management all through the business, the buying and selling being done with judgment so that losses are not made.

NORTHERN FRUITS IN THE SOUTH.

W. A. J., Long Island City, N. Y.—Will fruit trees grown in Northern nurseries, change seasons when planted in the South—say in Southern Virginia?

Ans.—There is little objection, save that of distance, to the use of Northern grown trees for planting at the South; or *vice versa*. It is true, however, that the later varieties (more especially of apples and pears) are increased in size, and mature early as they go southward. This is not found to be an objection, in the case of early or summer varieties, since increased earliness is the object sought. Such apples as Baldwin and Rhode Island Greening, however, while they are increased in size at the South, lose both in quality and season, becoming fall apples, while fall apples mature in Summer: Baldwin and Rhode Island Greening are found to be of little value south of central Pennsylvania and Ohio. Northern peaches succeed perfectly at the South—merely maturing earlier. Cherries do not generally succeed at the South, and may be expected to be only moderately successful in Southern Virginia; although in a cool situation—say a Northern exposure—with suitable soil, and only moderate annual growth, they will probably give satisfaction.

MYROBOLAN STOCKS FOR PLUMS.

G. S., Ontario, Oregon.—My neighbors and myself have bought fruit trees from a traveling agent for a Walla Walla nursery firm. We were told that they had been grafted on Merrablin roots, imported from France, and we were charged $1.50 extra for each root. Is there such a root; and were we swindled?

Ans.—There is, so far as we know, no stock of this name used in the propagation of fruit trees. The similarity of names, however, induces the suspicion that the fruit trees referred to may be plum trees, which are sometimes worked on the Myrobolan or Cherry plum, (Prunus cerasifera) a native of North America, sometimes employed as a stock for the purpose of dwarfing the plum. These stocks are sometimes imported from France to be used as stocks for the Garden plum, (P. domestica).

PIGS AND SMALL FRUIT FARMING.

W. A. P., Rockport, Ohio.—1. Is it practical for a small fruit farmer to buy and fatten pigs profitably, applying the manure to his fruit plantation? 2. If he has but little milk, of what age should the pigs be when he buys them? 3. Is it possible to make a floor of matched boards, that will save all the liquid manure in the pig-pen?

Ans.—1. To a limited extent, so that the milk, swill, weeds and refuse fruit and vegetables will make the greater part of the feed. 2. He should buy shotes or pigs three months old, as such pigs would do well with little milk and wheat middlings with coarser food. Matched plank will make a tight floor, and the liquid will run into the manure in the rear of the pen and may be absorbed with earth, muck or any dry substance thrown on the manure or put into the pen. In warm weather the pen must be cleaned every day. The floor should slant to the outside.

TANNING SMALL SKINS.

Several Subscribers.—To tan small skins, lay them down, flesh side up, and remove all pieces of flesh with a sharp knife. If not fresh, soak in moderately salt water until soft. Apply a mixture composed of equal parts of salt and alum, made very fine and saturated with a fluid composed of two parts of water to one of muriatic acid. Double the edges of the skin all around till they meet, and then roll up as compactly as possible and place in a cold place. If at the end of 24 hours, any portion of the dressing has disappeared, apply more and re-roll. At the end of two days, stretch the skin on a table or other flat surface, and with stones or sharp brick rub it until dry. Apply thick soap-suds into which cotton-seed oil has been placed; again rub till dry. Repeat the soap and oil emulsion and rubbing until the skin is sufficiently pliable.

EFFECTS OF MAGNESIA ON THE SOIL.

W. H. S., Providence, R. I.—I can obtain wood ashes in which burnt magnesia is largely present as a waste product; what effect would its application have on land?

ANS.—Magnesia is similar to lime in its influence on soil, but less active. The decompositions and transformations of the compound silicates and its action on the inert humus of the soil will be of the same nature as those produced by lime, but less energetic. The mixture of wood ashes and magnesia will be beneficial to most soils, especially to open, sandy soils where potash and phosphate of lime are deficient. The more wood ashes in the mixture the better for the crops.

Miscellaneous.

H. R. H., Farmville, Va.—Sumac seeds can be obtained from Thorburn & Co., New York, costing $1.50 per pound. We do not think the cultivation of sumac will be profitable unless one is so situated that he can make a business of it. Unless one is near a market and has facilities for gathering, drying, baling, etc., etc., the crop can hardly be made to pay. Most of the sumac used in this country is imported, chiefly from Sicily. Of the domestic product, more is gathered in Virginia than in any other State, the headquarters of the industry being at Richmond.

F. E. S., Cañon City, Colo.—1. The peach tree bears fruit only on the young shoots of the current year's growth. Raspberries generally bear fruit on the last year's canes. Some kinds bear also on the canes of the current year's growth, as Belle de Fontenay, everbearing caps, etc. Grapes bear fruit on the shoots which issue from the last year's wood. 2. The Leghorn, we think, lays the largest egg, size of fowl being considered. We do not know as to the yelk.

J. W. S., Melvern, Kans.—Among the small fruits adapted to a high and dry, light, gravelly soil, the best of strawberries are: Downing, Crescent, Cumberland and Sharpless; also try Jewell, Parry and May King. Raspberries: Cuthbert, Shaffer, Turner, Caroline, Earhart and Ohio. Blackberries: Kittatinny, Early Harvest and Snyder. Currants: Fay's Prolific and White Grape. Gooseberries: Downing, Houghton; try Industry.

R. M., Galena, Ills.—The mushroom has no visible seeds, but there is little doubt that it seeds as all other vegetation does, and that its seeds are what are known as spores. What we see of the growth of the mushroom is a thread-like substance called "spawn;" but we think that is only a secondary condition from the development of the spores or seed. There is no way in which mushrooms can be propagated by cuttings or anything of that kind.

W. H. J., Argentine, Mich.—Cuttings of the "common privet," mentioned as desirable for a hedge plant in a late RURAL, should be found at any well-established nursery. Price about $2.50 per hundred. The seeds are offered by Thorburn & Co. of this city at $1.50 per pound.

W. D. C., Foxboro, Mass.—Kerosene and lard oil for ticks on sheep should be in a mixture of equal parts. Rub well in with a cloth or sponge, or open the wool here and there, and pour from a can.

S. J. M., Reading, Mich.—For "yellows" (rust) in raspberries, there is no better remedy than to cut out the affected canes and burn them.

DISCUSSION.

C. H. H. ST. ALBANS VT.—In the F. C. of the RURAL of April 17th, an inquirer asks what should be done for a cow that had been falling off in flesh for six weeks, and which was troubled with "wolf-in-the-tail." The answer intimates that the cow doesn't get enough of suitable food to eat; and the inquirer was told to feed her liberally. Now, I don't consider this any answer at all. The cow could be cured by putting a tablespoonful of camphor in each ear. A cow of mine in the same condition was cured by this treatment. She suddenly ceased to eat, became sick and gave little milk, finally giving none at all. Several of my neighbors, good farmers, advised the above treatment, and although I thought it too severe, I followed the advice, and the camphor proved just the thing for her. She milked freely after a few days, and is now all right. I had bored her horns a few days before using the camphor, but I believe the latter caused the cure.

R. N.-Y.—An old "saw" accounts for much credulity in this world—*post hoc, ergo propter hoc*—after this, therefore on account of this. Because one occurrence or condition follows another, it is often considered the result of the other; whereas, in reality, there may be no more connection between the two than there is between the early crowing of one's neighbor's cock, and the nature of one's own breakfast; or between the discovery of the new comet in Cascopeia, and last Tuesday's bloody riots in Chicago, a week afterwards. It is this semi-superstitious and wholly credulous tendency of many to look upon an antecedent occurrence as the cause of a subsequent one with which it may have no causative relation, that induces many people to believe in dreams, many others to pin their faith on worthless medicinal nostrums, and still others to think the best remedy for an empty stomach or a softened tail in a cow, is to pour camphor into her ears, or bore holes in her horns. Dreams and events are occurring so constantly, that it would be passing strange if an event didn't sometimes occur after a dream which might readily be imagined by a superstitious person a forecast of it. Diseases and ailments are constantly disappearing from natural causes, as the morbid secretions or other deleterious conditions that cause them pass off in due course without medical treatment; but if any nostrum however worthless is taken, or any treatment however foolish or objectionable, is given shortly before the disappearance of the ailment, the "cure" is at once attributed to the medication, although it may occur not *because*, but *in spite of it*. The thousands of dreams that never foretell anything, the hundreds of doses and boluses that never do a shadow of good; the multitude of "remedies" that torture the dumb creation, aggravating instead of healing their ailments, are all forgotten, while the single supposed verification of a dream; or the single supposed instance of the efficacy of a nostrum or of a particular mode of treatment is remembered and bruited abroad, strengthening the credulity and gullibility of many, and constantly creating fresh dupes. In the present case, the symptoms strongly indicated malnutrition of the cow; and if the treatment prescribed has been followed, it is likely the animal has fully recovered by this time.

J. B., GUINEY'S, VA.—In a late RURAL a correspondent proposes that some one should "hunt the whole earth for a grass to reclaim North Carolina and Virginia." The grass to do this is here now, and is known as Wire Grass by people generally who regard it as a great curse to corn, wheat and tobacco growers. The much-abused Wire Grass of this section is, however, the Bermuda Grass of the Gulf States. Knowing the merits of the grass from some years' residence in Mississippi, after settling here I planted some, much to the amazement of my neighbors, and last May shipped to Richmond a cow that had been wintered, without shelter, in a field of this grass, with corn-stalks, and the butcher said she made the fattest beef he had ever seen. I have now another cow, a three-year-old heifer, a two-year-old and a yearling that have been wintered in a field of this grass with an addition of only top fodder and straw, and they are very fat and in prime condition. With hay in the barn and this grass in the field, I expect to be able to turn off export cattle without grain every month in the year, judging from my experience with the stock on hand, which do not belong to any of the beef breeds. My son who has been in New Zealand does not care for any New Zealand grasses here, as we have better kinds already.

R. N.-R.—The identity of the Wire Grass of Virginia with the Bermuda Grass of the more Southern States has long been known. Over 40 years ago, Randall, in his Sheep Husbandry in the South, spoke highly of it, and within the last decade it has been frequently commended in the RURAL under both names, attention being called to their identity whenever the more local name "Wire Grass" was used.

A. L. C., DORCHESTER CO., Md.—I think Mr. Minch, and T. T. L, are both right in their way in what they say of the yellows in peaches in a late RURAL. If a tree is so far gone with the yellows that the pit in the stone is shriveled, it will probably produce a diseased tree; but if the disease has advanced far enough, the seed apparently receives no nourishment, and has not sufficient vitality to germinate. The apparently healthy tree from which T. T. L., got his seed, was really badly affected, the disease showing itself principally in the seed, as I think it will sometimes do. I have often noticed that in opening a free-stone peach, the stone will open with the peach, and the pit is generally shriveled. Such seed would be apt to produce "yellowed" seedlings, and the trees from which such seed are gathered will be likely to show unmistakable evidence of yellows next year. I don't believe much in the contagiousness of the yellows, having pruned diseased trees and then healthy ones with the same knife, and seen no ill effects.

O. H. A., CHARLOTTE, VT.—Having heard that Pringle's Hulless and the Chinese Hulless Oats were the same, I tested them side by side two years ago, and found Pringle's to be distinct from the other. The kernels were a trifle larger, and the straw grew up nearly twice as high. Dr. Sturtevant writes me that he isn't sure that the seed planted at the New York Experiment Station was Pringle's. In a late RURAL the Chinese and Pringle's were declared to be identical on the authority of a report made by an employé of that station.

R. N.-Y.—As has already twice been stated in these columns, we sowed Pringle's Hulless Oats when first announced, and could see no essential difference between them and the old Chinese Hulless.

S. D. W.—Has anybody tried the following plan of "handling" celery to prepare it for winter-quarters? In October gather the stems and foliage, and place around the same an open wire link to hold them as gathered. If the plan is good, the links can be made rapidly by winding small annealed fence wire round a windlass similar to well rope, and then cutting the wire into rings with a cold chisel while wrapped on the windlass, cutting against a bar of iron imbedded longitudinally in the latter. The rings of annealed wire can readily be opened a little for larger plants, or closed considerably for small ones, and once made would last a lifetime.

G. W. S., OHIO.—Some time ago the RURAL made some inquiries about Xanthoceras sorbifolia. I consider it one of the most valuable and handsome early spring-flowering shrubs. Although the past Winter afforded a severe test of hardiness, it came through uninjured in wood or bud.

R. N.-Y.—The RURAL has three seedlings growing, from seed sent us by Mr. Wm. Falconer. They germinate very freely.

C. M. H., BOSTON, MASS.—A late RURAL gave an account of our friend Col. Wilder's azalea, 24 feet around and seven feet high. At the same exhibition I had the original plant of my seedling azalea, Suzette Hovey, which was 27 feet in circumference and eight feet high, raised in 1840, probably the largest and most profusely flowered azalea ever exhibited in this city.

C. C. S.—Lime at eight cents per bushel will be a cheap fertilizer for the purpose mentioned. Apply the hen manure in the hill or drill with a slight covering of earth, and scatter the ashes on the surface to be cultivated in.

A CORRECTION.—In the RURAL of April 24, C. P., Kirkville, Mo., speaking of the Earhart Raspberry, said: "It is stated that 16 gallons of berries were picked about Sept. 1, from two rows six or eight rods long, in this neighborhood." And from his own experience with other varieties, he thought this statement a great exaggeration. Many, doubtless, like ourselves, agreed with him; but he now writes us that he had 16 *quarts* in mind, and that the word *gallons* was "a slip of the pen." Fortunately he had taken a copy of the letter, so that, contrary to the usual custom, even he acknowledges that in this case the poor "printer," who has generally to shoulder all such blunders, was not in fault.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING May 8, 1886.

F. L. Wright, plants received in bad condition, but planted.—W. H. Byram, plants received.—J. T. M., plants received in fine order.—E. M. Bueckly, plants received.—M. P. W.—G. W. P. J., seed received.—T. J. Sprague, thanks.—J. D. I.—W. F.—T. T. L.—H. A. B.—C. W. Young, thanks.—F. D. C.—F. E. P.—J. J. H.—B. B.—F. M.—W. R.—J. McM.—W. H. G.

Miscellaneous Advertising.

Purify the Blood.

We do not claim that Hood's Sarsaparilla is the only medicine deserving public confidence, but we believe that to purify the blood, to restore and renovate the whole system, it is absolutely unequalled. The influence of the blood upon the health cannot be over-estimated. If it becomes contaminated, the train of consequences by which the health is undermined is immeasurable. Loss of Appetite, Low Spirits, Headache, Dyspepsia, Debility, Nervousness and other "little (?) ailments" are the premonitions of more serious and often fatal results. Try

Hood's Sarsaparilla

Sold by all druggists. $1; six for $5. Made only by C. I. HOOD & CO., Lowell, Mass.

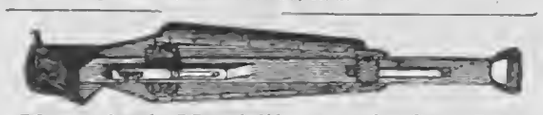
100 Doses One Dollar

WASH BUGGIES. WHITMANS Fountain Pump. SPRINKLING PLANTS & VINES USED IN ANY POSITION.

Send for large Illustrated Circular. J. A. Whitman, PROVIDENCE, R. I.

Improved HYDRAULIC RAMS.
Send for Circular and Price List. Address
ALLEN GAWTHROP, Jr.,
WILMINGTON, DEL.
Awarded Medal and Diploma at the Centennial Exhibition, Philadelphia.

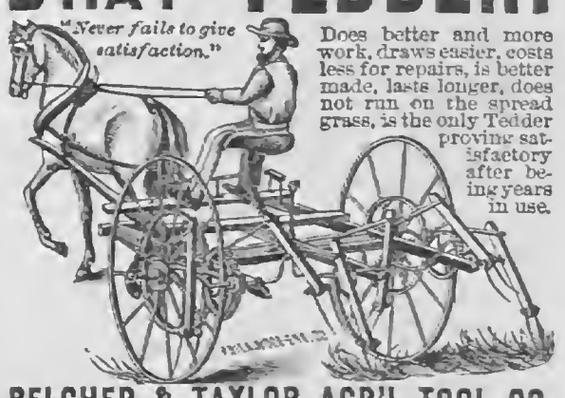
TO FARMERS. This simple invention is used in milking cows, particularly where there is any soreness. Made of solid silver, and sent by mail to any address on receipt of the price, 50 cts. Address The Milking Tube Co., 102 Friendship Street, Providence, R. I.



Macomber's Hand Planter, *for Corn, Beans, and Beet Seed.* The BEST in the world. Money refunded if it does not prove satisfactory, after a fair trial. Agents wanted. Send for circular and terms.
S. M. Macomber & Co., M'f'g's, Grand Isle Vt.
For Rhode Island address L. G. SHERMAN & CO., PROVIDENCE.

IF YOU suffer from "blood taint" in any of its three stages, whether "primary," "secondary" or "tertiary," that produces such horrible ravages, and results in cancerous humors, sloughing sores, and communicates its effects to the innocent and helpless, do not have yourself treated by the old methods, and by those who will fill your system with mineral poisons, which invariably leave their effects, the remedy ofttimes being as bad as the disease, but give yourself thorough treatment, with that high grade, standard blood alterative and specific; Warner's safe cure, the best known, best reputed medicine for kidney, liver and blood disorders in the world, always safe and always sure.

BULLARD'S HAY-TEDDER!



Does better and more work, draws easier, costs less for repairs, is better made, lasts longer, does not run on the spread grass, is the only Tedder proving satisfactory after being years in use.

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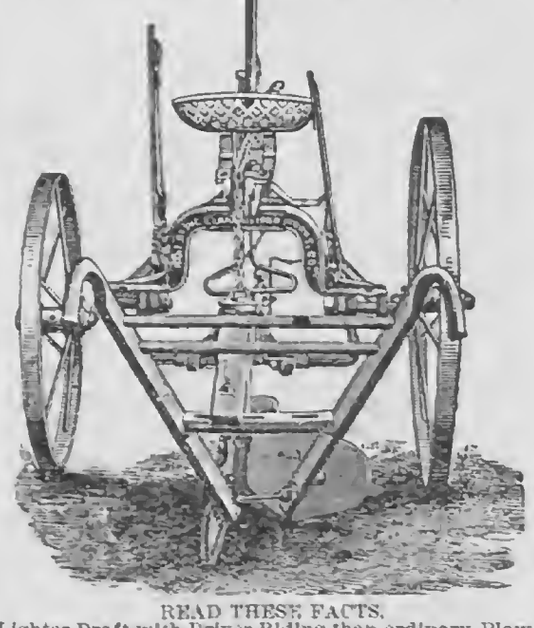

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Lighter Draft with Driver Riding than ordinary Plow with Driver Walking. Turns square corner without backing. It is wholly constructed of iron except tongue and front lever.
We claim and GUARANTEE that a Plow attached to the Sulky and carrying the driver, is from five to 100 pounds lighter draft than the same Plow doing same work without the Sulky. Write for prices.

ELKHART IRON WORKS,
ELKHART, IND.
Mention Rural New-Yorker.

Faith Increasing.

BUFFALO, N. Y., Sept. 22, 1885.—Some time ago, I had a patient suffering from Bright's disease. Urine nearly half albumen, with casts. Used all the regular remedies. Of no avail. Began to give Warner's safe cure, but had little faith. First bottle, patient began to improve, and after half a dozen bottles was entirely cured of kidney trouble. Have since prescribed it in many instances with success.—J. D. A. POHLE, M. D., 739 Michigan Street.

WE WANT ACTIVE AGENTS
TO SELL THE
Renner Combined Alarm and Door Bell
In every County in the United States and Canada. Geo. C. Owens, Modesta, Cal., says: "I have canvassed one day and took 22 orders." In same letter he ordered two gross. Wm. McKim, of Grand Haven, Mich., says "he took 13 orders in 10 hours." Profit on Bell, $2.50. In our EXTRAORDINARY OFFER to Agents we agree to take back all Bells unsold if the Agent fails to clear $125 in 30 days. Illustrated Circulars sent free. Address
RENNER MANUF'ING CO., Pittsburg, Pa.

Lifts 20 to 50 tons worked by 2 men; 5 sizes. Price, $35 to $70. Stands on runners. Circulars free. H. L. Bennett, Westerville, Ohio.

THE
RURAL NEW-YORKER.
A National Journal for Country and Suburban Homes.

Conducted by
E. S. CARMAN, Editor.
J. S. WOODWARD, Associate.

Address
THE RURAL NEW-YORKER,
No. 34 Park Row, New York.

SATURDAY, MAY 15, 1886.

Our Parker Earle Strawberry plants are variegated. Is that as it should be?

Eight Japan Chestnuts were received May 3 from the Storrs, Harrison Co., of Painesville, O., which weighed exactly 11¼ ounces.

If the number on your address label is 1894, your subscription expires with this number; if 1895, next week; 1896, in two weeks, etc.

This season we are trying the effects of excessive nitrogen applications upon potatoes. We are also trying the effects (for the second time) of all sorts of chemical fertilizers, separately and in every combination.

North, South, East and West the Rural's method of corn culture is gaining advocates—drill planting, level and shallow cultivation, and spreading the fertilizer or manure near the surface.

Now, after two weeks of sunny skies, a gentle shower comes to help on the oats, the early corn, the wheat, the peas, the potatoes, the grass. It is an early Spring, and the country is *so* beautiful that we are sorry indeed for the poor people that are confined to the monotonous, prison-like life of the city.

If one desires to sicken of strawberries, let him purchase those that come from the South in April. If one wants to dull his appetite for sweet corn, let him plant the *earliest* varieties. The earliest sweet peas are insipid as compared with some of the wrinkled kinds which come in only two or three days later. The earliest tomato is good for nothing. We might extend the list somewhat.

The "Mikado" is to be prized as an ornamental tree It is now (May 4) covered with its large white blossoms 1¼ inch in diameter, while those of other pears will average scarcely one inch. The leaves, too, are twice as large as other pear leaves, and more glossy. The fruit was illustrated in the R. N.-Y. last year. Except for canning it is worthless.

Turbulent agitators who set the laws of the country at defiance deserve no pity or favor. The foreign anarchists who, after receiving here chances of advancement they could never have met with at home, try to put their insane political and social theories into practice among us at the cost of blood and conflagration, must be promptly and pitilessly suppressed. As turbulent mobs, their treatment should be short, sharp, and decisive; as individual lawbreakers, their punishment should be prompt and severe.

Referring to Dr. Lawes's article on page 320, "The Source of Nitrogen in Corn," we may be excused for again referring to our experiment which, two years in succession, gave us nearly twice as much corn (grain) on plots which received potash, phosphate *and* nitrogen as on those which received *only* the potash and phosphate. All similar experiments with potatoes made on the same poor land, give substantially the same result. We can't grow crops on this field without complete fertilizers. If the corn plant gets its nitrogen from the air, potash and phosphoric acid should suffice at the roots.

We are sorry to see the statement "going the rounds" that tomatoes from seeds sown in the open ground will give ripe fruit as soon as the plants raised in the house or in frames. It is true that when the plants are grown too thickly and are not transplanted, they become feeble, yellow and "drawn," and when planted out require two or three weeks to recover strength enough to start into vigorous growth. But if not crowded too closely in the seed-bed, and if they are started early enough to be transplanted once by the middle of April, they will form strong, healthy plants with ample roots, and will give fruit a month before those raised in the open ground.

Master Luce, of the Michigan State Grange, has appointed June 10 for Children's Day. The day will be generally observed throughout the State by all Granges. For one day in the year the children will be masters of the situation. They will be seated first at the table, and as far as possible be aided to take the place of the older people in arranging and carrying out the entertainment. In fact the older people will appear as spectators, and try to crowd themselves into the places usually occupied by the boys and girls. This plan is a good one. It will surely interest the children in the useful work of the Grange, and teach them lessons in dignity and importance. We believe in giving the boys and girls a fair chance. The children of to-day are to make the history of to-morrow. Train them well for the work.

The Lower House of Congress has called on the Commissioner of Agriculture for information "as to the amount of wheat and corn on hand in this country, where it is located, the number of acres of winter and spring wheat now in the ground, the amount likely to be required for exportation, and other information on the subject." We are glad the House takes interest in such matters. The information will be valuable, and nobody is in a better position to collect it than the Commissioner. Much of the information sought is given in the monthly reports; but this special demand is likely to cause extra effort and secure more detailed and trustworthy information. Some see the fine hand of speculation in the matter; but why shouldn't Congress be honestly interested in the greatest industry in the nation—the one that imparts animation and life itself to all the others?

A respected friend who justly assumes that the R. N. Y. approves in the main of the new fruit nomenclature, remonstrates that, without protest, we should have deseribed and illustrated an apple with the preposterous name of "Grandfather Smith's Favorite." Our friend is quite right, and we thank him for calling attention to the oversight.

Several years ago the Rural expressed its opinion very positively as to the changes which the new nomenclature proposed, and we have no wish to alter that opinion. There is something which violates one's sense of the appropriateness of things when one is obliged to hear or to utter the coarse, absurd names which many fruits, both old and new, have received. We would not restrict the names of fruits to a single word by any means, providing the names were free from such objections, and especially if they were such as to aid in impressing them upon the memory or indicated some striking peculiarity. Otherwise, the shorter the name the better. But these little matters will regulate themselves. The main thing is to purify and reform our fruit nomenclature.

SPECIAL.

Those who, having applied for the Rural's present seed distribution prior to May 8th, have not yet received it, will kindly notify us by postal at once.

May 13 has been decided upon as a "field day" for the discussion of the Agricultural Committee's oleomargerine bill in the House of Representatives. The several bills on the subject were referred for legal consideration to the Judiciary Committee of the House, supposed to embrace some of the brightest legal lights of that body. In its report, just made, while it concedes that Congress has the right to tax oleomargarine for revenue purposes, it objects to such legislation and declares that the evils arising from its manufacture and sale must be remedied, not by Congress, but by the States.

The product has obtained its present sale by fraudulent misrepresentation. Supervision of its manufacture, as an uncolored product, by the General Government is the only way to prevent a continuance of this fraudulent practice. Such supervision must entail expense which should be paid by the manufacturers. For this reason, and to put it on an equal footing with the product it has for years been dishonestly injuring, it should be taxed. If the handlers of it should ever be forced or taught to make and sell it without disguise, for what it really is, the tax might be reduced so as to cover merely the cost of supervising the manufacture. It is not so much against the concoction itself when properly made, as against the fraudulent misrepresentation of it, that the dairy world is in arms.

It is calculated that the eight hour movement can affect only one in ten of all the workers in the country, the other nine-tenths being engaged in occupations in which shorter hours are impracticable, such as farming, herding, fishing, railroading and the like. All the other workers, however, as well as the great body of non-workers—the ailing, the old, and the young—must contribute towards the ease and comfort enjoyed by this one-tenth, but which they cannot share themselves. How are farmers who must suffer from the advance in wages or, its equivalent, the shortening of working hours of operatives, to gain any benefit from the labor agitation? The Knights of Labor and Grangers of Texas and Kansas have for some time been co-operating, and the State Grange and State Assembly of Knights of Labor of Michigan, have lately held a two days' conference at Detroit with a view to perfecting a similar scheme. It is proposed to establish distributing agencies at various central points in the State, where produce and merchandise of all kinds shall be gathered through purchasing agents, and then distributed to the members of both organizations. The plan, it is claimed, will not antagonize the merchants or commission men, as full prices will be charged for all goods, the profits to be paid back to the members in the shape of dividends. It is to be hoped that some means will be devised by which the farmers of the country shall partake of some of the advantages for which other toilers are contending.

"The Slaughter of the Birds" was the subject for discussion last Monday at the May meeting of the Sorosis, a club whose headquarters is in this city, and which is representative of the female culture, literature, intellect and fashion of this Western Hemisphere. It was conceded that women were "largely responsible" for the "injury to the welfare and beauty of our country by the destruction of our native birds;" but the English sparrow was justly denounced as an "intruder and a nuisance." In view of the fact that the slaughter of the birds "is calculated to alarm the lover of Nature and the agriculturist," it was resolved "that the members should pledge themselves not to use the plumage of native birds in any manner whatever," and that they would forward their "names to the Audubon Society to be enrolled among its members." Audubon societies (called after John James Audubon, the celebrated ornithologist, who died in this city in 1851), have already been established in several of the States by lovers of birds, haters of cruelty and friends of the farmer, and the movement is steadily extending. What a glorious thing is enthusiasm! Was there ever a great reform effected without it? Friends and neighbors may laugh at the enthusiast in any benevolent, humane or otherwise noble cause; but if their opinion is worth a thought, the laugh is tempered with kindliness, and right down in the hearts of the most "practical" of them there is an increased, if half-pitiful, respect. Oh, for an enthusiast in the cause of the birds in every neighborhood!

THE FIGHT AGAINST TEXAS FEVER.

The usual annual fight against Texas fever was begun last Thursday by Governor Oglesby of Illinois, who issued a proclamation, scheduling "all that portion of the United States South of the 35th parallel of latitude (the southern line of Tennessee) east of the Mississippi River; and south of the 36th parallel (running 30 miles south of the northern line of Arkansas) west of the river. The scheduled region embraces a small part of Southern North Carolina, the whole of South Carolina, Georgia, Florida, Alabama, Mississippi, Louisiana and Texas, nearly the whole of Arkansas, the Indian Territory, New Mexico and Arizona. The importation of cattle into Illinois from this whole region is prohibited hereafter between April 1st, and November 1st, or account of the existence therein of Texas or splenic fever, except under certain regulations prescribed by the State Board of Live Stock Commissioners and approved by the Governor. This year the proclamation is to go into effect on May 15. The Governors of the other States which are specially liable to infection will, doubtless, at once follow the example of Governor Oglesby. Then we shall probably soon hear once more of Winchesters and bloodshed on the "dead line," along the southern boundary of Missouri, Kansas and Colorado, especially the latter, the men of the North resolutely barring the march of the death-dealing herds which the men of the South, with equal resolution, are foreing onward to the "finishing" pastures of Nebraska, Dakota, Wyoming and Montana, or to the railroad shipping points for the markets of Kansas City, St. Louis and Chicago.

The cattle of the scheduled country are themselves, to all appearances, quite healthy; yet they impart the deadly fever to Northern cattle feeding on the pastures on which they have grazed, traveling over the roads on which they have been driven, or coming in contact with the bedding or feed which they have disturbed. If they are shipped by rail or river under proper precautions, no objection is made anywhere to their passage, and it is probable that this will be the exclusive mode of transfer ere long. A telegram early in the week from Albany, the northern terminus, nearest to the Panhandle, of the Texas railroad system, says the trail north from that point is now fairly open, and fully 45,000 head of cattle have started northward. Thousands of these were brought by rail from the southern and western parts of the State, as the severe drought through those sections forced cattlemen, owing to the scarcity of water and grass, to send their herds as far as possible by rail before starting them on the trail. This has never been attempted before, and cattlemen find that instead of the customary losses on the trail, there is no loss at all, and that the saving in time, wages, deaths and condition compensate for freight charges. The general impression there is that in a short time there will be no national cattle trail, as transportation will be found cheaper by rail than on the hoof. The resolute stand taken by the scheduling States will probably hasten the perception and acknowledgement of this fact.

BREVITIES.

Early potatoes at the Rural Grounds began to show above ground April 30.

We find many flowers on the Rostiezer Pear tree, that have six and seven petals.

The Yellow-flowering Horse-chestnut is the first large tree to clothe itself with leaves and blossoms

The leaves of the Variegated Tulip Tree, when first they unfold, are distinctly green and yellow.

During a walk in the woods last week we found that many of the flowers of the strawberry plants there growing were pistillates.

Circus time is at hand. Let the boys go, and go yourself. You will feel better for it, and all hands will do better work.

Chrysanthemums from seeds started in pots the last of February, were planted in the garden May 5th. It is supposed they will bloom in the Fall.

May 3.—Oats are well up, and thus early checked by drought. Oats never wholly recover from the effects of dry weather any more than potatoes do.

If ever the hens need yarding it is now. They will scratch up seed as fast as you can plant it. It is a shame to keep your wife chasing hens out of the garden. Fence them in or out.

The excellent cuts of Bantam fowls used in last week's number were kindly loaned us by Mr. Belmont Perry, of Woodbury, N. J. We unfortunately omitted his name from the descriptive article.

Our method of strawberry culture is to mulch with old manure in the Fall, and not to touch the soil until after fruitage. Then the soil between the rows is turned under and all weeds pulled up between the plants.

Water the horses frequently. We can't possibly urge this matter too often upon our readers. It will pay. If there is no water near the field, haul out a barrel on a drag, so that the horses can get a drink between times.

The making of gilt-edged butter exclusively is as much to be desired by the dairy interests of the country as that all men should deal honestly is to be desired by the public at large. We do not think, however, that the first of these ends is any more likely than the second to be advanced by the fraudulent handlers of oleomargarine, although friend Taylor is more sanguine in another part of this issue.

We have never before so early in the season seen so many potato beetles. It is not found that they do much damage to the leaves, though after so long a fast, it might reasonably be supposed that their appetites would be very keen. But potato beetles are *sui generis*. Any animal that, when its body is cut in two, walks off as if nothing had happened and lives for several days afterwards, might be expected to do other strange things.

In Nebraska alone the Union Pacific Railroad holds 2,344,901 acres of land which is not taxable, because the road has purposely neglected to take out patents for it. It is withheld from settlement, however, until its value shall be increased by the settlement of the adjacent sections by persons who have to pay taxes to open up and "improve" the country. The wealthy railroad magnates, without paying a cent of taxes, thus add to their millions on account of the taxes levied on poor settlers.

Miscellaneous.

SHORT TALKS FROM FARMERS.

ANY man who says, "Put tarred paper around young trees," doesn't know his business. I can kill more trees with tarred paper than all the mice or rabbits in the country can kill.

Ashtabula Co., Ohio. J. H. M.

It is well to kill all venomous snakes, but all the innocent species should be spared, protected and classed among the friends of farmers and fruit growers. Such snakes live wholly on small animals, insects, slugs, bugs and worms. Their size and activity enable them to consume more of these than birds or toads can manage. Where snakes are driven entirely away, insects, bugs and worms will surely multiply. Why not call the attention of entomologists, societies for the prevention of cruelty to animals and all others to this subject? Is it not time that the traditional hatred between the races of man and of serpents should have an end? The harmless snakes show their willingness to drop hostil ities by fighting our insect enemies. Shall man be behind them? S. W. H.

Madison Co., Ind.

My ducks at one year old, with free access to a pond of water, did not lay as well as they did at two years, confined with 20 hens, in a medium-sized yard, and given only a milk-pan of water. A small flock of ducks will pay far better than a pig. They will eat anything and make little trouble. SUBSCRIBER.

Steuben Co., N. Y.

A house lined with tarred paper is the nearest insect-proof of anything I have found in 20 years' work. The odor from the tar is conducive to the health of the fowls. Tar is called "healthy" for human beings. Why should it not be so for fowls? A lining of tarred paper on the house will surely help to line the egg basket with winter eggs. Try it.

Clearfield Co., Pa. H. F. S.

OUR bed-room opens into the dining-room. It takes a tremendous fire to keep both rooms hot in Winter. We can't afford to keep the door open all the time. My wife has invented a way of warming both rooms, that works like a charm. She suggested sawing off the top of the door about one-third down from the top. I did this and put another hinge on the lower part, thus making two doors out of the old one. A wooden button on the lower part holds them in place. In the afternoon we can open the upper door by turning the button and swinging the door on its hinges. The hot air at the top of the room passes into the bedroom just fast enough to keep both rooms comfortable. Try it. It is better than trying to keep the door ajar. H. M. C. G.

Orange Co., N. Y.

That Dakota furnace strikes me like a good thing. We have lots of old brush and chips every Winter, that could be used up in that way. Old stumps and roots have to be all hacked up before we can get them into any of our stoves. If we had such a furnace we could put them in whole. I have an idea that I can have a big tank made in the form of a "drum," so fixed that the last act of the heat before passing away will be to keep water hot. Then, by means of pipes, I can have hot and cold water with any of them. C. P.

Plymouth Co., Mass.

In spite of all that has been said against carp, I think it pays to keep them. My carp pond pays me well. I would not be without it. You can't have good carp with poor cooking.

Bucks Co., Pa. R. C., JR.

Two things on my farm have always troubled my eyes—numberless small stones and a bad "cat hole." One dry Summer I dug a well down through the "cat hole" till I came to gravel. Then I hired some boys to pick up stones, and dumped all we could pick up into that well. Then I put a dozen loads more at the bottom of the hole and scraped dirt over them. I can plow over the hole now without any trouble at all. I kept picking up stones at odd times and dumped them along on the road and put gravel on them. I have now got the best piece of road in this township in front of my farm. J. S.

Oakland Co., Michigan.

In this southern portion of Illinois, land is literally "tired." Thirty years ago it produced 60 or 80 bushels of corn per acre; now the average is but 20 or 25 bushels. For years farmers have taken all they could from the land and returned nothing—not even rest. Farmers are too much in the old ruts where their fathers worked so contentedly. The fathers had but few wants which were inexpensive and easily supplied. The present generation have many wants more costly and difficult to supply. Hence it is that so many boys leave the farm and seek other employment, and in after life regret the change.

Marion Co., Ills. J. L. H.

The best roosting poles that I have come across are iron rods wrapped about with thick woolen cloth. This cloth is saturated with kerosene with a small addition of oil of sassafras. No chance for lice there. "BUFORD."

Caldwell, Ky.

Orchards are white with bloom, and promise much this season, peaches alone excepted. Small fruits in good condition. Have tried keeping peach pits for use the second year by burying them three feet under the surface; it is a success.

Here is an explanation of the growth of weed seeds, such as morning glory, etc., year after year, on clean cultivated ground:—they are, part of them, buried at each plowing below their proper depth for germinating, and lie dormant. B. B.

Sangamon Co., Ill.

CATALOGUES, ETC., RECEIVED.

"RUSTLESS" IRON.—Catalogue from the Wells Rustless Iron Works, 9 Cliff Street, New York. The "Rustless" iron-work has been in the American market for about four years, though it has been in use for a much longer period in Europe. By means of treatment, first with superheated steam and then with highly heated air and carbonic oxide gas, the outer surface of the iron is converted into magnetic oxide of iron. This oxide is known in its natural state as magnetic iron ore. It has withstood centuries of exposure to both fresh and salt water. The cost is less than that of galvanizing or enameling. The rustless iron pipe is excellent for conducting water. Lead pipe is poisonous and many of the preparations used in preventing the rusting of iron contain lead or zinc, both of which are slightly acted upon by water. The "rustless" iron is free from all poisonous components, and as the work is done by heat, gas and steam, every crevice is reached. The "rustless" hollow-ware seems destined to come into very general use. We advise our friends to send for this exceedingly interesting catalogue.

THE BUCKEYE FORCE PUMP.—Catalogue from Mast, Foos & Co., Springfield, Ohio. The value of a pump depends upon its durability, simplicity, ease of operation, and safety from frost in Winter. It is claimed that the Buckeye pump possesses these valuable qualities in the highest degree. It is said that there are 100,000 of them in use in all parts of the country. The cylinders of the Buckeye are made of brass or of iron, lined with porcelain. The leather for the valves is of the very best quality, in fact, all material used is calculated to last for years. The stuffing or packing box found in most force pumps is not used in the Buckeye. The pump is easy to work, the flow starts at the first or second motion of the handle, and stops the moment the pumping ceases, thus leaving no dripping water to freeze on the platform. To learn the superiority of this implement more fully as well as to study the mechanism of pumps in general our readers should send for the catalogue.

MICHIGAN HORTICULTURAL SOCIETY.—Fifteenth annual report of the Secretary, Charles W. Garfield, Grand Rapids, Mich. Horticulturists and pomologists will find much to interest them in this volume. Michigan is becoming famous as a fruit and vegetable State. Secretary Garfield is one of the hardest workers in the profession. Readers of the present volume will be disappointed to learn that the usual Secretary's Portfolio has been omitted. The bright and condensed clippings that made up this portion of former volumes will be missed. The loss is well made up by a report of the last meeting of the American Pomological Society. This report is the best we have seen. The volume is so full of sensible hints and sound facts that we most heartily commend it to our readers. Every Michigan horticulturist who understands his business will secure one.

KELLOGG'S ROYAL SALT.—Circular from the Butter Preservation Salt Co., 384 W. 11th St., New York. The trade-mark of this new company bears a motto which should be dear to the hearts of the dairymen: "No more rancid butter!" This salt has received the very highest testimonials from chemists, business men and practical dairymen. Col. Wm. Crozier, an authority on dairy matters, considers this salt the best of all the brands he has ever tried. He rightly says that impure salt is a curse to butter-makers. It is certain that no inferior article could secure the testimonials which are printed in this circular. Our friends will do well to investigate the merits of this preservative. Address the company, as above, for the circular.

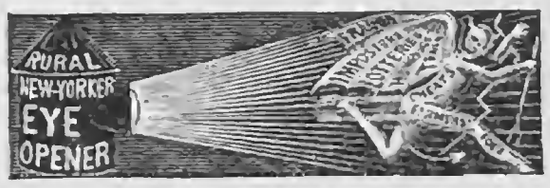
MISSOURI STATE BOARD OF AGRICULTURE.—Eighteenth annual report of the Secretary, J. W. Sanborn. It is unfortunate that the addresses of the secretary and the office of publication of the report have been almost omitted. They should be plainly printed on the title page. We also criticize the economy which necessitates the printing of such a volume in paper covers. The present volume is one of the best of the series. Every Missouri farmer should procure the book. The bulletins by Prof. Sanborn, The Grasses of Missouri by B. T. Galloway, and Stock Improvement by Prof. Shelton of Kansas, are worth the price of many a volume on agriculture.

SENECA LAKE GRAPE-GROWERS' ASSOCIATION.—Proceedings of the second annual meeting held at Watkins, N. Y. There is a great deal of interesting information to be found in this little pamphlet. One thing is certain—the men whose thoughts are given were practical grape-growers who spoke from experience. Among other articles we note a History and Progress of Grape Culture, Alumina as a Fertilizer, and The Vineyard from the Beginning to its Maturity. The Secretary discusses the shipping and handling of grapes. The pamphlet will be of interest to all who cultivate the vine. It will be sent on receipt of a stamp by the Secretary, C. N. Wixon, Penn Yan, N. Y.

KING OF THE HAY FIELD.—Catalogue of the Mallory Trackless Hay Elevator, manufactured by Herbert Baker, Toledo, Ohio. It is claimed that this is the best known device for filling a barn with hay. It is said to be the only hay elevator on the market that will deliver the hay at the sides and corners as well as at the end of a large mow. Fewer hands are required for pitching the hay into place on the mow than when the track elevators are used. The reasons why these elevators should be used are well stated in the catalogue. They should be read by all who desire to procure such implements.

INSECTS AFFECTING THE ORANGE.—A government pamphlet of 225 pages by H. G. Hubbard. The insect enemies of the orange are exhaustively and practically treated. The pamphlet is beautifully illustrated, the insects and their effects being well shown. A necessity to orange growers. Sent out by the U. S. Department of Agriculture.

THOROUGHBRED POULTRY.—Circular from Philander Williams, Taunton, Mass. Light Brahmas, Wyandottes and Plymouth Rocks. We saw specimens of birds from Mr. Williams' Yards at the New York Poultry Show. They were well worthy the prizes which were awarded them.



WHEN Texas became part of the Union after the war of '45, she retained all the public lands, so that ever since the United States have owned no land in the Lone Star State except a few small areas ceded for military posts, etc. Great and notorious as the corruption has been in the illegal appropriations, and dishonest cessions of the public lands of the United States, scandals have been still more outrageous and flagrant with regard to the public lands of Texas. These have been ceded and appropriated in the most unscrupulous and corrupt fashion, until now there remains no public domain in Texas. The large tracts still not owned by private parties are set aside for school and university purposes, or are asylum lands or belong to railroads. There are still a great number of old land certificates out, however, and as there is no land which they can cover, the holders, unable to sell, have in many cases illegally placed them upon lands specially granted for the above purposes, with the hope that at some future time the Legislature may be induced to make the certificates valid. There are several thousands of them outstanding, nearly all bearing date of about 100 years ago, when Texas belonged to Mexico. There are few of them in Texas, most of them having lately been sent for sale into the Northern States. It would be well to be careful about investing in Texas land certificates.

Blake and Riley are the names given by a pair of lottery swindlers arrested the other day in Milwaukee, Wis., for using the United States mails for fraudulent purposes. Thousands of letters were mailed by them to persons in all parts of the country, but especially in the West, inviting the recipients to invest. Each contained a fac-simile of the Louisiana Lottery scheme and a four-page circular giving a description of the lottery, with the name M. HUBER & CO., GENERAL AGENTS. Accompanying the circular was a "confidential," type-written letter from "Huber & Co., Bankers and Brokers, 431 Milwaukee Street, Millwaukee," stating that although the business was perfectly legitimate, yet as many doubted this, the writers, upon the receipt of $9, would send a ticket for the lottery, and if the ticket did not draw a $50 prize, they would send one each month until a prize was drawn; or upon receipt of $20 they would send four tickets, and if a prize was not drawn, then they would send 10 tickets a month until a prize was drawn. Thousands not being able to resist the tempting offer, sent on their money; but few of them ever received even a ticket, and not one of them ever got a prize. Why waste space in mentioning this swindle, after it has been suppressed—in carefully locking the door after the horse has been stolen? Because similar swindles have been flourishing for years, and will flourish for years to come, but not henceforth, it is to be hoped, on money enticed out of your pocket.

Complaints come from several parts of the country of a wolf in sheep's clothing. The beast dresses as an itinerant clergyman, and professes to be on a Bible-distributing tour. He asks for meals and lodgings, generally at farm-houses, talks a little pious clap-trap; but insists on paying for his meals and other accommodations, on the plea that the Board that has sent him on his travels requires him to do so and to show vouchers for the cost. He pays his entertainer a quarter, gets him to sign a receipt, and benignantly departs. Later that receipt turns up at a bank, or in the hands of some other "innocent holder," as a note for $100.25.

John Crawford, Marshall County, Ind., agreed to accept a sickle-grinder from an agent, and signed a postal card to that effect. In a few days he was notified that 36 sickle-grinders had been shipped to him as per written order—bill $216. He compromised by giving his note for $175. John Crawford won't in future be so ready to sign his name, even by way of accepting a gift from a canvassing agent, however sleek and glib-tongued.

A plausible rascal is selling Plymouth Rock eggs in Michigan for $75 a dozen, guaranteeing to buy all the chickens hatched therefrom at $100 each. The eggs are boiled. He or another member of the same tribe may turn up in your neighborhood to-morrow with this or a kindred swindle.

The EYE-OPENER'S notes show that this little trick has been practiced successfully in different parts of the country four times within three months, and attempted thrice more, and the Eye-opener's notes and clippings can't cover a tithe of the cases that actually occur:—A glib-tongued, well-dressed, solid-looking swindler comes along, and after more or less bargaining and bantering agrees to buy a farmer's place, depositing from $25 up, to bind the bargain. Shortly a confederate makes his appearance, and is very anxious to buy that particular farm, for which he is ready to pay, say, $500 more than the price offered by No. 1. He generally manages to work on the farmer so effectually that the latter agrees to let him have the farm, if he can get No. 1 to surrender his claim. On his re-appearance, No. 1 is ready to do so for, say, $200, in addition to his deposit, which the farmer pays him, and waits anxiously for the appearance of No. 2. No. 2, however, of course, never appears, and the farmer has paid $200 for the experience here given to you for nothing.

For Women.

CONDUCTED BY MISS RAY CLARK.

ELIAKIM GRAVES'S WOOING.

PART II.

WHEN Deacon Graves emerged from the woods and entered the wide meadow which was a part of the Drake homestead, he sat down and put on his stockings and shoes. And now unaccountable and hitherto unknown sensations began to creep over him. He felt weak and faint. What if Desire herself should come to the door? What should he say to her? Where would he find words to convey his meaning? And as he walked slowly up the lilac-bordered path to the front door, his knees trembled and he grasped his red silk handkerchief as though it were a rope to save him from drowning.

There was no light in the house. In those days people were in the habit of "sitting in the gloaming" on short, summer evenings. Eliakim knocked faintly, half hoping no one would hear him. There was a sound within as of some ponderous weight striking the floor. Then heavy footsteps, and the door opened disclosing the short, fat figure of Brother Drake, robed in his night-shirt.

"Good-evening:" said Eliakim.

"Good evenin', good eveuin', good e-v-e-n-in'," quacked Drake in a hesitating monotone, which became more assured as he slowly recognized his visitor.

"How are you prospering, brother? how are

you prospering?" questioned Eliakim in his short, crisp way.

"Wall, I'm so's to be waddlin', Deekin; so's to be waddlin'. Come in, Deekin, come in."

"No," replied Eliakim. "Is—I mean have you any pigs to sell, Brother Drake?"

"No I hain't, Deekin. I swan I sold the last one this mornin'. Did you want some, Deekin?"

"I wanted to enquire," was the answer, and Deacon Graves turned quickly and retraced his steps down the lilac-sceuted path.

He was routed, but not vauquished. He would combat this new foe of fearful self-distrust which had risen like a giant in his pathway. He would conquer it, and wheu opportunity offered, again seek an interview.

A couple of weeks had elapsed. The weather was unnsually warm and sultry with freqnent showers. Deacon Graves drove over to the village store one morning in his one-horse wagou to purehase some codfish and black molasses. As he entered the store a womau, dressed in a purple print gown and big gingham sun-bonnet, turned from the counter. As she pushed back the protecting bonnet he saw the snn-shiny face of Desire Hopkins. She greeted him pleasantly and passed out. A sudden inspiration seized him. He forgot the purpose for which he had come. He would ask her to ride and unburdeu his mind on the solitary road. So he hastily unfastened "Old Fan" and drove up beside her as she was carefully picking her way along the muddy street.

"Will you ride, Sister Hopkins?" said he, sitting very erect and bracing himself with the reins as again he felt that unaccountable feeling creeping all over him.

"Thank you. It would be a great favor," replied Desire, and she climbed up over the wheel aud seated herself beside him.

Eliakim's gaze was rivetted on the point of old Fan's ear.

"How is your mother's health this Summer, Brother Graves?"

"Good," snapped Eliakim. Quite unconscious of the Deacon's feelings towards her, Miss Hopkins chatted pleasantly of the crops, the weather and the church. The Deacou answered only in monosylables. His ideas would not frame themselves into words. The power of speech had left him. A cold perspiratiou broke out on his forehead. He grasped the wagon seat and drove at a pace which sent the soft mud flying in all directions. His opportunity was almost lost. Only a long hill now intervened between them and the place where Desire was now staying. Half-way up, driven to desperatiou by the fear that he might lose her, he made a mighty effort and began:

"Sister Hopkins, I have been thinking—that this will be an uncommon good year for turnips."

A little surprised by his manner, Desire pushed back her bonnet and looked up in his face. She saw the agitation depicted in his countenance, and straightway her womanly perceptions divined his secret. She blushed deeply, bnt Eliakim's gaze was fixed on a distant elm tree, and he saw it not. And being a modest woman, she sat silent.

Her destination reached, Desire Hopkins climbed unassisted ont of the wagou, merely saying: "Thank you, Brother Graves," to which her admirer responded: "You're much obliged, I'm sure," as he backed his wagon slowly around in the narrow road. Disappointment and hopelessness rode side by side with him on his homeward way, and he never once thought of the codfish and molasses until his mother inquired for them when she set about getting the breakfast the following morning.

And the busy seasou came on apace. "From early dawn till dewy eve" Eliakim Graves labored, patiently and uncomplainingly, while his heart ached with its burden of unconfessed devotion. The tall form grew gaunt and the venerable feather-bed could no longer soothe its occupant to untroubled slumber. He saw Miss Hopkins every Sabbath at church and she was always present at the Wednesday evening prayer meetings. But his limbs refused to move towards her; his tongue was as lead in his mouth when he would have spoken.

By and by a rumor came floating on the hazy, fruit-scented, autumn air to the effect that Judge Watsou (a portly, pompons widower with seven children) was paying attention to Desire Hopkins; and Deacon Graves himself caught the Judge "casting sheeps' eyes" over into the corner pew where Desire sat, resplendent in a new blue velvet bonnet with purple pansies. And the Deacon, half beside himself with love aud fear, was powerless.

And so the weeks went by, and Thanksgiving Day was at haud. There was to be a donation party at the house of the minister and everybody was invited. And, of course, everybody went and took his wife, mother, sister or sweetheart, as the case might be. And Desire Hopkins was there, and so was Eliakim Graves, also Judge Watson. For a time the company sat bolt upright aronnd the rooms, conversing in whispers as though the occasion were a funeral.

Then a merry youth out in the great kitchen proposed a game of "snap-and-catch-'em" and soon a large ring was formed in the spacious room. The sound of flying feet and shrieks of laughter woke up the company in the other rooms and one after the other edged out to "see the fun." Soon, nearly all were participating in the lively game, and "Needles Eye" and forfeits were proposed. In the course of the latter game Desire Hopkins was found guilty of misdemeanor and sentenced to "go to Rome," and her compauion on the journey was to be none other than Deacon Graves, who had persistently kept his seat in a corner. When Desire, in obedience to the rules of the game, walked modestly up to him, holding out her plump hand, Eliakim, though he would gladly have gone with her to the Antipodes, if he might, silently shook his head. No persuasion could move him, and he sat grimly in his chair and watched Desire as she made the journey with the odious Judge, and afterwards saw him lead her to a seat on a sofa and sit down beside her.

The sight was too much for the Deacon; he grew desperate. Something must be done immediately or all was lost. He rushed out into the open air to cool his fevered brain and devise some plan to get the start of the Judge.

As he walked up aud down the long lane which led to the barn, his eye fell upon the Judge's fine gray horse hitched in an open shed.

A bold idea suggested itself to the almost despairing mind of the Deacon. He unfastened the halter, threw it carelessly over the horn of the saddle and struck the spirited animal a blow which sent him flying out of the yard and up the road toward his home. Then he walked into the house, and standing in the door of the parlor, said in a loud, full tone: "Judge Watson, your horse is loose!"

As the Judge, filled with dismay, started quickly and left the room, the Deacon coolly crossed it and took the seat by Desire's side, which had just been vacated. He had conquered the giant at last and was perfectly cool and self-possessed.

"Sister Hopkins," said he, in his crisp, abrupt way, "I want a wife. You suit me; will you have me?"

And Desire Hopkins, who had been considering the matter ever since that revelatiou had come to her during their ride on that sultry June morning, answered:

"Yes, Deacon Graves, I will."

LIZZIE CLARE.

FOR, OR AGAINST HOME COMFORT.

THE decoration craze had seized the three Selby girls, and when the parlor overflowed and father persisted that there was enough and to spare of trumpery in the dining-room, they turned ou the overflow to the spare room. Walls, mantel and brackets were soon full, and the cry was "still they come." To cap the climax, one of the girls bought a second-hand scroll-saw of a mother who coaxed it away from her boy for some valuable considerations in the way of mince pie and doughnuts for nutting excursions. And now the decorative business began in earnest.

Abby "could learn scroll sawing if a boy could," and learn she did. Presently the old clock had an open-work border; then the pictures were all adorned; a wall cabinet screwed on between the windows to hold more placques and cups of Susy's painting, and all she could not dispose of elsewhere found a resting place in the spare room. Crochet and needlework were Louisa's strong points, and something in her line fluttered from every chair, mantel and window curtain.

They all thought what a blessing it was they had such a careful housekeeper as mother, to do the sweeping and dusting in the midst of so much labor-making finery. They believed in a divisiou of labor. They made the nick-nacks and she took care of them. There are many modern households which divide the work that way—the more the pity.

The transient guests who enjoyed (?) the hospitality of that spare room never forgot the occasion. Summer or Winter, when you entered it, the chill, dank air from a sepulcher seemed to greet you. The blessed out-door air and sunshine must be resolutely shut out, for it would fade or make havoc with some of the airy finery. One must move about as he would in a crowded china store to avoid disaster to some work of art it had taken long and patient toil to make. "Overdone" would have been an appropriate motto to hang on the wall. The whole would answer for a museum or bazaar, but was not comfortable for a living room. The subject quite lately up for discussiou at the womau's Club—"Sorosis"—in New York is an appropriate one for many young ladies of to-day to thoughtfully ponder. "Do the present interior decorations of our homes promote comfort and hapiness, or discomfort and needless service?" was the substance of it, though not the precise words. The overdone style is certainly not productive of that most blessed quality in auy household—home comfort. OLIVE.

"FIGHTING THE ENEMY."

I TOOK up a book this evening and read the title, "Fighting the Enemy." Now I do not know what enemy it refers to, as I have not read the story, but it started a train of thought. Have we not all enemies, even in these peaceful days? Certainly we have to contend with our inclinations sometimes and subdue them. How hard it is to make ourselves perform our duties always all housekeepers will acknowledge; oh! what a fight we have to shake off the enemy when the monotony of our work appears to disturb the tranquility of our souls. Why should we call it monotony? It is an enemy who whispers the suggestion. Let us conquer him.

At other times we are troubled because we cannot have all the conveniences and luxuries in our homes which we think we should so much appreciate. Why do we not make the very best of what we have? Because our foe—discontent—is attacking us. Let us crush him! Shame on us! we have unnumbered blessings to be thankful for! Have you not in visiting large cities noticed how those who are determined to "make a display" are tormented with a great number of enemies which we, who live in the country can keep at a distance? Think of the fathers and mothers who sacrifice themselves that their sons and daughters may enter and keep a fair standing in fashionable society! Oh! if only they would conquer the enemy, vanity! their children would become more noble men and women; the daily papers would contain fewer accounts of dishonest transactious by those who will not destroy this giant evil. Once I thought if I were an artist I would paint a large picture of a vast army moving along the dusty highway, tired and heated. By the roadside should be a fallen warrior—large and handsome, but fallen, not killed—utterly discouraged by the long march. I thought that to be a type of human life, and that the weary one should receive a large share of sympathy, because of all he had to contend with. But now, there should be a companion picture; the fallen soldier must rise and press on, until the enemy is subdued, for it is much grander to conquer than to yield an inch to our despair. After a while we shall lay aside our weapons and take up our palms. Then shall we rejoice if we have unflinchingly performed our work and kept down our adversary; fighting under our great Captain who bids us follow His lead. S. S.

Domestic Economy

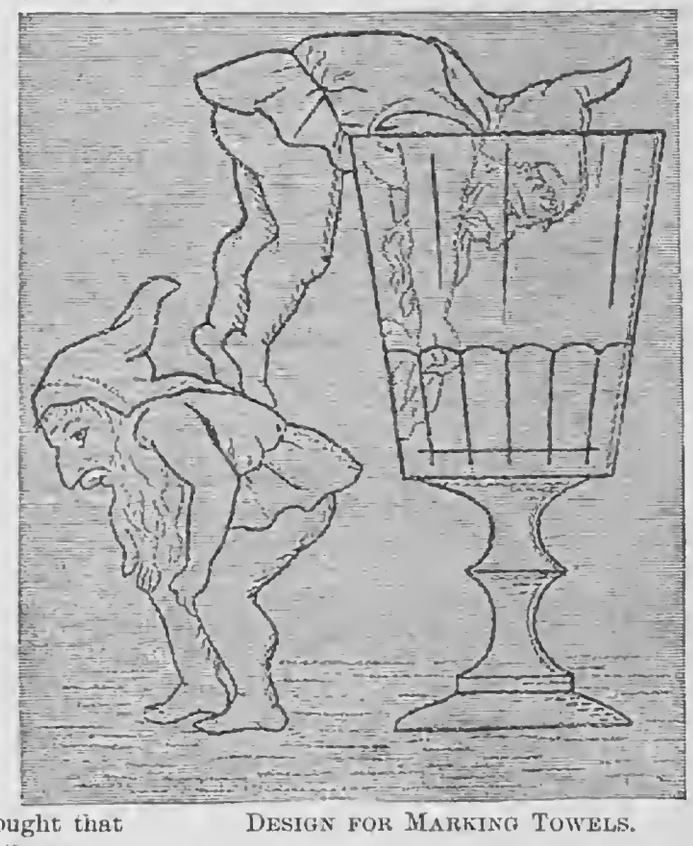
CONDUCTED BY MRS. AGNES E. M. CARMAN.

HOUSEKEEPING IN CALIFORNIA.—VI.

MARY WAGER-FISHER.

ONE of my Oakland acquaintances who has employed a good many Japanese in her kitchen—one at a time—entertained me one day with some of her experiences. She finds the Japanese more intelligent than the Chinese; but not so interested in their work. She thought a high-priced Chinaman—$30 a month—the best servant one could anywhere secure. The Japanese come to this country to be educated; the Chinese to make money. My friend explained that the reason she had had so many Japanese was owing to the fact that as soon as they earned a little money they went to school. Shortly before, she had employed Iberaike upon condition that she should teach him how to work, and he was to remain with her for a year. She spent almost one entire week in the kitchen teaching him how to cook, and soon after he came to her with a sorrowful countenance. "I am grieved to inform your loveliness," he began, "that I have conferred to Sanometer, and he tells me that I must go to school immediately" (Sanometer was a leader or adviser of the Japanese); "and that I must sacrifice my body to my country's good." Iberaike was quite a high-toned Japanese, too much so for kitchen work, and he had great ideas of serving his country. His successor Ken knew nothing of work, and evidently did not wish to. He read John Stuart Mill, and talked learnedly on political economy. He spoke some French and was very desirous to go to France. His mistress asked him one day why he did not study medicine, as good physicians were needed in Japan. With a scornful toss of his head he said: "Woman can study medicine."

For some time this lady had a Japanese servant named Mori, who had been at school considerably and wrote very amusing English letters. One time he was ill and had to go to an hospital, and he sent her news of himself on a postal card: "My sickness not well now." Again, in trying to supply his place for his employer, he wrote: "Dear Madam, Please you take this boy, who his name is Yahemma as Japanese name, but you call his name Gerge. I will remember your kindness, especially I thank you that you tolled me this words: 'You try to become a good man.' This your kind word coast me more million dollars"—meaning worth more, etc. Again he wrote, "I hape anxiously to know how your families are in this warme weather. Is Mr. B. healthy working on his business? Also your daughters and sons? I had begun to study my lessons at the last Tuesday. In my lessons, Greek and Latin are very hard, but I am trying to learn them slowly. I have sent you Gerge at the last Friday, but he is not a boy who I promised you. It is Masuda who I promised you to work in your house after me. When I leaved your house at the last Friday, Masuda could not go to you for some business, and Masuda sent me Gerge. At that day Masuda promised Gerge that Masuda must go to you after Gerge worked two weeks in your house. I think Gerge wish to go away from you by the reason which I written above. If Gerge leave your house, then my friend Masuda who I promised you, will take work in your house. Masuda is a nice and smart boy, but he cannot understand English well. Please you tell him how to do every thing, and you can pay him what you think, $2 or $2.50 a week in first week. If Masuda can not work in your house, you go and find another school-boy in Japanese Gospel Society. I think you can find some nice school-boy there."



DESIGN FOR MARKING TOWELS.

In discussing housekeeping, East and West, this lady—Boston born and bred, but who has long lived on this coast—said that housekeepers on the Pacific Slope did not wear themselves out with household cares as did those in the East—their housekeeping was less fine and there was more dirt in the corners! They were, however, cleanly in all essential things, but had reached the point of knowing what to do and what to leave undone, and did not worry over non-essentials. As there is far less of the kind of economy practiced here that Benjamin Franklin enunciated in the now trite axiom: "Take care of the pennies and the dollars will take care of themselves," than in the East, another kind of economy is practiced, that saves time and strength—two factors that many of us undervalue. Instead of "eternally darning" stockings for the boys, mothers buy the cheap hosiery and discard it when the holes become formidable. A dozen pairs of stockings at 10 cents a pair will last a long time for even work and play wear, and

Miscellaneous Advertising.

When Baby was sick, we gave her Castoria,
When she was a Child, she cried for Castoria,
When she became Miss, she clung to Castoria,
When she had Children, she gave them Castoria.

cost no more than one really fine pair for Sundays. Of course, what a boy needs is a pair of buckskin leggins that reach up to his neck, or his waist at least, and 17 pairs of calfskin shoes per annum, which was the number worn out by a certain New England girl, who afterward became a great and notable woman—partly because she had an unusually strong and well developed body to begin with. Then the washing and ironing almost universally are done out, and the laundry is as much a feature and necessity of society here as the small grocery or country store in the East, the mill and the blacksmith shop—and it simplifies housework wonderfully. The cheap and excellent laundering of the Chinese has undoubtedly had much to do with popularizing this branch of work, and the steam laundry will take the place of the Mongolians as they are driven out. With "bread from the bakers," it is easy to see how a great many families can dispense altogether with "hired help," and when all woman kind is "above" working in the kitchen; housekeeping then can be made possible by the transfer of the heavy work to outside forces. Public kitchens will probably also be established, where meats can be roasted and soups made—and, all things considered, it will be economical financially, too.

PATTERN FOR KNITTED LACE.

CAST on 16 stitches.

1st row.—(a) Knit 2, thread over twice, purl 2 together, knit 1, thread over twice, purl 2 together, knit 1, thread over twice, purl 2 together, (a) knit 1, (b) thread over twice, narrow, thread over twice, narrow, knit 1, (b),

2d row.—(c) Slip 1, knit 1, knit 1 and purl 1 in double loop, knit 1, knit 1 and purl 1 in double loop, (c) knit 1, (d) thread over twice, purl 2 together, knit 1, thread over twice, purl 2 together, knit 1, thread over twice, purl 2 together, knit 2, (d).

3d row.—Repeat from (a) to (a) 1st row, knit 3, repeat from (b) to (b) 1st row.

4th row.—Repeat from (c) to (c) 2d row, knit 3, repeat from (d) to (d) 2d row.

5th row.—Repeat from (a) to (a) 1st row, knit 5, repeat from (b) to (b) 1st row.

6th row.—Repeat from (c) to (c) 2d row, knit 5, repeat from (d) to (d) 2d row.

7th row.—Repeat from (a) to (a) 1st row knit 7, repeat from (b) to (b) 1st row.

8th row.—Repeat from (c) to (c) 2d row, knit 7, repeat from (d) to (d) 2d row.

9th row.—Repeat from (a) to (a) 1st row, knit all the rest.

10th row.—Knit 14, repeat from (d) to (d) 2d row.

11th row.—Repeat from (a) to (a) 1st row, knit all the rest.

12th row.—Bind off 8 stitches, knit 5, repeat from (d) to (d) 2d row.

There should now remain 16 stitches on the needle as at the commencement. Repeat from 1st row. DAISY.

HINTS FOR THE DINING TABLE.

NAPKIN rings are in bad taste, as a soiled napkin is not supposed to be put upon the table a second time. This for people who can afford to practice high etiquette; but if you do put a napkin on the table a second time, then by all means have some means of distinguishing it from that of another person.

Breakfast napkins are very pretty with the family initial embroidered in the center. In the end it is the best economy to purchase the best of napery; good double-damask, Irish linen. There is almost no limit to the usefulness of such goods. If you darn the small thin places as soon as they begin to wear, they will last an indefinite period as table cloths, and afterwards the borders which do not wear so rapidly, will make good napkins for everyday use. The parts that are too much worn for this, make good glass and china towels.

I saw at a friend's house some very pretty side-board covers. They were made from the border of an old-table cloth; several inches of the pattern were traced with red marking cotton, forming a showy border. They were lined with old white muslin, and when starched very stiffly, stayed clean for a long time.

Where there are children, in purchasing new table napery it is better to buy heavy, coarse linen for every-day wear. Keep the clean napkins in a drawer with lavender and other sweet herbs, or small bags of orris root, so that they will come to the table smelling of these, instead of vile laundry soap.

At a fashionable dinner the napkin should be allowed to drop unfolded by the side of the plate after the meal; at a social dinner follow the example of your hostess.

Philadelphia. MRS. A. E. MELVILLE.

B. B.'S.

A FEW months ago a lady contributor to the R. N.-Y. recommended corrosive sublimate very emphatically. Now, several years ago I had a double stone building that I converted into a kind of "flat" for tenants by subdivisions for families and with numerous extemporized board partitions for bed-rooms, and in less than two years the house was alive with B. B.'s. The lady's antidote was my favorite, and by the greatest vigilance I could in a measure hold the upper hand, but could not exterminate them. I then decided to give a thorough trial to pyrethrum—more commonly called Persian Insect Powder. The plant is now cultivated in this country. A Mrs. Hill, of California, had 100 acres in 1884, and manufactured 10 tons, and in 1885 she planted 200 acres more. It usually sells at about $1 per pound. I sprinkled about an ounce in empty bed-rooms, and proportionately more in larger rooms, and closed the doors to confine the odor to do its deadly work. In occupied rooms a sheet was spread on the floor or carpet, and a good thumb-and-finger pinch, or half teaspoonful was sprinkled on each loose article of bedding and wearing apparel hanging in the room, and all were tied up in the sheet so that the odor might effectually permeate each article. The powder was liberally dusted on the ends and edges of the mattresses and ticks, and rubbed in (it disappears under the rubbing like starch flour), and a small trail of the powder was drawn round on the strips that support the slats and in the grains or notches for them, and some was sprinkled on carpets and around baseboards. This was done in the morning, and the rooms were kept closed till bed time. The experiment proved a grand success—the house was cleaned.

Others in this vicinity have tried with equal success—and some feel as though they had little sympathy for those who are troubled, and persistently fight the pests in the old-fashioned ways of overhauling and scalding. Though scalding kills those exposed to it, it does not touch those that are secreted about the walls, nor those just hatched and attached to the clothing, and hence the failure to make a total extermination. I think an ounce-and-a-half to two ounces about right for an ordinary bed-room and bed—no matter about the number of B. B.'s, it takes just as much odor in the air of the room to kill five as to kill a thousand. All the rooms of a common house can be treated in less than an hour, so the saving of labor more than balances the cost of the powder.

An ounce put into a gill of cold water with as much whiskey to keep it from spoiling, and used as cologne water on the heads of children or on dogs, will eradicate vermin.

S. D. NEWBRO.

DOMESTIC RECIPES.

A GOOD PLAIN CAKE.

ONE cup of brown sugar, one egg, one cup of sour cream, a pinch of salt, two cups of flour, one teaspoonful of soda, flavor with nutmeg.

PICKLED CRAB-APPLES.

I WISH to tell the sisters if they are intending to make sweet pickles out of Hyslop crab-apples, to put them out doors over night, and let them freeze solid—this will take out all the bitter taste. Do not thaw them out but put them in the steamer and steam till done, then pickle as usual.

When making frosting, use only the freshest eggs.

A few drops of kerosene in cooked starch keeps the irons from sticking.

MRS. RUTH E. HOOSE.

POTATO SOUP.

THE following is, I think, an improvement upon the potato soup given in RURAL of Jan. 16. Boil one large turnip cut into dice, three tablespoonfuls of rice and a small spoonful of salt in two-and-one-half quarts of water for three-quarters of an hour. Then add 12 large potatoes peeled and sliced and cook until they fall in pieces.

Mix one tablespoonful of flour with one egg, and add to one pint of milk and stir in while boiling; add a piece of butter the size of an egg. Boil up and serve.

TURNIP PIE.

Not having any carrots, I tried turnips, and they were excellent, made the same way as pumpkin pies. One medium-sized turnip will make two pies. EVA M. HOLMES.

WALNUT CAKE.

BEAT one cup of granulated sugar with half a cup of butter, yelks of two eggs, half a cup of milk, and enough flour through which one teaspoonful of baking powder has been sifted, to make an ordinary cake batter. About two cups will be required. Bake in a round tin; when done and cool split in two. Crack out a pint of walnut meats, save out some of the whole halves for the top of the cake and chop the rest. Boil together a cup of sugar with a third of a cup of water, try it in cold water, and when it is stiff but not brittle, pour it over the whipped whites of two eggs, beat hard until it creams, mix it with the chopped meats, and spread half between the cakes and the rest on the top. Press the whole meats tightly into the top. Orange cake can be made in the same way, using, instead of the nuts, the juice and grated rind of two oranges. BESSIE.

QUESTIONS ANSWERED.

FOWL A LA MAYONNAISE.

WE give the following in answer to a request for the same:—Roast a young fowl, and when cold cut it up into joints. Put a layer of tender lettuce leaves on a dish, and on this a layer of the chicken. Over these slice hard-boiled eggs, about two, two anchovies and a few capers. Now add another layer of chicken, some washed water-cress dusted with a little dry mustard powder. Top the dish with some of the center leaves of lettuce, the wings and some small pieces from the breast. Garnish with slices of egg, and pour a mayonnaise over the whole.

FOWL A LA REMOULADE.

PUT a chicken trussed as for boiling into a stewpan with a pint of stock, an onion, a carrot, a slice of lemon and a bunch of sweet herbs. Simmer until tender, let it become cold, cut it into dice, place in a salad dish and cover with a dressing made of equal parts of table oil and vinegar, and the yelks of two hard-boiled eggs rubbed smooth. Cover with pickled French beans and slices of hard-boiled eggs.

Miscellaneous Advertising.

Pain in the Side

Is a symptom of disease. It may be caused by Rheumatism, or by Neuralgia, but it usually indicates a disordered condition of the Stomach, Liver, or Kidneys. Ayer's Sarsaparilla corrects the action of the vital organs, and removes every trace of disease from the system.

Last fall and winter I suffered from a dull, heavy, pain in my side. I did not notice it much, at first, but it gradually grew worse until it became almost unbearable. During the latter part of this time, disorders of the Stomach and Liver increased my troubles. I began taking Ayer's Sarsaparilla, and, after faithfully continuing the use of this medicine for some months, the pain disappeared and I was completely cured.—Mrs. Augusta A. Forbush, Haverhill, Mass.

Ayer's Sarsaparilla,

Prepared by Dr. J. C. Ayer & Co., Lowell, Mass. Sold by all Druggists. Price $1; six bottles, $5.

MAKE HENS LAY

SHERIDAN'S CONDITION POWDER is absolutely pure and highly concentrated. It is strictly a medicine to be given with food. Nothing on earth will make hens lay like it. It cures chicken cholera and all diseases of hens. Illustrated book by mail free. Sold everywhere, or sent by mail for 25 cts. in stamps. 2½-lb. tin cans, $1; by mail, $1.20. Six cans by express, prepaid, for $5. L. S. Johnson & Co., P. O. Box 2118, Boston, Mass.

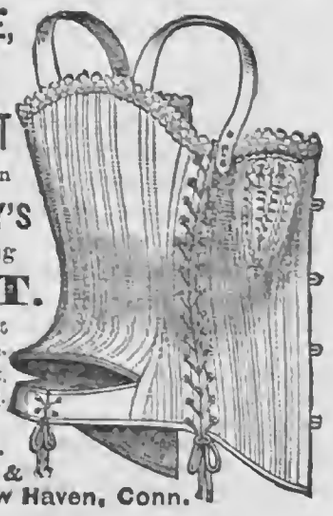
ELEGANT SHAPE, HEALTH and COMFORT

Perfectly Combined in

MADAME FOY'S

Skirt Supporting

CORSET.



It is one of the most popular and satisfactory in the market. For sale by all leading dealers.

Price by mail $1.30.

FOY, HARMON & CHADWICK, New Haven, Conn.

EPPS'S

GRATEFUL—COMFORTING.

COCOA

I HAVE SHAVED MYSELF

For over 30 YEARS always using the

GENUINE YANKEE SOAP.

It has no equal."
R. MILLER, P. M.,
W. Farmington, O.

For FIFTY YEARS unequaled as a Shaving Soap. Standard for quality in U. S. Navy. Avoid imitations. Obtain it of your Druggist, or send 12c. in stamps for full size trial cake to the

J. B. WILLIAMS CO.
Glastonbury, Conn.

Form'ly Williams & Bros Manchester, 1840.

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TRADE ORA ET LABORA MARK.

FOOD

FOR INFANTS AND INVALIDS.

The only perfect substitute for Mother's Milk. The most nourishing diet for invalids and nursing mothers. Keeps in all climates. Commended by physicians. Sold everywhere. Seend for our book "The Care and Feeding of Idfants." Sent free. DOLIBER, GOODALE & CO., BOSTON, MASS.

THE GRANGER FAMILY FRUIT & VEGETABLE

EVAPORATORS.

$3.50, $6.00, and $10 00.

Send for Circular. EASTERN M'F'G Co., 208 So. 5th St., Phila., Pa.

12 DOLLARS each for *New* and *Perfect* SEWING MACHINES. Warranted five years. Sent on trial if desired. Buy direct and save $15 to $25. Organs given as premiums. Write for FREE circular with 1000 testimonials from every state. GEO. PAYNE & CO., 47 3rd Ave. Chicago, Ill.

ALLEGER ORGANS you can get a strictly first class organ from $50 to $75, stool and book. Warranted 5 years. It will pay to send for circular before you buy. Address the manufacturer. H. W. ALLEGER, Washington, New Jersey.

"IN THE spring the young man's fancy lightly turns to thoughts of love," but persons in middle age whose powers are weakened by blood taint and corruption, get satisfactory results from the use of Warner's safe cure.

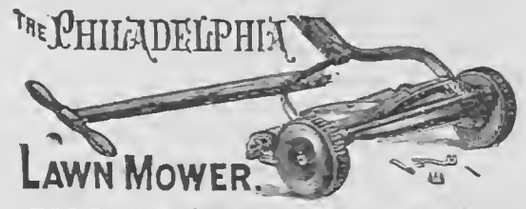
FARMERS,

Send for Circulars and Price List of The BARNES PAT. IRON FENCE, the cheapest and most durable fence in the world. Address
THE BARNES PAT. IRON FENCE CO., EASTON, PA.

AHEAD OF ALL COMPETITION

1886.

THE PHILADELPHIA



LAWN MOWER.

FOURTEEN SIZES FOR HAND USE.
Weighing from 21 to 51 Pounds.
THREE SIZES FOR HORSE POWER.

Graham, Emlen & Passmore,

Patentees and Manufacturers,

631 Market St., Philadelphia, Pa.

HAY CARRIER Mallory Trackless HAY ELEVATOR,

best in the market for filling a barn with hay. Better than any track carrier. Easily put up and taken down. Price only $5. Warranted to give satisfaction or money refunded. Best hay fork in the market, $3.25. Write for catalogue and terms to agents.
HERBERT BAKER, 93 Erie St., Toledo, O.

The Runabout Wagon.

Patented January 15, 1884.

Twelve different styles. *Light, Strong, Convenient* and *Low-priced*. The popularity of the RUNABOUT is such that its sale exceeds that of all other vehicles of its class combined.

Send for Illustrated Catalogue and price list direct to the manufacturer. ORVILLE H. SHORT, Syracuse, N. Y.

50 CARDS, Hidden Name, etc., 1 pretty Ring, outfit and present, all 10c., 6 lots 50c. O. A. Brainard, Higganum, Ct

Boys and Girls. *"The Dawn of Day,"* a handsome illustrated paper (size Youth's Companion) sent 3 months on trial for only **10c.** silver, and a lovely set of cards *free*. *The Dawn of Day*, 127 7th St., Detroit, Mich.

Secret of a Convent.

ST. ANN'S ACADEMY, 814 Tucker Street, PHILADELPHIA, Pa.—One of the sisters was very sick with constant pain in the back. Could not take any solid food. She can eat meat and vegetables, sleeps well and attend to her other duties. She suffered constantly from ulcers in the mouth and throat. Are now all gone. She used Warner's safe cure.—SISTER M. VICTORINE.

MOSELEY'S OCCIDENT CREAMERY AND REFRIGERATOR

Thick walls and Double Air Space. Positively no sediment drawn with either cream or milk. No Lifting of Cans. No Skimming of Milk. SOLD strictly ON MERIT.

MOSELEY & PRITCHARD Mfg. Co.

Send for Circulars to the manufac'rs. CLINTON, Iowa.

CHANNEL CAN CREAMERY.

Makes more Butter than any other process. Calls for less labor and ice. Will raise all the cream without ice. Automatic Butter-workers, Churns, etc. One at wholesale. Agents wanted. Send for circulars.

Wm. E. Lincoln Co.,

WARREN, MASS., and FORT ATKINSON, WIS.

Newton's improved **COW TIE** holds them firmly, draws them forward when lying down, pushes back when standing, gives freedom of head, keeps clean. E. C. NEWTON, *Batavia, Ill.*

News of the Week.

HOME NEWS.

SATURDAY, May 8, 1886.

THE boycotting of the Mallory steamship line at Galveston, Texas, has been declared "off" by the Knights of Labor, after it had really collapsed. The "Gould system" strike originated from efforts to stop the transportation of freight to the vessels of this line. The Gould strike has also collapsed and has been declared "off" by the Executive Committee of the K. of L, after a spirited address by the visiting Congressional Investigating Committee, and a conference between it and the St. Louis Citizens' Committee and the Local Board of the K. of L. Many of the old hands have gone to work again on the roads; others must find employment elsewhere, as the capable among the new hands will not be discharged to make room for the strikers.....The strikers in all cases are paid a certain sum weekly while idle during the strikes; how are those to live who can't get work after the collapse of the strikes?.....Strikes for shorter hours—ranging from eight to 12, according to the "work day" of each class before May 1—have been very numerous all over the country during the week. Many trades have granted the whole or a considerable part of the concessions demanded, especially those, such as the building trade, which cannot be affected by competition in other places where the shorter hours are not observed. Other employers resolutely resist, on the ground that either they want to manage their own business; or that they will not submit to coercion; or that while willing to treat with their men individually, they will have nothing to do with labor organizations; or that the compliance with the demands would either disastrously cripple or entirely ruin their business. The results will doubtless be a considerable decrease in the hours of labor in most trades with a corresponding decrease of wages in many cases. "Masters" and "men" are organizing, and as each class will be likely to press any advantage that may arise, the struggle is likely to continue indefinitely. From extended telegraphic inquiry, this morning's Bradstreet estimates that 325,000 men have hitherto taken part in the short-hour movement; that 175,000 have struck, and 150,000 have received concessions without having to strike. Some 35,000 have gained their ends by striking. Business has been greatly disturbed if not absolutely paralized at Milwaukee, Cincinnati, St. Louis, Baltimore and several other large centers of wholesale trade. At Chicago no wholesale business worth mentioning has been done. The few mail orders received have been hung up, as merchants generally have been awaiting the settlement of the labor troubles.....The most disastrous labor troubles occurred at Chicago and Milwaukee. In both cities there are large colonies of foreign revolutionists—chiefly Socialists, who want an equal division of all property, and Anarchists, who want the abolition of all laws and a complete upsetting of the present order of society. These have, for the most part, fled or been driven from their own countries; others, discontented with repression at home, have sought license, not liberty, here. They have been permitted to talk, harangue, march, drill, buy and prepare explosives, and imagined they could do as they liked. The worst firebrands in Milwaukee are Poles; the worst in Chicago, Germans. On May 1, over 40,000 men struck for shorter hours in Chicago, and the agitation continued violent but peaceable till Tuesday. A large body of thieves, cut-throats and the offscourings of a large city, mixed with discontented workmen and hot-headed revolutionists, then met in a large square, and were greatly inflamed by incendiary speeches from the Anarchist leaders. A considerable squad of police arrived on the ground to preserve order, and were greeted with insulting cries and menacing gestures, then pelted with stones, and finally a dynamite bomb was hurled among them, killing a number and wounding and mutilating many others, and some of the pressing crowd. The police fired upon their assailants, and a number fell dead and wounded, while a second volley scattered the cowardly mob in all directions. Much trouble, but no serious fighting has occurred since. Large subscriptions are being raised for the families of the killed and wounded officers. A large number of arrests of Anarchists and other ringleaders of violence have been made. Much dynamite, many incendiary manifestoes, etc., have been seized. The Knights of Labor and trades' unions have vigorously repudiated all connection with the outbreak, or any form of illegal violence. The strikes still continue, but in spite of mutterings of more trouble, no serious outbreak is feared.....At Milwaukee the militia were called out to protect a number of threatened factories; they were approached by a horde of excited, menacing rioters; these were sternly warned to halt, and on continuing their advance, the troops fired low, to kill. A number were killed, and more wounded, while the rioters sought safety in flight. In both cases the foreign Anarchist and Socialist elements were the prime movers in the disturbances.....There is little or no likelyhood that the Democratic House will pass the Republican Senate bill admitting Dakota as a State. It is sure to be Republican and must, therefore, wait at least two years more before any part of it can be admitted.....A great deal of trouble is constantly arising from the crossing of cattle over the border line between the United States and Mixico. Congress is seeking to surpress the evils.....Efforts are still being made in Congress to close the U. S. mails to all lottery circulars, etc., as well as to newspapers that publish lottery advertisements.....The extension of the benefits of the Signal Service to farmers is still being pressed in Congress.....Ex-President Arthur was well enough last Tuesday to attend a great dog show held here the past week. ....The House objects to make appropriations to carry into effect that Mexican treaty negotiated by Gen Grant and opposed by our tobacco and sugar industries.....The treaty with the Sandwich Islands, admitting their sugar duty-free, is however likely to be renewed.....Our annual pension appropriations for the benefit of the survivors of the late war are as great as those of many great nations for the support of their standing armies and pension list. Congressman Hewitt of New York says the taxpayer's limit of endurance has been reached, and the discontent of a tax-ridden people is breaking out in riot, death and dynamite.....Mrs Garfield's Cleveland residence is offered for rent..... ....Our occasional contributor, Prof. Brooks, of Phelps, N. Y., has discovered another comet—this is now in the constellation Pegasus. ....The Cherokees are to distribute their $300,000 lease money per capita—about $20 apiece. .....Maxy Cobb, the most famous trotting stallion in the world, died Monday, at Philadelphia, of inflammation of the bowels. His record, 2.13¼, made at Narragansett, near Providence, R. I., Sept. 20, 1884, has never been equaled by a stallion. It is said $40,000 were refused for him a short time ago..... The Lachine and Rideau Canals, Canada, were opened for navigation Monday..... The big log-rolling bill, appropriating $15,000,000 for "Rivers and Harbors," got 41 majority in the House, Thursday.....Jeff. Davis has attended the unveiling of the late Senator Hill's statue, at Atlanta, and a local centennial celebration at Savannah, and has been everywhere enthusiastically received by mighty crowds gathered to do honor to the Ex-Chief of the Confederacy. He thinks the Lost Cause not dead, but sleeping. Considerable loyal anger at the North, but the sober sentiment is that the North fought to make this a free country, where all can do as they please within the law, and that not the least among its glories is the fact that the head of the most extensive and bloodiest rebellion the world has ever seen, has been allowed to live to talk as this old man has been talking..... ..Yesterday the American fishing vessel David D. Adams, went into Digbyport, in the Bay of Fundy, to buy Canadian bait and ice. The commander of the Canadian frigate Landsdowne at once formally seized her. Some indignation, not unmixed with amusement here. How will Canada wriggle out of the difficulty? We say our vessels have a right to trade in Canadian ports. The Imperial Government will hardly support the colonial action. The President is urged to close American ports to Canadian vessels till the wrong is righted..... ..Gov. Larrabee, of Iowa, warns violators of the Prohibition Law that henceforth they must expect no Executive clemency, and calls upon priests, ministers, teachers and the press to enlist their moral forces for the law.....The Kentucky Legislature is working on an anti-lobby bill, which imposes a fine of $500 on any person loitering around the lobbies of either House importuning members to vote for or against any bill, this being held *prima facie* evidence of guilt.....Gen. Logan's amendments to the Mexican Pension Bill would, it is calculated, require an expenditure of not less than $600,000,000!.....

FOREIGN NEWS.

SATURDAY, May 8, 1886.

OF late no European question has been of more interest to all English-speaking people the world over than Gladstone's attempt to satisfy Irish longings for "home rule," and make a satisfactory settlement of the Irish land difficulty which has cursed the "fairest peasantry" in the world for generations—yes, for centuries. The "Grand Old Man," after a long life of active statesmanship, finds the only permanent way out of the interminable Celtic discontent and agitation lies in the direction of an Irish Parliament for the Irish in Dublin, with an Upper House whose members are to be partly named by the Crown, partly represent the wealth and aristocracy of the country, and partly be elected by the people. Full precautions seem to be taken to restrain any manifestation of disloyalty to the Empire; and all the concessions made yield a measure of self-government and independence considerable below what is now enjoyed by Canada and the Australian and New Zealand colonies. Supplementary to Gladstone's Home Rule Bill, is his Land Purchase Bill, which provides for the purchase of Irish estates from the landlords for sums aggregating 20 years' rental, the funds to be supplied by the Imperial Government. The land is to be divided into small farms among the present tenants and all others who may desire, and the purchase money is to be paid to the Government in stipulated yearly installments, the land to remain as security for the debt until paid. Only a bare idea can be here given of the general drift of both measures, each of which has a multitude of provisions and safeguards.....The Liberal Cabinet split on the measures, Lord Hartington, the aristocrat, and Mr. Chamberlain, the radical, being alike unable to agree with their Chief, Mr. Gladstone. Other less important personages followed their example. The Liberal party is split on the matter, the bulk of the party adhering to the fortunes of "Our William." The latter has made several concessions, and seems willing to make several others to secure a majority in favor of the "second reading" of the Home Rule Bill in the Commons. Then it will be in "Committee of the Whole," and amendments, and alterations will be in order. There's nothing definite now, except that after what has been done and said by England's foremost Statesmen, Ireland can never again be subjected to the humiliation, rapine and tyranny of the past. ..Perhaps a greater subject of general European interest just now is the attitude of Greece. After the Turko-Russian war, the treaty of Berlin gave Greece a large slice of Turkish territory on the northwest of what she already had, as a reward for her pacific conduct during the war. Turkey has ceded only a part of this gift, and during the late war between Bulgaria and Servia, Greece resolved to pitch in and seize the rest of the territory, as Turkey would probably be hampered by the rival belligerents. The sudden collapse of Servia, and the consequent peace, rendered the Greek action too slow, while the acquisition of Eastern Roumelia by Bulgaria exasperated Greek jealousy. The little kingdom, the pet creation and protege of the Great Powers, continued to increase and drill her army and fit out her navy. The Great Powers protested and threatened, but she kept right on. The Turks, if permitted by the Powers, could have made mince-meat of the Greek hosts in short order; but Turkey knew that her first attack on the Greeks would be the signal for the instant advance of the Russian and Austrian armies, and would probably result in a general European conflagration. She has been obliged to keep up her army on a war footing, however, at vast expense to her bankrupt treasury, by the action of Greece, and has been vigorously protesting to the Powers. During the week these have brought their greatest pressure to bear upon the Hellenic Government, but from to-day's cablegrams it appears, in vain. This morning's cable says the Greeks are pushing rapidly to the frontier; the Turks are there already, and a conflict may occur at any hour. The Ambassadors of the Powers have left Athens and embarked on the vessels of their respective nationalities, except the Russian Ambassador. The fleets of the Powers will blockade the Greek ports and prevent a naval conflict between the Greeks and Turks. They are trying to coerce the plucky little kingdom by boycotting her. There are so many open and concealed complications and entanglements in the "Eastern Question" that if war once begins, no one can tell when or how it may end, or how many nations may plunge or be drawn into it.....

AGRICULTURAL NEWS.

SATURDAY, May 8, 1886.

THE weight of fleeces from the 31,710,221 sheep in New South Wales, last year, was, for the aged sheep, unwashed, five pounds; hot-water washed, three pounds three ounces; scoured, two pounds 14 ounces. Lambs, one pound 13 ounces unwashed; one pound nine ounces washed.....Florida cattle ranges aggregating 67,200 acres have been purchased by Wyoming cattlemen, for $84,600..... The practice of spaying is said to be rapidly increasing on the ranges. There appears to be no other way of disposing of the over-stock of she cattle than to spay them and convert them into beef. Spayed animals are claimed to fatten more rapidly than steers, shrink less in transit and command better prices in the Eastern markets.....The grass seed trade of Chicago, during 1885, amounted to 68,000,000 bushels..... Rich beds of phosphate have now been found in Florida. Hitherto the supply, except from bones, has come mainly from the phosphate beds of South Carolina..... In the six months ending March 31, England imported from India 7,486,000 cwts. of wheat, as against only 4,024,020 cwts. in the same period of the preceding year; while the imports from America were only 5,984,000 cwts. against 10,264,000 cwts.....The French appropriation for the Ministry of Agriculture for 1886 is $8,154,312.....The Kentucky House recently passed a bill making it a felony, with from one to three years' imprisonment, to bring into the State cattle diseased with pleuro-pneumonia, or to own cattle so diseased and to allow them to come in contact with healthy cattle; also making it a misdemeanor, with from $100 to $1,000 fine, and a term in jail, to keep cattle so diseased in any inclosure within 600 feet of the highway. Further, upon complaint, the county judge is to have a jury examine any herd, and kill and burn infected animals.....Hog cholera has become epidemic at Bayside, Long Island, and in its vicinity. Several hundred hogs have died from the disease within a few days, one farmer having lost 30.....

Crops & Markets.

SATURDAY, May 8, 1886.

Late cables from the United Kingdom have been quite favorable to the prospect for all growing crops, especially wheat, though the area under this is about five per cent less than last year. Red wheats are 6d. per quarter (1½c. per bushel) dearer than a week ago. At Paris the prices of wheat and flour have been higher and firmer. Growing French wheat doing well. Wheat in Central Europe has had fine weather; but liberal sales in Austria and Hungary have depressed the market. France has doubled her import duty on oats, raising the tax from two cents to four cents per bushel.

The Australian wheat crop is a small one this season. Estimates from Melbourne, March 10, are as follows for colonies mentioned: Victoria, 10,433,000 bushels; South Australia, 5,161,000; New Zealand, 4,250,000; New South Wales, 3,400,000—making a total of 28,244,000 bushels for these colonies. The estimated surplus for export is 5,540,000 bushels, which it is assumed will be needed by New South Wales, Queensland, Tasmania, Western Australia, New Caledonia, Fiji and the South Sea Islands.

Reports received last week from the agents of the McCormick Harvesting Machine Co., Chicago, estimate the area sown to the spring wheat crop as compared with last year. In Dakota, 115 per cent.; Minnesota, 100; Iowa, 100; Wisconsin, 95, and Nebraska, 92. The season has been rather backward in Nebraska, but as a whole the spring wheat crop of the Northwest is having a fine start.

Reports from every county in Ohio, Illinois and Indiana show that all crops are now two weeks in advance of the average spring season and are in a much better condition than at the same date last year. A summary of the reports shows that the average per cent. of the wheat crop in Ohio is 95, Illinois 94 and Indiana 94; oats in Ohio 90, Illinois 97 and Indiana 92.

Owing to the labor troubles throughout the country, and especially at Chicago, speculative dealings in wheat have been quite limited during the week. Comparatively little wheat has left Chicago by water, and very little by rail. Here prices have risen more than at the other chief receiving points. The visible supply fell off 1,300,000 bushels during the week.

In corn there was a decline of 1,700,000 in the visible supply; but the markets have been weak.

Oats, too, have been weak and lower, though the visible supply for the week ending May 1, showed a decrease of 35,000 from the previous week.

PEPPERMINT has gone up; but the report that it is to be "cornered" is emphatically denied by large dealers. A "corner" was much likelier six months ago, when, as we mentioned, the smallness of last season's crop was first realized.

Present prices of hops—nine to ten cents—offer little encouragement to growers. Hop yards in this State are said to be as far advanced now as they were last year on June 10—the earliest season since 1885. Then a frost on May 28 nipped the vines and there wasn't over half a crop, and prices went up accordingly. In the absence of frost the crop this year must be exceedingly heavy, though as many have abandoned or curtailed their hop yards, the aggregate may not be excessive.

The main object of wool-dealers now is to keep down prices until most of the new clip has been marketed—say, July 1. Labor disturbances at home, preventing manufacturers from buying heavily, and extremely low prices abroad for foreign wool, help them in this scheme. Here is a comparison of the market prices in London for the last five years:

	—1886.— Apr.	Feb.	'85. '84. June.		'82. '82 June.	
	d	d	d		d	
P. Phillip, av'g. grease	8½	9¼	10¼	12	11½	13½
Sydney, " "	6½	7	8	9½	9½	10½
N. Zealand, " "	8½	9½	10	12	11½	12½
Cape, " "	5½	6	6½	7	7	7
R. Plate, " "	5¾	5¼	6½	7¼	7¼	7¼

[Multiply these by 2, to get the price in cents per pound.]

The latest London advices say colonial wool is cheaper now than at any time in the present generation.

MARKETS BY TELEGRAPH.

SATURDAY, May 8, 1886.

CHICAGO.—Compared with cash prices a week ago, "regular" wheat is ⅜c. lower; No. 2 Spring, 1⅜c. lower. Corn, 1⅜c. lower Oats, steady. Pork, unchanged.

WHEAT, active: Sales ranged: May, 76¾@77¾c; June, 78¾@80¾c; July, 80¾@81¾c; No. 2 Spring, 76¾@77¾@ No. 3 Chicago Spring, 68¾@70c. CORN.—May, 34¾c; 35c; June, at 36@36¾c; July, 37@37¾c. OATS—Dull

Sales ranged, May, 29¼@29⅜c; June, 29⅜@29¾c; July, 29@29⅛c. RYE.—No. 2, 60c. BARLEY—No 2, at 59c. MESS PORK.—May, at $9 05@9 07½; June at $9 10@9 20; July, $9 20@9 25; August, $9 30@9 40. LARD.—Steady; sales ranged, May, $5 87½@5 90; June, $5 92½@5 95; July, $6 00@6 02½. BULKMEATS.—Shoulders, $4 00@4 10; Short rib sides, at $5 17½@5 20; Short Clear sides, at $5 55@5 60.

ST. LOUIS.—Compared with cash prices a week ago, No. 2 Red wheat is steady. Corn, ⅜c. higher. Oats, unchanged. Pork, 10c. higher. Cattle, a trifle higher. Sheep, unchanged.

WHEAT.—No. 2 Red, Cash, at 86¾@87c; May at 86¾c; June at 87¼@87½c; July at 82¾c. CORN.—Quiet; No. 2 mixed Cash, 33@33¼c; May, 33c; June at 33¼c. OATS—Dull No. 2 mixed, Cash, at 29@29½c; May, at 29¼c; June, 29¼c. RYE—Strong at 62c. BARLEY.—American at 62@85c. BUTTER.—Quiet; Creamery, 19@ 30c; dairy, 16@18c. EGGS—Quiet at 7¾c. FLAXSEED at $1 03@1 05. PORK, at $9 25. BULK MEATS.—Long clear at $5 25; Short Rib, $5 35; Short Clear, $5 50. LARD—Steady at $5 70@5 75. CATTLE—Market active and strong; choice shipping and export steers, at $5 15@5 60; fair to medium, $4 75@5; common, $3 45@4 60; butcher steers, $3 75@4 10; cows and heifers, at $2 50@4 10; stockers and feeders, $3 35@$4 40. HOGS.—Market active and steady; butchers' and selected heavy, $4 10@4 20 common to good packing, $3 85@4 10; light, $3 90@4 10 SHEEP.—Market quiet at $2 50@5 00.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, May 8, 1886.

STATE OF THE MARKET.—Compared with cash prices last week, flour is 25c. lower; ungraded winter red wheat 1c. higher; corn, 3c. higher; oats, 2c. higher; pork, steady; butter, eggs and cheese steady; vegetables unchanged,

FLOUR, FEED AND MEAL, FLOUR—Quotations: Fine at $2 10@3 10; Superfine, $2 60@3 40; Extra No. 2, $3 25@3 65; Good to Fancy Extra State, $3 70@4 25; Common to Good Extra Western, at $3 25@4 00; Good to Choice Extra Western, $4 00@5 25; Common to Fair Extra Ohio, $3 25@3 75; Good, $3 80@4 20; Good to Choice, $4 25@5 00; Common Extra Minnesota, $3 25@3 60; Clear, $3 60@4 00; Rye Mixture, $3 50@3 90; Straight, $4 25@4 50; Patent $4 50@5 25. Bakers' Extra, $4 00@4 50; St. Louis Common to Fair Extra, $3 25@3 75; Fair to Good, $3 80@4 75; Good to Very Choice, $4 80@5 15; Patent Winter Wheat Extra, $4 40@5 25; City Mill Extra for West Indies, at $4 60; South America, $4 65@4 80. SOUTHERN FLOUR—Common to Fair Extra, $3 25@4 00; Fair to Choice do., $4 05@5 25. RYE FLOUR.—Superfine, at $3 20@3 40, latter for choice. CORN MEAL.—Yellow Western at $2 50@2 75; Brandywine, $2 70@2 75. FEED.—40 to 50 lbs. at 72½@77½c; 60 lb. at 67½@70c; 80 lb. at 70@72½c; 100 lb. at 80@82½c. Sharps at 90@93c. Rye feed nominal at 77½@80c.

GRAIN.—WHEAT.—Ungraded Winter Red at 85@90c.; No. 2 Red, 90¾@91c; Ungraded White, 90c; White State, 95@98c; No. 1 Hard Duluth, 97½c; No. 2 Red for May, 90¾@91c; do. for June, 91@92 3-16c; do. for July, 91¾@92⅝c; do. for August, 91¾@92⅝c; do. for November, at 95@95½c, do. for December, 96@96¾c. RYE.—Canada at 62@63½c; Western, 60@62½c; State at 64@65c. CORN—Ungraded Mixed, at 37@48c; No. 3, 41¼c, Steamer Mixed, 46½c; No. 2 Mixed, at 48c; No. 2 Mixed for May, 47¼@48c; do. for June, 46⅝@47 1-16c; do. for July, 46¾@47½c; do. for August, 47@47¼c. OATS—No. 3 Mixed, 36½c; No. 2, 37¼@37½; No. 1, nominal; No. 3 White, 39½@39¾c; Mixed Western, at 37@40c; White do., at 42@45½c; White State, 43½c; No. 2 Mixed for May, at 36⅝@36¾c; do. for June, 35¾@36c.

BEANS.—Quotations are: Marrows, $1 50; mediums, at $1 35; pea at $1 30@1 35; red kidney at $1 65 for choice; turtle soup at $1 75; white kidney, $1 50 for choice; California lima, at $1 80@1 90.

PEAS.—Green are quoted at $1 12½@1 15.

PROVISIONS.—PORK.—Mess quoted at $9 25@9 50 for Old and $10 25@10 50 for New; $10 25@$11 50 for Family Mess; $12 00@14 00 for Clear Back; and $9 50@9 75 for Extra Prime. BEEF.—City Extra India Mess, at $15@17; Extra Mess, in barrels, $8 00@8 50; Packet, $8 50@9 00 in bbls.; Fancy Plate, $9 00. BEEF HAMS.—Quoted at $20@20 25. CUT MEATS.—Clear, at 5¾c; Rib Bellies, light average, at 3½c; do, 12 lb, 5½c; Pickled do, 12 lb, 5 3-16@5¼c. MIDDLES—Long Clear in New York, 5¾c; at the West Long Clear, 5.35c; Short Clear, 5.50c. DRESSED HOGS.—City Heavy to Light, 6c; Pigs, 6¼c. LARD.—Western Steam spot, 6.20c; May, 6.15c; June, at 6.20@6.22c, closing at 6.21c; July, at 6.27@6.28c; August, 6.34@6.35; September, 6.40@6.41c; October, 6.48c, City steady at 6.05.

BUTTER.—Elgin Creamery, 23@24c; Pennsylvania do., 23@24c.; Western do., 19@23c.; State Dairy half-firkin tubs, 16@23c.; Welsh tubs, 17@20c; Western Imitation Creamery, 14@19c; Western Dairy, 10@16c; do. Factory, 11@15c.

CHEESE.—New State, at 4@10c; Old do, 3@10½c; Western, old, 3@8c; Skims, 1@2c.

EGGS.—State, at 12c; Western, at 11½@11¾c; Southern at 10@11c.

POULTRY.—LIVE.—Fowls, near-by lots, per lb, at 10c.; fowls, Western, per lb, 9½@10c.; fowls, Southern lots, per lb, at 9½c; Turkeys, per lb, at 10@11c; ducks, western, per pair, at 60c.@90c.; geese, western, per pair, at $1,25@1.50.

POULTRY.—DRESSED.—Turkeys, per pound, at 10@ pair, at 40@45c, per pound; fowls, Pennsylvania, 12c.; chickens, Philadelphia, light weights to prime, at 10@11c.; do. Jersey, at 10@11c; do State and western, at 9@10c. Ducks, Jersey, per lb, 13@14c; do. western, 12c. Geese, Jersey, at 10@12c; do. western, at 9@10c.

POULTRY.—FROZEN.—Turkeys, per pound, at 12@14c.; Chickens, per pound, at 8@11c.; Ducks, per pound, 12@14c.; Geese, per pound, at 9@10c.

GAME.—English snipe, per doz., $2; Plover, Western, per doz., $3.

COTTON.—The quotations, according to the American classification, are as follows:

	Uplands.	New Orleans, and Gulf.	Texas.
Ordinary	6 11-16	6⅞	6⅞
Strict Ordinary	7⅛	7 5-16	7 5-16
Good Ordinary	8 1-16	8¼	8¼
Strict Good Ordinary	8½	8 11-16	8 11-16
Low Middling	8¾	9 1-16	9 1-16
Strict Low Middling	9⅛	9 5-16	9 5-16
Middling	9 5-16	9⅜	9⅜
Good Middling	9¾	9 15-16	9 15-16
Strict Good Middling	10 1-16	10¼	10¼
Middling Fair	10 7-16	10⅝	10⅝
Fair	11 1-16	11¼	11¼

STAINED.

Good Ordinary	6¼	Low Middling	8
Strict Good Ord.	7 3-16	Middling	8¾

FRUITS.—FRESH.—Quotations are: Apples.—Baldwin, per bbl., at $1 50@1 75; Russetts, Roxbury, per bbl., $1 75@2 00; do, Hollens, $1 50@1 75. Cranberries.—Cape Cod, choice, per bbl., $3 50@4; do. choice, per crate, at 50c.@$1. Strawberries—Florida at 35@45c, per quart for best; do. poor at 15@25c; Charleston, per quart, at 25@45c.

FRUITS.—DRIED.—The quotations are as follows: Apples—Fancy evaporated, at 7c; choice, at 6½c; do. prime at 6@6¼c.; fancy North Carolina sliced, at 4c.; choice do. at 3c.; choice Tennessee quarters at 2c.; State quarters at 2½@3c.; southern sliced prime at 2@2¼c; do. common, 2c. Peaches—Peeled North Carolina, choice, 11@11½c; fancy, 12½@13c; extra fancy, 13¼c; Georgia, choice, at 11c; do, prime, 8@8¼c; unpeeled halves, 2¾@3¼c; unpeeled quarters at 2½@3c.; Delaware evaporated, peeled, 21@27c; unpeeled do., at 12@13¼c. Choice pitted cherries at 10@10¼c. Evaporated raspberries, at 14@15c; sun-dried do. 11@12c. Blackberries—Prime at 7¼@8c. Whortleberries at 6½c. Plums, at 6@7c; do. California, evaporated at 11c.

PEANUTS.—There is little doing; the sales are made up of small lots; prices are without change. Quotations at 6c. for best hand-picked, and 4½@4¾c. for farmers' grades.

HAY AND STRAW.—The following quotations are: for Choice Timothy hay at 85@90c; No. 1 at 80@82½c.; No. 2, 72½@75c; clover mixed at 65@70c; Clover, at 60@65c; shipping at 65c; Prairie, at 50@52½c. Straw.—Long rye, at $1 02½, short rye at 75@80c; oat, at 40@50c; wheat, at 40@50c.

TALLOW—Prime City quoted at 3¾c.

VEGETABLES.—Potatoes.—Maine, fancy, d. h. bbl. at $2 25; Nova Scotia per bbl., at $2 00; State, per 180 lb., $1 50@1 75; Burbank, State, bulk, per 180 lb, $1 62@1 87; Burbank, eastern and Nova Scotia, per bbl, $2 25@2 50; Hebron, do, do, do, per bbl, $2@2 25, Hebron, State, bulk, per 180 lb, $1 50@1 75; Prolific and Goodrich, eastern and Nova Scotia, per bbl., $2 00@2 25; Peerless, bulk, per bbl., at $1 50@1 75; Magnum Bonum, imported, 168 lb. sack, $1 80@2 00; Bermuda, per bbl., at $6@9; Florida, per bbl, at $6 00@8 00; Sweet potatoes, Delaware River, per barrel, at $2 50@3 25. Asparagus.—Colossal, per bunch, 35@40c; do, Norfolk, per dozen bunches, at $2@3; do, North Carolina, do, do, do, at $2@2 50; do, Maryland and Delaware, do, do, do, at $2@2 50; do, Shrewsbury, colossal, do, do, do, at $4@4 50; do. Prime, do, do, do. at $2 50@3 50; do, Oyster Bay, do, do, do, at $3@4 50. Beans.—Florida, per crate, at $1@2; do. Florida, round per crate, at $2@3. Beets.—Bermuda, per crate, at 50c; do, Florida, per crate, $1 00@1 25. Cabbages.—Eastern, per bbl., at $1 25@1 50 do, Florida, per barrel, at $2 50@4. Kale.—Long Island, per bbl., at 25c. Onions—Bermuda, per crate, at $2; do, Connecticut, per bbl., at $2@2 50, do, eastern, white, per bbl., at $1 75@2 25. Peas.—Charleston, per crate, $1@2 25; do, North Carolina, per half-bbl, crate, $2 50@3 50; do, Savannah, per crate, at $1 75@2 25. Radishes.—Norfolk, long, per 100 bunches, at 50@75c; do, do, round, do, do, do, at 75c.@$1. Rhubarb.—Long Island, per 100 bunches, at $2. Squash.—Florida, choice, per crate, at $1@1 25. Tomatoes.—Bermuda, per box, at $1; do, Key West, per box, at 75c.@$1.

LIVE STOCK MARKET.

NEW YORK, SATURDAY, May 8, 1886.

Shipments for six days, 1,265 live cattle, 8,540 quarters of beef, 85 live sheep, and 350 carcasses of mutton. BEEVES.—Ordinary to Good Bullocks sold at $5 10@5 90; Prime to Choice at $6@6 30. Bulls ranged from $3 50@4 60, and two Extras sold at $5; and Dry Cows at $2@4 50; Pennsylvania Steers, 1,448 lb, at $6 30; do, 1,407 lb, at $6 15; Slate do, 1,088 lb, at $5 25; Oxen, 1,635 lb at $5 25; Cow, 930 lb, at $4 12½; Pennsylvania Steers, 1,350 lb, at $6 15; do, 1,497 lb, at $6 10; do, 1,270 lb, at $6; Bulls, 1,930 lb, at $5; do, 1,350 lb, at $4 10; Cows, 1,120 lb, at $4; Pennsylvania Steers, 1,487 lb, at $6 25; Stag, 1,270 lb, at $4 60; Cows, 925 lb, at $3 65; do, 1,000 lb, at $3 25; Indiana Steers, 1,413 lb, at $6 16; Kentucky do, 1,600 lb, at $6 20; do, 1,166 lb, at $5 70; Chicago do. 1,235 lb, at $5 10, St. Louis do, 1,507 lb, at $6 10.

CALVES.—Common to Choice Veals, sold at 4@5c, and Buttermilks and Mixed lots, at 2½@3¼c; Veals, 126 lb, at 4c; do, 137 lb, at 5c; Buttermilk calves, 124 lb, at 2¼c; Veals, 152 lb, at 4¼c; Buttermilk calves, 102 lb, at 2¼c; Buttermilks and Veals, 126 lb, at 3¼c.

SHEEP AND LAMBS.—Total for six days, 26,326 head, against 28,881 head for the same time last week. Poor to Choice Clipped Sheep sold at $3 70@5 75; and a carload of Unshorn State do, at $6 12½; Clipped Yearlings, sold at 5¾@6¾c; and Prime Unshorn at 7¼. A few State Spring Lambs, were sold by the head at $4 each. Clipped Ohio Sheep, 73 lb, at 4¼c; Michigan do, 73 lb, at 4½c; Unshorn Michigan Lambs, 80 lb. at 7½c; State Spring do. at $1 per head; Clipped Western Sheep and Yearlings, 63 lb, at $5 62½; Unshorn State Sheep and Lambs, at 5¾c; Kentucky Sheep (part Yearlings), 70 lb, at 5½c.

HOGS.—Total receipts for six days, 29,192 head against 25,015 head for the same time last week. None for sale alive. Market firmer at $4 70@4 90 per 100 lb.

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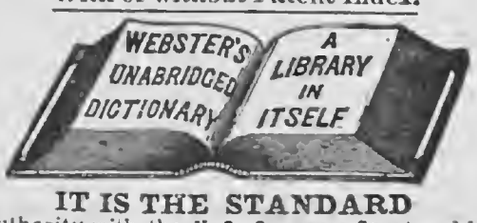

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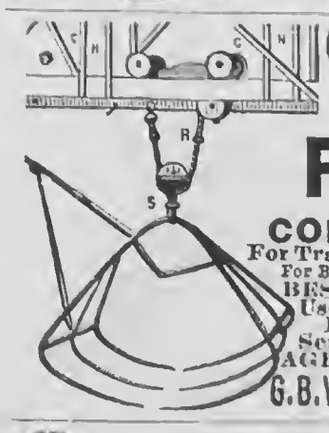

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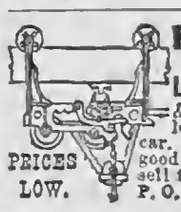

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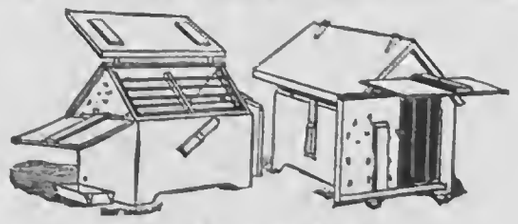

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For the Young.

GRANDMOTHER.

S. P. SHULL.

Her hair that once was chestnut-brown
Is now a silver-gray;
The eyes that once were keen and bright,
Now shun the light of day.

The blushing cheeks of rosy youth
Are wrinkled now and pale;
The voice, once musical and strong,
Now trembles, weak and frail.

Although her youthful charms are flown,
Yet, in her life's decline,
She is more truly beautiful—
Her beauty more divine.

Her aged face reflects a light
That cometh from afar,—
A pure, celestial light that shines
Through Heaven's gates ajar.

She stands so near Life's outer shore—
Near to eternity:
So near unto the pearly gates—
Near to the crystal sea.

She almost hears the angels sing
Their new and wondrous song.
She waits to hear the Master's call
To join the happy throng;

When she may leave this world of care—
May lay her burden down—
And on her spirit's wings of air,
Rise to receive her crown.

MANY of the Cousins are working hard for the plow. It will be a very hard word that will escape so many sharp eyes. Some of the Cousins have written to find out what words are to be accepted. We will accept any word that can be found in Webster's Dictionary, or any proper noun in common use. There are many words which have two meanings—like hide. That means to conceal, or the skin of a beast; of course, we could only count such a word once. Now, take plenty of time, and pick out every word you can think of.

One of the older Cousins says she has taken flowers to fairs for many years, and the great trouble is to think out new designs and arrangements so that the flowers will seem new and out of the usual order of things. Who can send in some suggestions? Let all those who have ever helped at decorations tell us how they succeeded.

The grass in the parks is green and beautiful. Many city children get their only ideas of what the country is like from these green patches. The little folks have great fun on the grass when the policemen are out of sight. Sometimes the policemen who have little boys and girls of their own at home, seem to become near sighted, for they never shout "Keep off the grass!" as they do to the older people. In some of the smaller parks down in the business part of the city, people have walked over the edges of the lawns and killed out the grass. Workmen were trying to fix this the other day as I walked through the park in front of the City Hall. With an iron rake they scraped over the bare places and put fertilizer on them. Then they sowed Blue Grass seed and put up great signs to keep people from walking there again. A good lawn adds greatly to the looks of any house. When we have our own farms we will see that the lawn is well cared for.

I saw a box of turtles at one of the markets the other day. There must have been at least 50 of them. They were the common black mud turtles. I used to catch them when I was a boy. We have all seen them sunning themselves on sticks or stones at the edges of ponds. How quick the little fellows are to jump into the water when they hear a noise. We used to find box turtles in the woods. Some of the boys would cut their names and the year into the shells and then let the turtle go. I found one once five years after the date had been cut. There is no reason why these turtles should be used as autograph albums. These little turtles that I saw were probably sold to city children. Within 20 feet of the little fellows I saw a great turtle so large that it took two men to carry him. His mouth snapped in a way that made me glad I was not his neighbor. I suppose he has been made into soup before this.

LETTERS FROM THE COUSINS.

DEAR UNCLE MARK: We are having very fine growing weather on Long Island. Papa has his potatoes in, oats sowed, and another bed of asparagus of three acres set out. We have now nine acres in all; we will soon have plenty to cut. I wish you could be here and help eat it. Please accept many thanks for the package of sweet peas you so kindly sent me. I shall try to give them good care. Papa is going to let me have some seed of the canteloupe, and I am going to try for the prize. Your affectionate niece,

LOU HALL.

[I should have to bring all the family with me to make very much impression on that great field.—U. M.]

DEAR UNCLE MARK:—Papa has taken your paper for a long time and likes it very well. I like to read the Cousins', letters, and I often think I would like to join the Y. H. C. I live on a farm of 100 acres, and go a mile and-a-half to school. We keep three cows and five calves. Papa keeps four and five head of horses; two head of work horses and two colts. We raise all kinds of fruit: apples, peaches, pears, quinces, plums, cherries, grapes, raspberries and currants. Papa made a strawberry patch last fall. Uncle Mark, I wish you and the Cousins would come in Summer and help to share some of the fruit with us. The neighbors always come to our house in Summer to share some of the fruit. Papa once said he would like to move, but the people advised him not to, they said if he ever sold out he would miss the fruit. Papa made two fish ponds. One of the fish ponds broke and let the water out. Some of our neighbors came over and helped to save the fish from getting lost. We put them in the Spring house in the ditch. There were 12 large fish and over 200 small fish. Thanks for seeds you sent us. We have not planted them yet. The seeds you sent us last year all came up, and were all very pretty. The flowers were of different colors—everybody that saw them thought they were so pretty. They would often ask us to save some seed of them. The people would often ask us where we got the seeds. I would tell them I got the seeds from the dear old RURAL NEW-YORKER. Your niece, E. EMERY.

Lamartine, Ohio.

[We would all like to come and eat fruit and visit with the neighbors. I guess you would miss the fruit if you moved.] U. M.

DEAR UNCLE MARK:—I live on a farm of 60 acres. Whenever I get hold of the R. N.-Y., I read the Cousins', letters the first thing. I am 11 years old. There is a creek called Chickamagua creek. We, that is my brother and I have found about two dozen Minnie balls since we lived here, which is one year. In our stony lands there are lots of arrow heads. We sent to the U. S. Department of Agriculture for some seeds, and received sweet corn early Minnesota, beet New Eclipse, carrot half long; bean Early Yellow six weeks; turnip; cabbage; lettuce; tomato and a few other kinds of seeds; but it would make my letter too long to name them all. We have two cows and three calves, two of which are heifers. I remain, your nephew, JOHN HOLM.

Chicamauga, Hamilton Co., Tennessee.

[Minnie balls and arrow heads are much better in the ground than in one's body.—U. M.]

DEAR UNCLE MARK: I have been reading the letters from the Cousins in the RURAL, and enjoy them very much. I ask you to let me join the Y. H. C. I am 13 years of age. I live on a farm of 16 acres of land. Pa has one cow, one horse and two pigs, and about 80 fowls. Mamma took off a hen with nine little chicks to-day. Papa received the seed distribution, and was very much pleased with them. My little brother raised a watermelon that weighed 30 pounds. We have a dog and two cats. The dog's name is Spot, and the cats are Lily and Jessie. We are going to have a nice flower garden this Summer. Mamma has some nice house plants. Our lily is going to blossom in a week or more. My brother George is knitting a net to go fishing this Summer. I should like to have some sweet peas, if you will let me.

FLORENCE L. HOFFMAN.

Wading River, N. Y.

DEAR UNCLE MARK: I wrote before and did not receive any answer. I got some sweet peas from you, and so I thought I would write again. I had a pig last Summer and sold it to Pa and got $5 for it. I raised 40 ducks last Summer and sold 37 and got $8. I have got 36 little chickens now. I have 200 old chickens. I get over 100 eggs a day. I helped plant the potatoes. Your niece, EMMA TAFF.

Christian Co., Ill.

DEAR UNCLE MARK: I was interested in Etta Shaffner's letter of Dawes Co., Nebraska, and hope she will soon write again and tell us more about the scenery in that part of this State. We live near Wisner, Cunning Co. Our farm joins the Omaha Indian Reservation which came into market two years ago. It is now quite thickly settled. January was a very stormy month with us. There were a great many blizzards from the Northwest. One of our neighbors had a hog buried in the snow for 45 days without food and when they got it out it was so weak it could hardly stand up; but they fed it sweet milk and i came all right and is now as smart as any in the pen. Another had one buried in the snow 47 days, and it is also smart now I think.

Your niece,

Wisner, Nebraska. ROZETTA BARTLEY.

[That hog had a long fast. No wonder it was weak. I am glad those blizzards get a little tired before they reach this part of the country.—U. M.]

LETTERS RECEIVED FROM Ella K. Barret; Wallie M. Coker; Erwin P. Allen; John C. Thompson; Herbert Damrell; Agnes Damrell; Amy B. Powers; Annie M. Hall,

The Finest Mechanism.

A CELEBRATED surgeon once said that he never stood in the presence of a body in the dissecting room without a feeling of awe and reverence, and well may every one do to remember the wonderful excellency of the house he lives in. The butterfly is beautiful and attractive in its aerial flight and its form is wonderfully adapted to its needs; but the human body is as much superior in its delicacy of construction and adaption to the needs of the being living in it as man is superior to the moth in length of days.

When this fine piece of mechanism gets out of repair, what is the best method to restore it to effective action again? Why is it that the majority of people are not content to take Nature's simple plan and follow it? Let us see what that plan is.

When the life-blood has made the circuit of the arteries and veins—before re-entering the heart, to be started on its circuit anew—it spreads over the surface of the air-cells of the lungs—a surface greater in area than the entire exterior covering of the body. Here the air inhaled by the lungs meets it, changing its color to crimson, and imparting to it new vitality. *Here kindly Nature has been ever a Healer and Repairer*; here modern science finds the proper place to help Nature in the most effective way. Taking the fact that the usual proportions of the mixture of the elements of the atmosphere are the proportions exactly adapted to the needs of the average man in health, and seeing that an extra effort is needed for the sick to repair the waste of vital force in the blood, a different proportion is made in a mixture of the atmospheric elements—a lesser quantity of Nitrogen is put with a larger portion of Oxygen. When this "Compound Oxygen" is used, the blood enters the heart with increased vitality. That organ receives a portion of that vitality from the blood in its passage, and sends it forth with more force and less wear to itself; the blood leaves on its circuit new deposits of vital force in every cell of tissue over which it passes, and returns to the lungs for a new supply.

The "Compound Oxygen Treatment" which Drs. STARKEY & PALEN, No. 1529 Arch Street, Philadelphia, have been using for the last sixteen years, is a scientific adjustment of the elements of Oxygen and Nitrogen *magnetized*, and condensed and made portable it is sent all over the world.

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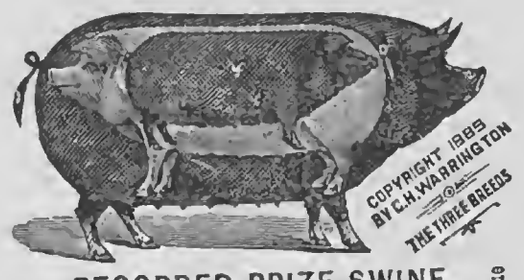

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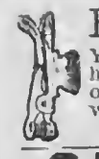

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$5 A DAY AND EXPENSES GUARANTEED AGENTS WANTED IN EVERY COUNTY. Greatest Opportunity Ever Offered. Don't miss it. Will pay salary if preferred, and advance expenses. Outfit and full particulars FREE. Address at once, Standard Silver Ware Co., Boston, Mass.

Almost Gave Up the Ghost.

HOUSE OF REPRESENTATIVES, WASHINGTON, D. C.—Last fall I contracted malarial fever. Suffered much for two months. Disease located in my kidneys, and I almost gave up ever getting well. Warner's safe cure, which cured me, is a great blessing to mankind, and if taken regularly will cure almost any disease of the kidneys.—TYRE YORK, M. D.

Real Estate.

FOR SALE—45 Acres rich Land, first-class buildings, all kinds of fruit. Located within two miles of Dover, Delaware. This is a beautiful Home. Price $2,900. Terms to suit the buyer.
THOMAS S. CLARK, DOVER, DEL.

NEOSHO RIVER VALLEY FARMS
For sale cheap. Write for circular.
WM. DARBY,
Humboldt, Kan.

Virginia Farms.—Mild Climate. Cheap Homes. Send for Circular. A. O. BLISS, Centralia, Va.

FARMS Hotels, Stores, Mills. Business Chances. Country Seats or Lands for *Sale* or *Exchange*. Inclose stamp for Lists. W. S. Hotchkin, Real Estate and Traders' Exchange, Binghamton, N. Y.

FOR SALE.
A fine Grass Farm, of 200 acres, known as the Ferguson farm, one mile north of Odin, Marion Co., Ill. Well improved. A good frame house of six rooms; two large barns and other out buildings, with plenty of water. For further particulars, inquire of
E. J. FERGUSON,
Odin, Marion Co., Ill.

FARM AND STOCK FOR SALE.

228 ACRES, 1½ mile from the city of Louisiana, Mo. Well adapted for Dairying, Stock Raising or Fruit Growing. Plenty of living water. Fine Buildings, Good Orchard. Owner cannot attend to it, and will sell low on easy terms.
Herd of 25 head choice Jersey cattle. Louisiana is on the Mississippi river about 75 miles north of St. Louis.
For particulars address
DR. H. B. BUTTS, LOUISIANA, MO.

PERSONALS.

GEN. CROOK says that he is not sorry to get away from the frontier, where he was forced to "hunt mosquitoes with six-mule teams."

LIEUT.-GOV. Ames, of Massachusetts, gave away trees last Arbor Day to any North Easton people who would set them out. He gives the town this year $2,000 to be used in planting shade-trees along the public highways, and has purchased 2,500 trees for that purpose.

SIR HENRY BESSEMER, the famous inventor of the Bessemer steel process, has recently invented a process of making steel plates covered with tin, which may by run out a mile long. The steel is to be run through the rolls and will come out plated with tin, and can be cut of any desired length.

VASSAR'S new president is the Rev. James M. Taylor, A.M., of Providence, R I. Born in Brooklyn, N. Y., August 5, 1848; graduated at the University of Rochester, N. Y., in 1868, and at Rochester Theological Seminary in 1871. Traveled abroad and was pastor of a Baptist church in Norwalk, Conn., for nine year, and for the last four a pastor in Providence. Vassar now has 271 "sweet girl graduates."

REPRESENTATIVE ST. MARTIN, of New Orleans, is the only Creole in Congress and the most cautious man in the world. During the rebellion, when General Lee was at the hight of his great fame, some one asked St. Martin what he thought of him. "Well," was the reply, "Beauregard speaks quite favorably of him!" Creoles think G. T. B. the greatest man America has ever produced.

Miscellaneous Advertising.

THE STREAM that does not run freely soon becomes stagnant. The blood in the spring and early summer months is thick and heavy and breeds pestilence and disease in the body, It is impossible to purify this blood unless the kidneys are put in perfect working order and kept so by the use of Warner's safe cure.

Buy the Best. THE EUREKA

Awarded FIRST Premium and Gold Medal at World's Fair New Orleans, over 12 leading Wind Mills. The EUREKA, after a trial lasting 4 mos. was pronounced the best over all and to-day stands at the head of all competitors. Sizes, 10 to 18 ft. diameter of wheel, either for Pumping or Power Mills. *Perfect in all parts and warranted.* Estimates on application. Also Mfrs. of the Adams Direct Draft Barn Floor Horse Power. *Live Agents Wanted.* Address Mfrs., SMITH & WOODWARD, Kalamazoo, Mich.

BRICK AND TILE MACHINERY AND CLAY CRUSHERS, BEST IN THE WORLD

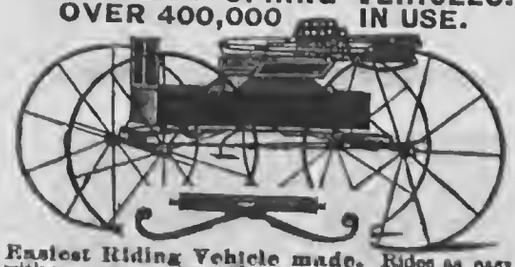
Address J. W. PENFIELD & SON, Willoughby, O. P. O. Box

AMERICAN ROAD MACHINE CO.
KENNETT SQUARE, PA.
Successors to
S. PENNOCK & SONS CO. and GEO. W. TAFT.
IMPROVED ROAD MAKING IMPLEMENTS
FOR CITY, TOWN AND COUNTRY.
Machines sent on trial, and satisfaction guaranteed. Purchasers are assured of immunity from law suits. Circular and colored cuts FREE.

A Debt that Can Never be Paid.

COLDWATER, Mich., Oct. 25, 1885.—Four months ago I was paralyzed and entirely blind, from kidney and liver diseases. I was unconscious for over two weeks. Physicians said I was incurable, and waited daily for my death. My friends gave me Warner's safe cure, and within a few weeks paralysis left me, bloating went down, enlargement of the liver subsided, and I became well, and owe my life to Warner's safe cure.—MRS. RUTH BROWN.

TIMKEN SPRING VEHICLES.
OVER 400,000 IN USE.



Easiest Riding Vehicle made. Rides as easy with one person as two. The Springs lengthen and shorten according to the weight they carry. Equally well adapted to rough country roads and fine drives of cities. Manufactured and sold by all leading Carriage Builders and Dealers

THE BRADLEY MOWER

The lightest draft, easiest operated, best made and most durable mowers ever placed in the market. *Send for Free Circular, "How to purchase direct from manufacturer."* Bradley Mowers Reapers and Hay Rakes. 4ft. 3 in. —AND— 6 ft. cut.

Bradley & Co. SYRACUSE, N. Y.
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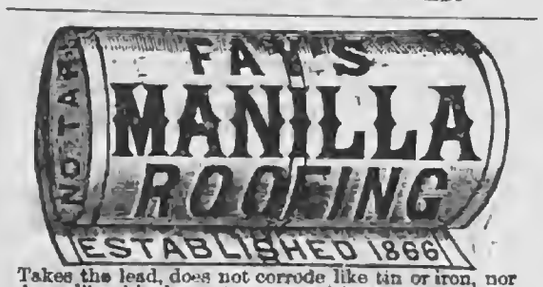
$25 A DAY saved by using the Little Giant Road Machine, instead of making roads in the usual way. It is the cheapest and the best. Send for circular.
STRONG & PARKER, Vergennes, Vt.

RUSTLESS IRON WATER PIPE. WM. T. WELLS, 7 to 9 Cliff St. New York. Send for Catalogue and Prices.

BEFORE YOU BUY
WAGON, BUGGY or SLEIGH

WRITE TO
Hotchkin Carriage Works,
SYRACUSE, N. Y.
LOW PRICES TO DEALERS.



Takes the lead, does not corrode like tin or iron, nor decay like shingles or tar compositions, easy to apply, strong and durable at half the cost of tin. Is also a SUBSTITUTE for PLASTER at Half the Cost. CARPETS and RUGS of same, double the wear of oil cloths. Catalogues and samples *free.*
W. H. FAY & CO., CAMDEN, N. J.

CRIMPED & CORRUGATED
IRON ROOFING
W. G. HYNDMAN & CO.
SEND FOR CIRCULAR & PRICES — CINCINNATI, O.

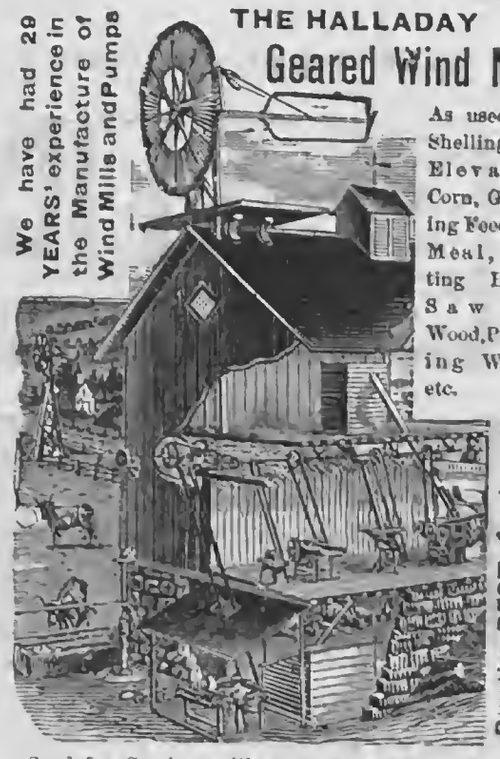
FIRE-PROOF! WATER-PROOF!
Gutta Percha Roofing.
Especially adapted to Hot or Cold Climates.
Cheap and Durable for Flat or Steep Roofs. Send for Catalogue.
EMPIRE PAINT AND ROOFING CO.,
1128 and 1130 Race St., Philadelphia, Pa.

IRON ROOFING
Send for prices and Illustrated Catalogue of
CINCINNATI (O.) CORRUGATING CO.

—THE—
Broad Cut Centre DRAFT. EUREKA MOWER
WILL SAVE FARMERS TIME AND MONEY

THE EUREKA is the only successful Direct Draft Mower manufactured. It will do at least, one third more work than the side-cut machines with same power. As the cut grass is untrampled, hay will cure quicker and sell for more money. Don't fail to see the Eureka before buying. Send for new 1886 catalogue. Mention this paper.
EUREKA MOWER CO., Utica, N. Y.

EVERY FARMER HIS OWN MILLER
THE HALLADAY
Geared Wind Mill



We have had 29 YEARS' experience in the Manufacture of Wind Mills and Pumps

As used for Shelling and Elevating Corn, Grinding Feed and Meal, Cutting Hay, Sawing Wood, Pumping Water, etc.

Buy the BEST, for in the end it is the CHEAPEST.

Send for Catalogue Illustrating the above machinery; also Pumping Wind Mills, Pumps, Tanks, Noyes' Haying Tools, Horse Powers, Jacks, &c.

Give depth and location of your well; quantity of water wanted. State also what machinery you wish to operate, and we will quote you a special price for the entire outfit, or any part thereof. Reliable Agents wanted in all unassigned counties.

U. S. Wind Engine & Pump Co., Batavia, Kane Co., Ill.

Trees, Seeds and Plants.

NURSERY STOCK---FALL 1886.
The old and Reliable! SYRACUSE NURSERIES Come to the front For the Fall of 1886
with the choicest Stock of their specialties, STANDARD APPLES, STD. and DWARF PEARS, PLUMS and CHERRIES, ever offered to the public, all young, thrifty and well rooted.
Also a very superior assortment of GENERAL NURSERY STOCK both FRUIT AND ORNAMENTAL including all the popular ORNAMENTAL TREES, SHRUBS, and ROSES.
All Nurserymen and Dealers are cordially invited to inspect this superior stock or correspond with us, before placing their orders for the coming Fall.
SMITHS, POWELL & LAMB, Syracuse, N. Y.
(When writing always mention RURAL NEW-YORKER.

HALF A MILLION GARDENS ARE ANNUALLY SUPPLIED WITH
SEEDS Peter Henderson & Co. PLANTS
EVERYTHING FOR THE GARDEN
Our Seed Warehouses, the largest in New York, are fitted up with every appliance for the prompt and careful filling of orders.
Our Green-house Establishment at Jersey City is the most extensive in America. Annual Sales, 2½ Million Plants.
Our Catalogue for 1886, of 140 pages, containing colored plates, descriptions and illustrations of the NEWEST, BEST and RAREST SEEDS and PLANTS, will be mailed on receipt of 6 cts. (in stamps) to cover postage.
PETER HENDERSON & CO. 35 & 37 Cortlandt St., NEW YORK.

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Also other SMALL FRUITS, and all old and new varieties GRAPES, Extra Quality. Warranted true. Cheap by mail. Low rates to dealers. Illustrated Catalogue FREE!
Headquarters and General Agent for *New White Grapes*—Empire State and No Niagaras genuine without seal: N. W. G. C.
NIAGARA Special Terms to Agents. T. S. HUBBARD FREDONIA New York.

EVAPORATING FRUIT
Full treatise on improved methods, yields, profits and prices FREE. AMERICAN M'F'G CO. Box P. WAYNESBORO, PA.

Marlboro Raspberry, *Ulster Prolific and Rough keepsie Red Grapes.* Send for description and price to A. J. CAYWOOD & SON, Marlboro, N. Y.

PEARL OF SAVOY POTATOES.
Earliest of all. Per bushel, $1.00.
Lakeside Farm, FITZWILLIAM DEPOT, N. H.

THE DINGEE & CONARD CO'S BEAUTIFUL EVER-BLOOMING
ROSES
Our Great Specialty is growing and distributing ROSES. We have all the latest novelties and finest standard sorts, in different sizes and prices to suit all wants. Over 450 *choicest varieties* to choose from. We send strong Pot Roses safely by mail to all Post Offices, purchaser's choice of varieties, all labeled, 3 TO 12 PLANTS $1. $8 to $15 per Hundred, according to value. Two year Roses by express. Our New Guide, 78 pages, elegantly illustrated, Free. Address THE DINGEE & CONARD CO., Rose Growers, West Grove, Chester Co. Pa.

Send stamp for sample.
Dietz Early Corn, Dietz Longberry Wheat, Dietz Fruit Dryer. New way of cutting fodder.
G. A. DIETZ, Chambersburg, Pa.

SEED POTATOES.

DAKOTA RED	$1.25 Bu.	$2.50 Bbl.
WHITE STAR	1.00 "	2.25 "
WALLS ORANGE	1.00 "	2.25 "
RURAL BLUSH	1.00 "	2.25 "
EARLY MAYFLOWER	1.25 "	2.50 "
WHITE ELEPHANT	.75 "	1.75 "
BURBANK'S	.75 "	1.75 "

An assortment of 50 kinds. One tuber of each, correctly labeled, $5.00. Delivered at freight or express office. C. L. HAWLEY, HORNELLSVILLE, N. Y.

600 ACRES. 13 GREENHOUSES.
TREES AND PLANTS
We offer for the Spring Trade a large and fine stock of every description of Fruit and Ornamental Trees, Shrubs, Roses, Vines, Small Fruits, Hedge Plants, Fruit Tree Seedlings and Forest Tree Seedlings. Priced Catalogue, Spring 1886, mailed free on application. Address,
BLOOMINGTON (PHŒNIX) NURSERY, Established 1852. BLOOMINGTON, ILL.

Stock and Poultry.

MAPLE LAWN POULTRY YARDS AND KENNELLS.
Breeders of Wyandottes, P. Rocks, White and Brown Leghorns and Pekin Ducks. No more stock until Sept Eggs for hatching until July 1st. Agent for Poultry Culture by I. K. Felch.
Imp. Scotch Collie Dogs bred direct from Tam. O'Shanter and Imp. Goffa. Send for circular.
WESLEY B. BARTON, Pittsfield, Mass.
P. S.—4 fine Collie pups for Sale. References.—I. D. Ferry, cashier Agricultural Bank, Pittsfield, Mass.

MILL BROOK
POULTRY YARDS
AND
KENNELS!
40 breeding pens of selected Wyandottes, Langshans, W. and Br. Leghorns, P. Rocks, Lt. Brahmas, R. C. W Leghorns, B. B. R. Games, Pekin Ducks. Eggs, $3 for 13, $5 for 26, $7 for 39. Duck eggs, $2 for 11, $3 for 22. Nine hens and one male to each pen. *I guarantee a good hatch. Try me.*
Champion St. Bernard Dogs, Champion Scotch Collie Dogs. Young stock for sale at reasonable prices. Champion mo[illegible] erone," in the stud. Send for Catalogue.
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ESTABLISHED 1877.
MIL-BROOK POULTRY YARDS
OF BERGEN COUNTY, N. J.
Our stock is the finest that can be selected as regards Standard Breeding. We spare no expense in getting our selections, which proves our success in giving you such fine birds. This year, 1886, we will breed Wyandotts, Light Brahmas, White and Brown Leghorns, and Plymouth Rocks. We will furnish eggs at $2.00 per thirteen, $3.00 per twenty-six, delivered in New York city free. Fine birds for sale at all times. Scotch Collie Pups from Imported Lassie of Wyckoff A. K. R. 2048, for sale.
HAVILAND & BAKER, Wyckoff, N. J.

SEDGWICK STEEL WIRE FENCE

Is the best general purpose wire fence in use. It is a **strung net-work without barbs.** Don't injure stock. It will turn dogs, pigs, sheep and poultry, as well as horses and cattle. The best fence for Farms, Gardens, Stock Ranges and Railroads. Very neat, pretty styles for Lawns, Parks, School-lots and Cemeteries. Covered with rust-proof paint, or made of galvanized wire, as preferred. It will last a life-time. It is better than boards or barbed wire in every respect. Give it a fair trial; it will wear itself into favor. The **Sedgwick Gates** made of wrought-iron pipe and steel wire, defy all competition in lightness, neatness, strength and durability. We make the best, cheapest and easiest working **all-iron automatic or self-opening gate,** and the neatest cheap iron fences now made. The best **Wire Stretcher, Cutting Pliers and Post Augers.** For prices and particulars ask Hardware Dealers, or address, mentioning paper,
SEDGWICK BROS., Richmond, Ind.
EDWARD SUTTON, Eastern Agent, 300 Market St., Philadelphia, Pa.

Humorous.

A LITTLE boy, whose sprained wrist had been relieved by bathing it in whiskey, surprised his mother by asking, "Did papa sprain his throat when he was a boy!"

FATHER was telling his little son of the wonders of modern science; that they had learned the distance of the stars, and through the spectroscope had discovered what they were made of. Little son: "Yes, but how did they find out their names?"

A MAN who was not of much account himself was forever boasting of his ancestry. A plain farmer, tired of this nonsense, asked him why his family were like a hill of potatoes. He gave it up. "Why," said the farmer, "the best part of them are under ground."

A BROWBEATING counsel asked a witness how far he stood from the plaintiff when he was struck. "Just seventeen feet nine and one quarter inches," was the reply, "How came you to be so exact, my friend?" "Because I expected some fool would ask me, so I measured it."

"MAMMA, be late sappers bad?" "Yes, my child, very bad." "What makes 'em bad?" "Why, it injures the health to eat just before going to bed." "Oh! I thought may be it injured the health to go to bed right after supper." Johnny wasn't hustled off to bed as early as usual that night.

Miscellaneous Advertising.

A SAFE FAMILY REMEDY.

ESPECIALLY SUITED FOR

BABES,

CHILDREN AND DELICATE PERSONS.

TROPIC FRUIT LAXATIVE

Entirely harmless and delicious to take. Tropic Fruit Laxative is unequalled for Constipation, Biliousness, Sick Headache, Loss of Appetite, Complaints of Children, and liver, stomach and bowel ailments generally.

Absolutely safe for delicate and nursing women. Taken eagerly by infants and children

Ask for **Liquid Tropic-Fruit Laxative.** Price 25 cents per bottle. *Sold by Druggists.*

DAIRY THERMOMETERS!

Every farmer should have one. Sent safely by mail for 50c.

Send for Catalogue of Thermometers, Lactometers, Creamometers, and Thermometers for Incubators.

W. M. McALLISTER, Optician.
720 CHESTNUT STREET, PHILADELPHIA, PA.

A NEW BUTTER PRESERVATIVE.

KELLOGG'S ROYAL SALT.

Positively Prevents Butter from ever becoming Rancid.

Endorsed by George B. Douglas, Esq., Ex-President Mercantile Exchange; Putnam Conklin, Esq., Manager Thurber, Whyland & Co's Butter Department, New York City; Col. Wm. Crozier, Northport, L. I., N. Y., and others. Send for Circular.

BUTTER PRESERVATIVE SALT CO.,
OFFICE AND FACTORY, FOOT OF
West Eleventh Street, New York City, N. Y.

CARTER'S

IMPROVED NEEDLE HAY KNIFE.

This knife has been tested with the most celebrated knives of other makers, and has proved an easier and faster cutter than any other. Its special excellence consists in a chisel edge tooth. It may be used for cutting hay in the mow, stack and bale; also for ditching, cutting peat, or for any other work for which a hay knife is used.

Send for circular.

North Wayne Tool Co.
HALLOWELL, MAINE

BUCHAN'S

SILVER FLEECE DIP.

Instantly soluble in water at any temperature. Cheapest, Most Convenient and Effective. **Will positively Cure Scab.** Send for Circular.

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WM. F. KINDER, Pres't.
ROBT. C. BUCHAN, Secretary and Treasurer.

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GOOD NEWS TO LADIES.

Greatest inducements ever offered. Now's your time to get up orders for our celebrated Teas and Coffees, and secure a beautiful Gold Band or Moss Rose China Tea Set, or Handsome Decorated Dinner Set, or Gold Band Moss Decorated Toilet Set. For full particulars address

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P. O. Box 289. 31 and 33 Vesey St., New York.

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Should send for our New Catalogue, mailed FREE

Boomer & Boschert Press Co., Syracuse, N. Y.

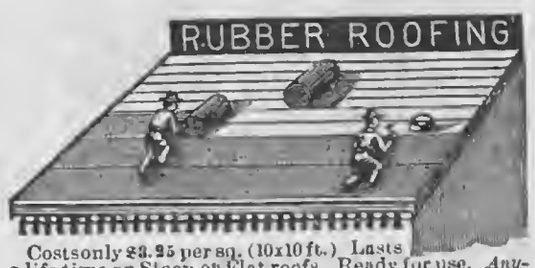
LINENS.

JAMES McCREERY & CO.

in addition to their very attractive stock of Fine Linens, are now offering a large assortment of medium and cheaper grades of Damasks, Napkins, Towels, etc., suitable for Hotel use, at lower prices than ever before.

ORDERS BY MAIL from any part of the country will receive careful and prompt attention.

JAMES McCREERY & CO.,
Broadway and 11th St., New York.



Costs only $3.25 per sq. (10x10 ft.) Lasts a life time on Steep or Flat roofs. Ready for use. *Anybody can apply it.* Illustrated book Free if you *mention* this paper. *Write at once* to 143 Duane St., N. Y. City.
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HIGHLAWN STALLIONS

ALCANTARA AND ALCYONE.

By GEORGE WILKES, dam ALMA MATER, by MAMBRINO PATCHEN.

The success of George Wilkes on the turf and as a sire, with the high rate of speed shown by each of the produce of Alma Mater at an early age, will enable these horses to transmit the qualities of their sire and dam with great uniformity.

Terms, $150,

At time of service. Usual privilege of return.
For catalogues, address
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GALVANIZED SHINGLES.

Makes handsomest, most durable, absolutely storm proof roof in existence. Send for particulars to
The National Sheet Metal Roofing Co.,
510 East 20th Street, New York.

Pennsylvania Agricultural Works, York, Pa.

Farquhar's Standard Engines & Saw Mills.

Send for Illustrated Catalogue.

Address A. B. FARQUHAR, York, Pa.

PEARSON'S FERTILIZERS.

High Grade. Reliable. Lasting.

Manufactured in dry condition, thereby assuring full weight of fertilizing material. Most flattering results where used side by side with other preparations. Where there are no agents for these Fertilizers, orders direct to the manufacturers will receive prompt attention. **JOHN M. PEARSON, Hudson, N. Y.**
Send for catalogue.

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STEARNS' STANDARD FERTILIZERS.

Splendid returns to the farmer for money invested. Permanent fertility to the soil.

STEARNS & CO., Manuf.,
149 FRONT STREET, N. Y.
Valuable Farmers' Handbook on application.
Agents wanted where we have none established.

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Is made from Red Iron Ore mined in Rossie, N. Y.—Is the best and most durable Paint for Tin, Iron and Shingle Roofs, Barns, Fences, Farm Utensils, Etc., Will not crack or peel.

Will protect roofs from sparks. Valuable for coloring mortar. Samples free. Ask prices of

Rossie Iron Ore Paint Co.,
OGDENSBURG, N. Y.

HAMMOND'S SLUG SHOT

Rouses the Insect Army that destroy Vegetables and Flowers. Since 1880 *One and a Half Million* pounds have been used with safety and efficiency. It is cheap and sold by the Seedsmen, and probably by some party in your place. For pamphlet address
Fishkill-on-Hudson, N. Y.

COOLEY CREAMERS.

LARGELY IMITATED, BUT NOT EQUALED. THEY HAVE A PATENTED PROCESS WHICH NO OTHERS CAN USE.

Are used by more fine butter makers and stock breeders than any other apparatus, because they have proved to make the **largest quantity** and **best quality** of butter with **least labor** and **expense.** They surpass everything in the Cream Gathering System. **Have both Top and Bottom Skimmers.** Cream drawn FIRST or LAST. *No danger or sediment.* Thick walls with dead air space. Used with or without ice.

SIX GOLD Medals and SEVENTEEN SILVER Medals awarded for superiority of process and product. Send for circulars giving facts and references sustaining these claims. DAVIS SWING CHURNS EUREKA and SKINNER'S BUTTER WORKERS, CARRIERS, PRINTS, and a full line of Creamery supplies.

VERMONT FARM MACHINE CO., Bellows Falls, Vt.

FOR REASONS WHY STODDARD'S CREAMERY AND REFRIGERATOR

With SURFACE SKIMMING ATTACHMENT IS THE **MOST POPULAR CREAMERY** ON THE MARKET, AND FOR CIRCULARS OF THE **BEST LINE OF DAIRY GOODS MADE,**

ADDRESS
MOSELEY & STODDARD MF'G CO. Poultney, Vt.

Sectional view of a can, showing skimmer in operation.

REED & BARTON

37 UNION SQUARE, NEW YORK,

MANUFACTURERS OF

ELECTRO GOLD AND SILVER PLATE,

INVITE INSPECTION OF THEIR EXTENSIVE STOCK OF

TABLE WARE,

WHICH EMBRACES EVERYTHING REQUIRED FOR USE OR DECORATION OF THE TABLE:

Coffee, Tea, Dessert, and Water Sets;
Cake and Fruit Baskets; Meat, Vegetables and Baking Dishes;
Epergnes, Candelabra, Spoons, Forks, Cutlery, Etc.

THEY WOULD ALSO CALL ATTENTION TO THEIR LARGE ASSORTMENT OF NOVELTIES IN

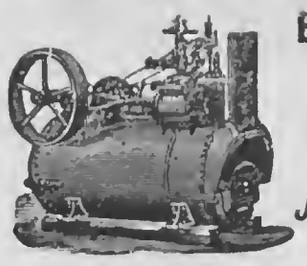
Oxidized Silver, Gold Inlaid and Applied Work.

TOWER'S TRADE FISH BRAND MARK

None genuine unless stamped with the above TRADE MARK.

SLICKER Is The Best Waterproof Coat Ever Made.

Don't waste your money on a gum or rubber coat. The FISH BRAND SLICKER is absolutely *water* and *wind* PROOF, and will keep you dry in the hardest storm. Ask for the "FISH BRAND" SLICKER and take no other. If your storekeeper does not have the "FISH BRAND", send for descriptive catalogue to A. J. TOWER, 20 Simmons St., Boston, Mass.



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UPRIGHT AND HORIZONTAL,
3 TO 10 HORSE POWER.
OVER 3,000 IN SUCCESSFUL OPERATION.
Illustrated Pamphlet sent free. Address,
JAMES LEFFEL & CO., Springfield, Ohio.
Eastern Office: 110 Liberty St., New York.

THE RURAL NEW-YORKER

A JOURNAL FOR THE SUBURBAN AND COUNTRY HOME

VOL. XLV. No. 1895. NEW YORK, MAY 22, 1886. PRICE FIVE CENTS. $2.00 PER YEAR.

Entered according to Act of Congress, in the year 1886, by the Rural New-Yorker in the office of the Librarian of Congress at Washington.

The Vineyard.

THE PEERLESS GRAPE.

SPECIMENS of the Peerless Grape, illustrated at Fig. 220, were sent to us early last October by the originator, Geo. W. Campbell, Delaware, Ohio, who thinks it in some respects the finest grape he has ever produced. Although permitted to overbear last season, the clusters were all perfect, or nearly so—neither loose nor crowded, and not a berry had rotted, though most other kinds did. As received, the color was light green, turning to a darker green when fully ripe. Skin thin, tough, with no bad taste when eaten close. Seeds, from two to four—mostly three—small and plump. Pulp quite large and firm, separating quite easily from the seeds. Juice not abundant, pleasant but not rich; free from all foxiness. Bunch long, slightly shouldered. Berries from half to five-eighths of an inch in diameter, adhering well to the pedicle.

Rural Topics.

Experiment Grounds of the Rural New-Yorker.

NITROGEN.—Upon the half acre which last year gave an unsatisfactory crop of potatoes under the RURAL'S trench-mulch system, there is now growing rye seeded to Timothy and clover. It will be remembered that a large quantity of potato fertilizer was used upon this half acre of poor soil—enough, it might be supposed, to feed half-a-dozen crops.

We are told that phosphoric acid and potash remain in the soil until taken up by crops, while the nitrogen is lost. As an experiment, nitrogen, at the rate of 100 pounds in the form of blood, nitrate of soda and sulphate of ammonia, was sown upon all of this land just before the first heads began to show, except on a belt seven feet wide through the middle. There was no rain afterwards in 10 days, so that the nitrogen mixture remained upon the surface without any effect during that time. A shower then occurred wetting the soil one inch in depth. In 40 hours afterwards it was noticed that all the rye, except that in the belt, was of a deeper green color, which, after another good rain several days after, was so intensified that the stakes marking the belt were no longer needed to show where the nitrogen was omitted.

MONARCH RHUBARB.—Two plants were received two years ago from the Messrs. Farquhar (Boston, Mass.) This year the leaf stalks were the largest we have ever seen, being fully 2½ inches in diameter. They were extremely tender, less acid than the Linnæus and fully as early. It is not always convenient for farmers to buy rhubarb roots. It is easily raised from seeds for 10 cents a packet. Seedlings vary greatly in size of leaf, stalks, earliness and quality.

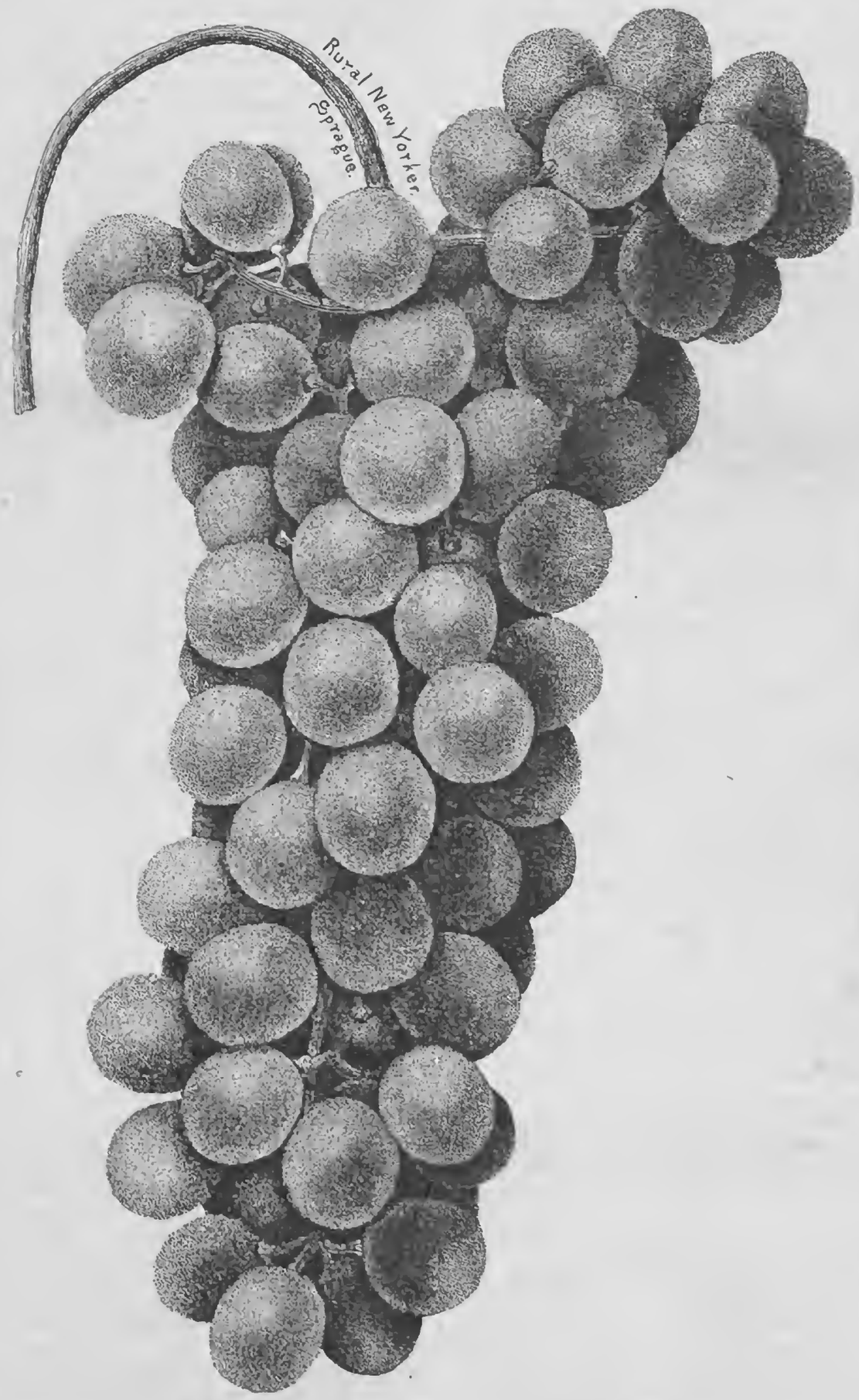
DANDELION.—Seeds were received last year of the French (cultivated) variety of this plant, which, though troublesome as a weed, is, nevertheless, valuable as a plant for early greens. Our plants, growing in clumps in the garden, were this year admired for their large flowers, many of which measured three inches in diameter, while they were as "double" as possible and as yellow as gold. The seeds were received from P. S. Chase, Brattleboro, Vermont.

MAY KING.—We have already spoken favorably of this early strawberry. Our plants have wintered well and are now as green and strong as those of any variety, while they are well covered with blossoms. The plants were received from John S. Collins, Moorestown, N. J., August 19, 1884.

MAMMOTH VERBENAS.—In late Winter we received plants of what Peter Henderson & Co. call their Mammoth Strain of verbenas, an illustration of which appears in their new catalogue. In 1884 Mr. H. raised the verbena "America" which, the catalogue says, far surpassed any variety previously in cultivation. From it, seeds were obtained to raise a large number of plants from which the advertised list of 14 kinds was selected.

One or these, "Century," is now blooming with us. The color is a brilliant scarlet with a well defined white center a quarter of inch in diameter. The single flower measures a plump inch in diameter. It is a great satisfaction to be able, as in this case, fully to support the claims made for new plants in seedsmen's catalogues. The verbena of old is a grand bedding flower, while judging by "Century," this Henderson strain is far in advance of anything we have ever seen among verbenas. The flowers remind us, at a little distance, of cinerarias, so large and brilliant are they. We shall speak of the other varieties comprising the set when they bloom in the garden.

EXPERIMENTS.—We have now 57 different kinds of new potatoes, 23 of new peas and 19 of oats above ground. Ten different kinds of alleged new varieties of sweet corn and 14 of field corn are in the ground. Our cross-bred wheats and hybrid wheat and rye plants are looking fine. We counted 40 culms from one root of the latter. The potato fertilizer experiments are favored with a fine start. Timely rains and warm weather have started the seed pieces at once, so that few will rot in the ground and we have now only to fear frost, which often visits us as late as the 20th, and drought. The trenches which received farm manure and potato fertilizer are ahead of the others, and there are 35 trenches, all fertilized or treated differently.



PEERLESS GRAPE. From Nature. Fig. 220.

Sheep Husbandry.

Notes from the Western New York Farm.

FEEDING LAMBS.

MANURE WORTH MONEY.

IF we would maintain the fertility of our farms, and not be content with crops that barely pay the cost of cultivation, we must in some way return to the soil as much of the elements of plant growth as is taken out by each succeeding crop. Luckily in stock feeding, a very large share of what is appropriated by the animal consists of those elements taken by the plant from the air or the water, so that if the excreta, solid and liquid, are properly cared for and returned to the field, but little loss is sustained, and when extra foods are bought and fed, especially those rich in the elements of vegetable growth, we carry to the soil more than was removed in the largest crops. This being true, it is only fair to retain sight of the value of the manure made, when we are figuring the profits of any branch of stock feeding.

We are led to these reflections by a letter from our good friend Richenbach, of Wayne County, Ohio. He says that in November, 1884, he put in 182 lambs at a cost of $465; from that time until April 11th, 1885, he fed them hay and grain worth, at market prices, $503, making an aggregate of $968. At this time he sold the lambs for $1,068, leaving him a balance of $120 for care, labor and interest, and he asks if this should be satisfactory. He had kept these lambs five months; the interest on the cost of the food or an average of half that time, and the wages and board of the person in charge, properly chargeable to the lambs, would amount to about $24, which leaves a clear profit of 10 per cent. on the money invested, which should be very satisfactory. But there was in this case a consumption of hay and grain to the amount of $503; the phosphates, potash and nitrates remaining in the excrements, if properly saved and returned without waste to the fields, could not be supplied in any other form at a cost of less than $230. (According to the experiments of Prof. Roberts, at Cornell, the manure would be worth $386). If we add this to the $120, cash profit received, we shall have $350, of which, taking the cost of care, interest and outlay for applying the manure, we should have left not less than $300, or about 30 per cent., and everybody knows that last year was about the most unfavorable for feeders ever known.

CAN HE DO BETTER?

Mr. Richenbach also says he put in November 4th last, 170 lambs weighing 73 pounds each, at a cost of $3.75 per hundred pounds, or $465.-38 for the lot. To these he has fed corn worth 35 cents per bushel; oats at 25 cents per bushel; oil-meal at $27 per ton; bran at $15 per ton, and hay at $7 per ton, and he has them to weigh 105 pounds each, and is offered six cents per pound. He asks if they would have done better with roots, and if he could have made more money by shearing them early.

He must make a fine margin of profit at the present Winter's prices of grain; but we can not but think he would have done much better by changing his grain ration somewhat, by feeding roots daily, and by shearing the lambs late in December or early in January. In the first place, oats at 25 cents per bushel cost $15.-62½ per ton; corn at 35 cents, costs $13.50 per ton; bran costs $15 per ton. Now, we should have fed a ration composed of 300 pounds of corn; 100 pounds of bran and 100 pounds of new-process oil-meal. While the oats are a healthy food, their relative cost is too high. The new-process meal would have cost several dollars less per ton, and would have been worth

absolntely more, for mixiug with the corn. Another reason for this charge would have been the value of the resnlting manure, that made from a ton of bran being worth more than double that made from the same quantity of oats.

THIS WAY AND THAT.

These 170 lambs, fed as before described, have made an average gain of 32 ponnds, weighing 105 pounds, worth six cents, or $6.30 per head. Now, had they been shorn early in December, fed in warm barns and with plenty of roots and the same grain, they would have gained the weight of wool removed and not less than 10 pounds besides, weighing easily 116 pounds each. But, although the wool would have made a good growth, being shorn, they would have sold for one-half cent per pound less, although we have just sold a lot of shorn lambs at six cents. The account would then stand as follows:—116 pounds at 5½ cents, $6.38; six pounds wool at 20 cents, $1.20; making an aggregate of $7.58 per head. Deducting from this 28 cents for mangels eaten, and $6.30 the price now offered, we have a net gain of just $1 per head for shearing, housing and root feeding. Surely this should be ample remuneration for the trouble.

To show that this is no imaginary case, we give a little experience:—Last Fall we put in a lot of cull lambs which cost, on an average, 75 cents per head. They were shorn in December, averaging 5½ pounds. They have just been sold at six cents per pound, and averaged 92 pounds in weight, bringing $5.52 each. Adding the value of the wool—5½ pounds at 20 cents, or $1.05—we have $6.57 each. Deducting the first cost, we have $5.82 to pay for keeping and for profit on the transaction.

When we add the valne of the manure made by the consumption of so much rich food, and its effect upon the yield of the crops to which it will be applied, we can only wonder that every barn in the whole country is not utilized for stock feeding.

Wheat has come through the Winter in fine order—very little is at all injured, and with a favorable season we shall expect a large yield.

While our manure is all drawn and spread where desired to be used this Spring, some of our neighbors are trying to worry theirs out now in the mud, poaching up the fields and nearly killing the horses.

Isn't it strange that farmers will never learn that every day's work done in Winter makes two days' difference now. This is doubly trne in the hauling and spreading of manure.

J. S. WOODWARD.

The Swineherd.

A COMPLETE PIGGERY.

PROFITABLE PIG RAISING AND FEEDING.

F. GRUNDY.

THE piggery shown at Fig. 222, is 20 feet in width, by 40 feet in length, with 10-foot

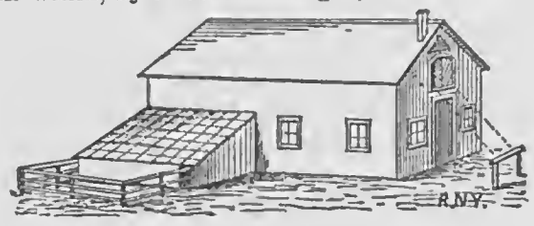


Fig. 222.

corner posts. The glass-covered extension on the south side, is 10x20 feet, and is, with the small yard adjoining, used exclusively for the little pigs. The floor is earth, graded about one-foot above the surrounding level.

On the ground-floor (see Fig. 223) are 11

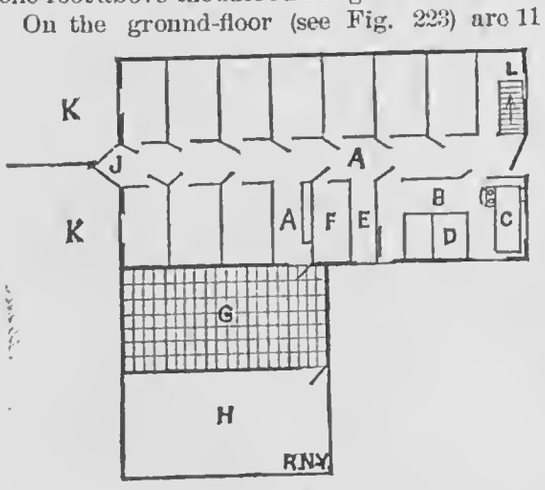


Fig. 223.

5x8-foot breeding pens, and a small hospital pen (F); a horse-power (E) for driving the sheller and feed-mill above; a furnace and boiler (C) for heating water, cooking feed, etc., and tanks (D) for meal, mixed feed, etc. The horse-power is sunk 18 inches in the floor to give space for the horses' heads below the ceiling. Between the boiler and tank is the pump which is provided with stop spouts for throwing water on either side. A four-foot passage (A) runs down the center of the building, and another connects this with the glass shed.

The second story (Fig. 224) contains the feed

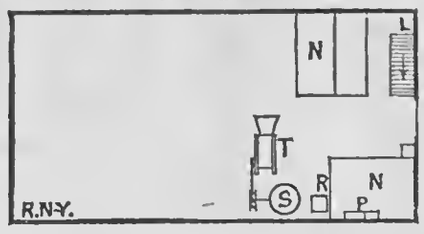


Fig. 224.

—corn, oats, etc. (N) and a corn-sheller (T) and feed-mill. A 10-bushel car (Fig. 225) is used for elevating grain, etc., into the loft. It runs on a track formed of 2x4 scantling, 18 feet

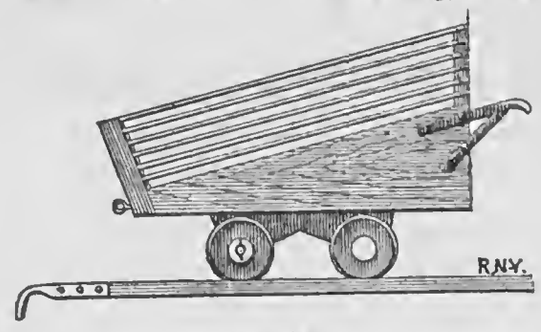


Fig. 225.

long, one end of which rests on the low scaffold in front of the building, the other being secured with hooks and rings to the floor just inside the doors. The car is drawn up and let down by means of a small windlass.

The owner of this piggery decided some years ago that the most profitable pigs are those farrowed early in the Spring and marketed before cold weather sets in in the following Fall, every particle of food eaten by the pig during this time being converted into pork, none being wasted in merely keeping up animal heat. He keeps 10 brood sows, five one year and five two years old at farrowing. They are bred to farrow about February 1. As soon as the pigs are weaned, the five old sows are fattened and sold, and the five young ones are turned on pasture where they run all Summer, living on grass exclusively. Early in the Summer he selects from his stock of pigs five of the best for brood sows, and turns them in with the old sows to live on grass, grow and develop strength and body. When Winter sets in, they are admitted to the breeding pens, and kept plentifully supplied with thin slops and light, bulky food up to the time of farrowing, the chief object being to satisfy hunger without fattening them. They are given the run of two large yards until about due to farrow, when each is shut up in a separate pen.

After farrowing, they are fed three times a day with boiled potatoes and beets, mashed and mixed with bran and corn meal, to which are added skim-milk and sufficient water to make a rather thick slop, which is fed warm. The amount of corn meal is gradually increased, and in about a week it forms the principal part of their food.

A small door in each pen is left open so the little pigs can run out in the passages and into the glass shed, where they frisk about and enjoy the warm sunshine. A low trough placed in the passage leading to the glass shed, is kept supplied with fresh milk and corn-meal slop. They soon learn to make this a part of their daily food, and it increases the rate of their growth fully 10 per cent. They spend the greater part of every sunny day in the glass shed, racing about or lying at full length enjoying a sun-bath. A nicer, smoother, jollier lot of fat, little pigs it would be difficult to find anywhere. On warm days they are allowed to run in the small yard adjoining the glass shed. After weaning, they are divided into two lots, the sows in one and the barrows in the other, and turned into adjoining clover pastures. They are given all the corn-meal—fed dry—they will eat; are kept constantly supplied with plenty of fresh water, and have a maple thicket for shade in hot days. So well do they thrive under this treatment that when they are brought to market, about November, any ordinary pig feeder would be willing to wager that they were fully 20 months old.

The owner holds that early pigs can keep healthy and grow rapidly only when provided with, 1, warm, dry beds; 2, plenty of rich food; 3, a warm, light, *sunny* place, perfectly protected from cold winds, to exercise in. The breeding pens supply the first; the well-fed dam and milk and corn meal the second, and the glass-covered shed the third.

Christian Co., Ill.

The Poultry Yard.

BRONZE TURKEYS.

OF the six or eight varieties of turkeys, there is a greater demand for the mammoth Bronze than for any other, as birds of this breed are the largest and most profitable, and can be easily raised. I have raised gobblers to weigh 40 pounds and hens 22 pounds, although the average weight of the Bronze gobbler is 30 to 35 pounds, and of the hens, 18 to 20 pounds. I knew of one gobbler that reached the enormous weight of 45 pounds. Three-fourths of our farmers continue to raise common or mixed breeds. Why will they not see that if about the same amount of feed and attention is given to birds of the Bronze kind, they would attain far more weight and be more salable in every way? The demand for them is increasing every year. Last season I shipped 25 gobblers and about as many hens, the gobblers bringing, on an average, $5 each, and hens $4. Now, the common breeds weigh from 10 to 15 pounds apiece and sell at from 10 to 18 cents per pound. Need anything more be said to show the superiority of the Bronze for profit?

I have frequently heard persons say, "Turkeys are delicate and hard to raise." I believe that with proper care and attention, young turkeys are no harder to raise than young chickens. In the Summer of '84, I hatched 63 Bronze turkeys and raised 60, losing only three in all. They were separated into three lots and put with three hens that had just hatched chickens. Each hen was kept in a large, tight coop with a board floor and glass door in front. The young turks were not let out in the mornings until the grass was dry. Their runs were on high ground covered with grass. Their coops were cleaned every morning, and the hens were housed immediately if a storm appeared, and were never allowed to get wet. I kept them in this way until they were eight weeks old; after that they were allowed more liberty. Their feed when first hatched should be the yellows of hard-boiled eggs; then, dry curd with a little pepper mixed in it, or a finely chopped onion. An excellent food is middlings made into bread the same as bread for family use, and then soaked in milk. When young, they should be fed often, but they should not be fed any more at a time than they will eat up clean.

Lice destroy hundreds of young turkeys every year. After the turks have passed all other juvenile dangers, these pests are always found in the quills on top of the wings. The application of a very small quantity of fresh lard will kill them instantly. I have sometimes dusted sulphur between the quills. Remember, a *very small* quantity of *either* is sufficient. I have known persons to overdo the matter, killing the lice and the turks too. Don't wait until you see the little things drooping; examine their wings frequently. There is no difficulty whatever in raising turkeys if they are kept dry, clean, and free from lice. Bronze turkeys ordinarily lay 18 eggs or more before wanting to sit; the second or third time they lay from 13 to 15 eggs, although I have known hens to lay 60 eggs in one season. Turkeys mate about the first of March, and usually commence laying the latter part of March. The nests for sitting should be made of grass or wheat straw on the ground, and should not be exposed to the hot sun and rain. In this way I have had every egg to hatch. The best time for hatching is in May or June.

E. J. CHANDLER.

Chester Co., Pa.

A FINE HOUDAN EGG RECORD.

HAVING come to this State for my health three years ago, and settled here a year and a half since, and started fruit growing, last Fall I added poultry keeping to the business. I started with six breeds of fowls—Wyandottes, Plymouth Rocks, Langshans, White Leghorns, Houdans and Black-breasted Red Games—obtained from the best fanciers of the country. I intended to keep only two varieties, but wanted, by actual experience, to decide which two I preferred. I have four Houdan hens which are exceptionally fine layers. They were all hatched in May, 1885, and on March 11 last, I separated the various breeds into breeding pens. From that date to April 17, these four hens laid 125 eggs, all quite large and pearly white—125 out of a possible 148, if each laid an egg a day for the 37 days. The lowest number of eggs laid in any single week was 21; the highest 25. This is away ahead of anything else in the same line around here. The great production is in the breed more than in the feed, in this case at any rate; for being a novice in poultry keeping, I do not know enough of the business to push the hens to their utmost capacity. I feed no "eggine" or any other stimulating food; they get no more than ordinary feed and care, the same as the other chickens. Who can beat this record—four Houdan hens lay 125 eggs in 37 days, or at the rate of 310 eggs a year apiece!

Cañon City, Col. F. E. S.

A HOME-MADE BROODER.

FOR the design of the home-made brooder illustrated at Fig. 217, we are indebted to our old friend J. H. Griffith, of Queens County, Long Island. Four pine boards one foot broad and 13 feet long, are set on edge, two serving as sides and the other two as interior partitions. The end pieces are six feet long. Wire net

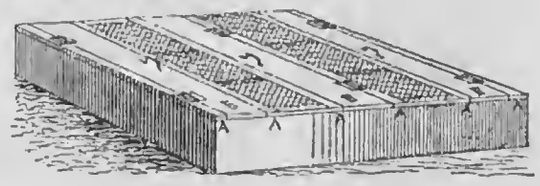


Fig. 217.

coverings are fastened to strips, A. A. A. A. A. A. A., which are hinged to the doors B. B. B., each six feet long and one foot wide, the center one of which is for feeding purposes. Under this is a cross partition, which with the longitudinal boards, cuts up the whole into six compartments each two feet wide and six-and-one-half feet long. Through the central door food can be introduced into all the compartments.

A MAKE-SHIFT HEN PEN.

"IF a hen I intend to set, steals her nest," writes friend Holmer, of LaCrosse Co., Wis., "I inclose her in a triangular pen made of three pieces of board a foot wide, and two or three long (See Fig. 214.) A piece of leather is nailed, hinge-fashion, over one angle of the triangle. A piece of rope or a leather string put through holes bored in the third piece of board and in the upper front edge of the others, serves as hinges for the door. Bits of shingle or waste lumber form the roof. Instead of binding the sides together with leather and strings, the device can be kept together by means of pins thrust into the ground."

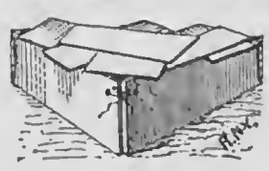


Fig. 214.

A HAWK TRAP.

MR. J. KRUPP uses an arrangement like that shown at Fig. 221 for catching hawks. The base is formed of a stout board, about the size of the head of a flour barrel. Two dozen steel wires, about as large as a telegraph wire,

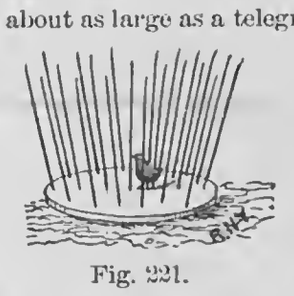


Fig. 221.

are fastened into the board, slanting as shown in the illustration. The upper ends are sharpened on a grindstone. In setting the trap, grass or dirt should be placed over the board to hide its color. The noisiest chicken on the place is tied in the center of the wires and left for the hawk. Do not polish the wires. When the hawk swoops down for his breakfast he gets a very sharp reception and receives a taste of his own argument.

REMEDY FOR LICE ON POULTRY.

WHEN we set a hen we sprinkle her and the nest liberally with powdered sulphur. If the hen is very lousy, we blow her feathers full of Persian Insect Powder. If these preventives are from any cause neglected, when the chicks are taken from the nest and found to be lousy, we rub their down full of the powder and give another dose, if necessary, in a few days to kill any that may have been hatched since the first application. This plan has been very successful. We are using brooders this season (our own make) and find the labor of raising chicks much less and the mortality almost nothing, having lost only one chick this season.

York Co., Pa. T. B. HOOVER & SON.

A PROLIFIC FLOCK.

I HAVE 19 hens that have averaged 12 eggs a day for the month ending April 26. They are Plymouth Rocks and Dominiques mixed. I fed them three times a day—breakfast, shorts and bran, equal parts, scalded; dinner, oats: supper, corn. I leave them the feed for half an hour, then take away what hasn't been eaten. They are shut up in stormy, cold and windy weather.

S.

Eagle, Wis.

Farm Topics.

WATER IN CULTIVATION.

THOMAS MEEHAN,
Editor of the Gardeners' Monthly and State Botanist of Pennsylvania.

NOTWITHSTANDING the great advance in the science of vegetable physiology, and in the practical application of its principles by a few successful cultivators of the soil, to the ma-

jority the exact place of water in cultivation is yet in a great measure unknown. They understand that wet ground is unfavorable, but the want of knowing why it is unfavorable leads to innumerable errors in practice, and is the cause of an annual loss to the country as compared with which the fearful figures of losses by insects, as furnished by entomologists, pale into insignificance. Nature swims in abundance, insects take a few buckets from the pool, keeping it from an overflow, but water where it is not wanted, often takes the whole, leaving us "high and dry." For instance: every farmer knows that Winters in which his grain fields are covered by snow the whole season are more favorable to abundant harvests than seasons when there is little snow. Some attribute this to shelter from frost, some to protection from sun, others to some fertilizing property in the snow itself. Each or all may have some beneficial influence, but the chief good comes from the counteraction of too much water in the soil. Plants draw out in wet ground by the action of the frost, the weight of the snow presses it down as the melting water from the surface thaws the ground beneath. But "drawing out" is in proportion to the water in the soil. Earth in itself, does not freeze; it is only the water that is in it that freezes. When a clod freezes dry it falls to powder. The expansion of earth by the freezing of the water that is in it, is upwards, and the plants are lifted up by this expansion. When the thaw comes, the liquid mush, being heavier than the root or plant, goes first into the space that the root ought to fall into, and hence the latter is left to dry or perishes in the sunlight and air. In dry ground, where there is little water to freeze, plants are not thrown out. On a sand-hill no such thing as thawing out can occur. Thus we see that the light crops of grain that follow Winters with little snow, are traceable to the drawing out and total loss of some plants, or the partial drawing out and proportionate injury to the plants that are left, and which give only a proportion of a full crop.

In the Old World, where farming is expected to be carried on by the same person on the same tract for years, this fact has been recognized, and a system of under-draining has been resorted to. Under-draining has been practiced in land comparatively dry, and with profitable results. Crops double, and even treble the size, have been obtained on land after under-draining. In our country, where an owner seldom knows how long he may hold ground before he is tempted to sell or vacate, the first expense of under-draining can rarely be thought of. Not often would he get back the first cost, with interest, under several years. But very much oftener than at present, he might surface-drain by plowing into ridges, or making open furrows through the flats. He would do so much oftener than now, if he did not forget that surplus water in the soil is at the bottom of most of his losses by short crops.

Aside from this, it is not well understood that water is of no value as food for plants. Its chief use to vegetation is to keep the parts cool—to keep a plant from drying up. Heat is evolved by the processes of life. Transpiration carries off the surface heat, just as perspiration keeps a man's body cool. A live tree trunk in summer time will be found quite cool, while a dead trunk alongside will be warm or even hot, and in Winter, when a thin snow on yucca, or other living leaves, will melt, on dead leaves, or dead wood, that have no living heat, it will stay till the sun or an advance in the temperature drives it away. Water is necessary therefore only as it can pass tissues, and transpire through the surfaces. It is not necessary that water absolutely in its pure liquid state should be in the soil for the plant to get all it needs. Tons of water, as we know water, are taken from earth from which we could not extract one drop by pressure—and we find by experience that the less of what we call water in its popular sense we have in the soil, the better for the health of the plant. This comes about from the food of plants being chiefly of a mineral character, and the necessity of oxygen in properly preparing food for the plant. Though actually in water, roots have to employ oxygen in preparing food. Water is capable of taking up a small portion of oxygen; when it has taken this small portion, it will take no more; when all the water is relieved of its oxygen the plant will die unless the water has the chance of absorbing more from the atmosphere in proportion to that used by the plant. A hyacinth could not live in a hyacinth glass only that the water absorbs from the atmosphere the oxygen it loses by root consumption. This has been proved by actual experiment. "If the water in which the roots of a plant are immersed be contained in a closed bottle only partially filled with the water, while the remainder is occupied by atmospheric air, the oxygen in this air will slowly diminish, being absorbed by the roots through the medium of water, the roots extracting it from the water and the water absorbing it from the air. If carbonic acid, nitrogen or hydrogen, is substituted for the atmospheric air in the bottle, the plant droops and dies in a few days." (Johnston's Lectures).

We see from all this that, while it is important that there should be moisture in the soil in order that there should be a circulation of the plant juices, it is quite as important, if not more so, that there should be always a supply of oxygen about the roots. They cannot get much when water surrounds them, and then only at second-hand. The soil is, therefore, in the best condition for plant life when it has no water in its popular sense—it should rather be in a gaseous than an aqueous state.

The "moral" of all this is, as the story books would say, that water serves two purposes in plant culture: first, it gives that moisture to the earth by which the plant can get of the liquid sufficient to supply the waste of transpiration, and maintain an even temperature, and, secondly (what is of far more importance), it drives out of the soil the waste air—the air that has been deprived of its oxygen, and, when the water itself sinks away by its own weight, a new supply of fresh air takes the place of that which the water dislodged.

Is it not strange how long it takes the cultivator to apply the facts which the scientific investigator makes so plain before him? Go where you will in greenhouses, you may see the water-logged pot that never dries, and the sickly plant, the grower never for a moment supposing that it is dying from root-suffocation, and we may go into the large establishment of the intelligent cut-flower grower, and find his benches of roses, bouvardias and carnations unprovided with any drainage; but fortunately they are kept in fair health by the slower process of moisture evaporating from the great flat surface, instead of the more rapid passage which good drainage affords. They seem to prefer to learn by horny-handed, thick-headed experience, costing no end of brains and thousands of dollars in money. After years of tussling with ten inches or a foot of soil in a bench, they found six inches or less in a bench better. No one could explain why? The reply is, "Well, we find it better!" They still kept to their solid board bottoms, that admitted of no drainage. Now they have found that slatted bottoms are better than the solid boards, and still no one knows any more than that it is better "because it is."

What an immense advance there will be in profitable culture when it comes to be understood everywhere that the oxygen in the air is essential to the roots of plants, and that the rapid drying out of the soil, so long as it retains some moisture, is the best way to re-oxygenate the earth.

Farm Economy.

CRUSHING BONE.

Mr. Charles E. Burnap "uses" the device shown at Fig. 226 for crushing bones for his

Fig 226.

poultry. It consists of a strong sugar barrel with three staves cut off one-third the distance from the top. It is then partly filled with small stones packed solid. At the top of these is placed a large flat stone fitted tightly to the barrel, with the top coming up even with the bottom of the place cut out. Upon this flat stone bones can be crushed, the sides of the barrel catching the fragments, thus saving much that would otherwise be lost.

GRAIN BAG HOLDER.

At Fig 227 we show another grain bag holder, different from the one illustrated last

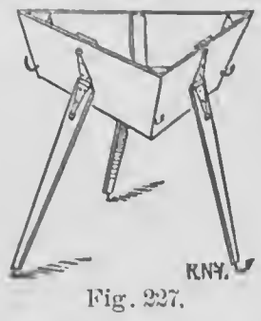


Fig. 227.

week. This one is used by Mr. Luther Shute. It is made of three pieces of half-inch basswood boards. Upper edge 23 inches long and lower edge nine inches. These pieces are fastened together at the corners by means of hardwood pieces, as shown. The three legs are three feet nine inches long, fastened on by means of strap hinges, so that it will adapt itself to bags of different length by giving a a greater or less spread to the legs. The hooks are formed of wrought iron nails driven into the corners and turned. Nails driven into the legs and sharpened hold the implement from slipping.

Horticultural.

MODERN HORTICULTURAL NOMENCLATURE.

T. T. LYON.

With the rejuvenation of horticulture within the past 30 or 40 years, important changes have occurred in modes of thought and practice, to a few only of which do I propose to invite attention. Then, the orchardist, perchance, would have no alternative but to plant the seeds, grow them up to trees, and thus provide for the planting of his orchards. Nurseries and nurserymen's catalogues were decided rarities. "Agents" and "tree peddlers" and especially the venders of blue lilies and roses, tree strawberries, curculio-proof plums, iron-clad peaches, Russian apples and mulberries, and all that tribe, were all unknown, as were the great mass of of our present horticultural literature, with the consequent necessity to write and re-write, print and reprint, study and restudy the catalogues and lists of to-day.

Serious as the mere fact of prolixity has now become, however, it ceases to be of importance when compared to the novelty mania, with its burdensome tax upon the time, as well as the purse, not only of nurserymen, but of the general public as well. It can no longer be said that misleading names are the outcome of innocent self-deception, or that they are mainly harmless. The new rose, Her Majesty, may, for ought we know to the contrary, be superior to any and everything in its way that has preceded it; but who dare deny that so pretentious a name was not chosen as an aid to its introduction and sale; or that quite as much use is not being made of the name as of its alleged merits in the way of advertising. The same to-day, as the rule, may with great apparent reason as well as probability, be charged as the motive for the selection of such titles as General, President, King, Emperor, Queen, etc., etc., while Beauty, Favorite, Prolific, and a host of other prefixes and suffixes subserve the same object—an unwillingness to wait till the variety shall win a character for itself, and a purpose to impose a character upon it which, too late to serve the purchaser, may, and as the rule, surely will prove spurious or at the least misleading.

To illustrate: I can see no good reason why all should not tacitly yield to the wish of the owners, and drop the name Comet as applied to the Lawson Pear, save that, being more or less sensational, it may be used to withdraw attention from its actual worthlessness, and thus promote the sale of trees.

The introducer of Meech's Prolific Quince by the use of the epithet "Prolific" becomes liable to the suspicion of a purpose to urge its sale upon the assurance of superior productiveness—a claim which will quite possibly entrap the ignorant; although those better informed will usually understand (as has been very properly said, recently, by J. J. Thomas) that prolificacy is quite as likely to prove a fault as otherwise. To the public it is sure to be only Meech.

I know nothing of the Golden Queen Raspberry, now widely and temptingly advertised; but the mere selection of such a sensational name, in defiance of the tendencies of the day, begets the suspicion that it was chosen to supply a factitious basis, on which an advertising reputation might be made up—a motive which seems to have heretofore induced the selection of such names as Legal Tender, Prince of Berries, Pride of the Hudson and numerous other similar ones.

South Haven, Mich.

Miscellaneous.

SHORT PITHY PARAGRAPHS.

Poultry and Sheep need sulphur, not only to prevent disease, but to make wool, eggs and feathers. For poultry and hogs, add charcoal. Keep your poultry houses well littered with sawdust. Occasionally dust sulphur and ashes over the perches to prevent vermin and scaly legs. Keep a box of ashes in one corner.

As Treatment of Diseases: for bloat or hoven in cattle, a cloth wet with strong brine laid across the small of the back will give relief. If cows are poor and weak, feed corn a few weeks before calving to give strength to expel the afterbirth. If fat, put them on dry feed 10 days before calving to prevent milk fever. For milk fever, give spirits of niter and quinine in small and frequent doses. Keep the patient well covered with blankets to prevent chills and congestion. I have cured the worst form of foot-rot in sheep in a week's time by driving them twice a day through a trough filled with lime, blue vitriol and water, mixed to a thin paste. Water must be added as it dries out. For scab, tobacco dip is safest; arsenic and carbolic acid are effectual, but dangerous. For distemper in horses, a teaspoonful of camphor gum twice a day, corn fodder, bran mash and blankets. For spavin use iodine, quicksilver and corrosive sublimate, equal parts, mixed with lard. Remove the hair, rub in the ointment for four consecutive days in eight or ten days, and the spavin will disappear. For strains and lameness keep on wet bandages. For ringbone, sweet oil, four ounces, turpentine, two ounces, oil of stone one ounce. Apply three times a day; fasten a bar of lead just above the enlargement. For scratches, wash with soap suds; add 20 drops of carbolic acid to a pail of suds. For sweeny, rub well with a bacon rind. For bots or colic, give sweet milk to which has been added a shovelful of wood ashes; after this has settled pour the milk off. If for bots, add one pint of molasses. Repeat the dose if relief does not speedily follow—a safe and efficient remedy. For saddle or collar sores, brush on some white lead paint. To prevent sore shoulders, wash well with cold water at night; keep the collars cleaned and well oiled. For poll evil or fistula, wash pure potash into the sores—sure cure. For hoof-bound, keep the hoof wet with strong brine; have the shoe made so as to expand the foot. Most blacksmiths shape the shoe so as to make the hoof contract or crowd inwards at every step, hence corns and hoof-bound. Buy stock as a rule, when everybody wants to sell, and sell when everybody wants to buy.

[R. N. Y.—Some of the modes of treatment recommended above for several of the ailments mentioned, differ from those prescribed by the most skillful and successful veterinarians. The methods of the latter have in every case been given from time to time in the Rural during the past year, and repeatedly in previous years, so that there is really no necessity for repeating them here. We do not think it right to exclude from a farmers' paper all mention of practices and beliefs common among a large number of farmers, simply because they do not coincide with what we think best ourselves. A word of caution, however, is not out of place, where the health or life of a prized animal may be affected.]—

To Preserve Fence Posts, dig a pit in the ground, that will hold 50, 100 or more posts of any size you want; break up freshly burned unslaked lime, put a layer on the bottom of the pit, lay in your posts until full; then pour on water to slake the lime; add two pounds of sulphuric acid to a pail of water; cover up quickly with boards and then with dirt; tramp down to keep in all the heat and steam; let them lie one week before opening. I have known elm posts thus treated to be good and sound after 18 years. Another way, with a cloth swab tied on a stick, apply sulphuric acid to the parts of the posts that will be a foot above and below the ground. Afterwards give a coat of linseed oil, or oil and resin, hot or coal tar. Another way, apply common coal oil to the entire post after swabbing it with the acid, as above. This is cheap and lasting. To make a cheap and strong post-and-rail fence, take number eight or nine wire; tie it around the post two feet from the ground; bring it up and make a loop for the ends of two rails to slip in; then tie around the post again, make another loop for the top rails; drive staples to the wire at the back side of the posts. This will make a cheap, strong fence to turn horses and cattle too; or three barbed wires can be added at the bottom to turn small stock. In making all wire fence, have the brace come about the middle of the end post, so that the post can spring as the wire contracts; if put at the top of the post it will draw out and loosen the whole fence.

To Keep Cider Sweet for years, add one ounce of salicycic acid to 40 gallons of sweet cider; dissolve the acid in hot water in a crock (don't use iron); let it stand on the stove two hours, or until dissolved. The acid is good for rheumatism and dyspepsia, and is kept by all druggists.

Morrow Co., Ohio. C. W. Carpenter.

[Salicylic acid is not now used as a food preservative nearly so commonly as it was a few years ago, as it is thought to be injurious to the stomach.—Eds.]

PITHS FROM SUBSCRIBERS.

A. C. Carpenter, of Minnesota, says that some contend that any journal is worth its

subscription price, and that you cannot read it a year without finding some useful hints, etc. But Mr. C. takes this view of the general proposition, "Here is a gold mine. There is $100 worth of gold in it; but it is worth $1,000 to dig it out." Therefore the mine is worthless."

My vineyard of Niagara and Concord grapes was almost an entire failure last year, on account of the injury done the vines by the extreme cold of the Winter before last. To avoid any such mishap again, I laid down the vines from the wires last Fall, and they now promise a great crop. C. P. W.

Hillsborough Co., N. H.

The cow that will suck herself is generally the best in the herd. If it was not for this fact, very few of them would be kept. When measures are taken to keep the cow's head away from the bag (and that is the only sure remedy), the cow must be kept in a stall by herself, as the frame on her neck will not let her head into a stanchion. It pays better, though, to keep a good cow in a stall than it does to keep a poor one in a stanchion.

Jefferson Co., N. Y. T. H. S.

In the Summer of 1884 several peach trees bore a medium crop, but almost without exception, the peaches were wormy. The apples were just as bad. Last May I had corn-cobs soaked in crude petroleum and tied in all the trees. We had an abundant crop of peaches and I don't remember one dozen to have had worms. I think small, wide-mouthed bottles hung in trees with the petroleum in them, might be better. In the Spring of 1884 I tried an experiment with a scrubby peach tree, that was about two feet high and 1½ inch in circumference. I removed the earth from the roots and put in a peck of ashes over which I poured two gallons of boiling water, and then put the earth back. Now the tree is fully 12 feet high and as thrifty as any tree on the place. The earth was removed this Spring, but no trace of worms could be found.

Orange, Va. MRS. J. E. M.

Some 30 years ago Horace Greeley spoke at the Indiana State Fair, and expressed surprise at the small size and inferior quality of the horses on exhibition. The average farm horse then was gaunt and spindling, averaging 13 hands high. It was then held that a colt could make its full growth without regard to care or feed. Colts were made to live on scant pasture in Summer, and straw stacks in Winter. Lately they have had better care and larger breeds have been introduced. The Hambletonian, Clevel,nd Bay, Clydesdale, Percherons, and other breeds are found everywhere. Raising good horses pays as well as any other branch of farming. It is to be hoped that with the improvement of the "general-purpose" horse, the gambling race course will not be made, as now, the chief attraction of our State and county fairs. S. W. H.

Madison Co., Ind.

I have been much pleased with artichokes as a food for hogs, especially in the Spring, or as a food for brood sows. We had a plantation near an old piggery which gave excellent satisfaction. Since the hogs were moved to new quarters we have fed no artichokes, but we shall put out a small plot, as I think they pay well. PROF. S. JOHNSON.

Lansing, Mich.

In many cases where hog cholera is given as causing the death of hogs, I think the trouble is due to kidney worms. The animals are sluggish and seem to grow weak behind. A dose of sulphate of iron or of turpentine will help matters. L. J. T.

Canon City, Col.

I have been bothered very much by my hens eating their eggs. I think I have at last found a sure remedy. A gentleman was at my place some time ago and we were speaking of this trouble with hens. I found we had both come to the conclusion that if the nests are kept nearly dark there will be no loss. I proposed to darken my nests by placing them in a separate room with but little light, and that not to shine into the nests. My hens are a cross between the Plymouth Rock and Brown Leghorn. They are good layers, rather tardy about sitting, and almost too timid. Black predominates among them. L. M. M.

N. Ferrisburg, Vt.

I was recently struck with a statement in coal mining. The miner filled three ton cars, employed his own driver, found his light, tools, powder, etc. After these expenses, it netted 10 cents per ton. A farmer places a tenant in absolute possession to pay as rent half the gain or in many cases two-fifths. The tenant has all the comforts of life, his cattle and horses' increase and profit, his poultry, vegetable garden, orchards, fuel, etc. What a contrast with the mine and its worker! There is discontent all over the country. Business languishes, and all must economize. The products of the soil remain unconsumed, or are sold at prices which will not pay the cost of production. Capital is settling into the hands of the few, while the many become poorer. A halt must be called. We must begin just where capital began. It created laws for its purpose, now farmers must take a hand. Too many of our legislators are lawyers. We want laws that the common people can understand. The rich have gained their wealth by the labor of the poor. Let all bear the burden alike. Honest labor can never fill its proper place till it forces itself into it. The war began the work by raising the most degraded labor. We must carry the work on. The Rural is right in the matter. Farmers have the power to work out their own freedom. J. B. B.

Talbot Co., Md.

I have just finished a machine that gives me great satisfaction. I can now crack all my corn and grind my oyster and clam shells. This is quite an item to one, like me, in the poultry business. I took an old mowing machine and took off one wheel and fastened a sweep to the other wheel, lengthened out the shaft, put a horse to it and with a Wilson $5 mill can grind all I want. It will save me much hard work. J. R. L.

Coxsackie, N. Y.

New seedling potatoes should be raised on clay loam, for on such soil they run a hard test, and if there is any bad blood in them it will show itself about the second year. Sandy soil is deceitful. Sandy soils give you beautiful Burbanks and Empire States, but on our clay loam in our valley they look like cows' horns, and grow very coarse, and will never do for our soil. O. H. A.

Charlotte, Vt.

Rev. Richard Nott of Charlotte, Vermont says; "I have heard "thin-skinned" folks express the belief that the Rural editor has not any feelings from the habit he has of "sitting down" so independently, callously, defiantly in his paper on matters and things, measures and men. I incline to the opinion, however, that the Rural folks—from the Editor-in-chief down to the imp of the composing room, are all people of kindly sensibilities.

Experience is the first and best teacher for successful farming, and the Rural is next best. We need to learn what we can do ourselves and also what others can do. There is much in the way this experience is told. We had a cow choke with a beet. It stayed in her throat all night. We fixed two blocks of wood between the jaws of a wood clamp, so as to press on the beet without pressing the wind-pipe. I screwed the thing up and it started the beet so that I had no trouble in working it out by hand. We applied the pressure near one end of the beet so as to start it. This is much better than trying to smash the beet with a mallet or poking it down with a stick. A. B. E.

Manhattan, Kans.

I am getting out of patience with strikers. Most of them get far better wages than the majority of farmers can possibly hope to get; yet they go on agitating and depressing times still more. We live nine miles from a railroad, and haul our oats and corn that distance over rough, muddy, country roads, and then sell at 20 cents per bushel. What would these "strikers" do in such a condition? Some people never know when they are well off.

Hopeville, Iowa. M. T. A.

Tree agents are around here deceiving the people with Moore's Arctic Plum and Kieffer Pear. They don't like to hear from the Rural. One agent offered peach trees grafted on water elm roots. He made no sales for lack of fools. Another agent sold trees which he said were grafted on a kind of stock that sent up such a smell that the borers never touched it. He found some customers, strange to say.

Monroe Co., Iowa. J. N. B.

Before the war, people here were planters but not farmers. We raised great crops of cotton, rice and sugar but let the smaller things go. Since then, while we have been wanting to change, we have been unable to learn to do as our father didn't do. We must get rid of the olds-tyle system of cultivation and learn the thrift, economy and management that have made other countries successful. How are we going to learn?

Sumpter Co., S. C. E. J. K.

We have to pay 7½ cents a foot for tile here, and sell cabbage at two cents per head and common grapes at two cents per pound. My four Jerseys keep us from running out of dry goods and groceries. They are doing extra well and support the family in better shape than many men could do. Times are hard but we expect to live yet. We have enough to eat and drink and wear. That is a good foundation anyway. I have successfully reduced 200 large carcasses by the use of fresh manure and gypsum. I have now enough fertilizer to do my 20 acres for a long time. J. K. P.

Knoxville, Tenn.

A neighbor has a hooking cow. She practices her peculiar habit upon every person or thing within reach. Among her farm companions is a monkey. The first time the cow saw him, she, as usual, lowered her head and "made for him." The monkey waited until she was within reach and then jumped quickly to the top of her head between the horns, and run the whole length of her body and jumped off at the rear. The cow was so badly frightened that she ran all the way to the stable. Since then she has behaved herself. C. A. U.

Falls church, Va.

A farmer who has everything convenient can take care of 200 hens without neglecting his other work. I do it and my work is generally done in time. Duck raising will not pay unless one is near a hotel or other good market where ducks can be sold at a fancy price. C. S. P.

Plymouth Co., Mass.

We have apples enough out here. In our apple season hundreds of bushels rot on the ground because there is no market near enough to get even with freight, etc. California apples to be appreciated must be tasted in their season and before the taster has filled himself with apricots, grapes, pears, strawberries and the like. Our apples will not keep well, but I find that they compare well with "Chicago" apples that have found their way out here. I have lived in the great apple-growing regions of this country—Michigan and Western New York—yet I must stand by our California apples; our Yellow Bellflower can't be beat. You can take an early start from the northeast corner of Maine and look all the way along to this place, so as to arrive here in October, and fail to find such apples on the road. The best of it is, we have them every year and no frost to cut them off. It is here just as it is elsewhere; poor fruit will find its way to market, and just because it is cheap, it will be hawked about the streets and carry a bad name into every kitchen. California is well able to supply her own apples.

Santa Barbara Co., Cal. O. N. C.

CATALOGUES, ETC., RECEIVED.

St. Johnsville Agricultural Works. Circular from M. Williams, St. Johnsville, N. Y., proprietor of the above named manufacturing enterprise. The horse powers, thrashers, truck wagons and other implements manufactured at these works have received the highest testimonials. The range in manufacturing is great: from the circular saw, weighing 325 pounds, to the great four-horse power, weighing 4,000 pounds. All machines are allowed to run four days within two weeks after they are received. If a machine does not give satisfaction after ample time has been given for fixing it, the purchaser may return the same at the expense of the maker, and whatever note or cash has been paid, will be returned. The catalogue contains a surprisingly large number of testimonials. We invite all who are interested in work requiring the use of such machinery to send for this catalogue.

Society for the Promotion of Agricultural Science.—Proceedings of the sixth meeting of the above society, from its Secretary, B. D. Halstead, Ames, Iowa. This society, though young, contains some of the brightest minds in American agriculture. It was organized in 1880, and has met yearly since then. It was organized for the purpose of bringing together persons interested in scientific agriculture that discussions as to the methods and results of investigations might be had. The present volume contains the papers read at the last meeting. It is packed full of facts. Papers were contributed by Dr. Beal, Maj. Alvord, Prof. Caldwell, Dr. Sturtevant, and others. This society is doing much for American agriculture as it presents a medium through which advanced thinkers can reach each other.

Cornell University Register—from the Treasurer of the University, Ithica, N. Y. All are familiar with the history of Cornell University. In many respects in is the leading industrial school of the age. It is gratifying to learn that efforts are being made to increase the scope and efficiency of the agricultural department. This would appear to be necessary, as out of a total of 604 students we can find but 22 who are taking the present agricultural course. The register is neat and comprehensive. It should be carefully examined by all who have children to educate. The advertisement of the University will be found elsewhere in this issue.

New Iron Fence for Farmers—circular from the Barnes Patent Iron Fence Company, Easton, Pa. A well considered effort to answer the question—"Which is the best fence for the least money?" The Barnes fence is cheap, strong and durable. The rails are made of wrought iron, seven-eights of an inch wide, one-eighth of an inch thick, and eight or ten feet long. Cattle cannot injure themselves against it and snow cannot drift about it. It can be easily moved, as there are no post-holes to dig and no rails to drive. The price ranges from $1.20 to $1.70 per rod, according to the number of rails required. A new thing. Investigate it by all means.

Roofing and Lining Papers for Poultry Houses. Circular from C. S. Garrett & Son, 12 and 14 Decatur Street, Philadelphia, Pa. Few things have done so much to make the poultry business what it should be as the fact that the means of building cheap, simple, yet warm houses have been greatly increased. Few lining papers have given better satisfaction than those sold by this reliable house. We are confident that our readers will receive prompt and courteous treatment in all business relations they may have with Garrett & Son.

Whitman's Fountain Pump.—Poster from Josiah A. Whitman, Providence, R. I. This excellent pump is deserving of a neater and more attractive advertisement than is given in this crowded poster. A neat pamphlet would have been far more attractive. This implement is considered by such men as Prof. Cook, Sec. Garfield, Prof. Comstock and others as being the best of its kind for spraying trees, plants and bushes as well as for all other purposes to which a fountain pump can be applied. It has given excellent results with us.

What Others Say.

New Fruit Nomenclature.—J. J. Thomas, the worthy horticultural editor of the Cultivator (Albany), refers to the action of the American Pomological Society in correcting and improving the names of fruits. He states that there are more than 250 names of pears with the word "Beurré" prefixed to them. With the exception of a few hard culinary or winter pears, the term applies nearly as well to all the thousand varieties, and is useless. There are nearly as many unnecessary prefixes to other fruits. It is hardly reasonable to require every one of the ten thousand fruit-raisers in the country to write these sterile words every time they refer to these pears. Many other names are inappropriate or misleading, or have been applied by dissemmators to help the sale of second-rate sorts, and others are coarse and vulgar; and it is entirely within the province of the American Pomological Society, on behalf of the great multitude who are to use these names, to correct or improve them.

A Potato Centennial.—Just now Montidier, France, is preparing to celebrate the centennial of the introduction of the potato as an article of human food into France by M. Parmentier, who was born in that town in 1737 and died in Paris in 1815. A chemist and enthusiast, he had struggled for years against bitter opposition, to make the "apple of the earth" (the French name for potato) an article of food; for it was then regarded by the French with the utmost contempt, as fit only for hog feed. Finally he obtained from Louis XVI. permission to cultivate the tuber on the plains of Sublons, near Paris, and in 1786 prepared a banquet to which he invited all the *savants* (the scientists of those days) of France, to prove to them the excellence of the potato and the variety of ways in which it could be made palatable. It was served up in 33 different styles, and was at once declared to be the most delicious of esculents. Parmentier became famous; he visited the King at Versailles, holding a bunch of potato flowers in his hand; Louis shook hands with him; Marie Antoinette allowed him to kiss her on both cheeks, and at a ball at night his Majesty wore a bunch of potato flowers in his royal buttonhole. Since then the potato has had a triumphant career in France, and the 33 styles in which it was introduced by Parmentier have, Alexandre Dumas tells us, been increased to 250. What statesman, poet, financier, orator or soldier has done as much for the real happiness and prosperity of the French people as was done by Parmentier? Have all the "glories" of Napoleon conferred as much "solid" happiness on them? Justly therefore are all the distinguished men of France invited to the celebration, and from the original home of the potato the Rural New-Yorker sends, from the Western Continent, its contribution of praise to honor the introducer of the tuber into France.

The Suffolk Horse is considered in many parts of England as superior to either the

Clydesdale or the Percheron for general farm work. The Suffolk is slightly smaller than either of the above mentioned breeds, nimble and quick, a fast walker and a good keeper. Youatt says the excellence, and a rare one, of the old Suffolk horse consisted in nimbleness of action and the honesty and continuance with which he would exert himself at a dead pull. It is a beautiful sight to see a team of fine Suffolks, at a signal from the driver without a whip, down on their knees in a moment and dragging everything behind them. In color the Suffolk is generally a chestnut, frequently with flaxen mane and tail. We have still room for this excellent breed in America.

BEN DAVIS APPLE.—Dr. Hoskins states, in the Vermont Watchman, that last Winter wiped out all his Ben Davis trees—some 40—though many of them were of considerable size and had produced large quantities of apples. But the trees have never been entirely healthy, and he is glad to replace them with the ever reliable Russians, or with the Wealthy. He feels sure that Ben Davis can be grown in Maine and be perfectly safe 75 miles north of the Baldwin limits. But he would not plant it where the Baldwin succeeds, unless it were to sell after the Baldwin is out of the market, and he is not sure that it keeps much better than Baldwin when grown side by side. In the Northwest it is the great standard market apple, as the Baldwin is in the East. Its true headquarters are in Kentucky, Southern Illinois, Missouri and Southern Iowa. The flat prairie does not suit it, but the further north it can be grown the better it keeps, and the poorer its quality. It can never become a rival to the Wealthy, which belongs in the next one hundred miles north.

DECLINE IN VALUE OF CATTLE IN ENGLAND.—Prof. J. P. Sheldon says that the serious decline in the value of cattle in England has had comparatively little effect in reference to the number of calves that will be raised this year. Calves have been so low in price that many farmers have decided to hold them in the hope that prices will improve by next year. Again, the value of milk is always a powerful factor in the rearing and fattening of calves. Milk and its products are now lower in England than for many years, and with the great quantities of imported beef, English farmers feel that it will pay as well to feed the milk to calves as to run it through the churn or vat, so that the usual number of heifer calves will be raised, and in some sections more than usual will be held. A loss will undoubtedly be felt in the sale of the "calf meals" or milk substitutes which have formed so important an element in English calf raising.

SHORT AND FRESH.

THE London Live Stock Journal notes the fact that in the days of the Roman Empire, a mixed crop of leguminous and cereal plants, like peas and corn, was grown for soiling cattle. This mixed food must have been to cattle what "succotash" is to human beings. This system might be employed at the present time. The practices of the old Romans are, many of them, too good to be lost. Old Roman agriculture maintained in Italy a well-fed population, larger than has ever been there since.....

THE North British Agriculturist thinks that the work done by American chilled plows is yearly gaining favor with British farmers....

IT also says that rough plowing and fine harrowing are the best preparations for a good grain crop.....

A NUMBER of Black Javas have been carried to England. The breed attracts some little attention there. The Plymouth Rock has never been very popular on the other side of the water.....

CONCRETE is found to be an excellent fireproof material. It resists the action of fire and still retains its form. Stone, as is well known, cracks, while iron twists and bends under the action of a severe heat. The Scientific American says it is now possible to construct buildings entirely of concrete.....

A FRENCHMAN has invented a machine for feeding lambs that works on much the same principle as many of the calf-feeders in use in this country. The milk is poured into a long trough from which a number of rubber tubes protrude. The lambs suck the milk from these tubes.....

JUDGE says that women should substitute ribbons for birds as hat ornaments, and thus encourage an American industry. Yes, and discourage un-American foolishness and cruelty at the same time.....

REV. J. G. WOODS, of England, calls a horse a machine. The man who understands his machine can make it last twice as long as one who simply "sets it agoin'." Proper treatment will lengthen the years of usefulness of a horse. It pays better to have a horse retain its youth and spirits a few years longer than to pay for two horses and wear them both out.

ENGLISH Hereford breeders find themselves with many young bulls left on their hands. The $100 registration fee levied upon imported Herefords by the Herd Book managers, keeps all but the very best at home. Many young bulls are sent into districts where Short-horns predominate, and rented to farmers who secure their service for their keep. It is hoped that the calves from these bulls will compare so favorably with those from Short-horns, that a new market for Herefords will be opened. Thus far, however, the venture is not particularly promising.....

AT a meeting of the Orange Co. Fair Association, it was voted that hereafter the exhibitor of animals or articles must be the raiser or producer or the owner, for a period of at least 30 days prior to the exhibition. This was done to prevent the all too frequent custom of buying, and getting together a fine herd of cattle, or buying large vegetables in order to win prizes away from legitimate breeders or farmers. This is a good move. The fairs are for the good of farmers and not for speculators. There are hundreds of Fair Associations in the country which might well follow this example .....

THE prospect for an abundant pasturage is good. Be careful about turning the cows out too soon. Let the grass get a good start before it is eaten down.....

ENGLISH authorities assert that sulphur mixed with grease will enable cattle to resist the attacks of the gad-fly, and thus be free from warble maggots or "grubs." The dressing is well rubbed along the backs of the cattle several times during Summer.....

AN English farmer was recently tried for injury done to land by excessive cropping. The land was rented for a term of years. Several crops of wheat were taken from it, and but little fertilizer was applied. The farmer was found guilty. Can you not rob land of its fertility as you can rob an animal of its energy?.....

IN an American cheese recently cut open in England was found a bottle containing a letter requesting the names of several young ladies who would correspond with the writer. This is the first time a cheese has ever been used as a matrimonial medium. The American dairyman who would send abroad for a wife ought to be ashamed of himself.....

THE London Live Stock Journal says that calves will thrive better upon sweet milk with water added than upon skim-milk. A calf, it says, will thrive and grow upon three quarts of milk per day until it is a week old, when the quantity should be increased to four quarts. This quantity should never be exceeded, but a little water should be added. Many farmers would hesitate to invest four quarts of sweet milk per day in a calf, yet they raise some splendid stock in England, and claim that the first secret of success lies in giving the calf every chance in the first year of its life.....

THE London Farm and Home would mark tools by covering the metal with a thin coating of tallow or wax, writing the desired name with a sharp instrument and then filling the marks with nitric acid. In less than ten minutes the work will be done and the tallow may be rubbed off.....

A WRITER in the Cincinnati Times sets down agriculture itself as a fraud. He says the fact is, agriculture would demoralize a saint. He was almost a saint when he went into it. He is a demon now. He is in war with everything. He fights himself out of bed at four o'clock, when his better nature tells him to lie till seven. He fights himself into the garden to work like a brute when reason and instinct tell him to stay in the house and enjoy himself like a man. He fights the pigs, the chickens, the moles, the birds, the bugs, the worms—everything in which is the breath of life. He fights the docks, the burdocks, the mulleins, the thistles, the grapes, the weeds, the roots—the whole vegetable kingdom. He fights the heat, the frost, the rain, the hail—in short he fights the universe, and gets whipped in every battle.....

THAT the great metropolis has been misgoverned, deceived, robbed by its Aldermen, no longer admits of doubt, says the New York Herald. But what else can be expected from such ignorant and besotted creatures as are elected to office—elected by rum bribery, "deals" and lies? In this New York and Chicago may embrace and shed tears of sympathy.

REV. DE WITT TALMAGE says that one of the trials of the newspaper profession comes from inadequate compensation. There is great rejoicing ever and anon in this land because the price of newspapers has gone down from five cents to four, from four to three, from three to two, from two to one. There are men who would like to have the price go down to half a cent. He never rejoices at such a time, because it means hardship, penury, domestic privation, starvation. "You may not see where it strikes, but it strikes. No newspaper in the land can afford to be published at less than five cents a sheet."....

THE spirit of the above is true enough. But it strikes us that we could afford to sell the RURAL as low as two cents a copy if we made it up of clippings, old engravings, gave up our Experiment Grounds, and printed it upon poor paper.....

THE country is filled with lawyers, says the Orange Co. Farmer, and four out of five are an unmitigated calamity to the neighborhood they infest. They incite litigation and they prey on the weaknesses of their fellows. The same is true to a lesser extent of medical men, adds the N. Y. Tribune.....

WRITE us your experience, farmers; send your opinions to some other excellent journal.....

THE tenderest radishes the RURAL has ever raised were grown in flower-pots of sand. The sand was kept moist with water to which small quantities of nitrogen, potash and phosphoric acid were added.....

A WRITER in the National Live Stock Journal believes that 90 per cent. of the so-called incendiary fires are caused by smoking or the careless habit of carrying matches in the pocket. It is usual for smokers to carry a quantity of matches in the vest pocket. It is comparatively easy for a match to escape from this pocket and fall unnoticed upon the floor. Stock may tramp upon and explode them; rats may bite them into flames. There are a dozen ways in which they may cause mischief. Matches should never be carried loosely in the pocket under any circumstances. A pocket match safe can be secured for a few cents that will prevent all possibility of danger. It is needless and useless to speak of the danger incurred in smoking in and around barns. It is plainly evident that the buildings are filled with the most inflammable material which needs but a spark to start it into flame. As a rule, smokers will not be taught as they should be until they smoke a building through the bowl of their pipe. .....

MAJOR BROOKS says, in the N. Y. Tribune, that we hear of hog cholera—that outrage on Nature. Exclusive corn diet occasions or aggravates it. Filthy water, made worse by the filth of the hogs themselves, full of bacteria and malarial poisons that come from vegetable and animal decay, is all the drink which some hogs get at the season of the year when their thirst is greatest.....

AGAIN he remarks that the civilized world should enter indignant protest against the abuse of dumb brutes. The law should punish transgressors much oftener than it does. The hight of absurdity is reached when people consent to be taxed to "stamp out" what carelessness and cupidity brought in; the hight of audacity is reached when the mischief-makers propose such a tax. Every farm needs cattle; the cattle business should be distributed, the big herds broken up, civilized treatment adopted, and there will be little stamping out to do.....

HARRIS LEWIS says that under the auspices of the present Secretary of the New York State Ag. Society it has "dwindled" down to an annual cattle show—no reports, no institutes"; and the whole concern is "run as a close corporation," and the "fellows" "make money out of it." They get a large "appropriation" of public funds, and their 1885 report pleads guilty to "disbursements" aggregating $7,040, all but $2,861 of which went for "salaries and traveling expenses."....

THE acknowledged receipts, it appears, include: From fair tickets last Fall, $24,412; "refreshment privileges" (chiefly "beer"), $2,393; catalogues, $183; transportation, etc., $141; membership fees, $699; cash from State, $8,000; from citizens of Albany, $3,880—a total of $39,708.....

COMMENTING upon the above, the Ag. Ed. of the N. Y. Tribune says that in view of the fact that the cost of the fair according to their own figures, was $26,091—$13,617 less than the income from it—and that $6,719 is acknowledged as "on hand," we suggest—mindful of present and prospective low prices for farm products—that the Legislature let this little ring of parasites on others' industry worry along the present year with their surplus, the cattle-show profits, and the evil fruits of the "beer privilege," without the imposition of the usual draft upon the reduced income of every reluctant taxpayer in the Empire State.....

BUTTER, says Henry Stewart, is known to be exceedingly absorbent of all kinds of odors. The careless farmers who suffer the butter to become odoriferous of rancid tubs and tobacco smoke; not to mention other sources of foul smells, lose by this neglect. And why should not careful dairymen gain by exposing their butter to the delicate odors of flowers and other sweet scents of Nature. This is done by some of the French dairymen who supply Paris with their choice and expensive products, and who pack bunches of sweet violets, jasmine and roses in the baskets among the rolls of butter, and thus not only make their wares agreeable to the sight, but also pleasant and fragrant to the taste, for the palate is able to distinguish the delicate flavors which these odors possess.....

A MAN may walk a mile in 25 minutes and return refreshed and benefited for the exercise. Let him run a mile and it may harm him in many ways. It is the same with a horse. It is fast driving that kills.....

IT is admitted, says the Weekly Press, that important changes in the diet of cattle should be made gradually; experience proves that the fresh bite of new grass does not destroy the cow's appetite for hay, and it proves too, that cattle fed night and morning and turned out a few hours at a time keep in better condition than if they were suddenly put upon an exclusive diet of young herbage, which has small nutritive value compared with what it will acquire after a few weeks' growth, and which is also loosening and debilitating. The critical change "from hay to grass" is made without any loss when it comes gradually, the cows having their hay and grain twice a day—in diminishing quantity for a time—then at morning only for a week longer, until the feed is dispensed with altogether.....

EDITOR STILES of the above journal, who conducts one of the best agricultural departments we know of, says truly enough that the maker of bad butter is the best friend of the oleomargarine manufacturer. The worse the real butter the better is the chance for the imitation of the best butter. Let it be borne in mind that the maker of bad butter is the *best friend of oleo*.....

MRS. L. HARRISON, according to the N. Y. Tribune, is a competent and trustworthy witness against silk culture. She says that from a dollar-and-cent point of view it is "an utter failure." Also she notes "much dissatisfaction" felt by those forwarding cocoons to the Women's Association of Philadelphia, "as after waiting weary months the returns in many instances are below the cost of expressage." Moreover, those who make money out of this "America's New Industry" are those selling eggs and mulberry trees and books. Notwithstanding the mass of evidence to the same purpose as the above, a few editors continue to publish misleading letters from persons who profit by thus deluding the credulous public.....

THE N. E. Homestead observes that the New York State Agricultural Society holds an annual fair, "but that is all." And the N. Y. Tribune adds: "Yes, and it does this only by a direct tax upon the people and the indirect one involved in the degrading results of its $1,475 beer privileges."..... ....

Everywhere.

RURAL SPECIAL REPORTS.

SETTLERS FOR UTAH.

The Territory; assayists; difficulties of freighting; scarcity of swine; farming; lawyers; surveyors; architects; florists; school-teachers.

OGDEN CITY, Weber Co.—No Territory is less known to the East than Utah, yet few would so well repay acquaintance. It is almost twice the size of Ohio, and has a population of 150,000. It should claim more attention from emigrants if only because it appeared attractive to so shrewd a business man as Brigham Young. A few years ago, before the railroad was built across the plains and through Utah, men who listened to advice to settle here without embracing Mormonism were brave to foolhardiness. The Mormons, wishing to be the exclusive inhabitants of the Territory, harassed the non-Mormons, or Gentiles, for attempting to settle. The spirit of Mormonism is not yet entirely purged of this disposition, still it is held in check, and Gentiles now live here not only with safety but profit; but one must not care for being called "carpet-bagger," or for meeting a cold reception at the hands of the Mormons.

I put aside the mining and stock interests of the Territory, leaving them for capitalists. To invest a small amount directly in either of these huge enterprises is as hazardous as investing in a lottery; but to bring a practical knowledge of assaying into a mining neighborhood, and to settle down with it, and advertise it, and keep enough of one's little hoard by one to buy chemicals with, and to cultivate the acquaintance of the miners who come into the towns in the Winter—this is the way for a poor young man of education to dig silver out of a mine. Another way to divert

silver from a mine without digging it, and without the responsibility of being a shareholder, is to ship eggs, poultry, meat, berries and butter to the mining districts. The fact that spring chickens have bronght $2 each at the mines, and eggs a dime apiece, might mislead one with the idea that produce is more profitable than it really is, much of the apparent profit being consumed in transportation; still enough remains to give the producer and shipper very encouraging returns. It goes without saying that farms and mines do not thrive in close proximity. Miners must go hundreds of miles to market, or, more properly, market must go hundreds of miles to miners. Some of the difficulties attendant upon getting goods into new mining localities are almost incredible. I cannot give a better instance than by quoting from a letter written to my father by a man who was out prospecting for him on terms known here as a "grub-stake":—"When the pack-mules came to the head of Thunder Gulch, four miles east of the Big Bonanza mine, it was mighty steep, I tell you. It looked bad for gettin' on. The snow had got there ahead of us, and the animals wouldn't budge, but stood shakin' on the top of the slope. Rawhides wouldn't budge 'em, so we just took hold an' upset 'em an' rolled 'em down. There was scratchin'! But we had strapped their packs on extra tight, and everything was all right when we got to the bottom." This could scarcely have been said if there were eggs in the packs. They were more likely to contain tinned meats, salt pork, flour and beans, and the sweet, mild California onions, so dear to the miner's palate under the nickname of "miners' apples."

Pork and lard are dear in Utah and reach it from Chicago. Lard is not rendered here, but comes in little buckets, and is sold at exorbitant prices. The reason swine is not raised largely is because the nights are too cold for corn to thrive. But an experiment is being made on a ranch near Ogden, the result of which is being carefully noted. If it succeeds it is hoped a domestic instead of an outside market will supply local needs in the future. The experiment is the gathering and parboiling of the prickly pear cactus, which grows wild among the sage brush, and the feeding of it to the swine. It is glutinous and fleshy, and, when the prickles are removed by parboiling, is said to be ravenously devoured by the pigs. The Mormons say that when they suffered famine in the early days here, they considered the cactus fine food, parboiled and fried.

Farming in Utah is profitable, and would be vastly so with more machinery. Farming lands can be had from the Government under the Pre-emption, Homestead, Desert-entry and Timber-culture Acts. The Pre-emption costs most, the Timber-culture next, and the Desert-entry is cheapest. If an irrigating ditch can be run through the farm, a competency is secure. There is often trouble between the Mormon and Gentile neighbors about the water supply. Each will shut off the supply from the other on slight provocation, and so injure his crop. Farmers claim that farming is so profitable here because of irrigation. There is no fear of drought, no speculation about the weather. Irrigation compared to rainfall is constancy to fickleness. A water-right once secured, irrigation can always be relied on.

In Utah, there are many willing hands to work, but heads to plan are scarcer. The Territory could give practice to more lawyers than are now at her bar. Disputed water-rights, cattle ranges, mining locations and land cases supply ample practice. These same interests give employment to surveyors, who might come in large numbers. Architects from the East, after learning the values here, would greatly improve the style of architecture, which now, outside of Salt Lake City, is crude. While planning and building for others, the honest architect may be building brick by brick his own fortune. Non-Mormon under-mechanics and workmen would not be wise in coming yet to Utah, as there are many excellent artisans here among the Mormons. To give a beautiful setting to the work of the architect, there are fine English and Dutch gardeners here, but they seem to be confined to Salt Lake City, and a few nurserymen and florists could do well in the outlying towns.

No complete flora of Utah has been prepared, and botanists will find a rich, fresh field here. Ornithological taxidermists will find over 400 varieties of birds, from the pouched pelican to the humming-bird.

The schools of the Mormons are schools in which "knowledge comes but wisdom lingers." In them is taught the shocking creed that Christ practiced polygamy, and also there is taught a belief in a plurality of gods; and that plural marriage is commanded by Divine revelation. The Gentiles cannot send to them, so that each church supports a school. Secular schools would do well here, and there is felt a want of the kinder-garten system. In the early days of Mormonism the only healing art practiced was the laying on of ordained hands for the cure of disease, but of late years physicians have made headway against superstition, and more could find patients, especially those who would give special study to rheumatism, the only chronic disease prevalent here.

The press is a profession to which Utah opens a wide field. The Salt Lake Tribune is the most thriving paper in the Territory. A Gentile paper must now, of course, express the sentiments of the unpopular minority, but Utah's political future must make her press a profitable and an important one, and there is room for several brave newspapers. Wisely edited, their power for good will be incalculable. In closing, let me recount, in the order in which they are most needed here, the kind of men and women who would do well to consider Utah before choosing another locality in the West: physician, editor, school-teacher, kinder-gartner, architect, nurseryman, florist, assayer, lawyer, surveyor, apiarist. Students of ornithology, taxidermy and geology would find a rich field here. K. D. FORGERON.

Iowa.

IOWA CITY, Johnson County, May 3.—This year bids fair to be the best of the last six. The prospects for fruit were never better, and the garden and field crops are fully a month in advance of this time last year, and work is well ahead. G. R. I.

Maryland.

WESTOVER, Somerset Co., May 3.—Strawberries and peas are far advanced; muskmelons are up and tomatoes are planted in the open ground. Wheat and and oats are looking well; much of the corn crop has been planted and some is coming up. More strawberry plants have been put out this Spring than for several years. On account of the low prices of corn, many of our farmers are planting more strawberries and less of that grain. The present prices are: corn, 35 and 40 cents; wheat, 90 cents; oats, 35 cents; butter, 25 and 35 cents; eggs, 10 cents dozen. S. C. S.

Michigan.

REDFORD, Wayne Co., May 1.—Wheat looks promising. Clover looks well; only few pieces winter-killed. Apple trees are very full of bloom. Small fruits look good for a full crop. Oats mostly sown. Weather very fine. R. A. L.

Minnesota.

BEAVER CREEK, Rock Co., May 3.—We have had very fine weather for spring work. Small grains all in. Some have planted corn; many more will plant the first of the week. Some have sown a part of their flax (which this year occupies nearly half the cultivated ground); more are waiting for the weeds to start so that a part of them may be killed before the flax is sown. L. D. M.

Tennessee.

WILFORD, Wilson Co., April 28.—A good many farmers in this county and Rutherford planted corn just before the rain storm of March 28, which was the hardest ever known here for the length of time. Many of them have to plant again. There have been larger areas of oats and clover sown than usual. Wheat is looking very fine. A large crop was sowed last Fall. Corn is from $1.75 to $2 per bushel; flour, $3 per cwt.; cattle are very low: good milch cows and fat cattle are the only kinds in demand, and milch cows from $20 to $30 where the calves are young. More interest is being taken in fruits, in apples and grapes especially. W. B. A.

Vermont.

N. FERRISBURG, Addison Co.—Trees and plants wintered better last Winter than the Winter before, and we had less snow and a lower mercury. We had plenty of rain last season, and perhaps trees and plants made a more healthy growth. Good prospect for the European plums. Some of us had a good crop last year, while others did not. It is quite unusual to have two good crops in succession. L. M. M.

THE FARMER'S CLUB

ANSWERS TO CORRESPONDENTS.

[Every query must be accompanied by the name and address of the writer to insure attention. Before asking a question, please see if it is not answered in our advertising columns. Ask only a few questions at one time. Put questions on a separate piece of paper.]

REMEDY FOR THE CABBAGE MAGGOT.

M. M. L., Cortland, N. Y.—The cabbage maggot is held in check by a dressing of oyster-shell lime applied at the rate of 150 bushels to the acre. The lime is sown on the land after plowing and then harrowed in. The plan described by "Horticola" in a late RURAL is effective, particularly when small plots of plants are to be cultivated. A small quantity of any concentrated cabbage fertilizer scattered in the hill and well mixed with the soil is highly recommended. Peter Henderson saved plants that had been attacked by the maggots by scraping away the earth from the roots and dusting lime thickly about them and again drawing up the soil. A handful of guano was dusted around every five or six plants, or about as thickly on the surface as sand is usually strewn on the floor. The lime arrested the work of the maggots on the stem and the guano started a quick growth, which caused the plant to make new, strong roots. 2. The kerosene milk mixture can be made by placing one part of kerosene and two parts of sweet milk in a jug or other vessel and rapidly shaking until the union is complete. Then put in twice as much water and shake again. This mixture must be kept well shaken or stirred while in use. If allowed to settle, the free kerosene rises to the top, and this will be death to the plant. The soap mixture is better. To make it, put one quart of soft soap with one gallon of water into a kettle and heat to the boiling point. While still boiling hot stir in one pint of kerosene oil. Hard soap or whale-oil soap will answer. 3. Radishes can be kept free from insects by a light dressing of common salt applied in the Fall, or by a dressing of lime just before sowing the seed.

MUSHROOM CULTURE.

W. R. S., Ravenna, Mich.—"To start and keep up a mushroom bed," take fresh horse manure, free from rough straw, and pile it up loosely to "heat." When it heats and before it "burns" any, turn it over, and repeat this turning just as often as it heats again and before it begins to burn, till it begins to "mellow," say in 14 to 24 days' time. You may then make the bed in a dry shed, a cellar, a pit, under a greenhouse bench, or anywhere else that is convenient, where a steady temperature of 50° to 60° may be maintained, the atmosphere is steadily moist and there are no undue exciting or drying influences. Darkness is beneficial, but not at all absolutely needed. Make the bed nine to ten inches deep and very solidly packed. After a few days the heat may rise to 130°, but wait till it declines to 100° before you spawn it. Get fresh brick spawn (costs about 10 cents a pound) and break it into lumps about the size of a hen's egg, and insert these three inches deep into the bed and some six to nine inches apart. In 10 days' time from spawning, cover the bed with good common field loam about two inches deep, and make all very firm. In four to five weeks signs of mushrooms should appear, and in six to seven weeks from earthing over there should be a good crop. On an average, fresh manure needs three weeks' work or 10 days in the bed before spawning; mushrooms appear six weeks after spawning, and beds continue in good bearing about four weeks. Mushrooms are a most uncertain crop. Maggots in May and hot weather in Summer render their artificial cultivation during Summer impracticable, or at any rate unsatisfactory.

APPLES FOR ENGLAND.

"Subscriber," Putnamville, Ont., Canada.—1. What apple should be planted here for exportation to England? 2. How would the Newtown Pippin do here? 3. From whom can apple trees be obtained?

ANS.—1. As shown by a number of reports in our "Crops and Markets" during the past Winter, the following were the American varieties sold in the English markets: R. I. Greening, Spitzenberg, Baldwin, Newtown Pippin, Golden Russet. The prices varied a great deal in accordance with the extent of the supply thrown on the markets, all arrivals being immediately sold by auction, and as many as 8,000 to 10,000 barrels being offered at once in Liverpool. The prices for the different varieties, however, nearly always bore the same proportion as that indicated in the report of the RURAL for January 7, last; Greenings, $2.21 to $2.70; Spitzenbergs, $2.70 to $3.19; Baldwins, $2.90 to $3.37; Golden Russets, $2.95 to $3.90; Newtown Pippins, $2.95 to $6.03. Some of these, however, will hardly thrive in your sections. 2. The American Pomological Society gives one star to the Greening in Ontario; two to the Baldwin; none to the Newtown; and one to the Golden Russet. The stars are not indicative of the quality of the varieties; but of the extent to which they thrive in any section; and the Spitzenberg, being a Russian, is likely to be hardy with you. The Ribston Pippin and St. Lawrence are the only other apples double-starred in the Province, but the Fameuse, Gravenstien, Hubbardston Nonesuch, Mother, King of Tompkins County and Wagener all do fairly well in some parts of Ontario. 2. Not at all. 3. Ellwanger & Barry, Rochester, N. Y., are a trustworthy firm.

TREATMENT OF A TROUBLESOME MARE.

M. C. G., Fredericksburg, Va.—My young mare is very restless while standing in the stable, moving her hind legs from side to side, switching her tail and kicking, sometimes violently, but generally tramping about and kicking the sides of the stall lightly. She is very hard to crupper, being inclined to kick during the process. How should she be treated?

ANSWERED BY F. L. KILBORNE, B. V. S.

The trouble is evidently nothing more than irritability, nervousness or viciousness, and the treatment required is a thorough course of training. For the kicking in the stable, attach with a strap, 15 to 18 inches of log-chain or a wooden clog to the limb used in kicking. The mare will soon tire of the practice. To harness and apply the crupper, first buckle a strong strap around the fetlock of the near fore foot, lift the foot until the heel comes in contact with the elbow, and buckle the strap tightly around the fore-arm. While thus strapped, the mare cannot put this foot to the floor, and being on three legs cannot kick. Now harness and apply and remove the crupper until the animal will stand quiet during the operation. Repeat daily as long as necessary. A few lessons should be sufficient.

TREATMENT OF A PREGNANT MARE.

W. H. B., South New Berlin, N. Y.— 1. How should a very fat 11-year-old mare that has done no work all Winter, be treated until she foals in June? 2. Ought she to be worked much? 3. Would it be well to keep up grain feeding? 4. What are the cause of, and a remedy for grubs in the backs of cattle?

ANS. 1. The mare should be worked moderately or turned to pasture where she can exercise regularly. 2. Moderate, steady work, or regular exercise is very beneficial, much better for both mare and foal than idleness. When accustomed to hard work, a mare may be simply worked reasonably hard to within a month of foaling, if properly cared for. But for three or four weeks before foaling, light, steady work is preferable. Excitement, straining, hard pulling, over-feeding or allowing too much water when thirsty is to be avoided. 3. No, withhold the grain and feed sparingly, until after foaling. If turned in pasture, let the feed be short. Breeding animals should not be kept very fat. They do much better when simply in fine working condition. 4. Read the article on this subject in the F. C., of April 24.

COLT WITH "BOW-NECK" AND TAIL CARRIED TO ONE SIDE.

G. C. C., Shashequin, Pa.—My one-year-old colt is a very fine youngster except that the top of his neck is rather low down, and he also often carries his tail a little to one side, especially when he feels pretty well; what should be done?

ANSWERED BY F. L. KILBORNE, B. V. S.

If the colt is "bow-necked," you probably cannot now change it any more than you can the shape of the head. Feeding from a moderately high rack will cause him to carry his head higher, if that is what you desire. By cutting across the muscles of the side of the tail towards which he carries it, and keeping the tail tied to the other side until healed, this habit may be corrected. The services of an experienced veterinary surgeon, or one familiar with the operation, will be required to insure success.

DAILY COLIC IN MARE.

D. W. S., Martensburg, W. Va.—My mare with foal has colic every day, sometimes severe enough to cause her to give every evidence of much suffering; what should be done?

ANS.—Knowing nothing of the conditions surrounding the mare, we cannot tell the cause, nor can we give a remedy, except in a general way. Give a laxative diet with grass, roots, or bran mashes, or gradually turn to grass in a shady pasture. Whenever an attack occurs give frequent, copious, warm water injections per rectum, with slow walking exercise or brisk rubbing of belly with whisps of hay or straw. Give two ounces of Glauber salts and one ounce of powdered gentian twice daily. If a severe attack occurs, give one dram of sulphuric ether and two drams of belladona in one-half pint of raw linseed or sweet oil. Purgatives, which are usually given for colic in horses, might be unsafe during pregnancy.

A KNEE-SPRUNG COLT.

G. E. L., East Setauket, N. Y.—After working my five-year-old colt a few days this Spring, I noticed that after a hard drive his knees would tremble, and he is a trifle knee-sprung. I attribute it to feeding too much grain in the fore part of Winter, and letting him stand in the stable. Am I right?

ANS.—You are entirely wrong. The knees are not sprung by feeding, but by overwork and hard driving, especially in young animals. Very little can be done, except to give the horse a long rest where he can have walking exercise. Lowering the heels and using thin-

heeled shoes will aid somewhat. A partial recovery may be expected in young animals.

ITCHY SKIN IN A COW, ETC.

A. S., Beechwood, Pa.—When out, one of my cows scratches herself so much as to rub off the hair; the hair is full of dandruff, and the skin of worms, and she has a little cough; what should be done for her?

ANS.—The cow may rub herself because she is troubled with lice, scabies or mange; or the trouble may be due to the condition of the skin. Examine the skin carefully for lice and also for the acari that cause scabies (see Scabies in the F. C. for Jan. 30). If acari are found, treat as there described. For lice, use the tobacco wash freely or wash with water that is saturated with coal oil or kerosene. In the absence of both parasites, use the wire card daily. Even if the parasites are present, the daily use of the card will break up and remove the dandruff and improve the condition of the skin. For the cough, take one dram of solid extract of belladonna and four drams of saltpeter, mix with sirup to form a paste, and smear upon the back teeth twice daily, and let the cow swallow as slowly dissolved.

FOOD FOR COLT.

O. S., Otisco, N. Y.—What is the best food for a young colt the first Winter after weaning, health and growth considered?

ANS.—Fully as much depends upon the care and protection the colt receives as upon the kind of food. A colt receiving no care may not thrive on any kind of food. Good, clean hay, bright straw, or corn fodder are all good. A variety is better than any one alone. One to three pints of grain twice daily, according to the needs of the animal; where straw is largely fed, a little more grain may be required. A few quarts of roots daily are beneficial; also a handful of oil or linseed meal twice daily with the grain. These aid in keeping the digestive organs in a healthier condition, and will improve the appearance of the colt.

Miscellaneous.

J. D. I., St. Thomas, Fla.—1. Here we pen out cattle at night, turning them out into the woods during the day. In order that the droppings may fall in the cow-pen, when should cotton-seed meal be fed? 2. What papers in New York give daily produce market reports? 3. Is there any agricultural or "truck farmers'" paper printed in Bermuda? 4. What Farmers' Club's constitution would be a good model? 5. Do new potatoes from Bermuda bring better prices than those from Florida in the N. Y. market?

ANS.—1. When cotton-seed meal is fed to cows or other cattle, it is better to give it in small rations, at frequent intervals—at least twice a day. It would not be wise to feed cotton-seed meal in large quantities for the sake of making the manure rich. This meal is exceedingly nutritious, and a small Southern cow should not have more of it than a quart at a feed twice a day. It would be better to use the meal itself as a fertilizer than to overfeed it to any animal. 2. The leading produce dealers issue a daily bulletin for the use of their regular patrons; but the weekly reports given in the RURAL contain everything that is given in the weekly bulletins. The daily business papers, such as the Journal of Commerce, $15 a year; and Commercial Bulletin, $12 a year, give full produce market reports each day. 3. We know of no agricultural paper published in Bermuda. The Gazette is the only newspaper in that island, and is the official journal. It contains all the news of the island, including market reports. 4. That of the Elmira Farmers' Club, Elmira, N. Y. 5. Bermuda potatoes sell higher than any other kinds of early potatoes because they are in the market before any other kind. The seed for planting in the island is all imported from the United States, and is the common red or merino potato grown by a few persons especially for this use. The seed can be procured from any dealer in produce in New York City. See our advertising columns.

H. A. B., Odessa, N. Y.—My seven-months-old boar pig has never shown more than one testicle; can he be fitted for the butcher either now or in the Fall?

ANS.—When butchered the other testicle will be found in the hog, the cord being too short to let it into the scrotum or sack. Such pigs—with one testicle in the body—are not salable by law; but the injury to the meat is more imaginary than otherwise. The pig should be killed before cold weather, and while in as passive a state as possible, and it will be found that any rankness in the taste of the flesh is not perceptible. This is all the injury there can be in the flesh for food.

J. C. V., Ft. Scott, Kans—Can moss that was received dry in bales last Fall, and which was used for packing nursery stock through the Winter and Spring, be kept through the Summer, and be again used for the same purpose? 2. Is there any standard work on varieties, care and propagation of evergreens?

ANS.—Yes; but it is not quite equal to fresh moss. The more it is handled and the finer it becomes, the less valuable it is. We prefer to keep it dry, and wet it up before using. 2. The "Book of Evergreens" by Josiah Hoopes, is the best work we know of on evergreens and their propagation.

G. J. B., Evant, Tex.—How can a young horse be castrated, only one of whose testicles is in sight?

ANS.—Except in the hands of a skilled operator, the operation is very difficult and dangerous, while it would take too much space to describe the operation in full. Unless you can secure the services of one who is familiar with the operation, the colt had better remain uncastrated.

S. H., Pulaski, Pa.—When is the best time to sow Orchard Grass, and how much to the acre, along with clover and Timothy, in an orchard sown in rye last year.

ANS.—For your climate perhaps Fall would be as good as any. A mixture as follows would serve: 1½ bushel of Orchard Grass, ten quarts of Timothy, eight quarts of clover. We don't know why any one should prefer Timothy to sow with Orchard Grass.

F. W. W., Chatham, Ont., Canada.—Hen manure and ashes, bones, etc., as fertilizers cannot be compared since hen and barn-yard manure are *complete* manures, furnishing all needed kinds of plant food. Ashes and bones are not complete. To get the equivalent of hen manure, raw-bone flour and ashes with the addition of more nitrogen than the bones contain, should be used.

Several Subscribers.—The Field Force Pump will give good satisfaction for use in spraying fruit trees with Paris-green. One pound of the poison mixed with 100 gallons of water will kill insects. Apply just after the blossoms fall.

W. D. B., Canterbury, Ct.—From your description we cannot locate the seat of the lameness in your horse and therefore cannot answer your questions. Better consult a veterinarian who can examine the animal.

Several Subscribers.—The saw shown on page 259 of the RURAL for 1885, is called the Wagener saw. It does good work. For sale by Charles Wagener, Pniteney, Stuben Co., N. Y. Price $2.

W. R., Fresno Cal.—Agave Americana (the American Aloe) is peculiarly adapted for a hot, dry climate. Drogue, florist, City of Mexico, Mexico, can furnish the seed.

J. P., Kingston, N. Y.—Our report of the Kieffer four years ago was that it was not hardy north of New York. The stem sent seems to us evidence of this.

F. N. W., Arkansas City, Kans.—We can only suggest that you turn the mare on to the wet pasture for a few weeks or months if necessary.

F. S. (no address).—From your description of the symptoms we can only *guess* what ails the calves.

DISCUSSION.

E. A., OF WAYNE, N. Y., sends us a double Thalictrum anemonoides. She says she has seen the single variety, but never remembers seeing a double one before. We have found specimens with two and three whorls of sepals, but never a double one. There is, however, a double variety.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING May 15, 1886.

C. Smith, thanks.—S. S. Shuster, plants received.—D. E. I. B., thanks.—J. P.—W. R.—F. E. P.—E. J. C.—T. B. H.—C. P.—N. W. C.—J. G. S.—O. H. A.—R. N.—J. W. H.—S. J.—L. J. T.—L. M. M.—J. B. B.—J. R. L.—H. W.—J. N. J. H. M.—Jacob T. T., potatoes received.—S. T. S., thanks.—S. H. & Co.—F. D. C.—J. N. B.—S. C. S., thanks.—D. F.—G. N. W.—H. H.—M. S. & S., trees received.—J. B. G.—J. L. B.—J. H.—F. O. C.—H. M. R. thanks.—C. B. M., thanks. B. F.—M. E. P., thanks.—E. B. C., thanks.—T. C. T.—L. T.—E. E. P.—J. D., thanks.—J. H.—J. J. S.—H. D. A.—N. H.—F. C.—L. H. C.—W. H.

Miscellaneous Advertising.

Hood's Sarsaparilla

This successful medicine is a carefully-prepared extract of the best remedies of the vegetable kingdom known to medical science as Alteratives, Blood Purifiers, Diuretics, and Tonics, such as Sarsaparilla, Yellow Dock, Stillingia, Dandelion, Juniper Berries, Mandrake, Wild Cherry Bark and other selected roots, barks and herbs. A medicine, like anything else, can be fairly judged only by its results. We point with satisfaction to the glorious record Hood's Sarsaparilla has entered for itself upon the hearts of thousands of people who have personally or indirectly been relieved of terrible suffering which all other remedies failed to reach. Sold by all druggists. $1; six for $5. Made only by C. I. HOOD & CO., Apothecaries, Lowell, Mass.

100 Doses One Dollar

DRESS GOODS.

JAMES McCREERY & CO.

are displaying an extensive variety of wool and silk-mixed Dress Materials suitable for mid-summer wear.

Among the latest importations will be found Challies, Mohairs, Summer Sicillienne, Dress Barege with bayadere and graduated stripes; all grades of Canvas for seaside costumes.

Also a large variety of Tweeds, Cheviots, etc., including the new hair-line stripes so much in favor.

Samples sent on application.

ORDERS BY MAIL from any part of the country will receive careful and prompt attention.

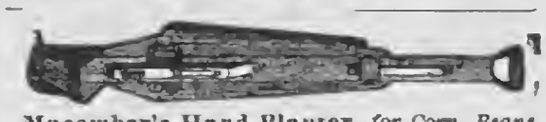
JAMES McCREERY & CO., Broadway and 11th St., New York.

WASH BUGGIES. WHITMANS Fountain Pump. SPRINKLING PLANTS & VINES USED IN ANY POSITION.

Send for large Illustrated Circular. J. A. Whitman, PROVIDENCE, R. I.

Improved HYDRAULIC RAMS. Send for Circular and Price List. Address ALLEN GAWTHROP, Jr., WILMINGTON, DEL. Awarded Medal and Diploma at the Centennial Exhibition, Philadelphia.

TO FARMERS. This simple invention is used in milking cows, particularly where there is any soreness. Made of solid silver, and sent by mail to any address on receipt of the price, 50 cts. Address The Milking Tube Co., 102 Friendship Street, Providence, R. I.



Macomber's Hand Planter, *for Corn, Beans, and Beet Seed.* The BEST in the world. Money refunded if it does not prove satisfactory, after a fair trial. Agents wanted. Send for circular and terms. **S. M. Macomber & Co.,** M'f'g's, Grand Isle Vt. For Rhode Island address L. G. SHERMAN & CO., PROVIDENCE.

Stock and Poultry.

Portable Poultry Fence.

A REQUISITE OF POULTRY KEEPING SUPPLIED. A Light and Neat Fence, easily put up, as easily removed, and not likely to be damaged by handling. Just the thing to protect the garden or make temporary poultry runs.

Twenty-five feet of Fence, four feet high, for

$1.50.

SAML. H. ROBERTS. Send for circular. 12 LISPENARD ST., N. Y.

Choice Eggs.—Langshans, S. S. Hamburgs, B. Leghorns & White Bantams. 13 for $1. A. RAPP, Holland, N. J.

EGGS from W. Leghorns, P. Rocks, or Black-Red Games, $1.50 for 13. *Eggs from Choice Fowls only.* Mention this paper. C. E. RICK, FAIRVIEW, PA.

SMITH & WALKER, Lee, Mass. Breeders of twelve varieties of high class standard Poultry. Eggs cheap. Send for circular, free.

HOW TO MAKE COMMON POULTRY PAY!

Seven years' experience of a MARKET POULTERER, on THE JOHNS HOPKINS UNIVERSITY FARM. Enclose ten cents to CHAS. C. BUCK & CO., Cor. Howard and Franklin Sts., BALTIMORE, MD.

EGGS! White Leghorns and P. Rocks at $1 per 13; $2 per 30. Wyandottes $1.50 per 13. B. Turkeys $2 per 7. **EGGS!**

SAYBROOK VALLEY POULTRY YARDS, Oak Hill, N. Y.

PEDIGREE PLYMOUTH ROCKS.

Pens headed by HANK WHITE BOYS, and ONTARIO CHIEF, with high bred females.

HULL WYANDOTTES.

Pens headed by COL. LEB, LEBANON LAD, and COL. PURE.

Send for circulars.

BRADLEY BROS., LEE, MASS.

LANGSHANS.

EXCLUSIVELY.

Champions at Winsted, Conn., 1885; at Meriden, Conn., 1885-6; also at the Great International Show in New York City, 1886.

My stock is pronounced by the most competent judges **The Champions of America.**

Eggs, $4 per 13; $7 per 26; $9 per 39. Packed in baskets to carry any distance. Send for circular—free to all. Address, with stamp,

ROBERT SEAMAN, Jericho, N. Y.

BROWN LEGHORNS.

This variety has been bred by me for over ten years with great care.

Eggs from May 1st at $2 per dozen.

Also Collie Dogs for sale.

Mention this paper.

FRANK L. FISH, TAUNTON, MASS.

SHELLBONE for POULTRY.

A mixture of Pure Bone and Ground Oyster Shells. All poultry need it. 25 Pounds, $1.00; 50 Pounds, $1.75, by freight. Samples, .05c. mail. T. H. BOCK, Crisfield, Maryland.

At the Great N. Y. Poultry Show.

THE SILVER CUP.

value $50.00, offered by Reed & Barton for the largest percentage of chickens hatched was awarded to

THE STANDARD INCUBATOR.

Manufactured by L. N. CLARK & SON, Dealers in all the leading Incubators, Poultry Supplies, etc.

38 DEY STREET, NEW YORK.

Mention this paper.

HATCH The CRAIG Folding Incubator and Brooder (combined) will hatch from 1,200 to 1,500 chicks per year, worth as broilers from $4 to $12 per dozen. No cost or experience to operate. Holds 100 eggs. Price $12.00 An absolute success. Perfection of the **CHICKS BY** late successful imitation hen. No lamps to explode. Ten hens will pay $200 profit per year. Send 4c. for new 36-pp. book on poultry, incubators, etc. F. D. CRAIG, North Evanston, Ill. **STEAM**

CAN'T BE BEAT!

THE "STANDARD" WIRE NETTING POULTRY FENCE,

AND

PATENT METALLIC PICKET FENCE,

FOR LAWNS, FARMS, ETC.

Price of 2-in. Mesh, No. 19 Wire, in Bales of 150 lineal feet only:

7-8 OF ONE CENT PER SQUARE FOOT,

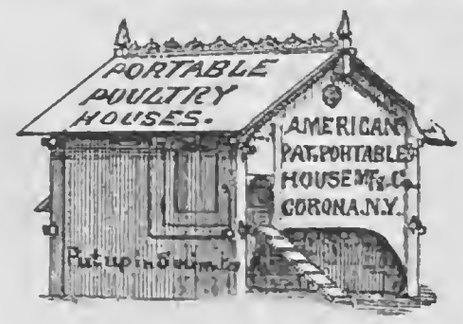
Write for circular.

Hatchers, Brooders, Poultry Houses, etc., fully described in our new catalogue, which will be sent on receipt of 10 cents. Circulars free.

Brockner & Evans,

(Formerly 422 West St.) 28 Vesey Street, N. Y.

PORTABLE POULTRY HOUSES.



Furnished all complete ready for occupancy. These houses are just what poultry breeders want, as they are

Neat, Practical and Cheap.

All kinds of portable houses suitable for all climates; ***rain, wind*** and ***water proof.*** Sent to any part of the world, and no carpenter required to put them together.

Send for our Circular before you order a poultry house.

AMERICAN PATENT PORTABLE HOUSE MANUFACTURING CO. Corona, Queens Co., N. Y.

NAPKNOLL'S

PROGRESSIVE POULTRY COOPS FOR HENS AND CHICKS,

WITH BROODERS AND INCLOSED RUNS.

The favorite Excelsior Poultry Coop and Nest combined

***PRICE* $6.**

Gold and Bronze Medals were awarded at the Great Show of New York Fanciers' Club, February, 1886.

Have you anywhere else in the world seen Chicken Brooders and Inclosed Runs that may at pleasure be either attached to or detachable from the coop?

If you have not any such coops or brooders, send a two-cent stamp for one of the Illustrated Descriptive Catalogues, with terms and Price List.

NAPKNOLL POULTRY COOP CO., GOSHEN, ORANGE CO., N. Y.

AGENTS:

NEWELL & CO., 127 State Street, Boston, Mass.

L. N. CLARK & SON, 38 Dey Street, New York.

MILL BROOK

POULTRY YARDS

AND

KENNELS!

40 breeding pens of selected Wyandottes, Langshans, W. and **Br. Leghorns,** P. Rocks, Lt. Brahmas, R. C. W. Leghorns, B. B. R. Games, Pekin Ducks. Eggs, $3 for 13, $5 for 26, $7 for 39. Duck eggs, $2 for 11, $3 for 22. Nine hens and one male to each pen. *I guarantee a good hatch. Try me.*

Champions: Bernard Dogs, Champion Scotch Collie Dogs. Young stock for sale at reasonable prices. Champion mouse-eater, "Terrorine," in the stud. Send for Catalogue.

WM. MONTGOMERY, Jr., Bergenfield, Bergen County, N. J.

PRESTON'S WYANDOTTES!

15 *GRAND BREEDING PENS FOR* 1886.

EGGS from Two Pens of First Premium Stock, headed by "Earl and Truston," at $3.00 per 13; $10.00 per 39. Eggs from 13 other pens of good breeding birds, carefully selected, and mated for best possible results, at $3.00 per 13; $5.00 per 26. Eggs from one pen each of fine Langshans, Light Brahmas, Plymouth Rocks and R. and S. C. Brown Leghorns at $2.00 per 13.

Elegant Wyandotte Chromos at 10 cents each. Large circulars with illustrations FREE to all.

GEO. A. PRESTON, Binghamton, N. Y., D. L. & W. R. R. Ticket Agent.

THE
RURAL NEW-YORKER.
A National Journal for Country and Suburban Homes.

Conducted by
ELBERT S. CARMAN.

Address
THE RURAL NEW-YORKER,
No. 34 PARK ROW, New York.

SATURDAY, MAY 22, 1886.

If any subscriber of the RURAL NEW-YORKER *has not received the paper regularly, he will confer a favor by notifying us. We are anxious to extend the time far enough to make up for all mistakes or neglects.*

IF the number on your address label is 1895, your subscription expires with this number; if 1896, next week; 1897, in two weeks, etc.

THE writer was talking a few days ago with one of his neighbors about the best way to raise muskmelons. The neighbor said that last year he manured them in the hill. They started off finely, made a good growth of vine, but began to fail as the fruit set and developed. "Now," said he, "this has happened before, and my belief now is, as the RURAL has often stated, that though the young vines were well fed, the older vines were starved. The roots had grown beyond the manure, and had nothing to draw upon when the melons began to form; and that is the time they most need food."

ONE of the largest crops of corn ever raised at the Rural Grounds was planted June 8th. We were then inclined to speak well of planting early kinds late. We once harvested a fine crop which was planted late in April. We were then inclined to favor very early planting. But a second early planting was much injured by frost, and it has been found that, in most seasons, drought will hurt late-planted corn in our sandy soil. Well, years of farm experience have taught us that it is never safe to plant before early May, the exact date to be decided by the season outlook. We may plant earlier and take the risk.

WE have three trees growing near each other, which, just at this season, are beautiful indeed. The leaves of the Blood Birch are now of a blackish-purple color; those of the Purple Beech are of a reddish-purple, while those of Schwerdler's Maple are of an amber-purple, if we may so describe colors. Near these three trees is another, the Golden Oak, which is just beginning to unfold its leaves which are at first yellow. A more charming group we can scarcely conceive of. The leaves of the Blood Birch turn, later in the season, to a dull, deep green, and, without making nice distinctions, so do those of the Beech and Maple. The Oak resumes something of its golden color in the Fall. As something akin to the above trees among shrubs, may be mentioned the Purple-leaved Hazel, the Golden Spiræa and Pissard's Plum.

THE bill making the Commissioner of Agriculture a Cabinet officer is again up in Congress. A considerable number of prominent farmers are opposed to it; but at conventions and other public meetings of farmers such a measure invariably receives overwhelming support. There does not appear to be any very urgent demand for it, however, among the farming community. The interest in it is of a mild nature, on the whole. The elevation of the official head of the Agricultural Department, would be quite acceptable to the vast bulk of our agriculturists, but there is slight chance of its taking place at this session of Congress, and the agricultural disappointment will hardly be excessive.

IT is time now to begin to talk about the next fair. The life of the crop is just beginning. You have all the Summer before you in which to fit the stock for the prize. Begin early this year, and see what you can do. It is your duty to do one thing at least, and that is to do all in your power to keep liquor off the fair grounds. Talk against it wherever you may chance to be—at the store, on the road, at home, anywhere you can get an audience. Farmers can keep this cursed thing out of their fairs if they will only think so. Public opinion determines such things. Give your opinion, your voice and your influence on the right side. Begin to talk now, and never stop till the thing is done. If you don't succeed this year, do your hardest talking on the fair grounds.

PETITIONS for the passage of the bill to tax bogus butter are daily being presented by the hundred in both the House and Senate from farmers in every State east of the Rockies. There are also a number of petitions in opposition, many of them of late from the Knights of Labor. The manufacturers of cotton-seed oil are especially earnest in their appeal to Southern Congressmen to vote against the bill, on the ground that its passage would depress the price of their product, which is largely used in the concoction. A remonstrance from the Chicago Live Stock Exchange says that cattle are worth $10 more per head now than they would be if the manufacture of bogus butter were prohibited. Who seeks to prohibit it? We merely want to regulate it, and to force its handlers into honest dealing. Supporters of the bill should lose no time in writing to their Congressmen on the matter. Have you done so? Remember a multitude of small efforts generate a tremendous pressure.

Little drops of water, little grains of sand,
Make the mighty ocean and the pleasant land.

OBSERVATION on Fourteenth Street and upper Broadway, and several of the other fashionable "shopping" streets of this city, leads us to believe that the thoughtlessly cruel fashion of wearing birds, whole or in parts, as decorations for feminine headgear, is waning. Even in the Bowery, Grand Street and other great thoroughfares thronged by "working girls" and women who make little pretence of being fashionable, fewer birds are seen on hat and bonnet, although this class is rather slow to follow change of fashion. The millinery stores, however, still display a varied assortment of head-gear barbarously "ornamented." Some hats are *disgraced* with two or more small birds, others with a single larger one; others with wings, heads or plumes. One firm bought last year over 60,000 birds; another 35,000; 70,000 were shipped to dealers here in four months from a single village in Long Island. It is to be hoped that fickle fashion will rapidly change to a more humane style. Flowers are now the "rage" here. Won't you help by word and deed to change the fashion in your neighborhood?

SAID a farmer the other day, looking out at one of the city parks, "If I had such grass as that is on my pasture, my cows would get too fat to walk." While the grass on this little plot was thick and green, his pasture was covered with a light sickly growth that compelled the cows to travel miles every day in order to pick up a living. The city plot had been underdrained, carefully cultivated and fertilized and well seeded. His own pasture had been left to take care of itself without manure, except that dropped by the cattle roaming over it, and not a pound of seed had been scattered upon it. No one can expect a farmer to spend the time and money in handling his pasture as these city parks are handled, yet the principles on which the success of one mode of cultivation is based are appliable in the other. A stout boy with a heavy wooden mallet could in two days, scatter the hard clumps of manure, so that it would do five times the work it now does. A few pounds of grass seeds, evenly scattered upon the surface, would surely make their mark. There are plenty of pastures in this country, that are far more luxuriant than any of the city parks ever can be. They were all produced by proper fertilization and care. The pasture should never be neglected. Too much of the money on the average farm comes from it. Many a farmer can learn valuable lessons from the keepers of our city parks.

WE want to see more students in the Agricultural Department at Cornell University. The equipment is in excellent condition, and the course of instruction ranks among the best in the country. Dozens of young men go from this to other States for Agricultural instruction. These should be kept at home. The requirements for admission into the Agricultural Department at Cornell have heretofore been quite rigorous, so that the greater number of farmers' boys have been unable to enter. Heretofore, students over 21 years of age have, on the recommendation of members of the faculty, been admitted as special students, and have been permitted to take such courses as they desired. This limitation of age has precluded large numbers who might otherwise have attended. Henceforth, any student 18 years of age, with a fair English education, may avail himself of all the advantages offered by the Agricultural Department of Cornell University free of expense for tuition. We are glad the requirements for admission have been made less rigorous, both as regards previous training and age. We would gladly see 150 agricultural students at Cornell. The State would be benefited in a marked degree by such an attendance. We will gladly give our most earnest support to any measures tending to increase the size of the classes in agriculture.

SPECIAL.

Those who, having applied for the Rural's present seed distribution prior to May 15th, have not yet received it, will kindly notify us by postal at once.

WE need a better test for beef at our Fat Stock Shows. There is a great advance in the present judging of beef cattle compared with the methods employed 50 years ago, yet we might well go still further. In olden times judges were satisfied with an outward examination of the animal. Now the butcher's block is regarded as the final test. The prize steer at our Fat Stock Show has gained fame enough. There is no reason why he should live longer. We are told the percentage of dressed meat, weight of each part, gain per day, and, in some cases, the cost of producing a pound of beef. Can we not go further and take the flavor of the meat and its economy in cooking into account? Encourage the improvement in quality as well as in quantity of beef. Carcasses of prize animals, which we have examined, appear to be coated with several inches of pure fat. Is this meat the most economical that can be produced? The bulk of animals has been wonderfully increased by the system of awarding prizes for the greatest gain in weight without much regard to quality of meat. It seems as if the practical limit in this direction had about been reached. It is a common belief with the public that grossness in animals, vegetables and fruits indicates an inferiority in flesh. It will be far wiser to improve the quality of these vast masses of meat than to seek to still further increase the size. Let the final test pass from the block to the pan. We may eventually know the proportion of edible meat to bone, and even the cost of producing a pound of this edible meat. We believe that keener tests would provide a strong incentive to improvement in quality. It is true that such a test might bring some hitherto neglected breed to the front, but in any event the gain would greatly benefit the general public. Why cannot the managers of our Fat Stock Shows move in the matter and establish a class for beef cattle where the quality and proportion of edible meat are solely to be taken into consideration?

CANADIAN DISCONTENT.

WHEN the Dominion of Canada was formed in 1867, Ontario, Quebec, Nova Scotia and New Brunswick were the only Provinces in the confederation, and before the act of union was submitted to the Imperial Government, the great majority of the people of Nova Scotia refused to sanction the action of their delegates in agreeing to it, and displayed a revolutionary violence in opposition to it, and the Legislature declined to assent to it. In Lower Canada there was considerable opposition and a still stronger one in New Brunswick, while Prince Edward's Island and New Foundland absolutely refused to enter the confederation, though the former was afterwards induced to do so. Since early after the formation of the confederation a good deal of hostility against it has been displayed in New Brunswick and Nova Scotia, especially the latter. The root of the discontent lies in the fact that the Maratime Provinces contribute yearly several hundred thousand dollars more to the Dominion than they get back; protection, too, which has been of service to the manufacturers of Upper Canada, has been injurious to them, as it has raised the price of goods by cutting off competition with this country, while the abrogation of the fisheries clauses of the Washington treaty last year, shut them out from the fish markets here, so that there is widespread business depression and distress among the people. Lately, in spite of the utmost efforts of the Dominion Government, a hostile provincial administration was elected in New Brunswick, and last Saturday the Legislature of Nova Scotia, with only six negative votes, passed a resolution declaring that "the financial and commercial interests of the people of Nova Scotia, New Brunswick and Prince Edward's Island would be advanced by those Provinces withdrawing from the Canadian confederation and uniting under one government." If this were impossible, the Assembly declared it "absolutely necessary" that Nova Scotia should seek separation, and ask permission from the Imperial Government to withdraw from the confederation and return to the status of a province of Great Britain with full control over her own fiscal laws and tariff regulations. The chief argument urged was that then a customs union or reciprocity treaty with the United States would be practicable. With the Maratime Provinces discontented with their present condition; Quebec, in part, disgruntled at the execution of Riel; Manitoba uneasy under inadequate Parliamentary representation and a protective tariff, and British Columbia grumbling at the failure of the Dominion Parliament to sanction her provincial anti-Chinese legislation, the provinces of the Dominion do not form an altogether happy family. Ontario, full of life, energy and spirit, is content, however, and seems resolved that no peaceable secession of any of the other provinces shall be permitted.

BREVITIES.

FREQUENT rains, warm, delightful weather at the R. G.

YES, the tender shoots of raspberries and blackberries that are now a foot high will live if carefully transplanted and watered.

MARY WAGER-FISHER'S transcontinental articles will be resumed next week, and will hereafter appear without interruption till all have been published.

GARDENER, of the Farming World, and Cincinnati four-per-cent loan notoriety, who has also been engaged in several other unsavory enterprises, about a year ago sued the Chicago Tribune for $25,000 damages for having libeled him by denouncing his schemes. The RURAL had done the same, and at the time declared that Gardener would never have the audacity to bring the case to trial. The case was dismissed by the Court the other day, because he had fulfilled our prediction.

BILLS now before Congress and which have nearly all passed the House, will restore to the public domain for homestead purposes over 100,000,000 acres of excellent land, withheld from settlement as railroad grants, some of it since 1857. Not a shovelful of dirt has ever been removed on some of the projected roads, yet the land has been held as bait for speculators often for over a quarter of a century. If this just and expedient legislation fails, the fault will rest with the Senate, and especially with the Senate Committee on Public Lands.

THE Women's Christian Association's bill to prohibit the sale of intoxicants at town, county or State fairs, introduced by Mr. Westfall, passed the New York Assembly on Thursday. Now let it be pushed through the Senate and be signed by the Governor. If the managers of our fairs are willing for the sake of a paltry money gain, to deliberately engage in rum-selling, the law should prevent them, not in this State only, but in every State in the Union. The man who sells to another the privilege of selling rum, is morally a rum-seller himself.

INTENDING emigrants should read what is said elsewhere of Utah as a place of settlement. We would especially call the attention of lawyers, yes, and also of doctors to the excellent openings there awaiting gentlemen of their professions. Like the poor who are always with us, there are too many of them here, and we call attention to the advantages Utah offers them, on the same principle on which some of the papers in many sections of the tramp-plagued South, annually call attention to the vast advantages Florida offers in the way of yielding a free livelihood to the thriftless, lazy and "tired."

THERE'S a growing inclination among all parties to restrict rather than any longer encourage the immigration of all foreigners. Immigration is desirable in a thinly settled country which wants hands to develop its resources; but we have here now 1,000,000 men for whom there is no employment, and as many others who cannot work "full time," and why should more be invited except for the benefit of capitalists anxious to keep down wages by overstocking the labor market? It is proposed to tax immigrants $300 apiece, and the recent Anarchist outbreaks stimulate the movement. There is a good deal of talk; but action is improbable—just yet at any rate.

IN view of the importance of legislation restoring to the public vast areas of the public domain, unjustly withheld from settlement for the benefit of railroad corporations, the people should bear in mind the names of the members of the Senate Committee on Public Lands. Here they are; Preston B. Plumb, Kansas; Henry W. Blair, New Hampshire; Charles H. VanWyck, Nebraska; Joseph N. Dolph, Oregon; Henry M. Teller, Colorado; John T. Morgan, Alabama; Francis M. Cockrell, Missouri; E. C. Walthall, Mississippi; James H. Berry, Arkansas. Whatever obstruction may arise with regard to such needed legislation will be in the Senate, the stronghold of capital and corporate interests. So great is the influence of the support of any measure by the Senate or House Committee in charge of such legislation, that in nearly all cases a unanimous support insures the passage of the measure, and the closer to unanimity, the greater the chance for the bill. Some of the above men are known to be honestly in favor of wresting from the railroads the lands to which they have no just claim; others are known to be personally interested in such corporations, and seldom antagonize the interests of any wealthy corporation for the benefit of the people.

The Herdsman.

GUERNSEY BULL, CLIMAX.

At Fig. 228 is the likeness of Guernsey bull Climax, re-engraved from the London Live Stock Journal. He is the property of the Express Dairy Company Limited, of Finchley, England, and was dropped at Sergentie, in the island of Guernsey, on June 16, 1882. His sire was Preston, a very celebrated bull of the island, whose progeny has probably won more prizes than that of any other bull of the breed, and for whom the highest price up to that time paid for a Guernsey bull was given by a Canadian, who imported him a few years ago into the Dominion. Indeed for three generations Climax's ancestors, on the sire's side, have been winners of first prizes on the island of Guernsey, and he himself won first prize at the Royal Guernsey Agricultural Society's shows in 1883 and 1884, before his importation into England, and, later, at the Bath and West of England Society's Show at Maidstone, he also took first prize, and was purchased for the Company for the highest price ever yet paid for a bull of the breed. In color he is a bright orange-fawn and white, and is remarkable for style and quality. His level back, great depth, vigorous constitution, and perfect head, tail and limbs make him an excellent specimen of the best bulls of the breed.

SHORT HORNS.

Preëminence of beef for profit; value of pedigree; rival beef breeds; Short-horns for milk; the Short-horn the best family cow; beauty of a Short-horn herd; generous feed.

When commencing to form a herd of cattle a few years ago, I looked the whole ground carefully over without prejudice, and with all the breeds before me, I chose Short-horns: and for the following reasons:- First, we wish our cattle to serve as agents for the transformation of feed—grass, hay and grain—into beef and milk at the least cost, and at the greatest profit. I put beef first, as that always finds a waiting market under any condition of season or place, with the least care and labor. Thus, while the milk and butter interest should not by any means be ignored, as a most valuable adjunct in securing money from the food products or the farm, I do think it may well rank second to beef, and yet but little below it.

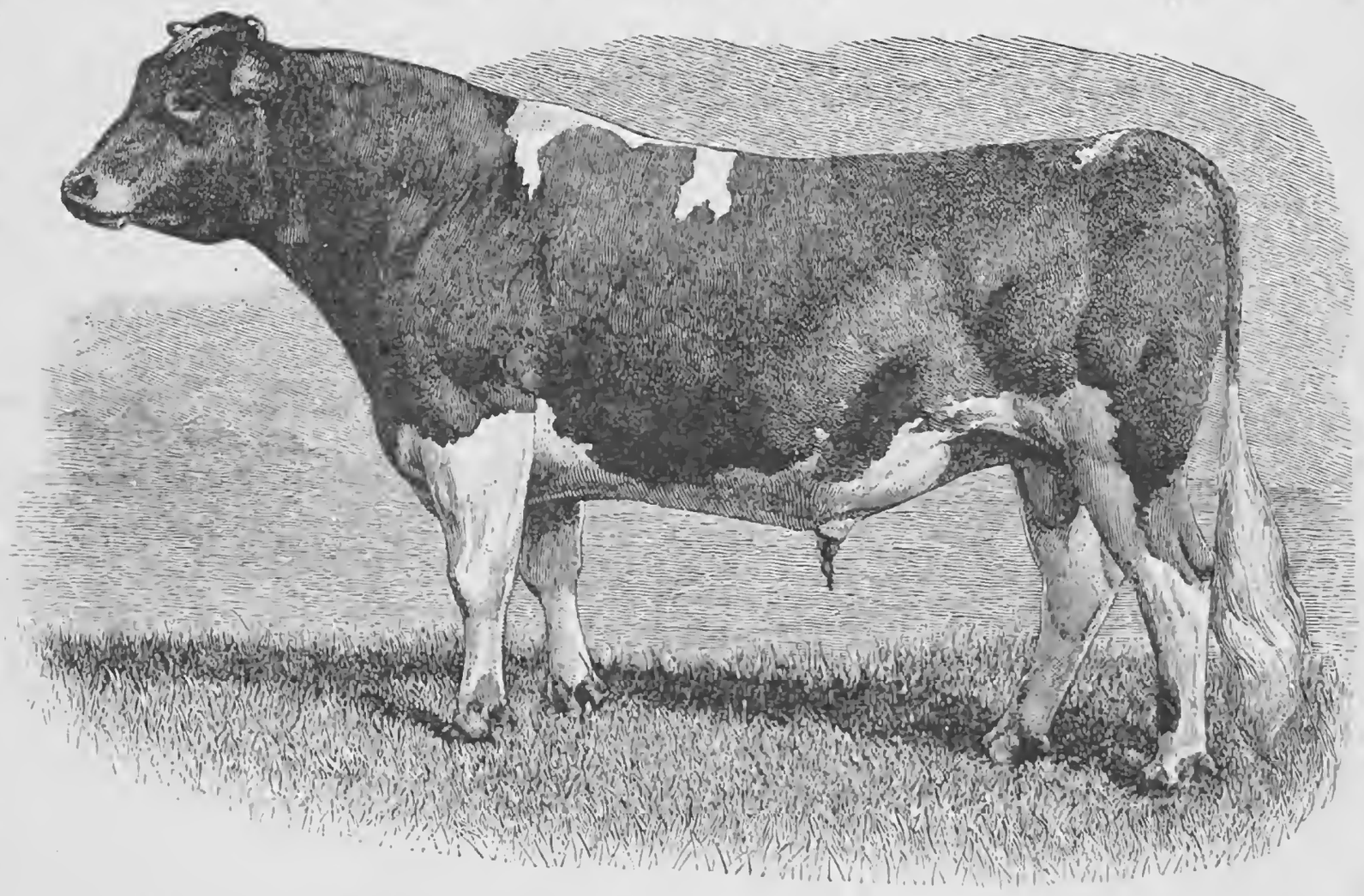
But to secure animals that will make beef at the least expense, we must choose those which have long been bred with this end in view. Pedigree is very valuable in our stock, as it is a guarantee of this careful breeding. Most of our farmers do not appreciate this slowly acquired excellence that long, careful breeding has won for our improved breeds of cattle. It is a sort of sinking-fund, which for years was being laid by with great care and expense and which we to-day are drawing from with such generous results. While the Herefords and Aberdeen-Angus are close competitors in the beef sense with the Short-horns, I do not consider them superior. Just now the Herefords are having a boom—a sort of spurt—but the Short-horns have had a boom all these years. They have stood for years at the front on trial under the severest test of criticism, and they stand as proud and peerless to-day as ever before. When a breed has reached such a state of perfection that one can take almost any specimen steer and make 2,000 pounds of the most choice beef at three years old, surely we need not fear either White-face or No-horns. Surely no breed has been bred up to a standard where, under good, generous care and feeding—and he who does not wish to give these ought not to secure Short-horns—its representatives will show larger returns than our Short-horns.

But, as I said before, there is another string to this bow. We must have some milk, and the more and richer the milk, providing we also get the beef, the greater the profits. Now, here the Short-horn leaves both Hereford and polled breeds away in the rear. Careful tests of the different breeds at the Michigan Agricultural College showed the Short-horns equal to the Ayrshires in quantity, and first of all breeds where both quantity and quality were considered. This fact, coupled with her excellence for beef, makes the Short-horn the best of all as a general-purpose cow, to any farmer who has learned that the best farm economy demands the most generous feeding.

Even the highest and most popular strains of Short-horns rank very high in this respect. When starting my herd, I paid a large sum for a calf from a pure Duke sire and from a Young Mary cow with some gilt-edged top-crosses. People laughed and asked where I was going to build my hot-house to keep her in, and how many scrubs I would need to bring up her calves. That cow is now five years old, and has been our family cow for nearly a year. Though we had for years before some excellent high-grade Short-horns for milk, and for the past three years a very fine specimen of the Judge's Jersey; yet wife and I both think that, when we consider both excellence and quantity, we never had so good a family cow as our present Duchess. I have contended for years that the Jersey is the ideal family cow. I now revise my opinion, and say that, for him who will bestow good care, the Short-horn is the best family cow. A milk yield of 2,000 pounds at two years old, and 10 quarts a day after giving milk eight months, and when due to calve again soon, strikes me as pretty satisfactory.

Second: I keep my farm and cattle partly for pleasure, and I wish that pleasure to be at its full as I look upon my herds of cattle and sheep. What can better fill the eyes than a herd of uniform, large, sleek, magnificent Short-horns. I acknowledge the Herefords to be their equal in this respect, probably a little their superior, as it is difficult to get such beautiful uniformity in any herd of Short-horns. The polled cattle are ugly in appearance; the Hollands lank and ill-proportioned to an eye educated among Short-horns, and the Jerseys even more so. A young Jersey is a thing of real beauty; a herd of old cows in full milk—I have seen the Judge's—are not what just fills my idea of perfect grace as to form.

Third: I think there is nothing more satisfactory to the lover of cattle, etc., than the act of full, generous feeding. I enjoy nothing more than the dealing out of full, ample rations to my stock. With Short-horns this is just what pays; so interest and pleasure walk hand in hand. Short-horns have been bred to this high feeding. It is not only safe but indispensable to the best results. At the recent meeting of the Michigan Short-horn breeders, every prominent breeder present urged the opinion that Short-horns should always be in show condition to give the best results. Thrift and vigor in high condition have been bred in the bone, and are the chief characteristics of the breed. We cannot feed so liberally with most of the other breeds. They have not been used to it, and would become enfeebled, and out of health under such treatment. While purchasing a car-load of Jerseys of a leading Jersey man in Central New York a few years since, he said to me, over and over, "Now don't go to feeding too heavily; that is the great danger in keeping Jerseys." With Short-horns I would say, "Feed heavily; that is the secret of success." And, besides the satisfaction, the more we feed the more capital we employ, and so the more profits we can secure. This was the way I reasoned some years ago as I commenced with Short-horns, and each year has added new emphasis to each point in the argument. SHORT-HORN.



GUERNSEY BULL, CLIMAX, 14 E. G. H. B. Fig. 228. (Re-engraved from the London Live Stock Journal.)

Horseman.

HINTS TO HORSE-OWNERS.

Last week and the week before Professor O. R. Gleason gave daily exhibitions of the management of vicious horses in a large hall in this city, in presence of large audiences of people interested in the noblest of our domestic animals—the horse. The Professor's performances in controlling and subduing the most vicious brutes and in quieting the most nervous and skittish animals, exceeded anything in that line we have seen since witnessing the feats of Rarey over a quarter of a century ago in England. During the performances he dropped a multitude of hints on equine matters, and some of these are briefly jotted down here, as likely to be useful to our readers.

Never buy a horse having long ears with long, straight hairs inside them, narrow behind the ears and between the eyes, with flat, round eyes in sunken orbits, and whose nostrils are small and thick; for he will certainly turn out stupid, hard to teach and incapable of remembering, and like stupid people, very likely be very obstinate. Let your choice have short ears, with short, curly hair inside them; one that is broad between the ears and eyes, with a regular, straight face, and large, thin nostrils; for he will be an intelligent, spirited and willing servant and a faithful friend, if rightly treated.

In training a colt, be at once kind and firm. Make him fear you first, then love you. When you caress him, don't pat his mane, for he doesn't like that. Pat his neck where free from the mane, the point of his shoulder and breast. You can't make too much of a pet of him. Never let him see you are afraid of him. In approaching him, don't say timidly, "Whoa! Whoa!" but go straight up to his head. When you give him an order, do so in a commanding voice, and always order the same thing in exactly the same words, and impress it upon his mind that he must instantly obey. Never say "Whoa!" unless you want him to stop at once: say "Easy!" or "Slow!" or "Steady!" but always use the same word to express the same order. Never lose your temper.

Break your horse of any vices he may have contracted by the mismanagement of others before you got him; and whenever you begin to break a horse, be sure to go through with it, or the attempt will do serious harm instead of good. As a rule, cord bridles, throwing a horse, the double safety rope, and the lifting of his hind feet by means of a rope hitched pulley-fashion to his tail, will quickly subdue a horse, and if repeated several times, will break him of almost all his bad habits, but different horses require different modes of breaking. Never hang a horse on the head or shins with a club or loaded whip.

Finely-bred, intelligent and nervous horses are often easily alarmed, so that they are apt to shy, bolt and run away. We cannot tell what awful suggestions strange things may offer to a horse's mind. A sheet of white paper on the road may, for aught we know, appear to a nervous horse a yawning chasm; the open front of a baby carriage may seem the yawning jaws of a dragon, and a man on a bicycle a flying, wingless monster. But when a shying horse becomes familiar with such things he grows indifferent to them. Therefore when a horse shies at anything, let him smell it, touch it with his sensitive upper lip and look closely at it. Both sides of him must be familiarized with the dreaded object; for if he examines it only with the near eye and nostril he will be likely to scare at it when it appears at his off-side. Rattle the paper, therefore, beat the drum, flutter the umbrella, run the baby carriage, clatter the tin-ware, etc., all around him, and he will soon regard the noise only as a nuisance, and the objects as of no importance. A horse with buck-eyes which render him short-sighted, is more liable than others to this failing. Nothing has so great a tendency to keep up the habit as chastising the horse after he has passed the object of his alarm. If he cannot examine it, the best plan is to get him in some way to pass the object, using as little violence as possible, and always speaking in an encouraging tone.

A horse or cow can be easily prevented from jumping fences thus: Put a strap, with a ring on it, around the near fore leg above the knee, and a surcingle or belt, with a ring, around the body. Then by a short strap, or piece of cord, attach the two rings so as to make a harmless but perfectly effective hobble. To cure halter-pulling in the stall, put a slip-noosed rope around the body, lead the end of it between the animal's fore legs, up through the halter and make it fast to the manger. Then from the loft throw down a lot of clattering tins into the manger. When the horse jumps back the rope will catch him and bring him forward, and he will soon learn not to jump back. To cure a horse of stamping in the stall, hang a moderately heavy bit of wood four or five inches long, by a string seven or eight inches long, from a strap above his knee on each fore leg, so that it will whack lightly against his shin every time he stamps, and he will soon stop stamping. A piece of stout elastic fastened about the hind leg will stop kicking in the stall.

When throwing a horse don't do it in a hurry. The tackle gives you the strength of four or five men, but he doesn't know it. After you have got him on his knees, keep him from rising again, and hold his head firmly toward the near shoulder, and he must soon come down. Let him wrestle and try his strength for a while, and he will be the more impressed with your mastery and the fact that you have overcome him fairly. When you have let him up, pet him, speak kindly to him; make him feel you are his friend as well as his master, and have no intention of harming him. If he refuses to get up after being thrown, blow in his ear, and if he doesn't then jump up, blow a mouthful of water in his ear. The Professor made a good deal of use of "throwing" to subdue vicious horses.

Balking seems inherent in some obstinate brutes, and is the hardest of all equine vices to cure. Very often a balky horse, when in double team, can be started readily by putting a slip-noosed rope around his loins and making it fast to the collar of the true horse. Generally the pressure will start him. Sometimes a very effective treatment is to stand before him and lash his fore legs sharply with a blacksnake whip, not angrily or very severely, but persistently, patiently, for an hour if necessary, though 15 minutes is generally enough, until he concludes there is no comfort in sticking. In extreme cases it is well to put a slip-noosed rope about his neck, hitch a team to it and start them. When he finds his head is going, he will be sure to hasten after it, and often such treatment will give him a horror of balking ever afterwards. If you can't cure or get rid of a balking horse in a team, it would be better to kill him, for his example will be certain to demoralize the true horse, and you'll have a balky team. Sometimes a handful of road dirt thrown in a balky horse's mouth, or a bunch of roughly broken twigs put under his tail, will start him, simply by giving him something else to think of besides the maintenance of his determined obstinacy; but such expedients will have only a temporary effect. Don't kindle a straw fire under him—a Western trick—better shoot the brute or give or trade him away.

Literary.

BOOKS RECEIVED.

THREE HUNDRED PRESENTS. Decorative and Fancy Articles for Presents and Fairs. By Lucretia P. Hale and Margaret E. White. Published by S. W. Tilton & Co., Boston, Mass.

This instructive little book will be highly appreciated by those of our lady readers who wish to add to the beauty of their homes. There are hundreds of little things that cost almost nothing and yet add wonderfully to the beauty and comfort of the home. They are valuable as presents, not because of their intrinsic value, but because of the fact that they represent the labor of some dear friend. We heartily commend this book to such of our lady friends as are interested in decorations. The suggestions regarding the conduct of fairs and other entertainments, will be of great service to those who are called upon to organize such meetings in aid of the church or school.

DOWN THE WEST BRANCH. By Captain Charles A. Farrar. Published by Lee & Shepard, Boston, Mass. Price $1.25.

This is supposed to be a record of the adventures of the Lake and Forest Club, a company of boys who spend their vacation "camping-out" in Maine. As a rule, we think too many of such books are written. They are all about the same thing, and in every one, boys go safely through adventures that not one man in 500 can ever expect to encounter. Still, there will always be a demand for such literature. As children delight in listening to old stories time after time, so older boys enjoy the stories of adventure. As to the influence exerted by such stories, opinion is divided. The Sunday schools of the country are filled with them. The present volume is well written and contains much scenic description that is admirable.

SALAMMBO. By Gustave Flaubert. Published by Saxon & Co., New York.

This is a weird, horrible, utterly useless, historical novel. Flaubert was a master at word painting and some of the scenes in Salammbo are magnificent specimens of powerful description. The story deals with a hitherto neglected period of the history of Carthage. Salammbo was the sister of Hannibal, and daughter of Hamilcar. The story deals with the attempts of a vast army of Barbarians to capture Carthage. Hannibal is seen only as a wild and vicious boy. The Carthagenians were a treacherous, cruel and cowardly nation In order to portray with truth, scenes in which they were actors, it is necessary to fill pages with cowardly murders, fiendish cruelty and base betrayal. For this reason Salammbo is not pleasant reading.

IMPROVEMENT OF THE SENSES. By Horace Grant, Published by Lee & Shepard, Boston. Price 50 cents.

This is an exceedingly valuable little treatise on the best mode of cultivating the senses in children. The idea enforced is that the usual method of forcing a child to learn long lists of words or facts with the majority of which he will have no connection in after life, is wrong. Text books are not necessary in the education of young children. Bright object lessons and interesting talks about familiar objects, will be far more serviceable in amply rounding out the youthful mind. We believe this idea is in the main correct. Our present system of education is faulty in the fact that it cultivates a mechanical memory, and discourages practical thought. The forms of questions for object teaching given in this book are admirable.

COMMON SENSE IN THE CARE OF THE PET CANARY. By Mrs. M. E. C. Farwell. From the Murray Hill Publishing Company, New York City.

This is a bright, well written little book, and, so far as we see, reliable. The author has evidently written from practical experience. A bright, clear-voiced canary can change the character of many a home. All lovers of the little golden bird will find much to instruct them in this book.

For Women.

CONDUCTED BY MISS RAY CLARK.

AN OLD MAN'S MUSINGS.

HOLLY DEAN.

SMOKING my pipe in the twilight,
Dreaming the hours away,
Linking the past and future
Into the present day.

Smoking my pipe in the twilight,
When the winter's day is done;
Dreaming of fairy meadows
Under the summer's sun.

Dreaming of wondrous grottoes,
Deep in the woody hills,
Dreaming of silver brooklets,
Dreaming of tinkling rills.

Smoking my pipe in the twilight,
By the fireside's cheerful glow;
Dreaming of Spring and Summer,
Seasons of long ago.

Dreaming even of Autumn,
Leaves of crimson and gold,
Ripened sheaves for the harvest,
Touches of Winter's cold.

Autumn's voice has spoken
Words of prophesy true,
Winter makes snow of the raindrops,
Frost of the gentle dew.

Life too has her changing seasons,
Spring with her blossoms fair;
Summers of golden promise,
Autumns of sorrow and care.

Buds of the Springtime—blasted,
Hopes for the future—dead,
Autumn brings leaves of purple,
And leaves of crimson and red.

But the snows of Winter cover
The rustling leaves as they lie,
The leaves of gloomy purple,
And the leaves of crimson dye.

So I smoke my pipe in the twilight,
And dream of the seasons gone;
Dream in the present shadows,
Dream of the future dawn.

NOVELS.

SOMEBODY, presumably George Eliot, says that "There is no more infallible characteristic of a mediocre mind than its tendency to indiscriminate generalization." No class of writings has suffered more from this tendency than novels. Whether novels are improving or hurtful; whether young people should be permitted to read them or not, and hundreds of kindred questions are propounded and variously answered, just as if the word *novel* were susceptible of inflexible definition, and covered all the qualities of a great class of books, as diverse in their merits and their influence as men and women themselves! None of these questions can be approached until it is understood what novels are read and how we read them.

Of course, every rule applying to the choice of books in general applies to the choice of this class of books—only before we bring them to bear upon our novels we must "*score them under*," as "Mr. Weller" says. That is to say, as novels take peculiar hold of our imagination and emotion, as they "come home to our business and bosoms," it is peculiarly important that we should refuse to look into such as are bad or of no repute, trashy. It is a good rule to read only standard novels; the masterpieces of Scott, Thackeray, Dickens, George Eliot, a few of Bulwer; his "Harold," "Rienzi," "Last of the Barons," "Last Days of Pompeii," "Caxtons," and "My Novel;" of Charlotte Brontë read "Shirley" and "Villette." It is not easy to omit "Jane Eyre," but I fear a sturdy moralist must include that among the "bad" books, though we are all sure that the gentle and conscientious authoress did not see the tendency of her writing.

Miss Muloch has written good and healthful stories. Charles Kingsley used to say: "If any man wants to be a hero, let him begin by reading 'John Halifax' and 'Henry Esmond.'" There is another of Miss Muloch more heroic than "John Halifax"—the exquisite, pathetic little story of "A Noble Life." But I don't know that I should recommend a course of her writings—there is a little *too* much sentiment, the lover's love is usually almost too prominent, and no books are good for dreaming girls, that ever look toward any ignoring of the dear home affections, which have environed them since their infancy. Trust me, girls, you will never find any admiration more fond and proud than that of a good father, nor any tenderness more perfect than that of a good mother! But, to return to our list. Good Miss Edgeworth has gone out of fashion of late, but, if you will read her "Helen," and "Absentee," and "Eunice," I think you will be very much inclined to browse about among her short stories, and will begin to understand the praises showered upon her by a past generation. With her, one thinks of Miss Austen so valued by literary artists for her inimitable delicate strokes, her "stippling," as an engraver would call it. Of her stories, read at least "Pride and Prejudice," to gain an idea of her fineness of finish. To this catalogue many additions might be made, but is it not long enough to occupy the leisure hours of many a month? And ought we not to be ashamed of wasting our time over the walls and strays of fiction, when its acknowledged masterpieces are within our reach!

There is one class of novel readers, to whom all novels are alike bad; another, to whom, we are almost ready to say all are alike good! The former reads for the story only; to them "all is fish that comes to their net." Could we turn inside out their literary stomach, we would find it like the ostrich's, containing "feathers, nails, hair, bits of glass, and nuggets of gold" in one heterogeneous mass! "Adam Bede" and "Aurora Floyd" are swallowed with impartial appetite. "David Copperfield" and "The Wide Wide World" rank together. These readers care only to know whether Miss A, marries Mr. B——, no matter whether Thackeray or Mrs. Wood tells the tale. It would be ridiculous, were it not so pathetic, to hear one of these omnivorous creatures giving her opinion of some novel, upon which a great author who has spent the best of his heart and brain. "I am *so* interested in 'The Newcomes'", said once one of this class—an apparently bright young girl. I had a regard for the child, and hailed her remark with pleasure. "Tell me what you think of it," I said. "Oh, its *lovely*! Mr. Clive' is so handsome and clever. Only it spoils it to have him marry 'Rosy', and it takes away all the romance to make 'Ethel' a second wife," That was all! who shall say that she might not just as well have spent her time over the poorest dime novel? All the pathos, all the wit, all the tenderness, all the grandeur of the moral teaching, all the grace and beauty of the central figure, that equisite gentlemen, Colonel Newcome, had passed over the reader's pretty blonde head like idle air! What hope is there for such?

Now the novel reader, who really gains something from her book, approaches its characters in this manner. They live before her, she analyses their motives, she sees how and when they might have developed differently, she observes the skill with which the author preserves their identity; and she notes, besides, all the felicities of style, all the beauties of description, all the charms of conversation, all the great lessons so often contained in the lives that speak to us from the eloquent page. And she sees now what is noble and pure, becomes only noble and purer through trial, temptation, and wrong.

When such a reader has closed such a book, think what a step upward she has taken, in mind, heart, character!

To her, and to all like her, ("may their tribe increase!"), a novel is not merely the empty amusement of an idle hour; it is a new force brought into her life; a larger culture, a wider knowledge of humanity, a fresh impulse toward good, a fresh hatred of whatever is low, and mean, and trivial—to say nothing of a new accuracy and elegance in that rare accomplishment, the use of English!

MRS. G. P. RICE.

"YOUR NOSE WILL BE OUT OF JOINT NOW."

MISS CROIX was dandling the new baby sister on her knee and regarding her pink face with a grim smile, which added little to the beauty of her angular face.

"Now Lena, your 'nose will be out of joint,'" she said.

The little one raised her eyes wonderingly, and slowly rubbed her little nose with her chubby hand.

"Lena," said mother quickly, "will you run down and pick mamma two sweet pinks and two pansies?"

Always delighted with such a commission, the little one sprang lightly to her feet, forgetting about her injured nose, but first she peeped into the little crib and said sweetly, "Lena 'll tum back pitty soon to see oo pitty one." Turning to the visitor, she explained: "Baby might try for me," and then she tripped off happily down the stairs.

"Would you spoil all that love and happiness, Miss Croix?" asked the mother earnestly. "Please never say a word to Lena that would set her against her baby sister. I know friends often do such things 'just for fun,' little thinking what mischief they do. Such a shocking account came in the papers lately of a little girl of four whose mind was poisoned against a baby brother until she hated him and often said 'he ought to be tut up.' Sure enough, when she got a chance and no one was near to hinder her, she did cut up his poor little face with a sharp knife, using all her baby strength. Another little boy of whom I have read was stung almost to insanity by the nurse's declaration that now his mother would not love him any more, nor even have him in her room. His mother had been all the world to him before. He could not bear such a rival, so he brought in a large stone and crashed it down on the baby's head as it lay in the cradle. The real murderers were those who had set the little ones against the darlings they should have been taught to love. Here comes mother's little girl with her posies. How sweet they are! By and by baby can hold one in her little hand, and Lena can bring them in for her. And next Summer, perhaps, she can go out to the flower beds herself, and Lena can take care of her." OLIVE.

Domestic Economy

CONDUCTED BY MRS. AGNES E. M. CARMAN.

HATS AND BONNETS; HAIR "YUM-YUM" STYLE.

E. L. TAPLIN.

WHILE it is always prudent to prepare for the summer campaign beforehand, there are many trifles of dress and adornment which it is best not to purchase until the end of Spring. Of course, all the sewing possible should be done before the warm weather, but the little niceties of dress can always be purchased to more advantage later on. This fact is very noticeable in millinery articles. Styles of headgear that obtain in the early Spring, seldom remain in favor the entire season. The picturesque but rather loud "Peek-a-boo" hats worn last year are an example of this. Early in the Spring they were much worn, but so much were they multiplied in common materials that before the season was over they were "slangy" in the extreme. So, when a woman knows that one best hat must content her the entire season, it is not wise to purchase too early.

Requirements in headgear naturally vary with the condition of the wearer; but it may be stated as a sound axiom in dress that two inexpensive bonnets make a better show than one costly article. They need not by any means be cheap-looking. The pretty little capote or princess bonnets are universally becoming, and consequently can never go entirely out of style. They change a little in shape from time to time, but a last year's bonnet does not look by any means out of date. It is rather a delicate matter to say just how many hats or bonnets are necessary; but for a country girl, we may suggest a plain but becoming hat for general wear, a "Sunday-go-to-meeting" bonnet, and a white mull bonnet to wear with a white frock. The three might easily be an extravagance if made by a milliner, but they are surprisingly inexpensive when the wearer can trim them herself.

The prevailing mode in bonnets has a very high horseshoe crown, sloping up in the back, and is trimmed with erect loops of ribbon and aigrettes or stiff feathers. It is pretty and becoming when not exaggerated, but if worn by a woman with a long, thin face, becomes a caricature, especially if the strings are tied under the chin. So, in this case, one of the lower-crowned bonnets must be chosen, with the strings tied on the left side. The trimming must be massed on top, and the loops, though erect, need not be quite so large. With a round or oval face the higher bonnet will of course be most becoming.

The widest latitude is allowed in color, though the craze for yellow has somewhat subsided. Perhaps the most popular of light colors for bonnet trimmings is absinthe green, a delicate and rather trying shade. It is much combined with brown. A little bonnet of rough brown straw may have a few loops of the green ribbon mingled with brown, or the brown loops may be lined with green. In this case it lightens up the bonnet without trying the complexion. Salmon or pale rose pink is very becoming to a brunette, combined with brown in the same way.

The bonnet should, of course, harmonize or contrast effectively with the gown, so she is a wise virgin who selects all her wardrobe with a view to perfect harmony. Naturally this planning is unnecessary when one can afford a bonnet with every gown, an impossibility in the majority of cases.

If in the beginning of the season we settle what color is to be the prevailing tint, we can vary our attire becomingly without extravagance. It is much easier to select a becoming bonnet than a becoming hat. The hats are in many cases very eccentric in shape this season. They agree in one particular only; they are all high-crowned. The prettiest are straight-brimmed walking hats, very becoming to young faces. Comparatively few flowers are used in trimming, the most popular garniture for both hats and bonnets being ribbon loops and stiff feathers. Less of the metallic trimmings are seen this season.

These high hats and bonnets necessitate an accommodating form of hair-dressing, and the most popular form at present is the "Yum-Yum," modeled on the style affected by the three little maids in the "Mikado." It is simple, and requires but little hair. The hair is all combed up high, the entire strand twisted over once, like a French twist; then the back, while in this position, is pulled out loose with the comb, from the nape of the neck, making it loose and fluffy. The strand at the top is divided into two, and rolled into two finger-puffs, which are pinned close together near the front of the head, so as to make one coronet-like roll. The "bang" is rolled back Pompadour-fashion in the middle, with loose curls on the

Miscellaneous Advertising.

When Baby was sick, we gave her Castoria,
When she was a Child, she cried for Castoria,
When she became Miss, she clung to Castoria,
When she had Children, she gave them Castoria,

sides. This style is very pretty, and sets off a little bonnet, as no other mode would.

A WHOLESOME AND CHEAP DINNER.

Potato Soup.
Round Steak, rolled and baked.
Salad of water-cress.
Apple fritters with sirup.

Cut in slices half a dozen potatoes, and one onion, and fry until they begin to take on a brown color. The fat from the top of the soup pot is excellent for this purpose—failing that, use butter or sweet dripping, but not lard. Turn them into a saucepan with three pints of hot water, and boil until the potatoes are soft. Any bones or trimmings of meat that may be in the larder, may be added, but it is quite possible to make a delicious soup of potatoes without meat. Mash through a colander, and return to the saucepan. Have ready a cup of scalding cream, add a teaspoonful of flour mixed smoothly in cold water, and turn all into the soup. Finish with a tablespoonful of parsley, give one boil, seasoning with salt and pepper, and serve.

Make a dressing as for turkeys and spread a round steak an inch thick with it. Roll up as you would a jelly cake, and tie to keep it in shape. Add a bit of butter and some hot water, and bake until tender, basting very often; season with salt and pepper, thicken the gravy a little and pour it around the meat. Slice it neatly from one end when carving. Baked onions are a nice accompaniment with this meat. Boil them, until tender, in salted boiling water with a little milk added. Then put them in a baking pan with a little of the water in which they were boiled, and pepper and salt, and a bit of butter on the top of each. Give them ten minutes in a hot oven, and put them around the meat.

Water-cresses are a delightful addition to a dinner, and are within the reach of many, if not most, farmers' families. They are healthful and good eaten with salt alone, but a simple French dressing makes a good salad. Cold, boiled potatoes sliced and added make a heartier dish, and for a supper dish with good home-made bread and sweet butter, make about as delightful a meal as any one blessed with a good appetite can desire. The dressing is made by mixing three tablespoonfuls of oil, and one of vinegar, salt, pepper, and a teaspoonful of scraped onion. Pour this over the salad and mix well.

The very nicest fritter batter is made as follows:—Put a heaping cup of flour into a bowl, add the beaten yelks of two eggs, and a tablespoonful of olive oil or melted butter. Stir in a tablespoonful of wine or lemon-juice, and add water a little at a time until it is the thickness of ordinary batter. This is better if set away for a day or two, although it may be used at once. At the moment of frying add the whipped whites of two eggs. The apples should be cut in large, thin slices, and sprinkled with cinnamon and sugar for a few hours before they are used.

A nice sirup is made by boiling, until it thickens slightly, two cups of sugar with one of water and a flavoring of vanilla. Of course, not one quarter of this quantity of sirup will be necessary but it is very nice for pancakes. A plainer fritter batter is made by mixing one beaten egg with a small cup of milk, a little salt, and flour through which baking powder has been sifted, to make a batter.

PALMETTO.

VINEGAR MAKING.

EVERY housekeeper who chooses to do so, can make her own vinegar with very little trouble and at very little expense. In truth, the best of vinegar can be made from what is commonly thrown away.

Apple parings and cores placed in a vessel and covered with warm water and kept warm, will make good, sharp vinegar in from four to six weeks. If a little molasses or sugar is thrown in, it will be deeper-colored and stronger, but it will take a little longer "to turn." A lady once pointed to a two-quart glass jar that stood upon a shelf near the stove, and said: "Perhaps you will hardly believe it, but that gives me all the vinegar I need for my table." Into it she slipped apple parings, and when it was sour enough, strained off the liquid and refilled the jar with sweetened water. This can be done again and again, as the parings do not decay. In making vinegar, be sure to give it warmth and air. Cover the mouth of the vessel with a thin cloth to keep out insects. If one wishes to make it in larger quantities, a barrel should be used. It could be set in a sunny shed and the vinegar making for the year be done in Summer. Sweetened water (using either molasses or sugar) with some common field corn thrown in, will make good vinegar. If it is kept warm it will be ready for use in a few weeks. To 10 gallons of warm water take three quarts of molasses and one pint of corn: or, if corn is not handy, use one pint of yeast instead. Vinegar made either way will keep pickles just as well as cider vinegar. Sorghum is as good as molasses for this purpose. Some claim that soft water must be used; no doubt it is better; but hard water answers very well. Here in Colorado our water is strongly tinctured with alkali and is very hard, and as the rainfall is not to be depended upon, we often use it for vinegar making, with good results.

S. E. H.

SICK-ROOM DIET.

BEEF-AND-TAPIOCA is very nourishing and digestible. Cut one pound of beef small, and cover with one quart of cold water; simmer slowly until the meat falls into shreds; strain and add two tablespoonfuls of tapioca that has soaked for an hour in a little warm water, a sprig of parsley and a shred or two of onion. Simmer for half an hour, season with salt and pepper, and when the soup is ready to serve, put in it a neatly trimmed poached egg, and accompany it with a thin slice of delicately browned and lightly buttered toast. Sago may be used for a change, in which case the soup must be simmered for an hour after the soaked sago is added. You may omit the poached egg, and just before serving stir in the well-beaten yelk of an egg. This may be done without curdling by pouring a cupful of the soup over the beaten egg, very gradually, beating the while, then turn this into a saucepan and give one boil.

A broth made of veal and sago is very excellent for persons suffering from any pulmonary complaint. Have a knuckle of veal weighing about two pounds cracked into pieces; cover with three pints of water and boil in a closely covered vessel for two hours. Strain, skim off the fat, if any, season to taste, and add two tablespoonfuls of pearl sago, previously soaked in warm water for an hour. Simmer for an hour. Have a cup of cream heated to boiling and stir in the beaten yelks of two eggs. Do it slowly to prevent curdling, add this to the soup, give one boil and serve.

For persons troubled with indigestion, beef sandwiches prepared as follows are highly recommended: Chop very finely a piece of tender, uncooked beefsteak, season with salt and pepper and spread between thin slices of lightly buttered bread. Remove the crusts and cut into neat diamonds or squares.

Coax your invalid with cream toast. Cut the crust from two slices of stale bread, and toast an even delicate brown; let half a cup of cream come to a boil, dip the toast in it, and pour over the slices the remaining cream. Brown bread is very nice and healthful prepared as above.

For children who have diarrhea, rice coffee may be partaken of freely. Pour a quart of boiling water over half a cup of rice that has been parched and ground as you would coffee. Let this stand where it will draw for 15 minutes; strain and sweeten with loaf sugar.

NURSE.

A BOILING KETTLE.

YOUNG people usually think it great fun to fuss over any cooking which is all their own. They will carry coffee, eggs, raw potatoes and meat to the woods, build a fire of such sticks as they can gather, and finally sit down in great glee to such a meal as would neither please them nor satisfy their hunger if eaten at their homes, and it is doubtful whether even as a picnic dinner it does the latter, unless pieced out with something bought already cooked.

But perhaps of all amateur cookery, none is more attractive than a kettle of candy. And those who are familiar with the ways of the small folk can tell you that Winter is not the only time when they enjoy a candy-pull, but every season has seen them with sticky hands and faces, bending eagerly over the fragrant bubbling kettle, tasting and testing the mixture cooking therein.

A very nice candy for pulling can be made of sorghum molasses. Allow one half cup of molasses for each one who is to pull. To each cupful of molasses add two tablespoons of granulated sugar and a small lump of butter; then boil until it will harden in cold water. Pour into buttered plates or tins, and pull as soon as cooled enough. It becomes a creamy white if well pulled, and the sugar makes it crisp and hard when cold.

A sugar-candy for pulling is made of two cups of granulated sugar, one teaspoonful of cream-of-tartar, and half a cup of water. After mixing these let them stand a few minutes until the sugar is dissolved, then put the kettle over the fire and boil its contents briskly without stirring until the candy will crisp in cold water. This will be in a very few minutes, and unless carefully watched the candy will boil too much, and return to sugar when poured from the kettle. If it does this, add another half cup of water, let the sugar dissolve again, then boil it once more. The candy may be flavored if desired, adding rose, vanilla or lemon extract while it is boiling. Do not burn the candy and it will be beautifully white when pulled.

In pulling candy, if it is held with only the tips of the fingers and thumb, and pulled each time as far as it will stretch readily, it will be much better than if grasped in the whole hand. Pulled in this way, it will become light and porous, and show a luster that candy crushed in the hand does not have.

Skillful candy-boilers will try to leave no traces of their work on tables, chairs, doors, pump-handles and floors. ALICE BROWN.

Miscellaneous Advertising

Ayer's Pills

Restore tone and strength to the Stomach and Liver enfeebled by disease, promote the Appetite, and cause the Bowels to move naturally. Ayer's Pills are safe to take, do not debilitate by excessive stimulation, and are not irritating in their action.

I have used Ayer's Pills for twenty years, and can truly say they have always given me satisfaction. Whenever I am troubled with Constipation, or suffer from Loss of Appetite, Ayer's Pills quickly set me right again.—P. N. Ward, Bath, Me.

Ayer's Pills have been my family medicine for fifteen years, and the result of that long experience is a complete vindication of your statements concerning them.—T. T. Nunney, West Point, Tex.

Ayer's Pills,

Prepared by Dr. J. C. Ayer & Co., Lowell, Mass. Sold by all Druggists and Dealers in Medicine.

MAKE HENS LAY

SHERIDAN'S CONDITION POWDER is absolutely pure and highly concentrated. It is strictly a medicine to be given with food. Nothing on earth will make hens lay like it. It cures chicken cholera and all diseases of hens. Illustrated book by mail free. Sold everywhere, or sent by mail for 25 cts. in stamps. 2½-lb. tin cans, $1; by mail, $1.20. Six cans by express, prepaid, for $5. I. S. Johnson & Co., P. O. Box 2118, Boston, Mass.

IF your blood is impure, you are liable to take any contagious or infectious disease that may happen to be in your neighborhood. Avoid all danger by keeping yourself in health by taking Warner's safe cure.

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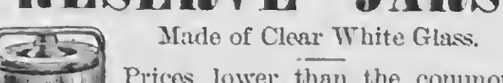


Every farmer should have one. Sent safely by mail for 50c

Send for Catalogue of Thermometers, Lactometers, Creamometers, and Thermometers for Incubators.

W. M. McALLISTER, Optician.
720 CHESTNUT STREET, PHILADELPHIA, PA.

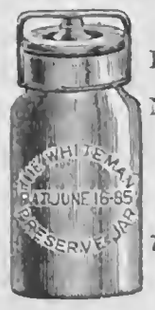
GOLD MEDAL, PARIS, 1878.
BAKER'S
Breakfast Cocoa.

Warranted *absolutely pure Cocoa*, from which the excess of Oil has been removed. It has *three times the strength* of Cocoa mixed with Starch, Arrowroot or Sugar, and is therefore far more economical, *costing less than one cent a cup*. It is delicious, nourishing, strengthening, easily digested, and admirably adapted for invalids as well as for persons in health.

Sold by Grocers everywhere.

W. BAKER & CO., Dorchester, Mass.

PRESERVE JARS.



Made of Clear White Glass.

Prices lower than the common green jars.

No Metal.

Much handier.

More reliable.

A. V. WHITEMAN, R.N.Y.
72 MURRAY ST., N. Y. CITY.
Price List on application.
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Commonly Called Laziness.

CHICAGO, Ill., Jan. 14, 1884.—In the summer of 1879, I noticed I was frequently tired. Had diarrhœa. Family physician said I had malaria in stomach. Bowels would move half a dozen times if I walked a block rapidly. Finally in August, I became too sick to leave my bed. Lay in bed six days. Had night sweats, and very yellow tongue. Six bottles of Warner's safe cure cured me.—WILLIAM WALLACE LOUNSBERRY, formerly with Nashua Lock Company.

Grind your own Bone, Meal, Oyster Shells, GRAHAM Flour and Corn in the $5 HANDMILL (F. Wilson's Patent). 100 per cent. more made in keeping poultry. Also POWER MILLS and FARM FEED MILLS. Circulars and Testimonials sent on application. WILSON BROS., Easton, Pa.

12 DOLLARS each for *New* and *Perfect* SEWING MACHINES. Warranted five years. Sent on trial if desired. Buy direct and save $15 to $35. Organs given as premiums. Write for FREE circular with 1000 testimonials from every state. GEO. PAYNE & CO., 47 3rd Ave., Chicago, Ill.

FARMERS,

Send for Circulars and Price List of The BARNES PAT. IRON FENCE, the cheapest and most durable fence in the world. Address
THE BARNES PAT. IRON FENCE CO., EASTON, PA.

TABER ORGAN.

Latest style; fine tone; made of best material, in the most substantial manner. Fully warranted. Send for Catalogue. Agents wanted.
TABER ORGAN CO., Worcester, Mass.

SPAIN'S CHURNS. Star Churns, Rapid Ice Cream Freezers, Improved Tree Tubs, all made of CEDAR. Send for illustrated circular and prices. Clement & Dunbar, Philadelphia, Pa.

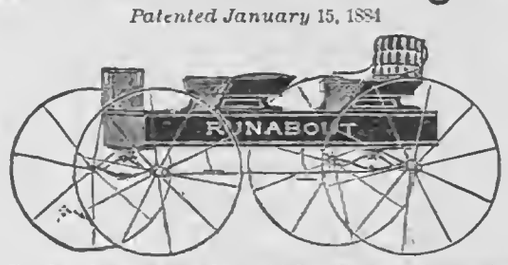
HIRES' IMPROVED ROOT BEER. Packages, 25 cts. Makes 5 gallons of a delicious, sparkling and wholesome beverage. Sold by all druggists, or sent by mail on receipt of 25 cents. C. E. HIRES, 48 N. Delaware Ave., Philadelphia, Pa.

DYSPEPSIA.

My remedy sent free, the result of actual experience with Dyspepsia. JOHN H. McALVIN,
Lowell, Mass. 14 years Tax Collector.

The Runabout Wagon.

Patented January 15, 1884



Twelve different styles. *Light, Strong, Convenient* and *Low-priced*. The popularity of the RUNABOUT is such that its sale exceeds that of all other vehicles of its class combined.
Send for Illustrated Catalogue and price list direct to the manufacturer. ORVILLE H SHORT,
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Write at once for circulars and special offer to first purchaser. Address
Delaware County Creamery Co.,
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COLTON'S

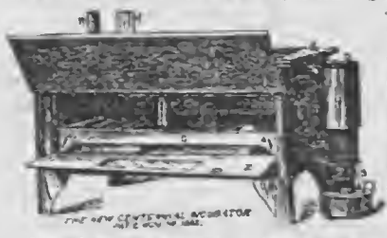
SELECT FLAVORS.

OF THE CHOICEST FRUITS AND SPICES.

Their absolute purity, unequaled strength and economy are winning friends everywhere, surprising and delighting families, and trebling sales for dealers.

Ask your grocer for them.
Laboratory (Home Dep't) Westfield, Mass.

HALSTED'S PERFECTED CENTENNIAL



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Our 50 egg machine, only $20, is giving unqualified satisfaction.

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Don't pay exorbitant rental fees to the Bell Telephone Monopoly to use their Telephones on lines less than two miles in length. A few months' rental buys a first-class Telephone that is no infringement, and works splendid on lines for private use on any kind of wire, and works good in stormy weather. It makes homes pleasant; annihilates time; prevents burglaries; saves many steps, and is just what every business man and farmer should have to connect stores, houses, depots, factories, colleges, etc., etc. The only practicable and reliable Telephone that is sold outright and warranted to work.
Chance for agents. No previous experience required. Circulars free. WM. L. NORTON, Buffalo, N.Y

Buy the Best. THE EUREKA

Awarded FIRST Premium and Gold Medal at World's Fair New Orleans, over 12 leading Wind Mills. The EUREKA, after a trial lasting 4 mos. was pronounced the best over all and 10-day stands at the head of all competitors. Sizes, 10 to 18 ft. diameter of wheel, either for Pumping or Power Mills. *Perfect in all parts and warranted.* Estimates on application. Also Mfrs. of the Adams Direct Draft Barn Floor Horse Power. *Live Agents Wanted.* Address Mfrs.,
SMITH & WOODWARD, Kalamazoo, Mich.

DUTTON GRINDER

Perfect Mowing
MACHINE KNIFE
GRINDER.
Weighs but 18 Lbs.

Can be carried into the field and attached to Mowing Machine Wheel. Send for Descriptive Catalogue. Agents wanted in every County.
R. H. ALLEN CO., 189 Water St., New York.

News of the Week.

HOME NEWS.

SATURDAY, May 15, 1886.

OF Grant's Memoirs, Vol., 1, 250,000 copies were printed, and several subsequent editions of 25,000 each have been issued. Of Vol. 2 300,000 copies are ready, and extra editions will be got out as demanded. There are 10,000 agents in the U. S., Canada and Mexico, and it is published simultaneously in the U. S. and Europe. If the second vol. sells as expected, the Grant estate will get $500,000 in all out of the work, besides a steady income from sales during the run of copyright.....After a storm last Saturday night in Chicago the sidewalks and streets in and around the Board of Trade electric light tower, were "fairly covered with dead birds of all sorts." The roof of the building was also covered with dead birds, and each of the lamps in the big circle of light was filled with them.....Here's a summary of the work of Congress down to last Wednesday: Bills introduced in the House, 8,740; joint resolutions, 171; total, 8,911. Bills of a private nature which have passed the House, 651; bills of a public nature, 172; total, 825. Of this number 170 private and 49 public bills have passed the Senate. The House has received 381 bills passed by the Senate, 129 public and 252 private. The House has passed 86 bills—33 public and 51 private.....Those deputy-marshals who shot into a crowd in East St. Louis, killing a woman and several men, and who subsequently sought safety from an exasperated people in a jail in St. Louis, were quietly transferred to the prison at Belleville, Ill., Wednesday. Gov. Oglesby sent the requisition for them nearly a month ago; but Gov. Marmaduke of Mo., doubtless to hold them till the excitement across the river had abated, declined to surrender them until after trial in St. Louis for shooting on the connecting bridge—a mere excuse for saving them from Lynch law.....The noted case of Hugh M. Brooks, alias W. H. Lennox Maxwell, charged with the murder of C. Arthur Preller at the Southern hotel in St. Louis on April 7, 1885, was called in the criminal court in that city this week. The body was found doubled up in a trunk in the hotel; and Brooks was brought back a prisoner from New Zealand. A large crowd were attracted to the court-room. The prisoner shows few signs of his long imprisonment and appears cheerful.....The American Tract Society held its annual meeting Wednesday at New York. The number of volumes issued by the society during the year aggregated 59,537,628 pages. The total receipts were $344,420 and expenses $338,632, leaving a balance of $5,888. ....The Millers' Association, embracing about 800 firms in N. Y., Pa., Ind., Md., Va., Ohio, Mich., Ky., Tenn., Ill., Mo., Ia., Kans., Neb., Wis., and Minn., has been in session in Chicago during the week. It hadn't met for five or six years, and was specially called together to agree upon measures to be taken with regard to a patent suit to be soon brought before the U. S. Court at St. Louis. Much business talk, etc.....G. H. Butler, nephew of Gen. Ben., died at Washington on Tuesday. Ex-husband of Rose Etynge; ex-Consul to Egypt under Grant; ex-journalist; brilliant but erratic and too fond of the "flowing bowl"..... ....Charles F. Woerishoffer, one of the greatest grain speculators in the world, died here suddenly Sunday night. Born in Hesse in 1843, arrived in New York in 1865; joined the Stock Exchange in 1870, and since has been a daring operator here and in Chicago. He died carrying 3,500,000 bushels of wheat, 1,500,000 of which he received May 1. He was seldom so "long" of grain, having been generally a "bear," and selling "short" for a fall in prices. .....The nomination of Gen. Rosecrans, as Register of the Treasury, has been "hung up" in the Senate, as there are against him grave complaints of dishonesty in connection with land transactions covering 800 acres near Los Angeles, Cal., and Ben Butler bitterly charges him with having made a hasty, untruthful and vindictive Congressional report charging him with embezzeling $200,000 while in charge of the Soldier's Home at Washington. "Rosy" is likely to have a hard road to travel to the Registership.....Ex-President Arthur is "no worse."....Sec. Manning is "slowly improving," and drives out with Mrs. M. every fine day.....A bill authorizing an arcade railway under Broadway, N. Y., has passed the N. Y. Legislature and been signed by Gov. Hill. It will start from the foot of the island, and on reaching Union Square will branch, one line going to Harlem under Lexington Avenue, and the other striking up Broadway to Harlem near the North River. Ordinary railway cars can run on it. Work to begin in 60 days; job expected to be completed in five years. Lots of capital.....Among other powers, this city is governed by 24 aldermen. Of last year's 24, 15 kept one or more rum-shops, and another was a "fence," or receiver of stolen goods. From the Battery to Union Square, Broadway is 2½ miles long, and the finest street in the world. For years, speculators have been trying to get permission to run street cars on it. A. T. Stewart offered $1,000,000 cash and a yearly percentage of gross receipts for the privilege. Others would have paid more. Jacob Sharp is chief owner and factotum of several street car lines, a burly, unscrupulous man of 64, for years a lobbyist at Albany and a corrupter of local politicians to gain his selfish ends. One of his lines runs cars on Broadway above Union Square, and for 20 years he tried to get the right to run them on lower Broadway. Having secured from the legislature last year an act opening the street to a "surface" line, he had to secure the consent of the majority of the property owners on the street and of the Board of Aldermen. The first he got through a Board of friends appointed by underhand means; the second by the grossest bribery. At least 18 of the City Fathers received bribes of $20,000 to $30,000 for giving the franchise to Sharp for a "song," though the city could have got millions for it. A Senate investigating committee, aided by lawyers ex-Senator Conkling and W. H. Seward, uncovered the rankest and most shameless corruption connected with the "steal." Twelve of the implicated aldermen are under arrest, two are dead, the rest are in Canada or Europe, fugitives from justice. The Legislature has taken the extreme measure of annulling the charter of the road, and virtually handing it over to the city. A Massachusetts bank, in behalf of "innocent holders" of its bonds, is to contest the constitutionality of the acts in the case. Long litigation will fatten lawyers who have been the most unscrupulous agents of, and the largest gainers by, the rascality. Jachne, one of the "boodle" aldermen and the "fence," is now on trial here for accepting a bribe—$30,000 it is said. All possible precautions are taken to prevent "jury fixing;"..... ....The New York Senate, by one majority, has voted $200,000 to lengthen certain locks on the Erie and Oswego Canals—just enough for a beginning.....The total value of goods, the product of Canadian manufacture, exported from the Dominion from the first of July to the first of April of the present fiscal year was $57,098,676, as compared with $59,782,576 for the same period last year. The value of goods imported for consumption in Canada in the same period this year was $72,756,598 as compared with $73,665,255 for the same period last year. The latter is exclusive of imports into British Columbia this year..... Apaches still depredating and murdering in Arizona. Gen. Miles, miles and miles after them. Senator Fair wants them, when caught, to be sent with the rest of their tribe to the Santa Catalina Island, 25 miles southwest of Los Angeles, Cal. They would then need no guard, and their blood-thirsty proclivities could be exercised only on each other. Island to be had for $3 to $4 an acre..... Blaine is very lively just now as a prospective Presidential candidate for 1888. His friends are capturing all the outposts of the National Republican Committee....."Destroyer" is the fit name for a new war vessel, steaming 25 miles an hour, armed with "blasting gelatine" shells which can be hurled 1,500 yards, one being able to destroy any iron-clad afloat. It is claimed the navies of the world would be at the mercy of one such craft .....The House Inter-state Commerce Bill was passed by the Senate Wednesday, by a vote of 47 to 4, after a single amendment by Edmunds, a number of others being rejected. It now goes to the House again, for concurrence in this amendment..... ....In Ohio the seats of four democratic Senators from Hamilton Co. (Cincinnati) were contested on the ground of gross frauds in their election. The Republicans had a majority of the Senate; but lacked two of a quorum; but they could always command a majority if two or more Democrats were present. The Democrats fearing that four Republican Senators would be voted the contested seats, left one of their number to call a count to show a quorum wasn't present, whenever legislation should be attempted, and all the rest rushed off out of the State—to Kentucky and Tennessee,—to escape arrest and compulsory attendance in the Senate. Last Saturday the Republicans spread a report that one had been arrested, and this frightened off the sentinel Democrat, who feared that if he, with the arrested Senator, attended, there would be a quorum. The Republicans at once unseated the four democrats, giving their places to four Republicans. Unless questioned at the moment, legislation in the absence of a quorum is quite binding, and the records are final. The official records have since been stolen, and the Democrats threaten a contest in the Courts. The remodeled Senate has passed the Dow Law, taxing beer-shops $100 and rum-mills $200 apiece..... The National House last week passed the River and Harbor Bill, appropriating $15,120,700 against $12,619,100 last year—by a vote of 142 to 103.....Congressman Morrow, of California, presented in the House a California petition 2,000 feet long, containing 50,000 names, including all the Knights of Labor in the State. It simply requested that Chinese shall forever be prohibited from entering the United States.....A city ordinance of San Francisco prohibited the carrying on of a laundry in a wooden building without the consent of the Board of Supervisors: 2,000 Chinese and 80 white men applied for a permit. The former were refused; the latter got it. The U. S. Supreme Court, on appeal, decides the ordinance is invalid under the 14th Amendment as well as a treaty made with China in 1881,.....The Chicago Inter-Ocean and Tribune have reduced their price from five to three cents per copy....."Influential New Yorkers" are mad because Senator Evarts economically uses postal cards in answering them.....W. H. English, of Ind., of Hancock & English political fame, has retired from his banking business and will travel abroad.....The overland roads have suddenly raised passenger rates so that tickets from this city to San Francisco now sell for $76 to $86 each, instead of $30 a month ago; and $118 before the break. Several hundred tourists caught "short" in Cal., are waiting for remittances from home..... ....The bomb thrown among the police by the Anarchists of Chicago has shaken every labor organization in the country. Of course, honest workmen had nothing to do with the infernal outrage, and all the trades unions and Knights of Labor express horror at it, and detestation of the miscreants who advocate or excuse such dastardly actions; but that deed has severely hurt labor agitation, nevertheless. This morning's Bradstreet, from a multitude of telegrams infers that within about two weeks there have been strikes at leading industrial centers to secure fewer daily hours of labor aggregating 200,000 employés, that 150,000 have secured concessions and that not over 42,000 of the 200,000 strikers have secured their ends. This indicates that over 190,000 employés are working fewer hours per day than one month ago, a small proportion of the total number claiming to be interested..... .... The reduction to eight hours has little of the moral support of the country; but there is a general impression that 10 hours' work is fully enough and anything over 12 hours a great deal too much. All over the country strikes are collapsing, or compromises are being made; and in a few cases the employers in particular lines, combine and have a "lock-out" against their hands until they agree to continue to work on old terms. The clothes makers of Chicago have now a "lock-out" which throws 35,000 hands out of employment. ....This will be a memorable year for storms. During the week cyclones, tornadoes, hurricanes, water-sprouts, rain-storms and every form of bad weather have played havoc over a vast extent of country. Kansas, Missouri, Illinois, Indiana and Ohio, have suffered most severely. A fearful storm of wind and rain swept over Kansas City on Tuesday, causing immense destruction and 29 deaths. Odell and Rockford, Ill; Evansville and Attica, Ind.; Leavenworth, Kans., and innumerable other places in those States have suffered severely. The destruction at Xenia, Ohio, was simply awful; dead and missing 29. Never in the history of that whole section have storms been so wide-spread and destructive. River bottoms are flooded; bridges swept away; crops destroyed; stock drowned; buildings of all kinds demolished or injured—a world of loss, suffering and sorrow.....

FOREIGN NEWS.

SATURDAY, May 15, 1886.

IN England the chances in favor of Gladstone's Home Rule and Land Purchase bills for Ireland, are rapidly diminishing. The Conservatives are, of course, all solidly opposed to both, and enough Whigs and Radicals under Hartington and Chamberlain, are likely to join the Conservatives to be able to defeat the Home Rule Bill, whose fate must be decided the first. Just 110 Liberals are reported to be ready to vote against it, and 30 more are doubtful. Gladstone is seeking to bring back the malcontents by modifying the bill; but they are distrustful and insist on its withdrawal. The Radicals want a confederation of England, Ireland and Scotland, with the chief colonies, each to have separate home governments, like our States, but all to be represented in Parliament at London, as our States are represented at Washington, and they insist that giving a separate government to Ireland, without allowing Irish representation at St. Stephen's, is destructive of such a confederation. Gladstone is thinking of withdrawing the bill for the present, so that the people may be "educated up" to a just appreciation of the case. If defeated, the Prime Minister ordinarily has the option of resigning, and then the "Opposition" assumes the Government; or of dissolving Parliament and appealing to the people by means of a fresh election; but as the Queen has never been a friend of Gladstone, and is strongly opposed to Home Rule, it is hardly likely she would consent to a dissolution. Home Rule for Ireland is likely to be delayed. In that case the Irish "men of action" are likely to begin a series of outrages and disturbances..... The Orangemen of Ulster are arming, and declare they will never submit to a Parliament in Dublin. They threaten to march at once on the Catholics of the other three provinces. Religious bigotry is increasingly used in all parts of the United Kingdom for political purposes.....Very severe industrial distress in the United Kingdom, especially in the manufacturing districts...Great wind and rain storms on Thursday did a world of damage, flooding river bottoms, sweeping away bridges, drowning stock, damaging crops, impeding railroad travel and traffic, etc...For the first time since the death of her husband, in December 1861, the Queen has been appearing prominently in public life, opening exhibitions etc., and this is awakening a good deal of lately dormant loyalty..... ....The resolute action of the Powers has put out the "Greek fire." The bellicose Ministry has resigned; another has been appointed, and a new legislature is being convoked. The troops have been recalled from the frontier and full assurances of peace have been given. It is likely the Powers secretely agreed to bring pressure to bear on Turkey to induce her to yield at least a good part of the territory claimed by Greece. Anyhow, the settlement of the "Eastern Question" is deferred, and the danger to the peace of Europe has for the moment, disappeared.....Germany —that is, Bismarck—still "bosses" Europe. In the Greek trouble France tried to gain undue *prestige* at the expense of the other Powers, by inducing Greece to reduce her forces, on French promises; but Bismarck's strong hand spoilt the game, by using the joint action of the Great Powers—Great Britain, France, Germany, Austria-Hungary, Russia and Italy —as the impelling force. The Great Chancellor has lately ceased all war with the Pope and entered into the friendliest relations with him. What stronger supporter is there of recognized authority and the powers that be, than the head of the Church whose chief injunction is obedience, and which makes unceasing war on all those abominations of constituted authority—secret societies?..... ....In Spain, Austrian Queen Christina, widow of the late Alphonso, and regent of the Kingdom during the minority of her posthumous girl baby, is getting on much better than expected. All fears of Carlist insurrection, republican revolution, or restoration of old Queen Isabella, have ceased, for the present at any rate. A terrible hurricane swept across the country Wednesday, causing a world of loss by destroying houses, crops, etc., and killing a great many people. In Madrid alone, 32 were killed and 620 severely injured..... ....Italy is again suffering from Asiatic cholera—for the third year. Yesterday three deaths and seven new cases were reported at Venice; nine deaths and five new cases at Bari, and one death and one new case at Brindisi. It has also appeared in several other parts of the kingdom. The Pope and the King appear to be getting along better. The fulminations of the Vatican, and the prosecutions of the civil authorities and the outrages of infidel mobs have ceased, at least temporarily..... .....Austria-Hungary and Russia are both busily plotting against, and intently watching Turkey and the recently created little Danubian kingdoms. Both want Constantinople, and are resolved to get it. There's going to be a terrible struggle for it ere long, and the outbreak will probably be begun by some movement of the Danubian puppet kinglings. Little attention would be bestowed on their quarrels were it not that they are supposed to be caused by one or other of the two Powers, with a view to securing some advantage in the way of seizing upon the effects of the "Sick Man of Europe." Hence the importance of the late Greek bluster..... ....On the whole, Europe is a vast camp. The soldier is everywhere. Man at his best is forced from profitable production; trained into a murdering machine; and placed upon the shoulders of toiling labor, to be fed, clothed and pensioned on its scanty and uncertain wages. Everywhere the toilers are discontented and mutinous. A horribly destructive outbreak of miners, metal workers and other operatives, has been just lately suppressed among burning towns and factories, the roar of cannon and the rattle of rifles in Belgium. Numerous riots of striking workmen have lately given a taste of war to the French army. Nihilists are again becoming rampant in Russia. Socialists are multiplying in Germany in spite of iron repression. Discontent is loud-voiced in England, and a few weeks ago was turbulent in London, which for some hours was in the hands of a mob. But the "season" has been unusually gay in Paris. Patti still gets $4,000 or $5,000 a night for singing an hour or so, and the "fashionables" flock to hear her. The theatres are doing a splendid business, etc., etc., etc.

AGRICULTURAL NEWS.

SATURDAY, May, 15 1886.

LAND Commissioner Sparks tells the Congress, that if he is allowed the additional clerks he wants, the entries he suspended April 3, 1885, will be investigated and disposed of within 18 months. A large percentage of these he thinks fraudulent. He still urges the repeal of the Pre-emption, Timber-culture, Timber-land, and Desert-land Laws. "Shall the public lands be protected and honest titles be insisted on, or shall dishonest appropriation be allowed?" "Will Sparks resign?" is a common question. Why should he? To please the land-grabbers? ..At Bulington, Ill., the other day a centrifugal milk separator burst, mutilating and killing the foreman of the creamery. Another like accident occurred there within the week, and we have lately heard of some others in different places. It's like the bursting of a whirling grind-stone driven by steam .....The system of selling stock by live weight is now receiving quite general attention in England and Ireland. British.....India is likely to begin peanut raising.... Tallow in Chicago is 3¾—the lowest price known to the trade. The abundance of cotton-seed oil causes the depression.....Texas is shipping porkers north; a few cars of extra-good have surprised Chicago .....

Crops & Markets.

SATURDAY, May 15, 1886.

THE Washington crop estimates give the wheat condition for May 1, as averaging 95 per cent for the whole of the winter-wheat area, against 70 per cent for the same time last year. There is no marked change anywhere but a slight advance is noted in the Ohio Valley, Missouri, Texas, Tennessee, the Carolinas, Virginia and Maryland. The season has been favorable; and the crop is more advanced than usual. The average in the principal states is: New York 96, Pennsylvania 95, Ohio 97, Michigan 91, Indiana 98, Illinois 92, Missouri 101, Kansas 67. The area sown to wheat in Minnesota, Dakota, Wisconsin, and Iowa is stated by other "authorities" to aggregate 9,700,000 acres, that in Dakota being about 12 per cent greater than last year, with a crop estimated to be about 30,000,000 bushels. All this points to a probable wheat yield of not far from 435,000,000 bushels for the United States this year, on the supposition of fairly good weather between this and the time of harvest. If is now announced that the area seeded to wheat in British India this year is only 1,800,000 acres less than that of 1885—instead of a difference of 2,500,000 acres, as was recently reported. There is now no room to

doubt that the wheat crop of Australia is a partial failure, and it appears probable that the people of that country, including the neighboring colonies, will not have enough for home use. They are already importing some—cargoes having left California, and one been ordered from the Cape of Good Hope, both for Australian ports.

The Department's report says the condition of rye averages 96, of barley 97. Cotton planting has been delayed by cold rain on the Atlantic coast and by overflows on the Gulf coast. The proportion to be planted in May averages 20 per cent. In ordinary years the proportion does not exceed 14 or 15 per cent. The stand is necessarily defective on wet areas; but re-planting is rapidly filling the gaps. The proportions already planted are as follows: North Carolina, 53; South Carolina, 82; Georgia, 83; Florida, 94; Alabama, 80; Mississippi, 76; Louisiana, 77; Texas, 84; Arkansas, 75; Tennessee, 77. While the season has been more advanced than usual north of the 37th parallel—the heavy snows of early April in the West and the excess of rain prior to April 15 have retarded spring plowing. It is somewhat more advanced than usual in the States between Maine and North Carolina, and in Wisconsin and Minnesota. Elsewhere in the South and West and the Missouri Valley and on the Pacific coast it is below an average. In the corn-growing States the preparation for seeding is later than in regions where small grains predominate. It is estimated that 72 per cent is done; in average years 75 per cent is the proportion.

The Chicago Farmers' Review summarizes the situation in the wheat fields on May 1, as follows: The only State in which no special improvement is reported is Kansas. The tenor of reports, however, is not different from those of the preceding six weeks. In Michigan the outlook is slightly improved. Many fields look thin, but the plant is generally healthy, and the present outlook is for 85 or 90 per cent.—a full average yield. In Ohio, Indiana, Missouri, Kansas and Tennessee prospects continue flattering. The presence of fly is reported in several counties in Indiana, but no injury from insects is reported in other States. Spring wheat reports from Dakota, Minnesota, Iowa, Wisconsin and Nebraska are of a very promising character. Recent rains in Dakota and Minnesota have left the ground in good condition; the growing plant is reported to have taken a good stand. In Wisconsin spring wheat is just putting in an appearance, while winter wheat is from eight to ten inches high. The reports from Iowa indicate a full average crop.

The Florida strawberry crop is reported to be very small this year, owing to killing by winter frosts, and those of Georgia and Carolina are only moderate; but that of Virginia is probably the largest and best ever grown in that State, growers having increased the area on news of the Florida disaster. Lower Maryland sent some strawberries to this market last week, and a considerable amount has come from there the past week, and a fair abundance from parts further south. Delaware strawberries will be ready for market two weeks earlier than usual, and New Jersey and New York berries, it is thought, three weeks earlier.

Now that the new clip is coming into market, we shall make special note of wool for some weeks to come.

A decided lack of animation continues to be apparent in the seaboard markets. Few manufactures are taking supplies in excess of their wants for nearby consumption. It is somewhat encouraging, however, to observe that among the New England mills there is less talk about strikes and less fear of prolonged labor agitation than a few weeks ago. All accounts from Texas agree in showing a considerable divergence of views between buyers and sellers, and a small aggregate of purchases to date. The prevailing weakness in the situation is well distributed over the various kinds of wool. At Boston, the principal wool market of the country, but little is doing in the way of actual sales, though manufacturers are looking about among the dealers to some extent. So far as prices changed at all the movement is downward. Any buyer in search of a good supply of wool can get it at shaded figures. The current prices for Michigan X and No. 1 combing are about 1c. lower than a week ago, and in other lines values are merely nominal. The sales of the week have been 1,668,000 pounds, against 1,469,200 last week and 2,012,000 the same week a year ago. Leading quotations are as follows:

Ohio & Penn. X	30@31c.	Fine Ohio delaine	32@33c.
Ohio & Penn. XX	32@33c.	No. 1 combing	34@35c.
Ohio & Penn. XX and above	33@34c.	Texas spring, 12 mos	19@23c.
Michigan X	28@29c.	Super A	31@34c.

The Philadelphia market is unsettled and weak. There has been a fair trade in medium wools, which have been in better supply here than elsewhere; but business generally has continued dull. Fine fleeces are especially weak and in relatively large supply.

Wheat has dropped everywhere. The decrease in the visible supply—1,300,000 bushels—is considerably smaller than was expected. Before the storms, reports of crops were excellent, and nothing definite is known yet as to the amount of injury done. The "bears" have been pawing down the market, and Woershoffer's death threw 3,500,000 bushels on the market, or there were fears that it would. Corn and oats sympathized with wheat. A "bear" week nearly all around in agricultural products.

MARKETS BY TELEGRAPH.

SATURDAY, May 15, 1886.

CHICAGO.—Compared with cash prices a week ago, "regular" wheat is 2⅛c. lower. Corn, steady. Oats, 1c. lower. Pork, 30c. lower.

WHEAT, active; Sales ranged: May, 74¾@75¼c; June, 75⅜@76⅛c; July, 77¼@78c; No. 2 Spring, 74⅜@75c; No. 3 Chicago Spring, 64¾@65c. CORN.—May, 34¾@35⅛c; June, at 34⅝@36⅛c; July, 36⅝@37⅜c. OATS—Sales ranged, May, 28¼@28⅜c; June, 28⅛@28⅜c; July, 27½@27⅞c. RYE.—No. 2, 60c. BARLEY—No. 2, at 55c. MESS PORK.—May, at $8 75@8 80; June at $8 72½@8 85 July, $8 80@8 95. LARD.—May, $5 87½@5 90; June, $5 90 @5 92½; July, $5 95@6 00. BULKMEATS.—Shoulders, $4 10 @4 20; Short rib sides, at $5 17½@5 20; Short Clear sides, at $5 60@5 65. CATTLE—Shipping steers, 1,350 to 1,500 ℔, at $5 50@6 10. 1,200 to 1,350 ℔, at $4 60@5 60; stockers and feeders, $3@5; cows, bulls and mixed at $1 75@4 25; slop fed steers at $1 50@4 60. HOGS.—Market strong. Rough and mixed, $3 70@4 10; packing and shipping at $4 00@4 30; light weights, at $3 60@4 15; skips, at $2 50@3 60. SHEEP.—Market steady; Natives, at $2 50@3 20.

ST. LOUIS.—Compared with cash prices a week ago, No. 2 Red wheat is 6¾c. lower. Corn, ½c. lower. Oats, ¼c. higher. Butter, creamery, 2c. to 3c.; dairy 3c. to 6c. lower, the fall in both cases being least in the best grades. Pork, 10c. lower. Cattle, 10c. to 35c. higher. Hogs, a trifle lower. Sheep, steady.

WHEAT.—No. 2 Red, Cash, at 80@80¼c; May at 80c; June at 81@81½c; July at 73¼c. CORN.—Weak; No. 2 mixed Cash, 32¼@32⅝c; May, 32¼c; June at 32¾c. OATS—Dull No. 2 mixed, Cash, at 29¼@30¼c: May, at 29¼c; June, 29½c. RYE—Strong at 75c. BARLEY.—American at 60@80c. BUTTER.—Quiet; Creamery, 16@18c; dairy, 10@15c. EGGS—Quiet at 7½c. FLAXSEED at $1 01@1 02. HAY—Steady; Timothy, $18 50; Prairie, $7 50. BRAN, quoted at 52c. at mill. CORN MEAL.—Steady at $1 90. PORK, at $9 25. BULK MEATS.—Long clear at $5 20; Short Rib, $5 25; Short Clear, $5 50. LARD.—Steady at $5 70@5 75. CATTLE—Market active and strong; choice shipping and export steers, at $5 50@5 70; fair to good, $1 80@5 30; common, $4 40@4 75; butcher steers, $3 50@4 80; cows and heifers, at $2 50@4 00; stockers and feeders, $3 50@$4 60. HOGS.—Market active and steady; butchers' and selected heavy, $4 10@4 15 mixed packing, at $3 85@4 00; light, at $3 90@4 00. SHEEP.—Market steady at $2 50@5 00.

BOSTON.—CORN.—Steamer mixed at 50@50½c., and no grade at 45@49c. per bushel. OATS.—No. 2 white, at 44½@45c.; No. 3 white, 43½@44c, and fancy white at 46@47½c. per bushel as to quality. Rye at 68c. ℔ bushel. Bran is $15 50@16 for Spring and $17@18 for Winter; fine feed and middlings at $15 50@19 00 and cotton seed meal at $23 25 on spot and $22 25 per ton to arrive. HAY AND STRAW.—Hay is in good demand at $19@20 per ton for choice and fancy; fair to good, at $17 00@18 00; fine, at $16 00@17 00, and $13 00@15 00 for poor and damaged; Western choice, $17 00@18 00; do fair to good $15@16. Straw—Rye, choice, at $20 00@22 00, and for common to good, $14@18. Swale hay, $11@12; Oat straw, at $10@11 per ton. PRODUCE.—BUTTER.—Northern and Eastern creamery, extra firsts, Eastern, new, at —@23c; Northern, firsts, at 21@22c; Western creamery, extra firsts, new, to extra, new, at 21@23c, firsts, 18@19c; Northern dairy, 20@21c. for Vermont extra firsts to extra, new; firsts, at 17@19c; thirds to seconds, at 10@16c; Western dairy, 15@16c; seconds, 9@12; Imitation creamery, 16@20c. for extra firsts to extra; ladle-packed, 14@15c. for extra firsts to extra; firsts, at 11@12c; seconds, at 10@12c; thirds, at 6@9c. CHEESE.—New York, choice to extra, 8½@10½c, per ℔; and common to good, 5@8c; Vermont choice to extra 8½@10c, and common to good, 5@8; Western choice to extra at 7@9c. Sage, extra, at 14c, per pound. EGGS—Cape and near-by, ℔ dozen, at 13c; Eastern extras, at 13c; do, firsts, at 12½c; Northern, fresh, at 12½c; Western fresh, at 12c; Provincial, 12½c. BEANS.—Choice Northern hand-picked pea, at $1 65@1 75 per bushel; do, do, New York, small, $1 50 @1 60; do, do, screened, $1 15@1 30; medium choice, hand-picked $1 30@1 35; do, do, screened, $1 15@1 25; Yellow Eyes, improved, $1 35@1 40; do, choice flats, at $1 25@1 30; Red Kidneys, $1 60@1 65. PEAS.—Canada, common at choice, at 65@95c, per bushel. Green peas, Northern, at 90c@$1; do, Western, $1 15@1 20. POTATOES range at 40@70c, per bushel as to quality.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, May 15, 1886.

STATE OF THE MARKET.—Compared with cash prices last week, flour 15c. higher; wheat, 1c. to 2½c. lower; corn, 1c. to 1½c. lower; oats, steady; pork, steady; butter and cheese slow and falling; vegetables steady.

FLOUR, FEED AND MEAL, FLOUR—Quotations: Fine at $2 00@3 05; Superfine, $2 60@3 35; Extra No. 2, $3 15@3 60; Good to Fancy Extra State, $3 70@4 25; Common to Good Extra Western, at $3 15@4 00; Good to Choice Extra Western, $4 00@5 15; Common to Fair Extra Ohio, $3 20@3 75; Good, $3 80@4 20; Good to Choice, $4 25@5 00; Common Extra Minnesota, $3 15@3 60; Clear, $3 65@4 00; Rye Mixture, $3 50@3 90; Straight, $4 25@4 50; Patent $4 50@5 15; Bakers' Extra, $4 00@4 50; St. Louis Common to Fair Extra, $3 15@3 75; Fair to Good, $3 80@4 75; Good to Very Choice, $4 80@5 15; Patent Winter Wheat Extra, $4 40@5 25; City Mill Extra for West Indies, at $4 50@4 60; South America, $4 65@4 80. SOUTHERN FLOUR—Common to Fair Extra, $3 25@3 65; Fair to Choice do., $3 70@5 25. RYE FLOUR.—Superfine, at $3 20@3 10, latter for choice. CORN MEAL.—Yellow Western at $2 50@2 75; Brandywine, $2 70@2 75. FEED.—40 to 50 lbs. at 72½@77½c; 60 ℔. at 67½@70c; 80 ℔. at 70@72½c; 100 ℔. at 80@82½c, Sharps at 90@95c. Rye feed nominal at 77½@80c.

GRAIN.—WHEAT.—No. 1 Northern, 88@89c; No. 1 Hard Duluth, 91¼@91¾c; Ungraded Winter Red at 88¾@99c; No. 2 Red, 90@90⅝c, No. 2 Red for June, 87⅞@88⅝c; do. for July, 88⅝@89⅜c; do. for August, 88⅝@89⅝c; do. for September, 89⅝@90c; do. for October, 90⅝@91c; do. for November, at 91⅞@92 1-16c, do. for December, 92⅝@93⅛c; do. for January, 93⅝@94⅛c; do. for May, at 97⅛@98⅛c. RYE.—Canada at 62@63½c; Western, 60@62½c; State at 64@66c. BARLEY.—Two-rowed State, 68@80c; Six-rowed State, 78@90c; Canada, 85c.@$1 10. CORN—Ungraded Mixed, at 38@46c; No. 3, 40c, Steamer Mixed, 45⅜@45½c; No. 2 Mixed, at 47¼@47⅝c; Jersey Yellow, 49c; Damaged White Southern, 35c; No. 2 Mixed for May, 47c; do. for June, 46 1-16@47⅛c; do for July, 46⅛@46⅝c; do. for August, 46⅝@47c. OATS—No. 3 Mixed, 36⅝c; No. 2, 37c; No. 3 White, 41¼@42c; Mixed Western, at 38@40c; White do., at 43@47c; White State, 45⅛c; No. 2 Mixed for May, at 36⅜@36½c; do. for June, 35⅝c; do. for July, 34⅞c.

PROVISIONS.—PORK.—Mess quoted at $9 25@9 50 for Old and $10 00@10 25 for New; $10 75@$11 50 for Family Mess; $12 00@14 00 for Clear Back; and $9 50@9 75 for Extra Prime. BEEF.—City Extra India Mess, at $16@17; Extra Mess, in barrels, $8 00@8 50; Packet, $8 50@9 00 in bbls.; Fancy Plate, $9 00. BEEF HAMS.—Quoted at $20 37½@20 50. CUT MEATS.—Rib Bellies, at 5⅛c; 500 Pickled Hams, 10c; Green Hams, 5c, at the West. MIDDLES.—Long Clear in New York, 5⅝c; at the West, Long Clear, 5.40c; Short Clear, 5 65c. DRESSED HOGS.—All averages quoted at 5⅞c. LARD.—Western Steam spot, 6.15c@6.20c; May, 6.16@6 17c; June, at 6.16@6.17c; July, at 6.23@6.24c; August, 6.30@6.31; September, 6.36@6.37c; October, 6.13@6.44c. City Steam, 6c. Refined quoted 6.40c. Continent 6.70.

BUTTER.—The market is very slow, while supplies are increasing and prices rule lower. Elgin Creamery, 20@21c, Pennsylvania do., 20@21c.; Western do., best, 20c.; do. do. prime, 18@19c; do. do. good, 18c; State do, pails, 21@22c; State Dairy half-firkin tubs, best, 20c; do, do. do., extra fine, 18@19c; do. do. do., good, 16@17c.; do, do., common, 15c; do, Welsh tubs, best, 18@19c; do, do, do., prime, 17@18c; Western, Imitation Creamery, best, 18c; do. do., fair and good, 14@16c; Western Dairy, fine, 16c; do. common, 10@13c; Western Factory, fresh, 15@16c; do. good, 11@12c.

CHEESE.—Exporters hesitate in operations, and there is not more than small lots taken. The situation as to prices is unchanged. Quotations are for: New State factory, best, 8⅝@8¾c; do. good, 8¼@8½c; do. fair, 6¾@7c; do. common, at 4@6c; New Pennsylvania skims, 1¼@1½c; Old State factory, best, 10@10½c; do, fine, 9@9½c; do, good, 8@8½c; do. common, 6@6½c; do. poor 3@4c.

POULTRY.—LIVE.—Fowls, near-by lots, per ℔, at 10@10½c.; fowls, Western, per ℔, 10@10½c.; fowls, Southern lots, per ℔, at 10@10½c; turkeys, per ℔, at 9@10c; ducks, western, per pair, at 65c.@90c.; geese, western, per pair, at $1.25@1.50.

POULTRY.—DRESSED.—Turkeys, per pound, at 10@12c.; chickens, Philadelphia, light weights to pair, at 40@45c, per pound; fowls, Pennsylvania, prime, at 12@13c.; do. Jersey, at 12@13c; do State and western, at 11½@12½c. Ducks, Jersey, per ℔, 13@14c; do. western, 11@12c. Geese, Jersey, at 10@12c; do. western, at 9@10c.

POULTRY.—FROZEN.—Turkeys, per pound, at 13@15c.; Chickens, per pound, at 9@10c.; Ducks, per pound, 12@13c.; Geese, per pound, at 9@10c.

GAME.—English snipe, per doz., $1 75@2; Plover, Western, per doz., $1 75@2.

FRUITS.—FRESH.—Quotations are: Apples.—Baldwin, per bbl., at $1 50@1 75; Russetts, Roxbury, per bbl., $1 75@2 00; do. Goldens, $1 50@1 75. Cranberries.—Cape Cod, choice, per bbl., $3 50@4; do. choice, per crate, at 0c.@$1. Strawberries—Florida at 25@30c, per quart for best; do. poor at 15@25c; Charleston, per quart, at 25@45c.

FRUITS.—DRIED.—The quotations are as follows: Apples—Fancy evaporated, at 6¾@7c; choice, at 6¼@6½c; do. prime at 5¾@6c.; fancy North Carolina sliced, at 4c.; choice do. at 3c.; choice Tennessee quarters at 2c.; State quarters at 2¼@3c.; southern sliced prime at 2@2¼c; do. common, 2c. Peaches-Peeled North Carolina, choice, 11@11½c; fancy, 12½@13c; extra fancy, 13½c; Georgia, choice, at 10c; do. prime, 9@9½c; unpeeled halves, 2¾@3¼c; unpeeled quarters at 2¼@2c.; Delaware evaporated, peeled, 21@27c; unpeeled do., at 12@13½c. Choice pitted cherries at 10@10½c. Evaporated raspberries, at 14@15c; sundried do. 11@12c. Blackberries—Prime at 7c. Whortleberries at 6½c. Plums, at 6@7c; do. California, evaporated at 11c.

PEANUTS.—Quotations at 6c. for best hand-picked, and 4¼@4¾c. for farmers' grades.

COTTON.—The quotations, according to the American classification, are as follows:

	Uplands.	New Orleans. and Gulf.	Texas.
Ordinary	6⅞	6 13-16	6 13-16
Strict Ordinary	7 1-16	7¼	7¼
Good Ordinary	8	8 3-16	8 3-16
Strict Good Ordinary	8 7-16	8⅝	8⅝
Low Middling	8 13-16	9	9
Strict Low Middling	9 1-16	9¼	9¼
Middling	9¼	9 7-16	9 7-16
Good Middling	9 11-16	9⅞	9⅞
Strict Good Middling	10	10 3-16	10 3-16
Middling Fair	10⅜	10 9-16	10 9-16
Fair	11	11 3-16	11 3-16

STAINED.

Good Ordinary	6 7-16	Low Middling	7 15-16
Strict Good Ord	7⅛	Middling	8 11-16

HAY AND STRAW.—The following quotations are: for Choice Timothy hay at 90@95c; No. 1 at 85@90c.; No. 2, 77½@80c; clover mixed at 65@70c; Clover, at 55@65c; shipping at 65@70c; Prairie, at 50@57½c. Straw.—Long rye, at 97½c@$1 00; short rye at 75c; oat, at 40@50c; wheat, at 40@50c.

TALLOW—Prime City quoted at 3⅝c.

SEED.—For Clover there is a moderate jobbing demand; prices are held about steady; job lots are quoted at 10½@11½c. Timothy quoted at $2 05@2 15. Linseed quoted at $1 65@1 70. Mustard at 5¾@6c. for Trieste brown mustard and 6¼c. for California yellow. Carraway seed at 10½c. for Dutch; Italian anise at 9½@10c; canary seed nominal at 2¾@3c. for Smyrna and 3⅛@3½c. for Sicily.

VEGETABLES.—Potatoes.—Maine, fancy, d. h. bbl, at $2 25. Nova Scotia per bbl., at $2 00; State, per 180 ℔., $1 50@1 75; Burbank, State, bulk, per 180 ℔, $1 62@1 87; Burbank, eastern and Nova Scotia, per bbl, $2 25@2 50; Hebron, do, do, do, per bbl, $2@2 25; Hebron, State, bulk, per 180 ℔, $1 50@1 75; Prolific and Goodrich, eastern and Nova Scotia, per bbl., $1 75@200; Peerless, bulk, per bbl., at $1 75@1 50; Magnum Bonum, imported, 168 ℔, sack, $1 80@2 00; Bermuda, per bbl., at $6@9; Florida, per bbl, at $4 00@7 00; Sweet potatoes, Delaware River, per barrel, at $2 00@2 75. Cabbages.—Southern, per bbl., at $3 50@4 25; do, Charleston, per bbl, $3 00@4 00; do, Florida, per crate, $1@4; do Florida, per bbl., at $2 50@4. Kale.—Long Island, per bbl, at 30@40c. Onions.—Bermuda per crate, at $2@2 25; do, Connecticut, per bbl., at $3@3 50. Tomatoes.—Bermuda, per box, at 75c@$1 12. Beans.—Savannah, per crate, at $5; do. Florida, round, per crate, at $2@2 50; do. Florida, per crate, $1@2. Beets.—Florida, per crate, at 1@1 25. Asparagus.—Norfolk, per dozen bunches, at $1@1 50; do, Maryland and Delaware, do, do, $1@1 50; do, prime, do, do, at $1 50@2 00; do, Oyster Bay, $1 50@2. Peas.—North Carolina, per half-bbl, crate, $1 25@2; do, Charleston, per crate, 50@75c; do, Savannah, per crate, at 50@75c. Radishes.—Norfolk, round, per 100 bunches, 75c.@$1; do. do. long, at 50@75c. Squash.—Florida, choice, per crate, 50@75c. Spinnash, per bbl, $1 50@1 75. Turnips.—White, Norfolk, per bunches, at $3@4. Lettuce.—New York, per bbl, $1 50@2.

LIVE STOCK MARKET.

NEW YORK, SATURDAY, May 15, 1886.

Shipments for six days, 1,342 live cattle, 5,820 quarters of beef, 102 live sheep. BEEVES.—The general range from Common to Choice was from $5 75 to $6 50. The average price to-day of Steers was $6 25, the highest average of the season. Four cars of Illinois "stillers" sold at $5 80; 10 cars of Kentucky do, at $5 50@6 05, and 10 cars of Cincinnati do, $5 90@6 10. Bulls and Stags sold at $3 70@4 85; Dry Cows at $2@5 per 100 ℔; Kentucky "Stillers," 1,125 ℔, at $6 05; Corn-fed Indiana Steers, 1,334 ℔, at $6 10; St. Louis do, 1,206 ℔, at $6 30; do, 1,253 ℔, at $6 25; Still Bulls, 1,422 ℔, at $4 15; Pennsylvania Steers, 1,355 ℔, at $6 50; do, 1,227 ℔, at $6 30; Buffalo do, 1,155 ℔, at $5 70, Ohio do, 1,626 ℔, at $6 40; do, Oxen, 1,706 ℔, at $5 90; Cow, 1,030 ℔, at $4 25; Corn-fed Chicago Steers, 1,300 ℔, at $6 15; do, 1,151 ℔, at $6 20; Buffalo "Stockers," 853 ℔, at $4 75; Chicago Bulls, 1,520 ℔, at $4 60; Buffalo do, 1,313 ℔, at $4 60; Cincinnati Stillers, 1,050 ℔, at $6 10.

CALVES.—Receipts for six days 8,110 head against 11,013 head for the same time last week. Buttermilks and thin Veals, sold at 4@4½c, and Common to Prime Veals at 5@6½c; and Choice at 6⅞c, with a few selected reaching 7c. Dressed calves firm and in good demand at 5@9c, for Country-dressed Veals, and 7@10c for City-dressed. Buttermilk calves, 135 ℔, at 4½c veals, 123 ℔, at 6¼c.

SHEEP AND LAMBS.—Total for six days, 29,736 head against 26,529 head for the same time last week. Clipped Indiana Sheep, 86 ℔, at 5½c; Ohio do, 82 ℔, at 5¼c; Kentucky do, (Ewes), 114 ℔, at 4½c; Kentucky Lambs, 52 ℔, at 8c; Clipped Ohio Sheep 82½ ℔, at $5 20; Virginia Spring Lambs, 53 ℔, at 9½; Clipped Yearlings, 82 ℔, 5c; Clipped Michigan Sheep, 81 ℔, at 5½c.; Clipped Western Sheep, 71 ℔, at 5¼c.

HOGS.—Total receipts for six days, 36,260 head against 29,192 head for the same time last week. None for sale alive. Nominal quotations at $4 60@4 85; Country Dressed unchanged at 6@6¼c. for Medium, and 6½@7c. for Light.

PRODUCE COMMISSION HOUSE
ESTABLISHED 1865.
S. H. & E. H. FROST,
100 PARK PLACE, N. Y.
Shippers desiring to favor us will be furnished stencils, shipping cards, etc., on application. Promptness guaranteed. References, RURAL NEW-YORKER, Irving National Bank, etc.

For Exchange.—Prize Wyandottes, B. Javas and Eggs, and, part cash, for 54-in. Bicycle. Center Table, Rag Carpet, or Lawn Mower. Circular free.
SHUTE & BEMONT, Meriden, Ct.

A Lemon-Colored Woman.

ROCHESTER, N. Y., Dec. 23, 1885.—Three years ago I was confined to my bed in a deplorable condition. Skin as yellow as a lemon. Slightest food would make me scream. Also had prolapsus and ulceration. Treated by physicians for two months. Grew worse. Doctors said it was the worst case of liver trouble they ever saw. Lost forty pounds of flesh. Could not sleep. Improved rapidly under the use of Warner's safe cure. Never was healthy. Would have been in my grave had it not been for the wonderful powers of Warner's safe cure. Am now perfectly well. —MRS. J. J. BAYNE, 52 Lake avenue.

IT PAYS to sell our Rubber Printing Stamps. Samples free. J. M. Mitten & Co., Cleveland, O.

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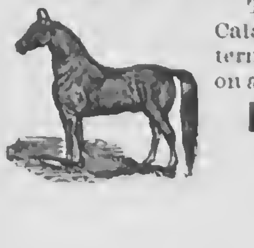
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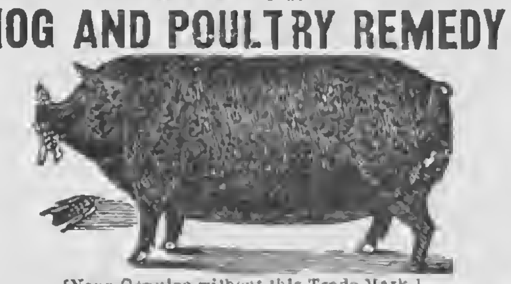
I WILL INSURE YOUR HOGS!
DR. JOS. HAAS'
HOG AND POULTRY REMEDY

[None Genuine without this Trade Mark.]
Is the only Practical Preventive of the so-called Swine Plague.

It has never been surpassed as an increaser of pork and general system tonic. Aiding digestion, stimulating the biliary organs, preventing torpor and engorgement of the liver, and regulating the bowels, it removes and prevents the formation of disease germs, and preserves to the well bred hog his natural constitution. Where it has been fed to such animals in the prescribed quantities, and other directions faithfully observed, it has proved a thorough preventive against swine disease.

AS AN EVIDENCE OF FAITH

in my remedy I make the following offer:

I will insure herds of swine of not less than one hundred in number against disease, at a small fee per head, provided they are fed my remedy under my direction, and prove upon examination prior to contract that they are in a healthy condition, and are neither in-bred, close-bred nor the progeny of such.

1. I will forfeit $100.00 to any breeder whose offer to examine for insurance I decline, provided he forwards remittance to cover my expenses to and from location of hogs, or I fail to prove to the satisfaction of any disinterested party, that failure to respond to invitation is caused by prior engagement or by matters of at least equal importance.

2. I will forfeit $500.00 if I decline upon examination to insure such herds, if my judgment as to their condition of health is overborne by the result of an examination made by at least two properly qualified and graduated veterinary surgeons.

Facts are Better than Assertions.

Please read the following testimony:

GIBSONTON P. O., PA., Feb. 2, 1885.

Dr. Jos. Haas—Dear Sir: About a year ago our herd here numbered about 2,700 head. Disease broke out, and no remedy we had would arrest the trouble. Our losses were heavy and we had to give up feeding entirely for about two months. We then heard of your remedy and bought a trial lot, and began feeding again. We have used it constantly ever since. We have since April last received about 5,000 head of hogs into our herd and have not had a single death from swine disease. This is our experience. Our opinion is that the remedy has prevented disease, and we would not think of being without it. As an aid in fattening pork, we believe it to be good. On this point, however, we have not made an actual test, *as we would not risk feeding a pen of hogs without the Remedy.*

Yours very truly, WHITE & CO.

[N. B.—White & Co., since writing the above letter, have purchased $450 worth of the remedy.]

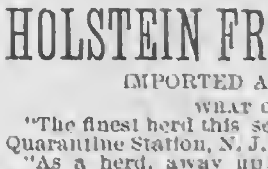
The remedy can be procured of all Druggists, or from my laboratory. Prices, $2.50, $1.25 and 50 cts. per package. 25 ℔. cans, $12.50.

JOS. HAAS, V. S.
Member of Indiana State Veterinary Med. Associat'n
INDIANAPOLIS, IND.

Look out for bilious fevers in the spring, and prevent them by unloading the liver and kidneys, and restoring them to healthy action by Warner's safe cure.

LITTLE'S
PATENT FLUID
NON-POISONOUS
SHEEP DIP
AND CATTLE WASH.
MORRIS, LITTLE & SON,
Manufacturers. Brooklyn, E. D., N. Y., Box 3. and Doncaster, England.

HOLSTEIN-FRIESIAN CATTLE.
Imported and bred by J. N. ROBINS, Beacon Farm, Northport, L. I.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HOLSTEIN FREISIAN CATTLE
IMPORTED AND HOME BRED.
WHAT OTHERS SAY.
"The finest herd this season."—Dr. Farrington, U. S. Quarantine Station, N. J.
"As a herd, away up! up! up!!!"—Dudley Miller Esq., Oswego, N. Y.
Young Cows; Yearlings with Calf, Yearling Bulls, and Spring Calves' Prime Stock. No fancy prices. We mean business. G. W. THOMPSON & SON, Stilton, N. J., P. R. R.

THE BEST CATTLE FASTENING!
SMITH'S
SELF-ADJUSTING SWING STANCHION,
The only Practical Swing Stanchion invented. Thousands in use. Illustrated Circular free. Manufactured by BROOKS & PARSONS, Addison, Steuben Co. N. Y.

Fine Farms.—Va. and Carolina, Piedmont Region; Water Power and Town Lots for sale. Estate Journal free. Elam's Real Estate Agency, Box 196, Danville, Va.

FOR SALE—45 Acres rich Land, first-class buildings, all kinds of fruit. Located within two miles of Dover, Delaware. This is a beautiful Home. Price $2,900. Terms to suit the buyer.
THOMAS S. CLARK, DOVER, DEL.

NEOSHO RIVER VALLEY FARMS
For sale cheap. Write for circular.
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Virginia Farms.—Mild Climate. Cheap Homes. Send for Circular. A. O. BLISS, Centralia, Va.

EUREKA FOLDING CANOPY TOP.

Made in different sizes, and can be attached to nearly all wagons, buggies, phaetons and carts. Easily removed and folds like an umbrella. If you cannot get it of your local wagon maker or dealer, send to us for illus. circular and price list. Agents wanted everywhere. *Mention this paper.*
D. C. BEERS & CO. Patentees and M'f'rs NEWTOWN, Ct.

For the Young.

LETTERS FROM THE COUSINS.

DEAR UNCLE AND COUSINS: Spring with its work is here, and I suppose that you are all busy. We have had plenty to do, but I will take time to write a short letter to you again. Although the summer season brings a great deal of hard work, it also brings the birds and flowers, which any of us may study during this part of the year. If you wish to study the habits of birds, provide yourself with some blank paper, or, better, a small blank book in which you may record your observations. First, you will notice the bird. Give its size and color, length and color of its bill and also the shape of the bill, whether straight or curved, long or short, round or flat, etc. Give also the different markings of male and female, and ascertain whether the male sits on the eggs at any time during the hatching of the eggs. Note the time at which the bird first appears in the Spring, and also at which it leaves in the Fall. Second, examine the nest and eggs on the following points: form of nest, diameter, depth, materials used in its construction when found, where placed—whether on the ground, in bushes or trees, and if on trees, whether near the body or at the ends of the branches, and in all cases the distance from the ground, and the kind of tree or bush—number, size, shape, general color and markings of the eggs, and the time of hatching. There are other interesting points in this quest for knowledge, such as the following: What is the principal food, how obtained, where may the food be most easily found, whether they are the friend or enemy of the farmer, etc. It is not likely that you can learn all of this in one season, but if a record of each season's observation is made, the bird will become well known in time. You can study this while going to and from your work on the farm, or on bad days when it is too wet "to plow or sow, to reap or mow," and you will find pleasure in it. If you do not know the name of the bird, give it a number in your book, and perhaps you may learn its name sometime in the future. Those who wish to study plant life can form a list of points which they wish to examine, and carry it out in the same manner. Uncle Mark will please accept my thanks for the sweet peas. We had a small bed of them last year, and they gave greater satisfaction than many more costly kinds would have given. I raised 13 or 14 grape-vines from seed sown last Fall a year ago, and I succeeded in bringing 11 of them through the Winter, by laying long grass and short brush across the row, and throwing dirt on the ends of these to keep the wind from blowing it away. The buds were nearly all colors, ranging from light green to bright red.

Ohio. URSA MAJOR.

VARIOUS TOPICS.

IN the R. N.-Y. of April 17th, E. M. D. writes, "Will some of the Cousins tell me how they save Pansy seed?" I do not understand what constitutes a genuine Uncle Mark's Cousin; however, as I am a subscriber to the R. N.-Y., and have just celebrated the anniversary of my 13th birthday, and have noticed no reply to the above request, I will venture to tell my way. I visit my Pansy bed once or twice a day and pick off all the seed pods that are holding their heads straight out. These pods will usually be a lighter green than the unripe ones with bent necks. I put them in a glass dish, use a pane of glass to cover them, and set them in a sunny place. If left uncovered, many of the seed will be lost when the capsules open. I also pick my Phlox Drummondii just before the seed is ready to snap out, and treat in like manner. The information desired about hyacinths, B. K. Bliss tells all about in his Fall, or Bulb Catalogue for 1884-85, also Peter Henderson in Fall Catalogue for 1882-83. I thank Uncle Mark for ever so many good hints; also both U. M. and Herbert Green for their bee letters. I made several dozen of the Old Gardener's screens, planted some lettuce as soon as the ground could be worked, and put the screens over half of the bed. Have frequently watered the uncovered half with liquid fertilizers, but it cannot keep up with the half under the screens. Some of my Rural Treasures are up and growing, but I am almost sure I have failed with the Canna seed. I tried a warm soapstone for bottom heat. Perhaps a "brooder" would have induced them to come up. The one Ricinus seed found among the Treasures is growing finely. If there is no objection I would like to join the Y. H. C. A. E. WAKEMAN.

Moodus, Conn.

[We are glad to have you join. Thanks for the letter. We hope to hear from you again.]

DEAR UNCLE MARK: I would like to join the Y. H. C. We have been taking the RURAL five years and we like it very much. I raised some potatoes, sweet potatoes and onions last Summer. I have planted some White Elephant and Blush potatoes this Spring. I have two ducks and a little pig. We have nine horses, 21 head of cattle, 21 pigs, 90 old chickens, and 30 young chickens. We have planted six acres of potatoes and will plant about 10 acres more. If I am accepted as a Cousin I will write again. JAMES H. TREGEMBA.

Carbondale, Kans.

DEAR UNCLE MARK: I have been very much interested in reading the cousin's letters, and would like to join the Y. H. C. My Papa is a Canadian farmer and we have taken the RURAL for a good many years. I am 11 years old, and attending school every day. I am studying very hard now, preparing for the entrance examinations to the High-school. I am also taking music lessons, so you see I do not get much time to help with the farm work, but I like to care for stock, especially the horses. Yours truly,

LESLIE R. BRIDGEMAN.

Smithville, Ontario.

DEAR UNCLE MARK: I want you for my Uncle as well as the rest. I am a little girl 11 years old. My Pa does not take the RURAL NEW-YORKER, but Grandpa does and I read it. I am going to have a garden next year of my own. I have two sisters and one brother and we have 50 chickens to take care of. We have two horses and one colt. And we have also a cow and two calves. I have some flower seed, but not very many. The pigs destroyed my flowers last year. From your niece,

Marshall Co., Ia. HETTA M. HAUSER.

DEAR UNCLE MARK: Thank you very much for the seeds you sent me. Mamma always has a hedge of sweet peas between the flowers and vegetable garden. Last Summer the grasshoppers ate the seed pods, so we could not save any seeds, so the sweet peas were very acceptable. My Papa is in the sugar bush, and I wanted to go too; but as it rained, Mamma thought I had better stay at home and write to you. We make sugar from 900 trees. We have had good times eating sugar and wax. As we have had so much snow this Spring; and, oh! such fun as we have had making candy out of wax. Don't you wish you had been here to help us? I do, but I suppose you have to stay and attend to business, reading and printing our letter, instead of having fun. We keep 36 cows, and last week we had 24 calves at a time, two of them twins.

From your friend, WILLIE W. HUNT.

Chagrin Falls, Ohio.

[I am a little glad it rained so that you could write to me. I guess I do wish I could go out to the sugar bush. We get the best fun we can out of work. We can make work as pleasant as play if we will only think so.—U. M.]

DEAR UNCLE MARK: I like to read the letters from the Cousins, and also what you say. We have had some very cold weather this Winter. Once the thermometer showed 35° at another 38° below zero. My Mamma's health is not very good, so we are living here, for a while, near Grandma's, to give her a chance to recover from a very long and severe sickness. My Papa is in Texas. He likes it there, because he is not troubled so much with asthma. I have a large, fine, Newfoundland pup, several months old. His name is Rollo. He is bright in learning what he is told. I have also some very beautiful young hens. They are partly Plymouth Rock and partly Poland. Some are all Plymouth Rocks and one is all Poland. The mixed ones have the plumage of the Plymouth Rocks and the comb and topknot of the Polands. We think they are very fine birds. A friend made me a present of a trio of Bantams, Nicky, Nip and Tuck. My rule is to clean my house every day, and my yards every other day. Not quite two years ago, Mamma bought four setting hens, two Polands and some eggs, and offered me the chance to get some by taking care of them. Since then we have raised more than 200 chickens. Out of my share I have bought several things, and have saved five dollars and fifty cents to buy a calf or a colt. Should we sell and go to a warmer country, I should like to try the Leghorns. But do not think I am all chicken. I like to study and read too. I study with Mamma, and I like to read History and Biography. "Cousin Horticola" will find some white water lilies at the head of the lovely lake, which gives our town its name, if he can come so far to get them. Your friend,

HENRY C. ANDERSON (11 years old).

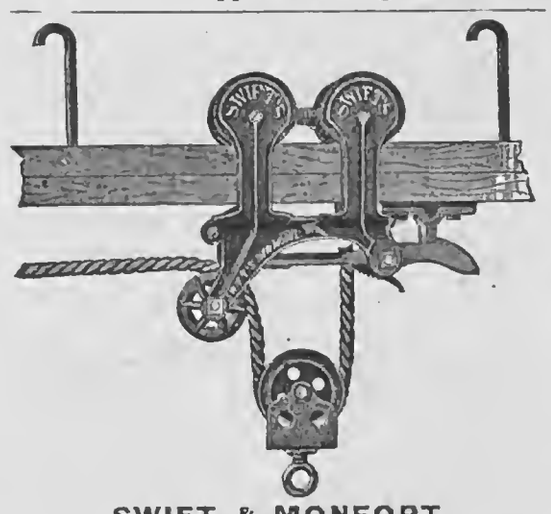
Clear Lake, Iowa.

[You have learned the first secret of success in poultry raising. The houses and yards must be kept clean, or much of our care will be useless. To be "all chicken" is not the worst thing in the world, still I am glad you like other things too.—U. M.]

LETTERS RECEIVED FROM Stella M. Bonnell; Fannie A. Nye; Burwell J. Cook; Thomas Knowles; Hattie Van Skiver; Eda Seymour; May Ambler; Luther Herman.

Miscellaneous Advertising.

THOUSANDS OF PEOPLE suffer in silent patience from diseases of the bladder. If there is anything more distressing among chronic diseases, medical literature has not yet revealed it. A newspaper is no place in which to describe the particulars of the agony. Every victim knows it for himself, but every victim does not know what thousands have testified to: that when all other remedies fail, they have been restored to health by means of Warner's safe cure. This great specific corrects the action of the kidneys, drives the uric acid irritant from the blood, reduces the congestion, and after a thorough course of treatment the formation of mucus ceases, the elasticity of the bladder returns, and health and happiness are regained.



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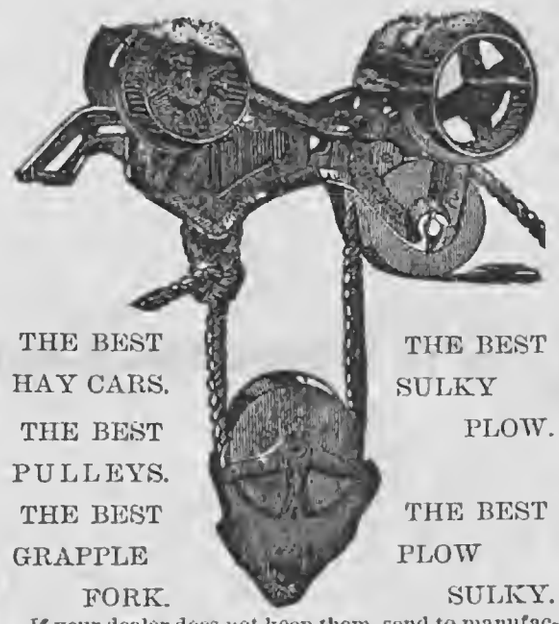


THE BEST HAY CARS. THE BEST PULLEYS. THE BEST GRAPPLE FORK. THE BEST SULKY PLOW. THE BEST PLOW SULKY.

If your dealer does not keep them, send to manufacturers for lowest cash prices.
Fowler & Farrington, TAUGHANNOCK FALLS, N.Y.

THE WILLIAMS

Grain Threshers, Horse Powers, and Engines.
Highest prize awarded these machines at the New York State Ag. Soc.'s latest trial, over a large number competing. Ample warranty and opportunity for trial given. For full particulars address
ST. JOHNSVILLE AGR'L WORKS,
St. Johnsville Montgomery Co., New York.

Grain Threshers, unequaled in capacity for separating and cleaning.
Combined Grain and Clover Threshers, fully equal to regular grain machines on grain, and a genuine Clover Huller in addition.
Two Speed Traction & Plain Engines, 4 to 15 Horse Power, positively the most desirable for Lightness, Economy, Power and Safety. Boiler has horizontal tubes, and is therefore free from the objectionable features of vertical boilers.
Horse Powers, both Lever and Endless Chain. All sizes. Send for Catalogue. Address,
THE WESTINGHOUSE CO.,
Schenectady, N. Y.

Blood Will Tell.

CINCINNATI, Ohio, Nov. 17, 1885.—In April, 1881, my daughter was taken sick with complication of symptoms. She continued to grow worse under the best medical treatment. Only temporary improvement. Had a relapse, grew rapidly worse, and at this time, had palpitation of the heart, intense pain in the head, nervous dyspepsia, and physicians said, catarrh of the bladder. She fell away from 135 pounds to less than eighty. Began to use Warner's safe cure and Warner's safe pills, together with Warner's Safe Nervine. In ten days she was much better, and in 100 days after she gained fifty pounds in weight, and was restored to good health.—JOSEPH THORNTON, Room 9, Johnson Building.

PILES. Instant relief. Final cure in 10 days, and never returns. No purge, no salve, no suppository. Sufferers will learn of a simple remedy, free, by addressing C. J. MASON,
78 Nassau Street, N. Y.

Brewster's Patent Rein Holder.
Your lines are where you put them—not under horses' feet. One agent sold 12 doz. in five days; one dealer sold six doz. in 15 days. Samples worth $1.50 FREE. Write for terms.
E. E. BREWSTER, Holly, Mich.

CARDS! 60 Fancy Pictures and 25 Elegant Cards in Gilt Edge, Silk Fringe, Hidden Name, &c. 1 Songster, 1 $50 Prize Puzzle, and 8 Parlor Games, all for 10 cts. Game of Authors, 10c. IVY CARD CO., Clintonville, Ct.

300 FOR 10 C. GAMES, Puzzles, Parlor Magic, Conundrums, Songs, Album Quotations, Embroidery Designs, and pack of Name Cards, Gilt Edge, Silk Fringe, Hidden Name. TODD CARD CO., Clintonville, Ct.

$5 A DAY AND EXPENSES GUARANTEED AGENTS WANTED IN EVERY COUNTY. Greatest Opportunity Ever Offered. Don't miss it. Will pay salary if preferred, and advance expenses. Outfit and full particulars FREE. Address at once, Standard Silver Ware Co., Boston, Mass.

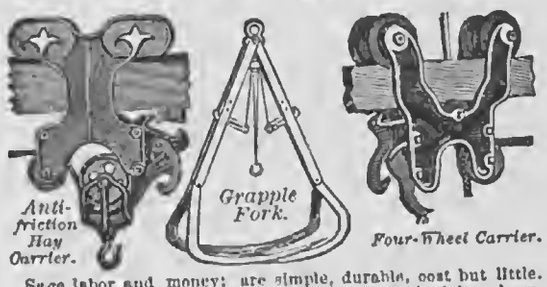
TILE and BRICK MACHINERY.
STONE-SEPARATING CLAY-CRUSHERS
Illustrated Catalogue free.
H. BREWER & CO.,
No. 154 Mill St.,
TECUMSEH, MICH.
Satisfaction Guaranteed.

THE UNION HORSE-POWER
Has the Largest Track Wheels. DOUBLE GEARED. NO RODS. CHILLED BEARINGS, and LEVEL TREAD.

UNION Thresher Separator and Cleaner, Premium Farm Grist Mill, Feed Cutters, &c.
W. L. BOYER & BRO., PHILADELPHIA, PA

RICHMOND CHAMPION FENCE MACHINE
Patented Nov. 24, 1885.
Surpasses all other wire and picket fence machines, for making strong and durable fences in the field, that no stock will break down. On rough, hilly ground, it keeps pickets perpendicular which no other machine will do without constant adjustment. It is easy to handle, uses any kind of pickets, and any size of wire. Write for circular and price.
WAYNE AGRICULTURAL CO., Richmond, Ind.

NOYES' HAYING TOOLS
For Stacking out in Fields or Mowing away in Barns.



Save labor and money; are simple, durable, cost but little. No trouble to get over high beams or to the end of deep bays. Thousands now in use. Wood Pulleys, Floor Hooks, etc. Send for circular and designs for tracking barns, to
U. S. Wind Engine & Pump Co., Batavia, Kane Co., Ill.

$250 WILL BUY

THE BEST SAW MILL
Yet offered for the money.
SEND FOR CIRCULAR.
RICHMOND MACHINE WORKS,
RICHMOND, INDIANA.

THE BIRDSALL CO.'S
Patent Variable FRICTION FEED CIRCULAR SAW-MILL.
Send for Circular "D."

Address THE BIRDSALL CO.,
AUBURN, N. Y.

AHEAD OF ALL COMPETITION.
1886.
THE PHILADELPHIA LAWN MOWER.

FOURTEEN SIZES FOR HAND USE.
Weighing from 21 to 51 Pounds.
THREE SIZES FOR HORSE POWER.
Graham, Emlen & Passmore,
Patentees and Manufacturers,
631 Market St., Philadelphia, Pa.

PERSONALS.

GENERAL BELKNAP, ex-Secretary of War, has lately been suffering much from rheumatism.

GENERAL NEAL DOW devotes much of his time to literary work. He is preparing to bring out a history of Prohibition.

SENATOR JONES, of Florida—and Detroit—was greatly infatuated with Miss Anderson when that lady last played at Washington.

SOME people are mad because Miss Folsom is buying her wedding trousseau in Europe; but what do they think of the American girls who buy their husbands, too, in Europe?

FROM his Duchy of Cornwall the Prince of Wales last year received the sum of $474,515. Of this he returned in various payments $435,510, so that his net revenue was only $39,005.

SAMUEL J. TILDEN is quoted as saying that a bachelor President in the White House is an incomplete President, and that he is glad to know that Cleveland is going to wed.

A SPECIAL from Mississippi City says that Jefferson Davis has been confined to his room since his return home and is under the care of several physicians. He will recover.

REPRESENTATIVE GEORGE TALIAFERRO BARNES, of Georgia, otherwise "Br'er Tarrypin," is said to be the biggest man in Congress, weighing 300 pounds and measuring five feet five inches in diameter in every direction.

DR. MCLAUGHLIN, of Texas has, just reported to the Medical Association of that State that he has discovered the microcobes of Texas fever, small-pox, yellow and dengue fevers and of other ferbile diseases.

PROF. PRITCHETT, of St. Louis, has discovered that our days are lengthening, but as it is only at the rate of two seconds in a century it will be some time before the extension comes in conflict with the eight-hour movement.

THE chances of Gov. Rusk, of Wisconsin, for renomination were excellent anyway, but since he snppressed the Milwnukee riots he is getting an added boom. His "this thing has got to stop, if it takes every man in the State" struck the popular heart.

EX-SENATOR David Davis, of Illinois, is dangerously, and it is believed fatally, sick at his home in Bloomington. Within the past week a carbnncle has developed on his left shoulder, and this week George P. Davis, the Senator's son, admitted that he believed his father to be on his death-bed.

AFTER a long struggle and many rebuffs, Mrs. Carrie B. Kilgore, wife of a Philadelphia lawyer, has been admitted to full fellowship at the bar by the Supreme Court of Pennsylvania, and can now practice before all the tribunals in the State—the first woman who has obtained the right.

SENATOR ALLISON, of Iowa, talked of a good deal lately as a possible Republican candidate for the first or second place on the next Presidential ticket, is the last prominent man whom the newspapers want to marry—to a handsome young lady of Washington.

EDITOR HENRY WATTERSON, of the Louisville Courier-Journal, who was lately sick well-nigh unto death, sailed for Europe Wednesday. He is looking well, and plans to spend the Summer in England and Switzerland and the Autumn in Paris, and to undertake no professional labor until his strength is fully restored.

JUSTICE STANLEY MATTHEWS, of the U. S. Supreme Court, is soon to marry Mrs. Mary K. Theaker, widow of Judge Theaker, who died two years ago at Deer Park, Md. He was a Congressman from Ohio, and Commissioner of Patents under Lincoln. She is described as "a charming and attractive person" and of "deeply religious convictions, a sincere and reverent Presbyterian."

"THERE'S another pig dead, and now away I go, too," exclaimed farmer Rezer, of Clarion Mills, Pa., Tuesday, just as a third pig died of some disease, during the week. He went straight to his bed-room; his wife ran after him, but was too late to prevent him from cutting his head nearly off with a razor. He was 37, and had never shown any signs of insanity.

GENERAL LORD WOLSELEY, the lucky Irishman who bravely retreated before the Mahdi, and who is reported to have threatened to resign from the British army to head an Ulster rebellion in case home rule is conceded to his native land, has lately received the Grand Cross of the Order of the Red Eagle from Kaiser Wilhelm.

THE widow of Commander J. A. M. Craven is poor and asks an increase of pension. When the monitor Tecumseh, leading Farragut's fleet in Mobile Bay in 1864, was struck by a torpedo, Craven and the pilot were in the turret and both ran to the small opening leading below. The Commander, however, drew back, saying: "After you, pilot." There was no "after" for him. The pilot was saved, but the hero went down with his ship,

Miscellaneous Advertising.

THE depressed, anxious, tired, prostrated feeling, with disposition to chills and fever, headache, malaria and nervous prostration, indicate that the blood is full of uric acid, which can be effectually remedied by that great blood purifier, Warner's safe cure.

$25 A DAY saved by using the **Little Giant Road Machine,** instead of making roads in the usual way. It is the cheapest and the best. Send for circular. **STRONG & PARKER. Vergennes, Vt.**

RUSTLESS IRON WATER PIPE. **WM. T. WELLS,** 7 to 9 Cliff St. New York Send for Catalogue and Prices.

FAY'S MANILLA ROOFING ESTABLISHED 1866

Takes the lead, does not corrode like tin or iron, nor decay like shingles or tar compositions, easy to apply, strong and durable at half the cost of tin. Is also a **SUBSTITUTE for PLASTER at Half the Cost. CARPETS and RUGS** of same, double the wear of oil cloths. Catalogues and samples *free.* **W. H. FAY & CO., CAMDEN, N. J.**

CRIMPED & CORRUGATED **IRON ROOFING** **W.G.HYNDMAN & CO.** SEND FOR CIRCULAR & PRICES ÷ CINCINNATI, O.

V. I. CASE T.M.Co

RACINE WISCONSIN. SEND FOR ILLUSTRATED CATALOGUE

HAY CARRIER Mallory, Jackiess HAY ELEVATOR, best in the market for filling a barn with hay. Better than any track carrier. Easily put up and taken down. Price only $5. Warranted to give satisfaction or money refunded. Best hay fork in the market, $3.25. Write for catalogue and terms to agents. **HERBERT BAKER, 93 Erie St., Toledo, O.**

50 CARDS, Hidden Name, etc., 1 pretty Ring, outfit and present, all 10c. 6 lots 50c. O. A. Brainard, Higganum, Ct.

Twenty Years Make a Skeleton.

THORPE, Tenn., Dec. 29, 1884.—Warner's safe cure restored me to perfect health, from an emanciated condition caused by chronic diarrhœa. Had it twenty years, and was reduced to a mere skeleton. I am well. Weigh 120.—JOHN L. GORMAN.

SOLID COMFORT

TONGUELESS. THE **"WONDER ON WHEELS"**

Self Guiding. Uses a wheel landside. Two horses instead of three. A ten year old boy instead of a plowman. No pole (except among stumps). No side draft. No neck weight. No lifting at corners. Easier driving, straighter furrows, and **LIGHTER DRAFT THAN ANY PLOW on or off wheels.** Will plow any ground a mower can cut over. No equal in hard, stony ground, or on hillsides. Our book, **"FUN ON THE FARM,"** sent Free to all who mention this paper.

ECONOMIST PLOW CO. SOUTH BEND INDIANA.

☞ **Special prices and time for trial given on first orders from points where we have no agents.**

NURSERY STOCK---FALL 1886.

The old and Reliable! **SYRACUSE NURSERIES** Come to the front For the Fall of 1886

with the choicest Stock of their specialties, **STANDARD APPLES, STD. and DWARF PEARS, PLUMS and CHERRIES,** ever offered to the public, all young, thrifty and well rooted.

Also a very superior assortment of **GENERAL NURSERY STOCK both FRUIT AND ORNAMENTAL** including all the popular **ORNAMENTAL TREES, SHRUBS, and ROSES.**

All Nurserymen and Dealers are cordially invited to inspect this superior stock or correspond with us, before placing their orders for the coming Fall.

SMITHS, POWELL & LAMB, Syracuse, N. Y.

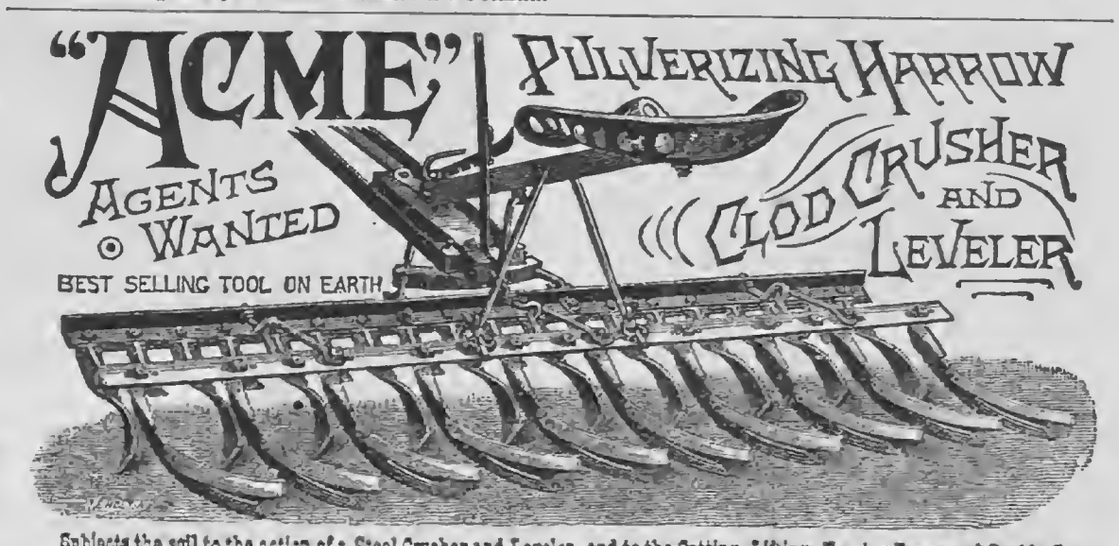
(When writing always mention RURAL NEW-YORKER.

"ACME" PULVERIZING HARROW

AGENTS WANTED

BEST SELLING TOOL ON EARTH

CLOD CRUSHER AND LEVELER



Subjects the soil to the action of a Steel Crusher and Leveler, and to the Cutting, Lifting, Turning Process of Double Gangs of Cast Steel Coulters. Immense cutting power. Crushing, Leveling and Pulverizing performed at the same time. Entire absence of Spikes or Spring Teeth avoids pulling up rubbish. Only Harrow that cuts over the entire surface of the ground. Sizes, 3 to 15 ft. wide. With and without Sulky attachment. We deliver free at Distributing Depots.

FAIR PLAY. **DO NOT BE DECEIVED.** Don't let dealers palm off a base imitation or some inferior tool under the assurance that it is better. SATISFY YOURSELF BY ORDERING AN "ACME" ON TRIAL. We will send a **double gang** Acme to any responsible farmer in the United States; if it does not suit, he may send it back, we paying return freight. We don't ask pay until tried on his own farm.

Send for pamphlet containing thousands of testimonials from 48 States and Territories.

Branch Office, **HARRISBURG, PENN.** **NASH & BRO.,** Manufactory and Principal Office, MILLINGTON, NEW JERSEY.

N. B.—"TILLAGE IS MANURE" and other essays sent free to parties who NAME THIS PAPER.

AMERICAN ROAD MACHINE CO.

Successors to S. PENNOCK & SONS CO., Kennett Square, Pa., and GEO. W. TAFT, Abington, Conn.

Manufacturers of **IMPROVED ROAD MAKING IMPLEMENTS**

for city, town and country streets and highways. **MACHINES SENT ON TRIAL,** and **SATISFACTION GUARANTEED.** Purchasers are assured of immunity from law suits. ☞ For circulars and colored cuts, address **AMERICAN ROAD MACHINE COMPANY, KENNETT SQUARE, PA.**

THE BRADLEY HANDY WAGON

The Coming Wagon. Light, strong, convenient, and low priced. **Handy** to get into and out of. **Handy** for single horse or pair. **Handy** for one person or more. **Handy** to load or unload. ***Send for free circular "How to purchase direct from Manufacturer."***

BRADLEY & CO., SYRACUSE, NEW YORK, or 22 COLLEGE PLACE, NEW YORK. 32 S. MARKET ST., BOSTON.

Marlboro Raspberry, *Ulster Prolific and Pough keepsie Red Grapes.* Send for description and price to **A. J. CAYWOOD & SON, Marlboro, N. Y.**

SAMPLE **ROSE OR GRAPE VINE** with Catalog, postpaid, 15c. WM. B. REED, Chambersburg, Pa. | mention paper.

NOW IS THE TIME TO

Spray Fruit Trees.

Eight dollars invested now, will return you Five Hundred Dollars in November. Catalogue and full information FREE.

FIELD FORCE PUMP CO., Lockport, N. Y.

OUR LEROY BASKETS AND CLIMAX

berry crate are the best made. Indorsed by all leading berry growers. Illus'ted Catalogue free. **DISBROW M'F'G CO., Rochester, N. Y.**

SEED POTATOES.

DAKOTA RED	$1.25 Bu.	$2.50 Bbl.
WHITE STAR	1.00 "	2.25 "
WALLS ORANGE	1.00 "	2.25 "
RURAL BLUSH	1.00 "	2.25 "
EARLY MAYFLOWER	1.25 "	2.50 "
WHITE ELEPHANT	.75 "	1.75 "
BURBANK'S	.75 "	1.75 "

An assortment of 50 kinds. One tuber of each, correctly labeled, $5.00. Delivered at freight or express office. **C. L. HAWLEY,** HORNELLSVILLE, N. Y.

"MICHIGAN."

This Seedling originated in Washtenaw County, Michigan, by H. C. Clark, is a prolific, vigorous, blight-resisting variety; of floury texture, and delicacy of flavor unexcelled by any other variety. Season, medium late.

Planted alongside of ten other varieties this past Season where four-fifths of them rotted, there was no sign of blight or rot with it. Price, $1.00 per pound by mail, post paid; by express or freight, at purchaser's expense, ½ peck $2.00, peck $3.00, ½ bushel $5.00, bushel $8.00. Send all orders to **H. C. CLARK, Lock Box 95, Ann Arbor, Mich.**

☞ **ECLIPSE** ☜

POST HOLE DIGGER.

The **Greatest LABOR-SAVING** tool ever invented for digging holes in the ground. This machine works on a new principle, and is unlike anything in the market. It is neither an Auger nor a Plunger, but is driven in the ground with a driving rod, which works in a pipe similar to a telescope. **We claim** for this tool:

1st. That one man can dig from **one to three hundred** holes two feet in ordinary ground in one day.

2nd. That it will dig holes any **size or depth** required.

3d. That it will work successfully in **very hard or rough** ground where other diggers and augers will not work at all.

4th. You stand up straight while using it, consequently no back-breaking work is required.

It will pay you to send for descriptive circulars and prices to **COLE & FLEMING, Manufacturers, Springfield, O.**

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The following rates are invariable. All are therefore respectfully informed that any correspondence with a view to obtaining different terms will prove futile.

ORDINARY Advertisements, per agate line....80 cents.
One thousand lines or more, within one year from date of first insertion, per agate line, 25 "
Yearly orders occupying 4 or more lines agate space..... .....25 "
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The subscription price of the RURAL NEW YORKER is:

Single copy, per year.....	$2.00
" " Six months.....	1.10
Great Britain, Ireland, Australia and Germany, per year, post-paid.....	$3.04 (12s. 6d.)
France.....	3.04 (16½ fr.)
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Any one sending a club of seven is entitled to one copy, one year free.

Agents will be supplied with canvassing outfit on application.

Entered at the Post-office at New York City, N. Y., as second-class mail matter.

Humorous.

"YES," said a fashionable lady, "I think Mary has made a very good match. I hear her husband is one of the shrewdest and most unprincipled lawyers in the profession, and of course he can afford to gratify her every wish."

A LITTLE girl asked, during a hail storm, "Are the angels popping corn?" The same child asked, after attending the service at a Quaker church, one cold morning, "Why don't they think at home, instead of going to church and wasting fire?"

TWO "gemmens" in Austin, disputing as to the "properest" way in saying, "We eated at de table;" or "we has done ate at de table," called on Uncle Moses to decide. His answer was: "In de case of you two niggahs, none of you am right. De properest way for sich cattle as you am is to say "We fed at de troff."

A CERTAIN judge, who had been a great scamp years before his accession to the bench, recognizing an old acquaintance in a prisoner brought before him, and supposing himself safe from recognition, asked the prisoner what had become of the companions of his early life of crime. The reply was, "They are hanged, your honor, except you and me."

MISS ANGELINA to Miss Belle, her rival, just now surrounded by a bevy of admirers: "Oh dear, do tell me how you do your hair up so charmingly. What do you do it up on! It looks so intellectual?" Miss Belle, who wears her hair high: "Well I'll tell you, dear. I generally do it up over brains, and (sweetly) I don't think you can buy them at the hair stores."

"FANNY, you should not beat your doll with that heavy stick. You will make all the saw-dust come out of it," said a Michigan mother to her little girl, who had placed her doll on the ground and was belaboring it with a base-ball bat. "I don't care if all the saw-dust does come out of her,' replied Fanny; "I don't want people to say that my children turned out bad because I humored them too much."

AS they were all coming out of the theater together, young Sypher accidentally trod on the dress of the pretty girl just ahead. "Oh, shoo!" involuntarily exclaimed the pretty young girl, as she suddenly brought up. Young Sypher thought he saw a chance for a brush. "You needn't shoo me," he simpered, smartly; "I'm no cow." "No," the pretty girl returned, with a glance that pinned him up to the side of the lobby, "perhaps not, now, but you will be when you grow up." Then she swept on, while young Sypher was so astounded that he actually forgot to light his oakum-stuffed cigarette when he got outside.

"WE MET BY CHANCE!"

Miscellaneous Advertising.

The Cold-Water Dip,
(THYMO-CRESOL,)
A very highly concentrated, non poisonous fluid—mixes readily with cold or warm water—the simplest, safest, surest cure for TICKS,
LICE,
MANGE, SCAB, all Insect Pests, all Skin troubles, and many other Diseases of Live Stock. Recommended by many prominent Breeders. See circular, sent on application. T. W. LAWFORD & CO., Baltimore, Md.

The Auburn Farm Wagon.

E. D. CLAPP WAGON CO. (LIMITED),
Send for circular. AUBURN, N. Y.
Mention this paper.

CARTER'S
IMPROVED NEEDLE HAY KNIFE.
This knife has been tested with the most celebrated knives of other makers, and has proved an easier and faster cutter than any other. Its special excellence consists in a chisel edge tooth. It may be used for cutting hay in the mow, stack and bale; also for ditching, cutting peat, or for any other work for which a hay knife is used.
Send for circular.
North Wayne Tool Co.
HALLOWELL, MAINE.

THE GREAT AMERICAN TEA Company
GOOD NEWS TO LADIES.
Greatest inducements ever offered. Now's your time to get up orders for our celebrated Teas and Coffees, and secure a beautiful Gold Band or Moss Rose China Tea Set, or Handsome Decorated Dinner Set, or Gold Band Moss Decorated Toilet Set. For full particulars address
THE GREAT AMERICAN TEA CO.,
P. O. Box 289. 31 and 33 Vesey St., New York.

CIDER MAKERS
Should send for our New Catalogue, mailed FREE
Boomer & Boschert Press Co., Syracuse, N. Y.

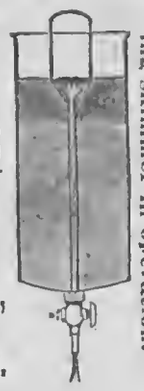
COOLEY CREAMERS.

LARGELY IMITATED, BUT NOT EQUALED. THEY HAVE A PATENTED PROCESS WHICH NO OTHERS CAN USE.
Are used by more fine butter makers and stock breeders than any other apparatus, because they have proved to make the **largest quantity** and **best quality** of butter with **least labor** and **expense.** They surpass everything in the Cream Gathering System. **Have both Top and Bottom Skimmers.** Cream drawn FIRST or LAST. *No danger or sediment.* Thick walls with dead air space. Used with or without ice.
SIX GOLD Medals and SEVENTEEN SILVER Medals awarded for superiority of process and product. Send for circulars giving facts and references sustaining these claims. DAVIS SWING CHURNS EUREKA and SKINNER'S BUTTER WORKERS, CARRIERS, PRINTS, and a full line of Creamery supplies.
VERMONT FARM MACHINE CO., Bellows Falls, Vt.

HOLSTEIN-FRIESIAN CATTLE!

LARGEST HERD AND LARGEST AVERAGE MILK RECORDS.
3 cows have averaged over 20,000 lbs. in a year.
5 cows have averaged over 19,000 lbs. in a year.
10 cows have averaged over 18,000 lbs. in a year.
25 cows have averaged over 16,000 lbs. in a year.
63, including 14 three-year-olds and 21 two-year olds, have averaged 12,783 lbs. 5 oz. in a year.
BUTTER RECORDS.
5 cows have averaged 20 lbs. 7 oz. in a week.
9 cows have averaged 19 lbs. 3½ oz. in a week.
11 three-year-olds have averaged 13 lbs. 2 oz. in a week
15 two-year-olds have averaged 10 lbs. 8 3-10 oz. in a week.
This is the herd from which to get foundation stock. Prices low for quality of stock. SMITHS, POWELL & LAMB, LAKESIDE STOCK FARM, SYRACUSE, N. Y.
When writing mention RURAL NEW-YORKER.

FOR REASONS WHY STODDARD'S CREAMERY AND REFRIGERATOR
With SURFACE SKIMMING ATTACHMENT
IS THE
MOST POPULAR CREAMERY
ON THE MARKET, AND FOR CIRCULARS OF THE
BEST LINE OF DAIRY GOODS MADE,
ADDRESS
MOSELEY & STODDARD MF'G CO. Poultney, Vt.


Sectional view of a can, showing skimmer in operation.

REED & BARTON
37 UNION SQUARE, NEW YORK,
MANUFACTURERS OF
ELECTRO GOLD AND SILVER PLATE,
INVITE INSPECTION OF THEIR EXTENSIVE STOCK OF
TABLE WARE,
WHICH EMBRACES EVERYTHING REQUIRED FOR USE OR DECORATION OF THE TABLE:
Coffee, Tea, Dessert, and Water Sets;
Cake and Fruit Baskets; Meat, Vegetables and Baking Dishes;
Epergnes, Candelabra, Spoons, Forks, Cutlery, Etc.
THEY WOULD ALSO CALL ATTENTION TO THEIR LARGE ASSORTMENT OF NOVELTIES IN
Oxidized Silver, Gold Inlaid and Applied Work.

CORNELL UNIVERSITY.
AGRICULTURAL DEPARTMENT
In the year 1886-87 courses of instruction will be given as follows:
In Agricultural and Applied Chemistry; Professors CALDWELL, SCHAEFFER and NEWBERRY: 8 Courses.
In Botany, Horticulture and Arboriculture; Professors PRENTISS and DUDLEY: 11 Courses.
In Entomology and General Invertebrate Zoology; Professor COMSTOCK: 7 Courses.
In Geology; Professor H. S. WILLIAMS: 3 Courses.
In Veterinary Science; Professor LAW: 3 Courses.
In Applied Agriculture; Professor ROBERTS: 6 Courses.
During the present year a course of lectures is given on the Management of the Dairy by the Honorable L. B. Arnold; a similar course may be expected next year.
A veterinarian building is to be erected in the course of the present year, and four rooms are to be added to the Agricultural Laboratory and Museum.
The University Farm contains 257 acres, of which about 125 acres are in tillage. The farm contains two very large barns, a dairy house, and an excellent herd of stock. All the appliances of the Farm are used chiefly for the purposes of illustrative and experimental husbandry.
Students who take the full course and pass the requisite examinations receive the degree of Bachelor of Science in Agriculture.
Students not candidates for a degree are received without examination as "Special Students" and are admitted to any or all of the above courses, provided the applicants are 18 or more years of age; and provided they satisfy the Professors of Agriculture of their disposition and ability to profit by the instruction.
The next collegiate year begins September 14, 1886!
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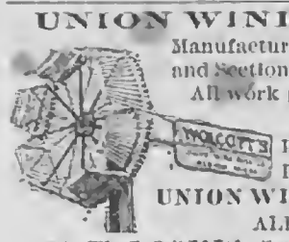

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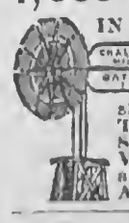

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THE RURAL NEW-YORKER

A JOURNAL FOR THE SUBURBAN AND COUNTRY HOME

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The Herdsman.

POLLED CATTLE.

IN the original struggle for existence among wild animals, the possession of horns, as offensive and defensive weapons, was undoubtedly an advantage to cattle, and whenever in the case of any animal any advantage occurred in size, shape, texture, or solidity of these weapons, it would be likely to be perpetuated, owing to the superiority it would give its owner in the battle for life with its kindred and other wild animals. But, however useful horns may have been in a wild state, in a state of domestication they are not only useless, but a source of danger, mischief and inconvenience. Prejudice and the endearment of association will, for a considerable time yet, lead many to prefer horns; but the admirers of "no-horns" are steadily and rapidly increasing, and doubtless will soon be, if they are not already, in the majority. One of the greatest hindrances in this direction is the difficulty stockmen experience in dissociating their favorite breeds from horns. What Shorthorn, Hereford, Devon, Ayrshire, or Jersey man can readily imagine his favorite breed without horns? As polls they would naturally appear something different, and would lose the place they hold in his regard; for the true lover of any breed admires not only their acknowledged excellencies, but all their special characteristics—even their defects, as in the case of horns. Wouldn't any of these fine breeds be really more valuable without horns, if with their horns they lost not a whit of their other characteristics?

Hornless cattle are generally milder than others in disposition; are less likely to injure man or beast, and can be shipped closer without injury. Can any stickler for any horned breed mention any advantage in the way of beef or milk production secured to his favorites by the possession of horns?

Polled or hornless cattle have been found in many widely separated places from time immemorial. Those of Great Britain were known to the Romans in the days of Julius Cæsar. They are all supposed to have been originally horned, and the change is attributed by some either to the natural conformation of the country where the breeds originated or to the effects of selection in breeding, or to a combination of both; while others think it due mainly to "sporting" or unaccountable variation from the ancestral type in some animals, and the perpetuation of this variation by design or circumstances. Certain it is, as we learn from D'Azra, that "in 1770 a hornless bull was produced in Paraguay which has been the progenitor of a race of hornless cattle that have multiplied extensively in that country." If such has been the origin of the Paraguayan polls, why may not the other hornless breeds have originated in the same way? "Muleys" have never been very uncommon among horned cattle.

Of the present recognized breeds of polled cattle the Galloway is probably the oldest. Its original home is in the counties of Wigton, Dumfries, and Kirkcudbright, forming the ancient kingdom or province of Galloway in the south of Scotland. The predominant color is black, though some are tawny, red, brown, or even dun; and others have white faces and are sometimes marked with white on other parts. They have always been noted for their excellent beef qualities, a writer in the sixteenth century speaking of them as "fair ky and oxin of quhilk the flesh is right delicious and tender," and the Galloway rib is a favorite with epicures to-day. They are symmetrical and compact in form; the skin, though thick, is soft and mellow; the hair long and silky; the flesh well and evenly distributed. They are straight and broad across the back, with short legs, long sides, well-sprung ribs and well-rounded hips, and very vigorous and hardy. The cows are poor milkers and soon run dry; but their milk is rich in butter. This shortcoming is greatly due to the custom of allowing the calves to suck their dams as long as they gave milk, and to the fact that it is as butchers' animals they have always been chiefly valued, so that little or no attention has been given to milk production. Lately they have been less numerous in their original home, having been, to a considerable extent, superseded by the Ayrshires, as the farmers have been devoting more attention to the dairy. Formerly great numbers (often 30,000 a year) were driven south to be "finished off" for the London market on the rich pastures of Leicester, Norfolk and other eastern counties, and the shipments are still heavy by rail and steamer.

LADY FULTON 2D. From a painting by C. Palmer. Fig. 229. (See page 350.)

The Polled Angus or Aberdeen—which the American breeders agreed, less than two years ago, to call Angus-Aberdeen—are in many points like the Galloways, but larger, flatter in the side, thinner in the shoulder, and longer in the leg. Being originally accustomed to a more humid climate and better treated when calves, they have a finer though hardly smoother skin, and a less rough coat of hair. They are also better milkers, though as they have been almost invariably raised for beef, and little care has been given to the development of their milking capabilities, their yield, though rich, is considerably less than that of the Ayrshires and other dairy breeds. They are very hardy, good breeders, mature early, fatten quickly, and can "rustle" for themselves almost as well as the Galloways. The prevailing color is black, though some are a kind of yellow or dun. Great numbers of them used to be driven as Galloways to the south of England, and their meat is considered prime in the London market. Their success as prize-winners at the Paris Exposition of 1878, gave them a great "boom," which the breeders were not slow to make the most of. Some think the Angus-Aberdeen and Galloway were originally identical, and that the differences now noticeable are due to differences for generations in their environments; others are of opinion that each originated in its own section.

The Norfolk Polled Red is generally supposed to have originated from selections made by the Norfolk farmers from the best Galloways grazing on their pastures. Those were bred for milk as well as beef, and hence a greater development of the milking capacity. This origin, however, is denied by many who insist that the race originated in the county. Suffolk has had from time immemorial a breed of red polled cattle, excellent butter makers. It is known that there were frequent crosses of Suffolk bulls on Norfolk cows, and according to Marshall, the result was an "increase in size and improvement in form." No doubt it was in this way the present breed of Norfolk and Suffolk Red Polls was formed. Since 1846 both counties have competed with stock known by this name at dairy and fat stock shows. They are of a rich red color, with the udder of the same shade; but the tip of the tail may be white. They are excellent milkers, fatten readily, make prime beef, and combine in a high degree the two leading objects of beef and milk production.

Some years ago a hornless breed called the Jamestown, was originated in Massachusetts by a cross of a pure-bred Jersey bull on an imported Norfolk and Suffolk Red Polled cow. The sire was from Motley's Flora, imported in 1851 by the Massachusetts Agricultural Society, and the dam was brought over from Ireland in the relief steamer Jamestown, on her return after conveying a cargo of provisions to the starving inhabitants during the famine of 1847. The progeny of the cross was

the polled bull Jamestown (called after the vessel), which gave his name to his polled progeny. The family was kept up by crosses on Ayrshire and Jersey cows, the hornless calves only being retained, until it grew numerous enough to be perpetuated without admixture of other blood. In 1878 it was recognized as a distinct breed by the Norfolk Agricultural Society (Mass.), and it was described and illustrated in the RURAL of January 22, 1881; but of late we have heard little or nothing about it.

LADY FULTON.

THE head of this beautiful cow is illustrated on our first page. She is a cross-bred animal, being three-fourths Red Poll and one-fourth pure Devon, bred and owned by L. F. Ross, Iowa City, Iowa. To our mind she carries the marks of her Devon blood in her face and head. She is a fine cow, one of the best in a noted herd. These cross-bred cattle are said to be, in some respects, superior to thoroughbreds of either breed. The potency of the polled breeds in producing hornless calves is most marked. Mr. Ross states that he produced a herd of "home-bred polls" by crossing the Devon and Short-horn on the native polled or "muley" cattle of Illinois. A polled bull produced in this way, though three-eighths Short-horn and one-half Devon, got polled calves without exception, and his progeny inherited this characteristic. Much experimental breeding has evidently been attempted in this herd, and with good results.

The Poultry Yard.

THE GAME AS A FARMER'S FOWL.

THOMAS W. LUDLOW.

INDEPENDENTLY of its great beauty of feather and its courageous disposition, the Game fowl combines important advantages for farmers, whether bred pure or used to grade up common barnyard stock. For farmers' purposes, the Exhibition Game is preferable to the Pit Game, which averages smaller in size than its more showy cousins, and lays, as a rule, smaller eggs. Of Exhibition Games, the best varieties for practical use are the Black-Breasted Reds and the Red Piles; although some strains of Whites and Blacks are also good. The beautiful Duckwings are less to be recommended to the farmer, inasmuch as they are seldom so large as the Black-Reds and the Piles, and, although one of the most prolific of fowls, their eggs are usually decidedly small.

There is very little, practically, to choose between good strains of Black-Reds and Red Piles, except the color. If sought for crosses on common stock, the former will give results more agreeable to the eye where the prevalent color of the flock is dark, and the latter where the birds kept are white or nearly white. Cocks of these varieties of Games frequently weigh over nine pounds, and hens not uncommonly attain the weight of seven-and-one-half or eight pounds. Thus, while making no claim to rival the sluggish Asiatics in size, they are well up to the requirements of a fowl of medium weight. The meat, too, is placed where it is most sought on a chicken—on the wings, and on the round, plump breast which is characteristic of the Game fowl, and is preserved in large measure by Game crosses. This meat, too, firm, tender, and fine of grain, is superior in flavor, perhaps, to those of all other varieties of chickens, not excepting the Langshan which is admirable in this as in almost all other respects.

As egg-producers, the Black-Breasted Reds and Red Piles have an enviable record. Their white, delicate-shelled eggs are of very fair size, and from many strains even large; and they are produced in great plenty. It is safe to say that these Games will push the Leghorns very hard in the number of eggs laid in the year, and that in Winter with the ordinary care, they will lay many more than Leghorns under the same conditions. Again, while if left with free range, the Games are unexcelled foragers and will provide for themselves in Summer and Autumn nearly the whole of their keep. If confined in even a small yard, they are entirely contented and continue to thrive and to lay when many strains of Leghorns would pine away for their lost liberty. It is an opinion very commonly held that the eggs of the Game are superior in flavor to those of other breeds.

The Game hens are excellent sitters, and if treated with gentleness they are very docile and submit without fuss or flurry to being handled. As mothers, they are very careful of their chicks, seldom trampling them to death, as the clumsy Asiatics do so commonly, and frequently they seem even to exercise a thoughtful consideration for the needs and powers of endurance of their broods. The chicks grow and feather very fast. Like all quick-feathering varieties, they are delicate until well feathered, but no more so than Leghorns; and as soon as they have become well covered with feathers so that the extraordinary drain on the system of providing so abundant a growth is checked, neither common barn-yard chicks nor chicks of any other pure breed are hardier.

In conclusion, the elegant form, close feathering and brilliant coloring of the Game are by no means disadvantageous, even to the strictly practical man. Few of us are wholly indifferent to beauty; and the poultry-yard can have no more beautiful occupant than a thoroughbred Game, whether it be the cock in his resplendent garb, or the hen in her more sober, but strikingly neat dress. The courage of the Game fowl, too, is not the least of its many good qualities. Both cock and hen will forcibly withstand a marauder, and will cope, not seldom successfully, with a hawk having sinister designs upon the little brood. The sneaking rat has not rarely had his skull laid bare by a blow from the beak of a mother Game which he has sought to deprive of her chicks. The writer has himself seen a little Exhibition Game cock of nine weeks save his life when attacked in an open field with no refuge attainable, by a rapacious cat. Instead of seeking hopelessly to flee, the little fellow ruffled up his feathers, faced the cat as she crouched for the fatal spring, and flew at her again and again with punny beak and rudimentary spurs. The cat was so completely taken aback by a stand as unexpected as it was bold that time was gained for the writer to come from a distance of several hundred feet, and to rescue the little champion.

According to the well-established rule that a grade of a pure-bred animal or fowl upon a mongrel will retain more than a due proportion of the qualities which are firmly fixed in the pure-bred stock, crosses of Games on common stock may be expected with confidence to produce active fowls of medium weight and good constitution, well shaped and of good quality for table poultry, and very good as egg-producers.

Westchester Co., N. Y.

HEN MANURE.

SEVERAL careful analyses of pure hen manure give of the three most important plant food elements:

Phosphoric acid	2.48 per cent.
Potash	2.05 " "
Nitrogen as Am. and organic matter	3.35 " "

As is well known, the manure of birds is valuable from the fact that it contains the urates and other highly nitrogenous substances which in other animals pass away in the urine. If the urine of animals could be secured in combination with the solid excrement, the value of the product would be greatly increased. It is claimed by some writers that hen manure is as valuable, weight for weight, as Peruvian guano. This is a mistake, as analysis of guano shows a far higher percentage of nitrogen and phosphoric acid. This is doubtless due, to a great extent, to the fact that much nitrogen is allowed, by careless handling and storage, to escape from the hen manure. Then, again, the Peruvian guano is obtained from birds which have an almost exclusive diet of fish and meat. It is beyond dispute that the value of manure depends upon the food from which it was produced. But hen manure is far superior to ordinary barnyard manure, as will be seen from the following table giving the number of pounds of the three most valuable elements in a ton of hen manure and a ton of well rotted barn manure.

	Barn Manure.	*Hen Manure.*
Phosphoric acid	6	48.60
Potash	10	41.00
Nitrogen	11	67.00

Thus 400 pounds of pure hen manure would contain very nearly as much potash, phosphoric acid and nitrogen as are contained in a ton of common barnyard manure. We believe that hen manure, properly saved, will prove cheaper, when used upon quick-growing crops, than any fertilizer that the farmer can save or buy. With melons and garden vegetables we have obtained the best of results from hen manure. Its effects upon corn are well known; in fact, in the regions where manure will be most likely to be saved, the corn crop will be almost sure to receive the benefit of its strength. We do not find it to be the most economical manure to use on potatoes; a fertilizer richer in potash will give better results. There is considerable discussion among farmers as to the best methods of preserving hen manure. The best poultry men to-day seem agreed upon the fact that it is most profitable to keep fowls upon low roosts with a shelf below to catch the droppings. With this arrangement the process of gathering the manure is much simplified. The shelves may be scraped off every few days into boxes or barrels, and the manure dropped upon the floor may be scraped up in the same way. It will pay to keep the shelves and floor well sprinkled with dry muck or sand. This will reduce the strength of the manure and keep it in better condition. Wood ashes should never be mixed with hen manure, as the combination will liberate the nitrogen. Where it is desired to apply them together it is safer to put the manure in the hill or drill and to scatter the ashes broadcast. Plaster may be profitably mixed with hen manure. It will "fix" the ammonia securely. Many farmers obtain their most valuable fertilizer by mixing hen manure with plaster and fine bone flour. The manure is spread upon a floor and beaten finely with a shovel. One-fourth its bulk of plaster is sprinkled over it and the mixture raked over and into a heap, to be again spread out and raked up. With one-fifth its bulk of fine bone flour mixed into the mass in the same way, a fertilizer can be obtained stronger than the ordinary superphosphate. Where poultry are confined in orchards or in various parts of the different fields the manure is evenly and cheaply distributed, to the great advantage of the soil.

FEEDING TROUGH FOR HENS.

MR. J. V. H. NOTT, of Ulster Co., N. Y., is greatly pleased with his feeding trough made like that shown at Fig. 234. It is easily made,

Fig. 234.

and will keep the food perfectly clean, this latter item being of vital importance in preventing poultry diseases. It saves the feed, and when filled at night, enables the hens to get their breakfast as early as they choose instead of starving for two or three hours, as is usual. The trough is made of 10-inch boards, six feet long, with sides five-inches high or wide, and with a space of four inches between the sides and the cover, allowing a row of hens on each side to feed at the same time, say 30 in all. The cover is made to drop between the end pieces, with a large nail or wire driven in near the edge for hinges (shown at the dot in the illustration), and with ear-pieces at the front edge to hold the cover in place.

FIELD MICE AND EVERGREENS.—I have recently cut out dozens of Austrian, Scotch, White and Cembra Pines, but more especially Austrians, that were killed by mice girdling them in Winter. These trees, used in shelter-belts, have been kept low-headed and densely bunched to the ground, so that a lot of dry leaves is sure to collect under their branches and around their stems. These give shelter to the mice in Winter, and field mice always repay any consideration shown them in that respect by cutting every green thing within their reach.

* * *

AZALEA AMŒNA.—We have a large azalea bed which on one side is bordered for 75 yards by Azalea amœna, of which there are 125 plants, and all of them are now in full bloom. It is a splendid show. The plants are hardy enough here, evergreen, and grow well and bloom lavishly every year.

* * *

DECIDUOUS AZALEAS.—Our azalea bed contains 2,500 plants, and is a solid bank ranging from 18 inches high at front to five feet high at back. Some of these now are in full bloom, and others will keep coming in in succession till the middle of June. They vary in color from white and yellow to flame and dark crimson. Every little sprig will bloom. Among them we have many A. mollis, but I think it is a little more tender than the average Ghent Azalea.

* * *

TREATMENT OF HARDY AZALEAS.—They love cool, moist ground, such as Rhododendrons delight in, and shelter from Winter winds. Ours, in an open place of minimum winter temperature of six degrees below zero, thrive very well. We mulch the whole bed heavily with tree leaves so as to preserve the ground cool and moist in Summer. We never dig or disturb the soil in the bed. We apply the mulching about the end of March, and renew it every year. Before Winter the mulching will have rotted down so much as not to afford shelter for mice; and it is to avoid the mice-plague that we do not mulch in Fall in preference to Spring.

* * *

DAPHNE CNEORUM is a trailing, little evergreen shrub with pink blossoms. It is now in full bloom, and it will blossom a little during the summer months, and yield a fairly good crop again in Fall. It loves a cool, moist nook deep in fairly good soil, and shade from bright sunshine, especially in Winter. It is hardy enough. We had a mass of it on a sunny slope in sandy land, but it was unhappy, so I lifted and tore it up into as many little bits as I could get with roots to them, and planted them in deep, moist ground, and now I have hundreds of plants all pink with blossoms.

* * *

DAPHNE GENKWA is now at its best. Its flowers are violet-blue, fragrant, produced all over its naked, twiggy shoots, and distinct in color from the blossoms of any other seasonable shrubs. Our plants are nearly three-feet across, very branchy, but hug the ground too closely to show themselves off to good advantage. I think if it were like the dwarf cherry, raised standard fashion, its looks would be much improved. It is slow-growing, but with us at any rate, appears perfectly hardy. Our plants are growing on an open sunny slope, in dry sandy ground that is kept mulched.

* * *

PTEROSTYRAX HISPIDUM.—We have two trees of equal size and some five or six years old. Had I allowed them to grow up at will, they would be ten feet high or more, but I believe in trimming a tree while it is young, so have made them into well branched six-foot specimens. One of them is now coming into bloom. It has racimes of creamy white, fragrant blossoms. Its leaves are large, downy, showy, and remain in good condition, and unmolested by insects all Summer long. Its outer bark comes off in shreds. Growing under ordinary circumstances it seems quite hardy. This Japanese tree will, I think, be a good addition to our list of decorative trees.

Long Island, N. Y. WM. FALCONER.

RURAL LIFE NOTES.

TYSON PEAR.—I am sorry to see in the RURAL the advice against planting the Tyson Pear. Mr. Parnell discourages its growth on account of its tardiness in bearing. I have no complaint to make regarding the Tyson in this respect. Having grown it both as a standard and dwarf for over 20 years, it has in every case fruited promptly and abundantly during all that time. It is too good to go without even were it a little shy in bearing. But as a matter of fact, it often fruits too heavily with me, at the expense of wood growth and size of fruit. Worked on large stocks, it will bear the second year. It is a fine table pear, both in flavor and appearance, and an especial favorite with ladies who are apt to be fond of things "so sweet, you know." It must, however, be eaten as soon as ripe; the flavor cannot be held in suspense for anybody The quality is rated best in the American Pomological Society's Catalogue, and it has won many stars there. A hedge on the farm of Jonathan Tyson near Philadelphia, was the birth-place of the Tyson. Don't let us give it up. That it was not named "Jonathan Tyson's Seedling" is an escape worthy of record.

SHORTEN THE NAMES.—Mr. Engle's defence in a late RURAL of the progressive changes made in the last two catalogues of the Am. Pom. Society respecting the shortening of names of fruits was timely. That such an intelligent pomologist and gardener as Mr. Hovey, who has for so many years been a guide in the gardens and orchards of America, and who has achieved so much in behalf of the horticultural world, should now be disturbed into opposing the honest progressive efforts of our best and most intelligent pomologists and fruit men, is a matter of surprise and regret. Surely one name is enough for almost any fruit, and even that is too much in hundreds of cases that might be cited. Let the ax of the "Nomenclateurs" continue falling until all the prefixes, affixes, descriptive adjuncts, and useless French encumbrances are lopped off. President Wilder is eminently right, and I believe nine-tenths of the fruit men are with him.

SNOWFLAKE POTATO.—Among all the potato notes and literature which the RURAL has so generously and carefully presented to its readers very little has been said of the Snowflake. In my estimation it stands at the head of all potatoes yet produced for quality. Not one on the entire list of new and old sorts that I have tried quite equals it on the table. Smooth and handsome in appearance, keeping firm and fresh till Summer, eyes scarcely indented at all, cooking dry, and beautiful at all times, and having a peculiar nutty flavor, it is difficult to suggest an improvement for a table potato. Some have found it less productive than a few of the newer varieties. With me it has exceeded the yield of any sort I ever grew. My first pound of seed, costing $1, gave me 150 pounds of the finest potatoes I ever saw, in every respect, without any special forcing to obtain a fancy yield. I have been entirely satisfied with the Snowflake ever since. [We tested the Snowflake when first in-

troduced. It does not yield well with us.—EDS.]

I SEE that Ellwanger & Barry have been kindly reminding their patrons and novices in fruit culture that peach trees always bear their fruit upon wood of last season's growth. Now that is in fact the old accepted notion and belief. But here along the Hudson River we have about lost faith in the doctrine. For two years in succession we have had no peaches on wood of any sort, and now the trees are dying in large numbers, and some of the impatient growers are beginning to doubt whether peach trees are likely to produce fruit even upon wood of future growth. Can it be that our modern peach buds are more sensitive than their ancestors, or are they subject to greater trials?

How many RURAL readers have planted seeds of the Chinese Primrose? Seeds sown now in pots, placed in a gentle hot-bed make fine plants, which will come into bloom in November or December, and remain in full flower all Winter and Spring. Nothing is more charming in a sunny window. The plants themselves, as they develop from the seed during the Summer, are beautiful and interesting in their wild-wood freshness. They should be protected from the direct rays of the sun and kept cool. Water sparingly at first, and keep the pots in a frame on the north side of a wall, or other similar protection, until ready to bring in for flowering. Get the very best seed. I already have a fine lot of little plants just showing the third leaf from imported seed—choicest strains. Beautiful double flowers are often obtained in this way.

MINNEWASKA BLACKBERRY.—This new blackberry, not yet disseminated, I believe, has again emerged from the Winter alive to the tips, here in the Hudson River Valley. This feature of hardiness has long been the pressing need of blackberry growers at the North. If with the exceptional productiveness, good size and quality so far evinced by the Minnewaska it shall continue to combine iron-clad vigor, it will be a valuable acquisition. H. H.

Kingston-on-the-Hudson.

Farm Topics.

FARM NOTES.

TOO MANY COCKS.—I have been examining the poultry on some of the farms about me. On one I found one rooster to every five hens, and on another one to every four hens. The average seems to be about one rooster to every seven hens. What the extra roosters are for is a question. They are of all sizes and ages; they are constantly fighting and chasing the hens about, and are of no use whatever. There are too many roosters on every farm. At least 50 per cent. of them could very profitably be killed off.

GARLIC FLAVOR IN MILK.—Many dairy cows are giving "oniony" milk. This comes from eating the wild garlic which is too frequently found in our pastures. The taste is worse at night, and passes away somewhat as the milk cools. The butter appears to be slightly affected. Cows seem to prefer the weed while it is young and tender; as it grows older and tough they care less for it. This suggests one means of shortening its power to do damage. Keep the cattle out of the pastures until the grass has a better growth. The garlic is hard to eradicate when once it gets a footing in the pasture. Sheep nibble it down but will not wholly drive it out. It can be killed only as other weeds are destroyed—by hand digging, or by using the ground for hoed crops and practicing clean culture. This plan is impracticable in many places, as pastures are hired or of such poor soil that no decent hoed crop could be raised without all the manure that is produced on the farm.

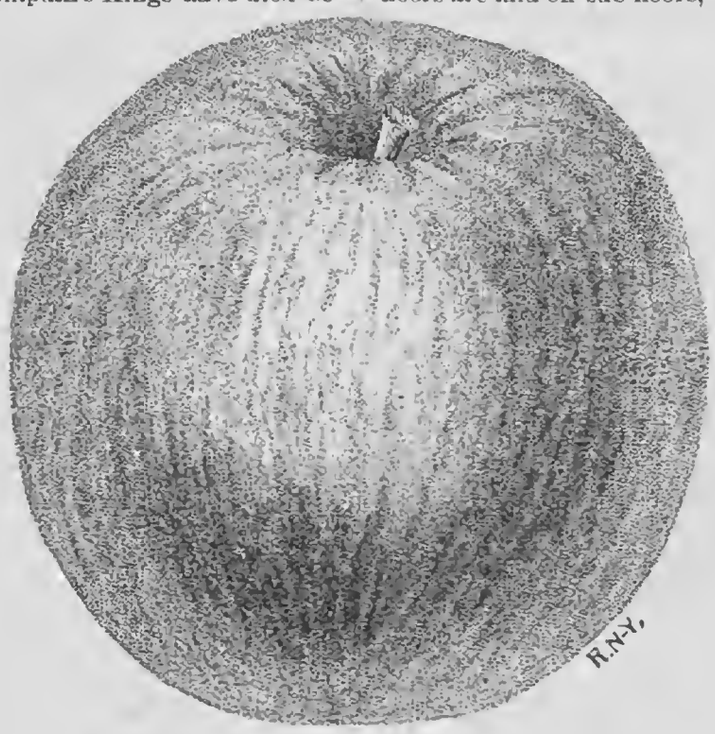
NEED OF WEEDING JERSEYS.—Let a poor Jersey bull go into a neighborhood, and he will spoil the reputation of his breed for ever. There are Jerseys and Jerseys, but common farmers will not understand it yet. Some families of Jerseys are but little better than scrubs for milk or butter. Every time a bull of one of these families is sold, the breed is injured. A farmer near me paid $20 for a Jersey grade calf which, at three years old, is hardly able to pay for her keeping. She was bought simply because she was a "Jersey." Her owner will now do his best to convince all hearers that "Jerseys" are good for nothing. The Jersey breed will never be able to reach its proper place until breeders muster up courage enough to conduct a systematic killing of all poor bull calves.

CLEAN OUT THE REFUSE.—Many lofts and sheds have not been cleaned out this Spring. The refuse of the hay, straw, or corn-stalks still covers the floor. Hens, pigeons, and other farm stock are allowed to run over this covering. They should all be cleaned out, and the contents placed in the manure pile. Most of it is too filthy for bedding. WORKMAN.

Pomological.

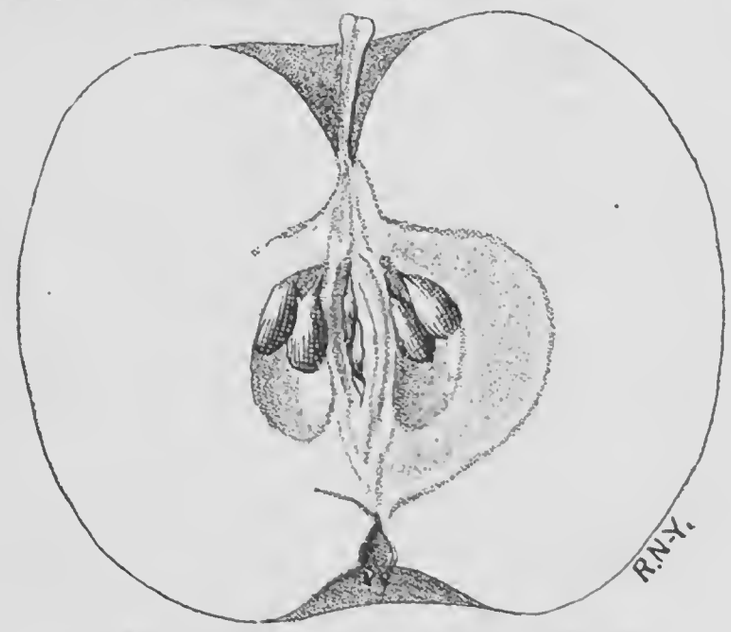
THE LICKLY APPLE.

LAST October we received specimens of the apple shown at Figs. 230 and 231, from J. D. Lickly, Jefferson, Michigan. He has in his orchard seven trees of the sort, planted 23 years ago, which came originally from Orleans County, N. Y., having been grafted before they were sent to Michigan. The trees are as vigorous as any in his neighborhood, and more so than most. They resemble the Baldwin in upright growth, but are much hardier and healthier. Not one of the sort has died since they were set out, though Northern Spys, Baldwins and Tompkin's Kings have died beside them. They bear annually, with very few exceptions; but they bear more fruit some years than others. They are the heaviest bearers in his orchard. Insects do not seem to injure them. The fruit is famous for its excellence in that neighborhood, being less gnarly and wormy than any other sort. It ripens and keeps like the Northern Spy, and is considered an excellent dessert and fair cooking apple.



LICKLY APPLE. From Nature. Fig. 230.

As received, it was conical and long, and a little irregular. Stem short (¾ inch), slender, planted in a small regular cavity, the inside of which was covered with russet. Calyx large, open segments, erect, situated in a shallow, slightly corrugated basin. Color, ground, a russety yellow-greenish about the calyx, and the whole apple nearly covered with a bright-red, thickly streaked with dark-maroon red stripes, somewhat irregular, with many small, gray dots. Core small and sparsely filled with small, plump seeds. Flesh firm, fine-grained, juicy, mild sub-acid and very pleasant. Color of flesh white, slightly tinged with a creamy hue. Skin very solid and hard. Quality very good, spicy and pleasant. A handsome and good dessert apple.



LICKLY APPLE. Cross Section. Fig. 231.

Architecture.

A COMFORTABLE RESIDENCE.

THROUGH the kindness of Mr. W. C. Goodrich, of West Troy, N. Y., we are enabled to show our readers the exceedingly well arranged house illustrated at Figs. 235–6–7, p. 353. It was designed by Mr. Clarence B. Cutler, of Troy, N. Y., and is to our mind a very ideal of comfort and convenience. It cost, in round figures, $5,000. It stands in an exposed position, consequently much heavier timber is required than would be needed in a more sheltered place. The cellar wall was made two feet thick, as the stone could be had in any quantity for the hauling. The outside walls are formed of 2x6-inch studding, lath and plastered inside and covered on outside with spruce flooring matched, then two thicknesses of heavy paper, and six-inch siding. The outside is fitted with three coats of white paint. The inside wood-work is rubbed smooth and polished. The kitchen and pantry wood-work is oiled and varnished. The roof is covered with shingles double-coated with Cabot's creosote wood stain. The flooring in the kitchen and pantry is of Georgia pine smoothed and oiled; in the dining-room, office, and hall, it is of maple, polished and oiled; and in the sitting-room and parlor, of clear white spruce. All the floors are laid on sub-floors, with two thicknesses of heavy paper between. The partition studding is all braced, and the flooring timbers are all bridged every eight feet. Ventilating flues run from the floor of every room to the peak of the house, up near the heater flues. These latter flues warm the air and thus keep up a perfect circulation, and the air in every room is kept pure. A tank is placed in the attic, and a force pump is in use on the kitchen sink. Water is warmed by the kitchen stove, in a boiler, for the bath-room and kitchen purposes. This well built house surely comes very near to the ideal family residence. It is strong, attractive, convenient and comfortable. From illustrations of this kind intending builders may obtain many useful suggestions without following exactly the plans described.

Rural Topics.

Experiment Grounds of the Rural New-Yorker.

MIKADO AND TURNER'S HYBRID THE SAME.—During the present season two new tomatoes were placed before the public as the Mikado and Turner's Hybrid—the first by Peter Henderson & Co.; the second by W. Atlee Burpee & Co. Both firms speak of it as entirely distinct, enormously productive of extra large, solid fruit, which is unequaled in flavor. We ordered seeds of each and sowed them. The plants are now two feet high. The leaves are distinct from all other tomatoes we have ever seen, but it is impossible to distinguish the Mikados from the Turner's Hybrid. Mr. Henderson, in reply to our question, says that the variety was obtained from a man near Jersey City. Mr. Burpee obtained his seeds from a man named Turner, whose address is lost. Certain peculiarities of the stems, color and hairs of the leaves, as well as their odd entire shape, lead to the inference that the Mikado and Turner's Hybrid are one and the same, though evidently coming from two different sources. The true origin of this variety is a matter of interest in the future improvement of the tomato, as it is plainly a decided departure from those in cultivation.

EARLY ASPARAGUS.—Our neighbor, Mr. W. Williams covers his asparagus bed before the severe frosts of early Winter with six inches of manure. In the Spring it is removed. The shoots are then found to be pushing from the protection they have thus received, and he secures asparagus a week or so earlier than others who raise it in the usual way.

CATALPA SPECIOSA.—This, as we have remarked, is growing near the house on the north side, securing only the early morning and late afternoon sun. The Common Catalpa enjoys a full southern exposure. Nevertheless, the Western or Hardy Catalpa, as it is called (C. speciosa), broke bud about one week before the other. We have never had the least doubt as to the distinctness of these two trees since we have had the opportunity of comparing them, and we dare say that doubts exist only in the minds of those who have taken but little pains to inform themselves.

Miscellaneous.

PITHS FROM SUBSCRIBERS.

Too many farmers kill their calves or sell them for a song. My best cows are the ones I have raised. I want to know the record of a calf's mother, grandmother and great-grandmother. I don't want to read this record in a book, but to milk it out with my own hands. My calves never know what it is to suck the cow. I feed them on new milk for three weeks and then gradually "taper off" to skim-milk. Oats or bran are the best grain food. I won't let a calf run out to be tortured by flies. Common bread soaked in water and boiled into a gruel, makes a fine calf food. I always castrate my bull calves before they are 10 days old. I would never let a young calf that I cared much for stay out in the dew, rain or wet. I breed my heifers as young as they will stand. I prefer to do this and then let them rest after their first calf. It pays to make cows out of them as soon as you can. Feed them well and there will be no lack of vigor. Dairymen are too stingy with their sweet milk. They won't put a few quarts of it into a good calf. That is where they make a big mistake. DAIRYMAN.

Steuben Co., N. Y.

MY mortgage is off. I believe the tile drains I have put in helped carry part of it away. Most people here have failed with Delaware, Brighton, Lady Washington and Duchess Grapes, while mine, over tile, have done extra well and pay better than common sorts. Onions, asparagus and rhubarb are all from seed, and are successful—thanks to the underdrains. Putting money out at drainage is like putting it into the bank. J. K. P.

Knoxville, Tenn.

I SAW in the RURAL, last year, an account of an experiment made with "floats"—finely ground South Carolina rock. It started me into a little experiment. I got a bag and put it on my wheat. I took one strip through the field and I can pick it out now without any trouble. It may not be the "floats," but something has done the business for it.

Orange Co., N. Y. H. M. C. G.

WE get a "fancy" price for our poultry and eggs; that is, we get just twice as much as farmers do who send their produce to the commission men. A lady who boarded with us one Summer liked our eggs and chickens so well that she asked us to send her some after she went back to the city. We did so, and she gave us lots of free advertising; that is, she told her friends about the pure, fresh, country eggs she was getting. The result was that her friends wanted some too, and this list of customers has grown until we have all we can do to supply orders. I suppose most "fancy markets" are started in about this way. There are always people who want the best and are ready to pay well for it. The trouble is to gain the confidence of such people and make them believe that you are honest and careful. It costs much time and patience to gain such customers, but it is a paying business. J. H. G.

Queens Co., L. I.

THE Wire-Grass region of Georgia and the Carolinas is recommended as a sheep country. These localities are better for sheep raising

than most of the Northern States, where the bulk of the sheep in the country are found. Florida is better still for the business. True, few sheep are as yet kept in the State, and these just grow up without being "raised:" but numerous small flocks attest the fact that the climate and feed are well adapted to sheep and that with proper care they will do well. In this part of the State there is considerable rolling, hilly ground, which is well covered with the different varieties of native grasses. Bermuda and St. Augustine Grasses are easily set out and have rare "staying qualities." The Bermuda is the best pasture grass in the South. The vast numbers of worthless dogs that roam about here hurt the sheep business more than anything else. There are also a few wild cats left. Bears and wolves have mostly been driven away. The Southern people don't pet their stock enough to have them do well—except the saddle or carriage horses. One reason for this comes out in the story told of the Texas man who entered a hog at the St. Louis fair. They asked him what ring he wanted to enter and he replied the speed ring. As it was not usual to expect speed in a hog, the secretary asked for an explanation. Texas thought they did not understand how matters stood at his home. Down where he lived a hog that could not outrun a darkie was not worth a cent. This may be why so many of our cows, sheep and hogs are trained for speed. J. M. M.

Clay Co., Fla.

I HAVE never been satisfied that there is such a gain for small farmers in using corn planters. I always plant my corn in the good old way—with a hoe. I know then just how it is put in, and I find I have less replanting to do. It pays to "make haste slowly" in these times. J. H. B.

Cass Co., Mich.

I HAD good luck at getting subscribers for the RURAL this year, and here is the secret of my success. Three years ago I bought a fine Holstein bull calf. This year I offered his services free for one cow to all who would subscribe for the RURAL. This has worked well in every way. Farmers were glad to take the chance and I got a good club at little expense to me. We shall improve the cattle about here and drive the scrubs out. H. B.

Saginaw Co., Mich.

I HAVE in my store window what I call a great curiosity. Last Summer I took up a tomato plant with some green tomatoes on it, put in a box and placed in the window. In October I picked 11 ripe tomatoes from it, in November three, in December three, in January one, in February two, in March 10, in April two, and now there are two ripe ones and over 20 green ones and lots of blossoms. I use a coal stove, and the fire never goes out in the Winter. I am now satisfied that it will keep on bearing just as long as I water and tend it. The seed was first put into the ground in April, 1885. My windows are also gay with petunias, snapdragons and verbenas. They have been in continual blossom ever since June, 1885.

Gallatin Co., Mont. B. P. VAN H.

WE have some fine Holland calves that were raised "under glass." Our "forcing pit" is a shed, the back half having a shingle roof under which is a row of pens for the calves. The front is of glass, under which is a hot-air flue, utilized to forward some of the more common spring flowers and, later, for young chickens. The calves are taken from their dams at one or two days old and put into this "forcing pit," where the sun bath seems to do them lots of good. We do not notice that calves treated in this way are less hardy in after years. Roses propagated in this pit years ago show no signs of constitutional weakness. Running a 300-egg incubator we found this pit a very convenient "brooder." The broilers sold well in New York, and the pullets commenced laying in August and kept on through the Winter with no tarred paper protection to their quarters. Our experience with plants and animals is that early "hardening off" is not the way to get best results. We never tried raising a good calf on the south side of the straw stack, and have observed that a check of one week in the first four of a calf's life is not made up at three months.

Stelton, N. J. G. W. THOMPSON & SON.

WESTERN visitors always wonder why we keep the Chester White hogs in this country. They say they never can make a white hog pay in the West, but want the Berkshires, Poland Chinas, and other blacks. They say the black soil makes white hogs sick and that anyway a white hog is not so hardy as a black. We have tried everything in this section and have fully decided that for our use the Chester White is by far the best. We have to make every ounce count in our farming, and if any other hog would pay us better, we would soon find it out. Feed is of the utmost importance with us. Milk for young hogs up to four months with a little corn now and then. Wheat middlings make a good feed where milk is not plentiful. Feed apples, potatoes or anything that would taste good to yourself. Hogs need a good grass pasture in Summer and plenty of hay in Winter. Feed them your best hay in racks. The Chester White needs good food while it is young, in order to put on a good frame. When this frame is large enough, corn and a little cottonseed meal will quickly put on the fat.

Charlotte, Vt. C. W. F.

THE RURAL states, in the Poultry Special, that 13 Leghorns eggs weighed 30 ounces, 13 Wyandottes eggs 24 ounces, while 7 Langshans eggs weighed one pound. I took 13 of my hens' eggs just as they came—the largest I had broken the day before to convince a friend that they were not double yelked—and the 13 weighed just 35 ounces, and one dozen weighed two pounds. Isn't this a little extra? My hens are of my own raising—common mixed stock, with most Light Brahma blood.

Moodus, Conn. A. E. W.

TREAT the hogs gently. Talk to them. Get a curry-comb and smooth their backs with it. This will make them quiet and they will thrive better for it. Never allow dogs near them on any account. Coal cinders or charcoal should always be kept near them. Cholera will never come where hogs are well cared for. If they get lousy rub them with coal oil. Meat of any kind is always good for hogs. It is best to boil it and mix it with their slop.

Woodson Co., Kans. MRS. E. N.

What Others Say.

EXPERIENCE WITH ENSILAGE.—A writer in the N. E. Farmer gives his three years' experience with the silo. The editor indorses him as one of the most careful observers and accurate experimenters in New England—one who is not led astray by excitement or influenced by prejudice. He has fed silage made from sweet corn fodder during the last three Winters. Most of the time when feeding silage he has used it as the entire fodder ration of the cows, giving to each one bushel night and morning, immediately after milking. Two bushels would weigh from 50 to 60 pounds. With this ration he gives from 9 to 12 pounds, per day, of a mixture of equal parts by weight of cotton-seed meal, bran and corn meal. He has never seen any injurious effects from feeding silage either to the cattle fed or to the dairy products. Most of the milk produced has been sold, and he has been told that it has given as good satisfaction as any milk. He has usually made enough butter to supply his family. His chief reason for so doing has been the difficulty of purchasing as good butter as he could make. No one has complained that his dairy products partake of the disagreeable odor or flavor of silage so often alluded to by some writers. He thinks when such taint is found it is caused by careless exposure of the cooled milk to the fumes of silage, which will always pervade the stable at feeding time, and to some extent at all times. He does not believe the taint is imparted along with the secretion of milk.

About the economy of feeding silage, though he believes it is a considerable saving in many cases, he is not as enthusiastic as many of the advocates of the silo of the Dr. Bailey order. He does not think he would construct a silo for preserving any other crop except corn fodder. Corn fodder is so coarse that it dries very slowly, and it is difficult to so cure it as to keep it in good condition. If it is dried sufficiently to keep when packed away in the barn, it will be found to contain so little of the saccharine matter abundant in its green state, that the taste cannot detect it. Just what becomes of the sweetness he does not know. Whatever the cause, it is a fact that cattle do not readily eat over-dry corn fodder. When packed away in a silo in the green state, such fodder will keep without drying, though it will take on a considerable degree of acidity. A part of the sugar will be changed into vinegar. Perhaps its food value is to some extent decreased by this change, but he thinks to a less degree than in the process of drying.

Though he has generally fed silage without other fodder except grain, he does not think that is the best way to get the largest returns from the cows. He thinks one feed per day of silage and one of dry fodder is quite as well. If good clover hay or rowen is used for one feed, the returns will be better than when silage alone is fed. When he changed from feeding silage to feeding good upland hay only, there was no increase in the flow of milk, the grain ration remaining unchanged. The cost of feed was largely increased.

He cuts the fodder about one inch in length, but thinks 1½ or two inches long would be as well. He thinks there is no necessity for hurrying when filling the silo, but it ought not to rest more than a day or two without adding a foot or two of freshly cut fodder to the surface until the silo is full. Then it should be covered and weighted 50 to 100 pounds to the square foot of surface. He uses loam or sand, believing it better than stones, as it excludes the air better. In constructing a silo he would recommend as great a depth as can be easily obtained without causing too much labor in filling and emptying. For feeding a herd of not more than 20 cows he would choose to have the silo 12 to 15 feet wide, and any length to get the room wanted. Then when using he would uncover at one end to expose about five square feet of surface for each cow being fed, and when that was used to the bottom he would uncover another strip.

His silo walls are in part cement and partly matched boards one inch thick. The silage is quite as well preserved next the wood as next the cement. Wooden walls are much cheaper for all that portion constructed above ground. It is very important that the walls should be of a true surface and perfectly plumb, and the perpendicular corners should be filled in about as much as would be done by using a 12-inch plank, beveling the edges to fit each side when the plank is set up endwise in the corner.

The cost of silage compared with other fodders will depend upon circumstances. To a farmer growing sweet corn for canning, he thinks the silo is a greater help than to most others. The ears are removed while yet the stalk is in its best condition to make fodder, either silage or dry. An acre of such corn will make from six to ten tons of silage, and three tons of such silage will equal in feeding value one ton of good hay. In such circumstances it will be readily seen that corn fodder silage will be found a cheaper feed than hay. When preserved in this way it retains its food value and palatability through the whole season. If the corn is grown for fodder only, the yield ought to average nearly 15 tons to the acre, and be more valuable ton for ton, when the ears have been removed, if both are weighed when containing an equal proportion of moisture.

The average cost per ton of curing silage will be not far from $1.00. If the fields are convenient to the barn and large quantities are handled, it may not cost so much; and if only small quantities are put in, it will probably exceed that sum. There has been considerable written about the comparative advantage of putting the fodder into the silo whole and cutting it before packing. The first season he thinks he hired it cut; the second season not finding it convenient to cut it, he packed the whole, laying it as straight as practicable. Last season he cut it again. He thinks it keeps about equally well either way, but the silo will hold about one-quarter more when cut. When packed uncut it was considerable work of a hard and disagreeable kind to take it out for feeding; and though the cows rejected very little they did not eat it wholly, as they do when cut.

REMEDY FOR APPLE BARK LICE.—Prof A. J. Cook says soft soap, or a strong solution of the same, will surely vanquish the apple tree bark or scale louse if it is applied in early June and again three weeks later. To apply this specific he knows of no better way than to use a cloth and scrub by hand. To be sure we can, if dainty, use a brush like a shoe-brush, but he likes to go at it with a good cloth, when, with sleeves rolled up, he makes pretty sure that no louse escapes.

For the past few weeks he has changed the substance by adding crude carbolic acid, which he thinks improves it, especially if but one application is to be made; and we know that at this busy season the second application is apt to be neglected.

He heats to the boiling point one quart of soft-soap to two gallons of water, and while still hot thoroughly stirs in one pint of crude carbolic acid. This may be applied as before. This carbolic acid mixture retains its virtue, he thinks, longer than does the soap alone, and so it is especially desirable when but one application is to be made as described above.

Like the arsenites, so the carbolic acid and soap mixture is of triple value. Not only does it kill the dreaded lice, but it also keeps off the dreaded borers, which are also serious pests in the orchards.

PITHS AND SUGGESTIONS.

THE ash of corn cobs, according to the late report of the Mass. Ag. Ex. Station, contains, in round numbers, two per cent. of lime, five per cent of magnesia, 60 of potassium, and nine of phosphoric acid. But various kinds differed notably in composition. The phosphoric acid varied from 10 to five per cent; the potash from 65 to 60, etc.

The Top-over Corn consisted of 83 per cent. of kernels and only 17 of cob. The average length of ear was nine inches and the weight 6.8 ounces.

T. B. TERRY finds his horse manure in the best shape this Spring that he has ever known it to be in. The stables were never cleaned out all Winter long. The horses were wintered in warm pens or sheds, allowing about 200 square feet to each horse. One gentle pair were put together while the others were put into separate places. There being little work for the horses, they were wintered on hay alone. Straw was thrown freely in whenever it was needed to keep the surface dry and clean, and the manure was kept leveled down. The horses look better now than they would if they had been kept standing in a stall all Winter. The work in caring for them was reduced to the lowest limit. The floor was tight and thus all the liquid manure was saved with the rest. The manure did not heat at all, it was kept solidly packed by the feet of the horses and retained its moisture. It was spread with the manure spreader in good shape.

Mr. TERRY says the manure spreader is more injured than any other tool by getting wet. It should be put in the barn every night, and before it rains, and kept well oiled. When rightly treated it is a most useful tool, because it saves labor, and puts on the manure in much better shape than hand work can ever handle it.

PUCK is of the opinion that the friends of the working-man are making it somewhat hard for the working-man to live now-a-days. They are holding a high revel, and the working-man is paying for it; they have taught him the use of the brutal, unreasonable, un-American boycott, which will send hundreds of honest, misguided men to prison before it dies the death which is appointed for it.

THE men who pretend to be the working-man's friends are not so; neither are they the friends of anything but their own interests. Working-men have every right which is possessed by any law-abiding citizen of the United States. The President himself has not, as a citizen, one right that the working-man does not share.

OF COURSE, there are heartless money-grabbers, and monopolists who will impose on working-men whenever they get a chance. But they are as much the enemies of the rest of the public as they are of the so-called working man. They are enemies of society—just as thieves and murderers are enemies of society.

ED. CHEEVER of the N. E. Farmer says that the character of the Jersey cow has been sadly injured in public estimation by the course too often pursued by breeders in saving every calf that has a pedigree, regardless of other qualifications. It has come to be a common saying with some of our best breeders that more than one-half the Jerseys now in the country ought to have been sold for veal before they were six weeks old.

ACCORDING to the last report of the Mass. State Ag. Station, Kentucky tobacco stems ground contained 2½ per cent. of nitrogen and nearly nine per cent. of potassium oxide. They also contained 1.4 of magnesium, 3.7 of lime and nearly one per cent of phosphoric acid. Thus they are a valuable fertilizer. Their trade value is $15.50 per ton.

THE various kinds of roots usually raised on farms for feeding purposes, differ essentially in regard to the amount of dry vegetable matter they contain. Turnips contain from 7 to 8 per cent.; ordinary mangolds from 11 to 12 per cent.; improved varieties of beet roots, like Lane's, from 15 to 16 per cent.; good carrots from 15 to 16 per cent.; a good sugar beet from 18 to 20 per cent. of solids; or in other words, one ton of an improved variety of ordinary sugar beets is equal to from two to two-and-one-half tons of ordinary turnips, as far as the amount of dry vegetable matter is concerned.

THE Post says that the public are beginning to realize there is danger of the total destruction of small birds to satisfy the demands of an odious trade founded upon a worse than barbarous fashion.

THERE are lots of difference in hired men; the good ones are not paid enough, and the poor ones are paid too much, says a writer in the N. Y. Tribune.

O. S. BLISS says, in the same paper, that the summer eggs produced by careless and indifferent farmers in the remote country districts are gathered up and preserved to be pushed upon the winter markets at prices only a few cents below those of fresh eggs, often not nearly as much as the actual difference in value, allowing the old ones to be entirely sound, which they often are not. Well-in-

formed egg consumers know that in a great many cases two new, fresh-laid eggs are worth as much for their use as three preserved eggs which look quite as good in the shell.....

We are advised from time to time that many of our readers have purchased Japan Chestnuts, or the seeds, and planted them. We hope they will advise us from year to year how they grow and fruit.....

The Philadelphia Press comments upon the different quantities of seeds to be sown to the acre, which authorities recommend. Henderson & Crozier, for example, sow from three to four bushels of oats. The Rural people have raised oats of nearly every kind for 25 years, and our best crops have come from 1¼ bushel. Of course, the poorer the land the more seed is needed; and, again, some kinds of oats tiller more than others—the Champion, for instance.....

Once having eaten a Savoy, the ordinary cabbage, Mr. Stiles of the Weekly Press thinks, is coarse, flat and flavorless. Why should not the very best be always found on the home table of the farmer?.....

Mr. J. Hoopes, writing for the Press, says that fuchsias are among the best plants for beds in partial shade. To have them in perfection the plants must be of good size and well established in five or six-inch pots. After setting out in the open ground, the foliage must be syringed or sprinkled every evening except in rainy weather.....

Single petunias, Mr. Hoopes says, will give as much satisfaction for a small amount of care as any annual in the entire list. Get a good strain of seeds in the first place, and the plants will furnish a supply of seedlings thereafter without the trouble of sowing. As soon as the frost is out of the ground the young plants put in an appearance, and quickly begin to bloom, and keep on blooming constantly even after a few sharp frosts. The diversity of color and markings in a bed of mixed seedlings is really wonderful.....

Mr. H. is of the opinion that tuberous-rooted begonias give better satisfaction than any of the newer bedding plants. A slight shade during the middle of the day is beneficial, although they will grow and bloom in the sun. The double flowers appear to be as satisfactory as the single, although the former are not so floriferous. The tubers should be potted early in the season and set out without breaking the ball of earth.....

The Industrialist says that one has only to see the contents of an ordinary millinery store to know something of the extent of the bird traffic. But when we remember that there are many thousands of these stores in the entire country, and that all of them are similarly stocked, we shall see that the number of birds annually killed to supply them must count up into the millions.....

Supt. Thompson, in the same journal, says that the farmer who worries the least, and does more work than his neighbor with less trouble apparently, is the one who is never behind with his work. A farmer who is behind with his work is in a worse predicament than a business man of a city; for he deals more with Nature's laws—and Nature waits for no one.....

J. J. Thomas quotes, in the Country Gentleman, from an address delivered by David Thomas before the Buffalo Horticultural Society in 1848. Among other things the speaker said that no animal but man appears to enjoy the beauty of flowers. He never noticed any indication on the part of the lower animals that they were in the least affected by beauty. The love of flowers must then be considered as evidence of a higher organization, and those who cannot appreciate it, suffer for want of proper development and have claims upon our sympathy .....

Prof. Long, of England, says there are in every herd cows that are mere manure makers or pickpockets. They have the same feed that the rest get, and yet they will not give one-half the milk. The cows are in the herd, yet the trouble is to pick them out. They are generally frauds in the fact that they are the best-looking cows of all. They give a good mess of milk for a short time and then drop almost out. It pays to get rid of all such cows.....

Australian fruit arrives in England in excellent condition. It is packed in corkdust or sawdust, and placed in a cold compartment, where the temperature is kept as near to 40 degrees as possible.....

J. D. Goodwin brings to light, in the Sheep Breeder, a new enemy of sheep—the skunk. This odorous little animal attacked his flock and succeeded in killing two sheep. It caught them by the nose and held on with its sharp teeth in spite of the frantic efforts of the sheep to throw it off. The heads of the wounded sheep swelled badly, and they lived but a few days, thus strengthening the general belief that the bite of the skunk is to a certain degree poisonous.....

The Kansas Farmer strikes the last Missouri Legislature a well deserved blow when it speaks of the stinginess which compelled the printing of the last report of the Missouri State Board of Agriculture in the style in which it appeared. The great State of Missouri is disgraced by such legislators.....

The Pacific Rural Press looks upon Orchard Grass as the best all around grass it knows for a California climate. It does well under more diverse conditions than any other grass there. It keeps green through the dry Summer, but does not grow until the Fall rains. The only objection to it is that it is inclined to grow in bunches.....

A COMFORTABLE RESIDENCE. Fig. 235. (See page 351.)

Everywhere.

TRANSCONTINENTAL LETTERS.—L.

MARY WAGER-FISHER.

Sugar-beet culture in Washington Territory; a fine farm house; farm life and routine; anti-Chinese agitation; need of restrictions on immigration.

While visiting the farm of Mr. A., at the head of navigation on the White River, Washington Territory, as the mornings in the Fall are wet from heavy mist, which is not dissipated until toward noon, our rambles over the farm were usually in the afternoon. One day we went to look at the growing products in a newly cleared field—beets, cabbages, onions, carrots, etc., all of enormous size and the best quality. On a selected acre of ground 31 tons of sugar beets were raised. The average yield is from 20 to 24 tons. A factory for the manufacture of sugar from beets is contemplated—to be built this year by a stock company, at an estimated cost of $200,000 and consuming 200 tons a day. The yield of sugar is 10 per cent. Mr. A. sends his present crop of sugar beets to the Alvarado factory in California, at a contracted price of $4 per ton. He uses the German seed and sows in drills at the rate of six pounds to the acre. Mr. Ezra Meeker, who has a farm in this valley, is the leading spirit in the sugar beet factory. He is a large hop producer, and it was his hop farm in the Puyallup Valley that we wrote about last year. Mrs. A. told me that her husband was the first raiser of hops in the White River Valley, and that he sold his crop at Olympia for 75 cents a pound. But they had scruples in regard to hop culture which contributes ultimately to so much misery, and they abandoned that business altogether.

The farm is well stocked with fruit, and the apples were being picked and boxed, the boxes selling for 40 cents. No poultry is kept on the farm at the present time, as it is regarded as a "nuisance;" but the only daughter of the house, a young lady attending the university, had a plan on foot for establishing a poultry yard. The children have an enthusiastic love for the farm, and are full of schemes for beautifying and improving it. The farm house is new, and probably cost six or seven thousand dollars. It is finished throughout in fir, stained and varnished, and with beautiful hard-wood floors. It is of spacious dimensions, with modern improvements, and was largely planned by Mrs. A. and her daughter, particularly as to the kitchen, which has some novel features The library is stocked with good books, and the house has the further refinement of music. The education of the children is a very considerable expense, but is regarded as a very important one.

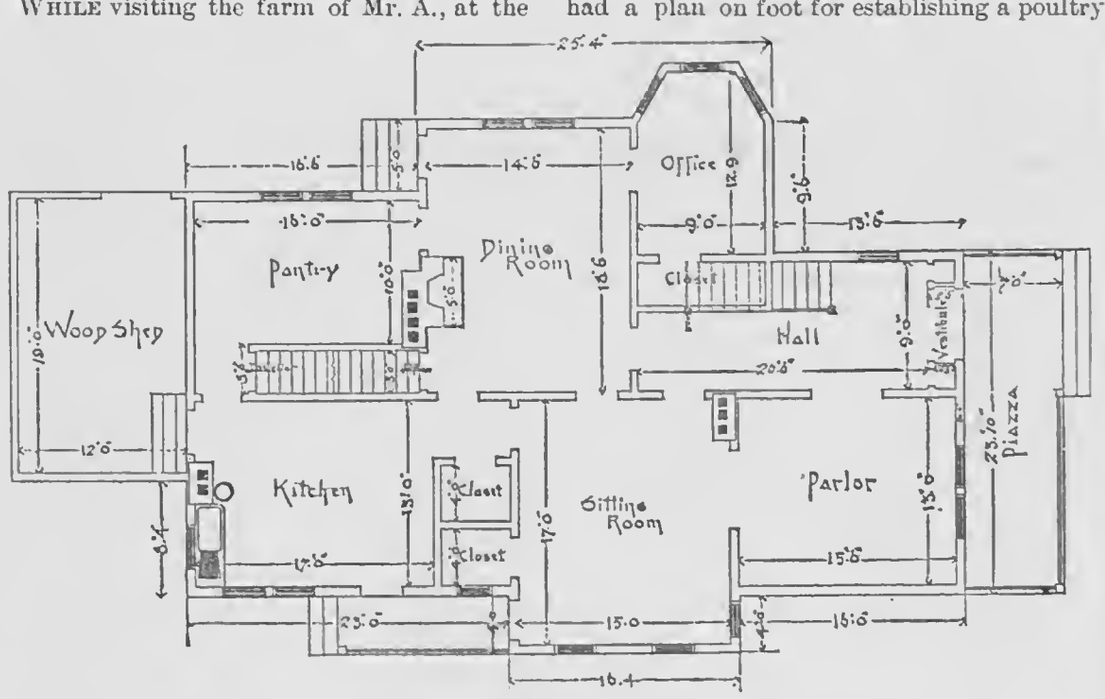


Fig. 236.

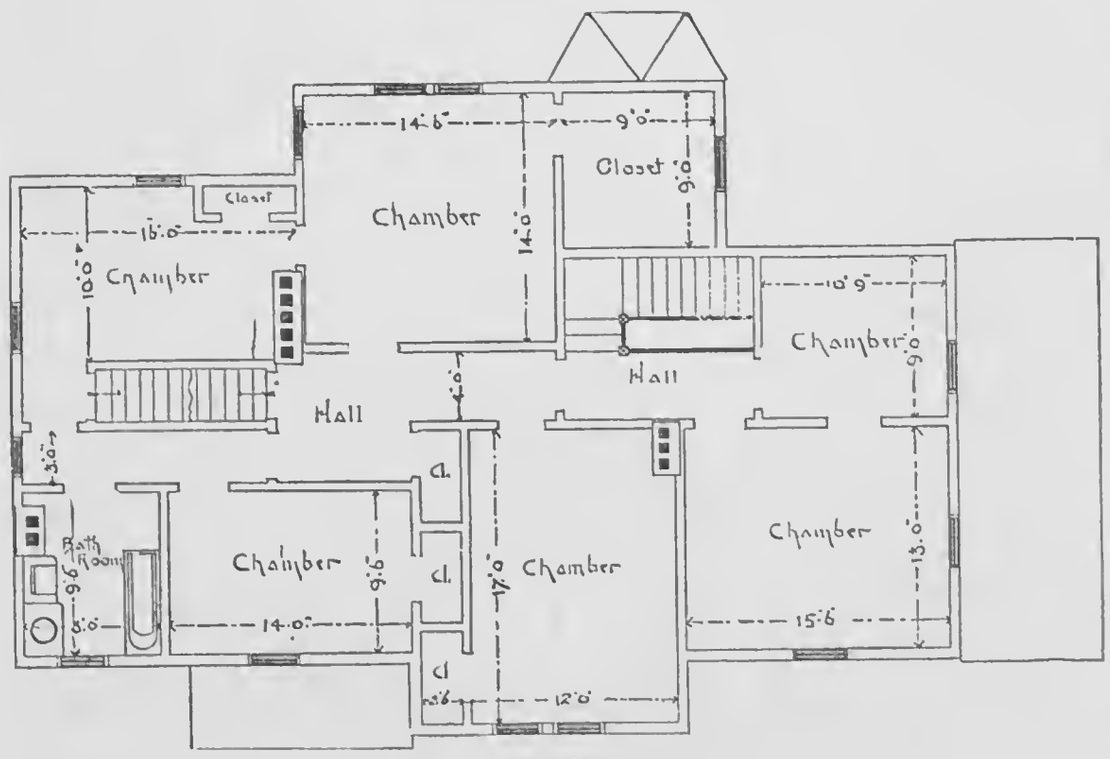


Fig. 237.

The library is stocked with good books, and the house has the further refinement of music. The education of the children is a very considerable expense, but is regarded as a very important one.

The inclination of pioneers, removed from the stimulating effects of social surroundings, to degenerate into slip-shod habits is so marked in many cases that I asked Mrs. A. how it happened that she had escaped a similar fate. She laughingly explained how it had come about, partly through the influence of a brother, who wrote her that he hoped, come what might, that she would always keep her "candle-sticks clean," and partly through her own "stuck-up-edness." She always argued that it was a mistake to lower one's-self to suit one's surroundings, but rather to stimulate others to self-elevation. During the early years she experienced the sore trials of isolation and the difficulty of getting help for the house, the only service available being the Indians, and she had taught Indian women how to work, to wash, and clean house. Of course on a farm where so large a force of men is to be fed for a part of the year, it is a matter of importance to have efficient house service. During the past year she has had a Chinaman for cook and general housework, with an assistant for washing dishes, etc., during the haying season; this cook also does the laundering, and has a salary of $30 a month. He is of superior skill as a cook, and very neat. Mrs. A. never knows what she is to have set before her at meal time, the cook making out his own bill-of-fare. She simply sees that there is no waste, and looks after the supplies. The table was invariably first-class—such cream as I never saw surpassed; only a few cows are at present kept, but a dairy is under contemplation in connection with the sugar-beet industry—and the meals were served promptly and with admirable order. The hired men ate with the family at a long table, but they appeared at table invariably with clean hands and faces and neatly brushed hair. During the Summer the original dwelling is used as a cook and dining house, so that the mansion house is free from the life of the kitchen; but in the Fall this building is required for the storage of apples, etc.

After the meadows are cut there follow several months of excellent pasturage, and large bands of cattle and sheep, which are brought from east of the mountains (Cascade), are pastured here for the Seattle meat market. The charge per month for sheep is 15 cents a head: for cattle from 80 cents to one dollar; for horses $1.50. I noticed, with genuine pleasure, that while the farming was first-class, the sanitary features of the farm house and adjacent buildings were carefully looked after, with convenient drains, and the appointments of the house, as well as its connection with outbuildings, so arranged as to facilitate work with the least fatigue. A piazza surrounds the house both on the lower and the upper floor, and from the tower on the top the outlook is magnificent, including an unobstructed view of Mount Ranier with the foothills, the mountain presenting a strikingly near and majestic appearance. One of the sons visited the mountain last Summer and shot during his short encampment there six mountain goats. Sunday is religiously observed at the farm, and neither Sunday-school nor church is neglected. It is hardly necessary to say that people of this class have not failed to win general appreciation and respect, and to be honored by all who know them; and no name in the Territory stands higher for integrity and trustworthiness than do theirs, which is no small thing on this coast, where high principles are not always held at par: and where, in order to "succeed," disreputable proceedings are often winked at. It must not be understood that success in farming here is to be achieved in any way but by hard work, frugality, and good management. The conditions here are different in several respects from those in the East, but the same qualities win success the world over. Mr. A. probably works harder than any of his hired men; but born with an equable, gentle, and kindly temper, he finds himself to-day with unbroken health and unworried countenance, and with nervous strength as fresh and tense as many a young man; while his wife is as trim in figure and as alert in step as a girl in her teens.

As this will be my last letter but one from Washington Territory, I wish to say that I hope nobody has been induced to come here "to settle" from anything I have written of the country. I have endeavored to be strictly honest, to tell the truth and to grind no axes, for I have none to grind. I like the country exceedingly, and in years to come the Puget Sound Basin will undoubtedly be one of the most magnificent portions of the United States. Its fine climate, the productiveness of the soil, and its great natural advantages and attractions are worthy of great praise. At this time there are no "booms," and if one

has money and a wish "to go West," it is a good time to buy property, which, however, is uot low, in the Eastern sense. Latterly there has been some disturbance on account of various so-called labor organizations combiniug to drive the Chinese out of the conutry, which effort has been attended in two or three instances with murder and destruction of Chinese property. As Eastern papers gave great publicity to these affairs, it was made to appear that the anti-Chinese element was composed of the best citizens, which is false. The anti-Chinese "congresses" and "conventions" were made up of "roughs," irresponsible persons and some misguided and foolish workingmen, who seem ever ready to listen to the babble of "leaders," who prate of being their friends, and who crave cheap notoriety. If the Restriction Act were enforced, there could be no good reasou for any outcry against the Chinese in this Territory, as the force is small and could be dispensed with only at the cost of great inconvenience. People employ them because their services are required. Iu Seattle the property owners and the leading citizens called a private meeting for adopting some method for the better protection of the city against the anti-Chinese rioters, as well as to prevent violation of law, and seven hundred of these private citizens were sworn as so many deputy sheriffs. Seattle is fortuuate in the temper and character of her people, and cau always be trusted to take care of herself. The people of Tacoma suffered the humiliation of having a mayor who was a "riug-leader" for the law-breakers.

I attended one of the anti-Chinese gatherings, and was uot surprised to hear one of the harauguers call men "miu" aud sentiments "sintiments;" he had evidently left "ould Irelaud" six months before, and had precisely the same right to the protection of this Government, and not a bit more than has a Chinaman, and is probably not half as desirable as a laborer. The Restriction Act should be enforced, and there should also be a restriction act for the Atlantic Coast as well, to modify the immigration from Great Britain and the rest of Europe. The happiest and most prosperous country is where the population is restricted to the supporting power of home industries, where the people do their own work, where there is no need for immigrants nor for emigration, and where the population is not made up of vagabonds from all quarters of the earth who fill the air with their spoutings of Socialism, Nihilism, Fenianism, Dynamite and "Whiteman's Government." If we could be protected by an immigration restriction act for 50 years to come, the United States might become Americanized and its population homogeneous in a general way. But under existing conditions there will be continuous ferment and trouble.

RURAL SPECIAL REPORTS.

Delaware.

DENVER, Kent Co., May 4th.—April was cool and dry, although we had but little frost. We have had so little raiu that small fruit that was set out this Spring will be a very poor stand. Corn planting commenced about April 24th; but most of the crop will be planted this week. Wheat looks fine, standing from 16 to 18 inches high. Clover and pasture fields look prosperous. Rye heading out. The peach crop prospect is better than anticipated; some sections will have a full crop, some half, and still others none. Apples, pears, cherries and quinces promise large crops. Small fruits look as if crops would be fair. Stock wintered well. Feed plenty, but few have yet turned out to pasture. Fresh fish plenty and brought to one's door for sale; herrings 75 cents a hundred; shad 18 to 25 cents apiece. The oyster season is over till Fall; still, oysters cau be bought yet. Times hard, and money scarce is the general cry, still nearly every one that wants it has work at fair wages. Farm hauds get from eight to $15 per month and board, and 50 and 75 cents a day and board. Mosquitoes have put in appearance to such an extent that screens are needed to keep them out of the house. Many Northern people are buying farms in this section, and good farms are selling for $50 to $80 per acre. S. T. S.

THE FARMER'S CLUB

ANSWERS TO CORRESPONDENTS.

[Every query must be accompanied by the name and address of the writer to insure attention. Before asking a question, please see if it is not answered in our advertising columns. Ask only a few questions at one time. Put questions on a separate piece of paper.]

RING-WORM ON A HORSE; HARD FROGS; WORMS; FEED FOR COSTIVENESS; WARTS; OIL-MEAL AS FEED.

W. E. J., Stapleton, N. Y.—1. Wheu I got my 10-year-old horse, three years ago, he had the heaves; and on his neck, a little below the ear, there was a bare spot under the maue. After brushing it got well, but reappeared larger in size, white and scaly. What is it, and what should be the treatmeut? 2. His frogs are hard, what should be done? 3. What is good for worms in a horse, and what are the symptoms? 4. What is a good food for a costive horse? 5. What will make him shed his hair? 6. What are large black warts on a yearling heifer? 7. How much new-process oil-meal is it safe to feed to a horse, and how much to a cow for butter-making?

ANSWERED BY F. L. KILBORNE.

1. Probably ring-worm. See Farmer's Club in RURAL of Jan. 30 last. 2. If very hard, they are too dry, and there is danger of contractiou of the feet, which may be followed by permanent lameuess. Allow the horse to run at pasture at night or in the morning, while the dew is on the grass, to wet his feet; standing for an hour or two daily in a very wet puddle of clay will auswer the same purpose. 3. Commou symptoms of worms in the horse are, general ill-health, rough coat, continual poor condition, although well fed and cared for, breaking of the hair about the root of the tail by rubbing against the back or sides of the stall; elevating the upper lip and rubbing it against the manger or wall, and mucus passed with the dung or collected and dried in a ragged ring around the anus; sometimes slight colic appears, especially before feeding, and frequently a cough. Various vermifuges are more or less successfully given. Oue of the most active and available is oil of turpentine, two to four ouuces diluted in oil or milk. The following is also very effectual: two drams of tartar emetic and one dram each of sulphate of irou and carbolic acid, to be given before feeding in the morning for six consecutive mornings, and on the seventh morning a dose of aloes. Also give an injection of several quarts of a strong solution of quassia to remove the worms in the rectum aud colou. In any case, five or six drams of aloes should be given 24 hours before giving the vermifuge to empty the bowels, that the medicine may be more effectual. Then, 24 hours after giving the medicine, give another dose of aloes to carry away the dead worms. Always allow free access to salt as a preventive. 4. Grass or other green food; oil or liuseed meal is also excelleut, one pint twice or thrice daily with the grain. If this is not sufficient, or green food is not available, give one ounce powdered gentian aud two drams each of aloes and niter twice daily until relieved. He probably does not chew his oats well; try ground feed. Read "Grain Ration and Cut Feed for Horse," iu F. C. of May 8. 5. Keepiug in good healthy condition and *thorough daily* grooming. Animals so kept will shed at the proper time. In the present case attend to the grooming and improve the condition as rapidly as possible. 6. They are probably warts or small tumors, judging from your description, and should be removed with the knife or with caustics. It is the grubs in the backs of cattle that are to be squeezed out. See articles on this subject in late numbers of the F. C. 7. It is *safe* to feed very much more than can be profitably fed; and the greatest amount that can be fed with profit will depend largely upon the nature and cost of the other articles of food, aud especially the grain ration. More can be fed with corn than with oats or wheat bran. A quart twice or thrice daily for either horse or cow is probably all that can usually be fed with profit. In ordinary cases one-half of this amount would be a fair allowance.

APPLE TREE SCALE LICE; CARBOLIC ACID AND SOAP MIXTURE.

H. S. C., Gaines, Tioga Co., Pa.—The insects uow found on the apple tree twigs are the apple tree scale lice. When so numerous as they are on the specimen you have sent us they are very harmful to the trees. They are amoug the most destructive insect pests of the apple tree. Under the scale will be found a great nuuber of minute eggs. These will hatch in June, when the young lice will attach themselves to the bark and engage in pumping out the sap. The remedy is to scrub the trunk and main branches of affected trees with soft soap, about June 10, and again the first of July, if you wish to be very thorough. The carbolic acid and soap mixture is still better, as one application goes farther. This is made as follows: Take two gallons of water and add one quart of soft soap, heat till the mixture boils; then add oue pint of crude carbolic acid, and mix till all unite permanently. To apply this to trunk and main branches, use a cloth or brush. If it is not kept from the foliage it should be still weaker, as the above strength would kill the leaves. If we mix one gallon of the above with two gallons of water, it will not harm the foliage. We prefer the strouger mixture, and apply it by scrubbing with a cloth, only to trunk and larger branches.

PRESERVING SEED CORN FROM BIRDS.

Subscriber.—It is probable that black-birds pull corn for the sake of the grain and not for the sake of doing mischief. In some localities they are very plentiful, and do great damage. They are not afraid of scare-crows or bells. An expensive method of preventing their depredations is to scatter corn in the field for them to eat. Early planted corn gets a good start and frequently gets too large for the birds to pull with ease, before the scamps come in large numbers. The usual arrangement of boy and shot gun, provides sport for the boy, but is costly and dangerous. When the corn is soaked in thick tar water and then rolled in plaster it becomes distasteful to the birds. Take ordinary gas tar in a cask, put in a small quantity of warm water and stir. Put in seed aud stir well up until every kernel is coated. Then drain in a basket and drop into plaster and plant.

ABOUT PRESERVING THE SCUPPERNONG.

J. G. S., Barnesville, Ga.—As a rule the Scuppernong, and also all the varieties of grapes of the Bullace type (Vitis rotundifolia), should uot be pruned, because the fruit is produced upon the old wood and there is liability of injury to vines from excessive bleeding which usually follows the cutting away of old wood. Should pruning be absolutely necessary to reduce the bulk of the vines, it is best to prune late in the Fall, after the fruit has matured and before the leaves have fallen. The most desirable plan is to train the vines when young by rubbing off the surplus young shoots in early Summer, and if properly trained upon arbors, pruniug will uot be necessary afterwards.

FAILURE OF POTATOES ON NEW LAND.—CHRONIC NASAL DISCHARGE IN A HORSE.

B. F. L., Reeve, Wis.—Though this is a new country, my neighbors tell me potatoes will not do well after the first crop, so all clear each year a new piece of land for this crop; what causes the failure, and how can it be prevented on land cleared only two or three years? 2. For a year one of my horses has nearly all the time been running from one nostril, and there is a bad odor; what's the matter?

ANS.—Reeve, Wisconsin, is in Langlade Co., and according to our geological report has a light clay loam soil, which should be favorable to the potato crop. All pioneers know that, with fair conditions, a "new breaking" piece will often produce the best crop of potatoes that can be grown on the farm, if the soil is not too "mucky." The soil of such land is loose from the large amount of decaying leaves and wood, and there is usually a large amount of ashes left on the soil from burniug the brush aud log heaps. Furthermore, the weeds of cultivation have not yet made their inroads, and so the potato plants have full benefit of soil and sun. These conditions, however, are not peculiar to any one section. It may be that the soil lacks potash or vegetable matter, humus, to keep it friable. To see if potash is lacking, spread ashes over the proposed potato ground. For the humus, try planting on land where clover is grown. We suspect, however, that the growth of weeds on the older cultivated lands has much to do with the unfavorable results. 2. The discharge may be due to any one of several causes, aud without knowing the particular cause we cannot prescribe definitely. The case is evidently not simple nasal gleet. From the long standing and odor of the discharge coming from one nostril only, glanders is expected. Examine the mucous membrane of the nose as high up as possible (place the horse in a stable, and elevate the head toward an open door or window) and compare it with that of a healthy horse. If yellowish or red elevations, pimples, erosions, or ulcers appear on the nasal membraue of the diseased animal, and the lymphatic glands on the inside of the lower jaw are enlarged, hard or nodular, and insensible, the case is undoubtedly glanders, and the animal should be shot at once, as dangerous to other animals and man. If no such lesions are found, have the horse examined by a competent veterinarian. This is always much safer and better than trying patent specifics of any kind. While they are sometimes good in general cases, they are useless in special cases, and frequently worse than nothing in any case.

LICE ON QUINCE TREES.

J. S. B., Hightstown, N. J.—Any one troubled with lice on his quince tree leaves can get rid of the pests if he will have the patience to apply the remedy. Get a cake of Buchan's carbolic soap (the black), pare off a couple of inches, put the parings in a tin or earthenware vessel and dissolve with hot water, which will convert them to a jelly. This jelly is readily reduced or liquified by cold water. For the quantity named above, four or five quarts of water may be used. The liquid is best applied with a syringe; or, in the absence of that, sprinkled with a brush or a small whisk broom, which, however, is tedious; or a tin pan may be used, in which case the foliage must be plunged iu the solution. The leaves must be thoroughly wet. The solution will not only kill the lice already on the leaves, but drying on the foliage, will prevent others from coming for a long time. If it should rain immediately after the application, it must be repeated. This is a cheap as well as a good remedy, and the only caution needed is not to use it too strong on young and tender growth.

Miscellaneous.

Mrs. A. B. C., Mountain Home, Pa.—When cows are fresh and the udders are very much distended, the milk frequently drops or leaks away. It is a common sight to see cows coming home from a good pasture with udders so full as to press a little milk away at each step. The most natural remedy is to relieve the udder by more frequent milkings. If this is possible, we would suggest it. If the trouble is due, as it may possibly be, to a weakening of the sphincter muscle of the teat or udder, it is not likely that any treatment will entirely remove it. A wooden plug is sometimes used to stop the leaking but never with complete success.

Fairmount, W. Va.—Will raspberries set this Fall do better than those set next Spring? 2. Will potatoes planted this Fall be earlier than those planted in Spring?

ANS.—1. We prefer to set raspberries, blackberries and currants in the Fall, and mulch or cover the soil about them with straw, manure or leaves. 2. Generally, yes. But there are serious objections to Fall planting—compaction of the soil, deep planting, etc.

J. W. S., La Favge, Wis.—Some of my sheep get so weak that they appear to have no use for their legs; there is a profuse discharge from the nose with occasional frothings at the mouth; they eat well, but finally die; what is the matter?

ANS.—We cannot say definitely. The difficulties may be due to exposure, lack of suitable food and drinking water or perhaps to parasites in the upper air-passages.

"*M.,*" *Davenport Center, N. Y.*—The very best thing a man who wants to start as a florist without knowing anything of the business, can do, is to learn the business by working for some good, experienced firm. We hope our inquirer will hold fast to his money until in this way he may be able to judge how to invest it. We should not buy a share in any business without any knowledge of that business.

G. C., Rosedale, Pa.—1. What would be the best crop on newly cleared, very rich land, sloping toward the northeast. 2. How can one tell when watermelons are ripe?

ANS.—1. Would suggest corn. 2. First, by the shriveling up and blackening of the tendril; second, by the sound when thumped. With a little experience one is rarely mistaken with these tests. The solid, dull sound is when the melon is ripe; the hollow sound is given whe nthe melon is not ripe.

W. C. H., Shrewsbury, Mass.—Boiled linseed oil may be applied to wagon wheels by means of the implement shown on page 103. This is an iron tank so shaped that the wheel can be revolved in it. The oil is heated to the boiling point, and then the wheel is turned in it. Where this implement is not at hand, place the wheel on a pole between two posts and apply the oil with a brush, turning the wheel and working the oil well into all cracks and joints.

J. H., Grant's Pass, Oregon.—No; pine sawdust is not "injurious to soil or plant," when decayed. We know of large quantities having been used in the South with good manurial effect. 2. No, we should never use sawdust as a mulch for strawberries. It is cold and heavy, excluding the air and harboring many insects.

J. T., Toronto, Canada.—1. Probably the best raspberries for your neighborhood would be the Doolittle, Franconia, Orange and Philadelphia. We have heard good accounts of Clarke, Caroline and Marlboro. 2. We are not able as yet to speak of the merits of J. T. Lovett's new yellow raspberry. Our plants have not fruited. It ought to be good for something, considering the advertisements.

T. N. W., Greenville, Texas.—Curl-leaf in the peach appears to be caused by climatic influences, such as very cold, windy weather. The leaves shrivel up and drop off, often after making a good growth in the earlier part of the season. We know of no remedy. The trees usually regain their vigor when the weather comes right again.

Several Subscribers.—The Ripe Fruit Carrier, mentioned at the last meeting of the Am. Pomological Society, is manufactured by Jenkins, McGuire and Co., Baltimore, Md. It seems well adapted to the distant transportation of choice, ripe berries.

A. B. E., Manhattan, Kans.—"To make a

success of celery raising" do not let the soil get dry. Do not let it bake. That's about it.

J. E. C., Bismarck, D. T.—From your description we cannot tell what ails the cow, and consequently cannot recommend any treatment.

C. A. T., West Cleveland, Ohio.—The Dorchester High-bush Blackberry will be hardy with you.

E. M. T., Susquehanna Co., Pa.—Prune the young arbor-vitæ hedge any time in September.

DISCUSSION.

BOGUS BUTTER AGAIN.

T. H. H., NEWPORT, VT.—The RURAL of May 15 says:—"We hear a great deal of the merits of the production from those interested in the manufacture of bogus butter. They claim that it is as healthy as the best butter and much more palatable than a large part of the 'rancid stuff' sold by grocers. Why, then, hasn't one of them come boldly into the market with this 'healthy, superior product' in its natural state, and sold it for what it is on its own merits?" Isn't it quite natural that the oleo and butterine makers should shield themselves as best they can from the whirlwind of defamation and falsehood which their product has encountered from the agricultural press? They lie, it is true, in calling their product butter; but, after all, it has to sell on its merits as an agreeable edible substance. I do not consider their crime so bad as that of those who have been trying to make the public believe that these goods are all made from diseased hogs, soap fat, and poisonous chemicals. This kind of falsehood has been dealt out by the newspapers generally (I do not include the RURAL) with utter recklessness as regards the real facts, and presumably because it is supposed to please the farmers. Yet it has done the farmers no good at all. The imitation butter continues to be made and sold, and will so continue, unless something better is offered at the same price. I talk with every dairyman I meet on the subject, for the purpose of hearing how they view it, and I am proud, as a farmer, of the intelligence and common sense of what they say about it. They just laugh at the rattle of the press, working to make itself solid with them as an ignorant mass of people, who are pleased to have lies told to injure a rival industry. No one knows better than our dairymen how much butter is put on the market that is utterly unfit to eat. There may be, as the RURAL asserts, "a multitude of little dark, filthy holes wherein all sorts of foul, rancid, deleterious fats from all kinds of animals are manipulated," (though proof of the statement has never come under my notice), but the product therefrom is quite equaled in nastiness by much genuine butter. The skilled dairymen of the country have no more sympathy with one than with the other. What they do ask, and all they ask, is that the factitious butters should be sold for what they are. This can be had by law, if no more is attempted. If more is attempted, we shall get nothing.

R. N. Y.—Judging by what they have done, there isn't a shadow of doubt that it is "quite natural that oleo and butterine makers should" "lie" "in calling their product butter;" but virtue consists in successfully resisting "natural" inclinations to evil; vice, in yielding to them, and there isn't a scintilla of doubt that every handler of bogus butter, from the wealthy manufacturer to the scrimping retailer, has yielded to the "quite natural" temptation to "lie," and has resolutely and persistently eschewed that noblest and most manly of virtues, truth. What a contemptible crew they must be, shielding "themselves as best they can" with the meanest and most despicable of all things, a "lie," from the "whirlwind of defamation and falsehood" set in motion by their own mendacity and dishonest dealings! Had they from the outset delt honestly and truthfully with the public, what paper with the slightest pretention to integrity or decency would have assailed them with a "whirlwind of defamation and falsehood?" Which came first—the falsehood on their part or the "whirlwind" from the agricultural press? Didn't they yield to their "natural" inclination to "lie," before the press ever stigmatized their practices, or even knew much as to their nature or extent? There is no doubt that considerable abuse and misinformation have appeared in some agricultural papers with regard to the handlers of bogus butter as well as to its ingredients and the methods of manufacturing it; but who for a moment supposes that anything that appeared in those papers was the original reason why the dealers lied? How many of them ever read an agricultural paper? What agricultural paper has ever been as abusive of both dealers and goods as some of the political and comic papers—the N. Y. Times and Puck, for instance. The errors that have appeared in this connection in the agricultural press have seldom been primarily due to a desire "to make itself solid" with its patrons (though an honest desire to do so is, of course, always excusable); but to mistakes due in a great measure to the known fradulent misrepresentations of bogus butter manufacturers. They knew there was fraud in its sale; wasn't "it quite natural" that they should believe there was fraud in its manufacture? In this connection the RURAL needs no defence, for while it has always vigorously stigmatized the frandulent falsehoods of the dealers of bogus butter, it has never misrepresented the product; on the contrary it has several times published lengthy illustrated articles describing the nature of its ingredients and the process of manufacturing it.

That there is a great deal of filthy, unwholesome stuff made, however, we have no doubt whatever. About two years ago, before the passage of the law creating the Dairy Commission in this State, the writer visited two dirty cellars in the lower part of this city, where a number of nearly naked, frowzy men were sweating in making bogus butter, which was sold to retailers at 8½ to nine cents per pound; while the product of the large dealers was wholesaled at the time at about 13 to 14 cents. A lengthy exposure of these and some other similar places appeared in the New York World at the time. Fear of the anti-oleo law now in force closed them some time ago. We have no doubt, however, that a great deal of the stuff is still secretely turned out, for certainly much of that seen in grocery stores in poor neighborhoods is too streaked, dirty and malodorous to have been made by any of the large manufacturers, and what is true of the business in this place is sure to be equally true of it in others. During last year several of the Chicago papers made frightful exposures of the way diseased cattle, sheep and swine were slaughtered by unscrupulous local butchers and the pestiferous meat sold to the poor at low prices; is it likely the fat of these carcasses went to the public rendering tanks when it could be so profitably converted into "butter?" Armour & Co., are doubtless right in their boasts that the bogus butter they turn out in such vast quantities is cleaner and wholesomer than some of the genuine butter thrown on the market; but Armour & Co., are not the only makers of bogus butter in Chicago. Just as the temptation offered by great profits leads to illicit distilling, so it also leads to secret "oleo" making; but the poisonous product is made from wholesome materials in one case, and form pestiferous materials in the other. We have often expressed our fears editorially that by asking too much from Congressional and State legislation the dairy interests of the country would get too little, or nothing at all, and entirely agree with our highly esteemed correspondent in his view of the matter.

ABOUT THE BROWALLIA.

C. E. P., QUEENS, L. I.—In the R. N. Y. for May 1st, page 284, I notice an article on eight obscure annuals, by Mr. J. N. Dickie. Now, I do not desire to be critical, but I wish to take exception to his remarks when he advises us to take up Browallia plants that have blossomed all Summer in the open air, cut them back and pot for winter blooming. Although I do not now grow the Browallia as a winter-blooming plant, I have formerly obtained very satisfactory results by starting young plants about the first of July, and then planting them out in a deep, rich border as soon as they were large enough. Then they were well cared for, and pinched back occasionally so as to cause them to assume a bushy shape, and about the 10th of September taken up and potted, and on the approach of cool weather brought inside. They were given a light, sunny situation and an average temperature of 55 degrees. When well grown they are very pretty plants for greenhouse decoration during the winter season, although they are of little or no value for cut flowers. Plants that have flowered all Summer will not do well in the winter, no matter how well they are cared for. The Browallia prefers a compost composed of two-thirds turfy loam and one-third well decayed manure. In potting use pots proportionate to the size of the plants, and see to it that they are well drained, and sprinkle or syringe the plants freely to guard against the attacks of the red spider, to which pest they are unfortunately very subject when grown under glass.

L. M. M., NORTH FERRISBURG, VT.—In a late RURAL, in answer to an inquiry about hardy shrubs, Deutzias were recommended. They are quite tender here.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING May 22, 1886.

R. S.—J. H.—D. G. B.—W. W. P.—A. A. C.—A. D. V.—M. B., thanks.—L. S.—W. W.—M. J. B.—N. B.—S. H. M.—W. C. H.—J. G. V.—J. S., Jr.—H. E. E. E.—I. M. G., thanks.—W. W.—J. G. S.—P. J. B.—J. L. S.—W. B.—S. M. S.—E. M. T.—C. E. P.—W. A. H.—D. A. B.—W. H. C.—C. B. M.—G. S., thanks.—H. G. L.—J. F. J.—B. G.—I. C. G.—W. S. D.—N. P. T.—C. J. V.—M. L. B.—G. W. S.—L. D. M.—A. B. E.—J. N. B.—J. H.—J. H. A.—M. E. S., thanks.

Miscellaneous Advertising.

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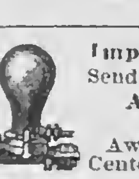
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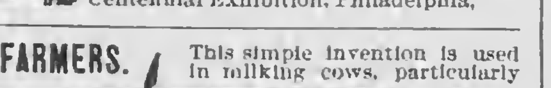

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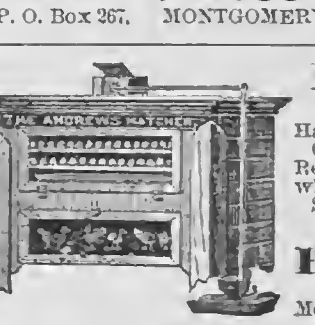

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when grass is good. No room here to give particulars; but try it, and you will see the good results. It is sold by all leading feed dealers.
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40 breeding pens of selected Wyandottes, Langshans, W. and Br. Leghorns, P. Rocks, Lt. Brahmas, R. C. W. Leghorns, B. B. R. Games, Pekin Ducks. Eggs, $3 for 13, $5 for 26, $7 for 39. Duck eggs, $2 for 11, $3 for 22. Nine hens and one male to each pen. *I guarantee a good hatch. Try me.*
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SATURDAY, MAY 29, 1886.

PRES. WILDER kindly writes us, in reply to our note of inquiry last week, that his Parker Earle Strawberry plants all have variegated foliage, though free growers "which," he continues, "is not generally the case with plants which sport in this way."

BEGINNING with the next issue of the RURAL NEW-YORKER, our accomplished contributor, Emily Taplin, will assume the charge of the Woman's Department. Contributions from our friends, however short, are solicited. It is desired that this department, more than ever before, should be made instructive and interesting to our lady readers.

THREE years ago we began to offer a horse Prickly Comfrey two or three times a season. At first he merely smelt of it. The second year he ate a little. This year he eats it greedily, leaves and stalks, in *preference* to grass or clover. He is the first animal we have ever known to relish this plant, which, as it grows with us, will produce a larger amount of green food than any other forage plant we know of, as it may be cut several times every Summer.

SIR J. B. LAWES, in reply to our questions, writes as follows:—"It is quite true the manures named by you" (nitrate of soda, sulphate of ammonia and blood) "are soluble and active in the order named. With regard to using them, I am disposed to think that some regard should be had to the cost of these substances. For corn, I think that nitrate of soda would prove the best manure, provided the necessary phosphates and alkalies are in sufficient quantity in the soil. If the nitrogen in nitrate of soda is as cheap as it is in other forms, it is certainly the best manure."

IT is becoming the fashion now-a-days among certain farm journals that are mean and dishonest enough to do such things, to copy from the public reports of distinguished farmers and horticulturists in such a way as to make it appear that the quotations are written specially for those journals. Thus we see the names J. B. Lawes, W. J. Beal, Marshall P. Wilder, P. Barry, T. T. Lyon, J. L. Budd, L. B. Arnold *et al.* appended to articles or paragraphs taken from public addresses, annual reports, etc., without any credit whatever. These are pretty examples for the editors of respectable farm journals to set!

OUR Government has demanded from the English Government the surrender of the two fishing vessels seized by the Canadian authorities. Should the latter condemn and sell them, it is likely a demand for indemnity will be made on the Imperial Government. There is a great deal too much intemperate talk in the papers about this fishery squabble. There is no doubt that the Canadians have a fair prima-facie case. The matter at issue is merely the construction of a treaty, and passion will prove no satisfactory help in arriving at a correct interpretation. The question will be ultimately decided by the Governments at Washington and London, and we believe that the trouble will be adjusted through British repudiation of the Canadian attitude.

THE city relative is now looking very graciously towards the country cousin. The summer vacation approaches, and there will be an unusual demand this year for country board. There are hundreds of city families who could hardly get through the year but for the help afforded by their relatives in the country, and it is surprising that it is, in general, this very class that has the most sneering to do at the farmer's life. The relations between city and country people have always been peculiar. Each class appears to thoroughly misunderstand the other. The country has always distrusted the city, while the city has been disposed to look down upon the country. There is no reason why this should be so. City wage-workers, as a rule, endure as great a care and worry as any farmer; while the intelligent farmers of to-day are as well read and as generally well-informed as the majority of city men.

IT is estimated that the losses of all kinds due to the numerous strikes and lockouts throughout the country during the past six weeks, foot up about $50,000,000. Many of the workmen had to run into debt; others have spent their savings; large numbers have become badly demoralized. Even if the number on strike was at any one time not over 125,000 (the number out on May 12), these figures would by no means indicate the number compulsorily idle on account of the troubles, for in many cases the strike of one trade necessitates suspension of work in which many others are engaged. The number of strikers on the "Gould system" was at no time over 7,000, and some put it considerably lower; but owing to the action of these, at least 15,000 others were thrown out of employment. It is to be hoped that some means will be devised by the thousands of heads now pondering on the problem, by which a recourse so disastrous to employés, employers and the innocent public may be hereafter avoided. If all the money lost by the strikers and contributed for their support were collected as capital, what a splendid beginning could be made in some co-operative industry.

LIKE the anti-oleomagarine law of Holland, that now before the English Parliament lays no tax on the product, but provides stringent regulations for its sale as an imitation of butter, and heavy penalties for violations of the law. It requires the name of the concoction to be put on each package in letters at least an inch long, and punishes a first violation of this provision by a fine not exceeding $100; a second by a month's imprisonment or a fine of $250; and a third offence is punished by six months' imprisonment. Each manufactory is to be registered and open at all reasonable hours to inspection by Government officers. A penalty of $25 a day is imposed for not registering. The place of manufacture must be clearly stated in every invoice, and the goods must be sold as oleomargarine or margarine. Neglect in this matter renders the seller liable to a fine of $500 for each offence, and he cannot recover from the purchaser the price of the goods sold. Retailers must inform purchasers what the article sold is, under penalty of $50 for the first offence, $100 for the second, and a month's imprisonment for the third. Any one shipping the product must state its real character or forfeit $2 for each package not booked according to law; and the transportation company must enter the goods on its books under the description given.

ONE of the most effective temperance documents we have seen lately is driven into the city every morning. It is a low milk wagon, the back of which is so arranged that it can be easily let down and turned into a counter over which milk is retailed at five cents per glass, with buttermilk at three cents. It is good milk, cleanly served, and kept cold and fresh. From the place where this wagon stands, in front of the post-office, there are within sight, by actual count, 15 places where whisky and beer are sold. Yet, even at this cool season, the sale of milk is large, and in the Summer it will be enormous. The trade increases from year to year, especially that in buttermilk. Temperance advocates will find a practical lesson in this business. Fight saloons with milk. Establish milk saloons throughout the business part of the city, the nearer to the whisky saloons the better. Put the price of a large glass of pure milk at three cents, and the rum-sellers' business will be sadly interfered with. There is a good opening here for some benevolent person who has money enough to establish the business and foster it until it can be made self-sustaining. There is not a town or city in the country in which trade of this kind should not be profitable.

THE FARMER'S COW.

LAST year, after much discussion, the Ohio State Board of Agriculture offered a special premium for the best general-purpose cow. It was designed to organize a contest between the different breeds in which beef qualities, milking qualities, gentleness, working qualities, and, in reality, fighting qualities as represented by horned and polled breeds, should be taken into account. The plan failed last year owing, doubtless, to lack of time for preparation on the part of breeders. We hope an attempt will be made this year to carry the idea through, for it is a good one. It is not probable that the question will ever be settled to the satisfaction of everybody. No single specimen of any breed can ever satisfactorily represent that breed, and no single breed can ever give satisfaction in all parts of the country. Different farms, different farmers, and different localities and soils require different breeds of cattle. That has been demonstrated beyond a dispute. Yet these contests between breeds will be of value, though the result may not be at once apparent. They will show breeders the weak points in their animals, and will help to point out the characteristics which are most generally desired by farmers. Let us have such contests, by all means. They might well be made a feature of every prominent exhibition in the country.

IS IMMIGRATION A BLESSING?

THE labor agitation is bringing the question of the immigration of cheap labor prominently to the front. During the five years ended December 31, 1885, 2,839,997 immigrants arrived in this country against 1,127,997 in the previous five years, an increase of over 150 per cent. For this period Chinese immigration increased only 10 per cent.; and during the last three years, since the enforcement of the Restriction Act, there has been a heavy decline. Europe furnishes the United States with 98 per cent of all immigration, and with nearly all the unskilled cheap labor and pauperism we get from abroad; and this sort of immigration is increasing much more rapidly than any other. Here is an instructive table compiled from official statistics of immigration for the two periods above mentioned,

FIVE YEARS ENDED DECEMBER 31.

	1880.	1885.
Women and Children	511,408	1,266,822
Workers	435,620	1,169,900
Totals	947,028	2,436,722

Here is the classification of the workers:

	1880.	1885.
Mechanics	217,810	365,700
Traders	43,563	116,928
Professionals	21,781	58,484
Unskilled	152,467	628,788
	435,620	1,159,900

Thus, while the number of mechanics, traders and professionals increased 91 per cent. in the five years, the number of unskilled laborers increased 313 per cent. The greatest increase in this undesirable class came from Italy, Prussia, and Hungary, the immigration from which is nearly all unskilled, cheap, and poverty-stricken. During the last five years the aggregate increase from these three countries was 94 per cent. more than from the rest of Europe. Is immigration any longer a blessing, is becoming one of the questions of the day.

LAND LEGISLATION.

THE public lands now remaining to the United States amount to only about 200,000,000 acres. Last year 20,113,663 acres went into the hands of corporations or private owners, and 261,649,319 acres the year before. If the public domain continues to be taken up at this rate, how long will any remain? This consideration has given a great deal of prominence to land legislation in Congress during the present session. A large number of bills relating to various corporations seek to restore to the public domain about 130,000,000 acres withheld from settlement in favor of railroads which have no legitimate claim upon it. The House has just passed a bill creating a commission of three persons to ascertain and settle land claims in Colorado, New Mexico and Arizona, held under Spanish or Mexican grants and treaties, and it is provided that "no alien or person not a citizen of the United States shall acquire any land under this Commission, unless his title to the same shall be clearly proved under some of the treaties or grants." Enormous frauds in connection with these old land grants have already occurred, and the number of exaggerated and fraudulent claims now outstanding cover vast areas, and a large proportion of them are in the hands of foreigners. Over 30,000,000 acres are owned in large bodies by aliens, besides a large aggregate area made up of smaller possessions, and vast tracts of the public domain are occupied rent-free and illegally fenced by alien cattle kings and corporations. A bill is now before Congress prohibiting alien ownership of land in the Territories. This affects only the land in the latter, where the General Government is supreme, and cannot, of course, affect the present holdings; but the passage of the bill would prevent an increase of an acknowledged evil. The States must deal with the question within their own limits, and the Legislatures of Illinois and Iowa have been discussing it of late.

CO-OPERATIVE SOCIETIES.

THERE is a good deal of talk just now in various parts of the country of different means for getting rid of labor troubles and lightening the widespread, prevalent distress, and co-operation in manufacturing and marketing goods is frequently suggested as an expedient. Co-operation in work is as old as civilization; but co-operation in marketing—distributive co-operation—is a development of the last half century, or less. England is its birthplace, and the most notable instance and success is the Rochdale Equitable Pioneers' Society, which was formed in 1844, with 28 members, for the purpose of selling to the members and others groceries at the prices current in the town, the profits to be divided among the shareholders. The original capital of $140 was raised by $5 shares; last year it closed with a membership of 11,084 and a capital of $1,623,000. In 1850 its trade amounted to $65,000, and its profits to $4,250; last year the former was $1,260,000, and the profits $226,000. It owns a central establishment which cost $70,000, and 20 branch stores, built or bought, besides two libraries for its members and a school of science, languages, and the mechanical arts. The business has steadily grown from the outset; there has never been a loss or even any considerable falling off in profits.

Besides this, there are also in England half-a-dozen other distributing societies with annual sales of over $1,000,000 each, and 22 with a yearly business of over $500,000, but under $1,000,000 apiece. Altogether, there are in the United Kingdom 1,350 co-operative societies; in Germany, 3,639; in Austria, 1,515; and in all Europe a total of 7,669, of which 2,649 are in trade. The remaining 5,020 comprise 3,617 people's banks, and 1,403 agricultural and productive co-operative associations. Several enterprises of the kind have been started in this country, but hitherto generally in a small way, and the most successful have been those connected with the Granges in some of the States.

BREVITIES.

A FRIEND writes: "Five eggs of my best Langshan hens weigh one pound, good weight," which surprise us.

HUNGARIAN Grass may be sown now or later. Sixty days will suffice for its growth. Sow on mellow soil—a bushel to the acre—and cut when the heads appear.

MANY city people select asparagus with long white stems in preference to green stems, forgetful that the white is the older and tougher part. Asparagus grows from the tips, and the more green there is the more tender the shoots.

THE praiseworthy Report of the Ohio Ag. Ex. Station has just been received. It is much to be regretted that it could not have been issued several months earlier; then farmers might have availed themselves of its information the present season.

WE have already said that the quality of the State of Maine Potato, which is one of the best keepers and a large yielder as well, is inferior. A few were boiled and eaten last week, but they were of poorer quality than earlier in the season. In fact, we should not eat potatoes if a better quality could not be secured.

DO any of the lady readers of the RURAL wear birds on their bonnets? We hope not. But if they do, we hope they will not do so any more. In all seriousness, we think that this fashion is not only cruel and unwomanly, but that it is effecting incalculable injury to the farmer's interests. Are we right? If not, tell us wherein we err. If right, then lend your aid, lady friends, to throw disgrace upon this senseless, heartless, iniquitous custom.

IT has been stated often enough that heavy applications of sifted coal ashes about the roots of currant and gooseberry bushes, will keep them free of the currant worm. We have given this a thorough trial, and find that the bushes so treated are just as much infested as the others. Somebody, probably, mulched his bushes with coal ashes. They happened to escape the worm that season. He wrote about it to his farm paper, and it has been going the rounds ever since.

MR. GEO. C. RIXFORD, of Rixford, Florida, sent us, May 13, a few mulberries from a variety so much superior to any he has seen, that he is disposed to try it. He has the Downing's Everbearing, but those who taste the new kind have no wish to eat the other. The tree is four years old from the cutting. The berries had begun to ferment before reaching us. They were nearly two inches long, and about half an inch in diameter—long and round, with small, crowded drupes of a reddish color.

THE element of hope is a necessary part of all successful agriculture. Unhappy indeed is the farmer's lot who never expects to do better farming and sees no possible prospect of improvement before him. Hope directs every farm improvement. We grade up our stock, try new grasses or fruits, buy improved implements and study new methods because we hope, through their help, to make life broader and better. The times are close and many farmers are pinched as they have not been in years, but let us not think of giving up. Let us rather hope for the better times that surely must come again, and in the meanwhile study to cut off every habit or method that stands in the way of true economy. If we can do this and hold to the good resolutions when the times get better again, we may live to count the "hard times" as a blessing.

Farm Economy.

A FEW THOUGHTS ON THE SIGNS OF THE TIMES.

Labor agitation and agriculture; combination in other industries; disadvantages of the farmer as a buyer and seller; what must be the end? Need of co-operation.

THE agitation now pervading all classes and industries, looking to a decreased number of working hours and an increased compensation for labor; the combinations and organizations of manufacturers, merchants, and tradesmen generally for the purpose of advancing, or at least upholding, present prices of manufactured products, demonstrate more clearly than any series of events of recent years the unfortunate and defenceless situation of the farmer. The workingman, by organized effort, can in a measure regulate and even dictate the price he shall receive for his labor. The manufacturer, by combination with manufacturers of similar products, can and does regulate the price he shall receive for his manufactures. The merchant, by similar means, can set an approximate price for the goods which are displayed on his shelves and counters. But our farmers, the bone and sinew of our country, the hardest-working, most industrious, careful, and reliable class of men our body politic contains, are by the very nature of their calling placed at a tremendous disadvantage.

As buyers, the prices of all necessaries, luxuries, and commodities are arbitrarily set for them, and they are powerless to regulate the prices of the goods which they stand ready with the money in their hands to buy. But as sellers they find themselves placed at even a greater disadvantage. Each one finds himself the competitor of the others, without the slightest chance for combination or original effort. Each is used by the wily buyer as a lever to reduce the price of his neighbor's produce, and fettered as he knows himself to be by his circumstances and his calling, the farmer victim gives up the hopeless attempt to obtain a fair remuneration for his toil and labor, and meekly accepts whatever price the buyer may see fit to offer him.

The signs of the times show danger ahead for our farmers. For several years prices of agricultural products have gone steadily downward, while the wages of the laboring classes are steadily advancing, and the prices of the many necessaries the farmer must purchase are gradually increasing. The prices of what he produces are steadily decreasing, while the prices of all that he consumes are advancing. Where must such a state of things inevitably lead? He sees his candle burning at both ends, yet is helpless to prevent it. He sees his daily income gradually growing less and less and his outgo growing more and more; can there be but one result to this state of affairs? Is not bankruptcy the only termination of such a situation?

Then, where lies the remedy? Who can solve the problem? Its solution I leave to older and wiser heads than mine; my object is only to sound a note of warning as to whither we, the farmers of America, are drifting, and to point out our helpless, and I may add, almost hopeless situation. It is true the persons now engaged in agricultural pursuits in the United States number over eight millions, a number nearly twice as great as that of those engaged in manufactures and mercantile pursuits. It is true that the capital invested in farms, buildings, stock, and improvements is also twice as large as the combined investments of the manufacturing and mercantile industries of our country. Surely, then, with such a vast power in their hands, the farmers should and could obtain a more just recognition of their rights and privileges than they now have, and will have but themselves to blame if they are not accorded a more potent influence in the management of the financial and political interests of our country. How to attain that influence, how to secure the legitimate fruits of their capital, energy, and industry, that is the problem we ask to be solved.

Does the answer lie in more thorough co-operation—co-operation in buying and co-operation in selling? Should we stand shoulder to shoulder, and by organized, systematic co-operation "strike" for that position in the world of business and industry to which we are entitled. We must either rise or fall. We cannot stand still. We have been, and now are daily falling behind in the march of industrial progress. Shall it continue? Shall we, the farmers of America, stand idly by, and see the brave old ship of Agriculture drift swiftly down upon the reefs of bankruptcy? That is the question of vital importance to each one of us to-day, and if we look for the answer it will be found in agitation. Let us first agitate, and then as the only logical sequence we must co-operate, and in co-operation only lies the future safety of the American farmer. W. E. S.

Rensselaer Co., N. Y.

A HANDY MARKER.

MR. REUBEN TOWNSEND, of Cape May Co., N. J., sends us the drawing for the handy implement shown at Fig. 232. It is intended to

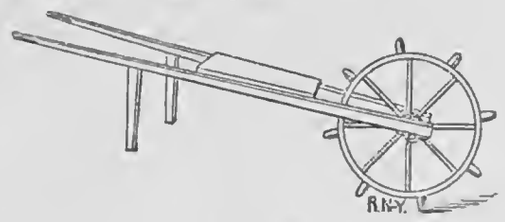

Fig. 232.

mark the rows and the places for planting potatoes, cabbage, beans, sweet corn, etc. The ground is prepared in the usual way and smoothed with the harrow and drag. The marker is then wheeled over the rows. The indentations made for the seed are all the same depth, and the same distance apart. The frame of the implement is made very similar to a wheel-barrow. The wheel is of any convenient size, say, two-feet in diameter. The felloe of the wheel is punctured with holes as near together as the closest plants will be planted. The markers can be inserted in any of these holes, so as to give any desired distance between hills. These markers are made of wood with the part which enters the wheel made to fit closely into the holes, while the hole-making portion is made egg-shapped, so that the soil will not so readily adhere to it. The depth of the drills is regulated by a bag filled or partly filled with sand or stones, the weight to be regulated to suit the depth of trench required.

CORN MARKER.

HENRY C. MARVIN has used a corn planter like that shown at Fig. 233 for two seasons, and says it works well. The head is made of 4x4-inch scantling. It is jointed so that when

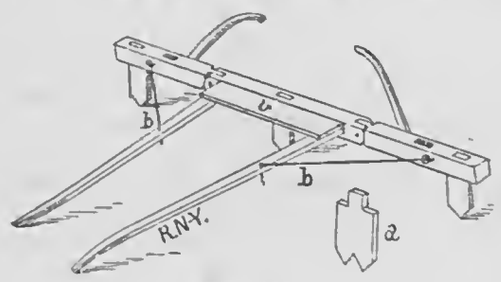

Fig. 233.

used on uneven ground all the teeth will touch at the same time. Two mortices are made at the ends of the head for outside teeth; one being three feet from the center tooth, for marking potatoes, and the other four feet for marking corn. Two sets of teeth are used, those in the frame being for general use, and that shown at *a* when corn is to be planted with a hand planter. This double tooth leaves a little ridge of mellow soil, and the corn is covered much better. The iron bars *b b* are three-eighths of inch in diameter, fastened at one end to the head of the marker by a staple; the other end is hooked into a hole in the thrills. This rod is to prevent the head from being split at the joint by the end tooth. The teeth and thills are made of inch-and-one-half plank. The handles from an old plow or cultivator will answer.

Various.

CATALOGUES, ETC., RECEIVED.

PUMP AND HAYING TOOL WORKS.—Catalogue from F. E. Myers & Bro., Ashland, Ohio.—An elegant, neatly printed statement of the superior points claimed for the tools manufactured at this establishment. F. E. Myers & Bro., by purchase from the Ashland Pump Co., become sole owners of all patents, machinery etc., heretofore used in the construction of the celebrated Ashland pump. A number of new patents and improvements in pumps and haying tools have been introduced, the aim being to make such machines second to none. The peculiar features of the Myer's Pump are the patent glass valve-seat and the expansive plunger. These have proved very successful. They are fully illustrated and explained in the catalogue. Anti-freezing deep well pumps, drill well, force and lift pumps of the best make are manufactured, as well as pipe and hose fittings and tools. The list of haying tools includes double lock carriers, wooden and steel tracks and nickel plate carriers, pulleys, sling attachments, grapple and harpoon hay forks and numberless smaller tools.

BRINSER GRAIN CRADLE.—Circular from E. C. Brinser, Middletown, Pa.—The age of self-binders and reapers is not by any means complete. There are thousands of good farmers who still find good use for a grain cradle. Even on the great grain farms of the West there are many places where a man can make good wages with a cradle. All farmers will be pleased with the Brinser cradle. Thousands are in use in many States. The best white ash is used for wood work. The fingers are sawed to the proper shape, and are thus better than the steam-bent fingers. Each finger is well braced with a wire brace having good thumb nuts inside and outside the snath to regulate at will. Send for the circular and read what others say.

PORTABLE POULTRY FENCE.—Circular from Sam'l H. Roberts, 12 Lispenard St., New York. A new and apparently happy idea. The fence is a combination of twine netting and wire. It may be run 75 feet between trees or posts. It can be used alone or in connection with other fences. It is so easily put up and removed that the poultry runs can be readily shifted or changed in size or form. It will be particularly valuable for use in orchards or in grain stubble. The price is given at six cents per running foot (four feet high) with a discount when large quantities are taken.

HOME PHOTOGRAPHY.—Pamphlet from Franklin Putnam, 485 Canal St., New York. The desire for having a "picture taken" is universal. There are dozens of objects about the home that might well be preserved upon paper. Such pictures would be doubly attractive if the work could be done at home. It is the design of the above-mentioned house to send out complete outfits of photographic goods, with such complete instructions that amateurs can readily learn to do fair work. The outfits are furnished at $13 or $20. We have seen samples of work done by amateurs with these outfits. It is certainly very fair.

Thomas Hood is the name given by a more than usually profane scoundrel who is advertising "green goods" for sale in this city. This is the old "sawdust swindle," which has been exposed over and over again in this department and in other papers all over the country. It was thought by some that the murder of Tom Davis, one of the principal rascals engaged in the "business" here, some months ago, by a Texas desperado, while negotiating for the "goods" in one of his dens, would have a deterring effect for some time at any rate; but, bless you! the crooks in that line have been unusually busy ever since, and unusually successful in swindling dishonest fools, who wished to get from them counterfeit money to be passed off as genuine among their friends and neighbors. The business is always done by sending circulars through the mails. The person addressed is assured that his name was obtained through a friend passing through the place. This is always false. There are men here who make it their sole business to collect lists of names from directories, advertisements in various papers, lists of newspaper subscribers when they can get them, and a multitude of other sources, and these they sell for so much per 1,000 to any body. Many of them are classified, so that people in a certain line of business may appeal to those most likely to become patrons. Thus people with chronic or imaginary diseases are grouped together for the benefit of advertisers of medical nostrums; those who have been duped by one swindle are bunched for the benefit of other swindlers; for the gudgeon who bites at one bait, is pretty sure to jump at another, however severely he may have been damaged by the first. The names of those who receive letters and circulars from strangers are generally obtained by the latter from these "dealers in names." Murdered Tom Davis was constantly sending out circulars, and had 18 different addresses in this city, a different name being given for each. On asking for Hood at the address given in his circular (a mean little cigar store) the Eye-opener was informed that no such person was known there; but the rascal got his mail there, nevertheless. In no case is counterfeit money sold; and those who are mean, dishonest and contemptible enough to try to get it, are pretty certain to be swindled.

In the RURAL of April 24th, we advised our readers "to have nothing to do with the 'new seed oats' offered by a certain seed company of Western New York. The plan followed by the company is precisely that by which hundreds of farmers have been heavily swindled by other companies offering Bohemian and Hulles Oats, Seneca Chief and Red Line Wheat, etc. Ten or $15 a bushel are charged for the seed, and a contract is made to buy back a certain proportion of the product (usually twice the amount of seed purchased) at the same price. Many other companies, which have swindled their patrons, have had the names of quite respectible people on the list of officers. With regard to this "seed company," a good friend of the R. N-Y, writes us: "I fear a late Eye-Opener did Mr. A and his seed company a bad turn. Mr. A is an honest, conscientious man, and the company are honorable, and I am quite sure they will do just what they offer. I think the oat is a good one, and though the method chosen to put it out may look a little 'wild catty,' I have no doubt but it is legitimate."

Quite a number of papers, some of them really "high-toned," are advertising ORANGE GROVE TRACT OF 40 ACRES FREE, in Florida. The offer is made, it is claimed, "for the purpose of organizing a local colony" in the recipient's neighborhood; and he, of course, is expected to work in getting up such a colony and getting them to pay hard cash for land on the sandy dunes of the Florida coast. It is in repayment for such work that the "tract" would be given, and, therefore, it would not be "free." We were offered an interest in the same place for publishing such an advertisement, but knowing the thing to be a wild-cat scheme of a parcel of land speculators, we declined to have anything to do with it on any condition. The place has been exposed already here among the Florida land frauds.

TO SEVERAL INQUIRERS.—Yes, there is such an "institution" as the "Civiale Remedial Agency" in this city. It will, most likely, send what it is ordered; but its claims on behalf of its remedies are greatly exaggerated; and as effective a "cure" as the best of them could be got for less than half the price at the nearest drug store.... We cannot recommend Heine & Co., of this city, who advertise to send, for $1, instructions by which a child can learn in a few minutes how to play the piano or organ. Only a child, and a very foolish one, would send money to such an obvious, barefaced humbug. By the way, one of the latest swindling schemes is that of the philanthropic sharpers who are anxious to put an organ in every farmer's parlor. They will send a specimen free as an advertisement in the neighborhood; but, "as a proof of good faith," they require a pittance of $4 to pay freight. Two or three weeks after the "fool and his money have parted," a 25-cent mouth organ arrives for the parlo .....

Literary.

BOOKS RECEIVED.

SIGNS AND SEASONS. By John Burroughs. Published by Houghton, Mifflin & Co., Boston, Mass. Price, $1.50.

John Burroughs is one of the pleasantest writers that we know of. His style is exactly suited to his theme. He is an enthusiastic observer and student of nature, and sees thousands of wonderful little things in the woods and fields which we, with our uncultivated eyes, would pass unnoticed. The book is made up of short essays which have already appeared in the magazines. The "Tragedies of the Nests" and "Bird Enemies" will be read with peculiar interest at this time, when such strenuous efforts are being made to protect our little feathered friends.

LEND A HAND. A new monthly magazine. Published at 3 Hamilton Place, Boston, Mass.

This magazine occupies a unique place in literature. It is a journal of organized charity, having for its main object the fostering of worthy charitable institutions and the discussion of the best methods of reaching and helping the unfortunate. In its teachings and spirit it is designed to be but an elaboration of that best of all English mottoes—"Look up and not down; look out and not in; look forward and not back, and lend a hand." The magazine is edited by Rev. E. E. Hale, who is assisted by so able a staff of contributors that it goes without saying that the literary features of the new publication are admirable. We know of no magazine more worthy of the support of benevolent persons than Lend A Hand.

FORGOTTEN MEANINGS. By Alfred Waites. Published by Lee & Shepard, Boston, Mass. Price, 50 cents.

This little book is rightly called "An Hour With a Dictionary." It is as though some student of words had invited us to glance through the dictionary with him, and listen to his explanation of the real meaning and derivation of such words as we may chance upon. We do not think however, that an ordinary person would select many of the words given in the book for explanation. They appear rather to be the selections of one who wished to present the curious or strange, yet any English scholar will find much to interest and instruct him in

this little volume. There is a peculiarity about the use words that is almost unexplainable. We are often at a loss for the "right word" in writing or speaking, yet the dullest of us will never fail to appreciate, in an instant, nice distinctions in the use of words by others.

SAINT GREGORY'S GUEST AND RECENT POEMS. By John G. Whittier. Published by Houghton, Mifflin & Co., Boston, Mass. Price, $1.00.

We doubt if any American can ever give a really just criticism of Whittier's poetry. There is so much of reverence mingled with any inclination to find flaws that the review always flows into an expression of admiration. Whittier is peculiarly the American poet. There is an earnest strength about his poetry that lodges it firmly in every home. The present volume has none of the fierce vigor which characterized his ringing poetry of 25 years ago: but there is a gentleness and tenderness about it which is quite as irresistable. Perhaps we cannot say that "The Light That is Felt" is the best of all Whittier's poems, but to our mind it is the equal of any. Nothing could appeal more powerfully to New England's wandering children than "The Homestead."

"O wanderers from ancestral soil,
Leave noisome mill and chaffing store;
Gird up your loins for sturdier toil
And build the home once more.

What matter if the gains are small
That life's essential wants supply?
Your homestead's title gives you all
That idle wealth can buy.

Your own sole masters, freedom-willed,
With none to bid you go or stay;
Till the old fields your fathers tilled,
As manly men as they.

With skill that spares your toiling hands,
And chemic aid that science brings,
Reclaim the waste and outworn lands
And reign thereon as kings!"

For Women.

CONDUCTED BY MISS RAY CLARK.

AN OLD PICTURE.

WHEN I was a child, a quaint old-fashioned copy of Bunyan's "Pilgrim's Progress" held within its leathern covers for me a mine of never-failing richness and delight. And before I was six-years old, I would sit for hours and even days in some quiet corner, reading and re-reading its finely printed pages and studying its strangely suggestive pictures, until the characters therein portrayed seemed to my imaginative mind as real as the people whom I met in my daily life. One picture in particular had a wonderful fascination for me. It was that of the man with the muck rake with bent body and sweat dripping from his face, eagerly scraping together the straws and rubbish with which the ground was strewn, while above him hovered a bright-winged angel holding out for his acceptance a jeweled crown, the existence of which his constant downward gaze prevented him from discovering. Oh! how I longed to take that man's head in my two hands and direct his eyes from the worthless heap he was accumulating to the treasure above him which was within his reach. And often my mind reverts to that picture, as I see people so eager in the pursuit of perishable pleasures and possessions, seemingly unconscious of, or not caring for, the inestimable riches of knowledge, human affection and forbearance, and those treasures which are imperishable.

Standing on the porch the other morning, the clear air wafted to my ear the harsh, angry tones of a father's voice swearing at his two little boys for some childish carelessness, and as I hastened into the house to avoid hearing the horrible stream of abuse and profanity which poured from that father's lips, that old picture seemed to spread out on the wall before me. Here is a man, who, at the thought of the expense of a dollar or two, for repairing the damage done, allows his passions full sway, and gives such an exhibition of his temper before those whose natural right it is to look up to and revere him, as must effectually check the growth of either love or respect. Unkindness, quarreling, and cruelty to animals from others are passed by with no comment. He has no comment. He has no time to attend to such matters. But a torn garment, a broken tool, or a forgotten duty, will almost invariably call forth a torrent of profunity. Yet this man is called a good citizen. His farm is well managed and productive, his buildings neat and orderly, and no doubt he loves his boys, but does not realize the great importance of controling his temper for their sakes. But "those who sow the wind shall reap the whirlwind," and those little boys who now stand white and trembling under their father's wrath will soon begin to say, "I don't care if father does scold." In a few years they will begin to swear back, and there will be two to one. And if in the future, after some furious altercation, the boys shall in the heat of anger leave their home and their parents, and rush with swift feet on the downward path to destruction, would their father have reason to wonder or to blame? Perchance his eyes would then be opened to see the folly of his own conduct. When his idolized farm shall have run down for want of interested help in its cultivation, when he sits alone in his silent home and unconsciously listens for the free, quick step of youthful feet, then he will realize that the treasures he has gathered are a worthless burden, and that priceless jewels have, by his own foolish conduct and neglect, been lost for time and eternity.

I spent a few days in the home of an old friend and schoolmate. Order and cleanliness were observed in the minutest detail of her housekeeping. The house was commodious and well arranged. The walls were daintily hung and adorned with handsome pictures. The carpets were bright and spotless, and the furniture free from scratch or stain. The table was perfect in its appointments and the welcome unmistakable; yet the visit, which had been so long and pleasantly anticipated, was a sad disappointment. I could hardly recognize in the fretful, impatient, worried mistress of this home the merry, good-natured school-girl of former days. The rooms, in spite of their cheerful furnishings, seemed dreary. Not a plant or bird tempered the glaring brightness of her polished windows. A book or paper was not for a moment tolerated in a careless position on stand or table, and her little girls were allowed no playthings, lest they should "litter the house." My heart ached for the little things who sat still and knit or pieced blocks all day long, and were not even allowed to vary the monotony of their tasks by wiping the dishes, as they begged to do, as their mother was so very particular she must do everything herself.

I heard no little confidences or playful words between mother and children, and when night came they were hurried off to bed with never a kiss or prayer. Though living within the sound of three church bells, this mother never attended Divine worship or her children the Sabbath-school, because she said they "could not afford to dress in style, and they should not go to be made fun of." Her house was her God, and for its decoration she spent every dollar she could get; and to keep it with exquisite nicety, she eschewed real comfort and innocent enjoyment. And in this house the old picture of the man with the muck rake loomed up and spread out on the walls and hid from my view the bright pictures and pretty ornaments hanging there.

I know a young lady who has a passion for fancy work. Every new craze that comes along is rapturously embraced by her, and her home is literally crowded with articles of every description and material. Her money and her time are spent in the manufacture of the things "which perish in the using," while the riches of science, of music, and of classic lore are within her easy reach. In the pursuit of her almost useless enjoyments she sacrifices intellect, health, and eyesight, while the mother performs the arduous household duties alone and unaided. And as I stand and look around upon the ornaments of which she is so proud, I cannot help again seeing the man with the muck rake scraping the ground while above him bends the bright angel holding out the jeweled crown. LIZZIE CLARE.

REAL LIFE.

I THINK it is George Eliot who says: "The real heroines of this life are those who do every day duties uncomplainingly." This is well, but I do not believe that there is a woman exists having a soul to comprehend larger and more beautiful things than such as compose the common every day duties, who does not grow weary, very weary, at times. Then the present needs and cares come kindly to her rescue. Dear ones need her so much, she must be ready to satisfy their longings with love, as well as to have ready the things requisite for their physical needs.

Right here let me say to husbands, brothers, and sons all over this land, I pray you, do not fail of returning this great love by constantly uttering words of love and appreciation, followed by the actions which naturally arise from this condition of mind.

Do not, through thoughtlessness, make her feel that:

"You think, perhaps, I should be all content
To know so well the loving place I hold
Within your life, and so you do not dream
How much I long to hear the story told.
I weary, sometimes, of the rugged way;
But should you say, 'through thee my life is sweet,'
The dreariest desert that our path could cross
Would suddenly grow green beneath my feet."

Think of the courting days! Tenfold sweeter now would be your caresses amidst the hard work and care she so willingly accepted, than they were when young, bright and beloved in the home of her childhood she gave up all for a lifetime to be passed by your side.

Speak never slightingly of those she loved in her girlhood's home—the parents now lying forever lost to her mortal view, the brother, the sister; to her they were perfect, though you, perhaps, may have distinctly seen their defects. But never mind, do not destroy her tender memories of them, for love for her own will make her a better wife and mother; the truest friend and charitable neighbor. She may have many faults, this wife or mother, but so have we all—you among the rest. Try to give her the love which is her life, and which in herself is deathless as the stars. The only thing divine, perhaps, which earth has yet known or can bestow, is love. ETTA.

THE TWO SCHOOLMATES.

LAURA PRESTON left the Young Ladies Seminary wearing the highest honors, but her success won little sympathy from "the dear 500 friends" which every school girl is supposed to possess. She received the gold medal with a ball-room grace and sweep of her rustling gown, and a covert smile passed around the circle of those who knew her best. When all was over the congratulations were few and formal, while all flocked around their darling Dulcie Russell, who had only won a book of poems, yet they could not do enough to show their love and pleasure at her success. Dulcie's dress was the simplest white, with a soft ruching at the throat and wrists, and no ornaments but half blown roses, which day scholars brought in profusion. Her arms could hardly hold the wealth of bouquets and flower baskets which the ushers handed up, at the close of her essay. And they were more true love offerings than is common on such occasions. A girl that is truly lovable, will hardly fail of winning love.

"If anyone wishes to quarrel with Dulcie, she will have to do it all herself" the girls used to say.

In all the years she spent at school, I think no one could remember a single unkind speech of hers, or one careless word that could wound another's feelings. But oh, such a comforter as she could be for lonesome homesick girls, or girls whose sensitive spirits had been wounded by unkindness.

Dulcie seemed to be everything that Laura was not. Laura's sharp, sarcastic tongue alienated all who were afflicted by it. She delighted in retailing ill news. If she knew some hateful thing about another she took a good opportunity of alluding to it in the presence of several others, and then watching keenly how her victim "took it." No pleasure seemed so great as uttering spiteful words. It was much as if one made it the business of life to go about and gather burs from burdock weeds and stick them on people as they passed by. It would seem a strange business to follow, but it would be innocent amusement compared with stinging the spirit with words that are like nettles. Such a disposition brings on old age with its crow-feet and shrill tones very early. While Dulcie will seem young and light-hearted at seventy. Her admirers will flock around her down to old age; but Laura, if she lives to that period, will be sourly, snapping at the ingratitude and want of attention shown by the youth of the day, her own immediate friends in particular. Wealth only will secure for her toleration, though it can never win for her affection. OLIVE.

Domestic Economy

CONDUCTED BY MRS. AGNES E. M. CARMAN.

HOUSEKEEPING IN CALIFORNIA.—VII.

MARY WAGER-FISHER.

UNLESS one keeps up a brisk fire all the day long in the kitchen, an oil stove is not only a great convenience, but a great economy. Indeed, in all of our own small housekeeping on this coast, we find it indispensable, and our last investment cost but a dollar and a half, and is altogether satisfactory. I have the bad habit of "cooking all over the house"—toasting bread over the parlor grate—a capital place—heating milk on the dining-room stove, and cooking a steak and boiling coffee on the oil furnace, as the fire in the kitchen usually expires soon after breakfast.

Living for so long a time, too, in towns where the water is brought into the house and is to be had by the turning of a faucet, I have come to the conclusion that for any woman to be obliged to pump all the water required for the house and kitchen is utterly atrocious, and that in building a house and establishing a home it is just as essential to provide means for supplying the menage with a flow of water, by some one of the powers that be, as it is to have mowing machines, sewing machines (a great deal more so, indeed!), horse pitch-forks and horses and carts. Of course, there are a great many things in the world of which we have no need, partly because we haven't been accustomed to them; and so a vast army of women do not "miss" running water and a good drain sink, because all their lives they have been used to a pump in a well, a water pail and a dipper. But the enormous tax on strength goes on—the body-wrenching business of operating a pump and lifting the filled water bucket. Much of the difficulty could be obviated, where dwellings are high and there is expanse of roof to fill eaves, if a tank were constructed sufficiently high, fed by the eaves and led into the kitchen by a pipe. The rain tank is usually put below the ground and called a cistern, and the water has to be pumped. The elevated tank would be beset with some difficulties—particularly in Winter where blizzards prevail—but I do not see, with intelligent management, why it could not be made a very efficient and satisfactory adjunct of the kitchen. If any woman has such an arrangement she might serve the cause of woman-saving by telling about it in the RURAL. It sometimes happens that farm houses are so situated that water could be brought from an adjacent hill, and, of course, in the good time coming, electrical power will be so well understood and so cheap, that everything will be done for us by the touch of a spring, and windmills and steam engines that now vex our souls by their "cranks" will vex us no more; and if we all were to live a thousand years, patience to wait would be no great virtue.

One day a lady said to me, "How do you eat your tomales?" (pronounced to-mal-es.) I stared at her in ignorance and replied "I don't eat them; what are they?" "A Mexican dish—three for 25 cents. Shall I send the man around to you?" So it came about that one evening, about seven o'clock, there was a ring at the door, and there appeared a handsome black-eyed young man, with a wooden pail in his hand, which contained coarse brown wrapping paper in a confused condition. I heard him say "Tomales!" and I sang out from the parlor, where I was reading, "Yes! this is the place. Come in here!" Then he began to fumble around in the bucket, and presently fished out from the sea of paper, three packages tied up in corn husks—still warm, like a cooled-off poultice. A volley of questions succeeded, and he informed me that the tomales were made in San Francisco, by Mexican women, and were distributed, piping hot, both in that city and Oakland. They could be reheated best by steaming them. I quickly cut from one the husk strings, one at each end, and one in the middle. The "thing" was about six inches long and as large around as an unhusked ear of corn—and I then took off a husk, a very wide one I thought, and it measured 11 inches in width. "The husks are all parboiled" explained the man. Then on the next husk, I discovered something that looked like a husk also, and I said, "this is husk too, and goes into the fire." "No, madame, this is the beginning of the tomale"—it was spread on the husk like a plaster. "And what is it made of?" "Of lard and corn meal; cooked together"—so I proceeded taking off husk after husk with its layer of lard and meal, meantime I asked what was inside? "Oh, inside there are olives and raisins and Chili pepper and chicken mice." "Mice!" "Mince do you call it? Mince of chicken—sometimes of pork. This is chicken!" Finally the inside wad was reached—minced chicken meat mixed with the ingredients he had named—and the mercy only knows what else. I began at once to eat, the "laddie" looking on and wanting some—but refused because it was too near his bed hour—and I had strong suspicions that it was a mixture to give a hyena indigestion. Anaximander declined with thanks—so that two tomales were laid away to be steamed hot for breakfast. Upon the whole I rather liked it—or thought I might with practice become fond of tomale. The young man said he was a Spaniard from Spain—not a Mexican—and told us how many chickens were daily used at the tomale factory; that the French and Germans did not care for them, and that Mexicans and Americans formed the chief patrons. He stood by, until I had swallowed the last of the tomale, and hoped that we would let him know if we wanted him to bring any more. The Chili pepper made me very thirsty, and I went to sleep to dream dreams of being a participant in five or six enviously ingenious murders, and of being murdered myself, finally, after which I awoke. I concluded, that so far as I was concerned, the tomale man need not call again.

The steamed tomales for breakfast were nibbled at gingerly by the uninitiated members of the family. The "laddie" liked the raisins and the chicken mince, while Anaximander thought he might eat them sooner than starve! As a mechanical device, the tomale is a success—the oddity of the corn husks, and the successive layers encircling the middle roll. The mush of lard and meal spread between the husks, is compressed into a wafer-like cake, and bears the print of the husk. Beyond cheapness and convenience, and its peculiar character as a wrapper I do not know that

anything is gained by its use. But probably a Mexican detects a certain husky flavor that the unenthusiastic do not discover.

WHAT TO WEAR.

Black stockings for children are still fashionable.

Plain, round dress waists of wash goods are very pretty and dressy cut out back and front, either square or V-shape,and filled in with embroidery.

A waist with a yoke back is not becoming to a round-shouldered woman or child.

Ribbon trimmings are very popular for summer dresses,

We regret that Dame Fashion again favors the wearing of jewelry upon ordinary occasions.

A CHAPTER ON SWEETS.

MANY of the best judges esteem the strawberry the most delicious, as well as the most healthful and nutritious of the whole family of fruits. I have compounded with great care the reliable recipes given below:

PRESERVED STRAWBERRIES.

Weigh your fruit, and for every pound of berries allow three-quarters of a pound of sugar. Use a granite or porcelain sauce-pan, and for every four pounds of sugar add a quart of water and boil until the sirup thickens to the consistency of stout molasses. The universal usage of a pound for a pound makes the preserves needlessly sweet, and with the lesser quantity the native flavor of the berry is more pronounced. With a large spoon lift and pour the sirup over the berries until they are thoroughly saturated, but do it carefully so as not to bruise the berries. Place over the fire until the sirup begins to boil, and at the exact stage of the boiliug point remove the scum, pour all into an earthern pan and set away till next day. The next day place them again on the fire, and as soon as the boiling point is again reached set them aside once more for several hours. Again place them on the fire until they are very hot, but do not let them boil. Lift out the berries with a skimmer and lay them on a large, flat dish. Boil the sirup 15 minutes, make all hot once more and seal up in glass jars or tumblers.

STRAWBERRY JAM.

Weigh eight pounds of berries and rub and press them through a hair sieve; add sugar in the same proportion as that given above, place over the fire and with a wooden spatula stir constantly for half an hour after it begins to boil. It is now ready to seal up. If you can make this late in the season and can add to this quantity a pint of red currant juice, the flavor will be exquisite. In this case you must boil the juice with the sugar for half an hour, then add the berries and boil for half an hour longer.

TOMATO FIGS.

It is hard to find a more beautiful preserve or one more delicious than the above. Take eight pounds of the small, yellow tomatoes, pour boiling water over them to take the skins off. It is better to plunge them a few at a time into boiling water and take them out and peel them quickly, so that they may not become softened. Weigh out six pounds of sugar and put both in layers in a large earthern dish, to stand over-night. In the morning drain off the sirup and boil it until no more scum rises. Put in the tomatoes with the juice of four lemons and four ounces of ginger root, and boil slowly for half an hour. Take out the tomatoes with a perforated skimmer; let them remain in the sun for several hours to harden; boil the sirup down until it thickens, return the tomatoes until they get hot through and seal up.

CANDIED FRUITS.

These are so easily made at home that there is no necessity of paying a dollar a pound for them. Make a sirup of a pound of sugar and a cupful of water and boil until it thickens, put in any kind of fruit and boil until it is tender. Let them remain two days in the sirup, take out, drain and sprinkle sugar over each piece separately. Dry slowly in the sun or oven with a very moderate heat.

Other recipes will be given later in the season. PALMETTO.

EXTRACT FROM A PRIVATE LETTER.

HOPING you care for it, I mail you a bit of long moss—Tillandsia usneoides—from the grand old live oak at Hibernia, Florida, which spreads its shade over a diameter of 140 feet, one branch extending horizontally, 75 feet; Each branch looks like the trunk of an ordinary tree, and this giant is so well proportioned, that one does not realize its size unless standing under it.

Florida this Winter with her poor sick orange trees, as bare of leaves as our oaks, had a desolate look, but "Nature, the dear old nurse," knew nothing less than the rainy days she sent in late Winter and early Spring would bring her beauty trees safely through. When I left in the middle of April, in Southern Florida, I believe they were all blossoming nicely, but farther north, there were plenty of leaves growing slowly, and but few blossoms, many of which were falling off—doubtless, doing a kindness to the trees. The noble St. John, one-and-three-quarter mile wide at Hibernia, was as beautiful as ever, while the quiet, home-like air and contentment of guests, some of whom used to go there "befo' the wah" made the place a truly pleasant spot in which to seek health and rest. MRS. M. G. W.

SPRING GREENS: COWSLIPS AND DANDELIONS.

AFTER they are gathered, pick them over carefully so that no grass or decayed leaves will remain among them, then wash carefully in two or three waters. Put them over the fire and let them come to a boil, and then drain them in a colander. Cover them with fresh water, return to the fire and boil an hour. Slices of boiled pork may be boiled with them to flavor them if desired; or when done, they may be drained and then seasoned with salt and butter, and eaten with vinegar. Horse-radish leaves in their season may be prepared in the same way, also rough-leaved mustard. MRS. B. C. D.

A FOURTEEN-YEAR-OLD GIRL'S EXPERIENCE IN BUTTER-MAKING.

MOTHER and I have been making butter for four years at 25 cents a pound for regular customers, and have never had any fault found, except that we could not furnish enough to suit them during some parts of the year. We have a milk-house one rod from the house, and whitewash it inside every Spring. We keep the milk, churn, cream and butter in it, and use the deep-setting cans in Summer and pans in the house in Winter, churning with a barrel churn the year around. We are very particular when weighing the butter, and allow one ounce of salt to each pound of butter. The cream can is kept behind the sitting-room stove in the Winter. Salt is added once, and it is stirred thoroughly every day. Have the temperature of the cream 60 degrees in Summer and 62 degrees in Winter. We think the butter should not come in less time than a half hour—it is then hard and yellow. We salt and work the butter just enough to work in the salt, and put it away till the next day, when it is made into rolls and set away until market day. We never think of washing it, and when it is in rolls it weighs just the same as when taken out of the churn. BECKY E.

KEROSENE IN WASHING.

A CORRESPONDENT asks if any of our readers have used kerosene in washing. We have never heard of it being used for cleansing purposes, but we have known of a few drops being added to boiled starch to prevent it sticking. This may be what our correspondent refers to.

STRAWBERRY ICE-CREAM.

Make a boiled custard of one quart of milk, one teaspoonful of corn starch, two eggs, one cup of sugar. Press three pints of strawberries, or as many more as you please, through a sieve. Make the juice very sweet, add it with one quart of cream, one cup of sugar, the whites of two eggs, well whipped, to the custard, just as you put it into the freezer. This makes one gallon of cream.

WHITE CAKE.

Whites of six eggs, scant three-fourths of a cup of butter, one-and-one-fourth cup of pulverized sugar, two cups of flour, juice of half a lemon, one-fourth of a teaspoonful soda. Mix soda with flour. Beat the butter to a light cream, and add the flour to it, stirring it in gradually with the fingers until a smooth paste. Beat the whites to a stiff froth, and mix with them the sugar; now stir the eggs and sugar gradually into the flour and butter, adding also the lemon juice. Bake in a moderate oven. Frost while hot with one white of egg and a heaping teacupful of pulverized sugar. Beat egg till slightly foaming and add sugar. This cake must be put together exactly as directed.

A friend molds her veal croquettes into the form of pears, as a change from the old way. M.

Miscellaneous Advertising.

When Baby was sick, we gave her Castoria,
When she was a Child, she cried for Castoria,
When she became Miss, she clung to Castoria,
When she had Children, she gave them Castoria.

Miscellaneous Advertising.

Debility

Languor, and Loss of Appetite, are cured by the use of Ayer's Sarsaparilla. It removes that terrible sense of *Constant Weariness*, from which so many suffer, gives tone and vigor to the stomach, and restores health and strength more surely and speedily than any other medicine.

Three years ago I suffered from Debility and Loss of Appetite, the result of Liver Disease. After having tried various remedies, and consulted several physicians, without benefit, I was induced to take Ayer's Sarsaparilla. The first bottle produced a marked change, and the second and third accomplished so much that I felt like a new man. I have, since that time, taken about one bottle every year, and had no recurrence of the trouble.—William E. Way, East Lempster, N. H.

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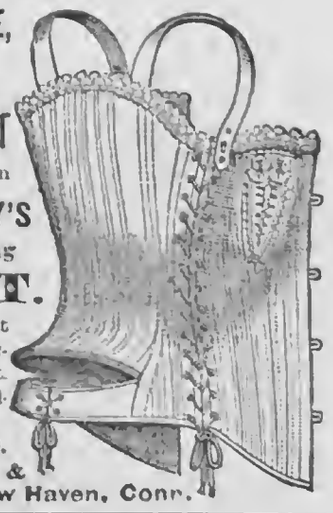

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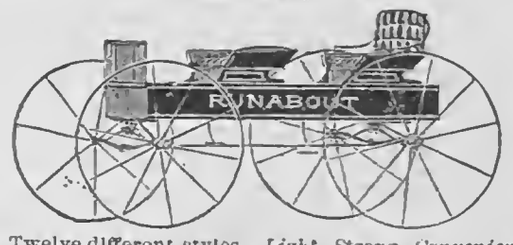

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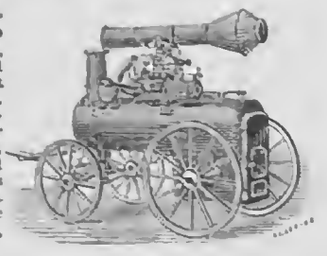

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50 CARDS, Hidden Name, etc. 1 pretty Ring, out fit and present, all 10c. 6 lots 50c. O. A. Brainard, Higganum, Ct.

News of the Week.

HOME NEWS.

SATURDAY, May 22, 1886.

THERE are now 77 Mormons in the penitentiary for polygamy and "unlawful cohabitation" within the last 18 months. Of these 35 are English, 25 American, 10 Scotch, 2 Swedish, 2 Irish and 1 each from Norway, Denmark and South Wales.....A Martinsville (Va.) affray, in which nine "leading citizens" were wounded, but none fatally, all on account of the publication of scurrilous posters, is a melancholy illustration of the decline of Southern marksmanship..... Marshalltown, Ia., has gone crazy with joy for having secured, from 18 jealous rivals, the $100,000 soldiers' home the Legislature has voted to build....."Jachne, the first of the "boodle" aldermen of this city brought to trial, has been convicted of accepting $20,000 as a bribe for voting for Jake Sharp's Broadway car line, and sentenced to nine years and 10 months imprisonment. Public opinion was too strong to allow any judge to fool with justice by letting him out on bail, pending an appeal. Went to Sing-Sing and stripes yesterday morning.....There's doubt at Washington of the passage of the Chinese indemnity bill because "there are no votes in it."..... .....There's a good chance of passing the Morrow bill excluding the Chinamen. Shouldn't we pay for those killed, before shutting out their countrymen?.....The Ohio Legislature has adjourned *sine die*. The Democratic Senators didn't return. Thurman is blamed for advising them to leave the State. A bill was passed redistricting the State for Congressional elections, restoring the boundaries of 1882, which were altered by the Democratic Legislature. The new Dow Liquor Law is the same as the old Scott Law, except that it is free from the objections on which the Supreme Court declared the Scott law unconstitutional. Liquor dealers say they will pay the licences without contest..... The New York Legislature adjourned Thursday. The Senate failed to confirm the nomination of E. A. Durent, Republican grain merchant of Albany, as Railroad Commissioner to succeed John O'Donnell, Democrat..... Governor Hill has signed a bill forbidding the employment of children under 14 in factories; and another providing for local boards of arbitration..South Dakota is mad that Congress has refused to admit it as a State, and Gen. Campbell, the leader, proposes to go ahead and organize a State Government anyhow. Others say this is Jeff Davis's doctrine of State rights. .....A very lively contest between Gen. Gordon and Maj. Bacon for the Governorship of Ga. All minor candidates have dropped out to witness or take part in the fight..... ....The Massachusetts senate has passed by a vote of 23 to 7, a bill raising the tax of telephone companies from $30,000 to $250,000..... The House, Monday, agreed, 196 yeas to 18 nays, to set apart June 3 (and as many subsequent days as may be needed), for consideration of bills relating to labor. This question is assuming vast importance in Congress, and the Committee on Labor, first established in this Congress, is becoming one of the most important in it, membership being eagerly sought by Congressmen as likely to make them "solid" with the labor vote.....By the treaty of 1778 France pledged herself to secure our independence, and we undertook to guarantee her American possessions and to give her special commercial privileges. A good deal of trouble existed between the two countries between 1793 and 1800, and a number of vessels belonging to each were seized by the other, especially by France. In 1800 the United States agreed by treaty to abandon all claims for compensation for them if released from all obligations of the treaty of 1778. Those who had lost by the seizures then claimed compensation from our government on the ground that it had sacrificed the rights of its individual citizens to secure a great national advantage. The matter has been before Congress ever since under the name of "French Spoliation Claims." Floods of talk and volumes of writing about it! Under President Arthur it was referred to the Court of Claims, which last Monday declared that the United States is legally responsible. Original claimants all long ago dead; children of most also. Claims now mostly in the hands of strangers. Lawyers will be the heaviest gainers. Several million dollars involved. A famous case. .....Some talk about starting the Keely motor—nothing but promises from Keely and some profanity from investors .. ..M. De Lesseps wanted the French Government to authorize a lottery for the purpose of raising a vast sum to build the Panama Canal. As so much French money is already in the enterprise, and no government could stand if it authorized further investments, should the undertaking collapse, as predicted by Americans, it appointed an agent, M. Rousseau, to investigate the matter. After close inspection of the works at Panama, he made to his Government, on Thursday, a report. He denies the correctness of the Canal Company's statements respecting its facilities for construction, the time when the canal will be completed and the amount of money still required to accomplish the work. M. Baihaut, the Minister of Public Works, will, therefore, inform M. De Lesseps and his fellow directors that they must reply to M. Rousseau's report, as the Government cannot authorize the proposed issue of lottery bonds until the position of the company is made clear. Our people on the Pacific Coast are deeply interested in this matter.....Prof. Timothy Dwight was unanimously chosen president of Yale College, Thursday.....Col. J. D. Folsom, grandfather of Miss Frances F., died Thursday morning, at Folsomdale, 25 miles from Buffalo, N. Y., after an illness of several years, aged 75. Was thought to be worth from $500,000 to $750,000; "Frankie" will get some.....President Cleveland has bought a $25,000 homestead near Washington. ....The House of Representatives, on Thursday, by a vote of 178 to 80, defeated the Senate amendment to the Post Office Bill, giving $800,000 as a subsidy to American vessels for carrying the mails..... ....Another American fishing vessel has been seized by the Canadians for buying bait. Bills are being rushed through Congress to deny commercial privileges to vessels of all countries, which, like Canada, deny them to our vessels. The treaty of 1818, on which Canadian action is based, says American fishing vessels may enter Canadian ports to buy "wood and water, and nothing else." Americans say this provison has been nullified since, and that American fishers having official permits to trade, can buy anything like other American vessels. The first vessel seized had no such "permit;" the second had. Canadians are angry because the papers of the Mother Country are belittling the "difficulty"—a tempest in a tea cup. American vessels are arming to resist capture; for Canadian bait and ice they will have, as otherwise their season will be ruined, as they can't lose time to go home for supplies. Numerous Canadian fishing vessels are buying seines, bait, ice, etc., in American ports..... The Curtin labor-trouble investigating Committee has returned from the Southwest to Washington—expense of junket, a trifle of about $3,000.....Rosecrans has, after all, been confirmed as Register of the Treasury, so has Mrs. Tompkins as Postmistress at Louisville, and D. T. Houser as Governor of Montana..... ..Bradstreet's reports that though 250,000 men have been on strike in this country at one time or another since April 24, there were at no one time more than 125,000 employés out, and that this number fell to 80,000 between May 12 and May 17, and to about 48,000 by May 20. The heaviest losses by the strike were from delayed or canceled contracts, and the building trades suffered most. The total loss on building contracts in 10 cities is estimated at $20,400,000. These losses have been most thoroughly reported and are represented by most of the figures in the last column of the following table of the losses thus far reported:

	Wages	*Current business.*	*New business stopped.*
New York City	$300,000	$300,000	$2,000,000
Philadelphia	60,000	50,000	5,000,000
Smaller Pa. cities	70,000	50,000	——
Detroit, Mich.	97,000	25,000	850,000
Cincinnati	375,000	300,000	1,000,000
Milwaukee	466,000	200,000	4,000,000
New England cities	257,000	——	6,000,000
St. Louis	75,000	——	——
Troy, N. Y	75,000	——	150,000
Washington, D. C.	54,000	——	2,000,000
Indianapolis	2,000	——	——
Pittsburgh	30,000	75,000	300,000
Louisville, Ky	23,000	5,000	500,000
Coal strikes	200,000	500,000	Indeterm'te
Chicago	700,000	700,000	3,000,000
Totals	$2,802,000	$2,105,000	$24,800,000
Grand total			$29,707,000

Remember these figures do not include the enormous aggregate of losses by strikes in smaller places and along railroad lines; nor the losses incurred by farmers and the general public by interruption in buying and marketing goods, etc., etc. The sum total of all the losses caused to the country by the late striking craze must be considerably over $50,000,000. Most of the big strikes have collapsed. There is a good deal of turbulence still in Chicago, especially among the hands at the stockyard and lumber handlers. Some more rioting at Milwaukee; a disorderly mob insisted on wrecking a factory guarded by the militia, although sternly warned not to advance. A volley dispersed the crowd, killed four and wounded a number.....In Troy, New York, 10,000 "girl" operatives in laundries and shirt factories have been thrown out of employment by a "lockout" by the employers. The employés of one man struck, and all the other "bosses" closed to support him. The eight-hour movement is already a failure. Some of those who granted the "short day" have already gone back to 10 hours, often with the consent, or at the request, of the hands. The others are sure to do so ere long.....

FOREIGN NEWS.

SATURDAY, May 22, 1886.

ACROSS the Atlantic the prospects for the passage of Gladstone's Home Rule Bill have brightened during the week. He has secured the Queen's consent to dissolve Parliament and hold a new election in case the measure is defeated at the second reading. The Liberal "machine," organized chiefly by Chamberlain, has turned against him in all parts of England, and now supports Gladstone. The Scotch Liberals, however, are still bitterly opposed to the bill. An election is always a heavy expense to candidates, who if successful, get no pay; many of the recalcitrant Liberal members are sure to be defeated as the Irish vote in the various constituencies will be solid against them, and they can expect little Liberal support; while the Conservatives will run candidates of their own wherever there's a chance of electing them. In other places they will support the "Union Liberals." The hesitating Liberals have finally decided to join the Grand Old Man. The Ulster Orangemen are still talking war in case Home Rule is granted; the Catholics say there are as many Catholics as Protestants in Ulster, and that the latter could be easily wiped out if they rebelled.. .....The Marquis of Salisbury, the Conservative leader, says discontented Irishmen should emigrate. The "No Popery" cry has been started in England for political effect.....A Home Rule cry has just been started in British India, where the prominent natives have long been chafing at their almost complete exclusion from the government of the country. English a little startled: if five million Irish Home Rulers give so much trouble close at hand; what a storm might be raised by 250 000,000 Hindoo Home Rulers away in the East. Caste, ignorance, and centuries of abject subjection are likely to confine the agitation within narrow limits, however.....England and Turkey now jointly occupy Egypt, the Turks being sent down to the southern border, where they have lately had a "brush" with the followers of the new Mahdi, whom they defeated, ornamenting the gates of their quarters with the heads of the slain..... The Greek Chamber of Deputies, just assembled, have rejected the nominee of the late Premier for President of the Chamber. M. Tricoupis, a former Premier, has formed a new ministry, whose policy will be peace. Yesterday, however, there was heavy firing between Greek and Turk outposts at the frontier, and the order to lessen the army has been countermanded, and troops are again hurrying to the frontier. No blood was shed at the outposts, however. The Czar, now in the Crimea, the other day issued a "remarkable manifesto" to the Black Sea fleet, reminding the men of their bravery in the last Crimean war, with England, France, Italy and Turkey, in 1853, and bespeaking a like courage in any future contest. That and the new Greek embroglio disturb the European money markets. Peace, however, is hardly likely to be disturbed at present . .. . Queen Christina of Spain last Monday gave birth to a boy baby, son of unstable Alphonso, who died last November. Little five-year-old Mercedes, who has hitherto been queen, will be so no longer, as a woman can succeed to the throne only in the absence of male heirs. Much rejoicing throughout Spain, especially at Madrid. Some think a male heir will give more stability to the throne than a female; others say Mercedes could have married the son of Don Carlos, who claims to be the legitimate sovereign, and thus discordant claims would be quieted. Don Carlos has lately inherited $10,000,000 from the late Countess De Chambord, which adds much to his means of asserting his claims..... De Lesseps's engineers are preparing an answer to Rousseau's statements about the Panama Canal. De L. insists it will be finished in 1889, and that he can get plenty money elsewhere if the French Government refuses him permission to issue lottery bonds France lately wished to contract a loan, and small investors offered 35 times the amount wanted. .....Minister Pendleton on returning from a great review of troops at Berlin, fell senseless to the ground when told of his wife's death here. He is "thoroughly broken down."

AGRICULTURAL NEWS.

SATURDAY, May, 22, 1886.

REPORTS from different parts of the dairy States say that several cheese factories intend to become creameries, as cheese has been so low of late and butter-making will receive a boom, if Congress should tax oleomargarine. The makers of this stuff who, at a late meeting at Pittsburg, made arrangements to raise an enormous sum to be placed where it would "do the most good" for their interests, are doing their "level best" to defeat hostile legislation. They have a big lobby at Washington; a "literary bureau" in this city, which is flooding the country with pamphlets in praise of oleo and running down poor butter, and they are getting cliques in the Boards of Trade of various cities to pass "resolutions" in favor of bogus butter. Armour got a majority of the directors of the Chicago Board of Trade to do so in the name of the Board, but the members protest, and say that such a resolution would be overwhelmingly defeated if presented in that body. Meanwhile farmers are pouring into Congress a multitude of letters favoring anti-oleo legislation.. ....The Ohio legislature proposed to squelch the Bohemian Oat swindlers, by means of a bill which provided that any rascal connected with the swindle should be treated to a free bed in the penitentiary for three years, or to pay a fine of $100 to $500 or both, at the discretion of the court..... To prevent the spread of Texas fever, Texas and Colorado representative rangemen have signed an agreement by which cattle from Northwestern Texas, a region supposed to be free from fever, are allowed to use the Dallas trail, leading through the Cherokee Strip and part of the Texas Panhandle, without restriction; while cattle from Central Texas are to be quarantined 60 days and from Southeastern Texas 75 days before entering the Cherokee Strip. All cattle are to be confined strictly to the trail, and to pass through the chutes built by the local ranchmen, so that local stock may be driven across the trail without risk of contagion.....Colorado live stock journals are pitching into Gov. Eaton for relaxing quarantine restrictions against the possible importation of contagious pleuro-pneumonia from the East.....Residents of foreign countries now own over 30,000,000 acres of land in the West, mostly for grazing purposes, though a large share is occupied by tenants. Moreover, they hold a number of smaller possessions in the East, and some very large tracts in the South, especially in Texas, Louisiana, and Florida....The River Platte (S. A.) is reported to have more than doubled its wool clip in the last 20 years, and to represent now a total probably equal to the entire Australian clip....In the nine months ending April 1, 1886, a total of 99,872,721 pounds of wool were imported, against 49,080,357 pounds in the same time a year before.....The aggregate receipts of wool at Boston since January 1, 1886, have been 78,616 bales domestic, 48,980 bales foreign, against 104,034 bales domestic and 19,472 bales foreign for the corresponding period of 1885. This is a decrease of 25,418 bales domestic and an increase of 29,508 bales foreign..... Exporters of live cattle are said to be losing money.....The export trade in apples was, for once, unprofitable the past season..... The world's wheat crop of 1885 is placed by the Department of Agriculture at 2,098,286,759 bushels.....Considerable reduction, Monday, in Eastern railroad rates on flour from Minneapolis and St. Paul to seaboard, forced on roads by competition on the lakes and canals. Rates from St. Louis too likely to be reduced to save some traffic.....A report circulated here that the water used for washing down the carcasses in Swift's and Armour's slaughter-houses in Chicago is dirty Chicago River water, is contradicted by the Chicago Health authorities, who say it is taken direct with a hose from an artesian well sunk on the premises of each, and is quite pure.....

Changing the Key-Note.

"A cheerful spirit gets on quick;
A grumbler in the mud will stick!"

Well, that's so. But suppose you are stuck in the mud by ill health, how are you going to get out? Suppose malaria or nervous depression or physical prostration have put you into so deep a rut that you feel it an impossibility to be cheerful? There are various means reported, but the one which has in recent years lifted the largest number of sick people out of the mire and placed them on solid ground of good health and cheerful, joyous life, is the Compound Oxygen treatment of Drs. STARKEY & PALEN, 1529 Arch Street, Philadelphia, who will mail to you their little book of nearly two hundred pages free on application. —*Adv.*

Crops & Markets.

SATURDAY, May 22, 1886.

The outlook for breadstuffs abroad begins to look a little more in favor of the bulls, as lack of rain and continued cold days and nights in portions of the United Kingdom and on the continent have notably delayed the growing wheat plant. These advices come from all sources by cable, and of late by mail. There still appears to be some doubt as to the supplies prior to new-crop receipts being sufficient to hold prices down to late levels.

The Mark Lane Express, in its review of the British grain trade during the past week, says: The floods and snow storms during the past

week have injured crops. The wheat market has not materially altered. Sellers were firm during the week, and millers were apathetic. The sales of English wheat for the week were 61,172 quarters at 31s 11d per quarter, against 46,467 quarters at 37s 5d for the corresponding week last year. Flour was more scarce, and values have improved. Foreign wheats were weaker, owing to the larger stocks, the large quantity afloat, the acute position of the American trade, and the outlook for the next crop of the world. There is no prospect at present of an improvement. English wheats were difficult to sell. For foreign there was no inquiry; American red was rather cheaper; good America was flat. Maize, although scarce, was 3d cheaper. Other grains were dull.

Exports of wheat from Australia to Great Britain for four months, January to April inclusive, were 48,000 quarters this year, against 796,000 last year. Flour exports were 1,100 tons, against 2,000 tons last year.

There are reports of heavy ruins which are said to have "lessened somewhat the former excellent outlook for spring wheat" in Minnesota, Dakota, Wisconsin and Nebraska. This rainfall is also stated to have caused some injury to the winter wheat in Wisconsin, Michigan, Ohio and Indiana, "where some of the fields were beginning to head out." But no serious damage has been reported. In Kansas, where but a "40-per-cent. crop" was to be harvested, "some improvement is noted" in the winter wheat outlook within 30 days, and in Michigan within a fortnight past.

At home the past week has been signalized by the heaviest week's decline in the visible supply of wheat on this crop, over 2,330,000 bushels, as compared with a decline of 1,900,000 bushels, the heaviest decline in any previous week. This is due greatly to the heavy foreign exports, as the low prices secured large investments. In spite of the decrease in the visible supply, however, prices have fallen everywhere.

Corn dull and generally lower. A decline of only 800,000 bushels in the visible supply. Oats have been irregular. Decrease in visible supply nearly 1,500,000 bushels. The decline in grain, as usual, produced a decline in hog products. Large operators predict that pork in July will sell for $7 a barrel in Chicago.

Butter lower on account of heavy accumulating stock. Cheese steady.

Old potatoes are growing scarce and higher. Apples too have begun to go up. It would seem that the low prices last Fall led many to bestow little thought on keeping their apples, so that now it is likely there will be a good market for those that have been kept sound.

It is expected there will be a shortage of at least five per cent. in this year's wool clip. There will be a falling off in Ohio, Penn'a, W. Va., and heavy losses are reported from Western Kansas and Southern Colorado. In Michigan, Wyoming, and Montana flocks have wintered well. The general impression is that the shortage of the home clip and the heavy sales of woolens by manufacturers point to higher prices later on. Just now buyers are doing all they can to depress prices and to force moneyless farmers to part with their stock at low rates, but when they have secured the bulk of the clip they will be equally anxious to put up prices on the manufacturers. The great hindrances to high prices are the labor agitation and the unprecedentedly low price of Australian wool in England. Nearly 400,000 bales are to be sold in London on June 16, and the prices there will influence those here. It is likely, however, that it will pay to hold wool rather than sell it below the cost of production, which was largely done last year. The wool market has nowhere, so far as we can find out, opened lower than a year ago, and in some places it is higher; two cents higher at Salt Lake City.

A San Antonio, Texas dispatch says that the wool market there is quite alive. On the 13th inst. over 1,000 bags, or 200,000 pounds were sold. Nearly all of it is six months' growth. The sales were made on private terms, purchasers requesting the sellers not to disclose them, but enough was learned to show that the price paid was not less than 16 cents per pound, and that some of it went at 16½ cents. There are at least 3,000,000 pounds of wool on hand there, and this amount does not embrace a third of the crop of this Spring.

MARKETS BY TELEGRAPH.

SATURDAY, May 22, 1886.

CHICAGO.—Compared with cash prices a week ago, "regular" wheat is ½c. lower. No. 2 Spring, ⅝c. lower. Corn, 1c. lower. Oats, ⅜c. higher. Rye, ½c. lower. Barley, steady. Pork, 25c. lower.

WHEAT, steady: Sales ranged: May, 74½@75⅝c; June, 75¼@76½c; July, 76⅞@77¼c; No. 2 Spring, 74¼@74⅝c; No. 3 Chicago Spring, 64½@65c. CORN.—May, 35¼@36c; June, at 36¾@36⅞c; July, 37@37½c. OATS.—Sales ranged, May, 28⅝@28¾c; June, 28¼@28⅜c; July, 27¾@27¼c. RYE.—No. 2, 59½c. BARLEY.—No 2, at 55c. MESS PORK.—May, at $8 50@8 55; June at $8 47@8 50; July, $8 57@8 67. LARD.—June, $5 90@5,92½; July, $5 95@5 97½, closing at $5 90@5 72½. BULKMEATS.—Shoulders, $4 15@4 25; Short rib sides, at $5 32½@5 35; Short Clear sides, at $5 75@5 80. CATTLE—Market steady: Shipping steers, at $4 50@5 90 stockers and feeders, $3 00@4 90; cows, bulls and mixed at $2 00@4 40; bulk, $3 20@3 50. HOGS.—Market strong. Rough and mixed, $3 70@4 10 packing and shipping at $4 10@4 20; light, $3 70@4 15, skips, at $2 50@3 60. SHEEP.—Market weak; Natives, $2 50@5 60.

ST. LOUIS.—Compared with cash prices a week ago, wheat is 1⅝c. lower. Corn, ¼c. higher. Oats, ¾c. lower. Butter, creamery, 1c. lower; dairy; steady. Eggs, ½c. lower. Pork, 10c. lower.

WHEAT.—Steady; No. 2 Red, Cash, at 78@78⅜c; May at 78⅜c. June at 78@79½c; July at 77¼c. CORN.—Dull; No. 2 mixed Cash, 32¾@33c; May, 32⅝c; June at 33⅛c. OATS.—Dull, No. 2 mixed, Cash, at 28¾@29c; May, 28½c; June, 25¼c. RYE—Firm at 68c. BARLEY.—There is no market. BUTTER.—Quiet; Creamery, 15@17c; dairy, 10@15c. EGGS—Quiet at 7c. FLAXSEED at $1 01@1 02. HAY—Steady; Timothy, $13 00; Prairie, $7 00. BRAN, quoted at 50c. at mill. CORN MEAL.—Steady at $1 95. PORK, at $9 15. BULK MEATS.—Long clear at $5 30; Short Rib, $5 40; Short Clear, $5 55. LARD—Steady at $5 75@5 80. CATTLE—Market active; Fair to Choice Native Shipping Steers, at $5 45@5 65; Native Butcher Steers, $3 50@4 80; Cows and Heifers, at $2 50@4 00; Stockers and Feeders, $3 50@4 65. HOGS.—Light, at 3 80@4 00; Packing, at $3 80@4 10; Heavy, $4 10@4 20. SHEEP.—Market active at $2 50@4 75.

BOSTON.—CORN.—Corn has been quiet. Sales Steamer mixed at 50½@51c., steamer mixed at 50c.; and no grade at 45@48c. per bushel, as to quality. OATS.—Steady; sales of No. 2 white, at 44½@45c.; No. 3 white, 43½@44c. and fancy white are selling at 47@48c. per bushel as to quality. Rye is selling at 68c. per bushel. Sales of Bran at $15 75 for Spring and $17 25 for Winter; fine feed and middlings at $15 50@19 00 and cotton seed meal at $23 25 on spot and $22 25 per ton to arrive. HAY AND STRAW.—Market for hay has been firm at $19@20 per ton for choice and fancy; fair to good, at $17 00@18 00; fine, at $16 00@17 00, and $13 00@15 00 for poor and damaged; Western choice, $17 00@18 00; do fair to good $15@16. Straw—Rye, choice, at $20 00@22 00, and for common to good, $14@18. Swale hay, $11@12; Oat straw, at $10@11 per ton. PRODUCE.—Most of the articles under this head command fair prices and are firm. We quote: BUTTER.—Northern and Eastern creamery, extra 23c; extra firsts, 19@20c; firsts, 18@19c; Western creamery, 20@23c. for extra firsts, new; firsts, 18@19c; Northern dairy, 19@21c. for Vermont extra firsts to extra, new; firsts, at 17@18c; thirds to seconds, 10@16c; Western dairy, ——, for firsts; seconds, 9@12, imitation creamery, 16@18c, for extra firsts to extra; ladle-packed, 13@15c. for extra firsts to extra; firsts, at 11@12c; seconds, at 10@12c; thirds, at 6@9c. OLD CHEESE.—New York, choice to extra, 8@10½c, ₽ lb, and seconds, 4@7c; Vermont firsts to extra, 8@9½c, and seconds, 4@7; Western firsts to extra, 6@9c. Sage, extra, at 14c. New Cheese. New York and Vermont extra, 8½@9c; do, do, firsts, 7@8c; do, do, seconds, 3@6c. EGGS—Cape and near-by, ₽ dozen, at 13c; Eastern extras, at 12½c; do, firsts, at 11½@12c; Northern, fresh at 12½c; Western fresh, at 11@12c; Provincial, 12c. BEANS.—Choice Northern hand picked pea, at $1 65@1 75 per bushel; do, do, New York, small, $1 50@1 60; do, do, screened, $1 15@1 20; medium choice, hand-picked $1 20@1 35; do, do, screened, $1 15@1 25; Yellow Eyes, improved, $1 35@1 40; do, choice flats, at $1 25@1 30; Red Kidneys, $1 00@1 05. PEAS.—Canada, common at choice, at 65@66c, per bushel. Green peas, Northern, at 90c@$1; do, Western, $1 15@1 20. POTATOES range at 40@65c, per bushel as to quality.

WOOL.—As the Boston wool market is the largest in the country, we give quotations there in preference to those in other markets. Here they are: The market continues quiet for most grades. The sales of the week have been as follows:

92,600 lb	Ohio and Pennsylvania fleeces, X, XX, and XX and above	@	33
15,000 lb	No. 1 Ohio fleeces part	@	33½
22,000 lb	Michigan X fleeces	private terms	
132,000 lb	fleeces, of various grades and qualities	private terms	
265,000 lb	combing and delane fleeces	@	32
14,000 lb	¼ blood unwashed combing	@	27
50,500 lb	Territory Wool	@	24
50,000 lb	Texas part	@	18
15,000 lb	Oregon Wool	private terms	
60,000 lb	California spring part	@	16
78,800 lb	unwashed fleeces	@	24
189,400 lb	super and X pulled	@	33
89,000 lb	scoured	@	50
1,066,300 lb	domestic		
37,000 lb	Australian	@	33
30,000 lb	Montevideo	private terms	
35,000 lb	Mediterranean carpet	private terms	
102,000 lb	foreign.		
1,168,300 lb	foreign and domestic.		

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, May 22, 1886.

STATE OF THE MARKET.—Compared with cash prices last week, flour is 5c. lower; wheat, 2c. to 4c. lower; corn, 2c. lower; oats, ½c. lower; pork, steady, butter and cheese a trifle lower; eggs ½c. higher; fruit, higher; vegetables steady.

FLOUR, FEED AND MEAL, FLOUR—Quotations: Fine at $2 10@3 10; Superfine, $2 65@3 40; Extra No. 2, $3 15@3 60; Good to Fancy Extra State, $3 60@4 25; Common to Good Extra Western, at $3 15@4 00; Good to Choice Extra Western, $4 00@5 10; Common to Fair Extra Ohio, $3 15@3 75; Good, $3 80@4 20; Good to Choice, $4 25@4 90; Common Extra Minnesota, $3 15@3 60; Clear, $3 60 4 00; Rye Mixture, $3 50@3 90; Straight, $4 25@4 50, Patent $4 50@5 10; Bakers' Extra, $4 00@4 50; St. Louis Common to Fair Extra, $3 15@3 75; Fair to Good, $3 80@4 75; Good to Very Choice, $4 80@5 00; Patent Winter Wheat Extra, $4 40@5 20; City Mill Extra for West Indies, at $4 50@4 60; South America, $4 65@4 80. SOUTHERN FLOUR—Common to Fair Extra, $3 25@3 65; Fair to Choice do., $3 70@5 25. RYE FLOUR.—Superfine, at $3 20@3 40, latter for choice. CORN MEAL.—Yellow Western at $2 50@2 75; Brandywine $2 55, quoted at $2 70@2 75. FEED.—40 lbs. 70@75c. for spring and winter; 60 lb, at 65@71½c; 80 lb, at 70@72½c, 100 lb, at 75@85c; Sharps at 95c.@$1. Rye feed at 80c.

GRAIN.—WHEAT.—Market firmer. Cash lots have advanced ½@1¼c, and closed firm. Options opened firmer, and advanced ⅝@1¼c, and closed firm at the best prices. No. 2 Chicago at 87@87⅜c; No. Milwaukee at 8?c; Ungraded Winter Red at 81@84½c; No. 2 Red, 87½c; No. 1 Northern, 91¾c; No. 2 Red for June, 86⅞@88c; do, for July, 87¼@88¼c; do for August, 87⅛@88⅝c; do, for September, 88¼@89⅛c; do, for October, 89⅝@90⅝c; do for November, at 90⅝@91½c, do, for December, 91@92⅝c; do, for March, 94@95⅝c; do, for May at 96@97⅝c. RYE.—Canada at 62@64c Western, 60@62c; State at 66@68c. CORN—Ungraded Mixed, at 35@42c; No. 3, 40@42c, Steamer Mixed, 45c, No. 2 Mixed, at 47¾c, No. 2 Mixed for May, 47½@47¾c; do, for June, 46¾c; do for July, 46⅝@46¾c; do, for August, 46⅜@47c. OATS—No. 3, Mixed 36½c; No. 2, 37@37½c; No. 1 nominal; No. 3 White, 43@45c; No. 2 White, 43@43½c; No. 1 nominal; Mixed Western, at 37@39c, White do, at 42½@47c; White State, 45½c; No. 2 Mixed for May, at 36¼@37c; do, for June, 35⅝@35¾c; do. for July, 34⅜@35¼c; do. for August, 32¼@33⅜c.

PROVISIONS.—PORK.—Mess quoted at $9 25@9 50 for Old and $10 00@10 25 for New; $10 75@$11 50 for Family Mess; $12 00@11 00 for Clear Back; and $9 50@9 75 for Extra Prime. BEEF.—Extra India Mess, at $16 00@17 00; Extra Mess, in barrels, $8 00@8 50; Packet, $8 50@9 00 in bbls.; Fancy Plate, $9 00. BEEF HAMS.—Quoted at $22 00@23 00. CUT MEATS.—Pickled Hams, 10½c; Fresh Hams, part 16 lb average, 9c. MIDDLES.—Long Clear in New York, 5¾c; Long Clear, 5.45c; Short Clear, 5 60c. DRESSED HOGS, City Heavy to Light quoted at 5¾@5⅞c.; Pigs, 6c. LARD.—Western Steam spot, 6.15c; Choice, 6.17½c; May, 6.12@6.11c; June, at 6.14@6.16c; July, at 6.20@6.21c; August, 6.25@6.29; September, 6.35@6.36c; October, 6.40@6.43c. City Steam in fair demand at 6c. Refined quoted 6.40c. Continent 6.70@6.75c.

BUTTER.—Elgin Creamery, 16@17c; Pennsylvania do., 17@18c.; Western do., 14@16½c.; State Dairy half-firkin tubs, 14@17c, Welsh tubs, 15@15½c; Western, Imitation Creamery, 12@14c; Western Dairy, 10@11c; Western Factory, 10@11c,

CHEESE.—New State, 4@8¾c; Old State, 3@10¼c; skims, 1¾@1¾c.

EGGS.—State, at 13@13½c; Canadian, 13c; Western, at 12½@12¾c.

POULTRY.—The market is moderately supplied, with prices held steady. Quotations are for: LIVE.—Fowls near-by lots, per lb, at 11c.; fowls, Western, per lb, 10@11c.; fowls, Southern lots, per lb, at 10@10½c; turkeys, per lb, at 8@10c; ducks, western, per pair, at 60c.@70c.; geese, western, per pair, at $1.25@1.50.

POULTRY.—DRESSED. Turkeys, per pound, at 10@12c.; chickens, Philadelphia, light weights to pair, at 48@50c. per pound; fowls, Pennsylvania, prime, per lb, 12½@13c.; do State and western, per lb, 11@12c.

POULTRY.—FROZEN.—Turkeys, per pound, at 13@15c.; Chickens, per pound, at 9@11c.; Ducks, per pound, 12@13c.; Geese, per pound, at 8@10c.

GAME.—English snipe, per doz., $2@2 25; Plover, Western, per doz., $1 25@1 50; Sand snipe, per doz., 40@60c

FRUITS.—FRESH.—Quotations are: Apples.—Baldwin, per bbl., at $3 00@3 50; Russetts, Roxbury, per bbl, $2 50@3 00; do. Goldens, $2 25@2 50. Strawberries—Florida at 12@15c, per quart for best; do. poor at 5@10c; Maryland, per quart, 15@18c, for prime; Norfolk, Wilson, per quart, at 14@16c; do. Charleston seedling, per quart, at 13@14c; do. scarlet, at 12c. per quart; North Carolina large, per quart, at 14@16c; do small, at 10@12c. per quart; Charleston, Hoffman's, per quart, at 20@25c. per quart.

FRUITS.—DRIED.—The quotations are as follows: Apples—Fancy evaporated, at 6¾@7c; choice, at 6¼@6½c, do. prime at 6c.@—c; fancy North Carolina sliced, at —; choice do. at 5¾@3c.; choice Tennessee quarters at 1½@2c.; State quarters at 2½@3c.; southern sliced prime at 1½@2c; do. common, —, Peaches—Peeled North Carolina, choice, 11c; fancy, 12@12½c; extra fancy, 13c; Georgia, choice, at —; do. prime, —@—c; unpeeled halves, 2¾@3c, unpeeled quarters at 2@2½c.; Delaware evaporated, peeled, —@—c; unpeeled do., at ¼@—c. Choice pitted cherries at 10c. Evaporated raspberries, at 14@15c; sun-dried do. 12@12½c. Blackberries—Prime at 7c. Whortleberries at 6c. Plums, at 5c.

PEANUTS.—Hold a steady price on moderate demands. Quotations at 6c. for best hand-picked, and 4¼@4¾c. for farmers' grades.

COTTON.—The quotations, according to the American classification, are as follows:

	Uplands.	New Orleans and Gulf.	Texas.
Ordinary	6 11-16	6⅞	6⅞
Strict Ordinary	7 1-16	7 5-16	7 5-16
Good Ordinary	8 1-16	8¼	8¼
Strict Good Ordinary	8¼	8 11-16	8 11-16
Low Middling	8⅞	9 1-16	9 1-16
Strict Low Middling	9⅛	9¼ 5-16	9 5-16
Middling	9 5-16	9⅜	9⅜
Good Middling	9¾	9 51-16	9 15-16
Strict Good Middling	10 1-16	10¼	10¼
Middling Fair	10 7-16	10⅝	10⅝
Fair	11 1-16	11¼	11¼

STAINED.

Good Ordinary	6⅛	Low Middling	8
Strict Good Ord.	7 3-16	Middling	8¼

HOPS.—The market is very quiet, the sales of small lots. Prices generally are unchanged. Quotations are for: State, pest, 9@10c; State, good, 7@8c; State, common, 5@6c; State, old crop, 3@5c; Eastern, 6@8c; California, 6@8c.

VEGETABLES.—The market is very firm for the better grades of potatoes, which have steady demands. Quotations are for: Potatoes.—Maine, fancy, d. h. bbl, at $2 25, Rose, Nova Scotia per bbl., at $2 00; Rose State, per 180 lb., $1 50@1 75; Burbank, State, bulk, per 180 lb $1 62@1 87; Burbank, eastern and Nova Scotia, per bbl. $2 25@2 50; Hebron, do, do, do, per bbl. $2 00, Hebron, State, bulk, per 180 lb, $1 50@1 75; Prolific and Goodrich, eastern and Nova Scotia, per bbl., $1 75@2 00; Peerless, bulk, per bbl., at $1 25@1 50; Magnum Bonum, imported, 168 lb. sack, $1 80@2 00; Bermuda, per bbl., at $6@8 50; Florida, per bbl, at $4@7; Sweet potatoes, Delaware River, per barrel, at $2 00@2 75, Savannah, new, ₽ bbl, $6@7 50; Charleston, new, $6@9. Cabbages.—Southern, per bbl., at $3 50@4 25; do. Charleston, per bbl, $3 00@4 00; do. Florida, per crate, $1@3 50; do Florida, per bbl., at $2 50@4. Kale.—Long Island, per bbl, at 30@40c. Onions.—Bermuda per crate, at $2@2 25; do, Connecticut, per bbl., at $3@3 50. Tomatoes.—Bermuda, per box, at 75c@$1 12. Beans.—Savannah, per crate, at $3; do. Florida, round, per crate, at $2@2 50; do. Florida, per crate, $1@2. Beets.—Florida, per crate, at 1@1 25. Asparagus.—Norfolk, per dozen bunches, at $1@1 50; do, Maryland and Delaware, do, do, $1@1 50; do, prime, do, do, at $1 50@2 00; do, Oyster Bay, $1 50@2. Peas.—North Carolina, per half-bbl. crate, $1 25@2; do, Charleston, per crate, 50@75c: do, Savannah, per crate, at 50@75c. Radishes.—Norfolk, round, per 100 bunches, 75c.@$1; do, do, long, at 50@75c. Squash.—Florida, choice, per crate, 50@75c. Spinnach, per bbl, $1 50@1 75. Turnips.—White, Norfolk, per bunches, at $2@4. Lettuce.—New York, per bbl, $1 50@2.

LIVE STOCK MARKET.

NEW YORK, SATURDAY, May 22, 1886.

Shipments for six days, 853 live cattle, 6,460 quarters of beef, 105 live sheep. BEEVES.—Pennsylvania Steers 1,428 lb, at $6 50; do, 1,332 lb, at $6 16; Bulls, 1,270 lb, at $4 50; Dry Cows 958 lb at $3 62½; Mixed Western Steers, 1,533 lb, at $6 40; do, 1,856 lb, at $6 30; Ohio do, 1,218 lb, at $6 10; do, 1,254 lb, at $5 90, State Oxen, 1,760 lb, at $5 00; Cows and stags, 1,006 lb, at $3 75; St. Louis Steers 1,392 lb, at $6 11, less $1 per head; do, 1,192 lb, at $6 10; do, 1,229 lb, at $6 05; Ohio steers and oxen, 1,297 lb, at $5 00; Bulls, 1,440 lb, at $4 55; do, 1,570 lb, $4 85; Chicago Steers, 1,590 lb, at $6 30; do. 1,332 lb, $6 20; do, 1,190 lb, $5 80; do. 1,570 lb, at $5 80; Cincinnati do. 1,064 lb, at $5 70; Cincinnati "Stillers, 1,017 lb, at $5 50; Bulls, 1,292 lb, $4 25; Kentucky "stillers" 1,189 lb, at $5 84½; do. 1,121 lb, at $5 75; Chicago Corn-fed steers, 1,341 lb, $6 20; do. 1,159 lb, $5 95; do. oxen, 1,750 lb, $6 40; State steers, 1,175 lb, at $5 85; do. 1,107 lb, $5 50, Pennsylvania meal-fed do. 1,402 lb, $6 30; do. 1,325 lb; $6 30; do. 1,102 lb, $6 25; Dry Cows, 1,175 lb, at $4 75; Still Bulls, 1,360 lb, $5; do. 1,33 lb, $4 50; Ohio steers, 1,825 lb, $6 16; do. 1,583 lb, at $5 90; Buffalo still-fed, 903 lb, $3 45.

CALVES.—Market quiet; a lot of Buttermilk calves sold 3¾c; Ordinary to Prime Veals, at 5@6c; and a bunch of Veals and Buttermilks mixed at 4¾c; Buttermilk calves, 146 lb, at 3¾c; veals and buttermilks, 170 lb, at 4¾c; Veals, 126 lb, 5¾c; Maryland calves, 145 lb, at 4¾c.

SHEEP AND LAMBS.—Total for six days, 31,770 head against 29,736 head for the same time last week. Demand slack and trade slow at barely sustained prices for Sheep, with Southern Lambs about ½c. lower. Sales of Sheep (all clipped) were at $4 50@5 65 per 100 lb. A car-load of light Ohio Yearlings sold at $6 37½; Southern Lambs, at 5@6¼c; and no States, Jerseys or Marylands were reported sold at either market. Ohio Sheep 90 lb, at $5 50; Kentucky do. 109 lb, $4 90; do. 91 lb, at $4 80; Kentucky Lambs, 57 lb, at 8c; Ohio sheep, 92 lb, $5 50; do, 84 lb, at $5 85; Virginia lambs, 25 lb, at 9½c per lb; do, 53 lb, 9c; Western Sheep, 82 lb, 5¾c; Ohio yearlings, 58 lb, at 6¾c.

HOGS.—Total receipts for six days, 31,233 head against 36,260 head for the same time last week. The feeling was a trifle weak to-day and live hogs are nominally quoted at $4 00@4 85.

SEND TEN CENTS IN POSTAGE STAMPS TO

E. & O. WARD,

PRODUCE COMMISSION MERCHANTS.

for Circular giving important advice about **shipping produce.** Also containing recipe for **preserving Eggs.** Established 1845.

No. 279 Washington St., New York City.

JERSEY RED, POLAND-CHINA, Chester White, Berkshire & Yorkshire Pigs. Southdown, Cotswold and Oxford Down Sheep and Lambs Scotch Collie Shepherd Dogs and Fancy Poultry. Send for Catalogue WALTER BERGEE & CO. Phila. Pa

THE UNION HORSE-POWER

Has the Largest Track Wheels, DOUBLE GEARED, NO RODS, CHILLED BEARINGS, and LEVEL TREAD.

UNION Thresher Separator and Cleaner, Premium Farm Grist Mill, Feed Cutters, &c

W. L. BOYER & BRO., PHILADELPHIA, PA

I WILL INSURE YOUR HOGS!

DR. JOS. HAAS'

HOG AND POULTRY REMEDY

[None Genuine without this Trade Mark.]

Is the only Practical Preventive of the so-called Swine Plague.

It has never been surpassed as an increaser of pork and general system tonic. Aiding digestion, stimulating the biliary organs, preventing torpor and engorgement of the liver, and regulating the bowels, it removes and prevents the formation of disease germs, and preserves to the well bred hog his natural constitution. Where it has been fed to such animals in the prescribed quantities, and other directions faithfully observed, it has proved a thorough preventive against swine disease.

AS AN EVIDENCE OF FAITH

in my remedy I make the following offer:

1. I will insure herds of swine of not less than one hundred in number against disease, at a small fee per head, provided they are fed my remedy under my direction, and prove upon examination prior to contract that they are in a healthy condition, and are neither in-bred, close-bred nor the progeny of such.

1. I will forfeit $100.00 to any breeder whose offer to examine for insurance I decline, provided he forwards remittance to cover my expenses to and from location of hogs, or I fail to prove to the satisfaction of any disinterested party, that failure to respond to invitation is caused by prior engagement or by matters of at least equal importance.

2. I will forfeit $500.00 if I decline upon examination to insure such herds, if my judgment as to their condition of health is overborne by the result of an examination made by at least two properly qualified and graduated veterinary surgeons.

Facts are Better than Assertions.

Please read the following testimony:

GIBSONTON P. O., PA., Feb. 2, 1885.

Dr. Jos. Haas—Dear Sir: About a year ago our herd here numbered about 2,700 head. Disease broke out, and no remedy we had would arrest the trouble. Our losses were heavy and we had to give up feeding entirely for about two months. We then heard of your remedy and bought a trial lot, and began feeding again. We have used it constantly ever since. We have since April last received about 5,000 head of hogs into our herd and have not had a single death from swine disease. This is our experience. Our opinion is that the remedy has prevented disease, and we would not think of being without it. As an aid in fattening pork, we believe it to be good. On this point, however, we have not made an actual test, *as we would not risk feeding a pen of hogs without the Remedy.*

Yours very truly, WHITE & CO.

[N. B.—White & Co., since writing the above letter, have purchased $450 worth of the remedy.]

The remedy can be procured of all Druggists, or from my laboratory. Prices, $2.50, $1.25 and 50 cts. per package. 25 lb. cans, $12.50.

JOS. HAAS, V. S.

Member of Indiana State Veterinary Med. Associat'n

INDIANAPOLIS, IND.

THOUSANDS OF PHYSICIANS all through the United States prescribe Warner's safe cure, in bottles of their own. You pay them $1.50 to $3.00 a visit; you can buy Warner's safe cure, sixteen ounce bottles, for $1.25. Do not be imposed upon.

The ROYCE IMPROVED REAPER

AND

DANSVILLE MOWER,

MANUFACTURED BY

Sweet, Faulkner & Co.,

Dansville, Livingston Co., N. Y.

The Lightest Draft and Most Durable Machines of their class in market.

Send for circular.

Portable Poultry Fence.

TWINE NETTING HELD BY WIRE.

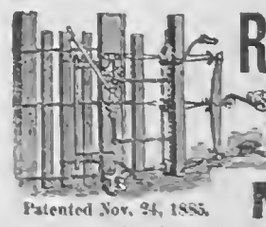
A Light and Neat Fence, easily put up, as easily removed, and not likely to be damaged by handling. Just the thing to protect the garden or make temporary poultry runs. Posts 50 to 100 feet apart.

Twenty-five feet of Fence, four feet high, for

$1.50.

SAML. H. ROBERTS,

Send for circular. 12 LISPENARD ST., N. Y.



RICHMOND CHAMPION FENCE MACHINE

Patented Nov. 24, 1885.

Surpasses all other wire and picket fence machines, for making strong and durable fences in the field, that no stock will break down. On rough, hilly ground, it keeps pickets perpendicular which no other machine will do without constant adjustment. It is easy to handle, uses any kind of pickets, and any size of wire. Write for circular and price

WAYNE AGRICULTURAL CO., Richmond Ind

He Was Willing to Ante Up.

BROCTON, N. Y., Oct. 23, 1885.—I had a severe trouble with my bladder. Consulted a number of first class physicians, without benefit. After using half a bottle of Warner's safe cure I was relieved, and I would gladly have paid any physician $100, could he have done what that small quantity did. Now I am thoroughly cured. Would like to proclaim its value from the top of the White Mountains, with a voice strong enough for the whol world to hear. E. D. CROSSMAN, grape grower, Late proprietor of the Rossin House, Toronto, Canada.

TILE and BRICK MACHINERY.

STONE-SEPARATING CLAY-CRUSHERS

Illustrated Catalogue free.

H. BREWER & CO.,

No. 154 Mill St.,

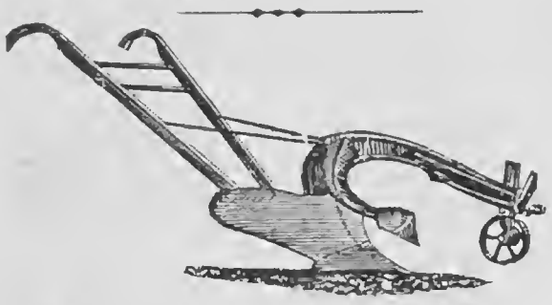
TECUMSEH, MICH.

Satisfaction Guaranteed.

For the Young.

A PRIMITIVE CHURN.

COME listen now to the tale I tell,
  Ye men awhile from your labor turn,
Ye women rise for a moment now
  From the awful "bondage of the churn."
List to a tale that you will not find
  In book or in pamphlet old and rare,
A simple tale of a simple churn;
  Then list to a moral straight and fair.
A housewife placed, in the olden time,
  A can of cream on the kitchen floor
When over the meadow the sun sank low
  And blackness flooded the landscape o'er.
Then out of the swamp as the moon rose high,
  When the family all had gone to bed,
A bullfrog came with a hop and jump
  For a moonlight walk—and his footsteps led
Him straight to the kitchen door—'tis sad;
  But pushed along in a splendid dream,
He made one jump of an extra size
  And landed square in the can of cream.
Now most of us at a fate like this
  Would drop at once in a wild despair,
But bullfrogs come of a sterner stuff
  He struck out manfully then and there.
He kicked and kicked till the butter came
  In a solid ball with a golden hue,
And he perched himself, with a knowing wink,
  On his new made throne when his work was through.
You can read the moral without a stop;
  There are times when we sink in doubt and fear;
We must kick the cream of our trouble out
  And make the best of our lives appear.
The cream will rise from our work some day,
  And if our lives have been nobly spent,
We can churn from the memories sure to come,
  The golden butter of sweet content.



WE shall have quite a plow talk this week. show a picture of the plow just above, so that you all can see what you are working for. The following letter was received by D. Woodward & Son, of Clinton, Mich., who offered the plow:

D. WOODWARD & SON:

DEAR SIRS:—I saw the prize offered in the RURAL for the boys that could make out the most words out of "Clinton Chilled Plow." Now I have no brothers under 16 years of age, and I am a girl under 13, and would like to try and get a plow for my father, who is a farmer. Please write and let me know if I can try.

MINNIE C. ANSLEY,

As soon as this letter came, Woodward & Son wrote me that they would offer another plow to the girl that could make up the most words. So now there are two plows to be won—one goes to the boy with the longest list of words, and the other to the girl who finds more words than any other girl can find. This is the best way for us to settle it. I am glad the girls are to have their rights. I shall give you one more week. All lists will be counted that are sent in before June 8th.

LISTS have already been received from Sophy Stratton, Howard Mintle, Isaac D. Davis, Flora J. Erskine, Merry C. Cassel, Johnny G. Veldhuis, Maud Raymond, Ralph and Laura Swartz. If any of the Cousins should send in their lists and find that they are not noticed, they must let me know at once, as I want to get all. I will give the names of those who send every week Remember there is no need to hurry; take plenty of time.

GREAT bunches of lilacs are brought into the city every morning to be sold on the streets. While the apple blossoms were fresh great baskets of them found their way into the city to brighten the homes and dingy offices. We had some in our office, and they made the place seem brighter and fresher. There are few flowers more beautiful than apple blossoms. When the trees begin to burst out into bloom in the Spring there are few things more lovely.

IT will soon be time to fight the potato bugs. I hope you will all be able to get the best of them. The little rascals are hungry and greedy just now, and we must head them off if we want any potatoes for next Winter. I suppose most of you have spent a good many days knocking the bugs off the vines into pans. That is pretty slow work. It is faster work to kill them with Paris-green mixed with plaster or flour. We must be very careful in handling this though, for it is a deadly poison.

LETTERS FROM THE COUSINS.

DEAR UNCLE MARK: I wrote before and did not receive any answer. Thanks for the sweet peas you sent me. I planted them and they are three inches high now. My little brother catches moles in his Grandpas's barn with a mouse trap, and if you spit at them they sing like a bird. They are as large as a mouse. They make us all laugh to hear them. Mother calls them singing mice. I am going to try for the plow. WILLIE BYRAM.

Dover, N. J.

[If people should spit at me I don't think I should feel like singing. I guess the moles cry because they are angry, and not because they are glad.]

DEAR UNCLE MARK: I have been reading the letters from the Cousins in the RURAL ever since papa has taken it. I would like to join the Y. H. C., if you will let me. This is the first time I have written. I am 14 years of age. We have a dog and two cats. The dog is a shepherd, and we call him Shep; and the cats' names are Tom and Tim. We weighed our dog this morning, and he weighs 110 pounds. Papa has planted the corn that he got with the RURAL'S free seed distribution, and Mamma has planted the peas. The peas are up nicely. Papa owns and runs a thrashing machine, and he is away thrashing every Fall. We have 28 young chickens and five young ducks, and they are all doing well.

From your niece, L. H. SCHADT.

Greenville, Penn'a.

[That dog will make a pretty good-sized Cousin. Some of us will have to grow in order to reach his weight.—U. M.]

DEAR UNCLE MARK: Mamma read in the R. N.-Y. something about a blue sun-flower. We raise sun-flowers; some of them are very large. Last year we had no Exposition, but the year before we had one. There was a sun-flower that took the premium the last time, and it measured 14 inches in diameter. I had one that measured 15 inches. Its seed were so full of oil that when I took the seeds out of the shell, I got my fingers all black. If there is a sun-flower that has a blue flower I wish you would tell me where I could buy the seeds. Uncle Mark, this year was the first time we got our seeds from the RURAL. Mamma says she believes they came, but the mail-carrier kept them. I am 11 years old: I wish I lived in the country; I hate city life. I never rode horse-back over six times in my life. When I read the letters from the Cousins I almost envy them. Sometime we expect to live in the country. We can see the Colorado Front Range, and the Sangre De Christo Range, and Pikes Peak. Were you ever in Denver? If you were you know it is built in a valley. The South Platte runs through it. On the hottest day in Summer when we are sweltering down here we can look up on Pikes Peak and see the snow up there and imagine the Signal Service agent up there wearing an overcoat I can't imagine my looking to the West without seeing the mountains. I suppose if I were to go back East and not see them I would think the world was sinking out of sight.

Your niece, MAGGIE JOHNS.

Denver, Colo.

[Who can tell about the sunflowers? I have never seen them. I have been in Denver and have seen the mountains many times. I wish I could see them again.—U. M.]

DEAR UNCLE MARK: It has been a long time since I wrote to you. I don't have much time to write letters only on Sunday. I have planted some of my flower seed in boxes in the house. I received the sweet pea seed you sent me and send many thanks for them. I enjoy reading the letters from the Cousins, but I don't enjoy reading the advertisement which has been put in the children's column. I like to see more letters printed and not so much advertisement. Why don't some of the Cousins send some lace patterns, or don't they do any fancy work? I would like to see the children's page filled up with fancy work and other useful things for the girls. I am going to raise some onions this Summer to sell. Our school commences in about a week. I will send a lace pattern which I think is simple but real pretty.

Cast on 11 stiches. Knit across plain two or three times.

First row—Knit four plain, thread over twice, knit two together, thread over twice, knit two together, thread over twice, knit two together, knit one.

Second row—Knit three, purl one, knit two, purl one, knit two, purl one, knit four.

Third row—Knit plain.

Fourth row—Knit plain.

Fifth row—Knit plain.

Sixth row—Bind off three, knit 10.

C. A. D.

DEAR UNCLE MARK AND RURAL COUSINS: I promised I would write you of my home. Papa has a farm of 115 acres. We have one horse, four yokes of steers, two cows, 10 sheep, 10 little lambs, and 40 hens. We live where we can see the lights from Faulkner's Island Lighthouse and Horton's Point Lighthouse. In hot weather we enjoy going picnicing down by the salt water. I would like to have you come and go sailing with us this Summer. I have four brothers and two sisters. We drink nothing but cold water; and my brothers do not scent their breath and handkerchiefs with tobacco. I have been trying to learn how to spin stocking yarn, but I don't think I shall take first prize at the fair this Fall unless I make improvements. I thank you very much for the seeds you sent us, I shall try very hard to have them all grow, for I am very fond of flowers. I have been wishing I could send you something. I have some Wild Goose Beans, the same kind that my great-grandpa used to raise—I have been told they could not be bought at the seed stores. Would you like to have me send you some?

Your loving niece, ELLA K. BARRETT.

New Haven Co., Conn.

[Yes, I would like the beans. I will plan them. If you try hard I think you can get that prize.—U. M.]

DEAR UNCLE MARK: I would like to join the Y. H. C., I am 13 years old. I like to read the Cousins' letters very much. I have one sister and two brothers. My sister will be 18 years old in June. We have 11 lambs; four of them are mine. We raised quite a lot of flowers. Our Lunar lily has seven buds on it this year. I set a hen with 12 eggs, and she hatched all of them. If you will admit me I will write more next time.

Centralia, Ill. BLUE BELL.

[Well done for that hen. She deserves extra good care for that.—U. M.]

DEAR UNCLE MARK: I have long read with interest the letters from Cousins in the RURAL, and enjoy them very much. I would like to join the Y. H. C. I am 14 years old. I live on a farm. I go to school, which is about one-half of a mile from where I live. I study arithmetic, grammar, geography, history and writing. We (the scholars have to speak pieces every two weeks. If any one has any pieces that would be good to speak I would like to have them send them. I have some old ones that I have spoken, but would like some new ones. I will send what pieces I have if any one would like them. Well, I think I had better stop for fear this letter is too long. Hoping to see this in print, I will stop, also hoping to join the Y. H. C.

Ashtabula, Ohio. MILLIE BALDWIN.

[It is hard to find suitable pieces for speaking. I have no doubt some of the Cousins will be glad to change with you. I find the 100 Choice Selections good books for speakers.—U. M.]

DEAR UNCLE MARK AND COUSINS: I hope I am to be admitted into "your family." I am eight years old and live in the country, and we call where I live "Forest Home." Father built right in the woods, where grow the oak, elm, maple, beech, sugar-tree, hickory, walnut, dog-wood, red-bud, white ash (and Oh! how beautiful when in bloom), and the evergreen cedars, arbor-vitæ, and spruce. The pretty birds build their nests and rear their young ones around the house. Mother has the ever-blooming roses, the old fashioned roses, and beds of flowers, which take in the "garden treasures." Don't you think I am one of the happiest of little girls, playing with my dear little sister and brother under the trees, on the green grass, and among the flowers and birds? About two years ago, father gave me a heifer, and now I have three head of cattle, and I am going to try to raise enough so that I can buy me an organ with my own money. With love to Uncle Mark, the Cousins and every body.

I am, ELIZABETH M. HAWKINS.

Midway, Tenn.

[Yes, indeed you ought to be happy. Many of these poor little city children will envy you your home. I hope you will have the organ. —U. M.]

UNCLE MARK: I, too, would like to join the Y. H. C. I am eight years old. I have one mile to go to school. I had a little garden last Summer; and had corn, radishes, peppers, beans, turnips and potatoes. I am going to try and have a better one this Summer. We live on a farm, and have horses, cows, pigs and hens. A fox came the other night and caught an old hen and two chickens, and left five little chickens for me to take care of. We set a trap for the fox and caught a cat. It looks very pleasant here now with the fruit trees all in blossom. We have a large strawberry bed. Your nephew,

Pompey, N. Y. MASON BERRY.

[Too bad about that fox. It is a pity you could not catch him. Perhaps the cat wanted to steal too. I like to see thieves caught.—U. M.]

WHO can tell us how to raise big melons? We want to know how to win the prize and also to take the premium at the County Fair.

LETTERS received from Mary J. and Nelly Baymiller, Eva Bomber, Moses P. Adams, Neal Eckerson, Lillie Moore, Ida M. and Ellen Jackson, Nellie M. Sankey, Alice F. Greenewalt, S. G. Anderson,

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PILES. Instant relief. Final cure in 10 days, and never returns. No purge, no salve, no suppository. Sufferers will learn of a simple remedy, free, by addressing C. J. MASON, 78 Nassau Street, N. Y.

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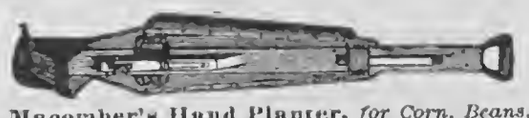
What an Increase.

GRAND RAPIDS, Mich., July 14, 1884.—I suffered many years from Chronic Diarrhœa and was able to get only temporary relief. My disease seemed to baffle medicine. Began to take Warner's safe cure, and increased in weight from 115 pounds to 140, and have not had a sick spell this summer, whereas last summer I was sick all the time.—M. H. WALBRIDGE, Mich. School Moderator.



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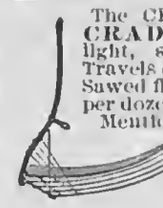

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Graham, Emlen & Passmore,
Patentees and Manufacturers,
631 Market St., Philadelphia, Pa.

PERSONALS.

It is said that the membership of the United States Senate represent $162,000,000 of wealth.

It isn't the mother of 44, but the daughter of 20 Grover is to marry, in spite of late reports.

The creditors of Ferdinand Ward have sold what they could of his property for having sold them.

John Deere, the first to apply steel to the manufacture of plows, died Monday evening, at his home at Moline, Ill.

The wife of the Chicago Anarchist leader, Parsons, asks for a suspension of judgment in his case; there should be a suspension of him.

Louis Riel's widow is dying broken-hearted, at St. Vital, Manitoba. She never recovered from the shock of her husband's execution.

Catholic Archbishop Croke, of Cashel, Ireland, a bitter Nationalist, has put a portrait of Gladstone in his private gallery—the first Englishman ever so honored.

King Kalakaua is an active member of the Honolulu fire department. He runs to fires with the engine, and is an expert operator of the pump handle.

Mrs. Buckingham, the richest woman fruit-farmer in California, has an orchard a mile long, with row after row of pear, cherry, peach and apricot trees.

President Cleveland very properly refuses to discuss his prospective marriage; the right of telling about that sort of thing belongs exculsively to Miss Folsom.

E. B. Washburne, of Chicago, has accepted the presidency of the American exhibition, to be held in London, commencing May 2, 1887, and to continue two months.

Powderly, head of the Knights of Labor, was boycotted 10 years ago, so that for months he could get nothing to do; naturally, therefore, he hates boycotting.

Sec. Lamar says he "would vigorously protest if Land Commissioner Sparks should intimate an intention to resign." "No honest, bona fide settler," says he, "has anything to fear from his rulings."

The Queen proposes to make Wales's eldest son the Duke of Kent, Victoria's father's title, which will give him a seat in the House of Lords, and the people will be asked to give him an annuity of $50,000 for so sitting.

Mr. Lowell caught a severe cold on his voyage to England, and Dr. Holmes was quite ill on his arrival. But both are now in good health and are the recipients of kindly attention. Dr. Holmes has been treated with marked courtesy. Among the authors and the reading public of England he has always been exceedingly popular.

The New York Legislature having amended the code so as to remove the restrictions against women practicing in the law courts, the Supreme Court, on Thursday, admitted Miss Kate Stoneman, of Albany, to the Bar—the first female lawyer in the Empire State. Women can practice law now in 16 States and two Territories; but there are only 48 female lawyers.

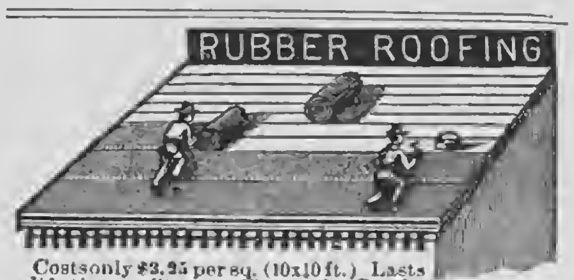
Andrew Carnegie, the steel-rail millionaire, has been trying for some time to give Pittsburg, Pa., a $250,000 public library, but the city cannot legally increase its indebtedness and declines the offer. Allegheny City now steps in with an offer of a site and the money to run the library if established there, and Mr. Carnegie is considering.

Agent McGillicuddy, of the Pine Ridge Sioux Agency, in Dakota, has been suspended by the Interior Department for insubordination in refusing to accept a new clerk appointed to his agency. He has long had much trouble with Red Cloud and his intractable band, but has always carried things with a high hand. A major of the 7th cavalry is temporarily in charge of the agency.

Ex-President Arthur drove out Wednesday and is improving. While he was Collector of this port there was an "unaccountable shortage" of $5,000, and a "descrepancy" of $3,436.83 in the accounts of a dead subordinate—making a shortage of $8,436.88. Arthur had to pay it, but Congress is likely to repay him, as no one attributes the loss to him.

Thursday afternoon, Mrs. Alice Pendleton, aged 61, wife of Hon. G. H. Pendleton, of Ohio, our Minister at Berlin, jumped from a hired runaway carriage here in Central Park, and pitching on her head in the road, was instantly killed. Her daughter, Jane Frances Pendleton, aged 22, also jumped, but though seriously was not fatally hurt. Both had left Berlin two months ago, and were to return soon. Mrs. P. was daughter of Francis Scott Key, author of "The Star Spangled Banner," sister of Philip Barton Key, killed by Gen. Sickles, and niece of Chief Justice Roger B. Taney.

Miscellaneous Advertising.



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HAY CARRIER Manure, Tackless **HAY ELEVATOR,**
best in the market for filling a barn with hay. Better than any track carrier. Easily put up and taken down. Price only $5. Warranted to give satisfaction or money refunded. Best hay fork in the market, $3.25. Write for catalogue and terms to agents.
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Hopkinsville, Ky., Dec. 7, 1885.—From 1872 until December, 1884, my condition was past description. My disease, uterine trouble with tumor, the best doctors pronounced hopeless. Under continued use of Warner's safe remedies, I am the picture of health.—Caroline Bell.

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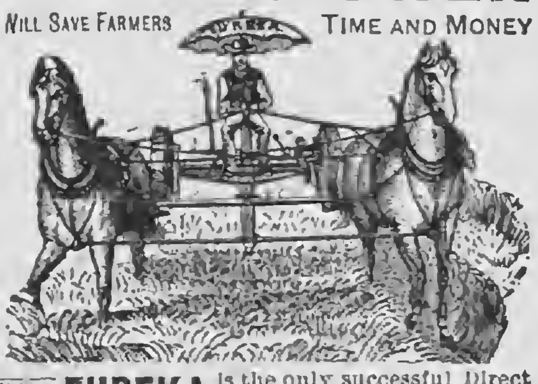

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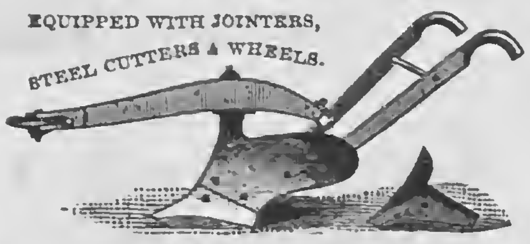

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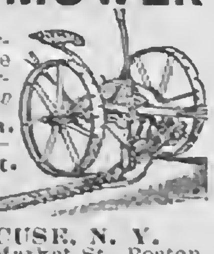

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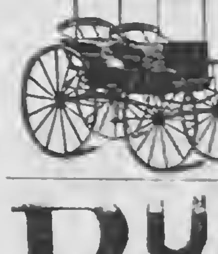

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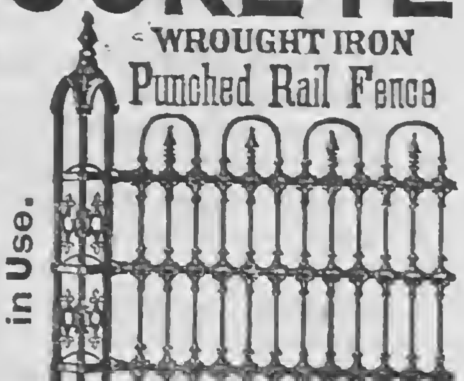

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Humorous.

A SOLDIER said he never knew what it was to "break ranks" until he fell into a basket of bad eggs.

"ADIEU," she said sweetly, as he kissed her good night. "He's adieu'd, aint he?" sung out her little brother as he vanished up stairs.

ETHEL, having put on a lady's bonnet and surveyed herself before the mirror, thus addressed herself: "Oh, ain't you a 'boss woman!"

ANOTHER cold wave, said the young man when his two sisters and three cousins standing in front of an ice cream saloon beckoned him to come over.

"ON what grounds do you leave me without a customary week's notice?" indignantly asked a boarding-house mistress of a leaving boarder. "Coffee grounds, mum, coffee grounds," he tartly replied.

A CITY girl saw a hen preparing to gather her chickens under her wings and shouted excitedly: "Oh! don't sit down on those beautiful little birds, you great, ugly old rooster!"

"WHAT are chilled plows, papa?" asked the little son of an agricultural professor. "Oh, my son," was the wise reply, "they are plows which have stood out in furrow all winter."

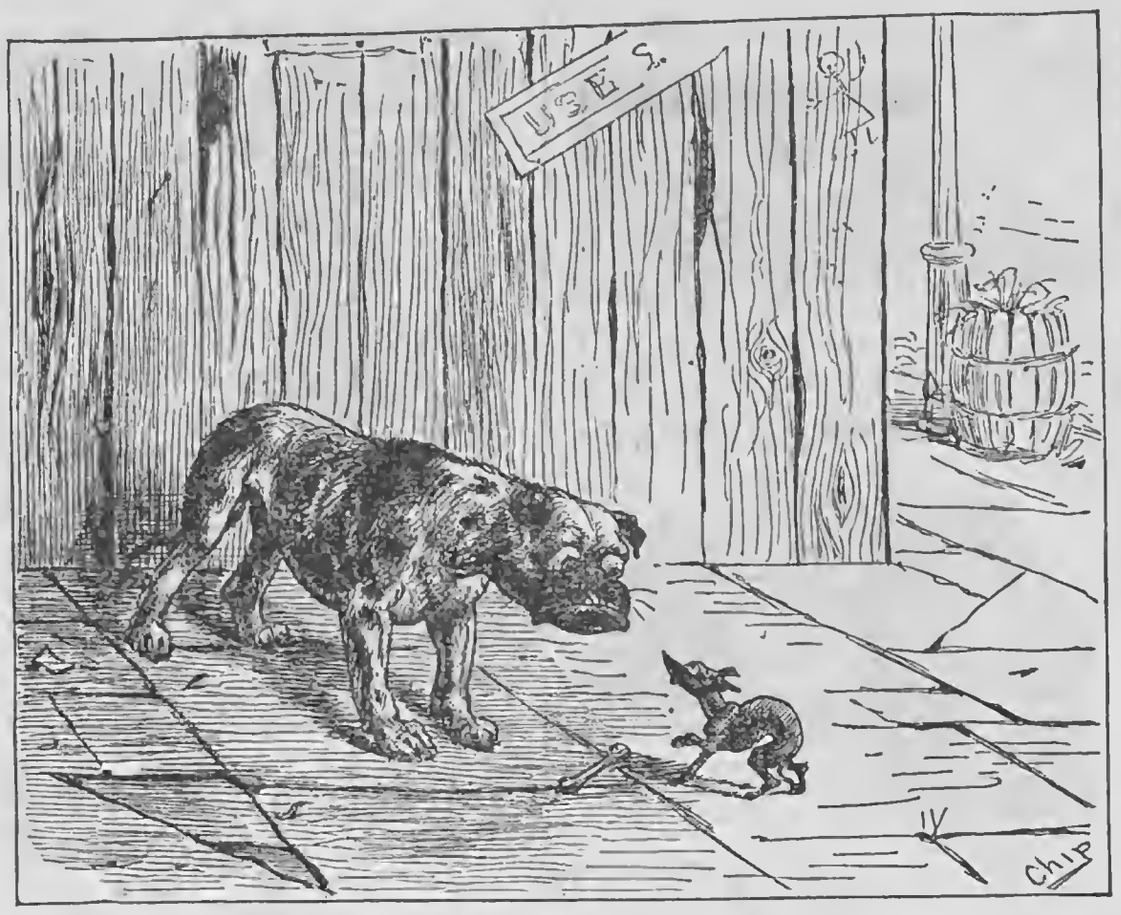
CLARA (looking at the bonnets, etc.): "Don't you think they are handsome?" Amy (whose thoughts are on the other side of the street): "Very, 'specially the one with the black mustache."

A LITTLE girl was walking on the street the other day, when she saw a very bowlegged man with a short coat on. "Oh, ma!" she cried, "there's a man with a tunnel under him."

SENIOR visits his girl at professor's house, getting quite late; conversation lags; girl nods; animal of the long-eared genus brays; girl starts and says, "What did you say, dear?"

A LITTLE girl's father sang in a church choir in Boston. Upon attending church here she noticed that the singers' seats were in the rear gallery. She inquired: "Does my papa sit in the attic and sing, same as they do here?"

A LITTLE boy came running into the house and told his mother he had kicked another boy. "Why did you not stop and take the consequences?" inquired his mother. "Oh," he replied, "I took the consequences before I kicked him."



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All Nurserymen and Dealers are cordially invited to inspect this superior stock or correspond with us, before placing their orders for the coming Fall.

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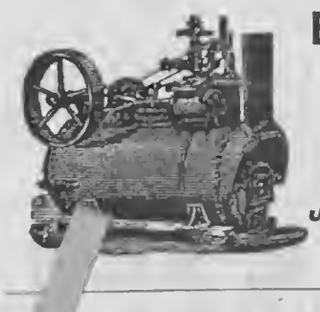

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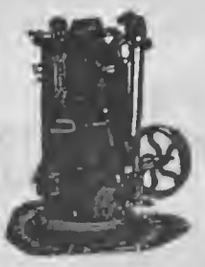

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During the present year a course of lectures is given on the Management of the Dairy by the Honorable L. B. Arnold; a similar course may be expected next year.

A veterinarian building is to be erected in the course of the present year, and four rooms are to be added to the Agricultural Laboratory and Museum.

The University Farm contains 257 acres, of which about 125 acres are in tillage. The farm contains two very large barns, a dairy house, and an excellent herd of stock. All the appliances of the Farm are used chiefly for the purposes of illustrative and experimental husbandry.

Students who take the full course and pass the requisite examinations receive the degree of Bachelor of Science in Agriculture.

Students not candidates for a degree are received without examination as "Special Students" and are admitted to any or all of the above courses, provided the applicants are 18 or more years of age; and provided they satisfy the Professors of Agriculture of their disposition and ability to profit by the instruction.

The next collegiate year begins September 14, 1886!
To all students of Agriculture "TUITION IS FREE."
Full information sent on application. Questions concerning courses of study should be addressed to I. P. ROBERTS, Professor of Agriculture; all other questions to **E. L. WILLIAMS,** TREASURER,
CORNELL UNIVERSITY, Ithaca, N. Y., May, 1886.

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THE RURAL NEW-YORKER

A JOURNAL FOR THE SUBURBAN AND COUNTRY HOME

VOL. XLV. No. 1897. NEW YORK, JUNE 5, 1886. PRICE FIVE CENTS. $2.00 PER YEAR.

Entered according to Act of Congress, in the year 1886, by the Rural New-Yorker in the office of the Librarian of Congress at Washington.

MARY WAGER-FISHER. From a Photograph, by Taber, of San Francisco. Fig. 238.

Biographical.

MARY WAGER-FISHER.

AN AUTOBIOGRAPHICAL SKETCH.

AT our repeated request, our esteemed contributor and friend, Mrs. Mary Wager-Fisher, has consented to favor us and our readers with the following characteristic autobiographical sketch. As it was written while she was away off in California, while "the records of her life" were at her home in Pennsylvania, she was, as she writes us, "quite at sea as to dates and events"; but her breezy sketch of her own career will convey a better idea of the woman as she is than could be imparted by any formal biography. She writes:

To the best of my knowledge and belief, I was born in Tompkins County, New York State—that county made immortal by its glorious "King Apple"—and I grew up on a farm that overlooked Cayuga Lake. My father was of English and Scotch blood; my mother was of Holland descent. Both my parents were persons of "faculty" and energetic to quite an unusual degree—to a destructive degree, for my mother died in her thirties and my father in his fifties. I remember that my mother had quite a local fame for her excellent spelling. She taught me to sew and knit, and I have a bed-quilt of which I cut and sewed the pieces when I was five years old. I hated to knit. My father's house was quite a rendezvous for Methodist preachers, and I heard a great many discussions as to foreordination, answer to prayer, etc. Being in despair one day as to my detested knitting, it occurred to me that it would be quite as easy for my stocking to be finished by faith as for a mountain to be removed. So, rolling it up carefully in a cloth, and putting it in a box in a spare bed-room, I knelt down and prayed God to finish my stocking, and I allowed two hours for the performance of the task. My subsequent chagrin upon finding that my prayer had not been heeded fully converted me to a belief in the uselessness of that kind of prayer, and convinced me that thereafter if I wanted anything accomplished, the only way to get it done was *to do it*, and I have never yet learned any better way.

As a child I had a furious temper, and often, when my dear mother was on her dying bed, she would call me to her, and beg me to govern my temper—not to give way to such wild outbursts of impatience. I was barely 11 years old when she died, and with my "fiery" disposition and willful temper, it is easy to imagine that my young career from that time on was by no means along a path of roses.

I can't remember when my dreams of the future did not far outrun any probable outcome of fact. I would not only be great, but I would be useful! I wished to work for the reformation of the world; for the happiness of the wretched, and I had many a skirmish with my father and two older brothers in regard to "woman's sphere." The boys laughed, and the father said I would fill my "sphere," if I learned to make butter and bread! As I think of it all now, I can feel all those days and years over again—and I blaze anew with wrath! However, I learned to make butter and bread—in a small way, to be sure—and turned my hand at the multifarious tasks of farm-house life—and I may as well make a note of it here—I never learned anything that did not at some time afterward serve me a "good turn." I first began to go to school at the mature age of three years, having first learned the alphabet and small words, and as my parents both felt the great importance of education, their children were kept continuously in school, and their progress in study was carefully watched. We were trained in Puritan fashion, and while my father was keenly alive to our best welfare, he was not given to frequent expressions of affection.

Filled as I was with a spirit of impetuosity, there had to be an outlet for it somehow, and I took to "scribbling" when about 13 years of age, and it was not long afterwards that my first effusion appeared in print in the county paper. It was an essay on "Death." I still have a copy of it, along with the succeeding "effusions" of the two or three years that followed, when I poured out the morbid feelings and vexations of that unhappy period. Meantime, I graduated from the public school into an academy, and I think I was about 15 or 16 years of age when I sent my first contribution to MOORE'S RURAL NEW-YORKER. Of course, as with most young writers, I wrote "poetry," and all my work was very crude. Most of my offerings were published, but further than that I never received any recognition of them from the Rochester office, until one day a note came to me from Charles D. Bragdon, the Associate Editor, giving me some suggestions as to "style."

In due time I went to college, my father yielding very reluctantly to what he considered my "high-headed" notions; but as I look back upon that time now, it was the cheapest disposition to make of me, for had I been foiled in that, he might as well have had a young whirlwind in the house. I believe I had a fair record as a pupil, was heedless of rules, wrote all the time for the R. N.-Y., had typhoid fever during the last year—nearly died—recovered rapidly and by dint of overstudy passed my examinations, got my diploma and returned home, broken in health. It was about this time that I sent an article, anent some recent novel, to a New York paper, and the editor sent me in payment for it a $5 greenback. It was the first money I had received for a literary production and it marked an event in my life. It was a proud moment for me, as I held it up for my father to see, and in the pleased surprise it gave him, he exclaimed, "Well, who knows but the girl will amount to something after all!" This success with a New York paper emboldened me to further effort, and I contributed to various journals, but without pecuniary success.

My ill health induced my father to take me to Philadelphia, where he left me for a time, and I returned home by way of New York, which gave me quite an idea of "the world." The following Winter I spent in Virginia, and during the Winter my father died. My only sister had died while I was in school, and my oldest brother, a young man of brilliant promise, had fallen in the war. It seemed a very sad world to me. My father's death deprived me of everything that was stable, and in the indecision that followed, as to what I was to do with myself, I concluded to see what I could do with my pen. The matrimonial gate was accommodatingly open, but I resolved that if ever I entered in thereat, it must be a long way off. I had no health to speak of, but I had a little fortune and abundant hope, so I went to New York, following, as I had all my life, a sort of hap-hazard destiny, without direction from any one. That I was successful in my writing from this first year in New York was chiefly owing, I think to my "country greenness." I saw everything with an unhackneyed eye, and I expressed myself with a vim and audacity devoid of discretion or conventional propriety.

Very soon after this, Mr. Moore came with the then MOORE'S RURAL NEW-YORKER to New York, and I called upon him at his office and asked him to give me a place on the RURAL. It was a very amusing interview, and I remember very well his expression when I gave him my name: "Why, you're just the girl I wanted to see," and he proceeded to tell me what he wished me to do. In a day or two Mr. Bragdon arrived from Chicago as Associate Editor, and I was very much guided in my work by his advice, and during several years thereafter he was my most helpful and valued friend. He was a man of rare qualities, true, devoted and generous to a fault. The RURAL office was a pleasant place. Mr. Moore was kindness itself, and treated me with great generosity. Col. Harris was there for a time—one of the most genial of men. I had charge of the Department of Domestic Economy, and established the Fashion Department, which went under the name of "Mintwood's Conversazione." In addition, I wrote of art, reviewed some books and described some events. I think it was in the Summer following my connection with the RURAL that I made a trip "out West," going nearly to the extreme westerly limit of Kansas. The previous Summer I had spent a month in New Hampshire. Another Summer I spent in Newport, Saratoga and on Lake George, and still another at Long Branch—always winding up the summer months in the neighborhood of my old home in Central New York. Two Winters I spent in Washington, and it was during the second one that I decided to go to Europe. I was never able, in my best days, to write more than two or three hours at the most without suffering greatly from nervous exhaustion, although it was no special effort for me to write. Whatever ambition I may have had to "amount to something," was very thoroughly nipped by typhoid fever as to its realization, although I don't imagine that I should ever have "set the Thames on fire" if I had had the strength of Hercules. I should have done much better work and more of it, simply.

The two years I had in Europe I spent in England, France, Italy, Austria, with a tour into Hungary and a short stay in Munich. I spent all of one Winter in close study in the National Library of Paris, where I collected material for various magazine articles, which afterward appeared in the "Galaxy," "Good Company," "Lippincott's," "Appleton's Journal," and Harpers' Bazar. I wrote letters during the time to the RURAL, the New York World and the Daily Graphic. While in Rome, I made the acquaintance of the gentleman whom I married in New York in 1876—one year and a half after my return from Europe. In 1875 I was engaged as correspondent of the "American Register," a journal published in Paris and London, which position I have since held. During the years I spent in New York, connected with the RURAL, I also wrote for the World, Tribune, Herald, New York Citizen, Harpers' Weekly (some stories), the Coachmaker's Magazine (stories and French translations), etc., etc.

During the transition of the RURAL, when it passed from the hands of Mr. Moore, and eventually into those of its present owner, I contributed very little, if any, to its pages. But since the inauguration of its present management, my contributions have certainly been frequent enough to satisfy my most "ardent admirers," if there be any such, and it is but natural to infer that, with my long association with the RURAL from "youth to old age," my affection for it is of a very pronounced character, and I feel as much pride in its beautiful appearance and prosperous condition as if I owned it. And its thousands of readers, I trust, are my friends.

MARY WAGER-FISHER.

Dairy Husbandry.

IT IS REASONABLE, LET'S DEMAND IT.

J. S. WOODWARD.

THE agents and lobbyists who represent the bogus-butter makers at Washington are an unmitigated set of liars, when they assert that the stuff is made only of the purest materials and is mainly sold only for what it is. It is a fact, patent to every one, that ninety-nine-hundreths of all that is sold is put up in packages exactly like those used for the best butter, and is sold as genuine butter and under names suggestive only of the product of some favored herd, whose only food is the fragrant grass, and whose drink is water as bright and sparkling as the dew-drops. The whole business of its sale is a fraud, an unblushing fraud from beginning to end. The people at large will not eat any compound made from the waste of the slaughter-houses if they know it, and in order to force its sale, bogus butter must be dressed in the habiliments of pure butter and labeled as such. If occasionally sold for what it is, it is to dealers to sell again, or to restaurant or boarding-house keepers, for the express purpose of taking the place of pure butter to the deception of the consumers.

If it were true that it is always made of the cleanest caul fat or even of the best suet, it would not be so bad; but men who make a business of deception and fraud are not at all scrupulous as to the extent of the fraud, so long as it adds to the percentage of profit, and by the aid of modern chemistry there is nothing in the fat line so filthy or disgusting that it cannot be deodorized and incorporated into the stuff. The lively opposition of the manufacturers of cotton-seed oil to the measures now before Congress proves very clearly that much of their product finds its way into the stuff, and the claim made by the Western butchers that the passage of these laws would reduce the price of every bullock slaughtered $10, shows that much besides the caul and kidney fat of these animals must be used for this purpose. The whole business is dishonest and worse than the issue of counterfeit money; for while that only affects the medium of exchange, this directly affects the food of the whole people. Possibly it can be made so as not to be absolutely unhealthy; but that it can be made as good as pure butter is a falsehood, and no one knows it better than the manufacturers of the stuff.

It is not the dairy interest alone that is injured by this fraud; for the economy of every family is outraged; nothing is further from the purpose of its makers than to make a substitute for butter; such claims are fraudulent; what they aim to do is to make a cheap imitation and to fraudulently sell it as butter, and for the price and in the place of butter, and every one to whom it is sold is robbed. If such was not the case, the manufacturers could not and would not object to any law compelling it to be put up, and colored even, so that it could not be mistaken for butter. If people are to be induced to eat any compound in the place of butter, it must be attractive, wholesome, and the consumers must be made to believe it to be cleanly made, and nothing will so quickly bring this about as legislation placing its manufacture under the supervision of proper officers.

We farmers ask for no restrictions on its manufacture, nor for more than a mere nominal tax, just sufficient to pay the cost of supervision; but we demand a law regulating its manufacture, so that it shall be innocuous to health and put up so as to be distinguished, and then sold for just what it is. If the dairy interests of this country cannot compete with an honest substitute for butter, then let them go to the wall. They have no more right to ask for any restrictions on the manufacture of any competing substance than have the manufacturers of iron; nor do they ask for any such. We ask for only what every honest man has a right to demand of the Government, protection against fraud and false pretences, and these are the pillars on which rest the whole bogus butter trade. Without these it could not exist, and against these it is the acknowledged duty of the Government to protect both producers and consumers. In this bogus product can be used the nastiest and most revolting fats and at an enormous profit, and the ordinary people have no means of detection, and Congress owes it to the Nation to place the manufacture under supervision, and to insist that the product shall be so made as to be a safe food and to be easily and certainly distinguished; this is as plain as that the people have the right to be protected in the money they use, or protected from lottery or other swindles.

It is for the interest of the whole people that Congress should move promptly in this matter, and all farmers should see to it that the members from their districts be made aware of their desires. That Congress has an eye to the wishes of the country, is plain to every one who has watched the sudden change of certain Senators even on the bill modifying the postage on seeds. Let petitions asking for a stringent law be circulated in every neighborhood, and let the names be sent in a flood upon the members, and no one need have a fear of some salutary action.

Niagara Co., N. Y.

THE LARGEST TWO-YEAR-OLD MILK AND BUTTER RECORD.

WE have just received from Messrs. Smiths, Powell & Lamb, of Syracuse, New York, the sworn statement of the milk and butter records of two of their Holstein-Friesian two-year-old calves, which are certainly marvels. Albino 2d, H. H. B. 3500, dropped her first calf April 7, 1885, being then two years, one month and 23 days old. Her record commenced on the morning of April 11, 1885, and ended on the evening of April 10, 1886, just 365 days. During this time she gave 18,366 pounds two ounces of milk, and at the end her daily record was higher than at the beginning. From the morning of May 5, 1885, to the evening of May 6, 1886, one year, she gave 18,462 pounds one ounce, surpassing by 715 pounds 15 ounces the famous two-year-old record of Aggie 2d, which was 17,746 pounds two ounces, and she was some months older than Albino 2d when her record began. Several well known Holstein-Friesian men, such as Mr. S. Hoxie, Dudley Miller, etc., tested her on special occasions during the trial, and her yield was always wonderful for an animal of her age. These gentlemen testify under oath to her performances.

Nearly as remarkable is the butter test of Benola Fletcher, H. H. B. 6891, belonging to the same firm, which dropped her first calf on April 18, 1885, and was put to a butter test on April 30, 1885, being then two years, one month and 20 days old. From April 30 to May 6, inclusive, she gave 300 pounds, one ounce of milk, from which were made 16 pounds nine ounces of worked, unsalted butter, being an average of one pound of butter from 18 11-100 pounds of milk. In just one year, ending April 19, 1886, she has given 13,159 pounds four ounces of milk. Her butter and milk records are sworn to by the man who made the butter, the superintendent of the farm and the person who milked her through the year. Certainly both these records are memorable additions to the honorable achievements already accomplished at the Lakeside Farm.

MILKING STOOL.

ALL kinds of milking stools are in use. Few other farm implements have so wide a range of construction. Frequently a simple block of wood is made to answer, or a board is nailed to the top of the stick. In the South, where the greater part of the milking is done by negro women, we have frequently seen the milkers on their knees under the cows, with the pail resting on the ground. Some dairymen, more elegant, and with an eye to their own comfort, bring out a comfortable chair, or even make a stool out of the pail itself. The stool shown at Fig. 242 is simple, easily

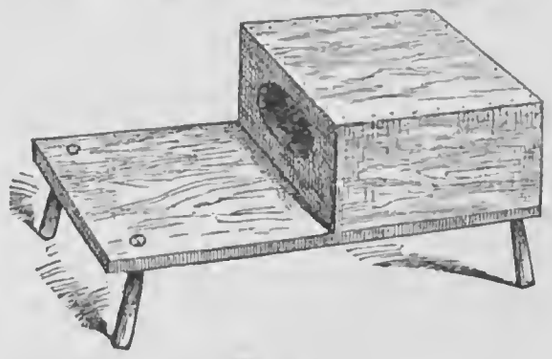


Fig. 242.

made and convenient. It is used by Robert Crane, Jr., of Bucks Co., Pa., who prefers it to all others. It is made of ordinary pine boards. The legs are six inches long. A cloth is kept in the box, so that the cow's udder can be quickly cleaned. The pail is placed on the board in front and held in place with the knees. The cow is unable to kick it away, and it is up out of the dirt, and there is no danger of its slipping from between the knees.

ABORTION AMONG COWS.

BREEDERS have had much trouble the past few years with abortions. These premature births have so lessened the profits as to partly discourage some of our breeders. I have not had a single case, but in my observation among herds where it has occurred, I wondered if the cause could not be often easily divined. In one place horses and cattle were all together. One kick from a playful colt is enough to produce premature parturition. In other herds frisky steers and young cattle were with breeding cows. I am fully persuaded that much of the dreaded abortion could be avoided if we should keep our breeding stock away from all other stock that could or would drive them harshly about or worry them. Cows, if Short-horns and in proper condition, will rarely injure each other. A little more expense in yard-making may be a sure and economical remedy for abortion. SHORT-HORN.

The Poultry Yard.

VALUE OF PURE BREEDS TO FARMERS.

Value of pure breeds; best crosses for grading up; inclosing fowls; overfeeding; green food; daily rations; lice.

WERE the nature and characteristics of the various pure breeds of fowls better understood, no doubt farmers would resort to them more generally to improve their stock by crossing or use pure breeds altogether. As all the pure breeds possess some points of value peculiar to themselves, I could not recommend any one that answers all requirements. That judicious crossing of some of the pure breeds upon common fowls improves the latter is a fact too well known to be doubted. Introducing new blood, an incidental feature of such crosses, is in itself a cause of improvement, as it infuses stamina and constitutional vigor into a flock. Some varieties are much hardier than others, and this is a feature that should be sought; for hens are profitable as egg producers just in proportion as they are able to withstand the hardships of severe weather. The Brahmas and Wyandottes are among the very hardiest of all the breeds. The former has the advantage of great size, while the latter matures early, and both have very small, low combs—a very essential feature in a hardy fowl. Hence, a cross with these breeds in the order named, is, I believe, the best to begin with to grade up common stock, followed another year by one with Pit Games or Leghorns, then reverting back to the larger breeds. Such a cross, if followed up, will produce a marked improvement in common fowls at a light expense each year for a good, pure-bred cock, which will be amply repaid in their improved condition both for laying and for market.

I find by experience that fowls inclosed in spacious runs, where they can have shade and grass in Summer, and warm, well lighted quarters in Winter, with cleanliness and proper diet, will thrive better the year round and yield better returns than if allowed to run out during all kinds of weather and trust to the hap-hazard subsistence so common on many farms. Why should we expect poultry to pay when they get poor keeping and no provision is made for their comfort, any more than we would expect the best results from horses, cows or sheep under like conditions?

While all fowls may be made to pay well with good care, I believe the pure breeds or their crosses, where judiciously selected and fed according to the requirements, will give the best results; the heavier breeds, such as the Brahmas, Cochins, and Plymouth Rocks, are too often overfed; their quiet disposition gives them a tendency to lay on fat too readily when fed all they will eat, and care should be taken to avoid this. The lighter breeds may, with impunity, be fed as much as they will eat up clean. Aside from a constant supply of gravel, ground oyster shells, etc., we all know, or ought to know, the value of green food for poultry the year round. Under this head, I may name potatoes, cabbage, onions, turnips, beets, etc. Few know what an excellent winter food is the mangel-wurzel. A very large quantity can be raised on a small piece of ground, and the roots are easily kept by merely pitting and covering them from severe frost, and then when taken out in Winter they are so crisp and tender that the fowls eat them ravenously. My practice has been to feed in the morning a mash of one half boiled potatoes, the other half about equal parts of corn meal, wheat bran, and ground oats, with occasionally a little ground oil cake added, and a few onions and meat scraps seasoned with a tablespoonful of salt—[we should leave this out.—EDS.]—to one-half bushel of feed, a little red pepper or ginger added now and then. At night, corn, wheat, oats, and buckwheat are fed each night alternately. No feed is given at noon, but, instead, we give what is no less beneficial to them, an armful of chaff or clover hay. This starts them scratching at once, and affords them exercise. Give them plenty of exercise in this way, especially when confined, and see that they as well as their quarters are kept clean and free from lice. Don't be afraid to pick up a fowl and examine it now and then. Part the feathers of the fluff and examine the skin underneath; you will sometimes in this way discover a condition of things that you did not suspect before. If you find upon thus examining your fowls

that they are troubled with lice, dust insect powder freely among the feathers under the wings and on the back. Where fowls have access to a good dust bath they can keep themselves free from this pest.

Good food in variety, such as above mentioned, cleanliness and a liberal supply of gravel, oyster shell, etc., will do all that any "egg food" can to increase the production of eggs. If green bones can be procured and broken up in small bits and fed, marrow and all, two or three times a week, they will be found one of the most valuable foods for egg production. ROBERT COATES.

Cook Co., Ill.

POULTRY IN CANADA.

THERE probably is no other occupation in the world in which there is such a vast difference between theory and practice as there is in poultry keeping, especially when conducted on a large scale. It is estimated that over 60 per cent. of the dry goods merchants fail in the world; but I believe there is a larger percentage of failures among extensive poultrymen. Every farm, however, should keep, say, 50 good hens, for there is no other kind of live stock so profitable, when the number is not too large for the range and food. I first tried pure Leghorns with poor success; they are not hardy, either when chicks or matured fowls, and are miserable things on the table. Non-sitters are not suitable for farmers: such a large proportion of their eggs are lost, and they are difficult to increase.

At present, Plymouth Rocks are our best all-purpose fowls for the following reasons:—1. They lay mostly when eggs are scarce and valuable, and the eggs are of a favorite brown color; 2, they are excellent mothers; 3, they are very hardy, both when chicks and mature; 4, they mature very early; 5, they are choice table fowls, beautifully colored meat being extensively produced on the breast, where it is of most value; and, 6, they have bare legs.

It pays to inclose farm fowl for short times, to keep them off small fruits and grain when ripening; and in early Spring, the best breeding stock should be kept separate from others. My plan is to have cheap portable hen-houses built on skids or runners, so that I move them about the pastures, stubble-grounds, and fallows during Summer, where fowls live well on grasshoppers and other insects, waste grain, etc. I keep these coops in the barn-yard during Winter. I believe wheat is good egg-producing food; but I receive the best results from cooked barley. I advise frequent change of diet, and I have always found it profitable in cool weather to feed them the meat of any animals that chanced to die. I find corn the best home-grown fattening food.

To buy pure-bred chicks in the Fall is much the best way of getting improved farm poultry. Then keep them separate from other fowls during breeding season. As soon as the stock of choice fowls is numerous enough, the old-time scrubs may be butchered to good advantage, in early Fall before beef, etc., become cheap. Buying expensive eggs is "buying a pig in a bag." Thoroughbred stock, with yearly change of males, has as much advantage over scrubs among chickens as among other stock. One of the worst losses is caused by keeping the hens till they are too old; they should be disposed of when three and one-half years old, or sooner. I cannot praise hen manure enough as plant food. It heads the list. F. W. WILSON.

Kent County, Ontario, Can.

POULTRY NOTES.

LEG weakness in chicks results usually from three causes—rapid growth, bottom heat in brooders, and the use of sulphur. Lard and sulphur rubbed on the legs of fowls, in damp weather, will cost them the use of their legs for awhile.

WHEN the hens appear droopy, and yet show no indications of disease or injury, remove the rooster, especially if the hens are fat. As soon as you have finished hatching chicks remove the roosters, as eggs from hens not in company with roosters will keep three times as long as will those that are fertile.

THE chick that seems nearly naked, and which feathers slowly, will be easier to raise, if kept warm, than one that begins to feather rapidly from the start. It is the feathering period that is the critical time with young chicks.

YOUNG chicks of the Polish, Dorking, or Hamburg breeds, are tender when very young and not as easily raised as some other kinds.

A CROSS of Wyandotte or Plymouth Rock on Brahma or Cochin hens makes the best broilers for market.

THE hens that begin to moult early will give you eggs in Winter. Do not sell the early moulting hens.

APRIL is the best month for obtaining high prices for poultry, and in December the prices are the lowest, but the case is reversed for the prices of eggs.

DRY, sandy soil that will not produce a blade of grass, is the best for poultry in confinement.

ABOUT one-fourth Leghorn blood will make its influence felt. It hastens early maturity, but imparts too much comb for cold climates.

THE size of the yards is of but little consequence if they are kept clean and the hens are made to scratch and work.

FEATHER pulling is an acquired habit. If one of the hens becomes addicted to the vice, she will teach all the others. There is no cure for it. When the habit becomes general, sell off the flock and begin anew. It always results from idleness. Keep the hens busy.

TOP ventilation has done more to cause roup and colds than all other causes combined.

A SATURATED solution of boracic acid should always be on hand. For swelled head and eyes, applied with a soft sponge, it is one of the best remedies known. A teaspoonful poured down the throat, twice a day, is an excellent remedy for roup, while a mixture of equal parts of the powdered boracic acid and borax—a teaspoonful once a day, has been successful in cases of cholera.

WHEN little chicks become drowsy, droop, refuse to eat, and finally die, examine very closely for lice.

WHEN sitting hens become disgusted, and leave the nests, lice are somewhere in the poultry house, but more particularly in the nests.

BROKEN or rotten eggs always breed lice in myriads.

OVER 1,000 broilers were raised with a loss of only three per cent., this season, in a building 10 feet wide and 60 feet long, brooders being used for that purpose.

DAMPNESS is fatal to young chicks, not only in Winter, but even in July.

The Swineherd.

A DEFENCE OF POLAND-CHINAS.

IN looking over last year's RURALS the other day, I came across an article on large breeds of swine by Col. F. D. Curtis in the issue of September 26, 1885. A writer in the Cultivator had said that the Poland-Chinas were the best for crossing with the smaller breeds, as the sows are always kind, have large litters, and rear with less difficulty and loss than any other breed the writer had tried; while the Chester-White and Duroc-Jersey sows become cross and unmanageable after rearing one or two litters, when a good sow should be worth most to a breeder. The Colonel called this the most preposterous paragraph ever written. He said the writer must be a Poland-China crank; that no large breeds of hogs have smaller litters or raise a smaller per cent. of pigs than the Poland-China. He insisted that the best large breed to cross with the small breeds is the Duroc-Jersey, and that Duroc-Jerseys and Chester-whites average one-third more pigs born and raised. He claimed the Poland-China hogs to be the weakest of the large breeds in bone and muscle, owing to close in-breeding, and the universal system of crowding the pigs with corn from birth. He declared they are three-fourths Berkshire, and get all their good qualities from that breed. "Simple assertion," says the gallant Colonel, "will not give hogs stamina, or lots of pigs, or large udders; nor will fat."

If extravagance of statement is to be the criterion, I might with equal or more justice call the Colonel a crank—perhaps of the Duroc-Jersey variety—but from his writings, I know that he is a shrewd business man, and from occasional advertisements, I know he has Duroc-Jerseys for sale. I certainly don't think, therefore, the Colonel is a crank, for I can see a better reason than crankiness for his exaggeration of the merits of the Duroc-Jersey, and his belittlement of those of a rival breed. I have had a good deal of experience with Poland-Chinas and the other large breeds, and know therefore that the writer in the Cultivator was not a crank in his praise of the breed, as hundreds of others could honestly express the same opinions from actual experience. As a matter of fact, the Poland-Chinas do not have smaller litters, nor do they raise a smaller percentage of pigs than the other large breeds; on the contrary, they are very prolific and the best of mothers. I cannot see why the Colonel should wish to cross the Duroc-Jersey on the smaller breeds, unless he wishes thereby to make an improvement in the Duroc-Jersey, which he certainly can do. I value a hog for the quantity and quality of the hog in him, and if a small breed suited my purpose, I would have it; and if a large breed did so, as is actually the case, I would have it also; but in no case would I have the Duroc-Jersey.

I admit the Poland-Chinas cannot climb fences and root under hedges like the Duroc-Jersey, but they have bone and muscle enough to walk long distances to market, carrying a very salable and profitable load of tender, juicy flesh. A few years ago I saw one weighing 700 lbs walk 15 miles to market in one day, so that he couldn't well be lacking in bone and muscle. With regard to the alleged excessive "crowding," why should the breeders or feeders of one strain of swine crowd their pigs from birth more than do the feeders of others, unless it is because they have the merit of being able to stand crowding better than the others? You can't crowd a Duroc-Jersey; but if you wait until he is two or three years old, and until you have cribbed in him two or three crops of corn (I believe the Colonel prefers peas), then you will have him in all his glory.

If the Poland-China has derived three-fourths of its excellent qualities from the Berkshire, is not that an excellent source from which to draw good qualities? As yet the Duroc-Jerseys have drawn very few good qualities from any source; indeed, it is doubtful whether the breed has yet been fully established—whether its claimed characteristics are transmitted with anything like certainty within its own membership, much less when crossed with other breeds. It is well known that the more markedly the characteristics of any breed are impressed on the pure-bred offspring, the more notable are they in crosses with scrubs or other breeds; and the Colonel acknowledges that the Duroc-Jerseys "have been bred scarcely long enough in a direct line to have become thoroughly established in all respects." The longer and more firmly a breed has been established, the greater the certainty of its transmitting its characteristics to its progeny by another breed, and as all the small breeds have been established much longer and more firmly than the D—J., isn't it plain that while a cross with them would improve the progeny on the Duroc-Jersey side: it would not be likely to do so on the small breed side, except perhaps in the same way as a cross with a "rail-splitter" might be said to "improve" them by imparting to the progeny a coarser vigor, a faculty for disposing of more food to less advantage, and other undesirable qualities which years of skillful breeding have bred out of the most profitable breeds.

Now for a few facts: In 1884 four pure-bred Poland-China sows produced and raised for me, 72 hogs, and when fattened in the same year, the sows weighed at 22 months, 450 pounds apiece. In 1885 three sows, 10 months old, produced 21 pigs and raised all of them. My favorite old sow, Bessie, last year produced and raised 24 pigs. I have also a pure Poland-China sow that farrowed three times in 1885, and raised 36 pigs. My neighbor, Mr. G. Goodlive, owns two Poland China sows which farrowed in March 1885; and one raised 14, the other 11 pigs, though the little things came in an open lot during a severe snow storm, with no shelter—did this prove they lacked stamina? I also know a herd of 12 sows (pure P. C.) which last Spring raised 108 fine pigs; can Col. Curtis show a herd of 12 Duroc-Jerseys which raised one-third more—or 144? I consider the Colonel an honest man and will accept his word in the matter; my own statements I am ready to confirm on oath at any time. "Simple assertion will not give hogs stamina, or lots of pigs," so it's your turn, Colonel, to come forward with the proof.

St. Joseph Co., Mo. R. J. YOUNG.

Farm Economy.

COTTON SEED FOR FEEDING.

IN our experiments in feeding cotton seed for beef and milk, the results seem to show that boiled cotton seed gives better results than cotton seed meal or seed with hulls removed.

Cotton seed is rich in fats and albuminoids; theoretically it should be fed with poor hay, straw, or corn or sorghum silage, to make a well balanced ration. Practically, when fed with the above named foods, we have found that it will make an animal fatten as rapidly as with the best quality of hay and corn. It is worth about 10 cents per bushel on the plantation, and one bushel—33⅓ pounds—is equal to half a bushel of corn for producing fat. A 1,000 to 1,200-pound steer will eat about one-half bushel of seed per day, if the seed is boiled, or about two-thirds as much, when fed raw. In our test last Winter, the steers fed on cooked seed gained nearly twice as fast in weight as the steers fed on raw seed, the balance of the ration in each case consisting of silage and hay.

In speaking of the indigestibility of the hull of the cotton seed, writers are drawing on their imagination. The hulls never appear in the excrements like grains and sometimes particles of coarse straw or hay, and, so far as I can learn, there is not a particle of evidence to show that cotton-seed hulls are less digestible than common hay. The hulls are used for feeding cows in many of the Southern cities, in the place of hay, and when fed with grain or cotton-seed meal, give about the same results as hay and grain. The cotton seed may not make as good a quality of beef as corn, but our Southern butchers pay as much for the one as for the other. F. A. GULLEY.

Prof. of Agr'l, Miss. Agr'l College.

DRAIN HEAD FOR "SINK-HOLE."

ON many farms there are one or more of those peculiar depressions commonly known as "sink-holes." They have no surface outlet, and the water from snow and rain that runs or falls into them, remains until evaporated by the sun and wind. The soil in them is invariably deep and rich, but is unavailable for any purpose except during very dry seasons. To drain them by cutting and maintaining a deep, open ditch, which is often done, is frequently to ruin almost as much good land as is contained in their area. The best, in fact the only practicable, method of draining them is to run tile drains through the high surrounding ground to the nearest natural outlet. In most instances where this has been done, a shallow well is sunk in the lowest part of the depression for the water to run into. It is walled with brick or stone, and the head of the drain opens into it. This well is only the less of two evils, as it must be guarded by a fence and cleaned out every year. A far better plan is to widen about four feet of the ditch to 2½ feet, lay the tile in, then fill this part of the excavation with coal ashes, as shown at Fig. 241. Cover the tile 12 to 15 inches deep with the coarsest hard cinders, then fill up, rounding with the coarsest of sifted ashes, tamping them firmly down as they are put in. Water will readily enter the drain through these ashes without carrying in any soil, while they present no obstacle to the passage of farming implements. Whenever they become clogged, which they probably will in five or six years, they should be removed. FRED. GRUNDY.

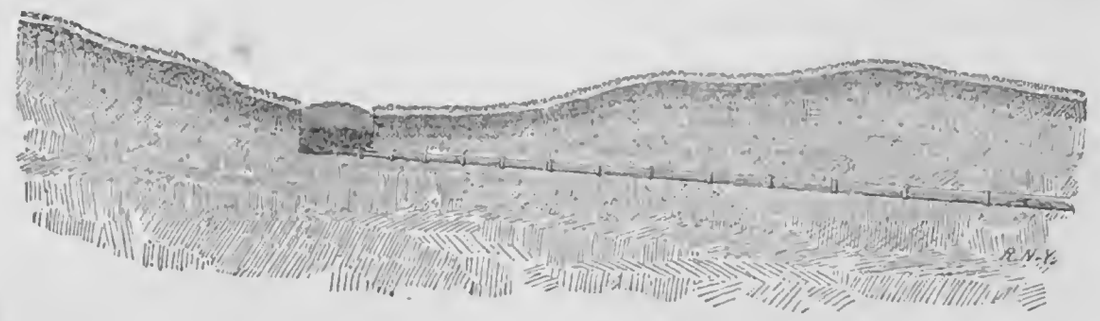


Fig. 241.

Christian Co., Ills.

A LAND ROLLER.

MR. W. S. WAITE, of Bedford Co., Tenn., is not well pleased with the roller described in the RURAL of April 3. He thinks it is clumsy, difficult to take down for transportation, and that the section behind is too light to mash hard clods or smooth uneven ground. The roller shown at Fig. 240 plea es him much better. The logs, or sections, are cut three feet long. A hole of the desired size is bored through the blocks in the center, and each end is morticed out to fit a 4½-inch square boxing. Both

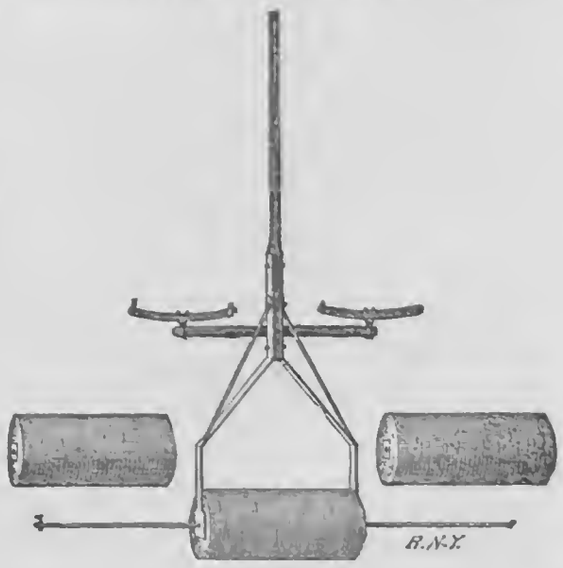


Fig. 240.

ends of the middle and the inside end of the outer sections are made concave. A tongue is used as for a wagon. The bars which hold the middle section are of 3½ inch by one-half inch iron, and fastened to the tongue by three bolts. Two braces of lighter iron are welded at the corners, as shown in the illustration, and bolted to the tongue. An iron plate, six inches wide, is welded to the ends of the bars over the ends of the middle section. To put the roller together, loosen the bolts on the tongue until the bars come far enough apart to cover the ends of the middle section. Then tighten the bolts well, put the pieces in exact line, and push the rod through, and fasten it with the key at the end. There should be a washer at each end of the rod. The rod should be two inches thick. Keep the boxing well oiled for light draft.

Floricultural.

NOTES ON NEW ROSES.

JAMES TAPLIN.

I AM afraid these notes will not be interesting, as they refer specially to varieties good for trade purposes; but yet these are in reality the best and most useful for the amateur to grow—that is, if he has the proper conditions for growing them.

HER MAJESTY, the latest novelty, is supposed to be a hardy rose. It is a very strong grower, and has a very large flower; but it is too new for me to give an opinion on its hardiness. Its appearance is much like that of the Baroness Rothschild; but we do not know yet whether it will flower as freely, though, of course, it may do so. There is no doubt that this is one of the largest, if not the largest, of roses; but we can find pæonies as large, that is, if size is its only recommendation, for it is woefully deficient in odor.

WILLIAM FRANCIS BENNET is also a new variety, and when well grown, like some exhibited at the N. Y. Horticultural Society's Show, it is a grand rose. It is good under any circumstances. It was complained that the flowers were nearly single when expanded; but we find that from good, strong plants, the flowers are full and large, and the scent is also fine. Unfortunately, like all the high-colored roses, the color soon goes; but I believe this will be one of the best new roses. It has not yet been proved hardy. It may be, but although La France is such a splendid forcing rose, it does little good in the open ground, and the Bennet belongs to the same class.

AMERICAN BEAUTY is said to have originated from seed gathered in the garden of Bancroft, the historian, at Newport, R. I. When I saw his garden, it was after a heavy thunder shower, and that evening the beautiful green grass to be seen in so few places in the United States, with the roses all in full bloom, made a lovely sight. Some growers think this variety will be a useful Autumn rose out-of-doors. At any rate, it is a fine grower, and also a splendid bloomer, and the scent is delicious.

MERVEILLE DE LYON appears to be better than Mabel Morrison; but all that class, although fine when well grown under glass, do not appear satisfactory outside.

SUNSET had, I presume, a good sale and I have seen some very good flowers of it from various growers; but, like the Perle des Jardins, from which it sprang, it does not seem adapted to outside planting.

THE BRIDE will, I believe, be the best paying white rose in cultivation for in-door culture; but, like its parent, Catherine Mermet, I presume it will be of little use outside. This sport originated with me, and I at once saw the value of it, though I did not push its sale. The stock was sold to a good judge, and is meeting with great favor both here and in England.

Arboricultural.

RUSSIAN ARTEMISIA.

PROF. J. L. BUDD.

PLANTS of the above have been sent to a number of experimenters in the Northwest, and these parties have requested me to give in the RURAL a note on its probable uses and value.

It is probably the Artemisia Tobolskianum of Loudon, who says of it: "This plant has elegant foliage, consisting of finely divided leaves. It is a much more vigorous-growing variety and larger in all its parts than the species (A. Abrotanum).

It will grow to a hight of from four to five feet, with a spreading bushy top, in a single season from cuttings. Its ultimate hight does not exceed eight feet. In foliage, fragrance and medicinal properties, it is much like the Southernwood or "Old Man" of our gardens.

It can hardly be called beautiful, but single clumps of it on the lawn are interesting, especially in the far Northwest where trees and bushes that will live are not over-abundant in number.

In riding a year ago over the prairies of North Dakota, without seeing a bush or tree for hours, the thought occurred that the wild artemisia of the Russian steppes would relieve the monotony of expression.

In hedge form it would prove invaluable, on the start, to arrest wind sweep from walks, flower gardens, etc.

In hedge form on the outer and inner borders of tree windbreaks it will also prove valuable for arresting snow.

It will grow on dry knobs of West Dakota, where most other ligneous plants will fail.

Ames, Iowa.

THE COTTONWOOD FOR SHELTER AND SHADE.

GOOD specimens of the cottonwood are, indeed, beautiful; and yet there seems to be a sort of a prejudice against it here in the West—strange, too, for in my humble opinion there is nothing like it. To the new settler on the prairies there is no tree that can take its place. I have known it now for 20 years, and the more I know it, the better I like it. If we were going on a new farm to-day—that is, on a prairie farm—the first thing I would do would be to plant at least five acres of Yellow Cottonwoods on the north of the site selected for the buildings, or, if I were going on to a farm anywhere here in the West, that did not already possess a good grove north of the buildings, I should immediately take steps to get one there. I wish I could impress the importance of this upon every dweller on the prairies. If the reader hasn't a grove he should make a move towards getting one next Fall or Spring, for in addition to its beauty, comfort, and pleasure, there is money in it—"big money," too. Don't set out half a dozen rows of trees and call them a wind-break, for they are only a fraud as a wind-break. At least four or five acres are wanted, and then the protection thus secured will do you and your stock some good.

Let nobody let some oily-tongued agent inveigle him into planting Russian Mulberries; for they are the biggest fraud of all; but let the intending planter get Yellow Cottonwoods for the first four or five acres; then if he chooses to plant more, let him plant black walnuts or ash. I recommend the cottonwood as the first, only because it is so easily procured and so early forms a protection, and a few about the house will soon form a grateful shade. The cottonwoods can be removed—or at least most of them—when one has had time to grow more desirable trees. One objection to the cottonwood as a shade tree is the annoyance from its millions of downy-coated seeds. These can be avoided by raising trees from cuttings, taking these from male trees which bear no seed. When we first came on the homestead, the old settlers told us that if we planted cottonwood we would soon have the whole farm seeded down; but this was a mistake. The seed seldom or never germinates except on sand-bars along the streams and on prairie that has been newly broken.

Evergreen Homestead. D. T. GAUTT.

SPREADING TREES.

ON page 238 of the RURAL, C. W. A. makes inquiries concerning upright pear trees. Let him use the arrangement shown at Fig. 239, and he will be well pleased with the result. By means of the little wooden brace shown in the picture, the trees can be easily changed as desired. These braces can be made of any free-splitting wood, from three-fourths to one-inch-and-a-quarter wide, of the length required, and thick enough not to bend. I have changed upright, thrifty-growing trees in this way very easily. It might not pay on a large scale, but for a few trees it would be desirable. N. CODY.

Tuscola Co., Mich.

Miscellaneous.

CORRESPONDENTS' VIEWS.

A FEW years ago I had a large quantity of buckwheat straw. I told my man to use it for bedding the hogs. He said it would poison them and give them some skin disease; but I used it all the same. I mowed three or four loads away in the hog-pen, and then let the hogs in. In the Spring I had several loads of fine manure and as nice a lot of hogs as I ever saw. It pays to bed hogs with a load of straw and not expect them to live on a few straws laid on a hard plank. Stingy bedding, in this country, will make a stingy-looking porker every time. C. W. F.

Charlotte, Vt.

THERE is no sure cure for a kicking cow. I would never keep one unless she was extra-good, and could give milk enough to pay for the extra work of handling her. The best cow I ever had would kick like a horse, with both feet. I put a ring in the post back of her, large enough to hold a good-sized strap. The strap could be buckled round her foot, and then pass up through the ring. At the first sign of a kick, I would get up and pass the strap through the ring, and pull on it till her foot came off the ground. Then she could only kick against the air, for the strap held her foot up. She never tried but once to kick with the other foot while one foot was tied up, and then she landed flat on her side. She got so that the strap, tied about her foot would keep her quiet. The foot had to be pulled up about once a month. The way some cows are treated, they would be fools if they didn't kick. I can take the mildest cow in this county and turn her into a kicker in six months. It looks sometimes as though a calf from a kicking cow would kick just like its mother. Too many cows have not much of anything but tricks to hand down to their calves.

Orange Co., N. Y. J. A. O.

I THINK the grade Percheron comes very near to the ideal farm horse for this country. The Clydesdales are good heavy-draught horses, but hardly active enough for a general purpose animal. If the Cleveland Bays are large enough to breed on our common mares, so as to produce a grade of proper size with their fine action and style, they will surely be the coming farm horse. PROF. S. JOHNSON.

Lansing, Mich.

THE yield of the Diehl-Mediterranean wheat, was, with me, 104 to one, and of the Thousand-fold Rye 121 to one. Like R. C. a late RURAL, I too think carp pay well. Last Summer I had in my pond one pair of carp three years old. From their family last Fall and this Spring, I have sold for stock purposes $44.10 worth, and still have as many more left in the pond. W. R. F.

Salisbury N. C.

NEW ZEALAND Grass is suggested for the South. I hope there is some man in the country with means, foresight and enthusiasm enough to act upon the suggestion. The man who can succeed in introducing a grass to take the place of the native grasses of the South, will be a great benefactor. I wish I could find such a grass for Texas. I landed here nine years ago, and at once asked, "What grass succeeds your prairie grass?" In all these years I have never received a satisfactory answer. One of the great misfortunes of Texas is her lack of good grasses. J. H.

Laurence., Texas.

FIRE-WOOD is the family peace-maker on many farms. A farmer who really desires to make the Summer but a long series of disputes with his wife and daughters, can easily accomplish his object by neglecting the wood pile. A. S.

IT is folly to plant potatoes on stiff, heavy, or clayey land, or on bottom land. The farmer who has no other kind of soil should leave potato culture alone, and raise corn on such land, and buy his potatoes. Potatoes grown on such land will be coarse and prongy, and have a ground taste. Three years of planting on such soil will transform good, smooth seed beyond recognition. E. A. P.

Chester Co., Pa.

WHEN my chicks come off the nest, I open their mouths and put one grain of black pepper down their throats, grease the top of the head well with lard and coal oil. They are the brightest chicks I ever saw. I have piles of broken dishes, pounded fine, placed about my chicken yard. The hens eat of it with relish. It takes the place of gravel. Such treatment keeps off cholera. There is no cure for the disease when it once becomes firmly established in a flock. Our potatoes were planted in trenches on the RURAL's plan. We did not have such a large crop, but we had more and better potatoes than our neighbors. The ground was not wet one inch in depth for three months. MRS. J. E. M.

Orange C. H., Va.

I KNOW of few ways in which my boys can be made more useful for a week in Spring than in pounding up the hard clumps of manure in the pastures. I make a lot of wooden mallets out of heavy wood. With a single blow from one of these, a hard manure clump can be scattered. This work pays as well as anything I know of in the manure line. The boys prefer it to spreading manure with a fork. The exercise of swinging the mallet is as good as base-ball to them. On a wet day the work can be done as the ground is firm and the hard clumps spread easily. M. D. E.

Queens Co., N. Y.

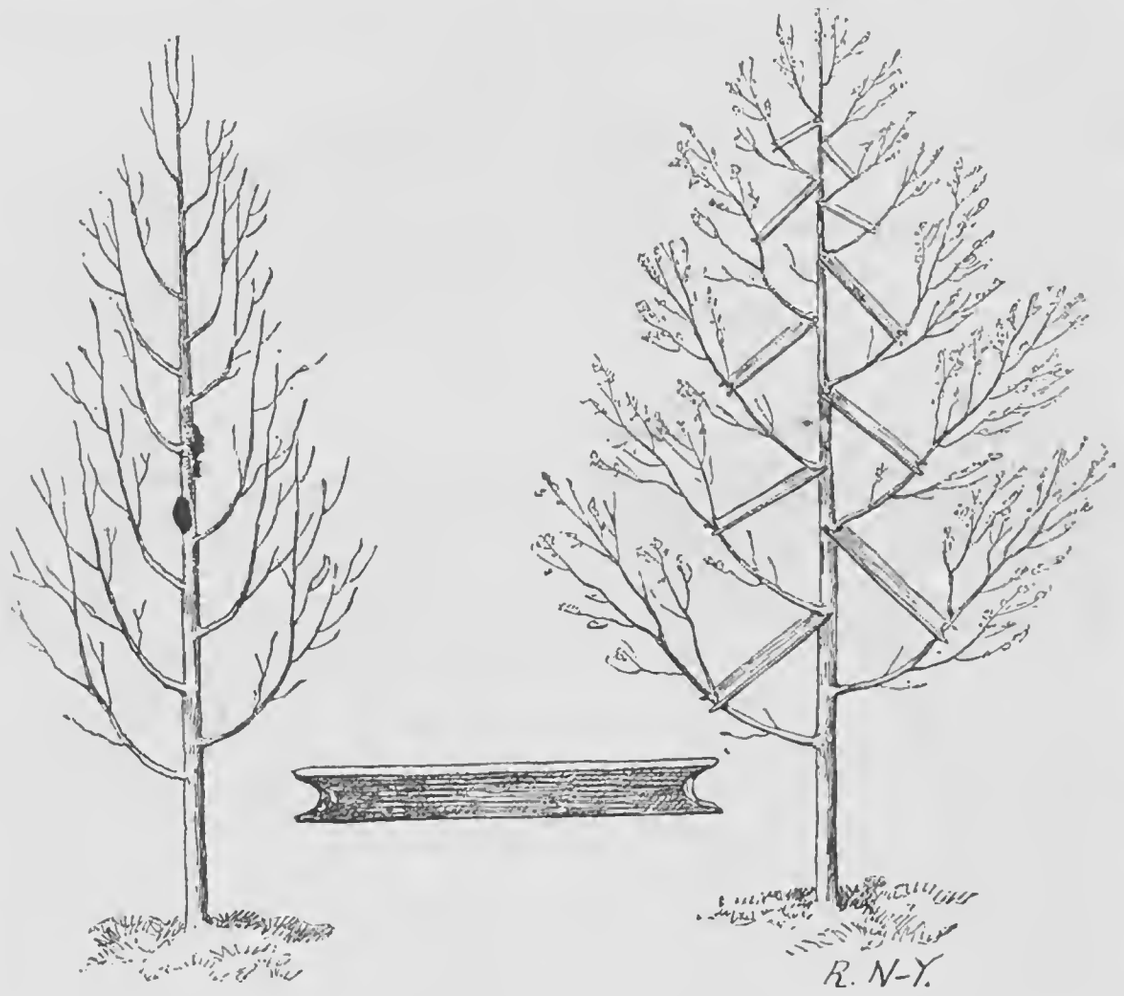


Fig. 239.

CATALOGUES, ETC., RECEIVED.

NUMEROUS FACTS ABOUT JERSEY CATTLE.—A very neat pamphlet of 30 pages, compiled by the official tester, under instructions from the Board of Directors of the A. J. J. C. It is intended for general distribution and can be obtained, we presume, from Mr. T. J. Hand, No. 1 Broadway, New York. As the pamphlet is designed to aid the general public in forming a just estimate of Jersey cattle, it would have been better to give the name of the official tester, as well as to have given the office of publication in a more prominent place. Members of the American Jersey Cattle Club do not need to be informed as to these points, but the general public does. As an instance of the need of such information, we may say that we have received several letters of late from owners and breeders of Jersey cattle, asking for the address of the A. J. C. C. As may be imagined, the pamphlet is given up to an exposition of the good qualities of Jersey cattle. As an argument in favor of the "little butter cow," it is a great success. We have never before seen so many facts and statistics concerning any breed of cattle crowded in a book of equal size. Those interested in any way in Jersey cattle should secure it. The superiority of the Jersey as a butter cow has long been admitted, and requires but little argument to support the claim. For milk dairies, Jerseys are rapidly winning a good reputation, both as to quality and quantity of milk. We do not think that Jerseymen will add much to the standing of their cattle by claiming much in the way of cheese or beef for their cows. Figures from Prof. Brown's tables are frequently quoted, but there is too much to be said on both sides as regards these figures to render them very authentic. We are told that the Herd Register of the A. J.

C. contained in the Spring of 1886 the names of 16,000 males and 37,000 females. It is estimated that of these registered animals, 9,000 males and 27,000 females are now alive. This gives one thoroughbred Jersey cow for every 2,200 people, and but one Jersey bull to every 1,300 dairy cows. Of course, this estimate does not include the grades which are found in great numbers in many localities. Mr. Edward Burnett, who writes of the Early History and Development of Jersey Cattle, thinks that the foundation of the breed was a cross on the large, red Normandy cow with the small, black Brittany many centuries ago. In Jersey it is evident that the Brittany predominated at first, and in Guernseys the reverse, as the Guernsey cow of to-day has the color, size and many characteristics of the famous Normandy cows. Owing to the difficulty of approach to those rock-bound islands, this original cross has been kept more or less intact, and time, coupled with good judgment, has formed a distinct breed of cattle. Space will not permit us to make further extracts from this valuable pamphlet. We heartily commend it to our readers

ROYCE REAPER AND DANSVILLE MOWER. Catalogue from Sweet, Faulkner & Co., Dansville, N. Y.—It is claimed for the Royce Reaper, among other things, that it has a less number of parts than any other reaper, and that it runs with the least possible power. These points are well illustrated and described in the catalogue. The Dansville Mower possesses simplicity, durability, and lightness of draught. It is a light, front-cut mower, drawn by a draught rod and chain attached to the double-tree. In both of these implements simplicity of movement and construction has been most sought after. The manufacturers very sensibly conclude that no farmer will buy a machine without first carefully examining all the various makes within reach. They invite such examination, having full confidence in the excellence of their implements.

SQUAWKIE HILL FARM.—Catalogue from F. S. Peer, Mt. Morris, N. Y.—Cleveland Bay and thoroughbred horses of fine quality are offered. The Cleveland Bay horse comes nearer the ideal "general-purpose" horse than any breed that has ever been brought into this country. There is a good profit to be made at breeding these beautiful animals. There is a good market for heavy draft horses, but a much better one for elegant coaching or carriage horses, and the Cleveland Bay seems admirably fitted to furnish the latter class. In fact, we cannot think of a more promising field for horsemen at present than the rearing of good grade Cleveland Bays. The animals at Squawkee Hill Farm are first-class. Send for the catalogue.

FOURTH ANNUAL REPORT of the Ohio Ag. Ex. Station, Ohio State University, Columbus, O.—This is by far the best report made by this station, and it is one of the most creditable reports we have ever looked over. A little more care might have been given to proof-reading, and the Report should have been issued months ago; but with these exceptions, every intelligent reader, but especially those who have been engaged in experimental work, will be struck with the great amount of hard work and patient, careful observation which the Report shows. It should be in the hands of all progressive farmers. Address the Director, W. R. Lazenby, as above.

MICHIGAN HORTICULTURAL SOCIETY.—Programme of the summer meeting to be held at Lansing, June 15 and 16, from C. W. Garfield, Grand Rapids.—This meeting promises to be very attractive. The programme is decidedly unique. We do not remember to have seen anything like it before. The aim is to exhaust a few popular subjects instead of trying to cover the whole range of horticulture. Professors Cook, Beal and Bailey, assisted by classes from the Agricultural College, will take charge of the evening sessions. All Michigan horticulturists should attend. To all visitors from other States we guarantee a hearty reception.

MISSOURI HORTICULTURE.—The summer meeting of the Missouri Horticultural Society will be held, so we are informed by the secretary, L. A. Goodman, at Louisiana, Mo., June 8 and 9. An excellent meeting is expected, and a glance at the well-arranged programme shows that the work of preparation is thorough. Free entertainment will be given all who attend. Premiums are to be awarded for best display of strawberries, cherries, currants, flowers, and vegetables. We are confident that horticulturists and, in fact, all who till the soil, will derive much profit and pleasure from this meeting.

PORTABLE POULTRY HOUSES.—New circular from the American Patent Portable House Co., Corona, Queens Co., N. Y.—These houses are growing in favor with the public. The small poultry houses are much admired. The greatest compliment that can be paid them is contained in the statement that the neighbors' chickens take possession of them, in the factory yard, before they are finished. Those purchasing houses are given special discounts on the price of the Standard Hexagonal Wire Netting. The circular will be mailed free.

AYRSHIRE CATTLE.—Catalogue of registered Ayrshires from the herd of the late Samuel Campbell, to be sold at public auction at New York Mills, Oneida Co., N. Y., June 23.—The list includes 83 cows and heifers and six bulls—all good animals. The Ayrshires have never been properly appreciated. They occupy a worthy place in farm economy. All who desire to secure good specimens of the breed should attend the sale.

THE GREAT AMERICAN TEA CO., 31 and 33 Vesey Street, New York.—Circular and price-list of teas and coffees. The prices of this thoroughly reliable house range, for coffees, from 15 to 30 cents, and for teas from 30 to 80 cents. All goods not satisfactory can be returned at the Company's expense both ways, and exchanged.

CUTTER FOR STRAWBERRY RUNNERS.

THE most profitable system of strawberry culture is the hill system. The greatest objection to it is the labor and trouble of keeping the runners off. I find a cutter made like that shown at Fig. 243, a very convenient arrange-

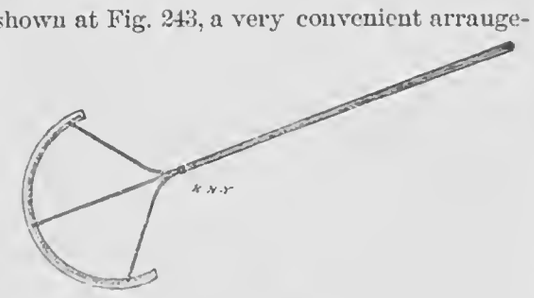


Fig. 243.

ment for that purpose: Take a thin plate of steel two to three inches broad and two feet long; sharpen one edge, bend it into a half circle, rivet three shanks to it—one near each end and one in the middle—bring these altogether with a gentle curve in the center and weld them into a single solid shank. Then put a handle on this, as on an ordinary hoe, and your instrument is completed. Two licks with this will cut the runners completely around a hill of plants, and no stooping is required Any blacksmith can make one.

Fremont Co., Col. L. J. TEMPLIN.

What Others Say.

EXPERIMENTS IN SILOS AND SILAGE.—The Weekly Press says that, as a rule, corn for ensilage is planted so closely that ears in quantity worth preserving are not produced. But for two seasons past some farmers have planted corn as usual, and when the ears began to glaze they have gone through the field, picked them off and thrown them on the ground to ripen in the husk. Immediately after, while the stalks were yet green, they were cut and pitted. It is claimed that the grain ripened perfectly, while the stalks made silage of the best quality. It should be added that it is not now considered necessary to retain all the moisture of the stalks. Many farmers cut over their entire field, allowing the stalks to lie on the ground and cure meanwhile if the weather is good and some even stand the stalks up in shock before beginning to fill the silo. The stalks wilt but do not ferment and they are lighter to handle without losing any of their nutritive value. This practice does not make a large force necessary, and the hurry and drive of the old system are escaped. Slow filling, too, is recommended by the most experienced.

BREEDING FROM IMMATURE PARENTS.—The above journal, commenting upon what has been written upon this subject, says that it is often said that there must be a loss of stamina in farm stock when animals are bred so young. It is argued that the offspring of animals yet growing and not having attained their full strength must partake of the immature quality of their parents and lack endurance and constitutional vigor. But there are no facts to prove that the offspring of two-year-old heifers are at all inferior to the offspring of fully developed cows. It is the aim of poultrymen to have hens lay at as early an age as possible, and has it been demonstrated that chicks from pullets are more feeble or subject to disease than those from the toughest of hens? It is argued that diseases of swine are more prevalent on account of early breeding. But where is the proof? Are there any tabled statistics from which comparison can be made? It is garned, too, that horses lack bottom from the same cause. But if one was asked to name the toughest piece of horse-flesh ever foaled, he would probably select Goldsmith Maid, who was hammered over every race-track in the country for years, and yet made her best time at 17, and kept killing off all competitors until she was 20, when she was withdrawn from the turf sound in wind and limb and without spot or blemish. But Goldsmith Maid's sire, Alexander's Abdallah, was an immature three-year-old when he got the Maid, and Hambletonian was a half-grown two-year-old when he got Alexander's Abdallah. Here was an immature sire and grandsire both, while the offspring was exceptionally sound and hardy. Certainly it is quite "natural" for animals to mate just as soon as they have the desire to do so, and in a state of nature animals would breed as soon as they were able. And we know no facts to prove that the offspring of young animals are in any way more feeble than the offspring of animals full grown, or in their prime or aged.

OUR Associate, Mr. J. S. Woodward, writing to the Philadelphia Press, holds that no man has a moral, nor should he have a legal, right to permit his orchard to be a breeding ground for canker worms, codling moths, etc., even if he is too stupid to see that it would be profitable to clear the land of trees, and use it for farming. He should be compelled to destroy the insects or to cut down the trees. Both Paris-green and London-purple are deadly poisons; but Mr. W. has used both for years, and has yet to see any ill effects to man or beast from their application. Of the two he prefers Paris-green. Although it costs a trifle more than the purple, it is of more uniform strength, and as one-fourth pound of pure green is sufficient for 40 gallons of water, its cost is a matter of little account. It should be kept well stirred and applied with a nozzle, giving a fine spray. The Field force pump and cyclone nozzle are the best he has seen, and they are both cheap. For leaf eaters, apply as soon as they make their appearance, driving the spray well through the trees. For codling moth, the proper time to make application is just before the apples get large enough to hang down or while the calyx end is still up. This enables the poison to lodge in the calyx, and as the eggs are uniformly laid here, the young brood meets certain death with its first meal. If the orchard is used for pasturage, it is well enough to keep sheep or cattle out for a short time or until after a shower.

HINTS FOR THE DAIRY.—At the late dairy show in Dublin, Mr. Gilbert Murray considered the Ayrshire cow as the most economical milk producer. She will thrive where many other breeds would starve. Grade Shorthorns are the favorite dairy cows in England, being deep milkers and easily fattened when discarded from the dairy. No hay was considered equal to that from well saved Rye Grass, cut just before the flowering stage. Overheated hay is bad for dairy cows. Where the hay is saved in stacks, the best way to prevent this over-heating is to place layers of straw at intervals in the stack. The climate of Ireland being moist, hay barns were recommended. A mixture of wheat, bean or pea meal with a small quantity of linseed was considered the best food both for rearing young stock and producing first-class milk. The growing of flax was recommended in connection with dairy farming. The disposal of skim-milk was considered a chief difficulty in Irish dairying. Specimens of dried skim-milk were exhibited which could be manufactured at a trifling cost. It promises to be largely used in the future both for culinary purposes and for stock rearing. It will keep for an indefinite period. It is perfectly soluble in hot water.

MULTUM IN PARVO.

COL. CURTIS says, in Our Country Home, that "the books are a little mixed on the Poas." The Colonel says that "the common idea is that Poa pratensis is the botanical name of the famous Kentucky Blue Grass." We guess there is no doubt about it. "And when Poa grows in the older States, it dwindles down to Poa compressa." That is a piece of news to the R. N.-Y. "June Grass," he says, "is little Blue Grass which grows everywhere in New York and New England, and this is Poa compressa natural to roadsides and waste places, which furnishes the first bite where there is no Orchard Grass." June Grass is certainly Kentucky Blue Grass. Poa compressa or the grass to which the name "Blue" properly belongs is distinct from Poa pratensis in many ways, notably in its flattened culm and in blooming a month later. Just for the once, we fancy the Colonel himself is "a little mixed."

IN case of injury to cow's teats, Waldo F. Brown uses a silver milking tube which costs 75 cents. He prefers these to 25-cent tubes, which are liable to rust. So he tells the readers of the Press.

REMEMBER that cabbages may be raised by sowing the seeds where they are to grow just as well as sowing in a bed and transplanting. Sow thick and thin out.

FULL feed from the beginning if stock-raising is to be profitable. It is said that it is well to add sulphur to salt with the hay in the mow. It keeps it sweet.

WE are inclined to think that pyrethrum powder, or Buhach, as the California article is called, is the very best remedy for the cabbage worm. Use the powder dry, blowing it on the plants through a bellows, or with water, a tablespoonful to a gallon, the powder first wetted with alcohol.

MORE is wasted in this country than would keep some of the European nations, says Editor Libby.

TAKE one heaping spoonful of white powdered hellebore and put it in a pint of hot water. In five minutes stir it and pour it into a pailful of cold water. Syringe the currant and gooseberry bushes with this to kill the currant worm.

BOOK AGENT: Now then, here, Maria Jane, is Bunyan's Progress. Maria Jane: No, sar; I'se got two bunions already, and dey's never been no help to dis yer Pilgrim's Progress.

MR. E. C. PARNELL, in Country Home, tells in a few words the entire story of how to plant watermelon seeds. The proper preparation of the ground is a matter of importance, and should be done early in Spring, so that it will be ready when wanted. The ground should be plowed thoroughly and deeply; then harrowed thoroughly so as to level it nicely, when it should be marked off into rows about six feet apart each way. At each intersection two good shovelfuls of well-decayed manure are placed, and carefully incorporated with the soil by means of the fork, at the same time forming a slight hill, in the center of which the seeds are to be placed.

HAVEN'T you ever noticed that the large farmer usually brags about the number of acres he raises, or the number of cows he keeps, and that the small, thorough farmer usually tells of how many bushels he raises to the acre, or of how much money he gets from each cow? There is a pleasure in trebling the crop of grass or potatoes. It is the joy of conquest with no harm done any one—no bloodshed. It is a pleasure to have your work so concentrated and in hand that you can avoid much of the worry of spread-out farming. Mr. T. B. Terry is credited with having written the above, though the paper is not mentioned.

PAY cash for everything; keep out of debt if you have to *borrow the money*, is the advice of "Life."

A WRITER in the Indiana Farmer speaks of curing some sick hogs by feeding them burnt corn-cobs. The cobs were burned in a heap, salt applied as the flame stopped, and a small quantity of corn thrown over the whole. Charcoal is one of the best known absorbents of foul gasses It is frequently given in human practice where the stomach is filled with sour gasses and undigested food. When given with salt or magnesia, it clears out the stomach and bowels, and allays the irritation of the intestines by removing the cause. Hogs need charcoal, and this method of supplying it appears as feasible as any.

IN Holland, the home of the Holstein, the famous black-and-white cows are bred for beef. At the last fat stock show held at Alkmaar, a six-year-old cow weighed 2,277½ pounds, but a fraction less than the great Hereford steer, Regulus at Chicago last year.

THE Agricultural Gazette says that the order of the day upon the farm just now is to live and not to practice what is commonly known as "improved agriculture." And yet, it occurs to us that many farmers must improve their methods, or fail.

THE Husbandman justly recommends oats as a good crop for the dairymen to raise. They can be cut while the straw is still green and the grain is turning gray—not yellow. At this stage oats are superior to hay for milk production.

THE Agricultural Gazette states that American horse breeders have taken the very cream of English horses out of the country. Not only has there been a lack of good stallions, but of brood mares as well. All the British breeds of horses, cattle or sheep appear to take on fresh vigor and size and reach their highest state of perfection at the hands of American breeders. England must soon look to America, not only for work horses but for breeding stock as well.

A WRITER in the National Live Stock Journal asks: How many stables are there that are properly lighted? Too many of them are gloomy dungeons, pervaded by a mysterious twilight, that might render vision clear to the open-eyed owl, but which requires several minutes for the adjustment of the smaller-apertured eye of man to enable it to see objects even in dim outline.

BUT you keep your horse in this stable! When you go in, you leave the door open, and

maybe you shove a board from a window in the rear of your horse. Why do you do this? For no other purpose than to enable you to see, even imperfectly, to do whatever you have to perform. But your horse is left, day after day, to stand in the dark and poke around the rack and manger for its feed, and you take no thought about the matter. Do you suppose its eye-sight is not strained by this exertion and the sudden transitions from darkness to light whenever you lead it out of the stable? You can depend upon it many a horse suffers from imperfect eye-sight because of this very thoughtlessness on the part of its owner.....

THEN, again, light is essential to health, continues the same writer. You can not dwell in a house or apartment where the sunlight never strikes and the full daylight never comes, without becoming depressed, gloomy, sour and sick This fact is beginning to be well recognized by many intelligent persons. The same effect in kind, if not in degree, is produced on the horse or other animal that constantly stands in the cold twilight of a never-sunlighted stable. You must have light, as well as air and food or you can not enjoy perfect health. Neither can your horse.....

AT the Elmira Farmers' Club, as stated in the Husbandman, it was remarked that by the use of cream separators the percentage of cream is increased; that is, more is obtained than by the ordinary process of setting the milk. It was stated, however, that the quality of butter made from separated cream is slightly inferior, and that the skim-milk makes very poor cheese.....

EXPERIMENTS have been made in England with a new fertilizer—basic cinders—the refuse of steel works. Analysis shows that it contains 14 per cent. of phosphoric acid and 41 per cent. of lime. Applied to heavy clay soil, the fertilizer gave excellent results. It was particularly valuable for root crops.....

SIR J. B. LAWES tells English farmers that the present depression in English agriculture will indeed be a calamity if it does not weed out some indolent habits, obsolete customs and unbusiness-like methods of farming. Hard times sharpen one's wits and work is reduced to the simplest methods.....

PROF. E. W. STEWART says that when the ensilage system shall have become perfected, corn, clovers, millet and many grasses will go into the silo together, or when necessary to preserve separately, will be fed together in Winter, and in this way milk can be made in Winter as well as upon grass in Summer.....

CORN, he says, is in the best condition for the silo when the ear reaches the dough state. The stalk and the ear in this condition contain all the nutriment possible in the corn crop. When the ear begins to glaze the stalk has become too woody for the best result.....

AN English writer notes the fact that cattle and sheep do not eat at random, but that they select grasses which they like and reject those which do not suit their taste. This explains why it is that worthless grasses run to seed while good grasses rarely seed except on meadow lands. The National Live Stock Journal holds that the above fact shows that the taste or instinct of the animal is a good guide to us in our selection of food for it to eat. It also shows why the best grasses often run out while the poorer take possession of the soil. If the rank, rejected growth could be mowed, and the more desirable growth kept up by sprinkling the right kind of seed over the pastures, a good gain could be made..

A WRITER in the Country Gentleman calls for justice for the pig. He very rightly says that the trouble with a dirty hog does not rest with the hog itself but with its master. The hog has both decency and manners if only permitted to practice them. A pen was divided into three compartments—a feeding room, a sleeping room, and a room for necessities. With little or no trouble the hogs were trained to use these rooms; where it was intended that they should sleep, a dry place was selected and filled with straw. A quantity of manure placed in the other room taught them the purpose for which it was designed. The article states that a cold and hungry hog can squeal off in a day what we have been at pains to put on it during a week of careful feeding.

IF the rum shop could be eliminated from the labor problem, says our respected friend the Western Rural, it would be easier of solution by a very large per cent. The money spent for liquor in this country is much greater than that spend for any article of consumption, and several times more than that spent for education.....

IT is true that the family may be suffering privation, but it is also true that it might, perhaps, be well provided for if a portion of the man's wages did not go for rum.....

WE know that if we could stop every still, and shut up every rumshop and plug up every rum barrel, every human being and the best interests of society would be better off.....

The hog must be fed less corn and more food that produces flesh, not fat.....

CLARE SEWELL READ, M. P., states in the London Live Stock Journal that English showyards have much to answer for the disrepute of pedigree stock. They have encouraged flesh to the detriment of milking and breeding properties of all their high-bred animals, and as a general result the females are shy breeders and poor milkers, and so farmers who have to get a living by selling store stock and dairy produce do not breed from them. To the comparatively few who sell only pedigree stock the case may be different.....

A WRITER in the London Live Stock Journal says he thinks for butchers' purposes there is nothing can beat a cross between a polled Angus bull and Short-horn cow They make good weights, and for early maturity and lightness of offal they are second to none. They are also very good dairy cows. He deems the polled Angus bull the most impressive sire of the day... .....

WHEN is the precise period that a pullet begins to be a hen; a pig a hog; a heifer a cow?.

THERE is in Ireland, says the London Live Stock Journal, a strong preference for the Booth strains of Short horns—heavy-fleshed animals, strong in the horn, and masculine in character. As a rule, they are moderate milkers, an important point in these depressed times.....

Everywhere.

TRANSCONTINENTAL LETTERS.—LI.

MARY WAGER-FISHER.

Olympia, capital of Washington Territory; a profitable and artistic dooryard; on the road to Portland; a dry season.

IT so happened in the course of our journeying in Washington Territory, that the very last place which I visited was its capital city, Olympia, situated at the head of Puget Sound. Aside from being the seat of legislation, this little town of 2,000 inhabitants has long been famous on this coast for the charm of its social life, the refinement and intelligence of its people, its tasteful homes, and "New England appearance." A lady once said to me: "In Olympia, everybody has a door yard full of fruits and flowers, and keeps a Jersey cow. It is the prettiest and most hospitable town in the Territory." So it was with a mind fully charged with pleasant prejudices that we boarded the steamer "Messenger," which plies between Seattle and Olympia, and after a charming sail of about eight hours, under a cloudless sky, we reached our destination. The town lies on a gentle eminence, which has a gradual slope to the water, and the hills and bluffs, which give great ruggedness to the site of most Puget Sound "cities," have here retreated far enough inland, and are sufficiently modified in character to leave to Olympia a distinctive location. The town would undoubtedly have acquired commercial importance, if its harbor, at low tide, had been capable of receiving sea-going vessels. As the capital, it is so far from being a central point in the Territory, that its chief chance of retaining this distinguishing privilege lies in the probable disagreement that will prevent any other town from being accepted as the capital, because of the rivalry between Eastern and Western Washington, which might harmonize their differences by having two capitals, as had Rhode Island, some years ago.

Captain P——, who owns and commands the "Messenger," and has a very picturesque home in Olympia, told me that off his home lot, consisting of less than a quarter of an acre, he had cut the past season a ton of hay, sent to market 40 boxes of apples from the trees, while from the garden his family had had an abundance of strawberries, raspberries, and blackberries, with other garden produce, and that he had given to his little son the privilege of selling all the cherries not desired for the use of the family and friends, and the little fellow said he got $20 for what he had sold, and had the money in bank. I thought it a profitable as well as an artistic door-yard, and from it I had, on October 15, a bouquet of exquisite roses, mignonette, sweet alyssum, carnations, abutilous, and many sweet-scented things.

The RURAL has a subscriber at Olympia, and to him and his hospitable family we owed much of the pleasure we enjoyed in our visit. During the hour and a half we were driven about the town and its environs, we had abundant opportunity to note the fruited gardens and the horses as well as "Jersey cows" nipping the luxurious pasture. We saw no pretentious dwellings, but the streets were beautiful with great maples planted years ago for shade trees—another distinct feature of Olympia, as Puget Sounders are, as a rule, afraid of shade trees—and cosy, tasteful, home-like dwellings peeping out through the foliage, for all the world like an Eastern village and delightful to Eastern eyes—none of the unkempt, crude and vulgar pomposity that so often characterizes the Western town, that has been inflated beyond its strength by a "boom." Our drive led us through a very picturesque suburb called Trimwater, which is Chinook for waterfall. These Trimwater Falls are in three series, which form a liberal distribution of water-power to various industries. During our drive, we saw two or three cemeteries, one Masonic and another "Odd Fellows," lying adjacent with a fence between, as a saving grace, one must suppose! As much as secret societies abound in the East, they abound still more here. There are all sorts of societies with high-sounding and mysterious names, but what they accomplish, beyond consuming enormously of time and money, is not very apparent. From Olympia, Mount Ranier shows its three peaks in distinct relief, and looking seaward, the blue range of the Olympic Mountains lay outlined against a background of yellow and vermillion—a wealth of color left in the sky by the setting sun. Our host drove us back to his home to "tea," of home cookery, which only a tired traveler knows how to appreciate fully, and where the laddie had a wild romp with the bright-eyed little people—Avis, Ida and Claude—a visit full of charm to us and long to be remembered.

At seven o'clock the next morning, we left Olympia by rail for Portland, Oregon. This railroad is a narrow-gauge affair, runs southeasterly through a level country for a distance of 16 miles to a town called Tenino, where it forms a junction with the Northern Pacific. The railroad fare is $1.25. For some distance out from Olympia, we saw comfortable and prosperous-looking country homes, imbedded in gardens of fruit trees, and considerable cleared and cultivated land. The woods had a park-like appearance, and, all in all, the ride was an interesting one. Considerable amusement was afforded the few passengers by a man in charge of a drove of spotted pigs. These black-and-white quadrupeds were completely demoralized by the passing train, and at once whisked about and began to run a race with it, while the drover, a red-headed man, threw off his hat and coat, and running at the top of his bent tried to head them off. What success he had we did not learn; but the last we saw of him he was still endeavoring to master the situation, with his arms beating the air. During a halt by the way, I saw a boy trudging along with a school book in his hand, and I asked him how far he had to walk to school. He said three miles and that there were 18 pupils in the school, which, if he spoke truly, was pretty fair evidence of the sparsness of the population in that locality.

It was about a year prior to this time that we traveled over this part of the Northern Pacific from Puget Sound to Kalama, a point on the Columbia River at which we took boat for Portland. But now the cars cross the river here on a huge transfer ferry, and as it was noon, there was half an hour for dinner in a fully fitted-up restaurant in the ferry boat, which occupied that length of time in the transit. It was the first time I had seen a restaurant under such circumstances, and, in the language of the West, I thought it quite a "scheme." We had a beautiful ride into Portland, the weather being of the finest description, and the snow peaks of Rainier, Adams, St. Helen's and Hood standing as if in a direct line in the range of the Cascade Mountains. St. Helen's rounded dome was almost devoid of snow, an unprecedented appearance, I was told, and last year when I saw it it was perfectly white. But every one seemed agreed that the past season had been one of extraordinary warmth and dryness on this Northwest coast. Indeed, whenever and wherever we went we had superb weather—altogether perfect—but everywhere we heard "old settlers" say, "Oh, this is exceptional weather," until we have come to think that all weather is "exceptional.

RURAL SPECIAL REPORTS.

California.

DRYTOWN, Amador Co., May 8.—We are just in the middle of haying, and the grass crop is the heaviest I have ever known here, and I have been in the State for 36 years. A trifle too wet for fine haying weather. Stock which three months ago was too thin to cast a shadow, is now rolling fat. Peaches and apricots very thin crops, as the continuous cold, wet weather during March and April caused the fruit to drop from the trees. Plums and apples will be heavy crops. D. B. R.

Canada.

FERNHILL, Ontario, May 20.—Times are very dull here, and prices are very low. Fall wheat will not be half a crop, as a great deal of it has been plowed up. Spring frosts were very heavy and did far more damage than at first supposed. Seeding is all done and everything looks well. The season is much in advance of what it was this time last year. Pears wintered well. We will have no peaches this year, and on May 8 there was a heavy frost which may injure plums and cherries. Apples will not be as plentiful as last year, while there are very few pears or grapes grown in this district. Plums and cherries have been a failure for some years past, but are coming in again. J. M. W.

Kansas.

SHERIDAN, Sheridan Co., May 9.—I have 40 acres of fall wheat and 10 acres of rye that look as fine as any grain I ever saw. I came out West only last year, and took up a Government homestead on timbered land, and though I have a wife and seven children, I raised last year plenty for my family to eat. I didn't expect to do any more as my land was all new. J. F.

Michigan.

ALBION, Calhoun Co., May 14.—The weather has been cool and pleasant this Spring. Wheat and grass are looking well. Oats are up, and last week fruit trees were in full bloom. S. G. E.

New York.

HORNELLSVILLE, Steuben Co., May 22.—The Spring opened here all of two weeks earlier than last year. Barley, wheat and oats all sown and the greater part of them up; and some very early sown barley is nearly ready to stalk. Grain never looked better in May, to my knowledge, than now, for the time sown. A large acreage of all kinds of spring grain sown. Winter wheat and rye looking fair, but badly winter-killed; very forward, and we look for an early harvest and a medium yield. Pasturing from two to three weeks ahead of last season and extra good; cattle turned out, generally, on or before the first of May. Timothy meadows looking well, and promising a heavy cut of hay of good quality. Clover and new-seeded meadows, in some sections, badly winter-killed and much turned under for spring crops; but what are left are early and looking well. Potatoes and corn are going into the ground from a week to 10 days earlier than common; some early planted fields are already showing well above ground. About average amount of corn planted; potatoes planted, planting and to be planted in large quantities. In fact, the farmers in this section are fast putting the potato crop at the head of their list. For general profitableness and certainty of yield, Burbanks, White Star and Snowflakes are the favorites for general culture in white varieties, and Blush, White Elephant and Adirondac for red. Fruit of all kinds has been in blossom for the last week, and blown the fullest for years; and at present no frost to do a particle of harm. Strawberries and other small fruits at least two weeks ahead of time and full of blossoms; and, if the weather continues as for the last four weeks, we shall have home-grown berries on our tables by the middle of June. Weather is and has been all that one could ask, and more than he could expect; just moist enough, and with nine-tenths of the heat, day and night, of July. Sheep being washed; but none as yet sheared in this vicinity. Beef and store cattle in good demand, but plenty; they are in extra good condition for the time of year. Dairy stock in fair demand at good prices; butter and cheese doing a little better than at same time last year. C. J. P.

Ohio.

YANKEE RIDGE, Coshocton Co., May 5.—Season very dry and backward till the middle of April, when warm weather brought everything forward with a rush, so that now vegetation is fully two weeks ahead of its condition at this time last year. A few farmers have begun to plant corn and others are getting ready as fast as they can. The ground has been pretty dry for plowing for some time, and farmers who make a habit of letting their stock run over their fields in wet weather have had a pretty tedious time in breaking it up. Early sown wheat looking well; but late-sowed was badly frozen out. Then drought and bad weather came on so it will be very thin on the ground. A good prospect for seedling peaches, but budded ones are a total failure. Outlook for apples never better at this season; indeed all kinds of fruit are making a fine start, except pears which are a failure. Very few berries are raised here; but what we have look fine. My Shaffer's and Doolittle came through the Winter in fine condition. Prices of all kinds of produce are very low: butter, 12 cents; eggs, 10 cents; bacon, 5 cents to 8 cents. Potatoes were worth 40 cents per bushel till about 10 days ago, when they fell to 30, and now the prospect is downward. Wheat 80 cents to 85 cents; corn, 40 cents; oats, 30 cents; other things in proportion. J. H. D.

Pennsylvania.

HEREFORD, Berks Co., May 20.—Crops are looking remarkably well. According to present appearances, the fruit crop will be the heaviest for the last ten years. Grain suffered somewhat last Winter, but has picked up very much, so that the stand now is excellent. But little corn has been planted as yet on account of the wet weather. Oats look promising.

W. H. S.

Vermont.

EAST POULTNEY, Rutland Co., May 18.—Farmers have about finished planting potatoes—area larger than last year. Some corn put in. Grass looking better than a year ago. Cows doing well. Horses selling high and in good demand. Eggs selling at 10 cents, and very abundant. Veal calves bring four cents a pound. Butter, 18 cents for dairy, and 25 cents for creamery. Hay from $14 to $18 per ton.

T. L. B.

Washington Territory.

SPANGLE, Spokane Co., May 7.—Our soil mostly rests on basalt rock which disintegrates and improves by cultivation, and we claim to excel in raising wheat, oats, barley, onions, peas and potatoes of extra fine quality and weight. It is not uncommon to raise potatoes here weighing from three to five pounds each without any cultivation whatever after planting. I inclose a sample of wheat which yielded 50 bushels per acre, machine measure. [It is known as the Seven-headed Wheat.—EDS.] The RURAL peas were splendid and the Flageolet beans did well.

F. P. H.

THE FARMER'S CLUB

ANSWERS TO CORRESPONDENTS.

[Every query must be accompanied by the name and address of the writer to insure attention. Before asking a question, please see if it is not answered in our advertising columns. Ask only a few questions at one time. Put questions on a separate piece of paper.]

FERTILIZING SMALL FRUITS: GETTING RID OF SORREL.

G. C. M., Middleton, N. S.—Within three years, each acre of my 10-acre small fruit plantation, chiefly in strawberries, has received one ton of bone meal, half a ton of superphosphate and 500 pounds of muriate of potash; is this a good combination? The fertilizers are sown broadcast and harrowed in. Is a ton of bone meal too much for two crops of strawberries in connection with the other fertilizers? 2. How can I get rid of sorrel in my old strawberry beds, to be used again for strawberries next year?

ANS.—1. As we are ignorant of the nature of the soil, and therefore of the kind of plant food in which it is deficient, it is difficult to say whether the combination is or is not a wise one. Clay loams usually contain potash enough for ordinary plant growth; yet a moderate application of that fertilizer will prove beneficial on most strawberry beds. Bone meal and ashes are considered special fertilizers for the strawberry, and superphosphates have given good results; but the effects may vary on different soils. It was quite right to apply the fertilizers broadcast; but they might also be applied after planting by spreading them around the plants, not permitting them to touch the foliage, a hoe or cultivator being relied on to distribute it more thoroughly. There are other growers who would apply all the above fertilizers to an acre of strawberries, but we think this would be beyond the requirements of the plants. Garden crops, however, are generally fertilized by the best gardeners beyond the needs of the growing crops, because in the present condition of horticulture it is impossible to apply ingredients containing just the kind and amount of plant food required by the plants. Heavy applications of yard manure are often made to hasten the maturity of early products by the action of nitrogen, there being an excess of other fertilizing elements. We feed our plants much as an inexperienced man would feed his horses or cattle, not knowing positively their likes, dislikes or necessities. 2. Sorrel is a terrible pest among strawberries, equaled only by chickweed, red-root, June Grass, and Canada Thistles. Possibly sorrel will carry off the honors as the worst. As it appears to thrive best on cold, undrained soil, we recommend thorough drainage, which will be beneficial in any event. After draining we would give the soil a liberal dressing of air-slaked lime. There it nothing, however, that can be relied upon to clear the soil of foul weeds but the most thorough and persistent cultivation. In some soils it appears to be exceedingly difficult to obtain a mastery over these pests. The more fertile the soil, and the more desirable for plant growth, the more difficult the task of extermination.

BUTTER RATION FOR A COW; RAISING A CALF WITHOUT MILK.

W. C. H. Shrewsberry Mass.— 1. What is a good butter ration for a cow for Summer and Winter. How much and how often a day? 2. What is the best way to raise a calf with little or no milk?

ANS.—The best butter ration for a cow in Summer is all the grass she will eat. When a cow can have this food she wants nothing else and the yield from extra food in the form of meal is not in proportion to its cost, or, in other words, it won't pay. In Winter give good hay, not over-ripe. Clover is the best, green Red Top next, and last, Timothy. With all the hay she will eat, give a pail full of *warm* water morning, noon and night, or more if the cow is large. According to the size of the cow, give a feeding of meal in the following proportions, feeding morning and night, *after* watering and mixing the meal with cut hay, chaff, or roots—the last, the best:—two quarts each of linseed meal, corn, wheat bran, wheat middlings or ground oats. This makes eight quarts, and it should be mixed and divided into two meals of equal quantity. A peck of roots added will increase the return more than the analysis of the roots would indicate. Keep the cow always out of the cold. 2. Steep *sweet* and clover hay in water, and give the calf, after it is a week old, a quart of this "hay tea" with two quarts of milk, gradually increasing the hay tea and reducing the milk till the proportions are reversed—Up to one week old the calf must have milk. Stir into the food, after the little thing is a week old, a pinch of linseed meal, and gradually increase the amount up to a gill, by the time it is three weeks old. After this, add wheat middlings—a half gill at first, and gradually increase, keeping up the tea with a little milk. An egg, stirred into the liquid, will help. Too much meal will give it the scours. Some calves will eat more than others. When two weeks old, tempt it to eat grass, and give it all it will eat. Put oats in a dish with it, and let it eat all it will. Sprinkle a pinch of salt on the oats to induce it to eat them. The bowels must be watched to see the effect of the food, and changes should be made to suit the cow. Indigestion will produce scours, and so will a cold: over-feeding and exposure to storms or cold drafts are the usual causes in both cases.

Miscellaneous.

W. H. L., Templeton.—1. How long does the offer of eight Jewell strawberry plants to subscribers, for one subscription, hold good? 2. What's the color of the Rural Blush Potato? 3. Would the R. N.-Y. Pea make a good field pea? 4. Should red raspberries be cut back in the Spring, as recommended for black-caps? 5. Which is the more profitable way of growing strawberries—in hills with runners cut, or in matted rows?

ANS.—1. June 1st. 2. It is a little darker than the Beauty of Hebron, often with pink eyes. It changes in color. 3. No better than any of the "First Earlies" offered by seedsmen. 4. Perhaps we do not understand the question. The old canes may be cut out in the Fall. The new shoots should be pinched off when the canes are three feet high, and the laterals when a foot long. This secures a bushy habit, and stakes are less needed. 5. Matted rows. As soon as the plants have fruited we cultivate between the rows, keeping the soil free of weeds. After the first freeze in early Winter, we mulch with old farm manure, and do not again disturb the soil until after fruiting the next season.

W. S., Cook Co., Ill.—1. There is no easy method of getting rid of Canada Thistles. Make the land very rich with manure, and smother out the thistles with some rapid-growing crop, such as Red Clover. Plow under before they seed or cut them off, then cultivate often and thoroughly for the rest of the year till Winter. 2. A second growth of stumps can be most economically removed with the grubbing hoe. There will be no such thing as ease in the operation. 3. Read last two numbers of the RURAL for remedies for leaf lice. The surest remedy for the curculio is found in the jarring process frequently described in the RURAL. A sheet is spread under the trees and the tree is jarred, generally by striking it with a heavy beam, about which a thick carpet or blanket has been wound. This covering protects the bark of the tree and yet the blow dislodges the curculio. The insects are picked up from the sheet and destroyed. This process, though slow and wearisome, is the surest of any.

W. H. H., Harrisburg, Pa.—Peaches do not grow wild in any part of Wisconsin; nor are they successfully grown there under cultivation, except by a few amateurs who lay the trees down and bury them in Winter. Peaches cannot be budded upon thorns; nor can other stone fruits. The buds of apple and pear will "take" upon thorn, but such budding is not a preventive against the borers, as the thorn is as subject to the pests as other trees.

L. A. G., Vernon, N. Y.—We have used the kerosene emulsion sprayed upon the affected leaves with success as a remedy for lice in currant bushes. Tobacco water is also effective.

DISCUSSION.

SALT FOR STOCK.

A. W. W., Burnhams N. Y.—Several times I have noticed articles in the RURAL advising the frequent feeding of salt to stock, some saying that it should be constantly kept where they can get it whenever they wish.

I think the practice is injurious; that the taste for it is not natural, but is acquired like that for all other stimulants, which are known and acknowledged to be hurtful, such as alcohol, tobacco, opium, and others. The habit becomes so fixed by indulgence, that the appetite gets beyond control, and the victims ere long find themselves almost powerless to abstain from the use of such things, even when they know them to be exceedingly hurtful. A justly celebrated medical writer and practitioner speaking of salt, says: "This substance is used, even by those who have given attention to medical and physiological subjects, more from mere habit than from any good reason why. 'How unpalatable every thing is without it,' is the common expression. The facts in regard to the dietetic use of salt are these:—1 Salt is wholly innutritious; it affords no nourishment to any structure or substance of the human body. 2. It is utterly indigestible; it enters the body as a mineral substance; it is absorbed unchanged as a mineral substance, goes the rounds of the general circulation as an unassimilated mineral substance, and is finally eliminated from the body, through the kidneys, lungs, skin, etc., as an unassimilated mineral substance. 3. Its acrid quality is offensive to the vital sensibilities of the organs, always causing vital reaction or resistance; and this vital reaction constitutes the only stimulation ever provided by salt, and is, therefore, always attended with a commensurate degree of irritation and vital expenditure, and followed by a corresponding degree of indirect debility and atony; and consequently it always and inevitably tends to produce chronic debility, preternatural irritability and disease;—the stomach, intestines, absorbents, veins, heart, arteries, and all the other organs of the system, are always irritated, exhausted and debilitated by its presence. 4. It never, in any measure, promotes digestion, nor any of the assimilating functions of the system; on the contrary, it always retards these functions, and is unfavorable to all the vital changes."

One of the Rural writers says animals need salt, and they never can do well without it. My experience in cattle raising, though not as extensive as that of many others, is quite the contrary. The finest animals I ever raised never tasted salt. I do not by any means deny that very fine animals are raised which are fed with salt, but the superiority of such animals is not due to their having eaten salt. There are other reasons why they are so, in spite of salt eating.

Another sentence reads: "Sometimes men are obliged to go without salt for a long time, and they say it causes them the most awful suffering." Is it certain that this "awful suffering" is caused by the want of salt? If so, may it not be an additional evidence of the evils resulting from the bad habit of using stimulants? Deprive the inebriate, the smoker or the opium eater of his usual indulgences and he becomes testy, woeful and miserable, if not crazy. Are these indications of healthful habits? Dr. Graham says: "It is well known that sailors or others when confined for a considerable time to salted food, become afflicted with scurvy, always a very distressing and often a very fatal disease. We are informed by a physician from Paris that there is a certain order of convents in France where the inmates have been in the habit for centuries of abstaining wholly from salt, and also from animal food. This is done as a matter of penance, and it is notorious that such persons are remarkable for permanent health and long life. There are certain Indian tribes who use no salt, and who are yet strong and healthy—remarkably so; so that whatever may be said by chemical physiologists and others of the necessity for taking this stimulant into the stomach, and thus into the circulation, facts plainly prove that this supposed necessity is chimerical and does not exist. From careful and extended experience, I am strongly pressed to the conclusion that the use of salt is largely concerned in the production of cancers and other glandular diseases of the human system; that it exceedingly aggravates many chronic complaints, and that it increases the liability of the body to diseases of every kind; that it is directly conducive to scrofulous, pulmonary and skin diseases and disorders of the mucous membrane. In short, there is every reason to believe that it not only serves to predispose the body to every form of disease, but also seems to aggravate and perpetuate every species of disease induced, and that it seems to hasten on a premature old age, by rendering the solids dry and inelastic."

R. N.-Y.—It is doubtless true that an excessive use of salt will in time prove injurious, yet a moderate and systematic salting will not, in our opinion, do an animal harm. Wild animals instinctively seek salt springs and rocks to gratify the desire for salt. Some waters supply a sufficient quantity for health, so that there is no need of extra feeding. We do not think it would be possible for an animal to enjoy perfect health with the supply of salt entirely cut off. Whatever causes the suffering among those deprived of salt, it is beyond question that the suffering is real. The last campaign of Lopez, in Paraguay, or even the last year of our own war, evidence the fact that men miss salt and suffer when deprived of it. Salt is the only mineral substance used as an article of food by man and the higher orders of animals, and among all, wild or tame, there is a natural craving for it. This is not the case with regard to the other stimulants mentioned, and the fact must have great weight in favor of its use in the minds of sensible men. It is a stimulant tonic only in small quantities, acting as a purgative or emetic in larger ones. Experience abundantly proves that animals and many plants will not thrive without it; though, of course, too much acts as a poison. Whatever may be the conviction of an individual physician, however eminent, it is the nearly unanimous opinion of the medical profession that salt is a necessary stimulus in health, quickly passing into the blood and escaping mostly through the kidneys. The Bible makes frequent commendatory references to its use—all sacrifices offered in the Temple were seasoned with it; new-born children were rubbed with it, and, finally, it is mentioned as one of the things most necessary to life.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING May 29, 1886.

S. E. V.—J. L.—M. M. W.—W. H. S.—E. L. T.—M. F.—A. M. C.—R. N.—M. R. S.—S. P. & L.—L. A. R.—W. H. H. L.—C. B. W.—E. L. T.—T. T. L.—G. R. H.—S. G. E., thanks.—L. B. A., thanks.—M. R. S.—A. C. M., seeds received.—M. P. W.—W. H. L.—S. C.—W. H. N.—Hired Man.—N. H., thanks.—J. H.—W. G. G.—T. K., thanks.—L. M.—P. M. A., thanks.—G. W. D.—L. W. P.—C. C. McC.—E. B. & F. B.—F. W.—W. F.

Miscellaneous Advertising.

That Tired Feeling

The warm weather has a debilitating effect, especially upon those who are within doors most of the time. The peculiar, yet common, complaint known as "that tired feeling," is the result. This feeling can be entirely overcome by taking Hood's Sarsaparilla, which gives new life and strength to all the functions of the body.

"I could not sleep; had no appetite. I took Hood's Sarsaparilla and soon began to sleep soundly; could get up without that tired and languid feeling; and my appetite improved." R. A. SANFORD, Kent, Ohio.

Hood's Sarsaparilla

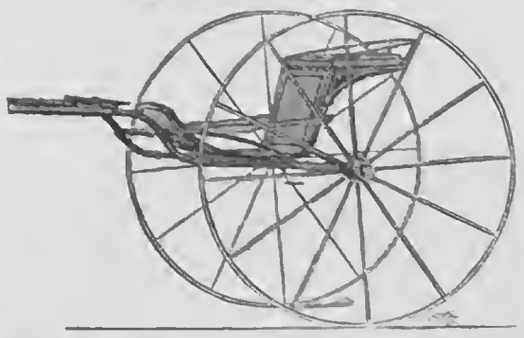
Sold by all druggists. $1; six for $5. Made only by C. I. HOOD & CO., Lowell, Mass.

100 Doses One Dollar

MANY PERSONS suffering from liver Cough have imagined themselves victims of Consumption, but have been entirely restored to health by means of Warner's safe cure.

TO FARMERS. This simple invention is used in milking cows, particularly where there is any soreness. Made of solid silver, and sent by mail to any address on receipt of the price, 50 cts. Address The Milking Tube Co., 102 Friendship Street, Providence, R. I.

SAVE YOUR BUGGIES.



Educate the colts, and enjoy yourselves. Ask **C. S BEEBE, Racine, Wis.,** about different styles of Carts. He makes them.

Caused by a Fall.

RAYMOND, Miss., Aug. 13, 1885.—Four years ago, from a fall from my carriage, my kidneys and bladder became badly diseased. Physicians said my recovery was impossible. Took seven or eight bottles of Warner's safe cure, and it has saved my life.—ANNA CARLOP.

THE
RURAL NEW-YORKER.
A National Journal for Country and Suburban Homes.

Conducted by
ELBERT S. CARMAN.

Address
THE RURAL NEW-YORKER,
No. 34 PARK ROW, New York.

SATURDAY, JUNE 5 1886.

PRESIDENT CLEVELAND and Miss Frances Folsom are to be married in the White House at Washington next Wednesday evening. Health, happiness, and all minor blessiugs attend the fortunate couple, and may their tribe increase!

SAVE seeds of your largest and best-flavored strawberries, blackberries, raspberries and currants, and sow them at once in drills of fine, rich soil. They will then sprout much sooner than if permitted to get dry. It is easy to protect such plants so they will winter in safety.

WE are very glad to know that the outlook for the Agricultural and Mechanical College of Mississipi is very encouraging. A majority of the students who have spent one, two or three years at this college have gone home to work on the farm. Its influence upon the adjacent country is shown, Prof. Gulley says, in the erection of 21 silos during the past 18 months by parties who have been watching the work of the college, while its plan of drainage, methods of planting and working crops and feeding cattle are being generally copied.

IN discussions of the labor question there appears to be a good deal of misconception as to the relative importance of the various pursuits and occupations in which the American people are engaged. According to the census of 1880, we had then a total population of 50,155,783. Of this number only 17,392,000 people of both sexes and all ages were engaged in gainful occupations in every kind of trade, business, profession or pursuit. Of this grand total people generally talk as if the manufacturing and mechanical industries employed the largest number of hands. This, however, was not so. Agriculture employed 7,670,000 people; 4,074,000 were employed in professional and personal services, and only 3,837,000 were engaged in manufactures, mechanics and mining, and the remaining 1,810,000 were employed in trade and transportation. The fact that people employed in manufacturing and mechanical pursuits are chiefly massed in our cities, and are combined in trade unions, and agitate a great deal in behalf of their own interests leads to the prevalent mistake that they form the largest division in the grand army of labor.

As is well known to our older readers, the R. N.-Y, has for years advocated the sowing of either Blue Grass, Red-top or both for lawns—rejecting the costly "lawn mixtures." Other writers have taken this matter up, and the Rural press in general is now alive to the importance of the subject. It is not economy to pay four dollars a bushel for lawn mixtures, made up chiefly of the two grasses mentioned, when either may be bought for less than half that sum. The pains-taking editor of the Weekly Press is in favor of sowing Timothy with them, so that a quicker effect may be prodnced. The Timothy, under the lawn-mower, will gradually die out giving way for the others. Early this Spring we sowed two small plots with Blue Grass and Red-top. They are now (May 27) covered as thickly as possible with grass and, but for a lighter color, could not be distinguished from the surrounding sward. Would Timothy have helped in any way?

TAXATION without representation is the lot of the farmers of this country almost as much as it was of the colonies when the grievance drove them into rebellion against the mother country. There are in the United States Senate 76 members, and in the House 332, a total of 408 in Congress. Of these, how many represent the most important industry in the nation, that which gives employment to nearly half the inhabitants of the country who follow any business whatever? The Congressional Directory shows that 10 members of Congress from all the Northern States call themselves farmers, while 15 Congressmen from the South call themselves planters. Of the Northern 10, Michigan contributes four, Wisconsin two, Rhode Island, New York, Missouri and Kansas, one each. But even of this meager number, all are not real farmers; for instance, the "farmer" from the Empire State is the Hon. Warner Miller, the great wood-pulp paper manufacturer. The great majority of Congressmen are lawyers; wouldn't it be better for the country if there were in its legislature fewer of these, and more of its agriculturists?

"OLEO" IN CONGRESS.

OLEOMARGARINE legislation has occupied more of the attention of the House of Representatives during the last four days than all other subjects combined. The bill taxing bogus butter, and placing its manufactnre under government supervision, has been eloquently, spiritedly, and learnedly supported, and bitterly assailed with invective, satire and ridicule. It will probably pass the House, as there appears to be a majority of about 50 in its favor. That Congress should place the manufacture and sale of bogus butter under government supervision is absolutely necessary to prevent the fraudulent sale of the stuff, and to insure that it shall be made of wholesome materials. It is a mistake to wage war against the product merely in behalf of the dairy interests of the country, however vast and important these are. It should also be opposed on behalf of consumers, upon the ground that the trade thrives only by fraud, and that nothing but fraud can keep it alive.

It is not a fight of one industry against another, but of butter producers and consumers against an atrocious fraud by which both are injured to fill with dishonest gains the pockets of a few wealthy manufacturers. The law providing for the honest manufacture and sale of the stuff must be general, so as to be applicable to every part of the country. It must therefore, be passed by the National legislature. The various States can legislate, if desirable, with regard to minor details. The great danger to the bill lurks in the Senate. That is the stronghold of corporate interests. The Senators only very indirectly representing the people, are less sensitive than the Representatives to the force of public opinion and the wishes of the people. Pressure should at once be brought to bear on them through the legislatures of the various States; for as it is by these they are elected, they cannot afford to disregard their wishes. The farmers of the country should, therefore, at once urge the members of their State legislatures to take action in this matter. There is not a moment to be lost. The bill will probably go up to the Senate early next week, and Senators should be at once enlightened with regard to the wishes of their respective States as to the necessity for protecting one of the largest interests in the country, as well as the public at large, from injury by gross fraud.

PRICE OF WHEAT.

REPORTS are general that stocks of wheat in farmers' hands are smaller than usual. If true, this is fortunate in view of the steady decline in prices. No. 2, the speculative grade, is selling at Chicago, the great receiving center, at less than 74 cents per bushel, and No. 3, at 67 cents. A good deal of the receipts will not grade higher than No. 3, the price of which averages from 7 to 8 cents below that of the speculative grade. On the basis of 74 cents per bushel for No. 2, the average price of all receipts would not be much over 67 cents, as a good deal doesn't grade at all. The cost of transportation and handling will average about 20 cents between the market and the country buyer, who must also make a profit, so that there isn't a vast sum left for the farmer. A similar showing can be made with regard to other grains, especially corn. It seems to us, prices ought to show an upward tendency. The visible supply of wheat has decreased from 58,432,389 bushels at the beginning of the year to 37,814,315 on May 22:—3,400,000 bushels less than a year ago. The "visible supply" now includes large quantities on the way to consumers by rail and water, and stocks at several collecting centers not counted in till less than two years ago. A year ago a large share of the enormous crop of 1884 was still in the hands of farmers; whereas but a comparatively small proportion of last year's meager crop is there now. Most of the available wheat must be included in the "visible supply," and that is steadily declining. Europe is buying freely at the present low quotations. In view of the foreign drain thus created, and the home consumption, it seems that prices should go up before the new crop can begin to come to market. In any case, there cannot be a heavy stock of old grain on hand to depress prices next harvest.

LABOR UNIONS AS REFORMERS.

IT is against the law to keep stores in New York open on Sunday; but in some of the streets, especially those in which Jews do a good deal of business, stores of all kinds are wide open from morning till night. The Central Labor Union, on complaint of the employés that they have to work 90 and sometimes 100 hours a week, has passed a resolution calling on all its members and friends to boycott all hat stores that keep open on Sunday, and has appointed a committee to see that the dealers should be duly prosecuted. This sort of boycotting seems hardly objectionable. It is the opinion of the most noted students of social life, that, apart from religious reasons, one day in seven should be a holiday. All who wish to give wage-earners a chance of rest and recreation, as well as all who seek a strict observance of the Sabbath, should wish success to this boycott. In this case organized labor acts as a reformer and an enforcer, not a breaker, of the law. The same agency is becoming a powerful aid to the temperance cause. The onslaught made on drink by Master Workman Powderly, in a late circular to the Knights of Labor, is likely to prove more effectual than the fervid addresses of scores of ordinary temperance agitators. A boycott against rum is the only boycott he favors, and this he urges every workman to establish on his own account for his individual benefit. Other prominent labor leaders are of the same mind, and in all the late labor strikes the excesses due to drink have been remarkably few. The labor leaders want their followers to be cool, fore-handed, and amenable to discipline; for thus they will have a better chance of winning what they seek. The Anarchists, on the other hand, favor rum and riot. They want their followers to be hot-headed, miserable and always poor, so that having no stake in the country, and being in a muddled, semi-crazy condition, they may be at all times ready for outrage and havoc.

AN INVITATION.

THE Rural hybrid rye-wheat plants show still further remarkable changes. We had hoped that it would be otherwise the present season, and that we might count upon such a constancy of characteristics that they might be propagated, named and in small quantities distributed over the country for general trial in a year or so. We had supposed that those plants which we have designated as "most resembling rye" had already assumed, more than the others, a fixed character, since from the beginning they have varied the least of all. It would appear, however, that they have *just begun* to vary, and that just when variation will cease, no one can tell. All of the seeds sown were from selected heads of tolerable uniformity with stems downy or hairy beneath the lower breasts. All were slightly bearded and of the same shape. Now we have stems perfectly smooth, partly hairy and densely so; heads that actually resemble *barley* more than either wheat or rye, while some are beardless. We shall not at this time dwell upon these strange variations. Our object in writing this note is to invite all botanists and all wheat specialists to visit the Rural Grounds between the present time and wheat harvest, that they may see for themselves, and study these hybrids that, in our humble estimation, present the widest differences and strangest developments known in cereal cultivation. No reference is made in the above remarks to our hybrids which are by parentage three-quarters rye and one-quarter wheat. We shall speak of them later.

Trains leave the foot of Chambers St. (Pavonia Ferry, N. Y. & N. J. R. R.) for River Edge, New Jersey, at 7:40, 8:40, and 9:50 A. M., and at 1, 4, and 5 P. M. The distance from the station to the Rural Grounds is one mile. If we can not in all cases give personal attention to our visitors, as we should be pleased to do, others will wait upon them.

WINTER WORK

FARMERS should plan work that will justify them in hiring laborers for the entire year. As it is, too many farm workmen live two lives. They work through the Summer and Fall on the farm, and then go to the cities where they spend the Winter as best they can. Boston and the smaller cities of New England provide shelter for thousands of these laborers through the Winter. Work for all of them is impossible in these times when hundreds of city laborers are seeking vainly for employment. Many of them find work shoveling snow, sweeping the streets or performing other work for the city, but such a life must be at best but a most precarious one, and the tendency is to drift into crime. It is estimated that 5,000 such farm laborers spent last Winter in Boston. Many of them find their way into the hands of the police, while all of them take back to the farm germs of disorder and vice to spread in the farmer's family. Doubtless some of these laborers prefer to spend their Winters in this way, yet there are others who would gladly stay on the farm for nominal wages and the sake of a home. The trouble is that farmers, under the present system of agriculture, arrange for so little winter work that they really need no help. Is it not possible for them, even in New England, to find profitable winter work that will enable them to keep a good proportion of this transient city population on the farm? The question has been answered satisfactorily by hundreds of good farmers who, by means of winter dairying and stock feeding, have been enabled to turn much of this wasting labor into cash. Their example is well worthy of imitation. The work of the year should be spread through the year instead of being crowded into seven months of hard labor with five months of comparative idleness. The work for the coming year is now in its infancy. Is it not possible to plan so that a little of the old order of things may be done away with? Try it.

BREVITIES.

GET the grape-bags ready.

FOR strawberries, probably there has never been the promise of a more abundant crop in many parts of the country than now.

IT was 26,649,319 acres of the public domain that were "taken up" in 1884, not 261,649,319, as the types made us say in the editorial on Land Legislation in last issue.

DUDLEY MILLER, of Oswego, writes us concerning our last cattle picture: "The RURAL deserves congratulations most hearty, for presenting its readers with the superb, life-like portrait of Lady Fulton, and will receive them in spirit, if not otherwise, from all lovers of fine stock who see this excellent and rare production."

REMEMBER that eggs are now worth 12 cents per dozen at wholesale in this market. Three months ago they were worth 25 cents. You are pushed with work now. Then you had plenty of time to sit about and talk. It takes very easy arithmetic to prove that six eggs then would bring as much cash as 12 eggs will bring now. Is there that difference in the cost of production? By watching the market reports you will find that there is almost as wide a margin in the prices of butter, beef, fruits, and other produce. The man who makes farming pay watches the markets. If he misses the best price one year, he is sure to be on hand the year following.

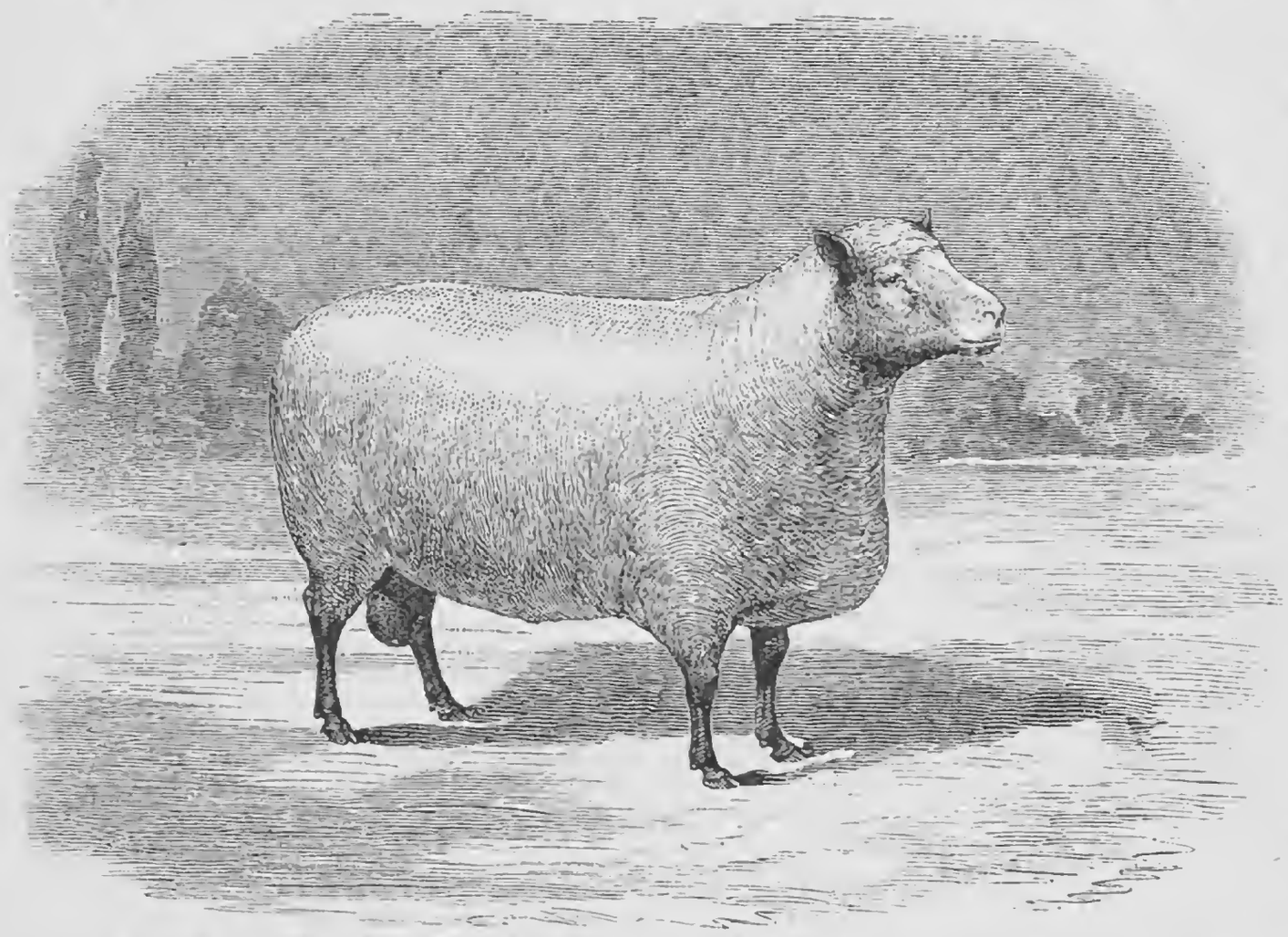
WE have just been looking over a copy of Moore's RURAL-NEW-YORKER, dated May 13, 1854, sent to us by a friend. It consisted then of but eight pages, the quality of the paper being about the same as that upon which the N. Y. Herald is printed to-day. The price was $2.00 per year. It was conducted by Mr. Moore assisted by Joseph Harris and several "corresponding editors." On the first page we find Crops for Soiling, a few words on Under-draining, the Grains and Grasses and an illustration of a Tumbler Cart. On the second page we have Charring Posts, Coal-tar, Drilling and Flat Culture, by L. B. Arnold; Shade and Fertilizer, Beans not an exhausting crop, and a column of Miscellany. The third page is devoted to horticulture; the fourth to educational topics; the fifth to poetry, short stories and to a ladies' department; the sixth to news items, the seventh to market, deaths and marriages and advertisements, and the last to poetry, short sketches, Youth's corner and advertisements. As we look over this journal of 32 years ago, which was then ranked as among the first of its class, and compare it with the present RURAL NEW-YORKER, we are impressed that Mr. Moore's favorite motto of "Progress and Improvement," has not been entirely lost sight of since.

THE lawn-mowers of to-day seem to be nearly perfection. They are light-running, durable and cut the grass evenly at the desired length. But an inexperienced person may in a year ruin a lawn-mower that with proper care would last five. The fatal mistake generally made is in screwing the revolving blades so low that they *touch* the horizontal blade. Of course, the machine cuts beautifully. The blades are sharpened by the contact, but wear away in a few days. Then the revolving blades are again lowered, and this is continued until they can be lowered no more and the machine needs repairs. Our experience is that when the essential parts of a mower need to be replaced, it is just as well to buy a new machine. The proper way is to see that the revolving blades of a new machine are so set that they can not be lowered *without* touching. Then it may be used one day at least in every week during the entire season without readjustment. The next year the knives may need sharpening, which is best done by lowering the revolving blades, or, properly speaking, raising the horizontal blade until they touch slightly, being careful that the pressure shall be equal in every part. Of course, machines should be oiled frequently and the bearings protected from sand and soil.

Sheep Husbandry.

SOUTHDOWN RAM CARDIFF.

THIS fine ram, shown at Fig. 244, is the property of the Prince of Wales. Cardiff has won numberless honors at stock exhibitions, and now heads the fine flock at the Royal Sheep Farm at Sandringham, where the supply of choice mutton for the Prince's tables is secured. The Prince of Wales may not be much of a farmer, but he ought to be a good judge of mutton; and the fact that South Downs have been kept so many years at Sandringham, speaks volumes in favor of this breed. We are told that the sole idea in breeding and selecting this flock has been to improve the quality of the mutton. The size and shape, and the wool product have hardly been considered. As a result of this selection, a flock has been formed which, in all probability, cannot be surpassed for the excellence of its mutton. Lord Beaconsticld once said that "our fathers lauded venison so highly for no better reason than because they never knew what good mutton really was." We may well believe that Sandringham mutton would quickly cure a taste for game. The sheep in this flock are fed on grass almost entirely. They run on the salt marshes during the Winter, except when the snow is on the ground. Every night they are brought back to the uplands and folded upon a field from which mangels have been drawn. A very few roots are fed, and at lambing time each ewe gets a small feed of oil-cake. Aside from this, the feed is entirely made up of grass and hay. The folding at night, done by means of portable fences, keeps the fields well enriched with comparatively little trouble. The earliest lambs come about the middle of February. The ewes appear to be very prolific, as 240 of them produced, last year, 360 lambs, and only six ewes were lost. The salt marsh is said to be very healthy for the sheep. There was hardly a case of lameness or stiff joints, while sore feet or rheumatism were unknown. The ewes with the most promising lambs are removed from the main flock and permitted to range by themselves. The others run in small bands in company with the young heifers or colts. It is said that these South Downs will ripen into the choicest of meat where the heavier breeds would starve; while the shepherds at Sandringham declare that they can keep five of these where three others would starve.



SOUTHDOWN RAM, CARDIFF. Fig. 244. Re-engraved from the London Live Stock Journal.

TICK PERSECUTION.

COL. F. D. CURTIS.

THERE were more sheep ticks last year than ever before. Where they all came from is a mystery. It is said, by old farmers, that when sheep run in the woods they will always get full of ticks. My sheep did run in the woods, and they were very ticky. This fact might prove the theory, but other people's sheep did not run in the woods, and they were also very ticky. I think condition has more to do with ticks and with the effects from the weather also. Thin stock always seem to invite parasites of all kinds. This is the case with cattle and the lice which infest them, and also with hogs; and why not with sheep? I think sheep were universally poorer the past Autumn and Winter than I ever saw them. The reason for this condition was the excessively cold and wet season, which is opposed to sheep doing well. The Spring, a year ago, was cold, wet and backward, and sheep carried their fleeces very late. This helped to lay a foundation for ticks, as it helped to make the sheep poor. The food sheep eat helps the tick business. If sheep are so fed as to be puny, they will have more ticks; these seem to delight in a poor condition and to want to be in at the death, to help finish up the poor creature they are preying upon.

The remedy for these depleting and destructive pests is care and sheep dip. The famous sheep breeders of Washington County, Pennsylvania, do not have any ticks on their sheep. They will not have any. So it seems resolution helps to keep clear of them. I have adopted the same idea, and have resolved to to try to carry it out. To do this involves early shearing, which has been done, and as soon as the weather will admit, each sheep and lamb will be dipped in Lawford's Sheep Dip, and again in the Autumn, and perhaps twice if necessary. The poor sheep should be put by themselves, and the best place for them is on some one else's farm, and if that cannot be done, in a pen by themselves. The amount of blood a good crop of sheep ticks will extract from a sheep or lamb is much more than a person imagines, and is always equal to the gain the infected and afflicted animal might make if the leeches were not at work. Unless the sheep are extra well fed they will run down rapidly, and they never gain anything, however well fed. The farmer should never neglect his sheep and allow these parasites to prey on them. They make the poor sheep mad with pain. I sheared a lot of sheep almost in midwinter to get the best of the ticks, and if it had not been done, the animals would have died, as they ran down in spite of food.

After sheep have been sheared the ticks go on the lambs, to return to the sheep when the wool gets out.

The dipping should take place in about two weeks after shearing, and care should be taken not to let the sheep get its nostrils under the liquid. Fools and boys should not dip sheep; it should be done by careful and humane men. The owner should be on hand to attend to the business the same as when sheep are washed. It is barbarism to set a lot of crazy boys and reckless men to do such work. The liquid may be put in a tub and the sheep dipped in and well saturated. It should then be lifted on a tight platform, slanting towards the tub, and allowed to drain off, the liquid running back into the tub. The waste of tobacco strips boiled does very well, if the decoction is just strong enough to kill the ticks and not to injure the sheep; but I prefer the sheep dip as safest and much less troublesome.

Educational.

EDUCATING BOYS FOR THE FARM.

A. DWINELL.

To educate his children the father must educate himself; drawbacks to academic and collegiate education; children shouldn't be so highly educated as to look down on their father or his calling; don't sink, that they may rise; parental influence must be maintained; pleasant early impressions form strong bonds of attachment to farm life; educate for work ahead; with good early training, later forms of education are matters of minor importance.

IF a farmer wishes to so educate his boys that they may become good and contented followers of his own calling, his first step should be to educate himself. In order that he may make successful farmers of them, he must himself have a just understanding of the possibilities of his vocation, and a genuine love for farm work. He must be wide-awake, enterprising, and always progressive; and, above all, he must be his sons' most efficient and best loved teacher. The farmer who neglects to improve his own mind and manners, who rigidly economizes and pinches in every possible way, who allows his home to fall into decay, become shabby, uninviting, and cheerless, that he may save money enough to send his boys away from home to the academy or to the agricultural college to learn the science of farming, makes a sad blunder. Instead of making contented and successful farmers of them, he is almost certain to educate them away from the farm, and, still worse, out of all sympathy and happy social relationship with himself. To give them a schooling which, under such circumstances, is quite likely to prove a real disadvantage to them, he relinquishes that parental influence over them which it is his highest duty to maintain and carefully exercise, and allows himself, his farm, and his home to degenerate into objects only too well calculated to deter aspiring young men from engaging in agricultural pursuits. This is penny wisdom and pound foolishness in a most exaggerated form.

I would not, by any means, be understood to say that the farmer who desires his boys to be farmers, should never send them to academy or college. A Liberal education is as great a benefit to a practical farmer as to any other business man. It is my object simply to emphasize the fact that it is never advisable for any man to undertake to lift his children on to a social plane above his own at the expense of his own comfort and advancement. It is, of course, natural and commendable for a father to wish his children to rise in the world, but it is the very essence of folly for him to make a tilting board of his life and seek to raise them into prominence by the dead weight of his own deterioration. The only safe course for him to pursue is that he should himself climb to the level he would have them occupy, and draw them up with him by the simple force of his love and example. If by their own efforts they finally reach hights which he cannot attain, well and good; but, be that as it may, his own struggle for self-improvement should on no account be given up except with life.

If a farmer is able to give his sons a collegiate education without pinching himself, it may be well for him to do so. Before deciding upon the step, however, he should take into careful consideration the influences to which a college student is at the present day exposed. Whatever may be said to the contrary, it is a fact that all our higher institutions of learning are pervaded by a certain atmosphere, the legitimate influence of which seems to be to create in the student who breathes it a distaste for agricultural pursuits. The sensitive and ambitious young college student, as a general rule, speedily becomes possessed of the notion that the labor of tilling the soil is low, unfavorable to intellectual growth, and a well-nigh insurmountable bar to social and political advancement. Unless the farmer, by virtue of his superior force of character, high intellectual attainments and social standing, has sufficient influence over his boys to neutralize this influence of the schools, if he is bent upon making farmers of them, he had better keep them away from even the agricultural college.

Very few college-bred men have become farmers; and of the few who have scarcely one can be found who passed his boyhood amidst the surroundings and influences of the ordinary farmer's home. This is not to be very much wondered at. Humiliating as the admission may be, there certainly is very little in the work or actual compensations of the average farmer to attract or satisfy an energetic young man whose intellectual powers have been awakened by an academic course of training, and it is not of much use to talk to a college graduate who was reared in the stifling social and mental atmosphere, which is only too often allowed to settle upon the farmer's isolated home, about the possibilities or the future of agriculture. The impressions left by the experiences of childhood are difficult to erase. Upon the character of those impressions in a great measure depends the future of our boys. If we succeed in making farming attractive to them: if we show them by our own example and achievements—by our own intellectual attainments and social successes—that there is really nothing in the work of the farmer to prevent his becoming the equal of other business men, or to hinder his acquiring as great comforts, social privileges and political influence as the successful professional man, mechanic or merchant, we may hope to make farmers of them. If we fail to do this, we have no reason to complain if they leave the farm and engage in other and more satisfactory pursuits. To teach a full-grown farmer's boy, in an agricultural college supported by legislative appropriations, how to make farming attractive and profitable, will be found of little avail when his experience of farm life has been such as to make him hate it.

That education is best for any boy which best fits him for his chosen work. The foundation for such an education must be an intelligent liking for that work. The laying of this foundation for the education that is to fit his boys for the business of the agriculturist, is the most important duty of every farmer. If this duty is faithfully performed, the building of the superstructure will be found comparatively easy. When a boy of ordinary intelligence has acquired a hearty liking for the work of the farmer, and acquired it in what may be termed the natural way—in the healthy, bracing atmosphere of a well managed farm home—the question of his school training need occasion very little anxiety. In his case, scarcely any practicable schooling will be found greatly amiss.

The chief difficulty about the education of the farmer's boys, then, as it seems to me, lies in the failure of the farmer himself to understand and intelligently perform his duty in the premises. Whatever course of schooling the embryo farmer may subsequently take, the most important part of his education, the part which is to have the greatest influence in shaping his career as a man, ought to be that which he receives at home from his parents, and from the practical experiences of every-day farm life. The knowledge gained here is woven into the very substance of his brain and muscle, and becomes as much a part of himself and as completely under his control as his hand, eye, or tongue. The consequences of any defect in his training here will follow him through life. No other teachers, however gifted, can ever fill the place in the education of a farmer's boy that should be filled by his parents. No other school, however excellent, can fill the place that should be filled by his father's farm.

If all our farmers could be brought to realize these facts, in all their bearings, I am sure the disheartening complaint that all our brightest and most enterprising young men are leaving the farms, would soon cease. If the father can be aroused to a full sense of the duty he owes his boys; if he sees to it that their first impressions of farm life are of the right character; if he gives to their first mental growth its proper training; and, above all, if he so orders his own life as to be always able to retain that influence over them which every father should have over his sons, it does not seriously matter what particular course of study they pursue at the academy or agricultural college, or whether they go to such schools at all. An academic course of training has its advantages, but is by no means essential to a high degree of success in life. It is example, and not theory, that the agricultural student of to-day most needs. He must see farming made attractive and profitable, as well as hear that such a thing is possible. The influences of his home-life, therefore, are of vastly more consequence to the farmer's boy who is to be a farmer, than the influence of all the schools in Christendom.

Cheshire Co., N. H.

The Harlem Commons Syndicate is the name by which a little clique of claimants for a large section of upper New York seek to turn their claims into cash at an early day, by obtaining money from all who may think that it would pay them to claim relationship, and trust to big promises and the law's uncertainty for a great future reward. The syndicate was organized last December, its object being to get from New York City a large part of

what was formerly known as Harlem Commons, much of which is now covered with buildings, and very valuable. The original patentees were the Covert, Sloat, and Yates families, and it is claimed that the city has no just title to the land; but that it rightfully belongs to the decendants of these families, and all of these, real or imaginary, on the male and female sides, whatever may be their names now, are invited to join the syndicate for the small sum of $10 apiece. To hurry them up a threat is made to increase the charge to $100 per head, later on. A number of names are given as those of the "Board of Trustees," among them that of Gen. Jno. C. Fremont, but some time back he repudiated all connection with the scheme. Mention was made of the "enterprise" and claims in the papers here some time ago, and several reputable lawyers were "interviewed" on the subject; but all laughed at the notion that the claim would ever amount to anything. The Eye-Opener remembers at least a dozen such syndicates, each got up by a scheming lawyer on the most nebulous claims to large properties in this country or in England, especially in the latter. Money was always collected from the members in various assessments as long as they were credulous enough to pay; but in no single instance has any of their hopes been realized. We have had three letters of late with regard to this Harlem Syndicate, which shows that its lines for gudgeons are cast in many places.

We do not recommend the remedy for "fits" advertised by F. G. Root, of this city. Epilepsy, which produces these convulsions, has so many different forms that medical men find it impossible to give a definition of it. There are numerous known causes of it, and probably some still unknown. As in most of the nervous diseases, there is a hereditary tendency to it in the offspring of persons who have had that or various other nervous complaints, such as insanity, paralysis, apoplexy or hysteria, etc. Various malformations of the body, and especially of the cranium, are among the most frequent predisposing causes; so are dentition, self-abuse and the use of alcoholic drinks. Various diseases, especially those in which the blood becomes altered or diminished, and organic affections of the nervous system, as well as excessive loss of blood, a wound, a burn, worms in the bowels, stone in the bladder, etc., etc., have all frequently produced it; while mental excitement is known to have often caused it. Complaints peculiar to woman also frequently occasion it. For treatment, the first thing to be done is to find out the cause, and to try to get rid of it, if it still exists. Often it depends on external causes of irritation, which may be easily removed, and these should be carefully sought for, as the patient is generally not aware of them. For no other disease has a greater number of "cures" been vaunted and found useless. The metallic salts, especially those of zinc, silver and arsenic, are much employed in advertised specifics, and sometimes produce good effects; but they cannot be used long, as they would injure the health. Belladona and bromide of potassium are the most serviceable remedies, and it is much safer and cheaper in the end to have these prescribed by a good, local physician than to take them "blindly" in a nostrum put up for sale and not for anybody in particular. Bromide of potassium in 10 to 30 grain doses, taken three times a day, will produce better results as regards the severity and frequency of the attacks, than any advertised nostrum; but before taking it a physician should be consulted. In some cases no remedy will ever relieve the patient; in most cases no remedy will do more. "Cures for all cases" must be humbugs.

Woman's Work.

CONDUCTED BY EMILY L. TAPLIN.

MY HUSBAND'S SHIRT.

I'm afraid you may think *him* a dandy
  And mention it, to his disgrace,
When I tell you the *f ont* was embroidered
  And the neck and sleeves trimmed with soft lace.
But I ironed it with such a feeling
  As never possessed me before,
Though I'd laundried his shirts, a full hundred,
  And made them for him by the score.

But, tenderly bending o'er this one,
  I said "bless his heart," and "sweet boy,"
And smoothing the lace on the neck-band,
  I lingered a minute to toy
With the frill as it lay on my finger,
  And (though you may think I was "soft,")
I pressed two quick kisses upon it,
  And laughingly held it aloft.

I know wives don't usually do so,
  When ironing shirts for their lords;
They're more apt to indulge in a tantrum
  Or tirade, o'er their ironing boards.
But list, and I'll tell you the secret,
  And you'll sympathize with me I know,
As one woman will, with another,
  If she the "white feather" will show.

My little girl up to her Grammy's,
  Was staying, the morning before,
And while she was rumaging, child-like,
  'Midst some duds in an old bureau drawer,
She captured a shirt which her papa,
  When he was a baby, had worn,
And begged it to rig up her dolly;
  And as it was wrinkled and torn,

Returned home, she said, "Mamma wash it,"
  And so as I did her behest,
And thought how my terrible giant
  Within its wee size had been pressed,
Do you wonder I said "bless his heart," as
  My fancy presented to view,
A miniature phrase of the monster
  Who now measures just six feet two?

—*Virginia C. Hollis in Good Housekeeping.*

POINTS FROM MANY PENS.

Silver "grape tongs" are a novelty in table ware. They are slipped over the forefinger and thumb when eating asparagus or bonbons.

Silver corn-shellers are a new and pretty wedding gift, removing the impossibility of eating corn on the ear gracefully. They may be purchased singly or in sets.

The rolling-pin key-holder has now made way for the potato masher, to be devoted t the same use. This utensil is gilded, tied up with ribbon and finished with four brass hooks screwed in at any desired angle.

An appropriate companion to the above is a match-scraper in the form of a gilded, miniature washboard. Probably the next thing in "art" decoration will be an antique gridiron adorned with tissue-paper flowers.

Tissue-paper flowers, though flimsy, are not by any means to be despised. When well made, they are astonishingly real in appearance and make a most effective decoration. A package containing vari-colored paper, rubber stems, gum and working utensils, and instruction book is offered for sale at many decorative art stores.

Fans, covered with one immense paper pond lily, are effective for wall decoration, while porcelain lamp shades are often covered with a mass of these flowers, mingled with natural ferns pressed and varnished. The newest fringe or bordering in decoration is exactly like crimped-tape mourning fringe, save in color; it comes in all the dainty hues now in favor. It makes a charming border for upholstered gipsy tables, and is much used on Moorish table scarfs.

A pretty paper holder or wall pocket is made from "tea-matting," the fabric used in wrapping tea boxes. The material is bound with ribbon of harmonizing hue; the lower part turned up pocket-fashion, with a bow of mingled ribbons on each side. One upper corner is turned down slanting with another bow, and some odd design is painted across the top in metallic colors. The word "Papers" is painted across the pocket in eccentric letters.

The Health Department of the W. C. T. U. has prepared a course of study embracing two years' work, which will prove of great value and interest to women. The first year's course is the "Relation of Health to the individual," relating to physiology, anatomy and hygiene; the second, the "Relation of Health to the Family," giving most thorough knowledge of sanitary and hygienic housekeeping in every department. It is a most useful course to every woman striving for a higher level in her household.

THE WORTH OF EARLY LESSONS.

While spending a few days at the house of a relative, I saw one of her daughters, a girl of 11, making a doll's bonnet out of a bit of blue silk. It looked so wasteful to my narrow mental vision that I called her mothers attention to it. "Oh, Cousin Delia" I said, "Your Anna is cutting up a piece of good silk to make a paltry bonnet for her doll. It is a lovely piece to put into your crazy quilt." "I'm not puzzling my head with crazy quilts yet. When I make one, it will be composed of clippings left by the children after cutting things for themselves and their dolls." "But a scrap of any common stuff would do for the child to cut up for that silly thing," I pleaded. My hostess looked amazed. "Amanda, the child is learning a lesson in millinery that will benefit her in life. I gave her leave to use that silk, and I assure you it will not be wasted." "But don't you think you are allowing her to waste good materials, for poor results? I should be afraid she would become extravagant." As the youthful milliner was in another room, our comments were not heard by her. Presently she came in with the diminutive bonnet, and showed it to her mother, who looked pleased, and said "you have made it well, Anna, in fact quite in the fashion." The child's face was radiant with pleasure. "Oh, mother" she said, it fits dolly so nicely. I did not cut the silk at all, I turned it under here and there, so that I can use it for something else," and she skipped away and left us. "She is ingenious, Delia, I must confess, but all girls of her age, cannot be trusted with nice materials to use." Train them carefully Cousin Amanda, and then they can be trusted. Lay responsibility on children early, and you will inspire them with confidence in their own bility. It is real economy to teach girls to cut and make plain garments for themselves, and no person will instruct them as patiently as their mother. It is natural for them to like to do fancy work and no urging is required in that direction, although care must be taken that each piece is finished before another is commenced." SOPHIA C. GARRETT.

RECEPTION DAYS.

ZEA MAYS.

Why cannot farmers' wives have reception days. I do not mean for intimate friends, or those from a distance; but for those good neighbors, who get their work done up after dinner, and taking work-bag on the arm, come to spend the afternoon and take tea. It would be quite an innovation—perhaps would cause some talk, even scandal! but what improvement it would be! Now one never knows when her privacy may be invaded by an uncongenial neighbor, or when, if her larder happens to be a little short, she may not be called upon to improvise a tea for an uninvited and critical guest. She may have planned for a quiet afternoon nap, or for a precious and long-coveted sit-down with a favorite author; no matter; she must entertain and be polite to one whom she wishes was in Guinea. A reception day, don't you see? would largely change all this, you could get your washing done on Monday or Tuesday, your ironing and mending finished, plenty of good bread baked, with light biscuit if you pleased, a cake or two, and a few pies if you use them, and having plenty of canned fruit and butter, with perhaps dried beef or honey, if about Thursday or Friday, several of your neighbors happen to come in, you are ready for several hours social chat, and all you need do is to boil the tea-kettle, and suit your table-arrangements to your company. How different this from having to build a hot fire when you had thought your own family provided for, and go and bake warm biscuit and cake, having first, possibly, to go and borrow flour or baking-powder of the nearest neighbor. It may not be the best house-keeping to be out of these necessaries, but, nevertheless, people do get out sometimes. A reception day for the little girls too, is quite a necessity where thoughtless neighbors allow their children to impose upon you.

"THET NEW HOUSE."

ANTY VEE.

Although I'm an old woman, yet I can see, and can hear and talk, and I keep trottin' aroun' from house to house, and from cellar to garret all throughout this county, and into one or two adjoining oues. Now I must say I don't like the way our houses are being built. The bed-rooms all on the second floor, and so small, too; I'd use 'em for corn cribs. You can't stand at the head and walk aroun' to the tother side of a coumon sized bedstid in one of 'em. And when you open your eyes, there the light is jest shinin' right into 'em. Such close, leetle, unbearable bed-rooms! Ef I was goin, to build I'd have a bed-room at least four inches larger then the bed-stid. I believe men have a right to say all nbout the farm and bout the barns; but when it comes to the house, then it's woman's turn. Last week I was up to Barry's, he who's built a big, white house and green blinds. And he tuk me over the hull of it, and he told me how much this cost, how thet was terribly dear, and thet "no other man in the county hed such a buildin" with so many improvements, and thet the carpenter sed it couldn't be beet," and all thet, etc., an so on. And sez I, "How duz the wife like this, and *this?*" sez I, pintin' frum one thing to another with my index finger. "Oh," sed he, "thet's the carpenter's plans." Well, when we'd got all around, and he sed he'd feed the teem, I walked straight on with him toward the barn, and after we hed cleared the new house, sez I, "Barry, is thet house insured, insured for all it's worth?" "Why," sed he in great surprise. "'Cause," sed I, "the furst thing I'd do would be to burn the whole durned thing to the ground." Now Barry was a deacon, and I was a professed Christian, and my words stunned him like. Then he tuk my arm and led me back into thet house, and sez he, "See what a great magnificent parlor!" "And see thet leetle smich of a bed-room," sez I, "hardly room to squeeze a common sized bedstid into it; and you, a great lumberin' two-hundred-pounder! I'd hev you sleep on a perch outside if you like a small place." "Eh," sez he, "I ginerally git to bed long before Susie comes. She's meudin' for me and the children, and then she don't miud about gettin' in back as she's always timid and afeered burglars might come aroun'." "Doesn't take any courage to sit up and mend," thought I, but I didn't say anything about thet, ez my principle is to never, *never* meddle. He agin called my attention to thet "magnificent parlor." "Yes," sez I, "its big, treemendous big, and not a thing in it! Blessed ef I wouldn't put my bed up in it and sleep there too." I could see Susie's eyes brighten, and I went it good and strong, and pinted out a good menny advantages, and how much they'd save and the doctor would lose. A day or two after I'd got home, a postal card cum, saying, "I hevn't felt so rested in a long time ez I do this mornin'. I slept so good last night in our bed thet Barry and I hev put up in the big parlor. Yours, Susie."

REST AND HEALTH.

The use of rest—absolute rest—as a health restorer is too much neglected, especially among those who really have the greatest need of it." Tired nature's sweet restorer, balmy sleep," is indeed a great panacea, but it is not the only one. Too often the tired house-mother keeps at her treadmill of domestic tasks until sleep is well-nigh impossible. She lies down with every nerve at loose ends, irritable and debilitated; small wonder that sleep only visits her by fits and starts. If an hour or two before bed-time is spent in simply resting, without any attempt to exert either mind or body, she will regain three-fold in peaceful, dreamless sleep, awaking with new energy on the morrow. Of course, she may leave something undone—there are always loose buttons and torn clothing to occupy the evening hours, but what are these compared with the mother's precious health? Physicians lay much stress on the benefits resulting from change of occupation—thus a schoolgirl who studies four hours a day and busies herself about the house another four hours, will learn much more rapidly than one who studies continuously eight hours. The same thing is true in domestic work; the woman who has other interests is pretty sure to be the brightest and most capable. She does not get into one narrow rut. Experience in various charitable societies has shown the writer that the women who do the most work for other people, are always the most notable housekeepers. "As thy days, so shall thy strength be." I am persuaded that the work we freely do for others reacts on our own personality giving us greater strength for our daily task. Mind, I don't say that every overworked mother must rush into work she has not strength for, only that every busy woman should have something to think of besides her daily work, whether it is a new book, a flower garden, or clothing and sweet sympathy for the needy, we can all do something to make this world brighter. EMMA LEIGH.

Domestic Economy

CONDUCTED BY MRS. AGNES E. M. CARMAN.

AN AMATEUR COOKING CLUB.

CAUSED BY THE WONDERFUL RECIPES OF THE RURAL.

For the past few weeks several of my girl friends have been holding secret meetings at each others' houses and congregating in the kitchens, whence Bridget was summarily banished and whence were presently heard to issue sounds of gay laughter. They have worn pretty blue badges with A. C. C. embroidered on in old gold, and when asked the meaning of these mysterious hieroglyphics, they would mischievously reply: "Amiable Cheshire Cats." The mystery was at an end when one day I received an invitation to a dinner given by the "Amateur Cooking Club." It was a marvel of skillful cookery, each dainty dish having been prepared by a different member of the club. The menu is given below:

Bisque of Lobster.
Salmon Croquettes.
Leg of Mutton braised with Green Peas.
Oyster Omelet.
Sweet Potato Fritters.
Apple Cheese Cakes.

Bisque of Lobster.—Remove the stomach, head and black vein from a boiled lobster. Set aside the meat from the tail and claws for a salad, and pound in a mortar all that remains, the small claws, the large shell and all the matter found in it. Set a saucepan containing a tablespoonful of butter on the fire; when the butter is melted put in the pounded lobster and stir for ten minutes with a wooden spoon, then add a quart of hot veal stock, and simmer slowly for 20 minutes. Strain, return to the fire, add a cup of hot cream that has been thickened with a teaspoonful of flour, the coral of the lobster, if any, which has been dried in the oven and pounded fine, and half a cupful of little dice of the flesh of the lobster. Give one boil, season to taste and pour into a tureen over little dice of fried bread. "This quantity," said the blushing author of the above delicacy, "is sufficient for eight persons and was made from one good-sized lobster. A cupful of the meat still remains for a salad or cutlets or patties."

Salmon Croquettes.—Take one large cupful of cold, boiled salmon minced fine. Work in a tablespoonful of melted butter, one beaten egg and a teaspoonful each of lemon juice and anchovy sauce. Put these ingredients in a saucepan over a slow fire, and stir in a half cup of sifted bread crumbs, salt, pepper and a bit of nutmeg, moistening with a gill of cream. Make into small, pear-shaped rolls, egg and bread crumb them, and fry in boiling dripping. Serve on a mound of mashed potatoes. They may be prepared in the morning and kept in a cool place until you are ready to fry them.

Leg of Mutton Braised.—"One cannot live on delicacies alone," said the pretty girl who dispensed this dish, "and it has fallen to me to prepare this substantial but I hope tasteful dish. Have the butcher bone a leg of mutton and tie it in shape. Brown it in a stewpan with a little butter, and when it takes a good color add a pint of water, half-a-dozen button onions, four small French carrots, and salt and pepper, and simmer slowly for six hours, turning frequently the while. Place on a hot dish, free the gravy from the grease, thicken it with a little flour, add a

spoonful of mushroom catsup and pour over the mutton. Serve with green peas."

OYSTER OMELETS.—"I have made most of the omelets given in the RURAL of the 27th of February," said a rosy Miss, "but I claim the credit of having invented this particular one. Drain at least a dozen oysters and keep the juice. Fry out the fat from six thin strips of larding pork one inch wide and two long, lay in the oysters and shake for a minute or two, until the beards just begin to open. Meantime cook in another pan an omelet of six eggs, and have it ready just at this minute to fold, lay in the oysters which you have lifted from the fat with a skimmer, fold and turn out upon a hot dish," Although I am little of an epicure, I shall carry through many a day the savory memory of that omelet.

SWEET POTATO FRITTERS.—Take three or four plump sweet potatoes, wash and peel them and cut them into slices lengthwise, and about a quarter of an inch thick. Soak them for half an hour in brandy with a little lemon peel in it. Then drain, dip in fritter batter and fry in hot dripping. Sprinkle with powdered sugar and serve.

APPLE CHEESE CAKES.—Take half a pound of pared and cored apples, half a pound of sugar and the thin rind of a lemon chopped. Stew all in a cup of water, Beat up well with the yelks of five eggs and the whites of three. Then melt three ounces of the best butter, mix all together, and bake in patty-pans lined with good puff paste. "The next display of the accomplishments of the Amateur Club," said Miss Gladys, the president, rising and displaying a thousand dimples, "will take the form of a breakfast."

PALMETTO.

KITCHEN TALKS.

ANNIE L. JACK.

I ALWAYS think Spring is the hardest time for farmers' wives; so much work has to be crowded into a short space of time, especially at the North. To be cook, and dairy-maid, laundry-maid, kitchen and parlor-maid all in one, is in itself no sinecure. To raise calves, pigs and poultry, too often falls to her share of the work, and she goes on her way with imperfect facilities for doing the work easily. One of the things that a farmer's wife has to attend to that does not disturb her city sisters is the drying of feathers from poultry that have been used all Winter. There is a panful in the oven just now, and it incommodes one when the oven is needed. But the feathers must not be wasted. Even the large ones can be stripped from the plumes, and used instead of batting for quilting in comforters. They are best inclosed in a tight bag and washed; then they become light and are clean. When drying in the oven they are quite a trial—somehow they will escape into the kitchen, while if you open the oven door to stir them, and even breathe on them, the fluff flies up into your nose and mouth in a very awkward fashion.

The amateur laundry-maid is busy cleaning her irons. She has a lump of wax tied in a rag, and rubs them when hot, then scours on a paper sprinkled with salt, and they become bright and clean. Can any of our RURAL readers introduce us to an easy-working and improved sad-iron?

A WEEK'S WORK AT MRS. HOMESPUN'S.

SATURDAY.

BREAKFAST being over, Mrs. Homespun began her weekly house-cleaning. Door-knobs were rubbed bright, window and door-casings were washed; the glass in the windows was polished; carpets were swept, papers sorted and put away to be preserved; books and furniture dusted, and every room in the house received its proper share of attention. The meals for Sunday were arranged for, so that they could be prepared with the least expenditure of labor. Cold, boiled ham, baked potatoes, bread and butter with canned strawberries, formed a part of the bill-of-fare. "I have had a new experience in canned fruit this year," said Mrs. Homespun, as she set down a glass can preparatory to opening it. "I had no good place except the cellar to keep any of my canned fruit; and to keep it cool through the very warm weather I packed the cans in salt, in a box. If I had only allowed the salt to come about two-thirds of the hight of the cans I think it would have been better; but the salt seemed to unite with some chemical in the metal covers that nearly ruined them; but as they were porcelain-lined, no harm was done to the fruit, and you see," she added proudly, "that they have kept in splendid condition." Next, she grated horse-radish enough to nearly fill a quart glass can, covered it with vinegar and set it away in the pantry for future use.

A PLEA FOR FANCY WORK.

WHY so bitter against fancy work, oh "Country Housekeeper"? Every spare moment cannot be spent in reading, no matter how one loves it; the brain tires, and often when doing this same fancy work which you say "only employs the fingers," the mind is busy, oh, so busy! and things we have read are pondered over, and thus more firmly impressed on our minds.

Did our Great Creator do no fancy-work in making this world of ours? Had He left out the beauties of Nature, which some may term useless, what a dreary world this would be.

God implanted in us the love of the beautiful, and surely when the Israelites were building the Temple, by God's direction, fancy-work came in for a goodly share of attention.

Why "put a few tucks" on our under garments? Tucks are of no use, only for show, while trimming preserves the edges of the garments and they wear longer, even if that same trimming is home-made.

"Hideous ornamentation of heavy home-made trimming"! Well, I have made a good many nice under-clothes lately, and much of the trimming has been home-made; light, airy, and beautiful, yet durable.

As for crazy-work, I have never done any; but I have seen some of it which was beautiful, and the makers thereof were not wanting in more solid sources of enjoyment; but did this in play-spells.

I have always encouraged my girls in their wish to do fancy-work, as it teaches them to sew neatly, and they are much more willing to learn on something pretty than on the old-fashioned patch-work, which our mothers made us do in our childhood—a good lesson, but so dry and uninteresting.

Yes, I believe there is a time for fancy-work, as well as for solid reading and hard work.

AUNT EM.

HANGING BASKETS.

THE following is a very pretty novelty. Saw off one end from a cocoanut, and bore four holes through the upper edge, through which run a scarlet silk cord. Gum on the outside, with mucilage, the pretty lichens that grow on the branches and trunks of trees. Get as great a variety of shades as possible, and you will have a beautiful ornament. I saw over a friend's mantel a small branch of a tree that had been covered with these lichens. A bird's nest was fastened in, and with a bright spray of autumn leaves behind it, I thought it a charming decoration. Pasteboard frames with lichens sewn on frame photographs very nicely.

MAY.

BED-ROOM CURTAINS.

I RECENTLY made a very pretty pair of bed-room curtains out of thin, unbleached muslin at three cents a yard. It resembled cheese cloth, and I ornamented it, top and bottom, with wide bands of Turkey-red cotton. Looped back with ribbon of the same shade, they were as graceful and bright as if they had cost much more.

For the same room, which needed a rocker, I tried my hand at upholstering. An old cane-seated rocker was found. This I painted a bright red, that is, the wood-work of it. I fashioned a seat by firmly tacking on a net-work of stout strips of ticking. This I stuffed with excelsior with a covering of cotton, and over all a bright piece of cretonne was tacked on. I made a little cushion or head-rest for the back to match, and tied a bow of red ribbon over one of the knobs at the back, and now Jack says it is the prettiest chair in the house, and wants it in the parlor.

My parlor, by the way, is sadly in need of a new carpet, and as that is out of the question, I shall try my hand at painting the floor. I am busy making a large rug for the center of the floor, that promises to be very effective. It is made of remnants of carpet (new) of all sizes and kinds; some have been given me by friends. I take pieces of any shape—squares or triangles—and trim with the least possible waste so as to fit together. Sew them very strongly with a seam on the wrong side, and line it with bagging, and bind it with carpet binding. Some bits of velvet carpet give it a very rich appearance. I am told that at carpet stores in large cities you can buy small remnants of carpet very cheap. I call it my crazy patch-work rug, and shall make a smaller one for the fireplace, which I shall edge on two sides with fringe.

MRS. V. D.

Miscellaneous Advertising.

When Baby was sick, we gave her Castoria,
When she was a Child, she cried for Castoria,
When she became Miss, she clung to Castoria,
When she had Children, she gave them Castoria.

Miscellaneous Advertising.

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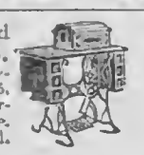

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News of the Week.

HOME NEWS.

SATURDAY, May 29, 1886.

EX-PRESIDENT ARTHUR is slowly, but steadily failing, and all his friends now hope is to carry him through the Summer. Lately he rode out in a carriage three times, but the consequent reaction confined him to bed for four days. Greatly emaciated; very feeble. ..OnJuly 14, 1880, Willard Fiske, a Professor at Cornell University, married Jennie McGraw, a hopeless invalid, but very wealthy. A year later she died and he got a legacy of $300,000 out of her estate worth $2,025,933, he having agreed to make no further claim. Her father had given $100,000 to the University and she left it property valued now at about $1,500,000. Six months after the settlement of the estate Fiske went to Europe, where he has since remained, but employed lawyers to contest the legacy to Cornell on the ground that a clause in its charter limits its holdings to $3,000,000, and that it held property worth more than that already, therefore the legacy was void and he inherited as heir at law. The court, Wednesday, decided against him..... ....The hostile Apaches are still murdering in the Southwest, and trying to get "reservation" Indians to join them. Report says Gen. Miles has offered $50 for each Indian or head of Indian and $2,000 for Geronimo or his head. The Government knows nothing about such offer, and under no circumstances would sanction such a barbarous warfare. Arizonaians offer the reward, however, and will pay the bill .. ...The people of Eastern Montana are mad at the proposed extension of the Cheyenne Indian Reservation to the Tongue River. At present it is 30 miles long by 20 wide, or 600 square miles, or about 385,000 acres. There are about 700 nomadic Cheyennes, who have already, therefore, nearly a square mile apiece—buck, squaw and papoose. The extension would embrace the homes and farms of a large number of bona-fide settlers, and would close the principal cattle trail from Southwestern Montana and Northern Wyoming. Generosity to the red man should not work injustice to the white..... Estimated by the number of names in the new city directory, Chicago has now a population of 750,000. St. Louis sure to protest or "go 10,000 better." .....Representative Bland, of Mo., has introduced a bill to restore the income tax, proceeds to be applied to the payment of pensions.....Zenas Fisk Wilbur, who, as Examiner in the Patent Office, passed Alexander G. Bell's application for a patent for "multiple telegraphy" in 1876—original "telephone patent"—swears that he gave Bell Patent Office secrets, especially with regard to Gray's application for a telephone patent, and thus enabled him to improve his original claims, which related to telegraphy, not to telephony. For this fraudulent conduct Bell and his lawyers made him presents and "loans." Bell says the story is made out of whole cloth... Snow to the depth of several inches was reported yesterday in various towns in Northern Vermont.....A Canadian fishing boat was seized at Portland, Me., for not having a manifest of her cargo—20,000 mackerel—usually not asked for though legally required. Captain fined $500—more than the worth of the boat. Fine may be remitted.....Canada is fitting out six steamers and as many schooners "to protect the fisheries." Our Government acting energetically in negotiating with England. Both Houses of Congress have passed the Dingly Shipping Bill with an amendment authorizing (asking) the President by proclamation to deny commercial privileges in all our ports to the vessels of any country that denies them to our vessels. The "war" to be waged on the lakes and rivers as well as on the ocean. Exasperation certain; serious trouble hardly probable. ....A good deal of agitation in Nova Scotia, as elections are to be held on June 15. All things point to a great Liberal majority, as that party favors secession from the Dominion and direct relations with England. Some talk of forming a separate confederation of the Maratime Provinces, including Nova Scotia, New Brunswick and Prince Edward's Island, and possibly Newfoundland. Some talk of annexation to the United States. Separation from the Dominion is what is chiefly desired, however....No more tinkering with the tariff need be feared at this session of Congress..... ....Clifton, Dak., is to have a cyclone cave large enough to hold the population of the whole town.....Brooks has discovered another comet; six within telescopic sight now. Two periodic; one here last in 1815. Warner, of Rochester, pays $100 apiece to the discoverers of new comets.....A $1,000,000 fire in Chicago Wednesday—publishers and lithographers the chief losers, and the owner of the fine six-story brick and stone building cremated.....Indiana Prohibitionists are to run a State ticket, and in convention, Wednesday, declared in favor of unqualified prohibition of intoxicants, strict observance of the Sabbath and woman suffrage.....New Jersey prohibitionists nominated a State ticket yesterday, and are going to make a vigorous fight without "entangling party alliances."... A House bill introduced Monday provides for the election, on the general ticket, of a second Vice-president to be President in case of removal, death, or resignation of President and Vice-president, and to be Vice-president in case of the elevation, death, or absence of the latter.....After all, what a sensation it would be should the Keely Motor turn out a success! Some of the reports of the late experiments intimate the possibility of the miracle.....The Chicago Grand Jury have found true bills for murder, as accessories before the fact, against the Anarchist leaders, August Spiers, A. R. Parsons, Samuel Fielden, Michael Schwab, and Herman Schnawble. These are the demagogues whose vaporings incited the late murderous riot in Chicago. The rascal who threw that bomb, which killed five policemen and injured 16 more, maiming some for life, is in custody, and it is believed 19 others were ready to hurl a bomb apiece when frightened off by the premature action of their comrade, and the consequent fire of the police. Twenty indictments of Anarchists, in all.....There's a scheme afoot to connect the Delaware and Chesapeake Bays by a canal 17 miles long, Baltimore subscribing $500,000 of the capital stock. An English company will furnish 80 per cent. of what's needed, if 20 per cent. is raised here..... The estimated National revenue for the current fiscal year is $175,000,000; and the appropriations call for $150,000,000 for outlay—only $25,000,000 left to pay interest on the national debt and to lessen the load. Revenue this month $16,000,000 over expenditures—there will probably be a decrease of $12,000,000 in the public debt .....The Canadian House of Commons has given a majority of 73 in a house of 159 members, against the abolition of duties on coal and breadstuffs, and this is considered fairly indicative of the popular feeling on the matter. Since the imposition of the duties the average value of the annual imports of breadstuffs from this country has decreased from $6,676,000 in 1874–78 to $3,130,500 in 1878–84, while the output of the Nova Scotia coal mines has doubled, and it is claimed that, taking an average of years, the prices of coal and breadstuffs have not increased..... ....All big strikes collapsed or collapsing; little ones are likely always to be too numerous for mention. Largest meeting ever held of Knights of Labor and Trades Unions now in session at Cleveland, Ohio. Much disagreement and a bitter fight between the Knights and the Unions as to which shall regulate strikes, boycotts, etc. Nothing certain now—wait for a week..... ....Congress seems willing to admit the whole of Dakota as a State; but the House objects to a divison of it into two.....Jaehne, the boodle New York alderman, is better in prison than elsewhere, being "quiet, industrious, and orderly" while starching shirts.....The accumulated photographs of babies that have been named after the President, number some 700, and fill three drawers in a White House closet.....There's a lively fight in the U. S. Senate over the confirmation of ex-Gov. Glick, of Kansas, as pension agent at Topeka, as the Kansas Senators are not enthusiastic in his favor. He'll probably go through, however.....The Grant Monument Fund has increased very little of late, and the trustees make one more appeal to public patriotism. It is now only $121,160.....It cost this city $3,000 to prove Jaehne's rascality..... ...Meetings in favor of Irish Home Rule have been the order of the day all over the country of late. Many of the State Legislatures and municipal bodies have passed resolutions commending the measure and lauding Gladstone for championing it. These have been engrossed and forwarded to the Old Country. James G. Blaine will speak for his forefathers' land at a large meeting to be held at Portland, Me. Governors, Mayors and other "big bugs" usually preside on such occasions. Many of them care little about anything Irish, except the Irish vote. Thursday night Gov. Foraker of Ohio, presided at a monster meeting at Columbus.....,For three hours Monday night Toronto, Canada, was under mob rule, owing to a strike of street car drivers and conductors. Between 30 and 40 street cars were wrecked and the passengers and "scab" drivers and conductors were pelted with bricks, stones and other missiles. Nobody seriously hurt, however..... .....It is reported that the Mormans intend to boycott the Gentiles in Utah. .....The annual report of Dominion fisheries show a decrease of nearly $500,000 in Nova Scotia alone. The total value of Dominion fisheries is placed at $17,722,973, of which Nova Scotia is credited with $8,263,923, New Brunswick with $4,005,430, Prince Edward Island with $1,293,430, British Columbia with $1,078,038, Quebec with $1,719,460 and Ontario with $1,342,692.....

FOREIGN NEWS.

SATURDAY, May 29, 1886.

OWING to the fight between the consolidated cable companies and the Mackay-Bennett lines, the price for transatlantic cablegrams is excessively low—lower by far than it ever has been or is likely to be again, as the present rates are ruinously unprofitable. They account, however, for the enormous amount of foreign news in our newspapers of late—a quantity altogether disproportionate to the importance of the events discussed..... By masterly management the "Grand Old Man" has obtained a much better chance of ultimately passing his Home Rule Bill, and won the name of "Old Parliamentary Hand" in addition to his other titles of admiration or affection. By vague promises of concessions to the Radicals, very positive threats of dissolution of Parliament, and vigorously working the caucus machine organized by Chamberlain, he has won over all the doubting Thomases, and some of the recalcitrant Radicals, so that it is quite likely he will secure a majority to allow the "second reading" of the bill. This will amount to a Parliamentary affirmation of the necessity of Home Rule for Ireland. The nature of the Rule is a matter of minor importance. After the bill is read a second time it will probably be withdrawn till next session of Parliament to allow time for full consideration, and to permit other needed legislation. If the motion for a second reading is defeated, Parliament is certain to be dissolved, and this will probably happen in any case, as it is desirable that the people should have an opportunity to express their wishes on such important legislation, before the bill is finally acted upon in the Commons. Gladstone believes the people will support him by giving him a handsome majority, and he can then with a bolder face and stouter heart face the certainty of bitter opposition in the Lords.....The Greek army has been reduced to its original size before the late troubles began. The large European blockading fleet is to be withdrawn from the Greek coast. The country is staggering under a very heavy load of debt. It has made such a rumpus, however, that its territorial claims must be taken into account whenever the "Eastern question" comes up again. The scrimmages on the frontier were due to the action of the Turkish troops in firing on numbers of their unpaid and half-starved comrades who were deserting to the Greeks at night. The latter heard the firing, and, dreading an attack, fired back. Then the Turks supposed the Greeks were attacking them, and so the muddle led to considerable bloodshed. About 175 Greeks were killed and many more wounded—no account of Turkish loss..... ....In France the most significant event of the week is the introduction into the Assembly of a government bill providing for the expulsion from France of all the descendants of former rulers of the country. It is directed against the Orleans princes, and especially the Comte de Paris, who since the death of the late Comte de Chambord, has been acknowledged by all Legitimists as well as Orleanists, to be the rightful heir to all the claims of the old line of French kings. Paris and the other large cities are still vehemently republic; but monarchy is becoming popular among country people. Since the foundation of the present Republic, over 15 years ago, the Princes have lived quietly in France, and it doesn't look well for the stability of the present form of Government that its fear of their growing popularity should now lead to their expulsion. Can't they "conspire" even better abroad? Didn't the boldest and most fortunate of all conspirators, Louis Napoleon, achieve success by conspiring in exile?..... The Czar, in his return to St. Petersburg from the Crimea, has been feted and "addressed" at all important places along the road, especially at Russia's old capital, Moscow, which is intensely religious and per-fervid in the belief that Russia should be for Russians. The addresses (doubtless read privately to or by him beforehand) all expressed the hope that the cross (Russian, of course) would soon wave from the top of St. Sophia, the chief mosque in Constantinople, and before the Turkish conquest, the St. Peter's, of the Greek Church. The tenor of the addresses, the wild enthusiasm that hailed them, the Russian attitude in the Greek embroglio, and the late remarkable manifesto of the Czar to the Black Sea fleet are thought a trifle menacing to the "peace of Europe."

AGRICULTURAL NEWS.

SATURDAY, May 29, 1886.

THE Canadian cattle exported to England are reported to be much poorer in quality than those received there from this country, so that the advantage they have of being admitted into the interior, while ours are slaughtered at the port of debarkation, is to a great extent counterbalanced by their lack of quality. Canadian exporters are said to have lost a good deal of money last year....."Winter cholera" prevalent in the West, is thought by physicians to be due to bogus butter..... Armour & Co., of Chicago have executed a contract to supply the French Government with 7,000,000 pounds of beef for the French army, to be put up in special cans..... We import 16,000,000 dozen eggs a year!..... Dr. Pauren is no longer the State Veterinarian of Illinois. Pleuro-pneumonia contagiosa no longer exists among cattle in Chicago—cause and effect?.....Freight rates on flour from Minneapolis to New York have been reduced to 27½ cents per 100 pounds. They are 25 cents from Chicago .....The French embargo on American pork is still a subject of mild agitation in "frog-eaters' land," the farmers supporting it and the working people—chiefly in cities and large towns—objecting to it. Petitions for and against reach the Government about once a fortnight.....England buys $19,252,884 out of the $20,805,824-worth of the bacon we export; of hams, $2,454,080 worth of the $3,231,609; nearly half of the $3,462,539 of pork, and about one-third of our surplus lard.....R. Anderson & Co., grocers, at Stillwater, Minn., were indicted Thursday for selling butterine. This i is the first indictment for this offense in that State.....

"ANOTHER HOUSEHOLD NECESSITY."

IN a recent number of this paper was published a reporter's interview with Mr. Joseph Wild, the venerable and estimable head of the firm of Joseph Wild & Co., of 82 and 84 Worth St., New York, in which he related his experience in the use of the remedial agent known as "Compound Oxygen" administered by Drs. Starkey & Palen, of Philadelphia, which he heartily endorsed. An error in the heading of the article gave to Mr. Wild the credit of being the inventor of "Linoleum," which, as the letter below will show, Mr. Wild hastens to disclaim.

JOSEPH WILD & CO.,
82 & 84 WORTH ST. AND 11 & 13 THOMAS ST.,
New York, May 13, 1886.

Drs. STARKEY & PALEN, 1529 Arch Street.,
Philadelphia, Pa.

DEAR SIRS:—The article entitled "Another Household Necessity—Mr. Wild the inventor of Linoleum, notes a discovery as valuable as his own," published in the Scientific American of May 8th, is misleading, as stating that Mr. Joseph Wild was the inventor of Linoleum. It should have stated that Joseph Wild & Co., 82 & 84 Worth St., New York, are the owners of the patent in the United States and sole manufacturers of Linoleum in the United States. Please insert the above in the papers that have had the mistaken advertisement.

JOSEPH WILD.—*Adv.*

Crops & Markets.

SATURDAY, May 29, 1886.

SERIOUS damage is reported by chinch bugs in portions of Kansas and Illinois, especially in Bond, Hamilton and Richland counties, in Southern Illinois., and in Johnson and Osborne Counties, Kansas. The Hessian Fly is also depredating there. Grasshoppers are doing injury in Allen and Wyandotte Counties, Ohio; while heavy rain storms have injured growing crops in parts of Ohio, Iowa and Nebraska. Very incouraging reports of spring wheat prospects from Dakota and Minnesota. Very good reports of wheat and corn from Ohio. Indiana reports favorable. In Missouri, Kentucky and Tennessee, harvest will begin at least 10 days earlier than usual.

An association of wool dealers was formed at Boston the other day to keep down prices. They say union is needed against jobbers and large growers, who combine to put up prices regardless of the stocks on hand. At present prices, a sheep turning off less than five pounds of pretty good wool, is wasting money, and should go to the butcher. Foreign importations are falling off, foreign prices advancing. A lot of Australian wool in bond was sent from Boston to Liverpool the other day to be sold at the approaching great auction sale, because it was thought prices there would be better than those here after paying duty. All fear of the Morrison-Hewitt bill is over for this season. The clip here will be less than of late years; and prices should be profitable. No advance has yet been made, however; while some concessions are reported. Little doing by manufacturers in the way of stocking up yet; nor will much be done till the new clip reaches the seaboard in greater bulk. In the interior buying is only beginning to assume importance. The sales of the week in Boston were 2,602,000 pounds, against 1,065,00 pounds last week, and 2,203,000 pounds in the corresponding week last year.

At the end of last and beginning of this week a large number of Western stockmen were in this city to bid for the government contracts for the supply of beef to the Indians on the various reservations. In all sections prices were unusually low. The lowest bid a year ago on 10,000,000 pounds of beef for the Indian Territory was $3.17 per 100; this year it was $2.64. The prices for all the other reservations were proportionately low, especially those for the other great Indian country, the Sioux Reservation up in Dakota. Col. Hunter, of St. Louis, and R. M. Bosler, of Pa., think prices will be higher this Summer than last, and that the low prices of the "lettings" are not a standard of the market prices. All Western Texas has been without spring rains; there has not been grass enough to fatten cattle, and not 50 per cent. of the usual number will be driven out of this great cattle-raising section. Supply smaller, therefore, and prices higher. Only the poorest beef goes to the government lettings—that from stock that couldn't be marketed elsewhere. Russell A. Harrison, son of Senator Harrison, of Indiana, thinks the prices no indication of the market, as bids must be put in long before the market prices are made. Thinks the prices will be pretty fair, and that the contractors will be kicking themselves for having bid so low. Mr. Denman, Colo., thinks government lettings "fairly show a downward tendency of range cattle." Prices have gone down 20 per cent. in a month, and 50 per cent in three years. Formerly, out of every hundred head of cattle on the ranges 75 per cent. would be fattened there; now not over 30 per cent. can be so fattened. Extension of settlement, etc., have so changed the climate as to cause rain in the Fall and Winter and not in the Spring over most of the country from Canada to the Gulf—hence a poor grass crop in Spring, while fall rain rots the grass. The poorer quality of the beef is one reason for the downward tendency. All these men are cattle kings. Denman thinks the wish is father to the thought in case of the others who predict high prices. Prices of range cattle must affect those of others.

MARKETS BY TELEGRAPH.

SATURDAY, May 29, 1886.

CHICAGO.—Compared with cash prices a week ago, "regular" wheat is 1c. lower. No. 2 Spring, ¾c. lower. Corn, ½c. lower. Oats, ⅜ c. lower. Rye, ½c. lower. Barley, steady. Pork, 17½c. lower. Cattle from 15c. to 25c. lower all round. Hogs, average steady, slight advances on some grades, and decline on others. Sheep, from 10c. to 50c. lower.

WHEAT, lower; Sales ranged: May, 73⅛@74⅛c; June, 73⅛@74⅝c; July, 69⅝@70⅝c; No. 2 Spring, 73⅝@73⅝c; No. 3 Chicago Spring, 67@70c. CORN.—May, 35¼@35⅝c; June, at 35⅝@36c; July, 36½@37c. OATS.—Steady. Sales ranged, May, 27¾@27¾c; June, 27¾@27¾c; July, 27¾@27¾c. RYE.—No. 2, 59c. BARLEY.—No 2, at 55c. MESS PORK.—May, at $8 32½@8 35; June at $8 32½@8 42½; July, $8 32½@8 55. LARD.—Cash, $5 85@5 87½; June, $5 85@5 87½; July, $5 92½@5 95. BULK MEATS.—Shoulders, $4 25@4 30; Short rib sides, at $5 20@5 22½; Short Clear sides, at $5 70@5 75. CATTLE—Market dull; Shipping steers, at $4 25@5 75, stockers and feeders, $2 75@4 00; cows, bulls and mixed at $1 75@4 00; bulk, $2 70@3 10. HOGS.—Market active. Rough and mixed, $3 75@4 10; packing and shipping at $4 00@4 20; light, $3 75@4 15, skips, at $2 40@3 50. SHEEP.—Market weak; Natives, $2 00@4 65.

ST. LOUIS.—Compared with cash prices a week ago, wheat is ¼c. lower. Corn, ¼c. lower. Oats, 1½c. higher. Butter, creamery, from 1c. to 2c. lower; dairy, 1c. lower for best grades. Pork, 15c. lower. Cattle, from 10c. to 20c. lower. Hogs, from 5c. to 10c. higher. Sheep, 26c. lower for top prices, others steady.

WHEAT.—Quiet; No. 2 Red, Cash, at 77@77½c; May, at 77c, June at 71@71½c; July at 76¼c. CORN.—Dull; No. 2 mixed Cash, 32½@32⅝c; May, 32½c; June at 32⅝c. OATS.—Firm, No. 2 mixed, Cash, at 30½@30½c; May, 30½c; June, 27¼c. RYE.—Quiet at 60¼c. BARLEY.—There is no market. BUTTER. Quiet; Creamery, 14@15c; dairy, 10@11c. EGGS—Quiet at 7½c. FLAXSEED at $1 01@1 01. HAY.—Timothy, $10 25; Prairie, $6 75. BRAN 46c. at mill. CORN MEAL.—Steady at $2 00. PORK, at $9 00. BULK MEATS.—Long clear at $5 30; Short Rib, $5 45; Short Clear, $5 55. CATTLE.—Market slow; Fair to Choice Native Shipping Steers, at $5 30@5 60; Native Butcher Steers, $5 30@4 80; Cows and Heifers, at $2 25@3 75; Stockers and Feeders, $3 25@3 35. HOGS.—Light, at 3 90@4 05; Packing, at $3 90@4 05; Heavy, $4 10@4 20. SHEEP.—Market quiet at $2 50@4 50.

BOSTON.—CORN.—no grade at 30@48c. per bushel, as to quality; steamer yellow, at 50½c, and steamer mixed at 50c. OATS are easier; of No. 2 white are held at 44@44½c.; No. 3 white, at 43c. and fancy white and barley are held at 45½@47c. per bushel as to quality. Rye is selling at 58c. per bushel. Sales of Bran at $14@15 for Spring and $17 00 for Winter; fine feed and middlings at $14 00@19 00 and cotton seed meal at $28 00 on spot and $22 25 per ton to arrive. HAY AND STRAW.—Hay is in fair demand at $19@20 per ton for choice and fancy; fair to good, at $16 00@17 00; fine, at $13 00@17 00, and $13 00@15 00 for poor and damaged; Western choice, $17 00@18 00; do fair to good $15@16. Straw—Rye straw is held at $20 00@22 for choice, and $14@18 for common to good. Swale hay, $11@12; Oat straw, at $10@11 per ton. PRODUCE. —BUTTER.—Northern and Eastern creamery, extra 19 20c; extra firsts, 18@19c; firsts, 16@17c; Western creamery, 18@19c, for extra firsts, new; firsts, 16@17c; Northern dairy, 16@17c, for Vermont extra firsts to extra, new; firsts, at 14@15c; seconds, 12@14c; Western dairy, 14@15c, for firsts; seconds, 10@12, Imitation creamery, 13@16c, for extra firsts to extra; ladle-packed, 12@14c, for extra firsts to extra; firsts, at 10@11c; seconds, at 8@9c; grease, 1@5c. OLD CHEESE. —New York, firsts to extra, 9@10c, ½ ℔, and seconds, 4@7c; Vermont firsts to extra, 8@9½c, and seconds, 4@7. New Cheese. New York and Vermont extra, 8@8½c; do. do. firsts, 7@7½c; do. do. seconds, 4@6c.; Western extra firsts, 6@7c. EGGS.—Cape and near-by, ℔ dozen, at 13c; Eastern extras, at 12½@13c; do. firsts, at 11½@12c; Northern, fresh at 12c; Western fresh, at 11½@12c; Provincial, 11@11½c. BEANS.—Choice Northern hand-picked pea, at $1 65@1 75 per bushel; do, do. New York, small, $1 55@1 60; do, do, screened, $1 15@1 20; medium choice, hand picked, $1 30@1 35; do, do, screened, $1 15@1 25; Yellow Eyes, improved, $1 40; do, choice flats, at $1 25@1 30; Red Kidneys, $1 60@1 65. PEAS.—Canada, common to choice, at 65@95c, per bushel. Green peas, Northern, at 90c@$1; do, Western, $1 15@1 20. POTATOES range at 40@65c, per bushel as to quality.

WOOL.—The sales of the week have been as follows:

83,200 ℔	Ohio and Pennsylvania fleeces, X, XX, and XX and above	31 @	33
234,000 ℔	fleeces, of various grades and qualities	26 @	32
43,600 ℔	Texas part	@	23
43,000 ℔	Territory Wool	18 @	23
70,000 ℔	Oregon Wool	private terms	
94,400 ℔	California spring part	@	15½
81,900 ℔	unwashed fleeces	18 @	25
189,300 ℔	super and X pulled	20 @	38
55,500 ℔	scoured	28 @	48
3,000 ℔	sundries	12 @	30
900,900 ℔	domestic		
40,000 ℔	Australian	32½ @	36
50,000 ℔	Cape	private terms	
50,000 ℔	Montevideo	private terms	
25,000 ℔	Mediterranean carpet	private terms	

165,000 ℔ foreign.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, May 29, 1886.

STATE OF THE MARKET.—Compared with cash prices last week, flour is unchanged; No. 2 Chicago wheat, 2c. lower; No. 2 red, 3c. lower; corn, 2c. higher; oats, 1c. lower; pork, 25c. higher; butter and cheese steady; eggs, ½c. lower; poultry, steady; vegetables firm.

FLOUR, FEED AND MEAL, FLOUR—Quotations: Fine at $2 10@3 00; Superfine, $2 40@3 30; Extra No. 2, $3 10@3 50; Good to Fancy Extra State, $3 50@4 00; Common to Good Extra Western, at $3 10@4 00; Good to Choice Extra Western, $4 00@5 00; Common to Fair Extra Ohio, $3 10@3 75, Good $3 80@4 40; Good to Choice, $4 45@4 80; Common Extra Minnesota, $3 10@3 50; Clear, $3 50@4 00; Rye Mixture, $3 50@3 90; Straight, $4 25@4 50. Patent $4 10@5 00; Bakers' Extra, $4 10@4 50; St. Louis Common to Fair Extra, $3 10@3 65, Fair to Good, $3 70@4 60; Good to Very Choice, $4 65@5 00, Patent Winter Wheat Extra, $4 10@5 10; City Mill Extra for West Indies, at $4 35@4 40; South American, $4 45@4 55. SOUTHERN FLOUR—Common to Good Extra, $3 30@4 00; Good to Choice do., $4 05@5 25. RYE FLOUR.—Superfine, at $3 20@3 40, latter for choice. CORN MEAL.—Yellow Western at $2 50@2 75; Brandywine quoted at $2 70@2 75. FEED.—Dull and heavy, 40 to 50 lbs. quoted at 65@70c.; 60 lb. at 60@6.½c; 50 lb. at 70@72½c; 100 lb. at 80c; Sharps at 95@90c. Rye at 75c.

GRAIN.—WHEAT.—No. 2 Chicago at 85¼c; No. 1 Northern, 89c; Ungraded Winter Red at 87@89c; No. 2 Red, 85½@85¼c; White Michigan, 90c; No. 2 Red for June, 83⅝@85¼c; do. for July, 81¼@86¼c; do. for August 85⅝@86⅝c; do. for September 85⅞@86¼c; do. for October, 86⅞@88¼c, do for November, at 87⅝@88¼c, do. for December, 89@90½c; do. for May, 94⅛@95¾c. RYE.—State quoted at 66@69c; Western, 60@63c; Canada at 62@64c CORN.—Rejected at 35c; Ungraded Mixed, at 37@43c; No. 3, 53c, Steamer Mixed, 41½c. No. 2 Mixed, at 47¼@48¾, No. 2 Mixed for May, 46¼@47½c; do. for June, 45¾@46c; do for July, 45¾@46¼c; do. for August, 46⅝@46¾c; do. for September, 47@47½c. OATS.—No. 3, Mixed 35⅝@35½c; No. 2, 36⅝@36⅞c; No. 1, nominal; No. 3 White, 35½@36c; No. 2 36½@36c; No. 1 nominal; Mixed Western, at 36½@38c. White do., at 39@45½c; White State, 38@43c. No. 2 Mixed for May, 36¾@36¾c; do. for June, 35⅝@35¼c; do. for July, 34½c; do. for August, 31¾c.

PROVISIONS.—PORK.—Mess quoted at $9 00@9 25 for Old and $10 00 for New; $10 75@11 75 for Family Mess $12 00@14 00 for Clear Back; and $9 50@9 75 for Extra Prime. BEEF.—Extra India Mess, at $16 00@17 00; Extra Mess, in barrels, $8 00@8 50; Packet, $8 50@9 00 in bbls.; Fancy Plate, $9 00. BEEF HAMS.—Quoted at $23 00. CUT MEATS.—Pickled Hams, 11c; Smoked do., 12c; Smoked Shoulders, 7c. MIDDLES.—Long Clear in New York, 5¾c; Long Clear, 5.45c; Short Clear, 5 70c. DRESSED HOGS.—City Heavy to Light quoted at 5¾@5¾c.; Pigs, 5¾@5¾c. LARD.—Contract Grade, 6.10c; June, at 6.14@6.18c; July, at 6.15@6.17c; August, 6.28@6.24; September, 6.31c; October, 6.38@6.39c. City Steam at 5.85@5.90c. Refined quoted at 6.3½c. Continent 6.70@6.75c.

BUTTER.—Elgin Creamery, 16@—c; Pennsylvania do. 17@18c.; Western do., best, 16c; Western do, prime, at 15c; Western do. good, at 14c; State pails at 18c. State Dairy half-firkin tubs, best, 15@16½c; do. do. do, extra fine, 15c; do. do. do., good, 13@14c; do. do, common, 11@12c; Welsh tubs, best, 15c; do prime, 14c; Western, Imitation Creamery, best, 13c; do. fair and good, 11@12c; Western Dairy, fine, 11@13c; do, common, 9@11c; Western Factory, fresh, 11c; do. good, 9@10c.

CHEESE.—New State Factory, best white, at 8c; do. do, best colored, at 7¾c; do. do, good, at 7¼c; do. do, fair, at 5½@6¾c; do. do., common, at 5c; Ohio factory, fine, at 7½@8c; do, fair, at 6@7c; Pennsylvania skims, ½@1c.

EGGS.—There is a slow market considering the supplies, with easy prices and irregular. Quotations are for: State and near-by, at 13½@13c; Western, at 12@12½c; Canadian, at 12½c.

POULTRY.—The receipts are not large, and there is sufficient damaged to keep prices very regular. Quotations are for:

POULTRY.—LIVE.—Fowls, near-by lots, per ℔, at 10½@11c.; fowls, Western lots, per ℔, at 10½@—c., fowls, Southern lots, per ℔, at 10@10½c; turkeys, per ℔, at 8@10c; ducks, western, per pair, at 60@75c.; geese, western, per pair, at $1.00@1.25.

POULTRY.—DRESSED.—Turkeys, per pound, at 10@12c.; chickens, Philadelphia, light weights to pair, at 50@55c. per pound; fowls, Pennsylvania, prime, per ℔, 11½@12c.; do State and western, per ℔ 11@12c.

POULTRY.—FROZEN.—Turkeys, per pound, at 13@15c.

GAME.—English snipe, per doz., $2@2 25; Plover, Western, per doz., $1 00@1 50; Sand snipe, per doz., 40@60c.

COTTON.—The quotations, according to the American classification, are as follows:

	Uplands.	New Orleans and Gulf.	Texas.
Ordinary	6⅝	6 13-16	6 13-16
Strict Ordinary	7 1-16	7¼	7¼
Good Ordinary	8	8 3-16	8 3-16
Strict Good Ordinary	8 7-16	8⅜	8⅜
Low Middling	8 13-16	9	9
Strict Low Middling	9 1-16	9¼	9¼
Middling	9¼	9 7-16	9 7-16
Good Middling	9¾	9 15-16	9 15-16
Strict Good Middling	10 1-16	10¼	10¼
Middling Fair	10 7-16	10⅝	10⅝
Fair	11 1-16	11¼	11¼

STAINED.

Good Ordinary	6 7-16	Low Middling	7 15-16
Strict Good Ord.	7⅛	Middling	8 11-16

FRUITS.—FRESH.—Quotations are: Apples.—Baldwin, per bbl., at $3 00@3 50; Russetts, Roxbury, per bbl., $2 50@3 00; do. Goldens, $2 25@2 50. Strawberries—Florida at 12@15c, per quart for best; do. poor at 5@10c; Maryland, per quart, 15@18c. for prime; Norfolk, Wilson, per quart, at 14@16c; do. Charleston seedling, per quart, at 13@14c; do. scarlet, at 12c. per quart: North Carolina large, per quart, at 14@16c; do small, at 10@18c. per quart; Charleston, Hoffman's, per quart, at 20@25c; do. fair at 12@18c. per quart.

FRUITS.—DRIED.—The quotations are as follows: Apples—Fancy evaporated, at 6¾@7c; choice, at 6½@—c, do. prime at 6@6¼c; fancy North Carolina sliced, at —; choice do. at 3¾@3c.; choice Tennessee quarters at 1½@2c.; State quarters at 2½@3c.. southern sliced prime at 1½@2c; do. common, —, Peaches—Peeled North Carolina, choice, 11c; fancy, 12@12½c; extra fancy, —c; Georgia, choice, at 10@11c; do. prime, 8@9c; unpeeled halves, 2½@3c, unpeeled quarters at 2@2½c.: Delaware evaporated, peeled, —@—c; unpeeled do., at —@—c. Choice pitted cherries at 10c. Evaporated raspberries, at 14@15c; sun-dried do. 12@12½c. Blackberries—Prime at 7c. Whortleberries at 6c. Plums, at 5c.

PEANUTS.—Continue at strong prices with fair demands. Quotations at 6½c. for best hand-picked; and 4¼@4½c. for farmers' grades; 5¼@5½ for country cleaned.

HAY AND STRAW.—Supplies are freely offered with prices favoring buyers. The following quotations are; for Choice Timothy hay at 85@90c; Good do, at 75@80c; medium at 70c, shipping at 65c; clover mixed, 65@70c; clover, black, at —@—c. Straw.—No. 1 rye, at 95c; short rye at 65@70c, oat, at 40@45c; wheat, at —c.

VEGETABLES.—There is a good demand for most sorts of garden truck, with free sellers at easy prices. Quotations are for: Potatoes.—Savannah, new, prime, per bbl, at $3@4 50, Charleston, Chili, prime, per bbl, $4@4 50; Charleston, rose, prime, per bbl, $3@4; Charleston, peerless, prime, per bbl, $3@3 50; Florida, new, prime, per bbl, $3@4 50; new potatoes, seconds, $2@2 25; new potatoes, $1@1 50; Rose, Maine and New Brunswick, prime, Rose, Nova Scotia in bulk, per bbl, at $1 75@2 00; Rose State, per bbl, $1 87@1 92; Burbank, State, per bbl, $1 62@1 75; Burbank, Nova Scotia, per bbl, $2 00@2 25, Burbank, Maine and New Brunswick, per bbl, $2 00; Hebron, eastern and Nova Scotia, per $1 75@2 00; Hebron, State, per per bbl, $1 25@1 50; Prolific, Nova Scotia and New Brunswick, per bbl, $1 75@2 00; Chili red, Nova scotia, per bbl, $1 75@2; Mercer, Prince Edwards Island, per bbl, $1 75@1 87; Peerless, bulk, per bbl., $1 75@1 87; Magnum Bonum, imported, 168 ℔. sack, $2 00. Asparagus.—Oyster Bay, per dozen bunches, at $1 50@2 25; do, upper Jersey, prime, $1 50@2 00; do, South, Jersey, Maryland and Delaware, per dozen bunches, $1 25@1 75. Beets.—Savannah, per crate, $1 75; Florida, per crate, at 75c@$1 25. Beans.—North Carolina, per half bbl, crate, at $2@2 50; do. Charleston and Savannah, wax, percrate, $1 50@1 75; do. Charleston and Savannah, round, per crate, $1@1 25; do. Charleston and Savannah, flat, per crate, at 60@75c. Cabbages.—Norfolk and North Carolina, per bbl., at $1 00@1 75; do, Charleston, per bbl, $1@1 50; do. Savannah, choice, $1 50@2; do, Florida, per bbl., crate, at $1@1 50. Cucumbers.—Florida, per crate, $1@3. Kale.—Long Island, per bbl, at 50@60c. Lettuce.—Long Island, per bbl, $1 50@2 50; do. Norfolk, per bbl, 75@$1 25. Onions.—Bermuda per crate, at $2; do, New Orleans, per bbl, $3@4; do, Egyptian per case, $2 50@2 75. Peas.—Maryland, per bbl., at $4; do, York River, per half-bbl, $1 25@1 50; do, Norfolk, per half bbl, crate, $1 25. Radishes.—Long Island, per 100 bunches, 50@60c. Rhubarb, Long Island, per 100 bunches, $1 25@1 50. Spinnach, Long Island, per bbl, $1 50@1 75. Squash.—Carleston and Savannah, per crate, 75c@1 00; do. Florida, white, per crate, 35@50c; do. Florida, yellow, per crate, at 75c@$1 00, Tomatoes. Florida, choice ripe, per crate, $3 50@4, do. Florida, green, per crate, $2@2 50; do. Bermuda, per box, 75c@$1.

LIVE STOCK MARKET.

NEW YORK, SATURDAY, May 29, 1886.

Shipments for six days, 491 live cattle, 7,550 quarters of beef, BEEVES.—Seven cars of Good Colorado "Stillers" from Terre Haute were sold at $5 85@6 00, or at an average of about $5 92; six cars of Illinois do, at $5 50; and 23 car-loads of Kentucky do, at $5 15@5 50, with one car of Scallywags down to $4 50 and nine head at $5 75. Six cars of little Kansas Cattle sold at $4 80@4 90 and for Ordinary to Choice Native Corn-fed Steers, the extreme range was from $4 30@6 30, with two cars of Extra Prime Chicago Bullocks which cost, laid down here, $6 40 per 100 ℔. Old Oxen, sold at $1 75@6 00; Dry Cows at $2 00@4 85; and eight car-loads of bulls, at $3 40@4 25 (few Extra at $3 40@4 75); Kentucky Corn-fed steers, 1,077 ℔, $5 60, do. Bull, 1,930 ℔, at $4 25; Still Bulls, 1,245 ℔, at $4 75; Maryland Steers, 1,386 ℔, at $6 05; do, 1,284 ℔, at $5 75; Oxen, 1,580 ℔, at $5 08¾; Pennsylvania Steers, 1,459 ℔, at $6 20; do, 1,312 ℔, at $6 20; Oxen, 1,720 ℔, at $5 50; Ohio Steers, 1,412 ℔, at $6 05; Chicago do, 1,258 ℔, at $5 80; do, 1,340 ℔, at $5 75; Pennsylvania meal-fed do, 1,390 ℔, at $6 30 less $5; do, 1,308 ℔, at $6; do, 1,381 ℔, at $5 90; State do, 1,064 ℔, at $4 95; Cows, 1,105 ℔, at $4; Bulls, 1,454 ℔, at $4; Illinois "stillers" 1,180 ℔, at $5 20 per 100 ℔; do, 1,183 ℔, at $5 50; Corn-fed Chicago Steers, 1,134 ℔, $5 50; Oxen, 1,429 ℔, at $5; Ohio steers 1,931 ℔, at $5 75; Chicago Bulls, 1,298 ℔, at $3 85; do, 1,166 ℔, at $3 75; Chicago Steers, 1,464 ℔, at $6 10; do. 1,346 ℔, $6 05; Ohio "Stiller," 1,230 ℔, at $5 60; Mixed Western Steers, 1,252 ℔, at $5 80; do. 1,241 ℔, at $5 70; Cows and Steers mixed, 1,091 ℔, at $4 55; Cows, 1,210 ℔, at $3 80; Kansas steers, 967 ℔, at $4 80; do, 905 ℔, at $4 90, St. Louis do. 984 ℔, at $6 20; Kentucky Stillers, 1,079 ℔, at $5 50; do, 1,071 ℔, at $5 40, holding good stock firm, and while the demand was slack and prices weak for Common and Trashy lots, a better market is looked for. Old Ewes and bucks sold as low as $3 50; Common to Good Sheep at $4@5 25; and Common to Choice Lambs at $6@8 per 100 ℔. Culls went down to 5c. per ℔; Ohio Sheep, 81 ℔, at $5 25; Virginia do, 82 ℔, at $4 25; Ewes and Bucks, 78 ℔, $3; Virginia lambs, 89 ℔, at 6c. per ℔; do, 51 ℔, at $7; Ohio do, (Culls), 51 ℔, at 5c. per ℔; Indiana Sheep, 80 ℔, at $5 per 100 ℔; do, 78 ℔, at $4 85; Kentucky do, 126 ℔, $5 50; do, 98 ℔, $4 50; Kentucky Lambs, 61 ℔, at 7c. per ℔; State Sheep and Yearlings, 72 ℔, at $5 per 100 ℔; Ewes and Bucks, 75 ℔, at $3 50. Spring Lambs (Common), 46 ℔, at 6¾c. per ℔; Indiana sheep, 79 ℔, at $4 75 per 100 ℔; Kentucky Lambs, 56 ℔, at 8c. per ℔.

HOGS.—Total receipts for six days, 39,658 head against 34,233 head for the same time last week. None for sale alive. Nominally weak and lower at $4 40@4 65.

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ESTABLISHED 1865.
S. H. & E. H. FROST,
100 PARK PLACE, N. Y.
Shippers desiring to favor us will be furnished stencils, shipping cards, etc., on application. Promptness guaranteed. References, RURAL NEW-YORKER, Irving National Bank, etc.

VERTIGO and various forms of dizziness, coming upon a man with a spiral sort of motion, indicate that the blood is full of bile and uric acid; cause, the failure of the liver and kidneys properly to act. For this condition that great specific, Warner's safe cure is prescribed by many thousand physicians with the best results.

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CHESTER CHIEF, Son of RYSDYK'S HAMILTONIAN, will make the season of 1886 for a limited number of mares, at $35 for the season. For Extended Pedigree, send for circular. JOSEPH GAVIN, CHESTER, Orange Co., N. Y.
Young Stock and Speedy Road Horses for Sale at all times.

COLD SPRING HERD, A. J. C. C.
ST. HELIER HUGO POGIS, No. 15550; Grandson of STOKE POGIS 3d; Sire of MARY ANN OF ST. LAMBERT, 9770. With butter record of 36 lbs. 12 oz. in seven days. Terms $50.
JUDD B. BRADLEY, Lyons, N. Y.
Also, a fine Draught Gelding, five years old, buckskin color; fine back; sired by Scotsland Glory. Price $300.

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A well matched Pair DAPPLE GRAY MARES, Six Years old. Weight 2,500 pounds. Warranted sound and all right. Bred by Imported Clydesdale Stock. Address CHAS. FINK, Jr., LYONS, N. Y.

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THE SEASON OF 1886.
Sired by Rysdyk's Hambletonian, dam by Seely's American Star. He is the sire of Inez, 2:22¼ (trial 2:18); five others with records better than 2:30, and eighteen more with records better than 2:40.
Terms $50.
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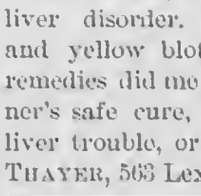
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Is the only Practical Preventive of the so-called Swine Plague.
It has never been surpassed as an increaser of pork and general system tonic. Aiding digestion, stimulating the biliary organs, preventing torpor and engorgement of the liver, and regulating the bowels, it removes and prevents the formation of disease germs, and preserves to the well bred hog his natural constitution. Where it has been fed to such animals in the prescribed quantities, and other directions faithfully observed, it has proved a thorough preventive against swine disease.
AS AN EVIDENCE OF FAITH
In my remedy I make the following offer:
1. I will insure herds of swine of not less than one hundred in number against disease, at a small fee per head, provided they are fed my remedy under my direction, and prove upon examination prior to contract that they are in a healthy condition, and are neither in-bred, close-bred nor the progeny of such.
1. I will forfeit $100.00 to any breeder whose offer to examine for insurance I decline, provided he forwards remittance to cover my expenses to and from location of hogs, or I fail to prove to the satisfaction of any disinterested party, that failure to respond to invitation is caused by prior engagement or by matters of at least equal importance.
2. I will forfeit $500.00 if I decline upon examination to insure such herds, if my judgment as to their condition of health is overborne by the result of an examination made by at least two properly qualified and graduated veterinary surgeons.
Facts are Better than Assertions.
Please read the following testimony:
GIBSONTON P. O., PA., Feb. 2, 1885.
Dr. Jos. Haas—Dear Sir: About a year ago our herd here numbered about 2,700 head. Disease broke out, and no remedy we had would arrest the trouble. Our losses were heavy and we had to give up feeding entirely for about two months. We then heard of your remedy and bought a trial lot, and began feeding again. We have used it constantly ever since. We have since April last received about 5,000 head of hogs into our herd and have not had a single death from swine disease. This is our experience. Our opinion is that the remedy has prevented disease, and we would not think of being without it. As an aid in fattening pork, we believe it to be good. On this point, however, we have not made an actual test, *as we would not risk feeding a pen of hogs without the Remedy.*
Yours very truly, WHITE & CO.
[N. B.—White & Co., since writing the above letter, have purchased $450 worth of the remedy.]
The remedy can be procured of all Druggists, or from my laboratory. Prices, $2.50, $1.25 and 50 cts. per package. 25 lb. cans, $12.50.
JOS. HAAS, V. S.
Member of Indiana State Veterinary Med. Associat'n
INDIANAPOLIS, IND.

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SHEEP DIP
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Weighing from 21 to 51 Pounds.
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RUSTLESS IRON WATER PIPE. WM. T. WELLS, 7 to 9 Cliff St. New York. Send for Catalogue and Prices.

For the Young.

COW FOOLS.

It was a Jersey heifer
  Walking through a pasture small,
Met a Shorthorn cow a-feeding
  Where the grass grew sweet and tall.
Bright and pretty was the Jersey,
  Long her pedigree, and neat,
Fat and awkward was the Shorthorn,
  Like a mountain built of meat.
And the Shorthorn stopped her feeding
  As the Jersey wandered near,
"Here is grass," she said, "in pleuty;
  Let us eat together here."
But the Jersey tossed her nose up
  In the most provoking way,
And she said, "I thank you kindly,
  But I think I will not stay;
I am higher bred than you, ma'rm,
  And I think you will agree,
I should lose my social standing
  In your low society."
Then the Shorthorn snorted fiercely,
  For her pride was deeply hurt;
And she said, "A right good riddance
  When you go—you little flirt.
It is true, your golden butter
  Is a pretty thing to see,
But what else, Miss, are you good for?
  There is nothing I'll agree.
For men cannot live on butter;
  They would quickly come to grief
If fat ladies such as I am
  Didn't keep them up with beef."
So the Shorthorn and the Jersey
  Stood and argued loud and long,
Each one tried to prove the other
  Was entirely in the wrong.
Till at last they fell to fighting,
  And the Jersey's unbelief
Fell away before the pushing
  Of the Shorthorn's solid beef.
And she limped away in silence,
  Feeling very mean and small;
While the Shorthorn was so angry
  That she could not eat at all.
You will say—What foolish creatures!
  So they were—but tell me, pray,
Can we not find human beings
  Who are just such fools to-day?
There are folks who, like the Jersey,
  Feel themselves above a man
Who is slow, perhaps, and awkward,
  And must labor as he can.
There are others, like the Shorthorn,
  Who would sneer at thought of gain,
To be wrought unto a country
  By the working of a brain.
Now what trouble would be buried
  If we, all of us, could see
That it takes all sorts of people
  To make up this great country.
For the world goes on forever,
  It is very like a race;
We must all run in the contest,
  We must always find our place.
Let us view the works of others
  With a certain charity,
And believe their words are honest,
  Though we cannot all agree.

I AM getting a little frightened at the cords of words you are plowing out. I had no idea there would be so many. During the past week, lists have been received from Harry King, Geo. H. Strong, Chas. Crane, Murray Gilkison, Ella M. Turner, Fred Corless, Frank E. Halbert, Ellie Nixon, Archie Lockhart, H. M. Ross, Johnnie R. Giles, Andrew Dermott, Ray C. Jewell, Willie S. Earhart, Fred W. Park, Amy B. Powers, Warren Collins, Hattie Van Skiver, Ernest McReynolds, Fred H. Carpenter, Elbert Marshall, W. W. Washburne, Charles H. Johnson, Kittie Lamb, Willie Byram, Neal Eckerson, Frank Murphy, Frank Hawley, James W. Searson, C. W. Kruse, Charles Wallace, Frank B. Williams, George B. Baskervelt, Abram H. Prince, Annie M. Hall, Henry Croyle, Sylvesta Thompson, Bessie G. Lehman, Chas. W. Ingraham, James W. Brown, C. C. Bruce, Ralph Sawyer, W. M. Newne, and one not signed. We shall cover an acre of paper if we keep on.

Some of the Cousins have sent in lists of Latin words. These will not be accepted. We had better confine ourselves to English I think. To tell the truth, I am lost whenever I go very far out of English, and I hope none of you want to lose me yet.

I find that quite a number of our boys and girls have neither brothers nor sisters, so that they have to do all the work of hunting out the words alone. I feel sorry for them, because I know it would be very pleasant to have som body in the family to play with and to talk to. But these boys and girls who have hunted out the words all alone have done so well that I am very proud of them. The work will help them very much, for I find that the things we have to puzzle out ourselves seem to stick to the brain the longest. It pays to be able to spell well, I can tell you. Many boys that I know of have lost good situations because, when asked to write a specimen letter, they got two or three words all out of shape. Five minutes spent in looking over the dictionary would have saved them. Never be ashamed to look at the dictionary. We can talk very well without betraying our bad spelling, but when we come to write it down, there is no chance to get away from it.

I had a pleasant surprise last week. I received a box of asparagus from Annie and Lou Hall. It was the most delicious asparagus I ever tasted and you may be sure that I enjoyed it. I have never seen anything neater that the way in which this asparagus was packed. It was tied up in round bunches as firm and compact as one could wish. The light heads were clustered at the centre of each bunch with the dark green heads on the outside, so that it was really as pretty as a bouquet. Such an arrangement must add greatly to its attractiveness. It shows what neatness and taste will accomplish. I am sure that Annie and Lou are a great help to their Papa.

"Mistress Mary, quite contrary, how does your garden grow?" I used to read that old rhyme when I was a boy, and I suppose most of you have seen it a great many times. We have a great many Marys in our family, and while I hope none of them are "quite contrary," I do hope each one has a garden. So I am going to ask "how does *your* garden grow?" I hope you can all give a better answer than the Mary in the old song. I wish I could go around and look at all the gardens. I wonder if I should find any weeds; what do you think about it? I have an idea that the gardens are looking pretty well. It will pay to keep them in good shape for nobody knows when I shall come to look them over.

LETTERS FROM THE COUSINS.

DEAR UNCLE MARK: I received the sweet peas you sent me, and thank you very much for them. I planted them and they are just coming up. Pa received his Rural seeds. He planted the Garden Treasures and they all turned out to be tomatoes. He also planted the melons. We have potatoes up a foot high. I am going to have a very nice flower garden this Summer. The seeds are planted, but some of them are not up yet. We are going to have some splendid Chrysanthemums. They are now about three inches high. Our house plants are doing nicely. We will have a lot of fruit this year. The strawberries are in blossom. Pa has got some called the "Jewell" so highly recommended by the RURAL. I wish you and Aunt Beth could come over and help us eat them. I see by the last RURAL that you are a strong temperance man. Ma is glad to learn that you are, for she is a temperance woman: being brought up in the State of Maine, she could not otherwise be anything else. ELLA M. TURNER.

Cornwall, Ontario.

[I wish I could come and help eat the strawberries. I think Aunt Beth would accept the invitation if possible. We want all the temperance people we can find.]—U. M.

DEAR UNCLE MARK: I suppose it is about time for me to write if I wish to remain a member of the Y. H. C. I should have written long ago, but you know something of farm life. Although I have not written for a long time, I have always managed to find time to read our department. Perhaps it might not prove uninteresting to tell what vegetables and what varieties succeed best here. I will begin with beans: the general favorites are German Pod Wax, Golden Wax and Ivory Pod Wax. Peas, Ferry's First and Best American Wonder and Champion. Onions, Red Westersfield, Yellow Globe Danvers, and Southport Yellow Globe; the latter is perhaps the most satisfactory of the three. Beets, Egyptian Blood Red and Eclipse. Cabbage, Early Jersey Wakefield, for early, and Henderson's Early Summer and the Filderkrant for medium and late. Radishes, Early Round Deep Scarlet and French Breakfast. Tomatoes, Livingston's Perfection and Favorite. Squash, Hubbard, Marblehead, Essex's Hybrid. Turnips, Purple Top Strap Leaved is about the only variety raised. Summer squash, Summer Crook Neck, Little Gem. The above mentioned varieties are no untried novelties but have been fully tested and approved. Why do not some of our youthful farmers give their experience with corn? My own experience with new varieties has been somewhat limited, but I will give it for what it's worth. The earliest corn we have is the Pride of the North. It is small, and it will not pay to raise this variety in this country, where we can raise larger varieties that will yield a great deal more to the acre with the same care. Hathaway's may prove profitable. The Queen of the Prairie is the staple early corn with the farmers. Wright's Golden is the best corn I have tested. The Golden Beauty is another promising variety. Cloud's Dent is a failure. Taken altogether, Wright's Golden and the Golden Beauty are the two varieties that seem to possess any merits above the ordinary field corn. I am glad that so many of the Cousins are growing seedlings; may the good work continue. I have seedling raspberries, strawberries, blackberries and gooseberries, besides quite a number of seedling potatoes. Some of the vines I hope will fruit this year, and another day I may write to you and tell you how they perform. It is quite interesting to watch a plat of seedling potatoes. Possibly there are members like myself who are desirous of testing newer vegetables but have not the means to do so. Now then, cannot we in a measure help each other, by exchanging seeds through the mails? I am very much interested at present in testing potatoes; have grown 20 to 25 varieties and have come to the conclusion that for home or market the following eight sorts are the best I have grown. E. Sunrise, E. Gem, Chicago Market, Mammoth Pearl, O. K. Mammoth, Prolific, White Elephant, Walls Orange and Rural Blush. If any of the Cousins who are interested in potatoes, who haven't got, or desire to get one or more varieties mentioned, would care to exchange tubers of other sorts for them, I would be glad to hear from them.

Your Rural nephew,
Edinburg, Ills. FRANK LOGAN.

[A good idea that! I think we can make an exchange department that will be very profitable. Let us try it.—U. M.]

DEAR UNCLE MARK: I am a boy, 15 years old and live near Los Gatos, a little town 10 miles from San Jose, California. I would like to become one of the Cousins, and am going to try and get the plow. They raise oranges, lemons, figs, olives, almonds, apricots and a great many other fruits here. The prospect for grain was never any better that it is this year, and there is going to be a large crop of fruit. We had no snow here this Winter, but there was snow on the mountains around us. I had a pair of pigeons, but the skunks killed them. I caught the skunks in a trap but the box I caught them in was not large enough, and they got away. There are a great many gophers around here, and we have to keep traps set all the time to keep them from eating the roots off our trees. We have some corn and potatoes planted and I am going to have a quarter of the crop for cultivating them. We have seven acres of land and 700 fruit trees. I have cultivated them five times this Spring. Cherries are almost ripe and prune trees are loaded with green fruit. We have 30 hens and about 40 chickens. FRED CORLESS.

[You are far away from headquarters, but our family is large enough to include you. I am sorry the skunks got away. They deserved death. Wouldn't some of the Cousins laugh to see those gophers sitting at the entrance to the hole? They are bright little fellows, but they do lots of mischief.—U. M.]

DEAR UNCLE MARK: Thanks for the nice package of Canna seeds I received. I will try and make them grow. Mamma and I are very fond of flowers and plants and pets. We have eight little lambs and 22 young chickens. I guess their toes are cold, but we try to take care of them. We have a nice home, lots of fowls and cattle, horses, etc. Would like to have some of the little Cousins write me a letter. I am nine years old. I am piecing a quilt and making a scrap book.

Your loving niece, RETTA M. AVERY.
Lebanon, Laclede Co., Mo.

DEAR UNCLE MARK: My father has taken the RURAL for two years, and I always read the letters from the Cousins, so I thought I would write to see if I might become one of them. I raised some peas last year and the year before, and they did well for the care they got, but next year I am going to raise some more and take better care of them. My father is a fruit man, has 250 plum trees, 50 of which are in bearing condition, six acres of grapes, 3,000 peach trees in bearing condition, 250 pear trees, two or three acres of apple trees, and about 12 acres of gooseberries, currants, red and black raspberries, and strawberries and blackberries. I have a cow, a pair of rabbits and 12 hens. I wonder if any of the Cousins have any rabbits. I must close.

Your nephew, AUSTIN ESTABROOK.
Grafton, Mass.

DEAR UNCLE MARK:—I have often read the letters your nephews and nieces have written, and thought I would write one. I would like to join the Club, too. Papa is a farmer in Dakota. He spends his Summer and Fall there and the Winter at home. I have two brothers out there and one at home. I have no sisters. I am next to the eldest. Papa owns 800 acres of land in Dakota, 160 in Nebraska and a large drug store here, which Mamma runs while Papa is away. Shortly before Papa left he gave me a very handsome piano. It is an Upright. Our school will be out in three weeks, and then I will receive a diploma, so that I can go to the High School. Last year there were five diplomas, and this year there will be nine, if not more.

Your affectionate niece, EDA SEYMOUR.
Dwight, Ill.

Miscellaneous Advertising

A LIBERAL OFFER.

Five Thousand Dollars to any Charitable Institution,

If It Cannot be Done as It is Stated.

Rochester, N. Y., Union and Advertiser.

Friends of Ex-President Arthur are very much disquieted.

Of course he is not going to die! He is in the hands of a very particular physician.

His doctor does not call it Bright's Disease! No, it is stomach disorder that he is suffering from now, and every few hours he takes a cold, and from time to time many other symptoms are developed. These symptoms the public should know are really secondary to Bright's Disease.

His physicians say that everything that medical skill can do for him is being done.

This is not so!

This case is a prominent one because the general is an ex-president; and yet there are thousands of farmers quietly dying in their farm houses of secondary symptoms of Bright's Disease, called by every other conceivable name; thousands of workmen, likewise dying, leaving helpless families; hundreds of thousands in all walks of life who have sickened, and are likewise dying, helpless victims of powerless physicians.

Eight years ago a very well-known gentleman was about to enter upon large commercial transactions. His medical adviser quietly dropped into his office one day and told his confidential clerk that he would be dead in three months, and that he ought to settle up his business affairs at once!

That man is alive and well to-day, yet he was given up as incurable with the same disease that is killing General Arthur!

Our reporter met this gentleman yesterday and in conversation about the General's case, he said:

"I will give $5,000 to any charitable institution in the state of New York, to be designated by the editor of the New York *World*, the editor of the Buffalo *News* and W. E. Kisselburgh of the Troy *Times*, if Warner's safe cure (taken according to my directions) which cured me eight years ago, cannot cure General Chester A. Arthur of Bright's disease from which he is suffering."

"Now I want you to understand," he said, "that we do not profess to make new kidneys, but we do know from personal experience and from the experience of many thousands of similar cases, that we can stop the consumption of the kidneys. Many a man has gone through life with one kidney without inconvenience. Thousands of people have lived a majority of their life with one lung. They did not have a new lung made. We do not make new kidneys, but if the kidney is not consumed too much we can stop disease and prolong life if taken in time."

This offer comes from H. H. Warner proprietor of Warner's safe cure, of this city.

Mr. Warner also said, "My dear sir, there are governors, senators, presidential candidates, members of congress, prominent men and women all over the country whom I personally know have been cured of disease, such as General Arthur suffers from, by our Warner's safe cure, but owing to the circles in which they move they do not care to give public testimonial to the fact."

Mr. Warner is interested in General Arthur's case because he is personally acquainted with him and he says that it is a shame that any man should be allowed to die under the operation of old-fashioned powerful cathartics, which have no curative effects, rather than that a modern, conceded specific for kidney disease whose worth is acknowledged world-wide, should save him.

"If you doubt the efficacy of Warner's safe cure," say the proprietors, "ask your friends and neighbors about it. This is asking but little. They can tell you all you want to know."

"We have kept a standing offer before the public for four years," says Mr. Warner, "that we will give $5,000 to any person who can successfully dispute the genuineness, so far as we know, of the testimonials we publish, and none have done it."

Were General Arthur a poor man unable to be left "in the hands of his physician," he would use that great remedy, as many thousands of others have done, and get well. How absurd then for people to say that everything that can be done is being done for the ex-President, when the one successful remedy in the world that has cured, or that can cure a case like his, has not been used by them.

SHORTHAND Writing *thoroughly taught* by mail or personally. Situations procured all pupils when competent. Send for circular. W. C. CHAFFEE, Oswego, N. Y.

PERSONALS.

PROF. LEOPOLD VON RANKE, the celebrated historian, died at Berlin, last Saturday, May 22, aged 91.

IT is reported that the betrothal of Princess Louise, eldest daughter of the Prince of Wales, to Prince Oscar, son of the King of Sweden, will be soon officially declared.

DAVID DAVIS is slowly recovering from his illness, although he is still a great sufferer from the tremendous carbuncle on his left side. His physicians now say he will recover.

GEN. F. E. SPINNER, ex-Treasurer of the United States, is ill in his tent on the beach near Jacksonville, Fla., where he has been camping out; threatened with pneumonia at the age of 85.

COLONEL TOM OCHILTREE, the red-headed shrewd, Texas blatherskite, thinks Texas ought to erect a monument to Jay Gould for developing the railway system in the Southwest.

CONGRESSMAN DAVENPORT, of New York, one of the richest bachelors in the House and the late Republican candidate for Governor against Governor Hill, is to be married in a short time.

COUNT HERBERT VON BISMARCK'S elevation to the dignity of Foreign Secretary will net him a snug little salary of 50,000 marks ($12,500), only 4,000 ($1,000) marks less than his father's official income.

JOHANN STRAUSS, the composer, frankly declares that he embraced Protestantism because the Catholic canons forbade his marrying a third time while his divorced wives are living, as he desired, and as Austrian law is similarly severe, he has for the same reason been naturalized as a German citizen.

LORD WOLSELEY, who has been talking of throwing up his commission and joining the threatened insurrection in Ulster, has no part or lot with Ulstermen. His branch of the Wolseley family has been settled in County Carlow ever since, just after Boyne Water, it broke away from the parent stock in Staffordshire.

"UNCLE" PHIL. ARMOUR is believed to be the heaviest loser by the recent great decline in wheat. He began to bull the market at 97 or thereabouts, and dropped his load at 80 or below. His loss is put at seven figures by some of the big operators, who think he dropped about as much as he made last year in speculating in St. Paul and Northwestern R. R. stock.

IT was $21,500, cash, not $25,000, the President paid for "Rosedale," about two miles from Washington. Deed of transfer recorded Thursday. The place "commands one of the prettiest views in the neighborhood of Washington." Known as "Pretty Prospect" as long ago as 1794; contains 28 acres. After some repairs to the homestead the President will occupy it—during the Summer at least—and be at the White House only to transact business.

GEN. DURBIN WARD, Democrat, was appointed one of the trustees of the Ohio Soldiers' Home the other day by Republican Governor Foraker, as a mark of high appreciation of his excellence as a citizen and a soldier. He died a few days later, on Saturday, May 22. Born in Kentucky February 11, 1819; moved to Ind. in 1823; studied law; joined the volunteers at the very outbreak of the war, and distinguished himself greatly in a number of battles, especially at Chicamanga, where he was wounded. Made Brev. Brigadier-General for services there.

MISS FOLSOM and her mother, or rather Mrs. Folsom and her daughter, arrived here at 9.30 Thursday night on the Red Star steamer Noordland from Antwerp. Col. Dan. Lamont, the President's private secretary and chum, met the party on the revenue cutter Chandler, and brought the mother, daughter and uncle, with lots of baggage, to this city, where he and Miss Rose Cleveland had engaged rooms for them in a fashionable uptown boarding house. Frankie's grandfather died after they had embarked, so they knew nothing of it. The President will be here tomorrow evening to attend Decoration Day, Monday. He will stay at Sec. Whitney's, close to the Folsom boarding-house.

MONDAY the body of Dr. Dio Lewis, who died here the previous Friday, was quietly cremated, according to his directions. Though enthusiastic to the verge of crankiness in some things, no doubt he did much good, especially in causing more attention to the physical development of girls. Born in Auburn, N. Y., in 1823; began medical practice there in 1845; practiced in Buffalo from 1847 to 1852, having become a homœopath. Soon became a foe to all schools of medicine, and began lecturing on hygiene, and devised a new system of gymnastics. Settled in Boston in 1860. Removed to New York in 1883.

Miscellaneous Advertising.

LADIES WHO SUFFER, as only themselves know, are now beginning to know that a congested condition of the system, if not removed causes the chronic complaints from which they so much suffer; this congestion occurs most frequently in the kidneys, liver and other abdominal organs, and it can readily be removed by that wonderful preparation, Warner's safe cure.

BROWN LEGHORNS.

This variety has been bred by me for over ten yea with great care.
Eggs from May 1st at $2 per dozen.
Also Collie Dogs for sale.
Mention this paper.
FRANK L. FISH,
TAUNTON, MASS.

SHELLBONE for POULTRY.

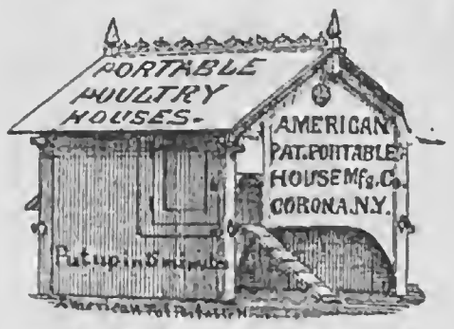
A mixture of Pure Bone and Ground Oyster Shells. All poultry need it. 25 Pounds, $1.00; 50 Pounds, $1.75, by freight. Samples, .05c. mail.
T. H. BOCK, Crisfield, Maryland.

At the Great N. Y. Poultry Show.
THE SILVER CUP.
value $50.00, offered by Reed & Barlon for the largest percentage of chickens hatched was awarded to
THE STANDARD INCUBATOR.
Manufactured by L. N. CLARK & SON, Dealers in all the leading Incubators, Poultry Supplies, etc.
38 DEY STREET, NEW YORK.
Mention this paper.

HATCH The CRAIG Folding Incubator and Brooder (combined) will hatch from 1,200 to 1,500 chicks per year, worth as broilers from $1 to $12 per dozen. No cost or experience to operate. Holds 100 eggs. Price $12.00 An absolute success. Perfection of the **CHICKS BY** feet imitation hen. No lamps to explode. Ten hens will pay $200 profit per year. Send 4c. for new 36-pp. book on poultry, incubators, etc. F. D. CRAIG, North Evanston, Ill. **STEAM**

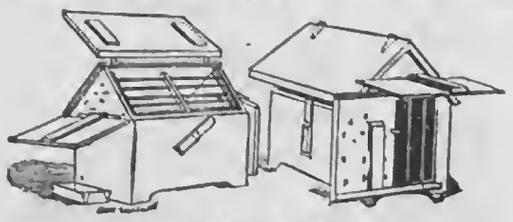
CAN'T BE BEAT!
THE "STANDARD" WIRE NETTING POULTRY FENCE,
AND
PATENT METALLIC PICKET FENCE,
FOR LAWNS, FARMS, ETC.
Price of 2-in. Mesh, No. 19 Wire, in Bales of 150 lineal feet only:
7-8 OF ONE CENT PER SQUARE FOOT,
Write for circular.
Hatchers, Brooders, Poultry Houses, etc., fully described in our new catalogue, which will be sent on receipt of 10 cents. Circulars free.
Brockner & Evans,
(Formerly 422 West St.) 28 Vesey Street, N. Y.

PORTABLE POULTRY HOUSES.



Furnished all complete ready for occupancy. These houses are just what poultry breeders want, as they are
Neat, Practical and Cheap.
All kinds of portable houses suitable for all climates; *rain, wind* and *water proof.* Sent to any part of the world, and no carpenter required to put them together.
Send for our Circular before you order a poultry house.
AMERICAN PATENT PORTABLE HOUSE MANUFACTURING CO.
Corona, Queens Co., N. Y.

NAPKNOLL'S
PROGRESSIVE POULTRY COOPS FOR HENS AND CHICKS,
WITH BROODERS AND INCLOSED RUNS.
The favorite Excelsior Poultry Coop and Nest combined



PRICE $6.
Gold and Bronze Medals were awarded at the Great Show of New York Fanciers' Club, February, 1886.
Have you anywhere else in the world seen Chicken Brooders and Inclosed Runs that may at pleasure be either attached to or detachable from the coop?
If you have not any such coops or brooders, send a two-cent stamp for one of the Illustrated Descriptive Catalogues, with terms and Price List.
NAPKNOLL POULTRY COOP CO.,
GOSHEN, ORANGE CO., N. Y.
AGENTS:
NEWELL & CO., 127 State Street, Boston, Mass.
L. N. CLARK & SON, 38 Dey Street, New York.

Blind Drunk.

CLEVELAND, O., Oct. 30, 1885.—A few years ago, I suffered intensely from uric acid poisoning. Would become totally blind and stagger. My friends repeatedly thought I was drunk. Took twelve bottles of Warner's safe cure and am well.—GEORGE F. RIDGEWAY, ex-Deputy Sheriff, 98 Murison Street.

Just published, 12 articles on PRACTICAL POULTRY RAISING, by FANNY FIELD. Tells how she cleared $449 on 100 Light Brahmas in one year; how she clears $1,600 annually on a 60 acre poultry-farm; about a mechanic's wife who clears $300 annually on a village lot; about incubators, brooders, spring chickens and capons. Price 25c. Stamps taken. R. B. MITCHELL, 69 Dearborn St., Chicago.

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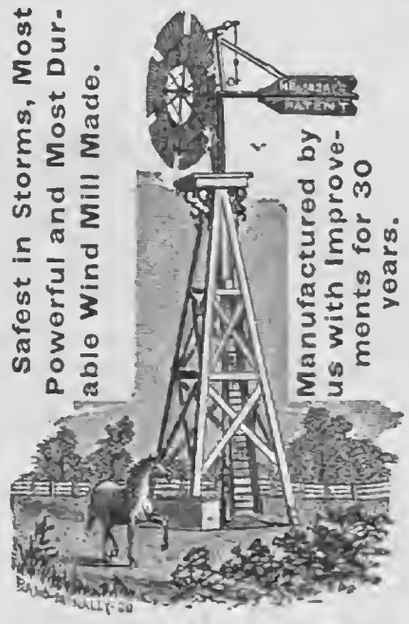
TONGUELESS. THE "WONDER ON WHEELS"
Self Guiding. Uses a wheel landside. Two horses instead of three. A ten year old boy instead of a plowman. No pole (except among stumps). No side draft. No neck weight. No lifting at corners. Easier driving, straighter furrows, and **LIGHTER DRAFT THAN ANY PLOW on or off wheels.** Will plow any ground a mower can cut over. No equal in hard, stony ground, or on hillsides. Our book, "FUN ON THE FARM," sent Free to all who mention this paper.
ECONOMIST PLOW CO. SOUTH BEND INDIANA.
Special prices and time for trial given on first orders from points where we have no agents.

THE BRADLEY HANDY WAGON

The Coming Wagon. Light, strong, convenient and low priced. **Handy** to get into and out of. **Handy** for single horse or pair. **Handy** for one person or more. **Handy** to load or unload. *Send for Free Circular, "How to purchase direct from the manufacturer."*
BRADLEY & CO. SYRACUSE, N. Y. 22 College Pl. New York. 32 S. Market St. Boston.

THE OLD RELIABLE HALLADAY
STANDARD WIND MILL.
THE BEST IS THE CHEAPEST. GUARANTEED THE BEST REGULATING, Safest in Storms, Most Powerful and Most Durable Wind Mill Made. Manufactured by us with Improvements for 30 years.



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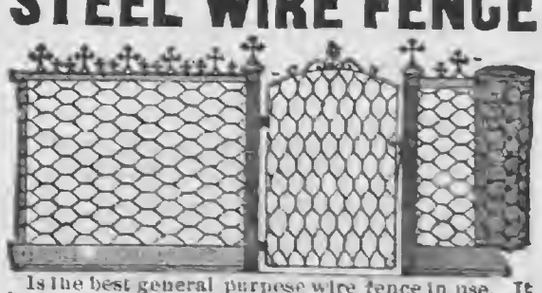
Also the Celebrated **IXL Feed Mill, IXL Stalk Cutter, IXL Sheller, Horse Powers, Wood and Iron Pumps, Tanks, Noyes' Haying Tools, etc.**
For Catalogue and Price List, address
U. S. Wind Engine and Pump Co., Batavia, Ill.

EMPIRE POWER and SEPARATOR
BEST, CHEAPEST and MOST IMPROVED in the market.

We also manufacture Mowers, Reapers, Twine Binders, Rakes, Field Rollers, Plows, Feed Cutter and Crusher, Hand and Power Corn Shellers, etc. Send for Illustrated Catalogue and Price List. S. S. MESSINGER & SON, Stockertown, Pa.

SEDGWICK STEEL WIRE FENCE



Is the best general purpose wire fence in use. It is a **strong net-work without barbs.** Don't injure stock. It will turn dogs, pigs, sheep and poultry, as well as horses and cattle. The best fence for Farms, Gardens, Stock Ranges and Railroads. Very neat, pretty styles for Lawns, Parks, School-lots and Cemeteries. Covered with rust-proof paint, or made of galvanized wire, as preferred. It will last a life-time. It is **better than boards or barbed wire** in every respect. The **Sedgwick Gates** made of wrought-iron pipe and steel wire, defy all competition in lightness, neatness, strength and durability. We make the best, cheapest and easiest working **all-iron automatic or self-opening gate,** and the **neatest cheap iron fences now made. The best Wire Stretchers, Cutting Pliers and Post Augers.** For prices and particulars ask Hardware Dealers, or address, mentioning paper,
SEDGWICK BROS., Richmond, Ind.
EDWARD SUTTON, Eastern Agent, 300 Market St., Philadelphia, Pa.

DELAWARE COUNTY CREAMERY
Write at once for circulars and special offer to first purchaser. Address
Delaware County Creamery Co.,
BENTON HARBOR, MICH.

PLANTS $1 per 1,000. Nansemond Sweet Potato and P. S. Cabbage after June 1st.
FREEMAN HURFF, SWEDESBORO, N. J.

Marlboro Raspberry, *Ulster Prolific and Poughkeepsie Red Grapes.* Send for description and price to A. J. CAYWOOD & SON, Marlboro, N. Y.

NOW IS THE TIME TO
Spray Fruit Trees.
Eight dollars invested now, will return you Five Hundred Dollars in November. Catalogue and full information FREE.
FIELD FORCE PUMP CO.,
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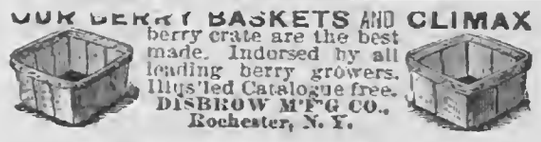
600 ACRES. 13 GREENHOUSES.
TREES AND PLANTS
We offer for the Spring Trade a large and fine stock of every description of **Fruit and Ornamental Trees, Shrubs, Roses, Vines, Small Fruits, Hedge Plants, Fruit Tree Seedlings and Forest Tree Seedlings.** Priced Catalogue, Spring 1886, mailed free on application. Address,
BLOOMINGTON (PHŒNIX) NURSERY,
Established 18—. BLOOMINGTON, ILL.

OUR BERRY BASKETS AND CLIMAX



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DISBROW M'F'G CO.,
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HOMES IN A MILD CLIMATE. Between Chesapeake Bay and the Atlantic Ocean. Healthy, easy and good living. CHEAP LANDS. Productive Soil. Fish and Oysters. Money made in Fruits and Vegetables. Cheap rates by rail and water. Send for Circular.
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Humorous.

"I SAY, papa, heard the news?" "No, my boy. What is it?" "Why, they aren't goin' to have the lamp-posts any longer!" "I am surprised! What is the reason?" "Why, they're long enough now."

A SCHOOL board recently asked the following question of a little girl: "What is the plural of man." "Men." "Very well; and what is the plural of child?" "Twins," immediately replied the little girl.

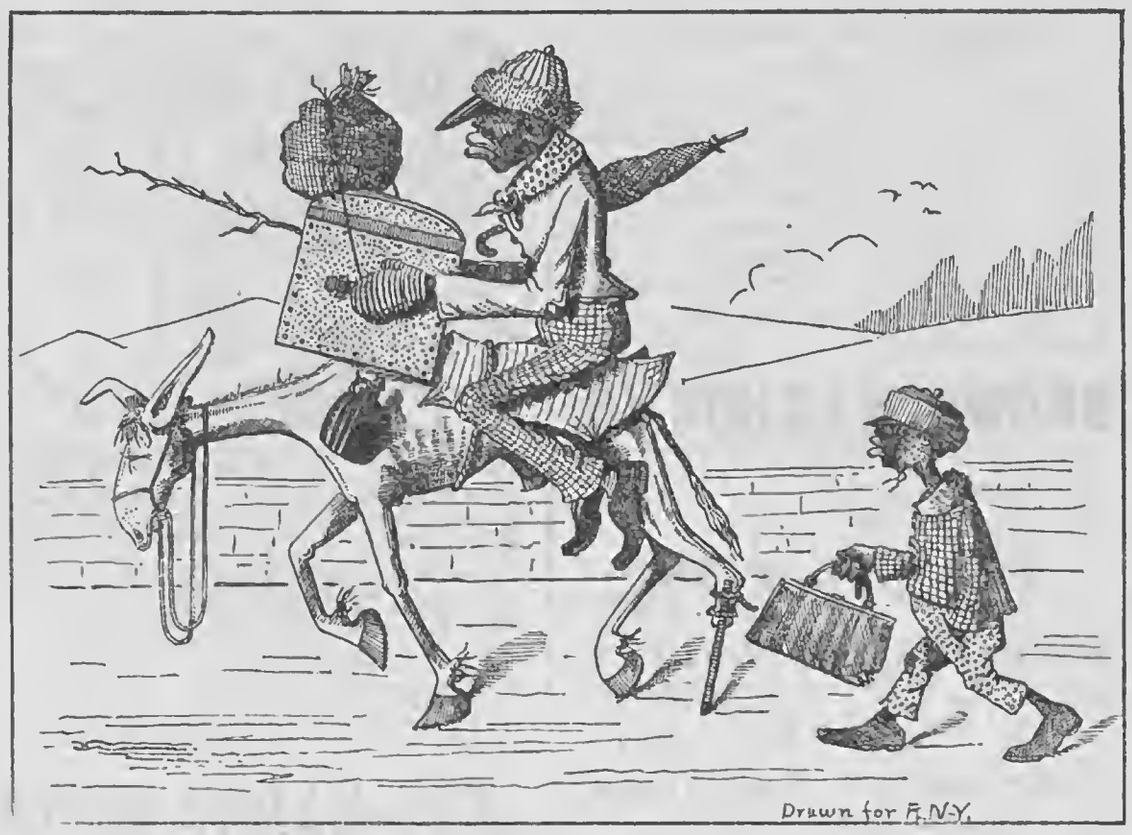
AT a book sale a copy of Dew's "Essay on Souls" was knocked down to a shoemaker, who to the great amusement of the assembly, innocently asked the auctioneer if he had any more books on shoemaking to sell.

SHE: "Ephlum, what makes so many cattails grow in dis heah pon'?" He: "Well, I should say! Doan you know? Why, dey grows up from kittens dat people has drowned in de pon', of course. Pea's like you wimmen folks doan know nuffin' about aglicultshah."

"WHAT is the meaning of a backbiter?" said a reverend gentleman during an examination at a parochial school. This was a puzzle. It went down the class till it came to a simple little urchin, who said, "P'r'aps it be a flea."

"BIDDY," said a lady to her servant, "I wish you would step over and see how old Mrs. Jones is this morning." In a few minutes Biddy returned with the information that Mrs. Jones was seventy-two years, seven months and twenty-eight days old.

UPON her first attendance at Sunday-school, a little girl three years of age was given the verse to recite, "Blessed are the peacemakers." When she returned home, her mother inquired what her verse was. She answered, "Blessed are the dressmakers' pieces."



"Say, you, 'Lijah! Ef dat mewel done know I drap dem lines he mought take et in he's foolish head ter run away wiv me. You jes better go 'n take him by de head, chile."

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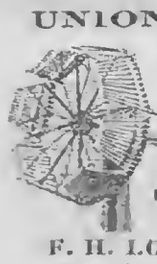
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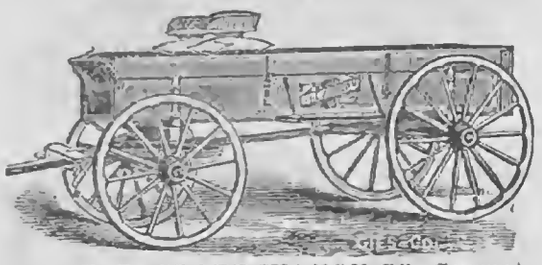
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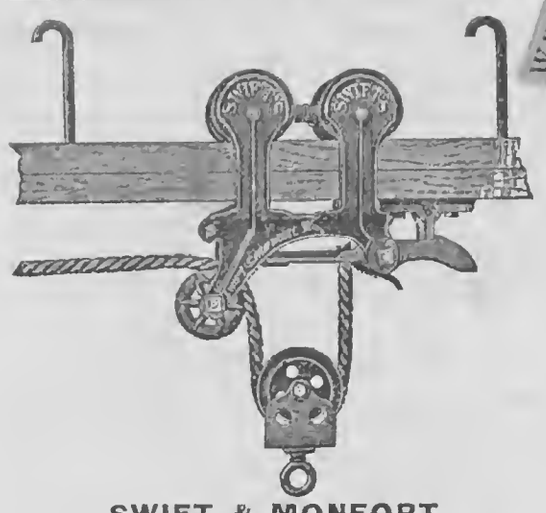
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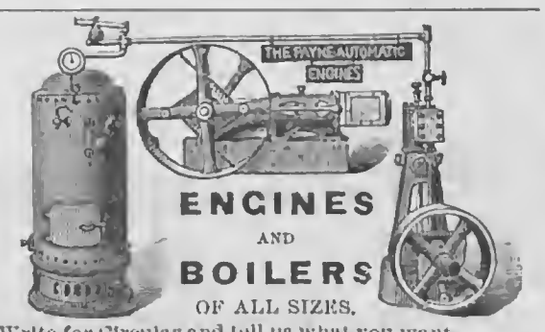

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In Applied Agriculture; Professor ROBERTS: 6 Courses.
During the present year a course of lectures is given on the Management of the Dairy by the Honorable L. B. Arnold: a similar course may be expected next year.
A veterinarian building is to be erected in the course of the present year, and four rooms are to be added to the Agricultural Laboratory and Museum.
The University Farm contains 257 acres, of which about 125 acres are in tillage. The farm contains two very large barns, a dairy house, and an excellent herd of stock. All the appliances of the Farm are used chiefly for the purposes of illustrative and experimental husbandry.
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THE RURAL NEW-YORKER

A JOURNAL FOR THE SUBURBAN AND COUNTRY HOME

VOL. XLV. No. 1898. NEW YORK, JUNE 12, 1886. PRICE FIVE CENTS. $2.00 PER YEAR.

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Horseman.

NORMAN MARES.

IN Fig. 245 we show a group of Norman bred mares with foals. These animals are owned by Messrs. Dillon Bros., Normal, Ill. Our artist has succeeded in making an admirable picture. The mares are just coming from the feeding barn, and slowly walking back to the pasture. The grouping is strikingly life-like and effective. Messrs. Dillon Bros. have now a herd of 186 horses at Normal. Besides the work of breeding pure-breds, they have engaged largely in range work in Texas, where they have some 4,000 horses, and breed 2,500 mares with a result that is said to be highly satisfactory. They have a large number of young pure-bred horses of their own breeding. These are considered far more valuable for breeding purposes than the imported animals, as they are more easily kept and less liable to disease than horses that have never been acclimated. The two fine stallions, Rio Grande and Extractor, are at the head of the herd. Extractor is sired by Favora, the winner of the medal at the Universal Exposition at Paris in 1878. No breed has done more for the improvement of American draft horses than has been done by the importation of this famous breed of French horses, whether known here as Normans, Percherons, Norman-Percherons or Percheron-Normans.

SHOELESS HORSES.

I ALWAYS wonder when I read the articles about shoeless horses whether the persons who write them really know anything about the matter. It is not true that a horse can go on ice without shoes without slipping. I had a mare which was never shod, and after she had bred 11 colts she was used some on the farm. One day she was put in to draw wood, and an attempt was made to drive her across a strip of ice. She could not stand up, and after slipping terribly, fell down and could not get up. She would have died there if she had not been drawn to the shore by putting a rope around her breast to which the other horse was hitched. This mare could not go on an icy road. Her hoofs had never been touched by a rasp or buttress, or anything else. They were as nature made them. Another thing—no horse can travel on a pike or a gravelly road for any length of time without wearing the hoofs down so much that the feet will become tender, and if kept up the animal will become lame and useless. Colts often get foot-sore in this way, running in the fields and stamping flies, which wears away the hoof. It wears off faster than it grows out. It is not the shoes which injure the horses, but the way they are put on. A shoe should be fitted to the foot of the horse, but quite often the rule is the other way, and the hoof is cut down and rasped off to fit the shoe. Shoes are too short or too narrow, and on this account the weight is not placed under the outside or shell of the foot, where it should be. I saw a whole stable of horses of great value at Cedar Rapids, Mich., which were all getting lame, because they were shod so very nicely by a man who was a "neat workman." This over-nice blacksmith had kept cutting away the heels and frogs so that each horse had become tender-footed, and oils had been applied to the hoofs to soften them. All the horses wanted were hoofs. Farmers make corns in their horses' feet very often by allowing the shoes to remain on too long, or until the foot grows to the outside of them, bringing the weight of the body right on the sole. This kind of economy and carelessness should never be practiced. It often spoils good horses.

F. D. C.

Rural Notes.

GRANT that by early sowing, transplanting and careful hot-bed nursing, ripe tomatoes may be secured 10 days earlier than by sowing the seed early in the open ground, the stubborn fact remains, that if we count the time required for the plants to grow from the seed to the first ripe fruit, we shall find it decidedly shorter in the plants grown in the open ground, account for it how we may. For the past two seasons I have grown so large a number of crossed seedlings of the tomato that I could not afford them hot-bed room. Both seasons I have been surprised at the early maturity of their fruit, as well as by the fact that the young plants were not injured by late spring frosts. Whoever knew a tomato plant that came up from self-sown seed to be injured by frost in Spring? I venture the guess that if we were to do away with hot-beds we should have before many generations tomatoes that would ripen their fruit as early as, and be far more hardy than, our hot-bed plants.

* * *

GROUP OF NORMAN MARES. Fig. 245.

A few weeks ago I stated that the prospect that we shall ever be able to grow the cabbage from leaf cuttings appeared very discouraging. It now looks brighter. Several cuttings made in March rooted and formed strong buds in less than 20 days. The buds developed very rapidly into thrifty plants, far surpassing those grown from seed. Although not of an early variety, these plants are now more advanced than any others that we have. In this case the slips were taken from the stem leaves of a plant that was forming the flower-stalk. We find that leaves from a plant that is in a condition of growth at the time the slips are taken, form the bud much sooner than from a dormant one. What are the advantages of growing the cabbage from cuttings? it may be asked. We should be able to keep a valuable strain with greater certainty than we can now do. The grower would be able to select his own heads and secure a crop from them the next season, without the necessity of waiting a whole year to raise his seed. The danger of cross-fertilization would be removed, etc. It is evident that we must be able to utilize the whole head for slips, before this method of propagation can be made practical to the market gardener. I think there is some hope that we may yet be able to do this.

* * *

All are familiar with the common garden sage, and most of us with that beautiful flowering plant, the Scarlet Salvia, which is a member of the same family. Besides the latter, we have grown two other plants of this family, that have been much admired by the curious. One is the Silver-leafed Sage, (Salvia argentea) which is conspicuous in the garden, from its very large, whitish, downy leaves, which lie almost flat upon the ground. These are often eight or ten inches in length when full-grown, and are among the first to appear it Spring, coming up almost as early as those of the rhubarb. They are covered on the upper surface with a long, white down, which gives them a striking appearance. I think this plant might be used with good effect for a perennial border in the background. It is readily grown from seeds.

* * *

The other plant is the Purple Sage, (Salvia horminum) and is interesting from the fact that the leaves of the floral stem are of a bright purple. The lower leaves are not strikingly different from those of the common sage, but at the time of blooming the highly colored stem leaves give the plant a very attractive appearance. There is a variety in which the stem leaves are pink.

* * *

The past Winter the plants of Early Harvest, Brunton's Early and Crystal White Blackberries were frozen down to the snow line. Ten other varieties remained uninjured. The raspberries came through all right, but young peach trees suffered a terrible mortality, nearly all being destroyed. Apricots and nectarines fared a little better, but were badly injured. E. S. GOFF.

Geneva, N. Y.

Farm Topics.

CORRESPONDENTS' VIEWS.

No amount of talk could induce me to have a farm horse shod except for work on icy roads. In my experience, unshod horses on the farm are much better off. It seems to me that most of those who advocate horse shoeing see nothing but heavy cart horses walking over stone pavements. We do not want the largest horses for our work; animals from 1,100 to 1,300 will do. All the larger horses can be sold to much better advantage for work in the pine woods, or for draught horses in the cities. We never think of keeping these great elephants for our own use. If the broncho could only get rid of his temper and ugliness he would make a good foundation for the farm horse, as he is as tough as a whip. His temper bars him out. It will be hard to beat the Cleveland Bay. Of the large horses I do not want more than one-fourth pure blood. D. W. D.

Des Moines Co., Iowa.

My man and I have put up eight miles of wire fence this Spring. We can make the holes and drive 250 posts per day over these flint hills. I took a tumbling rod of an old thrasher, and had the blacksmith cut 5½ feet off and weld a piece of steel six inches long at each end. One end was drawn out to a point and the other left flat. To make the holes, drive the pointed end into the ground and then work the top around. To unreel the wire we take two poles 10 feet long, strong enough to bear up 200 pounds each. Four inches from the end two good-sized holes are bored. Pins are put in these placed over hind bolster of wagon, under bed. Two feet from these holes two others are bored to pin on a cross-bar that shall hold the poles the right distance apart to enable two spools to roll easily between them. Two feet further back 10 more holes are to hold pins six inches long. Two spools of wire are placed on the post bar so that the wire will unwind from the underside of the spools, and put in front of the last set of pins. The spool nearest the fence is fastened for the top wire and the other for the lower wire. With a wide-tired wagon three spools can be used at one time. In this way the team is made to do work that would otherwise call for much hard hand labor. W. L. B. N.

Chase Co., Kans.

My experience on a poor farm teaches me that sheep and clover are the best agents to put at work. In the East I would add poultry and fertilizers. I can't say too much in favor of Red Clover as a natural fertilizer. It makes the best hay for cattle and sheep and the best of pasture, it improves the land and you can plow under the second crop and thus get the cheapest and best of manure. I don't see any sense in this talk about poor soil at the East. Fertilizers are cheap enough to enable any farmer to get a good catch of clover on the poorest soil. Let me get a good stand of clover and I can make over any soil.

Andrews Co., Mo. E. J. B.

I sowed two bushels of Welcome Oats. They thrashed out, with the machine, 125 bushels. One bushel weighed 44 pounds, making, by weight, 171 bushels and 28 pounds. The straw was from five to six feet high. I measured some heads that were 24 inches long and counted 209 grains on one head and 72 straws from one stool. The Welcome beats all the oats I have ever tried. M. V. C.

Manton, Mich.

You have given the "tree peddler" fits. I found that out when I was in the business. It never hurt me in the end, as it taught me to study my work and make no promises that I could not fulfill. Man can often tell what he can do himself, but it is hard to go bonds for a tree that somebody else is going to handle. S. P. G.

West Luna, Wis.

In putting down fertilizers at the South we use a "horn," which is very convenient. By its means fertilizers can be put down on windy days as well as when the wind is quiet. This tool can be made by any tinner. It is like a funnel with pipe about three feet long. The top of funnel should be about eight inches wide, and the pipe about two inches. A darkie will put down guano, with this tool, as fast as he can walk, by putting a strap to an old guano sack, half turned, and putting the strap across his right shoulder, letting the sack hang by his left side. The horn is held in the left hand, and the right hand is used for the guano, which is slowly dropped into the horn as it is carried along the furrow. When the hand is nearly empty, the horn, must be thrown forward, so as to get another handful and not be compelled to stop. I. G. S.

Barnsville, Ga.

There is still money in sheep-raising, and there will be more before there is less. Sheep are the best farm stock for farms like ours; they never tear down fences or stables, or root up gates, but they mind their own business. We use the Cotswold. We want a sheep that will give us both wool and mutton. It is cheaper for us to eat mutton and sell pork. The wool from a small flock will nearly keep us in groceries. Every farmer on bushy or grub land ought to have a flock of sheep by all means. We have our lambs come the latter part of March. The sheep are fed through the Winter on clover and Timothy hay, roots and a little grain. After the lambs come we give ground feed. If a lamb is chilled we never take it away from the sheep if we can help it, for it is hard to make her own it again. As we make sheep raising only a part of our farm work, we don't have the time to fool with lambs much. We generally put the sheep and lamb in the warmest corner of the barn and heat a block of wood and put it beside the lamb. We can generally get them through all right. E. K. S.

Delhi Co., Iowa.

I find the raising of Angora goats very profitable in this part of the country. They are tougher and hardier than any breed of sheep I have ever handled. I winter my goats in a cellar under the barn where the manure is deposited. The steam from the manure piles would kill sheep, but the goats do well, and don't appear to mind it. Salt hay and oat straw formed their feed for the Winter, and they did well. I think they prefer coarse fodder, flags and brakes, to good hay. In the Summer they are to be found among the sweet ferns and bushes, instead of the good feed in the pastures. They clip about the same amount in mohair that sheep do in wool, but the mohair is worth from two to three times as much per pound. A simple fetter on their legs restrains them as it does sheep. There is a great call for breeding stock from all over the country, and at prices several times greater than those given for sheep. We can sell our mohair to a mill close at hand. There is not enough of it raised in the whole country to supply this one mill. The ewes are twin-bearers as a rule. The goats are very docile and like to be petted. If allowed to ramble in late Fall or Winter, upon a change of weather they will be sure to return to their head-quarters. They will stand exposure as well as sheep. They can be bred in New England just as easily as sheep can, and with much greater profit.

New London Co., Conn. J. A. B.

Tree peddlers are swarming all through this region and telling all sorts of stories in order to sell their goods. An honest tree man has a hard time in trying to keep up with these nimble-tongued fellows. J. S. H.

Houston Co., Minn.

Cut-worms have been very troublesome this Spring. They will cut off tomato plants about as fast as I can set them out. About the only way I have found to keep them in check is to put paper around the plants. Any common newspaper will do it. They say salt will drive them out, but it doesn't work with me, though perhaps sulphur would do it. Potato bugs are unusually plenty. It would be a great boon if the hens would eat these bugs, but they don't do it, at least my hens won't. I am inclined to think turkeys or ducks would. Toads are the best friends of the potato grower. The time may come when we will have to make a business of raising toads to protect our potatoes. W. H. B.

Salem Co., N. J.

FARM NOTES.

Whatever the theorists or politicians may say about bogus butter, the fact remains that in our market, it is much easier to sell good butter than it was before the discussion became so warm. We can sell all the butter we can make at a fair price, and the more bogus butter there is on the market, the closer our customers appear to stick. I do not see that the bogus article can ever be made popular, and but little of it would be bought, except by the poorer classes, if it was not disguised as butter. Our customers tell us that they prefer to pay a few cents extra for the sake of knowing where their butter comes from. They will economize in almost anything else before they will eat oleomargarine. It will not pay us to sell to any other class of customers. Unless something is done to regulate the sale of oleomargarine, there is sure to be a great increase in the number of family cows kept near the towns and cities. Good thoroughbred or grade Jerseys will be in good demand. The fact is that what we call profitable customers will not eat oleomargarine, and they will go to any reasonable expense or trouble to avoid it.

Near slaughter-houses and soap factories, farmers can make small fortunes at duck raising. A duck is as great a scavenger as a hog. Ducks will thrive well on offal and slaughter-house refuse. It is an all too common practice to drag the carcass of a horse into the yard, cut it up and let the ducks feed at it. A few weeks feeding on grain is supposed to "sweeten" the flesh and take away the peculiar "meaty" taste. Small wonder that farmers who depend mainly upon grain for duck feed cannot compete in price with the large yards. These slaughter-fed ducks should come into the same regard as slaughter-fed hogs and "bull butter."

Farmers, as a rule, do not like to feed grain in Summer to the cows, and yet, where there is any market for butter and milk, it will pay. Scientists tell us that good green clover is a "complete ration." Not one farmer in 100, as nearly as I can see, ever pastures his cows on green clover or any other grass that has anything like a "complete ration." Most of our pastures are full of grasses that the cattle would hardly touch if made into hay. With such feed we need grain to help out the ration. Soiling is not half as popular as it should be. Many farmers have tried feeding very green corn and made a bad failure of it, as the stalks were soft and without any substance, and only gave the cows the scours. A good field of rye or oats will give much better satisfaction than an equal area of immature corn stalks. Truck farmers make the most of soiling when they feed the stalks of sweet corn after the ears have been removed. The stalks then are in good condition for feeding.

The common idea that extra feeding of grass or good clover hay increases the milk flow, but that it needs an extra feed of grain to show an increase in butter, is a sound one. We have proved it to our complete satisfaction in practical work, and I notice that many careful tests conducted at experiment stations show the same thing. It may be safely put down by dairy farmers that if they want more butter they must feed grain for it. Scientific experiments also appear to corroborate the common farm dictum that "bran makes milk, and meal makes butter." Many farmers who would be hopelessly lost among "carbohydrates" or "albuminoides" can give the scientists a lesson in the feeding values of grains and grasses. The fact is that no two cows are just alike, and that while general rules for feeding can be laid down at a distance, one must come where the cattle are and see and study them in order to get the best out of them. WORKMAN.

Floricultural.

RECENT ROSES UNPROFESSIONALLY CONSIDERED.

We have suffered from a surfeit of new roses of late, due no doubt to the extraordinary "boom" in these plants during the last three or four years. Of course, roses always have been, and always will be, the favorite flower, both with florists and amateurs, but they have never been so prominent as they are now. The ever-favorite Jacqueminot certainly did not receive such an ovation when it made its debut, as did

The William Francis Bennet, much advertised its first season as the $5,000 rose. The large sum paid by Mr. Evans for this stock caused much comment at the time, being apparently unparalleled in rose culture. Looking at the subsequent success of the rose, it may be regarded as a prudent investment. The Bennet is certainly a charming rose in every respect; its velvety crimson is richness in itself, and the long petals make it a peculiarly graceful bud. It is, however, at its best when half-opened. If the plant is at all sickly, it is apt to be most aggravatingly semi-double; but well-grown, it is all that can be desired in its class. The success of the Bennet recalls the high hopes raised a few years since by

Andre Schwartz, much heralded as the "Tea Jack." The lithographs of it were charming—such shapely flowers of such glowing hue—but when I persuaded it to bloom, it displayed a tiny flower, in color a cross between dingy ecru and dirty pink. Perhaps I had failed to gain its confidence, but it declined to retrieve its lost character in any way, so I relegated it to the horticultural shades, with a feeling of deep but silent disgust.

American Beauty followed the Bennet as a horticultural sensation. Perhaps it was a spirit of international emulation, but our native belle seemed determined to follow the English flower's successes very closely. The original holders of it wove a very graceful little mystery about its production, but we know now that it was raised from seed by a famous amateur rosarian, who gave the original stock to its Washington holders. The Beauty possesses one great advantage—the perfume is simply delicious. But the shape of the flower is not particularly graceful, being rather of the pickling cabbage style, and the color is a very ordinary, every-day rose-pink. We can scarcely say that it has been tested yet, and if, as claimed, it flowers outside late in the season when other hybrids are over, it will doubtless be of value to the florist. It is also expected to bloom under glass much earlier than others of its class, so here again it possesses a great advantage. Without these qualities it would be merely an every-day hybrid, though its delicious fragrance must ever be a distinguishing trait.

Her Majesty, the most recent sensation among hybrids, in point of size must certainly bear the palm. It is a cross between Mabel Morrison and Tea-scented Canary. The color is light rose, almost identical with Baroness Rothschild. Unfortunately, it is almost, if not quite scentless, and this together with its size and color, reminds us of the great pæonies beloved of our grandmothers. It recalls the prize strawberries we see, immense in size and glowing in color, but forcibly reminding us of a turnip as far as flavor is concerned. The first of these roses viewed by the writer was 19½ inches in circumference, but it had a distinctly careworn aspect, having been open for 11 days. Later specimens confirmed the first impressions. It is a great rose as far as size and vigor are concerned, but its want of fragrance will always be a disappointment, since that property is a special charm we always look for in this flower. We have two new whites to admire:

Merville de Lyon and the Bride.—The first is a magnificent hybrid of the Mabel Morrison type and may be described as like the Morrison, only more so; it is much fuller and larger. The Bride shows the graceful shape and vigorous constitution of its parent, Catherine Mermet. It has the size of Cornelia Cook without its tendency to

a greenish tinge, and shows as much delicacy as the Niphetos, without being so readily bruised. It is undoubtedly the best white Tea we possess.

Wm. Paul & Sons, the great rose growers at Waltham Cross, Herts, offer four new hybrid perpetuals for the season of 1886. Two of them, Florence Paul and Brilliant, are vivid red; Charles Dickens bright pink, and Inigo Jones dark rose tinged with purple. They are all said to be hardy garden roses. Whether they would be a success here we cannot say.

As one great horticulturist recently remarked, we are getting almost too many new roses, but so long as the demand continues, they will doubtless be produced, and improvements on existing varieties must always find a ready market, both in this country and in Europe.

E. L. TAPLIN.

Pomological.

C. M. HOVEY AND POMOLOGICAL NOMENCLATURE.

T. T. LYON.

I MAY be permitted to state that the "Rules for Naming and Exhibiting Fruits," respecting the application of which this discussion has arisen, were framed by a committee consisting of T. T. Lyon, of Michigan, C. M. Hovey, of Massachusetts; J. J. Thomas, of New York; Jno. A. Warder, of Ohio: and P. J. Berckmans, of Georgia. It having been found impracticable to secure a meeting of the committee, a preliminary draft of such rules was made by the chairman, and a copy sent to each member for criticisms and suggestions, and the same course was pursued with the final draft, which received the concurrence and indorsement of every member of the committee, Mr. Hovey included.

In order that the character of Mr. Hovey's strictures may be the more perfectly comprehended. I quote rules 1st, 2nd and 3rd, of Section 1st, to which this controversy pertains.

Rule 1.—The originator or introducer (in the order named,) has prior right to bestow a name upon a new or unnamed fruit.

Rule 2.—The Society reserves the right, in case of long, inappropriate or otherwise objectionable names, to shorten, modify, or wholly change the same, when they shall occur in its discussions or report, and also to recommend such changes for general adoption.

Rule 3.—The names of fruits should preferably, express, as far as practicable by a single word, the characteristics of the variety, the name of the originator, or the place of its origin. Under no ordinary circumstances should more than a single word be employed.

With these rules as our guide, if our refusal to indorse the objectionable names constitutes "boycotting," then is the American Pomological Society, of which Mr. Hovey is an honored official member the boycotter; and that, too, under the rules originated and reported with his personal approval.

Mr. Hovey charges a wholesale change of the names of fruits by the American Pomological Society, to which I will only reply by a denial that, in any case within my knowledge, this has been done. The nearest approach to this, so far as I have discovered, is on the part of the Committee of Revision, in such cases as American Golden Russet Apple and Fondante d' Autonme Pear, in which names heretofore, by many, at least, considered as synonyms, are made to do duty as the standard or leading names. All other cases, so far as I have observed, consist in omitting redundant or now meaningless words. Even this, so far as I have observed, is done with the utmost care to avoid any possible ambiguity or uncertainty as to the identity of the variety intended.

The American Pomological Society is largely a delegated body, and represents the great body of American pomologists, quite as perfectly as Congress represents the mass of our people. Hence its right to frame rules for our guidance in pomological matters, and I fancy that the person who may have a new and valuable fruit to offer to the public, will be very likely to feel a difference amounting to a good many "figs," between the approval and the disapproval of a society so constituted, with reason and propriety on its side. In all this, it must not be supposed that I assume to speak for the society, other than as one of its members, bound by its rules.

Mr. Hovey further remarks, in speaking of names of fruits—"There is no objection to nicknames, and nurserymen and cultivators, who have no time to write them in full, could abbreviate as much as they please." I observe, however, that thoughtful parents very generally avoid such names for their progeny as naturally suggest nicknames, preferring to avoid them if possible; while in pomology there are higher and far more important reasons for avoiding the using, and the consequent necessity for learning as well as for recording, an increased multiplicity of synonyms.

While volubility and prolixity seem to be characteristic features of French character, as well as of French nomenclature, the American thinks and talks far more tersely; and, as a natural consequence, prefers a terse, yet significant nomenclature

Van Buren Co., Michigan.

THE FIGUE AND DOYENNE D' ALENCON PEARS.

I HAVE grown both the Figue d' Alencon and Doyenné d' Alencon for a score or more of years. The trees having been procured of Ellwanger & Barry, of Rochester, N. Y., I have no doubt they are true to name. I think with Mr. Hovey, page 284, "there is evidently some mistake" with regard to the cut there referred to, but I think he is also mistaken in his conclusion that the Doyenné d' Alencon is the one illustrated. The illustration looks as though a good specimen of Princes' St. Germain had sat for its portrait in both form and shape of fruit and stem. The Figue d' Alencon resembles a fig in shape, with a short, thick stem, less than half an inch long, if my memory serves me. The skin of this pear is brown or brownish green. Of its quality I can only say that I have never had any that reached a condition fit to eat. If I attempt to keep them till that time they generally find their way to the pigs or cows; otherwise they reach the same destination earlier or are sold for cooking. On the whole, neither variety with me is worth cumbering the ground.

At times the Doyenné d' Alencon has come up so good that I felt encouraged to grow it, but it is so fickle in this respect that I give up all hopes of its ever becoming popular here.

Montclair, N. J. E. WILLIAMS.

[Both Mr. Williams and Pres. Wilder favor us with sketches of the Figue d' Alencon Pear, which may be described as fig-shaped with a short, stout stalk inclined to a fleshy lip.—EDS.]

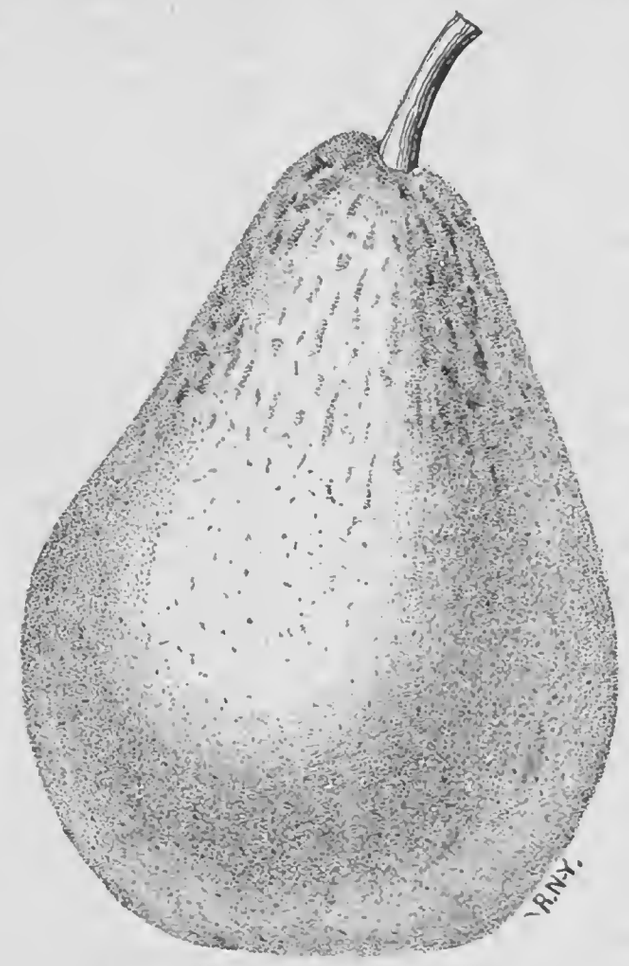
THAT FIGUE D'ALENCON PEAR.

BY that name I wrongly called a fruit pictured in a late RURAL. Its label and its likeness to Downing's description of the Figue, in all but shape, misled me. The true Figue is so named from its fig shape. As stated in his note, C. M. Hovey, than whom American pomology boasts no one more accurate and venerable, at first thought the portrait might be that of the Doyenné D'Alencon. But specimens just ripening sent me by him refute the claim as to form, color and season of fruiting. Perhaps the pear sent the RURAL and in dispute, is the Beurré Gris d'Hiver Nouveau. But the marked likeness of that portrayed, to one I have in different soil, by the latter name, starts a doubt about their identity. So now thinks Mr. Hovey.

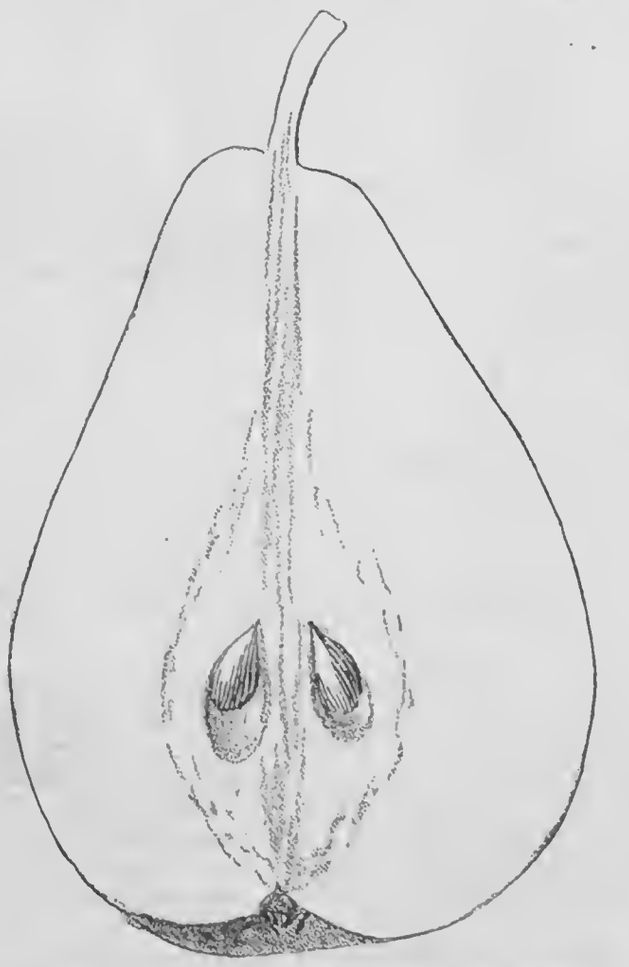
With the help of Mr. Hovey's half century's accurate knowledge of fruits, I shall get a correct verdict in the Fall, which shall be published. In the meantime, let all to whom I have sent cions of the pictured fruit rest content that they have a fine winter pear. The RURAL'S portrait of the pear in dispute is accurate. Some specimens are a little plumper and more shouldered around the stem. It has when picked a sort of an olive russet skin, or russet on an olive ground. It ripens up to a bright cinnamon russet, on a dullish yellow ground. The flesh is greenish white, buttery, somewhat granular and of a very high and peculiar flavor and aroma. It keeps from November to February. It should be kept in close boxes and often inspected, as it both wilts and rots readily.

GEN. WM. H. NOBLE.

Bridgeport, Conn.



DUVAL PEAR. From Nature. Fig. 248



DUVAL PEAR. Cross Section. Fig. 249.

THE DUVAL PEAR.

(*See, also, editorial page.*)

The pear Duval (Fig. 248, with cross-section at Fig. 249) is an old variety received from France about 50 years ago. Downing's description is correct. By the rules of the Pomological Society it would be classed as good to very good, but there are so many of its season of better quality that it has dropped out of cultivation except in a few of our collections.

MARSHALL C. WILDER.

THAT "SEEDLING" AFFIX.

I STAND by our veteran pomologist, C. M. Hovey, in adding "seedling" to its originator's name, given to a new fruit. No other word tells so briefly just what we want to know. It is due to the originator and to pomological history, that this affix should follow his name. Every new fruit is a seedling, but not every new fruit knows its own father. Because some hedge-grown wilding, some came-by-chance good fruit is found, the finder thereof gains no right to christen it after himself as "seedling." If I raise new fruit, and name it after another, the affix of seedling would be wrong, and if the name was in the possessive, I would tell a lie. But when to the name of its author, as in Hovey's Seedling Strawberry or Cherry, "seedling" is added, you have in the two words the history of the fruit. Any body who can claim the parentage of two such fruits, ought to covet and be proud of the record which that word seedling fastens to his name and to the literature of the orchard.

GEN. W. H. NOBLE.

Horticultural.

STRAWBERRY BLIGHT.

EVERY strawberry grower is familiar with the white spots that occur on the leaves of certain varieties of the berry. This disease is very common from the Atlantic to the Pacific, yet very few know its real cause. The white spots are circular, about one-eighth of an inch in diameter; and surrounded by a dark red stripe. An examination of the spots with a lens will disclose in the center of the white spot a number of small mealy tufts. These little tufts are exceedingly minute, and their color resembles that of the spot so closely that it requires patience and close examination to find them. The small mealy tufts consist of an immense number of cylindrical bodies supported on slender stalks. These small bodies are the spores or reproductive bodies of a fungus known to botonists as Ramularia fragaria (Pk). The disease then is not caused by the scalding heat of the sun, nor is it the work of insects; but it is caused by the minute parasite mentioned above.

Many, if not all, of the higher plants serve as hosts for one or more species of fungi. Several of these parasites attack the strawberry, but the one mentioned is the most destructive. As far as made out, the life history of this fungus is about as follows: The vegetative portion of the fungus (called mycelium) consists of slender colorless threads, which are exceedingly minute, and first appear in the tissue of the leaf, ultimately destroying the vitality of the cells in their immediate vicinity and causing the white spots described above. The reproductive bodies are formed on the slender branching threads, beneath the epidermis of the leaf, and when they have attained the proper size, they rupture this covering and appear in the center of the white spot in small tufts.

At Fig. 246 is shown a portion of a leaf

Fig. 246.

of a strawberry, showing spots of the natural size. Fig. 247 is a tuft of spores showing the supporting stalks and mycelium.

The disease is usually more abundant in old beds where the plants have become thick and

matted. Strong plants that have received good cultivation are comparatively free from the attacks of the fungus. Certain varieties suffer more from the effects of the disease than

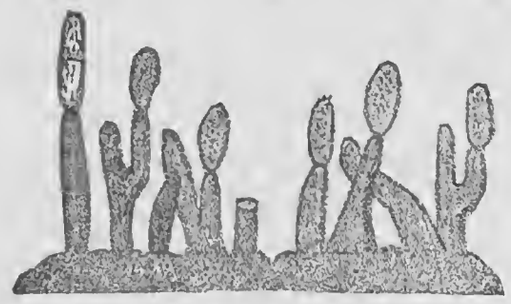


Fig. 247.

others. Downing, Cumberland, Captain Jack, and Wilson usually blight badly; while Crescent, Bidwell, Jersey Queen, Monarch and Manchester are comparatively free from its attacks. Lime is one of the best known remedies; it should be applied when the leaves are wet, commencing early in Spring, and repeating the operation every two or three weeks. B. T. GALLOWAY.

Columbia, Mo.

BERRY TRAY.

THE design for the berry tray shown at Fig. 251 was sent us by Mr. Dayton McCollum, of Mahoning Co., Ohio. The end pieces are four

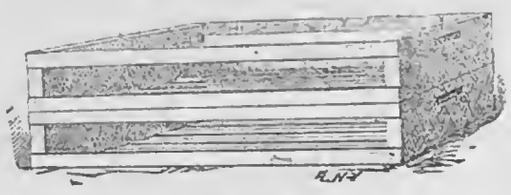


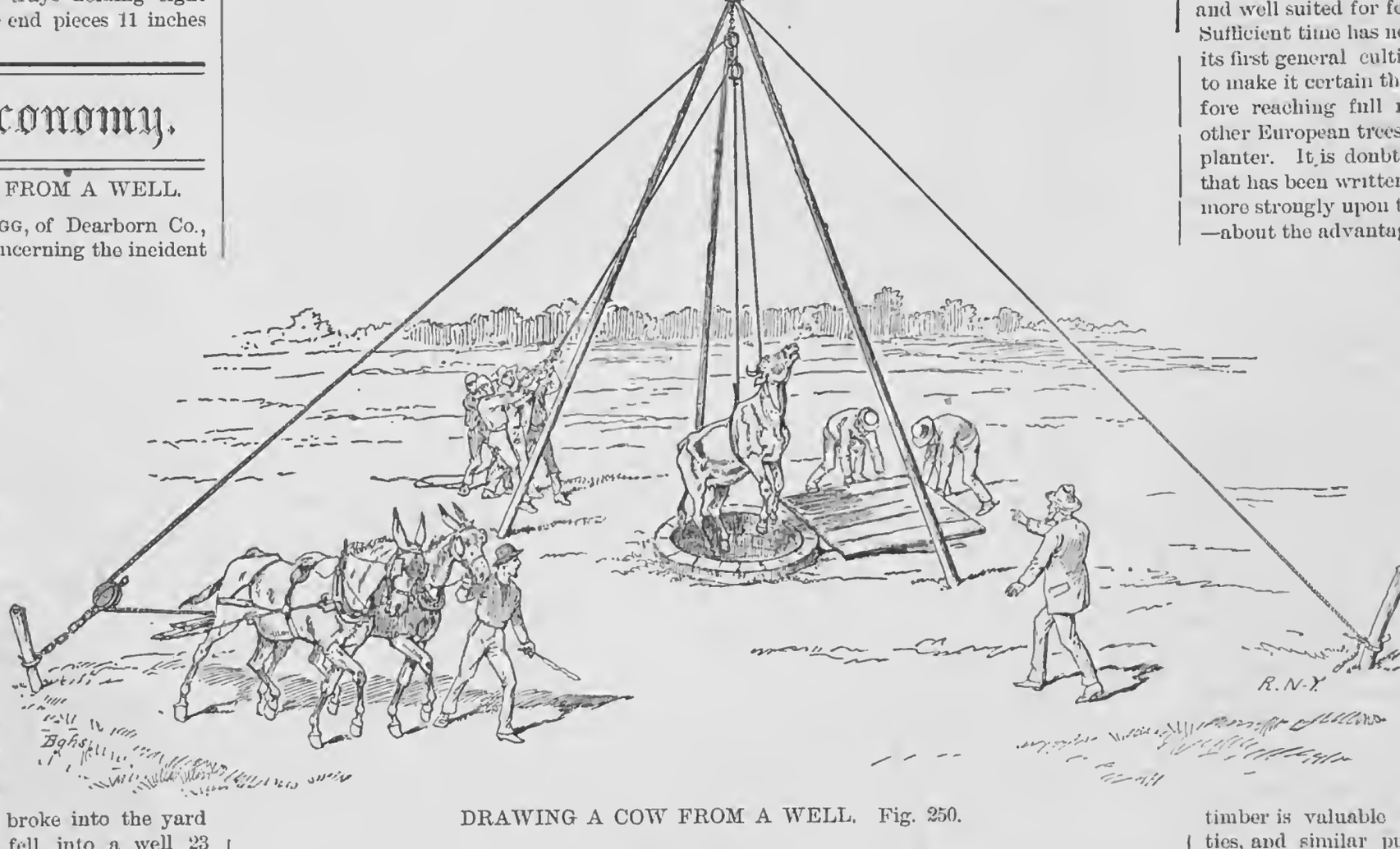
Fig. 261.

inches wide, 16½ inches long, and one inch thick. There are two laths for each side, two feet long, and six laths for the bottom. The bottom laths are sunk their thickness in the end pieces by plowing out one-half inch wide, and the thickness of the laths which makes the bottom laths one inch shorter than those at the side. A space one-half inch wide, one-half inch deep and four inches long is scooped out of each end to be used as a handle in lifting. A three-eighths-inch hole is bored in the top and bottom of each end piece. Pins put in at the top will fit in these holes and hold the trays when placed one on top of the other. The trays are designed for a home market and can be piled as high as desired, or three or more, with a cover, can be fastened together for shipping. To make trays holding eight quart baskets, make the end pieces 11 inches long.

Farm Economy.

DRAWING A COW FROM A WELL.

MESSRS. R. & P. GREGG, of Dearborn Co., Ind., send us the facts concerning the incident which our artist has illustrated at Fig. 250. In a country where wells and cisterns abound it is not uncommon for animals to fall into these openings. In a large cistern, it is frequently possible to build a track up which the prisoner may safely walk to the ground, or to throw in hay or straw for the animal to trample until it is raised high enough to jump out. When the animal is imprisoned in a small well so that it cannot turn, it is necessary to pull it straight out. In the case which we illustrate a heifer weighing 1,000 pounds, broke into the yard during the night and fell into a well 23 feet deep. She fell to the bottom with her head just above the water, where she lay looking up as though imploring aid. It seemed at first a hopeless case, but at last a plan was proposed that proved successful. Three strong poles 16 feet long, were raised over the well, chained together at the top, so that they stood over the well like a three-legged stool. Two sets of hay-fork ropes and tackles were obtained and made fast to the chain at the top. One rope was passed round the heifer, just back of the fore legs, and fastened. The other end was brought down through a pulley, as shown in the picture. A span of strong mules provided the motive power at the end of the rope. The other rope was fastened about the heifer's horns. A group of men pulled at this, and thus kept the animal's head from falling to one side and catching on the stones. A steady pull by the mules brought the heifer out without injury. As soon as she cleared the well curb, a door was pushed under her and she was lowered to the ground and the ropes were removed. In a short time she was upon her feet, apparently but little the worse for the accident. It frequently happens in accidents of this kind that animals are in danger of drowning, or of beating their heads against the wall. In such cases a halter or rope should always be put on the animal's head to hold it until help can be brought.



DRAWING A COW FROM A WELL. Fig. 250.

What Others Say

TREES AND TREE PLANTING.—The Annual Report of the Mass. Board of Agriculture publishes "Some Additional Notes upon Trees and Tree Planting," by Prof. C. S. Sargent. The other notes were printed in 1875 and 1878. Many of the conclusions then reached have not been substantiated by further investigations. Prof. Sargent was then impressed with the value of certain foreign trees for general cultivation in Massachusetts. He is now convinced that the native trees are better suited to that State than any exotic trees can be.

The European lindens, of which two or three species are cultivated, are in every way inferior, except in perfume of flower, to our native species. They suffer greatly from the attacks of various wood-borers, and usually perish before reaching any great age. The Sycamore Maple (Acer pseudo-platanus), a common European species, largely cultivated there for its valuable timber, and early and quite generally planted in Eastern Massachusetts, grows, like many European trees, very rapidly while young, but is soon unsightly here, short-lived, and quite worthless for any economic purposes.

The Norway Maple (Acer platanoides) is a more valuable tree in Mass., although greatly inferior to our native Sugar and Red Maples in beauty and general usefulness. It grows rapidly and vigorously, especially near the sea, reproducing itself freely, and giving every promise of reaching as great development as in its native land. The European Ash (Fraxinus excelsior), and its innumerable varieties, once largely and now occasionally planted in Massachusetts, are short-lived, brittle and utterly worthless trees, which should be exterminated in every Massachusetts plantation, to make room for our noble White Ash (Fraxinus Americana), which nowhere thrives with greater vigor or yields better returns to the planter.

It is too soon, perhaps, to speak with any degree of certainty in regard to the future of the European Sycamore (Platanus orientalis) in Massachusetts. Young trees, however, forty or fifty years old, grow with a vigor now never attained by our native species, and certainly give promise of long life and full development. Two species of elm (Ulmus campestris and U. montana), natives of Europe, thrive as well or nearly as well in Massachusetts as any of our native species. Specimens of the former attain a size in Eastern Massachusetts never reached there by any other foreign tree, with the exception, perhaps, of the White Willow: while the Dutch Elm (U. montana), now everywhere, reproduces itself from seed, and will doubtless eventually become completely naturalized in our woods.

The European Oak (Quercus robur) has always been a favorite tree among Massachusetts planters of a certain class. This tree grows there very rapidly when young; it can be easily raised and very easily transplanted; Its habit is excellent, and it carries its green foliage into early Winter, long after our native trees have shed their leaves. It is, perhaps, however, the most unsatisfactory deciduous tree which has ever been planted in Massachusetts. The promise of its early life is never realized. The European Oak begins to fail in Massachusetts when about 20 years old, with the cracking of the main stem, and then, after dragging out a wretched existence for a few years longer, miserably perishes. Tens of thousands of these trees have been planted in the State during the last century, but it is now almost impossible to find anywhere a healthy specimen more than 30 years old, while all the older trees have now almost entirely disappeared from the neighborhood.

The European Beech (and its varieties), although, perhaps, less beautiful and certainly less graceful than its American prototype, grows and thrives in Massachusetts, if not as freely as in Europe, yet sufficiently well to make it an interesting and valuable addition to all ornamental plantations there. The European birch, very like one of our smaller American species, and its numerous varieties, are graceful additions to our garden sylva, although not to be compared in beauty, vigor, and in economic value with several of the birches native of Massachusetts.

If Europe has given us few valuable deciduous trees, its contribution of conifers to our plantations is still less important. It was once believed, and no one, perhaps, was more firmly impressed with this belief than Prof. S., that the Scotch Pine (Pinus sylvestris), one of the great timber trees of Northern Europe, was destined to become an important economic factor in New England forests and plantations. This opinion, based upon the deceptive and insufficient evidence of the early promise of this tree, was reached too hastily. The past 10 years have shown that the Scotch Pine is a failure in New England as an ornamental and as a timber tree. It is very hardy; it grows quickly and easily from seed, and young plants can be raised and sold more cheaply, perhaps, than the seedlings of any other coniferous tree. They are not fastidious about soil and are proof against any exposure or hardship. The young trees, during the first 20 years of their life, grow with astonishing rapidity, and then either die outright, from some as yet inexplicable cause, or begin to fail gradually, and perish long before reaching maturity. It has cost American planters something in money and a great deal in disappointed hopes to discover the worthlessness of the Scotch Pine in this country. The Scotch Pine is still raised and sold in great numbers in some parts of the West, where rapid growth and perfect hardiness of the young plants on the northern prairies make it indispensable in all windbreaks and shelter plantations, at least in the opinion of men engaged in selling the plants to settlers.

The Austrian Pine (Pinus Austriaca), less widely planted and less thoroughly tried in Massachusetts than the Scotch Pine, promises also to prove a total failure there. The young plants grow rapidly and are very hardy, but they begin to fail early, and will probably disappear entirely before they are 50 years old. The cultivation of the Austrian Pine in Massachusetts should now be abandoned, and our native Red Pine (Pinus resinosa), a more beautiful and in every way more valuable tree, be substituted for it.

The Norway Spruce (Picea excelsa) has for many years been the most widely distributed and most generally cultivated foreign tree in Massachusetts. This tree, 30 years ago, had much, apparently, to recommend it to American planters. It is cheaply raised and easily transplanted; the young plants grow with surprising rapidity and vigor, and are hardly surpassed in grace and beauty by the young of any other of the spruces which will thrive in our climate. The general introduction of this tree into our plantations must nevertheless be regarded as a public misfortune. It has added nothing to their permanent value, and it has interfered with the cultivation of more valuable native trees, like the White Pine and White Spruce. The Norway Spruce, in spite of its early promise, must be acknowledged to be a complete failure in eastern America. It has passed its prime there and is almost decrepid before it is half a century old; it will never produce timber here, and it becomes unsightly just at that period of life when trees should become really handsome in full and free development.

It remains to speak of the European Larch. Something more is known of this tree in Massachusetts than was known 10 years ago, but not enough yet to speak with anything like certainty of its real and permanent value in Massachusetts plantations. The European Larch, at least during the first 50 years of its life, grows more rapidly than our American Larch, and more rapidly than most coniferous trees of equal economic value.

The European Larch grows rapidly upon the poorest soil of Massachusetts; it has begun to reproduce itself spontaneously, and there is good reason for believing that it will become a long-lived and valuable tree. The wood which it produces is hard, solid and durable, and well suited for fencing and railway ties. Sufficient time has not elapsed, however, since its first general cultivation in New England to make it certain that the larch will not, before reaching full maturity, like so many other European trees, utterly disappoint the planter. It is doubtful, too, in spite of all that has been written—and no one has spoken more strongly upon this subject than Prof. S.—about the advantage to be derived from cultivating this tree in Massachusetts, whether the European Larch can properly have any permanent place in our forests. Indeed, it seems to be more evident every year that the European Larch can do nothing for us which our native trees cannot do better and more economically. The larch will grow and make timber rapidly upon poor soil; but soil which will produce good larch timber will produce White Pine, and White Pine is a far more valuable article commercially than larch. Larch timber is valuable for fence posts, railway ties, and similar purposes, where durability with contact with the soil is necessary. The wood of our native chestnut possesses these qualities to an admirable degree, and the chestnut will flourish on land not much better than that which will produce larch. It is now known that chestnut railway ties are far more valuable than larch ties, and the chestnut can be more cheaply and easily grown than the larch, and will make timber more rapidly. In a State, therefore, where the native White Pine will thrive upon its poorest land, and the native chestnut can be depended upon to furnish posts and ties economically, it does not seem necessary to introduce a foreign tree, especially when no more is known about it than is now known about the larch, whose only merits are that it will flourish upon poor soil and produce durable timber. This tree can perhaps, however, be profitably grown in the region north of Massachusetts, beyond the natural range of the chestnut, and where no native tree producing such durable wood as

rapidly as the European Larch is to be found Many of these facts relating to the behavior of European trees in this country are now well known to nurserymen and other experienced planters. Probably where one native tree is now planted in Massachusetts, five foreign trees are planted. The cause of this unfortunate condition of things will be found in the ignorance and indifference of planters, and in the shortsightedness of nurserymen who supply them with trees. The fault, if fault there is, in this matter, lies with the purchaser, however, rather than with the seller. The nurseryman, as long as he can find a market at good prices for cheaply-grown foreign trees, can hardly be expected to sacrifice immediate profits in creating a demand which does not now exist for better material, wise as such a policy would doubtless be for him in the long run.

Massachusetts, in spite of her many sins of omission and commission, has made some substantial progress in the art of sylviculture. Her most instructive plantations, however, are not those which have been made upon the European fashion, or rather with European trees, by men who have studied the subject in Europe or in European books upon forestry, instructive and valuable as all such plantations have certainly been in showing us what to avoid. The real progress in sylviculture in Massachusetts has been made by the farmers of Barnstable and Plymouth Counties, who have taught us how to plant and raise forests successfully and profitably under the most favorable conditions. The secret of their success must be sought where they sought and found it, not in foreign treatises, unsuited to the requirements of this community, but in the native woods, in full view of their own doorsteps, which told them what to plant and supplied them with material for planting.

It has been demonstrated in Barnstable County that a crop of Pitch Pine can be raised from seed with as much certainty as a crop of corn, and with much less expense; and that the loose and shifting sands of Cape Cod, useless for every other purpose, can, with the aid of this tree, be made to bear valuable crops of wood.

Not less interesting, certainly, and perhaps even more suggestive of future development towards the true policy for New England forest management, are the White Pine plantations made 40 or 50 years ago in Middleborough, Raynham, Bridgewater, and other towns in that part of Massachusetts.

These plantations were made upon barren, sandy soil, entirely exhausted by long cultivation, with seedling pines dug in the neighboring woods. The young trees are set in shallow furrows, at odd times, without interfering with other farm work, and so with little expense to the farmer. A distance varying from five to twelve feet in different plantations was left between the trees, which, after planting, received no subsequent care or thinning. These trees, with few exceptions, have grown rapidly and with great vigor, and are now worth, on the stump, $60 to $75 an acre; and men are still living in these towns who have cut and sold White Pine saw-logs at the rate of $150 an acre, from seedling plants set by themselves.

These plantations are valuable, not in the great amount of timber which they have produced, but because they show how our farmers, with a trifling outlay, can improve their farms by covering worn-out and unproductive land with a valuable crop, which, if left to mature, will continue to increase in value for generations. They show that White Pine, the most valuable tree in New England, can be successfully and profitably cultivated; but, unfortunately they do not yet show the method of culture which can best be adopted in order to make this tree yield the greatest returns.

There are other trees, besides the White Pine, which the farmers of Massachusetts can cultivate with profit. The wood of some of the native trees of Massachusetts is in great demand, and will soon become rare and expensive everywhere. The best hickory has already been cut, and as no wood has ever been found to take the place of hickory for the particular uses to which that wood is applied, and as there is no hickory except in the United States, the value of any farm can now be increased by a plantation of hickories. White Ash of good quality has also become very scarce, and there can be no loss in planting this tree wherever good land can be spared for it, or in protecting and encouraging the young plants wherever they have sprung up spontaneously. Chestnut, too, must always be in demand for railway ties and fence posts, and there are rocky and unproductive hills in every town in the State, which might profitably be covered with groves of this tree.

HAY-MAKING.—Mr. James Howard, in an address before the English Farmers' Club, on hay-making, took the ground that in order to avoid loss, both in quantity and quality, pastures should be cut when the grasses are in flower, and that of two evils, cutting too soon and cutting too late, the latter is the greater. In very heavy grass where there is danger of lodging, it is unwise to wait even for the flowering stage. As a rule, farmers wait too long before cutting hay. They are anxious to secure an added bulk, forgetting that much of this bulk may be tough, woody fibre. The component parts of grasses mostly fitted for nutrition are those soluble in water, and the great object should be to secure the crop when it contains the greatest amount of gluten, sugar and other matter soluble in water. This stage is reached, in most grasses, when the flowers are well formed and before the seeds ripen. As a practical test, Mr. Howard watches the sorrel in his fields. When this begins to ripen he begins to make preparations for cutting. As to cutting, he thinks the extra bulk of hay obtained through the closer and more level cutting of a good machine is nearly sufficient to pay the cost of cutting. At the same time, nothing is gained by the practice of close shaving, as the roots of the grasses are always injured by this practice. Of all farm operations, none calls for quicker work than hay making. The most successful manager makes and secures his hay in the shortest time, and the quicker the work is accomplished, the less it will cost. Mr. Howard's plan is to cut a small area and at once put the tedder at work upon the cut grass, keeping the machine in motion all the time, if necessary tossing and re-tossing the hay. It was the old fashion in hand cutting to let the hay dry in the swaths. It would have paid even then to scatter and turn the hay by hand. Nowadays the employment of hand labor is to be avoided as far as possible. The object of a good hay maker is to get his hay into cocks as soon as possible, as it is safest and most easily handled in that condition. For this purpose the heavy horse rakes with the dumping done by the horse, are admirable. The hay is drawn into windrows and then the rake is run lengthwise of these, drawing the hay into piles which by a few strokes from the fork are easily turned into well shaped cocks.

SPICE.

A CORRESPONDENT of the Iowa Homestead thinks he has discovered a new way of milking that increases the flow of milk. He used to milk with "one hand up while the other was down." He now milks with "both hands up and down together, instead of alternately." The correspondent referred to thinks he has increased the flow of milk from one cow by the simultaneous movement of both hands at least eight or 10 per cent, and from another, four or five per cent. The above note we find in the Chicago Live Stock Journal.....

E. P. ROE says, in June Harper's, that he once saw the driver of a stage load of ladies, bound out of his vehicle to kill a garter-snake—the pallid females looking on meanwhile as if the earth were being rid of some terrible and venomous thing. They ought to have known that the poor little reptile was as harmless as one of their own garters, and quite as useful in its way.....

MR. ROE, one October day, took a stone pot of the largest size and put in first a layer of Isabella grapes, then a double thickness of straw paper, then alternate layers of grapes and paper until the pot was full. A cloth was next pasted over the stone cover so as to make the pot water-tight. The pot was then buried on a dry knoll below the reach of frost, and dug up again on New Year's. The grapes looked, and tasted as if they had just been picked from the vine.....

THE man who can allow a cow to kick him over three times and come up smiling each time, and refuse to retaliate, can cure a kicking cow, says L. S. Hardin in the Weekly Press.....

Prof. A. J. Cook much prefers tobacco to Mr. Woodward's lard and kerosene for lice on cattle, and he speaks from "abundant experience." For poultry he has found lard and kerosene or sulphur and kerosene excellent. He always keeps such a mixture in the poultry house, and every few weeks in Summer rubs the roost poles with it, and occasionally at night under the wings and tails and about the breasts of his birds. Such use is not untidy, takes little time and does effectually destroy the vermin. But on cattle or horses this mixture is disagreeable. The greased hair does not become smooth for days, and catches much dirt. Again, it is difficult to use so that a single application will suffice. On the other hand, he has found five minutes enough to make a thorough application of the tobacco decoction. It is not unpleasant to apply, and if used on a warm day, and the animal is blanketed well for an hour, it is attended with no danger.....

Prof. Cook always observes the last precaution. Chilling a cow in Winter may produce abortion or induce an ague, which should always be avoided. The very next morning after tobacco treatment, the animal can be curried and its hair made as smooth as ever. He has found a single washing to be wonderfully efficient..... .. ..

Not one of the so-called agricultural colleges in this country has accomplished desirable results without the compensated, obligatory student labor system, says Prof. F. A. Gulley in the late Report of the Agricultural College of Mississippi.....

TWO axioms connected with the breeding of stock are frequently heard among those who are interested in the subject, says the London Live Stock Journal. One is that "like produces like," and the other that "breeding is a lottery." Both cannot possibly be correct, and it may be said that neither is absolutely and invariably true.....

IT seems never to strike breeders that before allowing a mare to be served they should at least take the trouble to ascertain if the horse is in good health, for it cannot be taken for granted that because when robust and in strong exercise a stallion has fathered an Eclipse or a St. Simon, he will be capable of begetting similar stock when ill and uncared for.....

THE Journal further says that most breeders are familiar with the case of Lord Morton's Arabian mare, which to a quagga, or species of wild African ass, produced a hybrid having distinct marks of the quagga, and which in 1817, 1818 and 1821, having in these years been mated with an Arabian horse, gave birth successively to three foals, all of which bore unequivocal marks of the quagga. Still if certain considerations are constantly kept in view, it will be found in most cases that the maxim that like begets like is much nearer the truth than the other, that breeding is a lottery and altogether beyond the control of the stock owner .....

A WRITER in the Poultry Yard caught a troublesome mink by setting a steel trap just at the edge of the stream where the mink came out. A chicken was killed and the blood sprinkled about the trap. Then the body was suspended on a stake just over the trap.....

THE Herald of Health calls attention to the foolish though very general habit of making the back of the vest of the very thinnest stuff. The back of the vest should be made as thick and warm as the front. The first sensation of chilliness always comes at the spine. The lungs are protected in front by layers of muscle, fat and ribs, while at the back they come much nearer the surface. Many persons seek to wear "chest protectors," when the real protection is needed at the back. This could be supplied by a thicker back to the vest.....

OUR good friend, Dr. T. H. Hoskins, says, in the Vermont State Journal, that, practically speaking, good manure is too rich in nitrogen, and needs to be extended by the addition of both phosphoric acid and potash, especially the former. For use with manure there is no need of buying a nitrogenous superphosphate, for a plain superphosphate is much cheaper and quite as good. Along with this, use 10 or 15 bushels of unleached hard-wood ashes to the acre, and a half dressing of manure will give far better results than a full dressing used alone. We guess that the above is quite sound advice..

THE Massachusetts Experiment Station says that a bushel of average hard-wood ashes is worth, for the potash and phosphoric acid alone, 18 cents, taking the commercial price of these ingredients as a standard.

SUNFLOWER seeds are especially good for fowls when fed in proper proportion with grains, says Mr. Armstrong of the Husbandman. They are very oily, having somewhat the nature of flax seed. The usual estimate of yield is a gallon of oil to a bushel of seed, and the oil is said to be of superior character for many mechanical uses, and, when suitably refined, is used on the table.....

THE farmer who sits down to his breakfast of fried pork and potatoes through the month of June, while his neighbor revels in strawberries, doubtless flatters himself that the strawberries cost more labor than the pork did, and that he is thus on the right financial side. But he isn't. The Orange Co., Farmer thinks that he never made a greater mistake in his life. If the absence of fruit only punished the man who is responsible for it, we should not much care, but the trouble with it is that the wife and children must suffer for his sins of omission as well as himself.....

THE horse which can plow an acre while another is plowing half an acre, or that which can carry a load of passengers 10 miles while another is going five, independent of all considerations of amusement, taste, or what is generally called fancy, is absolutely worth twice as much to his owner as the other. So says Mr. H. W. Herbert. The Live Stock Journal (Chicago) takes the view that double the speed in traveling considerably more than doubles the practical value of the horse There is just as much trouble and expense in raising the slower horse. It is really working for less than half pay either to raise or use him. No farmer can afford this. So let us see if we can not, by proper selection, breeding, and breaking, improve the walking gait, and increase correspondingly the value of the general business horse.....

WE fancy that Director Lazenby, of the Ohio Ex. Station, in his trials of chemical manures upon corn, has made the mistake of selecting plots which were already well furnished with plant food. His fertilized plots, taken as a whole, give no increase of grain over those not fertilized. It is a pity the same careful experiments might not have been conducted on an impoverished soil.....

MR. LAZENBY says that the name "rust-proof," as applied to a variety of oats, has no significance. It is as subject to rust as any other..... .....

REFERRING to the Bohemian oat fraud, he says that these oats are commercially not equal to common oats in value.....

OF 34 different kinds of earliest potatoes tested, Stray Beauty was five days ahead of any other. It was planted May 4th, ripening July 20. Beauty of Hebron, Charles Downing, Early Durham, Early Gem, Early Harvest, Early Ohio, Early Pearl, Gardner's Early, Prince Edward's Early Rose, and Vanguard came next, ripening the same day, July 25. We are surprised that the Early Ohio is in this list. At the Rural Farm it is a week earlier than B. of Hebron..... .....

THE yield of the above was as follows:—Early Harvest 336 bushels; Early Durham 335; Early Ohio 324; Chas Downing 319; Beauty of Hebron 287; Prince Edward's 274; Gardner's Early 270; Early Pearl 285; Vanguard 195....

Lee's Favorite, ripening two days after, yielded 422 bushels, the greatest yield; and Clark's No. 1, ripening five days later, 363 bushels, the next largest.....

OF the second-early, Cullum's Superb, Pride of the West and Weld's No. 22 gave the best yields of marketable potatoes, while Pride of the West shows the best total yield. Quality poor. Of late kinds James Vick, Perfect Gem and Red Star head the list for marketable yield, and Jumbo for total yield—James Vick, second, being 451 and 449 bushels respectively.

THE Mammoth Pearl planted six inches deep yielded 329 bushels; eight inches 247; 10 inches 210; 12 inches 175. The yield of small tubers decreased with the depth the same as in the RURAL experiments.

Everywhere.

TRANSCONTINENTAL LETTERS.—LII.

MARY WAGER-FISHER.

The Lower Columbia River; Astoria; Sunday there; an early settler; back to Portland.

On the morning following our arrival in Portland, we boarded, at six o'clock, one of the steamers of the Oregon Railway and Navigation Co., which run from Portland to Astoria, for the purpose of seeing the lower Columbia. Readers of the RURAL who have followed our wanderings as detailed in this series of letters, may remember our trip up the Columbia to The Dalles, and appreciate our desire to see the lower river as well, which furnishes a scenic panorama of an altogether different character. The morning was foggy and it was fully nine o'clock before the fog lifted, after which the entire day was of the most radiant description, and the soft and graceful foliage of the river banks aglow with the brilliant hues of Autumn, borrowed added brilliancy from the blue-green color of the stiff pines that clothed the mountains rising in the distant background, and which in the extreme distance lay like so many undulating banks of hazy purplish hue against the roseate horizon, for it had a roseate tinge throughout the day. Occasionally an island, beautiful in vegetation, lay in the river—the rocks along a near shore were exquisite in mosses and vines, and as we sat on deck looking out from the stern I busied myself in making some sketches in color of some of the more striking views. An occupation of this kind invariably elicits a certain interest in the minds of one's fellow passengers, and "I wish I could sketch" is an exclamation I have many times heard. That an "accomplishment" of this character, which can be so readily acquired, is not a part of the education of every man and woman is one of the surprising things in this surprising world. As I sat at my work a young girl came and looked over my shoulder, and asked if I lived in Asto-

ria. If I did she thought she would like to get me to give her lessons in painting. She went on to tell me how she had learned to color photographs and would like to be an artist. I did not think it difficult to forecast her unartistic future. She had allowed decay to eat holes through her front teeth, and the money that should have plugged them with gold and bought a tooth brush had gone into artificial flowers, cheap ostrich feathers and jetted gimp trimmings for her dress. There is not much hope for a girl who allows furbelows and finery to win the day over care for her teeth.

One very striking triangular rock, of great hight, velvety green in color and with a clump of fir trees on the pointed top, goes by the name of Coffin Rock, because the Indians aforetime buried their dead upon it. A curious mountain range bears the name of Saddle Mountains from its resemblance to a saddle, and the nomenclature of the river scenes is suggestive of the practical rather than the esthetic sense of the early settlers. The scenery was exquisitely beautiful all the way, with an occasional clearing, where farms lay in luxuriant meadows "level as a house floor." Occasionally we passed a saw-mill, or stopped at a landing; but the signs of habitation on either the Washington or Oregon shore were few and far between. But we heard of fine farms "lying back."

We reached Astoria at four in the afternoon, and after establishing ourselves in the Occident Hotel we took a stroll about town. In the hotel where we passed the night in Olympia, there was a hand-grenade hung at every door, and a similar, but less bountiful provision had been made for fire extinguishment in the Occident, and judging from the hotels we have since been in, I judge that Pacific Coast inns have been generally supplied with them.

Of course, every American youngster has read of John Jacob Astor, from whom Astoria was named, and of the fact of his having had a trading post there. I had fancied Astoria as being built on low, marshy ground and with a great sweep of level land back of it, and was pleasantly surprised to find the location quite the reverse. Indeed so high are the hills and bluffs and so narrow the strips of level land along the shore, that the business part of the town is built on piles over the water, which explains, I suppose, the reason why Astoria is called, on this coast, the "American Venice," and it is needless to say that it resembles Venice in not the smallest degree. Saw-mills and salmon canneries are the chief industries of the town, which has a population of between five and six thousand.

The following day was Sunday, and we went out to attend church. The first church we came to had, hanging in the vestibule, what appeared to be a portrait of the pastor—which I thought a new "wrinkle," and as we were not favorably impressed with that sort of advertising, we went on and entered another, which proved to be Presbyterian. An old Englishman preached about heroism and laid much stress upon the great moral heroism of the working classes in England during our War of the Rebellion. As the looms of Manchester and other manufacturing centers were largely fed by American cotton, the sufferings of the people were great, and still they stood solidly by the North in their hatred of slave labor. The preacher said that part of the history of the war had never been written. I counted the persons in attendance at this service—28 men and 50 women, and the number of men on this coast is many times greater than that of the women.

After church, we climbed a high hill back of the town where we could see the breakers of the ocean as they broke on the bar of the river 15 miles away—for Astoria is this distance from the mouth of the Columbia. Afterward, we went in search of the site of Astor's old fort, and seeing an elderly woman in the street accompanied by a younger one, I asked her if she could direct us to it. "It was right there!" she said, pointing to the opposite side of the street, "just the other side of that house, in the same lot. Of course, when those grounds were fixed up and terraced, the place of the old fort was filled up. There was quite a hole there." "And who owns this property now?" I asked. "I do," she replied, "I was the first white woman to come to Astoria, and I've lived her ever since. I came here in 1846, and Astor then had sold out to the Hudson Bay Company, and that was removed soon after. Where he had his trading post was a block below here toward the river—a street now runs through the identical spot. Won't you come in the house?" Of course, we went in, glad of the opportunity to hear this pioneer talk of the old times. Her house was new and spacious, luxuriously fitted up in modern style; but she seemed to be quite alone in it—her husband dead and her children married. She was fashionably dressed in a gown of black satin; but any amount of prosperity could not erase from her face the imprint of hard work that had been her lot.

That evening, like the previous one, was of great splendor and we sat long and late on the pier of a huge saw-mill, watching the sunset effect on the broad and mighty river, and the far away faint lines of the mountains guarding its mouth. Steamers came in and passed out over the bar, fishes darted about in the water in myriads, and it was only the chill of the evening air that drove us from the charming spot. We went on board the steamer that evening, and early next morning were retracing our way to Portland. The day, like all the days, was perfect in clearness, and when we had reached the Willamette junction with the Columbia, St. Helen's, Ranier, Adams, Hood and Jefferson—all snow peaks—could be seen. All the way up the Willamette to Portland I thought the scenery the prettiest I had ever seen—the gorgeous Autumn foliage, the beautiful shores of the river, the gathering mist with the sunshine illuminating it, indeed it was a delicious sight, and like the girl who colored photographs, and wanted to be an artist, I wished I could paint what I saw.

RURAL SPECIAL REPORTS.

Kansas.

PARSON, Labette Co., May 29.—After a couple of heavy dashes of rain in the first days of the month, we have had dry, hot weather, the temperature being from 70° to 98° in the shade at 5 P. M. Wheat and oats are headed, but are threatened with the chinch-bug, and possibly with drought, as grass, strawberries and peas are already suffering therefrom. The two latter have sold as low as 70 cents per bushel for peas, and $1.60 for strawberries. Prices of strawberries would have gone still lower if seasonable weather had prevailed. Corn is by far the most important of our productions, and never looked better. It is now from six to 36 inches high, and exceedingly clean and vigorous. In the whole of the State, it is in this condition. A friend who passed hence *via* the "Santa Fé" to Pueblo, Colo., says: "Corn is immense in extent as far as we traveled before dark, and invariably well cultivated and clean, with a full stand. Apples will fall below an average; blackberries seem to have been "winter-killed; January had an unprecedented number of cold days, ranging from 10° to 20° below zero. We have had 25° below in former years without damage; but only, say, for about one day in the month. There is more railroad building going on now than at any other period. This is induced by low prices of railroad material and the willingness of farmers and citizens to vote bonds in aid. All these extensions and branches will, on completion, fall into the hands of the Western and Southwestern trunk roads, which are stretching far and wide into the "unoccupied territory." Crops of wheat and oats are hardly fair. J. B.

New York.

STOCKTON, Chaut. Co., May 31.—This has been the most forward Spring known to this section for many years. Crops are all in, with few exceptions. Grass is looking well and promises a good crop. The chief industry of this section is dairying. Many new factories are being started. Until this year the factories made cheese; now nearly all have put in separators for the purpose of making butter. The latest ruling price for butter in this vicinity was 14 cents. Prices of produce and feed are:—corn 45 cents; oats 40; potatoes 50; meal per cwt., 90; bran, 80; provender corn and oats, $1; flour from $1.25 to $1.45 per sack.

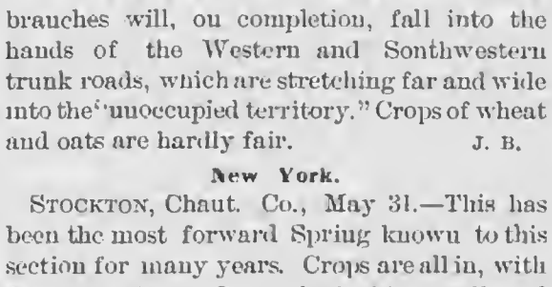
S. M. V.

Texas.

CLYDE, Callahan Co.—The weather has been so dry crops are almost all ruined—no rain for three months, and the ground hasn't been thoroughly wet for 12 months. Wheat and oats won't amount to anything—they're dead. Corn looks very well, but isn't growing much.

G. W. D.

MIDLAND, Midland Co., May 25.—We have not had a good general rain since September. All small grains are failures. Corn and cotton doubtful. Some little garden truck, irrigated from wells. Sheep are doing badly—too dry and too much Morrison tariff. Sheep can't be sold at $1.50 per head. J. S. C.



ANSWERS TO CORRESPONDENTS.

[Every query must be accompanied by the name and address of the writer to insure attention. Before asking a question, please see if it is not answered in our advertising columns. Ask only a few questions at one time. Put questions on a separate piece of paper.]

SUPPLEMENTARY FODDER CROPS.

G. S. S., Middleburgk, Pa.—As clover and Timothy are short, what would be a good crop to sow to supplement the scanty hay crop?

ANS.—Where the clover or the grass are light in a meadow, such places, or a whole field may be mown and then plowed up and sown with millet, and the new crop will be ready to cut for hay in two-and-a-half months; other land can also be used if there is time enough for maturity. Hungarian Grass (which is a smaller variety of millet than the common kind) will also make a good crop of hay. Either may be sown broadcast at the rate of ten or twelve quarts on an acre, and covered with a roller. A peck of seed is ample if the ground is in a fine condition, so that the seed will not be lost. A top-dressing of *fine* manure will send the crop along more rapidly and make a larger yield. Two hundred pounds of some good kind of superphosphate, sown broadcast and harrowed in, will pay well. With a little pains and manuring on the surface in good land, three to four tons of excellent hay may be obtained from millet or Hungarian Grass. There is a coarser and late-growing millet which should not be used. Some seedsmen call this the "German," and the kind with narrower leaves and taller and smaller stems, the "Golden." The latter is the better. In all cases these grasses should be cut *before* the seed matures, and while the stems are soft and green. The crop may be cut with a mowing machine, and left to wilt, and then be put up in tall cocks in which form it will dry nicely. The cocks should not be large but tall and slim, so the air can pass through. It would be well to let the grass lie on the ground till the second day, if the weather is good, turning it over before the first night, so that the dew will come on the green side. If a little salt is strewn amongst it when moved away, it will keep it from heating and do no harm for feeding. In no way can a farmer supplement his hay crop so easily as with millet. All large seedsmen keep the seed, which is cheap. Fodder corn will mature in three months, or less, if the weather is favorable, *i. e.* warm enough. In Pennsylvania it can be put in any time in June or early in July. There should be time enough for it to tassel out before any frost would kill it. This crop should be sown in drills and not too thick, so that every stalk will be fully grown and a a natural one. When grown in this form it is valuable food, but when sown broadcast and so thick that the stalks are mere stems without joints or substance, it is very poor food. The ground for fodder corn cannot be made too rich, and it should be cultivated frequently. This kind of corn will insure a large crop and a rapid growth. It should always be cut and put into stooks before it is touched by frost. When bound up in small bundles and about a dozen are got up in a stook, and a large band put around the top to hold them firmly, this fodder may be left out in the field till wanted, and it will keep well. The stacks may be bound around the top with bands of rye straw twisted together, or with willow twigs. It may be left till a dry time in the late Autumn and then be stored in the barn or in a stack, and in either case it will keep well and make the best of fodder for all kinds of stock.

EVERSION OF THE WOMB IN A COW.

P. W. S., Marksboro, N. J.—My six-year-old cow, a short time before calving, shows symptoms of falling of the womb, and a few hours after she "comes in," the womb comes out, and has to be put back and a stitch or two have to be taken in the vulva; what is the cause and what should be done?

ANSWERED BY F. L. KILBORNE, B. V. S.

The condition being unnatural, there is, of course, a cause for the eversion in every case. But there is not in every case an apparent cause. It may be due to an impoverished, relaxed condition of the system, brought about by insufficient or unsuitable food; to hot, damp, relaxing stables, or to disease. A common cause is the backward slope of the stall, which throws the weight of the abdominal viscera against the organ, forcing it backward. Violence, either in a natural or an assisted delivery, or pulling at the afterbirth may cause the eversion. In some cases, the eversion occurs without any apparent cause, owing perhaps to some predisposition on the part of the animal. In so far as one can remove the causes, there is a cure; otherwise, no. After the mishap has once occurred, it is very liable to occur at each succeeding parturition. Whenever the eversion does occur, carefully but thoroughly clean the organ with tepid water, in which may be added a few drops of carbolic acid or crystals of permanganate of potash. Then return it to place and retain with a truss or by the sutures, the former being preferable; place the animal in a stall with the hind feet the higher, and feed on sloppy or laxative food in moderate quantities for several days. Unless this animal is especially valuable for breeding purposes, we would advise fattening her for the butcher.

REFUSE ANIMAL MATTER AS A FERTILIZER.

T. A. P., South Bend, Ind.—I have bargained for a ton of fertilizer matter once a week for three or four months at $2 per ton. As nearly as I can tell, it consists of blood and a few bones. It smells so bad that I can hardly get close enough to it to tell what it is. The seller says it is the surplus of what he dries, grinds and ships East at $30 per ton. Is it cheap enough where barnyard manure can be got for 35 cents to 50 cents a cord? How should it be handled to keep it in proper shape until it is used?

ANS.—It is not safe to judge of the fertilizing value of any manure by its smell. The strongest and most disagreeable odor which comes from decaying substances, especially from animal matter, is sulphureted and carbureted hydrogen, produced by the decomposition of the carbonaceous matter and the sulphur. The odor of rotten eggs is due to the sulphureted hydrogen given off in the decomposition. The odor from decaying ammoniacal substances is pungent and not always disagreeable; the strong smell of a horse stable, for instance, is caused by volatile ammonia escaping. As to this particular matter, no opinion can be given from the statement, which is exceedingly indefinite. It is quite probable, however, if this stuff consists of the coarser refuse of dead animals, that it is well worth $2 per ton, unless it is very wet. At the price named for barnyard manure, however, there need be no anxiety as to other manures, the price being one that any farmer could well afford to give, even in the fertile West, and he would find it sufficient for every purpose. 2. The best way to manage decaying animal matter and to avoid the offensive odor, is to mix it with earth, and compost it; one load each of the decaying matter and earth would be sufficient, although three times the bulk of earth and a liberal mixture of lime is a common proportion in composting. There is no reason why manure should not be mixed with the compost, excepting that it is unnecessary.

APPLE BARRELS.

F. C. D., Daleville, Va.—1. What is the diameter of the heads and bilge set or tress hoop of apple barrels? 2. What kind of timber is best for staves; also for heads and also hoops? 3. What machines are used for making the staves?

ANS.—Two sizes of barrels are used in Western New York, one having a head 17 inches; the other one 16½ inches, in diameter. For the larger heads, "tress hoop" should be 17¼ inches; for the other, 17 inches inside diameter. The bilge hoop of the larger barrel should be 20 inches, and that of the other 19½ inches in side diameter, to give the barrel the proper shape. 2. Elm is the best timber for staves; but beech, soft maple, birch and ash are sometimes used; in fact, almost any timber that does not warp too badly will make staves. Heading is made of basswood, soft maple and beech. It can also be made of other kinds of timber. The hoops are made of ash or elm; but could be made of any tough timber. 3. Staves are cut of the proper thickness by a machine, from "bolts" (blocks split about six inches thick and of any width the timber will make). The bolts are put into boxes and thoroughly steamed through, and are then, while hot, cut into staves, and these sawed of the proper length and then piled in open piles to season, after which they are "jointed" by another machine which shapes the sides, so as to give the desired bilge to the barrel. Many machines are made for cutting staves, and all work with an up-and-down stroke. The heads are sawed by a saw running very fast and cutting lengthwise of the timber, which causes them to cut very smooth. They are afterward seasoned and then put into a machine which planes one side; after this they are jointed straight on the edges, and then "turned" by a machine of the proper size for the barrel. The hoops are made by hand and also by machinery. The hand-made are much the best, but cost considerably more than the others.

STRAINED SHOULDER MUSCLES IN A MARE.

F. C. McC., Beech Grove, Indiana.—What should be the treatment of a mare which, eight months ago, strained the inside muscles of the shoulder; effects never very severe, but more so at some times than at others?

ANSWERED BY F. L. KILBORNE.

Allow the animal a period of rest in a large box-stall or small inclosure, and apply a mild blister of equal parts of strong ammonia and sweet oil over the seat of the sprain. When the effect of the first application has passed off, repeat, if the animal is improving. If there is no improvement apply a more powerful blister, such as two drams powdered cantharides, one ounce of lard and five to ten drops of strong spirits of camphor. Cut the hair close and rub the blister well in against

the direction of the hair. Tie the animal so that she cannot rub the blistered surface with her mouth. When the blister is well raised (12 to 24 hours) carefully wash with Castile soap-suds, and anoint daily, until healed, with vaseline. Repeat this blister if necessary, or, this failing, try firing in points with the hot iron. At the outset it would be well to have applied a high-heeled shoe to relieve the strain.

PROPAGATING RASPBERRIES, ETC.

W. H. L., Harrisonburg, Va.—The best and most rapid way of propagating raspberries is by root cuttings. Take up the plants in the fall and cut the roots into pieces from one to three inches long. Then prepare boxes by boring holes in the bottom to insure drainage, placing little stones or bits of crock over them. Then cover with two inches of soil, then a layer of the root cuttings, and so on until the box is full. Bury this box in any dry soil so deep that the roots will not be frozen. It is well to cover with boards to carry off the water. In the Spring plant the roots in rich soil about three inches apart in drills, covering them three inches deep. If the cultivating is to be done with a horse, the drills should be three feet apart; if by hand, 18 inches. It is well to cover with mulch after planting to insure moisture. Of course, the cuttings may be made in the early Spring, but Mr. A. S. Fuller and other authorities prefer Fall as the roots callus during the Winter and thus start more readily. The Meshannock Potato is the same as Mercer we believe. It is not offered for sale that we know of.

MAKING AND KEEPING A PERMANENT MEADOW.

C. P., Trenton, N. Y.—A well fertilized piece of land has been seeded down with oats as a permanent meadow so long as it can be kept so without barnyard manure—soil, a gravelly loam—can the land be kept in good heart by the use of commercial fertilizers? How should it be treated?

ANS.—There will be no difficulty in keeping a permanent meadow in good condition if the right grasses and the proper treatment are used. There are Blue Grass meadows in Kentucky that have been in use for a century, and others in Europe that are hundreds of years old. Orchard Grass fields 40 years old are now in good condition and promise to continue so as long in the future. Orchard Grass, Meadow Fescue, Perennial Rye Grass, Yellow Oat Grass, Kentucky Blue Grass and Timothy, at the rate of six pounds of each per acre, will make a very good selection of seed. If the land is thoroughly well prepared before seeding, and the grass is kept reasonably well manured or fertilized and a little fresh seed is given every three or four years, the meadow may be expected to last a lifetime.

TEATS GROWN TOGETHER.

S. E. B. Endora, Kan.—My two yearling heifers have teats grown together, caused, I think, by their sucking each other. In other respects the teats are all right. Is there a remedy?

ANS.—If only slightly grown together they may be carefully dissected apart with a sharp knife, and kept apart until healed, by a light bandage around the body with a separate opening for each teat. Slight bleeding may be checked by touching the surface with a stick of lunar caustic or a solution of copper sulphate. While healing apply daily a dressing of vaseline, or an ointment made by mixing equal parts of almond oil and spermaceti. The operation should be performed before the heifer comes in milk.

STERILE COW AND BULL.

M. R. S., Pine Bluff, Ark.—A 10-year-old cow took the bull in Jan. 1885, but she has never since been with calf. She has been in good health all the time and still gives milk; can anything be done for her? A two-year-old grade Jersey bull, well formed and rendering good service apparently, fails to get calves; is he likely to continue worthless?

ANS.—There is probably no cure for either case. Before condemning them, however, it would be well to consult a competent veterinary surgeon, since the cause of the sterility may be removable.

Miscellaneous.

"Hired Man," Kirkland, Ill.—The inquiry about working corn is not one we can answer decisively. The land may or may not have been too wet. Harrowing young corn certainly pulls up many plants, and that's the end of them. If merely broken off, they would continue to grow. We do not think that the soil thrown into the young leaves' "cups" would deprive the plants of any moisture.

R. G. M., Dell Roy, Ohio.—The squash grub borer can be driven away by using a solution of two ounces of saltpeter in 1¼ gallon of water. The liquid is poured around the stem and roots with the double effect of killing the bugs and fertilizing the plants. Soot blown through bellows upon the vine and roots is also recommended. Gypsum and kerosene, in the proportion of two quarts of the former and a tablespoonful of the latter, sprinkled on the vines, will prove effective.

P. S. B., Plainville, N. Y.—What ails my 12-year-old horse? He is in good condition and has always been a good worker; but now, after working well a few hours, he acts as if tired and weak—breathing short and quick. He eats all right, except that he will pull his hay out on the floor and eat with his head down. Slabbers considerably.

ANS.—From your description it is impossible to say definitely. Try turning the horse on pasture for three or four hours daily, or feeding grass, roots or mashes twice daily. Work moderately, and when the animal shows signs of fatigue, take him from the harness and let him rest. For the slabbering examine the teeth to see that none are diseased or decayed. The pulse is normal?

J. C. O., Somerset, Ky.—What is the proper time to cut Clay Cow-peas for fodder and to be plowed under as green manure?

ANS.—The best time to cut Cow peas for fodder is when they are in blossom, or when the blossom is beginning to fade. The plant then contains the largest quantity of nutritous substance, which is chiefly sugar. After this, the soluble carbonaceous matter is converted into indigestible cellulose or woody fiber. As the most benefit from green manuring is derived from its action upon the soil during its decomposition, and the nitrogen it contributes, a green manure crop should be plowed in at the same period as that in which it is most valuable for feeding; viz. when in fullest blossom. This applies to all sorts of green manure crops.

C. C. M., Akron, Ohio.—My six-months-old pig eats heartily, and is all right except that it walks lame and is cross-legged in its front feet; what should be done?

ANS.—Give it two tablespoonfuls of castor oil. Feed sparingly, especially of grain. Green food and milk, with slops from the kitchen, will be good. If convenient turn into a dry, shady yard or field.

G. W. D., Clyde, Texas.—1. There is no way of budding grapes. 2. Grapes that thrive in your section are Concord, Cynthiana, Delaware, Goethe, Herbemont, Lady, Lindley, Martha, Moore's Early, Norton's Virginia, Perkins and Triumph. Agawam, Brighton, Early Victor, Elvira, Hartford, Iona, Ives, Massasoit, Merrimac, Noah, Prentiss do well in parts of Texas.

J. A. W., Maple Grove, Ont., Can.—Personally we know nothing of the Kelsey Japan Plum. Mr. Kelsey of Cal., imported it from Japan, in 1871. It is said to be over-productive, and to bear early. The fruit is large, heart-shaped, yellow and red. It is of good quality. Perhaps Dr. Hoskins, or some of our Canada friends, will tell us as to its hardiness.

J. G., Washington, N. C.—About bagging grapes:—We fancy cloth bags induce mildew Paper bags cost from $1 to $2 per thousand—what are known as two or three-pound bags, as needed. Our experience is to bag when the berries are the size of No. 5 shot.

Subscriber, Buckingham Co., Va.—The plant sent for name is Lithospermum arvense—Corn Gromwell. Native of Europe. Worthless.

J. D. S., Whitewater, Wis.—The plant sent is Orchard Grass—Dactylis glomerata.

DISCUSSION.

M. R. S., PINE BLUFF, ARK.—The RURAL (page 323 in Farmer's Club) says: "The peach tree bears fruit only on the young shoots of the current year's growth." It is evidently meant that the fruit buds were formed on the young shoots.

R. N.-Y. We meant to have written "preceding" instead of "current."

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING June 5, 1886.

H. S. M., Jr.—J. A. S.—H. T.—C. A.—A. E. S.—S. J. M.—L. T.—D. H. H.—A. S.—J. W. H.—N. J. S.—F. H.—T. J. H.—J. W.—J. B. F.—G. M. W.—J. J. S.—L. C.—C. M.—R. P.—W. A.—R. P. V. H., thanks.

Miscellaneous Advertising.

Dyspepsia

Does not get well of itself; it requires careful, persistent attention and a remedy that will assist nature to throw off the causes and tone up the digestive organs till they perform their duties willingly. Among the agonies experienced by the dyspeptic, are distress before or after eating, loss of appetite, irregularities of the bowels, wind or gas and pain in the stomach, heart-burn, sour stomach, etc., causing mental depression, nervous irritability and sleeplessness. If you are discouraged be of good cheer and try Hood's Sarsaparilla. It has cured hundreds; it will cure you.

Hood's Sarsaparilla

Sold by all druggists. $1; six for $5. Made only by C. I. HOOD & CO., Lowell, Mass.

100 Doses One Dollar

Stock and Poultry.

CHANNEL CAN CREAMERY.

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Send for Catalogue of Thermometers, Lactometers, Creamometers, and Thermometers for Incubators.

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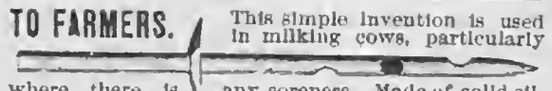
720 CHESTNUT STREET, PHILADELPHIA, PA.

TO FARMERS.



This simple invention is used in milking cows, particularly where there is any soreness. Made of solid silver, and sent by mail to any address on receipt of the price, 50 cts. Address The Milking Tube Co., 102 Friendship Street, Providence, R. I.

FOR sour stomach use Warner's safe cure.

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FOR fat covered eyeballs use Warner's safe cure.

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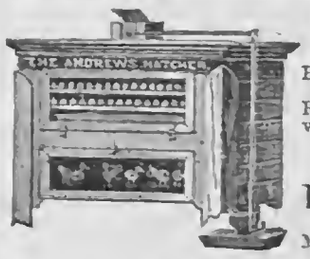

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ST. HELIER HUGO POGIS, No. 15550; Grandson of STOKE POGIS 8d; Sire of MARY ANN OF ST. LAMBERT, 9770. With butter record of 36 lbs. 12 oz. in seven days. Terms **$50.**

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Also, a fine Draught Gelding, five years old, buckskin color; fine back; sired by Scotsland Glory. Price $300.

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Breeders of Wyandottes, P. Rocks, White and Brown Leghorns and Pekin Ducks. No more stock until Sept Eggs for hatching until July 1st. Agent for Poultry Culture by I. K. Felch.

Imp. Scotch Collie Dogs bred direct from Tam. O'Shanter and Imp. Gotta. Send for circular.

WESLEY B. BARTON, Pittsfield, Mass.

P. S.—4 fine Collie pups for Sale. References.—I. D. Ferry, cashier Agricultural Bank, Pittsfield, Mass.

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INTELLIGENT BREEDING PAYS! BLYTHECOTE STRAIN OF WYANDOTTES.

Annual improvement sought by careful matings selected from the best. One setting of choice Eggs will produce more first-class birds than ten settings from inferior stock. A limited number for sale from the above yards this Season. Price, $3 per Setting of 13; Two Settings, $5; Five Settings, $10.

Address J. D. TOMPKINS, Brainard, N. Y.

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"I know it will cure Gapes. I never lost a single chick after I began to use it."—J. WESLEY STILLWELL, Freehold, N. J.

"These men are reliable."—W. S. STRONG, Mayor, New Brunswick, N. J. [City Seal.]

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SATURDAY, JUNE 12, 1886.

By request of the Editor of the R. N.-Y., Henry Stewart will next week begin a short series of articles, entitled "THE DARK SIDE OF FARMING."

IN one row of blackberries, we have the Early Harvest, Taylor's Prolific and Early Cluster. The last (at this time, June 2d) bears the most blossoms—Taylor's next and Early Harvest last. The Early Harvest was more injured by the past Winter than we had supposed.

WE have this season 66 different kinds of strawberries, as stated, growing at the Rural Grounds. Our first lot of ripe fruit was picked from Iron-Clad June 3. The berries are variable in size and shape, but firm and of good quality. The plants are moderately vigorous.

THE pear Duval (Beurré Duval) illustrated on page 383, was sent to us by Gen. Noble, of Connecticut late last Fall. It is a Belgian pear, named after the originator. The tree is vigorous and productive. The fruit is from medium to large; skin yellow, dull brown in the sun, with patches of russet and many brown dots. The flesh is nearly white, juicy, melting, sweet and agreeable. Its season is October.

WHEN corn sets appear, cut out all barren stalks—those which have no sets—and feed them to the farm animals. These barren stalks all bear tassels, and these, just the same as the fertile stalks, mature pollen which is wafted all over the field to mate, so to speak, with females which would otherwise be impregnated with pollen from ear-bearing stalks. In this way the fruitfulness of our corn fields is reduced. If not practicable to cut off the tassels of all the barren stalks in a given field, try it upon a part of the field, and from this the seed corn may be selected for another year. For ten years past we have raised a plot of corn, about a twentieth of an acre in area, for the purpose of ascertaining to what extent prolificacy can be increased by such means. Those who visit the Rural Grounds this Summer may see the results.

THE American Nurserymen's Association needs an energetic man for its Secretary; one who is filled with an appreciation of the good the society can accomplish other than as a mere organization for the sale of nursery stock. We want the society to be a body that will benefit the public as well as the trade. The office of Secretary entails an immense amount of work, and as the pay is trifling, it is hard to select the right man who would be willing to accept of the position. It has been suggested to us that Mr. Herbert Myrick, Editor of the Farm and Home, a young man of good executive ability, untiring energy, and well fitted for the work by education and taste, would be the right man. We hope the position will be tendered to him, and that in view of the value of the services he is capable of rendering, he will accept it.

EVERY farmer should know enough about politics to protect his interests. There is no reason why professional politicians should have a monopoly of the business. Steal the doctor's business by regarding the laws of health. Drive the lawyers out of business by thinking a dozen times before you go to law. Starve the politicians into some honest work by thinking and acting for yourself. Attend all primaries, and do your best to send honest men to represent you. It often happens that one vote at a caucus is worth a dozen at the general election. Whenever voters get careless and negligent, crime is sure to creep into office. The people wait in silence for a time and then rouse, with a mighty effort, and clean the public service. Then after a short period of watchfulness they grow easy again, and the same story is repeated. Let every farmer become a politician on a small scale; know what is going on; keep informed. When a candidate comes about smiling and shaking hands, don't let him take you by the nose and lead you up to the ballot box. He will do it if he can. Understand him, and he never will dare to do it.

HOW BEST TO TREAT THE POTATO BEETLE.

AGAIN some writers are talking of the economy of hand-picking potato beetles. "If this is well attended to, there will be no eggs deposited on the leaves," they say. Do they write from experience, or do they write such stuff because it seems plausible. Years ago, we diligently picked off and killed, once every day, every potato beetle to be seen on a patch 200 feet square, and yet there were, so far as could be judged, just as many eggs deposited and hatched as if this tedious work had never been done; while the soil between the rows was kept hard by being walked over so often. The fact is that the beetles are to be found in every crack of the soil, under little clods and stones, about the stems and creeping everywhere. One may pick off all the beetles from the plants at 10 o'clock, and at 11 they will be as thick as ever. Hand picking destroys just so many beetles certainly and there are just so many less; but it is like removing a mound of earth pebble by pebble, or emptying a tub of water drop by drop. The work has no appreciable effect. We have tried every method of killing potato beetles. For one entire season we tried London-purple, but found that if applied the least bit too strong, it would injure the foliage. Paris-green and water is also injurious to the foliage, because the water collects wherever the leaf will hold it, and evaporates, leaving a film of Paris-green. We now use pure Paris-green and plaster—one pound to a barrel of plaster—and see that it is thoroughly mixed with rake and hoe. The first application is made as soon as the plants get well out of the ground, and the second, when the beetles begin to deposit their eggs, and the third, when the grubs make their appearance. A fourth application is not needed for early potatoes.

PROGRESS OF THE RYE-WHEAT PLANTS.

THE development of the RURAL'S rye-wheat hybrids is far more curious and interesting this season than in any previous year. Those plants which "most resembled rye," as we have designated them, have hitherto varied to a trifling extent as compared with the others, which resembled wheat more than rye. We selected the best heads of the former, as already stated, and planted them in a plot of about one-twentieth of an acre. The heads in shape were rather narrow, tapering, half-bearded—the tops of the stalks of all were downy. It is a matter of very great surprise to us that in this plot there is such a variety of heads that if evidence were suddenly placed before us that all of the varieties of wheat in cultivation sprang from accidental crosses between rye and wheat, we should accept it as in harmony with the appearance of these plants. The down does not appear upon the culms of some, while others are covered more thickly than the parent stems. Some of the heads are beardless, others as much bearded as barley. Some heads are of the shape of Clawson, or the female parent, Armstrong; others are club-headed, with and without beards. Our readers must remember that this twentieth of an acre of plants, so strangely dissimilar, all originated from a *single seed*—one of the ten kernels which four years ago was the result of crossing rye upon wheat. The three-quarters rye-wheat plants (the cross made last year by again using rye pollen upon these hybrids) all differ from one another. There are 14 plants. We shall select some of the best heads and again attempt to cross it with rye, which, if successful, will make the progeny seven-eighths rye. If, as judged by appearances, we were finally to produce rye plants by the continued use of rye pollen, would this prove that wheat and rye were of the same origin?

CAN WHEATS CROSS NATURALLY?

IT has been assumed, and the writer was one to do so, that wheats naturally are invariably self-fertilizing; that the pollen of the three anthers is shed upon the feathery stigma before the anthers push their way between the close-fitting palets or envelops. That this is generally the fact, there can be no doubt. Two years ago we first noticed that these palets gaped open in exceptional cases before the anthers had burst, and the present season we have spent a good deal of time in observing how often and why this occurs. Now and then the top of a spike of wheat will get caught in the sheath or "boot." The head or spike is then bent over—sometimes nearly double—and the flowers are sometimes twisted or bent apart. Insects or birds in some cases injure a flower so that the sexual organs are exposed. Again, a flower will gape open without any cause whatever, that the writer can discover. Some of our rye-wheat hybrids have been and are virtually sterile. Nearly all the flowers open their mouths (so to speak) wide, as if, in their sterility, they were praying for aid to perpetuate their kind. In all these cases (except the impotent hybrids) the pollen ripens as usual, and 99 times in 100 is shed upon the pistils of the open flower. Still, it is conceivable that foreign pollen might be carried by the wind or insects and effect crosses. We are just as positive that such instances rarely occur as that their occurrence is *possible*. The chances of natural crosses are perhaps the same as those of a given house being struck by lightning. This subject has its practical value. We often hear of a new variety having been found in a field of Clawson, Diehl or Mediterranean. Nineteen times out of 20, such novelties prove to be old varieties well known in England, Germany, Russia or elsewhere. But in the twentieth case, the new kind may prove a true, natural cross-bred wheat.

"OLEO" IN THE SENATE.

THE Oleomargarine Bill passed the House on Thursday by a vote of 177 to 99. The party division was: ayes, Democrats, 81; Republicans, 96; nays, Democrats, 84; Republicans, 15. The votes from the New England States were 17 for and 4 against the bill. In the Middle States New York gave 20 yeas, and 7 nays; New Jersey, 4 yeas, 2 nays; Pennsylvania, 20 yeas, 4 nays; Delaware, 1 yea; Maryland, 3 yeas; total, 48 yeas and 13 nays. The Southern States, including Kentucky and West Virginia, gave 21 yeas and 66 nays. The Pacific States gave 7 yeas and 1 nay. The Western States, including Missouri, were the chief supporters of the bill, giving 84 yeas and 15 nays. The tax was reduced from 10 to 5 cents per pound, and the provision giving a moiety of the fine to the informer was stricken out; otherwise the bill remains the same as epitomized by us. Its fate in the Senate will depend chiefly on the committee to which it may be "referred." If referred to the Finance Committee as a revenue measure, it is thought it will be pigeonholed; if to the Agricultural Committee, it will certainly be favorably reported, and if the producers and eaters of genuine butter act energetically it will probably pass. But will the President sign it?

ONE point about the bill should not be overlooked. It has served to illustrate the possible strength of the farmers of this country as nothing has ever done before. Petitions and resolutions by the thousand have been poured in upon Congress and many a vote has been influenced by this popular demonstration. For years it has been considered the thing to advise farmers to "combine" and to demand their rights. The loudest shouters have very carefully neglected to inform the public how these "combinations" were to be made. To our mind the recent postal bill and the present oleomargarine bill have given farmers the most practical chance of asserting their rights that they have had in years. City Congressmen can afford to snap their fingers at the petitions of farmers, but the great majority of our legislators are created by farmers' votes, and they have common sense enough to understand it. For this reason we advised every cow owner and every butter eater to take a hand in the "oleo" discussion. We are glad to see that our remarks were so well heeded. Let the good work continue. Your Congressmen is not a bigger man than you are—you made him. We are getting into practice, friends, and "practice makes perfect,"

OUR SCHOOLS.

IN many places, much dissatisfaction exists with the present system of public education. In too many country school districts the course of education is almost a farce. A new teacher comes with every term, the school officials take little or no interest in the school, and the ill-feeling and animosity that exist between various families in the district are brought into the school-room. These failures should not be. The country school ought to do better work than the city school. In good districts where sensible and liberal-minded men are put on the school board, and where all take an interest, a school is maintained that is a credit to the community. Such a school not only tends to create a sound public sentiment, but it enhances the value of property. The old practice of electing the last man to move into the neighborhood, to any vacant position on the school board, is still in vogue in many districts, and a more ridiculous proceeding is hard to imagine. Too many of our town and city schools fall into the management of politicians, and favoritism is rampant in the selection of teachers. The average country teacher works simply to secure his wages. Unless he is watched and directed, there will be few grains of wisdom for the pupils. The average city teacher is generally a person who would be a most complete failure in any other branch of business. He seems to go upon the principle that all his pupils are to become teachers. In fact, he is only capable of teaching his trade just as the carpenter and the blacksmith would teach their trades. It is beginning to be generally felt by all, except professional teachers, that there are too much system and form and worthless routine about the common school education. This fact is evidenced by the fact that in all large places private schools are increasing in size and number. Many practical people are in favor of conducting our city schools in connection with workshops or places where pupils could learn the rudiments of business. The design is to shorten the hours of study, and put more time to practical work. It is justly claimed that the average workman seldom receives an adequate return for the time spent at school in studying geography or "language." When so many millions are devoted each year to the cause of education, it may be well to see if this education cannot be improved upon. Country schools can be the most easily and quickly improved of any. Every resident of a district should feel an interest in school matters, and do his best to rectify existing evils.

BREVITIES.

OUR first ripe strawberries for this season were found upon the Iron-clad. But there are better kinds.

A FARMER near the RURAL'S Ex. Grounds, has lost 130 chicks out of 150 with gapes. He can't account for it.

THE Convention of the American Nurserymen's Association will be held in Washington, D. C., June 16–18, inclusive.

THERE are this season 66 different kinds of new strawberries growing at the Rural Grounds. We have had as many as 110.

NEVER before have potatoes at this day (June 1st) been so far advanced. The season has been very favorable. The experiments with different chemical fertilizers and all sorts of combinations thereof promise to confirm the interesting results of two years ago.

The Bangor Blackberry (new), a semi-recumbent variety, is blooming freely from spring-set plants. The Earhart Raspberry, the plants set in November of last year are full of sets. We are in hopes this variety, for which so much has been claimed, will not disappoint those who purchase it.

THE summer meeting of the Michigan State Horticultural Society will convene at Lansing, on the evening of June 15, at 7:30—headquarters Hudson House. The topics to be considered will cover small fruits. The meeting will continue through the next day, closing with an evening session.

READERS of the RURAL will recall that we have repeatedly and earnestly tried to guard them against selecting the Norway Spruce and Balsam Fir for their lawns or farms. Prof. Sargent says, and we have no better authority, that "the Norway Spruce, in spite of its early promise, must be acknowledged to be a complete failure in Eastern America." And the Balsam is worse.

AFTER all, the worst of the striped melon beetle is that it lays its eggs upon the stems of melons, squashes, cucumbers, etc., and the grub which hatches out eats into the stems and our plants all at once die. Nothing better than pouring a small quantity of the kerosene emulsion about the stems of the plants to keep the beetles away has been devised.

A SUBSCRIBER favors us with the following remarkable bit of rhyme:

"O say do you see by the dawn's early light,
The crow in the corn field appearing,
Where the wire-worm has been gnawing through the long stilly night,
And the gopher his head is uprearing;
While the chipmunk comes out from the old rotten stumps
And the cut-worms so festive the blades are a-climbing,
And the blackbirds all gathered in the poplars near by,
While their notes are a-chiming;
Yet in Autumn the corn stalk in triumph shall wave,
O'er the field of the free, and the land of the brave."

A COTTON-PICKER has at last been invented which appears to promise fair results. It is in the form of a bulky box filled with revolving spindles or picker stems. The machine is driven directly over the rows, and the lint catches upon the spindles, and is thus drawn from the stalks. It is thought that some 75 per cent. of the lint can be thus gathered; what remains on the stalks must, of course, be picked by hand. A successful cotton-picking machine means a revolution in cotton culture at the South. At present the planter is at the mercy of his laborers. With a successful picker the work could be brought into the hands of a few trusty workmen. Quicker and more economical methods of planting and cultivating the crop will be adopted. The vast army of negroes and poor whites who now live on the cotton fields will be forced out of employment, and made to adopt some other work and a more diversified farming system.

The Herdsman.

JERSEY COW TINY.

THE animal shown at Fig. 153 won the gold medal at the show of the British Dairy Farmers' Association in 1885. She is a dark gray, and was calved in February, 1878. She produced a calf on June 5th, 1884, and was in milk for 44 weeks three days, when she gave 8,957 pounds of milk (10 pounds to the gallon). She calved again on May 30th, 1885, and was in milk 44 weeks five days, yielding 8,172 pounds of milk. During this latter period, she made three journeys—to Southampton, to the Royal Counties Show, where she was highly commended; to Tunbridge Wells Show, where she was also highly commended; and in October to the London Dairy Show, where she took the gold medal of the English Jersey Herd Society and second prize of the Dairy Farmers' Association, the first going to an Island-bred cow. She was in equal milking form when she had this her sixth calf, and it is believed she would have equaled or exceeded her former yield then, but her three journeys from home were much against her. She fell off nearly two quarts in her daily milking at Southampton, about a quart at Tunbridge Wells, and at the London Dairy Show nearly two quarts.

AYRSHIRE CATTLE.

I AM often asked why I keep Ayrshire cows, when other breeds are more fashionable. Now I am located in that region in Michigan where every inch of ground not under tillage, soon becomes thickly sodded with Kentucky Blue Grass. Even the wood lots will ultimately become sodded with it. All who know its habits have learned that it affords an abundance of excellent pasture, but is "short-biting." My cattle run in the wood and fallow pasture till after haying, and find good eating.

One acre of clean sod will furnish pasture for one cow during the Spring and early Summer, if she has the ability to eat every bit of it. To this work the Ayrshire is well adapted. I have only grades, but find them hardy, healthy, and profitable. They will, like a mule, eat any thing that ever bore a green leaf. They respond liberally to good care and feed; and, if not fashionable, they possess many sterling qualities for which they are appreciated. I know of no breed that will graze over so large a range and do so well on the short grass that here springs "unbidden" from the ground. All breeds have their good points, Ayrshires with the rest. They cannot be turned off for beef at so early an age as can the beef breeds; but they are fairly profitable for that purpose. Their fat, like that of all other dairy breeds, is laid on in the inside, and they dress better than their looks indicate. Ill health and accidents are seldom heard of among Ayrshires. At this season my little herd, two-thirds of which are heifers or farrow cows, are making a pound of butter apiece daily on pasture alone. They are one-half and three-fourths grades, and make nearly double what natives did under like conditions. The herd has not yet been improved by selection. Ayrshires may be set down as being among cattle what mules are to horses—born into the world without their knowledge or consent, and determined to stay here till old age takes them off. Let each one study his own circumstances and choose accordingly from among the many breeds, not to please some pet theorist who has pedigrees to sell. EUGENE DAVENPORT.

Barry Co., Mich.

Miscellaneous.

CATALOGUES, ETC., RECEIVED.

KALAMAZOO CELERY.—A pamphlet of 30 pages from G. Bochove & Bro., Kalamazoo, Michigan, price 50 cents.—Kalamazoo celery is famous, not perhaps as is stated in this pamphlet, "through the inhabited portion of the earth," but throughout a large portion of our own country. The object of this pamphlet is to give, in a few words, the methods of cultivation and care that have led to this reputation. The work is well done. There is not a superfluous word in the pamphlet, and yet the facts are all given, from the selection of the soil, to the marketing of the crop. A mucky soil is preferred. Around Kalamazoo the muck has a depth of from one to ten feet. The people engaged in the cultivation of the plant at Kalamazoo are mostly Hollanders. As a rule each family works from two to three acres. The land is drained by open ditches two or three feet deep, one foot wide at bottom and three feet wide at top. With this slope, the freezing and thawing of Winter will not break down the sides. Celery is of no better quality for deep drainage. On some of the best celery land the crop grows within 18 inches of standing water. If the plant itself is covered with water for two days, however, it will be destroyed. The ditches are placed from three to five rods apart. They are dug in the Fall with spade or plow. On very soft land wooden shoes six or eight inches in diameter are placed on the horses' feet. Well rotted stable manure is used, a layer about two inches thick being plowed or harrowed in. One ounce of seed will give from 5,000 to 10,000 plants. For the early crop the seeds are sown in the hot-bed in March and transplanted in late May or early June. This crop is sold during July and August. Too early sowing is said to cause the plants to run to seed, making them tough. For the main crop the seed is sown at intervals of every few days from April 20 to May 20. The seeds are sown broadcast in small beds in the mellowest and best pulverized spot to be found. When the plants are about two inches high, transplanting begins. This must be done on a cloudy day or late in the afternoon. The plants are set five inches apart. The leaves and points of the roots are cut off. When the sun shines, no watering is done before 4 P. M. Rows are placed from three to four feet apart according to the time desired for marketing. If for winter use the rows are close together. The dwarf varieties are mostly raised. Some lands are able to produce three crops in one season. Blanching is done with muck or with boards. In the first instance the soil is drawn towards, but not against the celery. The leaves are then lifted and straigthened and the ground pressed to the celery with the hands. No dirt should fall into the heart of the plant. About five days after the first cutting, more muck is drawn towards the plant—almost to the leaves. Two men are required to blanch with boards. The boards are from 10 to 12 inches wide, one inch thick, 15 to 18 feet long, and free from holes. These boards are placed on both sides of the rows, close up to the plants. Earth is drawn up to the bottom of the boards, while at the top they are fastened with wire or notched pieces of wood. The boards are left about two-and-a-half inches apart. Blanching requires from 10 to 20 day. The celery is stored in "coops" or in trenches.

FARMING IMPLEMENTS.—Catalogue from the Ames Plow Company, Quincy Hall, Boston, Mass.—Our readers need no introduction to this company. Any man who has ever handled a hoe or a shovel has read their advertisement on his implement. It is useless to say that the company is one of the most reliable in the world, and that its implements are in every respect first-class. Almost every known agricultural implement is manufactured by this company. All are well described in the catalogue. We call particular attention to the "American" Hay Tedder. The practice of "tedding" or turning hay by machinery is becoming more general, even upon the smaller farms. Where a large amount of hay is to be secured, the tedder is considered an indispensable piece of machinery. The great object in hay making is to shorten the time between cutting and stacking as much as possible. A drying wind is almost as effective an agent in curing hay as is the sun itself. Tossing or lightening the swaths admits the air and sunshine more freely. By the aid of a tedder, a horse can do the work that formerly required half a dozen men and boys. The American Tedder has been thoroughly tested, and has given universal satisfaction. It is simple and easy of draft. It has won many first premiums, and is highly recommended by hundreds of practical farmers. Send for the catalogue.

UNION WIND-MILL AND MANUFACTURING Co. T. H. Loomis, General Eastern Agent, 11 Caledonia Avenue, Rochester, N. Y., or Union Wind-Mill Co., Albion, Michigan.—An illustrated catalogue of Wolcott's Wind-Mill, Feed Mills, Corn Shellers, Stalk Cutters, Wood Saws, Pumps, Tanks, and fixtures for farms, railway, village and ornamental purposes. Our friends must send for this catalogue if they would learn the particulars of the goods manufactured by this firm. The Wolcott Wind Mill is known to do good work in all kinds of weather. It is one of the best self-regulating mills made; its construction is of the simplest and it is therefore durable. It is claimed, also, that this wind-mill presents a greater surface to the wind than any other. It is designed to work at the same rate of speed in light as well as in strong winds. The Company agrees to furnish, free of charge, any part or parts necessary to make good any defect in workmanship or material used for one year. The company's Geared Power Mills for grinding feed, shelling corn, sawing wood, churning, elevating grain, etc., are highly praised.

FIELD FORCE AND LIFT PUMPS.—Catalogue from the Field Force Pump Co., Lockport, N. Y.—It pays to spray orchards with a poisonous mixture of Paris-green or London, purple. That point has been fully decided. Few fruit growers would think of raising a fair crop without the aid of these poisons. As stated by us last year, we do not know of any force pump of equal price, that will do better work than the Field. It is particularly well adapted to orchard work, being strong, simple and easily handled. We advise all who are desirous of obtaining a pump of this character to send for this catalogue and study it. The information contained in it regarding the destruction of insect pests will far more than repay the writer's trouble.

SIXTH ANNUAL REPORT of the New Jersey State Ag. Ex. Station, New Brunswick, New Jersey, Prof. Geo. H. Cook, Director.—The Station has analyzed 239 samples of fertilizers, the list, with the manufacturers' names and guarantees appearing in full. There is a fund of information in this work for all who choose to study chemical fertilizers. Field experiments of many different kinds, feeding systems, feeds and fodders, reports on vineyards, sweet potatoes, sorghum, peach trees, etc., etc., are presented in an instructive way. We shall endeavor to quote from this Report at an early day, for the benefit of those readers who may not procure the entire Report.

JERSEY COW, TINY. Fig. 252. Re-engraved from the London Live Stock Journal.

TOBACCO SMOKE FOR GAPES.

A sure cure for gapes in poultry I have found in tobacco smoke. After having spent hours each day fishing worms from the throats of hundreds of chickens with horse hairs, Timothy heads, and feathers, I found tobacco smoke much more effectual and infinitely less troublesome. Place the affected chicks in a box with the lid on top and an open space on one side for the entire length of the box for ventilation and feed and water. Fill a large pipe with tobacco, light it, place a piece of muslin over the bowl, and blow the smoke into the box until the chicks begin to settle down. Be sure they do not smother. Repeat the operation two or three times; then cover them with a cloth. Three such performances, in 24 hours will almost always effect a cure. Keep them the entire time in the box, feeding and watering them from the outside. The entire litter should be smoked as soon as one is noticed scratching its noze or sneezing. A small-sized bee smoker is useful for those who cannot stand tobacco smoke themselves. W. H. B.

Dover, N. J.

[This is essentially Col. Curtis's method given in these columns several years ago.—EDS.]

TWO NEW GRAPES.

Mr. Wm. E. Green, of Vermont, originator of the Vergennes Grape, has originated a new variety called Early Delmonico. It resembles the Brighton. He says it is the earliest grape he knows of, and that it is superior to the Vergennes or Brighton. He also has a new black grape, called Montreal, that is superior to the Concord. O. H. ALEXANDER.

A VOICE FROM TEXAS.

The strikes ought to teach us lessons in political economy. It is high time we began to study the labor question. The distribution of labor lies at the very root of the matter. We can only wonder why so many people of moderate means persist in living in the cities when Nature has so lavishly provided for their maintenance and independence in the country. Sober and industrious persons could easily make homes here. Our large ranch owners are ready to help parties with small means to invest, by giving them an interest in their herds and helping them to a home. The trouble is that people want too much. They expect to come here with nothing, and in a few years to go back to their old homes and buy and sell all their old neighbors. This cannot be done in this age, and, consequently, many become discouraged and will not half try. The only successful immigrant is he who goes "for good," determined to cut away from the old home entirely and to build a new one. Would that thousands of the poor city people could be induced to settle here! I do not suppose they ever will. Country people move to the city far oftener than city people move to the country. T. H.

Comfort, Texas.

Woman's Work.

CONDUCTED BY EMILY L. TAPLIN.

OUR BABY.

WHAT is most like her, our baby sweet?
Strayed from the skies on yester-even,
So newly come that her dimpled feet
Still are missed in the gate of Heaven,
Where the angels kissed them and bade them go.
What is most like her? Don't you know?

The bud of a rose, of a moss rose fair,
Flushed and dainty, a folded flower,
The blossom a woman is fain to wear
Over the heart. May sun and shower
Brim her cup to the overflow
With dewy perfumes, if this be so!

Or call her rather a nestling dove,
That fluttered down through the moonlight amber,
To be brooded under the wings of love,
Here in a hushed and happy chamber.
May never a stain of our earth below
Dim her plumage, if this be so!

Or else I deem her a spellbound lute,
Unconscious yet of her songful mission,
The silver melodies sealed and mute,
Waiting the breath of the sweet musician,
Even of life. May grief and woe
Melt in her music, if this be so!

I liken her unto a pearl—a pearl
From seas of trouble. But whist, my numbers
What strains are these for our baby-girl,
Shut like a star in a mist of slumbers?
They vex her dreams with their tuneless flow;
She heard the angels a night ago.

—*Katharine Lee Bates, in Sunday World.*

OF INTEREST TO WOMEN.

A NOVELTY is the Mikado handkerchief of fine linen with hair-line plaid of many colors. It has a hemstitched border edged with lace.

Miss Catherine L. Wolf, of New York, who spends much of her immense wealth in unostentatious charity, has recently presented a

church, costing $45,000 to the Italian Mission of the Episcopal Church in New York.

This season fashionable girls have been seized with a craze for donkey carts, that unassuming but determined animal having come into style. The fancy is for a white one, which is handsome, but difficult to obtain. Of course, these donkeys are more expensive here than in England, where a good animal may be purchased for two pounds.

The daily papers are filled with glowing accounts of the fame and fortune awaiting energetic women in the far west. We are told that they may take up Government lands and rapidly attain wealth by sheep or cattle raising; while in the towns and villages they may make money quickly by their knowledge of music and art. We should like to hear something more of this from our Western RURAL sisters.

Scrap jars made of birch bark are to be seen at a New York bazar famous for its decorative novelties. The foundation is a cylindrical box about two feet high and 10 or 12 inches in diameter. This is smoothly covered with the satiny bark; around the top a slender spray of the birch forms a heading. On one side is a big bunchy bow of peacock blue and dull orange ribbon, having a spray of artificial fruit or filigrette flowers twisted amongst it. These filigrette ornaments look like skeletonized flowers or leaves of tinsel, and are very effective in decoration.

Charming pongee tidies are decorated with a combination of painting and embroidery. An outline design of wild roses being chosen, it may be worked in silk, the stems and leaves shaded green, the flowers rose-pink. Then these outlines may be filled in with water colors of appropriate hue. It is extremely easy work, and charming in effect.

A Fourteenth St. bric-a-brac store recently displayed a quantity of pretty little ornaments in Derbyshire spar. This substance, which may be unfamiliar to many, is an earthy crystal, appearing in delicate shades of cream and pink. It is common throughout the Peak of Derbyshire, a picturesque district much affected by tourists, who are great purchasers of these local souvenirs.

Relative to women's work, Ruskin says: "You may see continually girls who have never been taught to do a useful thing thoroughly; who cannot sew, who cannot cook, who cannot cast an account nor prepare a medicine, whose whole life has been passed either in play or in pride. You will find girls like these, when they are earnest-hearted, cast all their innate passion of religious spirit, which was meant by God to support them through the irksomeness of daily toil into grievous and vain meditation over the meaning of the great book, of which no syllable was ever yet to be understood but through a deed; all the instinctive wisdom, and mercy of their womanhood made vain, and the glory of their pure consciences warped into fruitless agony concerning questions, which the laws of common serviceable life would have either solved for them in an instant, or kept out of their way.

Give such a girl any true work, that will make her active in the dawn and weary at night, with the consciousness that her fellow-creatures have indeed, been the better for her day, and the powerless sorrow of her enthusiasm will transform itself into a majesty of radiant and beneficient peace."

CHIPS FROM A COUNTRY WORK SHOP.

WHAT a lot of philosophy there is in just letting things slide! We need not be lazy or slatternly about it either, but let things slide from a high moral standpoint. I mean this—we should not bother our heads and bodies too with vexatious superfluities, a very common failing with ambitious housekeepers. We needn't put 17 tucks and a frill on our small daughter's frock, just because her playmate has as many, when every extra tuck means a nail in the tired mother's coffin, to use a homely old saw.

We need not be ambitious to set before our guests three kinds of cake and puffy hot biscuits, presided over by a hostess too tired and heated to do more for entertainment than to press on her guests the material comforts for which she sacrificed the very spirit of hospitality. It is the true essence of hospitality to offer mere bread and salt in the spirit of genuine welcome. We must offer the refreshment of the spirit, the rest we may buy at an inn.

What a lot of superfluous cares we are apt to create through our anxiety to please our guests! Here is another direction in which to let things slide. Do not think I mean that we should be slip-shod in our hospitality. No; I mean that we should so live that "company manners" are a thing unknown—it will very materially simplify matters. This is especially true in all things connected with the table. If the meals are prepared and put upon the table with all things done decently and in order, while the olive branches are from the first instructed in table manners, the hostess is not likely to be annoyed by any unlucky *contretemps* when guests are present. A very useful little work for such instructions is "Don't: A Manual of Improprieties in Conduct and Speech." In alluding to the philosophy of letting things slide, we must not forget another valuable preventive of social friction, and that is, looking at life and its mishaps from a humorous standpoint. It does not imply making fun of serious things, but making high comedy of life, as Horace Walpole says. Really, we should live a good deal longer if, like Mark Tapley, we could be jolly under a variety of circumstances. So, if you have a keen sense of humor, cherish it as your most valued friend; if not, try to cultivate it, for it forms a sovereign shield against the blows of adverse fate. E. T. LYNN.

THE READING OF HISTORY.

HOLLY DEAN.

IN a previous article we have attempted to show, that home study is not a mere myth, but on the other hand may be made productive of most excellent results. In the present instance we shall present something in the way of illustration, and suggest the way in which these general principles may be applied. An eminent educator was recently asked the question: "How shall we read?" and in reply gave it as his opinion, that no general rule was possible, but that this was on a par with the equally unanswerable question; "How shall we breathe?" There is some truth in this observation, and yet experience gives us certain general rules, which are applicable in all cases. First, in choosing *what* to read, we must remember that we cannot read everything, and that this, even were it possible, would hardly be desirable. Much is written now-a-days, which is far from profitable reading. Never before has the literary market been so full of works, good, bad and indifferent and a nice discrimination has been never more necessary than now. But even when we have drawn in the over-full literary net, and cast the bad away, we find our mental fish baskets too small to contain the residue, and are so forced to make a second division.

Our subject leads us away from the wide and interesting field of fiction, and remands our attention to the question of historical reading. Its value as a means of culture is undoubted, and we only need to inquire, how a person with limited time, and small purse may be able to utilize this means of culture in the best possible way. History is the most accessible branch of study, open to those who are deprived of the benefits of instruction. Scientific works are largely obscured by a terminology peculiar to themselves, and this terminology must first be mastered before we can make any great progress. Languages may be studied in private with great advantage, and yet, an imperfect rudimentary knowledge of the rules of languages in general, may cause the home student much perplexing and discouraging trouble and delay. But history may be read and studied by any who can read at all, and forms an excellent preparation for more difficult work to follow. A year's course in some line of historical reading must result in the gaining of much useful, and practical knowledge, and even though the time devoted to the work each day is small, especially during the summer season, a single fact secured daily and thought upon in its several relations sufficiently compensates for the time and trouble bestowed. We must guard against two extremes, i. e., grasping too much and laying hold of little, or nothing. If we run over a large territory, and retain little or nothing of what we have read, the results are to say the least unsatisfactory. On the other hand, if we confine ourselves to the acquirement of the names of a few persons and places, and the dates of a few chief events, we have come far short of the true aim of historical study; we have laid a foundation, but reared no superstructure upon it. This calls to our notice another frequent cause of failure in this direction. The rule of progressive knowledge is "branch out," instead of this, some persons are under the constant necessity of branching in. Their progress may be compared to that of a ship, which, having proceeded a certain distance from a known point, is forced again to return to that point in order to "take bearings," and a second time start from the same place to go a little farther than before and again return.

It is good for a traveler in a strange country to make himself familiar with the road along which he is passing, as otherwise he may easily lose himself, and the same advice is applicable to the mental traveler, who enters an unexplored region. Be sure you know where you are, and then go forward always keeping your eye on some familiar landmark. Who can thoroughly enjoy Carlyle's admirable History of the French Revolution, without first thoroughly learning the facts connected with the event from some other source? Such writers presuppose this rudimentary knowledge, and proceed at once to their discussion in detail. Whatever line of historical reading you choose to pursue, first acquaint youself with the outlines. Construct a skeleton first, and then clothe it with flesh, and it at once becomes to you a thing of life.

History is a broad subject, and it is generally best to begin "near home," and gradually widen our circle of investigation. Some knowledge of our own national history is first essential. A brief and, at the same time, comprehensive American history is a *desideratum*, which genius and labor has yet to produce. Barnes' Brief History is a fair outline; Quackenbos' a little more full and certainly more interesting, while for those who desire to pursue the subject in detail, Bancroft's, when accessible, is the undoubted standard. The history of England is intimately connected with that of our own country. "English History" in the Chatauqua text books is an admirable little compendium of dates and events, and may be purchased at the price of a dime novel. By committing to memory the 50 small pages therein contained, we have constructed a good, firm foundation for subsequent reading. Dickens' Child's History, though sometimes inaccurate, is written in the genial, pleasing style characteristic of the author, and deserves a careful reading. After this, we have a wide field from which to choose. Many have here done yeoman service in recording the history of their country. Green's Short History has much to commend it to the general reader. It covers the whole period, is accurate, and constructed on a new plan, striving to present rather a history of the people than a mere detail of wars and political intrigues. Every person of liberal culture aspires to read Macaulay, and we cannot well afford to omit it from our list.

After this course, we are well qualified to read anything in the way of English history, and may pursue Hume, Lingard, and Hallam at pleasure. A general outline of universal history is a proper preliminary to further reading. Anderson, Willard and Lardner have each produced such sketches, of which the respective value is indicated by the order in which they are placed. Gibbon's decline and fall of the Roman Empire covers a field of history, occupied by no other writer. A careful reading of some small history of Rome, such as that of Smith or Liddell should precede the perusal of this more extensive work, which may really be considered as a general history of the period, of which it treats. Space does not admit the further specification of particular lines of historical reading. We close the article with one general suggestion in regard to the use of note books. These aids to the memory, are nowhere more profitably employed than here. By judicious use of pencil and paper, it is possible to compress a chapter of Hume or Macaulay into the limits of a few closely written lines, and so arranged that a reference to these notes recalls much that has not been written. Aside from this, the practice of condensing thought into the fewest possible words is acquired, and in this form, facts are most readily retained, and easily utilized. Question books may either accompany or partially take the place of note books. In these, questions are written out, the answers to which include the statement of facts, especially important in their bearing on the general subject. In either case, the same caution is necessary. Do not try to make a note book a transcript of the printed page. In this case, much time is lost, and, besides, nearly all the benefit derived from judicious note-taking. Make your notes few and brief, and as far as possible suggestive. A couple of lines will often recall a five-page argument. Review your note-book frequently. Do not think that when written full, its usefulness is past, and therefore consign it to the waste basket. Mark each book with the subject on which it is made, and lay it away for future reference. Well preserved and carefully written note-books form a library in miniature, and are especially valuable, when the book on which they are made, happens to be a borrowed one, and when once read passes out of your hands. Much more might be said on this point, and on the general subject, but what has been written has been presented with the especial view of aiding the unaided efforts of those who may chance to read this article. In this way many hours may be profitably and pleasantly employed, which would otherwise be devoted to trashy reading, or wasted in idleness or frivolous amusements, and a store of useful knowledge accumulated, which will prove of lasting benefit to the possessor.

Domestic Economy

CONDUCTED BY MRS. AGNES E. M. CARMAN.

PITHS.

VARNISHED furniture should not be wiped off with a *damp* cloth.

If you do not possess a carpet sweeper, insist upon having one.

When sweeping, open such windows and doors as will create a draught, that the dust may be carried off instead of settling again upon carpet and furniture.

Soiled clothing, particularly that which is damp with perspiration, should never be thrown into a dark, non-ventilated closet and there left until washday.

If you would rob ironing day of a part of its terrors, provide yourself with good, steel-faced flat-irons and then keep them, when not in use, in a dry place wrapped in thick, brown paper.

Water that has boiled for any length of time will not make a good cup of tea. Put fresh water over the fire, heat to boiling and turn at once onto the leaves. Let stand where it will keep hot, but not boil, for five minutes and serve. Long boiled tea is always suggestive of "yarbs."

We have seen a fretful baby quieted by giving it a few teaspoonfuls of cold water.

Cut waist linings *across* not lengthwise of the goods—this to avoid stretching—and silesia makes a much better lining than drilling.

HOUSEKEEPING IN CALIFORNIA.—VIII

MARY WAGER-FISHER.

WHILE visiting the Citrus fair in San Francisco in January, a man who was one of the exhibitors, and who had a ranch of 900 acres near Sacramento, was moved to tell me something about himself and his family, with which I was greatly entertained. He was a a son of John Bull, a solidly built man, not tall, but very snug and compact in figure, and looked the picture of health and strength. He was greatly interested in olives, and treated us to olives ripe and fresh, and olives pickled—the latter having been soaked in lye, and then when reduced to a pale green color, put in slightly salted water. He declared that his family lived well on simply dry bread and olives of which the children—he had five girls and a boy or two, but only the girls seemed to be of special account—were very fond. The oil in the olives made meat dispensable.

He thought his girls, girls worth talking about! One of them 10 years old, rode to school on horse back, a distance of two miles, and in addition, would, for a week at a time, pump water for 75 head of stock. Another daughter of 14 years, would carry a sack of flour weighing from 120 to 130 pounds up-stairs and think nothing of the feat. He never yet sent her in the meadows to catch a horse that she failed to catch, and he had always found girls more reliable than boys! She took entire charge of a stallion weighing 1,200 pounds, would make him lie down and get up at her bidding, and she would sit on him when lying down and read a newspaper with as much unconcern as if sitting on a stump. But she didn't play the "pianner" however, she wanted to learn, and in exchange for music lessons she would teach one how to feed and water, to clean off and bed a horse, to bridle and harness it, and make any horse gentle as a lamb. She would hitch one horse on one side of the tongue of a big wagon and make him draw it; all his girls rode on horse back, but astride. He thought it most ridiculous and absurd for girls, or women, to hang themselves on the side of a horse, and would I not do all I could to encourage astride riding? I assured him that I had always believed in women riding as did Queen Elizabeth, and that if I had daughters to ride on horse back they should all ride astride.

He said there was a great deal of nonsense talked about what one should eat and drink. He himself had not drunk tea or coffee for 40 years—water was quite good enough for him—and his wife had drunk neither for 20 years. They were never sick at his house. One time just to "experiment," he had gone without food for five days, and worked every day. Another time for weeks, he had worked in a printing office, and lived on 35 cents a week. "And did you keep well?" I asked, "Just as well as I am now!" Still another time for a period, he lived entirely on animal food, and an equal length of time entirely on vegetable food, and was just as well and strong on the vegetable diet, as on the meat food, and he could at any time carry a sack of flour in his teeth. But there was nothing like olives for dyspepsia—sure cure. His 14-year old girl, furthermore, would ride 40 miles in a half day, on horse back and think nothing of it, and take care of 100 head of horses. I might have questioned his veracity as to his wonderful girls, but I heard from another source of their extraordinary doings with horses.

This Anglo-American has lived in the United States 34 years, is now 59 years of age, looks ten years younger. He told me also of another girl—a young woman who came to California from Illinois hoping to find a school to teach. But meantime she must do something, and he hired her at $12 a month to work on his farm. She, too, understood horses and was not afraid of work, and she would harrow with a double team, as well as a man. She got a teaching certificate finally, and the school directors declared that any woman who could harrow a field as did she could teach a school, and so they hired her at a salary of $80 the month. She was a good teacher and was doing splendidly until a fellow came along and wanted to marry her. My informant said he advised her to have nothing to do with him; that she

know nothing of his antecedants—"but although she was a girl of downright good sense," he explained, "like so many other women, it seems to be their failin'. You couldn't make her cautions as to marrying, and she married. Then she tried to get him elected school superintendent. I told her it was no use, and it wasn't; and she paid his whiskey bills, and he not only used up all her money, but beat and misused her; that smart girl that might have lathered him well if she had set about it. But she didn't, and I guess if her father hadn't come on and took her away, that she would have gone on submittin' and died of a broken heart. And just as I had hinted to her, the fellow had a wife when she married him. He had left number one up in Washington Territory, and the poor thing followed him down here, coming in a lumber schooner, stowed away with her three-months' old baby in the hold like a piece of wood! And after number two left him he married still again!"

"That's the California way, is it?" I observed.

"Yes, it's the California way! Marry as many times as you can; and it's an awful good place to get crazy in; the lunatic asylums are just running over!"

"But you like it here?"

"Oh yes, I like it. When I look around on this show, all these oranges and lemons and pomegranates and olives and posies, I just wish that my father could take a look at it all. I've got his picture—taken 50 years ago when he was 50—and I've just a mind to bring it here and let him take a look around! Do you think there would be any harm in that?"

Girls generally in the country in California ride much on horseback, and in the towns drive a great deal, and seem to be accustomed to horses. And women, for the larger part, have the Boston fever of work. They all want to learn some trade, or acquire some vocation by which they can earn money, for the time has come when money is no more plentiful here than elsewhere. The girls learn typewriting, shorthand—are not so much employed as dry goods clerks—but very generally as teachers, and many married women with grown families engage in teaching. Single women object to this, as they contend that when a woman is married, it is the business of her husband to support her—as it is—only no husband "supports" his wife any more than he supports his hired man or clerk—and the mutual support comes just as much from her as from him. Everybody complains of the incessant drive of California life; owing to the climate, there is no specially dull season in trade or business, no getting away during the heats of Summer as in the East, or of rest for farmers in the Winter, no time when one can take a holiday better than at another, which is one explanation why business men break down and get into the insane asylum. Still, among agriculturists, there is a good deal of the *laissez aller*, and a large proportion of them haven't as yet caught the "Boston fever."

DISH DRAINER.

FIG. 253 shows a rack for drying dishes, the use of which will reduce the work of dish washing at least one-third. The dishes are washed clean, rinsed in warm or hot water and placed edgewise in the rack. In 15 min-

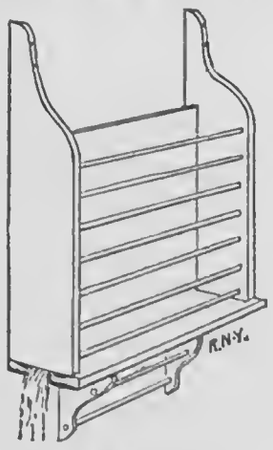


Fig. 253.

utes they will be found dry and shining. The end boards are 25x11 inches, one-and-a-fourth inch thick and curved at top for fastening to wall. The bottom is of one-and-a-half inch board 24x11 inches. This is nailed to sides so as to allow of one-half inch slope. It is slightly hollowed in center the entire length and extends a little beyond end to allow of water passing off freely. The back is of one-and-a-fourth inch board carried up to curve in sides. Inch rods are fastened securely in sides to hold dishes in place. The rack is secured to wall by screws at top and supported at bottom by wooden bracket-like pieces. Two or three rods can be fastened to these supports, as seen in cut, and are very convenient for hanging the drying towels upon.

HULDA WARD.

Miscellaneous Advertising.

When Baby was sick, we gave her Castoria,
When she was a Child, she cried for Castoria,
When she became Miss, she clung to Castoria,
When she had Children, she gave them Castoria.

LEMONS.

MANY people know the value of lemon juice in allaying bilious troubles. Many know nothing of the wonderful power wrapped up in the little yellow fruit, for the good lemon juice has done is wonderful—as wonderful as it is harmless and simple. A lady who had suffered greatly with severe attacks of something akin to bilious colic, keeps free from them as long as she faithfully takes lemon juice. Let her, through "feeling so well," neglect to take the juice of at least one lemon a day, and in a short time symptoms of the return of the old enemy will make her only too glad to be faithful over that little thing. For several years, this lady had been subject to these attacks, at times so severe as to indicate gallstones. No care of diet or druggist's doses averted them, and hope of relief was nearly gone, when a friend said, "You crave sour—why not try lemon juice and water? Dr. Somebody says a person need never be bilious who will take the juice of one lemon in water every night before retiring." Catching at this straw, the lemons were tried, and the juice in water, *without sugar*, was freely drank whenever thirsty, and always the last thing at night. One slight attack of the old trouble proved that the remedy was doing a good work, and after that, complete exemption for more than a year, makes her an ardent advocate of lemon juice and water. Sick headaches yield in many cases to this simple treatment. Some cannot bear the acid, but those who crave it are very sure to be benefited by its use.

S. E. H.

RAG DOOR MAT.

IN these days of cheap carpets one often wonders what to do with the old clothes we used to make rag carpets out of. I have found a way to make use of "men's old cassimere clothes." Make a large crochet needle out of green hickory, then cut the cloth in narrow stripes and sew it together as for carpet rags—the light and dark separately. Commence with the dark, knit a chain a quarter of a yard long, throw the cloth over the needle and knit around the chain with a plain stitch widening at each corner until the rug is three-quarters of a yard long. Then join the light cloth, and knit two rows, then two of dark, two of light and finish with two of the dark. If you will follow these directions you have a very serviceable door mat that will not easily kick up.

MRS. R. W. WILLIAMS.

CHEAP DRESS-GOODS.

Mrs R. W. W. writes: I think it is mistaken economy to buy cotton and wool dresses. The making, lining, buttons, silk and thread cost just as much as they would for an all-wool dress, and after they are worn a couple of times, their first freshness gone, they are faded and shabby, while by adding a few dollars to the first outlay and buying a good quality of all-wool goods, you have a dress which will look well as long as the fashion lasts, and can then be cleaned and remade. The summer silks are very pretty but are not as serviceable as an all wool dress of a good quality.

A BATCH OF PUDDINGS.

BOILED FRUIT PUDDING.

MIX half a pound of suet chopped fine, with one pound and a quarter of flour, and a teaspoonful of salt; make it into a paste with milk that can be rolled out, spread on it any kind of sweetmeat, roll it up, tie or sew up loosely in a cloth, put in boiling water and boil for an hour and a half.

INDIAN PUDDING WITHOUT EGGS.

BOIL a quart of milk, and stir in a scant pint of Indian meal mixed smooth with cold milk, boil for 20 minutes, add two tablespoonfuls of butter, one each of ginger and cinnamon, and a tablespoonful of salt. Stir in a cup of molasses and bake for an hour and a half. This may be varied by the addition of a cupful of raisins and currants.

OUNCE PUDDING.

NINE tart apples peeled and chopped, one-and-a-half pints of milk, 10 ounces of bread crumbs, and ten of raisins and currants mixed, six beaten eggs, half a grated nutmeg, the grated peel of a lemon, a quarter of a pound of sugar, and a little salt, steam in a mold for five hours. This is a large pudding.

CRACKER PUDDING.

ROLL fine six soda crackers, and pour over them a quart of boiling milk, add six eggs beaten separately, a teacupful of sugar, a pound of currants and raisins mixed, a little salt, and a scant cup of sifted flour. Boil in a mold for two-and-a-half hours.

Santa Clara, Cal. MRS. M. C. HAYES.

PIE MADE OF RHUBARB.

This pie tastes more like green apple than rhubarb. One cup of bread crumbs chopped fine, two cups of chopped pie plant, two-and-a-half cups of water, one cup of sugar, a little salt, two tablespoonfuls of melted butter, flavor with lemon or nutmeg. Bake in deep plates with two crusts. This will make three pies.

S. E. H.

TO MAKE A STOVE SHINE.

A good housekeeper in Bergen Co., N. J., says that she adds a teaspoonful of turpentine to the water she mixes her stove blacking with. She lets the stove become almost cold before blacking.

BREAKFAST MUFFINS.

Three thoroughly beaten eggs, one cup of sifted flour, two teaspoonfuls of baking powder, a scant cup of sweet milk—a little more than two-thirds—a half teaspoonful of salt. Sift the baking powder and flour together, add the milk to the beaten egg and pour over the flour. Beat and pour at once into hot buttered gem pans. The oven must be hot enough to cook them in 15 minutes. MRS. C.

Miscellaneous Advertising.

Catarrh

Is frequently an indication of a Scrofulous taint in the system. Ayer's Sarsaparilla purifies the blood, and thus restores health to the affected membranes. It also stops the nauseous catarrhal discharges, and prevents the infection from reaching the lungs and stomach. Catarrh should be treated as a blood disease.

I suffered for years from chronic Catarrh. My appetite was very poor, and I felt miserably. None of the remedies I took afforded me any relief until I commenced using Ayer's Sarsaparilla, of which I have now taken five bottles. The catarrh has disappeared, and I am growing strong and stout; my appetite has returned, and my health is fully restored.—Susan L. W. Cook, 909 Albany st., Boston Highlands, Mass.

Ayer's Sarsaparilla,

Prepared by Dr. J. C. Ayer & Co., Lowell, Mass. Sold by all Druggists. Price $1; six bottles, $5.

MAKE HENS LAY

SHERIDAN'S CONDITION POWDER is absolutely pure and highly concentrated. It is strictly a medicine to be given with food. Nothing on earth will make hens lay like it. It cures chicken cholera and all diseases of hens. Illustrated book by mail free. Sold everywhere, or sent by mail for 25 cts. in stamps. 2½-lb. tin cans, $1; by mail, $1.20. Six cans by express, prepaid, for $5. I. S. Johnson & Co., P. O. Box 2118, Boston, Mass.

ALLEGER ORGANS you can get a strictly first class organ from $50 to $75, stool and book. Warranted 5 years. It will pay to send for circular before you buy. Address the manufacturer. H. W. ALLEGER, Washington, New Jersey.

HIRES' IMPROVED ROOT BEER. Packages, 25 cts. Makes 5 gallons of a delicious, sparkling and wholesome beverage. Sold by all druggists, or sent by mail on receipt of 25 cents. C. E. HIRES, 48 N. Delaware Ave., Philadelphia, Pa.

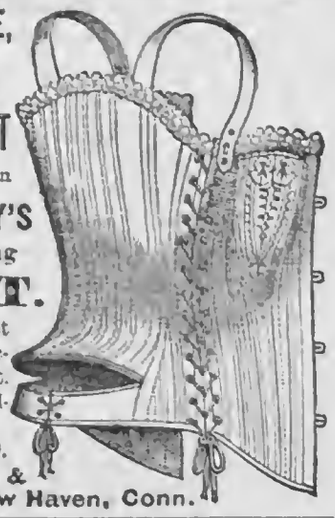
ELEGANT SHAPE, HEALTH and COMFORT

Perfectly Combined in

MADAME FOY'S Skirt Supporting CORSET.

It is one of the most popular and satisfactory in the market. For sale by all leading dealers. Price by mail $1.30.

FOY, HARMON & CHADWICK, New Haven, Conn.



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For over 30 YEARS always using the

GENUINE YANKEE SOAP.

It has an equal." R. MILLER, P. M., W. Farmington, O.

For FIFTY YEARS unequaled as a Shaving Soap. Standard for quality in U. S. Navy. Avoid imitations. Obtain it of your Druggist, or send 12c. in stamps for full size trial cake to the

J. B. WILLIAMS CO. Glastonbury, Conn.

Form'ly Williams & Bros Manchester, 1840.

PILES. Instant relief. Final cure in 10 days, and never returns. No purge, no salve, no suppository. Sufferers will learn of a simple remedy, free, by addressing C. J. MASON, 78 Nassau Street, N. Y.

A COPY OF OUR BOOK,

The Care and Feeding of Infants

Mailed free to any address; it contains advice and useful information for nursing mothers and invalids, and an analysis and description of

MELLIN'S FOOD.

DOLIBER, GOODALE & CO., Boston, Mass.

WOMAN. Do you have a bearing-down feeling in the abdomen? Weak back, languid tired feeling? If so, you can be sure there is some uterine difficulty, which Warner's safe cure will remove.

FRENCH ROMAN HYACINTHS

I now offer from stock grown by myself French bulbs of finest and best germinating quality, as under:
Roman Hyacinths, 1st size, $22; 2d, $18
Narcissus, paper white and double Roman, $10
Lilium candidum, $15.50 Parisian Hyacinths, $11 per 1,000 roots, f. o. b. Steamer, Marseilles.
Orders respectfully solicited.

ELOI DEFILIPPI, Ollioules (Var) France.

THE DINGEE & CONARD CO'S BEAUTIFUL EVER-BLOOMING

ROSES

Our Great Specialty is growing and distributing ROSES. We have all the latest novelties and finest standard sorts, in different sizes and prices to suit all wants. Over 450 *choicest varieties* to choose from. We send strong Pot Roses safely by mail to all Post Offices, purchaser's choice of varieties, all labeled, 3 TO 12 PLANTS $1, $8 to $15 per Hundred, according to value. Two year Roses by express. Our New Guide, 78 pages, elegantly illustrated, Free. Address THE DINGEE & CONARD CO., Rose Growers, West Grove, Chester Co. Pa.

$13.50 WILL BUY a full Nickel handsome Harness; best in the United States for the money. Send to KING & CO., OWEGO, N. Y., for catalogue.

AHEAD OF ALL COMPETITION.

1886.

FOURTEEN SIZES FOR HAND USE. Weighing from 21 to 51 Pounds. THREE SIZES FOR HORSE POWER.

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An Editor's Son Saved.

LITTLE ROCK, Ark., May 11, 1885.—Several months ago my little boy was badly afflicted with kidney disease. Less than two bottles of Warner's safe cure restored him to health.—OPIE P. REED, Ed. *Ark. Traveller.*

HOMES IN A MILD CLIMATE. Between Chesapeake Bay and the Atlantic Ocean. Healthy, easy and good living. CHEAP LANDS. Productive Soil. Fish and Oysters. Money made in Fruits and Vegetables. Cheap rates by rail and water. Send for Circular. Browne Jacob & Co., ACCOMACK C. H., Va.

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Virginia Farms.—Mild Climate. Cheap Homes. Send for Circular. A. O. BLISS, Centralia, Va.

News of the Week.

HOME NEWS.

SATURDAY, June 5, 1886.

THE Knights of Labor and Trade Unions Convention at Cleveland, Ohio, is over. No definite agreement was made between the two, the Knights wanting the control of strikes and boycottings; the Trades insisting that each trade should decide upon and manage these for itself. A large number of "trade-unionists" are also Knights, and in case of a conflict these would withdraw. Powderly and the other old officers of the K. of L. remain in power, but six new ones were elected, and these with some others already in control will be likely to form a majority with a more violent policy than that of Powderly, who is opposed to strikes and boycotting. By his efforts it was agreed that hereafter the Executive Board must approve all strikes, and, except in certain grievous cases where immediate action is necessary, a strike or boycott will not be allowed without their approval. Twelve propositions are embodied in a demand on Congress made by the Knights of Labor. The first seven relate to the public lands—keeping them for actual settlers, fully taxing those owned by corporations, forfeiting un-earned grants, barring alien ownership, etc.; the eighth asks the abolition of all laws requiring a property qualification for voters; the ninth favors an income tax; the 10th protests against the cutting down of the appropriation for the Labor Bureau; the 11th asks for the passage of the bills approved by the Congressional Labor Committee; the 12th asks for a passage of a law prohibiting the employment of minors for more than eight hours per day. Congressmen who pay no attention to this demand will be put "on the list." They also want Congress to regulate interest on money by opening loan offices where money can be got at three per cent on prime security..... .....It is not unlikely that the newspapers in favor of Capital against Labor, are exaggerating the dissensions, faults and shortcomings of the convention..... Labor troubles quieting down. Eight hour movement collapsed. Third Avenue strike here a complete failure. Employers everywhere organizing for a war of resistance against future demands: Example, 47 hosiery manufacturers of Philadelphia, Pa., employing over 12,000 hands, have organized for mutual protection on account of the recent demands of employés. Nearly all the prominent manfacturers were represented at the meeting. ...Last Friday and Saturday (May 29 and 30) the tracks on the Southern railroads (15,000 miles), were changed from five-foot to the standard gauge for the rest of the country. The trucks of engines and cars were also changed to suit the new gauge; yet all was done with such lightning rapidity along the various lines, that only an occasional through train was delayed a little. Henceforth one sort of engine or car can travel on 90 per cent. of the roads of the country....Although a constitutional amendment has prohibited the liquor traffic in Maine since 1884, the Collector now reports the traffic steadily on the increase!...The Senate has passed the bill "to prevent the acquisition of real property (land) by aliens"—in the Territories, of course .....Of late the "Salvation Army" has caused a great deal of trouble by its public vagaries in large and small towns nearly all over the country—its chief illegal fault in most cases being its absolute refusal to obey the orders of the municipal authorities forbidding its noisy street parades. At Beloit, Wis., it caused a serious riot the other day by refusing to obey the Mayor's orders.... .. The bill to tax railroad lands, which now escape in most cases in the Far West, because the railroads won't pay the cost of surveys, is being vigorously pressed by the Western Senators in the Senate; also a bill compelling the roads to have their grants surveyed at once, and in case of neglect, refunding the cost of surveying to outsiders who have done the work.....Neither Washington Montana nor Dakota Territories will be admitted into the sisterhood of States this year. The first and last are Republican, and the Democratic House know their votes would outweigh those of Democratic Montana..... About 250 representatives of stove-makers, assembled. Wednesday, at Cleveland, Ohio, and decided to raise the price of stoves throughout the whole country..... Gov. West, appointed to succeed Murray in Utah, went the other day to the penitentiary where 49 convicted polygamists are serving their sentences, and after some "goody-goody" talk, promised to secure their pardon if they would renounce polygamy. They have just answered they value polygamy above all other relations human or divine, and will all redouble the practice as soon as they get a chance. Document circulating like wild-fire through Mormondom, and encouraging the "Saints" everywhere. West has "slopped over" as Murray would never have done.....The House, after having shamefully pigeonholed Edmund's Senate anti-polygamy bill, now propose to bring in one still more severe—mere "bunkum" to bamboozle indignant constituents. All know it is now too late to pass such a measure—Mormon lobby triumphant!..... Maine Democrats have nominated Clark S. Edwards for Governor.....The lately established New York State Board of Arbitration, organized, Thursday, with William Purcell, of Rochester, as President. Quite a number of States have lately established such Boards, which must give advice without power to enforce it.....Ex-Treasurer Martin O. Van Fleet, of Huron County, Ohio, charged with having misappropriated $65,000 of the County funds, has been extradited by the Dominion authorities. They should do the same with the numerous other American swindlers skulking in hotels and boarding-houses, but, then, the rascals squander their plunder freely!.....The work of Congress to Thursday is thus briefly epitomised, from Speaker Carlisle's examination of the books of the House: Introduced in the House, 9,125 bills and 178 resolutions. Of these, the House has passed 191 public and 741 private bills, and the Senate has concurred in 72 public and 384 private bills. There have been 2,580 bills and 68 joint resolutions introduced in the Senate, of which that body has passed 157 public and 323 private bills; and the House has concurred in 36 public and 87 private bills. Thus the total result of the labors of Congress to Thursday last was 11,951 bills and resolutions introduced, and 108 public and 471 private bills acted upon by both Houses. Nearly all the "private bills" were pension bills giving pensions or increasing the same in cases not provided for by the existing laws.... No prospect of passing the general bankruptcy bill through Congress at this session, as the West and South are strongly opposed to a measure supposed to be contrived in the interest of Eastern dealers and money lenders. Many others object to the bill as increasing the security for debts, and therefore likely to enlarge their amount. The bill would be splendid for lawyers, as it would force into involuntary bankruptcy all 30 days behind in their payments. What a tremendous crop of lawsuits from this clause alone!!!.....Herr Most, a lately landed, loud-mouthed, virulent, cowardly German Anarchist, who through his catch-penny paper in this city, tried to incite riot, pillage and assassination, has been just convicted of having done so, and sentenced to one year's imprisonment and a fine of $500—the highest penalty. One of his fiery, blatant confederates got nine months, and $250; another nine months without a fine.....Now indictments against the Chicago rioters; and indictments also found against the Milwaukee Anarchists. This foreign scum is lashed all round.....A Congressional report intimates the practical failure of Ead's jetties at the mouth of the Mississippi. He really did deepen the channel, but the accumulating mud brought down by the river causes constant bars....Decoration Day a glorious success here and everywhere else. Here Grant's tomb was magnificently decorated, flowers coming from all parts of the country, even from California. The Emperor of China ordered his Minister to come from Washington to decorate the tomb. Logan spoke ....John H. Deane, of this city, for years counsel for the American Baptist Missionary Union, is "short" $150,000 in its funds entrusted to his honesty. .....The Presbyterian General Assembly which adjourned Monday at Minneapolis, objects to advertising in Sunday papers; and allows music in the churches.....Subscriptions for the families of the Chicago murdered policemen amount to over $70,000..... The New York Supreme Court has affirmed the conviction of Alderman Jaehne..... Canada is to investigate the Northwestern Indian trouble.....The Dominion Parliament at Ottawa was prorogued Wednesday. Governor-General Lansdowne congratulated both Houses for granting proper representation in the Commons to the Northwest Territories; on the completion of the Canadian Pacific R. R.; on the repayment by it of the advances it had received from the public treasury, and on the establishment of a public printing office like that at Washington..... The Canadian export duty on pine logs has been reduced from $3 per 1,000 feet to $2. .... Oregon is prospering from new immigration this year as never before, and it is almost exclusively American, as foreigners are generally too poor to travel so far. Portland has added 2,000 to her population. Agriculturally the State is "booming."....Rhode Island prohibitionists are much excited at the election of Brayton as chief constable to enforce the Prohibitory Amendment to the Constitution lately passed. They say he is a very bad man, and his bondsmen had to make up a deficit of $30,000 in his accounts while Postmaster at Providence..... .....Our government has released that Canadian schooner without exacting the $500 fine. Canada has seized another of our fishing vessels. Bait is being clandestinely sold by the 'long-shore Provencials. Our fishermen have lost a good deal by the Dominion embargo on bait and ice, and some won't pay expenses where usually they would have made a good surplus. Negotiations still in progress between Washington and London. Looks as if the British Government will side with Canada. Much complaint at the dilatoriness of Sec. Bayard. "Reprisals" the favorite cry. War talk here and there; war thought nowhere..... .....Denver, Col., greatly excited over the striking of oil in the heart of the city by people who were sinking an artesian well. Oil began to flow at a depth of 1,100 feet. Old oil men from Pennsylvania say that the prospect is good for a big flow.....James G. Blaine made a rattling, Irish-vote-catching speech at the "Gladstone meeting" at Portland, Me., the other night.....The public debt was decreased $8,828,566 last month, against a decrease of $10,065,388 in April. The debt, less $302,164,274 available cash items (including $100,000,000 reserve) and $76,142,611 net cash in the Treasury, is now $1,398,198,282. ....Pasteur's hydrophobia cure is to be tested in this city. Dr. Mott and assistants are "producing" rabies-virus, and two patients are waiting to be inoculated..... .....The Dominion Government has refused to sanction the anti-Chinese legislation passed by the government of the Province of Columbia..... ....We are glad to learn that the enterprising dry goods house of Messrs. James McCreery & Co. are falling into line in the early closing movement. For the month of June they will give one-half of their employés, alternately, the whole of Saturday each week. For the months of July and August they will give one-half of their employés, alternately, the whole of Saturday in each week, besides closing as usual every Saturday at 12 M. during these months. This arrangement, though somewhat novel, is quite satisfactory to all concerned...

FOREIGN NEWS.

SATURDAY, June 5, 1886.

LITTLE foreign news of general interest during the week. In England the Home Rule bill is still bitterly debated in the Commons. A vote on the second reading will be taken at 2 o'clock next Tuesday morning, and how it will go is still extremely doubtful: but it is probable it will be defeated. Gladstone will then dissolve Parliament, a new lot of members will be elected, and the people will thus decide the question. In Ireland the Orangemen are enrolling themselves and drilling; an army of 75,000 men is reported to be ready to take the field to oppose a Parliament in Dublin. Many tenants still refuse to pay rent, and much consequent distress prevails among some of the poorer landlords. A great deal of forced idleness and consequent privation among the laboring classes all over the United Kingdom..... .....In Spain the young King is getting along well. Don Carlos has issued a proclamation that he will never, under any circumstances, resign his right to the Spanish throne..... In Italy cholera has been making little headway of late. The Pope and the King are becoming more friendly. Great distress and poverty among all working classes, especially the agricultural.....In Germany Bismarck is redoubling his efforts to stamp out socialism and agitation of all kinds, while keeping a watchful eye on the movements of Russia against Turkey and British India..... .....In France the bill expelling all the descendants of former sovereigns is pretty certain to pass the Legislature. It will not be left to the option of the government to expel them; nor will expulsion be confined to the prominent members—all are to be exiled, not by the Government, but by the Legislature. The "princes" are preparing for exile. A good deal of labor trouble, especially among metal workers and miners. Strikers becoming riotous and threatening to use dynamite..... Russia is massing troops in the south, and thereby disturbing Turkey and Austria, as they fear the Czar is meditating a march on Constantinople.....Greece and Turkey have made peace without the intervention of the "Powers," and the Turks have surrendered 1,200 prisoners made in those frontier scrimmages, so it seems Greece got much the worst of the fighting.....

AGRICULTURAL NEWS.

SATURDAY, June 5, 1886.

THE sudden appearance of myriads of grasshoppers has created a panic among farmers in Williamson, Bell and Falls Counties, Northeastern Texas. Farmers hurridly assembling to devise means for averting the destruction of their crops .....The English Privy Council, last Wednesday, made Dundee, Scotland, an open port to foreign cattle. Glasgow, Hull, Liverpool, London, Cardiff, Bristol, Plymouth, Portsmouth and London have hitherto been the only ports open to this trade, and American trade has almost exclusively been with Glasgow, Liverpool and London, the other ports dealing almost entirely in Continental cattle. The opening of Dundee will, it is thought, improve the trade in American cattle.....The sugar crop of Egypt is very small this year, and some of the public sales have been stopped because prices are so very low. Bad news this for English, French and German bondholders. Egypt is held and farmed by the English with the single object of wresting from the wretched, starving fellaheen taxes enough to pay interest on these bonds, which bear preposterous interest, and were given for money wastefully and wickedly squandered by the Khedive Ishmael. The condition of the Egyptian fellaheen, under British rule, is worse even than that of the Hindoo ryots or the Irish peasantry..... Tremendous drought all through Texas, but especially in the Western section, including 48 counties and embracing a region larger than Illinois. Reports from the interior bring horrible accounts of suffering from drought. The loss of live stock will rise high among the millions, perishing from thirst and starvation by tens of thousands on the dried-up prairies and along the dusty, parched water-courses. All growing crops ruined or cut down fully one-half. Even in Galveston, where cistern water alone is used by a population of 40,000, fresh water is peddled in the streets at 50 cents a barrel. Hotels, etc., are using salt water for washing purposes. Fresh water has to be brought in tanks from Houston, 45 miles away. The longest and severest drought known in the history of Texas.....Just as we go to press the telegraph tells us a widespread rain has partly relieved the distress in a great part of the State..... .....

Epidemic at Ohemnitz, Germany, from eating raw beef—not pork—123 victims reported; disease still spreading.....The receipts of the Chicago citrus fair cover expenses so that California oranges, lemons, etc., have had a good advertisement *gratis*.....The Clydesdale Horse Society of Great Britain and Ireland, will present valuable medals for competition at the Clydesdale show, to open at Chicago, September 6, 1886. Competing animals must be entered in the British or American Clyde stud-book.....Jack rabbits are so unprecedentedly multitudinous as to be a grievous plague to the stockmen of Nevada, Utah and parts of Idaho. They swarm in the valleys eating more grass than all the herds and flocks. The last Legislature put a bounty on the scalps of coyotes, the next will be urged to take it off, as the increase of the pests is attributed mainly to the slaughter of the "wolves of the prairies" which used to feed upon them.. .....Over 12,000 acres belonging to Jay Cooke & Co., in Minnesota and Wisconsin, were auctioned off in Chicago the other day. Prices generally low .....At several of the grain warehouses at Chicago, 1884 wheat is said to have been mixed with that of 1885, to prevent shippers from drawing out the "old" wheat which is preferred to the "new."....Frosts and hail storms have been very destructive to the potato crop in some parts of Ireland..... Not only are our foreign cattle syndicates and barons turning their attention to the Canadian Northwest for grazing lands at a nominal rental, but many of our native "kings" are doing so too. Several are already seeking to rent large areas there, for grazing. Will the Canadian Government be as "liberal" as Uncle Sam has been? ...."Is ranching doomed?" is becoming a question in the West.

Especially Thoughtful People.

IN common with other thoughtful people, clergymen look with interest upon any method of relieving suffering. But they are very cautious about giving their names as witnesses to the value of any new candidate for favor in the healing art. They see many people and hear discussions of the merits and demerits of everything asking attention. The testing thus afforded secures them from making the mistake of hasty judgments, and gives to their utterances a value which those of few others can have. When so many therefore cheerfully make statements like the following, the seeker after health has reason to take courage:

Rev. Edward J. Fisher, Pastor of a Presbyterian Church, Bristol, Morgan County, Ohio, writes:—"A Treatment cured me of a severe attack of pneumonia, and I used only two-thirds. The rest cured a neighbor of *pneumonia* in its last stages."

Rev. Anthony Atwood, a widely known superannuated Methodist Clergyman, of the Philadelphia Conference, at the age of eighty-four, writes:—"I recommend Compound Oxygen to all who suffer from throat diseases."

Rev. J. H. Chandler, Missionary thirty-eight years to Siam, representing the Baptist Church of America, now returned, and living at Camden, New Jersey, writes:—"To all diseased, worn-down, disheartened fellow-sufferers, of every land and tongue, I beg to say, there is

hope for you in this remedy. Try it; be healed and live."

Rev. A. W. Moore, Editor of the *Centenary*, Darlington, S. C., says:—"I feel more life—more vigor—than I have had for years. I believe Compound Oxygen a blessed providential discovery."

Rev. Cyrus Hamlin, D. D. LL. D., President of Middlebury College, Vermont, writes:—"I derived so much benefit from your Compound Oxygen Treatment, last year, that I will ask you to send me the same supply for home treatment, for which I inclose the price. By my advice others have tried it, and never without benefit."

Rev. A. A. Johnson, A. M., formerly Financial agent, and now President of Wesleyan College, Fort Worth, Texas, wrote February 21, 1885:

"DRS. STARKEY & PALEN:—From 1878 to June, 1883, I was troubled more or less with catarrh. During those years I tried several remedies, but from them I received no permanent relief. In the Winter and Spring of 1883, I grew a great deal worse, and suffered greatly with sore throat, hoarseness, and catarrhal fever. At times I could not speak publicly, because of hoarseness and coughing. Alarmed at my condition, I sought a remedy, and was led to try the Compound Oxygen cure. It worked liked magic. Within two weeks my hoarseness and sore throat were gone, and my general health began to improve at once. At the end of three months, when I had finished the first Treatment, the catarrh was gone. I regard the Compound Oxygen Treatment as *a wonderful discovery* of science and a blessing to suffering humanity." Nov. 2, 1885, Mr. Johnson writes:—"You are at liberty to use anything I have written you in favor of Compound Oxygen. I regard it as a great remedy."

Rev. I. S. Cole of the Protestant Episcopal Church, Manitowning, Algoma, Ontario, Canada., writes:—"I deem it a high privilege to be able to assist in any way in making known so wonderful a discovery as your Compound Oxygen. I have found it of great benefit in my own family, and know of good results in the families of acquaintances."

Curiosity as to Compound Oxygen may be fully gratified by any one who will take the the trouble to write a postal card or letter of request to Drs. STARKEY & PALEN, at 1529 Arch St., Philadelphia. All their literature, or any part of it, will be sent, postpaid, freely, to any address on application.—*Adv.*

Crops & Markets.

SATURDAY, June 5, 1886.

Foreign cables have been exercising a steadily depressing influence on the wheat market during the week. Last Monday the London Mark Lane Express cabled to New York that English grain crops and trade had been checked by cold rains. Wheat, it was added, was more difficult to sell, and "rates for American (flour) were in buyers' favor." Wheat futures were easier. The present week opened with foreign wheats at London one to one and one-half cents lower per bushel, and with the demand almost nil. In France heavy receipts of wheat from Russia and India have lowered the market. Needed rains have greatly improved the wheat prospects in Southern Russia. Prussian and Austrian grain markets have been somewhat firmer. Recent mail advices mention a need of rain in central Europe.

At home the extreme depression in the wheat market for some time back was decidedly checked on Wednesday. The decline was due to free receipts at all points; the proximity of the new crop, backed by very favorable reports as to yield; the light export movement; the unwillingness of England to buy at our quotations, although her stocks were greatly depleted, and, finally, to the heavy bear operations at Chicago. The advance was due to a falling off of over 3,000,000 bus. in the visible supply; reports of considerable injury to winter wheat north of the Ohio from bugs, together with reports of cold rains, etc., and freer exports. The reaction caused an advance of from 1c. to 3½c. per bushel, Chicago leading, but New York following close behind. It is doubtful, of course, whether the upward movement will continue; but it ought, in view of the reduced reserves at home and abroad, a moderate crop in India, a short one in Australia, and doubtful outlook in Russia and the United Kingdom.

THE McCORMICK harvester reports give the following as the latest percentages of crop condition on wheat: Wisconsin 99, Nebraska and Dakota 98, Kentucky, Minnesota, and Iowa 97, Missouri 91, Ohio and Indiana 88, Illinois 86, Michigan 85, Kansas 50. Chiefly owing to unfavorable weather and the ravages of insects, the average condition of the winter-wheat crop was reduced about six per cent. during May. Condition of spring wheat crop higher. Outlook favorable to another large crop of corn, oats and grass.

Statistics compiled by the Washington Bureau of Agriculture, as given by the Associated Press, show that the world's product of wheat in 1885 was 2,110,000,000 bushels, the requirements of consumption 2,165,000,000 bushels, presenting a deficiency of 55,000,000 bushels drawn from the previous year's surplus of 125,000,000 bushels. They find the product of Europe a medium, those of India and Australia large, and a heavy reduction in the United States. For the supply of the coming year the crops of Australia, India, and South America already harvested are probably about 32,000,000 bushels less than those of last year, while those of the United States promise fully 100,000,000 bushels more than the harvest of 1885. The wheat in the United States on May 1 last was 104,000,000 bushels, against 152,000,000 bushels in 1885.

The visible supply of Indian corn increased 100,000 bushels during the week, and that of oats 400,000 bushels, hence, instead of sympathizing with wheat, both were lower.

Very little interest anywhere in hog products during the week. Chicago stocks of hams, short-ribs and shoulders are reported to be 20,000,000 pounds less than on May 1. Receipts of hogs at Western packing centers continue full, and there does not appear to be any likelihood of an advance at any early date.

At Philadelphia there is a good jobbing trade in hog products, and prices are firm. Butter is steadier under a more active demand. Cheese is one-half cent lower. Eggs are a shade lower and plentiful. Potatoes have advaneed under light receipts. Excepting bacon, provisions at St. Louis are dull, but without especial change of values. Cattle are in lighter offering than usual, and there is no reliable demand for any but the best grades. Hogs have been in good supply and very active at strong values, but the market is easier now.

There is a tendency to hold butter for better figures; but if the receipts continue as large as now, these are hardly likely to be offered.

	June 4, '86.	*June 4, '85.*
Creamery, new choice to fancy	16@18c.	16@17c.
State, new dairy fancy.....	15@16	15@16

Foreign advices for cheese are not encouraging. Receipts so far considerable smaller than last year; prices therefore better.

	June 4, '86.	*June 5, '85.*
New.....	7⅛@7⅜	6@6¼

The wool market is looking cheerfully up: holders have seldom got better prices; but they are less anxious to sell. The better outlook is due principally to brighter advices from London and Antwerp. Heavy purchases for manufacturers and dealers in Texas, especially at San Antonio. In Ohio and Michigan, prices asked are somewhat higher than at the same time last year. In Boston quotations show an upward tendency, and manufacturers appear ready to lay in stocks. Ohio and Pennsylvania X wools should now be rated at 30 to 31 cents, against 29 to 31 cents, last week, and Texas spring of 12 months' growth at 20 to 23 cents, instead of 19 to 23 cents. The current quotations for leading sorts are as follows.

Ohio and Pennsylvania X.....	30@31c.
Ohio and Pennsylvania XX.....	31@32c.
Ohio and Pennsylvania XX and above.....	32@33c
Michigan X.....	27@28c.
Fine Ohio delaine.....	30@32c.
No. 1 combing.....	31@35c.
Texas spring, 12 mos.....	20@23c.
Super A.....	31@31c.

Philadelphia market steady; holders refuse to make concessions; manufacturers disposed to fill up at bottom quotations. Interior markets also firmer. Receipts are light, as dealers are unwilling to pay the figures asked by growers.

MARKETS BY TELEGRAPH.

SATURDAY, June 5, 1886.

CHICAGO.—Compared with cash prices a week ago, "regular" wheat is 2⅝c. higher. No. 2 Spring, 3½c. higher. Corn, ¾c. lower. Oats, 1⅜c. lower. Pork, 17½c. higher. Cattle, some grades a trifle higher; others a trifle lower; prices average about the same Hogs, 5c. lower. Sheep, a shade lower.

WHEAT, active; Sales ranged: June, 76½@78c; July, 77⅝@79½c; August, 78⅝@79⅞c; No. 2 Spring, 77@77⅝c; No. 3 Chicago Spring, 66@71c. CORN.—Firm. Cash, 34½@35¼c; June, at 34⅜@35¼c; July, 35⅝@36¼c; August, 36¾@37c. OATS.—Firm. Sales ranged: Cash, 26⅜@26½c; June, 26⅝@26¾c; July, 26⅝@27⅛c. RYE.—No. 2, 57c. BARLEY.—No 2, at 55c. MESS PORK. Cash, at $8 50@8 55; June at $8 82½@8 85; July, $8 0@8 72½. LARD.—Cash, $5 87½@5 95; June, $5 9.@5 97½; July, $5 97½@6 05. BULKMEATS.—Shoulders, $4 30@4 35; Short rib sides, at $5 20@5 25; Short Clear sides, at $5 65@5 70. CATTLE—Market slow; 5 to 10c. lower than Yesterday. Shipping steers, at $4 30@5 55. stockers and feeders, $2 90@4 00; cows, bulls and mixed at $1 50@3 75; bulk, $2 80@3 00; thorough Texas cattle, $2 75@4 85. HOGS.—Rough and mixed, $3 65@4 05; packing and shipping at $3 90@4 10; light, $3 70@4 0.. SHEEP.—Market steady; Natives, $2 00@4 10, Texans, at $2 15@3 00.

ST. LOUIS.—Compared with cash prices a week ago, wheat is steady. Corn, 1⅜c. lower. Oats, 4¼c. lower. Butter, creamery, steady,; dairy, 1c. to 2c. higher. Flaxseed, steady. Pork, 25c. lower. Cattle, shipping steers, from 35c. to 40c. lower; other grades teady. Hogs, 5c. lower. Sheep, unchanged.

WHEAT.—Active; No. 2 Red, Cash, 76¼@77½c; June at 77½c, July at 77¼@78c; August, 79½c. CORN.—Dull; No. 2 mixed Cash, 30¾@32½c; June, 30@c; July, 32½c. OATS.—Dull, No. 2 mixed, Cash, at 26@26½c; June, at 27c; July, at 26c. RYE.—Quiet at 59c. BARLEY.—There is no market. BUTTER.—Quiet; Creamery, 14@15c; dairy, 11@13c. EGGS—Quiet at 8c. FLAXSEED at $1 00@1 01. HAY.—Timothy, $13 00; Prairie, $; 00. BRAN 63c. at mill. CORN MEAL.—Steady at $2 00. PORK, at $8 75. BULK MEATS.—Long clear at $5 80; Short Rib, $5 40; Short Clear, $5 55. LARD.—Steady at $5 67½@5 75. CATTLE.—Market firm; Fair to Choice Native Shipping Steers, at $4 80@5 35; Native Butcher Steers, $3 50@4 75; Cows and Heifers, at $2 25@3 80; Stockers and Feeders, $3 25@3 60. HOGS.—Light, at $3 80@4 00; Packing, at $3 85@4 05; Heavy, $4 10@4 15. SHEEP.—Market steady at $2 50@4 50.

BOSTON.—CORN.—Steamer yellow, at 50@50½c, and steamer mixed at 49c., and no grade at 35@47c. per bushel, as quality. OATS.—No. 2 white, 43@43½c; No. 3 white, at 42@42½c, and fancy white and barley are held at 44@46c. per bushel as to quality. Rye is selling at 65c. per bushel. Sales of Bran at $14@15 for Spring and $17 00 for Winter; fine feed and middlings at $14 00@15 00 and cotton seed meal at $23 00 on spot and $22 25 per ton to arrive. HAY AND STRAW.—Hay is in fair demand at $19@20 per ton for choice and fancy; fair to good, at $17 00@18 00; fine, at $16 00@17 00, and $13 00@15 00 for poor and damaged; Western choice, $17 00@18 00; do fair to good $15@16. Straw—Rye straw is held at $21 00@22, for choice, and $14@18 for common to good. Swale hay, $11@12; Oat straw, at $10@11 per ton. PRODUCE.—BUTTER.—Northern and Eastern creamery, extra 18c; extra firsts, 16@17c; firsts, 14@15c; Western creamery, 16@18c, for extra firsts, new; firsts, 14@16c, Northern dairy, 15@17c. for Vermont extra firsts to extra, new; firsts, at 13@14c; seconds, 12@13c; Western dairy, 14@15c, for firsts; seconds, 10@12; imitation creamery, 13@15c, for extra firsts to extra; ladle-packed, 11@11c, for extra firsts to extra; firsts, at 10@12c; seconds, at 8@9c; grease, at 4@5c. NEW CHEESE.—New York and Vermont extra, —@8¼c; do. do. firsts, 7@8c; do. do. seconds, 4@6c.: Western extra —@8c; do. firsts, @7c. EGGS.—Cape and near-by, per dozen, at —@15c; Eastern extras, at 12½@13c; do, firsts, at 11½@12c; Northern, fresh at 12c; Western firsts, at 11@12c; Provincial, 11½@12c. BEANS.—Choice Northern hand-picked pea, at $1 65@1 75 per bushel; do, do, New York, small, $1 50@1 60; do, do, screened, $1 15@1 30; medium choice, hand picked $1 20@1 35; do, do, screened, $1 15@1 25; Yellow Eyes, improved, $1 40; do, choice flats, at $1 25@1 30; Red Kidneys, $1 60@1 65. PEAS.—Canada, common to choice, at 65@95c, per bushel. Green peas, Northern, at 90c@$1; do, Western, $1 15@1 20. POTATOES range at 40@70c, per bushel as to quality.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, June 5, 1886.

STATE OF THE MARKET.—Compared with cash prices last week, flour is 5c. higher; No. 2 Chicago wheat 2c. higher; Ungraded Winter Red, 2c. higher; corn, 1c. lower; oats, 1½c. lower; pork, unchanged; butter and cheese slightly advanced, eggs, ½c. lower; poultry, 1c. lower; cotton, unchanged; frnit, steady; vegetables unchanged.

FLOUR, FEED AND MEAL. FLOUR—Quotations: Fine at $2 15@3 05; Superfine, $2 50@3 30; Extra No. 2, $3 15@3 50; Good to Fancy Extra State, $3 60@4 00; Common to Good Extra Western, at $3 15@4 00; Good to Choice Extra Western, $4 00@5 10; Common to Fair Extra Ohio, $3 15@3 75, Good, $3 80@4 40; Good to Choice, $4 25@4 80; Common Extra Minnesota, $3 15@3 50; Clear, $3 50@3 90; Rye Mixture, $3 50@3 90; Straight, $4 00@4 50; Patent $4 50@5 10; Bakers' Extra, $3 75@4 25; St. Louis Common to Fair Extra, $3 15@3 65; Fair to Good, $3 70@4 50; Good to Very Choice, $4 55@5 00; Patent Winter Wheat Extra, $4 40@5 10; City Mill Extra for West Indies, at $4 35@4 50; South America, $4 15@4 55. SOUTHERN FLOUR—Common to Good Extra, $3 25@4 00; Good to Choice do., $4 05@5 15. RYE FLOUR.—Superfine, at $3 00@3 25; Fancy lots, $3 40. CORN MEAL.—Brandywine and Sagamore quoted at $2 75. FEED.—40 to 50 lbs. quoted at 65@70c.; 60 lb. at 60@67½c; 80 lb. at 70@72½c, 100 lb. at 80c; Sharps at 85@90c. Rye at 75c.

GRAIN.—WHEAT.—No. 2 Chicago at 87@88c; Ungraded Winter Red at 81@91c; No. 1 Hard Duluth, 91½@92¼c; No. 2 Red, 87@88½c; No. 2 Red for June, 85½@86½c; do. for July, 85⅞@85½c; do. for August 86¼@86¾c; do. for September 87¼@87½c; do. for October, 88¾@89¼c; do for November, at 89¾@91c, do. for December, 90¾@92¾c; do. for January, 91½@93c; do. for February, 93¾@94c; do. for May, 95¾@97c. RYE.—Western, 60@62c, Canada at 62@63c; State at 65@67c. CORN.—Ungraded Mixed, at 30@32c; No. 3, 33½@34c, Steamer Mixed, 37½c, No. 2 Mixed, at 43½@43½c, No. 2 White, 47¾c; Kiln-Dried Mixed, 41c; No. 2 Mixed for June, 43¾@43½c; do for July, 44¾@45¾c; do. for August, 45¾@46¾c; do. for September, 46¾@47c. OATS.—No. 3, Mixed 33½c; No. 3, 33¾@34c; No. 1, nominal; No. 3 White, 35¾@37½c; No. 2 37@37½c; No. 1 nominal; Mixed Western, at 34@35c; White do., at 38@41c; White State, 38@43c; No. 2 Mixed for June, 34½@35¾c; do. for July, 33c; do. for August, 30¾c.

PROVISIONS.—PORK.—Mess quoted at $9 00@9 25 for Old and $10 00 for New; $10 75@11 75 for Family Mess; $12 00@14 00 for Clear Back; and $9 50@9 75 for Extra Prime. BEEF.—Extra India Mess, at $16 00@17 00; Extra Mess, in barrels, $8 00@8 50; Packet, $8 50@9 00 in bbls.; Fancy Plate, $9 00. BEEF HAMS. Quoted at $23 50@24. CUT MEATS.—Pickled Bellies, 12lb average, 5¾c; do, Shoulders, 6¼c; do, Hams, 11c. MIDDLES.—Long Clear in New York, 5¾c; Long clear, 5.45c; Short Clear, 5 40c. DRESSED HOGS. City Heavy to Light quoted at 5¾@6¾c.; Pigs, 5¾@6¾c. LARD.—Western Steam spot at 6.15@6.17½c; July, at 6.18@6.23c; August, 6.26@6.32; September, 6.36@6.41; October, 6.43@6.48c; November, 6.47@6.49c. City Steam at 5.95c, Refined quoted at 6.35c. Continent 6.55c.

BUTTER.—Elgin Creamery, 16@ -c; Pennsylvania do., 17@18c.; Western do., best, 16c; Western do, prime, at 15c; Western do, good, at 14c; State pails at 17@18c. State Dairy half-firkin tubs, best, 16c; do. do. do, extra fine, 15c; do. up, do., good, 13@14c, do. do. common, 11@12c; Welsh tubs, best, 15c; do prime, 14c; Western, imitation Creamery, best, 13c; do. fair and good, 11@12c; Western Dairy, fine, 13@13c; do, common, 9@11c; Western Factory, fresh, 11c; do. good, 9@10c,

CHEESE.—New State Factory, best white, 7¾@7¾c; do. do, best colored, 7¾@7¾c; do, do, good, at 6¾c; do. do, fair, at 5¾@6c; do. do., common, at 5¼c; Ohio factory, fine, at 7¾c; do, fair, at 5¾@6c; Pennsylvania skims, ½@1c.

POULTRY.—LIVE.—Fowls, near-by lots, per lb, at 9@—c.; fowls, Western lots, per lb, at 9@ -c.; fowls, Southern lots, per lb, at 8½@9c; turkeys, per lb, at 8@10c; ducks, western, per pair, at 70@90c.; geese, western, per pair, at $1.50@2.10.

POULTRY.—DRESSED. Turkeys, per pound, at 10@12c.; chickens, Philadelphia, light weights to pair, at —@15c. per pound; fowls, Pennsylvania, prime, per lb, 11@—c.; do State and western, per lb, 9@—c.

POULTRY.—FROZEN.—Turkeys, per pound, at 14@16c,

GAME.—English snipe, per doz., $3@2 50; Plover, Western, per doz., $1 00@1 50; Sand snipe, per doz., 40@50c.

COTTON.—The quotations, according to the American classification, are as follows:

	Uplands.	New Orleans and Gulf.	Texas.
Ordinary.....	6⅝	6 13-16	6 13-16
Strict Ordinary.....	7 1-16	7¼	7¼
Good Ordinary.....	8	8 3-16	8 3-16
Strict Good Ordinary..	8 7-16	8⅝	8⅝
Low Middling..	8 13-16	9	9
Strict Low Middling...	9 1-16	9¼	9¼
Middling.....	9¼	9 7-16	9 7-16
Good Middling.....	9⅜	9 15-16	9 15-16
Strict Good Middling...	10 1-16	10⅜	10¾
Middling Fair.....	10 7-16	10⅝	10⅝
Fair.....	11 1-16	11¼	11¼

STAINED.

Good Ordinary..... 6 7-16	Low Middling. 7 15-16
Strict Good Ord..... 6¾	Middling 8 11-16

FRUITS.—FRESH.—Quotations are: Apples.—Baldwin, per bbl., at $3 00@3 50; Russetts, Roxbury, per bbl., $2 75@3 00; do. Goldens, $2 50@2 75. Strawberries—South Jersey, per quart, at 14@16c; Maryland, per quart, at 11@16c; for prime; do. Wilson, per quart, at 12@14c.

FRUITS.—DRIED.—The quotations are as follows: Apples—Fancy evaporated, at 7@8—c; choice, at 6½@6¾c, do. prime at 6¼@6—c; fancy North Carolina sliced, at —; choice do. at 2½@3c.; choice Tennessee quarters at 1½@2c.; State quarters at 2½@3c.; southern sliced prime at 1½@2c; do. common, —, Peaches—Peeled North Carolina, choice, 11c; fancy, 12@12½c; extra fancy, —c; Georgia, choice, at 10@11c; do. prime, 8@9c; unpeeled halves, 2½@3c, unpeeled quarters at 2@2½c.; Delaware evaporated, peeled, —@—c; unpeeled do., at —@—c. Choice pitted cherries at 10c. Evaporated raspberries, at 14@15c; sun-dried do. 12@12½c. Blackberries—Prime at 7c. Whortleberries at 6c. Plums, at 5c.

PEANUTS.—Quotations at 6½c. for best hand-picked 4½@4¾c. for farmers' grades; 5¼@5½ for country cleaned.

HAY AND STRAW.—The following quotations are; for Choice Timothy hay at 80@—c; Good do, at 75@80c; medium 65@70c; shipping at 65c; clover mixed, 60@65c; clover, black, at —@—c. Straw.—No. 1 rye, 90@95c; short rye at 60@70c, oat, at 40@45c; wheat, at —c.

SEED.—For Clover there is but very little demand; prices are held about nominal; job lots are quoted at 10@11c. Timothy quoted at $2 05@2 15. Linseed quoted at $1 65@1 70. Mustard at 5¾@6c. for Trieste brown mustard and 6¼c. for California yellow. Carraway seed at 10½c. for Dutch; Italian anise at 9½@10c. canary seed nominal at 2¾@3c. for Smyrna and 3¾@3½c. for Sicily.

VEGETABLES.—Potatoes.—Bermuda, new, prime, per bbl, $1@5 60; Bermuda, new, small, per bbl, $2@2 50; Savannah, new, prime, per bbl, at $3@4 50; Charleston, Chili, prime, per bbl, $3@4 00; Charleston, rose, prime, per bbl, $2@3 50; Charleston, peerless, prime, per bbl, $3@3 50; Florida, new, prime, per bbl, $3@4 00; new potatoes, seconds, $1 50@2; new potatoes, culls, per bbl, 75c@1 25; Rose, Maine and New Brunswick, prime, $2; Rose, Nova Scotia in bulk, per bbl, at $1 75@2 00; Rose State, per bbl, $1 37@1 62; Burbank, State, per bbl, $1 50@1 75; Burbank, Nova Scotia, per bbl, $2@2 25; Burbank, Maine and New Brunswick, per bbl, $2 00; Hebron, State, per per bbl, $1 25@1 50; Hebron, eastern and Nova Scotia, per bbl, $1 75@2 00; Prolific, Nova Scotia and New Brunswick, per bbl, $1 75@2 00; Mercer, Prince Edwards Island, per bbl, $1 62; Peerless, State, bulk, per bbl., $1 25@1 50; Magnum Bonum, Imported, 168 lb. sack, $2 00. Asparagus.—Oyster Bay, per dozen bunches, at $1 50@2 25; do, upper Jersey, prime, $1 50@2 00; do, South, Jersey, Maryland and Delaware, per dozen bunches, $1@1 50. Beets.—Savannah, per crate, $1@1 50; do. Florida, per crate, at 75c@$1. Beans.—North Carolina, round, per half bbl, crate, at $3; do, North Carolina, round, per bush. crate, $1 75@2; do. North Carolina, flat, per half bbl, crate, $2 50@2 75; do. North Carolina, flat, per bush. crate, $1 50@1 75; do. Charleston wax, per crate, $1 50@1 75; do. Charleston round, per crate, $1 25@1 75; do. Charleston, flat, per crate, at $1@1 25c; do. Savannah, wax, per crate, 75c@$1; do. Savannah, round, green, $1@1 50; do. Savannah, flat, 30@75c. Cabbages.—Norfolk and North Carolina, per bbl., at 75c@$1; do. Charleston, per bbl, 50c@$1; do. Savannah, choice, 75c@$1 25. Cucumbers.—Savannah, per crate, $3@5; do, Florida, prime, per crate, $2@3; do, Florida, inferior, 75c@$1.50 Kale.—Long Island, per bbl, at 50@60c. Lettuce.—Long Island, per bbl, 75c@$1. Onions.—Bermuda per crate, at $1 25@1 62; do, New Orleans, per bbl, $3@3 75. Peas.—Maryland, per bbl., at $2@3 50; do, York River, per half-bbl. $1 25; do, Norfolk, morrow, per half bl, crate, $1 25@1 50; do. Norfolk, small, per half bbl. crate, $1@1 25. Radishes.—Long Island, per 100 bunches, 50@75c. Rhubarb.—Long Island, per 100 bunches, $1 25@1 50. Spinnach, Long Island, per bbl, $1 50. Squash.—Charleston and Savannah, per crate, 50@75c. Tomatoes.—Florida, choice ripe, per crate, $3@3 50; do. Florida, green, per crate, $2@2 50; do, Bermuda, per box, 30@60c.

LIVE STOCK MARKET.

NEW YORK, SATURDAY, June 5, 1886.

Shipments for six days, 950 live cattle, 5,620 quarters of beef, and 239 live sheep. BEEVES.—Among the sales were 10 cars of through Texans at $4@4 95, and 10 cars of Fair to Good "Stillers" at $5 50@5 90, while Ordinary to Prime Native Corn-fed Cattle sold at $4 75@6 10, with Choice reaching at $6 25. Pennsylvania Steers, 1,563 lb, at $6 10; do, 1,263 lb, at $5 55; Texans, 945 lb, at $4 40; Pennsylvania Oxen, 1,440 lb, at $5 25; do. 1,696 lb, at $5 50; Dry Cows, 880@1,050 lb., at $3 50@4 37½; Terre Haute "Stillers," 1,291 lb, at $5 90; Shelbyville do, 1,160 lb, at $5 50; Corn-fed Chicago steers, 1,120 lb, at $5 50; Ohio do, 1,325 lb, at $5 90; Chicago steers, 1,335 lb, at $5 88; do, 1,122 lb, at $5 85; St. Louis Cherokees, 970 lb, at $5 05; Indiana Steers, 1,265 lb, at $5 70; do. 1,884 lb, at $5 70; Kentucky do, 1,131 lb, at $5 45; do, 1,030 lb, at $5 40; Kentucky oxen, 1,388 lb, at $4 75; Tennessee Oxen and Steers, 1,319 lb, at $5 12½; Texans, 936 lb, at $4 80; do, 822 lb, at $4 50; Oxen, 1,430 lb, at $4 25; State Cows, 1,173 lb, at $4 55.

CALVES.—Fair to Choice Veals, sold at 4½@5¼c; Buttermilk calves at 2@3½@3¾c, and a few Fed do, at 3¾@4c; Dressed Veals in more active demand and ½c, higher; City Dressed Veals, soldat 6½@8½c, and Country Dressed at 5@7¼c.; Fed Calves, 185 lb, at 4c; Veals, 151 lb, at 5¼c; Buttermilks Calves, 133 lb, 2 11-16c.

SHEEP AND LAMBS.—Total for six days, 31,591 head against 34,161 head for the same time last week. With moderate receipts and cooler weather the Sheep market had a better tone and Prime stock sold at rather stronger prices, and although trade was not brisk, sellers were holding all grades of stock a little firm. Lambs were scarce and, quality considered, sold at higher prices. Common to Good Sheep sold at $4@5 55; and a few Choice at $5 75@5 90, with 20 selected Kentucky bringing $6 per 100 lb. A car-load of very Common Virginia lambs sold at $7 50; a car-load of Fair Kentucky do, at $8 00, and a deck-load of Good Marylands at $9 12½ per 100 lb; Ohio Sheep, 91 lb, at 5¼c; Westerd do, 97 lb, at $5 55; Kentucky do, 109 lb, $4 25; Maryland Lambs, 56 lb, at 9¼c; Virginia Ewes, 75 lb, $4; Virginia Lambs, 47 lb, $7 80.

HOGS.—Total receipts for six days, 26,041 head against 39,658 head for the same time last week. None for sale alive. Nominally firmer at $4 40@4 65 per 100 lb;

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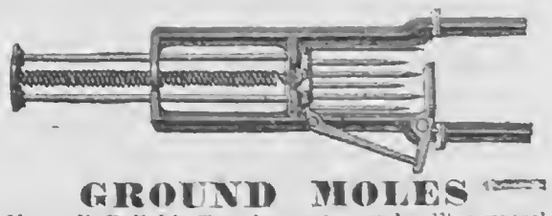

GROUND MOLES

Olmsted's Reliable Trap is sure to catch. Five years' use in National Cemeteries, Greenwood, Public Parks and Private Lawns and Gardens. A little book about their habits and circulars free. Price $1.65. Sent, express paid, on receipt of $1.75.

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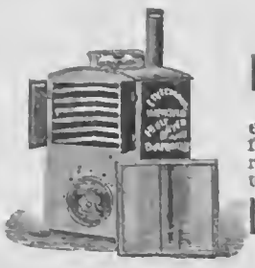

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LIGONIER M'F'G CO.,

Ligonier, Ind.

An Editor's Friend.

NEW CASTLE, Pa., March 27th, 1885.—I had a painful affection of the liver, and let it alone, until it got a firm hold of me. Took seven or eight bottles of Warner's safe cure, and am perfectly well, without pain.—F. J. MELANY, Editor *Clarion*.

For the Young.

DECORATION Day has come and gone. No doubt most of you helped to celebrate it. You will wonder, perhaps, why I talk about it after the celebration is all over. There were so many to talk and write about the day before it came that I have waited till now so that what I have to say can be remembered. Every one of our great holidays serves a good purpose. They take our thoughts away from the present, away from ourselves, and show us that we do not live for ourselves alone, but that this is a great big country, stretching thousands of miles North and South, East and and West. Every man and woman and every boy and girl ought to feel an interest in this country. It has cost too much to preserve the Union and to make this country what it is, for us to say that there are plenty of others to look out for good government and all that sort of thing. It is just such a spirit that makes war and bad government possible. Decoration Day is, to my mind, one of the most useful of all holidays. We always like to talk about brave men and brave deeds—it does us good to discuss them. The world has never seen braver men than those whose graves are covered with flowers on Decoration Day. I do not think the world can produce braver or nobler women than those who sent their husbands and sons and brothers to the war, and did a man's work at home that the battles might be fought. These things are sure to come into our minds on Decoration Day and they ought to do us good. We do not need to go back into the centuries, or to go to other countries to find examples of bravery; we have them here. Each one of my boys and girls desires to be good and true and brave. I never yet heard of a boy or girl who made a bad man or woman from choice. I hope our boys will never be called upon to fight, and I hope our girls will never be obliged to act as home soldiers, yet I know that there are thousands of little battles that you will have to fight before you can be the men and women I want you to be. There are a dozen giants like selfishness, carelessness and laziness that will be sure to want to fight. You must do the fighting alone for nobody can do it for you. You will need the same silent and patient courage that has called out the great heaps of flowers in the soldiers' graveyards. For this reason I say that Decoration Day has its uses. It should always be celebrated, and its memories should be cherished.

Look out for the slugs on the roses now. They will do plenty of damage unless you take them in time. Look for them on the under side of the leaves. The flies saw into the leaves and lay their eggs. When the slugs hatch out they feed upon the leaves and soon make them look as if they had been burned. A solution of whale oil soap in water will make them leave, but a good dusting with pyrethrum will make sure work.

Now is the time to get "into print" easily. We have more space now, and perhaps we can crowd that advertising column off the page. Let us try it. Who can tell us about catching moles, or keeping rabbits, or planting nuts, or in fact about anything that is a little new? You will get an idea from the above of a letter that will surely be printed.

Lists have been received this week from Abbie Ward; Freddie J. Champion; Stella Woodard; Clifford D. Greene; Sidney G. Anderson; Amy E. Taylor; Bessie Cole; Jessie M. Andrews; Dora Brasie; Fred Balsey; Freeman E. McNall; Nellie M. Sankey; Johnnie F. Holm; Emily Cockeran; Mary E. Nicholson; Emma Mohr; Harry Daxe; Mary Garmory; Lottie E. Stevenson; Julia E. Newman; Dennie E. Boyd; J. G. Campbell; Herbert Damrell; Harry M. Hart; John C. Hick; John Z. Reed; James H. Lewis; S. C. Stockton; George C. Brower; Asa Wersom; Walter Puntenny; Jos. Greethurst; Rubie Van Demark; Willie Marvin; Hoyt G. Muffitt; Thomas Knowles; Lillie Moore; Lewis W. Peterson; C. C. McClure; Eva and Fred. Bomber; Walter Fisher; Grace Dille; Walter H. Beall; Hubert E. Turner; Mark E. Hoose; Ethel M. Bennett; Robert M. Colt; Mary C. Green; Ada R. Allen; E. M. Burge; Frank C. Evarts; Lee Webster; Truman Gerould; Elmer R. Young; James M. Stevens; Lillian Newman; James A. Leland; John Ohline; Wirt M. Bishop; Sarah J. Gordon; Bertie Season; Joseph E. Crocker; Bessie D. Sandess; Orris French; and Agnes S. French. I have not had time to count all the lists yet but I am sure that there are many thousands of words in all. The papers, all pasted together would make a very long roll. Some of you did not understand it as I did. I find some words with more than one w and more than one h. The idea was to use only the letters that can be found in the three words given. I shall have to cut out all these "bogus" words.

A GOOD TRAP.

DEAR UNCLE MARK: Perhaps some of the boys in the RURAL family would like to make a box trap that will catch a rat, squirrel or rabbit, and be sure "every time." The enclosed sketch is a box trap open at either end and has a simple tripping arrangement connected with the bait. The trap I made was of sound, weather-stained boards (to avoid suspicion—light boards would not do), 26 inches long, 6 inches deep and 10 inches wide, inside measure. On the side opposite the bait, nail a standard outside, to extend 6 inches above the top of box. Nail a piece 2 inches wide and 12 inches long across top of box at center for post to rest on and to hinge lids to. On top of posts nail a piece about 9 inches long. Bore a hole

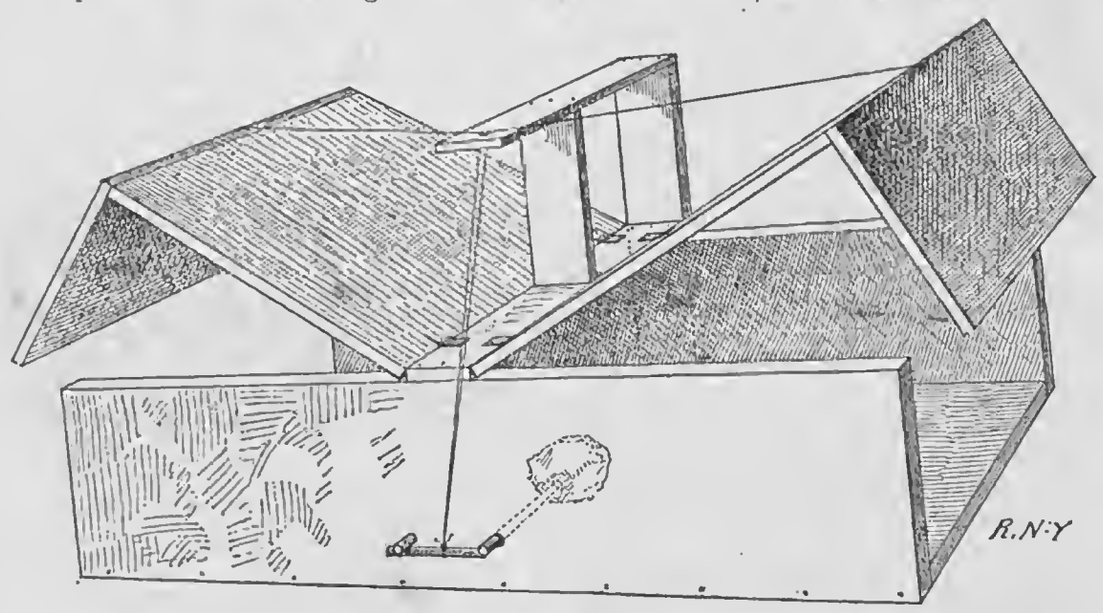


Fig. 254.

through the end of this piece for strings to go through, hinge the doors or lids to the center cross-piece. For bait bore two small holes, put a peg in tight at one and let it stick outside one-half inch, and in the other put a loose peg with bait tied on inside. Make the two strings even in length and tie them to the short loose stick. Now set the trap "ticklish," so a slight nibble will trip it. This is very simple, and can be made with saw, hammer and nails and square. As rats and squirrels will gnaw, take some old rusty tin and protect places where light shines in.

M. H. C. GARDNER.

Johnsons, N. Y.

LETTERS FROM THE COUSINS.

DEAR UNCLE MARK: As my last letter was not printed, I will try again. Papa received the RURAL seeds and gave me the Garden Treasures, and I have planted the sweet peas. I go to school and have the same teacher I had last term. Papa has a span of Norman colts two years old and their names are Tom and Dan. He has driven them and carried me to school. This Spring he tapped about 250 trees and made quite a lot of sugar, and I had all the warm sugar I wanted to eat, and wish you could have been here to eat some. Will Uncle Mark or some of the RURAL Cousins please tell me how to grow pansies? I have tried two or three times, but without success.

Sandy Creek, N. Y. STELLA WOODARD.

[Who has had the best success with pansies? I am glad you have the same teacher—U. M.]

DEAR UNCLE MARK: We are having fine weather for growing things, though we had an uncommonly cold winter. We have some corn a foot and a half high. In March last, we put out 1,000 plants of Crescent strawberries, and 500 of some other kinds, but the Crescent is a great deal the best. We planted the Alaska Peas, and they were getting along finely when the rabbits found them, and now we won't get back as much as we planted. We will have wheat to cut in a few weeks. We have potatoes and beans in bloom; tomatoes also. If we had not taken your paper we would have lost a horse and Jersey cow that we paid $65 for, so your paper has helped us. Last year we had two great big watermelons; one weighed 49 pounds and the other 20.

Your loving nephew,

Chickamauga, Tenn. JOHNNIE F. HOLM.

HAZE.

"I RECK'N I done quit fo awhile boss."

As the engine made this remark, he stopped turning the press and took up the bundle of rags which served him for a handkerchief. He polished his face lustily as the press went on until I had "fed in" the next paper. Then, with one hand the engine stopped the wheel and repeated his remark.

Now don't drop me entirely because I speak of an engine's talking. Give me a chance to explain. Our engine was a tall, strong colored man. We called him our engine, because he surely did an engine's work, and because he was the only one we had. We liked to speak of our "power press," and never cared if the public saw fit to make us more powerful than we really were.

Our engine was certainly stronger than any of his steam brothers of equal size. His muscles were like steel rods and his lungs were as strong as an iron boiler. He never puffed at all over his work, while a real engine would make a dreadful outcry when pushed a little.

The engine looked anxiously at me as he mopped his face. I was feeling rather good natured—no, I will tell the truth and say that I was lazy—so that I nodded to him. He never waited for a second word, but ran out at the door with all speed.

A short time after this I chanced to look out at the window and saw the engine in what seemed to me a curious position. There was a fence—in fact, several of them—between us, so that I could only see the upper part of his body. That was enough, however. He stood with his hat off and his head bent forward. His wife stood close at hand in very much the same position, while one or two little woolly heads just reached to the top of the fence. It seemed like a curious position in which to find the engine and his family. I had seen him in many ridiculous positions, however, so that it did not seem so far out of the way after all. A white man would have taken such a position at the grave of a very dear friend, but no one thought of the engine as a mourner. I contented myself with calling him back, thinking his vacation had been extended long enough.

In a short time he came rushing back to the office. He caught hold of the wheel and fairly made the press fly. After a "run" that made a great hole in the papers, he stopped to fill his pipe. As he rubbed the tobacco up in his great hands, it seemed to me that there was something wrong with him. He laughed and grinned just the same as ever, and fairly tied himself into a knot when I remarked that his pipe was strong enough to turn the press. Back of all this mask of gaiety, however, there was something that told me he was greatly troubled.

I doubt if I could have found out the reason of this trouble, however, if a friend of his own color had not dropped in. This gentleman had evidently called during the engine's absence. From their conversation I got something of an idea of the cause of the engine's seriousness. Let their dialogue tell the story.

"Whar you ben at," said the new comer, as he took off his hat and turned it into a fan. "I cum round yer awhile ago but done see nuffin ob you; reck'nd youse done quit."

"The engine rubbed away at his tobacco as he answered—"I'se ben to de berryin—dats whar I's ben at. I hates powerful ter quit, but pears like I orter go."

"Whose berryin' at wuz? Didn't know dat nobody wuz dead." The visitor spoke sadly, just as if he was sorry to miss such an important event as a berryin.

The engine began to act a little foolish again. He laughed and hung his head down as he answered, "It want one of dese sho' nuff berryin's—jest my dog; but 'pears ter me," he said, as if to explain something of his conduct, "dats deres a heap of men dat done deserb a berryin more dan dat dog done."

The visitor evidently began to get interested. He stopped waving his hat and thrust his great lips out in surprise as he asked: "How dat dog ob youse come ter die like dat? I reck'ned dat wuz de livest dog dey wuz in de hull place. Whar he die at?"

(To be continued.)

Don't kill the toads, boys. They do too much good. Let us spend all we desire to kill on the potato bugs.

Miscellaneous Advertising

AN OPIUM EATER'S STORY.

CRAWLING OVER RED HOT BARS OF IRON IN FEARFUL FRENZY—A SCIENTIFIC INVESTIGATION AND ITS RESULTS.

Cincinnati Times-Star.

"Opium or death!"

This brief sentence was fairly hissed into the ear of a prominent druggist on Vine street by a person who, a few years ago well off, is to-day a hopeless wreck!

One can scarcely realize the sufferings of an opium victim. De Quincy has vividly portrayed it. But who can fitly describe the joy of the rescued victim?

H. C. Wilson, of Loveland, O., formerly with March, Harwood & Co., manufacturing chemists of St. Louis, and of the well-known firm of H. C. Wilson & Co., chemists, formerly of this city, gave our reporter yesterday a bit of thrilling personal experience in this line.

"I have crawled over red hot bars of iron and coals of fire," he said, "in my agony during an opium frenzy. The very thought of my sufferings freezes my blood and chills my bones. I was then eating over 30 grains of opium daily."

"How did you contract the habit?"

"Excessive business cares broke me down and my doctor prescribed opium! That is the way nine-tenths of cases commence. When I determined to stop, however, I found *I could not do it.*"

"You may be surprised to know," he said, "that two-fifths of the slaves of morphine and opium are physicians. Many of these I met. We studied our cases carefully. We found out what the organs were in which the appetite was developed and sustained; that no victim was free from a demoralized condition of those organs; *that the hope of a cure depended entirely upon the degree of vigor which could be imparted to them.* I have seen patients while undergoing treatment, compelled to resort to opium again to deaden the horrible pain in those orgrns. I marvel how I escaped."

"Do you mean to say, Mr. Wilson, that you have conquered the habit?"

"Indeed I have."

"Do you object to telling me how?"

"No, sir. Studying the matter with several opium-eating physicians, we became satisfied that the appetite for opium was located in the kidneys and liver. Our next object was to find a specific for restoring those organs to health. The physicians, much against their code, addressed their attention to a certain remedy and became thoroughly convinced on its scientific merits alone that it was the only one that could be relied upon in every case of disordered kidneys and liver. I thereupon began using it and, supplementing it with my own special treatment, finally got fully over the habit. I may say that the most important part of the treatment is to get those organs first into good working condition, for in them the appetite originates and is sustained, and in them over ninety per cent. of all other human ailments originate."

"For the last seven years this position has been taken by the proprietors of that remedy and finally it is becoming an acknowledged scientific truth among the medical profession; many of them, however, do not openly acknowledge it, and yet, knowing they have no other scientific specific, their code not allowing them to use it, they buy it upon the quiet and prescribe it in their own bottles."

"As I said before, the opium and morphine habits can never be cured until the appetite for them is routed out of the kidneys and liver. I have tried everything—experimented with everything, and as the result of my studies and investigation, I can say I *know* nothing can accomplish this result but Warner's safe cure."

"Have others tried your treatment?"

"Yes sir, many; and all who have followed it fully have recovered. Several of them who did not first treat their kidneys and liver for six or eight weeks, as I advised them, completely failed. This form of treatment is always insisted upon for all patients, whether treated by mail or at the Loveland Opium Institute, and supplemented by our special private treatment, *it always cures.*"

Mr. Wilson stands very high wherever known. His experience is only another proof of the wonderful and conceded power of Warner's safe cure over all diseases of the kidneys, liver and blood, and the diseases caused by derangements of those organs. We may say that it is very flattering to the proprietors of Warner's safe cure that it has received the highest medical endorsement and, after persistent study, it is admitted by scientists that there is nothing in materia medica for the restoration of those great organs that equals it in power. We take pleasure in publishing the above statements coming from so reliable a source as Mr. Wilson and confirming by personal experience what we have time and again published in our columns. We also extend to the proprietors our hearty congratulations on the results wrought.

PERSONALS.

GENERAL TOOMBS'S estate, recently settled, was worth $250,000.

QUEEN VICTORIA'S chicken house is a palatial, semi-gothic building.

GEN. SHERMAN has decided to make New York his home henceforth.

PRESIDENT CLEVELAND and Miss Frances Folsom were married at the White House, Washington, on Wednesday at 7 P. M.

WALT WHITMAN'S 67th birthday anniversary on Monday found him in the best of spirits, but in constantly failing physical powers.

GOVERNOR RUSK is almost certain to be renominated by the Republicans of Wisconsin, and Gabriel Bouck is likely to be the Democratic candidate.

THE wife of Senator Leland Stanford, of California, distributed $5,000 among the kindergartens of San Francisco on her recent birthday.

ENGLISH poet Browning calls "our own" Oliver Wendell Holmes "the Horace of America." Oliver is having a glorious time across the Atlantic.

THE Chicago Anarchists are trying to engage Ben Butler to defend them. Having no defense, they suppose Ben is the best man to manufacture one.

COL. DAN. LAMONT has won "golden opinions from all sorts and conditions of men," and especially of women, for the way he conducted that little ceremony at Washington.

ROSE ELIZABETH CLEVELAND, sister of the President, steps down from the proud position of "first lady of the land" with the good opinion and wishes of all.

"Our Mary" (Anderson) sailed for England Thursday afternoon, accompanied by her brother Joe and her inevitable stepfather, Dr. Griffin. Will take "a long rest." The gross "take-in" of her recent tour here was $312,000.

PRINCE JEROME NAPOLEON, it is said, will soon come to the United States, ostensibly to meet his son, who is returning by way of San Francisco and New York from his trip around the world.

SECRETARY CHAMBERLAIN, of the Ohio Board of Agriculture, is to be President Chamberlain soon, he having accepted a call from the trustees of the Iowa State Agricultural College to the presidency of that institution.

ANDREW CARNAGIE, the several times millionaire steel manufacturer, has given $500,000 to build, stock and endow a public library in Pitsburg, Pa., and $250,000 for the same purpose to Allegheny City, across the river from Pittsburg.

IN order to keep an engagement in Washington, Mrs. F. B. Thurber traveled last week from Pittsburg to Washington by special train within eight hours and 15 minutes. The distance between the two cities is 304 miles. The run was the fastest on record. Cost her $300; but she was on time.

THE infant King of Spain, having been born after his kingly father's death, enjoys the almost unique distinction of having been born a monarch. There is no other like instance in the history of Spain, nor of England. In France there has been one such incident, in the case of John I., in 1316.

WILLIAM L. SCOTT, of Erie, Pa., is the richest man in the House of Representatives, if not in Congress. Worth about $15,000,000; born in 1828; page in the House from 1840 to '46; began shipping business on the lakes in 1850, then went into iron and steel; now represents 22,000 miles of railroad. Always a Democrat.

GORDON S. HUBBARD, who is dying in Chicago at 85, was the first trader who ever furnished the Indians with supplies at that point, was Chicago's first pork packer, built the first Chicago warehouses, raised Perry's famous flag-ship, and with it and three other vessels founded the Eagle line, the beginning of Western lake commerce.

JOHN KELLY, Tammany "boss," with country-wide reputation as a politician, died quietly here Tuesday, June 1, after over a year's illness. Born here in 1822; alderman in 1844; Congressman in 1856; sheriff twice here; comptroller in 1876, and for the first time, since it began in 1760, reduced the city's debt. It was $112,000,000,000, and in his four years he cut off $12,000,000. A good epitaph now would be what he has been called for years—"Honest John Kelly."

AVERAGE hight of our Senators, five feet nine; average weight 175 pounds. Fattest and heaviest, Philetus Sawyer, of Wis., 250 pounds, or thereabouts. Stanford, of California; Beck, of Kentucky, and Eustis, of Louisana aggregate 600 pounds. Logan, of Illinois; Palmer, of Michigan; Jones, of Arkansas; George, of Mississippi, and Vest, of Missouri, average 180 pounds apiece. Evarts, Spooner, Eli Salsbury, H. B. Paine, Ingalls and Mahone are the leanest and lightest.

Miscellaneous Advertising.

FOR THE HARVEST,

Which will soon be upon us, we offer to our FARMERS the following special TOOLS and MACHINES of our latest and most approved pattern:

The CROWN MOWER,
The MONITOR Hay Rake,
The Burdick Hay Tedder,
Our Improved Hay Loader,

with the largest assortment of small TOOLS and MACHINES for the Hay and Grain Fields to be found in this country.

Send for descriptive circulars of the above modern Implements as well as any and every requisite in the line of Tools, Fertilizers and Seeds.

A visit of inspection is invited to our extensive warehouses at **189 and 191 Water Street.**

R. H. ALLEN COMPANY,
New York.

THE DANA
CENTRIFUGAL-GOVERNOR
WINDMILL

Is the best working and most powerful Wind-Engine in the world, because it is the only one which unites the most perfect form of wind-wheel with the most perfect method of regulation. Geared Mills a specialty.

For Descriptive Circulars apply to
THE DANA WINDMILL CO.,
FAIRHAVEN, MASS., U. S. A.

IF your blood is tainted with foul disease, you must restore the kidneys to health if you ever expect to purify it, as they are the great blood purifiers—by use of Warner's safe cure.

PEARSON'S FERTILIZERS.

High Grade. Reliable. Lasting.

Manufactured in dry condition, thereby assuring full weight of fertilizing material. Most flattering results where used side by side with other preparations. Where there are no agents for these Fertilizers, orders direct to the manufacturers will receive prompt attention. JOHN M. PEARSON, Hudson, N. Y.
Send for catalogue.

A HAY-RICKER AND 2 WHEELED RAKES FOR $60.
WARRANTED TO BE AS GOOD AS ANY ON THE MARKET. SENT ON TRIAL TO RESPONSIBLE PARTIES. FOR CIRCULAR &C. ADDRESS A. J. NICHOLSON & CO. SPRINGFIELD. O.
MENTION THIS PAPER

FRUIT DRYERS!
Prices Greatly Reduced. Send for Circular. Mention this paper.
ZIMMERMAN MFG. CO., Burlington, Ia.

LINSEED OIL-CAKE MEAL.

ABSOLUTELY THE BEST FEED FOR
CATTLE, HORSES,
CALVES,
SHEEP AND HOGS.

The Oil Meal from the mills of the undersigned is found by many Feeders of

LIVE STOCK

to be of great service during the
SUMMER MONTHS
when grass is good. No room here to give particulars; but try it, and you will see the good results. It is sold by all leading feed dealers.

Mr. JOHN KING, NORRISTOWN, PENN., is General Eastern Agent.

Cleveland Linseed Oil Co., Cleveland, Ohio.
Toledo Linseed Oil Co., Toledo, Ohio.
Detroit Linseed Oil Co., Detroit, Michigan.
I. P. Evans & Co., Indianapolis, Ind.
St. Paul Linseed Oil Co., St. Paul, Minn.
Cincinnati Linseed Oil Co., Cincinnati, Ohio.

Newton's Improved **COW TIE** holds them firmly, draws them forward when lying down, pushes back when standing, gives freedom of head, keeps clean. E. C. NEWTON, *Batavia, Ill.*

DEITZ LONGBERRY Wheat
Send stamp for sample of this valuable Wheat and Deitz Fruit Drier. G. A. Deitz, Chambersburg, Pa.

BEFORE YOU BUY
WAGON, BUGGY or SLEIGH

WRITE TO
Hotchkin Carriage Works,
SYRACUSE, N. Y.
LOW PRICES TO DEALERS.

Unable to Dress or Undress for 10 Years.

LOCKPORT, N. Y., April 25th, 1884.—For ten years I suffered from lame back. Could not dress or undress myself. Different physicians failed to do me any good. Had constant desire to urinate, when I could not pass a particle of water. Suffered tortures. Took three bottles of Warner's safe cure, which effectually and permanently cured me. Never knew it to fail.—FAYETTE HASKELL.

GALVANIZED SHINGLES.

Makes handsomest, most durable, absolutely storm proof roof in existence. Send for particulars to
The National Sheet Metal Roofing Co.,
510 East 20th Street, New York.

FIRE-PROOF! WATER-PROOF!
Gutta Percha Roofing.
Especially adapted to Hot or Cold Climates.
Cheap and Durable for Flat or Steep Roofs. Send for Catalogue.
EMPIRE PAINT AND ROOFING CO.,
1128 and 1130 Race St., Philadelphia, Pa.

IRON ROOFING
Send for prices and Illustrated Catalogue of
CINCINNATI (O.) CORRUGATING CO.

CRIMPED & CORRUGATED
IRON ROOFING
W. G. HYNDMAN & CO.
SEND FOR CIRCULAR & PRICES ÷ CINCINNATI, O.

THE GIBBS PATENT "IMPERIAL"
Steel, Cast, and Chilled PLOWS.
EQUIPPED WITH JOINTERS, STEEL CUTTERS & WHEELS.

MANUFACTURED BY
BUCHER, GIBBS & CO., CANTON, O.

THE BRADLEY MOWER

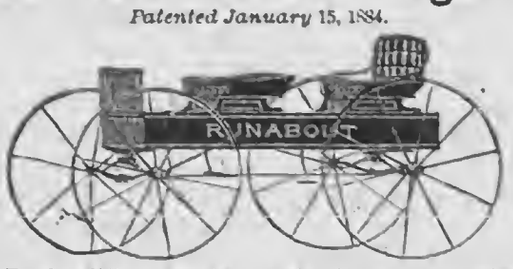
The lightest draft, easiest operated, best made and most durable mowers ever placed in the market. *Send for Free Circular, "How to purchase direct from manufacturer."*
Bradley Mowers Reapers and Hay Rakes.
4 ft. 3 in. —AND— 6 ft. cut.
Bradley & Co. SYRACUSE, N. Y.
22 College Pl., New York; 32 S. Market St., Boston.

BRICK AND TILE MACHINERY AND CLAY CRUSHERS, BEST IN THE WORLD

Address J. W. PENFIELD & SON, Willoughby, O. P. O. Box

AMERICAN ROAD MACHINE CO.
KENNETT SQUARE, PA.
Successors to
S. PENNOCK & SONS CO. and GEO. W. TAFT.
IMPROVED ROAD MAKING IMPLEMENTS
FOR CITY, TOWN AND COUNTRY.
☞ Machines sent on trial, and satisfaction guaranteed. Purchasers are assured of immunity from law suits. Circular and colored cuts FREE.

The Runabout Wagon.
Patented January 15, 1884.



Twelve different styles. *Light, Strong, Convenient* and *Low-priced*. The popularity of the RUNABOUT is such that its sale exceeds that of all other vehicles of its class combined.
Send for Illustrated Catalogue and price list direct to the manufacturer, ORVILLE H. SHORT,
Syracuse, N. Y.

Buy the Best. **THE EUREKA**

Awarded FIRST Premium and Gold Medal at World's Fair New Orleans, over 12 leading Wind Mills. The EUREKA, after a trial lasting 4 mos., was pronounced the best over all and to-day stands at the head of all competitors. Sizes, 10 to 18 ft. diameter of wheel, either for Pumping or Power Mills. *Perfect in all parts and warranted.* Estimates on application. Also Mfrs. of the Adams Direct Draft Barn Floor Horse Power. *Live Agents Wanted.* Address Mfrs.,
SMITH & WOODWARD, Kalamazoo, Mich.

EVAPORATING FRUIT
Full treatise on improved methods, yields, profits and prices FREE. AMERICAN M'F'G CO., Box P, WAYNESBORO, PA.

BULLARD'S HAY-TEDDER!

Does better and more work, draws easier, costs less for repairs, is better made, lasts longer, does not run on the spread grass, is the only Tedder proving satisfactory after being years in use.

BELCHER & TAYLOR AGR'L TOOL CO.
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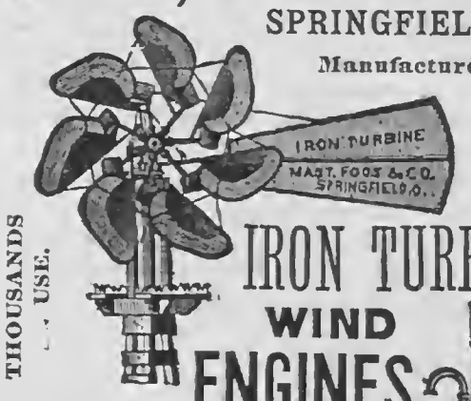
MAST, FOOS & CO.
SPRINGFIELD, O.
Manufacturers of the



THOUSANDS IN USE.

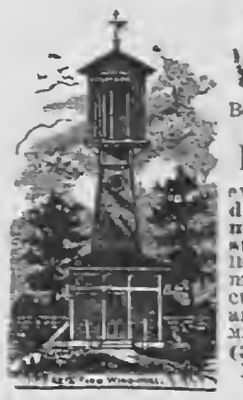
IRON TURBINE WIND ENGINES

Strong and Durable, will not Swell, Shrink, Warp, or Rattle in the Wind.

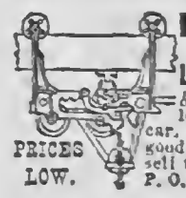
BUCKEYE FORCE PUMP

A CHILD CAN USE THEM.

Works easy and throws a constant stream. Has Porcelain lined and Brass Cylinders. Is easily set. Is the Cheapest and Best Force Pump in the World for Deep or Shallow Wells. Over 90,000 in use. Never freezes in Winter. Send for Circulars and Prices, giving depth of well. Also manufacturers of the Buckeye Lawn Mower, Buckeye Iron Fence, Buckeye Hose Reel, Lawn Sprinkler, etc., etc.



HERCULES WIND ENGINE.
Before you buy send for description and prices of the
BEST WIND-MILL
ever invented. It is the most durable, most ornamental, most powerful, strongest, steadiest, cheapest, is not liable to be wrecked; has automatic governor; can be placed in cupola of barn, or upon a tower, and is the ONLY RELIABLE GEARED MILL for driving machinery. The
Geo. L. Squier M'f'g Co.,
BUFFALO, N. Y., Sole Manufrs.
AGENTS WANTED.



FREE TO FARMERS
OUR CIRCULARS OF THE
LITTLE GIANT HAY LOADER
& the only hay carriers that runs right or left without any change and horse returns for car. HAY CARRIER OUTFITS sent on trial to good men where we have no agents. AGENTS sell the goods the farmer wants. Address P. O. Box 374. OSBORN BROS., Marion, O.
PRICES LOW.

RICHMOND CHAMPION FENCE MACHINE
Patented Nov. 24, 1885.
Surpasses all other wire and picket fence machines, for making strong and durable fences in the field, that no stock will break down. On rough, hilly ground, it keeps pickets perpendicular which no other machine will do without constant adjustment. It is easy to handle, uses any kind of pickets, and any size of wire. Write for circular and price.
WAYNE AGRICULTURAL CO., Richmond, Ind.

HAY CARRIER Mallory Trackless HAY ELEVATOR,
best in the market for filling a barn with hay. Better than any track carrier. Easily put up and taken down. Price only $5. Warranted to give satisfaction or money refunded. Best hay fork in the market, $3.25. Write for catalogue and terms to agents.
HERBERT BAKER, 93 Erie St., Toledo, O.

General Advertising Rates of
THE RURAL NEW-YORKER.

The following rates are invariable. All are therefore respectfully informed that any correspondence with a view to obtaining different terms will prove futile.

ORDINARY Advertisements, per agate line....80 cents.
One thousand lines or more, within one year from date of first insertion, per agate line, 25 "
Yearly orders occupying 14 or more lines agate space.....35 "
Preferred positions .....25 per cent. extra.
Reading Notices, ending with "Adv.," per line, minion leaded..... 75 cents.

Terms of Subscription.

The subscription price of the RURAL NEW YORKER is:

Single copy, per year	$2.00
" " Six months	1.10
Great Britain, Ireland, Australia and Germany, per year, post-paid	$3.04 (12s. 6d.)
France	3.04 (16¼ fr.)
French Colonies	4.08 (29¼ fr.)

Any one sending a club of seven is entitled to one copy, one year free.

Agents will be supplied with canvassing outfit on application.

Entered at the Post-office at New York City, N. Y., as second-class mail matter.

Humorous.

"STICK to it," as the flypaper observed to the fly.

THE bald-headed man remarked to the hair brush, we meet to part no more.

CATS are expert climbers. Some of them can get up a waul even if you clip off their claws.

FIRST FARMER:—"Do you feed your hogs corn in the ear?"—Second Farmer: "No; in the mouth."

"MISERY may like company," says a colored philosopher; "but I'd rader hab de rhumatiz in one leg den ter hab it in bof."

THERE'S a town in Massachusetts that will never have the measles. It's Haddam. And one in maine that can never escape them, for it is always sure to Ketchum.

LITTLE Ethel was taking a tedious walk up Congress street hill to Mountjoy. "Oh, dear!" she exclaimed, "I am so tired I shall have to walk on the other sides of my feet."

A LITTLE girl once asked a lady if she was young. "Oh, no," replied the lady, "I shall be 75 if I live." "Why," says the little one, "you are real old; when will you be new?"

"YES, sir," he said, much excited, "he's a liar, and I tole him so." "That's rather a riskey thing to do. I wonder he didn't knock you down." "Oh! I told him through the telephone."

AT one of our colored churches the brethren there were surprised at the shortness of the contributions, but their wonder ceased when they discovered that one of the collectors had tar in the top of his hat.

A STUDENT of the Dime Novel:—"Come now, Bertie, kiss your little sister and make up with her," said mamma to her 10-year old boy. "What! the Pawnee Chief bow low to pale-face Cry-Baby! Mother, you ask too much."

"ONLY A STEP."

Miscellaneous Advertising.

SUMMER DRESS GOODS.

JAMES McCREERY & CO.

Call attention to their very complete stock of Summer Dress Goods, and the following special lines:

40-inch French Foule, all colors, 45c. per yard. A large variety of plain and figured Albatross at 50c. per yard. 48-inch Diagonal Serge at 75c. per yard. 42-inch striped and plain Camelette Suitings at 75c. per yard.

The above goods are all wool, and are remarkable value for the prices named.

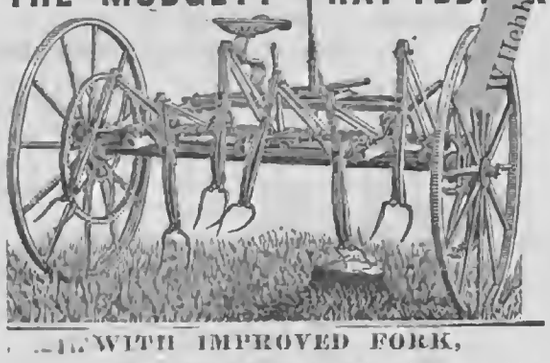
ORDERS BY MAIL

from any part of the country will receive careful and prompt attention.

JAMES McCREERY & CO.

Broadway and 11th St., New York.

THE MUDGETT HAY TEDDER



—IT WITH IMPROVED FORK,

Is the strongest, lightest draft and easiest working Tedder in the market. No **breakage** of forks or springs. Agents wanted.

B. & J. W. BELCHER,

Box 75. Chicopee Falls, Mass.

THE GREAT AMERICAN TEA

GOOD NEWS TO LADIES.

Greatest inducements ever offered. Now's your time to get up orders for our celebrated Teas and Coffees, and secure a beautiful Gold Band or Moss Rose China Tea Set, or Handsome Decorated Gold Band Moss Rose Dinner Set, or Gold Band Moss Decorated Toilet Set. For full particulars address

THE GREAT AMERICAN TEA CO.,
P. O. Box 289. 31 and 33 Vesey St., New York.

ROSSIE IRON ORE PAINT

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Will protect roofs from sparks. Valuable for coloring mortar. Samples free. Ask prices of

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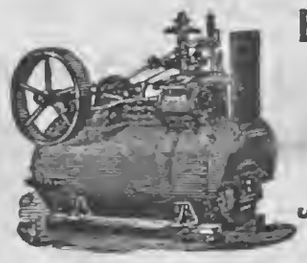

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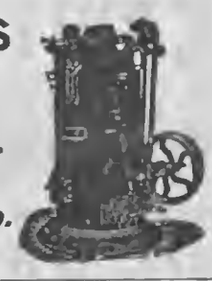

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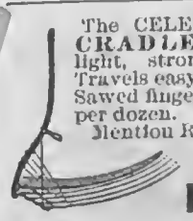

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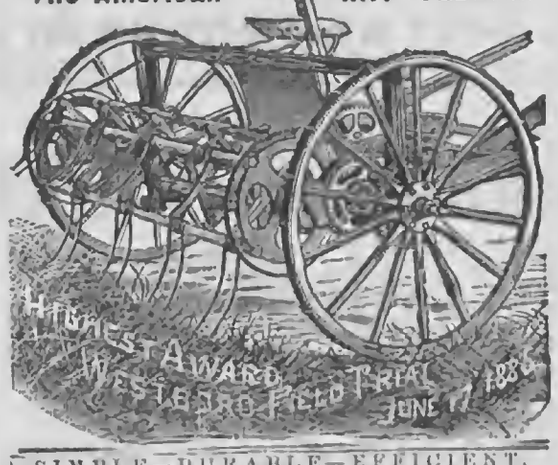

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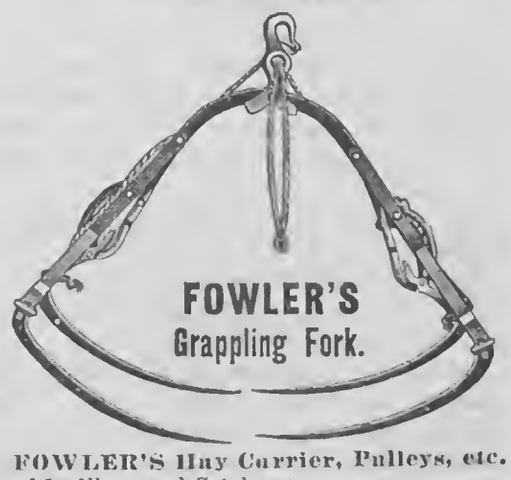

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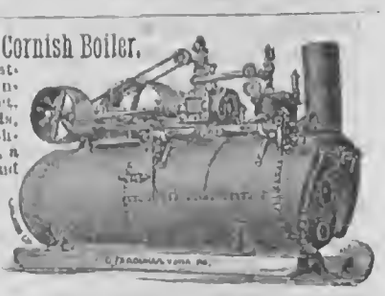

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A JOURNAL FOR THE SUBURBAN AND COUNTRY HOME.

VOL. XLV. No. 1899. NEW YORK, JUNE 19, 1886. PRICE FIVE CENTS. $2.00 PER YEAR.

Entered according to Act of Congress, in the year 1886, by the Rural New-Yorker in the office of the Librarian of Congress at Washington.

Architecture.

A BEAUTIFUL HOME.

RURAL readers will find much to interest them in an examination of the house illustrated at Figs. 253, '4 and '5. Such a building is well adapted to the needs of a country family. An examination of the plans for the first and second floors (p. 398) show that comfort and convenience have been most sought after. It will be noticed that the front door opens directly into the sitting-room, while the stairs are in the center of the house, away from the front door. We like this arrangement exceedingly. The house was planned and built by Mr. A. Freed, of Lancaster, Ohio, and cost not far from $5,000. Mr. F. writes us, concerning the internal arrangements, as follows: "The greatest convenience in the arrangement of my house, and one which the family would be least willing to be deprived of, is the method of supplying water. An abundance of rain water, both hot and cold, is ready for use in the bath-room for water-closet, wash stand or bath. The arrangement is this: the water is conducted as it falls from the roof by an iron pipe down through the building into the cellar, thence underground up a hill near the house into a cistern holding about 75 barrels. From the same pipe that conducts it to the cistern it is distributed first through the cook-stove to a tank, one pipe from the latter supplying hot water to the sink in the kitchen. Another, ascending to the second story, supplies the bath tub, and a branch from this leads to the wash-stand. The cold water is supplied from the "down" pipe in which the water always finds its level with that in the cistern on the hill. Other conveniences are a dumb-waiter and china cupboard in the wall between the dining-room and kitchen, with doors opening to both; also an elevator for carrying coal from the cellar to grates on first and second floors. In moderately cold weather, the halls, bath-room, dining-room, sitting-room, parlor and library are heated by hot water running through pipes which pass through a furnace in the cellar. This mode of heating here in the country is a new thing. The heat is distributed where it is needed without the inconveniences of stoves, dust and ashes. This mode of heating is cleanly and agreeable, but in very cold weather the heat is not sufficient to warm the house without the grates; but by the use of both methods, the rooms are very agreeably and comfortably heated."

A BEAUTIFUL HOME. Fig. 253.

Farm Topics.

CITY AND COUNTRY FOLKS.

CHARLES A. GREEN.

WHEN we first moved to our run-down farm we were constantly surprised by visits from merchants, lawyers and others, calling for the purpose of discussing what was best to be done with property in which all had a mutual interest, and by calls from other fashionable city friends and acquaintances. I was never at ease when entertaining these city friends. I have lived in the city myself, and know precisely how city people look upon the country and country folks. They live where money is spent lavishly upon gardens, pleasure grounds and drives by men whose rest is disturbed only by plans for distributing money, rather than gathering it. They come from the pavements, from front yards only a few feet in extent, kept mowed, ornamented and made attractive at small cost, if the owner is so disposed. These city people make a study of dress, manners, equipage and general appearance. When they drive out into the country they see everywhere evidences of economy and frugality. And when the city guests are seated about the parlor or dining table anyone could easily distinguish the residents of the country from those of the city. The unpretentious farmer points with some misgivings to the growing crops, to his cattle and horses, but the ill-conceived compliments that the city friends bestow are apt to grate harshly upon his ear, and he is apt to feel relieved when they depart. The farmer's horses are not made more beautiful by their work at the plow and harrow. It is sometimes the same with the farmer and his family. Their plodding in heavy boots, their hard work in bent positions, their faces discolored by the blaze of the hot summer's sun tell against the beautiful chiseling of the human form. Indeed, he must be a handsome man who can withstand a thorough tanning in the burning sun and yet retain his good looks. Genuine palor is certainly a badge of intellectuality. A man with a brown face may be as wise and acute as his untanned brother, but he does not have that appearance. It is not dignified to have a nose as red as a beet, or cheeks like leather. True nobility, however, will shine out through all these disadvantages.

There was once a wealthy banker who had taste for fruit growing, and liked nothing better than to get on his old clothes and work among the trees and plants. One day a man called at his house, desiring to interview him, not having found him at his office. Passing through the grounds he saw the gardener, apparently, who pleasantly bade him good afternoon. The visitor scorned to recognize the salute, but inquired gruffly if Mr. So-and-so was at home? Imagine the visitor's dismay a short time afterward, when the apparent gardener (really the banker) appeared in the drawing-room in answer to his call. The visitor had expected to negotiate an important loan. It is needless to state that he did not get it, and was taught a good lesson in good manners. While I would not like to over-estimate the value of dress and personal appearance, I must confess that in my opinion, people of rural districts do not give enough attention to this subject. It costs no more to dress in good taste than to dress in poor taste, but it requires more attention. I shall have to state, in closing, that rural people make altogether too much ado over their city guests. We should assume that city people go into the country for a change, and all attempts to give them other than good farmers' fare and accommodations are out of place and uncalled for. We cannot make the country like the city, nor can we appear like city people, and it is folly to attempt either. Let us take pride in being ourselves, not fearing that others will hold us in less esteem by such a course.

When I lived in the city, I drove into the country with a friend for a day's shooting. Becoming separated from my friend, and finding myself near the residence of an esteemed cousin, I called at the door for a bowl of bread and milk, which was my favorite dish. Imagine my surprise and horror when I found that the lady of the house had begun to spread an elaborate repast, tired as she doubtless was at that busy season. The table as usually set was cleared, china and silver were laid on snowy linen, and every delicacy at her disposal was placed before me. I felt guilty of a crime in thus trespassing, but knew that it was useless to protest. Can the reader doubt that I would have preferred my bowl of bread and milk, with more time to chat with my cousins, who were exceedingly interesting people?

Rochester, N. Y.

CORRESPONDENTS' VIEWS.

KEEP at the bogus butter makers and dealers until you drive them from the face of the earth. If you do, future generations will "rise up and call you blessed." By the way, why don't the bogus butter makers eat their own stuff? I notice most of them pay a big price for dairy butter to use on their own tables. L. P. S.

Rockford, Tenn.

SEVERAL stockmen near me are grading up their cattle somewhat. One man is using pedigree sires, and to some extent, dams. Short-horns are the favorites. His cattle are very fat and present a most marked appearance alongside of our natives. He sold yearlings this Spring at $62.50 per head, while the rest of us that sold any got only $8 per head.

McMillen Co., Texas. T. K. B.

MILKMEN are frequently troubled, during the summer months, by their milk souring. This is owing, no doubt, to the fact that they cannot cool it quickly enough after milking. Various plans are tried, like lowering the cans down the well, or placing them in a barrel surrounded with water. It would pay them to buy a creamer like the Cooley. These creamers are the best things in existence for cooling milk or for the retail trade. Milk can be kept sweet for several days, and a glass can be drawn at any time by simply turning a faucet. They are as valuable for the milk dairy as they are in butter making. W.

Windham Co., Vt.

LAST Fall I built a poultry house for my little boy, and started him in the business. I set posts in the ground about five feet apart, put streamers 2x4 inches on the outside of the posts, and put on white oak boxing an inch thick. The same thing went on the inside—nailed to the posts. The space between was filled with new sawdust packed tightly and firmly. This made a sawdust wall six inches thick. A light floor or loft was made above, and covered with six inches of sawdust; one large window at the south and two smaller at the end. In putting in the ceiling, it is best to nail on about two feet, beginning at the ground, and then fill this with sawdust before nailing on more. This house has been warm in the coldest weather. BUFORD.

Caldwell, Ky.

TOO many farmers neglect to bed the horses. They are foolish. A bed is needed even in Summer. Wheat straw is the best for this purpose. It is brittle, and the animal will not get his feet tangled up in it. Oat straw is too tough. Barley straw is too dusty. It causes irritation of the skin. A few straws will not answer. Give a good, soft bed. A. U. H.

Ashland Co., O.

CAPONIZING pays. The flesh of capons is decidedly sweeter and of finer flavor than that of cocks. They gain from two to four pounds in weight, while the cost of feeding is no more. If the farmer could once get a taste of a capon, there would be a great reduction in the number of roosters on his place. After capons have once been introduced into a market, there will be a great demand for them. A cross of the Dorking or Game on the common poultry will make a fine capon. The operation can be performed at any age, but from two to six months gives the best results. I do not see that the birds suffer much pain after the first incision. They lie motionless unless you touch their heads. To show how little people in general know about caponizing, I can relate a fact that came under my observation. At a poultry farm where I was visiting, a lady called and examined some capons. When told what they were, she said they were splendid birds, and asked the proprietor to be sure and send her some eggs. W. H. W.

Philadelphia, Pa.

IN the rush for chemical fertilizers let us never forget that good barnyard manure, all things considered, is the cheapest fertilizer we can find. Some writers spend long sentences trying to prove the inertness of green stable manure the first season after application. My experience does not show the same result. Grain-made dung that has been made to retain a fair proportion of the urine

even by the addition of great quantities of inert absorbents, with me shows good effects from the first application. It is surprising to see how quickly young corn plants will find it when merely plowed in moderate quantities into washed sterile clay soil. There is no doubt in my mind that grain-fed dung is quicker in its effects than dung from cattle fed on hay or straw alone. The addition of the urine has a marked influence on the activity of the manure. C. S. O.

Foristell, Me.

ITEMS of evidence showing that Holsteins combine to a wonderful degree the characteristics of beef and milk cattle, are the weights of the following descendants of Empress:—Holland milk record, 109 pounds in one day; American milk record, 19,714 pounds 4 ounces, in a year. Her dam's record in Holland is reported to be 114 pounds in one day.

	Pounds.
Empire, out of Empress.....weighs	2,450
Emporium, 7 mos. 1 day old, out of Empress,	850
Pledge, 5 yrs old, out of gr. daughter of Empress,	1,720
Bull calf, day he was calved, out of gr. daughter of Empress.....	138
Ofanto, 6 mos. old, sired by gr. son of Empress,	702

Oswego, N. Y. DUDLEY MILLER.

As a soiling crop, rye has some merits, but I do not consider it by any means equal to clover or corn where these can be grown successfully. A fair crop of hay can be made from rye, if it is cut at the right time—just when coming into bloom. It will make a profitable hay crop in localities where Timothy and clover do not succeed. It would make a good hay plant for the South. For Winter and Spring pasture for sheep or calves, rye is excellent. It can be pastured with us, in the Spring until Blue Grass and clover are well started, and then make a fair crop of grain. We find the hardiness of rye to be one of its strongest recommendations. It will grow and flourish about anywhere, and on soils too poor to grow beans. K. B.

Kankakee Co., Ills.

I HAVE eaten fresh grapes of my own raising nine months of the past year, commencing with Champion and ending with Diana. The grapes were kept in hard-wood sawdust, in 20-pound grape baskets in an ordinary cellar. Victoria cuttings fail to grow alongside of others. Buds did not even swell while those of other vines grew. The buds were not well developed or matured. T. A. P.

So. Bend, Ind.

IN putting up a wire fence the corner post must be well braced to stand the pull given in stretching. We take a brace 14 feet long and put in the second post so that the brace will just come to its foot. Then stretch a wire from the foot of corner post to the top of second post. Place top end of brace just under where the top wire will come. Posts braced in this way, will not "raise." To stretch the wires, we brace the corner posts as above described. Drive a wagon about eight or 10 feet past the post you want to stretch to, with the inside wheel on a line with the fence. Let the tongue down, and drive a post-bar into the ground at the end of the tongue. Fasten the tongue at the bar in the ground—a stay chain is best for the purpose. Put a piece of board or a wagon-jack under the hind axle of the wagon so that the wheel nearest the line will clear the ground. Fasten the wire to the spoke or hub and turn the wheel until the wire is as tight as desired, and then staple it securely. My man and I have stretched and stapled a mile of fence—three wires—in this way in one day. On level land one quarter of a mile can be stretched at one time.

Chase Co., Kan. W. L. B. N.

SOME agricultural papers tell us that ashes sifted over currant bushes, will kill or drive away the currant worms. I have tried it four times with good unleached hickory ashes, and it will not do any such thing. My worms fatten on this treatment. My plan is to pick off every leaf that has turned red and rolled up, and burn them. If you can't do it yourself, hire some boys to help you. "Workman" talks about "oniony" milk in a recent issue. He can make sure of one thing at least—he has been eating genuine butter for once. No "oleo" would be flavored in that way. Don't dig up the garlic, let it stay and thus make a sure test for pure butter. Or would you rather have the "oleo" without the garlic?

Brightwood Ind. W. H. L.

Sheep Husbandry.

Notes from the Western New York Farm.

LAMB FEEDING.

EARLY vs. LATE-CUT HAY.

ALTHOUGH I have before spoken of the advantages of early-cut hay, yet as the haying season is at hand, and the difference is so much in favor of early cutting, I again refer to this subject. I have in mind two lots of clover hay: the one was of large growth with coarse stalks, and yet the lambs ate it clean, even to the coarsest stalks. The other was much finer and apparently much better, but the lambs would eat nothing but the leaves and heads. On tasting, I found the coarse stalks of the one filled with sweetness: stalks of the other, though much smaller, were coarse and woody. On inquiry I learned that the first, for fear of lodging, was cut a little before it was in full bloom; while the other was left until regulation time, or until a half or more of the heads "were brown." The first was cheap at the price ($8.00 per ton), and lambs would have wintered in good order if fed only such hay and plenty of roots, and kept in warm stables. The other would have been dear at $6.00, and the lambs would not eat enough of it to have kept in good condition. The same is true of Timothy hay, only in a more marked degree, because a larger proportion of its nutritive value is contained in the stalks and stems.

My father was once a firm believer in the superior value of well-matured hay, and would cut his only when at least one-half the seed was ripe enough to grow. Once, when he was from home, I commenced the haying, and cut several tons when in full bloom. On his return the haying was stopped until, as he thought, the proper season; when Winter came I was told that the reason for the stock eating the early-cut hay so much the more readily was because of its want of substance, making it necessary for them to eat the more of it. I could convince him that it was because of its greater palatability, and that it was really better, only by an actual feeding test of several weeks' duration.

The philosophy of the difference is plain enough when we consider the sequence of growth. The plant takes its mineral matter, including its phosphoric acid, its nitrogen, hydrogen, and oxygen, entirely from the soil, while its carbon comes mostly (probably entirely) from the air. Sugar, gum, starch, and woody-fiber, while differing so widely in digestibility and nutritive value, are strikingly similar in chemical composition, and are evolved in the process of growth the one from the other. When just coming into bloom grass contains a large proportion of sugar and gum, the more easily digestible; but these, as the plants mature, are rapidly changed into starch, and later into woody fiber. In this condition not only do they become much less digestible and lose much of their nutritive value, but much of the nitrogenous matter is locked up in the close embrace of the woody fiber.

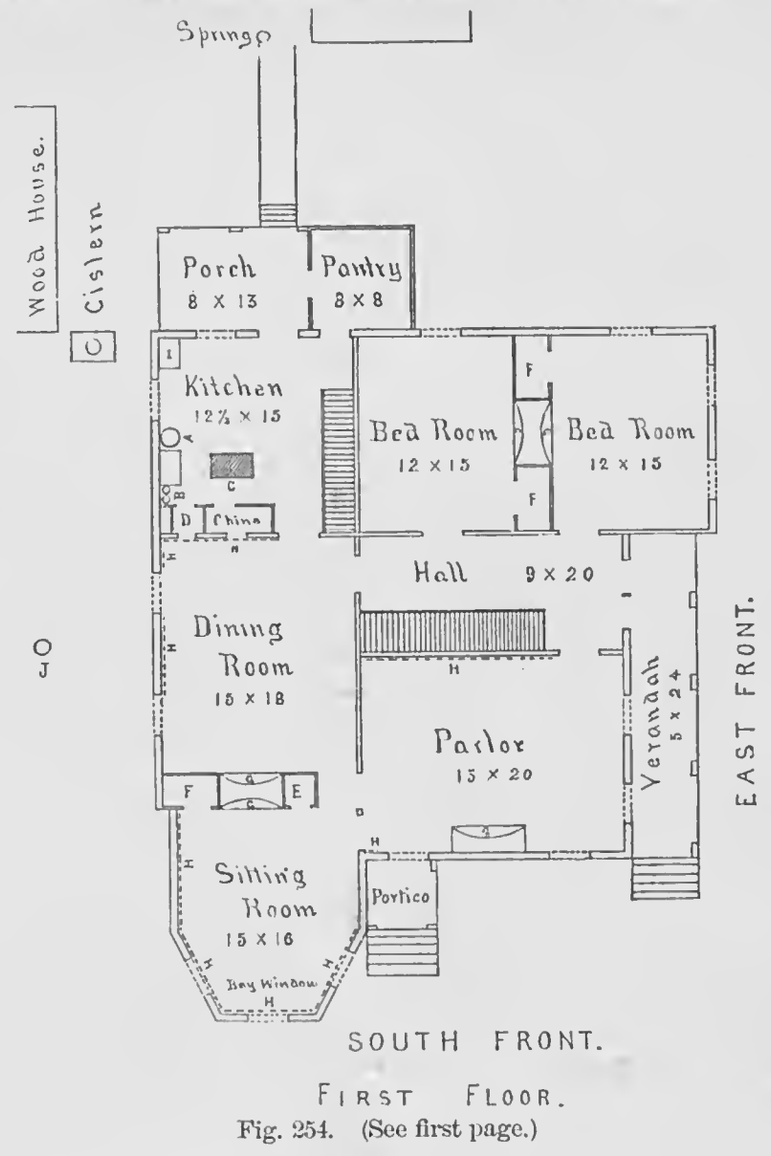
It is really strange to hear the superiority of early cut hay so universally conceded by all careful feeders, while nearly all hay is allowed to stand over until ripe. Probably one reason of this is, that with the most improved machinery it takes several days, and in bad weather, weeks even, to cut all the meadow, and when people wait before beginning until the grass is wholly fit, much of the crop is sure to get far too ripe before it is cut. Since I have so often in my own experience proven that lambs will not thrive to the best advantage on anything but the earliest cut hay, I would strongly urge upon every one intending to engage in lamb feeding, the importance of closely watching the meadows, and of cutting the clover even a little before the fields are in "full color."

WITHIN two weeks we shall be cutting clover on an early rich field, and shall probably cut it three times this Summer, especially "lamb hay." It excels everything else for young lambs.

The field of hand-picked Diehl-Mediterranean Wheat is a sight. It was sown with a scant bushel per acre, but is now over waist-high, as "thick as a mat," and bids fair to go away above 40 bushels per acre. This is a magnificent wheat, and its introduction has been worth millions to the country; yet being a crossbred, it still sports, and requires careful selection by hand-picking to fix its type so as to be uniform. This field has been hand-picked twice, and I am anxious to see if it will still show "bald heads."

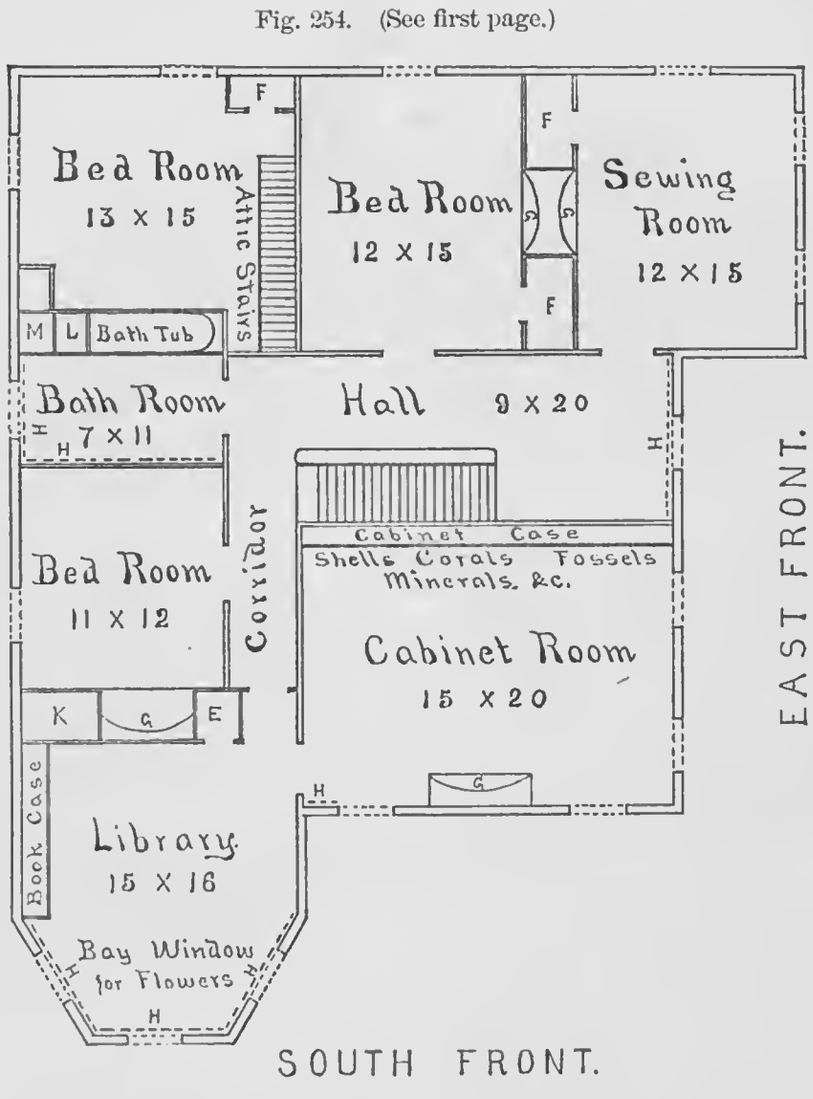
Yesterday I tried the Aspinwall potato-planter, made at Three Rivers, Mich. It opens the furrow, drops the pieces of potato, one in a place, and at any distance from 10 to 90 inches apart, puts a little soil, then the fertilizer, and then more soil on the seeds, leaving a ridge from two to three inches above the level of the surface. It does not miss one hill in 50, and seldom drops more than one piece in a place. One man and a team planted, using phosphate, five acres in a day easily, and could have done much more if crowded. I mention this, not to boom the machine or to puff the makers, but I can recognize merit when I see it, and this machine shows the result of much study, and is a jewel to every person raising a half dozen acres of this valuable crop each year. It has almost human intelligence, and I say success to the man who invented it. J. S. WOODWARD.

Niagara Co., N. Y.



FIRST FLOOR.

Fig. 254. (See first page.)



SECOND FLOOR.

Fig. 255. (See first page.)

Dairy Husbandry.

"WITCHES IN THE CHURN."

T. D. CURTIS.

A CORRESPONDENT writing from Cicero, N Y., says that he used a portable creamery during the Summer with good results, but when cold weather came on he at times found it impossible to make the butter come. The milk was set at a temperature of 40 degrees for 12 hours, and the cream was kept at 60 degrees until slightly sour, and then churned at 62 degrees. He wants to know what was the matter with the creamery, as when the milk was scalded and set in pans there was no difficulty in churning the cream.

There was nothing the matter with the creamery, so far as appears from these facts. The trouble was evidently with the temperature of the cream. As a rule, milk is more albuminous in Winter, or when it is cold in the Fall and Spring, than it is in the Summer. Chilling the cows by standing out in the cold, or by leaving a warm stable to encounter the cold air, or by gorging with ice-cold water, causes an excessive secretion of albumen in the milk. Any sudden shock to the cow's system, sickness of the cow, and other derangement for some reason cause this excess of albumen. Hence, we suspect that our correspondent's cows in some way suffered from exposure to the cold; that this increased the proportion of albumen in the milk: that this albumen adhered to the butter globules and interfered with churning; that in consequence his cream was viscous and ropy and that scalding the milk when set in pans congulated the albumen and left the butter globules free or freer to unite and coalesce in the form of butter. If the milk had been scalded before setting in the creamery, it would have churned the same as when set in the pans—although we do not know precisely what the effect is of running the temperature down to 40 deg.; in his pans it probably did not go so low. If he had diluted his cream with warm water quite considerably, we think it would have facilitated the churning, as would also churning at a higher temperature. If he has such trouble again, let him try the temperature of 64 or 65 degrees, and up even as high as 70 degrees. It will do no harm, even if the butter does not come; if it does, he will learn something.

We have recently got some new light on the character of the butter globule. It has appeared in the report of the New York Experiment Station. During last Summer, Dr. Babcock was experimenting with milk fats and other fats, and found that the milk fats are liquid globules, pure and simple, without membranous covering, and that at a certain temperature they will break up by churning, without changing their appearance in the

least, save as to size. At another temperature, they remain unchanged under the operations of the churn; while at an intermediate temperature between these, they readily coalesce by churning and appear as butter. He was able to take milk with small cream globules and convert them into large ones, but correspondingly less in number; and by churning at another temperature, he could make the large cream globules in milk smaller and correspondingly increase their number. He made emulsions of other fats, the globules of which appeared under the microscope the same as the butter globules, and he could unite and divide them in the same way, and also churn them into the consistency of butter. But he had to observe a particular temperature for each kind of fat. This is why temperature is so important in churning. If the temperature is too light, the butter globules are broken up and reduced in size. If the temperature is too low, they refuse to adhere together, and no butter comes. The right medium temperature makes the churning easy.

As albumen is a constant element in milk—less just after the cow calves and during warm weather, and more in proportion in cold weather—it is inferred that this, being the most viscous, is the one that clings most tenaciously to the butter globule, giving it the appearance of a thin membrane. The churning presses the globule from this entanglement before it can unite with its fellow and congeal into butter. Prof. Arnold thinks the butter globule remains liquid until broken in the watery serum, which rapidly conducts off the heat and allows the globules to blend together and congeal in the form of butter, if the temperature is right. If it is too high, they only break and divide. If too low, they do not break at all, but remain enveloped in the viscid albumen. Hence the advantage, when the albumen is in excess, of churning at a higher temperature and of diluting the cream with warm water. It makes the whole mass more limpid, and allows the fat globules to free themselves from the albumen. This is the best light we are now able to throw on the subject.

The Poultry Yard.

POULTRY AT THE SOUTH.

THE Plymouth Rocks are, in my opinion, by far the best birds for this climate, both for the fancier and for the general farmer. They are hardy, thrifty and prolific. Langshans and Brahmas do well here, as do the Games. Any of the above will be profitable with fair treatment. The Polish, Houdans and other breeds with excessive feathering are delicate and almost worthless. Leghorns are healthy and prolific after reaching maturity, but delicate and hard to raise unless hatched very early. All sorts of geese thrive with us and can be raised at little or no expense. Fortunes can be made at geese farming. I can raise a ton of geese feathers for less money than one could produce a ton of wool.

I do not think this climate is as bad for poultry diseases as a colder one would be. If Northern poultry should be treated as badly as ours are, there would be none left at the North. We have but little roup and cholera, and only from neglect and filth. Our worst disease for little chicks is gapes, and I have seldom noticed that outside of filthy runs. Northern and Southern specimens of the same breed do not differ, except in development.

With the same care, we can grow a larger bird from the fact that all birds delight in warm weather—when not excessively warm. All birds, in their natural state, hatch their young in warm weather. Every poultryman knows that cold weather is death to young birds, and even when birds are fully feathered they will not grow in cold weather as they will in warm. Hence, I conclude that as we have nine months of warm, growing weather, we can raise a better bird that can those who live in a cold country where there are three months more of colder weather. Many Fall-hatched chicks are caught by the cold, and stunted, and consequently never reach their full size. Another reason why we can produce larger chickens in a warm climate lies in the fact that bugs and worms abound for a longer period of time. These are the natural food of birds and essential to their health and development. Again, the tender, growing vegetation is spread before fowls for a longer period of time. Chopped meat and vegetables will not so completely meet the tastes and requirements of a bird as the living and growing animal and vegetable life. Birds have no stomachs, and consequently no gastric juice. Owing to the fact that we have an abundance of insects, fruits, grass and seeds during nearly the entire year, we can raise our fowls for one-fourth the cost in a colder climate, yet, to our shame be it said, we buy both eggs and poultry away from home.

I would never advise a friend to buy eggs. Fanciers never buy eggs except now and then to secure a few chicks from an exceptionally fine cock. I would advise a farmer to kill all his old roosters, buy a pair or trio of good Plymouth Rocks, and keep the one or two hens laying all through the year, setting the eggs under his common hens. He could watch their nests and thus secure their eggs. From a trio of Plymouth Rocks a farmer could, with fair success, raise 125 chickens. This would give him at least 50 good hens, and enough to warrant him in killing off all the scrubs. He will have a flock of fine birds as much above the common stock as a race horse is above a Texan pony. If he should buy eggs he will be just one year behind his more enterprising neighbors. If he buys one or two settings, but a part of the eggs will hatch, and he runs the risk of trying to rear a lot of in-bred and poorly mated chickens, and perhaps not enough hens to do away with the common stock. A trio of chickens worth, say $10, will produce in a year 20 dozens of eggs, worth at least one dollar per dozen. The man, therefore, who buys chickens instead of eggs, gets his eggs for half price, and still has a fine trio of fowls on hand. It costs more to start in this way, but I think it pays best in the end.

Baton Rouge, La. W. W. GARIG.

MINORCAS.

THE Black and White Minorcas are new and valuable additions to the many varieties of poultry we already have in this country. Mr. Stephen Beales, one of the best known and ablest English writers, says: "These varieties have been very carefully bred for very many years in the south of England, outside of which, until recently, they were scarcely known; but now their great value as layers has made them very popular indeed all over the country, and they promise to become first favorites in this respect. Nor can we wonder at it, for their great fecundity, the large eggs they produce, their precocity and hardiness, their adaptability for all soils and places, whether confined or otherwise, make them one of the most useful breeds we possess, and, being non-sitters, we must give them the first position among all the laying breeds of poultry." The Minorca is a stylish bird, with stately, upright carriage, close, compact body and of a stout, square build. Their combs are large and single, earlaps white, and face coral red. They are very hardy either as fowls or chicks, and mature early, the pullets laying when 18 to 20 weeks old. They are small eaters and splendid foragers, and I believe will become great favorites, especially among the farmers.

There have been four importations this year, three for prominent breeders in Pennsylvania and one for one of the leading breeders in Maine, each having a fine breeding yard of the Blacks. The White Minorcas are very scarce, and but few have been imported. I predict for those few breeders of Minorcas a very ready sale for all the chicks they may raise this year, as this is surely one of the best fowls we now have in this country, and as true merit will always win, they will speedily come to the front. J. D. N.

Philadelphia, Pa.

Pomological.

"HARDINESS OF FRUITS."

PROF. J. L. BUDD.

THE general conclusion reached by Mr. T. T. Lyon, in the RURAL of May 1st, in regard to the need of foliage that will maintain perfect health during our summer extremes of heat and relative moisture of air, cannot be questioned; but it occurs to Western readers that habit of determinate growth and perfect hibernating in Winter should be considered in the same connection. To illustrate the harmony of theory and practice, the behavior of the great variety of ligneous plants on the Iowa Agricultural College grounds during the past three peculiarly severe Winters and Summers may have some interest.

The behavior in Central Iowa of the cherries and pears of Vladimir and Kazan Russia, perfectly illustrate the correctness of Mr. Lyon's views. In their native clime they endure a winter temperature of from 40 to 50 degrees below zero, while with us they have been injured or killed at a temperature of 30 degrees below, for the reason that their foliage will not stand our dry summer heat. Last August I failed to find a perfect leaf on a single variety of the cherry or wild pear from this coldest orchard-growing region of the world; yet, in Northern Dakota, and in Manitoba, they will prove specially valuable. On the other hand, varieties of the apple, pear, cherry, plum, forest trees, and shrubs, from Eastern Central Russia, 400 to 600 miles farther south, seem as hardy with us as our native forest trees. Nature seems to have fitted this oldest orcharding region of the world for developing all the requisites of what we call an iron-clad tree. The alternate play of the winds from the deserts on the east and southeast, from the inland seas and the Baltic on the west and southwest, and from the cold, dry tundras of the far north, has given the leaves of all plants from two to three more layers of palisade cells than are found in those of plants 600 miles farther north, or in any of the indigenous plants of Southwest Europe.

Observation also shows that the epidermis of bark, and all the parts of the flower, have been equally fitted for enduring periods of extreme heat and aridity of air, or extremes of moisture or abnormal cold. With the aid of Dr. Halstead and some members of the junior class, I have for the last two days been engaged in pollenizing the flowers of plums and cherries, with a view to the possible uniting of desirable points as to tree and fruit. The superior thickness and firmness of petals, thickness of stamens and pistils, and strength and firmness of anthers and stigmas have been constant subjects of remark in all fruits from this region.

Again, the constant dry autumns of this interior section, in accordance with a well known law, have in time developed in all woody plants another essential of the true iron-clad, viz., a habit of determinate growth as fixed and constant as that of the currant bush or the Duchess apple. A third essential of the hardy tree is what Mr. R. P. Speer calls "capacity for perfect winter hibernation." The currant, the lilac, and most of our indigenous trees have this capacity for perfect rest, undisturbed by our spells of genial warmth and rain of late Fall, mid-Winter, or early Spring. Possibly the law of survival of the fittest, or some climatic peculiarity has developed this essential in about all the plants of the East Plain south of Simbirsk on the Volga.

Ames, Iowa.

Horticultural.

HIGH FERTILIZATION AND CULTURE,

AS AFFECTING THE GROWTH AND FRUITAGE OF PLANTS ON THE BASIS OF ECONOMY.

Profit the only object of the commercial grower; conditions affecting the value of high manuring; the soil as a bank of deposit; varieties best adapted to high manuring; how to get the best varieties; difficulties.

P. M. AUGUR.

WHATEVER may be the possibilities of size and yield and growth of plant to the amateur, these matter not to the commercial grower if not compatible with clear economic investment. Look at the matter as we may, the question will arise, "Will it pay?" This is the test by which the whole matter must be settled.

To what extent, then, is high manuring and high culture profitable? Regarding the question from this stand-point, a variety of conditions confront us—the variety in hand, the present and prospective condition of the land, the market demand, the cost of labor, the cost of fertilizers, the enhanced value of the land worked, and the consequent profit or loss by extra outlay of capital in manuring and culture. I am a believer in the idea that what is worth doing, is worth doing well.

In any agricultural or horticultural product the variety raised is a matter of prime importance. With an animal, a good respiratory and digestive system, so that every pound of food does the most good, producing best results, is what is needed. Just this, too, is needed in a variety of vegetable or fruit. And it may be truly said that as good breeds and good breeding are important with the successful animal, no less so are good varieties, and careful retaining of vital points, with the vegetable or fruit. Analogy between the animal and vegetable in these respects is strikingly close. For high culture, then, we need only those varieties which respond generously to such treatment. Fortunately we are not without such varieties.

As regards the present and prospective value of the land, a retentive soil properly drained and subsoiled, is nearly as safe a place of deposit as a sound bank of discount; hence, if we wish to make heavy drafts we must make liberal deposits, knowing that what we do not draw out now will remain for future use. I fully believe that heavy manuring last year has an added value this year, especially for the strawberry, the manure having in the interval become much more available for plant food. Composting does for green manure what yeast does for flour, and no good cultivator can forego its advantages. An application of from 30 to 50 cords of stable manure per acre on land well adapted for the application, to be planted to the most productive varieties of strawberries, is positively on the basis of economy. A given amount of composted stable manure, put on evenly at three different dressings, the whole being plowed in each time, and 10 days after each plowing crossed thoroughly with an Acme harrow, makes a splendid preparation for strawberries; but if large berries are objected to, don't try this plan; but if your policy is to drive small berries out of market, the plan will work well. It seems like using considerable manure and, indeed, if I were to plant the field to the Bidwell or Crescent, I would use less, but for the Sharpless or Jewell it is all right, and the two go well together. To secure the heaviest yield possible my plan would be to plant four rows of Jewell to one of Sharpless, or to make the field all Jewells except the first, sixth, 11th, 16th and 21st rows, and so on. My experience shows that this proportion is all-sufficient for complete fertilization of the flowers, and as the Jewell is most productive, I give that the larger space.

To obtain the largest attainable yield under high culture, I would have my propagating bed on rich land planted in Autumn, or very early Spring; I would allow no blossoms, and secure as a result, with good culture, early plants. On rich prepared land, plant as early in July as you get a sufficiency of plants; set them 24 by 18 inches apart and keep off all runners. The immediate results of such a course will gratify the planter, and surprise his neighbors; but the greater surprise will be in the fruiting season, when the profusion of large, bright berries will indeed be a marvel. Under the foregoing plan the maximum yield per plant should reach two quarts, with an average yield of one quart or more; but to reach this, there must be no slip-shod management. As in the solution of a problem in mathematics, every step must be right, in which case the solution will be right. With such a yield selling at 15 cents per quart, the gross returns would exceed $2,000 per acre, or at 12 cents per quart, the income would exceed $1,700 per acre. But observe that to do this, the land, the manuring, the management, the variety, the season and the marketing must all be right. Let no novice expect that he is to step right into such success, the first time; if he did, it would be the greatest marvel of all.

There are difficulties to encounter: the grub may destroy some plants; other insect enemies may do damage; drought may cut short the yield, and in many ways there may be disappointment. So it is never best to count chickens before they are hatched. But I have fully concluded that high culture and expert management are on the basis of true economy in any agricultural product, but nowhere more so than in the production of small fruits.

Middlefield, Conn.

STRAWBERRIES FROM SEED.

THERE are probably but few growers of the strawberry who have not been the victims of the tree agent or a well-written advertisement extolling the merits of this or that "best berry in the world." A few years ago, at our county fair, some very large berries were on exhibition. "They were new, not on the market," but "to oblige," etc., the exhibitor "would sell a few at $5 per dozen," and many bought at that price. A year later there wasn't one of them who wouldn't sell the stock at $5 per 1,000.

Thinking what one could do, another might, I selected a half dozen of the finest berries, and started to raise new varieties, and the next year I had 75 seedlings to plant out. The result was that 10 were good, four very good, and some medium. Of these seedlings I still have three.

At the next year's fair E. P. Roe had a very fine exhibit. Thinking as the fruit was from his trial grounds, there was a better chance for cross-fertilization, I selected those having the most desirable characteristics: result, 150 plants, and none really poor. At least 50 very good, which I continued to grow, dropping some each year, until I now have 15 kinds. They have always had common care, such as the average grower would give to acres, as I determined they should stand on their own good behavior. I have planted many leading varieties under the same treatment, and have a pride in seeing the new surpass the old. The Winter before last was very hard on unprotected berries. With us Sharpless, Bidwell, Atlantic, Prince, and Warren were all surpassed in hardiness by my own seedlings.

The object of this letter is to induce all growers to raise each year a few seedlings. Any one who has intelligence enough to grow an acre of strawberries, has enough to raise his own plants from seeds. My advice is, get a dozen varieties of the best kinds for your locality; plant them close; care for them well; select the best fruit of each kind; plant the seed mixed in sand in a shallow box; fill near-

ly to the top with good soil. When the plants have rough leaves, prick out for more room, winter in a cold-frame, or under a covering of evergreen boughs. In the Spring, when you plant for your crop, plant a row of the seedlings throughout the center. You will get enough fruit to pay for all the work done, and the chances are good that there will be some very choice sorts. You have the advantage of an experiment with 100 or more varieties at once, that have cost you nothing and will be more likely to give satisfaction than kinds grown on soil entirely different from yours, and stimulated to the fullest capacity of an ambitious culturist or nurserymau.

Creedmoor, N. Y.

The Vineyard.

HOME-MADE BAGS FOR GRAPES.

Mr. James Dougal (Ontario, Can.) favors us with a plan (see Figs. 256-257) of making bags for covering grapes, which, with little explanation, will be understood by the sketches. No. 1 shows the way to cut and fold the

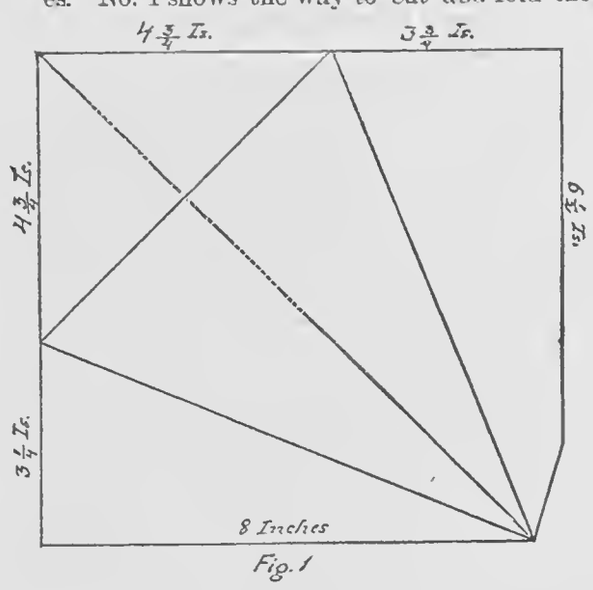
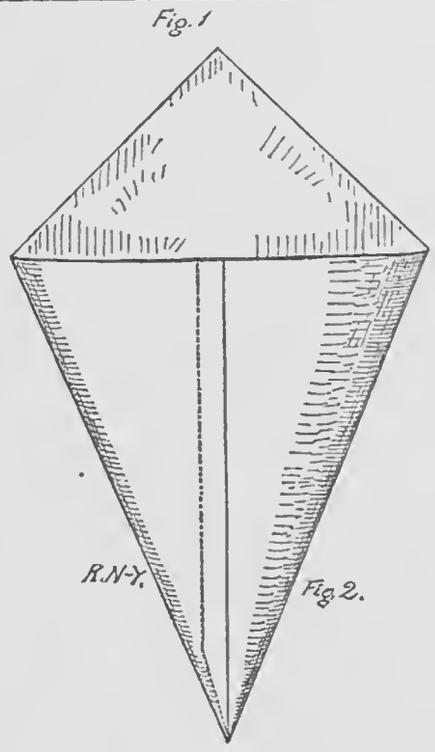


Fig. 1



Figs. 256 and 257.

paper; No. 2, the finished bag. The lid or top of the bag must be cut through, so as to make a place for the stem of the bunch, and this should be done with a sharp knife or pair of scissors after the bunch is in the bag. The lid may then be carried over the branch and securely pinned to the bag itself. It is well to cut off the tip end of the bottom of the bag so that any rain that beats into the bag may escape at once. We have never used this form of bag, and cannot, therefore, say from experience, whether it is more or less convenient than the form generally used.

Farm Economy.

A BARREL LIFTER.

Mr. Benj. Macomber sends us the sketch shown at Fig. 259. The implement is designed for carrying open barrels of apples or vegetables from place to place. It can also be

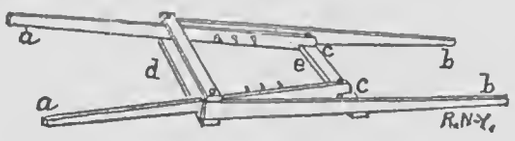


Fig. 259.

made to take the place of a hand-barrow. The four handles, *a a* and *b b*, are four feet two inches in length. The cross-piece, *e*, is firmly bolted to the handles, *b b*, also two cross-pieces, *d*, are bolted to the same handles, one above and the other below, leaving ample space between for the handles. *a a*, to be easily moved. The handles, *a a*, are bolted to the cross-piece, *e*, at *c c*, so loosely that they can be moved as on a hinge. The handles, *a a*, have spikes in them, as shown. To carry a barrel, the handles, *a a*, are spread, and the barrels placed between them. The spikes pass just below the bilge, and the handles are then pressed together, and two men can carry the load with ease.

HAY-RACK SEAT.

Mr. T. H. Rood, of Wyoming County, N. Y., sends the design shown at Fig. 258. All farmers know how hard it is to find a comfortable seat on a hay rack. One must sit at the side and be well shaken, or stand in the center.

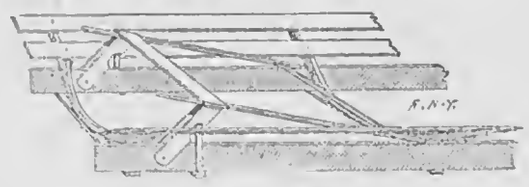


Fig. 258.

It frequently happens that farmers have to haul hay or grain half a mile. In such trips a good seat would be a great convenience. In the figure shown the standard is turned back. The supports are bolted to the wagon bed so that they will turn. As will be seen, the seat is a narrow board nailed to the standard posts. When the field is reached the standard is raised in front. The supports turn on the bolts and form a brace against the standard. The hay holds the standard in place, and when the load has been removed the seat can again be formed.

Field Crops.

MAKING AND PRESERVING PERMANENT MEADOWS.

HENRY STEWART.

Immemorial meadows in this country; grass an exacting crop; preparation of the land; seeding; mixture of varieties; when to sow; seeding with grain; practical directions.

Very little is known on this continent about permanent meadows: but there is a widely prevalent opinion that the American climate is unsuitable and even adverse to the successful permanent growth of grass. That this opinion is wholly unfounded, is proved by the fact that there are millions of acres of grass lands in the Western States and Territories, which have been productive for ages, and will continue to be: that countless thousands of buffaloes and antelopes have pastured and bred upon these great plains no one knows how long, and now that the ruthless hunter has exterminated these herds, millions of cattle have taken their place, and there is room for millions more. In Ohio, Indiana, Kentucky, Arkansas, Louisiana, Texas, Florida and other Southern States, there are meadows which have never yet been plowed, and yet bear annual crops of grass. The Blue Grass pastures of Kentucky, Ohio, and Indiana afford instances of permanent grass fields, which are not surpassed by any of those historical pastures of England, in regard to one of which Sir J. B. Lawes recently wrote that it had been in grass for centuries undisturbed. Some of these American and English meadows are able to fatten one ox per acre.

But there is other evidence than these analogous instances to prove that American farmers can have permanent meadows and pastures if they will take the pains to prepare the land in the right manner and feed the soil adequately, and get rid of the old idea that the only use of grass is to cut two or three crops of hay, to pasture it a year or so, and then, when it "runs out" and becomes full of moss and weeds from extreme starvation, to plow it under and, after further exhausting the soil by crops of corn, oats, wheat or rye, to seed down again with the belief that the grass and clover "rest the land." This idea is to be wholly obliterated from the mind of a farmer who desires to grow grass as it may be grown, and the fact be strongly impressed upon him that grass is an exacting crop upon the soil and must be prepared for and fed and nursed as much as any other crop grown. And to prove that under these circumstances permanently productive meadows may be made, there are abundant instances. Orchard Grass sown 25 or more years ago, is still as productive as ever and yields hay and pasture, both, yearly, with a liberal top-dressing and reseeding occasionally.

The whole secret is in the preparation of the soil, and the selection of the proper kind of grass. When an English farmer prepares to seed permanent grass, he grows a crop of roots, manures the ground abundantly and cultivates it thoroughly, destroying every weed that appears above the surface. Then the land is summer-fallowed and worked over several times, and again every weed is killed. A liberal application of artificial fertilizers is given, a ton of ground bones, 1,000 pounds of superphosphate, or of Peruvian guano per acre being frequently used, and there is no stint of seed, three or four times as much as we niggardly use, being sown. The seed is sown with great care, and is harrowed in patiently with a special kind of harrow, and the surface is rolled and brought to a perfect condition of smoothness, as well as of fertility; $25 to $35 per acre are often thus expended by an English farmer in putting in grass, and it well repays him in a continuous yield of three or four tons of hay per acre for many years.

Grass is, in fact, the most valuable crop. I have cut Orchard Grass over five feet high early in June, which had been sown eight years, and it made four tons of hay per acre, worth $25 per ton, and every year the grass was pastured from September until the snow covered it. Then the English farmer feeds his grass. When visiting an extensive farmer in England more than 30 years ago, when Peruvian guano was comparatively new, and very dear, I passed over one of his meadows and noticed the pungent odor of the guano. The small lumps of it were thickly scattered over the grass—the ground was invisible, being densely covered with the luxuriant herbage in early Spring—and there must have been at least half a ton used to the acre. On inquiry, I was told the grass had been top-dressed the Fall before, after the second mowing, with a ton of bone dust per acre. Besides this, occasional top-dressings of rich compost were given. In this meadow there were Sweet-scented Vernal; Meadow Fescues; Meadow Foxtail; Timothy; Orchard Grass; Kentucky Blue Grass; Italian Rye Grass; Perennial Rye Grass; Oat Grass; Red Top; Rough-stalked Meadow Grass and some others which I can not now recall, besides Red and White Clover and Rib Grass, (Narrow-leafed Plantain) considered then valuable for pasture for sheep, a large flock of which were kept on this farm.

If the same pains were taken here as there, the same results might be reached. I have for years past adopted fall sowing as in every way preferable to spring sowing, and the seed is sown alone and without any foster crop to rob it of food, light and air in return for the very questionable shelter afforded. Shelter is required only when the seed is scattered on the surface and not covered with soil, and the weak rootlets are sprawling on the ground in the effort to find a place to enter, and the tender seed leaves are waiting for the roots to get into the soil to feed them. Then one day's hot sunshine upon the unprotected rootlets kills them, or a few dry days cause them to perish, and the disappointed farmer finds "the seed has failed to catch." On the other hand, when the seed is properly covered in the fine, rich, mellow soil, the roots find their way to their food at once, and being well supplied with moisture, dry weather and hot sun don't hurt them.

An oat or rye stubble may be prepared for grass sowing as follows: It is first well dressed with manure, prepared for it, made fine and partly decomposed. This is plowed in, by lap furrows, set at an angle of 45 degrees and not turned over flat. The plowing should be eight inches deep, if the soil is well enriched to that depth: and if it is not, it is better not to try to put down the land to permanent grass at present, until it is adequately fertile. As soon as the land is plowed and while it is moist and pulverulent it is thoroughly harrowed, first along the furrows and then diagonally across them, until the field has been covered. This method secures a thorough mixing of the soil and the manures, and gives three separate workings, which bring the land to a fine mellow and yet compact texture well adapted to the reception of the very fine seeds of the various grasses.

The ground is made ready by the first of August when the seed is sown alone; or if it is thought better to give some shade and protection, a pound per acre of turnip seed is sown with it. The seed is covered in with a light harrow having short teeth not over three inches long, sloping back at an angle of 60 degrees. A harrow so made passes over the surface smoothly, tearing up nothing from under it; and as the teeth sink in the soil the frame of the harrow is dragged over the surface, smoothing it and covering the seed perfectly to a sufficient depth and no more. From a great many experiments with grass seed, I have concluded that one inch is the best depth to have it covered. At this depth the roots are well developed before the spire appears, like a hair, almost invisible on the surface, and dry weather has no injurious effect upon them. This is the great advantage of this method of seeding. The manner of sowing, amount of seed and the kinds most desirable will be referred to in another article.

SOME POTATOES.

In the Rural of May 20th, page 300, a correspondent has a good word to say for the Snowflake Potato. So far as size, quality and appearance are concerned, it deserves all that can be said in its praise. It is also an excellent keeping sort, but it has one fault that will prevent it from being extensively grown—it is not productive enough to render the crop profitable [That is our experience.—Eds.]. After testing many varieties I have come to the conclusion that there is none better for the late or general crop than the White Star, and for early use one cannot do better than to select the Early Ohio. I prefer the White Star to any other sort. Its white flesh and fine, floury texture, combined with its enormous productiveness and the uniform size of its tubers, are qualities to be desired.—[The Early Ohio is a small yielder in many places. We agree with our correspondent as to the White Star.—Eds.]

C. E. P.

The Apiarian.

BEE-KEEPING FOR FARMERS.

W. Z. HUTCHINSON.

I approve of the division of labor. I believe that specialties in rural pursuits are more profitable in the long run. I think that there are many things that the ordinary farmer can buy to better advantage than he can produce them. Among other things, I believe that the farmer can raise his honey more cheaply in his potato, corn or wheat fields. The busy time with bees—swarming—comes during the haying and harvesting. It does not pay to allow the mower, reaper or self-binder to stand idle in the back lot, while one-half or three-fourths of an hour is spent in coming to the house to hive a swarm of bees.

But we must take things as we find them, not as we wish them to be, and comfort ourselves with the thought that many little children now eat honey, who would seldom taste it did not their farmer father keep bees. There are many farmers who yet keep bees, and probably will continue to keep them—so fascinating to some is the pursuit—even though they could buy their honey more cheaply than they produce it. It is to assist this class that I now write.

The advantage of producing comb or extracted honey depends upon circumstances—the amount of time that can be given, and the season at which it can be given, etc. If some member of the family, as, for instance, an old man, or some one of the older children, takes an interest in the bees, it is quite an important factor, but let us suppose that the farmer himself must care for the bees. If he has as many as 20 colonies to care for, it will pay him, and pay him well, to hire an extra hand during June and July, as the crop of honey that would be lost by a few days' neglect, might be worth more than the few acres of hay or wheat saved by neglecting the bees.

As usually managed, more extracted than comb honey can be secured, while by the use of the extractor the disposition to swarm is greatly lessened, but, in order to keep down the "swarming fever," the extracting must be done often; while it is much less labor, or rather there is less work to be done during the busy season, if "tiering up" is practiced. By "tiering up" is meant tiering up the hives several stories high. To practice this, there must be plenty of hives and an abundance of empty combs or of comb foundation. When the lower story, or brood department, is filled with bees, brood and honey, and honey is being brought in quite freely, then an upper story filled with empty combs is placed upon the brood department. When these combs are filled with honey, and the bees begin sealing it, the usual course is to extract the honey, returning the combs to be re-filled. Such honey as this is not thoroughly ripened, and must be stored in open vessels to allow further evaporation. The vessels should be covered with muslin to exclude dust and insects. If the apiarist has plenty of empty combs and hives he can, instead of extracting the honey, simply raise the story of filled combs and place between it and the lower story another story filled with empty combs. When the last added combs are filled another story can be added next the brood nest. At the close of the honey harvest the combs of surplus can be removed and extracted. By this method there will be but little work to do during the busy season; and many bee-keepers think that honey thus thoroughly ripened by the bees has a more smooth, fine, rich, aromatic flavor than honey that is extracted while "green," and ripened artificially. Although frames of any depth can be "tiered up," shallow ones are much better adapted to the method. As the honey is not extracted until the harvest is over, robbers will be very troublesome, unless the proper precautions are taken. By a plentiful use of smoke nearly all the bees can be driven from the combs of the upper story, when it can be removed to a room with wire cloth over the windows. The wire cloth should extend several inches above the window on the outside, and should not touch the casing at this point, a space being allowed

between the wire and casement large enough for a bee to crawl through. The sashes must be removed. The bees will leave the combs, alight upon the wire cloth, and crawl out at the top. If it is not convenient to arrange a room as above, then a small tent made by covering a light wooden frame-work with mosquito netting can be set over a hive while the combs are taken out and the bees brushed off.

For a surplus receptacle in raising comb honey I know of nothing better for farmers than what is known as the Heddon case. It is simply a shallow box, without top or bottom. It is three-eighths of an inch deeper than the section boxes used, and as large as the top of the hive. There are partitions of thin boards inside the case. These partitions are such a distance apart that a row of sections just fills a space between them. To support the sections strips of tin are nailed to the lower edges of the partitions, and to the end pieces of the case, the edges of the tin projecting sufficiently (one-eighth of an inch) to afford a resting place for the sections. The case is filled with sections, the sections first being filled with comb foundations, and placed upon the hive. A plain, flat board, cleated at the ends to prevent warping, is used to cover the case. When the sections are two-thirds finished the case can be raised and another placed beneath it. When the lower case is partly finished, another can be placed beneath that. As soon as the top case is finished it can be removed. This manner of procedure may be continued as long as the honey harvest continues.

Movable comb hives are, of course, advisable, and in the production of extracted honey are indispensable, but box hives *can* be used in raising honey. If they were more shallow than usually made, it would be better. Bore the top of the hive full of holes, lay some thin strips (⅜ inch) around the outside edge of the top of the hive. On these strips set a Heddon case of sections, and proceed to "tier up" the cases as before described.

Genessee Co., Mich.

Miscellaneous.

CATALOGUES, ETC., RECEIVED.

AMERICAN FORESTRY CONGRESS.—Proceedings at its meeting held in Boston, September, 1885.—This association is doing much good. Its efforts are not fully appreciated by all, but the time will come when the value of its labor will be understood. As a nation we have always been wasteful of our trees. The early settlers hated trees and stumps. The great wood giants fought hard for the possession of the farm. Many of us have inherited this hatred or look upon the woods as boundless as the air, without limit, incapable of destruction. As it is well put in this volume, years ago America was a forest, but had no Congress; now she has a Congress but too little forest. People are rapidly increasing, but trees are decreasing still more rapidly. The Forestry Congress has done much to arouse public sentiment in favor of protecting forests, and has accomplished much in the way of promoting legislation favorable to that end. The present volume contains the addresses delivered at the meeting. They are filled with practical and sensible information. We hope to make copious extracts from them in the future. The facts and figures given to show the proportion of woodland, as compared with the total land area in this country, are startling. The percentage of forest to total area is 26.4. To build the existing miles of railroads in this country has required the available timber on 4,131,520 acres. To keep them in repair requires the product of 590,217 acres. Allowing 25 years as the time necessary for trees to attain a size suitable for making ties, it would require the annual growth of 14,755,425 acres to keep good the existing roads, and 8,300,000 to supply the demand for new roads. Thus we must hold in reserve 18,000,000 acres, simply to maintain the road-beds of our rail-roads. This area would be larger than the States of New Hampshire, Vermont, Massachusetts and Rhode Island combined. Americans may well feel uneasy over the wholesale destruction of forests.

THE "MUDGETT" TEDDER.—Circular from B. & J. W. Belcher, Chicopee Falls, Mass.—We spoke last week of the value of a good hay tedder. By the use of such an implement one horse and a boy can be made do the work of 20 men. A man or boy may slight work that is not closely watched, but a machine cannot do so, unless it is broken. The spring fork on the "Mudgett" tedder enables the machine to pass safely over stumpy or rocky ground. Farmers are urged to procure the "Mudgett" because of its strength, its close and uniform work and its lightness of draft. The good points of the machine are best discovered by a personal examination on the part of the purchaser, and the manufacturers earnestly request all intending purchasers to look the "Mudgett" carefully over and compare it with other makes before deciding which one to buy.

THOROUGHBRED STOCK.—Circular from G. H. Bell, Rome, N. Y.—Good specimens of thoroughbred Short-horn and Ayrshire cattle and Poland-China swine, are held for sale.

THYMO-CRESOL.—The Universal Purifier, The Cold Water Dip!—Circular from T. W. Lawford & Co., Baltimore, Md.—This material is highly praised by such men as Henry Stewart, Col. Curtis and Wilmer Atkinson. It has given universal satisfaction wherever it has been tried. It will mix easily with either cold or warm water, and forms a perfect sheep dip. It is not poisonous, and in small proportions it can safely be taken internally by any man or beast. As an agent in the cure of skin diseases in man and beast it has given good results, and as a disinfectant it is highly recommended. It will destroy all vermin on animals, and is frequently used in the poultry house. For horticultural purposes, to rid vegetation of lice and scale, it will be found useful.

What Others Say.

CULTIVATION OF CORN.—We can find no good reason for changing our belief, frequently expressed heretofore in these columns, that it is injurious to the corn crop to disturb the soil between the rows, after the plants are eight inches high, to a greater depth than three inches. Henry Stewart says, in the N. Y. Times, that some years ago it was claimed as a great discovery by Dr. Sturtevant, of Massachusetts, now Director of the New York State Experiment Station, that corn should be root-pruned by running the plow deeply between the rows about the time of tasseling, so as to break the roots and compel the plants to throw out new ones, by means of which the formation of ears could be largely aided and the crop much increased. This was hailed by some inexperienced persons as a most excellent idea, and it was commented upon favorably by them as a valuable hint to corn growers. It is quite possible that the Director had tried this plan on his own corn-fields in a wet season, and had based his theory and advice on this illusive experience. For it was not long before the grand mistake was acknowledged in a bulletin from the Experiment Station. But as truth travels very slowly, while error goes by leaps, the mischief is still being done and the deep cultivation of corn is still advocated. Now, for one very good and sufficient reason, at least, deep cultivation in any kind of soil is to be held as injurious to the corn crop. The excuse for it by those who advocate it under any circumstances is that in a wet season it is the only way to dry and warm the soil in such a manner as to provide for the necessities of this crop, which requires warmth. But we submit that this is neither the time nor the way to dry and warm the soil. This should be done previously, either by draining the land or by previous deep and thorough plowing, leaving it in a well fitted condition for the crop. We recognize the difficulties met with in working the adhesive, stiff, pasty soils in many localities in the corn-growing regions, but the fact that the deep working of such soils, when saturated with water, is exceedingly injurious to them, as well as to the crop, cannot be got rid of, and the way out of these difficulties is by drainage and not by breaking the soil deeply while the corn is growing. The R. N.-Y. has raised several of the largest crops of corn on record, and our plan of shallow and flat cultivation and surface manuring or fertilizing is everywhere gaining advocates.

CHEMISTRY OF HAY-MAKING.—Mr. Voelcker, speaking of the chemistry of hay-making, says that hay made on a fine day with the heat of the sun, loses practically nothing of its value. Hay cut in fine weather contains 70 per cent. of water—too much to induce fermentation. As the grass lies the cells of the plants begin to die and water passes off by the combination of the heat of the sun and a drying wind—so does the balance of water and sugar and fermentable matter in the grass alter. A point is reached which is most favorable to fermentation. At this point the grass remains nice and green, and gets the sweet aroma characteristic of well-made hay. If the weather still continues fine, the water passes away until there is not enough left to induce fermentation. In rainy or damp weather we do not get these conditions. When the grass reaches that point where fermentation is most favorable, the dampness keeps this point up and fermentation goes on. If rain comes we not only lose from fermentation, but also in consequence of washing by excessive water. It is found that the class of manures used has a great effect upon the leaves and stems of grasses. Nitrogenous manures tend to produce an increase of leaf, and mineral manures an increase of stem.

PLANK STABLE FLOORS.—A writer in the same excellent journal says that hemlock and spruce are among the best materials for stable floors. But a plank floor is an absorbent of the urine, and soon becomes rank with ammoniacal odors. Then some process is required to make the planks waterproof. This may be done by saturating them with hot gas tar, when the floor becomes a most desirable one for such stables as cannot have a ground floor. For a plank floor of the best kind the writer would lay the timber double; that is, first a floor of three-inch plank of some soft kind, and thoroughly soak this with boiling hot gas tar, filling the joints well. Then, while the tar is still hot and soft, a two-inch plank floor is laid, breaking joints, and pressing the planks close, so that the tar fills the joints of the upper floor, and overflows upon the upper surface, which is finally well coated with the tar. This floor is made to slope to the rear one inch in the yard, or 2½ inches in the 7½ feet of the standing floor, which is all that is double. This short double floor gives a dry bed for the horses, and the drainage all flows off from it to the lower floor, where it may be collected by a liberal coating of dry absorbents. The tar coating is apt to make a slippery surface, but this may be avoided by dusting dry sand upon the tar until no more will be taken up.

THE CAUSE OF ROPY MILK.—There is something wrong in the feed. Just what it is cannot be told without a full inquiry into the case, says L. B. Arnold in the N. E. Homestead. There are several things that produce ropy milk and cream. The most common cause is the use of some medicinal weeds, especially bitter weeds, as rag weed, tansy, wormwood and some species of yellow daisy. Poisonous weeds, such as cicuta, and lobelia, which cows sometimes seem disposed to take, have the same effect. He has, in several instances, known it to occur from an excessive use of good food. A too free use of corn meal and of sugar beets has every now and then been the occasion of ropy milk, but oftener in hot weather than in cold. It is also often the result of weakness from any cause, but especially from scouring. As the cow in question is apparently well and giving milk, the cause undoubtedly lies somewhere in her feed, and if the owner will take the trouble to change one condition of her feed at a time he will be able to find the cause, and will gain for himself a bit of valuable information.

CLOVER AND HOGS.—John Tucker says, in the Farm Journal, that it does him good to hear people talk about clover and hogs. There is no way a farmer can improve a field faster than by seeding it down and pasturing hogs in it—unless it is to sow peas in a lot and then let the hogs eat them on the ground. A pint of corn fed to a hog every day in a clover pasture will make it fit for killing before cold weather. Two quarts of middlings a day wet up and fed to a hog, wintered over, in connection with good pasture, will make it ready for the market in Autumn. In this cheap way the hogs may be fitted for market early, and the land fitted for a good crop of corn the next year. The shut-up system of making pork is mighty poor economy. The hogs will do a great deal for us if we only give them a chance.

TRUE INWARDNESS.

CUT the clover before the blossoms begin to fade .....

THE Farm Journal says that the animals must drink in hot weather and must take what they can get. But they hate nasty water as much as we do.....

THE Striped Melon Bug, according to Fred. Grundy in the Weekly Press, may be driven away and kept away by sprinkling the plants with water with which a liberal quantity of fresh cow manure has been stirred. Use a whisk broom or something of the kind and don't be afraid of applying too much. Repeat after every shower.....

YES, we should suppose that the green foliage and stems of cow peas would be among the best plants for the silo. In our tests with the different kinds of cow peas eight years ago, some varieties spread as far as 12 feet, growing in hight from one to two two feet. We also found, as others have since found, that some kinds of cow peas ripen, their seeds and have time to spare.....

THE staple food for chicks, Henry Stewart says, is cracked wheat and corn. A coffee mill will serve to crack them. Earth-worms are a great treat to chickens. In place of the worms some lean meat may be chopped fine; give a tablespoonful to a brood of 10 or 12 each day. Give them pure water. The gapes which destroys so many chickens may be avoided by keeping the chicks on clean ground and in clean houses.....

A LITTLE food scattered under a plum tree which is jarred immediately after (in the early morning) will attract the chicks, which will devour every curculio that drops.....

A WIRTER in the London Ag. Gazette speaks highly of pure Langshans. He says it is well known that Langshans lay more eggs than either Cochins or Dorkings. He gives the number of eggs for each hen as 173 per year. The hens should be fed only sound whole grain. He says they lay all through the Winter.....

THE same Journal says that even butter-makers must admit that butterine is a legitimate article of manufacture, and only requires to be sold under its proper name to prove a great boon to the poorer classes, who may not be able to purchase real butter. It is the universal experience that good butterine is infinitely superior to many samples of fresh butter to be found in the English markets....

HON. T. C. JONES, writing to the London Live Stock Journal, says that there is no doubt that British as well as American breeders of Short-horn cattle have been making too much of pedigree—that by combination among owners of fancy sorts, values have been advanced to such prices that breeders have been obliged to reserve every animal of the approved lines of breeding, however inferior, for use in the breeding herd. The consequence has been in too many instances a marked and obvious decline in useful qualities.....

THE horse show to be held in Chicago, Sept. 6, is to be a great affair .....

MR. SHARPE says, in Nature, that it is not merely a sentimental grievance that is uttered by the bird defenders—although it would be greatly to be regretted if all our bright plumaged birds were destroyed—but one that affects the welfare of the nation at large. A very considerable proportion of the birds killed are essentially beneficial to man, and should, from mere economical considerations, be protected.....

IT is an axiom in political economy that the demand creates the supply. As long as women will ask for feathers and birds, so long will they be destroyed, for the collector would willingly kill the last of its race if he could get 15 cents by selling the skin. In social morality we regard the tempter and the receiver as worse than the thief. In our criminal courts of justice he is always, when convicted, punished more severely than the culprit, whose ill-gotten goods he buys. It is useless for a lady purchasing the corpse of a Bird of Paradise to endeavor to ease her conscience by saying, "I did not kill it; and if I did not buy it some one else would." It was slain with ten thousand others to gratify her desire to wear dead birds, and she is more guilty than the man who shot it, for he killed it to gain a subsistence and she instigated the killing for mere caprice.....

THE better the workman the better the work, and the better treatment he should have, says the N. Y. Times. To some degree the entrance of a hired man into a farmer's family is to be viewed with suspicion if not alarm, as a threatened danger, and on the other hand the workman is sometimes degraded by the treatment received. .....

FOREIGN immigrants and tramps now take the place of young men who could be introduced to the family without objection .....

A WRITER in the Albany Cultivator says that he has fed for three seasons his entire herd in milk on green rye, and the improvement in quality of milk, cream and butter is marked. Green rye makes butter gilt-edged. He uses no coloring for butter.....

"'I am going to the seaside,' said the milkman blithe and gay;
'For I love the ocean breezes, and love the dashing spray,
Yes, I love the glorious sunset, love the calm and love the squall—
But I think I love the *water*, in my business, best of all.'" —*Tid-Bits.*

A WRITER in the Cultivator (Albany) says that he has owned a creamery and bought milk in various quantities for the last eight years. In that time, he has used successively the Cooley system, Swartz system of deep open cans in ice water, the Marquis system of 1,200-quart vats (milk being cooled by a current of ice water flowing through four inch pipes, running through the vats), and lastly, for the past two years, the Laval separator. The last he believes the best. It is simple, easy to run, does not get out of order, separates the milk as soon as brought to the creamery, makes more butter per hundred weight of milk, and by the market standard of price, gives as good a return, if not better than any other system.....

PROF. TUSON, in a lecture on disinfection,

says that the desideratum is a substance that will throw off sulphurous acid on exposure to the air, while remaining unchanged in confinement. Chloride of lime sets free its active agent in this way, but though a deodorizer, it is not an anti eptic.....

A DISINFECTANT destroys the organic germs; a deodorizer destroys or neutralizes offensive odors, and an antiseptic prevents or retards putrefaction. It is said that sulphurous acid will combine all these properties in the best form. A mixture was formed of sulphate of lime, sulphate of zinc and sulphate of alumina. Moisture or air caused a decomposition between the sulphates of lime and alumina, which resulted in an evolution of sulphurous acid gas. This has given the most remarkable results in neutralizing foul odors.....

THE best Scotch married shepherds receive as yearly wages about $125 in money, 500 pounds of oat meal, potatoes, a cow's keep and a free house and garden. In many localities the "pack" system of paying wages still exists. Under this system the shepherd is permitted to raise a small flock of sheep of his own and find his wages in the profits derived from his sheep. These small flocks are generally about eight per cent. of those herded for the owner of the estate.....

A. W. CHEEVER would be perfectly willing to dispense with the crow and the English sparrow, as he thinks both birds do more harm than good. A crow can be tamed as easily as a chicken, and quickly makes himself at home about the yard. He will not touch the potato beetle as some persons have claimed. He is a great robber of birds' nests, and is as unfeeling as a butcher .....

A WRITER in the New England Homestead well says there are millions of dollars' worth of good fertilizers lying dormant under barn floors. Where there is no basement, it will pay to take up the floor of the stable and dig up the soil and fill in with fresh earth.....

THE Homestead makes sport of the common practice of shouting at oxen. There is no reason for this tremendous outburst of noise which is hurled at oxen ordinarily. Cattle can be trained to mind a quiet and determined voice without this shouting.....

PROF. ATWATER says that in a pint of milk and a pint of oysters there is the same amount of nutriment. The oysters contain more nitrogenous matter—the milk more fat.....

SIR. J. B. LAWES says that the pig is the best and cheapest fat-making machine which exists, and that the human stomach has a great requirement for some sort of fat.....

THE N. Y. Times says that hundreds of millions of bushels of corn are sold in the ear at the rate of 70 pounds to the bushel. This will do for some kinds of corn. But the ears of many varieties do not weigh 14 pounds—some less than 10. Potatoes vary in weight from 40 to 60 pounds, and a dozen eggs weigh from 14 to 30 ounces. Yet all are sold for the same price .....

THE National Live Stock Journal is right in saying that the questions, what is the cost of a bushel of wheat, a pound of butter or of beef, is about like asking what is the length of a string or the size of a piece of chalk. The cost depends upon the circumstances. It may cost a certain farmer so much to produce a certain amount of produce, another farmer on a different soil, with different stock, different tools and methods, cannot use these figures with any success. The only way to find out what produce costs, is for each farmer to figure on his own work and not accept the figures of others. The closer farmers follow this rule, the nearer they will come to success.....

THE Pacific Rural Press says that California grape growers have found that in smoking for frost, as in sulphuring for mildew it pays to get in the remedy ahead of the disease. On frosty nights bonfires of any material that will make a dense, heavy clinging smoke are made 30 to 40 feet apart throughout the vineyards. It was thought at first that it was only necessary to build these fires just before the sun came up. Now they are kept burning all night .....

IT appears to be pretty generally decided that the most economical use for liquid manure is to mix it with the solids and apply the two together. It will hardly pay to collect and cart out the liquids by themselves and for most plants they are too strong. They can be best conducted into a pit where the solids are thrown, or poured over the piles...

SPEAKING of Herefords, a writer in the London Live Stock Journal says that the disproportion in size between oxen and the dams they come from is one of the curiosities of breeding.....

DR. OGLE thinks that a white nose in cattle or horses indicates imperfect smelling power. He would suppose that white-nosed animals would be most likely to eat noxious or poisonous plants. Who have noticed that this is true?..... ....

THE Mark Lane Express states that arsenical sheep dips have been in extended use in England, but complaint is made that the rains wash the arsenic out of the wool to drip into the feed, frequently poisoning the sheep. A dip prepared from carbolic acid is well spoken of.....

OUR young associate of other days, C. S. Plumb, writing to our esteemed contemporary, the Drawing-room Companion, says that at Geneva (N. Y.), Lucerne or Alfalfa produces an abundance of foliage. It is hardy and a lover of dry, warm soil. He finds, however, that it makes an abundant and vigorous growth where the soil is cold and the thermometer drops to 15° below zero. His plots begin a vigorous growth as early as April 20th, and on July 2d the first cutting is made. One plot yielded at the rate of 10 tons per acre of green fodder; another over seven. On July 17th the plots were again cut and yielded at the rate of over six tons per acre. On Sept. 3d a third crop of over three tons was cut . ...

THESE plots of Alfalfa have made a good growth for three successive years. The foliage is clover-like, and all animals relish it. The average hight of the plants just before making the first cutting was two feet four inches. The plots were not manured. The roots descended quite vertically into the soil, and sometimes measured, a foot below the surface, three-eighths of an inch in diameter, and at two feet nearly one-fourth of an inch. Fibrous roots, though not abundant, penetrated to a depth of four feet below the crown. One large tap-root was traced three feet 10 inches below the surface. In sandy soil they have been traced to a depth of 13 feet. No wonder it thrives in dry soils.....

THE plants, as we know from a trial of Alfalfa at the Rural Farm, do not grow to a cutting size the first year. The land must be prepared as for clover, and 20 pounds of seed sown to the acre..... ....

Everywhere.

TRANSCONTINENTAL LETTERS.—LIII.

MARY WAGER-FISHER.

Sights at a fair; "second" fruit crops; nuts; jellies; apples; potatoes; onions; cabbages; grasses; wheat; origin of Golden Grain; farm wages; patronizing home industries.

THE Mechanics' Fair was in progress while we were in Portland, and we visited it on three different occasions as we found leisure so to do. The pavilion in which this fair is annually held is a permanent structure, and when decorated, as upon this occasion, presents a brilliant interior. Outside of the agricultural department I found little of interest to one like myself, who is tolerably familiar with the "stock in trade" of most fairs. There were more "crazy" quilts than I had ever before seen together, and considerable decorative work, of which the prettiest was a screen of satin or plush, on which was painted a part of a datura plant in bloom, the flower being very fine in effect. A young man who, with his brother, had invented a pillow sham holder—a metal fixture to be fastened to the head-board of a bedstead for holding up shams and lifting them out of harm's way at night—seemed to be having quite a patronage among women. I asked him how it happened that he had busied himself to invent such an article so distinctively belonging to the house, and he said he wanted to make some money. I thought if he had been a chamber-maid and had seen the shams tumble down after he had arranged them scores of times, he might have had reason to hunt for some mechanical remedy. Is it not a little curious that women so rarely invent practical labor-saving machines that apply directly to their own work? In the dairy department I noticed a "separator" for milk, that was labeled "sold."

In the agricultural department I found many novelties in the way of fruits and grains, and a good degree of taste manifested in the arrangement of grains on the stalk—a lesson learned, probably, at the Kansas Exhibit at the Centennial. There was quite a display of "second crops"—Wilson's Albany Strawberries, the second crop picked Oct. 12: the first April 25. This second crop of strawberries is not phenomenal in Oregon or Washington Territory, and this exhibitor, I was told, had brought in 40 boxes, which he sold for 40 cents the box. His ranch was near Mt. Tabor. There was a second crop of "June" apples, and a similar exhibit of silver prunes. Of a second crop of Bartlett Pears, I measured one which was 11 inches in circumference the long way and nine inches around—a goodly crop indeed. There were a number of strawberry plants in bloom and bearing green and ripe fruit—a sight to be seen in many a garden until Christmas. A laudable attempt had been made to show a second crop of cherries, but as the exhibit was limited to one cherry, it could hardly be called a crop! There were grapes from Walla Walla that had been raised without irrigation, and some very large, compact bunches that came from Jacksonville. Of grapes grown in the open air near Portland, I noticed Black Hamburg, White Tokay, Muscat Hamburg, Black Spanish, Iona, Royal Muscatine, Chasselas, Rose and Eumelan. Of nuts, there were black and English walnuts, chestnuts, hickory-nuts and filberts. But the display was meager—a few nuts in glasses—and from what I could learn, I am not inclined to correct the statement I have hitherto made concerning nut-growing on this northwest coast. The nuts, even when they can be produced, do not mature well.

A lady exhibited what she called Mesple—a German fruit, which was unfit for use until it decayed! Then, she averred, it made a fine jelly. Some of the jellies exhibited were fanciful in appearance—a section of orange jelly surmounted with currant, or a sandwich of the contrasting color, through the middle. There was a magnificent display of apples, one man exhibiting 98 varieties. I think the finest collection was made by the Porter family—superb apples without flaw. Early Rose potatoes, a foot long, were common; and I noticed one potato labeled as weighing 6½ pounds. There were some very fine-looking sweet potatoes from Eastern Oregon, and if they can be well produced there, they would form a profitable product, as the price is invariably high. The onions were exceedingly fine. I measured one of average size, 15 inches in circumference, and they produce from 1,000 to 1,200 bushels to the acre. There was an exhibit of onions grown on sage brush land in Idaho. The weight of one of these onions was two pounds ten ounces. A Peruvian pumpkin weighed 128½ pounds. Chinese squashes were brilliant in color. The cauliflowers were extraordinary—compact and firm—the circumference of one head was five feet and nine inches. Cabbages from 18 to 20 inches in diameter; but a Pacific Coast cabbage head would at any time be respected in the East for its size and quality. There were fine apples and squashes of a new shape, and a curious-looking fruit that was evidently undecided whether to be a pear or an apple, but which was called the former.

I saw stalks of oats eight feet high, and the stalk three-fourths of an inch around; Timothy eight feet and three inches tall; clover from the Waldo Hills, east of Salem, seven feet two inches. The Timothy man harvested 12 tons off four acres. One Timothy head was 18 inches long. There was a fine exhibit of wheat, both as to quality and variety, and it was well endowed with fanciful name—"English Purple Velvet," of which one farmer in Linn County harvested 96 bushels from three acres. "Palestine Mammoth Wheat"—largest wheat known. The exhibitor told me that he had sent 30 bushels of it to a Philadelphia firm, which changed the name to "Golden Grain." Its yield was 30 bushels to the acre. Black African Wheat, with beards like porcupine quills, was black of head and yellow of stalk—a novelty. Russian rye, with grain three-fourths of an inch long, yielded 35 bushels to the acre. A fine specimen of Japanese bamboo, grown in Portland, promised a probable future for that plant on this coast. White Australian Spring Wheat and the Winter Velvet were mentioned as good varieties for Oregon, and yielding from 20 to 60 bushels to the acre, according to condition. There was a general complaint of lack of markets for products, which was urged as partial explanation of wasteful, shiftless farming so prevalent in Oregon; but every one seemed agreed that a better class of farmers were coming in from "the States"—as old Oregonians still speak of the the rest of the country.

I asked the wages paid to farm laborers—an average wage, with board the year around, $15 per month; for the Summer, $1.50 per day. A stock show—the first held in Oregon—was also in progress, but I quite forgot about it until it was too late. Its great attraction was the "largest steer in the United States," owned by Mr. Johnson, of Portland. It weighed 700 pounds more than the prize steer at the last Chicago stock show, and bore the pretty Indian name of Multnomah. On every side we heard much talk of protecting home industries by patronizing them, and it would seem to be the only successful way to do, for with Eastern manufacturers flooding this coast with their wares, there is small chance for local industries. There is iron enough here for all purposes, but nine-tenths of all stoves come from the East. It is the old story—tribute to the East. Oregon has some good woolen manufactures, and some of the cloths made are fine enough in appearance for any gentleman's wear; but the men, as a rule, buy English cloths, sending their money to Great Britain, and then growl about the Chinese sending their money to China! Quite an amusing incident occurred at the fair, produced by a lady asking if certain stoves were made in Portland, and upon being told that they came from Chicago, she remarked with a patriotic toss of her head, that she believed in patronizing home industries. The man who had answered her question replied with spirit: "So do I, madam, and I wish every lady in Oregon wore linsey made on that loom there!" The lady wore a gown of silk that was made in France, a shawl that was woven in India, the feathers on her bonnet came from South Africa, her shoes from the East and her gloves probably from Paris. But she had a sense of "justice," nevertheless, much as we all have, and exemplified it in about the same fashion—one kind of preach and another kind of practice.

RURAL SPECIAL REPORTS.

Illinois.

KIRKLAND, De Kalb Co.—Small grains look well here. H. M.

Indiana.

PENDLETON, Madison Co., June 6.—Wheat still gives promise of an average crop. Corn planting is about over. Corn planting and wheat harvest never before came so close together. Some wheat fields have a tinge of gold, as if they would be ready for the sickle in 10 days. Drought is prevailing to such an extent that fields as well as roads are dusty. Gardens, late planted corn and berries are suffering for rain. S. W. H.

Maryland.

WESTOVER, Somerset Co., June 7.—Though we had an unusual amount of rainfall the past Spring, the season is the earliest we have had since 1880. The pea and strawberry crops are all marketed, and although there have been no fancy prices, fair prices have ruled the season through. The crops have been abundant, and most growers have realized a handsome profit. The hay crop will be the best in several years. Wheat and oats are looking well, oats heading out, and wheat will soon be ready for the reaper and binder. Corn is making a slow growth on account of the very cool nights, and much re-planting has to be done because the birds have pulled it up—principally black-birds. All kinds of stock are in a thriving condition. Musk melons in bloom. Tomatoes as large as a hulled walnut. I pulled to-day from the "Alaska" Pea 10 pods weighing two ounces. S. C. S.

Missouri.

ELDON, Miller Co., June 1.—Farmers certainly cannot complain of the prospects for crops this year, for taking things all around, it would be difficult to have them average better. Wheat, oats and grass will all make full average crops. This is well-nigh assured. Pastures are in first-class condition. Fruits in full supply, except peaches. Corn all up and growing finely. Ground clean and weather favorable. N. J. S.

Montana.

FRIDLEY, Gallatin Co.—I have a farm here of 700 acres, Yellowstone Valley land, and a great portion of it is nice enough and good enough for garden, and from a three years' experience, I am satisfied almost any kind of fruit or vegetable grown in N. Y. State can be grown here. Last year and the year before last, no frost from May 1 till September 10.

B. P. VAN H.

THE FARMER'S CLUB

ANSWERS TO CORRESPONDENTS.

[Every query must be accompanied by the name and address of the writer to insure attention. Before asking a question, please see if it is not answered in our advertising columns. Ask only a few questions at one time. Put questions on a separate piece of paper.]

THE STRAWBERRY LEAF-ROLLER.

D. H. L., Sheboygan, Wis.—For two years an insect somewhat like the cut-worm, but only half its size, and of not so bright a green, has infested my strawberry beds. It appears about the time the fruit begins to ripen, and in a short time nothing is left but ribs of the leaves and the stems. What is the name of the pest, and a remedy for it?

ANSWERED BY PROF. A. J. COOK.

It is the worst enemy of the strawberry, and has done serious damage in Michigan as well as in Wisconsin, Illinois, Indiana, Ohio, etc. It is the Strawberry Leaf-roller—Phoxopteris fragariae (W. & R.) The moth is quite small, expanding not more than 9-16 of an inch. The front wings are brown striped and specked with black and white. The body and hind

wings are dusky. There are two broods. The moths are flying in early Spring and in July. The caterpillars are small, about one-half inch long when full-grown. Like all larvæ of the Tortricids, or Leaf-rollers, they have 16 legs. They vary much in color, from brown or yellow to green. They will be seen feeding in May and June, and again the second brood in July and August.

As we find true of almost all Leaf-rollers, these larvæ roll up the leaves as they feed. These leaf cylinders are held by threads of silk. Thus the insects live in a green house, which serves them not only for food but for shelter as well. This feeding upon the leaf causes it to turn brown and to wither. The insect pupates within the rolled leaf, where the chrysalis may be found in late June or at the close of the harvest. Saunders advises the use of hellebore to kill the pests, but I have not found it effective. Neither has pyrethrum served the purpose. The larva is so well protected that it is difficult to reach it, as we must to make buhach a sure remedy. Paris-green dusted on to the leaves in May will kill the insects: but, of course, it can not be used on beds where the berries are soon to be used. When beds are in bearing, so that we can not use Paris-green, we can fight only the second brood. There are two ways which I have tried with marked success. First, sprinkle a light coating of straw over the beds as soon as the berries are picked, and set fire to it. This destroys the insects, now in the larval or chrysalis state, and as the vines seem little injured, we seem to have solved the difficulty. The other remedy is the use of London-purple just as the second brood commences to work—late in July in Michigan and Wisconsin. As the insects are so snugly rolled up, the poison does not get where all can or will eat it, and so, on the whole, the burning has given the best satisfaction. As a small parasite is destroying these insects in great numbers, it may be well not to burn over the beds, except where the insects are very troublesome.

SWEENY.

Subscriber, Blue Hall, Fairmount, W. Va.—What will cure sweeny caused by a sprain a month ago?

ANSWERED BY F. L. KILBORNE.

If there is still any heat, swelling or tenderness over the shoulder, keep the animal quiet, and bind a wet blanket over the seat of injury until relieved. When these symptoms have disappeared, allow daily walking exercise on level ground or road. Rub the wasting muscles briskly for 15 or 20 minutes each night and morning with a hard-twisted wisp of hay or straw; or apply a mild blister of equal parts of strong ammonia and sweet oil, to be repeated as soon as the effect of one application has disappeared. Several weeks will probably be necessary to effect a complete recovery, but this simple treatment should be sufficient for so recent a case. The animal should not be worked on miry or uneven ground or be put to the plow for more than a year after recovery, as by so doing the animal will be very liable to be sweenied again.

THE VETCH.

J. J. S., Columbus, Ga.—The "pea" sent us is the common vetch or tare. It is much cultivated in Europe and latterly in many parts of the South. In good soils it grows two or three feet high. The stems are tender and soft and cattle love it. It is an annual, flowering in May in Georgia, the seeds ripening in the course of the Summer. Then the plant dies. Toward Autumn the seed germinates and the young plants grow slowly all Winter, running up rapidly in early Spring. It may be cultivated profitably in the South as an early spring forage plant, and also be cured as hay for winter use. Later in the season the cow-pea is the favorite. The botanical name of this vetch is Vicia sativa.

GREEN LICE ON APPLE AND PLUM TREES.

A. S., Beechwood.—Green lice on apple and plum trees seek the twigs and tender shoots, suck their juices and thus live. The remedy is to spray them with tobacco tea, or to dip the infested twigs into the tea. We have tried nearly everything to kill these pests, and find that when trees or large bushes are attacked the best way is to "grin and bear it." In the case of rose bushes and smaller plants, we spray them, as stated, with tobacco tea or with pyrethrum powder and water, or blow the powder upon them. Paris-green does not kill them since they suck the juices. When the tips of the twigs are alone infested, it is well to pinch them off or destroy them. The black ants you mention as attending the lice merely squeeze the latter, which thereupon yield up a liquid which the ants relish.

DEATH TO THE CURRANT WORM.

J. W., Sand Lake, N. Y.—There are several ways of killing the currant worm. The best is to use powdered white hellebore. Put two tablespoonfuls in a pint of hot water. Mix and add this to two gallons of water. Spray the bushes with this. It is an absolute specific. A spraying bellows (Woodason's for sale by seedsmen), a hand force pump with cyclone nozzle, or, finally, a watering (flower) pot. Buhach or pyrethrum powder, used in the same way, answers very well.

Miscellaneous.

S. C., Davenport, Washington Ter.—1. What is the best way to root cuttings which are difficult to root? 2. How can onions be kept over Winter? 3. Will Tall Oat Grass endure drought and summer frosts?

ANS.—1. By layering, *i. e.*, bending down a branch and burying a part of it. 2. Spread the onions 12 to 18 inches deep on a tight floor or loft in a dry barn or shed. Cover them with a foot or more of straw or hay, and don't disturb them till Spring. They will be injured if allowed to freeze and thaw alternately; but not if after freezing once, they are kept from thawing until wanted. 3. Tall Oat Grass stands summer heat well in Alabama, and is prized in New England. Of late years good accounts of it come from Michigan. Prof. Shelton regards it favorably for Kansas; Mr. Wysor objects to it for Virginia as not as good as Timothy, as a great impoverisher of the soil, as not relished by cattle if they can get Timothy and clover. But to answer our friend, it would seem that this grass has great power of endurance.

"Subscriber" Home, Tenn.—A large gobbler began losing feathers from his breast last December, and has continued to do so ever since. The exposed flesh is puffy, soft and red; otherwise he is in good health and thrifty. What's the matter?

ANS.—If the turkey has never moulted, being in his second year, there may be several causes for the trouble. First, the turkey hens or barnyard hens may pick off the feathers. Second, it may be caused by the roosts, as he may have some peculiarity in roosting, thereby rubbing off the new feathers as fast as they appear. Third, it may be due to a parasitic disease. We would suggest anointing the parts, once or twice a week, with a mixture of 10 drops of carbolic acid in a tablespoonful of glycerine.

J. B. F., Smyona, Del.—Gooseberries planted in the Fall of 1882, are heaved up every Winter, until now many plants have only a bare hold in the ground. I am thinking of running a peach tree cutter under them next Fall and resetting; would I lose next year's fruit crop by so doing?

ANS.—We are afraid we do not understand the question. Any injury to the stems or necks of gooseberries would injure the roots, in which case they would not descend deeply into the soil, and might be thrown out by the alternations of frosts and thaws of Winter and Spring. The best thing to do is to cut them back in the Fall to within three inches of the soil, and cover them with a mulch of straw or manure. You will lose next year's crop.

G. M. W., Johnstown, Pa.—Last Summer I planted a lot of potted strawberry plants which throve well till they had attained a fine growth, when the leaves began to wither and shrivel. Examination of plants and roots could detect no insect enemy. Now they are in bloom and many have large berries, but here and there they are suffering as they did last year. What is the matter?

ANS.—We have never had a similar experience, and can not give our friend any information. Perhaps some of our readers can answer the question.

T. M. V., Steuben Co., N. Y.—A breed of cattle, "good milkers and fair for beef, to be used in supplying milk to a factory, principally for cheese," will be found in Holstein-Friesians. For all practical purposes three-quarter grades will do as well as thoroughbreds. Cows from a good Holstein bull out of grade Short-horns would come as near to the animals you require as any we can think of. Hereford cows are not suited for the dairy. They have been bred for beef and for early maturity, and even their champions claim nothing for them as dairy animals.

R. W. H., Jasper Steuben Co., N. Y.—1. Is the Manshury Barley better for feeding purposes than the common six-rowed kind? 2. Does it yield more?

ANS.—1. Yes, it is a plumper, heavier barley and weighs more per bushel, and, of course, it has more flour in proportion to the hull. 2. Yes, nearly one-half more; two years ago we harvested 517 bushels from seven acres. Anyone is foolish to try to raise common barley when he can get this.

T. F. B., Wolf's Store, Pa.—Your chickens are troubled with roup. Change the feed and give cooked feed, vegetables, green food and rice. Dissolve a dram of chlorate of potash in each pint of drinking water. Bathe the heads in water slightly tinctured with vinegar. Put a little cayenne pepper into the feed. Remove the sick fowls from the flock, and put them in a dry, sunny place.

Subscriber (address mislaid).—Will corn-fodder keep (if cut, sweated and salted, or air-slake limed and put in a mow) like clover hay?

ANS.—We do not know that the plan has ever been tried. We do not see how this system would give any advantage over results now obtained with the silo.

C. R., Battle River, Dak.—The few kernels of grain sent resemble the Diamond or Polish Wheat. It is known by many other names. It is a spring kind and bearded, with wide, peculiar chaff.

E. Moore, Jefferson Co.—We know nothing of the "Earhart cap raspberry." Plants are growing in the Rural Grounds and we hope to report upon them in due time.

DISCUSSION.

T. H. H., NEWPORT, VT.—In answer to an inquiry, a late RURAL says:—

Hen manure and ashes, bones, etc., as fertilizers cannot be compared since hen and barn-yard manure are *comp ete* manures, furnishing all needed kinds of plant food. Ashes and bones are not complete. To get the equivalent of hen manure, raw bone flour and ashes with the addition of more nitrogen than the bones contain should be used.

Does not the RURAL, in the above quoted remarks, confound a complete manure with a well balanced manure? Ashes with raw bones are complete, *i. e.*, they contain phosphoric acid, potash and combined nigrogen. They do not constitute a well balanced fertilizer: but no more is barn manure, and still less is hen manure. This subject of well balanced fertilizers has not been sufficiently pressed upon the farming public. A badly balanced manure is used at a loss, often a large one, and farmers should be made to understand fully this important point in farm economy. Nearly all animal manures have an excess of nitrogen—often a large excess, and phosphoric acid in some form should be almost invariably used with them. To understand this, and to know how to make any manure, whether complete or incomplete, closely adapted to a particular soil or crop, are very nice, and very important points of husbandry.

R. N.-Y.—The question was as to the comparative value of hen manure, ashes, bones, etc., separately, not as to the value or results of a mixture of any two or more. This would have been more plainly indicated, if instead of "ashes and bones are not complete," we had said, "Neither ashes nor bones," ect. The other points which Dr. Hoskins makes should be studied by every farmer. Hen manure or farm manure of any kind fails to have the same effect on different soils, for the reason that some soils need more or less of the food constituents which are lacking or abundant in those soils. To feed the soil just what it needs is the great economical problem.

C. E. P., QUEENS, N. Y.—In the RURAL for May 29th, "Workman" advises us to clean out the refuse of the hay, straw, etc., that can be found in the lofts and on the barn floor, and to place it on the manure pile. Such a cleaning would be found to be a very profitable job for a rainy day; but I certainly would not advise anyone to place such refuse on a manure pile unless it is his intention to fill his fields with a great many troublesome weeds. Such refuse will, if closely examined, be found to contain seeds of many of our most troublesome weeds, such as daisies, snapdragon, wild onions, etc, and to place them on a manure pile where they will retain their vitality and be distributed among the crops is certainly, to say the least, a very foolish piece of work. All such refuse should be burned if possible, or else buried very deep, and it will be well to destroy all vegetation that might spring up around the place for some time afterwards. Most farmers are very careless in this respect, and are forever complaining of the constant increase of weeds on their farms, when in very many cases they have no one to blame but themselves, and the exercise of a little care and forthought on their part, would certainly prove to be very profitable to them in this respect at least.

C. M., ONONDAGA CO., N. Y.—A late F. C, spoke of the reason why the leaves of some pear trees turned black. I attribute it to high winds. The leaves were tender owing to their fast growth. Here we had a like experience. When the leaves had spread fully, a high gale lasted 24 hours, and all tender growth showed the effects of the severe whipping. Raspberry bushes were torn, as the leaves were badly beaten against the briars, and the maple trees looked as if the army worm had stripped them.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING June 11, 1886.

J. D. S., grass received.—G. W. D.—P. M. A.—J. G.—E. W.—W. Z. H.—A. L.—W. P. D.—W. A. B.—S. J. C.—N. E. W.—P. S.—I. C. R.—H. R. W.—L. C.—W. R. F.—D. P. P.—H. A. C.—A. M. K.—W. O. B. C.—E. A. P.—J. D.—W. P. L.—W. H. S.—H. H.—J. H. B.—C. E. P.—W. T. P. H. J.—H. S.—Alonzo H., thanks. J. C. O.—H. S.—H. G. M.—E. D.—F. S. P.—R. V. D.—J. G.—J. B.—P. S.—A. M.—J. T.—J. B.—A. P.—A. A. H.—"Gray Beard."—L. P. N.—the bean weevil, no doubt.—W. F. K.—H. E. W., thanks.—E. J. B.—E. S. G.—W. D.—E. D. W. thanks.—M. H. K.—K. D.—J. S. J. E. N.—M. G. J.—T. H.—A. M.—L. O. R.—F. M.—H. E. K.—G. G.—F. D. C.—"Hired Man."—A. J. C.—H. S.—W. H. B.

Miscellaneous Advertising.

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THE
RURAL NEW-YORKER.
National Journal for Country and Suburban Homes.

Conducted by
ELBERT S. CARMAN.

Address
THE RURAL NEW-YORKER,
No. 34 PARK ROW, New York.

SATURDAY, JUNE 19, 1886.

NOW, RURAL readers, let us again press it upon you to save seeds of your best strawberries, and sow them *at once* in fine, rich, mellow beds. If you would have the greatest variety of seedlings, sow the seeds of pistillates that grow among different perfect-flowering kinds. Select berries that are shapely and of good quality. A good way to gather the seeds is to mash the berries between thick pieces of paper and let the pulps dry.

THE value to the farmer of many of the reports of our experiment stations is seriously injured by the confused manner in which the results are presented. The teachings of a given experiment are often so much mixed in with the details of it, that they become clear only after considerable study. We can easily imagine an intelligent farmer who is really seeking after knowledge, giving up in bewilderment and despair his attempt to digest one of these muddled reports. However valuable the information may be, if its arrangement is such, and it is expressed in such terms that the kernel can not be extracted without hard and protracted study, it remains practically worthless. The director of an agricultural experiment station should be able to report his work in such a way that the intelligent farmer may be able readily to comprehend what a given experiment was intended to show, and what useful deductions are to be drawn from it. If he cannot do this, it is a conspicuous proof of his incompetency as a public teacher.

THE influential papers that so bitterly oppose the oleomargarine bill, and call upon the President to veto it should it be passed by the Senate, characterize it as a "vicious bill." They claim that it simply opens the way for unlimited fraudulent taxation; that if it is passed, any business that can command sufficient power in Congress may tax its competitors out of existence. These papers do not attempt to deny the fact that if oleomargarine had always been manufactured and sold for just what it is, legislation against it would be impossible. They are forced to admit that the action is taken solely against the fraudulent character of the business. Further than this, they very carefully neglect to suggest a bill that would be more appropriate than the present one. As to the taxation which may follow this opening, can there be too much of it? Almost every article of food is adulterated, and shoddy goods of all descriptions are manufactured and sold for a fraudulent price. If in passing the "oleo" bill Congress opens the way to effective legislation against various fraudulent practices, we may well congratulate ourselves on our part of the work.

THE Senate by barely one majority—22 to 21—last Monday, referred the Oleomargarine Bill to the Committee on Agriculture instead of to the Committee on Finance, which would have certainly failed to report it—in other words, it would have pigeon-holed it till the close of the session, next month. The Committee on Agriculture will report it favorably at an early day, and most likely the Senate will pass it in some shape. Of this there is no doubt if producers and consumers of butter and all lovers of honest dealing will bring pressure to bear on the Senators, directly by writing to them personally, and indirectly by urging the various State Senators and Representatives to take action in the matter. Only two Democrats voted to refer the bill to the Committee on Agriculture, and five Republicans voted against that reference. An analysis of the vote shows that of Senators whose terms of office expire March 3, 1887, and who must, therefore, be re-elected this year, ten voted for the reference and only four against it, while eleven refrained from voting. Of those whose terms expire in 1889 only four voted for the reference, seven against it, and 15 did not vote at all. Of those whose terms expire in 1891, eight voted for the reference, ten against it, and seven did not vote. Thus, judging from this point of view alone, it appears that those Senators who must soon appeal for re-election to their constituencies, were much more inclined to vote honestly as the people desire than those who imagine the people have short memories, and will forget or forgive their conduct before time for re-election.

ABOUT IRELAND.

No country in the world is attracting more of the attention of Christendom than Ireland just now. With an area of 32,531 miles—over 1,300—less than that of Indiana—it has a population of somewhat over 5,000,000 the number of inhabitants having steadily decreased since the famine of 1848, when they numbered over 8,000,000. Of the 20,819,840 acres in the island, 729 Englishmen own one-half, 3,000 other holders own the majority of the other half, and there are but 19,288 land-owners altogether. The tenants and peasantry pay a yearly rental of $65,000,000; while the income tax of the island amounts to $35,000,000 and the local taxes to $15,000,000 more, making an aggregate of $115,000,000 wrung from the wretched inhabitants of a island much less than Indiana, South Carolina, or Maine.

According to the statistics of 1880, the latest attainable, Ireland produced that year 4,000,000 bushels of wheat; 8,000,000 bushels of barley; 70,000,000 bushels of oats; 110,000,000 bushels of potatoes—within 60,000,000 of the entire product of the United States for the same year. She also produced 185,000,000 bushels of turnips; 60,000,00 pounds of flax and 850,000,000 cabbages, besides 3,800,000 tons of hay, and a vast aggregate quantity of fruit and garden truck. She had over 4,000,000 cattle, 3,500,000 sheep, 560,000 horses and 210,000 asses and mules. In that year she exported to England 700,000 cattle; over that number of sheep and nearly a million swine. What a marvelously rich land! But the people, how wretchedly poor!

COUNTRY GRAVE-YARDS.

IN a single verse Whittier has well described the old-fashioned country churchyard:

"A winding wall of mossy stone
Frost-flung and broken, lines
A lonesome acre thinly grown
With grass and wandering vines."

Who has not seen these dreary, dismal places? The grass grows out over the walks; blackberry vines climb over the graves; a few bushes lean over the wall. Through the broken gate the sheep come at will. A few wild flowers struggle through the tall grass as through ashamed to show themselves to the sun. Now and then some mourner cuts the grass from a few graves, or some member of the district takes the contract for mowing the whole yard for the sake of the hay. Careless feet go tramping over the graves, the frost throws the grave-stones out of line and the moss creeps over the letters. It seems as though our ancestors wished to make death appear as dismal and horrible as possible. There is no reason why this feeling should continue. Flowers, trees, shrubs and clean-kept graves add much to the beauty of the grave-yard, and take nothing from the sacredness of the place. In fact they add to it; their beauty gives a feeling of rest to the mind, a thought that our friends are resting in peace. Decoration Day has done much to improve our country grave-yards. The graves of the soldiers are always trimmed and beautified, and the crowds that annually come to witness the ceremony have taught the owners of grave lots a certain pride. The grave-yard should lose its old look of horror and repugnance. Each neighborhood should combine to take measures for beautifying the place. We do not believe in erecting costly monuments to the memory of the dead, but we believe the harsh and ugly features that so often characterize their resting places should be removed.

A GREAT HORSE SHOW.

THE American Percheron Horse-Breeders' Association intends to have a grand exhibition of Percheron horses in connection with the Illinois State Fair to be held at Chicago from September 6 to 11. Premiums amounting to $5,700 in money, and a large number of gold, silver and bronze medals will be offered. The jury of awards, always the most important feature of such exhibitions, as the accomplishment of the objects for which they are held must depend on their competency and fairness, will consist of three members, one to be appointed by the Minister of Agriculture of France, one by the Commissioner of Agriculture of the United States, and one by the Minister of Agriculture of Canada. Ample provision seems therefore to have been made to secure the best men for this responsible position. All pure-bred animals entered for competition must be recorded in the Percheron Stud Book of America. Is it intended by this provision to shut out the large numbers of excellent animals of the same race recorded in the Norman Stud Book? If so, the public at large will not be able to derive the best and widest information from the show, however satisfactory it may be to the importers and breeders of French draft horses, who form the American Percheron Horse-Breeders' Association. Apart from this, however, great care and foresight mark the rules made to govern the exhibition, and we predict a very large, interesting and instructive show of this magnificent race of draft horses. We trust, however, that before the opening of the exhibition, the breeders of "Percheron" and "Norman" horses, really the same race, will have amicably adjusted their differences so that all may exhibit their best stock under the same name, and have them recorded in the same Stud Book. A similar agreement has been found economical and in every way advantageous by breeders of cattle, as in the case of Holstein-Friesians; and of swine, as in the case of Duroc-Jerseys; and a like harmony in the case of French draft horses would be better for the breeders, and more satisfactory to the public than the present discord.

THE FARM BREED.

Is the best farm cow contained in the ranks of any of the present breeds of cattle? Many farmers are asking themselves this question. Breeders who desire to sell stock for breeding purposes, thus securing a price beyond what animals would bring at the block, or milk into the pail, are quick to answer "yes." Farmers who have no desire to sell breeding stock are by no means certain. There is no use in denying the fact that farmers with small herds of cattle, are still inclined to hunt for that much desired animal the "general-purpose cow." The tendency is to breed for special purposes, and no pure-bred animal can ever completely fill the place of a "jack of all trades." No breeder, however skillful, can put beef on the Jersey and retain the little cow's wonderful butter record, and there will always be "a great gulf fixed" between excessive milk production and excessive beef production. Can the desired result be more nearly obtained through high grades or cross-bred animals? For all practical purposes a good high-grade Jersey is as valuable as the average thoroughbred. Her price will be measured solely by the number of pounds of butter she can make, and for men who have no desire to speculate in pedigrees or sell breeding stock, this basis will be satisfactory enough. Cross-breeding is being more generally practiced than ever before. There are several herds in the country, in which this practice has been followed systematically, where the characteristics of what may be called a new breed have been developed. The offspring of a Jersey bull and a grade Short-horn cow has given excellent results in many instances, while calves from a Holland bull out of grade Devon or Short-horn cows are reported excellent for cheese dairies. The farmer who will drive his cows by a thoroughbred bull for the purpose of patronizing a scrub at a small price is foolish, but he is far from wise to buy thoroughbred cows, unless he can afford extra time for rearing, advertising and selling his calves. If he wants a "general-purpose" cow, he will be apt to find the best animal for his purpose in the off-spring of a thoroughbred bull of one of the dairy breeds, and a high-grade beef cow. The "general-purpose" cow may be known as the "farm breed" as distinct from the Jersey, Devon and the others. Bearing in mind the fact that each of the pure breeds represents certain fixed characteristics, a farmer can, at a small cost, develop a herd best suited to his farm.

THE RURAL'S NOTES ON LATTER-DAY STRAWBERRIES.

PRINCE OF BERRIES does not ripen evenly, and, though of good quality, will not be the berry for the million. Parry, its child, is earlier, larger, ripens more evenly, and is more prolific, though not so good in quality. Parker Earle, though the foliage is variegated, bears large berries and many of them. It is firm and of good quality. Lida, offered this Spring at the modest price of $1 each plant, is a rich, dark crimson in color, of fine shape, ovate-conical, generally pointed at the tip. It is of fair quality. It is a berry of some promise, if we may judge from spring-set plants. Jewell, what shall we say of this? In size of berry, in evenness of ripening, in keeping up the size during the season, in shape, in productiveness, in vigor of plant, it is all that could be desired. Could we add to its quality and a trifle to its firmness, it would be perfect. May King disappoints us as to earliness. But the plants are vigorous and productive, the berry of good quality, shapely and firm. It resembles the Crescent, but is larger. The Henderson is, at the Rural Grounds, a disappointment. The plants are variable, some being quite strong, others feeble. They are not, at all events, productive as grown with us. The berries mature as if protesting against ill-treatment, being variable in size and shape. But the quality is superb—in fact it is the best berry for one of its size that we know of. Were we to grow seedlings with the view of producing a *perfect* berry, we should strike for the quality of the Henderson combined with the other merits of the Jewell.

Bonanza is unique. Of all harlequin-shaped berries, this takes the prize. The plants are marvels of vigor, the berries often of remarkable size, but no two alike, except as to a swan-like neck, a characteristic of all. The berries are furrowed, coxcombed, winged, upside-down, wrinkled, round, square, parallelogramatic, rhomboidal, and every other shape we have ever seen in a strawberry, except a regular heart-shape. The plants are quite fruitful, the berries of good quality but generally hollow and mushy in the middle. Iron-clad is this year the earliest berry we have. The plants are thrifty and healthy. The berries are of medium size, about the shape of Crescent, firm and of good quality. We know of no better berry that is as early. Amateur is a variety with pronounced virtues and pronounced failings. The quality is better than that of Jewell. It is almost as productive, but the berries average smaller and softer. The plants are as vigorous as need be, but the leaves so o'ertop the berries, borne on slender peduncles, that the berries ripen, as it were, in a dense shade. The foliage of Connecticut Queen burns—the berries shrivel. Vineland Seedling is of little promise. Wonderful is of fair quality, medium-early, bright red, quite firm, variable in shape and size. Plants vigorous, but not remarkably productive. Queen of the Peninsula bears rather small berries, and is not worthy of introduction. Dimondale, also, had better be confined to the originator's grounds. Gardener's Colossal seems worthy of future trial. The berries are of fine shape, firm and good. Bubach No. 5 is promising. The berries average very large, bright red in color, variable in shape, firm and of fair quality. Iroquois we must not speak of yet. Bomba resembles Lida, but is not so prolific. Later in the season we shall again refer to the above berries, and to many others being tried this season for the first. Illustrations will accompany the best of them.

BREVITIES.

THIN out the fruit. If we would have large, fine fruit, a certain proportion of leaves to fruit must be established. It seems a waste to cut off a dozen bunches of grapes upon a single cane; a waste to destroy six young apples where there are but nine. Still a green plant can do only so much work. Take your choice between an abundance of inferior fruit or less of the best quality.

PICKING them off or shaking them into a pail of kerosened water is the advice given by horticultural journals to destroy the dreaded rose bug. Our use of pyrethrum powder in water, sprayed through a little hand-pump, with a rubber hose ending in a cyclone nozzle, was quite successful last year, and we shall try it again this. After receiving the spray, the bugs drop to the ground in five minutes. We use about two tablespoonfuls of the powder (first wet with alcohol) to two gallons of water.

ONE plot at the Rural Grounds is now especially attractive to all—a plot of roses, consisting of about 100 different kinds. Until last year we had avoided the cultivation of roses, knowing that they require care to rid them of insects and that they must be made a distinct study if one would write about them discriminatingly. But we are involved now and do not regret it. As we see the incomparable buds of the Hybrid Remontants unfolding, followed by the ever-blooming kinds, we exclaim again and again, "The rose *is* queen!"

UNCOUTH, illiterate Senator Sheard, of California, "Uncle George" of the "bhoys," who has been lifted into the United States Senate, not by his merits, but by his millions, is bitterly opposed to the oleomargarine bill, and says, "The bill cannot pass. I shall vote against it." Had not this boorish miner and prospector had the luck to strike a bonanza, he could not be elected a San Francisco alderman; yet his millions now give him power to injure one of the greatest industries in the country by giving him a vote in the highest legislative body in the Nation. This is the genius who, in eulogizing the late Senator Miller of California, capped the climax of panegyric and startled his fellow-senators, by declaring that he knew the dead Senator had at one time an opportunity of dishonestly making $100,000, and he didn't make it! Midas in the Senate legislating for the Nation, and unable to conceal his assinine trouble!

The Herdsman.

FORESTER 2D.

THE fine Guernsey bull, Forester 2d, 21 E. G. H. B., is shown at Fig. 260. He gained second prize at the Bath and West of England Show in 1884, and in 1885 he was first at the Brighton Show, and first at the Royal Show at Southampton. He is a son of Forester, a prize-winner in 1883 and 1884; while his dam, Queen 263, was first at the Salisbury Show in 1881.

Rural Topics.

THE DARK SIDE OF FARMING.

HENRY STEWART.

A prisoner on the farm; square pegs in round holes; success in the man, not in the land; a contrast; the bright and dark sides of farming.

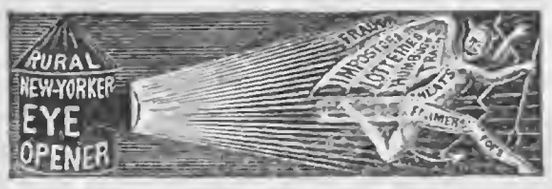
There is said, by poets, to be a silver lining to every cloud; but the one who sees the clond and not the bright lining, perceives only the dark side of it, ominous of storm and tempest. It is so with the life of many a farmer. It is quite true that while but one in ten of the professional men or merchants succeed in establishing themselves permanently in business, but one out of ten farmers fails to make some sort of success. But what sort of success is it for a large proportion of those who stick? Like the life prisoner bound by an iron chain to the stone walls of his dungeon, dark, dreary and hopeless, the farmer, bound by his penury to his farm, chafes and rebels against his equally strong bands, and remains, simply because he cannot escape from them. All he owns is tied up in his farm. He cannot dispose of it, and is bound to it for life. Working without hope and in disappointment, misery and wretchedness, he worries along, a slave to himself and to those who depend upon him for subsistence. No doubt this is the lot of many a farmer who has lost heart in his work, who has no sunshine to cheer him, but who exists always on the dark side of his life.

It has been said by a quaint old writer, who saw through a good deal of human nature, that human life represents a board with a number of round holes in it, and men are like square pegs trying to fit themselves into these holes. How true this is. How hard for a man to find his true place; how he frets and worries in his efforts to find it; how many never find it, but go mournfully and despairingly from one hole to another, but never find one to fit until the unhappy man drops into his last hole and is covered up out of sight, finding at last, let us hope, in some better life a better-fitting occupation and the rest which always evaded him here. And farmers are like other men, and have all their weak points and failings, and therefore necessarily come to the same end in their enterprises; but as a farm provides a home and at least a living, and cannot be abandoned easily, the farmer sticks to it and pines and frets at his lot from which he cannot escape, but in which he makes but a sorry attempt to live in the true sense of the word.

A common adage has it that "it is through the man and not in the farm" that success or failure is made. The same idea is given by Shakespeare in his lines,

> Men at some times are masters of their fates.
> The fault, dear Brutus, is not in our stars,
> "But in ourselves, that we are underlings."

A successful farmer is often next neighbor to one who never sees the bright side of his work or life. The one enjoys every comfort and many luxuries drawn from the farm. All his environments bespeak contentment and abundance. His air is that of a man satisfied with himself and what he has. The other shows by his actions and words that he is discontented; his home is cheerless and squalid; his fences are mean; his crops are poor; his stock is wretched; he and his family are careworn and dispirited; he is the victim of all sorts of accidents, and he is always complaining of his bad luck. And yet the farms adjoin; the soils are alike; the same sun shines for both; the same beneficient showers and dews fall upon each; yet one has all the bright side, and the other the dark side of life and work. The two men alone differ; one works perhaps no harder, and rarely as hard as the other, for it is not work or labor alone that avails—it is how the work is done, and the quality and character of it, that give it value and effect. Mere force brings a man to the level of his ox or his mule; it is reason, intelligence, thought; in a word, brains, that raise human labor above brute force, and give effect to it. It is thus that farm work needs to be done to be successful, to be lifted up above drudgery, to rise above mere labor, to become pleasant, attractive, alluring and profitable; and then the farmer, although the cloud of depression in business may hover over him, stands on that side of it which reflects the bright golden rays of hope, and the silver lining of satisfied and intelligent effort and conscientious, careful work, and the cloud is not dark, nor are there any low mutterings of disaster coming from it. But the unfortunate man on the other side of it sees only the darkness; and no cheering gleam comes from it to encourage him to hope that when the cloud has passed over, the bright sun will shine upon him, for this man sees only the dark side of farming.



WITHIN the past week we have noticed exposures of four cases in which people in widely separated sections were swindled by sharpers acting as canvassers for papers or magazines. In all cases women were mostly the victims; and in all cases subscriptions were taken at greatly reduced rates. Generally the fellow pretended to be a relative of some well known book and paper dealer, and sometimes produced a forged "authority" to make collections. There are a large number of honest, respectable men who act as canvassers for periodicals, and it isn't at all wonderful that a few rascals should embark in the business; but caution is needed on the part of the subscriber.

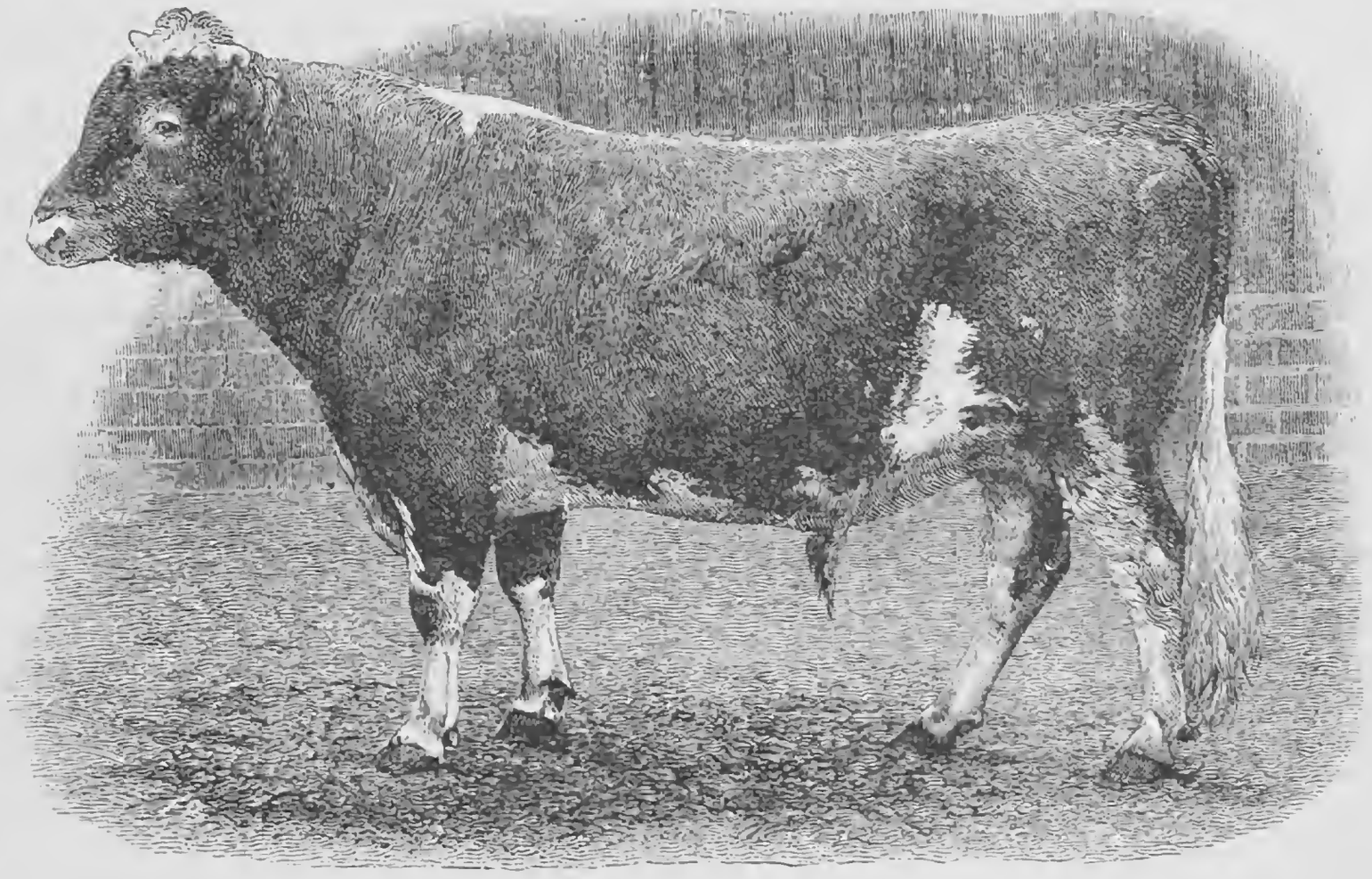
FARMERS AND COUNTRY MERCHANTS IN TROUBLE.—Assistance given to those financially embarrassed, on the most favorablee terms; it is worth your while to write us in confidence. Brown, Smith & Co., Brokers, Clark Street, Chicago.

Have you ever seen an advertisement of that sort? Of course, the form may be different; but have you seen one the gist of which was the same? If not, you haven't paid much attention to advertisements in all sorts of papers, even in those of the religious kind. A smart crook can get such an advertisement as the above in 1,000 country papers for $50, through an advertising agency. Have you any idea of the number of "farmers and country merchants" "financially embarrassed"? Well, on a moderate estimate, 2,000 applications would come through those 1,000 advertisements. Now, there are two ways of "working the game," and the Eye-Opener's notes contain several instances of each. In one case the crook wrote to each applicant, in confidence, that he had by bribery secured wax impressions of the genuine greenback $5 plates, and was prepared to supply $5 bills in any quantity at 25 cents on the dollar, to those who would assert on honor that they were in absolute need of money to tide over a present financial distress. The price to all others would be 50 cents on the dollar, and not over $1,000 worth would be sold to any one person. Of course, there were many injunctions as to secrecy, etc; many assurances that the bills could not possibly be distinguished from genuine greenbacks, etc. Did the "financially embarrassed" bite at the bait? Certainly a considerable percentage did, and in consequence become more "financially embarrassed" by the amount the crook swindled them out of by the old "sawdust game." In the other case negotiations were opened for loans on very favorable terms—about as favorable as those offered by that Cincinati four-per-cent-loan humbug—but in all cases a preliminary deposit of $5 to $20 was indespensable "to pay for investigation," etc., and as the securing of this was the only object of the swindler, he at one stopped correspondence when he got it.

The "Montreal Sanitary and Plumbing Association" is a swindle that came to grief early the other day; but no doubt the same or similar swindles will turn up in other places on both sides of the line. Geo. R. Watson, Secretary-Treasurer, lately rented an office, and issued a prospectus setting forth that the principal object of the Association was to examine, report and execute all drainage and plumber work for members' houses for a yearly subscription of $10 each. It also offered to analyze well and other water to see if it was fit for drinking purposes, for $5 per analysis. The names of prominent citizens, including that of the mayor, were freely given, without the slightest authority, as references, and the Bank of Montreal was mentioned as the bank of the Association. Of course, there were lots of gudgeons ready to jump at the glittering bait. Ten-dollar subscriptions began to pour in quite lively from simple people who expected $100 worth of work for their X. Agents were wanted for so driving a business at a salary of $600 per annum and commission; but, of course, a deposit of from $100 to $200 apiece was indispensable. How many such deposits the Secretary-Treasurer received is not known; but the evening he "lit out," one would-be agent called to deposit $100, and another to get rid of $200. The fellow had paid some of his debts with bogus checks, was arrested by one creditor, surrendered enough to pay that particular debt, and at once left the city.

The New York Medical Society has denounced the pretended Indian doctors or "medicine men," who, during the last few Summers have multiplied greatly throughout the country. These charlatans travel from place to place, setting up an imitation Indian camp in each. They draw crowds by a crude variety show, singing, dancing and athletic feats. The medicines they offer for sale are composed of a stew of herbs made in a kettle over a fire in presence of the gaping spectators. The better to bamboozle the ignorant and superstitious, they frequently accompany the manufacture with a farrago of savage incantations, quasi-mystic rights and hideous contortions. Through wholesome fear of arrest, the rascals are generally careful not to call themselves physicians, but they do call themselves "medicine men," and are, in the opinion of the Medical Society, medical practicioners in the eye of the law, and should therefore be suppressed by the authorities. Most of them have little or no medical skill, though a broken-down, disreputable physician with a diploma, is sometimes to be met with among them. Their "cure-alls" seldom do any more good than bread pills; but the rogues are generally too cautious to employ any ingredient which would do harm. The nostrum is generally a simple cathartic, no more suitable to any particular disease than purgatives generally are. Over a dozen such "outfits" have started from this city. The most elaborate of them had its headquarters in a disreputable "dive" at Chatham Square. The leader is a big, swarthy, long-haired, glib-tongued fellow named Doadens, *alias* "The Pawnee." He traveled last year as the "Big Wonder," and found so many dupes ("chumps" he calls them) that this season he extended the outfit so as to embrace five young women for Indian dances: an ugly old hag for a witch and fortune-teller: two male athletes for acrobatic feats, and two comic vocalists. All the women and most of the men are stained to pass as Indians, and there are also several genuine Indians from Canada or Western New York to sell bead-work and baskets. A three-card monte swindler will also be with the crowd, the "privilege" being worth $50 a week, as the profits are likely to be over $100. The whole party are quite vicious and disreputable. This is a sample of the other "outfits" in this line. Of course, no sensible man, woman or child will patronize the rascals, but, alas! no other crop in some places is so abundant as that of fools, and this crop swindlers harvest the year round.

Look out for the lightning rod sharks. The Eye-Opener has a number of notes of their swindles upon farmers in different parts of the country, especially in the Prairie States. A very active gang has lately been operating in Northern Illinois. Another has been swindling farmers in Central Iowa; and two others have been busily operating in Missouri. Some have crossed the Ohio also, and are working in Kentucky; while milder reports of other swindling gangs come to us from several other States. A great deal of hot indignation is felt against them wherever they have operated; but they care as little for the feelings of their victims as do the pickpockets and burglars for sentiments of the people they have preyed upon. Like the ruck of the criminal classes, these fellows have very little inventive ingenuity: and the mode of swindling practiced by them in one part of the country or in one year is the same as that practiced by similar vagabonds in another part of the country or another year. They generally get a farmer to sign what he supposes to be a contract, but often it is a note, which soon goes into the hands of "innocent holders," and so must be paid. "Innocent" is often used instead of "idiot." In the combination "innocent holders" of swindling paper, if the word cannot be used in this sense, it should generally have a meaning like that of "fence," indicating a sleek, hypocritical rascal ever ready, for a large margin of profit, to enable thieves and swindlers to realize on the results of their dishonest operations. Often the lightning rod sharpers, instead of getting a negotiable note, merely obtain a contract for three or four or more times the quantity of goods the signer thinks he is ordering. A few days after the advance agent has secured the contract, the gang appear in force, and insist on putting up a much greater number of rods, or rods of a much more expensive kind, than the farmer wants. He objects more or less resolutely, but they point to the contract, and bluster. Generally the farmer submits; often he compromises; sometimes he has spunk, determination and force enough to drive them from his place. From the E.-O.'s notes, this would seem to be the best plan. The rascals, knowing they are in the wrong, usually play a bluff game; but when resolutely met, they at once lower their demands, or slink away like the paltroons they usually are. It would be well for the farmers of every neighborhood to have a very distinct understanding among themselves as to the treatment to be accorded to all such dishonest scamps. Few of them would have the hardihood to practice their rascalities among a community known to be resolute and united in their treatment of such pests, and, then, too, each victimized farmer, knowing that he would be backed up by the sympathy, whips, boots and bull-dogs of his neighbors, would be less likely to submit to imposition.



GUERNSEY BULL, FORESTER 2D. Fig. 260. Re-engraved from the London Live Stock Journal.

Woman's Work.

CONDUCTED BY EMILY L. TAPLIN.

HOPEFUL AND CHEERFUL.

CLARA AUGUSTA.

THAT man is wise who never frets
Whatever trials rise,
Who beats in mind that 'neath the clouds
Shine ever blue the skies;
Who takes the ill luck with the good,
And keeps a trusting heart;
Content to struggle at his best,
And do his humble part.

He never looks with anxious eye
For troubles till they come;
He lets no grumbling atmosphere
Surround his happy home;
He keeps his patience, sweet and strong,
Whatever may befall,
And never doubts, because he knows
That God reigns over all!

He does not wait for happiness,
He takes it as he goes;
Around his pathway every day
Perpetual sunshine flows;
He knows this life a prelude is
Unto that glorious fate,
Which gives to man a wider scope
And grander far estate.

That man is a philosopher!
He has not lived for naught;
And happy he to grasp the prize
So many only sought!
And if we'd act with wisdom here,
And thus our days prolong,
Why let us take things cheerfully,
Just as they come along.

OF INTEREST TO WOMEN.

LITTLE black silk socks are a novelty for babies' wear, though many mothers still prefer the light colored ones.

The pretty belted Norfolk jackets in many colors, particularly black, tan and putty color are very popular for street wear, over skirts of different hue. The ever-useful Jersey may now be purchased in this shape.

In spite of ridicule both from the press and the stage, the immense bustle and tournure continues in vogue. Though a full drapery is pretty enough in moderation, when thus carried to excess it becomes a caricature. The new comic opera, "The Little Tycoon," containes several sharp hits at this fashion, and also at the flaming scarlet jackets now popular.

The fancy for portiere curtains and many draperies has resulted in the production of several new materials for such uses, some of them being surprisingly inexpensive. Cream colored scrim has made way for Mikado draperies, a gauzy brocaded cotton or linen stuff closely resembling the more expensive Madras curtains. Another cotton and linen stuff is "Bulgarian drapery," woven in broad horizontal stripes of contrasting colors.

A short time since, every hat and bonnet must be overloaded with stuffed birds. Muffs were adorned with them, and evening gowns bore positive garlands of these slaughtered innocents. Now it is learned that Queen Victoria, disapproving of this cruel fashion, has organized plumage societies, whose object is to discourage the style in every possible way. Thanks to the mania for English customs, and we hope, to our women's sense of justice, similar societies are being organized here, to the manifest disgust of the milliners, many of whom have a large stock of birds which will now be unsalable. This cruel fashion reached the very acme of repulsiveness at a great ball in New York last Winter, where a woman wore a yellow gown literally garlanded with stuffed canaries; so many innocent little songsters sacrificed to satisfy the vanity of one thoughtless woman.

Just on the bluff over the Hudson, at Riverside Park, northwest of Grant's tomb, is another solitary grave. Surrounded by an iron railing is a square block of time-stained marble, surmounted by a crumbling urn. On one side is this inscription:

"Erected to the memory of
An Amiable Child,
ST. CLAIRE POLLOCK,
Died July 15th, 1797,
In the 5th year of his age."

Poor little St. Claire Pollock! He is unknown to history, save as "an amiable child;" his father, sometime owner of Riverside Park, was an English refugee of mysterious antecedents, who left nothing of record, save this lonely little grave. On Decoration Day, some kindly hand placed a bunch of roses on the crumbling urn, in gentle sympathy of the little sleeper's solitary tomb.

"BE CHEERFUL."

FARMERS' wives and daughters can do much toward making the toilsome life of a farmer a pleasanter and happier one. When returning from the field, the barn, or the dreary winter's ride from the city, cold, hungry, and perhaps discouraged(as who is not at times?), the cheerful greeting of a smiling, neatly dressed woman, and more than all, the blazing fire, and a well-laden supper-table waiting only for father, will do much to lighten any burden, and to inspire him with renewed activity for business and life.

No good housekeeper or duty-loving wife delays the preparation of meals of the day till after or just before the coming in of the men from the field. How tedious it must be for them to be obliged to wait for food which should have been previously prepared! How unpleasant to them to move from this side to that, and from that to this, that you may get nearer to the stove or the oven, thus reminding them that they are in the way, when the fault is really your own!

Then, if you had trouble with your servants or the children have been unusually cross, do not weary your husband with your fretting and complaints, and unless you are sick enough to need his active attendance, or the advice of a physician, do not tell him of it; nothing weakens the strings of affection sooner than a constant fault finding disposition. Do not excuse yourself from the duty of making home pleasant, because your husband is cross and morose. May not your dilatoriness in household matters have something to do with this? At any rate, try the better way; make home cheerful and pleasant to your husband and children, and at the same time you will find that life and home will have new charms, and new comforts unfelt before, for you.

F. W. CLARK.

"CAN MONEY BE MADE BY FARMING IN NEW ENGLAND?"

THIS question is asked every day; some less ambitious souls contenting themselves with inquiring: "Can a living for a family be made by farming in New England?" These queries will be answered either in the affirmative or negative, as the standpoint varies from which the questions are viewed. Fifty years ago in the most fertile parts of Connecticut many a farmer with large families of children, not only made a living from his farm, but left his sons possessed of farms (not as large as his own, but large enough) and to each of his daughters a sum of money which in those days was considered sufficient. Now, the question arises, could this be done to-day? From our observation and experience we do not hesitate to say that without some income besides the produce of the farm to start with, it could not be done, without going back to a manner of life for which our young people are wholly unprepared. Let us see—we have in our mind two farmers in the town of—Hilltop (let us call it), and these examples might be multiplied indefinitely. One of these men's ancestors was poor, unlearned and originally from the rough parts of Rhode Island, which have remained rough to this day. A son of the family came to this town, where are now some of the model farms of New England, more than half a century ago. He bought a place of four or five hundred acres, heavily mortgaged. It was all cleared land, and the whole family were "tigers" for work; they had no superfluities, they kept no help, the eldest daughter milking her ten cows with her brothers. They were a naturally bright and intelligent, large family, of which the members worked to the extent of their powers the father and mother leading. They made the best cheese, not only in New England, but in the country; they raised the largest fields of corn, and the heaviest hogs in the town. In those days, the corn of the West was unknown, and the porkers of Chicago had not 'come to the fore'. The women spun, and wove and knit, the children sewed carpet rags, and braided whip lashes in the evening. The furniture of their home, though comfortable was of the plainest; they all ate in the kitchen together and all washed at the sink. They gave no parties except once a year, the "sewing society" they had but little time for visiting, and everything that could by any possibility be made at home, was home made. The older members were tough, they worked early and late, and they thought all the rest could do the same. One young creature, of more delicate fibre than the others, succumbed, and went to rest, but the others worked on. The mortgage was taken up before many years, and in the end, the father died leaving each of his sons a well cultivated farm, and each daughter with a lien upon her brothers, and a jointure sufficient to pay a small board. Now for their descendents; some have gone West, and those who still occupy the farms make their chief profits not from farming, but from city boarders, thus having the prospect of a shorter and easier way to competence than their ancestor.

Another farmer whom I have in view inherited his farm and lived with his family, a wife and one child upon the homestead, and died leaving a comfortable estate.

But was it made by farming proper? Hardly, since the greater part of his gains came from "cattle trading," for which he had a wonderful talent, and with a very frugal wife, his money accumulated. There are very few of the proprietors of landed estate in Hilltop who can be said to live by the produce of their farms. There can be counted within a radius of three miles from the centre of this very grave old Puritanic town, almost settled by the passengers of the Mayflower, at least 10 or a dozen of the best farms belonging to Irishmen, bought and paid for. They can live on the product of their farms and bring up large families, which must surely people these parts, for the original stock is growing "beautifully less" every year. They know how to live economically, they hire no help, but change work as our farmers did in olden time.

They buy far more than the earlier inhabitants of whom I have written. These, our adopted citizens are industrious, frugal, excellent farmers, and they all came here penniless within the last 30 years. This we fancy is the general state of things throughout New England. Near cities or large towns, of course farming pays better, and in some places the summer boarders bring traffic in garden stuff, small fruits, etc. From our standpoint then we conclude that a farm is a wonderfully pretty plaything for a man of large means, a delightful home to one with a thousand or two to make both ends meet, and a means of living, to a family accustomed to self denial and not afraid of constant hard work.

CLAUDE.

PHEBE'S RAG CARPET.

ALL through the long, bright Summer, Phebe was busy as a bee in all her spare moments over a little project she had in hand, which should add much to the home comfort through the long, cold Winter. She was bent upon making a strong rag carpet to spread down on the bare floor of the family room. She diligently gathered and saved all the scraps and worn-out garments about the house, and if she did not "beg" like our fair workers in "crazy patchwork," she was very thankful when kind aunts and cousins sent her even a small contribution to her stock. A little basket was kept always handy, and when she had some waiting minutes, you would hear the click of her bright shears cutting up the scraps into strips, and the pile grew very fast. When it came to sewing, even the boys were ready to help, after she taught them the science. It was a poor day when one great ball was not added to the large basket, and it was just a recreation to Phebe to slip them into a large sack and weigh them every few days.

"But I am afraid we can never afford the weaving," said mother rather despondently.

"Only get me the warp, mother, and I can weave it myself. I've talked it over with good Mrs. Booth, and she will let me use her loom and teach me also. I have woven a little on her carpet sometimes."

So the work sped, and on a rainy day in November the long widths were tacked down, the furniture re-arranged, and the family took possession that dreary evening, with a sense of comfort and riches, that only such well-earned possessions can ever give. The baby crept about on the warm floor with great delight; little Nannie sat down on the carpet to point out bits of goods which she recognized; father praised Phebe's industry and perseverance; mother reflected with pleasure on the great saving of work it would be, as well as the added comfort; the boys all liked it, so on the whole it was a happy day for Phebe. It was a great enterprise for a girl of 16 to carry through, and she deserved all the praise she received. But the gain to her was more than the gain to the family. She had learned many valuable lessons over it, and not the least was how blessed it is to work for the good of those we love. She had learned to overcome difficulties, and many a time afterwards the thought of that rag carpet encouraged her to feel that "where there is a will there is also a way."

That good carpet deadened many a discordant sound, and diffused a sense of comfort through the humble room. So the influence of this eldest daughter was a blessing to all the household. Yet while she was ministering to the happiness of all the household by her daily walk and conversation, she was in the most substantial manner contributing. Those who live for self are of all others most unhappy, and those with the widest hearts are the happiest.

OLIVE.

Domestic Economy

CONDUCTED BY MRS. AGNES E. M. CARMAN.

MY FIRST DAY OF HOUSEKEEPING.

I SHALL never forget it, and I shall always hold that gas stove responsible for all its disasters. It was nearly two years ago, and though I was not a novice in housekeeping, yet common housekeeping is very different from trying to live amicably with a gas stove, especially if you are not in the least familiar with its disposition.

It was a pleasant home to which "John" took me after our short wedding trip, and his mother—a sweet, gentle lady, never strong—had quite worn herself out in the attempt to get up a lovely little reception for us. So the next day she was obliged to keep her room most of the time, and "John" staid in the house an hour or two to show me where things were and initiate me into the mysteries of that awful stove. It looked harmless and seemed so easy to manage that "not a wave of trouble rolled across my peaceful breast" when I set the milk on to make some blanc-mange. Alas for human hopes and ignorance! I had not the smallest idea that that little circle of fiendish blue flames could heat anything so quickly, and before I knew it the milk had boiled over and put out the fire.

I wasn't sure what to do at such a crisis. John had gone, and not daring to run any risk, I had to go up stairs and ask mother. She told me, but I am sure she did not realize the situation or she would not have detained me so long to talk. I couldn't leave at once without seeming rude, and although it was but a few minutes, I was haunted by a vague fear that something might be going wrong with that cooking machine, and at the first possible moment hurried down. Something was wrong, for during my absence the cap, or whatever it was, had cooled so that gas was no longer generated, and as I had left the valve open, the fluid had begun to flow. Not knowing what else to do I applied a match, and then, oh! then, my countrymen! there was a blaze that shot nearly to the ceiling. I was terrified—I was frantic. John wouldn't be back till noon; I couldn't bear to alarm the invalid mother unless obliged to, and I dared not leave that rampant blaze to its own wicked devices long enough to go to the neighbors for help. There seemed nothing to do but stare helplessly at the flames, for nothing appeared to be on fire except the stove, or rather the space above it, and what good could it do to throw water on gas? I was fairly petrified with fear lest the ceiling should take fire. Had I come to that house only to burn it up the first thing, and would no one come to help me?

Gradually the fire lowered, and though I had no assurance that the whole reservoir would not take fire next, I stood the ground "whence all but me had fled," and bravely—did nothing. When at last the flames contracted to proper dimensions, I turned the valve and extinguished them in the legitimate way. Then I pared some potatoes and once more approached my dread enemy. A gas stove has no stability whatever; it is full of freaks and seems to be a combination of witches, demons and gun-powder. Every time I lighted it, it would spurt or hiss or puff up or out, or do some queer, jerky, spasmodic thing to keep my nerves lively.

Dear me! how those potatoes did boil! and before there was scarcely time to turn around the water had all turned into steam and there was an odor of scorched potatoes. They weren't all burned, however, and what were good I put into a crock and proceeded to mash. At the very first lunge of the masher (and it was quite a moderate sort of lunge, too) the bottom of the crock broke. I saved most of the potatoes from that second wreck, and wondered if I was destined to become a dish-smasher as well as house-burner. Oh, dear! I really do believe I got something else for dinner on that direful day, but for the life of me I can't remember what! I only remember that the gentle mother considerately praised "those nice potatoes." I shall always bless her for that, but I reserved the privilege of smiling privately over the dish-pan, and to this day she does not know what painful vicissitudes those potatoes and I experienced. John told me that unlucky crock and several of its boon companions had become badly cracked by being used as cooking utensils over the intense heat of that stove. I had not seen the cracks, so, after all, that same evil-minded stove was to blame for the breakage, and not my gigantic (?) strength or carelessness.

By the time the day was ended, I wasn't in love with that gas stove, and advised John to divorce it. He agreed, admitting that with such a dangerous thing in the house, a serious accident was only a question of time. He knew a nice family with whom they had boarded before building, that he thought would like to buy the stove, but he had too much regard for their welfare to wish to blow them up with it, he said, and concluded not to offer it to them. It was finally sold at auction. We never knew who bought it, but devoutly hope they are still alive, sane and whole. I never used it after that one day, and I never wish to behold another. However, my innate sense of justice compels me to say that gas stoves do have a few virtues: they take up but little room, do not look like stoves, they cook rapidly, have no smoke, ashes or dust, and do not heat up the room at all. Anybody who wants one is welcome

to have it, but if you value life, happiness and home, my advice, born out of that day's bitter experience, is—don't! RENA ROSS.

AN EXTENSION TABLE.

SOME years ago, we greatly felt the need of an extension table. The purse would not admit of a new one, and the head of the household was too busy to make one. The thrashers were to be on hand within the week, and unless I could in some way remedy the matter, I would be under the necessity of setting the table a second and perhaps a third time; thereby making the work a good deal harder, when there was enough and to spare, simplify it as best we could. But when a "woman wills, she will and there's an end on't," and I *willed* to enlarge the borders of our family table before that busy day should arrive. At the barn I found a wide hemlock board, with any amount of slivers. But though Jack-plane and I were not very well acquainted, we managed to make that board passably smooth, while the hand-saw did us good service in fitting the false leaf to the exact width of the table. A couple of cleats were nailed on the under side of the board with about eight inches extending beyond the width, after the fashion of Fig. 261.

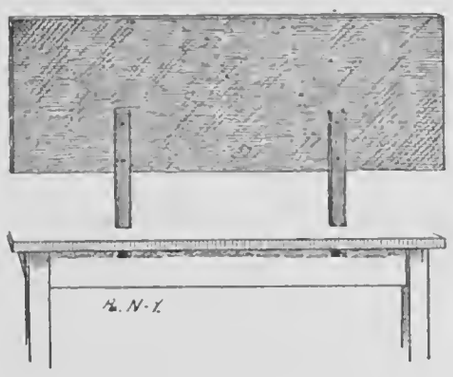


Fig. 261.

A small augur and chisel were next used for making a couple of mortices in the end board of the table, corresponding in distance apart, and also in size and depth, with the cleats, which were to slide into the mortices; and behold! I could seat three or four more at the table; another leaf, and there was room enough for most occasions in our farmer's family.

Last Summer a friend told me that she took the top or bed of the table off, and sawed out the pieces in the end board of the table, to admit the cleats. Afterwards she got a carpenter to make her a kitchen table, and that was as long as her fall-leaf table was wide, so upon great occasions she could extend her table the whole length of her dining-room.

MAY MAPLE.

HOUSEHOLD HINTS.

BUTTER THERMOMETERS.

ALMOST every one has noticed the variation in the number of degrees in heat and cold indicated at the same time by different thermometers. I have learned that thermometers used for testing the warmth of cream are not always to be trusted; that is, while with one 62° in Summer and 65° in Winter is the proper temperature to bring butter satisfactorily; with others, other degrees must be indicated to attain that end. The thermometer we now use is so made that we are obliged to have the cream at 68° to gather the butter, and in the Winter at 70°. Any one used to churning can tell after a few trials just where the mercury should stand. We had considerable needless wearisome work to do last Winter before we learned where the trouble lay.

SMOKING MEAT.

When Massachusetts was our home, there was no trouble in getting hams cured and smoked, for in every village there was some person that would do that work, and had proper conveniences for it. On the prairies, every one must wait upon himself, and be independent of others by his own ability to do what must be done, if he would prosper. A Western boy made an inexpensive smoke-house of the materials right at hand. It was so satisfactory that some one may be helped by a description of it:—A little trench was dug leading from a small hole in the ground; over the hole was turned a headless barrel. In the trench were laid several sections of stove pipe. The hams to be smoked were suspended from the bottom of the barrel. The pipe was covered with earth to help the draft. The cobs and fire were put in the end of the pipe farthest from the barrel, and a broken shovel acted as a damper when needed. If only one piece of pipe is used, the meat may be burned.

SALTING PORK.

Whether the alkali in the water is the cause of it I can't say; but fat pork packed in a barrel with layers of salt, and cold water turned over all, would not keep the whole year without scalding the brine. While I was going through that troublesome process our Western boy said. "If you will turn your brine *boiling hot* over the pork you will never need to scald it, that is mother's way." I tried it and found it just as he said. Now I make my brine strong enough to hold up an egg, and turn it, boiling hot, over the pork, which has been cooled from the animal heat, and packed in a barrel with slight sprinklings of salt, being always sure to keep it under the brine with a weight.

SALTING CUCUMBERS.

I make my brine for salting cucumbers for pickles, by keeping the salt and cold water in a keg and stirring it until enough is dissolved to bear up an egg, or a medium-sized potato if more convenient. The fluid is dipped out and put over the cucumbers, and more water and salt are put together for the next time of need. In this way there is no waste of salt and no uncertainty about the cucumbers being properly salted.

PICKLES.

When needed for pickles, I fill the tin boiler with cucumbers and place them over the stove, covered with cold water, and bring to a decided boil. Drain this water off and put on half vinegar and half water, and throw in a little alum to make them hard. Bring to a boil. Let them stand in this over-night or longer, if not in haste, in an earthern or wooden vessel. For the third time put upon the stove with clear vinegar (and spice if desired) and when cold they will be found to be sour enough for use. Good pickles can be made in a very short time in this way.

If a cloth is laid over the top of salted cucumbers, under the weight, the scum that will arise can be easily removed by taking off the cloth and rinsing it. S. E. H.

DOMESTIC RECIPES.

TOMATO FIGS.

TAKE small, red tomatoes, scald and skin them quickly, breaking them as little as possible, add one-third their weight of granulated sugar, boil slowly until they are clear, take them out and spread them on plates; boil the juice till it is very thick, pour it over the tomatoes, and dry them in a warm oven. When dry, pack in layers in a clean paper box, first sprinkling sugar over the bottom of it, and also between each layer, pack tightly and cover closely, and you will have a nice confection for Winter. AUNT EM.

HUCKLEBERRY CAKE.

One cup of butter, two cups of sugar, three of flour, five eggs, one cup of sweet milk, one teaspoonful of soda dissolved in warm water, a teaspoonful each of cinnamon and nutmeg, one quart of ripe, fresh huckleberries thickly dredged with flour. Stir the butter and sugar to a cream, add the beaten yelks, then the spice, flour, whites beaten stiff, soda and fruit. Stir in the huckleberries with a wooden spoon or paddle so as not to bruise them. Bake in a moderate oven until a straw used for testing the cake comes out clean from the thickest part. This is a delicious cake that deserves to be better known.

DELICIOUS LEMON JELLY CAKE.

Two cups of sugar, one-half cup of butter, one cup of milk, three eggs, one teaspoonful of soda, two of cream-of-tartar and three cups of flour. Bake in five thin layers. For the jelly grate the rind of three small or two large lemons, and add the juice of the same with one cup of sugar, one egg, one-half cup of hot water, one teaspoonful of butter and a tablespoonful of flour made smooth with a little water. Boil, stirring until it thickens. Spread between the layers. This cake will be better if kept a week or 10 days before eating. HATTIE M. RUDD.

[Will the above contributor please send her address to us at River Edge, Bergen Co., N. J.—ED.]

QUESTIONS ANSWERED.

GENERAL TRAINING COOKIES.

EMILY J. BOWEN asks for a cookey receipe of 50 years ago. The children, she says, gave the above name to the cookies as they made their appearance upon "General Muster" day.

ANS.—The only "Muster" day recipe that we have at hand is one for Ginger-bread, taken from the Buckeye Cookery. The ingredients are: One gallon of molasses or strained honey, one pound and a quarter of butter, a quarter of a pound of soda stirred into a half tea-cup of sweet milk, a teaspoonful of alum dissolved in just enough warm water to cover it, flour to make it stiff enough to roll out. Put the molasses or honey into a large earthen dish, add the soda and butter melted, then the other ingredients. Mix in the evening and let stand over-night. In the morning knead it a long time like bread. Roll out into squares half an inch thick, and bake in a well-heated oven. To make glossy, rub over the tops just before putting in the oven, a mixture of beaten egg and sweet cream—equal proportions.

RASPBERRY VINEGAR.

M. A. B. asks for a recipe for the above.

ANS.—Put ripe, red raspberries into an earthern dish and crush. Cover with pure cider vinegar, let stand over-night, strain, throw away the pulp, put as much fresh fruit into the dish as you used before, crush and cover with the strained juice. Set aside for the day. The next morning strain and to each quart of this juice allow a pint of water, and to each pint of the mixture a pound of lump sugar. Heat, stirring to dissolve sugar. Skim as it heats. Just bring to a boil, strain and bottle, making the corks secure with wax. A few spoonfuls of this mixture with a little sugar in a glass of ice water will be found most refreshing when the mercury is in the nineties.

Miscellaneous Advertising.

When Baby was sick, we gave her Castoria,
When she was a Child, she cried for Castoria,
When she became Miss, she clung to Castoria,
When she had Children, she gave them Castoria.

Miscellaneous Advertising.

Worth Knowing.

THAT, as a household remedy, for children and adults, Ayer's Pills are invaluable.

THAT, in Colds, with headache, backache, coated tongue, symptoms of fever, and a constant feeling of weariness, Ayer's Pills will often effect a cure when other remedies fail.

THAT these Pills are sugar coated, perfectly safe to take, do not gripe, and contain neither calomel nor any other dangerous drug.

I have used Ayer's Cathartic Pills in my family for the past thirty-five years. For stomach or liver troubles, or any irregularity of the bowels, and in case of Colds, Ayer's Pills are unequaled. I am never without them.—Frank Tisdale, Montpelier, Vt.

Ayer's Pills,

Prepared by Dr. J. C. Ayer & Co., Lowell, Mass. Sold by all Druggists and Dealers in Medicine.

MAKE HENS LAY

SHERIDAN'S CONDITION POWDER is absolutely pure and highly concentrated. It is strictly a medicine to be given with food. Nothing on earth will make hens lay like it. It cures chicken cholera and all diseases of hens. Illustrated book by mail free. Sold everywhere, or sent by mail for 25 cts. in stamps. 2½-lb. tin cans, $1; by mail, $1.20. Six cans by express, prepaid, for $5. I. S. Johnson & Co., P. O. Box 2118, Boston, Mass.

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I now offer from stock grown by myself French bulbs of finest and best germinating quality, as under: Roman Hyacinths, 1st size, $2.25 2d, $1.8 Narcissus, paper white and double Roman, $10 Lilium candidum, $15.50 Parisian Hyacinths, $11 per 1,000 roots, f. o. b. steamer, Marseilles. Orders respectfully solicited

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Ollioules (Var) France.

PLANTS $1 per 1,000. Nansemond Sweet Potato and P. S. Cabbage after June 1st. FREEMAN HURFF, SWEDESBORO, N. J.

FOR SALE.—200 Improved Grain and Stock Farms in Southern Indiana. Healthy climate; good soil; churches, schools, railroads. $10 to $30 per acre Catalogue free. Address A. SHEPHERD & Co., No. Vernon, Ind.

Virginia Farms.—Mild Climate. Cheap Homes. Send for Circular. A. O. BLISS, Centralia, Va.

HUMPHREYS' Homeopathic Veterinary Specifics for HORSES, CATTLE, SHEEP, DOGS, HOGS, POULTRY. Used by U. S. Government. Chart on Rollers, and Book Sent Free. Humphreys' Med. Co., 109 Fulton St., N. Y.

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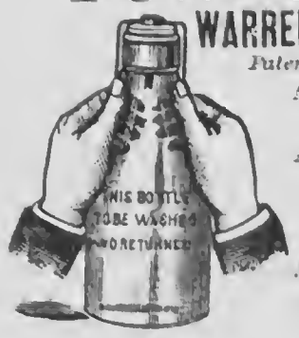
In use 30 years. The only successful remedy for **Nervous Debility, Vital Weakness,** and Prostration, from over-work or other causes. $1 per vial, or 5 vials and large vial powder, for $5. SOLD BY DRUGGISTS, or sent postpaid on receipt of price.—Humphreys' Medicine Co., 109 Fulton St., N. Y.

PURE MILK.



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Perfect Mowing MACHINE KNIFE GRINDER. Weighs but 18 Lbs. Can be carried into the field and attached to Mowing Machine Wheel. Send for Descriptive Catalogue. Agents wanted in every County. R. H. ALLEN CO., 189 Water St., New York.

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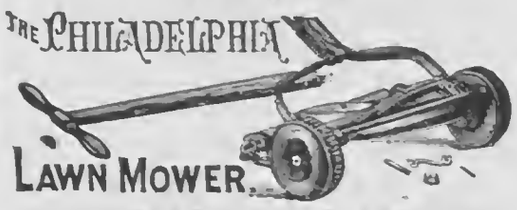

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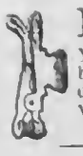

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News of the Week.

HOME NEWS.

SATURDAY, June 12, 1886.

THE returns for the election just held in Oregon summarized are as follows: The Republicans re-elect Herman to Congress by 1,000 plurality, and also elect their candidates for Secretary of State, Superintendent of Public Instruction, and Public Printer. The Democrats elect their candidates for Governor, Treasurer, and Supreme Judge. As Governor, Secretary of State, and Treasurer constitute the board for the management of all State institutions, the Democrats will have control of the State affairs for the next four years. McBride (Rep.), for Secretary of State, has 400 plurality, and Strain (Dem.), for Supreme Judge, 150 plurality. The official figures will not change the result. The Prohibitionists polled about 2,000 votes. Oregon has always been reckoned a Republican State; but the policy of the Republican party on the Chinese question has worked a partial revolution. ....The Ohio Dow Liquor Law is sure to cause great excitement in every township. The Cincinnati Police Commissioners pushed a test case through the Common Pleas and Circuit Courts without the knowledge of rum-seller or newspaper, and is is now before the Supreme Court. If the newly imposed tax isn't paid by June 20, the County Treasurers are compelled to collectit by execution.....The Chicago Times charges that $127,000 were divided on Monday evening among less than 20 aldermen, as a bribe, by the North Chicago Passenger Railway Company for permission to do as it may please in the streets through which its lines run. Price per alderman, "low-down" $1,500 and under: "respectable," $8,000; "high-toned," $10,000 and over. Charles J. Yerkes, President of the bribing road, was convicted of stealing a check for $33,048.50 in Philadelphia in 1873,and sentenced to the penitentiary for two years and six months, but was pardoned after seven months for political reasons.....Land Commissioner Sparks has appointed "Captain Jack" Crawford, of New-Mexico, custodian of the abandoned Fort Craig Military Reservation in New-Mexico vice R. Amijo, resigned. It is understood that Crawford will soon join General Miles, as chief of scouts, in his campaign against the Apaches. Miles telegraphs that for 36 days his forces have been unintermittingly pressing hard upon Geronimo's band, and must soon kill, capture or drive them into Mexico. In this time, however, the red devils are known to have killed 13 scattered herdsmen, prospectors and settlers; how many more will never be known till Judgement Day.....There is a rumor that a syndicate of European capitalists are to buy the Sandwich Islands for $10,000,000. The king "is not adverse" so long as he secures most of the money..... ...Monday at the Local-option elections in N. C., the Prohibitionists carried 12 out of 21 towns reported. .....Minister Winston, lately sent to Persia, has urgently pressed his resignation, which has been accepted. Infinitely prefers Chicago to Teheran.....Senator Blair's Pension Bill provides for a uniform Pension of $12 per month for all Union ex-soldiers and sailors of the ate war now unable to maintain themselves—no distinction as to rank. Likely to pass if there's time..... ....The Senate has passed the bill appropriating $150,000 to indemnify the Chinese for the Rock Springs, Wy., massacre and outrage; also a bill to legalize National trades-unions. .... The House has passed the bill repealing the Pre-emption, Timber Culture and Desert Land Laws, by a vote of 183 to 40. Many protests from the Far West, especially from Kansas; but they were thought to be mainly from land-grabbers, their attorneys, agents or henchmen..... .....Senator Dawes wants to issue $30,000,000 in $1 bills and $35,-000,000 in $2s to relieve the present scarcity of small bills. They are to be in place of bills of larger denominations. There are now only about $18,000 in ones, and about the same in twos.....Representative Judge Kelley, of Philadelphia, has deservedly lashed Representative Gen. Wheeler, of Alabama, for having inserted in the Congressional Record, a bitter attack on the late Edwin M. Stanton, our tremendous War Minister, in a speech supposed to have been delivered in the House; but which was never made there..... .....Congress will hardly adjourn before the latter part of July..... The Mass. Senate has passed a bill increasing the allowances for good behavior on sentences of jail birds. On all sentences of a year or longer, it takes off two months for each of the first two years; four months for each of the third and fourth years; and five months for each succeeding year. It is to be retroactive so as to be applicable to convicts now in prison. Aren't judges who think a criminal really deserves a long punishment, likely to take the probability of such liberal commutation into account in passing sentence, by adding considerably to the term?..... ....The fishing difficulty still continues, with greater vigilance on the Canadian side, and greater exasperation on the American. The latter are not allowed to fish within three miles of a line drawn from one headland to another; while they insist they have a right to fish within three miles of the coast, in bays or outside. Mackerel fishing is now the best; and mackerel schools run mostly inside the "three-mile limit"—poor luck, therefore, for Yankee fishers. Canadians are allowed to import, duty free, fresh fish for immediate use, sounds, etc.; but the Bontelle Bill now before the House, imposes a tax on these, and our fishermen insist that it should be passed at once. There is less disposition now than ever in Congress to form a new reciprocity treaty with the Dominion.....Much distress among the coasting population of the Maratime Provinces from being prevented from selling bait, ice, etc., to Americans. Negotiations between the American and Imperial Governments necessarily slow, but friendly... .....Col. Richard M. Hoe, who revolutionized the printing press, died at Florence, Italy, Monday. Born in New York September 12, 1812; studied a little at school, but got a thorough knowledge of practical mechanics in his father's machine shop. Perfected his rotary press in 1848—the basis of all improvements—could print 10,000 copies an hour; now every rotary press can print 20,000 to 25,000 copies an hour..... ..Mr. Bodwell, Blaine's candidate, received the Republican nomination for Governor of Maine, Thursday, by 882 votes against 201 for Dr. Hamlin. Mr. Bodwell is 68, and very rich, though in 1834, he was a farm laborer at $6 a month. For a dozen years he has been quite noted as an importer and breeder of thoroughbred cattle. Blaine is now considered to have fairly entered the field as Republican candidate for the Presidency in 1888. There's no doubt he has the strongest following; but is it stronger than that of all other prospective candidates combined? Is he the man that would have the best chance of getting elected? These are the questions puzzling politicians.....President and Mrs. Cleveland on the day of their marriage sought retirement in a nice cottage at Deer Park, Maryland, where they remained quietly, receiving a few friendly visitors, until last Tuesday, when they reached the White House in the evening. Since then they have been living the lives of ordinary folks, he attending to his official and social duties; she to household matters, receptions, etc. The amount of gush and jenkinsism expended on the marriage in the papers has been simply nauseating,..... ..Ex-President Arthur is still only so-so—no better or worse; confined to the house..... .....There seems to be a good deal of rivalry or disagreement between the Democratic leaders, Randall and Holman, in the House, and it is likely to hamper or block much legislation.....'Maxwell," *alias* "Brooks," the murderer of Preller, in St. Louis, over a year ago, has been convicted of murder in the first degree, but is seeking a new trial—likely to swing, however, and very justly, too..... Sec. Manning has gone to the Hot Springs, Ark.....Dakota is getting over her craze for dividing the Territory, and would like to be admitted as one big State. If this desire had come earlier she would probably have got in; but it is now so late in the session that her admittance this year is doubtful..... .. The Rhode Island Legislature refuses to legislate or remove from office the obnoxious Chief Constable, Brayton. After all the talk he is bound to do his best to show he can do the square thing, and enforce the law.....All over the country the Prohibitionists are taking an unusually active and prominent part in political warfare, and generally act independently of the other parties. Republicans are considerably disturbed, as the great majority of the prohibition vote will leave their party. Many attempts have been made to compromise matters, but generally in vain..... Never was there a hotter fight than that between Gen. Gordon and Maj Bacon for the Governship of Georgia. Hitherto the Major has secured more delegates than the General, and many of his prominent supporters say if the latter carries the convention, they'll bolt.. .....Canada will continue to pay a bounty of $1.50 a ton on Canadian pig-iron made from Canadian ore till July 1, 1889, and give $1 a ton for three years thereafter..... ....Sunday last, Catholic Archbishop Feehan, of Chicago, confirmed 117 convicts in the decorated chapel of the State Penetentiary, Joliet, Ill.....Gov. Hill has signed the bill which adds 500 men to the police force of this city, making the whole number 3,250. Patrol wagons are also to be introduced. Increase of city, and danger from strikers and Anarchists justify the measure..... A Washington fund for buying Mrs. Hancock a home now amounts to $10,000.....The valuation of New York State has increased $275,000,000 during the past year, or about nine per cent., and now amounts to $3,266,-609,000; the total tax for State purposes was $9,536,000.....The police of East St. Louis have all—14—been discharged, being accused of being in league with a gang of professional burglars to rob the city treasury, a bank and the stores and homes of the wealthiest citizens.....Prince Augusto Leopold, heir to the Emperor of Brazil, arived here the other day, and is to see a good deal of the country, as his genial father did a few years ago. .....The Senate election Committee find the report of the Ohio Legislative Committee on the election of Senator Payne so empty of facts to show corruptian that they have unanimously decided that nothing in it calls for an inquiry—there has been too much flinging of dirt in this case.... ....A Territorial form of government is being urged for Alaska, by Gov. Swineford of that place. No one can buy a foot of land there, and wood for the mines can be got only by stealing. House Committee on Territories hesitates on account of the policy to be adopted towards the Indians there...Litchfield, Ct., was almost entirely cremated yesterday.

FOREIGN NEWS.

SATURDAY, June 12, 1886.

THE second reading of the Home Rule Bill was defeated early Tuesday morning by 30 majority in the House of Commons. The majority was not expected to be over 10 either way. Doubtless some members, finding the bill would be defeated anyhow, voted to increase the majority in the hope that if it were large, Gladstone would not care to dissolve Parliament and appeal to the country. This he will do, however, as soon as the pressing business is over—probably about June 20. The next Parliament will then be ready to assemble about the middle of July..... .....The Conservatives, under Salisbury; Liberal-Unionists, under Hartington: and disgruntled Radicals, under Chamberlain, will aid each other wherever possible to defeat the Liberals under Gladstone. All the most liberal contributors to election expenses are on the side of the Opposition; for the aristocracy and plutocracy of great Britain and the landlordism of Ireland are bitterly opposed to Home Rule, while Gladstone trusts mainly to the democracy of the United Kingdom for victory. Last year he secured an increase of over 2,000,000 in the number of voters, all among those whose poverty had deprived them of suffrage, and though these have not yet been properly registered, most of them are likely to support him.....England is in no position to have Ireland an enemy in the rear as she faces Europe at present. War in the East may break out any day. Russia has lately appropriated a large slice of Persia adjoining Afghanistan, which was lately conquered by England, and whose king is a paid English puppet. Russian railroads are being pushed rapidly to the Afghanistan frontier, and in any trouble with England the Czar could send an army by land into India much more easily than England could send one by sea. The wretched Hindoo ryots, or peasants, are holding vast secret assemblies, and defy the best Government detectives to discover what's up. A "home rule" agitation is growing in India, and discontent is increasing on all sides. It is feared Russia is secretely fomenting the trouble. England's influence is weakened in peace by Ireland's discontent, and her power would be crippled in war by Irish turbulence or rebellion..... ....Parnell in his speech in Parliament charged that a member of the Conservative Government told him at the last election that the Conservatives would give Ireland Home Rule in return for Irish votes at the polls, and the Earl of Carnavon, then Lord Lieutenant acknowledges that he made such a promise. Much rejoicing among the Home Rulers. .....One of the strongest objections to Home Rule was the fear of handing over poor Protestant Ulster to the tender mercies of an Irish Parliament. This will lose much of its force owing to the turbulence of Protestant mobs in Belfast and Lurgan during the week, especially in the former head-center of Orangism. An absolute reign of terror has prevailed there. Fierce mobs have assaulted prominent Catholics, wrecked and plundered over 150 private houses, demolished several liquor stores and made hogs of themselves on the contents. They have assailed and several times defeated the police, who, on different occasions, were forced to fire among them. Cables say 15 are known to have been killed, and over 100 wounded among the mob, and many of the police have also been injured. Magistrates, clergymen, the riot act, and all other authorities and laws have been fiercely defied, and the nights have been made hideous and the days terrible by "the scum of Belfast." Now the mob is still riotous, but troops patrol the streets; the police have received strong reinforcements from Dublin, and for the present further outrages are impossible, but the mob threatens to take vengeance on the police and Catholics when outside aid is withdrawn. It must be remembered that nearly half the population of Ulster is Catholic, and that the Parnellites elected a majority of members of Parliament for the province at the last election. Fears are felt that the Catholics, who are enormously in the majority in the rest of Ireland, will retaliate on local Protestents; but their leaders seem to possess great power over them and are using it to preserve a very politic peace. As the defeated party, they have a better excuse for turbulence.....

In the French Chamber of Deputies, the expulsion of the Princes was voted by a large majority yesterday. The "chief pretenders" are to be expelled at once: and it is left to the Government's discretion to exile at any time any other obnoxious members of the Orleans and Bonaparte families. The bill will go to the Senate Thursday, and will probably be passed by June 22, so we may have the royal and imperial aspirants to the French throne here before long. Having made an inglorious peace with Madagascar, and a not very honorable one with China, France is now seeking an extension of territory by seizing upon some islands in the Pacific; but England and Germany are watching her movements closely there. Labor troubles temporarily quieted: strikers resuming work.

King Ludwig II of Bavaria, whose crazy vagaries and crack-brained extravagance have for years been the shame and distress of his people, and the wonder and amusement of the rest of the world, was deposed on Wednesday by his Uncle Prince Luitpold, who has proclaimed himself Regent. Army, Court and people consent. King, locked up in one of his multitudinous palaces, refuses to surrender. Will be allowed his past income, and all the honors, but none of the powers of a king. He is 41 and unmarried; his uncle 64, married and the father of eight children.....

AGRICULTURAL NEWS.

SATURDAY, June 12, 1886.

IN 1884 there were 37,334,000 sheep in New South Wales, but owing to the drought of that year the number was reduced to 31,660,-321. The current year it is thought will show an increase.....Importations of foreign wools into Boston since Jan. 1 have increased over 100 per cent.; receipts of domestic wool have fallen off over 21 per cent....Texas wool is said to have improved so much of late years as to be equal to Australian, and Texan wool growers are advised to hold on to their wool for good prices. The wool growers of Eastern Ohio have "resolved" that 35 cents is a fair price for their wool, and have, therefore, fixed that price for the present clip..... The entire fruit crop of California is expected to bring to that State an aggregate of $100,-000,000!.....American corn is delivered in England at 60 cents per bushel!.....There are now in the U. S. about 20,000 flouring mills with a yearly capacity of 500,000,000 barrels—nearly seven times the requirements of home and foreign demands.....Recent public sales of Short-horns in England have ranged from $80 to $160 per head..... ..A disease like the "black rot" of the sweet potato is playing havoc with Irish potatoes in Southern N. J., Eastern Del., and the "river line" counties of Pennsylvania—attributed to wet weather.....California expects the largest grape crop in her history. Gov. Stoneman, Thursday, telegraphed Sec. Manning urging him and the whole Administration as well as the California Senators and Representatives, to aid the passage of the "wine bills" now before Congress, as the proposed remedial legislation is of paramount importance to the greatest interest of the State..... ....

Crops & Markets.

SATURDAY, June 12, 1886.

The weather in the United Kingdom has of late been favorable to grain crops, hence prices have been very low. Flour fell 12 cents per barrel this week. British importers are buying nothing beyond enough to fill immediate demands. Latest cables say the wheat harvests in South America, India and Australia are "up to anticipations." A short time back the anticipations portended short crops. Do the cablegrams mean they are not short? Very heavy imports of Indian corn of late into England and the Continent. On Friday, wheat in London fell 1¼ to 3 cents a bushel, and Indian corn ¾ to 1½ cent.

THE June crop report of the Dep. of Agriculture, a summary of which was telegraphed from Washington yesterday, makes the area of spring wheat nearly the same as last year—about 12,000,000 acres. There is an increase of one-sixth of last year's breadth in

Dakota, a decrease in Nebraska, and a small reduction in Minnesota and Wisconsin. The minor spring wheat districts show a small advance. The extension of area in Dakota is due mainly to settlement and the necessity of ready money for improvements and somewhat to last year's unsatisfactory flax product in Southern Dakota. The effect of low prices of wheat has been counteracted by the superior rate of yield of recent years. The condition of spring wheat averages 98½ against 97 in June of last year; Wisconsin 97; Minnesota, 99; Iowa 100; Nebraska 97; Dakota 99; Washington 100. Winter wheat is not quite so promising as on the first of May. A slight decline in condition is reported in the West, and the low condition of the Southern crop is still more reduced. Yet the average is only reduced two points, from 94.9 to 97.9. It is still from average to high in the great wheat-producing States. In New York it is not tillering as in 10 years of strong root growth. It is very promising in Maryland and Virginia, except in wet lands. In the South it has been affected with rust, shriveling the grain harvested. There have been injury from drought in Texas, rains and floods in Ohio, and hail-storms in Missouri. The prospect is good for a small fraction above 12 bushels per acre. Rye has also declined from a general average of 95.7 to 94.4 during the last month. The barley acreage has been increased three per cent, and condition averages 100; last year in June, 89. The large acreage of oats in 1885 has not been extensively increased. It has been slightly reduced in Kentucky and Ohio, where the area was abnormal last year. The increase will approach half a million acres. Condition averages nearly 96, against 94 in 1885, and 98 in 1884. It is the highest east of the Alleghenies, and a little below full condition in the South and West. The increase will approach half a million acres. Condition averages 96 against 94 in 1885. The tendency to increase the area of cotton has been checked in the eastern States of the cotton belt. The net increase is about 250,000 acres, an advance of 1⅓ per cent. The record stands: Virginia, 99; North Carolina, 100; South Carolina 99; Georgia, 98; Florida, 103; Alabama, 99; Mississippi, 102; Louisianna, 105; Texas, 107; Arkansas, 102; Tennessee, 101.

A telegram from Indianapolis says reports from every county in Indiana, Illinois and Ohio, which have just been received and compared, show that in the last 30 days the wheat crop has been seriously damaged by severe storms, but that the condition is 27 per cent. better than at the same date last year.

Reports of local rains and droughts in the Northwest; but a great tendency to cry "wolf." Frosts have done some damage in the Red River Valley, but mostly to vegetables. It is generally believed the reports are being garbled or concocted to serve the ends of speculators.

This month is of great importance to the growing grain and crop reports, and rumors have flown thick and fast through the newspapers and across the floors of the exchanges. We have had damage done by the chinch-bugs, by the Hesian fly and other pests, by drought in some sections and cold and excessive rains in others. But there is thus far no good reason for believing that material damage has been done. The Agricultural Dep't's report looks slightly unfavorable as compared with that for May 1st, but since its preparation a much needed rain has been reported at the Northwest.

The cotton crop is progressing finely in Louisiana, Mississippi and Texas. Heavy rains in the Carolinas and Georgia foreshadow trouble from grass. Burley leaf tobacco is strong at Louisville in the face of heavy receipts, while lugs are fractionally higher. The weather favors planting. Heavier sugar supplies, and better beet-crop prospects further depress sugar prices.

The wheat boom started last week in Chicago has collapsed and wheat has dropped everywhere a trifle more than it advanced last week. This has been due to the persistent refusal of exporters to buy at the advanced figure, and the favorable prospects of the new crop, backed by large stocks in sight and fair receipts, so that here No. 2 Red has fallen four cents during the week. Of all large markets the advance and fall have been smallest at St. Louis.

Corn has sympathized with wheat, and been further weakened by an increase of over 1,000,000 bushels in the visible supply. Oats have been firmer—an increase of only 250,000 bushels in the visible supply. Butter has slightly advanced—mainly, it is thought, through speculation. A good deal is going into cold storage to await better prices. Cheese has been advanced, owing to a fair export demand and moderate receipts; but exporters won't buy at the advance, so it is hardly likely to hold.

The excellent tone lately reported here continues in the principal wool markets. Manufacturers are buying freely for present needs, though few are stocking up. The ruling figures at Boston and Philadelphia—the chief wool markets—are considered low in view of the prices asked in the interior. Texas wool has already been pretty well all bought, as there has been a keen competition for the clip between dealers, agents of Eastern factories, and speculators. In Ohio, farmers are demanding, and in some places getting, relatively higher prices than those now ruling at the coast. The London sales, which begin on Wednesday, will settle the question whether the better tone abroad of late was due to the general improvement in trade or to temporary causes. In Boston the market is very firm, but has not noticeably advanced. The sales of the week are reported at 2,532,000 pounds, as against 2,435,700 pounds last week, and 1,891,000 pounds in the corresponding week last year. The current quotations for leading sorts there are as follows:

Ohio and Pennsylvania X	30@31c.
Ohio and Pennsylvania XX	31@32c.
Ohio and Pennsylvania XX and above	32@33c.
Michigan X	27@28c.
Fine Ohio delaine	30@32c.
No. 1 combing	33@34c.
Texas spring, 12 mos	20@23c.
Super A	31@34c.

MARKETS BY TELEGRAPH.

SATURDAY, June 12, 1886.

CHICAGO.—Compared with cash prices a week ago, "regular" wheat is 3c. lower. No. 2 Spring, 3⅝c. lower. Corn, ⅛c. higher. Oats, 1⅜c. higher. Pork, 30c. higher. Cattle, shipping steers from 20c. to 45c. higher; others grades also higher. Hogs average 15c. higher. Sheep, steady.

WHEAT, active; Sales ranged: June, 73¼@74⅝c; July, 74 7-16@75c; August, 75½@77⅛c; No. 2 Spring, 73⅝@73¾c; No. 3 Spring, 61@61½c. CORN in moderate demand; Cash, 31⅝c; June, at 34⅝@35¼c; July, 35⅝@36⅜c; August, 36 13-16@37 3-16c. OATS.—Quiet. Sales ranged: Cash, 27¾@28c; July, 27½@28c; August, 25½@26¼c. RYE.—No. 2, at 55½c. BARLEY.—Dull; No 2, at 50@53c. FLAXSEED, steady; No. 1 at $1 08. MESS PORK.—Active; Cash, at $8 80@8 85; July, $8 72½@8 87½; August, $8 95@8 97½. LARD.—Cash, 6 05@6 07½c; July, 6 10@6 12c; August at 1 07½@6 25c. BULKMEATS.—Short rib sides steady; cash at 5 50c. Boxed meats steady; dry-salted shoulders, at 4 45@4 50c; Short Clear sides, at 5 75@5 80c. BUTTER—Steady; creamery at 12@16c; dairy at 8@11c. EGGS at 10@10½c. CATTLE—Market active; 10c. lower than yesterday. Shipping steers, at $4 50@6 00; stockers and feeders, $2 75@4 75; cows, bulls and mixed at $1 65@4 10; bulk, $2 80@3 20; thorough Texas cattle, $3 00@4 00. HOGS.—Market strong. Rough and mixed, $3 85@4 20; packing and shipping at $4 00@4 30; light, $3 85@4 25; skips, $2 50@3 70. SHEEP.—Market strong; Natives, $2 10@4 60; Texans, at $2 15@3 00; Lambs, per head, $1 50@3 50.

ST. LOUIS.—Compared with cash prices a week ago, No. 2 red wheat is ¼c. lower. Corn, ⅝c. higher. Oats, steady. Butter, unchanged. Eggs, 1½c. higher. Pork, 25c. higher. Cattle, from 10c. to 25c. higher. Hogs, from 5 to 15c. higher. Sheep, 25c. lower.

WHEAT.—Active. No. 2 Red, Cash, 76c; July at 71½@75¼c; August, 75½@76¼c; September at 77¼@78c. CORN.—Very quiet but firm; No. 2 mixed Cash, 31½c; June, 313c; July, 32½c.; August at 33⅝@33¾c, September, 34⅛@34½c. OATS.—No. 2 mixed, Cash, at 26c. nominal; July, at 24½c. RYE at 55c. BARLEY.—No market. BUTTER.—In fair demand and firm; Creamery, 14@15c; dairy, 11@13c. EGGS.—Active and easier at 9½c. FLAXSEED.—Nominal at $1 00@1 01. WOOL.—Active, strong and higher; medium clothing at 20@24½c; combing at 22@23½c; low and coarse at 13@20c; fine, light, at 18@23c; heavy, at 16@19c; black at 16@20c. PROVISIONS.—Fairly active and steady. PORK firm at $9. LARD.—Strong at 5 75@6. BULK MEATS.—Steady; Loose lots, Long clear at $5 50; Short Rib, $5 60; Short Clear, $5 75.; box lots—long clear, at 5.50@5.60c; short rib at 5.70c.; short clear at 5.80. Bacon very active and strong; long clear, at 6.05@6.10, short rib at 6.20@6.25c; short clear, 6.25@6.30c. Hams very firm at 10½@12c. CATTLE.—Market fairly active and 5 to 10 cents lower than yesterday. Good to Choice Native Shipping Steers, at $5 15@5 50; Native Common to Fair, $4 00@5 00; Butchers Steers, $3 70@4 65; Cows and Heifers, at $2 25@3 75; Stockers and Feeders, $3 25@4 60; Grass Texas, $2 25@4. HOGS.—Market active; Light, at $3 90@4 05; Packing, at $3 90@4 10; Heavy, $1 15@4 20. SHEEP.—Market quiet at $2 25@4 25.

BOSTON.—CORN.—Steamer yellow, at 42@50c, and steamer mixed at 48@49c. Oats have been quiet and unsettled, but closed firmer; No. 2 white, sold at 40½@41½c; No. 3 white, at 40c; barley is selling at 41@46c. per bushel as to quality. Rye is selling at 68c. per bushel. Sales of Bran at $14@15 for Spring and $17 00 for Winter; fine feed and middlings quoted at $14 00@19 00 and cotton seed meal at $28 00 on spot and $22 25 per ton to arrive. HAY AND STRAW.—Hay is in light demand at $18@19 per ton for choice and fancy; fair to good, at $16 00@17 00; fine, at $15 00@16 00, and $9 00@13 00 for poor and damaged; Western choice, $16 00@17 00; do fair to good $15. Straw—Rye straw is held at $22 00@23, for choice, and $14@18 for common to good. Swale hay, $10@11; Oat straw, at $10@11 per ton. PRODUCE.—BUTTER.—Northern and Eastern creamery, extra, 17½@18c; extra firsts, 16@17c; firsts, 14@15c; Western creamery, 15@17c. for extra firsts, new; firsts, 13@14c; Northern dairy, 13@14c. for Vermont extra firsts 16 extra, firsts, at 13@14c; seconds, 12@13c; Western dairy, 13@14c, for firsts; seconds, 9@11; Imitation creamery, 11@13c. for extra firsts to extra; ladle-packed, 9@12c, for extra firsts to extra; firsts, at 8@9c; seconds, at 7@8c; grease, at 3@4c. NEW CHEESE.—New York and Vermont extra, 7½@8c, do. do. firsts, 6@7c; do. do. seconds, 4@5c.; Western extra 7@7½c; do. firsts, 5@6c. EGGS.—Cape and near-by, per dozen, at 13c; Eastern extras, at 12½@13c; do. firsts, at 11½@12c; Northern, firsts at 12c; Western firsts, at 11@12c; Provincial, 11½@12c. BEANS.—Choice Northern hand-picked pea, at $1 65@1 75 per bushel; do, do. New York, small, $1 50@1 60; do, do, screened, $1 15@1 20; medium choice, hand picked $1 30@1 35; do, do, screened, $1 15@1 25; Yellow Eyes, improved, $1 40; do. choice flats, at $1 25@1 30; Red Kidneys, $1 60@1 65. PEAS.—Canada, common to choice, at 85@95c, per bushel. Green peas, Northern, at 90c@$1; do. Western, $1 15@1 20. POTATOES range at 40@70c, per bushel as to quality.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, June 12, 1886.

STATE OF THE MARKET.—Compared with cash prices last week, flour is 5c. lower; No. 2 Chicago wheat 3c. lower; No. 2 Red, 4c. lower; corn, ½c. lower; oats, 1c. lower; pork, 25c. higher; butter, cheese and eggs, steady, poultry, unchanged; vegetables, steady.

FLOUR, FEED AND MEAL.—FLOUR—Quotations: Fine at $2 10@3 00; Superfine, $2 50@3 20; Extra No. 2, $3 10@3 40; Good to Fancy Extra State, $3 50@4 00; Common to Good Extra Western, at $3 10@4 00; Good to Choice Extra Western, $4 00@5 00; Common to Fair Extra Ohio, $3 10@3 75; Good, $3 85@4 20; Good to Choice, $4 25@4 90; Common Extra Minnesota, $3 10@3 50; Clear, $3 50@3 90; Rye Mixture, $3 50@3 80; Straight, $4 00@4 50. Patent $4 50@5 00; Bakers' Extra, $3 75@4 25; St. Louis Common to Fair Extra, $3 10@3 65; Fair to Good, $3 70@4 50; Good to Very Choice, $4 55@5 00; Patent Winter Wheat Extra, $4 40@5 00; City Mill Extra for West Indies, at $4 25@4 35; South America, $4 40@4 50. SOUTHERN FLOUR—Common to Good Extra, $3 25@4 00; Good to Choice do., $4 05@5 00. RYE FLOUR.—Superfine, at $3 10@3 35, latter for choice. CORN MEAL.—Sagamore, $2 70, and 400 bbls Brandywine $2 75. FEED.—40 to 50 lbs. quoted at 55@65c.; 60 lb. at 55@60c; 80 lb. at 60@65c; 100 lb. at 70@75c; Sharps at 80@90c. Rye at 70@75c.

GRAIN.—WHEAT.—No. 2 Chicago at 83½c; No. 2 Red, 84½@84¾c; No. 2 Red for June, 83@83½c; do. for July, 83½@84½c; do. for August, 83½@84½c; do. for September, 84½@85½c; do. for October, 85½@86½c; do. for December, 87½@88½c; do. for January, 88½@89¼c; do. for February, 90¾@90¾c; do. for March, 91½@91¾c; do. for April, 92½@92½c; do for May, 93½@93¾c. RYE.—Western, 58@60c; Canada at 58@61c; State at 64@65c. CORN.—Ungraded Mixed, at 26@45c; Steamer Mixed, 35¾@36c; No. 2 Mixed, at 43¼@44½c; No. 2 Mixed for for July, 41@41¾c; do. for August, 45¾@45½c; do. for September, 46@46¼c. OATS.—No. 3, Mixed at 33½c; No. 2, 34@34½c; No. 1, nominal; No. 3 White, 37@37½c; No. 2 38¾@38½c; No. 1 nominal; Mixed Western, at 32@36c; White do., at 37@44½c; White State, at 39c; No. 2 Mixed for June, 33¾@34½c; do. for July, 33½@34¼c; do. for August, 31½@31¾c.

PROVISIONS.—PORK.—Mess quoted at $9 25@9 50 for Old and $10@10 25 for New; $10 75@11 75 for Family Mess; $12 00@14 00 for Clear Back; and $9 50@9 75 for Extra Prime. BEEF.—Extra India Mess, at $13 00@14 00; Extra Mess, in barrels, $8 00; Packet, $8 50; Fancy Plate, $9 50. BEEF HAMS.—Quoted at $23 00@24 00. CUT MEATS.—Pickled Bellies part, 5 5-16; do. Shoulders at 6c; do. Hams, 10½@11c. MIDDLES.—New York, 6c; at the West, Long Clear, 5.60c; Short Clear, 5 85c. DRESSED HOGS.—City Heavy to Light quoted at 5½@6c.; Pigs, 6½c. LARD.—Contract quoted at 6.22@6.23c; July, at 6.33@6.33c; August, 6.39@6.44; September, 6.47@6.53; October, 6.58@6.59c; City Steam in fair demand at 6.5@6.10c. Refined quoted at 6.55c. Continent 6.90c.

BUTTER.—Creamery—State and Delaware County palls, fine, 17@18½c; State and Pennsylvania, 16@17½c; Western best, 16@17c; Western prime, at 15c.; Western good, at 14c; State palls at 17@18c. State Dairy.—Half-firkin tubs, best, 16c; do. do.do, extra fine, 15c; do, do. do., good, 13@14c; do. do. common, 11@12c; Welsh tubs, best, 15c; do prime, 14c. Western.—Imitation Creamery, best, 13c; do. do. fair and good, 11@12c; Dairy, fine, 12@13c; do, common, 9@11c; Factory, fresh, 11c; do. good, 9@10c.

CHEESE.—The market has a less firm tone, in that receivers are less urgent in claiming outside prices. New State Factory, best white, 7⅝c; do. do, best colored, 7¾c; do. do, good, at 7@7½c; do. do, fair, at 5¾@6¼c; do. do., common, at 5c; Ohio factory, fine, at 7½@7½c; do, fair, at 5@6½c; Pennsylvania skims, ½@1c.

EGGS.—State, 12½c; Canadian, at 12½c; Western, at 11½@12c.

POULTRY.—LIVE.—Fowls, near-by lots, per lb, at 9½@10c.; fowls, Western lots, per lb, at 9@9½c.; fowls, Southern lots, per lb, at 9@—c; turkeys, per lb, at 8@9c; ducks, western, per pair, at 60@75c.; geese, western, per pair, at $1.00@1.25.

POULTRY.—DRESSED.—Turkeys, per pound, at 8@10c.; chickens, Philadelphia, light weights to pair, at 40@12c. per pound; fowls, Pennsylvania, prime, per lb, 11@—c.; do State and western, per lb, 9@—c.

POULTRY.—FROZEN.—Turkeys, per pound, at 14@16c.

GAME.—English snipe, per doz., $2@2 50; Plover, Western, per doz., $1 00@1 50; Sand snipe, per doz., 40@60c.

COTTON.—The quotations, according to the American classification, are as follows:

	Uplands.	New Orleans and Gulf.	Texas.
Ordinary	6 9-16	6¾	9¾
Strict Ordinary	7	7 3-16	7 3-16
Good Ordinary	7 5-16	8⅛	8⅛
Strict Good Ordinary	8⅜	8 9-16	8 9-16
Low Middling	8¾	9 15-16	8 15-16
Strict Low Middling	9	9 3-16	9 3-16
Middling	9 3-16	9⅜	9⅜
Good Middling	9 11-16	9⅝	9⅝
Strict Good Middling	10	10 3-16	10 3-16
Middling Fair	10⅜	10 9-16	10 9-16
Fair	11	11 3-16	11 3-16

STAINED.

Good Ordinary	6⅞	Low Middling	7¾
Strict Good Ord.	7 1-16	Middling	8⅜

FRUITS.—FRESH.—Quotations are: Apples.—Baldwin, per bbl., at $3 00@3 50; Russetts, Roxbury, per bbl., $2 75@3 00; do. Goldens, $2 50@2 75. Strawberries—South Jersey, per quart, at 14@16c; Maryland, per quart, at 14@16c; for prime; do, Wilson, per quart, at 12@14c.

FRUITS.—DRIED.—The quotations are as follows: Apples—Fancy evaporated, at 7@—c; choice, at 6¼@6¾c, do. prime at 6½@—c; fancy North Carolina sliced, at —; choice do. at 2½@3c.; choice Tennessee quarters at 1½@2c.; State quarters at 2½@3c.; southern sliced prime at 1½@2c; do. common, —, Peaches—Peeled North Carolina, choice, 11c; fancy, 12@12½c; extra fancy, —c; Georgia, choice, at 10@11c; do. prime, 8@9c; unpeeled halves, 2½@2c; unpeeled quarters at 2@2½c.; Delaware evaporated, peeled, —@—c; unpeeled do., at —@—c. Choice pitted cherries at 10c. Evaporated raspberries, at 14@15c; sun-dried do. 12@12½c. Blackberries—Prime at 7c. Whortleberries at 6c. Plums, at 5c.

PEANUTS.—Are wanted moderately at steady prices. The quotations are for; 6½c. for best hand-picked 4½@4½c. for farmers' grades; 5¼@5½ for country cleaned.

SEED.—In Clover there is unimportant demand; prices are undecided. Timothy quoted at $2 05@2 15. Linseed quoted at $1 65@1 70. Mustard at 5¾@6c. for Trieste brown mustard and 6¼c. for California yellow. Carraway seed at 10¼c. for Dutch; Italian anise at 9½@10c, canary seed nominal at 2¾@3c. for Smyrna and 3⅝@3¼c. for Sicily.

VEGETABLES.—Potatoes.—Bermuda, new, prime, per bbl, $5@5 50; Bermuda, new, small, per bbl, $2@3 00; North Carolina, prime, per bbl, $3 75@4 50; Savannah, new, prime, per bbl. quoted at $4 00@5 00, Charleston, Chili, prime, per bbl, $4@4 50; Charleston, rose, prime, per bbl, $4@4 25; Charleston, peerless, prime, per bbl, $4@4 50; Florida, new, prime, per bbl, $3 50@4; new potatoes, fair, per bbl, quoted at $3 00@3 50; new potatoes, seconds, per bbl, $2@2 50; new potatoes, culls, per bbl, $1@1 50; Rose, Maine and New Brunswick, prime, $2; Rose, Nova Scotia in bulk, per bbl. at $1 75@2 00; Rose State, per bbl, $1 37@1 62; Burbank, State, per bbl, $1 50@1 75; Burbank, Nova Scotia, per bbl, $2@2 25; Burbank, Maine and New Brunswick, per bbl, $2 00; Hebron, State, per bbl, at $1 25@1 50; Hebron, eastern and Nova Scotia, per bbl, $1 75@2 00; Prolific, Nova Scotia and New Brunswick, per bbl, $1 75@2 00; Mercer, Prince Edwards Island, per bbl, $1 62@1 75; Peerless, State, bulk, per bbl., $1 25@1 50; Magnum Bonum, imported, 168 lb. sack, $1 75@2 00. Asparagus.—Oyster Bay, per dozen bunches, at $1 50@2 00; do, upper Jersey, prime, $1 50@2 00; do, South, Jersey, Maryland and Delaware, per dozen bunches, $1@1 50. Beets.—Charleston and Savannah, per crate, at $1. Beans.—Norfolk flat, per half bbl, $1 75, Norfolk flat, per bushel crate at $1 25; North Carolina, round, per half bbl, crate, $1 75@2 25; North Carolina, round, per bush. crate, $1 25@1 50; do. North Carolina, flat, per half bbl, crate, $1@1 50; do. North Carolina, flat, per bush, crate, 75c.@$1; do. Charleston wax, per crate, at $1@1 50.

WOOL.—Foreign in bond has sold more freely for export, and the late large shipments have materially reduced the supply of foreign wool here, while prices have likewise materially advanced. The receipts of Domestic have latterly been large, but the market has remained firm. XX Ohio has sold at 35c; Fine Delaine at 32½c; Spring California at 19@21c; Spring and Fall Western Texas at 16c; Scoured California at 50c; do, Pulled at 40c, Half-blood Delaine at 34@35c, and ⅜ Clothing at 34c.

LIVE STOCK MARKET.

NEW YORK, SATURDAY, June 12, 1886.

Shipments for six days, 1,872 live cattle, 3,339 quarters of beef. BEEVES.—Pennsylvania Meal fed Steers, 1,442 lb, at $6 16; do, 1,472 lb, at $6; Ohio 1,130 lb, at $5 85; Still Bulls, 1,226 lb, at $4. Ohio Dry Cows, 1,075 lb, at $3 92½; Pennsylvania do, 740 lb, at $3 50; Colorado steers (Corn-fed), 1,220, lb, at $5 45; Chicago Natives, 1,228 lb, at $5 71; Kentucky steers, 1,435 lb, at $5 60; do, 1,199 lb, $5 25; Pennsylvania steers, 1,400 lb, at $6 25; Oxen, 1,430 lb, at $5; stags, 1,660 lb, at $5 12½; Pennsylvania Cows, 970 lb, at $3 75; Indiana do, 1,057 lb, at $3 57; Chicago steers, 1,216 lb, at $5 50; do, 1,025 at $4 70; Stags, 1,710 lb, at $4 40; Oxen, 1,760 lb, at $4 25; Kentucky "Stillers" 1,012 lb, at $3 40; do, 882 lb, at $4 85; stags, 1,162 lb, at $4 50; Oxen and stags, 1,363 lb, at $5 30; oxen, 1,231 lb, at $4 95; Indiana Steers, 1,151 lb, at $5, Cincinnati "Stillers," 1,308 lb, at $6 05; Corn fed Chicago steers, 1,275 lb, at $5 60; do, 1,095 lb, at $5 50.

CALVES.—Buttermilk calves at 3½c. per lb; Fed do. at 4¼@4¾c; and Common to Extra Veals, at 4@6¼c.; Veals, 146 lb, at 5½c; do, 160 lb, at $5 75. Fed Calves, 178 lb, 4½c; Veals, 191 lb, at 5c; Buttermilk Calves, 166 lb at 3½c.; Veals, 152 lb, 6c.

SHEEP AND LAMBS.—Total for six days, 42,512 head against 31,591 head for the same time last week. Demand limited, and a very light business was transacted. Good Lambs were fairly sustained in prices, but sheep were drooping and Common Stock not wanted. Poor to Good Sheep sold at 2@5c; Common to Prime Lambs, at 6@8c, and a little bunch of Jerseys brought 9c; Prime Dressed Mutton sold up to 9½c, and Dressed Lambs as high as 14c, but Common Stock sold at low figures and the hooks was cleared with difficulty; Ohio Sheep, 96 lb, at 5c; Virginia Lambs, 60 lb, 8c; Kentucky Lambs, 62 lb, 7½c; Virginia Lambs, 65 lb, at 8c; Kentucky Sheep, 103 lb, at 4½c; Virginia lambs, 54 lb 7c; Virginia Ewes, 81 lb, at 4c; Bucks, 90 lb, at $3; Jersey Lambs, 63 lb, at 9c.

HOGS.—Total receipts for six days, 37,371 head against 36,041 head for the same time last week. None for sale alive. Nominally quotations at $4 50@4 80.

I WILL INSURE YOUR HOGS!

DR. JOS. HAAS'

HOG AND POULTRY REMEDY

[None Genuine without this Trade Mark.]

Is the only Practical Preventive of the so-called Swine Plague.

It has never been surpassed as an increaser of pork and general system tonic. Aiding digestion, stimulating the biliary organs, preventing torpor and engorgement of the liver, and regulating the bowels, it removes and prevents the formation of disease germs, and preserves to the well bred hog his natural constitution. Where it has been fed to such animals in the prescribed quantities, and other directions faithfully observed, it has proved a thorough preventive against swine disease.

AS AN EVIDENCE OF FAITH

In my remedy I make the following offer:

I will insure herds of swine of not less than one hundred in number against disease, at a small fee per head, provided they are fed my remedy under my direction, and prove upon examination prior to contract that they are in a healthy condition, and are neither in-bred, close-bred nor the progeny of such.

1. I will forfeit $100.00 to any breeder whose offer to examine for insurance I decline, provided he forwards remittance to cover my expenses to and from location of hogs, or I fail to prove to the satisfaction of any disinterested party, that failure to respond to invitation is caused by prior engagement or by matters of at least equal importance.

2. I will forfeit $500.00 if I decline upon examination to insure such herds, if my judgment as to their condition of health is overborne by the result of an examination made by at least two properly qualified and graduated veterinary surgeons.

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Please read the following testimony:

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Yours very truly, WHITE & CO.

[N. B.—White & Co., since writing the above letter, have purchased $450 worth of the remedy.]

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Member of Indiana State Veterinary Med. Associat'n

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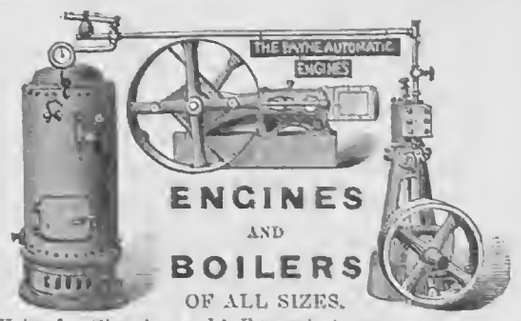

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For the Young.

MAY making time is almost here. No doubt some of the Cousins have already had a taste of the work. We shall all be at it before long. Boys can do far more work in the hayfield then they could when I was a boy. I know boys who can drive the mowing machine or the horse-rake just as well as a man can. Girls can do the work too. It is wonderful, isn't it, how by the aid of machinery, a boy's muscle becomes as powerful as his father's? It is very much the same way with the brain. Some people seem to have wheels and levers inside their heads, so that every thought is made three times as strong as it otherwise would be. These wheels and levers come from thinking and study; they never can come in any other way.

Years ago, about the only thing a boy could do in the hay-field was to spread the swaths and rake the hay into windrows. I had my full share of that work. Somehow they used to give the boy the worst tools on the farm. I wonder if that is so now? If there was any broken pitchfork or rake, why the boy was expected to take it. It would have been well enough if it was understood that these poor tools meant less and poorer work, but that was never thought of. They always looked out that the boy had enough to do, and if he didn't keep up there was a great commotion. The sharp grass used to prick my feet, and sometimes they got pretty sore, but of course it never would do to wear the "new shoes" out in the field. It used to seem to me that my shoes were always "new" as long as they could hold together. When the mowers sat under the trees to "cool off" the boy was always sent after a jug of water—while he was "resting." One day I had a good rest. The mowers cut into a bumble-bee's nest. The bees chased them so hard that they ran and hid under the hay-cocks. I sat under the trees and waited till they could get to work again.

Another work that was always given to the boy was "mowing away." I have done all kinds of hay work, but to my mind there is nothing harder than treading hay in a hot, dusty mow. I have known two great, strong men to pitch hay at me that they knew I never could handle. How they would laugh when they had me "buried up." Instead of coming up to help me handle the hay, they would lean on their pitchforks and tell me I wasn't half as smart as the boy on the next farm. They used to tell me that such work would make a boy tough. I am inclined to think it will, but there is such a thing as being altogether too tough. If I wanted to make a little old man I would treat a boy just in that way. A boy that will work right on without noticing when a bird flies over the field or a rabbit runs into the woods, is not a boy at all, and he never will be one. He will just work, work until his muscles give out—and then what a blank the rest of his life will be.

Now, boys, I hope none of you are badly treated. Sometimes boys think they are having a dreadful time, when, in reality, there are plenty of people much worse off. All boys and girls ought to work; all who do not do something useful are drones. The majority of people prefer work to idleness. When work is made pleasant and boys are given to understand that they amount to something, they will make good farmers and good workmen. When they are crowded and driven and made to feel that they are nothing but "boys," they will grow up to hate farm work, and I for one don't blame them for doing it. I want my boys to stay on the farm and make farm life what it ought to be. I know well enough, though, that one good, satisfied farmer is worth a dozen men who have had their youth crushed out by hard work and constant fault finding. Don't get discouraged, boys. Have patience. Even if some of you have to work hard and feel that you are badly treated, keep cool. Never lose your idea of what a farmer's life ought to be. You will come out all right in the end.

The lists still come in. Time is up now though. I will try and get the counting done by next week if I can. I am beginning to feel sorry there is no Aunt Mark to help count. Lists have been received during the past week from Bertha S. Giddings; Ethel Drummond; Edith Pidd; E. R. Childs; Edu Seymour; Huttie Belle Hotchkiss; Anna Weaver; J. E. M. Valentine; Kittie E. Turner; David Falconer; Kittie M. Grossman; Lulu Hudson; Eleanor M. Burge; Stella P. Anthony; Lottie M. Tew; Maggie Brown; Nina A. Dodge; Laura Finda; Lynne C. Greenwood; Una Bowker; Johnnie Rightsell; Ivan C. Rex; John Dockstader; W. O. B. Cribbs. Alice M. Kell; L. R. Williams; Lillus Cox; Willie R. Fick; H. A. Clough; Ella J. Hallock; Henry Freyensee; Henry S. Moore Jr.; Mahlon Gross; Roscoe Ives; Homer L. Orr; Minnie Mattingly; Carrie M. Warner; Sarah J. Miller; Anna Emery; Olivia B. Sell; Edith M. Campbell; Katie E. Cook; Fred Douglass; Hugh M. Sherwood; Maggie Carter; Maggie Booth; Isaac I. Van Wie; Harry Camp; Mary M. Davies; Eddie M. Slack; Grace M. Putnam; Anna Greene; Alice E. Johns; Bessie Hope; George Lea; Alice McCarty; Bessie M. Snow; L. May Minep; Hattie S. Winship; Frank W. Clegg; Wallace H. Tarbell; Arthur L. Wright; Eva Hambleton; Abbie G. Burnham; Phoebe T. Ives; Edwin S. Parsons; Fannie Senter; Minnie C. Ansby; Charlie E. Pearce; Arthur Lewis; Mamie E. Laing; Gertrude Stough; Marion Walker; Maggie W. Butler; Warren L. Loop; Abbie Ward; Robert Brown; Luther Herriman; Jennie Hunt; Merwin T. Sudler; Elizabeth Ottaway; Ossie Sturdevant; Clark Gardner, and several that are unsigned.

NOTES FROM THE COUSINS.

DEAR UNCLE MARK: I am 13 years of age. My father is proprietor of the Osage City Nursery. He has about 6,000,000 evergreens, large and small. We planted about 100 bushels of soft maple seed this Spring. They are most of them up now. I go to the Osage public school. I study reading, writing, arithmetic, history, grammar and spelling.

Your nephew, CLARK GARDNER.

Osage, Iowa.

[I am glad you are planting trees. Too many people are cutting them down.—U. M.]

DEAR UNCLE MARK: We received the Garden Treasures. We planted them, and they came up nicely. There is one little geranium, one hollyhock and some phlox. We think very much of them. I have about 50 young chickens. I have two pet hens. Last Summer the old hen came off her nest with her chickens before we knew she was setting, and left two eggs in the nest. I took them and wrapped them up in a damp cloth. When they hatched the old hen was so wild that I could not put them with her, so I had to keep them. I would let them out in the yard in the day time. When they were about as large as partridges, they would come and fly up in our lap to be put to roost. We have three young pole-cats; they will stamp their feet at us sometimes. My brother caught them. Well, I guess I will close. Your niece, MINNIE MATTINGLY.

Muskingum Co., Ohio.

[That is a new way of hatching chickens. I guess they were already hatched, but that the egg-shells were too hard and dry for them to break alone. They must have been good pets. I think it would be safer to let those pole-cats go.—U. M.]

DEAR UNCLE MARK: Thank you, Uncle Mark, for printing my sister's letter. I wish you would come and help to eat strawberries with us. They are getting ripe. They are the largest I ever saw. Papa bought us a nice organ. I can chord some on it. My sister can play some on it. We have about 30 little chickens. Papa put the fish in the pond. It broke out since he put the fish in it.

Your niece, ANNA EMERY.

DEAR UNCLE MARK: I am a farmer's boy, living on a farm of 110 acres. We are plowing our ground for potatoes now. I am raising celery to sell. I have about 500 plants now of the White Plume and Boston Market. The plants are nearly two inches high, and I have transplanted them once into shallow boxes. I expect to make quite a good deal of money out of my celery this fall when I sell it. When I gather and sell it I will write you again. We have about 40 early lambs, averaging in weight about 40 pounds each

Yours truly, HOMER L. ORR.

UNCLE MARK: As Homer was so busy helping his father on the farm, he did not have much time. So I have helped him some about his words and letter.

HOMER'S SISTER.

[I hope you will make some money; still if you miss it, be ready to try again. Write us again about the celery.—U. M.]

HAZE.

(Concluded.)

THE engine had finished rubbing his tobacco by this time. He filled his pipe and brought a coal from the fire-place with which to light it. He glanced at me as the visitor asked his question. I pretended to be busy over the press. I will confess that I was anxious to learn about the dog. Not a very high ambition, perhaps, when the world was waiting for the paper to be printed, yet high or low there was something about the conversation that interested me, so I pretended to be busy and let the two talk on.

"I done killed dat dog dis mornin'. Dey wuz a mad dog done bite him, an' a white man say dat my dog ud go mad an' bite folks. So I done kill him do I hates mightily to do it."

The visitor began to show signs of alarm. He put his hat firmly on his head and looked nervously about to hunt up a line of retreat.

"Whar you reckin dat mad dog is now?" he asked earnestly. "Ef he aint been killed, pears like I wanter git home ter once an' see what de prospects is." He moved towards the door as he spoke, but the engine's next sentence gave him considerable comfort.

"I reckin he's dead sho' nuff. Dey waz a white man kill him. I'd like mightily to do it myself. Jes arter sun up the mad dog he come snuffin' roun' snappin' jus like he wanted ter tar things all to pieces. My little boy he playing out in the yard, an' fus you know, dat mad dog he run an' snap jes like he gonter tar de boy all ter rags. De boy he yell po'ful, but my dog—old Haze I calls him—he jes jump up frum whar he laid by de do', an' he tackle that mad dog like fo all he's worf. Den dey fite po'ful an' old Haze he drive de mad dog away. Den after while he pear like he mightily shuck up. He come back to de do' an' lay down an' den I see dat he's bit mighty bad. Dey waz a white man come an' say dat he go mad jes like de mad dog done. He say dat when folks goes mad dey is terrible. So I kills old Haze an' we had de buryin' dis evening."

The visitor was all sympathy. He rubbed his head as if trying to think of some consoling remark. He was forced to resort to the common practice of praising the dead.

"Dat was a po'ful good dog at wuz. 'Pears like he wuz de boss dog ob de hull place. I neber see no dog dat cud whip him. I reck'n he'd wear out all the dogs dey is."

The engine began to warm up at this praise.

"You'se mighty right, you is. Ole Haze he done beat 'em all. A bull-tarrer he wuz; his teef dey wuz sharp ez knives. You jes orter see him fite. Dey want no yard full ob dogs dat cud make him run. He wuz one of dese yer snappin' dogs, he wuz. He set down and fite, he do. When he git a holt he jes shet his eyes an' say nuffin. De fus time dat I eber knowed him ter jump up an' fite wuz dis mornin' when he fit dat mad dog. I reckin dat wuz kase de mad dog he gonter bite my boy an' ole Haze he see dat sumfin got ter be done mighty quick. He neber hurt nobody when dey let him alone. He'd jes set by de do' an' watch like he had a heap ob money inside. 'Pears like dey want no dog like him."

The visitor screwed his face into a doleful expression that doubtless did the engine much good.

"It am po'ful curus how it is dat de bes an' de braves' has ter be tuck away when deys allus a heap ob shucks layin' round lose like. 'Pears to me deys a po'ful fine lesson in dis yer bery succumstance. Yer is a heap of dogs dat ain't worf shucks; dey all gits off—clar off when dey ain't no danger sho' nuff. But dis yer dog ob yo's, de bosses ob all de boss dogs, jes bekuse he stan' up fo' de rights ob de human family, he done git killed. I reckin deys a heap ob men—white men, too, I reckin—dat don't do no braver act dan yo' dog done. He jes gib up his life fo' his fren'—dat what he done, an' I reckin dey ain't many folks dats gonter do mo' dan dat. 'Pears like its jes de same way wid folks. Now here I is, an' dere you is, an' yers dis nun yer an' dat nun yar. Who is guinter be taken an' shuck up wid fiar? De shucks an' de nubbins? Its jes as like ez not dat de fus you knows you an' I is gonter be ketched up an' all dese yer low down folks is gonter stay an' hab de fun."

The conversation had drifted so far from the original subject that I felt justified in bringing it to a close. The engine was evidently anxious to have it continued, yet at a sign from me he took hold of the wheel and resumed operation. In the rattle of the press the visitor found that the effect of his sentences was lost. He left us to go and comfort some other sorrowing person.

The next day the engine came to me with a board which he had rudely carved into something of the shape of a gravestone.

"Boss," he said, "I reckin I'd like ter git you ter sorter write dat dog's name on dis yer bo'd. 'Pears like I'd like ter know whar he is buried at."

I wrote the name "Haze" in large letters on the rude board. What though he was only a "nigger's dog," he did not live in vain. He gave "his life for his friend."

Miscellaneous Advertising.

WHAT SCIENCE SAYS.

The "Fearful and Wonderful" Mechanism of the Human System Graphically Portrayed.

[In the editorial columns of the New York *Analyst*, H. Lassing, M. D., editor, writes the following beautiful description of the laboratories of the human system. We think we have never read a finer or more trustworthy one.]

"Man is the greatest of all chemical laboratories. Magnify the smallest cell of the body and what a factory is spread before the eyes—countless chambers in which are globes of air, masses of solid matter, globules of dying liquid! A flash comes and the whole is consumed and needful heat is carried into every part of the system. Electrical forces also generate and are conveyed to the brain, the muscles and the various nerve centers.

"In another set of a million chambers we see various gases and vapors. By chemical action these are changed and purified in the lungs and the skin. The blood, we often say, is a great living river. In its current are masses which the air in the lungs did not affect: blocks of chalk; slabs of tartar; pieces of bone-ash; strings of albumen; drops of molasses, and lines of alcohol. How are these waste masses disposed of? Begin where you will in this great stream you must come to the purifying places of the system. Here all is activity, and an invisible force reaches out into the stream, siezes and carries this mass of waste into vast trenches, thence into a smaller reservoir, and finally into a larger reservoir, which regularly discharges its contents.

"This separation of lime, uric acid and other waste material from the blood, without robbing it of a particle of the life fluid, passes human comprehension. In health this blood-purifying process is carried on without our knowledge. The organs in which it is done are faithful servants whose work is silent as long as health remains.

"People strangely wait until pain strikes a nerve before they realize that they have any trouble. They do not know that pain concerns chiefly the exterior, not the interior, of the body. A certain set of nerves connect these blood-purifying organs with the brain. They may not gnaw and bite as does the toothache or a scratch, but they regularly, silently report. When these organs are failing these nerves indicate it by drawing the blood from the face and cheek, leaving the lip and eye blanched, by sending uric acid poison into the smallest veins, the skin then becoming gray, yellow or brown. They also prevent the purification of the blood in the lungs and cause pulmonary difficulties, weariness and pain. Who enjoys perfect health, especially in this land where we burn the candle in one mass? The athlete breaks down in the race; the editor falls at his desk; the merchant succumbs in his counting-room. These events should not have been unexpected, for nature, long ago, hung out her "lanterns of alarm." When the "accident" finally comes, its fatal effect is seen in a hundred forms: either as congestion, chronic weakness, as wrong action, as variable appetite, as head troubles, as palpitation and irregularities of the heart, as premature decay, as dryness and harshness of the skin causing the hair to drop out or turn gray, as apoplexy, as paralysis, as general debility, blood poisoning, etc.

"Put no faith then in the wiseacre who says there is no danger as long as there is no pain. Put no faith in the physician, whoever he may be, who says it is a mere cold or a slight indisposition. He knows little, if any, more than you do about it. He can neither see nor examine these organs, and depends entirely upon experimental tests, that you can make as well as he.

"If the output is discolored or muddy; if it contains albumen, lymph, crystals, sweet or morbid matter; is red with escaped blood, or roily with gravel, mucus and froth, something is wrong and disease and death are not far away.

"These organs, which we have described thus at length, because they are really the most important ones in the human system, the ones in which a large majority of human ailments originate and are sustained, are the kidneys. They have not been much discussed in public because it is conceded that the profession has little known power over them. What is wanted for such organs is a simple medicine which can do no harm to the most delicate, but must be of the greatest benefit to the afflicted. Such a remedy, tried and proved by many thousands all over the world, is Warner's safe cure. With those in whom disease is deep seated it is the only specific. For those in whom the seeds are sown and the beginning of illness started it is an unfailing reliance. It may be recommended to the well to prevent sickness and the sick to prevent death. With its aid the great filtering engines of the system keep on in their silent work without interruption; without it they get out of gear and then disease and death open the door and cross the threshold."

Such writing ought not only to please but to carry conviction that what Editor Lassing, M. D.—so high an authority—says is true, and that his counsel is worthy the attention and heed of all prudent, right-minded people.

PERSONALS.

JUDGE FULLERTON, of this city, is confident the Government will have to pay the Confederate bonds "in time;" "in eternity" all others think.

SENATOR ALDRICH, until a short time ago "an unknown young man of simple mercantile training," has been re-elected to the United States Senate by the Legislature of Little Rhody.

THE marriage of Judge Stanley Matthews to Mrs. Mary K. Theaker will take place here June 23, and on the same day the happy couple will sail for Europe to remain there till October.

SAID Cleveland to a Cabinet officer just before the event: "Things will be a good deal changed about here, no doubt." Democratic office-seekers hope so, and some even expect a change.

SEC. MANNING, the "brains" of the Cabinet, has resigned; but the President wants him to take a holiday for his health till October, and will not accept his resignation, if he is in good condition then. The resignation will probably be accepted.

THE wedding would have been in the Fall were it not that the engagement had leaked out, and made life a burden to both. He proposed to be married in New York, she preferred to be the first woman married to a President in the White House.

LAST Saturday a large part of the country was startled by the announcement that Henry Ward Beecher had dropped dead suddenly. He is still bright and active, however, never better in his life, and has planned to deliver 40 lectures during a European tour on which he is to start next week.

MISS ROSE ELIZABETH CLEVELAND has purchased the old homestead at Holland Patent, N. Y., and fixed it up "with excellent taste" and is going to live there. The publishers of her book say that up to May 1, she had received from it $12,000, and the steady sale of it is bringing her in from $25 to $100 a month. It has got lots of free advertising.

"HONEST JOHN KELLY," who was buried last Saturday, left all his money—over $400,000—to his wife, making her sole executrix. She will do the right thing with their two children and the charitable institutions which expected something. At 21 he had nothing but good health, a strong body, a resolute mind, no education, but good natural abilities.

SEC. GARLAND was the only member of the Cabinet who did not attend the President's wedding. At the death of his wife, 10 years ago, he vowed he would never enter into social festivities again. He has kept his vow, and did not attend even the wedding of his son a year ago, though he married with his father's full approbation. Devotes all his time to office work and the care of his aged mother.

REV. DR. SUNDERLAND got a brand-new $100 bill for performing that little ceremony at Washington, and straightway handed it to Mrs. S., who will keep it as a memento. The Doctor omitted the word "obey" from the pledge of the bride, not using the Episcopal form, but a brand-new one invented by himself. For the groom his words were: "love her, cherish her, comfort and keep her;" for the bride: "love him, honor, comfort and keep him."

IN the little Holstein village of Segeberg there lives a humble shoemaker named Honelach, who has collected 2,563 different kinds of beetles—1,390 native and 1,173 foreign. They are all scientifically arranged and classified, and the collection is exceedingly valuable from a scientific point of view. Although his years are 80, Honelach is still an enthusiastic student of beetles, and probably knows more about these insects than any man living.

GRAND MASTER WORKMAN POWDERLY offered to resign at the Cleveland Convention, believing it wasn't in harmony with his views. The convention refused to accept his resignation and offered to double his salary, making it $3,000, instead of $1,500 a year. He was induced to keep his place, but absolutely refused the offered increase of salary. He says the telegraph operators at Cleveland were instructed by Jay Gould to exaggerate the disagreement in the convention, for the purpose of hurting the Order.

CONTROLLER CHAPIN, of this State, has decided to pay, without the deduction of a cent, ex-Senator Conkling's bill of $20,000 for the work he did in discovering the Aldermanic bribery here. He says Conkling declined work that would have brought him over $20,000 to give all his attention to the case "which he conducted with great ability." Chapin is noted for slashing bills. Conkling makes, it is said, about $100,000 a year; as U. S. Senator his salary was $5,000. Clarence A. Seward, another of the consel, wants $21,000. The whole bill amounts to $48,000—$6,000 for stenographers and printing the testimony.

Miscellaneous Advertising.

FOR THE HARVEST,

Which will soon be upon us, we offer to our FARMERS the following special TOOLS and MACHINES of our latest and most approved pattern:

The CROWN MOWER,
The MONITOR Hay Rake,
The Burdick Hay Tedder,
Our Improved Hay Loader,

with the largest assortment of small TOOLS and MACHINES for the Hay and Grain Fields to be found in this Country.

Send for descriptive circulars of the above modern Implements as well as any and every requisite in the line of Tools, Fertilizers and Seeds.

A visit of inspection is invited to our extensive warehouses at **189 and 191 Water Street.**

R. H ALLEN COMPANY.
New York.

THE SPRING POTATO DIGGER.

THE BEST Potato Digger ever invented. Will work anywhere. The lightest draft. The cheapest machine out. Manufacturing, jobbing and local AGENTS WANTED in all parts of the U. S. Write for particulars. J. SPRING & SON, Bridgewater, Oneida Co., N. Y.

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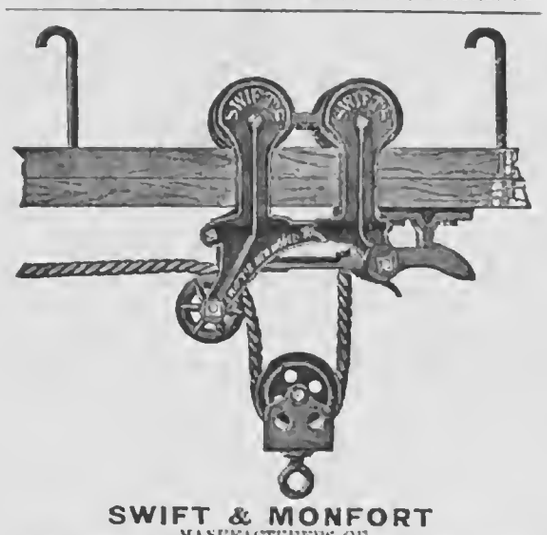
High Grade. Reliable. Lasting.

Manufactured in dry condition, thereby assuring full weight of fertilizing material. Most flattering results where used side by side with other preparations. Where there are no agents for these Fertilizers, orders direct to the manufacturers will receive prompt attention. JOHN M. PEARSON, Hudson, N. Y.
Send for catalogue.

A HAY-RICKER FOR $60.
AND 2 WHEELED RAKES
WARRANTED TO BE AS GOOD AS ANY ON THE MARKET. SENT ON TRIAL TO RESPONSIBLE PARTIES. FOR CIRCULAR &C. ADDRESS
MENTION THIS PAPER A. J. NICHOLSON & CO. SPRINGFIELD O.

HAY CARRIER Mallory Trackless HAY ELEVATOR.

best in the market for filling a barn with hay. Better than any truck carrier. Easily put up and taken down. Price only $5. Warranted to give satisfaction or money refunded. Best hay fork in the market, $3.25. Write for catalogue and terms to agents.
HERBERT BAKER, 93 Erie St., Toledo, O.



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HERCULES WIND ENGINE.

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ever Invented. It is the most **durable, most ornamental, most powerful, strongest, steadiest, cheapest.** Is not liable to be wrecked; has automatic governor; can be placed in cupola of barn, or upon a tower, and is the ONLY RELIABLE GEARED MILL for driving machinery. The **Geo. L. Squier M'f'g Co.,** BUFFALO, N. Y., Sole Manufrs. AGENTS WANTED.

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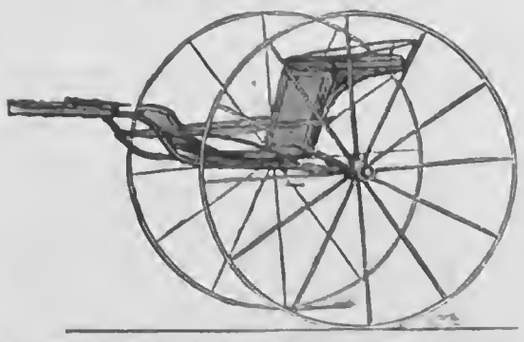

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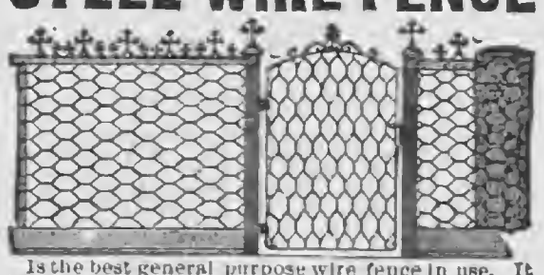
SEDGWICK STEEL WIRE FENCE



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EDWARD SUTTON, Eastern Agent,
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IN USE IN EVERY State and Territory of the U. S. It is a sectional wheel, has been made by us 15 years, and has never blown down without tower breaking, a record no other mill can show. MILLS SENT ON 30 DAYS TEST TRIAL. BEST FEED MILLS, CORN SHELLERS, ETC. GOOD AGENTS WANTED in all unassigned territory. Catalogues free. CHALLENGE WIND MILL AND FEED MILL CO., Batavia, Kane Co., Ill.

Beats the WORLD.

TILE and BRICK MACHINERY.
STONE-SEPARATING CLAY-CRUSHERS
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TECUMSEH, MICH.
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The Coming Wagon. Light, strong, convenient and low priced. **Handy** to get into and out of. **Handy** for single horse or pair. **Handy** for one person or more. **Handy** to load or unload. *Send for Free Circular, "How to purchase direct from the manufacturer."*
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Surpasses all other wire and picket fence machines for making strong and durable fences in the field that no stock will break down. On rough, hilly ground, it keeps pickets perpendicular which no other machine will do without constant adjustment. It is easy to handle, uses any kind of pickets, and any size of wire. Write for circular and price.
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Eggs from May 1st at $2 per dozen.
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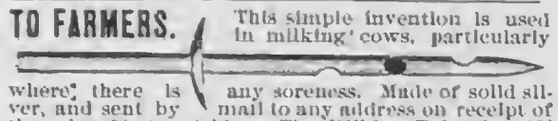
TO FARMERS.



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Humorous.

A MARRIAGE ceremony is very much like a street-car strike. It's nothing more nor less than a "tie-up."

IT is a sure sign that the fools are not all dead, when a fat man tries to be a dude and wear tight pantaloons.

NOW that the funnyisms of Lord High Executioner in "The Mikado" are becoming stale don't style them chestnuts. Call 'em Ko-ko-nuts.

WHAT must we do to be saved?" asked a Sunday School teacher of her pupil. "Git lost," was the very suggestive, but incorrect reply.

FIRST small boy—"Say, Johnnie, where are you in Sunday-school?" Second small boy—"Oh, we're in the middle of original sin." First small boy—"That ain't much; we're past redemption."

A YOUNG gentleman asks the editor to tell him which is proper for him to say on leaving a young lady friend after a late call. Answer: Either is proper; but always speak the truth, even if you have to say good morning.

THE young lady having asked her S. S. class what lesson was taught us by the parable of the wise and foolish virgins, one of the smallest girls answered: That we should always be on the lookout for a bridegroom.

"YOU say the trout weighed ten pounds?" "Yes, sir; it was the biggest trout I ever saw." "And he got away from you?" "Yes." "Will you take an oath to that?" "I'll take no more oaths; I swore enough about it when he got away."

"I'D like you to help me a little," said a vagrant, poking his head into a country shop. "Why don't you help yourself?" asked the proprietor. "Thank you, I will," said the tramp, picking up a bottle of pickles and two loaves of bread and then vanishing.

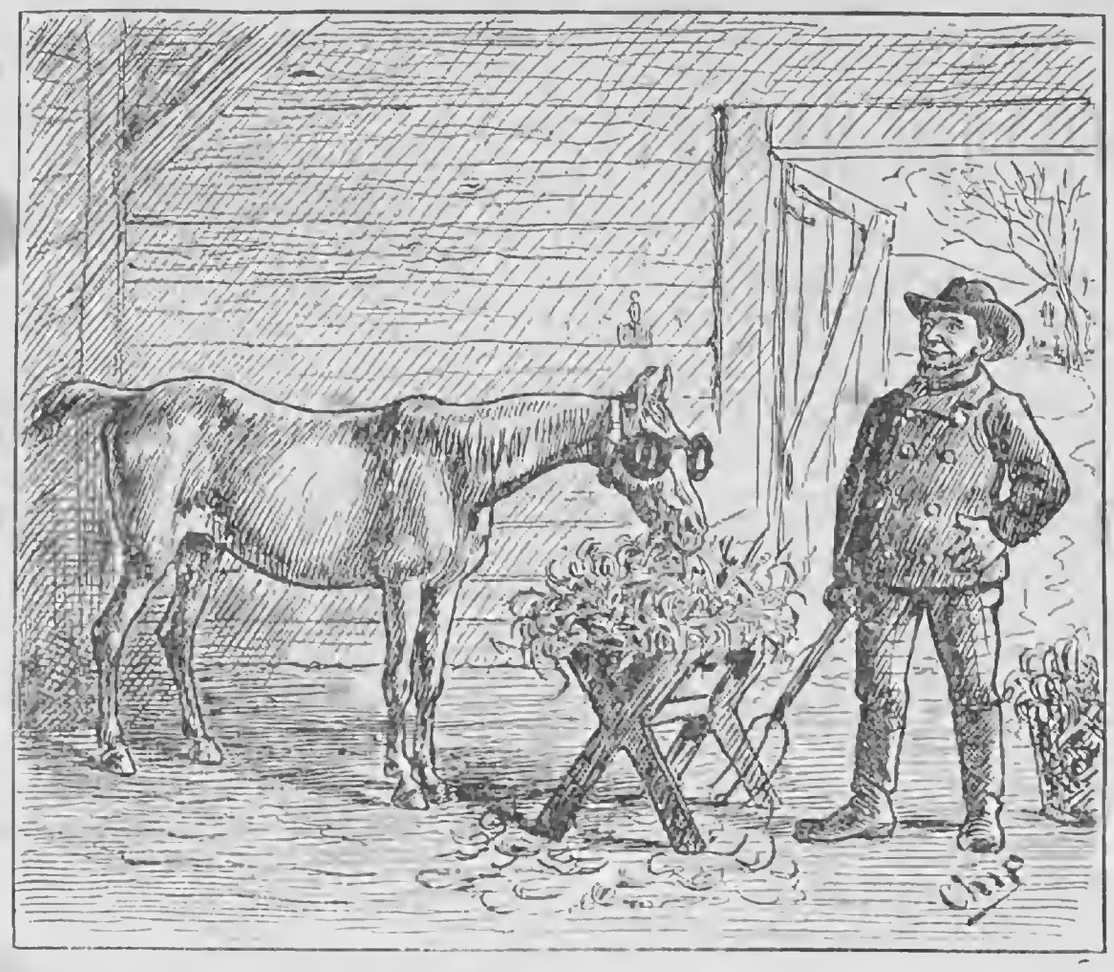
"I WONDER what Mr. Fogg meant to-day when I told him about our new grand piano?" said Miss Pedalpounder; "I asked him if he would come over to-night and hear me play, and he said, 'No, thank you; I'd like to see your graud farther.' Wonder why he is so much interested in grandpa?"

"BOBBY," said the minister at the dinner table, "what do you expect to be when you grow up?" "I'll be a minister, I think." "That's a laudable ambition, indeed, Bobby. Do you think you will like to be a minister?" "Oh, yes," Bobby replied. "Pa says you've got the softest job in town."

DOCTOR: "Your wife is in a very critical state, and I should recommend you to call in some specialist to consult on the case." Husband: "There, you see, doctor, I was right again! I told my wife long ago she ought to get proper medical advice; but she thought you would be offended."

A NEWLY married lady, not well posted about household matters, said to her grocer not long since: "I bought three or four hams here a couple of months ago, and they were very fine. Have you got any more of them?" Grocer—"Yes ma'am, there are 10 of those hams hanging up there." "Are you sure they are off the same pig?" "Yes, ma'am." "Then I'll take three of them."

A GOOD old deacon in Central Illinois who lost all his big drove of swine by hog cholera took the matter so lightly that his wife felt called upon to reproach him. "Deacon," said she, "I should think you would be ashamed of yourself. It looks to me as though it was a judgement sent on you by the Lord." "My dear," said the good old man, "if the Lord wants to take out his judgement in three-cent pork, into which I would have to be pouring good thirty-cent corn if they lived, let us not grumble."



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Blue-glass spectacles turn shavings into hay. A hint to horse-owners.

The Cold-Water Dip,

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A very highly concentrated, non-poisonous fluid—mixes readily with cold or warm water—the simplest, safest, surest cure for TICKS,

LICE,

MANGE, SCAB, all Insect Pests, all Skin troubles, and many other Diseases of Live Stock. Recommended by many prominent Breeders. See circular, sent on application. T. W. LAWFORD & CO., Baltimore, Md.

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ST. HELIER HUGO POGIS, No. 15550; Grandson of STOKE POGIS 84; Sire of MARY ANN OF ST. LAMBERT, 1770. With butter record of 36 lbs. 12 oz. in seven days. Terms $50.

JUDD B. BRADLEY, Lyons, N. Y.

Also, a fine Draught Gelding, five years old, buckskin color; fine back; sired by Scotsland Glory. Price $300.

1886 Tariff (3632) 1886
RECORD 2:20 3-4.

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5 cows have averaged over 19,000 lbs. in a year.
10 cows have averaged over 18,000 lbs. in a year.
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25 two-year olds have just completed their records, the entire lot averaging 12,309 lbs. 8 oz. each in a year.

BUTTER RECORDS.

4 cows have averaged 21 lbs. 13¼ oz. in a week.
6 cows have averaged 20 lbs. 3½ oz. in a week.
11 cows have averaged 19 lbs. 1⅛ oz. in a week.
28 cows have averaged 16 lbs. 13 oz. in a week.
11 three-year-olds have averaged 13 lbs. 11½ oz. in a week
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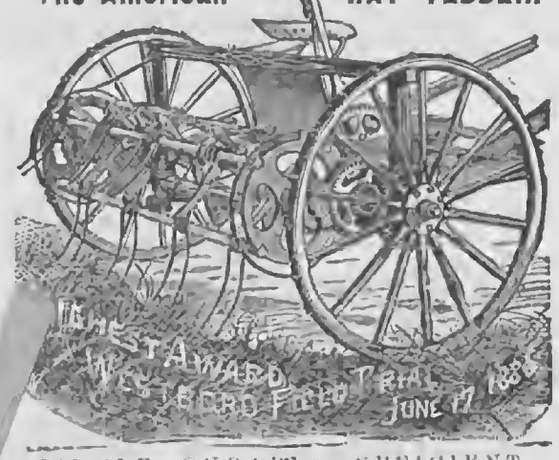

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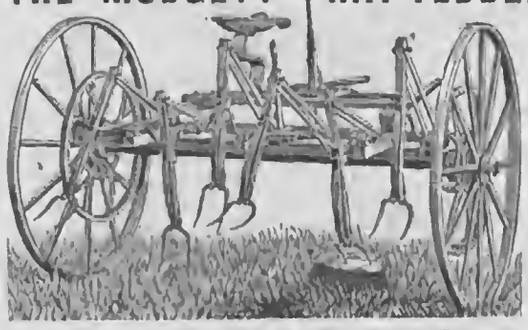

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Horse Powers, both Lever and Endless Chain. All sizes. Send for Catalogue. Address,

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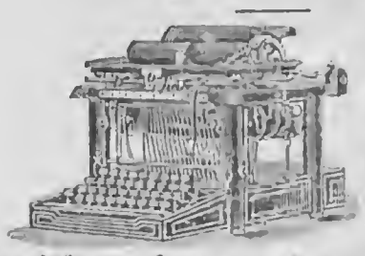

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THE RURAL NEW-YORKER

A JOURNAL FOR THE SUBURBAN AND COUNTRY HOME

VOL. XLV. No. 1900. NEW YORK. JUNE 26, 1886. PRICE FIVE CENTS. $2.00 PER YEAR.

Entered according to Act of Congress, in the year 1886, by the Rural New-Yorker in the office of the Librarian of Congress at Washington.

The Herdsman.

MISERY AND COMFORT IN CALF FEEDING.

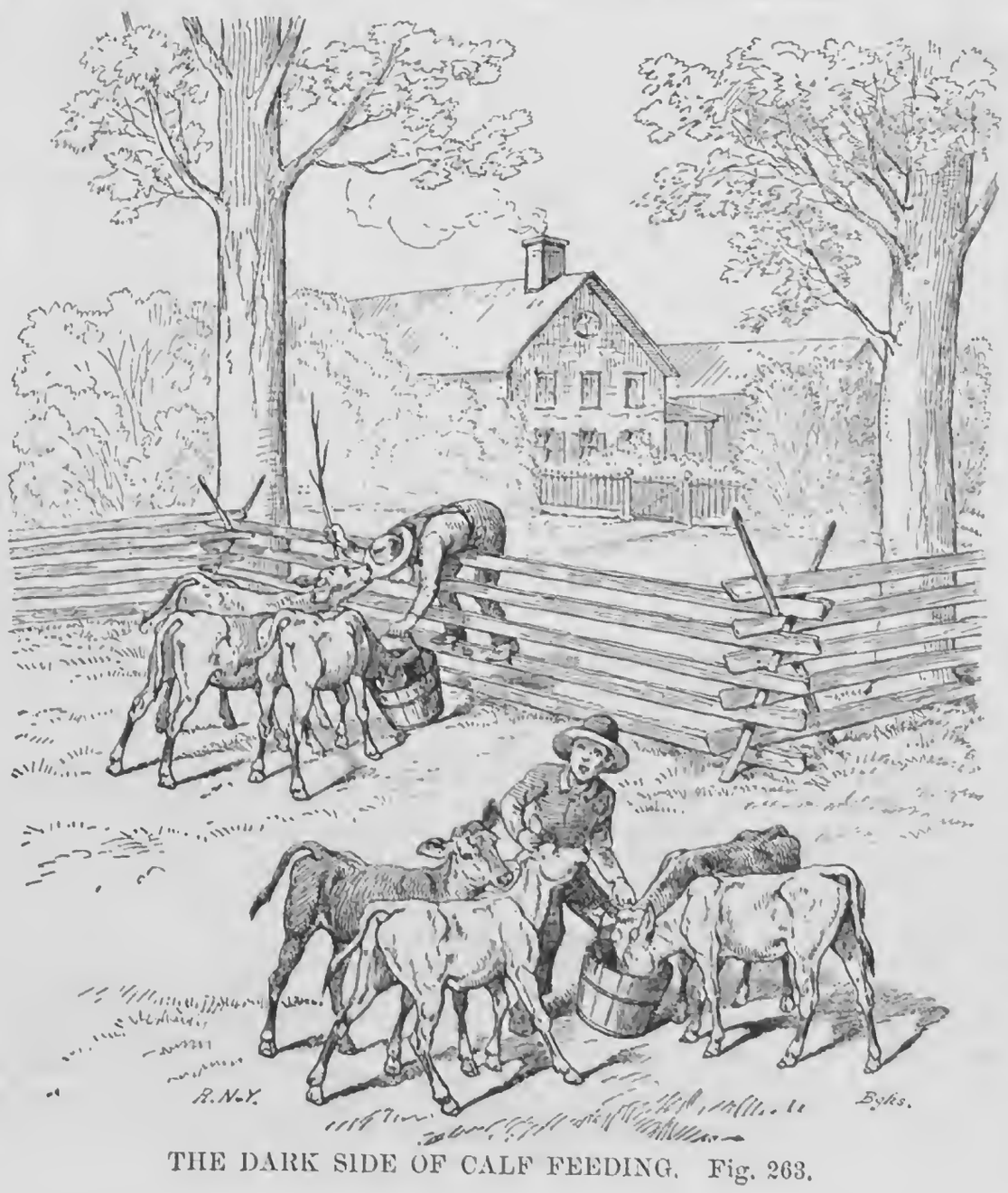
R. J. M. DREW, of Winona Co., Minn., sent us two drawings from which our artist has succeeded in illustrating the dark and the bright sides of calf feeding. Mr. Drew informs us that before the stanchions shown at Fig. 262 were built, the whole family had to turn out in order to feed the calves. Any man whose boyhood was passed on the farm will appreciate the little drama shown at Fig. 263. If there is anything that seems to be all stomach and no brain it is a hungry calf. The boy leaning over the fence is probably willing to confirm this statement. He has all he can do to balance himself upon the fence without plunging headlong into the pasture. The two calves bunting and pushing away at the pail keep his hand occupied, while the other tormentor, with genuine calf-wisdom, sucks away at his new hat, regardless of the blows from the stout switch. The other boy is no better off. He has carried the war into Africa to the extent of entering the pasture with his milk. Nothing but his slippery hold upon the calf's ear saves him from total annihilation. Once let his hand slip and his milk is gone forever. To make this system of calf feeding a success there should be several other boys armed with sticks to keep the extra calves away. Fig. 262 proves two things that have hitherto been considered doubtful: a boy can feed calves with a good deal of comfort and actually smile during the operation; and even a calf can be taught a small amount of common sense and respectability. The picture explains itself. You would hardly recognize the boy. He stands erect and satisfied. He feels that his hat is no longer in danger, and that his boots will not be filled with milk. These stanchions have transformed him from a fighting character into a statesman, showing the great superiority of brain power over brute force. The stanchions used by Mr. Drew are made of 16-foot fence boards. This space gives room for 10 calves. They may be secured to posts or trees, with a stout post in the middle. The upright pieces are three feet long, made of pieces of fencing split in halves. A row of such stanchions long enough to feed a dozen calves can be made in three hours, and nobody but the boy can understand how much patience, perspiration, and milk they will save. At first the calf will have to be pushed into the opening, but after finding that he can get his milk in no other way he will need little urging. The restraint will make a new calf out of him. He will be easier to break to the halter and will be gentler all his life to pay for this early training. After this, let us hear of no more tragedies at the calf pen.

COW TALK.

COL. F. D. CURTIS.

JUNE and July are the months when most of the cows are bred for the next year, so that the calves come in March and April. I have had early calves for years, and think it is better to have them in April and May. Breeders generally allow cows to be stinted the first time they are in heat after the calf is born. There are some good reasons for this, one of which is that the calves are soon weaned; but there is a loss in the vigor of the mother, unless it is made up by liberal feeding, which is usually the case. This very liberal feeding is a damage, for no animal does well on a long-continued stimulating diet. If for a breeder, a cow should have a rest; and if for the dairy, she requires a time for recuperation, but not the usual period of four or five months allotted to native cows. When cows come in, in cold weather, they must be tenderly cared for and liberally fed, or they will become miserably poor and dry up in their milk. To prevent this, they must be fed well, and this is expensive. Hence I have changed my past practice, and this year the cows are coming in after they have been turned to grass. They are fed before calving a little meal—two quarts at night—and have a little hay or straw to eat.

THE BRIGHT SIDE OF CALF FEEDING. Fig. 262.



THE DARK SIDE OF CALF FEEDING. Fig. 263.

Not a case of garget or any trouble with hard udders. When the cows came in in March, the udders were often swollen and so sore that they were milked with difficulty. There is a wonderful renewing, cooling and salutary virtue in grass; and when the cows are wholly or partially at grass, is the safest and best time for the calves to come. In cold weather the cows must be watched at night; and this is always a disagreeable job for the owner and exceedingly against the notions of the modern hired man, who is averse to doing any more than he is obliged to, and whose idea of duty is to work short hours and few of them. The farmer, then, who would have his cows in the most profitable condition when Summer comes, and save himself a great deal of trouble, will arrange to have his cows in milk with the starting of the grass. When they come in later, they will hold on in milking later in the Winter.

Sheep Husbandry.

Notes from the Western New York Farm.

SCAB REMEDIES—INEXCUSABLE IGNORANCE.

"As soon after shearing as possible cure the scab in your flocks. Tobacco and sulphur is a sure remedy and helps the sheep in various ways. It stimulates the growth of the wool, kills the ticks and lice also. If swallowed in small quantities it can be recommended for the same reason that Paul advised the use of wine, viz: for the stomach's sake and often infirmities. It rids them of worms and sich like."

The above, cut from The Sheep-Breeder and Wool Journal, Chicago, fairly illustrates the gross ignorance still existing on the subject of animal medication: it is also a specimen of the twaddle ignorant or careless editors allow to lumber up the pages of the farm reports, to the disappointment and even injury of the confiding reader.

"As soon after shearing as possible cure the scab," teaching by inference that at other times it may be allowed to run. What nonsense! Why, scab is a terrible scourge in a flock, and the breeder must remember that whenever its presence is discovered, not a moment is to be lost in separating every affected sheep from the flock, and no matter how slight the attack, they must be cured or killed at once, and the unaffected sheep should be also immediately put into clean quarters, and the old ones cleansed by a strong lime or potash wash, charged with carbolic acid, otherwise the scab spreads rapidly through the flock which is rendered practically worthless.

The use of tobacco and sulphur as a remedy, is old and laid down in many old authorities as a specific; but it is on a par with bleeding, blistering and the use of blue mass in human medication, and by no means a sure cure. We have now much better and surer agents, and he who is not posted in their use is out of place in the editorial chair of a sheep-breeders' journal.

That tobacco or sulphur can be used either externally or internally so as to be stimulating to the growth of wool is an utter humbug; and that tobacco, when swallowed in any quantity, however small, is anything but a poison and as such only harmful, all should know, and no one having a desire to benefit the sheep industry would dare to deny. That tobacco will kill the scab insect as well as ticks, etc., I admit; but it only kills when in actual contact, and as it possesses no penetrative power, when applied for the scab it only kills those insects which by rubbing or some other means are brought to the surface, and unless repeatedly applied, it is no cure, only a

palliative. I seriously doubt whether any flock was ever entirely cured of the scab by its use. And again, its proper application requires steeping kettles, dipping vats or tubs and drainage pens or tables, and is, in every way, a costly, slow, nasty and disagreeable "job." There are many remedies much preferable to this, namely, Little's or Lawford's sheep dips. Though perhaps costing more than the tobacco and sulphur, their efficacy depends upon the penetrating and cleansing properties of coal tar and its extracts, and they are sure cures.

There is still another remedy which should be most widely known. It is plentiful and cheap, and, when its virtues are known and it is called for, it will be obtainable in every region where sheep are kept. I allude to

CRUDE PETROLEUM.

It can now be had at most drug stores, and is a sure destroyer, not only of the scab, but of every other insect that infests domestic animals. It also cures all classes of skin diseases as well. Ordinary "coal oil" or kerosene, such as is used for lighting our houses, will kill, though not quite as surely or quickly, but it has the grave objection of blistering and taking off the wool or hair. This is not the case with the crude oil. It may be freely applied by a brush or "swab," or may be poured from a can having a small spout, and if the sores be rubbed so as to break up all "scabs," it will penetrate to the remotest depths, and not an insect will survive its deadly influence, and if applied to the most delicate skin it has only a beneficial effect. On the Western New York Farm it is always kept in quantity, and applied freely to any animal infested with lice, scab, or mange, and also to the interior of the hen-houses. It is also used as a lotion in case of wounds or scalds on man or beast; nothing can be better. It is time that agricultural writers and the press should make its virtues more extensively known, and no longer recommend the use of such a nasty, poisonous, and, withal, uncertain a medicine as tobacco.

Clover meadows are beginning to show "their colors." Thus far there is no appearance of the midge. It *looks* good to see them once more as bright as a bed of roses, and it will *seem* good if we can once more grow our own clover seed; yet I very much doubt whether it will pay me to grow any for market at present prices of seed and hay. I cut all my meadows twice and some of them three times, getting at each cutting a good crop of hay, and the extra hay is of nearly or quite as much value for feed as the money the seed would sell for in the market, and then the crop is not nearly so hard on the land as when fed, nearly all the abstracted fertility goes back.

I shall, however, if the midge does not put in an appearance later, raise what seed I want for my own seeding. I pride myself on having clean fields, and weed my farm over twice each year, and when I raise my own seed I know just what I am getting. This is never the case when I buy seed.

Western New York farmers are meeting much loss and are greatly annoyed by finding, after planting, that their seed corn was bad. Thousands of acres have been planted the second time, making it quite late, besides the extra expense. Last Fall was very rainy and with but little sunshine, and corn, even when husked and cribbed early, scarcely seasoned at all before cold weather. The result of freezing in this condition was the destruction of the vitality of the grain, even when showing no sign of injury in appearance, hence so much failure. My seed corn was selected and husked early and at once put into crates and placed directly over the heating stove in the room where the men spent their evenings; it got perfectly dry before cold weather; every kernel has grown, and we have a fine stand to reward us. It would pay to give a little more care to the selection and keeping of the corn for planting. J. S. WOODWARD.

Niagara Co., N. Y.

Dairy Husbandry.

DAIRY NOTES.

T. D. CURTIS.

RANK FOODS MAKE RANK MILK.

It has long been a mooted question as to whether cabbages, turnips and other rank-smelling vegetables can be fed to milch cows without their taint being imparted to the milk. Some say they can be safely fed in small amount; others say that if they are fed just after milking, all bad effects will disappear before next milking time; while others say they will always taint the milk more or less, according to the amount fed. I suspect the latter are right, and that the longer as well as the more these rank vegetables are fed, the more injurious the effects. In a short time the cow will become saturated with their odor and flavor, and these will appear in the milk until they are eliminated from the cow's system. There are other foods that are more suitable for milch cows, leaving the rank ones for other stock, so that it is not worth while to take the risk of feeding them to dairy stock. Beets are much preferable, and make nice, sweet milk. Carrots are favorites with some, but if fed in large quantities they impart a sort of smoky flavor to milk.

MILK-PRODUCING AND BEEF-PRODUCING.

THESE are two quite different things, yet beef producers often consider themselves dairymen. Hence it is that we hear so much said about the desirability of beef and milk from the same animal. With the beef producer, milk is an incident, a by-product: but, of course, the more he gets of it, the more it adds to his profits. His eye, however, is mainly to beef, and for this reason he is not properly a dairyman, but a beef-producer. But who wants to eat cow beef? Nobody who can get better. It is used mostly for canning purposes, when not sold by city retailers in cheap quarters. Cow beef will never amount to much unless we slaughter the cows at seven to nine years of age, as they do in Holland, instead of keeping them until they are 12 to 15 years old, and drying up their milk because their teeth get so poor that they cannot eat. Really one should not look for beef in a milch cow, for it will be of very poor quality, and she ought to pay her way with the milk she gives. What is wanted is a breed that will turn out good beef steers, and good beef heifers when rejected as milkers. This several of the breeds will do. But the first consideration with the dairyman should be milk. Veal and beef are his by-products.

SALTING BUTTER.

ANENT the salting of butter without working, a correspondent writes that he does it in the churn. He uses a "square-oblong" churn. After washing—one washing being in brine with "a handful or two" of salt thrown in—he lets the butter drain. Then as it is evenly spread over the bottom of the churn, he sprinkles over it nearly half the salt required—an ounce to the pound, made fine by rolling or otherwise, if not already so. Next, he unhooks the churn, and gives it a quick flop to throw the butter on the side next to him. Nearly all the remainder of the salt is then sprinkled on, when "another flop of the churn the other way will take the butter out of the corners not before reached." The balance of the salt is now sprinkled on, none of the granules being smashed by dipping out, and he finds it secures very even salting. The churn is now slowly revolved until the butter is gathered into a solid mass. After this it is taken out and allowed to stand and drain an hour or more, when it is slightly worked and ready to pack. If the buttermilk is well washed out and the butter well drained before the salt is sprinkled on, the butter will be ready to pack directly from the churn, without taking out and draining and working.

STRONG BUTTER, WEAK IN FACT.

THE strong quality in butter is its weak point, notwithstanding this may seem paradoxical. If rank, it does not improve its standing. The trouble is usually in the manufacture, although good butter is very sensitive to surrounding influences, and is often spoiled by the way in which it is kept—or, rather, is not kept. Says Col. McGlinsky: "Look at a dozen packages of farm butter and you will see a dozen shades of color, from the immaculate white to the brick-dust red; and from the solid boring, grainy specimen to the salvy grease; some will be as salty as a last year's codfish, while others will be as free of salt as spring water. Some of it will be as streaked as Jacob's cattle, and possibly twice as strong." Every one who has frequented a country store will recognize the truthfulness of the picture. A preponderance of all the butter made in the United States is made in small, private dairies, in which no sort of progress is made, and honest thoughtlessness turns out only abominable stuff, and imagines it excellent. As the owners of such dairies do not read dairy papers or attend dairy conventions, how can they be reached? Shall it be by itinerant instructors, as in Europe? Can we get a little chemistry of everyday life into our common schools, and reach the rising generation in this way? Something ought to be done, for this is too expensive a way to supply the demand for grease. It would be far preferable to keep all bogus butter grease in its natural state to supply the grease market. Economy demands that something be done. But what?

SHOULD BUTTER BE COLORED?

THIS is a mere matter of taste—not so far as the palate is concerned, but the eye. June butter is considered best the world over, and this has a beautiful yellow tint, hard to imitate, but which is closely approximated. Everybody likes to see it, and the bogus butter men are ready to gratify the eye. Their product, however, is a counterfeit. Not so the genuine butter, except so far as its color is concerned. This, then, is an innocent cheat—a practical "white lie"—on the part of the dairyman. The color adds nothing to the quality, nor does it take anything from it, if a good color preparation is used. The amount is almost infinitesimal. But the color is a fraud—a harmless fraud—which all manufacturers of butter color are interested in keeping up. It enables the dairyman to make butter of about the same color the year round. He can do this in another way. Early-cut hay and corn-meal, with oats, middlings, wheat, corn, or something else to make up the balance of nitrogenous material, will do it, if the cows have proper care and shelter. It will even impart some of the June flavor. This is an excellent way of coloring butter, and I can commend it without any disposition to injure the butter-color men—notwithstanding they are powerful accessories in the manufacture of counterfeit butter.

The Poultry Yard.

ONE RURAL COMFORT.

GEN. WILLIAM H. NOBLE.

FINE poultry brings joy and profit to the farm. The cock's crow in the watches of the night and hailing the dawn, the turkey's gabble, the goose's call and the quacks of ducks are the out-door home music of rural life. I would as soon have the farm without garden, barns or fruit as bare of a well stocked poultry yard.

What a comfort to the little and the big of the household, are the peeps and busy food-search of the chicks, the plaintive call of the turkey mother and her brood's response, the waddlings and the washings of the downy ducklings, the cackling concert of the barnyard over the new-laid egg. These make up one great joy of rural life.

Then, if the farmer listens to the great poet's counsel: "Put money in thy purse, Horatio," he cannot quicker load his pouch than from the poultry-yard. As a food supply to his own table, how nicely it varies the steady drag and array from the pork barrel and the smoke-house. How joys the festive board with chickens broiled and fricaseed, with the well-browned turkey's savory roast, and in the luscious tenderness of the grass-fed gosling and the ducks. The purse joys when thus the meat wagon's daily call is saved.

Then when you look to the markets for profit on your stock, how much sooner can "Horatio put money in his purse" out of his poultry-yard than from the swine, beeves and sheep in his pens, stalls and pastures. Pound for pound, how much greater the profit! Four to six cents per pound will limit the average of the latter. The poultry price will run up into the teens, and never be much or long below in the biggest wholesale marts. Besides, with decent care of food, housing and feeding range, poultry can be profitably marketed at as low figures as the beeves, mutton and porkers. Is there any doubt of this? I speak now merely of the flesh food.

But when you figure on the egg crop of the poultry-yard, I believe this alone will yield a profit equal in ratio to that of the stalled ox or swine, or from the wool and flesh of sheep. In no case will fullness come to the purse but through that care and sense, without which no profit comes to any line of industrial product. I should only claim this egg profit from good, healthy, laying strains, well cared for as to food and shelter. As to either eggs or flesh, there is a good deal to be said about breed and breeding. To these, in any line of farm stock, the average farmer takes little heed. It is pretty much of this sample with all he raises on the farm—flesh, grass, grain or fruit. He runs in ruts, as a rule, or does not run at all. Yet, thank God! for him and our country, by the help of such journals as yours, he mends his pace slowly.

You ask will the farmyard poultry pay shut up? No, not as a business. To amount to much more than a supply for your own table the poultry crop wants to be in proportion to your domain and your other products. No city-yard style will do on the farm. Its like will never make a paying branch of farm industry, for several reasons.

First, because the farmer has enough to do without such paltry care as shut-up fowls demand. 2. Because all poultry is healthiest, better fleshed and more profitable with a range of feeding ground. In these days wire netting will so cheaply corral a flock, so protect your garden and near-by plow land in the crop season, that no farmer should think of putting poultry in a close pen.

Poultry, when given a chance, feed as much on grass as grain. They throughout the year consume great quantities of green or half decayed vegetable food, and will eat hay in Winter almost like a stalled ox. Besides, "all is grist that comes to their mill," which they can swallow. No end of insect life is squelched and held back by their endeavors. A skirmish line of turkeys through a stubble or new-mown field, equals in order and array that of soldiers advancing to a fight. The whole poultry tribe are great foragers. Whenever anything is to their liking, to nibble or to dig for, they are sure to find it.

I say, therefore, to the farmer, don't call yourself such unless you make poultry care and culture a feature of your life; never, except for discipline, keep your poultry shut up in narrow quarters.

I never would buy a farm, or tenant one, through, or skirting which some rippling brook or good stream, with pools and rapids, did not run. At any rate, I should not choose any where an ample and clean supply of water could not be had for all the needs of poultry life and taste.

You pictured some years since in your journal this joy of the poultry tribe: A cheap dam of stones held back a pool and made a minute waterfall on a swift brook; on and around this gamboled, or quietly sailed, the aquatic tribe. Others searched along the shallows of its brink for tid-bits of bugs or worms, or tiny fish.

Let all farm life cherish as its proper belonging and loveable feature and profitable charge the poultry tribe. Arrange to feed this stock well with the least possible care. Get good breeds for flesh and egg production combined. Then improve them by studying the points of your stock, and only breed from the best.

Within 20 years the quality of poultry stock and its egg product have vastly increased. The origination of new breeds combining both of these aims with hardy constitutions and adaptation to our climate, have helped the beauty and profit in this part of farm industry. In a class of animal life on which improved crosses tell so markedly and quickly, there is hope for vast gains under skillful mating.

Rural Topics.

Experiment Grounds of the Rural New-Yorker.

THE YELLOW WOOD—CONTINUED FERTILIZER EXPERIMENTS UPON POTATOES IN A POOR SOIL—THE RURAL'S RYE-WHEAT HYBRIDS.—PEA TESTS.

THE YELLOW WOOD AGAIN.—The writer is sitting under the specimen of Yellow Wood so often alluded to in these columns. It is the 7th of June. It was planted about 11 years ago, and is now 36 feet in diameter at the base, for the branches nearly sweep the turf. We wish our readers could see it now, and then tell us if we have said a word too much in its favor. Its drooping panicles of pure white pea blossoms from six inches to a foot in length, are so numerous as to fairly divide the graceful tree between green and white. This tree is grace itself and—life. Its branches, long and slender, respond to every breeze, swaying slowly up and down, more slowly now, indeed, from the weight of its thousands of snowy blossoms. There are many trees, like the big, stubby-limbed horse-chestnuts, that are dull, heavy, stupid-looking. Except in a gale, their leaves alone move. They excite no admiration or affection. We do not care to talk and associate with them. But we could not part with our Yellow Wood. We admire its wide-spreading, gently-swaying branches, its soft, green foliage, its airy, sprightly grace as if they were the charms of a friend. And yet this trees has its faults. It will not stand contact with any other tree, or scarcely close proximity. Many of the inner leaves turn yellow early in Summer, and keep dropping. Occasionally a small branch dies without apparent cause, though not to the disfigurement of the tree, so far as we may yet judge. The bark of the tree is always smooth, and the stems are not attacked by borers, as are the locusts. We should be glad to hear from our friends who have single trees of the Yellow Wood 20 years or more old.

FERTILIZER EXPERIMENTS UPON POTATOES.

Such experiments often contradict one another, and years are required before any definite conclusions can be drawn. The experiments made here two years ago were not contradictory. They all told the same story, viz., that the land needed *complete* fertilizers and that a good crop could not be grown without them. The present experiments, upon the same unproductive soil, point to the

same conclusion, and in fact, as now judged by the growth of tops, are essentially a repetition of the results obtained in 1884. During the past 10 days the condition of the plants has been estimated by two persons, neither knowing the fertilizers used in the trenches so judged. Ten indicates the best and 0 the poorest plants:

		Rated at
Plot 1.	Nitrate of soda	3
" 1½.	*Nothing*	3
" 2.	Sulphate of ammonia	4
" 3.	Dissolved boneblack	4
" 4.	*Nothing*	2
" 5.	Sulphate potash	2
" 6.	Plaster	1
" 7.	*Nothing*	2
" 8.	Nitrate of soda and dis. boneblack	2
" 9.	Farm manure	4
" 10.	Nitrate soda and sul. potash	2
" 11.	Dis. boneblack and sulpate potash	3
" 12.	Nitrate soda, dis. boneblack and sul. potash	3
" 13.	Raw bone, fine and coarse mixed	4
" 14.	Farm manure	4
" 15.	*Nothing*	2
" 16.	Hen manure	3
" 17.	Complete potato fertilizer, 800 lbs. to acre	8
" 18.	Farm manure	5
" 19.	Complete potato fertilizer 1,200 lbs. to acre	9
" 20.	Acid phosphate, muriate potash and nitrate soda	6
" 21.	Acid phosphate	3
" 22.	Nitrate soda, muriate potash	4
" 23.	Ground fish	5
" 24.	Complete potato fertilizer with *mulch*	9
" 25.	*Nothing*	2
" 26.	Hen manure, double the quantity used in Plot 16	6
" 27.	Blood, nitrate of soda and sulphate ammonia applied at the rate of 1,100 pounds to the acre to ascertain if nitrogen, supplied in superabundance, would give a large yield	7
" 28.	Complete potato fertilizer, 1,200 lbs. with the preceding nitrogenous fertilizers 600 lbs.	10
" 29.	Same as 28, mulched	9

The average of plots which received the *complete* fertilizers is eight. The average of those which received hen and farm manure is a fraction over four. The average of the trenches which did not receive either fertilizer or manure is a fraction over *two*.

We shall expect that the farm manure plots will improve as the season advances, and that the plot to which nitrogen alone was furnished in excess will not hold its present rating.

It will be seen that several of these experiments are designed to show whether acid phosphate (that is, S. C. rock dissolved in sulphuric acid) and muriate of potash will serve as well as dissolved boneblack and sulphate of potash. The only contradictory part of these tests is shown in plot 12, which, though it received a *complete* fertilizer, is ranked but three. We have another series of potato experiments which differ from the others in the methods of planting—the fertilizers being the same—which promise to be of interest to our readers.

THREE-QUARTER RYE HYBRIDS.—There are 11 plants from the cross of rye pollen upon a head half wheat, half rye, made last Summer. The first plant bears regular wheat heads inclining to club-shaped, beardless. The upper part of the culm is downy. No. 2 is a regular beardless elliptical head, resembling wheat without down on the culm. No. 3 bears a small head heavily bearded, the straw or culm without down. No. 4 is a regular beardless head without down. No. 5, a very loose, barley-like head without down. No. 6 is a narrow, beardless head with down. No. 7 is a loose-bearded head with down. No. 8 is like No. 1. No 9 is a tall plant, bearing 22 bearded heads; culm downy. All the heads seem to be sterile. No. 10 is also tall, culms slightly downy, probably sterile. No. 11 is a short, beardless head, hairy culm. We anticipate great changes in these plants another year. It will be remembered that from the three-quarter rye plant of 1885 several imperfect seeds were obtained. Three plants grew. They bear fine, regular, half-bearded heads, and the culms are all hairy. No further resemblance is thus far developed towards rye in these three-quarter rye plants. The best of the heads were selected, and after castration rye pollen was again applied several times.

THE large plot of wheat-rye hybrids, all from one seed planted four years ago, is now the most interesting of all. Upon this plot we have heads of all sorts, though the seed sown was from heads quite uniform in appearance, all being half-bearded, regular in shape, with downy culms. The straws of some of the plants are three times the thickness of ordinary wheat straw. Some are denseley downy, others are perfectly smooth. Twenty-five heads could be selected from this plot differing as much from one another as do any wheats in cultivation. Some of the heads are compound. Illustrations will appear later.

PEAS.—It was claimed by Mr. Cleveland, of St. Vincent, N. Y., the originator (by selection) of the Alaska Pea, that it was the earliest blue pea in cultivation; that the pods and peas remain green longer than those of any other variety; that 90 per cent could be gathered at one picking. In order to test these claims a row 50 feet long was planted April 9th, and beside it a row of the Clipper Peas sold by W. W. Rawson & Co., of Boston, Mass. This last was selected, first, because we had never tested it, and, second, because it was assumed to be a fair type of the "First and Best" sold by all seedsmen.

The first picking was made June 12. The vines grow to the same hight, four feet, and present no notable differences. Both varieties seem to mature at the same time and to be equally productive.

ALASKA: 100 pods weighed 16 ounces; contained 686 seeds which weighed six ounces.

CLIPPER: 100 pods weighed 16 ounces, contained 672 seeds which weighed six ounces. It will be seen there is no real difference in the size or earliness. The peas were cooked separately, and eaten by six persons. The Alaska when cooked is a lighter or more yellowish-green than the Clipper. Four of the six judged the Alaska to be "more sugary" than the Clipper, and that the Clipper had more of a pea flavor. Two preferred the Alaska, four the Clipper. All agreed that the difference was infinitesimal.

Farm Topics.

CORRESPONDENTS' VIEWS.

THE average hired man is an important but sadly neglected member of the farm stock. I wish to say a word concerning his treatment, being one of the band myself. Few people know what farm laborers suffer. If they did know, the laborers would receive better treatment. The average "boss" regards his hired man as a superior horse or cow, possessing no more feelings than a piece of farm machinery. He is paid his wages, but there preparations for his comfort stop. His bed-room is usually an attic or some other room where nobody else will sleep. How can he do a good day's work unless he is made comfortable? The floor seldom sees a broom. If the bed is made (unless by himself), it is the next thing to a miracle. Often three or four men are crowded into one small room. The furniture consists of any rubbish that is not required in any other part of the house. If a chair is wanted in another room, the girl is always told to get it from the men's room. A basin is never considered necessary, and nobody thinks the hired man ever wants to take a bath. He can walk to the pond or river for such a foolish operation. The hired girl apes the methods of her master and mistress, and orders the hired man about at will. If the "boss" happens to be out with a horse at night, the hired man is expected to stay up to unharness. This is never supposed to interfere with his early rising next morning to do the "chores." Should there be any company, he is expected to wait for his meals till the family have finished, though no one needs food more. All farmers do not use their help in this way, but too many of them do, and to my mind they make a great mistake. There are very few hired men who would not make a quick return for a little kindly attention to their needs and tastes. Try it, farmers; a hired man is not a brute. Why should you try so hard to make a brute of him? HIRED MAN.

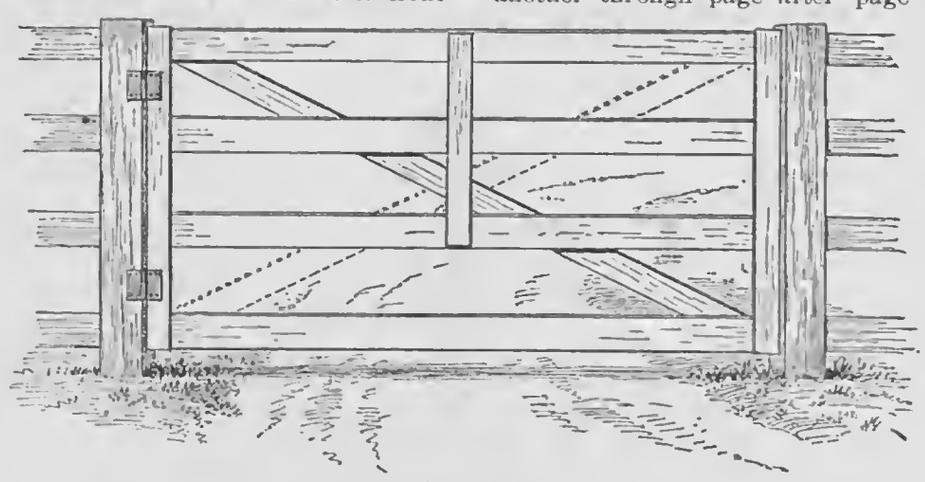


Fig. 269.

A HORSE that is gentle and safe in all positions is worth three times as much as one of equal ability that cannot be trusted. If I wanted to pick out a colt which offered a good ground-work upon which to build an education, I would look for width between the eyes, a large brain, a pleasant look out of the eyes, and a fine coat of hair. If you teach a colt to expect a blow instead of a caress, you will be sure to make a brute. If you tease him, look out for his heels when he grows up. I prefer a short, compact horse to a long and leggy animal. The first is tougher and costs less to feed and care for. D. W. D.

Des Moines Co., Iowa.

The washing machine which I obtained as a present from the RURAL gives great satisfaction. It is the best machine I ever saw for cleaning clothes with the least labor. We have a beautiful herd of seven little Jerseys. One of them, one year and 26 days old, has a heifer calf by her side, and last week I made six pounds of butter from her milk, fed on grass alone. She is a perfect little beauty. The Jerseys cannot be excelled for the dairy.

Nunda, N. Y. MRS. J. E. M.

I NAME no names. I content myself with saying that in more than one respect certain nursery catalogues stand sorely in need of improvement. The spelling is bad; the grammar is still worse. One man is unable to give correctly the name of the most popular of pears; another through page after page tramples upon the laws of English syntax in a way of which a schoolboy would be ashamed. What matters it? I answer that to the nurseryman, at any rate, it matters much. A nurseryman who gives proof positive that he knows very little about his mother tongue, gives by that very fact proof presumptive that he knows very little about the practical science to which he is more especially devoted. Horticulture calls for intelligence. An ignorant man may, indeed, grow fruit trees, but he will grow them in much the same way as the Irishman played the fiddle. For such trees and such music most of us have small fancy. Thus much for the present. More anon.

A CATHOLIC PRIEST.

IN old dairy districts there is always to be found some old farmer who is an expert at selecting dairy stock. It is hard to deceive these farmers into buying a poor cow, yet they will frequently keep a cow of their own raising, three or four years, that they never would buy at any price. A good butter cow, whether Jersey, Holland, Ayrshire or scrub, will be sure to approximate to a certain model, just as most of the beef breeds are of much the same shape. A dairy cow raised on the rich pastures of Holland will have about the same shape as an Ayrshire raised on the barren Scotch pastures. There are differences in color and size, but the shape must be the same and the same organs must be developed in either animal. This holds as true of scrubs or grades as it does of thoroughbreds, and it is what guides dairy experts in their selection of cattle. A good milker, no matter what the breed, must possess a feminine appearance. Heifers with a coarse, masculine appearance will never make good milkers, in spite of good feeding. They will put on flesh easily and work off their surplus energy in fighting, breaking down fences—in short, doing anything but milking. A masculine heifer looks like a steer. She is coarse in the legs and horns, with a heavy head, neck and fore-quarters. A good cow should have a distinct "cowey" look. She should be fine in the limbs and head, with slender horns, thin neck, light fore-quarters, yet wide enough to make room for a good-sized heart and lungs. I would look for a large stomach, short legs, large udder and milk veins and a small tail. F. K. M.

St. Lawrence Co., N. Y.

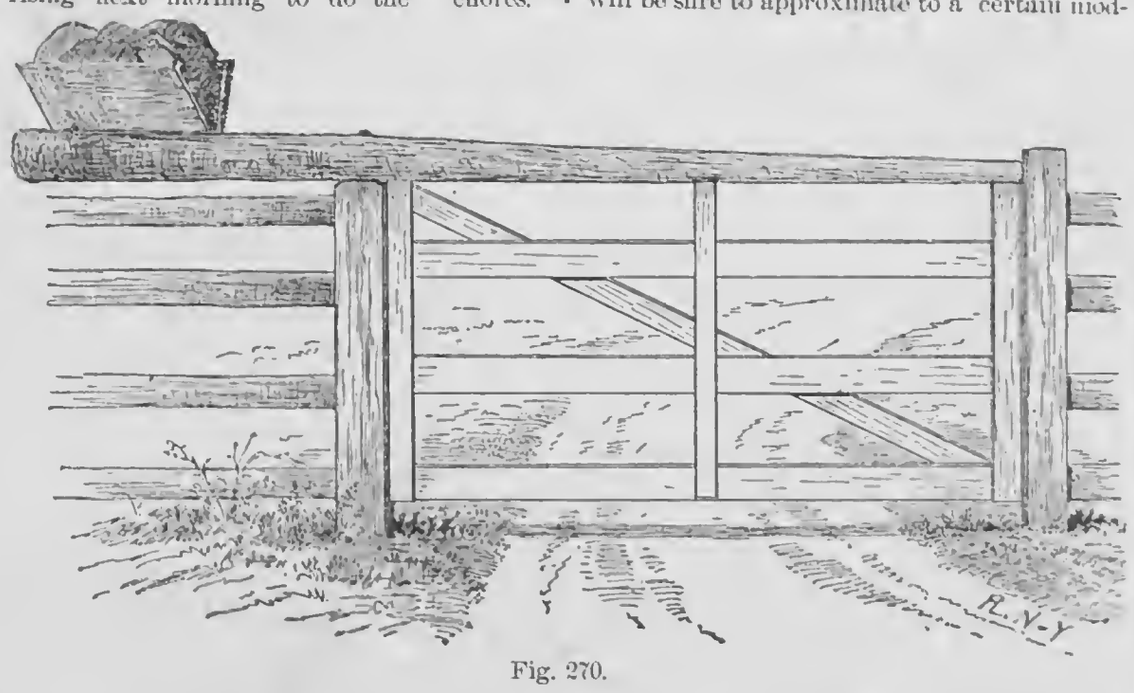


Fig. 270.

I HAVE for several years been testing as to the hardiness and productiveness of raspberries. I would place them in the following order: Tyler, Doolittle, Ohio, and Gregg. The Tyler is very hardy and productive. The Ohio follows in good time, somewhat later, and it is a large yielder. The Gregg, the latest of all, and liable to be winter-killed, is only profitable on good upland and in protected situations. Of the red, the Philadelphia and Turner are perfectly hardy and yield a crop every year. The Cuthbert froze back to within two feet of the ground. It is a fine berry, but not as hardy as I would like. The Marlboro wintered better. Shafer's for six years has proved very hardy and productive. I have not lost a bush from any cause. Insects and blight, that affect black raspberries, do not trouble it. This is enough like a black-cap to be classed as such and to take their place, as it is gradually doing with those who know its worth. Were I to confine myself to one berry it would be this. There are no suckers which with many varieties of the reds, are as troublesome as weeds. C. M.

Onondaga Co., N. Y.

Farm Economy.

NOTES ON SWINGING GATES.

NOT long since a correspondent sent us the drawing of gates shown at Fig. 267-268. He wished to prove that the longer post, as in Fig. 267, gave an added strength to the gate. We submitted the drawings to Prof. R. C. Carpenter, who replies in substance, as follows:

"The strain on the hinges of a gate is the same whether the brace is inclined toward the bottom hinge or from the top hinge toward the bottom of the gate. This is proved by a proposition in physics or mechanics termed the Parallelogram of Forces, which is that, 'If two sides of a parallelogram be given, the direction of two forces and a length proportional to these forces, the diagonal of that parallelogram will be the resultant force.' From this we can deduce a simple rule for finding the strain on the hinges as follows: Divide the weight of the gate by the distance between the hinges, and multiply this result by the width of gate. In all cases of two hinges and a vertical post the pull on the top hinge will equal the push on the bottom hinge.

As an example, suppose a gate five feet between the hinges and 10 feet wide, weighs 200 pounds; strain on each hinge equal (200-5)x10=400 pounds, the tendency to overturn the post is the same, no matter what may be the hight of the post, provided the weight is the same. In this case the tendency to overturn is found by multiplying the force acting, by the distance, or arm with which it acts. Thus, in the last case, there were 400 pounds acting to overturn the gate post at a point five feet from the lower hinge. This would be equal to five times 400 pounds, or 2,000 pounds, acting at the lower hinge. If the hinges were twice as far apart the effect would be the same, because the pull on the upper hinge is lessened as much as the distance is increased. Thus, if the hinges were 10 feet apart by the rule given, the pull on the hinge would be (200-10) x10=200 pounds. This multiplied by 10, the distance, gives 2,000 as the tendency to overturn. So far as theory is concerned, it makes no difference whether the gate is built in one or the other forms shown at Figs. 267—268.

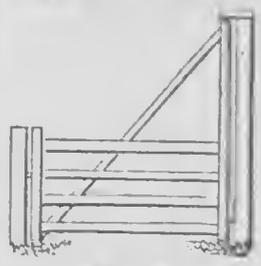


Fig. 267.

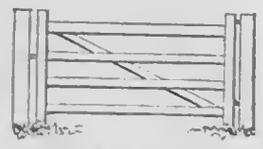


Fig. 268.

As the direction of the brace or diagonal of the gate is of no moment, I should consider the best form of gate one that provides the greatest strength with the least material. The form in Fig. 268 is superior to the form in Fig. 267, simply because it has less timber and is less expensive to build; the brace will do equally good service from the other corners.

My own observation leads me to believe that the form of post gate in Fig. 269, is usually

made unnecessarily heavy, and the result is that the post is soon pulled over to such an extent that the gate drags on the ground. The short post in Fig. 269 can be readily stayed by a fence. The hinges in use on the post gates are often capable of improvement, and usually give more trouble than the posts.

A form much used consists of a wedge with a hole at the end driven into the gate, and a wedge with a pin at the end driven into the post. These soon work loose, and let the gate out of line. They should be of such shape that a nut could be put on the back side of the post.

Were I to give my opinion as to the most sensible gate mechanically, I should no doubt refer to a form which can hardly be said to be new, but which has proved its many good points by holding its own against all innovations for years. See Fig. 270. It is a form easily built, has all strains balaneed, opens easily, is strong and cheap. It was used by your forefathers, and is better to-day than any patent gate I know of.

THE BENEFIT OF MUCK WHEN APPLIED TO GRASS.

Composted and alone; differences in intrinsic value and in results on different soils; retentive of fertility; for corn, oats and grass; as a preventive of drought; as an absorbent.

A CORRESPONDENT of a Western agrieultural paper, in speaking of his experience in the use of muek, says that a good supply of coarse manure, to be mixed with the muek, is indispensable, in order to derive any praetical benefit. That composting with manure is far the best way in which to utilize muek I have no doubt; but there are other ways in which some benefit may be derived and as all farmers have not a sufficient supply of manure on haud at the proper time for making compost heaps, I wish to say to such not to neglect to try the effeet of muek alone. I have used muek in almost every manner and for a number of years, and by its aid I have changed a rundown farm to one of the most productive in this locality. When I commeneed its use I had very little manure on hand, and hence used the muck alone from necessity. There is, of course, a vast difference in the value of muck, as well as in its effects when applied to different kinds of soil. The same may be said of any eommercial fertilizer, and in this connection let me say that I have found that a good dressing of muck upon soil of a gravelly character is of much assistance in getting the full benefits of superphosphates. It is generally conceded that the latter are of the most value when applied to heavy loam, and that such soils retain the fertilizing qualities longest. The tendency of muck, when applied to light soil, is to furnish a substanee which retains much of the soluble qualities of the superphosphates, and prevents, to a eertain ex tent, their leaching away.

My first experience with muck was by an application direct from the swamp. I had but little manure, and, wishing to plant corn upon a field that was pretty badly run down, I drew out and covered about one-half of the lot with muck, saving what manure I had for use in the hill. The effect upon the eorn crop was not apparent, exeept that the portion of the field treated with muck was more backward than the other part. It appeared to have been chilled, and although the soil was practieally the same in the whole field, I think this part was fully a week later in growth, and also in ripening. There was no difference in the yield of corn or stalks, and my first impression was that my labor in drawing the muck had been wasted. The corn was followed by oats, and my reeollection now is that I failed to note any difference in the crop, but the prime benefit became apparent as soon as the field was seeded to grass, and from the first season's cut of hay until the lot was plowed up again—some four years—the muck-treated part yielded from 16 to 20 per cent. more than that portion where no muck had been used. [Isn't it possible that the better effects were due to the freer liberation of the fertility in the muck or the greater development by it of that in the commingling soil owing to lapse of time rather than to any special benefit the application would confer on grass over corn and oats? If corn and oats had been sown on the plot the third year, might not the effects have been as noticeable as in the case of grass? It would have been more satisfactory had the experiment been tried at least on a small plot in the field.—EDS.] Upland meadows of gravelly soil are frequently liable to dry up so badly before Timothy can acquire a full growth, that not more than half a crop of hay can be secured, and sometimes the quality of that is injured by becoming raspish. I have found that where muck had been used freely on such meadows before seeding, the ground retained moisture much longer and was less liable to suffer from drought.

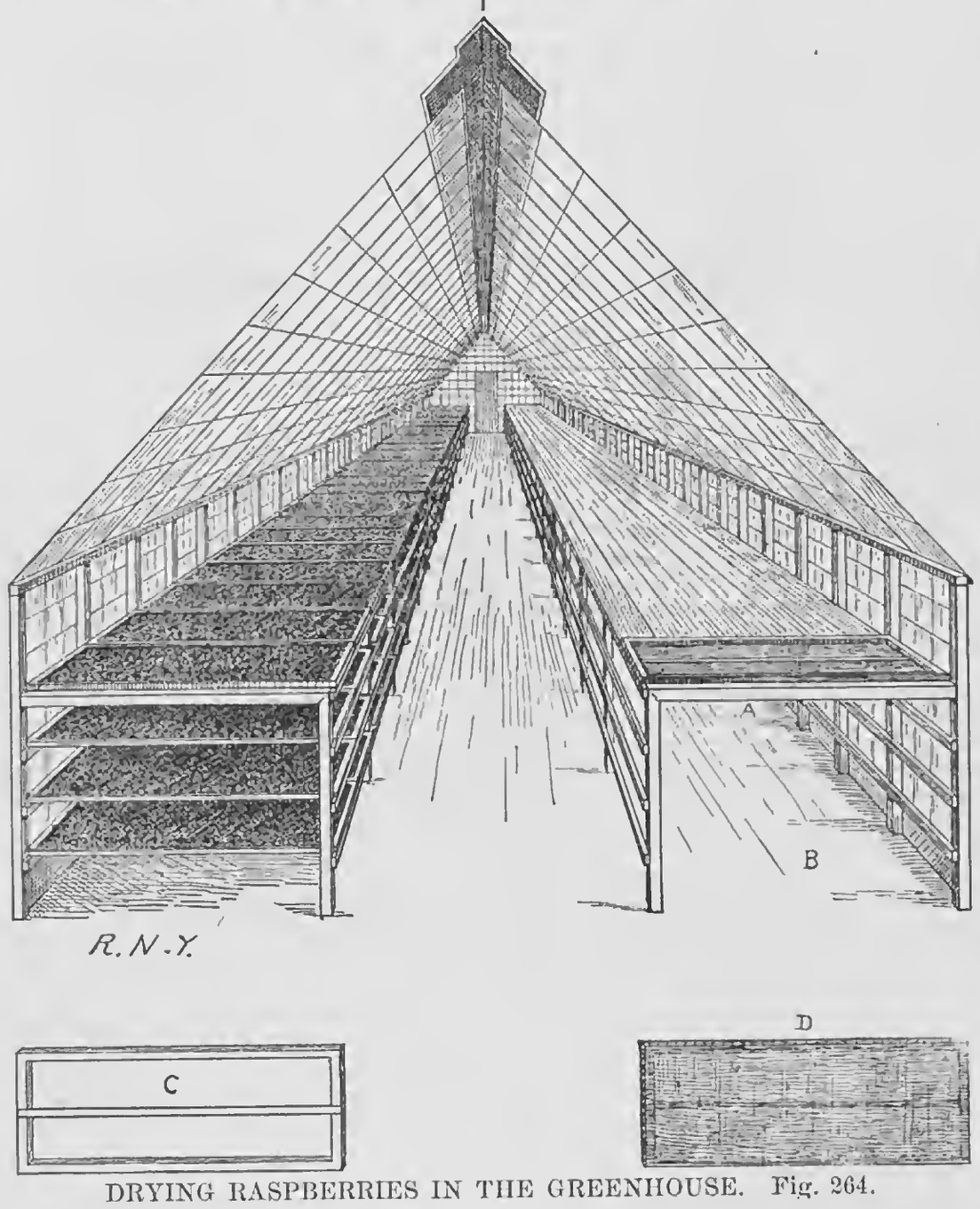
It is well to dig out the muck as long a time in advanee of its being used as convenient, giving it an opportunity to dry thoroughly. I draw my muck generally with a one-horse eart, but have frequently moved a good quantity, when the ground was frozen, on a sleigh, using two by four scantlings for bottom boards and dumping through the bottom, thus avoiding shoveling more than once. I think that three loads of a compost, made from one half each manure and good muck, are so nearly equal in value to three loads of pure manure, that no farmer can deteet the difference in the result when applied to a erop. I find, however, that it pays, when using this eompost for potatoes, to mix in a small quantity of wood ashes, in the hill. Any one having a manure vault cannot do better than to keep a good supply of dry muck on hand for absorbing the liquid manure, and the value of manure made in this manner cannot be overestimated.

HENRY STODDARD.

Columbia Co., N. Y.

DRYING RASPBERRIES IN A GREENHOUSE.

Mr. J. S. Bennett proposes to use the greenhouse as a place for drying fruit. His arrangement is shown at Fig. 264. Strips of wood are nailed on the posts both front and back, as shown at B. These are left about eight inches



DRYING RASPBERRIES IN THE GREENHOUSE. Fig. 264.

apart. A shows the way the sieves are placed. The sieves, shown at C and D, are made of inch pine boards. They are just long enough to reach from the strips at the windows to the strips in front, and are one foot nine inches wide. A lath is fastened to the under side of the frame, sunk into the board so that it will be level with the frame. The frame is covered with stout muslin cut a little larger that the frame and turned up at the edges so that it can be tacked on more securely. At the left of the picture the sieves are arranged as desired for drying. The drying is done on a clear, bright day with the aid of a good fire. It is desirable to heat the interior of the greenhouse to 130°. The ventilator is raised about two inches, thus securing ample ventilation. Care should be taken to avoid putting too many berries in the sieves, about five quarts in each will be enough. They should be spread out as thinly as possible. Mr. Bennett estimates that berries will be thoroughly dried in two days by this process, and the great number that can be handled at one time will make it profitable for those who have greenhouses and small fruit plantations to make use of it. There will be little cost for fixtures at all events.

Miscellaneous.

RAZOR STROPS.

EVERY farmer should be prepared and know how to give himself a good shave, as very few are situated convenient to barber-shops, and if one is fortunate enough to be in easy reach of one, he usually wastes more time in getting shaved than would be required to shave himself half a dozen times, and then, unless he possesses a razor and cup of his own, he risks a filthy job. By the aid of the accompanying drawings any reader of this paper

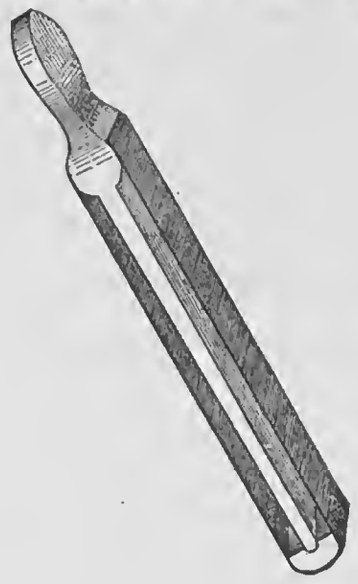


Fig. 265.

will be able to make himself a better strop than can be bought, and at little expense.

Fig. 265 plainly shows how the handle and stretcher are fashioned out of one piece 1¼ inch square and 16 to 18 inches long. Straight-grained pine or bass-wood is light and the best; but a hard wood will do. The leather, which should be the finest-grained and smoothest obtainable (thick, firm Russian leather is best, but costs most), should be of the same width as the stretcher, and long enough to go twice the length of the latter,

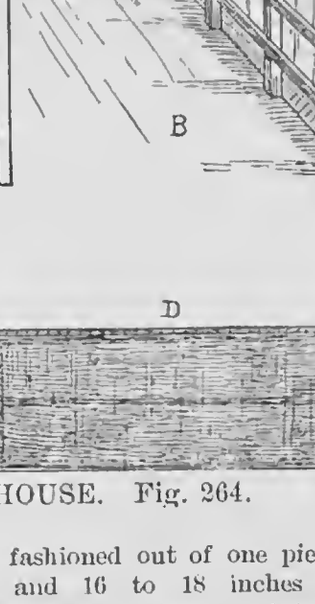


Fig. 266.

and be glued to both sides of the square part of the handle, grain, or smooth side, out. La Page's liquid glue is the best, and very useful for any purpose where glue is needed. It is always ready for use, and every farmer should have some. The block has a groove to fit the streteher, and is made wedging, so as to stretch the leather firmly. If the strop should get slack, put a thin piece of leather, about the size of a wedge, against the strop and force the wedge in again. A very fine emery paste should be put on one side of the strop, upon which to touch the razor up when dull. If you can't get the paste already prepared, a very fine emery rubbed on with a little oil, will answer every purpose.

To make the strop shown at Fig. 266, will require more ingenuity and skill; but it is the best. The central piece should be 18 inches long, one-half inch thick and one-and-one-half inch wide. The end enlarges to one-and-one-quarter inch in thickness. The blocks are fastened on with small hinges. The wire loops for holding the strop when stretching it, are made of No. 13 or 14 hard wire. One is shown detached at Fig. 266. This requires only half as much leather as Fig. 265. The strop is glued or stitched to the end wire loop, and when the rough side is wanted, is put over the end and tucked through another wire loop, when, by pressing the block down with the thumb, the strop is drawn tight, as shown in the upper part of the engraving. The strop, when stretched, should be 14 inches from loop to loop. Put the emery paste on the rough side of the leather, and never let any get on the smooth side. In fact, great eare should be exercised never to get any dust or other substanee on the latter. The strop should be provided with a case or be wrapped in clean paper when not in use. The good wife or sweet-heart cares more for you when you have a nice, smooth face, exeepting, of course, the moustache or side whiskers.

The farmer is apt to care too little about his personal appearance, and what folks may think of him. It costs very little in time or money to keep reasonably tidy, and if you keep so, those you associate with will have a better estimate of you, an important factor for suecess, both socially and in a business way.

Wakeman, O. D. Q. H.

What Others Say.

ENSILAGE—PROVED A SUCCESS.—It would seem certain that the system of ensilage is to become an established feature in British agriculture. These remarks of the London Live Stock Journal are prompted by the striking evidence in favor of ensilage which has been brought to light of late—not the evidence of enthusiastic advocates, it would seem, but the calm deliberations of judicial bodies appointed to consider and determine as to its working. The reports of the Ensilage Commission and of the judges of the Royal Agricultural Society's silo competition, have just been published, the former in a Blue Book and the latter in the Journal of the Royal Agricultural Society. Both bodies emphatically declare ensilage a success, and both reports are capable of affording encouragement to British farmers.

The Ensilage Commission classify the advantages claimed for ensilage under these three heads: 1. In rendering the farmer independent of weather in saving his crops. 2. In increasing the productive capabilities of farms: (*a*) in greater weight of forage saved, (*b*) in greater available variety and rotation of crops, (*c*) in increased facility for storage. 3. In connection with feeding: (*a*) dairy stock, (*b*) breeding stock, (*c*) store stock, (*d*) fatting stock, (*e*) farm horses. Taking each point in order, they remark upon the extent to which they consider the system capable of fulfilling the advantage claimed for it. In regard to independence of weather, it has been proved to them that ensilage is of great economic value, as it will enable farmers to avoid or minimize the losses sustained in attempting to save hay, especially second growths, in wet seasons. Then, as to increased productiveness of farms, it is considered that by means of ensilage a greater amount of food may be obtained from a given area of land than if the crop was made into hay. The feeding value of ensilage, weight for weight, is only one-third that of hay, but a ton of green food preserved by ensiling will weigh in silage five times as much as if it had been made into hay thus giving a decided advantage to silage. In this calculation it is assumed that the silage and the hay are both perfectly made and preserved. It is pointed out that by recourse to ensilage more varied and more rapid cropping may be practiced. Various grain and green crops may be sown in the Autumn, and cut for ensiling in June, which will "leave the land free for a second sowing, and thus increase its capabilities of annual production, while maintaining the fertility of the soil."

As to the feeding value of silage, the com-

mittee speak very favorably. They received the strongest evidence of the undonbted advantage of the system for the feeding of dairy stock. To breeding stock it had been given successfully, but in this case it had to be judiciously and carefully mixed with other foods. For store stock it forms a complete and wholesome food, and in fattening stock it compares favorably with roots. The advantage of its use is most apparent in the degree to which it enables a farmer profitably to consume straw chaff, rough hay chaff and other dry materials, which, without admixture with some moist kind of food, would not be palatable or advantageous to the growth of stock. A limited proportion of silage mixed with other food has been given to work horses with satisfactory results. The Commissioners, in conclusion, state that they endeavored to discount all exaggerated estimates, as well as to make allowance for a considerable amount of prejudice and incredulity which they met with, and they add: "After summing up the mass of evidence which has reached us, we can without hesitation affirm that it has been abundantly and conclusively proved to our satisfaction that this system of preserving green fodder crops promises great advantages to the practical farmer, and, if carried out with a reasonable amount of care and efficiency, should not only provide him with the means of insuring himself to a great extent against unfavorable seasons, and of materially improving the quantity and quality of his dairy produce, but should also enable him to increase appreciably the number of live stock that can be profitably kept upon any given acreage, whether of pasture or arable land, and proportionately the amount of manure available to fertilize it."

The reports of the Royal Society's judges are also very interesting and instructive, and are equally favorable to the system under investigation. The following concise summary of the experience of the judges of the northern division is worthy of production: "We are of opinion that the great question of satisfactorily ensiling green crops has received ample confirmation. It has been proved to us, incontestably, that its success has been manifested in every district. We have seen silos of brick, of stone and of wood; we have seen old barns and other buildings converted into silos; we have seen them sunk into the ground and built on the level; we have seen them containing 20 tons and we have inspected others capable of containing 700 tons; we have found silos constructed at a little over £20, and others at £400; we have found them filled with all sorts of green crops, and we have found some sour and some sweet—the latter in by far the greater proportion; we have seen them weighted with bricks, with stones, with slates, with sand, with earth and also with ingenious mechanical contrivances; we have inspected some chaffed, and in others the fodder spread out and put in whole; in all cases the practice was successful, and in every instance cattle of all descriptions did well on the silage, and in many instances the opinion was conclusive that decidedly more stock could be carried per acre with silage than with hay."

The report winds up with the following verdict: "The chief advantages of silage-making against hay-making is its comparative independence of the weather: that the fodder is handled, while green, without any risk of the tender and nutritious leaves being lost on the ground as in hay-making; that the resulting silage is succulent and palatable, and that on purely grazing farms it is now possible to obtain a portion of the grass crop for Winter in such a state as to equal the effect of summer-fed grass for the purpose of the dairy."

SALT FOR STOCK.—The National Live Stock Journal, noticing a recent communication in the RURAL regarding the feeding of salt to stock, makes the point that water is wholly innutritious, adding nothing of substance to any structure of the body. It is utterly indigestible, is taken as water, goes the rounds of circulation as water, and is finally eliminated from the system as water. All that can be said of salt in this line can be said of water. But does it prove that water is injurious, or useless? Does it perform no important office in the body, although not digested or assimilated? Water is absolutely indispensable. Without it, neither vegetable nor animal organisms can exist. It is a medium for dissolving all foods, and assisting in their circulation and deposit at the points where needed. Remove the water and everything would be but crumbling dust, to be blown about by the winds. What, then, is the force of the argument of the "justly celebrated medical writer and practitioner" against salt? He could not live without a certain per cent. of it in his blood, in which it is a constant element. It attracts water and keeps the blood fluid. In this respect, it undergoes more change than water does. Its crystals are dissolved, while water remains water still, from first to last. Yet one may injure himself by an excessive use of water, as he may by an excessive use of salt; and if he gets into water it will drown the life out of his body. Possibly he might smother himself in salt. But salt is nothing like as dangerous an element to deal with as water.

THE MEN WHO SUCCEED WITH SHEEP.—Scattered as they are, all over the country; addicted, of necessity, to diverse systems of management, nevertheless the men who have made a success of sheep husbandry, says the Breeder's Gazette, will be found to possess certain uniform characteristics. They are intelligent, experienced, prudent, persevering. Intelligent enough to appreciate their own surroundings, and to know the type of sheep best suited thereto, sufficiently experienced to know that their business is not necessarily a failure because prices for its product are not uniformly high. Prudent enough to escape the panic which periodically seizes their weak-kneed co-laborers, and to profit by the mistakes of those who persist in selling when sheep are low and buying when, as a result of such folly, prices again advance. Persevering, with faith in that average of results which has made for sheep husbandry as good a record for profit as can be shown for any other agricultural specialty. These are the men to whom those younger ones who think of becoming flock-owners should look for lessons, rather than to that class of talkers and writers who at times occupy the public attention, taking to themselves the credit for successes and blaming others with adversities. The road to success in sheep husbandry is the plain, simple track leading to success in other callings. The man who achieves his ambition must start right; must keep right; depending more upon his own efforts and judgment than on those of any other man or set of men. He must meet low prices with economical management and meritorious products; must keep his face to the wind, whether it blow high or low; keep head and heart when others quail; advancing only when sure of his footing, and never voluntarily taking a step backward.

POINTS FOR CATTLE BREEDERS.—Our friend Prof. Shelton of the Kansas Agricultural College, said, at a Missouri Farmers' Institute, that he never heard of anyone getting anything useful out of color in stock, yet nine farmers out of ten will not look at a Short-horn that is not red. So, many will condemn an animal because its horns have not the peculiar turn they fancy. Let us be sure that we do not base our selection upon some trivial matter that has no money value. All the valuable points of an animal may be divided into two classes; first, those that are in themselves useful; second, those that point to or vindicate the possession of useful qualities. Why do careful judges place such a high value upon touch—the texture of the skin? It is of no value in itself, but it indicates a long list of qualities that are indispensable. If the touch is hard and the skin hard and inelastic, lookout for a hard feeder and an animal that is slow and late in maturing. So, the flank is of little value in itself; it is a boiling piece of low market value. Yet the good judge knows that an animal with a long, deep flank will be a good feeder, with thick flesh and good constitution. The crop, again—the region just back of the shoulder—is generally ranked high, although it indicates nothing, but is itself a part of great value. The question is often asked: How can minor defects in a herd, or individual animal, be corrected? The advice generally given to correct such defects is to use a sire that is well developed in parts where the cows are defective. There arises this difficulty, however, in attempting to correct one fault—we are quite likely to develop defects of another kind. The best way is to employ males whose general character is good. Select, as a sire, an animal that is well developed, not merely in the region where the cows are defective, but in all other points; thus you will correct the evil of which you complain, and not fall into other errors.

SWEET AND SOUR-CREAM BUTTER.—John Gould says, in the Practical Farmer, that ever since Professor Voelcker announced why sweet cream butter was best, and if made understandingly was by far the best keeper, the churning of less acid cream has been regarded with more and more favor. P. McConnell, of England, the first dairy lecturer of that country, says of the two plans, sweet and sour cream butter: "By the former method the cream is used fresh, and it is possible to milk a cow, separate the cream, and churn it into butter in less than an hour, the product having the finest delicate flavor and the best keeping qualities. In the other system the cream is kept for several days to allow a certain amount of acidity to develop, this being sometimes further aided by the addition of a little butter-milk. The cream is churned more easily, and the butter is of a stronger flavor, but will not keep so long." This is very important testimony, but it does not relate, after all, to one very important point. Why does the butter made from the cream of the cabinet creamery, churned sweet, lack in flavor? The answer to this is that cream needs air to bring out flavor, and the closed cans preventing this, the cream must needs be left to sour. Professor Arnold, after long experiments, has concluded that flavor in butter is the result of the union of the oxygen of the air and the essential oils of the butter fats; but at the same time he would avoid souring the cream by long standing, and *ripen* it by heating it up to about 75 degrees as soon as it is removed from the milk, stirring it frequently until that point is reached, and then setting it away to cool down to somewhere about 60 degrees, and then he would churn at the appearance of acidity. This does in a few hours, and to a certainty, what would otherwise take 24 to 36 hours to accomplish, and gives a certain uniform result that cannot be attained by "chancing it" with the uncertainties of the atmosphere.

LONG-HORN CATTLE.—Bell's Messenger describes one of the few remaining English herds of Long-horn cattle. This favorite old breed of Bakewell's is seldom mentioned now. The more fashionable breeds, like the Short-horn and Hereford, have crowded it out. The herd described in the Messenger belonged to Sir J. H. Crewe, and was brought together more as a novelty than because of any superior excellence on the part of the cattle. Long-horns are picturesque and look well on a lawn or in a park. They are described as a handsome dark brindle in color, with a sheet of white all down the back and white spots at the thighs. They are well ribbed and deep and compact in form, with a high quality of skin and flesh. They have noble heads, a large proportion with tapering wheel-horns encircling the neck itself. Few breeds can rival the Long-horn for hardihood, constitutional vigor and longevity. They are excellent dairy animals. The milk is not large in quantity, but, like that from the Jersey, is exceedingly rich. In a test made some years ago, six Short-horn cows gave 152 pounds of milk and six Long-horns gave 135 pounds. The milk from the Short-horns made but 14½ pounds of curd, while that from the Long-horns made 19½. As beef animals, the present Long-horns do not excel. They have never been heavily fed from calfdom. Their principal points of merit are their toughness, their dairy qualities and their picturesque appearance.

WORTH NOTING.

CHEESE is a muscle-making food; and, in Europe, it is used by the peasant and working classes to an extent that has no general parallel here, says the Orange County Farmer. To people who work, and who cannot buy meat, it is almost a necessity; and the quantity a laborer can eat of it with impunity, where meat is forbidden by its high price, would surprise one who simply takes a crumb occasionally with the final course of an excellent dinner.....

WHY milk should net the farmers about Philadelphia, three cents per quart while producers in Orange Co. N.Y., get from one-and-a-half to two, is one of these latter-day problems which the local farmers cannot understand. To our minds, it is in both cases, the result of organization—compact and strong. Near Philadelphia it is the farmers who are thus organized. In this section, it is the Milk Exchange, not the farmers, and the result is seen in the different prices that prevail.....

IT is a pretty sure sign of a good farmer when we see a field of green rye from which daily cuttings are being made in May, says the New England Farmer.....

THE Farm Journal—the little monthly that has a lot of imitators but no equals—says that there is no way a farmer can improve a field faster than by seeding it down and pasturing hogs in it—unless it is to sow peas in a lot and then let the hogs eat them on the ground. A pint of corn fed to a hog every day in a clover pasture will make it fit for killing before cold weather. Two quarts of middlings a day wet up and fed to a hog, wintered over, in connection with good pasture, will make it ready for the market in the Autumn. In this cheap way the hogs may be fitted for market early, and the land fitted for a good crop of corn the next year. The shut-up system of making pork, is mighty poor economy. The hogs will do a good deal for us if we only give them a chance.....

A WRITER in the Fruit Recorder pours a pint of kerosene upon a barrel of coal ashes, mixes and uses it the same as he would lime or plaster. The smell of kerosene keeps all insects away from squashes, melons, etc.....

HOW much farther can we go in the direction of breeding for specialties before nature will give an imperative command to halt, asks the Live Stock Journal. We have run some of the beef breeds to the point of barrenness, if not of a diseased tendency to lay on fat. We have done the same with the hog, and in some instances bred off the snout, which nature intended for a purpose.....

RAPID milking is an advantage, says the above journal, if it is done without hurting or irritating the cow and she is milked clean. If not milked in a reasonable time, the cow refuses to "give down." If made to feel comfortable, she just stands and "pours out" the milk. The rapid milker has the advantage. How long ought it to take to milk a cow? Ordinarily about six minutes. A good milker, with good cows having no impediment in the way of rapid milking, ought to milk 10 cows in an hour. Some can not milk over eight, while others can milk twelve.....

WHITE Wyandottes, it is said, will have a boom as soon as the breed can be fixed and multiplied. But what advantage they will have over the original Wyandottes remains to be seen.....

CROCKS of butter to be kept for several months, says the U. S. Dairyman, should never be placed upon the cellar bottom. This causes two degrees of temperature in the crock, which will be at the expense of the quality of the butter near the top. The crocks will keep their contents far better if placed at least a foot from the cellar bottom, upon a bench and a thick woollen cloth thrown over it.....

THE Science News mentions that a crock of butter was lately taken out of a well where it had lain 50 years, and found to be solid and sweet.....

THE Dairyman quotes Prof. Sweet as recommending that butter be salted with a mixture composed of one pound of white sugar to three pounds of fine salt, using one ounce of this mixture to a pound of butter...

DR. VASEY, Botanist of the Department of Agriculture, says that a hand-book of Northern farm grasses will probably be issued at Washington during the coming Summer or Fall. Let us pray, says J. B. Olcott, that some observing farmer may have a hand in it.....

A WRITER in the London Ag. Gazette gives the cow her dues. The Hindoo worships the cow, and the Irish peasant lives with her on a footing of social equality. She is the friend of man in every zone, a peace-offering from Nature to the human race in all climes.....

THE cow converts millions of tons of herbage every year into the richest food for man. Although the scale of animal existence is almost infinitely graduated, the cow is the chief connecting link between human life and the earth that supports it. She is man's forager and nurse after he quits his mother's breast till he drops into the grave. Her patient churning mouth is always going as if she was aware that millions are depending on her for their most wholesome luxuries, as well as for nearly half their sustenance.....

REST a short time after eating, and the hotter the weather the longer the rest. Eat slowly and masticate the food thoroughly. It does not so much matter *what* we eat as *how* we eat it. Do not eat too much.....

MR. HALLADAY says, in the Poultry Keeper, that there are a few persons who sell knowingly Black Cochins for Langshans, but there are more who sell the same through ignorance, having purchased in good faith what they supposed to be Langshans.....

MR. P. M. SPRINGER and Mr. D. L. Thomas are engaged in a discussion as to whether hog cholera is or is not contagious. The latter in proof of his belief that it is not, publishes the following letter from M. W. Smith:

COLUMBUS, IND., Jan. 20, 1886.—I have been engaged in rendering dead animals for fifteen years, and I am proprietor of three factories located at different points. Since I commenced the business not less than 300,000 to 400,000 hogs and pigs have been rendered at my factories. They died from all kinds of diseases that hogs are afflicted with. In the meantime I have kept hogs and raised pigs each year, and they ran in the lots that inclosed my factories and had free access to the offal and ate the liver and lungs of hogs that had died from every variety of disease; and during all that time I never had a case of "hog cholera" among my stock; but my hogs have always been uniformly and uncommonly healthy. They have every possible chance to contract swine diseases, but have escaped. Scores of men living near my factories will attest these facts.....

PROF. W. A. HENRY wisely tells the farmers of Wisconsin that train loads of bran cross that State from Minnesota to be fed out on the Eastern farms. It should be dropped on Wisconsin farms, fed to cattle and thus changed into beef, butter, cheese and manure. Dakota and Minnesota will grow poor from this constant grain production, but Wisconsin by tapping this stream of bran can grow in wealth and fertility .....

THE presence of any thoroughbred cow in a herd has a most remarkable effect upon the

owner, says the American Dairyman. She gets all the petting. Her milk is set in a separate place for family use. When she has a calf, everybody must go out to see it. She has a refining influence in the family. Strange that a man must be taught manners by a cow.....

SOMEBODY having invented a milking stool that shuts up when the cow kicks, the Norristown Herald suggests that it is now in order to produce a milker who will shut up when the cow kicks.....

DR. HOSKINS says that the eyes of any Vermonter can daily confirm the fact that the Morgan blood has not "gone." The perpetuation of the Morgan horse is merely a question of public demand. Of late Morgans true to type seem to be on the increase.....

THE N. E. Farmer states that in many New England manufacturing villages, some of the poorest paid operatives use large quantities of lard instead of butter. It is spread on the bread the same as butter, and then sprinkled with salt.....

ENGLAND is troubled, not only with bogus butter, but with bogus meat. Large quantities of imported beef are sold as prime English beef. The Government will take measures to stop the practice.....

PROF. JAMES LONG has fully satisfied himself that a butter-making dairy farmer is doing himself great injustice in using the old practice of skimming when he could secure a separator. From 669 pounds of Shorthorn milk passed through a separator he secured 36 pounds of butter, or one pound for every 18.5 pounds of milk. From 274 pounds of Jersey milk, set in shallow pans, he obtained 9¼ pounds of butter, or one pound to every 29.6 pounds of milk. It is generally admitted that skim-milk from the separator is decidedly thinner in quality than that from the pans....

SHEEP-WASHING is coming to be less practiced in this country than ever before. Many good sheep men have abandoned the practice, and many of our agricultural papers are outspoken against it. The National Live Stock Journal, among other arguments against it, says the sheep themselves, could they speak, would vote unanimously against the practice. To this English sheep men reply that this latter argument is entitled to as much as, and no more, consideration than the objections of a dirty boy when he is about to be washed in a tub. The washing does the boy good, and, if done at the proper time, the sheep is helped by it.. .....

Everywhere.

TRANSCONTINENTAL LETTERS.—LIV.

MARY WAGER-FISHER.

Through the Willamette Valley; Eugene; Oregon fossils; immigration fever; the Umpqua Valley; Roseburg; Rogue River Valley; Oregon hotels; Ashland.

IN continuing our journey southward from Portland, we traversed by rail the same route through the Willamette Valley that we passed over about a year ago, but being nearly a month later in the season, and the weather perfectly clear, the scenery was considerably finer, the autumnal color being more intensified. I doubt if there is a more charming valley in the world in point of natural beauty, and it is large enough for many, many times its present population, which is scattered over too large farms, and ignores to a painful degree the value of attractive home surroundings. We had been told at the headquarters of the Oregon and California Railroad, over which we rode in this valley, that if we desired to see the entire route through to Ashland—the present terminus of the road—a point 16 to 20 miles from the line dividing Oregon and California, by daylight, we could do so by riding in a freight train from Roseburg, and that such a train with a passenger coach attached, went over the road once every four days; so in leaving Portland we arranged our trip to meet this train, but on our way we learned by a telegram that the train would not move for four days later, which left us with that much time to dispose of, and we concluded to stop at Eugene and see Professor Condon, of the State University, to whom we had an introductory letter.

Eugene, to my mind, is the prettiest town in the valley in point of location and surroundings, and Oregonians themselves take pride in Eugene, and call it "nice." Because of the State University being here, many farmers and others have made it their home for the purpose of educating their children. Prof. Condon has a fine and very interesting collection of fossils chiefly found in Oregon, and most of it is housed in the University. He has some choice specimens, however, at his residence, among which are the jaws and the bones of a fore leg of a now extinct horse, which in its day was only about 26 inches high. The teeth are perfect, and show the little horse to have been five years old. Another petrification of recent date is the toe of a stocking—the foot of the stocking filled with mud which stuffed it out as if a foot were in it—and the petrification is so perfect that every detail of the toe is as apparent as in the real thing—it was a *woven* stocking, and the top and bottom were joined together by sewing. He has bones of camels found at the foot of the Blue Mountains, twenty feet below the surface of the ground, and of the rhinoceros. Fossilized sea shells are exhumed in great quantities about Eugene, but it is evident that the sea receded from Oregon at a later period than it did from Iowa, for example. One curious thing in his collection is the face of a baboon carved in stone, and unmistakably the work of Indians. It was found in the sands of the Columbia River, but where had the Indians seen a baboon? Anent fossils, there is in the Scientific Museum at Seattle a petrified egg, the shell, albumen, and yelk being perfectly defined.

The hotel where we stopped while at Eugene, was kept by Pennsylvanians, who had lived 10 or 12 years in Southeastern Kansas where the husband's health was affected by the alkali water, and wife and children were charged with malaria. There is some malaria in the Willamette Valley, but the Pennsylvanians like Oregon better than Kansas. As we meet with many Pennsylvanians on this coast, the question often arises, why so many people leave that magnificent State of such varied resources, and with thousands of acres of still unutilized land, and go "West." Nothing explains the matter, probably, better than the restlessness inherent in the American—the inborn as well as educated tendency for "pastures new;" for the majority of people will do vastly better in the good old State of William Penn that they will anywhere west of it, all railroad and real estate agents advertising "to the contrary, notwithstanding:" what is gained in one direction is offset in another, as a rule. But I would not, under any ordinary circumstances, live in a malarious region, or where the drinking water is unwholesome, for there is no financial profit to be named under the sun worthy of the sacrifice of health.

After a day at Eugene, we went further south, as far as Roseburg, where we again halted for a couple of days. The railroad, after leaving Eugene, soon enters the Umpqua Valley, which is narrower than the Willamette, and the scenery becomes gradually more and more like that of Northern California—mouse-covered hills, smooth and sleek, save for their setting of russet clumps of scrub oaks, the yellow of the wheat stubble fields; but not a green field to be seen. No rain has fallen for weeks, maybe for months, and the grass is as brown as the Buffalo Grass in Colorado in Summer. This is quite a valley for sheep. Some fields of unpicked hops were noticed, an occasional farm house was snugly nestled in an orchard of fruit trees—a picturesque country with the land lying in billowy mounds, and the streams bordered with deciduous trees in their full dress. At one point we saw a deer swimming the Umpqua River, and a passenger quickly drew out a revolver and from the car window discharged two shots at the pretty creature, which luckily did no harm. The deer are said to be quite a nuisance to farmers by their trespassing, but the deer undoubtedly regard the farmer as a greater nuisance.

Roseburg is a pretty little town in the mountains, with some good buildings, and while it was the terminus of the railroad it was of some considerable importance, which it has now in large part lost. An easy-going, elderly woman at the hotel told me that she crossed the plains in an ox team in 1853—being six months making the transit. She said that then the native grass in the Umpqua Valley was breast-high, and that it was predicted that it would never give out, and California herders drove their cattle there for pasture, but the prediction had sadly failed.

The road from Roseburg to Ashland was through territory new to us, and there was more to note. The country became drier and when we reached the Rogue River Valley, the products of the land were of a more valuable character. This valley has been greatly extolled for its excellence, and it has some fine farms well tilled and set with attractive homes. Here flourish peaches, grapes, melons, apples, pears, plums, corn good in quality, but small of stalk, more wheat and oats than other grains, an occasional bevy of cattle and horses—improved farms worth from $20 to $25 per acre. Here the Black Oak succeeds to the White Oak of the Willamette Valley—the former I am told indicates an older country. The railroad runs all the way through mountains in which are set pretty little valleys—a road costly to build, of many tunnels, but excellently built. All along this region there is more or less mining for gold, as there is gold in the mountains on this coast from Patagonia to Alaska. We had for fellow passenger an Ex-Governor of Oregon, who detailed a number of thrilling incidents connected with Indian hostilities—now happily at an end—of the marvelous heroism of women, whose deeds had they been enacted on the soil of New England would have become historic themes. He was a man of marked kindness, as we had abundant evidence in his attentions to a sick and aged woman to whom he was under no special obligations, and the kindness of Oregonians to such as are sick or in trouble, is proverbial. One would suppose that people who had the energy to cross the plains in an ox team, as so many of the early settlers did, would have had enough energy left over to be manifest unto the present day. But for the most part, it was expended in that one stupendous undertaking. The Ex-Governor gave us, from his wife's lunch basket, some dried elk meat, which he pronounced the most nutritious and digestible of all dried meats, and we found it delicious.

We passed no towns of especial note in the later part of our journey,—Gravel Pit, Jump Off Joe, Grant's Pass, half mining towns, and the people about the stations dressed in a back-woodsy fashion—both young men and women in high-heeled shoes, the latter with dangling ear-rings, bangs to their eyes, and skirts distended with hoops. We reached Ashland early in the evening, and getting into the only 'bus at the station, were taken to the White Sulphur Springs Hotel, where we found a very good table, but a shabby room. We have been in many and various hotels in different cities and towns in Oregon, usually at the best hotels, but taking them all in all, they are of inferior character, and far from being "first-class" in the Eastern sense, and even in Portland the residents say that the great need of the city is a first-class inn. We found a number of hotels without a bar for the sale of liquors, and there seemed to be a healthy and effective temperance influence prevailing; but considerable gambling was reported. At Ashland we slept for three nights, indulging in this delay for the purpose of securing the choice outside seats on the stage—a matter of importance as we had before us a stage ride of 125 miles before reaching Delta in California, where we could again board a railway car. In Ashland we found almond burrs full of ripe nuts, great quantities of dahlias, roses, petunias, and chrysanthemums in strikingly luxuriant bloom. It was October 25. The town has a large woolen factory and a fur-trading room under the auspices of the W. C. T. U. and only two poorly patronized saloons. It is surrounded with mountains, wooded on one side, and nude on the other. On Sunday we attended church where a most uninteresting man who had never been called to preach, talked distressingly through his nose, and where the atmosphere was so hot and close that had I been a "fainting female," I should have fainted, as my piety is very partial to a fresh supply of oxygen, and plenty of it.

RURAL SPECIAL REPORTS.

Alabama.

ATHENS, Limestone Co., June 7.—We had a backward and cold Spring, therefore farm crops and fruit are late. Wheat is being harvested this week; but little is raised through Northern Alabama. This year's crop is rather above an average in yield, but the acreage is less in this locality. Corn and cotton look well. Apples, peaches and plums are good half crops. Small fruits are fine: mulberries and blackberries never fail. We do not need cultivated blackberries of extra varieties here—the wild ones far surpass any I have seen in the Northern States, and wild mulberries are 1¾-inch long and as large around as one's finger. My Angel of Midnight Corn is in tassel and my Bird Cantaloupe is in bloom.

W. M.

Illinois.

MONMOUTH, Warren Co., June 12.—The weather has been very dry and sultry for the past three weeks. Corn looks well, but oats and meadows are needing rain badly. The strawberry crop is short, and unless we get rain soon it is said that the entire berry crop will be a failure. I have never seen pasture as good as it has been this Spring, but this dry weather is very hard on it. J. K. S.

Iowa.

OSAGE, Mitchell Co., June 9.—Vegetation is forward, but crops are not unusually in advance of the average season. Produce is lower now than ever before since the war, or perhaps it never reached so low a point here. Eggs are quoted at 6½ cents a dozen; wheat, 40 and 45 cents; barley, 28 cents; oats, 21 cents; corn, 22 cents; rye, 35 cents; flax, 75 cents; potatoes, 20 and 30 cents; butter, unsalted, 6 and 8 cents; choice dairy, 10 cents; stock—fat cows—$2.50 per cwt. The continued rains during early planting season will cause both light and late crops. In some localities quite a drought is prevailing. We are longing for "showers of blessing." L. S. E.

Kansas.

BEATTIE, Marshall Co., June 11.—Corn all planted and cultivating has begun. Stand good all round. Oats look bad on account of the hard drought; heading out, though not over 12 to 14 inches long. Clover good—just ready to cut for hay. Hog cholera has been a plague here for about a year. No remedy has been of any use. Thousands have died. I have lost over 100 head since Christmas.

"SUBSCRIBER."

Kentucky.

PEMBROKE, Christian Co., June 10.—Peaches a complete failure. I failed to find a single bloom in this section. Worse, the trees are, most of them, dead—a few green branches amid a mass of decaying limbs. A temperature of 20 degrees below zero is evidently fatal to the peach. One of the largest nurseries has dug up all its peach trees planted for sale, and burned them on the plant bed, as the proprietor could not afford to put such diseased specimens on the market. Pears almost a failure. Apples a fair crop. Grapes not much injured. Wheat unusually promising. It was protected by deep snows during the severe weather; prospect good for an unusually good yield and quality. Tobacco ruling very low; prices not satisfactory, but it will be extensively planted again, simply because we can find no substitute for it. Our farmers would like to abandon tobacco, but money must be had, and with necessity as a stimulus and custom as a force, we are bound to continue raising a crop that is ravenous in its demands for the very best food, and whose gluttony leaves little for the next crop. Worst of all, nothing is ever returned to the soil from the tobacco crop.

J. D. O'B.

North Carolina.

HIGHLAND, Macon Co.—I find it in every way delightful here, excepting that living is somewhat rough and the bill-of-fare is rather scant at this season. Just like the South everywhere, it is a hand-to-mouth system, no prevision, no provision for the future, and a waiting on Providence or time and season for everything that is wanted; and so in the Spring we have to wait for the skeletons to get fat before we have any beef, and the grass to come up before there is any butter. I am the only man, I guess, in the South who has a barn full of hay on hand and has kept seed corn fit for seed. Corn planting has been done two or three times over, because the seed has been left to soak on the stalk and got frozen in the cold spell; and yet every one takes it easy and is happy. C. S.

THE FARMER'S CLUB

ANSWERS TO CORRESPONDENTS.

[Every query must be accompanied by the name and address of the writer to insure attention. Before asking a question, please see if it is not answered in our advertising columns. Ask only a few questions at one time. Put questions on a separate piece of paper.]

EVERGREENS FOR KANSAS AND THEIR TREATMENT.

"Subscriber," Washington, Kan.—1. What varieties of evergreens do best in Kansas? 2. How should evergreen seedlings from a nursery be planted, shaded and cared for? 3. What kinds are best adapted for topiary work—cutting into different shapes?

ANSWERED BY PROF. EDWIN A. POPENOE.

1. For a short list of evergreens that may be planted in the eastern third of Kansas, in expectation of fine growth with reasonable care, I should name the Red Cedar, the Austrian and Scotch Pines, the Norway Spruce. Add, by way of experiment, the American Arbor-vitæ, the White Spruce, the White Pine, the Douglas and Engelmann Spruces of the Rocky Mountains, the Dwarf Mountain Pine, the Table Mountain Pine, the Yellow and Pitch Pines of the Alleghanies, and you have a sufficient variety for ordinary lawn planting. All of these are successfully grown at the college here. Our experience with the retinispora and the various junipers is not sufficient to warrant conclusions, though several species among them promise well. The same may be said of various fancy Arbor-vitæs that we are now testing. 2. In handling evergreens of any size the chief care is to keep the roots moist until planted. This is a matter of special importance here where we may have to handle them during a drying south wind. They should have the roots "puddled," or dipped into a thick mixture of stiff soil in water, as soon as they are unpacked. If a

delay of even a few hours is necessary before planting, the trees should be "heeled in," or the roots well covered with damp earth. If the smaller-sized seedlings are to be cared for, they are best set in beds, and protected from the heat and dryness of sun and wind in midsummer by screens of lath, which may be shifted or removed as occasion demands. It is cheaper to procure trees several times transplanted in the nursery, unless the purchaser is skilled in tree culture. 3. Shearing trees is an unnatural practice, and in bad taste, unless in a hedge where a formal shape is admissible. The close-growing sorts, like the Red Cedar, the junipers and the Arbor-vitæs, are alone adapted to such modes of training; but the tree lover prefers to bring out their peculiarities rather then to bring all down to the same or similar set forms.

Ag'l College, Manhattan, Kans.

THE CUT-WORM LION.

J. N. L., Haw Patch, Ind.—I send a specimen of an enemy of the cut-worm, which will kill more than a lazy boy. What is its name?

ANSWERED BY PROF. A. J. COOK.

The insect is the grub of one of our most valuable predaceous insects—Calosoma calidum. It is black with a horny back, and it needs this shield, as any one may readily believe who sees it attack a savage caterpillar much larger than itself. Like most larvæ of beetles, it has six-jointed legs just back of the head, and two caudal horns, resembling jaws, at the opposite end of the body. The mature insect is one of our most common and handsome ground beetles. It is black with three rows of silver or gold-colored spots along the back of each wing cover. Both the grub and mature beetle are worthy of our regard, as both feed extensively on our worst insect pests. This grub is sometimes called, with good reason, the Cut-worm Lion. It is very exciting to see one when hungry attack a cut-worm. Though the latter may be much the larger and stronger, the hungry grub fearlessly fastens its jaws into its prey, changing its hold till it secures a position in which it is safe from the strong jaws of its victim, or at least such a position that the cut-worm can bite only the horny back of its destroyer. The stronger cut-worm will turn over, writhe about, twist around, and double up, and yet all the time the fiery grub will maintain its hold, evidently sucking the blood from its prey, as proved by its own increasing size, and the rapid diminution of its victim. In about five minutes the discouraged cut-worm gives up, and is then soon despatched by the triumphant, but no longer hungry, grub. There is something wonderful in the economy of Nature as seen in the way by which the balance is maintained. Last year the cut-worms were terribly destructive in Indiana and Michigan. This, of course, gave plenty of food to these Cut-worm Lions, and so, of course, they prospered with exceeding prosperity. So we may hope, with much reason, that the cut-worms will do far less damage this year. With the cut-worms thinned out, the grubs will fail of food, and soon will be far less in numbers. Then our enemies, the cut-worms will again thrive. And thus we study the marvelous relations of life on the globe.

KEEPING AND USING MANURE.

J. C. V., Fort Scott, Kans.—How is manure best kept through the Summer for use on Fall crops? 2. Which is better—to manure in the hill or broadcast?

ANS. 1—If in barns and trodden quite compact, manure will keep nicely; but it should not be allowed to become so hot as to burn. This may be prevented by a liberal use of water; but the better way for the majority of people and circumstances is to draw it out and put it into broad piles, or it may be piled in the yard. In either case it should be put into broad piles, the outside all round being kept a little the highest so as to cause all the rain falling on it to run into the pile. It is well to mix with it plenty of vegetable matter, such as straw or seedless weeds or any spoiled hay, and also to mix the manure from the horses, cows and other stock well together, so as to have an even grade. If there is too large a proportion of horse manure, it would pay to put over the pile, while building, an occasional layer of muck or other rich soil—good rich prairie soil is good—so as to prevent so rapid a fermentation as to cause fire-fanging. After the manure has all been placed in the piles, a thin coat of soil over them will greatly retard fermentation and also arrest any escaping ammonia. If the manure gets hot, it will also pay to apply water, if convenient, in quantity sufficient to moisten the pile and thus control the fermentation. 2. There is no doubt that the plants to which manure is applied will take up a larger proportion of the fertility when it is applied in the hill, and particularly so when only a limited quantity is to be used; but such application has a tendency to forward the crop while young, and to starve it later, so that broadcast manuring is quite as satisfactory. One thing should be always kept in mind: manure gives the largest returns and is most satisfactory when mixed with the surface soil. In no case should it ever be plowed in deep.

SILAGE A YEAR OR TWO OLD.

E. A. B., Talladega, Ala.—What can be said of the quality and feeding value of silage kept over one year in the silo? My silo was filled last year; but not quite half was used, and the remainder is still in the silo. The end exposed to the air will, of course, be spoilt; but will that in the center? The weight of stones has never been removed from that part.

ANS.—There are several well-authenticated records of corn silage kept in this country, in sound and palatable condition, for more than a year. Well packed and pressed and left undisturbed, particularly if in a masonry silo underground, so the temperature varies little, there is no evidence contrary to the belief that silage can be kept for an indefinite period. In this special case we do not hesitate to express the opinion that the bulk of the remaining silage can be kept unimpaired for another year. There will undoubtedly be a total loss of the material on the face of the exposed surface, extending into the mass from eight to twelve inches. If above ground, and exposed to varying temperature, the decay may penetrate farther. If the empty half of the silo should be filled this season there would probably be a loss of an equally thick section of the new material where it joined the old. But this could be largely avoided by a partition of boards set on end and fitted tightly against the bank of old silage. Without this there might be difficulty in the new lot settling evenly on the side next the old. A friend writes us that within a few days he has examined silage in good order in silos in the Carolinas and Georgia, which gives every indication of keeping well for months to come.

FORCING A PIG.

H. C. K., Blodgett's Mills, N. Y.—What is the best grain ration for a Spring pig to give the greatest weight by December 1, in addition to all the milk it will drink? Which would be the better—keep it out-of-doors or on a floor?

ANS.—By all means put the pig out-of-doors where it can get grass. Let it have a bed sheltered from the hot sun and rain, and the range of a pasture. The exercise will give it an appetite which may be aided by allowing it to have all the charcoal it will eat. This may be kept in a box and in another there should be a mixture of salt and sulphur, where piggy may take a lick whenever he desires. These helps will keep the stomach in good order. Mix fine wheat middlings with the milk, and allow this swill to get slightly fermented. When the pig is two months old, put in one-fourth of corn-meal, and when it is six months old make the meal part of the food one-half corn-meal. Barley meal is excellent. Wheat bran may be mixed with finer food. There must be course and fine food to keep up a perfect and healthy working of the bodily functions. All fine feed will make a disordered stomach and fever, and all coarse will not furnish sufficient nutrition for the blood to make a rapid growth. A grown hog may be fed all corn, for its body is already grown.

INCREASE OF CATTLE.

F. M. Ashtabula, Ohio.—If I let out, on shares, a heifer with a calf by her side, and she and her offspring have calves every year on April 1—just the day the first is two years old—how many head will there be in all within the five years?

ANS.—These would be most remarkable cattle to have heifer calves with such regularity, but if they did, and none of the calves died, the answer may be figured out. The start would be made with two animals. At the end of the first year the heifer would have calf, thus making three animals. At the end of the second year both the cow and her first calf would have calves, thus making five animals. At the end of the third year calves will be dropped by the cow, a three-year-old and a two-year-old, making eight animals. At the end of the fourth year calves come from the cow, a four-year-old, a three-year-old and two two-year-olds, making 13 animals. At the end of the fifth year additions are from the cow, the original calf, a four-year-old, two three-year-olds and three two-year-olds, making a total of 21 animals.

Miscellaneous.

J. T., Gusenaw, W. Va.—1. Would it be advantageous to mix muriate of potash with stable manure, the same as kainit? 2. Would it be advisable to mix bone-meal and lime together; or what form of phosphoric acid would do well on land which has had a heavy dressing of lime within a year, as I see some object to using superphosphate on limed land on account of its reverting? Would the lime be detrimental to floats, or undissolved South Carolina rock, on such land? 3. Which is the better feed, all things considered, prices being equal, cotton-seed meal or new-process linseed meal?

ANS.—1. Yes, if your land is poor in potash. 2. No. There is nothing to be gained and something to be lost. If you wish to lime land, spread it alone. Use bone, that is, raw bone flour. Any kind of soluble phosphate will revert when there is plenty of lime in the soil. But the reverted acid is nearly as valuable as the immediately soluble, because that reverts in a short time. 3. Cotton-seed meal.

A. P., Highland Falls, N. Y.—1. How is Boston Lettuce raised? 2. How can I get mushrooms to grow in my fields? They do not seem to be indigenous here.

ANS.—1. The Boston Market or White-seeded Tennis Ball is a small, solid-hearted variety, excellent for use between November and May, but of no use in Summer. Boston-Curled is a pretty-appearing lettuce, but not, in our estimation, of fine quality. Lettuce likes rich, mellow, moist soil, and to have it crisp and tender it should be grown quickly. 2. After a soaking rain in August plant pieces of fresh brick spawn, about the size of an egg, in the field, and some two or three inches under the sod. But even then there is no certainty that mushrooms will grow there.

J. B., Pittsburg, Pa.—Some of my pear trees, standing in grass and not manured for some years, are very full of fruit. The grass will be cut early in July; what would be a quick-acting fertilizer to scatter around the trees to help them to produce large fruit?

ANS.—We should not do it. It will be too late, and might only serve to start the trees into a late growth, which would be killed by the Winter. Again, we should not apply soluble nitrogen alone, and if at all in the Spring. Then it would be better to use the nitrogen with wood ashes, sulphate or muriate of potash and bone.

H. M., Wyanet, Ills.—The horse collars should be kept clean and soft. Of course, no man will drive a horse with a collar that does not fit. Scrape the dirt away from the leather and beat it frequently with a stick. Oil the leather at intervals. Where the collars are kept as they should be, we do not think sweat pads are necessary. Write to the Commissioner of Immigration, Des Moines, Iowa for information in regard to lands.

G. E. B., Waynesville, Mo.—Probably the most practical way to remove the stumps would be to dig them up by the roots. We do not advise experimenting with explosives unless one is accustomed to their use. In some localities parties make a business of blowing out stumps, and can thus do the work cheaply and effectively. Dig a ditch around the stump, and with axe and grub-hoe cut off all the roots you can reach. A good team can then pull the stumps out, and the hole can be filled

F. W., Neenah, Wis.—For an account of the Norfolk and Suffolk Red Polls, see RURAL of May 29. Yes, they are excellent general-purpose cattle. For milk and beef combined, they are probably as good as, if not better than any of the other pure breeds. While the improvement of the "poor man's cow"—the cow for the man who keeps only one—is greatly to be desired, it is a trifle doubtful whether it would be worth while to produce a general-purpose cow, or whether one could be produced in any case.

W. F. K., Clinton, La.—Of the grasses sent for name, No. 1 is Lolium perenne, Italian Rye Grass. Early maturity and rapid growth after cutting are its leading characteristics. All animals are fond of it. It is valuable for green fodder or hay. It is very nutritious. The second is Cheat or Chess—of no special value.

G. M., Wingham, Ont.—The Japan Quince is propagated by cuttings, by offsets and grafting. Grafting on the Japan Quince. It makes a curiosity to graft the white, red, dark-red, etc., on one plant.

DISCUSSION.

H. H., KINGSTON, N. Y.—I must differ from Mr. Taplin with regard to what he has said in a late RURAL, about the out-door behavior of the La France Rose. It is a grand success in my garden, and what a charming rose it is! If not really at the head of the cutfre list, it is surely second for beauty, size and fragrance. Mr. Fish, the distinguished floral writer in England, pronounces it the best of all, without hesitation. Who can name its superior? This sweetest of all roses was raised by Guillot the younger, and was first sent out in 1867. I find that roses do nicely in moist soil. I have a bed along the border of which flows a gentle rivulet from a cool spring. The soil remains wet all through the year, and the roses grow with exceptional vigor, blooming profusely. Of course, the drainage is free and ample. What a field of labor is presented to the progressive nomenclateur by our rose list. Large plant dealers will soon need to run special lumber yards with cutting and planing machines to supply their labels.

THE USE OF SALT AGAIN.

L. C., PHILADELPHIA, PA.—I note what the RURAL says in a late issue about the use of salt. The writer's remarks show plainly that he really never studied the subject, and that it is all guess-work. My conclusions are quite different from those of the RURAL. I looked into the subject myself a couple of years ago, and came to the conclusion that the habit was not only an unnecessary but a bad one, and so I quit it with results completely satisfactory.

R. N.-Y.—The alleged "guess-work" indicates the opinion of the scientific and practical world on this subject more correctly than do the "conclusions" of our friend. It may be, however, that immemorial belief and practice in the matter have all along been wrong; but it will take more than the opinion and experience of any single person, or indeed of any hundred persons, to convince the world of the blunder. The subject is well worthy of discussion, however, and our columns are open to anything valuable our friends may have to say on either side of the question. Contributions from our medical readers would be especially acceptable, and we trust our highly esteemed contributor, L. C., will also favor us with the reasons "for the faith that is in him." We have already anti-liquor and anti-tobacco agitations; are we to have an anti-salt agitation also? All the RURAL wants is to draw forth "the truth about it."

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING June 19, 1886.

G. C. R., mulberries received.—E. P.—E. R. P.—F. D. D.—C.—C. R. A.—F. R.—E. M.—F. D. L.—A. J.—C. M. S., seeds received.—J. R. P., not until August.—P. P. S.—N. H.—E. H.—T. C. M.—C. A. K.—C. B. W.—W. B., thanks.—E. W.—J. D. O. B.—E. A.—L. B. L.—H. S.—J. P.—W. T.—C. A. G.—W. M.—W. D. S.—C. C.—L. S. E.—E.—L. S. E., thanks.—H. A.—H. E. A.—L. O. R.—L. C.—T. T. L.—E. S. G.—A. B. C.—L. M.—C. S. T.—D. C.—A. J. H.—L. V.—C. A. K.—J. N. L.

Miscellaneous Advertising.

That Tired Feeling

The warm weather has a debilitating effect, especially upon those who are within doors most of the time. The peculiar, yet common, complaint known as "that tired feeling," is the result. This feeling can be entirely overcome by taking Hood's Sarsaparilla, which gives new life and strength to all the functions of the body.

"I could not sleep; had no appetite. I took Hood's Sarsaparilla and soon began to sleep soundly; could get up without that tired and languid feeling; and my appetite improved." R. A. SANFORD, Kent, Ohio.

Hood's Sarsaparilla

Sold by all druggists. $1; six for $5. Made only by C. I. HOOD & CO., Lowell, Mass.

100 Doses One Dollar

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Of every Description,

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ICE PITCHERS.

The Linings of our Pitchers are held in position by the Cover, which is secured by thumb-screws and is easily removed and replaced, thus facilitating the cleansing of both pitcher and lining. The lining is of the finest Stone China, and has no equal for preserving ice and keeping water pure.

SALESROOMS:

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THE
RURAL NEW-YORKER.
A National Journal for Country and Suburban Homes.

Conducted by
ELBERT S. CARMAN.

Address
THE RURAL NEW-YORKER,
No. 34 Park Row, New York.

SATURDAY, JUNE 26, 1886.

Of 20 different (?) kinds of oats growing at the R. G., White Belgian, Clydesdale, Badger Queen and Welcome are the first to "head out." With the exception of Badger Queen, which, under that name, at least, we have never before tried, we believe, and have so stated, them all alike. Our object in again raising them side by side is to enable others to judge whether we were correct or not.

It is probably true that the disease known as "gapes" kills more chickens than any other. Most of the remedies offered are uncertain, such, *e. g.*, as obliging the ailing fowls to inhale lime dust and tobacco smoke. Will kerosene kill the worm which causes gapes? Will it kill the chicken if a drop of kerosene be dropped in the trachea? We can answer "no" to the latter question, and from a single experiment we are inclined to say "yes" to the former. The writer dipped a very small feather (about two inches long) into kerosene, and then carefully pushed it down the windpipe, carefully turned twice or thrice and then withdrew it. The chicken which had the gapes recovered in a few hours. The experiment is worthy of repetition.

Many of our readers will remember that upon the half-acre of poor soil on which we attempted to test the value of the Rural's trench-mulch system of raising potatoes, a large amount of chemical fertilizers was sown, both broadcast and in the trenches—enough we should suppose, so far as potash and phosphate of lime were concerned, to last for half-a-dozen crops. The field was sown to rye. The crop is a good one, but no better than the rye of neighboring fields. This Spring, as has already been stated, high-grade nitrogenous fertilizers were sown at the rate of 100 pounds to the acre, except upon a strip 10 feet in width. The color of the rye of that strip is and has been lighter, but it promises to yield about as well. Why this half-acre does not yield a great deal more than the other parts of the field also in rye is what we can't understand.

The American Association of Nurserymen, Florists and Seedsmen met at the Agricultural Department Building, Washington, D. C., last Wednesday and Thursday. The list of the new officers elected is given in our news columns. A strong effort was made to elect Herbert Myrick as Secretary instead of D. Wilmot Scott, of Galena, Ill., who was re-elected. A great lack of system and proper arrangement marred the meeting, which resembled an assemblage of school boys for fun, rather than a convention of men for business purposes. From 400 to 500 members were present, and 27 States were represented by vice-presidents. Many had traveled long distances, and it was hardly worth while to go to so much trouble and expense of time and money to learn so little. The young members who hoped to learn something which would be of use or profit to them on their return home, were especially disappointed. One good thing the Convention did—and that was outside its legitimate business—it passed a strong resolution in favor of the Oleomargarine Bill now before the Senate.

Wednesday last Chairman Morrison, of the House Committee on Ways and Means, made an adverse report, on behalf of the Democratic majority, on the resolution to restore the wool tariff of 1867, as desired by the wool growers of the entire country. He takes the old ground that the tariff of 1867, enacted "in obedience to the clamor" of the flock-owners of the chief wool-growing States, lessened the production and lowered the price of wool, and insists that putting wool on the free list would increase the production and price of the staple, while affording cheaper fabrics to the consumers! No attempt is made to explain this marvelous phenomenon so diametrically opposed to the acknowledged results of protection in other industries. If free trade in wool increases the price of the home-raised raw material, how can it at the same time enable the home manufacturer to turn out cheaper goods for the consumer? Does not the cost of the raw material have much to do with the price of the finished product? Representative McKinley's report, on behalf of the Republican minority of the Committee, is a convincing reply to the specious reasoning of the majority's report. The subject has been largely discussed in our columns already, and as tariff legislation during the present session of Congress, is rendered highly improbable by Thursday's vote in the House, further discussion of the question will be more appropriate when it comes up again in Congress, probably during the next session.

Twenty-six United States Senators are the direct owners of individual and corporate property amounting to $100,000,000, and 22 of them are agents for corporate monopolies, chiefly railroads, the property of some of which is now legally forfeitable to the Government, and they have to legislate as Senators on questions which they are paid to support as lawyers. In view of this disgraceful state of affairs, Senator Beck, of Kentucky, the other day introduced a bill forbidding, under heavy penalties, Senators or Representatives acting as attorneys for railroads which have received Government aid—land-grant roads—and concerning which, therefore, they would have to act in their legislative capacity. The bill startled and surprised the railroad Senators, and, being obviously fair, was passed before they could plan to defeat it. It was afterwards "reconsidered," however, and still hangs up in the Senate, where it is likely to remain till the end of the session. All the railroad Senators are combined against it under the leadership of Edmunds, who is stimulated to defeat it by pleasant memories of big fees received from the Central Pacific Railroad, and cheering prospects of more to come. Legislative morality, the interests of the public, and common decency demand the passage of the measure; shall it be defeated by shameless, selfish greed?

The Senate, by a vote of 42 to 1, has passed the bill forfeiting the unearned lands of the Northern Pacific Railroad alongside that part of its main line which was to extend from Wallula Junction to Portland, and that part of the Cascade Branch which may not be completed at the date of the passage of the bill, and making the right of way in the Territories subject to taxation. Nothing in the act is to be construed to waive any right of the United States to forfeit any other lands granted to the road, for failure, past or future, to comply with the conditions of the grant. There is no intention whatever of constructing the Wallula-Portland road, yet it was sought by the railroad to withhold indefinitely from settlement the land granted for its construction. The Cascade Branch should have been completed seven years ago to entitle the company to the grant. This is the first of the numerous bills forfeiting land grants, acted on by Congress, and all the railroad lobbies and agents were bitterly active against it. Insidious amendments, nullifying or minimizing its most important provisions, were pertinaciously pressed by the railroad Senators. These were all rejected by various majorities, and when it came to the final vote, Blair, of New Hampshire, was the only Senator with effrontery barefaced enough to go on record against it. A more sweeping bill has already passed the House, so that this is sure to pass as a compromise measure, and if the other land forfeiture bills meet with the same success, over 130,000,000 acres of excellent land now unjustly held for corporations, will be thrown open for settlement under the Homestead Law.

The Senate Committee on Agriculture has been listening to arguments from the supporters and opponents of the Oleomargarine Bill during the week. The main reliance of the latter has been the purchased opinion of scientists with regard to the healthfulness of the product. These examined only choice goods turned out by the best makers—not fair specimens of the product; and who that reads the papers does not know that the highest scientific knowledge is at the command of the best filled purse? Experts say the fat must not be over 24 hours old when manipulated into "oleo;" but there is abundant evidence to demonstrate that much of the fat used, especially in the East, is much older. Some of the highest authorities also say the wholesomeness of bogus butter cannot be proved by chemical analysis, it must be ascertained by its effects on the human system. Senator Miller, Chairman of the Committee, thinks the bill will pass—possibly by 10 majority—but Western Congressmen believe it is in danger of defeat by the votes of the Republican Senators from New England, and some of them declare that if this happens, they will help to take up again and pass the Morrison Tariff Bill, which is bitterly opposed by the Protectionist New Englanders. If the bill shall fail to pass, it will be because the farmers of the country have failed to exercise due pressure on their Congressmen.

The question put squarely before the people of Nova Scotia at the Provincial elections last Tuesday, was secession from the Domion or continued union with it, and by the election of 31 out of 38 members of the new Assembly—an unparalleled majority since the formation of the Confederation, 19 years ago—the voters decided that they preferred secession. The Province has been dissatisfied ever since the union with the Dominion, and her dissatisfaction has increased as her prosperity has diminished. It is charged that when Nova Scotia entered the Union, her debt was $5,000,000, while now her proportion of the Dominion debt is $28,000,000, or over $60 a head for every man, woman and child. The Dominion has incurred vast debts for building railroads, improving canals and developing new country; but while the other Provinces are benefited by these, especially Ontario, the Maratime Provinces derive little or no advantage from them, though groaning under the load of taxation caused by them. The present purpose of the Nova Scotia secessionists is to induce New Brunswick and Prince Edward's Island to join in the movement with a view to the formation of a Maratime Confederation, or, failing in this, to force the Dominion to turn a more attentive ear to the Province's remonstrances for fairer treatment, and to secure Imperial aid in both or either project. Union with the United States would be a final alternative.

MAGNOLIA MACROPHYLLA.

Perhaps scarcely one in a dozen of our readers has seen the flower of the Great-leaved Magnolia (M. macrophylla.) In general appearace while young it resembles the Umbrella Magnolia, though the leaves are larger, obovate, and heart-shaped at the base instead of pointed, and the under part is covered with a dense silvery bloom. Our tree is now about 10 years old and 15 feet high, blooming now, June 10, for the first. The flowers are monsters, of a bell shape and white color; the petals eight inches long, four wide in the middle, tapering towards the base and rounded tip. Thus the flower when spread open measures 17 inches. The petals are in two whorls of three, the inner three blotched with dark purple near the base. They have little odor and that rather unpleasant. This tree is perfectly hardy at the Rural Grounds. It is free of the decided objections to the Umbrella, those of a scraggy growth and tendency to sucker. Unlike that tree also its growth for the first few years is slow, though it compensates for this by a symmetrical form. This tree is found wild in Kentucky and southward, though it is hardy in Rochester, and we know not how much further north. All home grounds need a few large-leaved trees. They give to a lawn the same luxuriant appearance that cannas and caladiums give to the flower border. For this effect we know of no tree more suitable than the Large-leaved Magnolia.

DISCOURAGED FARMERS.

There are hundreds of discouraged farmers in this country. They do not hesitate to advertise their condition. One can hardly blame them. The world looks dark, indeed, to the man who has lost his courage. Courage is fickle; it is hard to win it back when once it is driven away. It is customary to sneer at the discouraged farmer, and tell him that his failures are his own fault. This talk does no good. It only makes a man more bitter to say "I told you so" to him. Such men need encouragement and hope, and not sneers. Many a man who has worked carefully, honestly and well, finds himself no higher up the scale of agriculture than he was a year ago. No wonder the long days of drudgery that lie behind him blacken his prospects now, and magnify his obstacles. We appreciate the position of such a man, but would beg of him, for the sake of his family at least, to keep his courage and cheerfulness. You owe a duty to your family. The strong must uphold the weak. Strength comes only through suffering. When you give up, you give every one of your children a lesson in cowardice. Life is not so bad after all. Your work has not been all in vain. There are plenty of people worse off than you are. Hundreds of these city people who go about with plenty of money, who never seem to be troubled, have a life-long hunger gnawing away at their hearts. Rest assured that some man envies you your lot. You would not sell your own health or the health of your wife and children for any money. The world is better than it might be, friends. Let us make the best of it. Times are going to be better again. Never get so sour and discouraged that you cannot enjoy the good times when they come.

BREVITIES.

The Parry Strawberry June 11 was at its best and yielded well.

We have been trying to make out which of our 66 varieties of strawberries bears the most fruit (June 14). We decided in favor of the Dewey, of which we shall have more to say.

Poor, tired land! Oh, how weary! and how hungry, too! Let our grandsons feed it and rest it, says the tired farmer. We cannot work for posterity. It is as much as we can do to earn our own living.

So, after all the hubbub and bluster, the fishery trouble—that tempest in a teacup—is in a fair way to adjustment, and that, as we said editorially in the Rural of May 29, "through British repudiation of the Canadian attitude."

In answer to inquiries—Any bags will answer for "bagging" grapes. It is a poor bag, indeed, that will not last through the season. Any bag that will hold a pin is good enough. One can make his own bags in a short time by pasting good newspapers together.

In the way of peas, what now seems to be most needed is a wrinkled variety as good and early as the American Wonder, as productive as the earliest, with haulms that grow about two feet high. This is what we are now working for by crossing the earliest smooth peas upon the American Wonder.

We are painting the base-boards of our new chicken yards with tar and linseed oil—mixed half and half. Now, why isn't this a good paint for such purposes? Is not it durable? The pickets may be painted dark-red and, then, you see, our chicken yards will be fashionably dressed after the Egyptian style.

Mr. R. M. Littler has done good work for the cause of pure butter. His bulletins and circulars have contained much fact and convincing argument. They would have been just as effective and a great deal more dignified if the usual poetry had been omitted. To talk about "bleeding sire and son" in connection with oleomargarine will make no converts.

We have received a box of the Henderson Strawberry from the originator, George Seymour, of South Norwalk, Ct. The berries are all large, shapely and firm, measuring over four inches around the middle. It is in quality the best berry *of its size* we know of. It does not thrive at the Rural Grounds, but these berries show how well it thrives on its originator's grounds, and how well it may do under similar conditions.

Oats and wheat are rusting badly in the country about the Rural Ex. Grounds. There has never been a larger crop of strawberries, and the promise of the raspberry and blackberry crop was never better. The early potato crop will be immense, unless the wet weather causes rot. The hay crop will be fine. Peas are abundnut. Rye never looked better. In fact, up to this time it is a season of abundance.

The World moves. There was a time in English history when the farmer was obliged to stand quietly by and watch a party of hunters ride directly over his fields. There was no chance for him to obtain redress. The rich were too rich and the poor were too poor. Times have changed. Farmers are taking steps to prevent this hunting over their farms, and they are meeting with success. Independence is gaining ground and toadyism is failing. We have so-called "sportsmen" in this country. It is difficult to treat seriously of men and women who will chase a bag of anise seed all day over farms and meadows, yet such people are with us. They are harmless enough in their way so long as they do not interfere with the rights of others. When they trespass or commit damage on the farm, they should be treated like common law breakers.

Audacious, fiery, little Senator Van Wyck, of Nebraska, the "Old Van," of his friends, the "Little Wasp" of his foes, has more fun himself and causes more trouble to his opponents than any other man in the Senate. No respector of persons is he. Once convinced a project is right or wrong, he will support or fight it to the bitter end, no matter who may be in the opposite ranks. He will attack the staid, brainy, sarcastic Edmunds just as spunkily as that Midas of the Senate, Sheard of California. Monopolies, and especially railroad monopolies, are to him what a red flag is to a bull—he goes for them every time. What splendid service he did in the late debate on the Northern Pacific Forfeiture Bill. How shrewdly he saw through, fearlessly exposed and adroitly circumvented the schemes of the railroad Senators! And when, last week, the odds looked heavy against Senator Miller's being able to secure the reference of the Oleomargarine Bill to the Agricultural Committee, it was Hot-Spur Van Wyck to the rescue with a speech that stirred up the Senate and delighted the galleries, and after damaging Butler and turning the laugh against Edmunds, lo! the bill was properly referred. May thy watchfulness and courage never grow less, and may more men of thy spirit soon find seats beside thee, plucky Senator from Nebraska!

Horseman.

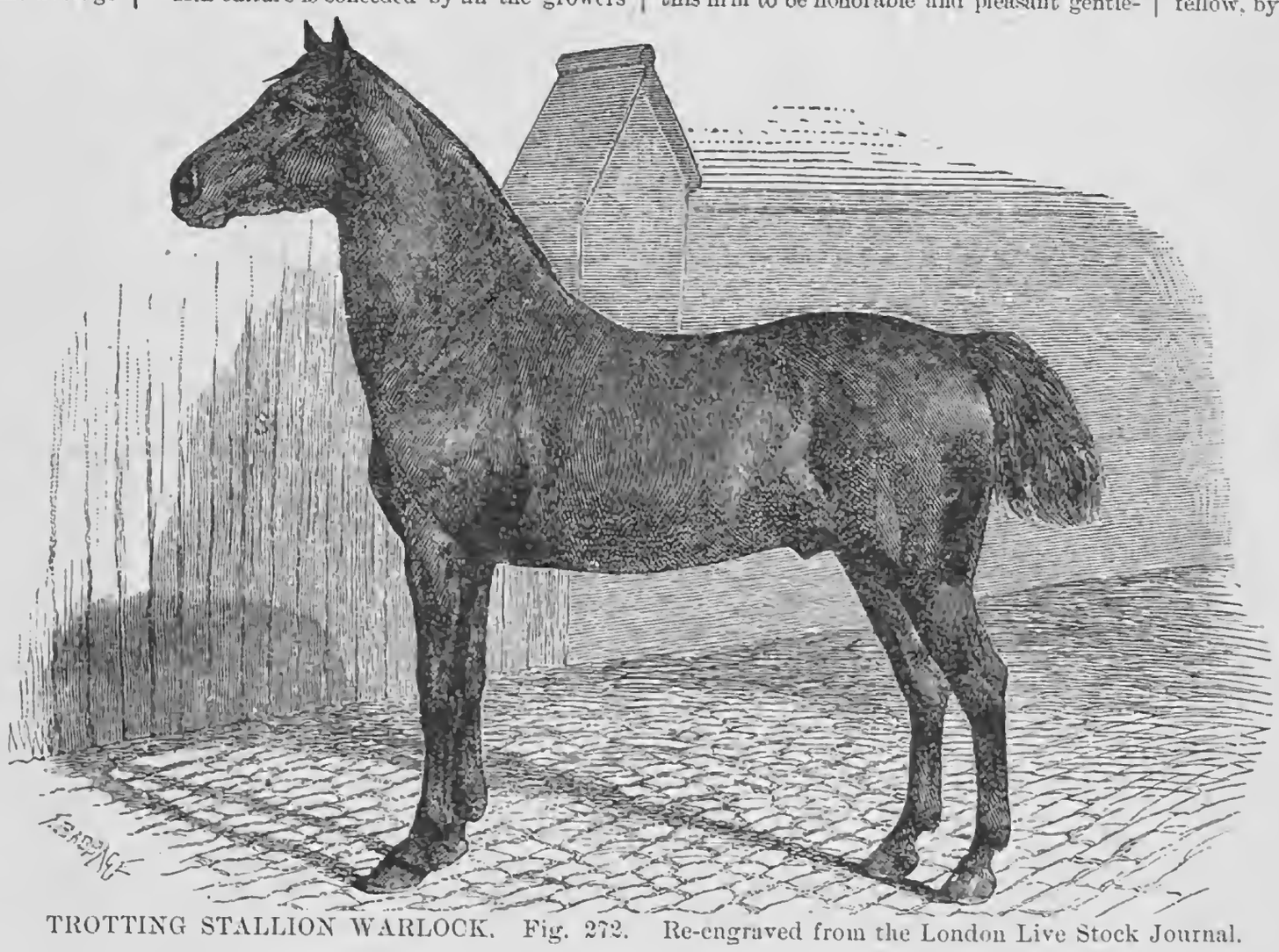
TROTTERS.

TROTTING STALLION WARLOCK.

AMERICA is, *par excellence*, the home of the trotter. The trotters of this country can easily fling their dust in the faces of any other roadsters in the world. Even here, however, the trotter is a comparatively modern development. Fifty years ago a horse that could trot a mile in three minutes was a wonder; nowadays so much of the attention of breeders and the public is given to a few phenomenal flyers, like Goldsmith Maid, St. Julien, and Maud S., that the vast number of horses that can trot their mile in 2.50 or even 2.30 are lost sight of, although less than a quarter of a century ago an animal with this gait would have attracted no small degree of wonder and admiration. This increase in speed is due mainly to breeding, but improvements in the system of breaking, training, and driving, as well as in courses, vehicles, and harness, have all contributed to it. There has also been a great increase in the number of horses trained as trotters, and the statistics of the various trotting courses show that the average speed of trotters has improved, and it is quite natural that as the average excellence of the multitude increases the excellence of the best among them should advance at least proportionately; for, as a rule, it is easier to be the best among a few than the best among many.

By constantly selecting for breeding purposes animals that have excelled the average in speed, and rejecting all their progeny which failed to inherit this quality, and confining their attention mainly to the few families, such as the Hambletonians, Clays, Bashaws, and Mambrinos, in which there has been noticed a marked inherited tendency to speed, American breeders have gone far towards producing a distinct breed of trotters in which superiority in the trotting gait is inherent and transmissible.

In England the race-horse and hunter have always received a great deal more, and the trotter a great deal less general attention than they have met with in this country. The English have always had the stock from which trotters can be developed; but sufficient care has never been given to the matter to produce any thing remarkable in the way of speed, so that a three-minute trotter is no commoner in England to-day than 2.35 minute flyer is on this side of the water. Indeed some of the English rules for trotting matches have doubtless been a check on making the best time of which a horse is capable. For instance, in case of a break in a race to wagon or sulky, the driver was compelled to pull up and back the wheels, and if the race was under saddle the rider must stop and turn the horse round whenever he broke. It was, therefore, quite natural that the driver or rider would be afraid to push his animal to the top of his speed.



TROTTING STALLION WARLOCK. Fig. 272. Re-engraved from the London Live Stock Journal.

While several of our very best race-horses, like Umpire, Iriquois, and Foxall, have been taken to England to compete for the "Blue Ribbon of the Turf" at the Derby, and for the honors and emoluments of other famous meetings, none of our strictly first-class trotters has ever crossed the Atlantic.

In comparison with the trotters of their respective days, Rattler, taken over 42 years ago, was probably as good as any ever imported. So brilliantly did he defeat all transatlantic opponents, under the guidance of an American driver, that those who handled him challenged the whole world with impunity; but on this side of the Atlantic no one doubted that Dutchman could have easily beaten him, and he would have crossed over to do so, under the management of Hiram Woodruff, were it not for a trifling disagreement as to the price to be paid for him.

Since then a considerable number of excellent trotters have been exported, not only to the United Kingdom, but also to the Continent, and among the best of the late shipments is the trotting stallion Warlock, Fig. 272, which was bred by the famous Kentucky breeder, A. J. Alexander. His pedigree is excellent, from a trotting point of view, having been got by Belmont, out of Waterwitch, by Pilot Jr. He inherits, therefore, some of the very best trotting blood, Belmont being by a grandson of Hambletonian, while Pilot Jr. was the grandsire of Maud S., the fastest trotter in the world. In England he is attracting a good deal of attention, and much is expected from him, but in the stud rather than on the track.

Indust'l Societies.

OHIO STATE HORTICULTURAL SOCIETY.

(RURAL SPECIAL REPORT.)

THE first summer meeting of this society was held at Barnesville, O., June 9 and 10. The first day was spent in a tour of inspection among the berry patches, for which the region is so famous. There are at present about 66 growers who cultivate an aggregate of 150 or more acres of strawberries and rather more of raspberries. About 1,000 bushels are now shipped daily. The crop for the season is estimated at about 10,000 bushels each of raspberries and strawberries. The quantity of fruit grown is exceeded by many other localities outside of the State, but probably nowhere are there grown such fine strawberries as at Barnesville. The reason for this is partly because of the method of culture and partly because none but the finest varieties are planted. Sharpless, Jucunda, Cumberland, Manchester, Wilson, Crescent and some other sorts are grown, but Sharpless is the general favorite because of the large size of its fruit, the vigor and health of the plant, and its readiness to respond to good treatment.

Hill culture is conceded by all the growers to be the most profitable, and is practiced by many. Some adopt the matted-row system because it involves less labor, while others follow the compromise plan, which means to allow only a part of the runners to take root. Fertilizers are used as abundantly as the means of the grower will permit—160 loads of barn-yard manure per acre have been used, and it is thought profitably. Some growers have replanted the same ground several times. One is now picking the second crop from the third planting, or the eighth crop from the same ground. The berries actually lie in heaps by the side of the plants, so prolific are they. A moderate dressing of manure was given at planting, but no more. The estimated cost of an acre up to the time of picking varies considerably, but the average is not far from $100. The yield is about 150 bushels per acre, and if sold at $2.50 to $3.50 per bushel—the prices realized thus far—the profits are not large, but the growers express themselves as satisfied if they can do as well for the whole season.

The evening of the first day was spent in reading essays, discussions and admiring the fine exhibit of strawberries and cherries. Larger collections of varieties have been seen elsewhere, but those competent to judge declare that no finer exhibit of strawberries ever was made. Wednesday forenoon was to have been spent in further inspection of berry fields, but rain prevented. Pres. Ohmer and others were unanimous in the opinion that our first summer meeting had been a grand success, and that the object lessons of the day and a half had been worth vastly more than any number of essays and discussions.

W. J. GREEN, *Sec. pro tem.*

Various.

CATALOGUES, ETC., RECEIVED.

AGRICULTURAL COLLEGES.—A report by Prof. Wm. Saunders, published as an appendix to the report of the Minister of Agriculture of Canada.—In this pamphlet the author has apparently made a condensation of the catalogues of all the agricultural colleges in America. It is a valuable pamphlet, and teaches some very forcible lessons. It is surprising to learn that there are 40 institutions in the country dignified by the name of "agricultural schools." We never hear of more than half a dozen. Every State appears to attempt to support an institution for the purpose of imparting agricultural education, some of them having two or three. In every instance where the agricultural college is combined with a literary school, the number of students taking the course in agriculture is so small as to be ridiculous. Four institutions apparently contain 80 per cent. of the college students who are learning anything about agriculture. In these colleges, the labor system is rigidly enforced, and there is no "literary" distinction possible.

BROCKNER & EVANS.—A set of pamphlets from the above firm, located at 28 Vesey St., New York.—These pamphlets are entitled "Can Dogs Be Hatched?" "How to House, Train, and Care for the Dog," and "How to Fence the Poultry Yard, Kennel, Lawn, and Garden." Customers will find the members of this firm to be honorable and pleasant gentlemen. The "Standard" wire fencing has given excellent satisfaction. The manner in which it is prepared and put up is well described in the pamphlet. The suggestions as to the breeding and training of dogs will be appreciated by all dog owners. The shipping cases, kennels, and other dog furnishings will be sure to please. The "Invincible Hatcher" has received the very highest testimonials from press and public.

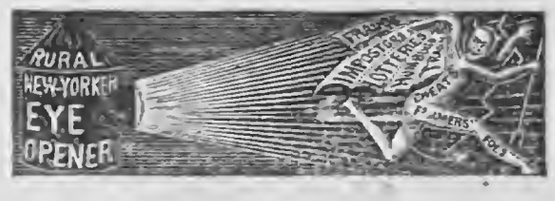
BEAUTIFY YOUR LAWN.—Circular from John M. Pearson, Hudson, N. Y.—This dressing is described as clean, pure, inodorous and effective. All of these qualities are desirable in a lawn dressing. Where stable manure is used, the lawn cannot be used for games or walks, and the odor is very offensive to those who are unused to it. Then, again, there is danger of seeding the lawn to weeds. This dressing enables the owner to fertilize his lawn effectively and easily, while avoiding all the unpleasant features that come with an application of a more bulky manure.

STANDARD TROTTING STALLIONS, "Chester Chief" and "Harry Plummer."—These fine horses will make the season at Chestnut Stock Farm, near Chester Depot. Address Joseph Gavin, Chester, Orange Co., N. Y.—Chester Chief is a bay 15¼ hands high. He is called the best proportioned horse Hambletonian ever sired. At five years he trotted a mile in 2.28, and repeatedly trotted a quarter in 35 seconds. Harry Plummer is by Harry Clay; dam, Netty Plummer. He is a fine horse and can easily show a 2.35 gait. These horses need to be seen on the road, in harness, to be appreciated. Full particulars mailed on application.

DEATH TO INSECTS.—Circular descriptive of the Woodason Insect Exterminators.—As we have repeatedly stated, we find the Woodason bellows very efficient for spraying shrubs and plants with poisonous mixtures. We can indorse what is said in the circular. From Thomas Woodason, 74 Canalport Avenue, Chicago, Ill.

SCENTED ROSE BUSH LEAVES.

OF late our florists across the water, have been vigorously agitating the subject of scented leaves from rose bushes. Over here most amateur growers are very thankful if they can keep the foliage clean, fresh and free from insects. But if any of the delicious aroma from the lovely Sweet Briar can be imparted to our garden foliage, let us have it of course. We can at least plant more of the Sweet Briar in our gardens, and why don't we? It is one of Nature's choicest bits for the eye and nostril of man. "Just two lovely for anything," in feminine parlance. H. H.



JACOB HICKMAN, an old farmer, near Galesburg, Ill., was swindled out of $2,500 last Thursday by three sharpers. Two of them drove up and said they wanted to buy a farm for a widow. They got him to ride with them to show them one of his farms, and, of course, on the way they met the confederate. This fellow, by the aid of the others, induced old Hickman to take a chance in a lottery scheme, and he drew a $25,000 prize. They demanded 10 per cent. ($2,500) cash down as one of the conditions for getting the prize. He drew the money from the bank at Galesburg, gave it to them, and started for home to make preliminary arrangements. On the way one of the sharpers became violently sick, and the others induced the old simpleton to go on alone, saying they would come right on after him. They haven't done so yet. Old man frantic. Officers scouring the country—probably in vain.

TO SEVERAL INQUIRERS.—J. W. Bain and W. H. Baird are poultry sharps who advertise from several places in Ohio, but chiefly of late from Zanesville. Their tricks and dishonesty have been repeatedly exposed in this department, and by a large number of other reputable papers in different parts of the country. Bain has for years been operating under or through different aliases, and is a shrewd, dangerous rogue. The "crowd" have lately started the "American Poultry Adviser," and we certainly strongly advise our readers to have nothing to do with it or them.

Literary.

BOOKS RECEIVED.

FOREORDAINED. Published by the Fowler & Wells Co., New York.

A sensible and practical book which might very profitably be read by all thoughtful persons. It is called "A Story of Heredity," but in reality it is not a story at all, but a scientific essay on the laws of heredity. The design of the book is to show that children are positively sure to inherit certain diseases, bad temper, selfishness, or any propensity to self-indulgence. Perhaps a good idea of the general thought of the book may be gleaned from a quotation which is introduced to point its argument: "Parents should be aware that no precept which they can inculcate, or example which they can set, will turn bad tempers into good ones, neither can hygiene or exercise, or all the fresh air in the world, create good constitutions." It is claimed that every child has within it certain latent forces. These forces can be directed by culture, but they cannot be changed. On this principle criminals and drunkards may not justly be held wholly responsible for their acts. We think the book purposely errs on the right side. That is to say, it places its facts in the strongest possible light, without qualification, in order to startle readers into a thoughtful consideration of its contents. One might get the idea from these pages that he who carried in his veins any hereditary taint must consider himself cursed. This we do not care to believe. We prefer to think that any person can, by proper regard for the laws of health, strengthen the body, and through it the mind and the will, and resist temptation. The

career of a strong, healthy man ought to rest with himself.

TOMMY'S FIRST SPEAKER. Published by W. H. Harrison, Jr., Chicago, Ill.

Every mother likes to have her little boy learn to "speak a piece." There is nothing more "cunning" than the sight of some bright little fellow standing up before the company, making wise gestures and talking like a man. Many a mother's heart has magnified the little speaker into some mighty orator that the years have in training. This vision may be seldom realized, yet the idea of teaching children to memorize and recite simple poems or portions of essays is a good one. The memory is cultivated, a confidence in ourselves awakened, and an ease and grace of manner are developed. It is hardest to find a "piece" that will be suitable for the very little people who cannot remember a long poem and who cannot be expected to understand a thoughtful production. The little poems found in the book under consideration are admirably suited to supply this want. They are short, simple and bright. There are no long words, but the diction is such that any little boy can understand all the poems. The book is said to be edited by Tommy himself. "Tommy" is evidently a pretty old boy, but like all who grow old gracefully, he remembers his youth.

HANDBOOK OF ENGLISH HISTORY. By Francis H. Underwood, A.M. Published by Lee & Shepard, Boston. Price $1.20.

This book is based on the lectures of the late M. J. Guest. The list of English histories is already large. The number of people in active life who have time to read several histories for the sake of comparing the opinions of the various historians is limited. Perhaps for this reason this volume may be useful. It has the merit of being condensed and carefully written. The original production, being written as a series of lectures, was comparatively wordy. No attempt is made to introduce descriptive passages. The story of the battle of Waterloo is all told in two pages, and curt, short sentences are the rule. For this reason the present volume will be useful as a textbook for the student who desires to use it as a skeleton, and to fill in with readings from other authors. The comments on political events appear to be as impartial and truthful as any we have seen.

LYRICS OF LIFE, by John Grosvenor Wilson. Published by the Caxton Book Concern. Limited.

All men, at some period of their lives, write poetry. Most of us have the disease before we are 30, and pass the rest of life in trying to hide all evidence of our contributions to poetic literature. We can see no reason why the present volume should have been published unless friends of the author wished to show their friendly appreciation by buying a book which personal association alone can make readable. We surely could not advise our friends to buy it. The world is crowded with rhyme, but the list of real poets does not appear to grow very rapidly. We prefer to read Whittier or Longfellow or Tennyson over and over again, than to spend time upon this fledgling poetry.

Woman's Work.

CONDUCTED BY EMILY L. TAPLIN.

SPRING.

The song of a woman who does her own work.

SPRING!
To be sure—so it is—and I'm going to sing,
Not the tunes that the regular poets rehearse
In ridiculous verse.
I've nothing of winds aromatic to say,
Nor pansies, nor tulips, nor hyacinths gay.
I live in the city,
And discover no pretty
Green leaflet or bud
Sticking out of the mud;
Nor do I hear warble of black bird or blue;
Yet I know it is Spring just as well as you do.
Aye, I know it *too* well, for it's *all* spring to me;
From long before breakfast till long after tea.
I spring with the mats and the rugs out-of door;
spring to the carpets—drag them from the floor;
I spring up step-ladders and wash down the walls;
I spring to the windows, I spring to the halls;
I spring to each corner, each closet, each nook;
I spring at each dust-laden picture and book;
I spring to the garret, where cobwebs abound;
I spring (if I may be allowed the expression) to the cellar, half-way underground;
I spring—but, good gracious! to tell everything
I spring at would take me the whole of the Spring.
And when Spring is over I feel, I declare,
As though *my* springs were broken beyond all repair.
Spring!
To be sure—so it is—but let nobody bring
Any poems to me about beautiful flowers,
Or life-giving showers,
Or vine-covered bowers,
Or sunshiny hours,
For realy such things seem extremely unmeaning
To one on whom springs a lot of spring cleaning.

Harper's Bazar.

OF INTEREST TO WOMEN.

FRENCH batiste comes in very pretty combinations, with cream or ecru as a prevailing ground tint. An over-dress of the plain color is usually made with skirt of the combination, cream and navy blue or cream and seal-brown is the favorite combination. Next to the batiste, which is really like a very fine smooth linen, crinkled seersucker may rank in prettiness and durability. It is very pretty in cream color, and above suspicion as a washing fabric. It has the added charm of being very inexpensive.

According to American silk manufacturers, staple articles, such as dress goods and handkerchiefs scarcely pay for the making, owing to extreme competition. The most profitable branch of the business now is making tailors tags for sewing on overcoats and the like which have the tailor's name woven in the silk.

Crazy work has had its day, which is a matter of congratulation to many. Its successor is silk strips woven together like rag carpet, which makes a very heavy and rich fabric, suitable for portieres and upholstery. It is especially effective when tinsel is woven in with the silk.

Just at this season, when dwellers in the country or suburbs are surrounded by a wealth of blossoms, it is only just to remember the sick and suffering among the city poor. The New York Flower Mission gladdens the eyes of thousands by its work, both in tenements and in city institutions. The flowers distributed come from anywhere within a radius of 50 miles; they are generously transported free by the railways, and on their arrival at the Mission are made into bunches before distributing. All flowers are acceptable, but fragrant ones are always chosen for the blind.

Last week we spoke of the "Plumage Societies" organized in England, intended for the protection of birds. In this country it is impossible to mention the number of birds slaughtered for millinery use, but we hear of a single collector bringing to a taxidermist the skins of 70,000 birds, killed in one district during four months. To combat this wholesale evil, it is proposed to form an association for the protection of wild birds and their eggs, to be known as the Audubon Society. Its membership is free to any one willing to aid in this work. This work is to prevent, if possible, the killing of any wild bird not used as food; the destruction of nest or eggs of any wild bird, and the wearing of birds as ornaments or dress trimming. All desirous of joining this society should send their names to the "Forest and Stream," 40 Park Row, New York.

Says the Detroit Free Press: "A wife's life is made up of little pleasures, of little tastes, of little cares, and little antics, but which, when added up together, make a grand sum total of human happiness. She is not expected to do any grand work, her province lies in a contrary direction—in gentleness, in cheerfulness, in contentment, in housewifery, in care and management of her children, in sweetening her husband's cup of life when it is, as it often is a bitter one, in abnegation of self—these are emphatically a "woman's rights;" her heritage, her jewels, which help to make her crown of glory.

"The trivial round, the common task,
Would furnish all we ought to ask;
Room to deny ourselves; a road
To bring us daily nearer God."

There is in "Crabbe's Poems" a conversation supposed to take place between husband and wife, which is very beautiful, containing advice to both. The husband addresses the wife thus:

"Each on the other must in all depend—
The kind adviser, the unfailing friend;
Through the rough world we must each other aid,
Leading and led, obeying and obey'd:
Favored and favoring, eager to believe
What should be truth; unwilling to perceive
What might offend, determined to remove
What has offended; wisely to improve
What pleases yet, and guard returning love!"

NEHEMIAH'S PLAN.

WHEN pious Nehemiah saw the melancholy estate of his fellow Jews after the captivity, unable to protect themselves in their ruined city, he did not sit down and lament their fallen condition; he just built up the city wall nearest his own dwelling. Unmoved by the ridicule showered on him, he kept on with his work, and gradually pursuaded his friends to do likewise until the wall was rebuilt, the temple re-consecrated, and the people returned to their father's worship. Nehemiah's plan seems a fine rule for every-day use, if we can understand its true significance. It teaches us to do the duty that lies nearest us—often the hardest of all things. How much easier it seems to do some great work than to accomodate ourselves and our frailties to the friction of home life! Says Thomas à Kempis: "It is no great thing to live peacefully with the good and gentle, for this is naturally pleasing to all, and every one likes to be at peace, and prefers those who agree with them. But to be able to live in peace with those who are hard and obstinate, or who are undisciplined and contrary, is a great grace, and a highly praiseworthy and manly line of conduct."

"If I could only do something rather than these narrow tasks and homely duties," sighs many a dreamy girl. Ah, dreamer, if you would only follow Nehemiah's plan!

"A servant with this clause
Makes drudgery divine;
Who sweeps a room as for Thy laws,
Makes that and th' action fine."

It is not what you do, but how you do it. Little aids and kindnesses, little acts of self denial—how much they may mean if we could only see the pattern our life is weaving!

Said a bright girl to the writer:

"The greatest cross I have in my life is the necessity of staying home and trying to be good, when I've always wanted to be an hospital nurse, giving up my whole life to charity."

Dear girl! she is the sunshine of her father's house, and surely her gentle ministry is as much the quintessence of charity as if she devoted it to the highways and hedges. To do the work that lies nearest us, that is the very pith and marrow of our usefulness. Think of Mrs. Jellyby, with the gravy boat full of envelopes and the tea-kettle lying on a guest's dressing table, while the serene hostess dictated philanthropic letters about Boorioboola gha! Charity begins at home, though too many are willing to let it end there.

If we do the work set before us in our own immediate circle new interests and new opportunities will surely present themselves. One single work of love—who can judge its effect? It is like dropping a stone into a silent pool, with its ever-widening circles and ripples. Nor is it solely the effects on others; every effort for a higher plane of thought and character strengthens and perfects us; every labor of love widens our sympathies. Plain living and high thinking—let those be our watchwords until we attain our ideal life.

MARY WAGER-FISHER.

THE portrait of Mary Wager-Fisher in a recent issue of the RURAL is a most welcome surprise that every reader will appreciate. How much her intelligent face resembles her letters; clear, frank, perspicuous and determined. I like it. No such face ever goes through the world without "amounting to something," because there is force of character and individuality back of it that are bound to leave an impress which lasts through coming centuries. In the modest sketch of her life, she leaves the reader slightly in doubt in regard to the fiery temper of her youth; how she managed to control it in later years, or whether it ever became fully under subjection. I write this under the impression that Mrs. Fisher is still off on the Pacific Coast, of course.

In this brief sketch, which all school girls may read with profit, it will be noted that this lady was born and reared upon a farm, where she learned to make butter and bread, to sew and to knit, all of which accomplishments she says served her well afterwards. She "hated to knit," but has found that the only way to get anything done was "to do it." If she can fully impress this simple lesson upon the girls and maidens of America, hers will be a grand life work indeed. Far too many of the girls of the present day, in the country as well as the towns, are idly drifting into womanhood wholly without aim or object. They indulge in the filmy fabric of a hope that has neither warp nor woof, while the mothers are making the bread and butter in the kitchens and carrying out the realities of existence. A wife who can't make a good loaf of bread with her own hands isn't worth having. There now; I've said it, and its true, if I do get in a RURAL bee's nest for it. H. H.

CANDY AND CHILDREN'S TEETH.

I WONDER how many mothers of young children read this department? How many mothers of grown children will read it and will kindly give their experience of the effect of candy on children's teeth.

All our children have had teeth and were literally crammed with sweets. My own experience with children began with a step-son four years old, who would eat little else than pound for pound preserves, sugar, cream and candy, with cake and cookies, instead of bread and vegetables. He looked fat, but was light as a feather, and very small. His teeth decayed so that all his double ones had to be filled before he was 15, and he suffered terribly from toothache.

I made up my mind that my children should never have candy, and the holidays brought them fruit, books, pictures, nails and hammers, miniature tools, etc., but no sweets. None of them ever had toothache while under my care. None have ever yet had even on their "Baby teeth" the least speck of decay or discoloration, the eldest now living being 22 years old. When my eldest, as a lad of 16 first went from home, it occurred to him, so he told me afterward, that he could eat candy. He bought a pound, ate it in the course of 10 days, and had the toothache for the first time in his life.

"Oh, mother," he said "it got so bad before I could have the tooth drawn, that neither chloroform nor laudanum helped me to sleep. That six weeks misery with an ulcerated tooth made me sure it was not 'a mere whim' that caused you to deny us candy."

Dear lad! I have had torture enough from ulcerated teeth myself to know how he must have suffered. AUNT E.

GOLDEN GRAINS.

THERE are a good many people who carry their religion as though it were a basket of eggs—all the time afraid that it will break..

GREAT thoughts are among our most precious and abiding treasures. They enlighten our darkness, they people our solitude, and while other things fall from us, like the leaves which are loosened from the greenwood tree, these remain, like the atoms which go to build up its girth, being woven into the very substance and tissue of the soul.....

AN ability and an opportunity to do good, ought to be considered as a call to do it.....

WE should never go in the way of temptation for the purpose of trying the strength of our virtue..... .....

BISHOP WHATELY says: "If our religion is not true, we are bound to change it; if it is true, we are bound to propagate it."....

AT the Fiftieth Anniversary of the Union Theological Seminary, Dr. Hitchcock said: "Character always decides a man's condition. A man of character will rise above the circumstances in which he is placed. The greater part of poverty is culpable. Annihilate whisky and you almost annihilate poverty. The industrial classes should be taught how to be economical. The American laborer spends three or four times as much as the one in England or Germany. The laborer should share in the profits of the production, but not in the direction of the capital employed."....

ARBITRATION cannot be successful to any great extent in settling differences between employers and their employés, because it involves the surrender of the liberty of both parties.....

BESIDE the welfare of the individual, the common weal must be looked after. It is possible that in the future restricted immigration may be necessary for this country. Labor is weaker than capital, hence legislative protection is necessary. Eight hours are enough for a day's work, but the question of how much shall be paid for a day of eight hours remains to be decided.....

"No man is more severely punished than he who is subject to the whip of his own remorse," is as true to-day as it was in the days of Seneca..... .....

SMILES emphasizes the necessity of self-restraint; he says: "For want of self-restraint, many men are engaged all their lives in fighting with difficulties of their own making, and rendering success impossible by their own cross-grained ungentleness; whilst others, it may be much less gifted, make their way and achieve success by simple patience, equanimity and self-control."....

A WELL-KNOWN lecturer says: "The most beautiful thing God ever made is a five-year-old girl, fifty springs in each heel, a hundred day dawns in each cheek, and a whole flock of morning larks and nightingales in her throat. Religion makes no distortions, and the child, for all its piety, should be none the less a child."....

"WE see," says Mr. Beecher, "the principle of heredity set forth in the passage, 'Visiting the iniquity of the fathers upon the children.' That is, making the children bear the result of the parents' conduct. It is a principle well established, that the faults of the parents do visit themselves upon the children, both mentally and physically. A man who leads a virtuous life hands down virtue to his children, and the man who is a Christian through his life, hands down, as it were, the Gospel to his children, while the parent whose life is a violation of law, sends down an inheritance of damnation to his descendants. Retribution is a part of the economy of God. It is not an exception to divine goodness, but a part of it, and it is especially designed to hold men in the right way and to warn them when they step out of it that they are going in a wrong direction".....

FEW great preachers have so many words of comfort as Dr. Talmage. "'Cast thy burden upon the Lord.' Does your head ache? His wore the thorn. Do your feet hurt? His were crushed of the spikes. Is your side painful? His were struck by the spear. Do you feel like giving way under the burden? His weak-

ness gave way under a cross. While you are in every possible way to try to restore your physical vigor, you are to remember that more soothing than any anodyne and more vitalizing than any stimulant, and more strengthening than any tonic is the prescription of the text: 'Cast thy burden upon the Lord, and He shall sustain thee.'".....

Domestic Economy

CONDUCTED BY MRS. AGNES E. M. CARMAN.

PITHS.

CHEESE that is easily crumbled is digestible, and may be eaten without fear. It is the India-rubber article that gives one a fit of the blues.

A feather duster is a delusion and a snare—it is simply a "flirter."

A piece of lemon is excellent for cleaning the hands.

It is a mistake to put spoons in the holder handles down.

A very thin coat of what is known as French picture varnish will restore chromos and oil paintings to their original brightness.

Lazy people are abominations—dead weights to be carried upon some one's overburdened shoulders.

Buttermilk and lemon juice are harmless cosmetics for removing sunburn and freckles.

Don't reprove children before company—it hardens them and lessens their self-respect.

HOUSEKEEPING IN CALIFORNIA.—IX.

MARY WAGER-FISHER.

As the Winter sped on some things developed differently from what had been predicted. No ants appeared in the closets, for which I was very glad, for I have a profound respect for the extraordinary intelligence of these small creatures, and never kill one purposely. But mice appeared, and gave us considerable trouble. We had no trouble to catch them, as the trap we make use of never fails—a bowl turned up with one edge resting on a loop formed of a whalebone, or flat strip of steel, with a bit of cheese held in the two tied-together ends: but the trouble lay in knowing what to do with the mice after they were caught, for there was not one of us who could kill the pretty, furred animals, with their bright eyes, and the upshot was that they nearly all escaped. But they seemed to learn wisdom from their experiences, and finally remained away.

The water, too, instead of becoming worse, became much better after the lake was filled from the rains, and we gradually became somewhat reconciled to it, as the only fault it retained was muddiness after a heavy rain—and when it rains in California it rains a regular down-pour. During the first half of January, it was what the people called "very cold." The mercury would fall in the night to 26° or 28°, and the ground would be frosted. The Calla Lilies were scorched by the frost, and the rose geraniums—but they all quickly recovered. For a week or so, I did not cut the geraniums, for my flower vases, and I found a graceful substitute for green leaves in the bed of carrots in the back yard, the tops of which were beautifully green all the time, and we didn't care for the roots. A friend often brought me, in January, flowers once or twice a week—great bunches of violets, roses, carnations, etc., but from February 1st the violets, primroses, narcissus, etc., were abloom in our own garden. I gave myself a whole holiday on February 3—a glorious sunny day—and taking the laddie with me, we went off to the hills back of Berkeley, and one of the first shrubs I discovered in full bloom was the wild currant—Ribes sanguineum—and further on I was fairly carried out of myself at great clumps of lupin in bloom, and I came home with my arms full of flowers, topped off with the graceful acacia that made all the country round aglow with its yellow magnificence! We took a simple lunch with us—dried California figs—three pounds for 25 cents and dry bread—and I spread a shawl over a clump of sage brush which made for us a nice seat. But it was uncomfortably hot in the sun to sit for long.

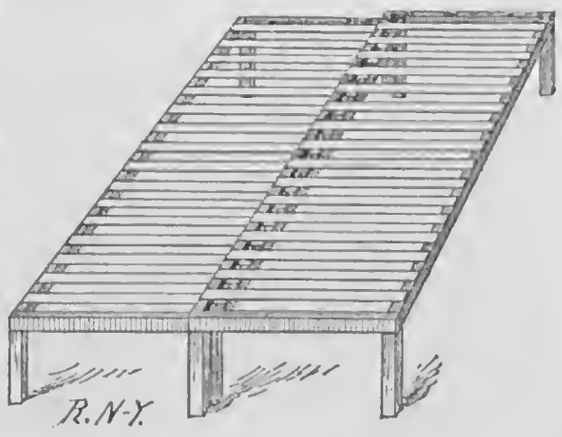
Berkeley, where the State University is located is one of the most enchanting sites in the world, its groves of Live Oak and the adorable panorama spread out seaward. While the experimental grounds—gardens in which grow cinchona camphor tree, Chinese bamboo, and the olive, where it is a perpetual Summer the year around, but foggy throughout June and July and bad "for the lungs"—could I ever console myself with the blizzards and cold and winds of a Pennsylvania Winter, and the scorching heat of its Summer?—were questions I often asked myself. But in California people complain as much of the weather as we do elsewhere, and say that after a few years of residence here, they feel the cold as much as ever they did East. I sat at my writing or sewing all Winter, on sunny days, in an upstairs room, with a large window fronting the South, without ever a fire, and needed none. A friend told me that she always, for 10 years, had spent Christmas with friends living in the foot-hills, about 30 miles from San José; and that for Christmas dinner they never failed to have asparagus, lettuce and green peas, fresh, and from gardens in the neighborhood, and at that time raspberries were quite plentiful in the market. On one New Year's Day, they found 64 varieties of garden and field flowers in bloom—but that was an "exceptional" New Year's—and as usual all the bad weather was "exceptional." We got used to the word, however. It all suited me—and I had decidedly "exceptional" health. But the laddie had only contempt for a Winter without snow, and feared that he would become "unhardy misfortunately" and not like the Winters at home. But all Winter his radiant face glowed with perfect health, a child who has never known an ache or pain—for which Heaven be thanked. Anaximander found the climate not altogether "delightful"; it tended to the development of bronchitis—and it was a common remark that the coast climate gave everybody, soon or late, catarrh or neuralgia. But we could, both of us, work mentally as never before, and the ability to do this was another marked characteristic of the "climate."

Our housekeeping went on much as usual in "California fashion," except that after a little we found that it consumed too much time to prepare three meals per diem, and we resolved to have an early five or half-past-five-o'clock dinner and take a "standing lunch." Usually the luncheon consisted of a pudding baked during the breakfast getting. Some friends of mine who are artists and very busy women, said that for luncheon—when Mr. A., the husband and father, was not at home—they had hot milk—not scalded—and bread and fruit, and as everything was done so in a rush with them, they found such a repast just the thing for easy digestion; the milk cold did not agree with their stomachs. But when Mr. A. was at home more had to be prepared, as usual! The mercy only knows why a man, who works no harder than women, should require his "regular" meat meal three times a day, with all the circumstance of cloth and china? When in camp, and where no women are around, he can lean against a tree and gnaw a bone and munch bread and cheese, and feel never aggrieved—even cook a meal and wash out his stockings and shirt. But if his wife is around, he lapses at once into helplessness. It comes, I suppose, from his having been "spoiled" by being "coddled!" But our informal lunch worked satisfactorily, and after the early dinner until half-past seven 'twas the laddie's hour. We saw the man on horseback dash through the street lighting the street lamps, and then—

(*Continued in next paper.*)

NEBRASKA BEDSTEAD.

I send you a sketch of a bedstead that we made. I put two narrow ticks on it close together, then double a heavy quilt and throw it across the middle. The bedstead is very



light, the slats are of laths, and I can shove it together, put one tick on top of the other, and cover it with a lounge spread in less time than it takes me to tell it. It is a great convenience where lumber is scarce and the houses are as small as they are here in Nebraska. It should be very low to admit of one tick being placed on top of the other when not in use.

MRS. E. ANNIE WRIGHT.

CHERRY PIE AND OTHER SEASONABLE DESSERTS.

ALWAYS let a fruit pie be a "fat" one. Use the deepest pie dish you can get, line it with paste and fill with successive layers of cherries and sugar, and cover and bake in a moderate oven. A little flour (about a tablespoonful in all) dredged over the different layers will cause the juice to thicken and it will not be so apt to run out. A mixture of the sour pie cherry and the Black Tartarian makes the best pie.

Strawberry tarts are made by mashing a pint of berries thoroughly with four tablespoonfuls of sugar, add two well-beaten eggs, line patty-pans two-thirds full and bake.

Strawberry fool is a dessert greatly liked by many. Put a quart of berries over the fire in a porcelain saucepan with a quarter of a pound of white sugar, cover closely, and stew gently for ten minutes. Shake the pan occasionally to keep them from burning, remove from the fire, rub through a hair sieve with the back of a wooden spoon. Set away to cool, and then stir a gill of rich cream. Place on the ice until thoroughly cold, and serve.

Strawberry Blanc-mange is also very nice. Put a quart of berries on a dish and sprinkle over them a quarter of a pound of sugar, letting them stand for several hours. Meantime have made a blanc-mange of gelatine, sweetened to taste, and stir into it the juice that has oozed from the berries. When all is mixed thoroughly, put in a mold that has been wet with cold water, and set in a cold place until needed for use. Place the strawberries around the base.

For strawberry ice-cream mash a pound of fully ripe berries with half a pound of pulverized sugar. Rub through a sieve. Mix with a pint of cream and freeze. For strawberry water-ice, rub one pound of berries and half a pound of currants through a sieve with three-quarters of a pound of sugar, and freeze.

It is almost a pity to use oranges when other fruits are so cheap, but this recipe will do for the season when oranges are the most plentiful and the cheapest fruit: peel and slice a dozen oranges and arrange in a glass dish with grated cocoanut and powdered sugar in successive layers. A small grated cocoanut and half a cup of powdered sugar will be sufficient for the above number of oranges.

A salad or Macedoine of fruits can be made most exquisitely where many different kinds of fruits can be obtained at once. Arrange cherries (stoned), berries, currants, raspberries, pineapples and bananas in such proportions as your taste may direct, with sugar between each layer, add the juice of three oranges to a large dishful, and serve very cold. You may pass around cream with it for those who like it.

Strawberries should never be washed unless they are very sandy, and then you had better not buy them, as washing destroys their flavor. You may say that you don't know who picked them, but Marion Harland says you might as well say you don't know who washed them and in what, as she once saw a housekeeper wash berries in a wash-hand basin! There is no doubt that washing lessens the flavor of the fruit. There are some people who suffer from dyspepsia after eating berries. If they would eat unwashed berries without sugar, the trouble would be lessened. PALMETTO.

FOR THE SICK ROOM.

SACK POSSET.

POUND or roll one Boston cracker or a soda biscuit, and set it over the fire in a pint of cold milk; simmer 15 minutes. Beat one egg with a wine-glass of wine, a spoonful of sugar, a little salt and a dash of nutmeg. Turn this into the milk, stirring constantly, boil up once and take from the fire.

WINE WHEY.

Bring to a boil one cup of new milk, and stir in half a glass of sherry wine. Boil a moment and strain. Sweeten if liked. This is very nutritious. NURSE.

TO RENOVATE MENS' STRAW HATS.

As the season for straw hats is at hand, often old ones of last year's wear will be found that might be made to render considerable service yet, if cleaned and a new band applied. Wash these old hats with rain-water and Palm-oil soap, which will remove the dirt and grease, and make them look bright and clean. DASH.

MRS. HOMESPUN'S RECIPES.

YEAST.

EIGHT fair-sized raw potatoes grated, a tablespoonful of salt, the same of sugar, a teaspoonful of ginger and three tablespoonfuls of flour. Stir this into the grated potato. Have a handful of hops boiled, and pour the water on this, then turn on boiling water enough to make this a thick paste, and with a good fire cook all five minutes. Cool and put in enough yeast to raise it. Stir down repeatedly as it rises, and then cover well and set away in a cool place.

POT-PIE DUMPLINGS.

A quart of flour with two teaspoonfuls of baking powder sifted in it. Rub in a piece of butter the size of an egg, add a pinch of salt and wet up with sweet milk. Stir thick with a spoon. Drop this in chicken or beef broth, cover and cook 15 minutes without removing the cover. The same recipe may be used for strawberry shortcake.

FRUIT CAKE.

Two pounds of seeded raisins, one pound of currants, one-fourth pound of candied citron, one tablespoonful of cinnamon, one of allspice, one of cloves, one or two nutmegs, five eggs, one cup of sour cream, one cup of melted butter, a teaspoonful and a half of soda, three cups of brown sugar, one cup of molasses or sorghum, flour to make this thick. Bake slowly three hours and a half. This makes a large cake that will last a year if one wished to keep it that long.

Miscellaneous Advertising.

When Baby was sick, we gave her Castoria,
When she was a Child, she cried for Castoria,
When she became Miss, she clung to Castoria,
When she had Children, she gave them Castoria.

Miscellaneous Advertising.

Pain in the Side

Is a symptom of disease. It may be caused by Rheumatism, or by Neuralgia, but it usually indicates a disordered condition of the Stomach, Liver, or Kidneys. Ayer's Sarsaparilla corrects the action of the vital organs, and removes every trace of disease from the system.

Last fall and winter I suffered from a dull, heavy, pain in my side. I did not notice it much, at first, but it gradually grew worse until it became almost unbearable. During the latter part of this time, disorders of the Stomach and Liver increased my troubles. I began taking Ayer's Sarsaparilla, and, after faithfully continuing the use of this medicine for some months, the pain disappeared and I was completely cured.—Mrs. Augusta A. Forbush, Haverhill, Mass.

Ayer's Sarsaparilla,

Prepared by Dr. J. C. Ayer & Co., Lowell, Mass. Sold by all Druggists. Price $1; six bottles, $5.

MAKE HENS LAY

SHERIDAN'S CONDITION POWDER is absolutely pure and highly concentrated. It is strictly a medicine to be given with food. Nothing on earth will make hens lay like it. It cures chicken cholera and all diseases of hens. Illustrated book by mail free. Sold everywhere, or sent by mail for 25 cts. in stamps. 2½-lb tin cans, $1; by mail, $1.20. Six cans by express, prepaid, for $5. I. S. Johnson & Co., P. O. Box 2118, Boston, Mass.

HIRES' IMPROVED ROOT BEER. Packages, 25 cts. Makes 5 gallons of a delicious, sparkling and wholesome beverage. Sold by all druggists, or sent by mail on receipt of 25 cents. C. E. HIRES, 48 N. Delaware Ave., Philadelphia, Pa.

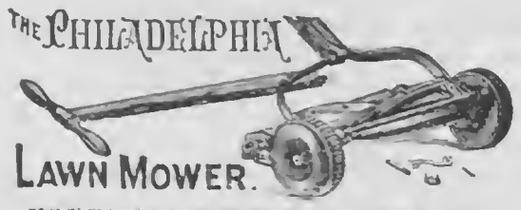
FARMERS,

Send for Circulars and Price List of The BARNES PAT. IRON FENCE, the cheapest and most durable fence in the world. Address THE BARNES PAT. IRON FENCE CO., EASTON, PA.

ALLEGER ORGANS you can get a strictly first class organ from $50 to $75, stool and book. Warranted 5 years. It will pay to send for circular before you buy. Address the manufacturer. **H. W. ALLEGER, Washington, New Jersey.**

AHEAD OF ALL COMPETITION.

1886.



FOURTEEN SIZES FOR HAND USE.
Weighing from 21 to 51 Pounds.
THREE SIZES FOR HORSE POWER.

Graham, Emlen & Passmore,

Patentees and Manufacturers,

631 Market St., Philadelphia, Pa.

Brewster's Patent Rein Holder.

Your lines are where you put them—not under horses' feet. One agent sold 12 doz. in five days; one dealer sold six doz. in 15 days. Samples worth $1.50 FREE. Write for terms.

E. E. BREWSTER, Holly, Mich.

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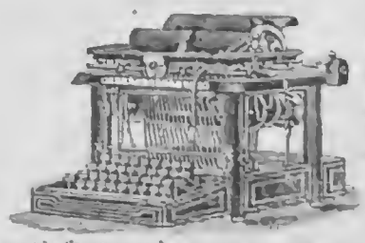
Standard Typewriter.



Attention is called to the **Increased excellence** of this **incomparable machine.** Buy it, with the **privilege of returning** it at any time within thirty days, C.O.D. for full price paid, if not **absolutely satisfactory in every respect.**

Handsome Illustrated Pamphlet on application.

Wyckoff, Seamans & Benedict,

339 BROADWAY, NEW YORK.

News of the Week.

HOME NEWS.

SATURDAY, June 19, 1886.

LOGAN is getting sarcastic on the Plumed Knight, "as the only politician in the country who is running the politics of the country just now," and "of England, too, for that matter." .....The Dominion Parliament is likely to meet for a short session in Oct. or Nov. and general elections are probable in Dec..... ....Cornell University is to have a Law School..... Of 445 samples of spices examined by Analyst Wood, of Mass., 170 were adulterated..... Australia having failed in the fight with her rabbit plague, an Adelaide University Prof. went to Europe for a couple of dozen affected with an infectious malady, intending to set them loose to spread the fatal disease. They died on the voyage, and another lot is ordered. Why not get the virus and inoculate Australian rabbits?..... .....The sheep butchers of this city—about 320—are on strike for higher wages; mutton has gone up two to three cents a pound. Near-by butchers doing a "booming" business. Armour is expected to ship mutton heavily from Chicago. A large number of sheep in the slaughter-houses here are dying, and still more suffering severely. Green "scabs" spoil the pelts.....The number of soldiers, disabled and dependent on their labor for support, to be benefited by the new Blair Pension Bill, is put at 33,105, involving an annual expenditure of $4,767,120, at the rate of $144 each, per year.....Biggest fire ever known there at Muscatine, Ia., Sunday—mostly lumber, 10,000,000 feet..... Mrs Samuel L. Vining, of St Louis, is to receive from the Government $1,000,000 awarded by the Court of Claims under the terms of the French Spoliation Bill. The family has always stuck to the claim. Several other awards have also been made..... On complaint of the State Board of Health 10 of the largest molasses dealers in Boston have been put under bail to wait trial for having adulterated the product with salts of tin—a dangerous poison.....The Capitol of this State, as originally planned, was to cost $4,000,000; it has already cost $17,000,000 and will cost several millions more before it is finished. What do farmer tax-payers think of the matter?....Representative Gen. Wheeler, of Alabama, to prevent the expunging of his speech from the Congressional Record, wishes to expunge from it all the cantankerous things he put in it against Stanton and Lincoln.....Tuesday, June 11, Michigan was 50 years a State. Joyous celebrations in all towns, especially at Lansing, the capital, where Gov. Alger "electrified an immense audience" by strictures on Jeff. Davis's recent utterances..... ....That Chicago aldermanic scandal grows worse; but in cases of bribery it is nearly impossible to prove legally what everybody knows to be a fact. Yerkes and his Philadelphia syndicate make a "cool" million by one stroke in the transaction—they take the $5,000,000 stock of the North Side Railway Corporation at 80—$4,000,000—and sell it at 100—$5,000,000....Another Philadelphia syndicate has just got control of the forfeited Broadway and Seventh Avenue surface road in this city, and propose to run it for themselves in spite of late legislation. Much complaint at dilatoriness of legal action in the matter..... The President has approved the act for the relief of ex-President Arthur for a defieiency in his accounts when Collector of this Port... Arthur is only so-so; wants to get out of the city; but his doctors fear ill-results.....Much visiting and dinner giving and receiving, and one grand reception by the "happy couple" at Washington.. .. .. The Maine Prohibition Convention at Portland, Thursday, nominated for Governor, Aaron Clark, a prominent Greenbacker in 1879, a farmer, 63 years old. Delegates present, 193, representing 14 out of the 16 counties in the State—the largest Prohibition Convention ever held. Ex-Gov. St. John, of Kansas, made a rousing speech. Convention roundly denounced both the old parties, and urged all to vote the straight Prohibition ticket ....A reign of terror in East St Louis. No police; treasury empty; burglary by night; highway robery by day; brutal assaults numerous, some fatal already, others likely to be; women openly insulted—the place in the hands of ruffians. Mayor anxious to do something: City Council won't move through fear of the expense.....The trials of the 31 Anarchists indicted at Chicago will begin June 21. The Congregational Club of the city has raised $6,000 for missionary work among the Bohemians and other non-English-speaking people in the city, with a view of preventing other outbreaks.....Gordon is now 50 delegates behind Bacon for the Governorship of Ga. His "brutally insulting" language in the joint discussions between the two has greatly injured him, and the discussions have been given up.. ....The Supreme Court of Ohio has decided the so-called "rump" Senate which unseated four Democratic Senators from Hamilton Co., giving their places to four Republicans, was legal, and the Dow Liquor Law, together with the other enactments passed by the "amended legislature" are therefore all right. Court, politically divided—three Republican judges for, two Democrats against. .....Thursday the House refused not only to pass, but even to discuss the tariff legislation as embodied in the Morrison bill. Here is an analysis of the vote: New England—Yeas, 3; nays, 20; not voting, 3. Middle States (excluding Maryland)—Yeas, 11; nays, 54; not voting, 4. Southern States—Yeas, 96; nays, 16; not voting, 8. Western States—Yeas, 30; nays, 58; not voting, 12. Pacific States—Yeas, none; nays, 90. Total—Yeas, 140; nays, 157; not voting, 27, of whom 26 were paired. Four Republicans voted to consider the bill, and 35 Democrats opposed it. The delegations from the following States voted solidly to consider the bill and therefore for alterations in the tariff in the direction of free trade: Arkansas, Florida, Georgia, Mississippi and Texas. The Representatives of California, Kansas, Maine, Nebraska, New Hampshire, New Jersey, Rhode Island, and Vermont voted solidly against consideration. One Alabama Representative voted against the bill. New York gave seven votes for, and 25 against. Ohio gave three votes for, and 18 against. Pennsylvania gave three votes for, and 22 against.....Richard A. Proctor, the astronomer and chess and whist expert, has come over the water to stay with us permanently—at St. Louis or thereabouts..... Congressman Weaver (J. B.) of Iowa, erstwhile the great Greenbacker, is ready to bury the Greenback organization, thinking "a great new political party" can be built out of the labor troubles.....Powderly has sent a "special circular" to all the K. of L., warning them that an effort will be made by politicians to capture the organization at the great convention to be held at Richmond, Va., in October.....A party of 10 French railway officials, representing every railway in France, are running about the country in palace cars on fast time getting points for the improvement of their own lines, which they already regard as "quite Americanized"..... .... Congress has increased the appropriation for the Labor Bureau from $53,000 to $92,000—the Cleveland convention so "ordered" it..... The Vermont Republican convention at Montpellier, Wednesday, was decidedly an Edmunds assembly—the largest ever held—630 delegates. E. J. Ormsbee, Edmunds' man, was nominated for Governor, Luke L. Poland, avowedly a Blaine man, getting only 44 votes. Ormsbee is 52, "a fair specimen of a Vermont lawyer."....Edmunds pretty certain of a re-election.....Vancouver, British Columbia, terminus of the Canadian Pacific railroad, was burnt Snuday—not a dozen out of its 500 houses left standing—its 3,000 inhabitants homeless—loss over $1,000,000. Little or nothing saved except the clothes on their backs. Going bravely to work to rebuild the place.....All over the country, especially in the large industrial centers, fervid meetings are being held to express sympathy with Irish Home Rule in the form of contributions toward the expenses of the approaching election. The opponents of Home Rule have nearly all the wealth of the three kingdoms, and its supporters must be at a great disadvantage without outside aid. Contributions have been liberal, not only from Irishmen here and decendants of Irishmen, but from a great many others of American and other origin, who give more or less either for political reasons or because they really sympathize with this endeavor to free a friendly people from the oppressions that have tormented them for centuries. Liberal contributions are also sent on from Canada, Australia and other places... ....The fishing trouble is probably over. The Canadian authorities have withdrawn the old instructions to the captains of the revenue cruisers and issued new ones which say nothing about the purchase of ice or bait, or the shipping of men from Canadian ports, or any other ground of complaint. It merely tells them to see that Americans do not fish within the three-mile limit. It is understood the Imperial Government insists that Canada must be more friendly. A mixed commission is likely to try to settle the fishery question once for all.... ..... Senator Edmunds has introduced, by request, a bill to incorporate the Maritime Canal Company, of Nicaragua, to construct and operate a ship canal by way of Lake Nicaragua and the river San Juan. The principal office of the company is to be in New York City, and its capital stock is to be not less than 500,000 or more than 1,000,000 shares of $100 each.....The Wisconsin Knights of Labor have gone boldly into politics and will nominate a full State ticket. .....The biggest crush ever seen at a public reception at the White House came yesterday to see Mrs. Cleveland in her wedding finery, and admire her beauty and grace. .....Texas has been drowned and buffeted with rain and wind storms during the week.. ....The Blair Educational Bill is dead for the session.....

FOREIGN NEWS.

SATURDAY, June 19, 1886.

INTENSE excitement about the approaching election in the United Kingdom. All the prominent men—Liberal, Union-Liberal, Radical and Conservative—have either issued manifestoes of opinions or plans, or delivered speeches embodying them. The "Grand Old Man" was never grander. By manifesto and speech he defines the issue as either "government of confidence, or government of force"—Gladstonism and Home Rule, or Salisburyism, and 20 years of coercion. He is greatly helped by the late Orange riots in Ireland (all quiet there now) and the extreme harshness of Salisbury's late utterances. The fight is settling down between these two—the others getting dwarfed into insignificance. Gladstone has just made a journey to Midlothian (capital Edinburg) which Scotch county he represents in Parliament, and in his 54 years of public life no such enthusiasm ever hailed him. The millions of Englishmen whom he has enfranchised are wild to help to rescue the millions of Irish still in distress. It must be borne in mind, however, that only the G. O. M.'s admirers flock to cheer him; his opponents—and he has lots and lots of the very bitterest sort—stay sullenly away. Throughout the United Kingdom it is "anything to beat Gladstone," whom many regard as a sort of "Antichrist" bound to ruin the glorious British Constitution and dismember the Empire. Yesterday he is said to have promised disestablishment to Dissenters if they help him to give Home Rule to the Irish. At present it is anybody's fight—with possibly brightening prospects for the "Old Parliamentary Hand."....In France the Assembly bill expelling the Princes, though amended to suit the Cabinet and, therefore, supported by it, is pretty certain to be defeated in the Senate, as the committee of nine appointed to consider it, have reported, six to three, against it. The Senate has become rather unpopular in France of late, and antagonism here is sure to cause greater unpopularity, and likely to lead to an attempt to abolish or change that body.....French vessels hoisted the French flag on the New Hebrides Islands in the Pacific; England vigorously but diplomatically protested; France has ordered the flag hauled down—of course it was intended to be only temporarily raised while the fleet punished the natives for recently massacring five Frenchmen.....Labor troubles in France are temporarily settled..... .....Ludwig, the deposed King of Bavaria, committed suicide by drowning himself in a lake near his palace prison. His attendant physician was drowned also either in trying to save him, or from remorse for having permitted him to do the deed—more likely the former, as there were marks on his face indicating that the King had struck him. King's physician from birth declares he was not insane—only eccentric. Others say he was mad, and that the condition of his brain after death proved it. He was much beloved by the country folks who are wild with excitement and suspicions of foul play. He was buried Thursday. His successor is his brother Otho, 10 years younger—31—who has been insane for a decade. Prince Luitpold will remain Regent, and doubtless he or his heirs will succeed to the throne, unless Prussia shall find some excuse for annexing the kingdom, as she has done with so many other minor German powers..... ....Chili, although it triumphed so completely over poor Peru, and seized on the Terrapaca nitrate beds and most of Peru's guano deposits, is not altogether happy. At the elections last Tuesday, 40 persons were killed and over 100 more or less severely wounded in a riot at Santiago de Chili. Latest advices say the elections are likely to favor the Liberals..... Peru is slowly recovering from its disastrous war with Chili. Caceres, the only general who didn't surrender, was quietly elected President the other day. It will take at least a generation to recover from the drubbing and spoliation the country suffered. It is now bankrupt, and the only hope is in foreign capital to develop the resources of the country and give employment to the people. The fertilizer wealth having been lost, no convenient way of getting "ready money" remains..... ... .Juarez Zelman has been elected President of the Argentine Republic which has been greatly developing its resources, especially its vast live stock interest, of late years.....

AGRICULTURAL NEWS.

SATURDAY, June 19, 1886.

A CANADIAN bullock and heifer lately landed in England, weighed, together, "close on 6,000 pounds."....For several weeks, 70 cars of strawberries a day have been shipped from Centralia, Illinois ....Three cases of death or severe injuries from cattle horns reported this week. It is thought there are at least 200 deaths a year from this cause in the whole country..... .....The wool trade of Chicago is growing very rapidly.....The fee for a license to deal in cider, hard or sweet, at Windsor, Ill., has been fixed at $1,000 a year. Evidently cider is not thought "harmless" there..... ....The liquor license fee at Joliet, Ill., has been fixed at $1,000.... ....Estimated improvements to the Duluth dock system aggregating an outlay of over $3,000,000, are under way. Going in for a big grain trade this Fall. . The Woman's Silk Culture Association of Philadelphia, Pa., issued their sixth annual report Thursday. It says that there is now an open market for the reeled silk which bears a value second only to the best silks of Italy. There is also an outlet for waste and cocoons. Ninety of the 380 silk mills in operation in this country are in Pennsylvania. Mrs. John Lucas was re-elected president.....At the great meeting of the American Association of Nurserymen, Florists and seedsmen in convention at Washington, Wednesday and Thursday, the following officers for the ensuing year were elected:—President, C. L. Watrous, of Iowa; first vice-president, M. A. Hunt, of Illinois; secretary, D. Wilmot Scott, of Illinois; treasurer, A. R. Whitney, of Illinois; executive committee, S. D. Willard of New York, U. B. Pearsall of Kansas, and George Weltz of Ohio. A resolution was adopted urging the passage of the Oleomargarine Bill pending before Congress.....The third meeting of the Fruit and Vegetable Growers' Association of the United States in convention at Columbus, Ohio, Thursday, adopted the Arnold system of preserving fruits by evaporation. C. H. Chilcoal, of Illinois, was elected president..... ....Congress will not repeal or reduce the tax on tobacco at this session.....W. A. Boies, of Marengo, Ill., the "Butter King" of America, and probable the largest maker and dealer in butter and cheese in the country, controlling the production of over 20 creameries near Marengo, and paying nearly $500,000 a year in wages, failed the other day, owing about $300,000, of which at least $40,000 are due to the farmers and patrons of his factories. His assets won't be over $64,000.....Charley" Blatz, of Chicago, a very large cheese dealer, has "sold" his business to a young man named C. S. Mauran. "Charley" owes $100,000, much of it to farmers who consigned goods to him, or sold them on time: his assets will probably be not over 25 cents on the dollar, though he claims they will be more.....Partly owing to these failures, Harton Gill's, of Big Foot, near Harvard, Ill., operating eight cheese factories, has failed—liabilities—mostly to farmers—$50,000; assets $10,000. Almost every farmer within a radius of 10 miles will lose from $50 to $300.....

Crops & Markets.

SATURDAY, June 19, 1886.

The first wheat of the present crop was offered at the Baltimore Exchange, on Wednesday. Grown in Rappahannock, Va., and sold for 80 cents a bushel—Fultz, "very green and wet;" a small lot."

Production of Minneapolis mills last week 145,200 barrels, against 135,530 the preceding week, and 46,512 the corresponding week in 1885. Flour quotations 10 cents lower than a week ago.

A small, black worm, a new-comer there this season, is devastating onions on the famous "Graycourt" and "black dirt meadows' near Middleton, Orange Co., N. Y. Whole fields ruined. Onion weevil also unusually troublesome. Usual crop 400,000 bushels; hardly half so much likely this year.

According to the Chicago Board of Trade's Tuesday report, the number of bushels of grain in store in the United States and Canada June 12, and the increase or decrease as compared with the previous, were; wheat, 32,458,681, decrease, 1,006,858; corn, 9,387,200, increase, 575,704; oats, 2,595,298, increase, 423,307,; rye, 304,328, increase, 21,535; barley, 244,476, decrease, 51,569. The amount in Chicago elevators was: Wheat, 8,300,929; corn, 2,301,285; oats, 373,904; rye, 17,781; barley, 30,363.

THE Financial Chronicle, examining the Ag'l Department's last cotton report, finds that an increase os 1.52 per cent. is indicated, making the area for this year 18,994,000 acres. The reports of condition appear to indicate a very hopeful prospect, though more depends

upon climatic influences this season than is usual, because of the backward state of the plant in more than half of the area. It is reported that the condition is as good as it was last year, or better, in States having about 7,400,000 acres in cotton, while in States having about 11,000,000 acres the condition is at present more dependent upon climatic influences than it was a year ago. It may be roughly inferred that, with favorable weather, the yield this year may range from 6,300,000 to 6,700,000 bales if the season should be decidedly favorable.

For the last month prices of cattle have been rather unsteady. It is thought there will be little change in the next few months, though an advance is more probable than a decline. The low prices are attributed by many to the dressed beef trade. This is entirely in the hands of a few unscrupulous men. The Eastern shipments have undoubtedly lowered the prices of Eastern stock, and the great slaughter kings of the West are so manipulating the Western markets as to control prices there, and who expects they would pay a cent more than absolutely necessary? Men of Armour's kind, controlling vast capital and thoroughly unscrupulous in its use within the limits of "business morality," are dangerous to the public, especially when the combination of a few of them can establish a monopoly in such a business as the dressed meat trade. Owing to the great injury done by January blizzards in Texas, and the still severer losses by the recent terrible drought there, the supply of beeves from that State is likely to fall much short of early anticipations. In New Mexico, Colorado and Kansas there has also been much need of rain on the plains, so the pastures are short and parched, and stock are not doing well. Complaints of dry weather come from the Northwest also. As a whole, range cattle have not been doing well, and unless things change a good deal, much good beef can't come off the ranges next Fall; hence the prospect of prices for "States" cattle ought to be brighter.

There's no doubt that the firm stand taken by wool growers has helped to stiffen the price of wool this year. It is estimated that prices would be some cents lower had they rushed to sell at any figure. It is very desirable that large wool growers and wool growers' associations should take a firm stand as regards the prices for their wools. Commercial papers are deprecating high prices and predicting disasterous results, but they speak for their patrons—the dealers and manufacturers—and growers should be cautious in accepting their teachings. St. Louis has lately aspired to become a great wool market, and "blowed" a great deal, in advance, about an auction sale held there the other day; but by all reports it was a fizzle—Boston agrees with Chicago on this point. Prices in the Eastern markets are higher than a week ago, owing to excitement in the Western markets, where prices for the new clip are relatively higher than those lately commanded by wool at the seaboard. Moreover, the great June wool sales in London have opened with lively competition, and prices for cross-bred wool are 5 to 10 and for Merino at least 15 per cent. above those at the close of the last series of sales. Manufacturers are willing to pay now without haggling, prices that couldn't tempt them a fortnight ago. West, local speculators have been buying freely in competition with Eastern dealers and manufacturers, and a good deal of the clip has already left farmers' hands. In Boston, prices have gone up one to two cents per pound this week, and even now wool there is relatively lower than the new clip in the country.

Current quotations for leading sorts there are as follows:

Ohio and Pennsylvania X	31@32c.
Ohio and Pennsylvania XX	32@33c.
Ohio and Pennsylvania XX and above	33@33c.
Michigan X	29@31c.
Fine Ohio delaine	31@32c.
No. 1 combing	34@35c.
Texas spring, 12 mos	22@24c.
Super A	31@34c.

Living Wonders.

THE wife of a clergyman at Fulton, New York, writes:—"Within the past seven years my husband has had two shocks of paralysis. His pulse was fast as I could count—his breath twice to my once. His body seemed a burden to him."

A month later came this report:—"His hands, which were bloodless and cold, are now natural, and the veins stand out, showing a renewed circulation."

Four months later was this further report:—"My husband continues to improve. About the last of July his left leg, which had a paralytic limp, straightened out, so that he now steps evenly on both legs. The paralytic condition of the right hand and the left side of his face, which were affected by the last shock, has also disappeared."

The wife of a clergyman in Sandersville, Georgia, writes:—"Was paralyzed in body and brain. . . I am now the happiest being you ever beheld. Compound Oxygen wrought wonders for me. I am a marvel and a wonder to the whole country."

A daughter of Colonel Hornbrook, of Wheeling, West Virginia, a wreck from paralysis, was completely restored to health by the use of the Compound Oxygen Treatment.

Dr. J. W. Williamson, of Boydtown, Virginia, reports a cure of one of his patients, who "had but little use of his right side; could neither walk, talk, nor write. Had not been able to ride for five years. He now talks, walks, and rides well."

W. R. Flanders, Esq., writes from North Thetford, Vermont:—"A spinal complaint partially paralyzed my limbs, so that their extremities were dead to the touch. Compound Oxygen has restored my strength, not only of body but of mind."

A clergyman of Allamakee, Iowa, writes:—"Your Compound Oxygen has worked like a charm. After three weeks use I have increase of weight, clear mental horizon, freedom from incipient paralytic attacks, and good rest. What more could I ask?"

"Compound Oxygen—Its Mode of Action and Results," is the title of a brochure of nearly two hundred pages. It is published by Drs. STARKEY & PALEN, 1529 Arch St., Phila., Pa., giving full information as to the means by which these and similar results are secured, and will be mailed free to any address on application.

MARKETS BY TELEGRAPH.

SATURDAY, June 19, 1886.

CHICAGO.—Compared with cash prices a week ago, "regular" wheat is 2¼c. lower—a fall of 5¼c. in two weeks, or rather nine days, as the drop didn't start till Thursday of the previous week. No. 2 Spring, 2¼c. lower—a fall of 5¾c. in nine days. Corn, ⅞c. lower. Oats, ⅝c. lower. Pork, 12½c. lower. Cattle, shippers 50c. lower; stockers, 35c. lower; "mixed," 15c. lower; "bulk," 5c. lower; Texans, unchanged. Hogs, a trifle higher. Sheep, Texans, from 10c. to 40c. higher; lambs, 50c. higher on medium grades; 50c. lower on the best.

WHEAT, active; Sales ranged: June, 70¾@71¾c; July, 72¼@73c; August, 73¾@74¼c; No. 2 Spring, 71¼@71⅜c; No. 3 Spring, 61@62c. CORN weak; sales: Cash, quoted 33¾c; June, at 33½@34¼c; July, 34¼@35¼c; August, 36½@36¾c. OATS.—Lower. Sales ranged: Cash, 26@27½c; July, 27¼@27¼c; August, 25¾@26c. RYE.—No. 2, at 55¼c. BARLEY.—No 2, at 53c. MESS PORK.—Cash, at $8 67½@8 70; July, $8 65@8 67½; August, $8 72½@8 77½. LARD.—Cash, 6 05@6 07½c; July, 6 10@6 15c; August at 6 20@6 23c. BULK MEATS.—shoulders at $4 85@4 90; short rib sides, at $5 40@5 45; Short Clear sides, at 5 80@5 85. CATTLE—Market easier and very slow. Shipping steers, at $4 00@5 50; stockers and feeders, $2 40@4 40; cows, bulls and mixed at $1 50@4 10; bulk, $2 75@3 25; through Texas cattle, $3 00@4 00. HOGS.—Market slow. Rough and mixed, $3 90@4 12½; packing and shipping at $4 10@4 30; light, $3 95@4 20; skips, $2 50@3 50. SHEEP.—Market firm and strong: Natives, $2 00@4 50; Texans, at $2 25@3 40; Lambs, per head, $2 00@3 00.

ST. LOUIS.—Compared with cash prices a week ago, No. 2 red wheat is 1c. lower. Corn, ¼c. lower. Oats, ⅜c. higher. Butter, unchanged. Eggs, ½c. lower. Flaxseed steady. Wool, all grades unchanged, except "fine light," "heavy" and black, which lose 1c. on the best sorts, though the other kinds on each are steady. Pork, 10c. lower. Cattle, just a shade lower on the best kinds; steady on the others. Hogs, light, 10c. higher; others unchanged. Sheep, steady.

WHEAT.—Active; No. 2 Red, Cash, 75c; July at 73@73¾c; August, 73¾@74¼c; September at 75¼@75c. CORN.—Dull; No. 2 mixed Cash, quoted at 30¾@31¼c; July, 31@31¼c; August at 32@32½c; September, 32¾c. OATS.—Dead, dull and prices nominal. NO. 2 mixed, Cash, at 24¾c; July, at 25c; August at 24¼c. RYE at 53c. BARLEY.—No market. BUTTER.—Active and steady; Creamery, 14@15c; dairy, 11@13c. EGGS.—In moderate demand at 9c. per doz. FLAXSEED.—Firm at $1 01. BRAN strong at 45@46c. CORN MEAL—Firm at $2 05. WOOL.—Active and firm; medium clothing at 30@34½c; combing at 22@23½c; low and coarse at 18@20c; fine, light, at 18@22c; heavy, at 16@20c; black at 11@20c. PROVISIONS.—Quiet. PORK weak at $8 90. LARD.—Nominal at 5 75c. Bacon firm; long clear, at 6.05c; short ribs, at 6.30c; short clear, 6.25@6.30c. Hams very firm at 10½@12c. CATTLE.—Market firm; Good to Choice Native Shipping Steers, at $5 15@5 50; Native Common to Fair, $4 40@4 80; Butchers Steers, $3 50@4 50; Cows and Heifers, at $2 50@3 75; Stockers and Feeders, $3 25@4 60; Grass Texas, $2 25@3 85. HOGS.—Market active and steady; Light, at $4 00@4 10; Packing, at $3 90@4 10; Heavy, $4 15@4 25. SHEEP.—Market steady at $2 25@4 25.

BOSTON.—CORN.—Steamer yellow, at 49c—c, and steamer mixed at 48c—c. OATS.—No. 2 white, at 41½@41¾c per bushel, and fancy white and barley, 44@45c, per bushel as to quality. Rye, 65c. per bushel. Bran, at $14@15 for Spring and $16 50 for Winter; fine feed and middlings, at $14 00@19 00 and cotton seed meal at $23 00 on spot and $22 00 per ton to arrive. HAY AND STRAW.—Hay quiet at $18 per ton for choice and fancy; fair to good, at $16 00@17 00, fine, at $15 00@16 00, and $9 00@13 00 for poor and damaged; Western choice, $16 00@17 00; do fair to good $14@15. STRAW—Rye straw is held at $23 00@22 00 for choice, and $14@18 for common to good. Swale hay, $10@11; Oat straw, at $10@11 per ton. PRODUCE.—BUTTER.—Northern and Eastern creamery, extra, 15½@16c; extra firsts, 16¼@17½c; firsts, 15@16c; Western creamery, 16@18c, for extra firsts to first; firsts, 14@15c; Northern dairy, 15@17c, for Vermont extra firsts to extra, firsts, at 13@14c; seconds, 12@13c; Western dairy, 13@14c, for firsts; seconds, 9@11; imitation creamery, 11@13c, for extra firsts to extra; ladle packed, 10@12c, for extra firsts to extra; firsts, at 8@9c; seconds, at 7@8c; grease, at 3@4c. NEW CHEESE.—New York and Vermont extra, 8c; do. do. firsts, 6@7c; do. do. seconds, 4@5c.; Western extra 7@8c; do. firsts, 5@6c. EGGS.—Cape and near-by, per dozen, at 13c; Eastern extras, at 12½@13c; do, firsts, at 11½@12c; Northern, firsts at 12c; Western firsts, at 11@12c; Provincial, 11½@12c. BEANS.—Choice Northern hand-picked pea, at $1 65@1 75 per bushel; do, do, New York, small, $1 50@1 60; do, do, screened, $1 15@1 30; medium choice, hand-picked $1 30@1 35; do, do, screened, $1 15@1 25; Yellow Eyes, Improved, $1 40; do, choice flats, at $1 25@1 30; Red Kidneys, $1 60@1 65. PEAS.—Canada, common to choice, at 65@95c, per bushel. Green peas, Northern, at 90c@$1; do, Western, $1 15@1 20. POTATOES range at 45@70c, per bushel as to quality.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, June 19, 1886.

STATE OF THE MARKET.—Compared with cash prices last week, flour is unchanged; No. 2 Chicago wheat 3c. lower; No. 2 Red, 1½c. lower; corn, 1c. to 1½c. higher; oats, ¼c. lower; pork, unchanged; butter, cheese and eggs, a shade lower; vegetables, steady.

FLOUR, FEED AND MEAL, FLOUR—Quotations: Fine at $2 10@2 90; Superfine, $2 50@3 15; Extra No. 2, $3 00@3 30; Good to Fancy Extra State, $3 40@4 00; Common to Good Extra Western, at $3 10@4 10; Good to Choice Extra Western, $4 00@5 00; Common to Fair Extra Ohio, $3 00@3 75, Good, $3 80@4 30; Good to Choice, $4 25@4 75; Common Extra Minnesota, $3 00@3 50; Clear, $3 25@3 75; Rye Mixture, $3 30@3 80; Straight, $4 00@4 50, Patent $4 50@5 00; Bakers' Extra, $3 75@4 25; St. Louis Common to Fair Extra, $3 00@3 65; Fair to Good, $3 70@4 50; Good to Very Choice, $4 55@5 00. Patent Winter Wheat Extra, $4 10@5 00; City Mill Extra for West Indies, at $4 20@4 35; South America, $4 30@4 40. SOUTHERN FLOUR—Common to Fair Extra, $3 25@3 85; Fair to Choice do., $3 70@5 00. RYE FLOUR.—Superfine, at $3 10@3 90, latter for choice. CORN MEAL.—Brandywine at $2 70@2 95; Sagamore, at $2 75; Yellow Western quoted at $2 50@2 75. FEED.—40 to 50 lbs. quoted at 60@65c., and from mill at 70@72½c; 60 lb. at 60c; 80 lb. at 65c; 100 lb. at 75@80c; Sharps at 95c.@$1. Rye at 67½@72½c.

GRAIN.—WHEAT.—Market firm; No. 2 Chicago at 79c; Ungraded Duluth, 81@81¼c; No. Hard Duluth, 84½c; Ungraded Winter Red, 85@86¼c; No. 2 Red, 82⅞@83¼c; Ungraded White, 86c; No. 2 Red for June, 82⅞@82⅝c; do. for July, 82⅛@83¼c; do. for August, 82 3-16@83⅛c; do. for September, 84@84¼c; do. for October, 85½@86¼c; do for November, 86½@86¾c; do. for December, 87⅝@88¼c; do. for January, 88½@88¾c; do. for February, 89¾@90c; do. for May, 92⅝@93c. RYE.—Western, 56@59c; Canada at 58@60c; State at 61@65c. CORN.—No. 2 Mixed at 37@38c; Ungraded Mixed, at 30@47c; No. 2 Mixed, at 44c; No. 2 White at 45@45¼c; No. 2 Mixed for July, 41⅜@45c; do. for August, 45@45½c; do. for September, 45⅞@45¾c. OATS.—No. 3, Mixed at 32c; No. 2, 33@33½c; No. 1, nominal; No. 3 White, 36@36½c; No. 2 37@37½c; No. 1 nominal; Mixed Western, at 33@35c; White do., at 36¾@44½c; White State, at 37@40c; No. 2 Mixed for June, 32½@33c; do. for July, 33@34½c; do. for August, 31c.

PROVISIONS.—PORK.—Mess quoted at $9 25@9 50 for Old and $10@10 25 for New; $10 75@$11 75 for Family Mess; $12 00@14 00 for Clear Back; and $9 50@9 75 for Extra Prime. BEEF.—Extra India Mess, at $12 00@14 00; Extra Mess, in barrels, $8 00; Packet, $8 50; Fancy Plate, $8 50. BEEF HAMS.—Quoted at $23 00. MIDDLES.—Long Clear in New York, 6c; at the West, Long Clear, 5.65c; Short Clear, 5 90c. DRESSED HOGS.—City Heavy to Light quoted at 5¾@5¾c.; Pigs, 5¾@6c. LARD.—Western Steam spot quoted at 6.25c; July, at 6.26@6.32c; August, 6.39@6.44; September, 6.45@6.47; October, 6.54@6.62c; City Steam steady at 6c. Refined quoted at 6.50c. Continent 6.90c.

BUTTER.—Creamery—State and Delaware County pails, fine, 15@—c; State and Pennsylvania, 17@17½c; Western best, 17c; Western prime, 15½@16c.; Western good, at 14@14½c; State pails at —@—c. State Dairy.—Half-firkin tubs, best, 16c; do. do. do. extra fine, 15c; do. do. do., good, 13@14c; do. do. common, 11@12c; Welsh tubs, best, 15c; do prime, 14c. Western.—Imitation Creamery, best, 13c; do. do. fair and good, 11@12c; Dairy, fine, 12@—c; do, common, 9@11c; Factory, fresh, 11c; do. good, 9@10c.

CHEESE.—The quotations are for: New State Factory, best white, 7¼@7½c; do. do, best colored, 7¼@7½c; do. do, fine, at 7@7⅛c; do. do, fair, at 5½@6c; do. do., common, at 5c; Ohio factory, fine, at —@—c; State factory, light skims, at 4@5½c.

EGGS.—The market is steadier. Trade is fairly active. Quotations are for: State, at 12@12½c; Western, at 11½@12c; Canadian, at 12c.

POULTRY AND GAME.—The market is rather firmer with fair trade demands.

POULTRY.—LIVE.—Fowls, near-by lots, per lb, at 9⅛@—c.; fowls, Western lots, per lb, at 9½@—c.; fowls, Southern lots, per lb, at 9½@—c, turkeys, per lb, at 9@10c; ducks, western, per pair, at 50@65c.; geese, western, per pair, at $1.00@1.25.

POULTRY.—DRESSED.—Turkeys, per pound, at 8@10c.; Spring chickens, per pound at 16@22c.; fowls, Pennsylvania, prime, per lb, 10@11c.; do State and western, per lb, at 8@9c.

POULTRY.—FROZEN.—Turkeys, per pound, at 14@16c,

GAME.—English snipe, per doz., $2@2 50; Plover, Western, per doz., $1 00@1 50

COTTON.—The quotations, according to the American classification, are as follows:

	Uplands.	New Orleans and Gulf.	Texas.
Ordinary	6¼	6 11-16	8 11-16
Strict Ordinary	6 15-16	7⅛	7⅛
Good Ordinary	7¼	8 1-16	8 1-16
Strict Good Ordinary	8 5-16	8⅛	8⅛
Low Middling	8 11-16	8⅞	8⅞
Strict Low Middling	8 15-16	9⅛	9⅛
Middling	9⅛	9 5-16	9 5-16
Good Middling	9⅝	9 13-16	9 13-16
Strict Good Middling	9 15-16	10⅛	10⅛
Middling Fair	10 5-16	10⅝	10⅝
Fair	10 15-16	11⅛	11⅛

STAINED.

Good Ordinary	6 5-16	Low Middling	7 13-16
Strict Good Ord	7	Middling	8 9-16

FRUITS.—FRESH.—Quotations are: Apples.—Russetts, Roxbury, per bbl., $2 75@3 00; do. Goldens, $2 50@2 75; Strawberries—South Jersey, per quart, at 3@5c. Maryland, per quart, at 6@7c; for prime; do, Wilson, per quart, at 6@8c; up river at 9@12c. Cherries at 7@10c. for dark red, large, and 4@5c. for small. Huckleberries at 8@10c. per quart for North Carolina. Gooseberries, per bushel, at $1 50.

FRUITS.—DRIED.—The quotations are as follows Apples—Fancy evaporated, at 7@7¼c; choice, at 6¾c; do. prime at 6¼@6½c; fancy North Carolina sliced, at —; choice do. at 5¾@5¾c; choice Tennessee quarters at 1½@2c.; State quarters at 2½@3c.; southern sliced prime at 1½@2c; do. common, —, Peaches—Peeled North Carolina, choice, 11c; fancy, 12@12½c; extra fancy, —c; Georgia, choice, at 10@11c; do. prime, 8@9c; unpeeled halves, 3¾@3c; unpeeled quarters at 2½@2½c.; Delaware evaporated, peeled,—@—c; unpeeled do., at —@—c. Choice pitted cherries at 10c. Evaporated raspberries, at —@15c; sun-dried do, 12½@13c. Blackberries—Prime at 6¾@7c. Whortleberries at —c. Plums, at 5c.

PEANUTS.—Remain at strong prices. Demands are fair. The quotations are for; 7c. for best handpicked; 4½@5½c. for farmers' ades.

SEED.—Quotations: Timothy quoted at $2 05@2 15. Linseed quoted at $1 65@1 70. Mustard at 5¾@6c. for Trieste brown mustard and 6½c. for California yellow. Carraway seed at 8½c. for Dutch; Italian anise at 9½@10c; canary seed nominal at 2¾@3c. for Smyrna and 3¾@3½c. for Sicily.

HAY AND STRAW.—The following quotations are; for Choice Timothy hay at 85@—c; Good do, at 75@80c; medium 60@70c; shipping at 55c; clover mixed, 60@65c; clover, black, at —@—c. Straw.—No. 1 rye, 90@95c; short rye at 65@75c; oat, at 40@45c; wheat, at —c.

VEGETABLES.—Potatoes.—Bermuda, new, prime, per bbl, $3 50@4 50; Bermuda, new, small, per bbl, $2@3; North Carolina, prime, per bbl, $2 25@2 75; Savannah, new, prime, per bbl, quoted at $2 50@3 00; Charleston, Chili, prime, per bbl, $2 25@2 75; Charleston, rose, prime, per bbl, $2 25@2 75; Charleston, peerless, prime, per bbl, $2 25@2 75; Florida, new, prime, per bbl, $—@—; new potatoes, fair, per bbl, quoted at $—@—; new potatoes, seconds, per bbl, $—@—; new potatoes, culls, per bbl, $—@—; Rose, Maine and New Brunswick, prime, $1 75@2; Rose, Nova Scotia in bulk, per bbl, at $1 75@2; Rose State, per bbl, $1 25@1 50; Burbank, State, per bbl, $1 50@1 75; Burbank, Maine and New Brunswick, per bbl, $1 75@2 00; Prolific, Nova Scotia and New Brunswick, per bbl, $1 85@75; Mercer, Prince Edwards Island, per bbl, $1 50@1 75; Peerless, State, bulk, per bbl., $1 25@1 50; Magnum Bonum, Imported, 168 lb, sack, $1 75@1 90. Asparagus.—Oyster Bay, per dozen bunches, at $1 50@2 00; do, upper Jersey, prime, $—@—. Beets.—Charleston and Savannah, per crate, at 40@60. Beans.—Norfolk flat, per half bbl, $1 75. do. Norfolk flat, per bushel crate at $1 25; do. North Carolina, round, per half bbl, crate, $1 50@1 75; do. North Carolina, round, per bush. crate, $1 00@1 75; do. North Carolina, flat, per half bbl, crate, $1 00; do. North Carolina, flat, per bush, crate, 50@75; do. Savannah, round, green, 40@60c. Cabbages.—Norfolk and North Carolina, per bbl., at 50c@$1. Cucumbers.—Charleston, per crate, 75c.@$1; do. Savannah, per crate, 50@$1; do. Florida, prime, per crate, 25@50c. Onions.—Bermuda per crate, at $1 50; do, New Orleans, per bbl, $3@3 50. Peas.—Long Island, per bag, $1; do. Jersey, per bbl, $1 50@1 75 do. Maryland, per bbl., at $1@1 50; do, Norfolk, morrow, per half-bbl, 50@60c; do. Norfolk, small, per half-bbl. crate, 50@1 25. Radishes.—Long Island, per 100 bunches, 50@75c. Squash.—Charleston and Savannah, per crate, 50@75c. Tomatoes.—Florida, choice ripe, per crate, 75c@$1; do. Florida, green, per crate, 50@60; do, Bermuda, per box, 25@—c.

TALLOW—Firm and nominally active. Prime City quoted at 4½@4¾c. Sales 150,000 lb at 4½@4¼c.

WOOL.—Quiet but firm. The Ohio clip, it is reported, will show a decrease. The sales of late have included X and XX Ohio Fleece, at 33@34c; No. 1 Fleece at 34½c; Scoured Texas at 50c; Spring Western Texas at 15½@19c; Fall do. 15½c.

LIVE STOCK MARKET.

NEW YORK, SATURDAY, June 19, 1886.

Shipments for six days, 1,495 live cattle, 5,860 quarters of beef, and 139 live sheep. BEEVES.—Pennsylvania Meal-fed Steers, 1,347 lb, at $6; do, 1,406 lb, at $5 85; Chicago steers, 1,381 lb, at $5 80; do, 1,406 lb, at $5 70; State do, 961, at $4 50; Ohio Steer Cows and Heifers, 93 lb, at $4 25; Terre Haute "Still Fed," 1,240 lb, at $5 85; do, 1,307 lb, at $5 85; Cincinnati do, 1,033 lb, at $5 50; do, 1,105 lb, at $5 30; Kentucky do, 1,045 at $5 35; Still Bulls, 1,111 lb, at $4 do, 1,367 lb, at $3 90; Chicago steers, 1,315 lb, at $5 70; Corn-fed Nebraska Texans, 1,081 lb, at $5 20; do, 1,058 lb, at $5 10; Kentucky "Stillers" 1,332 lb, at $5 72½; Lancaster County Pennsylvania steers, 1,245 lb at $5 75; do, 1,257 lb, at $5 65; Indiana Dry Cows, 1,129 lb, at $4 60; Bulls, 1,171 lb, at $3 65; St. Louis Steers, 1,223 lb, at $5 85; Ohio do, 1,357 lb, at $5 70; Buffalo do, 1,061 lb, at $4 70; Western do, 1,373 lb, at $5 88; Cincinnati Still Bulls, 1,131 lb, at $4 15; Pennsylvania Cows, 740 lb, at $3 75.

CALVES.—Veals, 153 lb, 5½c; do. 169 lb, at 5¾c; Buttermilk calves, 209 lb, at 3c.; Buttermilk and Fed Calves, 156 lb, $3 25; Fed Calves, 158 lb 3½c; do. 139 lb, at 4c; Veals, 155 lb, at $5 50, Maryland Veals, 177 lb at 5½c.

SHEEP AND LAMBS.—Total for six days, 27,499 head against 42,542 head for the same time last week. Trade was slow and sales limited, with Good stock fairly steady, but Common weak. Poor to Good Sheep sold at 2¾@4¾c; Fair to Prime Lambs at 6@7c, and one deck of State brought 7¾c; Ohio Sheep, 82 lb, at 4½c; Kentucky Lambs, 53 lb, at 6c; do. 61 lb 7c; State do. 59 lb, 7¾c; Western Sheep, 66 lb, at 4½c; Virginia lambs, 58 lb. 7c; Ohio Sheep and Lambs Mixed (common), 66 lb 3½c; Kansas-Texas Sheep, 76 lb, at 2½c.

HOGS.—Total receipts for six days, 35,156 head against 37,371 head for the same time last week. None for sale alive. Nominally quotations at $4 50@4 75.

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For the Young.

A MEMORY.

By the meadow bars together,
While the sun sank low,
Mary dear and I were standing,
In the long ago.

Ah! her eyes were brown and tender,
As she looked at me;
Round us kindly dropped the shadows—
There were none to see.

Well, indeed, do I remember,
Life was fair and young;
Time's ax had not left the grindstone,
Trouble's song unsung.

At my side her fair head rested,
As I held the pail;
Eagerly her bright eyes glistened,
As she switched her tail.

Switched her tail? Why yes; I'll tell you—
Now I'll make you laugh:—
I was but a dreaming milkman,
She—a Jersey calf.

Now for the plows. I have been hunting through the words pretty carefully. It is a great surprise to me to learn that there were so many words locked up in those letters. As I figure, we have found over 105,000 words. This would fill 36 pages of the RURAL. The paper covered about 1,200 square feet. If cut into strips six inches wide it would reach nearly half a mile.

The longest list of correct words from any boy came from

James A. Leland,
Kent Co., Michigan.

The longest list from any girl came from

Abbie Ward,
Monroe Co., N. Y.

These lists were very well prepared and there were few words to be taken out.

SOME of the Cousins sent in very long lists, but I found that many of the words were not allowable. The greatest trouble was that a double e or a double t would crowd in. You will remember that there is only one e and one t in "Clinton Chilled Plow." I had to take those words out, and that made the lists shorter. Then some of you forgot what I said about using a word like "hide," that is spelled in one way, but used with two meanings. Take it all together, though, the work was very well done, and I want to praise you all for the way you have worked. I have always thought my boys and girls were pretty smart, but I never was so sure of it before. I am sorry we cannot send a plow to all who tried so hard. I am inclined to think Woodward & Son would feel like doing it if they knew how hard you have worked. All those who tried and failed should never be discouraged. We have learned a good deal about spelling, anyway. One thing I forgot to say is that the majority of the lists came from girls.

Be careful how you stand and where you stand. I saw a woman the other day who came very near killing her baby. She stood on a ferry boat, with the baby in her arms, near a swinging door. She thought the door was fastened because it was shut, so she leaned up against it. It was not fastened at all but opened beneath her weight and gave her such a start that she could not keep on her feet. She staggered a few steps and then fell, dropping the baby on the floor. The baby was not hurt, but it was almost a miracle that she did not fall upon it and crush the little thing. Be careful now about leaning up against unstable things. It pays pretty well to keep our feet under us. I don't like to see these people who are always looking about for a good place to lean. When a boy once starts into this habit he never will get over it. All through life he will be looking out for a good place to rest, and while he is hunting for somebody to lean upon, the good things of life will all rush by him. Stand up straight boys and be your own walking sticks.

When I was a boy there used to be an old lady who gave me lots of advice. She had a very queer hobby; she thought people did not blow their noses half enough. Whenever she found a child doing nothing she would say "now just take out your handkerchief and give your nose a good blowing." Some of you will laugh at this, yet it was very good advice as I have often proved. As a rule, people don't blow their noses half enough. I am well satisfied that there would be much less catarrh, headache and other head troubles if people would keep their noses clean. Some people never carry handkerchiefs. That is a sure sign that they don't care much for their health. Carry a handkerchief and use it.

The fields and woods are at their best now. Make the best of this beautiful season. When Summer comes with its heat and dust we shall lose the freshness that now covers everything. The best way, after all, is to make the most of each season as it comes. Enlarge the good things of the present instead of wishing for something to come in the future. "Live for to-day!" That is a good motto.

Near a railroad over which I ride a good deal lives a dog. He looks something like a bull dog, black and white, and not very large. Every time the train comes by he rushes out of the house and runs a race with the engine. He runs with all his might at the side of the cars, and seems to feel badly enough when we shoot past him. Of course he can't keep up—he ought to know it by this time, but still out he comes and runs as hard as ever. When he gets to be an old dog he will have more sense. His legs will get stiff and he will know enough to stay where he is comfortable and let the engine go. Did you ever see a boy or girl like this foolish dog? I have. They don't try to race with engines, but they try, time after time, to do things which a little thinking would prove ridiculous. Think more about your work or play. Nothing of any value can be done in a minute. We would have no respect for a cat or a dog that was caught in the same trap twice. What shall we say about ourselves if we do a foolish thing twice?

NOTES FROM THE COUSINS.

I NOTICED that A. E. Wakeman, fears he has failed to sprout the Canna seeds found in the Rural Treasures. I would say, this seed is almost impossible to start unless it has boiling water poured over it and remains in soak over night. I always treat them so, and now have two fine plants from as many seeds found in the Rural Treasures. AUNT EM.

DEAR UNCLE MARK: I thought it was about time I wrote to you or you will forget me. My Brother Norman wants to join the Y. H. Club. He is nine years old. Thanks for the seed you sent me. A week from now it is vacation. I like to go to school, though I am always glad when vacation comes. I take care of the school house now. I did not get but $5 for 10 weeks of school this term. We have had bad luck with our chickens and hens. A skunk carried off 12 chickens and five hens. Can you tell me how to catch him? He is too smart for a steel trap.

Yours truly, RALPH SAWYER.
W. Medway, Mass.

[Try the box-trap for the skunk. I used to "blow the organ" in church when I was a boy and only got $4 a year for it. So you are earning more money than I did.—U. M.]

UNCLE MARK: A little girl, Retta M. Avery, says "she wishes some Cousin would write to her." May I be a Cousin, and may I write to her through your paper? My Papa takes your paper, and I sent in a list of words last week. Mamma did not think I had enough words to get the prize, but thought my name would be among the others, as having tried. My little brother died the day he was six-and-one-half years old; and my sister is too old to help me. I am the same age as Retta. Our school closes this week, and I intend to recite a piece from the RURAL called, "A Primitive Churn." I think it may make some fun. I, too, have been making a scrap-book. Our teacher gives us beautiful pictures, for perfect lessons. Mine is full now. If Retta will write to me, through the mail, I will reply.

HATTIE BELLE HOTCHKISS.
West Cheshire, Conn.
Care of C. F. Hotchkiss.

[I am glad you wrote, and I hope you will get an answer.—U. M.]

DEAR UNCLE MARK: My Pa takes the RURAL. I read it with much pleasure and some profit. We planted the Rural seeds. Some of them are growing nicely. The cutworms and moles destroyed the largest share, so we had to plant the ground to something else. My Grandma gave me nine duck eggs. I set them under a hen, and she hatched them all, but one died. The eight are doing nicely. I have two young crows. They are very mischievous. My Pa has a nice Arabian mare, and she has a nice colt. We live on a small farm, 15 miles from Grand Rapids. I am learning stenography of my brother, who teaches it in Oakland, Cal. He sends the lessons to me on cards. JAMES A. LELAND.
Kent Co., Mich.

DEAR UNCLE MARK: My sister Mary takes the paper. I am a girl, 13 years old. I live on a farm. Pa has five cows and five young calves, seven horses, two working teams, three colts and six pigs. My sister has 39 nice little chickens, and she has three hens hatching on chicken eggs and two hens setting on turkey eggs. She has two turkey hens and a gobbler. One of her hens has laid 38 eggs, and the other one has laid three. She has a nice flock of chickens. NELLIE M. SANKEY.
Clearfield Co., Pa.

DEAR UNCLE MARK: Sister and myself have been reading the Cousins' letters and of their other doings, and we have become so very hungry to become members of the Y. H. C. If you will take us in we will write you often of our doings. Papa has taken the R. N.-Y. the last six years, and the whole family read it and believe in it. I am 11 years old next birthday, and sister is eight. We go to school 1½ miles. Papa carries on mixed farming nine miles from Macomb. He has horses, cows, hogs, turkeys, chickens, ducks, and we have a prospect for a large crop of all kinds of berries. There are seven in our family. MARY J. & NELLY BAYMILLER.
Macomb, McDonough Co., Ill.

[We want to know more about your county.]

DEAR UNCLE MARK: It has been a long time since I have written to you. I went on a visit to Indiana, and I liked it very well. I live in a mountainous country and I like it better than a level country; the water is better. It is nice growing weather and everything looks nice. We raise all kinds of fruit: apples, peaches, pears, quinces, plums, cherries, grapes, raspberries, currants and gooseberries, and strawberries and blackberries. I would like to know what is good for currant and gooseberry worms. Pa has 15 cows, and I help milk them, and we have six horses and 13 hogs and 15 pigs and 50 hens and 150 chickens and 21 turkeys, 40 young ones, and 12 geese and 15 goslings and eight ducks and 10 young ducks. We have two dogs, Jack and Towser, and two cats, Tom and Charlie.

Your niece, N. E. WOODFORD.
Alpina, W. Va.

[Hellebore, powdered, mixed in water and sprayed on the bushes, will kill the worms.—U. M.]

DEAR UNCLE MARK: I would like to tell you a little about our home in Nebraska. It is five miles south of Gordon, and the Niobrara River is about the same distance south of us. This country is begining to settle up very fast. There are several persons who came from New York this Spring. My father came here about 18 months ago, and took a homestead and brought logs from the River and commenced building a log house. It was the first that was put up in this township. I like to write letters, I write to my Pa, he is working in Mississippi and he says he likes to get my letters. We like this place, but it was the middle of August before Ma and the family came from Minnesota and it was too late for a garden. I expect to have a garden this year. My brother takes the RURAL and got the seeds and will give them a fair chance.

Your neice, MARY JULIA MURPHY.
Gordon, Nebraska.

DEAR UNCLE MARK: I have long been thinking I would write to you, but I could not get up enough courage. I am 13 years old and have a brother 10. We have been to school all the time, but have been setting strawberry plants for the last two days. We picked, last year, from 2½ acres, 19,000 quarts, and have three acres to pick this year, also three acres of raspberries, which look promising. My Papa keeps a yard of bees, containing 100 swarms, which were looking very well last Fall when we shut them up in a stone house, but have died out some during the last dreary Winter. I have got one swarm and 32 chickens, 12 of which are Brown Leghorns and the other 20 Dark Brahmas. The cherry and apple trees are in full bloom here and will have a good crop if we do not get a frost.

Yours truly, JOHNNIE R. GILES.

[I don't think I am so terrible that people must wait for courage in order to write to me—I hope not, anyway. Too bad about the bees.—U. M.]

THE TUSCARORA INDIANS.

IN reading accounts of the troubles between the whites and the Indians in the far West, it is pleasant to hear about those tribes who live undisturbed on reservations in the Eastern States. Among these the Tuscarora tribe, numbering 430 persons, may be mentioned, whose home is on the Mountain Ridge, and some distance eastward, in the town of Lewiston, Niagara Co., N. Y. Here they own, 6,240 acres of the most desirable land in the State.

History says, "The Tuscaroras formerly lived in North Carolina. When obliged to leave their homes in that State, they turned their steps northward, and in 1712 came to Central New York, and built their wigwams on unoccupied ground near the Iriquois, a company of five tribes, who had united their interests for mutual protection and defense. The Tuscaroras were kindly received, and invited to join them, which they did gladly. Afterward these tribes were called "The Six Nations." Mohawks, Cayugas, Oneidas, Onondagas, Senecas, and Tuscaroras lived near each other contentedly until the Revolutionary War. Then some of the Tuscaroras, who were in sympathy with the British, stole away to Canada, and were active in the great conflict. At its close, they set out to return to their former hunting grounds in Central New York. Stopping at Lewiston to visit some Senecas who owned land on the Mountain Ridge, they decided to stay there, and a piece of land one mile square was given to them by their hospitable entertainers. Wishing to own a greater tract of hunting ground, the Holland Land Company kindly gave them two square miles of land adjoining their homes. Years went happily on, as then there were but few white men in the country to interfere with their pursuits. Again the want of more land began to be felt by them, but it was now too valuable to be given away; so they raised a small amount of money, and bought the desired tract from the Holland Land Company in 1808. It was densely wooded, and small game was abundant. The region was infested with wolves; consequently but few deer were found. If a deer went to the lake or river to drink, some prowling wolf would frighten it and make it take refuge in the water. Its enemy waited in the thicket until the poor, timid creature, tired with fruitless swimming, ventured to the shore, where it was soon killed and devoured. When the wolves were hunted and driven away, deer became plenty, bears were often shot and furnished food for the hunter. Occasionally a panther crossed his path, and was regarded as a dangerous foe. Fish were unusually plentiful in the creeks that ran into Niagara River. Thickly shaded with woods, they did not dry up in Summer, as small streams do at the present day. In March and April that delicious fish, the pike, was eagerly watched for and speared by the Indians. Flocks of swans, cranes and wild geese lived around Niagara River, and wild ducks and gulls were there in immense numbers. As the country became settled and the woods cleared off, game gradually disappeared. Wild ducks are still abundant on Niagara River, but hunting them is laborious work, and is often attended with danger. The Tuscaroras no longer depend on hunting for support, but are engaged in cultivating their farms. In this work many of them have been very successful. Land is allotted to the head of a family and subdivided among the members of the family. Where a family runs out, the land goes back to the commonality, and is again allotted to a new family. Some of the land is leased to white neighbors, who live near. A religious society was organized among the Tuscaroras in 1805. Various missionaries labored there, aiding them to acquire knowledge of the true God, the Great Spirit, who created all things. The Rev. Mr. Rockwood was sent to them in 1837, by the Board of Missions, and lived on the reservation 30 years. As many whites attended the Indian church, the sermon was preached in English as well as in Indian language. The minister spoke a sentence in English, then paused a moment, during which it was quickly translated into the Tuscarora tongue by an expert interpreter. In this way sentence by sentence, the sermon was translated to the people, who gladly listened to the Gospel's joyful sound. Now there are two churches on the Reservation, whose bells peal forth sweet tones that echo among the ravines that furrow the Mountain Ridge, proclaiming this to be a Sabbath-keeping people. The public schools, taught by native teachers, are well conducted. The older scholars are frequently sent to schools in the neighboring cities to complete their studies. These Children of Nature are gifted with fine vocal powers. One of them, Mr. Samuel Jacobs, taught singing schools among them for 30 years. They are lovers of song, and their singing is long remembered by those who hear it. Several of them are favorites in the concert room. Great attention is given to instrumental music, and there are two well organized musical bands, whose services are often sought on holidays.

This tribe still has its chiefs, after the manner of the olden times. There are 15 chiefs. Chief John Mount Pleasant, elected in 1827, when but 17 years of age, is the highest in rank. The other chiefs are his counsellors. Each has a tribal name, such as United States Eagle, French Beaver, etc. This tribe is composed of six classes, named as follows:—Bear, Wolf, Beaver, Snipe, Mudturtle and Eel. People of one class marry those of another, as each class is made up of relatives. Besides the chiefs, most every one has a tribal or Indian name. These are given to perpetuate the old customs of the race long before white men lived in this country. An annual picnic for the benefit of the Sabbath Schools of the Reservation is held during the month of August in a fine maple grove, where sap-troughs, lying at the roots of the trees, indicate that maple sugar-making is still carried on in the Spring. This picnic is largely attended by the whites, who are entertained with speaking, and also choice vocal and instrumental music by these accomplished and happy aborigines. SOPHIA C. GARRETT.

PERSONALS.

ARCHIBALD FORBES, the English war correspondent, is now in Washington for the purpose of being married to a daughter of General Meigs.

SAMUEL J. TILDEN is as bright as ever, mentally, and was able to walk from his carriage to his yacht, the other day, steadily without help or support.

E. P. WHIPPLE, critic, lecturer and distinguished man of letters, died at his home in Boston Thursday night, of pneumonia, after an illness of several weeks. Born March 8, 1819.

THAT young Prince Leopold, grandson of the Emperor of Brazil, is a midshipman on a Brazilian frigate here, and his visit is entirely unofficial, and he is to be treated not as a prince, but as an ordinary midshipman—with a difference.

LIEUT-GOV. JONES—Jones of Binghampton who pays-the-freight—has won golden opinions while presiding in the New York State Senate, and while Acting Governor during Hill's absence, and there is some talk of "booming" him for Governor at next election.

FROM a large number of reports, it is very evident that the fine old Emperor William, of Germany, is near his end. He is very weak, has frequent fainting spells, and although he has had marvelous rallies during the last 10 years, he cannot expect many more at the age of 89.

SPEAKING of the great Russian Foreign Minister, Count Paul Vasili says: "M. de Giers is not popular; he is shy and reserved. But he is thoroughly patriotic, is an admirable tactician and conceals an iron will under a supple exterior. He speaks little, but he acts."

COLONEL FREDERICK D. GRANT is spending the greater part of his time putting into shape and editing his father's journal of that triumphant tour around the world, which brought the American soldier into personal communication with nearly all his famous contemporaries.

AMERICAN Miss Grant was to marry English Earl Cairns—Lord Garmoyle, who had to pay $50,000 for jilting pretty actress Fortescue. The engagement is broken off, however, because Miss G., or her people, are unwilling or unable to give money enough to satisfy his "lordship's" debts or desires.

"THE second term movement is fairly launched," is a remark often heard in Washington. Mrs. Cleveland is smart, energetic and ambitious, and will hardly be content with half a term in the White House; hence a change of policy is expected on her husband's part to bring him into closer relations with the mass of his party.

REPRESENTATIVE W. S. HOLLMAN, the "Great Objector," *alias* the "Treasury Watchdog," received his 15th Congressional nomination, Wednesday, from the Fourth Indiana District, by a vote of 121 to 50, after four votes had been taken. Reports of strong opposition made him quit Washington suddenly the other day, and hurry home "to mind his fences."

HON. ROBERT M. T. HUNTER, of Va., has been confirmed Collector of the Port of Tappahonnock River, a sleepy place, whose commerce brings the Collector $250 a year. He was a Representative in Congress for 10 years and a Senator for 14, before the war, Confederate Secretary of State during the war, and State Senator after it—a man of great abilities and unblemished honor.

PRINCE ALEXANDER, of Bulgaria, formerly despised everywhere, but who by gallantry, dash and generalship won victory, territory and renown in the late brief campaign against Servia, opened in person the first Bulgarian-Rumelian Assembly at Sofia, last week. "United Bulgaria," said he, "has earned an honorable place among the nations. We are justified in hoping for a brilliant future."

CLARENCE A. SEWARD, associate of Roscoe Conkling in the Broadway Surface investigation, last Tuesday, got from Controller Chapin of this State, $15,000 of the $21,000 he claims for his services. The payment bankrupted the treasury so far as concerns the appropriations made for the investigation; the other $6,000 must be appropriated by the next Legislature. Seward can have a good time on the European trip on which he started this morning.

ONE of the daughters of the Comte de Paris married the heir to the throne of Portugal the other day, and another is to marry the heir to the throne of Italy. Queen Victoria has offered the Comte the palace formerly occupied by Louis Phillip, should he be expelled, and a number of officers associated with him when he served on McClellan's staff during our war, have invited him to make his home here. The heir of the Orleanists and Legitimists can't live far from Paris, however,

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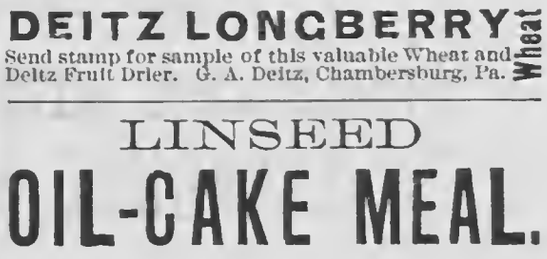

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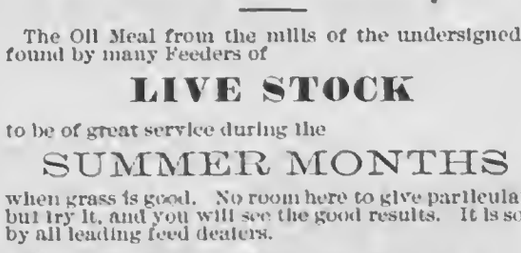

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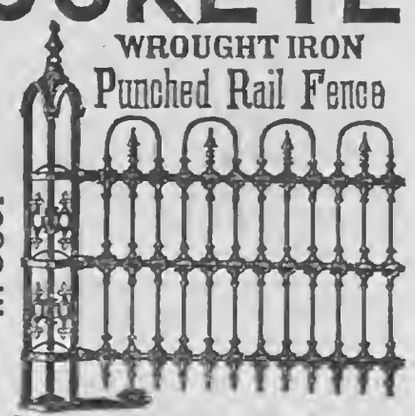

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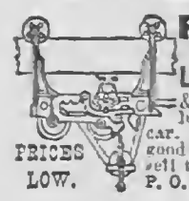

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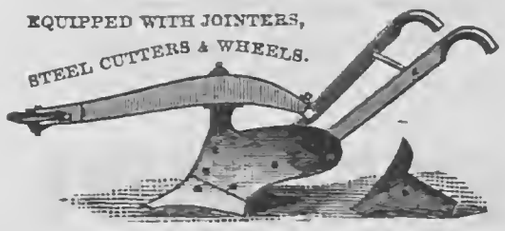

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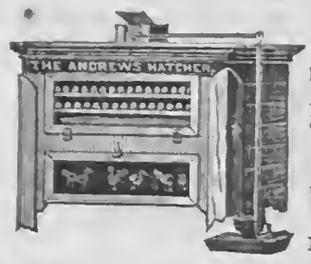

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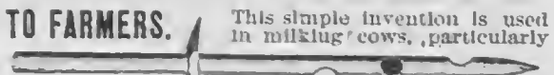

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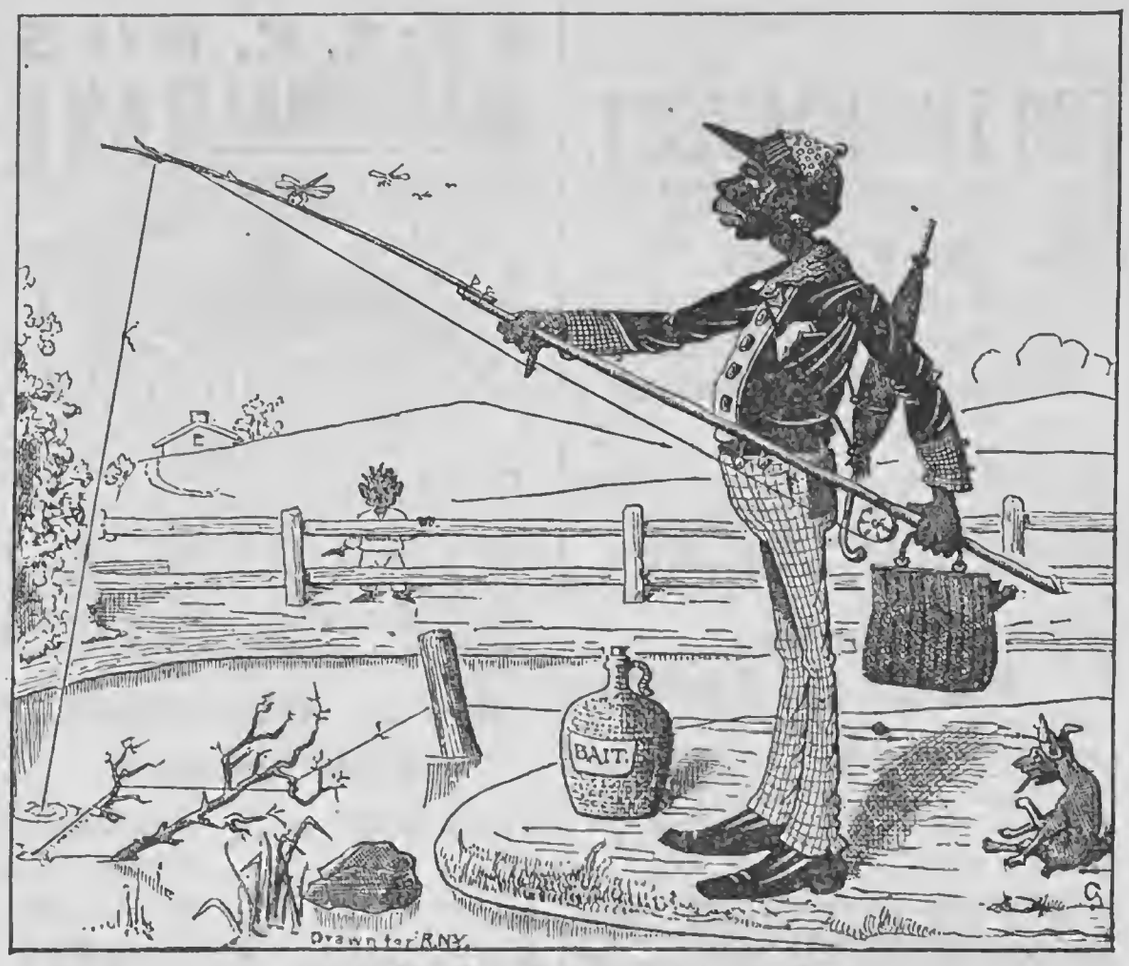

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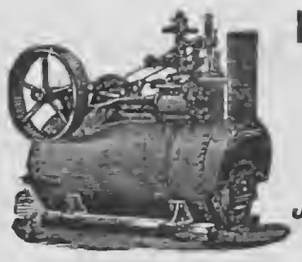

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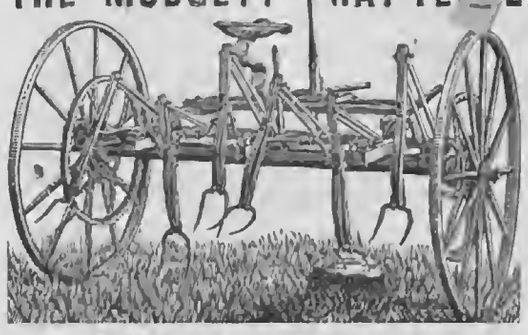

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THE RURAL NEW-YORKER

A JOURNAL FOR THE SUBURBAN AND COUNTRY HOME

VOL. XLV. No. 1901. NEW YORK, JULY 3, 1886. PRICE FIVE CENTS. $2.00 PER YEAR.

Entered according to Act of Congress, in the year 1886, by the Rural New-Yorker in the office of the Librarian of Congress at Washington.

Sheep Husbandry.

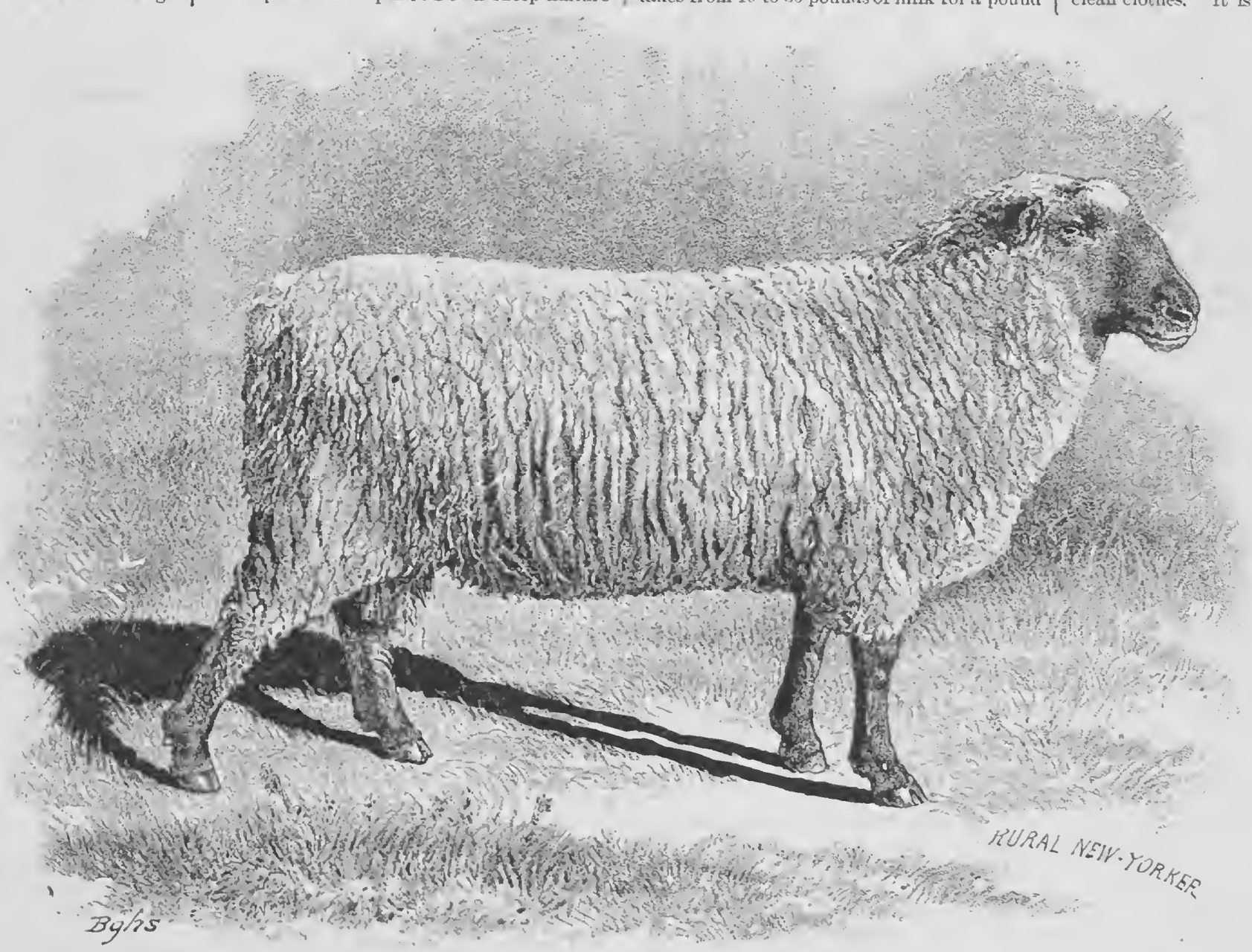
HAMPSHIRE DOWN SHEEP.

THE word "down" or "downs," as applied to land, is used in England to indicate a large, open tract of poor, untilled land, generally of a dry, hilly, sandy nature, covered here and there with heath or furze, and economically used only for pasture—almost exclusively for sheep. Probably the largest tract of this kind is a range of low hills, underlaid with chalk, extending or rather cropping up almost continuously, though Sussex, Hampshire and Dorset, in the extreme south of England. The hills slope gradually to the English Channel on the south, and merge into rich, cultivated lands on the north. Though unprofitable for tillage, they are covered with a rich sweet, short, dense herbage, affording an excellent pasture to the large flocks of sheep which have been raised there for many centuries. On these "downs" originated three of the best breeds of native sheep in England—the South Down in Sussex, the Hampshire Down in Hampshire, bordering on Sussex on the west; and the Dorset, in the county of that name adjoining the western boundary of Hampshire. The sheep of the entire region were, doubtless, originally horned, but the Dorsets alone bear horns at present. How long ago the South Down became hornless, by sporting, environment, or breeding, nobody knows; but probably through atavism, it is not, even now, a very unusual thing to find a lamb with short horns among male South Down lambs.

The Hampshire Down originated about 80 years ago by a cross between the horned, white-faced sheep for ages native of the district, and pure-bred South Down rams. From time immemorial the South Downs had dark-brown or black faces and legs, and at the time of the cross Mr. Ellman, of Glynde, had, by 50 years of careful breeding, done as much for them, in the way of improvement in form, wool, and quality of mutton, as Mr. Bakewell, of Dishley, had done for the Leicesters. The original Hampshire was larger and coarser, but hardier than the South Down, slower to mature, and inferior in the quality of flesh; for even then the South Down had generally won the reputation which it enjoys more widely to-day—that of being the best mutton sheep in the world. Another characteristic in which it surpassed the Hampshire, as it surpasses all other English breeds to-day, was its prepotency—its power of transmitting its special characteristics to its offspring by any other breed—due either to its superior natural vigor or to wise breeding for many years in one line by those who originated it, or to a combination of both. Hence it soon impressed its own characteristics on its offspring by the Hampshire, and in a few generations entirely changed the characteristics of the breed. The horns disappeared, the face and legs became dark, the frame grew more and more compact, the bones smaller, the back broader and straighter, the barrel rounder, the legs shorter and the flesh of better quality; while the offspring retained the superior hardiness and greater size, as well as the massive head and Roman nose of the old-time Hampshire. There seems to be no doubt that the present Hampshire Down has also in it a dash of Cotswold, and consequently of Leicester blood, as the Improved Cotswold has a large admixture of Leicester.

The present Hampshire Down sheep mature early and fatten rapidly. The lambs are of large size, and are usually dropped early and fed for market lambs, or kept over till one year old, the following Spring, when, if properly treated meanwhile, they will weigh 80 or 100 pounds, and sell readily at a profitable figure. They clip from six to seven pounds of wool suitable for combing, longer than South Down wool, but not so fine. The mutton has a good proportion of fat and lean, and is juicy and fine-flavored. This breed has been used considerably for crossing on other breeds, and when crossed on Cotswolds the wool is more valuable for worsted than that of pure Cotswold. Its chief use here, however, would be to cross on native sheep to improve the progeny. Large numbers were formerly imported, especially for the South before the war, but of late years more fashionable and better "boomed" breeds have come across in greater numbers. It is still quite popular in England, however.

The specimen Hampshire Down ram shown at Fig. 272 is from the herd of James Wood, Mt. Kisco, N. Y.



HAMPSHIRE DOWN. Fig. 272.

Dairy Husbandry.

DAIRY NOTES.

BY T. D. CURTIS.

MILK FOR A POUND OF BUTTER.—Some one says "the quantity of milk necessary to make a pound of butter varies greatly, ranging from nine to fifteen quarts." He might have said, ranging from five to twenty-eight quarts—for counting a pint a pound (it is a little more) according to the old woman's rule, it takes from 10 to 56 pounds of milk for a pound of butter. Prof. Henry, of the Wisconsin University Farm, found it took the latter amount of milk from his Holland cow to make a pound of butter, and the milk of some of the Jerseys requires only nine or ten pounds. These, of course, are extremes. Some of the Holland cows give milk of which only 18 or 20 pounds are required to make a pound of butter. The herds of the country will average 23 to 25 pounds of milk for a pound of butter for the entire season. The general average is 20 to 25 pounds.

THE TROUBLE IN DAIRYING.—It is asserted by some one that "the great trouble in dairying is the multiplicity of theories and the flood of advice offered by shallow persons who are not practical dairymen." Such an assertion does not show a great deal of practical sense. No man with a head on his shoulders need be led astray by theories or blunders because of their number. My observation is that we have too many self-conceited and stupid dairymen, who always misunderstand and misapply what is taught them, if they pay any attention to it, and then blame the source of their information. Comparatively few people have imagination enough to comprehend and apply correctly oral or printed instructions. The few who have are the lights of the world, teaching the great mass by example. Most men have the imitative faculty.

EXTREME NICENESS.—I see it stated that a Massachusetts dairyman requires his milkers to wash and comb their hair before milking. This may be very nice, but all depends on what they work at before milking. It might demand washing and combing, and then fail in cleanliness if the milkers did not put on clean clothes. It is to be inferred that the cows are to be washed and combed.

THE AVERAGE HERD.—A Western exchange describes the average herd as follows:

"Two extra, five very good, five good, five poor milkers, one kicker, two jumpers, and one that milks so hard that it costs all that it is worth to get it; of the remaining four, one has lost a teat and three are too old. Look to it that this paragraph does not describe your dairy."

There is no question *but* that most of the herds of the country would be improved by a judicious weeding out—and now is a good time to do it.

THE BEST BREED.—I consider the search for the best breed of dairy stock to be about as sensible as the search for the philosopher's stone or the fountain of youth. All the published experiments that I have seen bearing on this subject, are partial and unsatisfactory, showing only the relative value of the individual animals experimented with. It is a very difficult, if not impossible thing to get any one animal of a breed, that can properly stand as its representative and determine its relative value—so much depends on conditions. The same animal will not always give the same results. To determine the relative value of breeds would require many experiments, not with individuals, but with properly selected and kept herds. I very much doubt if such an experiment would pay, if it were ever so carefully and thoroughly tried.

YES, IT CAN BE DONE.—I have often heard the question asked if we could not select foundation stock from our best so-called "natives" and develop a valuable breed. Yes, it could be done, but would it pay? Our "natives" were once imported, but have become mixed, mongrelized and degenerated by hard fare and lack of care in breeding. Such

foundation would be very unreliable—about like quicksand for the foundation of a building. It would take a long while to fix the type, even if we secured a good one, and get up to where we might begin by selecting thoroughbreds for a foundation. It is always best to start with the best. Even then, obstacles enough will arise.

SUGAR IN BUTTER.—I see it stated that "Prof. Stewart recommends salting butter with one-fourth of white pulverized sugar and three-fourths in weight of fine salt, one ounce of the mixture for every pound of butter." What Stewart we are left to guess. But I think there must be some mistake about this. Sugar is a very unstable compound, when in a diluted form, and very bad for both butter and cheese. It plays the mischief in the cheese-vat, if the maker is not careful to guard against it and get rid of it as soon as possible, and I have always considered it objectionable in butter. The more completely it is washed out, the better and the longer the butter will retain its flavor, which will be cleaner without the sugar than with it. To add sugar to it—and especially common pulverized sugar, with all its impurities—is to invite rapid loss of flavor and the development of a bad one. The sugar will surely decompose, if oxygen gets to it—and it is difficult to keep it away. It is much easier to keep the sugar out of the butter. Pure butter, free from all foreign ingredients, and flavored with pure salt, is the most palatable and will keep the longest. Don't doctor your butter with sugar, saltpeter or anything else. There is too much adulteration.

COSTS AND VALUES.—Prof. I. P. Roberts finds it costs him 1¼ cent per quart to produce milk on the Cornell University farm, and the value of the manure he estimates at 16¾ cents a day per cow. This was in an experiment to test the value of the manure by special feeding for the purpose. Only the manure of well-fed milch cows could be so valuable, and to secure or retain this value, the manure must be carefully housed. There ought to be profit in producing milk at 1½ cent per quart, even in these times of low prices.

BIG MILK RECORD.—Up to May 1 last, 25 of our heifers had closed their two-year-old records which commenced in the Spring of 1885. The weight of each milking of every animal was carefully and accurately kept, and testified to by the milkers in a manner satisfactory to the Superintendent of the Advanced Registry. The record of the entire lot averaged, for the year, 12,409 pounds eight ounces. This average so far surpasses all previous herd averages for heifers of the same age (two-years-old) that its publication will be of interest to all breeders.

SMITHS, POWELL & LAMB.

Syracuse, N. Y.

The Swineherd.

THE VOICE OF THE DUROC-JERSEYS.

I LIKE the article of Mr. R. J. Young, St. Joseph Co., Mo., published in the RURAL of June 5, for its general fairness and its entire brightness. Mr. Young has done well with a bad case. Lawyer-like, he made his premises to suit himself, and went away back into the legends of the past to get his specimens of red hogs on which to found his argument, and repeated the old, old squib of the corn-crib breeders, about "rail-splitters." I wonder what the Poland-China perfectionist would do if he could not call up this antiquated jibe when he towers in indignation at a little good advice about his line of breeding and feeding and the dangers attending it. People have been blind before and suffered woefully for it. None of us is too wise to learn, and the breeders of the Duroc-Jersey hogs have lived and learned and improved their hogs wonderfully; and I have heard it said that Poland-China breeders were afraid of them.

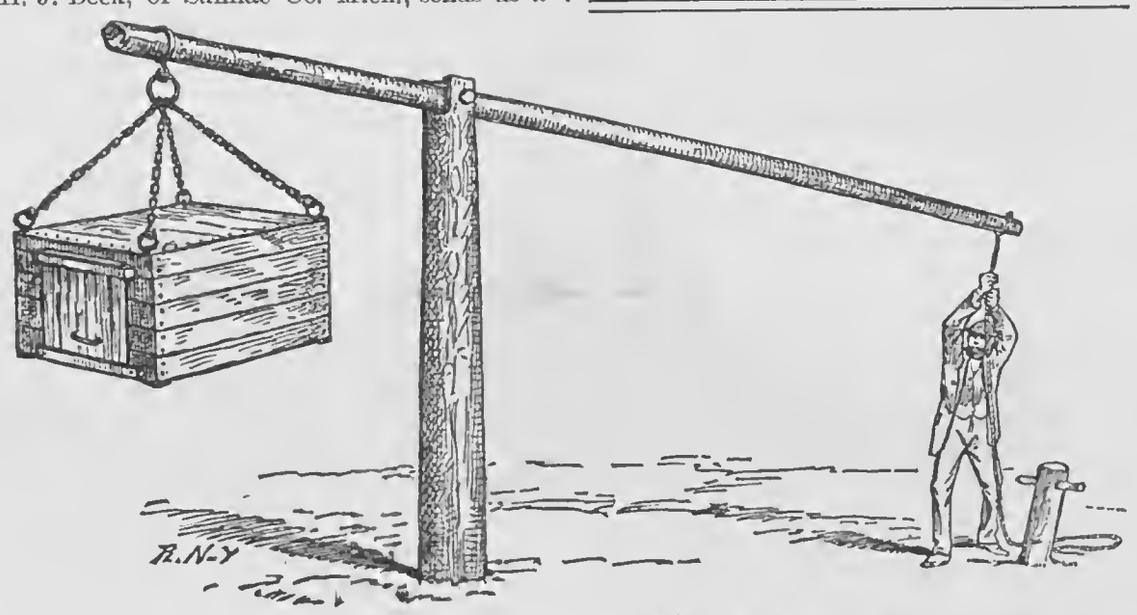
I will say again that I think the Poland-Chinas "are as nearly perfect as they can be." They have got all the Berkshire in them they can very well get, and the road is ended in that direction, and now I generously suggest to them to travel with us and try the Duroc-Jersey blood. When perfection is reached, or rather if "improvement" is reached which has been aimed at, which is called sometimes "early maturity," and means getting fat all the time, then comes a good time to change and put in some new blood before deterioration sets in too strongly. It doesn't seem to have dawned upon the average Poland-China breeder that when a thing is finished, it is done—when a thing is ripe the next step is decay. Breeds have run out in the past, and they may be running out in the present, and they will in the future.

Science has exploded a great many old traditions and notions, and science teaches me that a line of breeding founded on *corn and fat* will run out any breed of people, cattle or hogs, and cholera seems to confirm this view; for it revels in just these conditions. A number of Western men have told me that the Poland-China pigs are apt to be weak when they come, and I have no doubt of it. That Mr. Young, or his careful neighbor, had strong pigs and lots of them would not disprove this. They may be the exception. A great many shippers told me that the losses with Poland-Chinas, in shipment, were excessive; that they did not "stand up" well in shipment. I do not doubt this at all, and the fact that one could walk 15 miles in a day, though it weighed 700 pounds, won't upset the statement. This was another notable exception. No one can convince me that all corn and fat in fathers and mothers for generations will put strong bone and stamina in the offspring. I have not lost one pig this Spring from weakness or disease, and one sow had 11 pigs in an open field in the night during a cold rain storm. It is a common thing for Duroc-Jersey pigs to dress more than 300 pounds when eight to ten months old; but I am aware "that simple assestion will not give hogs stamina or lots of pigs;" but new and strong blood with plenty of muscle and bone and a variety of food will, and that is what we want.

F. D. CURTIS.

A HOG LIFTER.

IT is often necessary to carry hogs from place to place. A sow with a litter of pigs is the most uncomfortable thing imaginable to drive when she takes a notion to go in another direction. Large hogs can be driven from the pen, up a board, into a wagon, but little pigs are hard to manage in this way. When the whole brood are driven into a box it requires several men to load it into the wagon. Mr. H. J. Beck, of Sanilac Co. Mich., sends us a sketch of a contrivance that must add greatly to the ease of such a shipment. While visiting a neighbor he saw a sow and her pigs loaded into a wagon with so much ease that he made a note of it at once. A large box with a sliding door and rings at the corners—like that shown in the illustration—was placed on the ground. By means of a little feed, the sow and her pigs were induced to enter. Then the slide was dropped, leaving the pigs prisoners. Then the long pole shown in the picture was lowered so as to fasten the chains and hooks as shown. Then by pulling on the longer arm of the lever, the whole thing was lifted and fastened so as to hang high enough to enable a wagon to be backed under it. With an implement of this kind one man can lift a very heavy load.



A HOG LIFTER. Fig. 275.

The Poultry Yard.

BLACK RUSSIAN FOWLS.

MR. E. HALEY, of New London Co., Conn., sends us the following information regarding the Black Russians, shown at Fig. 278, p. 431: "This rather odd but beautiful breed of fowls is supposed to have been originally imported from Russia. They are a trifle odd, because they haven't a vestige of crest: they have full beards or whiskers, which give them a peculiar look. They are naturally very hardy, and being very fully feathered, they are well adapted to cold weather, hence they are great egg layers through the winter months, and also good summer layers. Their bones are rather small for their weight, for they have full, plump breasts and bodies. Though they have dark-colored legs, they have yellow fat and skin and are fine table fowls, their weight being from six to eight pounds. They are quiet and gentle and easy to manage. They feather and mature quite young, and pullets commence to lay when about five months old. They have all the good qualities that could be desired in a fowl, and are therefore one of the best breeds for the farmer. Their glossy, greenish-black plumage, bright red rose combs, heavy beard and stylish carriage make a flock an ornament to any yard or lawn."

REMEDY FOR ROUP.

I HAVE lately had several cases of roup among my poultry, and have cured every one discovered in time—bad attacks too—by simple remedies. First, give a bread pill containing Cayenne pepper and red horse-powder, and at night a teaspoonful of the best castor oil. Also wet the nostrils well with kerosene oil during the day—twice if the attack be severe—and let the birds breathe fumes of the flowers of sulphur. I take a pan of ashes, put live coals on it, then sprinkle sulphur on the fire and move the pan under the roosts in the evening when the fowls are on them. Care must be taken not to allow it to be too strong. I have used compounds made by long recipes, and have not found them nearly as effective as the above remedy. I would no more be without this than I would go without camphor and cough medicine or ointment in the house.

Durand, Ill. G. S.

DOES IT PAY TO KEEP POULTRY?

SOME deny it. I kept 27 hens the past Winter. From Dec. 21, 1885, to April 26, 1886, inclusive, they laid 1,272 eggs, or 106 dozen, which sold for from 18 cents down to 10 cents per dozen, and averaged 14 cents or more. At 14 cents, they netted $14.84. The birds were fed wheat screenings with corn and boiled vegetables occasionally. The entire feed did not cost $5. They were Plymouth Rocks, Black Javas and Brown Leghorns. Of the last we had five pullets. They began to lay when five months old (this is no guess-work), and between the above dates they laid 450 eggs. No doubt many can beat this, but it answers the above question.

C. S.

Plover, Wis.

ONE way of flanking our insect foes is to change our planting ground. Plants of squashes in an old garden were beset by an army of cucumber beetles as soon as their seed-leaves appeared above ground, while on a plat a few rods distant, on which no cucurbitæ had been grown for years, the plants were scarcely molested at all. Potato plants on soil devoted to potatoes three years were eaten back to the ground by the Colorado Beetle, while on ground that has seen no potatoes recently the foliage is scarcely injured.

I have received little if any benefit from the much lauded kerosene emulsion. Used for aphides in varying degrees of strength, it greased the foliage, but did not kill the lice. Used very strong for the cabbage maggot, it has not stopped, if it has checked the injury. An emulsion containing one-fourth in bulk pure kerosene did not kill the maggots immersed in it. Used for the codling moth, it injured the foliage, but did not decrease the wormy fruits. Who has a better record for it?

I find that transplanting may be accomplished with excellent success, even in very dry weather, if it is properly done. Make a hole with the dibber or trowel, and fill it with water. A few minutes afterward, set the plant, placing the roots deep, pack the earth tightly about the roots and stem, and cover the surface with mellow earth. Plants of cabbage, egg plant, tobacco and pepper set in this way, have scarcely withered, though no rain has fallen since, nor for many days before the setting.

Another season's careful experiments in fertilizing the blooms of the strawberry with pollens from different varieties give only negative or nonconmittal results. The drought pinched the fruits severely on removing the plants from the greenhouse to the garden, and they ripened prematurely; but the story told is a repetition of that of last season. Berries of Crescent fertilized with pollen from Lennig's White, were not perceptibly lighter in color than the same fertilized with Wilson pollen. Flowers fertilized on one side with pollen from Lennig's White, and on the other with that from Sharpless, gave berries colored all alike. Flowers not fertilized at all, unless from the pollen imperceptibly carried through the air from neighboring plants in the greenhouse, produced a few berries which bore apparently normal seeds, though the blooms bore no visible filaments or anthers. One effect of the cross-fertilizations, however, was visible. The percentage of berries secured in the crossings was clearly in proportion to the abundance of the pollen yielded by the flowers used. That is to say, the Lennig's White and Sharpless, which yielded more pollen than the Wilson, gave a larger proportion of berries than did the latter.

E. S. GOFF.

Geneva, N. Y.

Farm Topics.

THE DARK SIDE OF FARMING.—II.

HENRY STEWART.

THERE are a great many misfits in this world. A bright, witty woman once remarked of those married couples who sought disunion in the courts, that they were misfit couples, and surely this term may be applied to those farmers who have got into a business unsuited to their character and habits, and in which they chafe themselves, and live under the dark shadow of discontent. Contentment is a spring of happiness, and happiness in one's vocation is the secret of success. Riches and the means of extravagant living are not often possible to the farmer; a plain sufficiency, abundance even of all the necessaries and many of the comforts of life a farmer may have, but the empty superficial pleasures of society, the gossip, and the frivolous employment which some call "society," are scarcely consistent with farm life. When these are thought to be the sum of happiness, then one pines in what has been called the dreary isolation of farm life, and contentment vanishes, with all the brightness which it brings to the life. There is no dreariness or isolation when a farmer and his family "shut up in measureless content" find within their narrow environments all that is pleasing to an intelligent mind, in the contemplation of all the beauties and wonders of nature, in the pure air breathed, in the wholesome varied exercise of the field and garden, in the studies and pleasing discoveries which are made day by day, and in the "sweet restorer, balmy sleep" which is enjoyed nowhere else so fully as on a farm.

The man or the woman who is a misfit farmer or farmer's wife is to be pitied, not because farm life is not desirable, but because the disposition to enjoy it and make the most of it is wanting, and this casts a dark shade over the life, however one may be situated. Once I saw a cross child given a bright toy; it was one that opened with a spring and let loose a gayly dressed figure. The child in its petulence threw the toy from him with force enough to loosen the cover, and out burst the figure. Here was a revelation, a discovery of something which startled the mind and gave rise to pleasurable surprise. The child instantly changed from frowns to smiles; the tears were dried, and with a cry of joy, the cast-off toy was picked up and examined and its nature pried into and every discovery was a pleasure. Just so in a large way the misfit farmer may at some time, and generally does sooner or later, make the discovery that he is at fault, and that he has been casting from him in disgust many enjoyable opportunities and privileges which he could find nowhere else. He has been living in darkness because he has shut his eyes to the light. Sometimes this is true of the farm wife, and with her all the family are made miserable. The children then look forward with hope and anticipation to the time when they can flee from the farm house which has been dark and dreary to them, and by and by one by one they disappear, and the old couple alone, seek enjoyment in their own misery and pass their old age, like Bunyan's Giant, blind and helpless, but full of spite and rage, because every passer-by seemed happy and was beyond his reach. Such a life makes the boys leave the farm, and the girls are in haste to follow them. It is not the land or the oil; it is the men, who have been misfitted to it, or perhaps the women, who have made their labors doubly hard by their own discontent and fretting and have worn out their life in misery.

How can it be altered? It is not hard for a man's disposition to be changed. A word does it sometimes, a bright thought breaking in upon the mind; a reflection, as it were, from a mirror, which shows the man his fault; but it must come from without; it cannot spring from within. No man was ever converted from the error of his ways by a slow process of self-reasoning. But he has been brought up "all standing," as it is said, by a sudden thought or circumstance. Now, let this farmer who feels that he is living on the dark side of his occupation, begin to think of the purpose of every act and work of his; to study the principles of his work; ask himself why this is and how that is. When he sees the seed he has sown germinating and sending up its spire and down its radicle; or the trees and plants, only a few days ago dead and lifeless, now breaking out into leaf and bloom; or the insects which buzz and seem to enjoy themselves about him; or how all living things appear to live in the light and sunshine, let him ask how it is that all nature is so beautiful, so well ordered, so amenable to the strictest law and order, and so happy, if it is not that some most beneficent wisdom has made everything work together for man's happiness, and that if a man is not happy it is his own fault, and if he will only take the right way of doing it, he may clear away the clouds from his life and be as happy as a man can be, if he will only not be a misfit, but fit himself completely to his circumstances and work.

CORESPONDENTS' VIEWS.

I THINK the lime-dust treatment the best of all cures for gapes in chickens. It is cheap, simple and effective. I put a whole brood of chickens in a peck measure with a bag over the top. A barrel partly filled with air-slaked lime, as dry as powder, was turned on its side and the lime was stirred with a stick until the whole barrel was filled with lime floating in the air. The chickens were put in this, with the bag over the mouth of the barrel. They were put into the dust three times, not more than a minute each time. They should be kept in the measure all the time. We let one brood stay in too long and lost five out of seven. The wind-pipes of the dead chickens were found more than half filled with gape worms, which made it more difficult for them to breathe. My little son, seven years old, treats his chickens in this way successfully. The lime can be slaked with water and then allowed to dry so as to powder. A lot of lime thus prepared will last for years for this purpose. F. D. C.

Saratoga Co., N. Y.

I WANT to know what others think about rye as a green manure. With me it has not been a success by any means. I tried sowing it in alternate strips across a 40-acre field that was to be planted to corn. The previous crop was oats. When the rye was ready to head, the whole field was plowed and planted to corn, and all parts were treated just alike. The strips that had no rye on them yielded three bushels more per acre than the rye-ground. In this instance, then, the rye as a fertilizer proved a loss of one plowing, the seed and seeding, and three bushels of corn per acre. Besides this, the ground was in a worse condition — more grass and weeds. Early plowing, before the weed seeds were ripe, sowing among the corn or on fallow might have produced a different result. People say that a crop of rye contains so much plant food. I would like to know from farmers what soil, seasons, conditions and handling are necessary to make this plant food available. M. B.

Kankakee Co., Ill.

IT is very hot here now, and we have flies about us by the million. Screen doors and window frames are slowly coming into use, but most of the Southern people have not thought of keeping flies out of the house. They seem to prefer to let them come in and then to drive them out again with green boughs. Nothing amuses the Northern visitor more than the little negro who stands at the head of the table brushing the flies away from the food. He has a long green bough in his hand, which he skillfully flourishes about the table. In Richmond, many of the restaurants have fitted up large fans which are run by water power furnished by the city. These fans are of light wood, about three feet long, in the shape of a double wing. They make about eight revolutions per second, and create such a breeze that all flies are driven out, while the temperature of the room is greatly reduced. I believe it would pay well for the planters in this section to put up some of these fans in their houses. Where labor is as cheap as it is here, the motive power could be easily supplied. A crank could be fixed on the outside, and the boy who now brushes flies away from the table could turn it about as easily as he uses the bough. Such an arrangement would bring untold comfort to this hot climate. [Over a dozen years ago we saw such a contrivance in a planter's house near Victoria, Texas, driven by a cheap or home-made little wind-mill on the roof. There is generally wind enough in the hottest day to do such light work—and the breeze created is a blessing in the sweltering nights of the South.—EDS.] There are many little things about house-work that could be greatly aided by some sort of cheap motive power. Inventors seem to have given their great attention to the work of perfecting the stronger powers. If there could be made a portable boiler and power that could be fitted upon the common stove or range, and connected with light machinery about the house, a great deal of disagreeable house-work could be lightened. SUBSCRIBER.

Fluvanna Co., Va.

I FIND that many so-called temperance men raise barley and sell it to be made into beer. I can't see what business they have to find fault with a beer seller. They should either keep quiet on the temperance question or have their barley ground into cattle feed. It does not look right for a man to be continually cursing a business to which he owes his support. G. W. S.

Chester Co., Pa.

EVERY hog raiser, East or West, ought to have a field of clover. I don't see how hogs can be raised with any profit without it. There is nothing that suits hogs so well as a summer feed, and there is nothing that so cheaply and easily improves the soil. Hogs should be fed some grain while at pasture. I find that a hungry hog makes too good use of his legs. He becomes rangy and leggy. When he has plenty to eat and finds he does not have to roam about for his food, he will devote himself entirely to the business of laying on flesh in the most desirable parts of his body. This is, as I understand it, the proper business of a hog.

Montgomery Co., Va. J. M. E.

EVERY farmer should have a patch of raspberries. This fruit will give better satisfaction than any other. It will pay to transplant wild black raspberries where others cannot be obtained. I tried this 30 years ago with good success. I went through the distant fields and dug up some healthy briars. These I planted in September, in a rich sod ground on the west side of a stone wall. I left the briars from three to four feet in length and did not remove the buds. They were watered when first set out until rain came. They bore a good crop the next year, and for 15 years thereafter. It paid me well as I had my berries near at hand and did not have to tramp a long distance after them. Farmers, as a rule, have to depend upon the woods and fields for their fruit, from strawberries to apples. With a little work in the Fall, they could save much of the tramping after berries, by bringing the plants nearer home. Along old walls and fences, out of the reach of the cattle, the plants will find a climbing place so much like their old home in the woods that they will be content. I would say, buy the cultivated plants if you can, and give them good care, but at any rate save yourself time and tramping by bringing the wild plants nearer home. H. E. S.

Waterloo, N. Y.

I notice most of the papers are advocating the soaking of the rims and felloes of wagon wheels in hot oil. Now is this really a benefit or is it all experiment? I would like to have farmers give in their experience on this point. How does the oil affect the wood, and what is gained by the operation? H. G.

Orange Co., N. Y.

A BOX without any bottom in it, a foot square and eight inches deep, with a string stretched from one side to the other, with rags tied to the string and left to flutter in the wind, placed over the melon hill, I find to be protection against the meanest bug (yellow-striped) I ever had to contend with. A quarter of a teaspoonful of Paris-green in three gallons of water, sprinkled on the vines, will kill the bugs, and if the sun comes out hot just after the sprinkling, it will kill the vines also; but if it remains cloudy these will not be hurt. I do not recommend it: yet I used to employ it, but if I hadn't boxes, I would take the risk, it is such a pleasure to kill the bugs. If they are not destroyed or kept away, they will kill the vines. I have many inquiries regarding my hay furnace. Some few of the letters contain a stamp for answer. I wish the friends would remember that I am not a Congressman, and have no franking privilege.

Alexandria, Dakota. T. H. YOUNGMAN

I AM at a loss to know whether it is better to pick Sharpless & Bidwell when the top is *green*, or wait until the tip is rotten.

N. HALLOCK.

Field Crops.

THE RURAL'S WHEAT-AND-RYE HYBRIDS.

PROFESSOR W. TRELEASE.

ABOUT two months since the editor of the RURAL was kind enough to send me one of the original heads (sterile) of his seedlings obtained from Landreth (Armstrong) Wheat, castrated and pollenated with rye at the Rural Grounds in 1883. I have been interested in his experiments as reported at intervals in the RURAL, and in the opinions of the correspondents to whom specimens have been submitted; so that it was a pleasure to examine the specimen sent me, and to review what has been published concerning this cross. Having done this, I have thought that some of the RURAL readers might be interested in a statement of the botanical features of the parent plants and of these seedlings, as these have not been clearly brought out in any article that I have seen.

Mr. Bentham, who died not long since in England, is generally conceded to have been foremost among students of the Gramineæ, and his revision of the group for the Genera Plantarum is universally followed. In this work "Secale" (rye) is placed between "Agropyrum" (which includes our common Quack Grass, and "Triticum" (wheat). As Quack Grass has commonly been placed in the genus Triticum, it is self-evident that the relationship of wheat to rye is extremely close, so that there is no *a priori* reason why hybrids should not be obtained by proper manipulation; yet I don't know that this result has been claimed by others than the RURAL Editor.

The essential difference between Secale and Triticum lies in the structure of the spikelets (breasts) of the head. As in most grasses, each of these has at its base a pair of empty glumes (G in the cut, Fig. 276), forming part of the chaff; above these are the flowers, each with its flowering glume, and some more delicate inner scales that are of no particular int eres in this connection. The technical differences between the genera in question may be stated as follows:—

"Secale."—Empty glumes, narrowly linear, flattened, and keeled on the back. Spikelets two-flowered, the flowering glumes keeled; five-nerved, their nerves all running into a long awn or beard.

"Triticum."—Empty glumes broader, more rounded on the back, several-nerved. Spikelets two to five-flowered, the flowering glumes rounded on the back or keeled only toward the top; five to nine-nerved, only the middle nerve running into the awn when the glumes are bearded, the lateral ones shorter or prolonged into a pair of teeth on the sides of the awn.

These characters are shown at Fig. 276: A, a single spikelet of rye; C, a spikelet of wheat; and B, a spikelet of the RURAL specimen sent me: all enlarged one half.

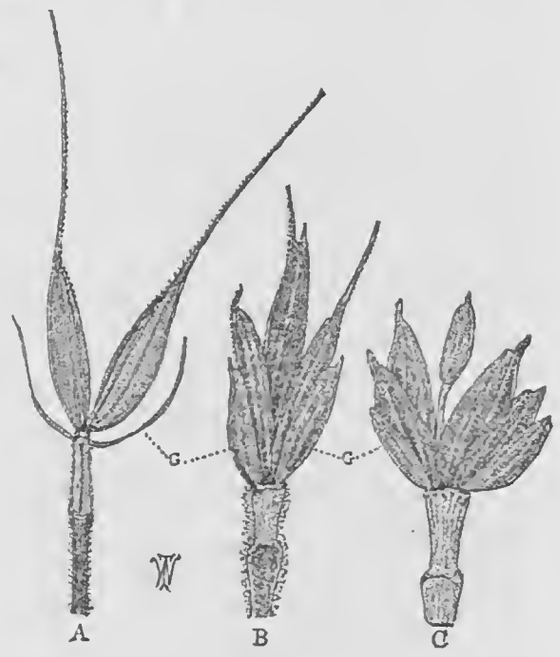


Fig. 276.

I think that a person picking up a single spikelet of this plant, or looking over the illustrations in the RURAL for Aug. 30, 1884, would pronounce it to be wheat. A glance at the illustrations given here shows that the specimen submitted to me has the generic characters of wheat in every respect and the foliage of these seedlings is said (RURAL, Aug. 30, 1884,) to have been colored like that of wheat.

So far as I can see, there are but two reasons for asserting that they represent hybrids; 1, the great variability of their offspring; 2, the fact that the culm is soft-hairy below the head, as in rye, while the rachis between the spikelets is similary hairy. It is well known that the offspring of fertile hybrids are prone to considerable variability, but this is also called out in some cases by simply cross-fertilizing different varieties of the same species. Granting, therefore, that the supposed hybrids may be the result of accidental crossing by the pollen of another variety of wheat—and the pollen of these wind-pollenated plants is so easily blown about and so insidious that this is no reflection on the care of the experimenter—this variability might be so explained. Just such a result from intentional crossing is reported in the RURAL for Oct. 31, 1885, p. 724. The hairiness of the stem below the head of flowers is the only real evidence of hybridizing that I find, and this is not usually regarded as a generic character, but only as one peculiar to the species of rye. However, it is sufficiently pronounced to satisfy me, in the absence of evidence that it is also found on certain varieties of wheat, that the RURAL experiments have resulted in a partially fertile hybrid, that is wheat to all intents and purposes, but with the one evident character of rye that I have named, and, possibly, additional hardiness or other obscure characters.

Since writing the foregoing lines, I have been favored with a fine suite of specimens (39 in number) representing the principal forms that the offspring of the RURAL hybrids present this year. As has been said of them before, these are extremely unlike, and the privilege of examining them has been eagerly accepted. After going over them all carefully, however, I find no additional evidence of hybridization. About half of the specimens have the culm hairless below the head. I doubt if a botanist not familiar with their history would suspect these being anything but wheat. But it is interesting to observe that in these, notwithstanding their great variability, there is no indication of rough hairy spikelets such as are characteristic of some varieties of wheat; so that this variability is within the type limits—widely understood—of the mother plant. The others present the same evidence of hybridity as the original specimen, viz., a downy culm.

St. Louis, Mo.

[In the collection sent to Dr. Trelease we were unable to add specimens, of the three-quarters rye plants from last year's cross. These will be illustrated later.—EDS.]

BLACK RUSSIAN FOWLS. Fig. 278.

Farm Economy.

PLOWING THE EXPERIMENT PLOTS AT HOUGHTON FARM.

REMARKS BY MR. EMERY.

In all experiment work, it is essential so keep all the conditions possible under control, except the one which is the subject of investigation. This has long been well understood by experimenters, and entered into the plan in the regular work to be done at Houghton Farm. On all plots of ground which are to be differently fertilized, every possible condition except that of fertilization is made identical. To this end, the work on the plots in the field is carried on in such a way that an equal amount is done on all plots at the same time by the same men and teams to insure like preparation of the ground and handling throughout. For instance, in plowing the plots in the Spring, the furrows run crosswise of the plots, and teams are employed to plow all of one series of plots in one day, and each team is started so as to do equal amounts of work on each plot, thus equalizing any difference there may be in quality of work done; they are harrowed the same day; the seed all planted on one day; and the hoeing and cultivation are done the same way as the plowing. When harvest time comes, the crops are harvested in the same way, and all products carried over the scales at that time. This gives us the final result as accurately as we can attain, with all conditions possible to control, except the one under trial, the same for each and every plot. The original condition of the plots, as has been stated in a publication of the Farm, was very uniform, whatever exception there was being there stated in full.

A few paragraphs from our H. F. experiments with Indian corn, under the head, "Distribution of Labor," are as follows:—"In all experiments with field crops, a uniform distribution of the work of preparing the soil, of cultivating the crop during its period of active growth, and of harvesting, not only as to the amount of effective labor upon each plot, but also as to the time of performance, is a matter of great importance.

The same amount of labor on adjacent plots, if performed at different times, even if but a single night intervenes, may give quite different results if but a moderate shower or other climatic change occurs in the interval; and variations in the crop, from differences in performing particular operations, have been observed without any other apparent cause. From the hygrometric properties of both the ears and stalks of Indian corn, a difference of a single day in the time of harvesting and weighing may make important differences in the apparent yield.

Without further details in the way of illustration, it is safe to say that too much care cannot be exercised in securing uniformity in all operations performed on the plots under experiment, and that lack of attention to what may be deemed trivial or unimportant details, may not only diminish the value of experiments, but render their results worthless. To save repetition, under the different heads of this report, a general outline of the system adopted in conducting the experiments to secure uniform conditions will be given here. The plowing and preparation of the soil are always done in the same direction, crosswise of the plots, so that each receives the same treatment.

In plowing, three teams were employed, so that the work for each series of plots could be done without hurry in one day, but they were changed in rotation from land to land so that each team did the same amount of work on each half plot. From this arrangement, if there were any difference in the holding of the plows, or in their performance, or in the speed of the teams, each plot would receive its fair share of the labor performed.

In planting, cultivating, hand-hoeing and harvesting, the same method of crossing the plots in each operation was practiced."

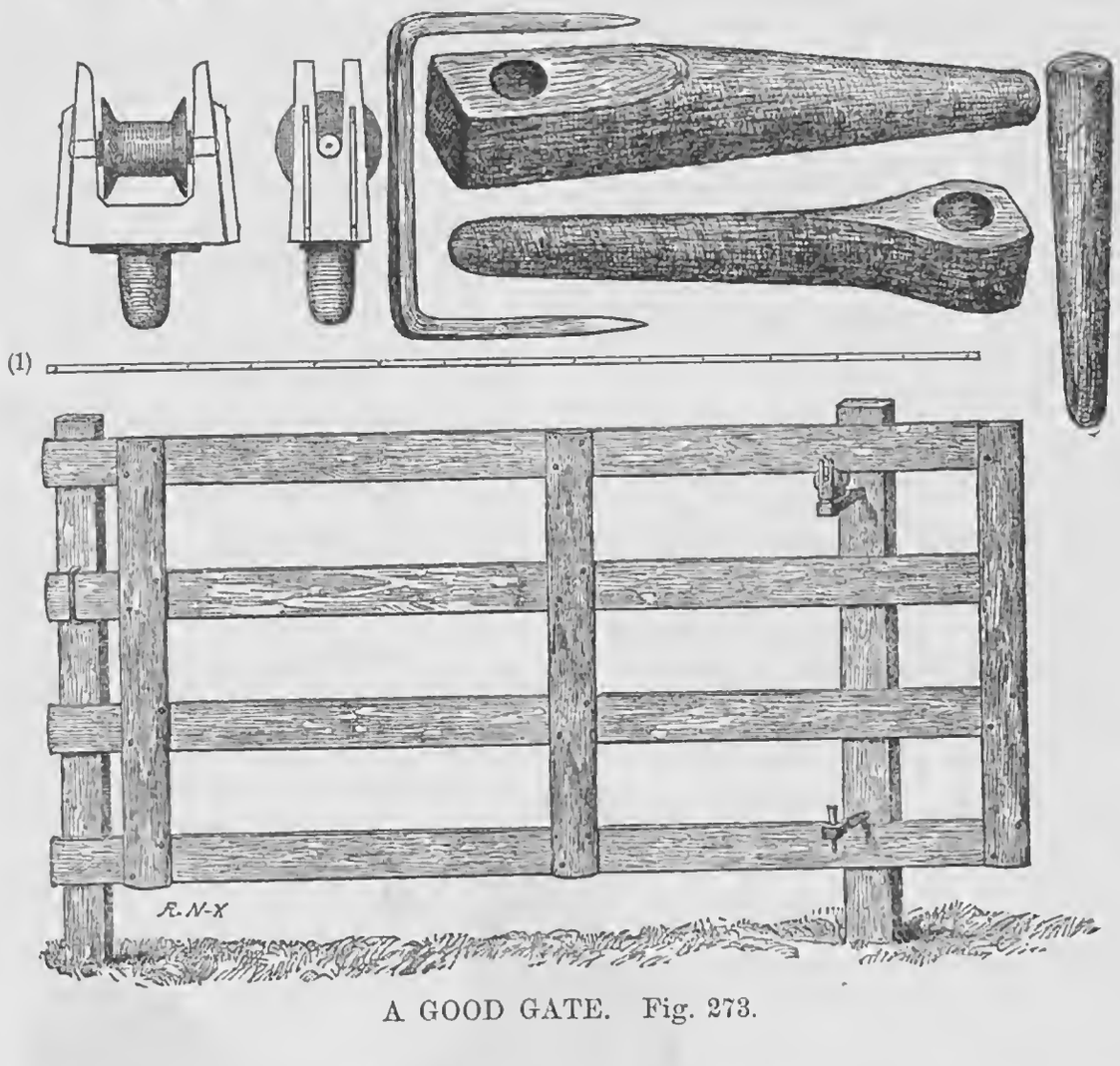
A paragraph from the same pamphlet, under Field Experiments, says:—"From the very nature of the complex conditions involved in all experiments in the feeding of animals and with growing crops in the field, the importance of the greatest care in conducting them, and a thorough verification of results by frequent repetition on a well-devised plan, to check the disturbing influence of the many conditions that are not under the control of the experimenter, cannot be too strongly urged."

A GOOD GATE.

The gate shown at Fig. 273, is the property of Mr. Bradford Bruce of Niagara Co., N. Y. He calls it the best gate in the world. How many of our readers are ready to agree with him? The drawing fully shows the way in which it is constructed. One can see at a glance how it is supposed to work. The iron work can be bought and the farmer can easily make the wood-work himself. The wheel pins and iron stay or clasp are shown at the top enlarged, while on the gate itself they are in place. An iron strap, marked 1, is nailed on the under side of the top board so that it runs over the wheel. The gate runs to the center board and then swings open. The lower shank with wooden pin prevents stock from lifting it. In winter this pin can be put one board higher, so that the gate will swing over any ordinary snow-bank.

STORING HAY.

G. Pelton & Sons, of Sauk Co. Wis., send us a description of their method of unloading hay. This is illustrated at Fig. 274. In the instance given the hay is stored in a barrack,

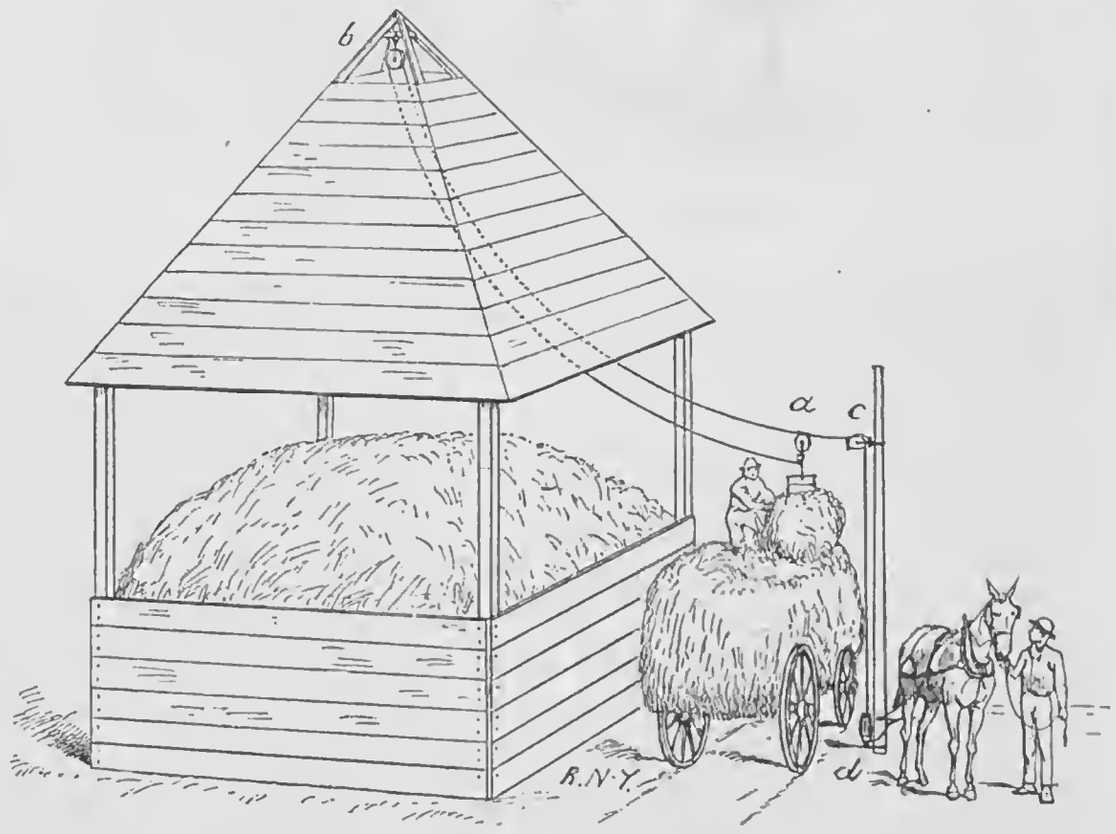


A GOOD GATE. Fig. 273.

but the same principle can be employed in unloading hay into almost any building. A rope 90 feet long, is fastened to the hay fork and slipped through the iron pulley, *a*. It is then passed up through the pulley, *b*, which is fastened at the peak of the roof. Then it passes down though *a* to *c* and *d* where it is attached to the horse. A strong post holds the pulleys at *c* and *d*. This system is simple, easily rigged, will save much lifting and expense for hay carriers.

FRUIT LADDER.

Mr. D. J. Bowling, of Harrison Co., Ind.,



STORING HAY. Fig. 274.

finds the fruit ladder shown at Fig. 277 a very handy implement. He used it in gathering

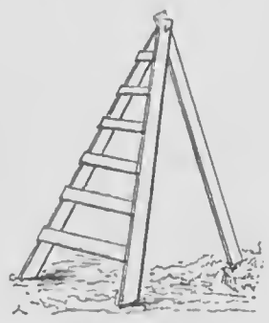


Fig. 277.

plums, cherries, etc. Two side-bars, each 7½ feet long, and one brace eight feet long, are all joined at the top with a 3½-inch bolt of five-eighths-inch round iron. The side-bars spread three feet at the bottom, and the cross-bars or steps are nailed 14 inches apart. The whole thing is made of 1x4 inch lumber. The ladder can be carried from tree to tree; it will stand on uneven ground, and there is no danger of injuring the limbs or twigs of trees in placing it.

Horticultural.

EXPERIENCE WITH SMALL FRUITS.

In the Rural's remarks on strawberries the Parker Earle has been mentioned. It has fruited this year with me, and I shall stick to it, for some time at least. The fruit is large, and, when fully ripe, of a light-red color, retaining for a long time a firmness not often seen in so large a berry. It is productive, "perfect"-flowered, and a plant of this variety could be selected from among a thousand other sorts on account of its variagated or yellowish blotched foliage: but I find no fault on that score, as it is one of the rankest of growers, thrifty and upright.

On the Rural's repeated recommendation I purchased, last Winter, four dozen plants of Jewell, put them in the hot-bed, gave them extra good care, put down every sucker, and now I have over 700 plants. Some of the old ones fruited, and were fertilized from Sharpless and Prince. They were extremely productive of fine, large, well formed berries, had a sprightly, sub-acid flavor, and I think they have come to stay.

I wish I could talk loud enough to make every raspberry grower in Uncle Sam's domain hear me call "Marlboro." My "patch" of them is a sight to see. Although only put out last Spring, they are loaded down with large fruit of extra-good size, fine flavor, and in my opinion far better than Hansell or Turner, and equally early. Entirely hardy on my not very rich ground. [A single year's trial of any new fruit will often lead us astray. —Eds.]

Early Harvest and Wilson Jr. blackberry plants are not hardy with me—at least they were not last Winter; 20 degrees below zero killed them to the ground. Strong shoots are coming up now, and if they do not winter through 1886–7 I shall apply the spade at the the root. [Early Harvest is not hardy at the R. G., and we fear Wilson Jr. is not.—Eds.] Taylor and Snyder are the iron-clads for our Buckeye Winters, and for productive qualities I can see no reason why they should ever take second place. E. M. G.

Dayton, O.

PRES. LYON'S STRAWBERRY NOTES.

The first strawberries this season were Alpha, on June 1st. This has now, for several years, shown itself to be the earliest really valuable strawberry with me. Early Canada may sometimes be a day earlier; but Alpha is larger, more productive and of finer flavor; while the hardiness and vigor of the plant of the latter are all that need be desired. Metcalf and Crystal City may, perchance, be a day or even two earlier; but their lack of size, and extreme unproductiveness have ruled them out, and I abandoned them several years since.

Alpha, Maggie, Bright Ida and Arnold's Pride, which ripen successively in the order named, are all seedlings (in the second generation) of the late Charles Arnold of Ontario, from a cross of Wilson upon the foreign variety, Dr. Nicaise; and are again, this season, as for several years past, surprising me with their fine size, fair quality and great productiveness. Jewell, Parry and Cornelia are fruiting heavily; but I doubt if either of these—even the Jewell—can be said to excel the former in vigor or productiveness.

Howell, a new variety of the history of which I am ignorant, ripened along with Crescent, on the second day after Alpha, and were soon followed by Philadelphia, Nicanor, Duchess, Duncan, Maggie, Bidwell and many others about in the above order.

The Alpha, last season, ripened its first fruit on June 13th; or about two weeks later than this year. Parry showed its first ripe fruit this season on June 11th. The plant shows a moderate degree of vigor; and is more than maintaining its last season's reputation for productiveness, as well as for the size, beauty and high quality of the fruit.

South Haven, Mich. T. T. LYON.

What Others Say.

Ripening and Preserving of Fruits.—At a late meeting of the Massachusetts Horticultural Society, Hon. Marshall P. Wilder read a very valuable paper on the "Ripening and Preservation of Fruits." The preservation of apples through the winter months is now pretty well understood, but with the pear, grape, and other delicate fruits more care is requisite.

The ripening of fruit depends on saccharine fermentation; this is followed by the vinous and acetous fermentations. To prevent these, and preserve fruit in all its beauty, freshness, and flavor, the temperature must be uniform, and kept below the degree at which the fermentation or ripening process commences. Mr. Robert Manning, in a prize essay, said, "The ripening of fruit is the completion of the chemical process by which starch is transformed into sugar, and is the first step toward fermentation, or decay; therefore, whatever retards fermentation will tend to its preservation."

Late fruits may remain on the trees until severe frosts are feared, but should be gathered with great care. Summer pears should be picked some days before the ripening process commences. A summer pear ripened upon the tree is generally inferior. In respect to the latter Mr. Patrick Barry says: "The process of ripening on the tree, which is the natural one, seems to act upon the fruit for the benefit of the seed, as it tends to the formation of woody fibre and farina. When the fruit is removed from the tree at the commencement of ripening, and placed in a still atmosphere, the natural process seems to be counteracted, and sugar and juice are elaborated instead of fiber and farina." Thus pears which become mealy and rot at the core if left on the tree to ripen, are juicy, melting and delicious when ripened in the house.

With the increase of fruits their preservation in the most perfect condition has become a matter of great importance.

About 20 years ago several patents were secured for the preservation and long keeping

of fruits and other commodities by Messrs. Shaler, Nyce and Smith. Professor Nyce of Ohio had one of his houses built in Boston, to be controlled by ice, and many constructed upon his plan are still in use in our large cities and large towns for the preservation of meats as well as fruits.

Mr. Hellings, in 1868, used a house for the preservation of fruit, which proved very successful. This was regulated by ice; he used no chemicals or machinery—the temperature was kept at from 34° to 36°—the atmosphere was so cool and dry that no moisture was deposited on the walls, and there was no dripping from the ceiling. The most constant care was also given to ventilation, and the light was entirely excluded to prevent ripening and shriveling. With these arrangements so perfected, no gases or mixture of gases with atmospheric air were ever generated. In these houses he kept apples two or three years in perfect condition. His houses are still in succesful operation at Bristol, Pa.

But the most common method for small establishments and private use is the construction of houses with walls of non-conducting materials and with well drained and thoroughly cemented cellars. Such was the house built by M. Victor Paquet, of Paris, about 40 years ago. It was built with outer and inner walls, with a space of three feet between; in fact, a house within a house, and so arranged that he could control the temperature at will, and which he kept at a little below 40° Fahrenheit. Our climate differs so much from that of Paris that we cannot follow all of M. Paquet's plans. Suffice it to say that by this process, without the use of ice, he kept his fruits in perfect condition until June.

On this plan, fruit houses may be constructed at a very moderate expense, in which fruits may be kept in all their beauty, freshness and flavor through the entire season. The Anjou Pear has been exhibited as late as the month of May by the late Gardner Brewer, from his retarding house.

Mr. Charles F. Curtis, one of the fruit merchants of Boston, informs Mr. Wilder that there is no perceptible difference between a cold storage house controlled by chemicals and one where ice is used. Each has its advocates.

One great secret of success begins in the state in which the fruit goes to the cooler. It should be before any specimen begins to show ripeness, and no single fruit should be stored that has fallen to the ground; for, however perfect it may seem, sooner or later that dropped fruit will tell its own story, and often cause the decay of the whole package when not noticed in time, which rarely happens when hundreds of bushels are piled one above another for a month or two. The fruits intended for cold storage houses should go directly from the orchard.

The fruit house of Ellwanger & Barry, at Rochester, N. Y., is a building where walls and floor are lined with straw and boards, with cellars underneath for storing fruit. When the mercury goes 10° or 12° below zero, a few 3° or 4° of frost get in, but the boxes and barrels are all covered with straw mats, and are never reached by the frost.

When the late fall and winter pears are gathered they are put in bushel or half-bushel boxes, and placed on the north side of a building outside of the fruit house, and protected. They are kept there as long as the weather will permit—by that time the room has got thoroughly cooled and ready to receive the fruit. They had both pears and apples there in perfection April 10th.

In the report of the Michigan Horticultural Society for 1882 is an account, by Mr. S. W. Dorr, of a fruit house constructed by him, on the cold-air system, without the use of ice. He lays down the principle that in order to keep fruit for any great length of time the store-room must be frost-proof and kept at a low, even temperature—three or four degrees above freezing, with sufficient ventilation to carry off all moisture and impurities. He was able to keep his house within three degrees of freezing for five months, and when the temperature outside changed 60 degrees in 24 hours, the change in the fruit room was imperceptible. Again, when the thermometer fell to from six to 20 degrees below zero, for five days in succession, the temperature scarcely changed one degree in the fruit house. This result was effected by building a house with triple walls, 15 inches in thickness, 10 inches of which were filled with sawdust.

The conditions of success may be briefly stated as follows: *The perfect control of light and moisture.* All experience shows that these conditions must be complied with or success cannot be attained; hence these apartments must be cool, and constructed so as to exclude at pleasure the external atmosphere, which starts fermentation. After many years of experience, both with and without ice, Mr. Wilder adopted a house built in a cool, shady aspect, with the door on the north, and with a thoroughly drained and cemented cellar, with small, double windows, which may be opened or closed at pleasure. In this way he is enabled to keep his late fall and winter pears until February or March in good condition. Apples may be kept at a lower temperature than pears—say 30 to 40 degrees.

In a fruit room of this kind, Mr. John J. Thomas says that by admitting air on cold nights, and closing the entrances when the air is warm, he has had sound Lawrence pears in March, and Josephine of Malines in April, and Baldwin apples in June.

Mr. Wilder's fall and winter fruits, intended for long keeping, are allowed to remain on the trees until frost is apprehended. They are then gathered with great care into bushel baskets, and placed on the north side of his fruit house in tiers of boxes six or seven feet high, and covered with boards, where they are kept until the ground begins to freeze. They are then removed to the cellar, piled up in the same manner, with thin strips of boards or shingles between the boxes, until wanted for use, when the boxes are looked over and the most mature are from time to time taken out. In this way he keeps pears until March or April in perfect condition.

In regard to the use of ice, Mr. Wilder said that where fruits are kept for some months under its influence at a low temperature, they seem to lose much of their flavor; the cellular tissue also seems to have become dry, and to have lost its vitality or power to resume the ripening process. Experience proves that, for the common varieties of the pear, about 40 degrees of Fahrenheit is the temperature best suited to hold this process in equilibrium. The proper maturing of fruit thus preserved demands skill and science. Different varieties require different degrees of moisture and heat, according to the firmness of the skin and the texture of the flesh. Thus, some varieties of the pear will ripen at a low temperature and in a comparatively dry atmosphere, while others are improved by a warm and humid air. Some varieties of the pear ripening with difficulty, and formerly esteemed only second-rate, are now pronounced of excellent quality because the art of maturing them is better understood. Great improvement has been made in the handling, packing and preservation of fruits, so that they are delivered in perfect condition from distant places, every class of fruit having its suitable style of package. So well is the art of keeping grapes now understood that we have them in our markets in such fine order as to command from 15 to 20 cents per pound until the month of May.

Robert Manning thought that the most critical time in regard to keeping fruit is the warm days in Autumn—the lovely Indian-summer days of October. Especial care is then needed to keep them cool.

Mr. Wilder said, in answer to an inquiry, that everything depends on the condition of fruit when it is placed in the storehouse. His superintendent watches the picking of his fruit with the greatest care: every fruit is handled as carefully as are eggs. Fruit placed in the storehouse bruised and in uneven condition as to ripeness will never keep.

Benjamin G. Smith, said that shippers begin gathering apples two or three weeks before it is generally done.

E. W. Wood agreed with Mr. Manning that the warm autumn weather is a critical time in the keeping of fruit. He generally picks his Anjou pears about the 10th of October, and last year they ripened about the end of that month, and he had to send them to market. Every year apples are found under leaves perfectly sound in the Spring. He thought those who store apples like to have the temperature as low as 30° and from that to 28°. Every year they get caught and frozen, but this is not considered an injury if the fruit is not wanted for immediate use. His father had stored apples in the cellar and found them frozen, but he allowed them to thaw without moving and they came out in perfect condition. They must not be shaken while frozen. He thought that houses where ice is used are not apt to be damp from the waste of the ice. In the cold storage house on North Street, Boston, which is five stories high and 150 feet deep, with an engine in the attic, and kept cool by the use of chemicals, it is so dry that matches laid anywhere will light with perfect ease, and he was under the impression that fruit comes out of such a house with better flavor than from an ice house. Cold storage is a great convenience to fruit growers; Bartlett or other pears can be stored when there is a surplus, and put on the market as it will bear them. The Vicar is the only kind that was carried through to the first of February this year.

Mr. Flint said that he once kept nine or ten barrels of apples on the trees till the 9th of November, when his neighbors thought they were spoiled, but he piled them up on the north side of a building until Christmas, and then put them in the stable and covered them with straw, and they kept finely.

Mr. Wood said that he once picked some Roxbury Russet apples very carefully and laid them on the ground until they were covered with a foot of snow; they were afterwards packed in barrels in coal ashes and opened the middle of June, when they were nearly perfect—plump, with the flesh crisp and juicy, and of fine flavor when others had lost their flavor. The air was excluded from them and the temperature was even.

VALUE OF WOOD ASHES.—Dr. R. C. Kedzie, of Michigan, issues a valuable bulletin on the value of ashes as a manure. Many of the analyses of ashes heretofore given have been almost too scientific to be of practical value. All foreign substances were carefully excluded from the specimens examined. As found on the farm, ashes always contain more or less sand or earthy materials. It is interesting for scientists to note the difference in composition of the ash of the body wood as compared with that of the branches of the same tree: but when body, limbs, bark and all are reduced in the stove or furnace, with the addition of much dirt, these nice calculations are apt to fail.

When we consider how large an amount of vegetable matter is represented by a small amount of ash, the value of wood ashes for manure becomes evident. Thus only 10 pounds of ash remain from the combustion of a cord of hard wood, and only five pounds from a cord of soft wood. One hundred pounds of ash represent the mineral matter of 85 bushels of wheat, 85 bushels of corn, or a ton of timothy hay. Eleven tons of gooseberries, grapes, blackberries, peaches or apples would contain only 100 pounds of ash. Seven tons of cherries, plums or raspberries contain only 100 pounds of mineral matter. But small as is the amount of ash, it is still indispensable for the production of these crops, and must be present in the soil in available form before profitable cultivation is possible. Let it not be supposed that the ash in all these crops is identical in composition. The ash of each class of plants has a composition peculiar to itself, and different in some respects from that of other classes; yet there is a certain similarity in the ash of all cultivated plants. When the ashes of vegetable substances are served up for any plant by mixing them with the soil, such plant does not of necessity order every dish of the bill-of-fare, but selects such materials and in such quantites as are adapted to its wants, and leaves the balance for some future meal or some other guest. If any soil is naturally deficient in any of the ash constituents, or has been impoverished by excessive cropping, the restoration of these materials in the form of wood ashes appears to be the natural and safe process because they contain all the minerals of vegetable growth.

Discarding ashes of mineral coal as valueless for manure, the ashes of wood and of land plants of every kind are of value for manure on every kind of soil which has been reduced by cropping: but the greatest benefit is shown upon sandy and porous soils. On these "light soils" crops of every kind, but especially root crops and corn, will be benefited by a dressing of wood ashes. Fruit trees and fruit-bearing plants having a woody structure, will be benefited by wood ashes. Thirty or fifty bushels to the acre of fresh ashes will be a full dressing, and three or four times that amount of leached ashes may be applied with permanent benefit.

Dr. Kedzie gives the values of ashes as they are ordinarily found upon the farm, as follows:

Hard wood ashes per ton				$20.00
Leached	"	"	"	10.40
Soft wood	"	"	"	16.00
Corn-cob	"	"	"	50.00
Tannery	"	"	"	4.50
Soft coal	"	"	"	.40
Hard coal	"	"	"	.16

MILK FEVER.—A writer in the London Agricultural Gazette states he treated a cow suffering from this dread disease. On Thursday night the cow calved, and all went well until Saturday evening at six o'clock, when the premonitory symptoms appeared. He at once set to work as directed in Moore's Veterinary Homœopathy, and administered a dose of aconitum, 10 drops in a wine-glass of water; three hours after a similar dose of belladonna was given, and three hours later another dose of aconitum. At this time, half-past twelve o'clock, the pain began to subside. She then had, four hours later, a dose of nux vomica, 10 drops in water as before, and during Sunday at regular intervals she had three more doses of nux vomica, and a last one on Monday morning. All Sunday she remained in a sleepy, helpless condition, but quite free from pain. On Monday morning she got up and had a small bran mash; in the evening she took her food eagerly, and on Tuesday was quite well. Her flow of milk stopped only during the hours of great pain. After reading of such "cures" the query involuntarily arises, "What would have happened had no medicine been administered?"

ROOTS IN THE MILK RATION.—Prof. L. B. Arnold, in the N. Y. Tribune, says that carrots make better-flavored milk and butter, and rather more of them, than mangels when equal weights are fed. Mangels are notorious for making thin and low-flavored, but not unwholesome, milk, like that from brewers' grains. They have a food value, as compared with carrots, as seven to nine, but mangels are raised with less labor, and will produce about 50 per cent more weight to the acre than carrots, about 600 bushels of carrots and 900 of mangels being the usual crop for an acre of good ground, if good care be taken of them. As measured by analysis, 5¼ pounds of carrots, or seven pounds of mangels, would have a value equivalent to one pound of oats. Owing to the quicker and more complete digestion and greater efficiency of green food than dry, something less than the weights above named, perhaps a pound less of each, would be as valuable as a pound of oats. As a quart of oats weighs a pound, about 18 pounds of carrots or 24 pounds of mangels would be a fair exchange for four quarts of oats. In substituting roots for oats, it should be remembered that they differ so much in composition that one cannot fill the place of the other. Oats alone make an excellent milk-producing food, being well balanced as to flesh-forming and heat-producing matters, while roots are much lacking in flesh-forming material. Something that will make more flesh than roots should be fed with them. Wheat bran and middlings would help them very much, or an equal weight of early-cut clover hay, or one-eighth of their weight of linseed, cottonseed or pea meal. When *fresh* (not fermented) brewers' grains are fed with roots in equal weights, each serves to correct the defects of the other, and the two make a much better milk than either would alone.

BREEDING HEIFERS.—In deciding the age at which heifers should be put to the bull, the American Dairyman says that it is well to remember that no two heifers are exactly alike, and rarely will the same set of rules apply equally and justly to both. Some are nearly double the size of others at the same age, while it often happens that the large ones are not so well matured as many that are smaller. A large, weedy, long-legged heifer may be injured permanently if made to produce a calf before she is two years old, while another and much smaller, but more closely-knit heifer will support the maternal duties with perfect ease at 18 months of age. So it is with breeds. The small breeds, such as Jerseys and Ayrshires, may be safely bred much sooner than heifers of the larger breeds, such as Holsteins and all the beef breeds. The point is to do this thing with some respect to surrounding circumstances and have no cast-iron rules about it, such as breeding all the females at 15 months of age or at any stated age, but take them when properly matured and ready to bear the burdens that may be put upon them.

TRUE INWARDNESS.

WHAT an advantage it would be to farmers, says the Analyst, if townspeople could be induced to take more milk and less tea, coffee or beer; and what an advantage to the townspeople also. Few people will be inclined to argue that any one of the three beverages named contains a tithe of the nourishment that milk does. Why, then, in the face of this admission, is good, wholesome milk sold at a quarter of the price that any of the others are?.....

WHY don't people drink milk? Why, because they are in part ignorant of its value and in part afraid of it. The ignorance is inexcusable; the fear is equally so. Numerous outbreaks of fever have without doubt been traced to contaminated milk, and in some cases so clearly as to leave no doubt that milk is capable, when contaminated, of conveying such diseases. Some few deaths have been caused thereby, and consequently many people have given up the use of milk as a beverage. But how many has John Barleycorn slain? His victims may be counted by thousands annually. And the abuse of the social cup of tea has ruined many a constitution. But well known though these facts are, they have not led, as might have been expected, to an increased use of milk, because, as has been already stated, so many view it with suspicion.

PROF. E. W. STEWART says, in the Country Gentlemen, that there is not much difficulty in teaching calves to take skim-milk. He would moisten ground feed with a little sweet skim-milk. The calves will eat the ground feed after mincing a little, and get the taste of the milk. Next time make it a little more moist with milk. Proceed in this way for a

few times, and they will learn to take the feed with a good deal of milk. He has never known this plan to fail. He has taught colts and horses in thin flesh to take skim-milk in this way, and found the milk very effective in restoring condition. It would be better that the milk should be warmed.....

THE Iowa Homestead says you can't steal from your land or from your calf without being caught in the act. Uneven crops and thin ribs will not be driven out of sight.....

WILLIS P. HAZZARD names the Guernsey as the best "general-purpose" cow. She has the butter qualities of the Jersey with a tougher constitution, larger size and better feeding qualities. She is the happy medium between the butter Jersey and the huge Holstein, with the good qualities of both and the defects of neither.....

Too many farmers still consider skim-milk simply a waste. Mr. R. H. Gage, of Wisconsin, thinks otherwise. He bought 10 calves, grade Short-horns, from one to three days old, and put them on to a skim-milk diet with a little oil meal and hay as soon as they desired it. In six months these calves weighed 3,500 pounds. Figuring hay and oil meal at regular prices, the skim-milk brought in $101.85. That is, it enabled the farmer to turn a certain amount of his work into that much cash. That sum is four per cent. on $2,500.....

A HALF-STARVED CALF, says the Am. Dairyman, is in just the condition to invite all kinds of diseases, and especially those chronic lung complaints that occasionally do so much damage in herds of dairy cattle. Remember it—you who seem to grudge every quart of milk that goes down the calf's throat.....

PROF. OLIN says, in the Industrialist, that it is becoming clear to the American people that strikes, lockouts, boycotts and mobs are not remedial agencies. The old-fashioned conviction is forcing itself upon the political and social world that if you sow corruption, there will spring up crime; if you plant sedition you will gather rebellion; if you scatter mob law, you will harvest mobs; if you sow to the winds of socialism and anarchy, you will reap the whirlwind of destruction and death..

CAPITAL oppresses labor while sustaining it. This is all wrong. But it is the suicide's solution of the problem to destroy capital.....

No question is settled until settled on the basis of right, not force; and in this settlement an ounce of common sense is worth barrels of dynamite.....

THE London Ag. Gazette says that there are individual cattle, sheep and pigs which inevitably pick your pockets. The Breeder's Gazette says that there is a whole gospel in the above sentence. The moral is: Supply their places with better ones, and the sooner done the better.....

PROF. GOESSMAN thinks the feeding of our home-raised fodder is as important a question as the raising of it. Fertilization, or the science of feeding plants, has made rapid advancement of late. Cattle feeding should be studied just as carefully .....

EVERY farm house should have a supply of lemons on hand during the hot weather, says the Kansas Farmer. You can make lemonade at one cent per glass. You will get five cents' worth of benefit out of it. There you make a clear profit of 400 per cent.....

REV. CANON BAGOT, the Irish dairy expert, asserts that 100 dairy factories will be established this year in Denmark. Unions are formed much as our farmers combine to establish creameries. Separators will be used almost exclusively. Butterine drives the dairymen into combination for mutual protection.....

THERE are many men, says the Live-Stock Indicator, who are proud to possess $1,000 or $5,000 cattle, just as there are men who pay $10,000 to $40,000 for a noted horse, *but as a business speculation, the last buyer is always the loser*.....

THE Journal of Agriculture says that the country has been flooded with a cheap lot of pedigree Short-horn stuff that are a disgrace to the name of thoroughbred cattle, and the same parties who have thrown them upon the market this year will have others for sale next, and more of them. If there is no way out of this difficulty the end is near at hand on all Short-horns.....

A WRITER in the Kansas City Indicator suggests taxing bulls at so much per head, and says the effect would be to kill off all the scrubs whose only service is to get cows with calf when the stock is not worth raising; and which thus do great injury to stock interest..

THE American Dairyman says that the dairyman who buys a big cow with a view to selling her carcass for beef when through with her in the dairy, has been aptly likened to the man who bought an engine several times too large for the work he had to do, with a view to selling it for more as old iron when worn out than he could a smaller engine. The waste of food in carrying the extra carcass of the big cow is similar to the waste of fuel in running the engine that was too large for the work to be performed. There is a comical likeness too in the money value, for fattening purposes, of the carcass of the old cow and the merchantable value of the old worn-out engine.....

A WRITER in Hoard's Dairyman cured the worst case of caked bag he ever saw in about four hours by thoroughly soaking and rubbing with the juice of pie plant.....

ACCORDING to several speakers at a late meeting of the Central N. Y. Farmers' Club, as reported in the Cultivator, in rearing animals we should begin right. Select from the best parents. Feed properly, and keep the calf growing. When milk is short, feed something else. Oats are good. When the calf is a year old keep it on grass in the Summer, and give extra food in the second Winter.....

DO not let a dairy shrink in July and August. Heavy losses are sustained by not keeping the stock well through the dry season. One successful dairyman cuts his corn fodder and mixes it with as much early-cut hay to feed in dry weather.....

A GOOD ration for feeding is four parts of shorts, two parts of ground oats, and one part of corn-meal. The above is a good ration for quantity of milk. Of course nothing in the way of feed is quite as good as fresh grass. When sowed corn is fed green and immature, Mr. Hoxie does not think it helps the flow of milk very much.....

HARRIS LEWIS says that in establishing a dairy breed, the farmer should go back to the calf and have a bony structure well developed. Guard against having a heifer very fat before she comes in. Oats and wheat shorts are splendid food to produce cattle, but when you feed cornmeal or cottonseed meal for that purpose, it is a mistake.....

THE Popular Science News relates the following as occurring between a Chicago man of a statistical turn of mind and a companion;—"Do you see that man over there? Well, he's a farmer down near Elgin. There he goes with a friend. They are going to get a drink; the farmer will pay for it. Now, let me see: that man will sweat half an hour next Spring to plow enough ground to raise one bushel of corn. The bushel of corn he will sell for 30 cents. He is going in there now to spend the 30 cents for two drinks, therefore the farmer and the corn have parted."....

THE Michigan Farmer says that a year ago, Messrs. Merrill & Fifield made a strong effort to buy the Hereford bull Hotspur, one of the most noted sons of Lord Wilton. The price asked was $5,000, which the firm considered too strong for them. But they wanted that bull, and wanted him bad. Finally, early this season, they decided to take him at the price named, and he was shipped to them. The voyage was a rough one, and the animal worried himself to death. It was found impossible to quiet him, and he never ceased his struggles until he had worn himself out. He was insured, we understand, for $3,000.....

Everywhere.

TRANSCONTINENTAL LETTERS.—LV.

MARY WAGER-FISHER.

From Ashland to San Francisco; a wet start; an agreeable stage companion; over the Siskéyou Mountains; in California; the Klamath Valley; the dry, brown, blazing Summers; an inconsiderate pie-maker; a despoiled creek; Mount Shasta.

As no train leaves Portland for Ashland on Sundays, there are usually fewer passengers for the stage on Monday morning than on any other day in the week, and for this reason the stage agent had advised us to wait until that day—a day that I endured with much disquiet, fearing that our long succession of brilliant days would end in rain; for, indeed, it was rarely that the Fall rains had held off so late. So you may judge of my disgust upon our arising at four o'clock on that eventful morning, to find a gentle drizzle descending! To make this stage journey with any degree of pleasure or profit required clear weather, and we had been anticipating it for a year. It was our first encounter with "ill luck" since leaving home, and I swallowed my breakfast and bundled myself inside the stage, in a mood which might aptly be expressed "as mad as a hornet." It was five o'clock and barely daybreak. Anaximander and the laddie, in rubber coats and rain hats, went on top with the driver. There was but one other passenger, and he came inside—a fine-looking man who proved to be an ex-United States Senator from Oregon, and who had lived in Portland for 25 years. He was inclined to be chatty, told me that he had crossed the continent 27 times, by rail and stage; had been a week at a time in the latter; had often made the stage ride we had just set out upon; had never been in the stage when it was stopped by highwaymen, but had only missed them upon two occasions by being a day behind or before them. That we were liable to be waylaid by robbers at any time, was an incident of which I had not seriously thought, but the possibility added a spice of danger to the undertaking. However, a year and a half had elapsed since the last robbery, and the Senator said that the robbers rarely disturbed passengers, but confined their seizures to the mails and packages of the express companies. Even now, Wells, Fargo & Co., send an armed messenger on certain days in the week to guard their treasure box. If he is quick in getting his revolver up before the robbers take aim, the latter take to their heels, or are shot; but if *vice versa*, there is nothing better to do than to submit to their demands. The stage drivers go unarmed—there are five employed on the route and they are paid each $100 a month, with board. The stage fare for the entire distance—125 miles—is $15. Only a limited amount of baggage is carried free, what is over weight is charged eight cents a pound. A through unlimited ticket between Portland and San Francisco can be had for $36—a limited ticket for $32. The distance is 738 miles. Four cents a mile is the highest rate railroads can charge in Oregon—according to a recent railroad enactmen. The legal rate of interest is 10 per cent., but the law is easily evaded, and much money is loaned for even a higher rate.

For an hour or so we rattled along over the hard road on which the rain had only laid the dust, but if there was a rough place or a stretch of corduroy, the driver drove over it with increased speed, until I was "fairly jolted to death." This was a small coach—none of them have springs—and it was lightly loaded. Then we stopped at a farm for breakfast and made a change of horses, taking on six instead of four, and soon after began the ascent of the Siskéyou Mountains, crossing them in a pass at the south, at the hight of 5000 feet. It had taken us two hours to make the last six miles. All the way we drove through the mountain forest, magnificent trees of Sugar Pine with beautiful bark, while on many of the oaks were great, dark-green pendent branches of a parasite, here called mistletoe, which gave a peculiarly luxuriant and wild effect to the forests. Near the summit the Senator pointed out the spot where the stage had been stopped in daylight by bandits. Near by the road I saw in bloom the Torch Plant, sometimes called "Red-hot Poker," and it was the only place in which I have seen it growing wild. Just as we crossed the summit the clouds had begun to break and disperse, and high up through a rift appeared a great snow-capped mountain peak. It was Shasta, and at the next halt the driver made, I climbed up to my place on his seat, where I sat, with my little boy between us, until half-past six o'clock the next morning. Down the mountain we rattled with the speed of a Jehu, and thence on for miles and miles, through the Klamath Valley, crossing Klamath River on a ferry propelled by the current of the stream.

Meantime, the sky continued to clear until not a cloud remained. We had crossed the State line into California, and the laddie seemed disappointed that we could not see the line; that there was not even so much as a stream of water or a fence to mark the division between the Web-foot and the Golden States. I have read that a post with a rag waving from the top was planted by the roadside, but I failed to see it. On our high seat, we soon began to feel the scorching effect of the glaring California sun. No rain had fallen here, and the dryness and dust increased all the way. The Klamath Valley is not of great width, and was very sparsely populated along our route. There was not a green field to be seen; everything was in the brown of Summer, the rolling foot-hills on either side bearing scrub oaks, clumps of grease brush, chapparel and sage brush. Some variety was given to the color of the landscape by occasional fields of grain stubble, the stubble being peculiarly bright, probably because of the dryness of the atmosphere. I have never yet met with a Californian who did not like, or pretend to like, the long summer season without rain, and to lay marked stress upon the conveniences and advantages of not being obliged to make provision for a downpour. But I love the rain, and I am sure that I should wear out nervously in the long, dry Summers and pitiless sunshine of the interior valleys in California, where one finds two or three of the twenty or more climates with which this great State is blessed, and if one will look on a map he will find that California is nearly as long as from Massachusetts to Georgia, and has just as many climates.

At half past eleven we stopped for change of horses and for dinner. The eating stations along this part of the route are merely farm houses—one-story buildings, "long and low," planted long distances apart, and set around with shade and fruit trees—locust and Lombardy Poplars, being favorites for shade. The farmerine at the dinner station was a little behind with the meal, giving as an excuse that it was Monday—the Chinaman had been washing, and she herself had a toothache. We had soup and roast beef, baked beans, potatoes, nice honey in the comb—from hives on the ranch—and pie, two kinds—always pie without a thought, seemingly, that there are people in the world who regard it as an insult to fruit, to put it between pie crust dough. Our next spin was over a hard and level road to Yerka, which we were to reach at three o'clock with four horses. The driver was very reticent, briefly answering questions, and occasionally venturing a bit of information. All the time at intervals, we had views of the top of Shasta which we were gradually nearing "You see that post there by the road-side with the stones packed around the bottom?" observed the holder of the ribbons: "Well, that marks the grave of a stage robber. A messenger shot him on that very spot, and he was buried there Them messengers make quick work of 'em. He was from Illinois; all those fellows are generally escaped convicts from the East." As we were driving along a stream of water for some, miles he said, "That's a noted creek." "What is it called?" "The Cottonwood." "And for what is it noted?" I continued. "For the number of men who've been drowned in it, and horses, and for the gold that's been taken out of it—millions of dollars. They used to just pick out the clear nuggets of gold. But its all taken out now, I s'pose." It was a most innocent and common-place-looking creek, with cattle at intervals drinking in it, and with cottonwood trees growing sparsely along its banks. The road lay through the open valley with rarely a fence on either side; the hills brown, reddish-brown or mouse-brown—they all had a varying tint—continued to bear their orchards of scrub growth, and further back and higher up, occasional plantations of pines. We met the stage coming from the opposite end of the route, and had passed probably three or four wagons in the 50 miles we had come. Finally, we came into the Shasta Valley with Mt. Shasta looming up in front of us; from base to summit, and for fully 12 hours, we were in full view of it, but from no place was the view so fine as from the Shasta Valley. The mountain had less snow on it than usual, because of the unusual dryness and heat of the Summer; but absence of snow below the summit revealed what ordinarily cannot be seen—the extent of volcanic action. On one side of the mountain a crater was evidently built up almost as high as the peak, and some views of Shasta, particularly taken from Strawberry Valley, show two peaks of about equal magnitude. One of the foot-hills of the mountain is called Black Butte, and it is quite a mountain in itself, and all in the foreground and clustering about the base of the mountain are a multitude of conical mounds of varying hight and size, but as regular in outline as if thrown up "to order." The mountain is wooded part way up. The nearest approach we made to it was within a distance of 18 miles, and it did not look to be over five.

RURAL SPECIAL REPORTS.

Dakota.

ALEXANDRIA, Hanson Co., June 10.—I planted the Alaska Pea, sent in the RURAL'S F. S. D, on April 21; to-day there are peas ready to cook—quickest time in the world, I think. American Wonder, (a good pea) and Salner's Earliest and Best are more than a length behind. Salner's so-called Earliest and Best is a very poor yielder. Frequent showers and hot weather are rushing things.

T. H. Y.

Kansas.

LYONS, RICE CO., JUNE 12.—Prices for the crops of 1885 have been very low. Wheat selling for 25 cents to 60 cents a bushel; corn 15 cents to 19 cents a bushel; oats 17 cents; old potatoes 40 cents. No rain since May 6; weather very warm and dry. Wheat will be 40 per cent. of a full average crop; oats half a crop, should there be rain to enable them to fill out. Corn very promising; as nearly all was "listed," the dry weather was very severe on it; it is fully two weeks behind the average growth. I don't think there is more than half a stand. Hay very light. Sorghum halapense came through the Winter well and is growing nicely. Trees were killed very badly last Winter, especially peaches and apricots.

E. S. J.

Ohio.

DAYTON, Montgomery Co., June 15.—The weather has been favorable here for growing crops, some barley is harvested, and wheat and oats promise to be of more than average

yield. Clover and Timothy, where not winter-hurt, will give large returns, while corn is now in such thrifty growth as to promise well for future crops this Fall. Scarcely half last year's acreage in potatoes; while tobacco will fall short of last season's acreage. More was planted last year than could be marketed or properly cared for, and the quality will perhaps be better if it receives proper culture.

E. M. G

THE FARMER'S CLUB

ANSWERS TO CORRESPONDENTS.

[Every query must be accompanied by the name and address of the writer to insure attention. Before asking a question, please see if it is not answered in our advertising columns. Ask only a few questions at one time. Put questions on a separate piece of paper.]

TEMPORARY OR PERMANENT STERILITY IN MARES.

J. W. B., Shelbyville, Tenn.—Why do some mares not get with foal, and why don't some breed every year? Can anything be done for such animals?

ANSWERED BY F. L. KILBORNE.

Temporary or permanent sterility in the mare is not uncommon, only 60 to 75 per cent. of those put to the horse get with foal. Why there should be so large a percent. unfruitful, even under favorable conditions, we cannot say. There are various known conditions that tend to prevent conception, while on the other hand there is in many cases no apparent cause for the sterility. Any malformation of the generative organs, unless removable, usually produces permanent sterility. Such malformation may or may not be recognized during the life of the animal. Disease or derangement of any part of the generative apparatus may produce either temporary or permanent sterility; and any general disease or disease of any other important organ usually produces temporary unfruitfulness. Some mares will not breed while nursing a foal, so that they will breed only every other year. The diet has much to do with sterility. Animals that are poorly or improperly fed, and especially those that are pampered and overfed, are very likely to be unfruitful as long as that state of affairs exists. A good, healthy, working condition is the most favorable. There is no remedy, except to avoid as far as possible all conditions that tend to prevent a successful fecundation. Keep a brood mare always in prime, healthy condition, but *not too fat*. Work moderately and allow daily exercise when not at work. Idleness and much fat are always unfavorable. See that the surroundings are clean and healthy, the stables light, airy and free from foul odors. Daily grooming is very desirable, and will go a great way towards keeping a mare in good breeding condition.

ITCH IN COWS.

D. H. L., Renovo, Pa.—1. What is a remedy for itch in a cow? 2. What's a good book on the cow and her diseases?

ANSWERED BY F. L. KILBORNE.

1. Itch, also known as mange, scabies or scab, etc., is a disease of the skin, due to the presence of minute animal parasites, or acari. The disease is common to all domestic animals, each animal having its peculiar itch parasite, or in some cases, as with the horse and cow, three or four such parasites. The treatment is very simple, but to be effective it must be thorough. First wash the animal with warm, strong, soft-soap suds and a stiff brush, to break up and remove all dandruff and scabs or crusts. Then apply a decoction of tobacco made by boiling one pound of leaf or stem tobacco in each 12 quarts of water. Other parasiticides may be used with equal success, but this is one of the simplest and safest remedies, and very effectual. [See what Mr. Woodward says in the last issue about remedies from scab in sheep. The same treatment will be effectual for itch or scab in all kinds of domestic animals.—EDS.] Repeat the application on the third and sixth days, first washing with the soap-suds in each case. The three applications should be sufficient. It will also be desirable to treat the stable and rubbing-posts to a similar wash. 2. "The Farmer's Veterinary Adviser," by Prof. James Law, of Cornell University, Ithaca, N. Y., price $3—to be had of the author, is one of the best.

YACHTING.

C. H. M., Cayuga N. Y. This is an agricultural, not a nautical paper, so we really cannot spare room for "a good account of yachts, their construction, rig and sailing." In view of the numerous yacht races the coming season, however, the following brief answers to some of our friend's questions will be of general interest: A "boom" is the spar or stick attached to the foot of a sail to keep it over a boat's side; a "gaff" is the spar fixed to the head of the sail for the same purpose. Sloop yachts, such as the contestants for the America's Cup last year and this, carry two booms—the "main boom" attached to the mainsail, and the "spinnaker boom," which, when not in use, is generally carried vertically against the mast, and lowered on the side of the boat opposite that over which the main boom happens to hang, when the spinnaker is to be set in sailing before the wind. Then the main sail spreads out on one side of the boat and the spinnaker on the other, and the vessel sails on a pretty even keel. The "bowsprit" is the spar stuck out in front of the boat to hold the headsails—the sails set in front of the mast. The top-sails are the upper sails: the "gaff" top-sail is the triangular sail set over the mainsail: the "club" topsail is a sail set in light winds over the gaff topsail and attached to "clubs," or small spars, to make it reach higher up in the air. The gib "top-sail" is the topmost gib or headsail. "Working to windward" is an expression used to indicate that the vessel is making a number of tacks to reach a point in the direction from which the wind is blowing; and "sailing close to the wind," or "close-hauled," indicates that she is headed as near to the point from which the wind is blowing as she can be made to sail.

A JERSEY COW BECOMES STERILE.

D. C., Deer Park, N. Y.—My eight-year-old Jersey cow has dropped six calves; has never been dry since she dropped the first; has given 14 quarts of milk per day, which would make 12½ pounds of butter per week; she is a good feeder and in fair condition. Eight months ago she dropped a calf and has been in heat regularly since, and been served several times by different bulls, but doesn't get with calf; what can be done for her?

ANSWERED BY F. L. KILBORNE.

Without knowing the cause we cannot suggest a remedy. It may be due to some general disease, or to disease of the generative organs. Tuberculosis would be suspected if this disease is in your herd. Were her ancestors prolific? If not, she may inherit a tendency to become sterile early. We can only suggest that you call a competent veterinarian to personally examine her, although we suspect the cow may be permanently sterile.

GOITRE IN A HORSE.

E. J. R., Loweville, N. Y.—My horse has a difficulty in breathing as if troubled with the heaves, but there is no cough. On each side of his neck, well up under the jaw, there is a bunch the size of a large hen's egg. That on the left side came when the trouble began. What should be done?

ANS.—The trouble is probably goitre, a diseased and enlarged condition of the thyroid body, due to debility or the drinking of water from lime-stone regions, or both. Give one dram iodide of potassium night and morning. Rub the swellings thoroughly every other day with tincture of iodine; or, if the swellings are soft, draw off any liquid they may contain with a hypodermic syringe, and inject a solution of compound tincture of iodine, one part, and water, four or five parts. Keep the animal in good healthy condition, and use rain-water for drinking. Continue the treatment for several weeks if necessary. Recovery will probably be slow.

TO REMOVE WARTS ON A COW'S TEATS.

J. C. P., Minneapolis, Minn.—The warts on the teats of your cow should be easily and safely removed. With a pair of sharp scissors cut the warts close to the teat. Then thoroughly cauterize the cut surfaces with nitrate of silver. They can be best removed while the cow is dry. If they crack open or become sore before then, cauterize the raw surfaces by touching with a stick of the nitrate of silver.

Miscellaneous.

C. A. K., Beattie, Kan.—1. When and how should strawberries be set out? 2. What is a remedy for black striped bugs on water-melons? 3. What for the cabbage worm? 4. What's a good feed for young ducks and Guineas? 5. How can Ground Squirrels be destroyed?

ANS.—1. Any time after fruiting when the soil is moist, up to September 15. Spring is perhaps the best time. If for the field, set the plants three feet by two apart. If for garden, set three feet by one foot. 2. Sprinkle the leaves, when covered with dew, with plaster, or even fine, dry soil. 3. The best remedy is to blow pyrethrum (or buhach) powder upon them through bellows. Or wet two tablespoonfuls of the powder with alcohol, add this to two gallons of water, and spray the plants with this. 4. The first food for ducks may be bread moistened with milk; curds or hard-boiled eggs chopped fine are also good for them. After a few days' corn meal, boiled and mixed with milk, boiled potatoes, a few chives, or lettuce chopped fine, will be a good addition. They thrive well on all kinds of sopped food, such as barley meal and water mixed thin. Later on pot-herbs will do them good, raw, chopped fine, mixed with bran soaked in water, with barley and boiled potatoes beaten up together. The Guinea chicks require food almost immediately—at most within six hours after hatching—and should be fed and cared for the same as young turkeys: but they require more constant feeding than any other chicks, as a few hours' abstinence is generally fatal. They also require a good deal of animal food to make them do well, especially in Winter. 5. The name Ground Squirrel is given to two kinds of animals in the West—the Striped and Spotted Prairie Squirrel—(Spermophilus tredecimlineatus), and the Tamias striatus, or Chip-muck. The first only, however, is a real squirrel; but unlike other varieties of squirrels it never inhabits timber when prairie is near at hand. It is very destructive in cornfields by digging up the corn which it carries to its burrow, often necessitating replanting. The pests also inflict serious injury on some other crops. They soon disappear before the plow, however, and are readily trapped or shot, and a few buckets of water will always drown one or a pair out of their hole. Strychnine is also used to kill them, mixed with the food of which they are fond. The same modes of extermination will be effective with the Gray Prairie Squirrel, which is also called "Ground Squirrel" in some places, though it is not so easily drowned out of its hole, especially when it is in a bank or drain—a favorite location.

E. A., Aberdeen, Dak.—1. At what age should I breed my two-year-old colt without running any risk of injuring her? Two of my horses sweat a good deal across the kidneys when they have drank water after a hard day's work; what should be done?

ANS.—1. If the colt is quite forward it will do to breed her now. But if she is not, we would prefer to wait a year, when we would expect a better foal with less injury to the young mare. 2. If there are no other symptoms—no weakness or tenderness across the kidneys—probably no medicinal treatment is needed. Work more carefully and give the drinking water frequently, in small quantities. Attend to the general comfort of the animals; see that the food is wholesome and the surroundings healthy.

S. C. M., West Millcreek, Pa.—We have now a very effective remedy for moles in Hales' Mole-trap, which in its way is simply perfection. The trap is now reduced to $2, and will last a lifetime. It is easily set, though a little experience is needed to adjust it just right. Follow the directions. The earth over the mole run should be gently pressed down, and the trap set so that the plate merely *rests* upon the compressed soil. It will never fail. The Isbell trap ($1.50) is good, but after several years' experience, we much prefer the Hales. Address H. Hales, Ridgewood, Bergen Co., N. J., or you may buy it of any seedsman.

F. G. W., Oswego Co., N. Y.—A valuable trotting mare got with foal accidentally about a week ago; can anything be done to prevent her from having a foal?

ANS.—We cannot recommend any of the methods that might be used to produce an abortion. Less injury will propably be done the mare by allowing her to carry the foal, than by attempting to produce an abortion in the way desired.

F. H. B., Meridian, N. Y.—My three-year old colt has a bunch growing on the back of his hind leg, at the bottom of the gambrel joint; what should be done for it?

ANS. Without knowing the nature or cause of the bunch, we cannot prescribe definitely. Painting with tincture of iodine twice a week for a few weeks might be beneficial. Excision may be demanded.

G. W. T., Stelton, N. J.—My horse has a tremendous swelling on his sheath, due probably to bad castration; can it be removed in any way except by excision?

ANS.—Excision is probably the only remedy. Unless vital structures are implicated the operation should be successfully performed by a competent operator.

R. M. A., Fredericktown, Mo.—My mare dropped a colt six weeks ago; she makes water all the time while driving; what should be done with her.

ANS.—Consult a veterinary surgeon if the difficulty does not soon remedy itself. We cannot advise you so that you would be able to treat the case yourself.

P. P. S., Mehoopany, Pa.—There is no remedy that is not too costly for lice swarming on a cherry tree. Tobacco tea sprayed through a force pump and cyclone nozzle will kill the lice.

E. G. L., Essex, N. Y.—The grass sent for name is Blue Grass—Poa pratensis.

DISCUSSION.

T. L. K., McMINN Co., Tenn.—That was an interesting article on salt feeding in a late RURAL, but I don't think what was said against the use of salt will make much difference in the quantity of salt fed. All farmers and farmers' wives know the beneficial effects upon milk and butter of keeping the cows regularly salted. All hunters know of the "licks" dug out in salty places by deer and other wild animals. We would like to have some one explain how these wild creatures have acquired this "fixed habit" that is so hurtful to them. Guided by instinct, they readily discriminate between wholesome and unwholesome herbage around them. If salt was unnecessary and hurtful, would not instinct teach them to reject it? Too much salt is injurious, and so is too much corn, oats or clover, but what would our stock do if they were deprived of everything which, taken in excess, proves injurious? I never knew an animal that had salt continually before it, to eat too much. Animals seem to know just what they require. They take a few licks at the salt trough and then go about their business. If the great laboratories of nature should get out of order and the ocean be deprived of its salt, those who now object to the substance would call far more loudly for its return. A few days since, while walking in my garden, I saw a common gray rabbit standing on his hind legs with his head resting against my meat house. On watching him closely I found that he was eagerly licking salt from the wall. It had exuded through the brick, and he had discovered, either by accident or instinct, where he could draw his rations free of charge. Now, please, tell us where this "victim" of a "dreadful habit," a poor little rabbit, acquired his taste for this unwholesome stimulant.

Miscellaneous Advertising.

Scrofula

Probably no form of disease is so generally distributed among our whole population as scrofula. Almost every individual has this latent poison coursing his veins. The terrible sufferings endured by those afflicted with scrofulous sores cannot be understood by others, and their gratitude on finding a remedy that cures them, astonishes a well person. The wonderful power of

Hood's Sarsaparilla

in eradicating every form of Scrofula has been so clearly and fully demonstrated that it leaves no doubt that it is the greatest medical discovery of this generation. It is made by C. I. HOOD & CO., Lowell, Mass., and is sold by all druggists.

100 Doses One Dollar

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The Linings of our Pitchers are held in position by the Cover, which is secured by thumb-screws and is easily removed and replaced, thus facilitating the cleansing of both pitcher and lining. The lining is of the finest Stone China, and has no equal for preserving ice and keeping water pure.

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SATURDAY, JULY 3, 1886.

OF eight Japan Chestnuts planted in May, all sprouted and are now about seven inches high.

WE find that the Rancocas is essentially as early as the Hansell. The latter will ripen a berry or so first, but the other will give its main crop as early. The quality of the Rancocas is as good, while the plants are more vigorous and fruitful.

MR. G. M. VANNESS, of Morris Co., N. J., has sent us two stools, with the soil attached, of wheat and chess plants to show, as he believes, that wheat will turn to chess. We carefully washed out the soil from the roots, and found that they easily separated without rupturing a fiber.

REFERRING to the article on the RURAL'S rye-wheat hybrids, with which Dr. Trelease kindly favors us, it may be stated that many of the plants have leaves and stems like those of rye in color. The plants, taken as a whole, which "most resemble rye" show this at a glance, and it has been remarked upon by many.

WE wish we could induce all seedsmen, florists and nurserymen to discontinue the use of the word hybrid as applied to crosses between mere varieties. It should be confined to crosses between species and genera. If they had more interest in the truth and propriety of things and less in "taking" names, they would do it. The Am. Pom. Society, Am Hort. Society, and Society of Nurserymen should take this matter up, and act upon it.

KEEP an eye on the managers of your fair, friends. How many of them are going into the liquor business this Fall? They would doubtless feel insulted if you called them rum-sellers, but what else are they if they accept money for a liquor privilege? By the way, how much better are you if you stand by and wink at such practices? Come out and tell folks what you think about this grog business. "Silence gives consent" every time. If you want to put the practice down, talk about it and get all your friends to talk about it too. Between you, you can talk it to death.

TEACH the horses to mind when they are spoken to. The importance of this cannot be overestimated. An intelligent horse knows his driver, and will, if so disposed, readily take advantage of any lack of decision. Not long since we saw two frightened horses running on the street. One of them, at a single sharp command from his master, stopped short. The other only ran the faster at the shouts of the crowd. Teach them to mind at a single word. Never fool with them by giving half a dozen orders when one would do, or by shouting or menacing them. The typical woman driver lets the horse see at once that she is afraid of him. She jerks his bit ten times per minute, clucks at him continually and says "Whoa!" a dozen times before he makes up his mind to stop. Such treatment will make a spirited horse unsafe, or make a fool out of a lazy one.

ON an average throughout the country, harvest will be fully a fortnight earlier than usual this year. It will still be some time, however, before the crops move to market, though cutting is now in full blast as far north as parts of Ohio, Indiana, Illinois, Missouri and Kansas, and before this reaches our readers, the bustle and excitement of busy, joyous harvest will have moved steadily north. This is just the time, therefore, when it will be most advantageous to be able to form a fair idea of what the outcome of the various crops will be in this and other countries, because each will then be in a position to judge what the prices should be for his products. Our next issue will be our regular annual "Crop Report," compiled from special local reports from over 4,000 correspondents in nearly every county in the Union. We have delayed it somewhat later than usual, so that our conclusions may approximate all the closer to the truth. As in the case of every special number, there will, of course, be some readers who will not take any particular interest in the issue, and who will miss for once some one or more departments in which they find special pleasure or instruction. All, however, ought to feel a deep interest in the crops of the country, for it is these that set and keep every industry in the land in motion, and the prosperity of the farmer, dependent on his crops and the prices therefor, is identical with the prosperity of the whole country.

ONE of the surprising things to the writer is that country people—yes, city people—having even a square rod of ground, do not raise strawberries from seed. To-day, June 22, we have gone over our seedling plot to mark those which seem to be worth propagating. There are perhaps 200 plants raised from the seeds of berries selected last year and the year before. From these we gathered a large plate full of clusters and single berries which, as to size, color, firmness and qualities, were equal to any of the 66 varieties under trial. We do not intend to say that any one berry possessed all these qualities, but that, taking them as they come, the average would be as high as selected pickings from the same number of varieties which are being tested from various sources. Now it is almost as easy to raise strawberries from seeds as from plants purchased. If seeds are sown now, many of the plants will fruit next Summer—all, the Summer after. We have then to mark the best while in fruit and to transplant them as soon as the fruit is picked. Such plants, if well treated, will bear well next Summer—better than nine-tenths of of the so-called potted plants sold at a high price by nurserymen.

FARMERS are frequently puzzled to account for the fact that while money is loaned on United States securities at less than 3½ per cent., and on security of good railroad stock or State and municipal bonds at a trifle more, they have to pay from six to 10 per cent. for loans, though they offer the most solid security—the earth itself and the improvements thereon. The men of business, the manufacturers and merchants of Canada, are now perplexed at a like seeming discrimination against them. They complain at having to pay seven to eight per cent. for loans while stockbrokers can readily get accommodation at four to five per cent. The explanation in both cases is simple. Bankers and other lenders prefer as security that which they can sell the quickest in case of default. Stocks and bonds can be sold at once, while the merchant's paper and the farmer's mortgage cannot be so readily disposed of. A suspicious security, easily converted into cash, sometimes finds a much readier market than an unquestionable security which cannot be realized on without delay and legal trouble.

THE SMOKE TREE.

Bless this dear old plant! If we were constrained to part with all our shrubs but one, we should hold on to the Smoke Tree. At this time (June 25) it is easy as one looks at it from a little distance, to fancy it a cloud tinted with the faintest rose and the faintest green blended together, or a mass of smoke such as may issue from a combination of colored fireworks. There is no shrub like it while in bloom. The delicate, downy inflorescence is not due to the flowers, which are quite inconspicuous, but to the feathery pedicels that elongate and so diffuse themselves as to conceal the leaves, while because of their delicacy we see only softly blending colors that might well indeed be smoke or a cloud.

We have seen specimens of this little tree 20 feet in diameter—a mass of light, mossy green and purple or rose. Later all this becomes gray, and its beauty is gone, though the later growth of leaves takes its place in a measure. One likes old-fashioned things that bring to mind the old homestead or the familiar country gardens of early days, and the Smoke Tree, though among the choicest collections of plants of more recent times, seems like an old and tried friend among aristocratic strangers.

It has been said that this little tree, so distinct from all others, so oddly beautiful to those who see it for the first time, rejoices in a dry, warm soil. It is true. But it also thrives in heavy, moist soils. We have it in both positions, and it seems to prefer the latter. Its botanical name is Rhus Cotinus, and it is known familiarly as the Purple Fringe, Wig Tree and Venetian Sumach, as well as the Smoke Tree.

THE WAR AGAINST FRAUDULENT BUTTER.

THE House Committee on Agriculture are hopeful that the Senate will pass the Oleomargarine Bill, with possibly a reduction of the five cent tax provided by it as it left the House. It will certainly be acted upon next week. The House will agree on any amendments on which the Senate may insist, if they do not interfere with the chief end sought by the bill—to force the manufacturers and dealers in bogus butter to make the goods of wholesome materials and sell them for what they really are. State legislation, however stringent, has in every case been unable to do this; for State legislation cannot provide for the supervision of manufacture, or for following the product from the maker to the final purchaser; and federal legislation can, to a great extent, do this, and federal legislation is therefore essential to the rightful protection of the producers and consumers of genuine dairy goods.

Senator Edmunds, Chairman of the Senate Committee on the Judiciary, who voted to refer the bill to that Committee, and was supposed to be at least "doubtful," in a letter to a Vermont farmer declares himself strongly "in favor of Congress taxing bogus butter, so as to give makers of real butter their fair rights," and adds that he needs no "urging to look after the interests of our farmers." A good deal of urging will not be wasted, however, on him or any other Senator. Edmunds is reputed to be one of the very best constitutional lawyers in the Senate, and the fact that his re-election will be decided this coming Fall weakens not a jot his opinion as to the constitutionality of the Oleomargarine Law; for, of course, if he thought it unconstitutional, he wouldn't support it. Should the farmers' influence of the Green Mountain State be against him, he might find it more dangerous to his ambition than even that of Brother Blaine.

The fraudulent makers of counterfeit butter are exerting themselves to the utmost to secure the defeat of the measure. Whereever possible they are getting public bodies, such as Boards of Trade, etc., to petition against it, and the great Chicago packing houses have compelled their workmen to sign a petition urging the Senate to reject the bill. Thousands of workmen signed it simply because they were compelled to do so. Desperate indeed must be the case of the bogus butter people when they are forced to resort to such methods. A business that can muster as supporters only an army of paid "scientists" and intimidated workmen has no business out in the sunlight. Keep on in the good work, friends. The "bogus" army is shaking.

LEGAL HONOR IN THE SENATE.

ON June 10 the United States Senate, by a vote of 37 to 11, passed a bill, introduced by Senator Beck of Kentucky, prohibiting Senators and Representatives from being the hired attorneys of railroad corporations on which they are to sit as judges. Senator Hawley, of Conn., says the bill was sprung upon the Senate suddenly and stampeded through. The general public say that its obvious propriety left the Senators without any ready ground of opposition and without the effrontery to vote against it. Out of the 76 Senators, however, 65 are lawyers, and if the bill becomes law, a large proportion of these who are either permanently retained by the roads or receive large fees from them, will be deprived of a rich source of income. Remember, many of them are employed, at high figures, precisely because their position as legislators enables them to be of service to their clients in matters of legislation, and the whole course of the Senate shows that it has been steadily subservient to these great subsidized corporations, and that any law, however urgently demanded by the interests of the people, if hurtful to those of any of these corporations, can be passed by that body only when the force of public sentiment in its favor becomes irresistible.

On June 22, therefore, the bill was "reconsidered," by a vote of 31 to 21, and instead of being passed, as the public had a right to expect, was sent to the Committee on the Judiciary made up entirely of lawyers, most of whom are the hired agents of corporations. Thirteen of the Senators—ten of them Republicans—who originally voted for the bill, subsequently voted in favor of putting its fate into the hands of its deadly enemies. Mitchell, of Oregon, wanted to swamp the bill with ridiculous amendments. Evarts, of New York, regarded it as a stigma on the Senate and an insult and reproach to the legal profession, whose members are incapable of subordinating the interests of the public to those of their clients and themselves! Edmunds of Vermont, thought it required an ideal honesty in Congressmen, such as can be found only in an angel-governed world.

In a body made up almost entirely of lawyers whose *esprit de corps* is notorious, Evart's appeal was the most powerful; but the Federal laws already contain many provisions for prohibiting lawyers in Congress from accepting fees to work for corporations and against the people. By laws passed by the Senate, a Senator is forbidden to take fees for procuring a contract or an office, or for any sort of service on any question which may be brought before him in his official capacity; or to take bribes, or to hold an interest in public contracts, etc. If these are not insults to the Senate or the legal profession, why should the provisions of the Beck bill be so regarded?

All the special pleading of all the lawyers in the Senate, which contains many of the best special pleaders in the country, will not convince the great public that men who, as representatives of the people in the highest legislative body in the nation, are called upon to legislate on the obligations of subsidized railroads to the Government and the people, should have fat fees from those very railroads at the time in their pockets. A question forced on public attention by this discussion is: "Is it right, is it expedient, is it for the public interest, that 65 out of our 76 Senators should be lawyers?"

BREVITIES.

DANIEL RUPERT gives some good advice on page 437.

Is the buckwheat land ready? Don't sow too late. A late frost may spoil the crop.

OUR next portrait will probably be that of the RURAL'S friend, Gen. William H. Noble of Connecticut.

THOSE interested in cold storage will read Pres. Wilder's statements, under What Others Say, with interest.

JUNE 20. To-day we find several ripe Hansell Raspberries. There is not upon any other red variety a berry that is even showing color. A few of the earliest caps are turning a little.

THE RURAL every week, in its News Columns, gives in the most condensed form the news of the world. It is carefully selected and rewritten from week to week from all available sources.

GEN. CLAY'S views are striking, if somewhat peculiar. We like what he says about the engravings of animals which are not drawn from life, but made by rule and line to suit the ideal fancy of the times.

IT has been shown that the roots of corn four feet high may and probably do extend, horizontally at least six feet—and most of these roots are within three inches of the surface. Knowing this, our friends must cultivate to suit themselves.

THE Marlboro in the place of its origin is a very thrifty raspberry. We have seen canes 10 feet high. Mr. Caywood himself planted a bush at the Rural Grounds, the canes of which were eight feet high. But with us this vigor does not last. The Marlboro is this season no more vigorous than the Hansell.

REMEMBER the prizes. Ten dollars each for the largest Bird Cantaloupe, the largest watermelon, the longest ear of the Angel of Midnight Corn, and 10 of the heaviest pods from the Alaska Pea. The prizes will be awarded October 1. Competitors must advise us by mail as to the weight or size of peas, melons or corn. Are you trying to secure the prize? Several reports from the peas have come to hand.

SENATOR MITCHELL, of Oregon, Hipple-Mitchell of unsavory notoriety, who after having been relegated to private life for one term for the good of his party, was re-elected to the Senate last year by Republican-Democratic jugglery, which materially helped to lose the State to his party this year, appears to be one of the men who regard a place in the Senate as valuable chiefly as a means of serving wealthy corporations in return for past and prospective favors. Isn't it notorious that he owes his present position in a great measure to railroad influence during his hard struggle for the Senatorship before the Legislature last Fall? During the late Northern Pacific Forfeiture debate he was one of the most insidious and persistent foes of the bill, and by a deceptive amendment would have rendered one of its chief provisions abortive, were it not for the vigilance of Van Wyck, of Nebraska; but it was during the debate on Beck's Honest Congressmen Bill that Hipple-Mitchell outdid himself. In order to make the bill ridiculous, he introduced an amendment prohibiting Congressional lawyers from appearing in any case in which the interests of any organization, association or partnership is concerned, because, in sooth, Congress has to legislate in a general way on matters connected with them, while it has to legislate specially with regard to land-grant roads. With little sense of decency or dignity, a great deal of plausible cunning, and an unscrupulous eye ever open to the "main chance," a poor sort of creature indeed seems this Oregon Mitchell.

Indust'l Societies.

MICHIGAN STATE HORTICULTURAL SOCIETY.

(RURAL SPECIAL REPORT.)

Spring strawberry planting preferred to fall; too many pistillate plants; best varieties for market; matted rows better than hills; mulching; picking; how to eat strawberries; raspberries for market; picking and marketing; blackberries; "plant patents"; grapes for market; mildew; cucumbers.

The summer meeting of this Society was held in Lansing, beginniug June 15 and holding through the 16th. The program was very full and interesting, mostly discussions. "Strawberries for Market" was the first general topic. All the growers present preferred spring to fall planting. In Spring the plants are more likely to live, as the weather is more congenial and a crop can be had as soon as from fall planting. President Lyon remarked that we should plant as early as possible; a gain of a week is usually very marked in its effects. There was some expression of disfavor concerning the introduction of so many pistillate varieties. Perhaps the using of pistillate plants as mothers in crossing for new sorts has a tendency to increase pistillate varieties. Best varieties for market in general are Wilson and Crescent. Wilson often blights and Crescent overbears. Mr. Scott, a very successful grower at Ann Arbor, on heavy soil finds Mt. Vernon the very best market berry. Matted rows, a foot to fifteen inches wide, are preferable to hills for most markets and most varieties. Bidwell and Sharpless do best in hills. A. G. Gulley, South Haven, said that his Wilsons and Crescents in matted rows are as good as those in hills.

A letter from Parker Earle, of Illinois, recommended planting in spring. He has mostly Crescents, three rows to one of some perfect-flowered sort. He cultivates clean in matted rows, mulches with straw which is not removed until after harvesting, and ships in 24-quart crates. It was generally agreed that the proper way to mulch is to cover the plants lightly and the ground between the rows heavily, and leave the mulch on until the berries are picked. Some burn off the mulch. Strawberries demand intensive culture. Most growers use tickets for berry-pickers and pay a cent and a-half a quart, although that is too much for Crescents. Berries must be sorted by a careful man before they are put upon the market. Most growers pay pickers once a week, although some do not pay until the end of the season. It is best to use four-quart berry-carriers, and to make pickers fill their carriers before leaving the field. Fast pickers may take two carriers. Do not allow pickers to snap off the berries or to tread down the vines.

Few people know how to eat strawberries to advantage. The flavor of the different sorts is always disguised when the berries are smothered in sugar and cream. They are usually best to cultivated palates when eaten with the addition of a little sugar and water. The poorer the berries, the more sugar and cream we use. Sec. Garfield has the best sorts brought to the table with hulls on, and eats them from the hand.

An interesting feature of the first evening's program was a series of short talks, illustrated by charts, by students from the botany classes of Dr. Beal, of the Agricultural College. For market, red raspberries seem preferable to the black-caps. Turner, Cuthbert, Marlboro, Brandywine, Tyler, Souhegan, Shaffer, Ohio, Mammoth Cluster and Doolittle were mentioned as leading market sorts. For market, the first desideratum is firmness. Fall planting was generally preferred for reds, and spring planting for caps. Price paid for picking varies from one-and-a-half to two-and-a-half cents. Pint boxes with sloping sides are generally preferred. E. A. Scott uses tickets for one, two, three, four, six and eight quarts, and as these accumulate, they are taken up and the picker receives 20-quart tickets.

Pres. Lyon despairs of finding a hardy blackberry. He prefers to plant the best sorts and lay them down for Winter.

A communication was read from Jacob Moore, asking that the society consider the question of plant patents, the advisability of endeavoring to protect the originators of new fruits. A committee, consisting of President Lyon, Prof. Tracy, Prof. Bailey and Secretary Garfield, was appointed to consider the matter, and report at some future meeting.

The leading grapes for market prove to be Worden, Concord and Moore, with much promise for Early Victor, Ulster and one or two others. Prof. Bailey thought that resistance to mildew is fully as important as hardiness. Even hardy sorts winter-kill when injured by mildew. He said that the sulphur and other remedies which are used for mildew in France are not likely to prove satisfactory here, as our mildew is not the same as the European oidum. Delaware is going out of date on account of mildew.

Prof. Cook recommended the brand of pyrethrum known as buhach above ordinary sorts as an insecticide. For application to trees with a fountain pump a tablespoonful is mixed with a pail of water.

Prof. Tracy gave his experience concerning cucumbers. For general purposes it pays to plant in the open ground. Plant in drills and the losses from bugs will not be felt. Of all vegetables it is most important that cucumbers be fresh when eaten. Soaking in water will usually remove bitterness. Pick early in the morning. Do not turn over the leaves. Always pick clean.

Wednesday evening a number of Prof. Bailey's students from the Agricultural College presented the results of their work in horticulture. One reported upon the effects of chemicals in hastening germination; another upon experiments with various stocks for grafting; another upon pea trellises where wire was found to be cheaper than brush; another upon the effects of last winter upon fruit and ornamental trees, and others upon a successful fire hot-bed, upon the botany of raspberries and blackberries, and upon points in landscape gardening. ILEX.

Miscellaneous.

FARM WISDOM IN SHORT, PITHY PARAGRAPHS.

KINDNESS to all around you is the cornerstone of happy farm life, and pays in every way.

The farmer who makes it a rule to hurry his work for the sake of getting through in time for an hour's play spell in the evening, will drive a poor horse, carry a lean purse, and most likely a heavy mortgage too.

The best calculating a farmer can do as to time, is to so plan his work as always to have enough to do, and never to be overdriven.

The farmer should realize that farming has not yet reached perfection; that improvements are possible in a thousand things: and his constant study and careful observation should be to discover the better plan.

The farmer's motto should be, "Learn something new every day." Never rest satisfied with hearsay, but find out for yourself. Experiments poorly tried are like wet weather in haying; and to rely altogether on hearsay is like frost in June.

Make all your experiments fairly, faithfully and effectually; measure and weigh with exactness, and keep a true account of all the details. Let your experiments be on a scale so small as not to injure you in case of failure.

Get your ground in good order, and plant and sow good seed in good season, and faithfully attend to all after requirements of the crop, and never mind the moon.

It is better to make two small loads and go twice, than to take all at one load and break down.

Avoid extremes, and always seek that happy medium in which the least outlay shall bring the greatest proportionate returns. Avoid law-suits and quarreling with neighbors. Mind your own affairs more, and your neighbors' less. Quarrels are like bad weeds in the garden, and law-suits like a drought.

Have a careful eye on fences, gates, and barn doors, and attend to all such things as soon as you see they need it. Have as good and convenient a place for your cattle to drink at as is possible.

Accustom yourself to habits of regularity and method. Be regular in all things. Have regular hours for rising, for meals, for feeding, and generally be as regular as you can in all things.

When away from home keep your eyes open to see how much other farmers may be in advance or in the rear of you in matters pertaining to farming.

When tired rest; when thirsty drink, and treat your horse in these respects as you treat yourself.

Be sure that your calculations are not larger than your means or your strength, for less well done, is better than more poorly done.

Labor with your mind as well as your hands, and do not over-tax either, for to be successful you will need both.

Have a place for your tools, and have your tools in their place.

Keep good tools, and keep them in good order, for poor tools make hard work, which is unprofitable.

Cleanliness is a promoter of health and good morals.

Clean stables and bedding help to make horses sleek and cattle look well.

I have never known the farmer who did his work neatly and in good season, visited by constables or burdened with a mortgage.

Slovenly farming tends to draw a farmer down hill, and slovenly harvesting is to be unthankful for what did grow. Slovenly hands in the field are like rats in the wheat bin. The farmer who does his work neatly will find it less difficult to pay heavy, than the sloven will to pay light taxes.

The farmer who keeps good fences is likely to prosper, live at peace with his neighbors and have something to give to the poor; but the farmer who keeps poor fences will have his crops destroyed, have quarrels and law-suits and nothing, except harsh words, to give to anybody.

A man may so improve his farm as to lose it.

A farmer who doesn't exercise sound judgment is like a ship at sea without a rudder.

First improve upon what you already know, and learn as much more as you can.

You may read pithy sayings all day and admire them in the evening, but your work will not be done unless you "lay your shoulder to the wheel" and push. There is no helping those who will not take counsel and help themselves.

To have many bad neighbors is a sign you should reform.

To hurry and flurry to get our work done shows much wind in the garret, but little brains.

The man who cannot learn from his neighbors' mistakes, will teach his neighbors by his own.

To have more stock than we have pasture for, is to save a spoonful and lose a shovelful.

To pasture our meadows in Spring is to borrow hay of Winter.

What is not worth taking pains with is not worth a place on the farm.

The farmer who is often caught in bed by the sun
Will see his neighbors have money while he has none.

Buy what you can pay for, if you need it, and stop there.

Show me where lives the farmer who makes it a rule to borrow tools, and I will show you broken gates, lousy calves and dirty stables.

The wagon that stands out over Winter is drawn by poor horses.

The man who cannot get the lice off his calves thinks of going West. He thinks he knows all about farming.

Pigs that are well fed, and have a warm and dry bed, are a good breed.

When anything is ready to be done and you can do it, then is the time to do it. The best time to do a thing comes only once.

Never calculate on a mild Winter because you are short of feed.

Never enter into partnership with, or leave your business in the hands of an "unlucky" man, for by reason of his careless habits you might suffer loss. He who cannot manage his own affairs is not fit to manage yours.

Details are the nails that hold the house together, and if neglected the house will go to pieces.

System is the groundwork of success, and the soul of good planning.

You may vote without talking politics, and you can be pious without long arguments on religion.

A pig is a pig, put him where you will; even in the parlor he'd be a pig still

In Summer prepare for Winter, and in Winter prepare for Summer.

Always do what you can first, and leave the rest to Providence.

Keep your eyes and ears open and your mouth shut.

Remember that that which costs the least is not always the cheapest; nor that which costs the most always the best.

Treat your hired help with respect, feed them well, pay them well. If you cannot do so, keep none. DANIEL RUPERT.

Crawford Co., Pa.

MORALITY AND TRADE.

GEN. CASSIUS M. CLAY.

RELIGIOUS SYSTEMS AND THEIR INFLUENCE.

MORALITY may be defined as the science or art of human happiness. Religion is not the basis of morality; but it may be an aid or motive power. The first religions of the race were polytheistic, when great objects and qualities in Nature were held and worshipped as gods. Polytheism then was the germ which ripened into a higher unity and philosophy of pantheism of the unity of the creative power—of the two forms one holding to theism, and the other to nature. In theism the divisions of polytheism continued, but in a vastly diminished number. Each sect held to one god, but by individualizing him, he was not the same. True theism nevertheless exists in the thought of the highest mental structures, whilst it may for all practical purposes be held the same as Nature. Religions sects have under the theistic idea been as numerous as those original polytheism produced, and the consequences have been the same; not the unity of the human race, but its severence. These systems have but little influenced morality—the science of human happiness. No one, therefore, need be alarmed at the decay of religious creeds, which have never advanced morality, and therefore cannot obstruct its progress. The higher theism is stronger today than in any former age, and morals being based upon eternal laws, just as physics, have now full vent for surer and more permanent establishment. With these postulates we are prepared to consider

MORALITY AND TRADE.

The greatest summary of moral duty in trade, as in all our acts concerning others, is contained in the Christian aphorism, "Love thy neighbor as thyself:" or "Do unto others as you would have others to do unto you." Trade may be said to be the exchange of commodities and values. The violation of the golden rule is most frequent in

FRAUDS OF APPEARANCE.

If the conductor of the RURAL should send out a specimen copy to induce subscriptions, and then after receiving the money asked, should continue a very inferior publication, that would be a fraud. So the farmer who should sell fruit by sample, and fill the hill with inferior fruit, would commit a fraud; and similar action on the part of the merchant or trader would be fraud. But when the parties trading are all present and have the means of examining the commodity exchanged, a similar fraud may be perpetrated; for if the fruit vender should put the best fruit on the top of the fruit basket, inducing the belief that the whole mass was equal; or if the merchant should sell sized cloth for real thick goods, or should show the first good yard of a bolt of goods, the others being faulty, it would be equally a fraud, though the vender should make no statement about the qualities of the fruit or the merchandise.

If the commodity is defective, it makes no difference whether it is falsely conceived by the buyer, or falsely represented by the seller, by word or device, it is, all the same, a fraud. The legal distinction of fraud, must come short of the moral; but both agree as far as they go on the same road.

PRICE.

When there is no concealed defect in the commodity, is it worth all it will bring? Not always. As a general rule it is; but there are exceptions:—Suppose I sell gun-powder which is high because of an existing war, and I have heard of the peace, and the buyer who expects to sell to the army has not been informed of the cessation of arms: in law I may charge war prices, but not in morals. I should first tell the buyer of the peace, and then sell. When all the events which make price, and all the investment of money, mind, labor, etc. entering into the product, are known, then the thing is worth all it will bring. For a thing is more valuable to one man than to another, of which the buyer only can judge, else there would be no such thing as trade.

ADULTERATION AND IMITATIONS.

Having fixed the idea of frauds, we come to consider some of the most common instances. A very common fraud is the adulteration of products: the mixture of a cheaply grown seed with others more valuable, as seed of weeds with clover, or any other prime seed; cabbage seed with mustard, rye or chicory with ground coffee, etc. So adulteration runs through all the materia medica, all the commercial eatables, as glucose or corn sugar in cane sugars; pebbles in coffee; deleterious coloring in teas; water in milk; log-wood in port; cider champagne; terra alba in flour, etc. So vicious mixtures are sold for vinegar, and wines and brandies; oils and oleomargarine made of filthy beef tallow for butter, etc. The adulteration and fraudulent imitations are bad enough; but what shall we say of the poisons which are used without stint in these infernal frauds of trade? Not only should fine, imprisonment and exile, but death be summarily inflicted upon these destroyers not only of the happiness, but of the lives of the human family.

FRAUDS OF LIVE STOCK BREEDERS.

The fraud here most common is selling one breed under the name of another, or the same breed under the record of false parentage, or claims of qualities which do not exist, as speed, size, weight of carcass, wool, health, and all that. But the greatest fraud under the present enlightenment of the laws of species and breeding, is the humbug of *new* breeds made by some Solomon, within his own short life and brain, wiser than all the lives and all the brains of all the ages! Some of the lesser accomplishments of these shams are prints of animals not taken from life, but made by rule and line to suit the ideal fancy of the times.

All animals should be photographed from life, and be presented by honest artists just as they are.

SHAMS OF SEEDSMEN AND OTHERS.

The shams of seedsmen run mostly into early varieties of plants. If all our fruits and vegetables are to be eaten only in early Spring, what are we to do in Summer, Fall, and Winter? Then there is the new-variety sham. The potato! The earliest variety of this fine vegetable that I remember is the Neshannock; every year since some spirited seedsman has been bringing forth some new potato; and now at last the old Neshannock is the finest flavored of all! So of the grape. I began with the Catawba, have run through most of the modern varieties, coming down to my last fruit age, the Lady, and the Catawba is the best table and wine grape after all. What strains upon the constitution of the moral sense! We have potatoes that will produce so much to the acre, which will not rot in the hill or in the cellar, which well stand wet and cold and drought, will not mildew, or even be eaten by bugs or beetles! Then we have the log-of-wood muskmelon and the carved seed and scale rind watermelon, and the seven-eared corn, and the plums which the curculio will not bite; then the wheat that came from the one-thousand-year-old mummy, and the tobacco which was born of a single, unknown plant; and the Shanghai chickens, because they are big; and the Bantams, because they are little! Some won't lay and some won't sit! and so on. What shall we say of silos and ensilage, commercial manure, silk and mulberries, ducks and geese, pea fowls and Guinea hens, tea and coffee raising, sorghum and beet sugar, and all that? What of Angora goats and Shetland ponies; of Poland-China hogs, of Red Berkshires and Duroc-Jerseys; of Short-horns and Long-horns, of Jerseys, Devons, Ayrshires and Herefords, and all cattle with horns and all without horns? What of South Downs and Oxford Downs and Shropshires, and long-wools and short-wools and middle-wools and fine-wools? I say, look out! there's humbug somewhere. Very slightly helpful; be slow to touch; "try all things, hold fast what is good" on a small scale! Go with D. Crockett, "Be sure you are right and then go ahead.

White Hall, Ky.

CATALOGUES, ETC., RECEIVED.

LOUISIANA AGRICULTURE.—BIENNIAL REPORT OF THE STATE COMMISSIONER OF AGRICULTURE.—A very encouraging pamphlet. Too little has been told about the real state of agriculture in the South. It is a section blessed with a bountiful soil and climate, and cursed with a degraded labor and a set of decayed traditions. Immigrants have been unable to find the happy medium between the blessing and the curse. Such pamphlets as this will be useful in pointing out the real resources of the State and her most crying needs. The four great staple crops in Louisiana agriculture are cotton, sugar, rice and corn. The cotton crop averages about 500,000 bales, of which some 65 per cent. is produced by negro labor. Some 200,000 hogsheads of sugar are produced, with 40,000,000 pounds of rice, and 12,000,000 bushels of corn. The raising of fruits and vegetables for the Northern market is a somewhat modern industry that proves fairly remunerative. There are splendid sheep ranges in this State, but the great droves of worthless dogs paralyze the industry. But little fertilizer is used, except in the gardens and small farms near the cities. Cotton seed and cotton-seed meal are used in the drill or put around the plant after it breaks the ground. Jersey and Holland cattle and their grades are highly esteemed as dairy animals, and Devons and Short-horns are valued for beef and oxen. Louisiana is an excellent stock country, and after passing through the dangers of "acclimation," all improved breeds do well. Most of the deaths of horned cattle are due to exposure and insufficient feed. One correspondent puts it well when he says that most cattle die of hollow-horn or hollow-tail, and the cause lies directly between these two extremes, viz: hollow belly. In the back counties very few improved implements are in use. Plenty of laborers still cut hay with hoes and cultivate with a stick. There are, in the State, 17,584,600 acres of forest lands, containing all kinds of timber known to the Gulf States. The United States Government owns about 2,000,000 acres in the State, while the marsh and swamp lands, 5,193,767 acres, are in the hands of the State Government. The pamphlet can be obtained from Hon. T. J. Bird, Baton Rouge, La.

SALT SAYINGS.—Pamphlet from E. S. Fitch, manufacturer of Fertilizing Salt, Bay City, Michigan.—An interesting pamphlet filled with quotations from various authorities as to the value of salt as a fertilizer. This fertilizer salt differs from the ordinary article in the fact that it contains small amounts of potash, lime and iron, so that it is a richer fertilizer than common salt. Some excellent results have been obtained from the use of this fertilizer, the most notable being its effects upon grass or wheat crops. With wheat, not only has the straw been rendered larger and stiffer, but the heads and grain have been improved perceptibly. The use of this material is increasing, and the farmer who aims to inform himself regarding the more intricate processes of his business, should by all means send for this pamphlet and study it. The use of salt in agriculture dates from the earliest times, yet its proper place as a fertilizer is perhaps as little understood as is that of any fertilizing element. A small amount is beneficial, particularly upon certain crops and certain soils. A large quantity is worse than useless—it is harmful. Just the proportions and conditions necessary to produce best results have never been exactly determined, and the study of the matter will prove both interesting and useful, leading to a better understanding of the value and behavior of other elements of fertilization. It is generally believed that the mechanical effects of salt are most valuable, that it helps other elements rather than supplies needed food itself; that it pursuades rather than forces.

COMMON PLANTS AND THEIR USES.—A chart compiled by the class in economic botany at the Missouri State University. This class, consisting of two young women and 15 young men, have been working under the direction of Prof. S. M. Tracy. In fact, the chart is really an epitome of the lectures delivered before the class. The work has been well done, and the chart is well placed as a bulletin from the Agricultural College. If we mistake not it will be found fully as valuable as any of the previous bulletins. The chart gives the order, botanical and common names of each plant, where found, whether used for food drink or fiber and the quality of its timber etc. Over 200 plants are thus treated, and the amount of information that is concentrated upon this space is surprising. The design is an excellent one, most admirably executed.

BLACKWOOD.—Circular descriptive of this fine stallion which will make the season at the stables of H. R. T. Coffin, Glen's Falls, N. Y.—Blackwood is by Alexander's Norman. He is half brother of Lulu, 2:15, and May Queen, 2:20. He has a record of 2:31 as a three-year-old. Among other fine colts he has sired Rosewood, 2:27 at five years, Blackwood Jr. 2:22¼ at five years, and Proteine, record 2:18. Blackwood is a fine horse and his colts will surely give satisfaction.

Woman's Work.

CONDUCTED BY EMILY L. TAPLIN.

NEVER MIND.

NEVER mind if your clothing is threadbare and worn
And the colors beginning to fade;
Such trifles are easier by far to be borne
Than the thought of a bill to be paid;
For debt is a master relentless and grim,
He grants you no rest or repose;
If once you are sold into bondage to him,
No pencil can picture your woes.

Never mind if your neighbors wonder and guess
Over things you don't choose to make known;
Your motives and actions would trouble them less
If they would attend to their own.
There's naught to require one to make his affairs
Of neighborhood gossip the theme;
If a man breaks no laws, what he eats, drinks and wears,
Is his own special business, 'twould seem.

Never mind, let the world move along as it will,
Life's changes are certain we know;
And the man that's to-day at the top of the hill
May soon grope in the valley below.
Live rightly, and slander and gossip will fail
To harm you, and soon you will find
That the very best armor whene'er they assail
Is to say from the heart: "Never mind!"

Palmer (Mass.) Journal.

OF INTEREST TO WOMEN.

MILLINERS are reviving rosettes of narrow ribbon loops. Low-crowned toques are trimmed with a mass of them in front.

Says Good-Housekeeping: "Women were patterned by nature to be housekeepers, and good ones. Let them vote, if they will, let them go into professional life and the labors that were once monopolized by men, let them do what they will, they are yet physically, morally, and feelingly best fitted to reign as Queen of the House."

Fuller's advice may be commended to all good women: "A good wife is none of our dainty dames, who love to appear in a variety of suits every day new; as if a good gown, like a stratagem in war, were to be used but once. But our good wife sets up a sail according to the reel of her husband's estate; and if of high parentage, she doth not so remember what she was by birth that she forgets what she is by match."

The young women composing a majority of the graduating class from the high school at Vincennes, Ind., have rendered themselves conspicuous, in a somewhat unpleasant way. They have "struck," and refuse to attend commencement, because a colored girl who has passed the required examination with great credit is, or was to gradnate with them. A similar unpleasantness in the high school at Paterson, N. J., a few years ago, was promptly crushed, the public showing their sentiment at commencement by applauding the colored graduate so vigorously that she could scarce read her essay, and loading her with flowers, while the remainder of the class received the most luke-warm of receptions.

A square or angular looking parlor is often improved by pulling out the piano from the wall, and placing it "catty-cornered," as children say. In English drawing rooms an upright piano is often put this way; the back being towards the room, is usually decorated. This gives scope for much ingenuity. A popular style is to hang curtains from a rod at the top, and then place flat Makart bouquets of grass and peacock feathers against the curtains.

If we would be happy, we should return to

"That time the sturdy English middle class
Was not so fine as now;
Daughters and wives would wear a last year's gown
Without a fume, because the gay beau monde,
Had slashed its sleeves and clipped an inch of skirt.
And housewives clung to old receipts, old ways
Of ordering this and that, their mothers taught;
And most of all, eschewed the petty tricks
Of show to make the little seem the much."

WHAT'S YOUR OBJECT?

THIS heading looks rather abrupt and uncompromising in cold print. Perhaps it would seem better if we called it "Advice to Young Women," only it isn't. We do not offer advice; we want to ask a few pertinent questions. Tell me, maiden with a new diploma and a new graduating gown, have you any clearly defined object in life? That "object in life"—what a bugbear it is to the foolish virgins! To echo the query of a famous or rather infamous rascal, "What are you going to do about it?" Shall you sit down in golden dreams until the fairy prince comes galloping along? Small doubt of the object then; the prince holds out his hand, the dreamer mounts behind him, and off they go into "that new world that is the old." But if the prince never comes! He always did in the old tales, but, alas! we don't live in the Golden Age now; "this is an unjust world, and virtue is triumphant only in theatrical performances." If the prince never comes! Then we only have a web of gossamer fancies, "trifles light as air," to protect us from the storms of this work-a-day world. The years we should have spent in gathering strength and imparting it to others all gone in idle dreams; all the dignity of mature womanhood unripened; all the crudities of girlhood in full bloom. Truly, our last state is worse than our first.

Not that a girl needs blame for all her innocent dreams and fancies about the prince who will some day seek her. It is a part of her very womanliness. But she need not fold her hands and let those dreams take full possession of her. And the very qualities that make her a worthy helpmate will make her a happy and useful woman—if her prince does not come.

Here let me make an heretical remark in a stage whisper. Said a clever girl: "Oh, yes! I know I'm bright, but I try not to 'give it away,' as my small brother says. A reputation for cleverness is such a handicap on one's matrimonial chances."

Now, according to general opinion, the remark quoted contains some truth; but, dear girls, a man who regards a girl as undesirable matrimonially because she is well dowered with intellect is, to say the least, unwise in his generation. But any man is right to view with indifference a woman like the cultured heroine of a popular poem who

"Knew the reasons of things—
Why the Indians wore rings
In their red, aboriginal noses,"

but who, according to her veracious chronicler, "didn't know chicken from turkey."

"A perfect woman nobly planned" is one who turns her ripened intellect to the best interests of home life, and who, should her fairy prince tarry or never come, will so order her life work that the title of old maid becomes to her a very crown of blessing.

WOMEN'S WORK.

WHAT a blessing it is upon America's daughters that there is a department in papers devoted especially to women. Here are topics of almost every description that is of an edifying and instructive nature freely discussed. Almost every RURAL contains some useful information, or some hint that will help the housewife in her daily routine of labor to perform her duties in a better way. And at the same time the literature within its pages awakens the heart to a higher action and inspires us with zeal to look ever onward and upward; for if we do not press onward with this active world, we shall be left behind in utter darkness. As we read over the lives of the truly great men and women, we see that they did not sit with folded hands, but like the scriptural lesson, "What-so-ever thy hand findeth to do, do with thy might," they went to work, and work indeed they did, to achieve what they have. So it is for us, no matter in what sphere we may live or what may be our vocation in life, the object should be to excel. Excel not by crowding others down, but by elevating ourselves to that high standard in using the advantages offered by others.

It should be our greatest theme in life to be something and to do something that will be to the advancement of society, that this people will not go backward. There is much in this wide world for each and every one to do, and if prepared to do this work, it seems no great task. We should, then, influence the young to a higher and nobler work. It should be instilled into their minds in infancy, then, when they have ripened into early manhood and womanhood, it will be no difficult task to do the duties of life in the best possible manner.

MARY D. THOMAS.

MIDSUMMER FASHIONS.

As the season advances we see few changes in the prevailing modes, save that some of the more startling eccentricities are a little modified. We are told that hat and bonnet crowns are to be lower and altogether more modest in their dimensions, a fact which appears to be flatly contradicted at every concert or promenade. At present one meets everywhere multitudes of hats whereof the model appears to have been a Gainsborough for the brim and Mother Goose's sugar-loaf chapeau for the crown—a startling headgear, only bearable above a pretty face. But, as the French novelist says, all young women are pretty. Styles in gowns are but little altered; the fancy is still for simplicity in trimmings, with heavy artistic folds for drapery. Not that this seeming simplicity implies inexpensiveness by any means.

Etamine, or canvas cloth, plain, striped and embroidered, is still in favor, but I fancy it is on the wane, as many New York houses are selling it off at greatly reduced rates. It is very handsome, particularly when embroidered or woven in lace stripes, and it drapes beautifully, but it is very difficult to make up, as it frays dreadfully, and is as hard on thread and fingers as wire netting. Albatross cloth, something like a finely finished nun's veiling, is very nice for woolen summer gowns.

The crinkled seersuckers seem to grow prettier as the season advances; they are very effective with dark velvet trimmings. A pretty gown of this material was pale blue and white stripes; the basque had collar, cuffs and revers of black velvet with vest and skirt trimmings of white embroidery. Cream and brown stripes trimmed with brown velvet would be very effective.

Among white frocks, a very pretty one for seaside or mountain wear is of cream-white albatross cloth, with pleated drapery of white wool lace. In thin white fabrics, the choice is of infinite variety. A white frock is always pretty, be it ever so simple, and now it is equally inexpensive. Piqué or Victoria lawn should not be chosen, however, for it cannot be depended on in washing. India lawn is reasonable in price, and washes as well as mull or organdy—it is always fine and smooth in texture. Nainsook embroidery is the best trimming for general wear, but except for very fine occasions a white frock should always be simple in make—that is one of its special charms.

Domestic Economy

CONDUCTED BY MRS. AGNES E. M. CARMAN.

PATTERN FOR LACE.

CAST on 33 stitches, and knit across plain.

FIRST ROW.—(a) Slip one, knit one, thread over twice, purl two together, knit five, thread over three times, purl three together, knit two, thread over twice, purl two together (a), knit four (b), purl one, thread over, purl two together, thread over, purl two together, thread over, purl two together, thread over, purl two together, thread over, purl two together, thread over, purl last two separately (b).

SECOND ROW.—Slip one, knit seventeen (c), thread over twice, purl two together, knit one, narrow, make three stitches alternately plain and purled in loop formed in preceding row by casting thread over three times, knit five, thread over twice, purl two together, knit two (c).

THIRD ROW (d)—Slip one, knit one, thread over twice, purl two together, knit ten, thread over twice, purl two together (d), knit five, repeat from (b) to (b) first row.

FOURTH ROW.—Slip one, knit eighteen (e),

Miscellaneous Advertising.

When Baby was sick, we gave her Castoria,
When she was a Child, she cried for Castoria,
When she became Miss, she clung to Castoria,
When she had Children, she gave them Castoria.

thread over twice, purl two together, knit five, thread over three times, purl three together, knit two, thread over twice, purl two together, knit two (e).

FIFTH ROW.—(f) Slip one, knit one, thread over twice, purl two together, knit one, narrow, make three stitches alternately plain and purled in loop formed in preceding row by casting thread over three times, knit five, thread over twice, purl two together (f), knit six, repeat from (b) to (b) first row.

SIXTH ROW.—Slip one, knit nineteen (g), thread over twice, purl two together, knit ten, thread over twice, purl two together, knit two (g).

SEVENTH ROW.—Repeat from (a) to (a) first row, knit seven, repeat from (b) to (b) first row.

EIGHTH ROW.—Slip one, knit twenty, repeat from (c) to (c) second row.

NINTH ROW.—Repeat from (d) to (d) third row, knit eight, repeat from (b) to (b) first row.

TENTH ROW.—Slip one, knit fourteen, narrow, thread over twice, narrow, knit three, repeat from (c) to (e) second row.

ELEVENTH ROW.—Repeat from (f) to (f) fifth row, knit four, knit one and purl one in double loop of preceding row, knit three, repeat from (b) to (b) first row.

TWELFTH ROW.—Slip one, knit thirteen, narrow, thread over twice, narrow, narrow, thread over twice, narrow, knit one, repeat from (g) to (g) sixth row.

THIRTEENTH ROW.—Repeat from (a) to (a) first row, knit two, knit one and purl one in double loop, knit two, knit one and purl one in double loop, knit two, purl thirteen.

FOURTEENTH ROW.—(h) Slip one, knit one, thread over, narrow, thread over, narrow, thread over, narrow, thread over, narrow, thread over, narrow, thread over, narrow (h), knit two, narrow, thread over twice, narrow, knit three, repeat from (c) to (c) second row.

FIFTEENTH ROW.—Repeat from (d) to (d) third row, knit four, knit one and purl one in double loop, knit three, purl twelve, purl two together.

SIXTEENTH ROW.—Repeat from (h) to (h) fourteenth row, knit eight, repeat from (e) to (e) fourth row.

SEVENTEENTH ROW.—Repeat from (f) to (f) fifth row, knit eight, purl twelve, purl two together.

EIGHTEENTH ROW.—Repeat from (h) to (h) fourteenth row, knit seven, repeat from (g) to (g) sixth row.

NINETEENTH ROW.—Repeat from (a) to (a) first row, knit seven, purl twelve, purl two together.

TWENTIETH ROW.—Repeat from (h) to (h) fourteenth row, knit six, repeat from (c) to (e) second row.

TWENTY-FIRST ROW.—Repeat from (d) to (d) third row, knit six, purl twelve, purl two together.

TWENTY-SECOND ROW.—Repeat from (h) to (h) fourteenth row, knit five, repeat from (e) to (e) fourth row.

TWENTY-THIRD ROW.—Repeat from (f) to (f) fifth row, knit five, purl twelve, purl two together.

TWENTY-FOURTH ROW.—Repeat from (h) to (h) fourteenth row, knit four, repeat from (g) to (g) sixth row.

TWENTY-FIFTH ROW.—Repeat from (a) to (a) first row, knit four, purl twelve, purl two together.

TWENTY-SIXTH ROW.—Slip one, knit sixteen, repeat from (e) to (e) second row.

Repeat the scallop from beginning. It will be seen that the inserting which serves as a heading begins to repeat at the third row. It is, in fact, distinct from the edge, and may be made separately if desired by following directions from (a) to (a), (c) to (c), (d) to (d), (e) to (e), (f) to (f) and (g) to (g). DAISY.

KITCHEN TALKS.

ANNIE L. JACK.

THE old saying that "One sickly sheep infects the flock" was verified in our home this Spring when the Student came home ill with a fever that slowly but surely caught in its grasp one after another of the family group. Some escaped with a slight touch of the disease; others were some time ill, all depending upon the condition of the blood. Trying hard to reach the source of the trouble by inquiry, I ascertained that the college procured its supply of drinking water from a neighboring well, into which ran a great deal of surface water, and it was thought the slops from the kitchen contaminated it when rains came.

There were no bath or other appliances for bathing, except the wash bowl, and to boys accustomed to a regular "tub night" this was enough to cause sickness, and the result was that our boy came home ill, and communicated the dire fever to brothers and sisters. I thought, as the subject was thus presented to me, that we cannot be too careful as to the institutions where our children are placed, not only for mental and moral, but for physical reasons. Good health is of first importance to success in anything, and should be attended to in all institutions of learning. As a consequence of neglect in this respect our whole family have suffered, and doubtless many others in the same way. Children of ordinarly cleanly habits accustomed to bathe freely, and to eat and drink what is pure and fresh, are more likely to contract disease than those who know no change from their usual habits.

Just now in our home the roses are blossoming, myriads of flowers are to be seen from the kitchen door—and all nature is beautiful. The birds sing their very sweetest in early morning—it is a song of hope and love with which they talk to each other in the brooding time. The kitchen has on its Summer aspect, everything being with a view to coolness and comfort there. It is a season of rapid transitions, more than I ever remember seeing. Hardly had the blossomed trees faded their pink and white wreaths when some one says, suddenly, "How large the crab apples are;" and the strawberry bed hardly loses its whiteness when a little hand brings proudly into "mother" the first ripe berry. Ah! these little hands, our dearest earthly treasures, how soon they learn the beauty of self-denial! I often watch a child's face in giving, its sweet delight innocently shown, a living confirmation of that beautiful sentence, "It is more blessed to give than to receive."

POTATO BEATER.

As I have often intimated, I like a fork best for "mashing" or breaking up potatoes; but while visiting a friend, a short time ago, I saw her using an implement that was even better than a fork, especially where one has quite a large quantity to prepare. It was made of very coarse wire and bent into finger-shaped loops, with the two ends of the wire twisted together and fastened into a wooden handle. Almost anyone in a family could

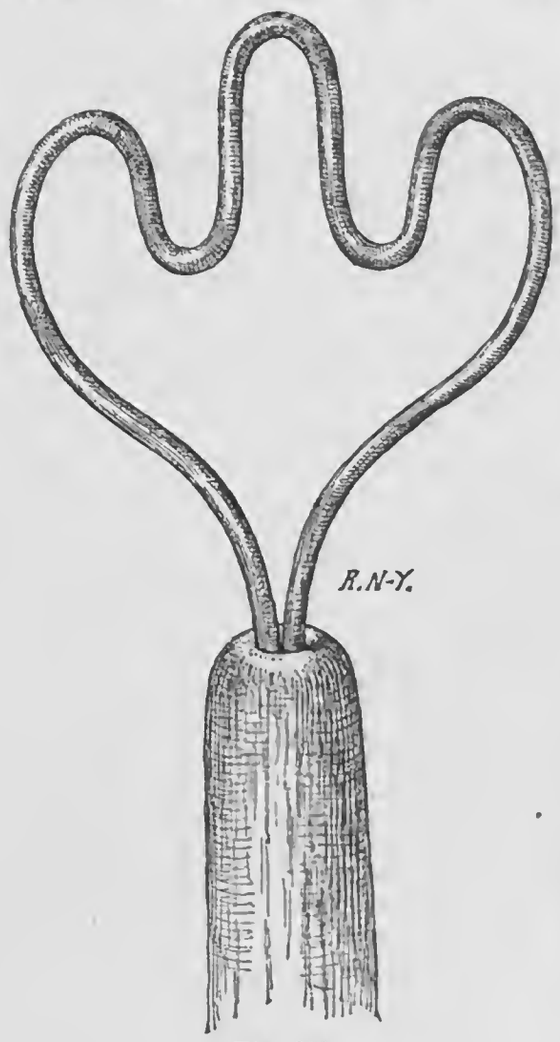

Fig. 279.

make the implement, and the cook would appreciate the convenient little article.

MAY MAPLE.

WHAT TO EAT.

The Housekeeper says: "So perfectly ignorant are people generally of the laws of nature that they give their pigs the food which their children need to develop muscle and brain, and give their children what their pigs need to develop fat. For example, the farmer separates from milk the muscle-making and brain-feeding nitrates and phosphates, and gives them to his pigs in the form of butter-milk, while the fattening carbonates he gives to his children in butter. He sifts out the bran and outer crust from the wheat, which contain the nitrates and phosphates, and gives them also to his pigs and cattle, while the fine flour containing little else than heating carbonates he gives to his children. Cheese which contains the concentrated nutriment of milk is seldom seen on our tables, while butter, which contains not a particle of food for brain or muscle, is on our table at all times of day."

So, then, we should eat Graham, corn-meal, oat-meal, barley, cracked wheat, wheatlet, and for many people who feel the lack of suppleness and general ease of movement, the Southern grains, containing much less lime than the Northern ones, as rice, tapioca and sago, are preferable, with plenty of vegetables and fruit acids. More rice, as a rule, would help our bill-of-fare, because it is easily digested.

Next in value we would place eggs—plenty of eggs—nothing is better for a brain food. Why? A certain physician cured a case of insanity by giving 16 eggs daily. Fresh fish, oysters and clams, if fresh, are good. A little salt fish is allowable, although the principal benefit derived from codfish is on account of the milk and cream we prepare it with. Vegetables and fruits are all good and should invariably form a part of every meal. Beans are excellent eating, and should be found often upon our tables. Comparing their nutritive value with that of buckwheat, which enters largely into the winter diet of many families, it will be found that beans have two-and-one-half times more muscle-forming elements and only about two-thirds as much sugar and starch: while the phosphates are as four to one, and the time of digestion is about one-half hour less.

Use sweet cream with mush and simple desserts of rice, plain puddings, baked apples and the like. Housekeepers do not hesitate to dip out two cups of sour cream any time for baking cake, but sweet cream, O, my! Milk makes an excellent basis for supper, to be eaten with bread or mush of some sort. The natural food of an infant contains no starch, but usually the first solid food given to babies is made up of little else but starch. Give the little ones nice fresh Graham, bean porridge, mush, meat broth and such like food. Brown bread and beef contain very nearly the same food elements, which is a strong argument for vegetarians: but if we must have meat twice or three times a week let it be beef, mutton, veal, lamb, or at least chicken. As to what we must not eat, first and foremost, pork. It requires five hours and a quarter for digestion—longer than the usual interval between meals. Perhaps some families can thrive upon pork, but we know many that can not, and we have tried and proven that farmers' families can live without even keeping a pig.

Then we should forbid fried cakes, cookies, cake, pie and rich pudding. It seems cruel to have these things on our tables and refuse them to the children, and if they are in the house, children are sure to have them. There seems to be no good reason why potatoes should enter so largely into our daily bill-of-fare. Pickles also should be tabooed, especially for supper. A physician of note says of mustard and horseradish: "I never put anything into my stomach which would draw a blister upon the outside." As for drinks, there are milk, butter-milk, water, lemonade, crust coffee, chocolate and many simple preparations which have not the ill effects of coffee and tea. But some farmer folk will say, "We cannot afford to buy wholesome foods; we must eat what we raise; to be sure, pork and buckwheat don't agree with us very well, but we are in debt and must practice economy." Be assured, we cannot afford to live below the very highest physical condition attainable by us. This is the very best economy—nothing but religion pays better. ZENA.

FOR THE DESSERT.

A NICE little dish for dessert:—Butter and cut in half a slice of fresh bread for each dish required; mash fresh, ripe currants with plenty of sugar and cold water sufficient to form a sirup; place one half slice of the bread on the dessert plate, dip over it liberally of the prepared currants, place the other piece of bread on top, and cover well with the currants.

MARBLE CUSTARD PUDDING.

Cover the bottom of a pudding basin with slices of stale cake (best of dark colored), add a light layer of raisins, and for each pint of milk allow one egg beaten with sugar and a little salt; stir this into the milk, using whatever flavoring desired. About two tablespoonfuls of sugar and two or three handfuls of raisins to three pints of milk, and either nutmeg, lemon or wintergreen is nice for flavoring. Quickly put the pudding in an oven not too hot, not stirring it up at all, as the cake should remain intact on the top. Bake slowly until the custard jells, no more, or else it will whey, and custard should never do that. When done, set it in a cool place, and when the steam has partially escaped, cover the dish. Serve cold, dipping out carefully and turning each spoonful bottom upwards. GLADDYS WAYNE.

LEMON MINCEMEAT.

Peel the rind very thinly from three lemons, being careful to take up none of the white skin. Put the rind into a saucepan with a little water and stew until it is so tender that you can mash it into a paste. Pare, core and chop eight large, tart apples, free from skin and fibers, and chop fine a half pound of suet, cut small one ounce each of candied citron and lemon, and squeeze and strain the juice of the three lemons. Mix all these with the paste of the lemon rind, add half a pound of brown sugar, half a grated nutmeg, a saltspoonful of powdered mace, and a wine-glassful of brandy or cider. This will improve by standing closely covered for a few days. Should it not be moist enough, add a little cider when it is to be made up into pies.

APPLE MINCEMEAT.

This is also very nice and quite different in flavor. Chop two pounds of tart apples and half a pound of suet, add one pound of currants well washed, half a pound of raisins seeded and chopped, one pound of brown sugar, the juice of four oranges and one lemon, one teaspoonful each of mace and allspice, and one gill of brandy or cider. Mix thoroughly and keep closely covered in a cool place. NETTIE.

Miscellaneous Advertising.

Vitality and Color

Are restored to weak and gray hair, by the use of Ayer's Hair Vigor. Through its cleansing and healing properties, this preparation prevents the accumulation of Dandruff, and cures all scalp diseases.

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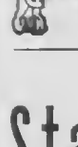

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News of the Week.

HOME NEWS.

SATURDAY, June 26, 1886.

ANARCHISTS are on trial at Chicago, Milwaukee and St. Paul, and boycotters in this city have been convicted....The Moulders' Union, over 100,000 strong, are pretty sure to join the K. of L.; elections in all the local unions to vote upon the measure.....The Edison dynamo and heavy electric machine shops are to be removed from this city to Schenectady, on account of the "uncertainty of labor" here, a strike in May having caused much loss to the Company. Over 300 skilled mechanics will be thrown out of employment, as only the best and faithfulest are to be taken along, the rest of the needed help to be secured in the interior and Eastern cities. Several changes of the same kind, and for a like reason, are taking place elsewhere.....A good deal of talk still, especially in Republican papers, about that Payne bribery case. New evidence of bribery said to have come to light. The Senate Judiciary Committee reported yesterday against investigating the case for lack of evidence of bribery of which Payne knew anything..... Republican and Democratic papers persist in saying there are no Mugwumps worth mentioning, yet what a tremendous amount of mentioning they give them! Is it possible there really are a considerable number of men impracticable enough to cast their votes for what they deem best, outside party lines? Are Prohibitionists Mugwumps?.....Specimen strikes: plasterers at Pittsburg and Allegheny City for eight hours; building at a standstill. Switchmen at Chicago Stock-yards for better pay and fewer hours; other workers attacked; a blockade made. The great female strike of 10,000 shirt and collar makers and washers at Troy, N. Y., after lasting four weeks and costing the strikers $620,000 in wages, has collapsed. The employers to the last refused all concessions, and all recognition of the Knights of Labor, merely promising to look into and discuss the work "girls'" grievances. All the factories opened yesterday.....Randall, protectionist, and Morrison, free-trader, the Democratic leaders of the House, are bitterly opposed on tariff legislation, and Wednesday wrangled a good deal as to the way the tariff plank on the Democratic platform of 1884 should be construed ....Same day a deadlock in the House on Morrison's motion to lay a special income tax to defray the money appropriated in all new pension bills. Republicans oppose, and leave the House without a quorum.....The President is sending a great number of vetoes to Congress, especially of pension bills—71 to yesterday.....Canada dispatches say the Dominion will have a deficit of $5,000,000 this year.....Brooklyn is profiting largely from the East River Bridge. The new city directory shows an increase of 8,827 names over last year, and an estimated population of 768,000 ....Out of 300 persons who celebrated the third anniversary of Pastor Schmitz's ministry in the German Reformed Church of Pottersville, a little hamlet on the Black River in Huntingdon County, N. J., by a picnic on Thursday week, 214 have been or are ill, and some of them are likely to die; 13 are still prostrated. It is thought some wretch poisoned the spring during the festivity..... The guard around Grant's tomb will be removed next Tuesday.....Judge Poland, of Vermont, denies that he is unfriendly to Edmunds. The general opinion among Republican factions there is to "kiss and be friends." .....Catholic Archbishop Gibbons, of Baltimore, created Cardinal June 7, received the insignia of that dignity last Sunday from two high Papal officials just arrived from Rome. .....The decree of the Cardinal Archbishop of Quebec against the Knights of Labor, prohibiting Catholics from becoming members, has been approved by the Pope. American Catholic authorities, however, think differently from the Canadian. Nothing authoritative about the Papal indorsement ... .Logan says he never said that Blaine is trying to run the politics of this country and also those of Europe, or any words to that effect.....It appears probable that there will be a very decided change in the President's policy with regard to office holding soon. Most of the sticking Republicans are likely to be shot out on July 1, or thereabouts. Democrats glad, for they get the "loaves and fishes;" Republicans not sorry, as every discharged person is sure to become a very "offensive partisan" indeed.....J. Harris Rogers, perpetrator of doggerel and inventor of the Pan-Electric Telephone, has brought suit for breach of contract against Attorney-General Garland, Senator Harris, Indian Commissioner Akins, and Ex-Congressman Casey Young, to whom he gave a big lot of stock of the company for their influence in starting it. He says they havn't pushed it as he expected, and therefore he reclaims the stock; they say they are glad of the suit as it will enable them "to get rid of Rogers;" and that it is "exceedingly absurd," and that R. is mad because they "refused to allow the country to be flooded with stock." All stick to their stock, however..... Nothing except preparation by the lawyers with regard to the Government's suit to burst up the Bell telephone, which has lately gained three suits against infringers on its patents, before the United States Courts..... .. .... Beecher sailed for England just a week ago.... .....Randall, of Pa., the anti-free-trade Democrat, to whose opposition the defeat of the Morrison tariff bill is due, is preparing a tariff bill of his own. In it the duty on wool is not lowered—Morrison had put in on the free list—neither is it raised to the figures of 1867, as desired by flock owners; but a clear distinction is made between washed and scoured wools, so as to prevent the enormous frauds that have lately been perpetrated by wealthy importers who have been bringing in scoured wools as washed, so as to pay a much lower rate of duty. Wool and worsted are put together, and there's a new classification of wool. The internal taxes on tobacco and and fruit brandy are repealed entirely, and a rebate is allowed on all unbroken packages in dealers' hands. Proposed reduction in revenue, $9,000,000.....Some postal clerks on railroads, chiefly in Ohio, Indiana and Illinois, fearing they would be discharged, have been lately trying to induce the other railroad postal clerks to form a union, and strike whenever any member should be sacked. Postmaster-General Vilas heard of the move two weeks ago, and summarily discharged 29 of the scheming clerks Thursday. Very little excuse is now needed to discharge "offensive partisans" ....All the papers just now are poking fun at Midas Hearst, of California—a splendid miner, but a parody on a Senator... The French Chamber of Deputies have appointed a committee of nine to investigate the Panama Canal before consenting to a lottery loan of 600,000,000 francs (about $120,000,000) which Lesseps says will be enough to complete it. Six are known to be against and three for it. The obligations thus far are $167,000,000 (nearly all French money), and the annual interest charge is $6,000,000. France has so much at stake in the matter already, and De Lesseps's influence is so great among French investors, that it is likely permission will be given to launch the loan, whatever the report may be. If not, the affair must collapse. Americans generally think it will either do that in any case, or require very much more money and time, or a change of plan so as to make locks along its course, instead of making it a sea-level work like the Suez Canal. Pacific Slope people are very anxious for its completion. Now, their exported grain has to go round Cape Horn: when built, it will go through the canal.....Anent ex-President Hayes' children: Webb is a trunk-maker at Cleveland, Burchard is practising law at Toledo, Rutherford is paying teller of a little savings bank at Fremont, and Fannie and Scott are at school.....The Senate has passed a bill for submission to the people of a constitutional amendment extending the term of President Cleveland to April 30, 1889, and providing that April 30 shall at that time supersede March 4 as the date of inauguration. This is to prevent the lapse of so long a time between the election of Congressmen and their entry on their duties..... ... Moses A. Dow, founder and proprietor of the Waverly Magazine, died in Charleston, Mass., Tuesday, aged 76.....The 250th anniversary of the founding of Providence, R. I., was celebrated by large processions in a heavy rain-storm Thursday.....Mayor McLean, of Vancouver, British Columbia, appeals for his people reduced to "extreme want" by the late cremation of the town. Donations sent to him will be used "where they will do the most good."..... ....The first caucus of the House Democrats was held Thursday—all wanted to go home, hence an early close of the session probable in Congress.... The bill repealing the Pre-emption and Timber Culture Laws was passed by the Senate Thursday, after providing that the "holders of military bounty land warrants, or other land warrants or other land scrip," heretofore issued, shall not be deprived of their right "to locate such warrants or scrip on the public lands of the United States," as if the act had not been passed.....Contributions to the Irish Parliamentary Fund are flowing in generously from all parts of the country; $225,000 have hitherto been remitted by the Rev. Charles Riley, Treasurer of the Irish National League of America, and many other collectors have sent more.....The annual death rate of colored people in cities, especially in the South, is much greater than that of whites. The ratio in Washington is nearly two to one, and in Savannah it is said to be 122.94 in 1,000 against 12.19 for whites, while last year the rate for children under five years is reported at 602.93 in 1,000, or over half those of that age. Are the health authorities acting fairly with the colored "man and brother" and his little ones?.....The Massachusetts House killed the Senate bill increasing the commutation on sentences of convicts for good behaviour as unconstitutional.. ..The Utah Supreme Court has decided that the Auditor and Treasurer of the Territory appointed by the late Gov. Murray were validly appointed. The Governor removed their predecessors because they paid the members of the Legislature after he had vetoed all the appropriation bills, in order to keep the hands of the "Saints" off the money bags.... ....Gov. Pennoyer's majority in Oregon has increased to 3,340—usual Republican majority, 2,000.....The Nova Scotia secession majority was 12,000, in a total vote of 60,000..... A consultation of eminent Chicago and local physicians at Bloomington, Ill., Thursday, decided that ex-Senator and ex-Judge Davis was beyond hope of recovery. He died calmly this morning after a lethargy of 12 hours.....The New York Times has sent Lieut. Frederick Schwatka, the Arctic traveller, and Prof. William Libbey, Jr., of Princeton College, to explore the Southern Coast of Alaska, and tell the public what they discover about the native races and the country..... .....During the present Congress 493 special pension bills have passed and gone to the President, and 111 more on the way—over 600 in all—nearly three times the number passed at any session since 1861. Why shouldn't the well equipped, trained and expensive Pension Bureau have charge of all the pension business?..... ..At Clinton, Ia., after a trial for breach of the Prohibition Law, a whiskey mob attacked the principal witnesses, who fired with fatal effects among the crowd. For this two of them were jailed, and Monday night a mob of about 1,500 whiskey advocates attacked the jail to lynch the prisoners. The Sheriff's posse opened fire on the rabble and after wounding four, dispersed them. Prisoners taken for safety to State Prison, at Anamosa, Tuesday morning. Several other reports of great bitterness and much violence, in various places, between the opponents and supporters of "free rum." ....A high coal syndicate is buying up and consolidating all the mines in Southern Illinois. Capital $1,500,000—small operators to be frozen out. A uniform price of coals to be fixed. The Ellsworth Coal Co., at the bottom of it; Jay Gould reported to have a large fist in the "pie." .....Over four months ago 1,500 stove moulders struck for an increase of 17 cents on the dollar, at Troy, N. Y., one of the largest stove-making centers of the country. Manufacturers, owing to keen competition, especially in the West, refused. A few days ago J. W. Hayes, of New Brunswick, N. J., of the Executive Board of the K. of L., began to arbitrate. After much trouble the manufacturers agreed to open their works on Monday at the old "board" scale of wages, and to pay the average price paid in other places. Finally, the men accepted. Over as many more stove workers were forced to be idle for over four months through the moulders' strike..... .... Benjamin Moran, late United States Minister to Portugal, and for nearly a quarter of a century Chief Secretary of the United States Legation in London, has just died in England, where he has been for some years an invalid.. ....The edition of 325,000 of Grant's work is so nearly exhausted that a new edition of 25,000 is about to be published. Webster, the publisher, has just gone to Europe to push its sale there. On his return he will give Mrs. Grant another check—probably for $250,000.. ....Stephen Kelley, a hearty veteran of this city, goes to Gettysburg every Memorial Day to decorate his own grave, the record showing he was killed and buried there..... East St. Louis is still the paradise of thieves, burglars and thugs of all stripes—nothing done by the local authorities, and Gov. Oglesby refuses to furnish militia..... The Chinese Minister is to build a one-story Mandarin Palace, costing $250,000, at Washington, for the representatives of the Flowery Kingdom.....Of the 67 police officers present at the Chicago riot when the Anarchist bomb was hurled among them, seven have died from their injuries, 16 are still unable to leave their beds, and 18 only have hitherto been able to report for duty. The doctors seem inclined to claim all the money contributed for the killed and wounded, though nearly all have been treated in hospitals and other public institutions..... The wall-paper manufacturers' pool "goes to the wall" by limitation at the end of this month, and there's little present prospect of renewing it; hence prices of all wall paper are likely to drop nearly half soon, except those of the very expensive, hand-made sorts. ....The Chesapeake and Ohio road is to be merged into the Newport News and Mississippi Valley line, extending to New Orleans and connecting with the Huntington system to San Francisco ....Rose Elizabeth Cleveland goes to Chicago to edit a literary paper.....Congress likely to adjourn by July 10.....The bill for the relief of Fitz John Porter has passed the Senate—all it now needs is the President's signature to become a law.....

FOREIGN NEWS.

SATURDAY, June 26, 1886.

PARLIAMENT was prorogued yesterday by a message from the Queen, and is to be dissolved to-day "in order to ascertain the sense of the people on the important proposal to establish a legislative body in Ireland for the management of Irish affairs as distinguished from Imperial affairs," to use the words of Her Majesty.....General elections are held here in all parts of the country on one day; in the United Kingdom some will occur every week-day from July 5 to 16, so that the result cannot be ascertained for some time. Last year the Conservatives seemed to sweep everything before them at the outset, yet they were beaten in the end. Never, in the history of the British Isles, has there been so bitter and passionate an election as the present. Gladstone appeals to justice, generosity and the "people;" his opponents to fear for the unity of the Empire, the spirit of domination and bigotry, class distinction, and the immemorial prejudices of the English and Scotch against the Irish. The heated discussions on land purchase and land tenure, and the evils of aristocracy and legislators by inheritance, are sure to sap the present system of land tenure in Great Britain and the deep-laid foundation of British aristocracy. ....Wherever Gladstone appears, he is hailed with the wildest enthusiasm by the masses, and with matchless eloquence and skill, he has placed all his opponents on the defensive. The latter are also fervidly greeted, but not by the masses. As yet it continues anybody's fight; but if enthusiasm instead of votes won the battle, the G. O. M. would be the victor.

After all, the French Senate, unable to withstand Radical pressure, gave a majority in favor of the expulsion of the "Princes." The Count of Paris has been enthusiastically received in England, where he will reside temporarily. The Queen has sent him a letter of sympathy and the nobility and people are making a martyr of him. Prince Jerome Napoleon (Plon-Plon) is in Switzerland; his son Victor, the recognized heir to what there may be for Bonapartes to inherit, is at Brussels in Belgium, where he will hold a miniature court. Many high French officials have resigned as a protest against the expulsion. All the foreign papers say it was suicidical folly for the Republic to expel the pretenders to the throne, as while in France they would be under Government supervision, abroad they will be able to plot in freedom, and have become much more conspicuous personages. It is quite possible, however, that the French Republic knows what is best for it..... There's nothing else of general European interest this week.....

AGRICULTURAL NEWS.

SATURDAY, June 26, 1886.

The clipping season has been a trifle late, but it is now about over.....A praisworthy strike—that of wool growers for better prices. .....Isn't wool-growing labor as much entitled to "protection" as wool manufacturing labor?....When before did the London wool market give the American wool market such a "lift" as this year?.....If wool manufacturers raise the wages of their hands five to 15 per cent. is it fair to take it from the wool growers by trying to bear the market? Let the consumer pay it, as he has to do in other cases.....There's a world too much glorification over the defeat of the Morrison free wool tariff bill; a change of nine votes would have passed it; but even then it would have been certainly defeated or pigeon-holed in the Senate....The rise doesn't suit the commercial papers at all—except Bradstreet's..... London bankers are said to have advanced heavily on colonial wools, and will withdraw offerings rather than allow a decline in prices. .....It is now understood that on and after July 1 the elevator charges for storing grain in Chicago will be reduced three-quarters of a cent for the first 10 days and half a cent for each additional 10 days thereafter. The charges for switching and trimming also will be abolished. The effect of the change will be a reduction of 55 per cent. in the charges for storing and handling grain during the first 10 days on an average car load of 600 bushels. This is a movement which has been very strongly urged for several years, and is regarded in the grain trade as one of the most important steps taken with respect to the future of the grain trade in that city..... The 60 days' stay granted by Sec. Lamar to the cattle barons of the Indian Territory was up Tuesday, and Monday Gov. Jones Wolfe, of the Chickasaw Nation, issued a proclamation saying the stay was a fraud on the Indians and that he will confiscate enough of the cattle to pay $1 a head to his people for pasturage during the 60 days, and drive out the others after June 24. Cattlemen are "to take their stock, pay the price asked for grass, and at once remove their cattle".....Three years ago woodchucks became so abundant and so destructive in La Porte County, Indiana, that the authorities offered a bounty of 20 cents for each woodchuck scalp. The first year 2,875 scalps were presented; the second, 5,640; the third, 7,371—a total of 15,886 scalps, on which was paid $3,177.20. Some men make a regular business of hunting woodchucks..... ..From March 1, the total packing of hogs is 2,205,000, against 2,110,000 a year ago—increase 185,000 .....Among the exports from New York last week were 1,540 live cattle, 140 live sheep and 5,820 quarters of dressed beef.....The exports of live stock and dressed meats from the port of Boston for the English markets last week were 719 cattle, 700 sheep and 2,821 quarters of beef.....Present prices of hogs in Chicago are 10 to 15 cents higher than one year ago. Cattle are about that much lower, and sheep practically unchanged. This is on an average of several weeks.....The bill of Senator Edmunds relating to the inspection of pork and bacon for export, designed to be retaliatory to France and Germany, has passed the Senate . Stock-raisers in the West are incensed at the railroads for charging full rates on stock cattle returned to the country. Formerly all feeding cattle were carried at two-thirds of the tariff rates. .....In Great Britain during the 13 weeks ending March 27th, 124 fresh outbreaks of pleuro-pneumonia were reported and 564 cattle were attacked by that disease a great increase over the corresponding period of last year, when 72 fresh outbreaks were reported and 214 cattle attacked.....The Treasury Department has rendered a decision in which it is held that the provision in the "Free List" for animals specially imported for breeding purposes only applies to such animals as are proved by evidence satisfactory to the Colector of Customs at the port of importation to especially imported for the said purpose. The breeding must be the special, and not the incidental, object of the importation. Now mules are imported "free" from Canada "for breeding purposes," and the other day a flock of 3,000 sheep were driven across the Mexican line with wool on their backs, "for breeding purposes," shorn and driven back again—the wool escaping the duty .....Lake freights from Chicago to Buffalo are on a basis of two-and-quarter cents for wheat and two cents per bushel for corn... Farmers of Great Britain much depressed over the low prices, not only for wheat, but for barley and oats.....While prices for strawberries have been universally low this season, there never was a year in which this fruit brought more money into the coun-

try.....This country now produces three-fourths of the corn grown in the world, and has averaged for five years a product of 1,619,000,000 bushels, and exported only an average of 56,000,000 bushels, or three-and-one-half per cent, and would readily have doubled the exportation without missing it.....The State Auditor of Indiana predicts that the total assessment of real estate of that State will fall $100,000,000 below that of last year, on account of the decrease in values.....

....Arrangements are in progress for that great Chicago Horse Show. All breeds will be finely represented. About $12,000 of the $20,000 in subscriptions for premiums, etc., desired by the State Board of Agriculture, have already been secured. .....More than three million of trees were planted in Nebraska on Arbor Day.....

Crops & Markets.

SATURDAY, June 26, 1886.

The Mark Lane Express, in its weekly review of the British grain trade, says: The weather has been variable. The wheat crops are fully three weeks late [Here they average fully two weeks early]. Barley and oats are also backward. Trade favored buyers. The sales of English wheat during the week were 43,176 quarters at 31s. 4d., against 38,184 quarters at 33s. 2d. during the corresponding week last year.

Connecticut never had such a fine apple crop as last year's; fine winter apples sold last Fall for 40 cents a barrel; lots rotted on the ground for want of barrels; many cellars still full. Many farmers making June cider; others using them as a fertilizer. Apple crop promises to be unusually large again this year.

The tone of the wool market has improved greatly within the last two or three weeks, owing in great part to the energy and enterprise of Western dealers in buying, and to the resolute stand taken by large growers in selling. Western action in both these respects has greatly strengthened the Eastern markets. The shortage of the clip, now acknowledged by all, has also helped; this is greatly due to the rise in the price of mutton; fair muttons brought from $5 to $6 per head in March against $2 and $2.50 in 1885. The highest estimate of the shortage is 33, and the lowest anywhere above five per cent. Since early cablegrams of London sales, Ohio has put up prices from 2 cents to 5 cents. Much excitement in Michigan and a firm advance from what is now seen to have been too low figures. Texas clip nearly all sold. Kansas wool pretty well cleared up at 18 cents to 20 cents per pound there. San Francisco markets bare of six and eight months' wools. The largest amount of wool ever offered at auction sale in this country was the 400,000 pounds lately put on sale, but partly withdrawn, at St. Louis. The great June auction sales of colonial wool in London which opened on June 16, include over 140,000,000 pounds, or 370,000 bales—350 times the St. Louis offring, more than two-fifths of the entire annual product of the United States, and more than we have ever imported in one year. For the 10 months ending April 30, we imported 113,015,213 pounds against 64,557,468 pounds for the corresponding period last year—more than double. If May and June imports are proportionate, our imports this year will be the largest on record; the 128,131,747 pounds imported in 1879 being the heaviest now on record. In the 10 months the greatest increase was in clothing wools—of which we imported 35,673,409 pounds against 8,711,118 pounds in the same time the previous year—over four times, or 400 per cent, as much. The increase in combing wools was over twice, or 200 per cent; while in carpet wools there was an increase of only 59 per cent. Hence the foreign competition has been greatest against fine-wool sheep, next against combing-wool sheep, and least against coarse-wool sheep.

Prices of wool now at the East are very firm in sympathy with the West and Europe. Since June 1, prices at the seaboard have advanced two to three cents per pound, and the advance has been greater in many parts of the interior. Some say the market can't be sustained and that purchasers will have to sell at a sacrifice; but while holders are not anxious to sell at present figures, manufacturers are ready to buy up everything. The sales at the Boston market during the week have been 4,611,000 pounds against 2,134,000 pounds last week and 2,069,000 pounds in the corresponding week last year, so that arrivals are very lively; but it is thought some lots change hands several times, being counted each time in the sum total of sales. Prices of the leading sorts have been

Ohio and Pennsylvania X	31@32c.
Ohio and Pennsylvania XX	32@33c.
Ohio and Pennsylvania XX and above	32@33c.
Michigan X	30@31c.
Fine Ohio delaine	31@32c.
No. 1 combing	31@33c.
Texas spring, 12 mos	21@21c.
Super A	31@31c.

At Philadelphia prices are two to three cents higher than on June 1. Supplies very light; receipts of new clip at least 50 per cent. less than last year. Advices from Europe show an advance in wools. There has been a gain of 20 to 25 per cent. in prices at the great London sales, and competition is extremely keen among French dealers and manufacturers.

MARKETS BY TELEGRAPH.

SATURDAY, June 26, 1886.

CHICAGO.—Compared with cash prices a week ago, "regular" wheat is ¾c. higher; No. 2 Spring, 1⅜c. higher. Corn, ⅜c. higher. Oats, ⅛c. lower. Pork, 55c. higher. Cattle, shipping steers, 35c. to 95c. lower; stockers, 10c. to 35c. higher; bulls and mixed, 10c. lower for best, 50c. higher for others; "bulk," 5c. higher for best, 15c. lower for others; Texans, from 20c. to 50c. higher. Hogs, from 15c. to 27½c. higher on all grades. Sheep, from 5c. to 20c. higher on all sorts.

WHEAT, active; Sales ranged: June, 72⅛@72⅝c; July, 72¾@73¼c; August, 71¾@71¾c; No. 2 Spring, 72¼@72½c. No. 3 Spring, 62¼@63c. CORN easy; sales: Cash, at 34@34¾c; June, at 34¼@34¾c; July, 34⅝@35⅛c; August, 35½@36¼c. OATS.—Quiet. Sales ranged: Cash, 26¾@26⅞c; July, 27¼@27½c; August, 26@26⅛c. RYE.—No. 2, at 56c. BARLEY.—No 2, at 53c. MESS PORK.—Cash, at $7 20@9 25; June, at $9 30@9 25, July, at $9 00@9 27½; August, $9 07½@9 35. LARD.—Cash, 6 15@6 17½c; June, quoted at $6 15@6 17½; July, 6 20@6 25c; August at 6 20@6 37½c. BULKMEATS.—Shoulders $5 20@5 25; short rib sides, at $5 77½@5 80; Short Clear sides, at $6 05@6 10. CATTLE—Market steady; trade brisk. Shipping steers, at $3 65@4 15; stockers and feeders, $2 75@4 50; cows, bulls and mixed at $2 00@3 90; bulk, $2 60@3 30; through Texas cattle, $3 20@4 50. HOGS.—Market active. Rough and mixed, $4 15@4 10; packing and shipping at $4 35@4 57½; light, $4 10@4 40; skips, $2 75@3 00. SHEEP.—Market quiet and steady; Natives, $2 50@4 50; Texans, at $2 40@3 50; Lambs, per head, $1 50@3 25.

ST. LOUIS.—Compared with cash prices a week ago, No. 2 red wheat is 4½c. higher. Corn, ½c. lower. Oats, 2c. higher. Butter, unchanged. Wool, generally steady, but a shade lower on two grades. Pork, 60c. higher. Cattle, shipping steers from 85c. to $1.15 lower; common, 9c. lower; butchers', 25c. lower; cows and heifers from 15c. to 25c. lower; stockers, steady; Texans, steady on poor grades, 65c. higher on best. Hogs, from 10 to 25c. lower on all grades except light, which are 10c. to 15c. higher. Sheep, best kinds, 25c. higher; others steady.

WHEAT.—No. 2 Red, Cash, 79¾@80c; July, 79¾c; July at 73¾@74c; August, 74½c. CORN.—Dull; No. 2 mixed Cash, quoted at 30⅝@31c; June at 30⅝c; July, 31c. OATS.—Quiet; No. 2 mixed, Cash, at 25¾@29c.; June at 26¾c.; July, at 24½c. BUTTER.—Quiet; Creamery, 14@15c; dairy, 11@13c. EGGS.—Quiet at 8½c. FLAXSEED at $1 04@1 05. WOOL.—Active and higher; medium clothing at 20@21c; combing at 22@23c; low and coarse at 13@20c; heavy, at 16@20c; black at 16@20c. HAY.—Timothy, $10 00; Prairie, $4 50. BRAN, 45c. at PORK, $9 50. BULKMEATS.—Long clear, at $5 90; short ribs, $9 50; short clear, $6 05. LARD.—Steady at $5 82½@5 85. CATTLE.—Good to Choice Native Shipping Steers, at $4 00@4 65; Native Common to Fair, $4 85@4 75; Butchers Steers, $3 50@4 25; Cows and Heifers, at $2 25@3 60; Stockers and Feeders, $3 25@3 60; Grass Texas, $2 25@4 50. HOGS.—Market firm and unchanged; Light, at $4 10@4 25; Packing, at $4 00@4 30; Heavy, $4 25@4 05. SHEEP.—None; market quiet at $2 25@4 00.

BOSTON.—CORN.—Steamer yellow, at 47½@48c, and steamer mixed at 46½@47c. OATS.—No. 2 white, at 41c; and fancy white at 45c, and barley, at 44@45c, per bushel. Rye, 68c. per bushel. Bran, at $14@15 for Spring and $16@16 50 for Winter; fine feed and middlings, at $14 00@19 00 and cotton seed meal at $23 00 on spot and $22 00 per ton to arrive. HAY AND STRAW.—Hay at $18 per ton for choice and fancy; fair to good, at $16 00@17 00; fine, at $15 00@16 00, and $9 00@13 00 for poor and damaged; Western choice, $16 00@17 00; do fair to good $14@15. Straw.—Rye straw is held at $22 00@23 50 for choice, and $14@18 for common to good. Swale hay, $10@11; Oat straw, at $10@11 per ton. PRODUCE.—BUTTER.—Northern and Eastern creamery, extra, 18½@19c; extra firsts, 16½@17½c; firsts, 15@16c; Western creamery, 16@18c. for extra firsts to extra; firsts, 14@15c; Northern dairy, 13@17c. for Vermont extra firsts to extra, firsts, at 13@14c; seconds, 12@13c; Western dairy, 12@13c, for firsts; seconds, 9@11, Imitation creamery, 11@14c. for extra firsts to extra; ladle-packed, 9@12c. for extra firsts to extra; firsts, at 8@9c; seconds, at 7@8c; grease, at 3@4c. NEW CHEESE.—New York and Vermont extra, 7½@8c; do. do. firsts, 6@7c; do. do. seconds, 4@5c.; Western extra 7@7½c; do. firsts, 5@6c. EGGS.—Cape and near-by, per dozen, at 13c; Eastern extras, at 12½@13c; do. firsts, at 11½@12c; Northern, firsts at 12c; Western firsts, at 11@12c; Provincial, 11½@12c. BEANS.—Choice Northern hand picked pea, at $1 65@1 75 per bushel; do, do, New York, small, $1 70@1 80; do, do, screened, $1 75@1 80; medium choice, hand picked $1 30@1 35; do, do, screened, $1 15@1 25; Yellow Eyes, improved, $1 10@1 15; do, choice flats, $1 25@1 30; Red Kidneys, $1 60@1 65. PEAS.—Canada, common to choice, at 85@95c, per bushel. Green peas, Northern, at 90c@$1; do, Western, $1 15@1 20, POTATOES range at 45@60c, per bushel as to quality.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, June 26, 1886.

STATE OF THE MARKET.—Compared with cash prices last week, flour is 10c. lower; No. 2 Chicago wheat 2½c. higher; Hard Duluth 1c. higher; corn, 1c. higher; oats, ½c. higher; pork, unchanged; butter and cheese a shade lower; eggs, ½c. higher; poultry, 1c. higher; cotton, ⅛c. higher; fruit about steady; vegetables, steady.

FLOUR, FEED AND MEAL, FLOUR—Quotations: Fine at $2 60@2 80; Superfine, $2 30@3 00; Extra No. 2, $2 60@3 25; Good to Fancy Extra State, $3 00@4 00; Common to Good Extra Western, at $2 75@4 00; Good to Choice Extra Western, $4 05@4 85; Common to Fair Extra Ohio, $2 60@3 75; Good, $3 80@4 40; Good to Choice, $4 25@4 75; Common Extra Minnesota, $2 60@3 50; Clear, $3 25@3 75; Rye Mixture, $3 30@3 75; Straight, $4 10@4 50, Patent $4 50@4 85; Bakers' Extra, $3 75@4 15; St. Louis Common to Fair Extra, $2 60@3 65; Fair to Good, $3 70@4 50; Good to Very Choice, $4 55@4 85, Patent Winter Wheat Extra, $4 00@4 95; City Mill Extra for West Indies, at $4 25@4 50, South America, $4 30@4 40. SOUTHERN FLOUR—Common to Fair Extra, $3 05@3 50; Fair to Choice do., $3 55@5 00. RYE FLOUR.—Superfine, at $3 10@3 25, latter for choice. CORN MEAL.—Brandywine and 100 bbls. Sagamore, at $2 75. FEED.—40 to 50 lbs. quoted at 62½@67½c., and from mill at 70@72½c; 60 lb. at 60c; 50 lb. at 65c., 100 lb. at 75@80c; Sharps at 95c.@$1. Rye at 67½@72½c.

GRAIN.—WHEAT.—Ungraded Duluth, 81c; No. 2 Chicago at 82¼@82½c; No. 2 Milwaukee, 81½c; No. 1 Northern, 83½c; No. 1 hard Duluth, 85½c; Ungraded Winter Red, 79@80c; No. 2 Red for July, 81¼@81½c; do. for August, 82¼@81 7-16c; do. for September, 81½@83c; do. for October, 85¼@86c; do for November, 86¾@86c; do. for December, 87½@87½c; do. for January, 88¾@89c; do. for May, 92¾@93½c. RYE.—Western, 56@59c. Canada at 59@60c; State at 62@64c. Canada peas, 65@66c. CORN.—Ungraded Western Mixed, at 31@50c; Ungraded Yellow, 50c; Kiln Dried Mixed, 51c; No. 2 Mixed, nominal at 50c, No. 2 Mixed for July, 35¼@35⅝c; do. for August, 35¼@35½c; do. for September, 35½c. OATS.—No. 3, Mixed at 32½c; No. 2, 33@33½c; No. 1, nominal; No. 3 White, 35¼@37½c; No. 2 37¼@40c; No. 1 nominal; Mixed Western, at 33@35c; White do, at 37@41c; White State, at 43c; No. 2 Mixed for June, 32@33¼c; do. for July, 33@41½c; do. for August, 31½@31⅞c.; do. for September, 32@31½c.

PROVISIONS.—PORK.—Mess quoted at $9 37@10 00 for Old and $10 25@10 75 for New; $12 00@$14 00 for Family Mess; $11 75@13 50 for Clear Rack; and $8 50@9 00 for Extra Prime. BEEF.—Extra India Mess, at $12 00@14 00; Extra Mess, in barrels, $8 00; Packet, $8 50; Fancy Plate, $8 50. BEEF HAMS.—Quoted at $22 50. CUT MEATS.—Pickled Bellies, 5¾c; Pickled Shoulders, 5½@5¾c, Pickled Hams, 10¾c. MIDDLES.—Long Clear in New York, 6c. at the West, Long Clear, 5.85c; Short Clear, 6 05c. DRESSED HOGS, City Heavy to Light quoted at 5¾@6¼c.; Pigs, 6¼c. LARD.—Western Steam spot quoted at 6.40c; July, at 6.38@6.41c; August, 6.47@6.52; September, 6.58@6.62; October, 6.65@6.67c; November, 6¾c; City Steam stronger at 6 10c. Refined quoted at 6.60c. Continent 6.55@5c.

BUTTER.—Creamery—State and Delaware County pails, fine, 17½c; State and Pennsylvania, 17@17½c; Western best, 16½c; Western prime, 15@15½c.; Western good, at 14c—c; State pails at —@—c. State Dairy.—Half-firkin tubs, best, 16c; do. do, extra fine, 15@15½c; do. do., good, 13@13c, do. do. common, 11@12c; Welsh tubs, best, 15c; do prime, 13c. Western.—Imitation Creamery, best, 12½@13c; do. do, fair and good, 11@13c; Dairy, fine, 13c—c; do, common, 9@11c; Factory, fresh, 11c; do. good, 9@10c.

CHEESE.—The quotations are for: New State Factory, best whites, 7¾@—c; do. do, best colored, at 7¾@—c; do. do, fine, at 7@7½c; do. do, fair, at 5¾@6¾c; do. do., common, at 5½c; Ohio factory, fine, at —@—c; State factory, light skims, at 4½@5½c.

EGGS.—Quotations are for: State, at 13¾@14c; Western, at 13½@13¾c; Canadian, at 13½@13½c.

POULTRY.—LIVE.—Fowls, near-by lots, per lb, at 9@—c.; fowls, Western lots, per lb, at 8½@9c.; fowls, Southern lots, per lb, at 8@8½c; Turkeys, per lb, at 8@9c; ducks, western, per pair, at 50@60c.; geese, western, per pair, at $1.00@1.25.

POULTRY.—DRESSED.—Turkeys, per pound, at 7@9c.; Spring chickens, per pound at 17@32c.; fowls, Pennsylvania, prime, per lb, 10@11c.; do State and western, per lb, at 9@10c.

POULTRY.—FROZEN.—Turkeys, per pound, at 14@16c.

GAME.—English snipe, per doz., $2 25@2 50; Plover, Western, per doz., $1 50@2 00.

FRUITS.—FRESH.—Quotations are: Apples.—Russetts, Roxbury, per bbl, $2 75@3 00; lower grades quoted at $1@1 50. Strawberries—Jersey, per quart, at 4@6c.; Western New York, per quart, at 3@6c; up river, per quart, at 3@6c; and at 8@10c. for extra choice lots. Cherries at 7@8c. for dark red, large, and 3@5c. for small. Gooseberries, per bush., at $1 25@1 50. Raspberries at 6@7c. per quart for Maryland, and 6@8c. per quart for blackcap. Huckleberries at 10@12c. per quart. Peaches at $1 50@2 for prime per crate, down to 50@75c, for inferior.

COTTON.—The quotations, according to the American classification, are as follows:

	Uplands.	New Orleans and Gulf.	Texas.
Ordinary	6⅝	6 13-16	6 13-16
Strict Ordinary	6 1-16	7¼	7¼
Good Ordinary	8	8 3-16	8 3-16
Strict Good Ordinary	8 7-16	8⅝	8⅝
Low Middling	8 13-16	9	9
Strict Low Middling	9 11-16	9¼	9¼
Middling	9¼	9 7-16	9 7-16
Good Middling	9¾	9 15-16	9 15-16
Strict Good Middling	10 1-16	10¼	10¼
Middling Fair	10 7-16	10⅝	10⅝
Fair	11 1-16	11¼	11¼

STAINED.

Good Ordinary	6 1-16
Strict Good Ord.	7⅛
Low Middling	7 15-16
Middling	8 11-16

FRUITS.—DRIED.—The quotations are as follows Apples—Fancy evaporated, at 7½@c; choice, at 7¼c, do. prime at 6¾@7c; fancy North Carolina sliced, at —; choice do. at 3½@3c.; choice Tennessee quarters at 1½@2c.; State quarters at 2½@3c.; southern sliced prime at 1½@2c; do. common, —, Peaches—Peeled North Carolina, choice, 11c; fancy, 12@12½c; extra fancy, —c; Georgia, choice, at 10@11c; do. prime, 8@9c; unpeeled halves, 2½@3c, unpeeled quarters at 2½@2½c.; Delaware evaporated, peeled,—@—c; unpeeled do., at —@—c. Choice pitted cherries at 10c. Evaporated raspberries, at —@15c; sun-dried do. 12½@13c. Blackberries—Prime at 6¾@7c. Whortleberries at —c. Plums, at 5c.

PEANUTS.—There is a firm tone to the market under steady fair demands. The quotations are; 7c. for best hand-picked; 4½@5¼c. for farmers' grades.

HAY AND STRAW.—The following quotations are; for Choice Timothy hay at 75@80c; Good do, at 65@70c; medium 55@60c; shipping at 50c; clover mixed, 50@60c; clover, black, at —@—c. Straw.—No. 1 rye, 90@—c; short rye at 65@70c, oat, at 40@45c; wheat, at —c.

SEED.—For Clover, there is a dull and nominal market. Quotations: Timothy is quoted at $2 05@2 15. Linseed quoted at $1 65@1 70. Mustard at 5½@6c. for Trieste brown mustard, and 6½c, for California yellow. Carraway seed at 8½c. for Dutch; Italian anise at 9½@10c. canary seed nominal at 2¾@3c. for Smyrna and 3¼@3½c. for Sicily.

VEGETABLES.—There is a very good inquiry for the best lots of potatoes and a strong market. Quotations are for: Potatoes.—Bermuda, new, prime, per bbl, $3 00@4 00; Bermuda, new, small, per bbl, $2@2 50; Norfolk, extra Choice, per bbl, at $2 75; Norfolk and North Carolina, prime, per bbl, $2 25@2 50; Eastern Shore, Va., per bbl, quoted at $2 00@2 25; Charleston, Chili, prime, per bbl, $2 00@2 25; Charleston, rose, prime, per bbl, $2 00@2 25; Charleston, peerless, prime, per bbl, $2 00@2 25; Florida, new, prime, per bbl, $—@—; new potatoes, fair, per bbl, quoted at $—@—; new potatoes, seconds, per bbl, quoted at $1 25@1 50; new potatoes, culls, per bbl, quoted at $1 00; Rose, eastern, prime, per bbl, $1 75@2; Burbank, State, per bbl, $1 50@1 75; Burbank, eastern, per bbl, $1 75@2 00; Proline, Nova Scotia and New Brunswick, per bbl, $1 50@1 75; Mercer, Prince Edwards Island, per bag, $1 25@1 37; Mercer, Prince Edward Island, bulk, per 180 lb, $1 25@1 30; Peerless, State, bulk, per bbl., $1 25@1 37. Asparagus.—Oyster Bay, per dozen bunches, at $1 50@2 00; do, upper Jersey, prime, $1 50@2 00. Beets,—Long Island, per 100 bunches, $2 00@2 50. Beans.—Maryland, wax per bbl, $2 50@4 00; Norfolk, wax, per half bbl, 50c.@$2 00; do. Norfolk, round, per half bbl, 75c. do. Norfolk flat, per half bbl, 00@00c; do. North Carolina, round, wax, per half bbl, 50c.@$2 00; do. North Carolina, round, per half bbl, crate, 50@63c; do. North Carolina, round, per bush. crate, 100@50c; do. North Carolina, flat, per half barrel crate, 25@50c. Cabbages, Long Island, per 100, $3 80@4 00; do. Norfolk and North Carolina, per bbl., at 50@75c. Cucumbers.—Norfolk and N. C. per bushel crate, $1 25@1 50; do, Charleston, per crate, 75c.@$1; do. Savannah, per crate, 50@75c. Onions.—Bermuda per crate, at $1 50@1 75; do, New Orleans, per bbl, $3 25@3 50; do, New Orleans, per bag, $1 62@1 75; do, Maryland, per bbl, at $2 75@3 50; do, Virginia, per bbl, $2 00@2 75; do, Egyptian, per cafe, $2 25@2 60. Peas.—Long Island, per bag, 50c.@$1. Squash.—Norfolk, white, per crate, 50c.@$1. Tomatoes.—Savannah, per crate, $1 00@1 50; do. Florida, choice ripe, per crate, $1 00; do. Florida, Inferior, per crate, 65@75; do, Bermuda, per box, 25@30c. Turnips, white, July and L. I., per 100 bunches, quoted at $2 00@2 50.

WOOL.—Moderately active and generally steady. Sales in Boston lately have included:

190,000 lb	Ohio and Pennsylvania fleeces, X, XX, and XX and above	30 @	33
1,000 lb	Fine Delaine	@	32
21,000 lb	Unwashed Combing	24 @	25½
99,300 lb	Territory Wool	22 @	23½
95,000 lb	Texas part	23½ @	24
123,000 lb	California spring part	16 @	19
134,506 lb	unwashed and unmerchantable fleeces	18 @	22
482,000 lb	super and X pulled	26 @	33
131,100 lb	scoured	24 @	60
3,000 lb	sundries	10 @	22
124,000 lb	Australian	30 @	37
275,000 lb	fleeces, of various grades and qualities	private terms	
25,000 lb	Oregon Wool	private terms	
30,000 lb	Montevideo	private terms	
50,000 lb	Mediterranean carpet	private terms	

LIVE STOCK MARKET.

NEW YORK, SATURDAY, June 26, 1886.

BEEVES.—Ohio "Stillers," 1,124 lb, at $5 15; Ohio Steer 1,386 lb, at $5 50; do, 1,335 lb, at $5 35; Michigan steers, 1,206 lb, at $5 35; do, 1,305 lb, at $5 10; Western do. 1,218 lb, at $5 05; do, 1,257 lb, at $5 10; Cow, 730 lb, at 4c. per lb. Kentucky "Stillers" 1,107 lb, at $5 05; do, 1,168 lb, at $5 25; Ohio Steers, 1,359 lb, at $5 40; Ohio Bulls, 1,500 lb, at $3 60; Still-fed do, 1,353 lb, at $3 50; Ohio Cows, 1,146 lb, at $4 15; Colorado steers, 1,454 lb, at $5 30; Chicago 1,251 lb, at $5 35; do, 1,305 lb at $5 30; Cincinnati do, 1,053 lb, at $5 20, less $5; Buffalo do, 1,190 lb, at $5 12½; do, 1,133 lb, at $4 90; Stag, 1,150 lb, at $4 25; Bulls, 1,599 lb, at $3 50; Indiana Dry Cows, 1,221 lb, at $4 40; do, 1,160 lb, at $3 90; St. Louis Steers, 1,258 lb, at $5 50; do, 1,960 lb, at $5 10; Kansas do, 996 lb, at $4 85 Kentucky do, 1,410 lb, at $5 75; Kentucky Oxen, 1,416 lb, at $5.

CALVES.—A few selected Veals brought 5¾@6c, with Ordinary to Prime quoted at 4½@5c; Buttermilk calves were not wanted even at 3c. per lb. Dressed Calves in fair demand early in the day, closing dull and weak. City Dressed Veals sold at 7@8½c. (few choice at 9c; Country Dressed at 5½@7½c, and Dressed Buttermilks at 4@5c; Veals, 206 lb, at 5c; do. 168 lb, 5¼c; do 163 lb, 5½c; Buttermilk Calves, 150 lb, 3c; do. do. 104 lb, 3½c; Veals, 162 lb, 5¼c.

SHEEP AND LAMBS.—Total for six days, 37,109 head against 27,199 head for the same time last week. The market was dull and dragging, and while Sheep ruled steady with Prime stock firm, Lambs were weak. Common to Choice Sheep ranged from 3½c. to 5½c, with Ordinary to Fair selling at 3½@4½c; Common to Prime Lambs sold at 6@7¾c, and best Jerseys at 7¾@8c per lb; State Bucks, 191 lb, at 3½c; State Sheep, 120 lb, at 4½c; State lambs, 57 lb, 7c; Western Sheep, 75 lb, 4½c; Kentucky Bucks, 138 lb 3½c; Kentucky Sheep, 92 lb, 4½c; Kentucky Lambs, 60 lb, 7c; Virginia Lambs, 59½ lb, at 7½c. per lb; Virginia Ewes, 96 lb, at 4c; Ohio Sheep, 88 lb, at 4½c; West Virginia Lambs, 59½ lb, at 7½c; Jersey Lambs, 57 lb, at 7½c; Jersey Lambs, 65 lb, 8c; Jersey Ewes, 118 lb, at 4½c; do. 91 lb, at 5½c; Ohio Sheep, 80 lb, at $4 80; Kentucky do, 105 lb, at $4 75.

HOGS.—Total receipts for six days, 22,649 head against 35,156 head for the same time last week. No sales reported on live weight. Nominally firm at $4 60@4 85.

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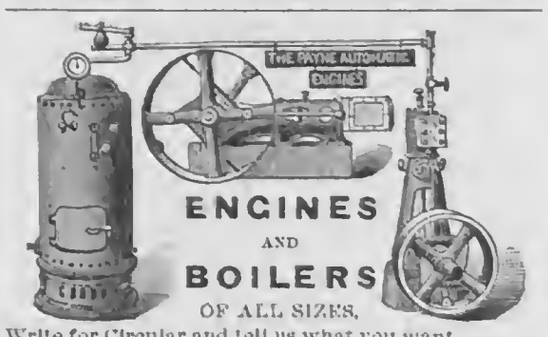

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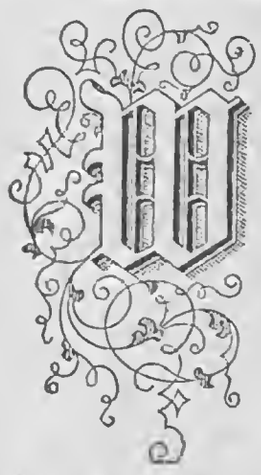

Elwould all like to see that little baby-King in Spain. No doubt you have all read about him. He is a King before he can talk. Gray headed men will be obliged to call him "Your Majesty" long before he can creep. There will be small chance for people to talk "baby talk" to him, and as for kissing him, that will be out of the question, unless his nurse should do it on the sly. I expect he looks about like all other babies, only he may be much weaker and smaller than many who are not one-hundredth part so famous. It is a good thing to remember that a King has to be a boy just like every other man. I have often wondered what the boyhood of a King must be. I don't believe they have half the fun that our boys have. I don't see how they can help being selfish and proud. They frequently do things for which they deserve to be whipped, but I am afraid they don't get the whipping as often as they should. I remember reading how the Prince of Wales was once whipped by his father, and I don't think the whipping ever did him any harm. We have no room for Kings in this country, at any age. Our American boys are better off than any set of Kings that ever lived. We have a chance to spread out and become masters of ourselves; that is more than any King can say.

Friendship is a wonderful thing. Every boy and every girl ought to have a good friend. Most people naturally pick out a "chum." That is a good plan. Such a friendship teaches us lessons in generosity. The selfish people are those who never knew what real friendship is, and so cannot see how pleasant it is to do things for others. There are too many selfish people in the world now. They make the very air about them sour and blue. Pick out your own friends. Those that other people may select for you will not be half so true.

I have often read the newspaper item about the young lady who sat in the parlor singing "Don't Forget Your Mother When Her Hair Turns Gray," at the very moment when her mother was washing in the kitchen. Is there any truth in that item? I ask the girls alone—the boys need not answer. I believe that most girls love their mothers dearly. Sometimes they get a little thoughtless though, and forget how much mother has to do, and how easily they might make the work lighter. It is possible for you to be too much of a lady, girls, but you can't possibly be too much of a woman. I wonder if you can see just what I mean by that. Think it over. Do all you can for your mother, girls, and stop complaining. She has to endure three times what you do. Whenever you see her looking tired or discouraged, you just go up to her and kiss her right on the mouth. Don't be afraid you will hurt her or injure yourself in any way. Take my word for it, it will do you both good.

We are having plenty of rain now. In fact, we have a little to spare for some place where there is a dronth. Some farmers are getting a little discouraged about the weather; they have so much hay down and the crops need sunshine so badly that things begin to look blue. When I was a boy they used to tell me such weather is good for young ducks. I think it must be true about that, but human beings sometimes feel that they would like to have such weather all off in some place where the ducks could go and enjoy it by themselves. It won't do to growl about the weather though. Make the best of it. That is all we can do. Plenty of people are worse off. Here is a city man for instance, who can appreciate all that has been said about wet weather.

He has been caught at the corner of two streets, where the wind blows all ways at once. A few days hence he will be in about this condition.

THE STORY OF A DISTRICT SCHOOL.

A COLLEGE BOY'S DIARY.

[Not long ago I had the pleasure of looking over a diary belonging to a good friend of mine. It was written while he was at college quite a number of years ago. I was greatly interested in reading what he had written, and the part that I liked best of all was his account of his experience as a teacher in a district school. You know that many college boys teach school during the Winter in order to earn money enough to pay their expenses at college. He has consented to let me use his notes in something of the form of a story. I am not to mention his name, and I am to write what he has given me in my own words. It is about as near a true story as we can get. I hope there are very few places like Bear Creek, yet I think a great many of our district schools could be made a great deal more effective than they are now. That is partly the reason why I shall tell about this school; so that you can notice all the mistakes that were made, and think how the school might have been made much better. One thing I will tell you. I don't think this young man had any business to try to teach in Bear Creek, yet I suppose he knew as much as most teachers do. I think teachers are like poets—born and not made—and that those who teach just for the sake of making a little money will not do much good unless they are pretty well watched. It is partly because I want to get people to take more interest in schools that I give this diary a place on our page. I hope, if there is anything that seems a little strange, you will get father and mother to read it over and explain it. Remember, I am going to write just what this young man did, without any attempt to explain or defend his actions. If you find any of the characters using bad grammar or saying or doing things that you do not think are right, remember the proper thing is to avoid doing them yourselves.—UNCLE MARK.]

We were sitting in my room at college talking over our plans for the Winter. It was really a council of war, for we did not expect a very peaceful vacation. I suppose most college boys, many of them at least, look forward to the vacation as a season for great fun and rest. We always get such an idea by reading such books as "Tom Brown at Oxford." It was hardly so with us, however. Our vacation meant simply a season of hard work, in which we were to earn money enough to carry us through the next college year. We were about at the end of our finances. I doubt if we had $15 in all. No wonder we met to discuss plans. They were important enough to us. We were students at an agricultural college at the West. We had just come in from work on the farm. George had been digging potatoes. Frank had been husking corn; and Ed. and I had been ditching. Some of the boys may call this rather queer work to be done at a college, but we had grown used to it. A college life without this work would have been all wrong to us, and I really think we got about as much fun out of it as most college boys get out of games or other exercises. My room was not the best of places for holding a conference. There was no carpet on the floor, and I had but one serviceable chair. Frank occupied that, while George and Ed. sat on the bed, and I acted as chairman on the trunk. Plenty of educations are chopped out amid such surroundings at our agricultural colleges. Such educations will not be apt to break when the test comes.

There was but one question to be asked—What are you going to do this Winter?

Frank had found a school to teach in a country district. He had taught in the same place once before, so his way seemed comparatively easy.

George had found a place to chop cord-wood at 50 cents per cord and his board. That was considered great wages in those days.

"I'll come back a millionaire, boys," he said gleefully. "Fifty cents a cord and pick your timber—why I shall have money enough to throw away next year!"

Ed. had a new line of work in view. "I'm going to canvass for the Royal Path of Life," he said, with a genuine book agent's flourish. "I've got that speech reduced to a regular science. Let me sell you a book!"

He ran to the table and brought back my geometry as a "sample copy," and began: "Now just observe the elegant binding, the clear, open-faced type and the fine paper. Here we have a picture representing youth and old age. The little child stands looking hopefully into the future, while the old man sits dreaming of the past."

He would have gone on to the end of the story had not Frank pulled the book away from him, and pretended to call for the dog.

"You may make lots of money out of the 'Royal Path of Life,' but I'd rather plow for a living; but what are you going to do?" And they all looked at me.

"Oh I have the best thing of all; just look here"; and I produced a letter that had come the day before. They all came and looked over my shoulder as I read:

HIGHLY RESPECTED AND ESTEEMED SIR: At a recent meeting of the school board of this district, I had the honor of presenting your application for the position of principal of the educational institute in said district. It gives me a satisfaction which I have vainly attempted to purge from this communication, to announce the fact that you were unanimously elected to fill said position, and it therefore behooves me to remind you that it is now incumbent upon you to qualify yourself, as required by law, and present yourself in said district, at said time, fully prepared to assume the mantle of said authority. In my opinion, it will be well to confine your educational efforts to writing, elocution and deportment, and to the propagation of the elements of that sound morality which lies at the base of all good government. Educationally yours,

CHARLES FOREST,
Director of Bear Creek District.

"Now, boys, what do you think of that? Really, now that I am to be a teacher of education and moral elements, I don't know that I ought to associate with book agents and wood choppers."

In answer to this remark George and Ed. picked me up and carried me to the window.

"Testify to the nobility of book agents and wood choppers or fly to the ground," they shouted.

"Never mind what you do to me boys, but save that letter," was all I could say. "I feel that I havn't lived in vain while I can call out such a note as that."

"So we are all right," said Frank, as the boys brought me back from the window and threw me on the bed. "We are all sure to come back in the Spring. You heard what Prex. said in chapel this morning? He wanted every boy to try and bring back a freshman with him in the Spring. Lets all shake hands on it and agree to turn up in the Spring with a good man. We ought to have a large class."

We all shook hands at once.

"If I come to a place where I can't sell a copy of the 'Royal Path,' I'll drag out a boy any way," said Ed., and we shook hands again glad that we were so well settled for the Winter.

(To be continued.)

NOTES FROM THE COUSINS.

DEAR UNCLE MARK: Uncle Nelson takes your paper and likes it very much. He told Papa if he would take and read it (especially the Eye Opener), he need not do anything else. I have 28 Plymouth Rock chickens, eight ducks and another hen setting on Guinea eggs. I set a hen on 13 eggs, and she hatched one and lost that. She wants to set again, and would you advise me to set her? Many thanks for the seeds you sent me. I planted them and they came up very well.

Kirkdale, Que. JAMES STEVENS.

[I would set the hen again. No doubt she feels ashamed of her poor success and wants to try again.—U. M.]

DEAR UNCLE: One of the Cousins wanted to know how to grow pansies. I will give my way. Fill a box with good rich soil, and about the first of March sow your seed in drills. Set them in the south window, and keep the soil wet. Then about the middle of April transplant on the north side of the house. I think they will grow. Then about the first of December cover them with a little straw or dry grass, and in the Spring they will be nice. I wonder if any of the Cousins read novels. I have read Dickens and Scott, and many others. I have taken music lessons since I was eight years old. I am now 12 years old. I have a small flower garden. Your niece,

Galion, Ohio. EMMA DICKIE.

[I like Dickens. It is much better to read good books than to spend time upon those which are simply "exciting."

DEAR UNCLE MARK: I thank you very much for the package of sweet peas which you sent me. I planted them, and they all came up nicely. We moved to Illinois lately. We like it here better than we did in Michigan. We live on a small dairy farm of 240 acres. We have 22 cows to milk and 26 that we do not milk. We have raised 70 little chickens, and have 100 hens. We have two birds; both are singers. We have lots of flowers. We have got 22 large pigs and 34 little pigs. My sister and I go two miles to school.

From your niece, LILLIE JOHNSON.
Elburn, Ill.

DEAR UNCLE MARK: Uncle Sam sent us some seeds. We planted them, and they are doing very well. We have a very mild climate here. I have never seen ice strong enough to bear a weight of even ten pounds, and when we do have snow, which is very seldom, it always melts as soon as it touches the ground. Father has two cows, two horses and a pig. We live a mile from the Monterey Bay, and we can see the ships and steamers coming into the harbor. Sometimes we can see the breakers dash against the rocks, and toss the spray high up into the air. This county is becoming a great resort for Eastern tourists. It has long been a favorite summer resort for people in the various parts of the State, on account of its even temperature and excellent beach for bathing, but within the last four or five years it has been visited by winter tourists, who pronounce the beach the best they have ever seen, and equal to Long Branch. People were in the surf bathing on New Year's Day.

Your nephew, ARTHUR SMITH.
Santa Cruz, Cal.

DEAR UNCLE MARK: I might have written before, but as soon as I got my work done I could not help improving the play time. I had quite a pretty flower garden last year, but the prospects of a better one this year.

We have nine chickens and five more hens sitting. I have a handsome heifer, one year two months and 23 days old. She stands about four feet high. She is half Dutch and half Jersey. She has good points of being a good cow. Yours respectfully,

E. Deering, Me. MOSES P. ADAMS.

[That ought to make a good cow I think. We want to know how she turns out.—U. M.

DEAR UNCLE MARK: As Papa did not have any boys he said that I must try for the "Clinton Chilled Plow" prize, because he wanted a plow. I have two sisters and their names are Lerah and Daisy. The State Agricultural College is in Fort Collins and my sisters are both attending it. We live on a farm of 160 acres, two-and-a-half miles from Fort Collins. We raise all kinds of small grain, and potatoes. Papa thinks the "Beauty of Hebron" the best kind of potato that he raises.

Your neice, SOPHY STRATTON.
Fort Collins, Colorado.

[I am sorry you did not win the plow. I hope the girls make good college students.—U. M.]

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Lowell, Mass. 14 years Tax Collector,

PERSONALS.

THE most important, perhaps, of Victor Hugo's posthumous works is a poem of 6,000 verses, entitled "The End of Satan."

SIR JOHN MACDONALD is the representative in Canada of the Masonic Grand Lodge of England. The Prince of Wales is the Grand Master of this Lodge.

EX-PRESIDENT ARTHUR, feeling somewhat better, went, for the Summer, to New London, Conn., Thursday. His sisters, son and daughter went with him.

NEWLY elected Democratic Governor, Pennoyer, of Oregon, again insists, Dinnis-Kerney-like, that the "Chinese must go," if not peaceably in a body, "go they must anyhow."

OSCAR H. COOPER, the new State Superintendent of Public Instruction in Texas, is the youngest man in the United States holding a similar position—only 23, a graduate of Yale, where he was formerly a tutor.

YET another change of presidents at the Mass. State Agricultural College—President Greenough has resigned, and the trustees have accepted his resignation, and appointed Prof. Goodell as president.

JUSTICE STANLEY MATTHEWS, of the United States Supreme Court, and Mrs. Mary K. Theaker, widow of Judge Theaker, Commissioner of Patents under Lincoln, were very quietly married at a friend's house in this city last Wednesday—no ushers or bridesmaids.

JONES, of Florida, is the only Senator who hasn't introduced a bill at this session of Congress; indeed he hasn't introduced himself. He still lingers at Detroit; but he draws his salary regularly the first of each month—$5,000 a year for doing nothing!

MAGGIE MITCHELL, daughter of the Oregon Senator, is going to marry Count de Rochambeau, heir of the Count of the same name who figured so prominently in our War of Independence, and now an attaché of the French Ministry at Washington.

SAID Senator Edmunds, the other day, in his speech on the land-grant question, referring to Attorney-General Garland, of Pan-Electric fame, "to whom I am always glad to pay my respectful homage as an upright and just man." Strong indorsement from a strong man; but it won't silence vituperation in the least.

Miscellaneous Advertising.

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SHORTHAND Writing thoroughly taught by mail or personally. Situations procured all pupils when competent. Send for circular. W. C. CHAFFEE, Owego, N. Y.

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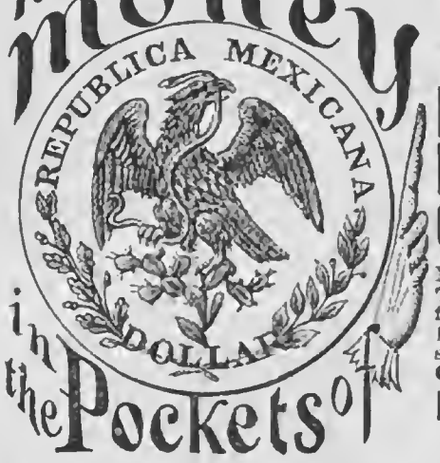

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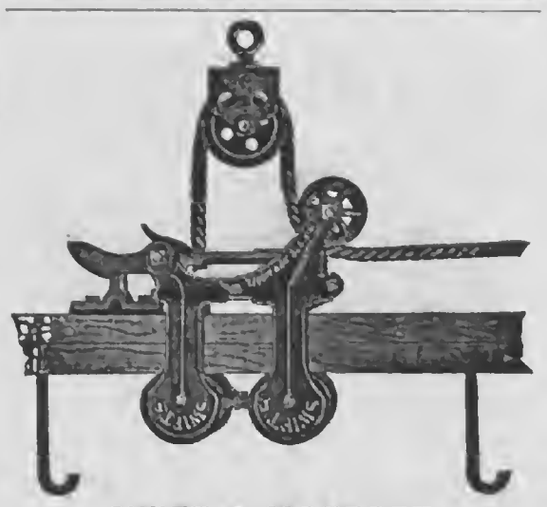
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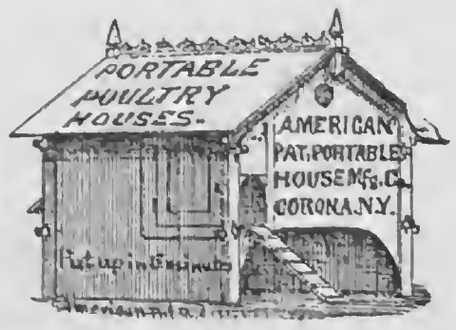

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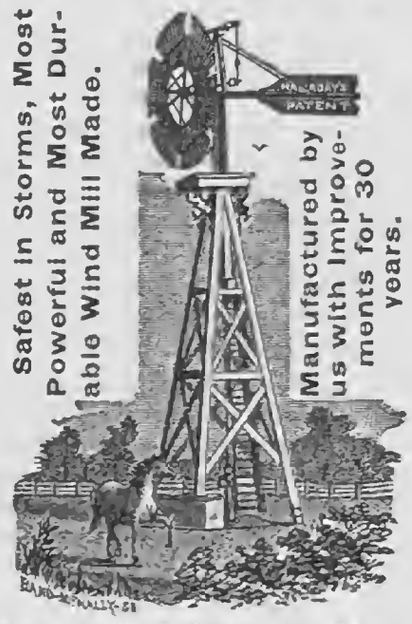

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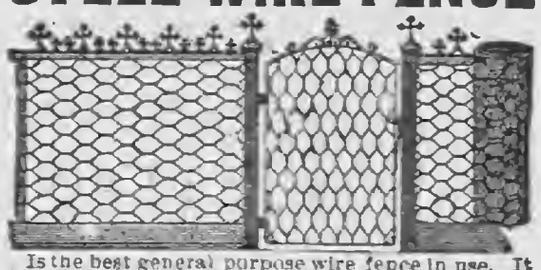
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Humorous.

"DON'T put in no muskecter-nettin' for me," said Aunt Hannah, "I don't want to breathe no strained air."—*Vox Populi.*

"IF I cannot have the fat of the land, I can take a little lean," said the tramp, as he rested his shoulder against a lamp-post.

DUDE—"Excuse me, Miss Sharp; I had quite forgotten you; I am so absent-minded, doncher know?" Miss Sharp—"Yes, I have noticed the absence of mind."

A LADY writer asks: "Why don't bachelors marry?" That's so—why don't they? Come to think about it, we have never seen a bachelor who was married. It's lamentable, too.

"GIVE us, O give us the man who sings at his work," says Carlyle. "Oh! yes; give him to us; deliver him into our hands. He occupies the next office, and we can't get at him."

THERE is one place in this country—away down in Maine—where the people are so polite that they never speak of unmarried ladies as old maids. They simply call them ladies-in-waiting.

JOHNSON says he likes New-England girls, because they always extend every court-easy to the strange and eligible young man visiting in that section.—*Cincinnati Merchant-Traveler.*

IT is said that much suffering is caused an animal by defective shoeing. This will be readily understood by noticing a woman shoo a hen. The poor bird does not know which way to go.—*Boston Post.*

"Do you think you can clear him?" she asked of the lawyer. "I don't know, madam," replied the attorney doubtfully. "He has lived here all his life, sir, and knows every one." "Yes, that is what makes me nervous about it."—*N. Y. Graphic.*

"HAS your father got his affairs wound up yet?" said a Cleveland man to young Mr. Flatt, whose paternal parent, Flatt, the jeweler, recently made an assignment. "No," answered the youth, "an' he ain't likely to get 'em wound up inside of twenty years." "How so?" cried the astonished citizen. "Why, his assets are mostly in Waterbury watches."

A POOR SHOT.

Miscellaneous Advertising.

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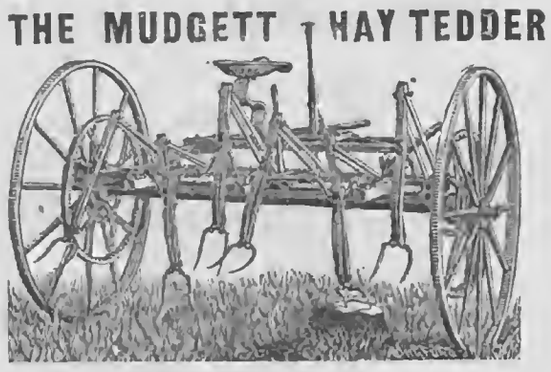

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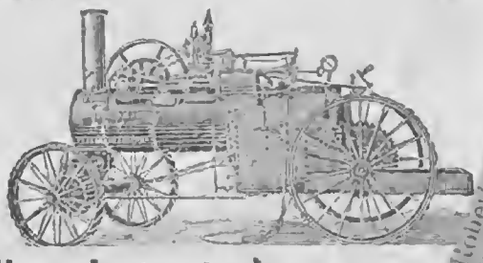

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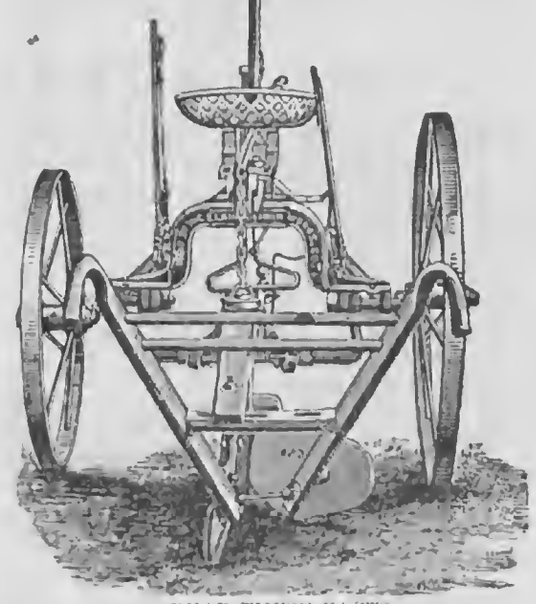

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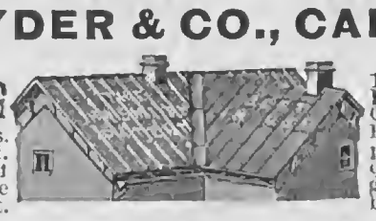

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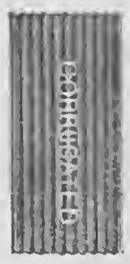

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21 two-year-olds have averaged 11 lbs. 9 oz. in a week.
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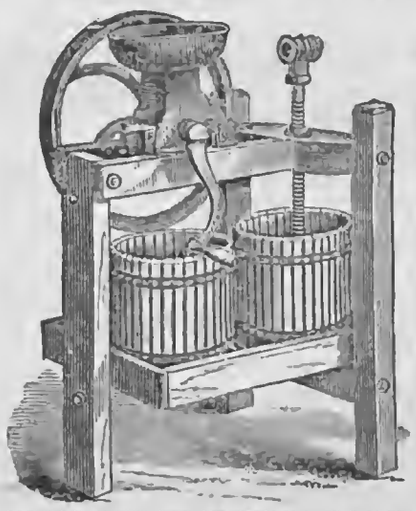

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THE RURAL NEW-YORKER

A JOURNAL FOR THE SUBURBAN AND COUNTRY HOME

VOL. XLV. No. 1902. NEW YORK, JULY 10, 1886. PRICE FIVE CENTS. $2.00 PER YEAR.

Entered according to Act of Congress, in the year 1886, by the Rural New-Yorker in the office of the Librarian of Congress at Washington.

SPECIAL.

PROMISE of a GOOD HARVEST

WHEAT.

Winter wheat, a good crop on the whole; a considerable increase over the area harvested last year; little plowing up; poor crop and smaller area in the South; best crop in California; poorest in Kansas; probable aggregate yield 295,000,000 bushels against 212,000,000 in 1885. Decrease in area of spring wheat; considerably injured by drought and blight; probable yield 140,000,000 against 145,000,000 in 1885.
Total crop 435,000,000 bushels.

OATS.

Slight increase in acreage; considerably injured by drought and insect pests; probable yield 600,000,000 bushels against 629,000,000 in 1885.

RYE AND BARLEY.

Slight increase in acreage of rye; grown chiefly for grain in the North and pasture in the South; slight increase in production; considerable increase in area of barley, especially in Kansas, Minnesota, and the Pacific Coast. An excellent crop.

CORN.

Acreage about the same; a good stand; outlook good for a fine crop.

POTATOES.

Decrease of area in New England owing to the low prices and rot; early potatoes a heavy crop; late promising, especially in the West.

GRASS.

Large increase in acreage; supplanting potatoes in New England; much greater cultivation of tame grasses in the West and South; considerable increase in clover; a heavy hay crop, injured somewhat by drought.
Pastures good.

TOBACCO AND HOPS.

Slight increase in area of tobacco; prospects fair. Decrease in hop area; crop generally excellent; late reports of threatened destruction by insects and "honeydew" in New York.

COTTON.

Slight decrease in old States more than counterbalanced in the new, mainly in Texas; condition lower than in 1885.

FRUIT.

Outside New England apples likely to be only a fair crop; young fruit dropping excessively everywhere; generally the "bearing" year; poor crop in the South; much injury to orchards by winter cold and spring frosts in the Ohio Valley and Northwest. Pears a poor crop. Peaches below an average. Strawberries too plentiful for profit. Other small fruits good crops.

EASTERN STATES.

Maine.

BIDDEFORD, York Co.—Hay now promises to be a large crop; potatoes show up finely; many early planted lots are now in bud. About the same quantity put in this year as last; garden truck now coming in freely in good condition; strawberries now ripening. First pickings to any amount will be offered the first of next week. The apple crop promises to be large. J. L. L.

DEXTER, Penobscot Co.—Grass is looking well; a full average crop. Grain of all kinds growing rapidly, and a full harvest is anticipated. Potatoes looking well. Corn an average, excepting sweet corn, which did not come up well; two-thirds or three-quarters crop is all we can expect, much of it having to be replanted. Feed good, and stock doing well. F. H. S.

SKOWHEGAN, Somerset Co.—We are having a dull spell with some rains, which we hope will continue long enough to restore the damage to all crops by our recent drought. We had an early Spring and fine weather up to first of last month, since which all crops have suffered for rain. Grass, especially will be light on old ground, but may on the whole be an average yield. Oats is our principal grain crop, and is looking well; wheat and rye very little sown; corn did not come up well and is backward. The season has been too cold thus far. Potatoes, not much planted except for home use; they are looking well, with fewer bugs than formerly; apples blossomed profusely, and have set well and promise a crop fully equal to last year's. All small fruits plentiful. Farmers who patronize the butter factory find that their outputs for commercial fertilizers are gradually growing less—one of the greatest benefits from the factory system. J. H. L.

New Hampshire.

HAVERHILL, Grafton Co.—Hay crop heavy. Apple crop better than could be expected. Small fruits plentiful. Potatoes looking well. J. O. G.

MANCHESTER, Hillsborough Co.—Corn, from 75 to 90 per cent.; wheat, but little raised here; early oats looking fine, will be more than an average crop; rye, most raised for fodder, has been mostly cut, a fine crop; barley, same as rye; potatoes, prospects for more than average crop, large area planted; garden truck, early cabbage, badly damaged by cut-worms and maggots; beets, mostly destroyed by cut-worms; onions, started well, but maggots are destroying them very fast, small crop in prospect; celery, plenty started, and prospects good; apples, few and poor; grapes looking well; pears, small crop; but few peaches raised here; peas looking finely, large crop; carrots, parsnips and turnips looking well and large area; blackberries and raspberries looking well. A. H. W.

PETERBOROUGH, Hillsborough Co.—The earliest season we have had for a number of years. Corn is backward on account of the cool weather, but is looking fully as well as last year at this time. Grain of all kinds is ahead of last year, and promises a heavy yield. Potatoes looking exceptionally fine. Apples, the prospect is for the largest crop for five years past. On the whole, the prospect for the farmers in this part of the country is very encouraging. Grass looks fine, and a heavy crop of hay is the prospect, which has not been the case for three years past. C. N.

PORTSMOUTH, Rockingham Co.—Our staple crop is hay, which promises to be more abundant than for several years. Wheat, tobacco, sorghum, hops, broom-corn and peaches none raised. Oats, rye, barley above the average. Potatoes and garden truck better than last year at this time. Apples promise well where the trees are not infested with canker worm. Pears below an average. Only a few grapes raised, but looking well. Season one or two weeks earlier than last year. C. E. T. Y.

SWANZEY, Cheshire Co.—Oats, corn, rye, potatoes are of the average; garden truck looks very well, or would if it wasn't for the cutworms which are working corn badly to the north of us. C. H. R.

Vermont.

GEORGIA, Franklin Co.—Spring opened unusually early, but for want of seasonable rains the frost left the ground very slowly, and the surface was, to a large extent, in tillable condition, while there remained a very considerable stratum of frozen earth below it. The result is that upon all undrained lands the growth of nearly all crops has been exceptionally slow for this latitude. As the season has advanced, the rains have been quite copious, and grass and the small grains have made a more vigorous growth. To casual observers who base their estimates on what they can see from the car windows or their carriages, these crops promise a very unusually heavy yield. Such observers are looking for a good deal more than an average hay crop, and we frequently hear them placing it at double that of last season. But farmers who carefully go over their meadows and note the sad havoc here and there of the summer droughts, and the winter freezes among their grass roots, and the very large proportion of daisies and other foul weeds which are springing up in the place of better grasses, sadly shake their heads and limit their expectations at a good average crop—perhaps 50 per cent. better than last year. The small grain crops compare favorably with last year's, but are not notably better. The universal testimony is that corn never came up so slowly or made so slow a growth after it was up. Generally the crop stands well, considering its size; but in some localities the cut-worm has done some damage. I have heard of a few fields being harrowed up and sown to barley or oats. With a favorable Autumn there is yet time for a good corn crop, but the present outlook is not favorable. Potatoes and garden truck are doing well. On the drained gardens in the village of St. Albans, they are a week or two more advanced than a year ago, but such is not generally the case. My own early peas are not half a week earlier, though planted two weeks earlier. The three earliest varieties are just in bloom. My earliest snap beans, two varieties, have not grown more than an inch in two weeks from the time of planting. The later plantings promise to outgrow them, though they look green and healthy. Fruit trees, with the exception of plums, blossomed full, but the fruit is mostly blasted, though a small crop may be perfected. I have a curiosity in the shape of a cherry tree, a large part of which is now in bloom. O. S. B.

MANCHESTER, Bennington Co.—Corn, area, 104; condition, 110; oats, area, 100; condition, 105; rye, area, 100; condition, 110; potatoes, area, 100; condition, 105; apples, condition, 120; pears, condition, 110; grapes, condition, 100; hay, area, 100; condition, 110. G. G. B.

NEWPORT, Orleans Co.—All crops, including fruit, look well. Grass unusually heavy and forward, and potatoes much in advance. Corn is up and looks well, but the weather has not been warm enough to push it. Rye is heading, wheat looks well, and oats are promising. The apple crop will be good if no accidents occur. All gardens look well. Hop culture has declined here somewhat, but the prospect of a crop is good. Small fruits look well. T. H. H.

NORTH BENNINGTON, Bennington Co.—Corn, oats, rye and potatoes look about as well as at this time in other years; hay, a better crop than last year. C. B. A.

WILLIAMSTOWN, Windham Co.—Potatoes, corn, oats, wheat and barley, also the hay crop are looking better than they did last year. H. T. E.

Massachusetts.

GLENDALE, Berkshire Co.—Corn, good prospect; about the usual area; wheat very little if any. Oats, rye, potatoes and garden truck, good prospects. Potatoes, I think more than usual planted; the area increasing every year. Apples and pears are about an average of last year's. Peaches and grapes fair; just coming in blossom. Grass never looked better, but there is danger of it lodging a good deal. J. H.

LEYDEN, Franklin Co.—Grass is looking better than at the same time last year. Corn, oats, rye and potatoes are looking well. Insects very injurious to garden truck. Apples and pears half crops. No peaches this year. N. F.

Rhode Island.

WARREN, Bristol Co.—Corn, about the same area as last year; condition about the same; wheat, very little planted in this section; oats, are looking well, and bid fair to be a good crop; limited area of rye planted, looking first-rate; about the same area has been planted to potatoes, they have not sprouted well. Whole fields have been plowed up, thus reducing the area planted. Potato bugs out in full force. Apples bid fair for a good crop; yellows and cold winters or rather extremes of temperature have destroyed so many peach trees, that the peach is not a profitable crop. Strawberries an abundant crop. Early cabbage very much injured by maggot and cut worm. J. B.

Connecticut.

BRISTOL, Hartford Co.—Corn, rye and oats look well—rather better than usual—but the grain crops of this State do not affect the market much, for there is no farmer raises any to sell, and most farmers have to buy. Buckwheat, one-third more than last year; hay, a quarter more. The potato crop will be much larger than last year. Not much tobacco raised along the Connecticut Valley. There is not so much set out as last year, owing to the low prices. Apples will not be any more than a quarter of last year's crop. Peaches, none. Garden truck looks well; only enough raised for home market. C. D. P.

SAUGATUCK, Fairfield Co.—All winter grain good; oats and potatoes very good; grass large; corn rather backward; fruit moderate; onions good. G. C. B.

TERRYVILLE, Litchfield Co.—Corn not quite up to the average; did not come up well. Wheat, none raised about here. Oats, rye, potatoes and most garden truck, above average. Apples, not up to average: the trees overbore last year. Pears not up to average. Peaches, better than last year, but not very promising for a big crop. Plums, up to average. Grapes and hay above the average. C. W. C.

WEST HAVEN, New Haven Co.—Corn backward, but improving fast for the last week. Wheat, very little raised, but looking well. Rye, a full acreage and forward. Oats and barley promising. Potatoes better than an average. Grass better than for years. Garden truck doing well. Apples not set, except Baldwins, and those orchards attacked by canker-worms. Season thus far moist and rather cool. L. A. B.

MIDDLE STATES.

New York.

AUBURN, Sullivan Co.—Wheat, oats, rye and barley are looking fine—too well, if anything, as there is danger that they will lodge before time for cutting. Corn is generally backward, owing to the fact that a large share of the farmers have been compelled to plant a second time. Potatoes and garden truck looking well, and are very early. Hay light—weather too dry. Peaches, plums, cherries and apples have forsaken us this year. Crops are two weeks farther advanced now than at the same time last year. D. P. H.

BORODINO, Onondaga Co.—All crops are in advance of last season, except corn, which is not as good as in ordinary seasons, mainly owing to the seed failing to grow on account of coldness of soil. Many farmers are planting beans to fill up the row. Winter wheat is much better than last year, while oats and barley are fully better than an average. Potatoes are looking fine; strawberries are in excess, so that 6 to 7 cents per quart is the ruling price, instead of 10 cents as in former years; pears, apples and plums are set sparingly, although the bloom gave promise of an abundant crop; meadows are rather light as a whole, and haying will begin 10 days earlier than usual. Grape-vines which were not laid down were badly winter-killed, but those who

cared for their vines have promise of plenty of fruit. Fullers' teasel is raised quite extensively here,and rarely ever looked more promising than now. From 60 cents to $2 per thousand are the outside prices paid for them, while from 75,000 to 200,000 from an acre give an idea of the yield. G. M. D.

CANAJOHARIE, Montgomery Co.—Prospects not as good as last year for average crops. Too dry. A rain has now set in which may relieve us somewhat. Hay, 75; corn, backward; wheat, where not winter-killed, average. Many pieces nearly all killed. Oats, where sown early, bid fair to give a full crop. Rye, an average. Barley none. Early potatoes have suffered from drought. Orchard fruits, 50. Hops looking poorly. Cows are doing well; the flow of milk is equal to last year's. T. O. W.

CANASERAGA, Albany Co.—As compared with last year, spring and winter wheat about 80; corn, as good; oats, about two-thirds; barley, about two-thirds; potatoes, about the same; apples, good for the "off year;" hay, about one-half to two-thirds. It is very dry here, and unless we get rain soon spring crops will not be as good as reported. Wool, 25 to 30 cents. F. M.

CATON, Steuben Co.—Corn, oats,rye and barley about the same. Wheat and potatoes off one-third. Apples not one-half crop; other fruits an average. Grass poor. J. M.

CHATHAM, Columbia Co.—Early in Spring prospects for all crops were excellent, but lack of rain is making bad results. A good average crop of hay, but by no means a full crop. Oats are turning yellow from dry weather, but they will probably be a fair crop. Corn doing well. No wheat or barley of any consequence raised; potatoes doing well; apples will be light. For other fruits a fair prospect. Cherries are terribly troubled with the black aphis. All insects are numerous, owing to the favorable weather in April for their development. No frost to kill eggs or insects. General outlook favorable for the farmer, but much will depend on early rains. J. W. D.

CLINTON, Oneida Co.—Corn is slow; stands even; has good look; needed rain just falling; wheat in excellent condition; potatoes, good; but hardly so good as last year. Apples blossomed rapidly; but a check in bloom, and young growth started a perfect plague of lice. For pears this is the "off" year, but they will be in good supply; grapes are very fine; sorghum is not so much grown; hops so far are moderately good; cherries and plums very full. E. P. P.

CLYDE, Wayne Co.—Hay will average as good as last year; old meadows are complained of as short; low meadows were injured somewhat by water; corn is promising a little better than last year; much of it is late, however; low lands could not be planted till the last of May; oats and barley promise to be as good, if not better, than last year; wheat, good, and will be better than last year; no Hessian fly or midge to speak of; potatoes equal to last year's; apples bloomed to the utmost—the bearing year—two weeks or more earlier than last year; the blossoms fertilized perfectly, for the trees averaged five apples to the twig, when the size of large peas; since they have fallen off at a tremendous rate until we haven't one apple to five twigs; the complaint is general. The crop will be as short as that of 1882. Grapes, 100; berries, 100; hops, 60; pepperment, 90. W. X.

EAST HAMLIN, Monroe Co.—Corn poor, owing to poor seed it did not come out well. Wheat looks well. Oats are an average; barley the same. No apples, pears or peaches to any amount. Apple orchards were full of blossoms, but the fruit all dropped. H. M. G.

FRANKLIN, Delaware Co.—Ours is not a corn section strictly speaking, but about the usual area is planted and is looking fairly well and with favorable weather, from now out there may be an average crop, though we have had many cold nights so far. Oats about the usual acreage and until the past two or three weeks, they did finely; but the weather is now getting very dry, and if it continues will greatly shorten the crop. Wheat, rye and barley are little grown, hay, our main crop, on the low lands along the streams will be much better than last year, while on the hills many old meadows were badly winter-killed and will be very light. Potatoes promise an average yield, but they greatly need rain just now. Apples will be a full average crop—following the largest crop last year ever known in Delaware County. E. J. B.

FULTON, Oswego Co.—Corn backward; wheat rather poor; oats, rye, barley and potatoes about an average; apple and pear prospects good; hay poor; tobacco not as many acres as usual. E. H.

GENEVA, Ontario Co.—Corn, backward; many fields had to be replanted; wheat, fine condition, 100; oats, fair, but being injured by drought; rye, first-class crop; barley and potatoes, backward, because of dry weather. We have been having a severe attack of this. C. S. P.

GREENWICH, Washington Co.—Corn acreage about as last year; oats look fine; acreage about as last year; rye fair crop; potatoes doing well; acreage planted about as in 1885; garden truck never better; apples plentiful prospect; other orchard fruit, fair crops; hay, old meadows light; new seeded and clover, good crop; small acreage of flax sown, looking well. J. G. S.

HARTWICK, Oswego Co.—The only field crop that looks as well as last year at this time is the oat crop; apples, pears, plums and all other fruits are looking about the same. H. O. B.

HIMROD'S, Yates Co.—Wheat good crop and fair average with last year. Oats looking well. Rye is filling well. Barley never looked better. Potatoes and garden truck good. Apples, peaches, pears and other orchard fruits abundant. Grapes good. Clover heavy; hay grass light. Corn good. G. A. B.

KINGSTON, Dutchess Co.—Corn promising, planting was somewhat delayed by wet weather. Wheat and rye wintered well; acreage not large; crops fair; oats average, equals 85; no barley grown here; potatoes look well; bugs less troublesome than usual; full crop now indicated; growth in advance of last year this time; garden truck in general also maturing rapidly; apples, heavy crop now indicated, by far too heavy; pears below the average; plums loaded; curculio very active, black-knot destroying every twig; peaches, very light yield promised; grapes, loaded beyond precedent; all small fruits abundant; large hay crop almost matured. H. H.

MARLBOROUGH, Ulster Co.—Grain up to the average. Grass half a crop. Potatoes and garden truck average. Apples better. Peaches 25. Grapes average. J. G.

PHELPS, Ontario Co.—Corn is one-fourth less than last year; wheat a little better; oats five to ten bushels per acre; barley hardly as good; potatoes are looking fair; apples and pears less; peaches, none; trees drying; the dry weather has damaged hay one-eighth; hops are hurt by the same cause. H. P.

RHINEBECK, Dutchess Co.—Corn backward; will need warmer weather for a full crop. Wheat a good average. Rye good in both grain and straw. Potatoes a full growth of vines; outlook good. Of apples next to none. Pears and cherries a fair average. Plum trees and grape vines heavily loaded. Raspberries and currants, enormous crops. Hay a fair average; much better than last year. J. L. V. W.

ROCHESTER, Monroe Co.—Wheat promises a full average yield, but the acreage is not as high as in former years. Corn has largely failed to sprout. Many farmers have replanted, but the corn crop is greatly retarded in consequence and the outlook is discouraging. Potatoes promise fair. Oats are but little sown, barley largely taking their place. Barley is looking fairly well, but is suffering somewhat from dry weather. The hay crop promised well early in the season, but expectations have not been realized; the latter weeks have been too dry. Beans have met with the same fate as corn. Outlook not encouraging. Apples seem to be an entire failure. Altogether the farmers in this vicinity are not very much encouraged with the outlook, considering the low prices that are ruling. C. A. G.

SOUTH CAMERON, Steuben Co.—We had an unusually early Spring and every indication of good crops, but the outlook is not so good. We did not have any rain for four weeks and four days, until last week, Wednesday, when we had a good shower of about 30 minutes' duration, but the ground is as dry as ever. Winter wheat, excellent; hay, about half a crop; early sown oats and barley fair; large acreage of buckwheat; many meadows turned over and sown to this grain. Good milch cows sell for $30. Seed buckwheat 60 cents per bushel. J. W. W.

Pennsylvania.

ANTHENS, Bradford Co.—The average present condition and future outlook for the following crops in this section, as compared with the condition and outlook at the same date last year, are 25 per cent better:—corn, wheat, oats, rye, potatoes and garden truck, apples, pears, peaches, and other orchard fruits, grapes, tobacco, etc. Hay is only 75 per cent of last year's crop. T. B.

AVONDALE, Chester Co.—Corn, three weeks behind; wheat, better; oats, very good; potatoes, very good. The apple crop will be a heavy one here if prospect holds good; grass, very good. J. H. T.

BEECHTREE, Jefferson Co.—Wheat a fair average crop as compared with last year's. Grass not so good. Corn more forward than at this time last year; oats and potatoes promise good crops. Apples are good. G. B.

FAIRVIEW, Erie Co.—It was extremely dry here since Spring opened, until the 17th, when we got a good rain, which has greatly revived things and future prospects. As compared with last year, corn is 100; wheat, 125; oats, 85; rye, 90, but increase in area; barley, 85; potatoes, 80; hay, 75; garden truck, 80; apples, 125; pears, 50; peaches, none last year, but some this and plenty near the lake; plums, trees overloaded this year, none last year; cherries, 125; grapes, 75. T. M. R.

GLENBURN, Lackawanna Co.—Oats, rye, wheat look better. Potatoes and corn backward; planted late. Fruit will not be an average crop; last year was the bearing year for most orchards. Onions, tomatoes and garden truck look well. The hay crop will be light; the cut will not exceed that of last year. H. N.

GRANVILLE, Mifflin Co.—Spring opened at least two weeks earlier than last year, and everything has come on rapidly. Prospects excellent for a good crop of corn. Wheat and rye badly winter-killed in some fields; but the average will be considerable above that of last year. Oats look well. A large crop of early potatoes, strawberries, cherries, peas, beans and all kinds of early garden truck. Peaches few, the trees failing to blossom. Apple and plum trees well loaded; pears not so good. Grapes, raspberries and huckleberries very promising. Farmers have commenced to make hay; the crop will be double that of last year. H. M. R.

HARRISBURG, Dauphin Co.—Wheat, in the section inclosed by a line drawn south from Harrisburg to the Maryland, and another east from Harrisburg to the Delaware River, will probably give a crop considerably above the average; but the average in the whole State will be reduced by the diminished yield of some of the interior and northern counties, notably that of Center, where the absence of snow during windy weather last Winter and Spring and the the ravages of the fly in Spring, have reduced the crop far below the average. The area of the crop is estimated at about 1,550,000 acres, and the possible yield at 19,750,000 bushels. Corn, condition varies greatly in different portions of the State; not only in adjoining counties but also upon adjoining farms; that which was planted in the eastern part of the State, early, is in fair condition, but late planted fields are looking bad and will, at best, yield but a partial crop; much replanting was necessary, and whole fields were replowed and planted the second time; much of the crop looks yellow, but with a continuation of the present favorable weather, will soon recover much of the lost ground. Area planted estimated at 1,200,000 acres. The cool damp weather has promoted the growth of oats, which stand thickly; probable acreage 1,100,000; prospects fully up to an average. Potato crop is fully up to the average of the past 10 years; in many localities the Colorado Beetle has done more damage than during the past two or three years, but the liberal application of Paris-green has prevented much loss from this cause; a slight increase of acreage over the average of the past 10 years, and a probable decrease as compared with that of last year; low prices and a wet Spring have combined to discourage the extensive planting of this crop. Hay, in most of the eastern and southeastern counties, will be a very large crop, but in many of the northern and western counties it will be below our average for the past 10 years; estimated cut 2,500,000 acres. Yield probably not far from 3,000,000 tons. Apples will be above the average. Small fruits are and will be unusually abundant in the eastern and central counties, and the falling off in the western part of the State will be more than balanced by the production in the east. An unusual crop of plums; most of the trees are too full to produce the best quality of fruit, and some of our best growers have removed a portion of the crop so that the remainder may be properly filled up. T. J. E.

INDUSTRY, Beaver Co.—Crops have all suffered from drought, especially the grass—clover is good but Timothy very light and full of "white tops" in many fields. Corn is very small yet—cut-worms were worse than for many years past. Wheat, a fair crop—some now ripe. Oats look bad, but may yet be a fair crop. The apple crop will be light and pears very scarce. Peaches, a good yield, but few grown here. E. E.

LACYVILLE, Wyoming Co.—Wheat and rye full average crops. Oats good. Corn fair. Hay light—two-thirds of crop. Peaches a failure—trees winter-killed. Apples light. J. R.

MILLER'S STATION, Crawford Co.—Wheat good, oats good, corn rather backward. Potatoes looking well. Apples a fair crop. Hay from half to two-thirds crop. J. B. B.

OXFORD, Chester Co.—Corn, early planted, looking well, later planting (fully two-thirds owing to wet weather) did not come up well, some having to plant a second time; will require late Fall to mature. Wheat, straw large and the crop will be above the average. In some localities, many of the heads have been cut off by worms. Oats looking very well; heading now; will be fully up to last year's if not injured by storms; potatoes looking well; hay, clover, very good; Timothy very light; apples, above the average; pears, will be short; peaches, good; little or no tobacco planted this Spring. Crop has not been paying. J. H.

SHARPSVILLE, Berks Co.—Corn, 100; wheat, 90; oats, 80; potatoes and garden truck, 100; apples and pears, 90; peaches and grapes, 50; hay, 70; small fruits, 100. G. B.

SUGAR GROVE, Warren Co.—As compared with last year, corn is 110; wheat, 90, nearly all winter wheat; oats, 105; rye, 95; barley, 100; potatoes, 105; gardens and apples, 100; pears, 105; peaches, none, and none last year; plums, 150; grapes, 90; hay, 80. F. R. M.

TYRONE, Blair Co.—In this and Centra County the severe cold of last Winter, which occurred when the snow had been taken off by a thaw, damaged wheat seriously. The Spring was favorable, no frost after April 1, except on April 5 and 9, and then only 32 degrees. Abundant rains in May and June,and much cloudy weather. This has been unfavorable for corn, and has rotted strawberries, which have also suffered by the Winter, as had the wheat plants. But it makes a heavy grass crop and fine promise of oats, potatoes and other garden crops and small fruits. Cherries unusually plentiful. Apples promise well, although the "off" year; so do grapes; pears, a small crop. W. G. W.

UTAH, Indiana Co.—Crops compared with last year at this time, are about as follows in West-Central Pennsylvania: Corn, 105; wheat, 105; oats, 100; rye, 100; potatoes, 100; garden truck, 100; apples, 75; peaches, an entire failure both years; cherries, 200; grapes, 100; hay, 75. J. L. M.

New Jersey.

BLAIRSTOWN, Warren Co.—Wheat better than for several years. Oats good. Rye heavy crop. Corn not a very good stand. M. H. C.

BRIDGETON, Cumberland Co.—Corn, good take; waiting for hot weather; wheat, soon ready for harvest and a good crop; oats, never a better promise for a good crop—we are too far south for oats, the heat of June generally shortens the product.—[Oats are grown to the Gulf.—Eds.] Rye, good, not much grown; potatoes and garden truck, never better; apples, pears, and peaches, good show for fair crops. All crops grown in this section give promise of good returns. C. E. E.

CEDARVILLE, Cumberland Co.—Corn is small for the time of year; wheat above an average; oats, good—not many sowed; rye, straw large; garden truck, uncommonly good; apples good; peaches not so good as last year; early potatoes very good; sweet potatoes very small for time of year. S. S.

ELMER, Salem Co.—Corn a little backward, owing to wet weather. Wheat looking well. Grass, a heavy crop where a stand was got last season. Oats and rye both good. Potatoes, rather larger acreage planted this season than last. Early ones a good crop assured. Garden truck abundant, owing to continuous rains of May and June. Apples promising; pears good; peaches none of any extent in bearing in this locality. Fruits slightly damaged by hail. R. W. S.

FRANKLIN, Ossett Co.—Corn, rather backward, owing to very wet weather; rye, good—the late rain put some of it down; potatoes rather uneven; some look very good, but a good many did not come up well. One man planted some whole potatoes to fill out and they have come up and look decidedly better; garden truck looks well; lots of apples bloom, but I have seen more apples. W. V.

HANOVER, Morris Co.—Corn, backward; wheat, better; oats, promising; rye, the same; barley, none raised; potatoes, poor, crop will be a partial failure. Garden truck good; hay, 150. F. J. R.

MARLBORO, Monmouth Co.—The Rural corn bids fair to be a good crop. Wheat, rye and oats will be about an average; hay will be at least a quarter heavier than last year; peaches, scarcely half a crop; apples, about an average; potatoes promise well, except the late-planted which don't come up well, so that much replanting had to be done. P. W.

NAUGHRIGHTVILLE, Morris Co.—Corn came up badly; was planted even, and looks generally backward and uneven. Oats promise a fair crop; wheat and rye, good; potatoes and

garden truck about an average, but the potato bugs are worse than ever before. The hay crop will be the best for several years. Apples, cherries, peaches, pears, and grapes are all good here, but in many places, in this and adjoining counties, the fruit has fallen off to a large extent. J. S. C.

PATERSON, Passaic Co.—Weather too cool for many crops. Wheat, rye and oats are all very good. Hay promises better than for the last five years. Potatoes and garden truck doing well. S. M. J.

Delaware.

DOVER, Kent Co.—May was wet and mostly cool, yet vegetation has grown right along. Corn is being worked the second and third times. Wheat, a fair crop. Black-caps and blackberries look promising. Peaches are dropping very badly—more on the ground than on the trees. Other fruits in abundance. S. T. S.

GREENSPRING, Newcastle Co.—Corn not looking as well as last year; wheat about 15 per cent. better. Rye and barley are not grown here to any extent. Potatoes and garden truck about the same as last year. Apples are more plentiful. Pears not so good. Peaches about half as good as last year in some sections, and in others all killed by the freezing weather in February. Grapes about the same as last year. Hay is at least 50 per cent. better. Oats about the same. J. J. W.

HOCKESSIN, Newcastle Co.—Corn, acreage 75; condition 80; wheat, condition 100; oats, condition 90; potatoes, acreage 80; condition 60; apples, 85; pears, 50; grapes, 95; hay, 105. These are the principal crops raised in my section. I have used 100 to represent an average. T. L. I. B.

MCDONOUGH, Newcastle Co.—The wheat crop better than last year. Grass is heavy, but wet weather has interfered somewhat with haying. Corn is looking well. Good season for oats, but not a large amount sown. P. W. A.

MILTON, Sussex Co.—Nothing has suffered for lack of rain. Corn, area, 100; condition 95; wheat, area, 100; condition, 100; oats, area, 80; condition, 100; potatoes, area, 90; condition, 100; garden truck, area, 90; condition, 100; apples, condition, 95; no peaches in this vicinity. What few there are in the country are near salt water. D. E. W.

SMYRNA, Kent Co.—Corn, backward; wheat, a trifle better than last year; hay full crop, but no weather for making; grapes, full. Apples and pears light; peaches, quarter to half a crop. W. P. C.

Maryland.

ALLEN, Wicomico Co.—The average present condition of the following crops as compared with last year at the corresponding time is: corn, 50; wheat, 125; oats, 300; rye, 125; potatoes, 150; apples, 75; pears, 75; peaches, 75; grapes, 150; hay, 300. O. P. J.

CALVERT, Cecil Co.—Corn very late, but looking well, with a favorable season will come up to last year's crop. Wheat never looked better at this time; 15 per cent. better than last year. Rye and barley not much raised. Potatoes and garden truck come up to last year's. Apples, pears, peaches, hay, clover better, and Timothy not so good. J. M. H.

CATONSVILLE, Baltimore Co.—Wheat and oats better than last year. Rye a full average; corn, uncertain. We have had many rains since May 1, which have hindered working ground before and after planting. Potato prospects good. Apples, probably a full crop. Pears a good crop; peaches fair. Hay full average, but full of weeds. Garden truck pretty good. Weather has been and is very cool and cloudy. A. L. C.

CHESAPEAKE CITY, Cecil Co.—Wheat a full average crop; oats, but few sown; prospects good. Corn late, but looking well. Have had continuous showers for a month past. Grass crops, clover and Timothy, heavy where the catch was good. Peaches (acreage much reduced from a few years since), prospects good for full crop on what remains. Cherries and all small fruits, prospects good. Early potatoes, prospects good for full crop. Apples and pears very light crops. T. B. H.

DENTON, Caroline Co.—Corn, quite as good as last year. Wheat better, heads larger; looks fine. Never saw oats so good. Rye fully equal to last season's. Potatoes and garden vegetables better. Apples and pears not as heavy a crop as last season. Peaches not half a crop here, and the "June drop" has begun. An abundance of grass and clover, but no hay weather; too much rain. Grapes promise well now; but then, the rot. J. W. K.

EASTON, Tabot Co.—There has been much wet weather. Pasture good as compared with last year. Corn about 100; wheat (now being harvested) 100; oats, 125; potatoes and other small truck 100; apples and pears, 80; peaches, 100; grapes, 100; hay 150; (unusually fine growth of Timothy) most farm products promise bountiful yields—Prospective prices very low. T.

FREDERICK, Frederick Co.—Corn not quite so good as last year, owing to so much being planted late. Wheat nearly double, except where injured by fly. Oats, a full crop; rye, not so good. What little barley there is will make a full average crop. Potatoes a full crop. Garden truck much better than last year. Hay more than double the crop of last year. Apples a fair crop. Pears half a crop. Peaches and grapes very abundant. Small fruits promise an abundance. D. G.

NOTTINGHAM, Prince George Co.—Wheat above average of 1885. Corn generally good, but a deal below last year at this time, owing to late planting. Oats and rye above average; potatoes and garden truck ditto. Apples fair crop. Pears scarce. Peaches fair to good. Hay generally above an average. Tobacco, the main crop of this section, generally later than last year, although those few whose stand was not injured by fly are ahead, and their crops looking fine. W. W. W.

SALISBURY, Wicomico Co.—Wheat promises well; oats unusually good; rye very good; potatoes very good; peach prospect good. S. A.

SOUTHERN STATES.

Virginia.

BERKELEY SPRINGS, Morgan Co.—The corn crop promises better this year than last. The wheat crop will be from 50 to 60 per cent. larger. There will be large crops of oats and rye; potatoes promise to be good. The fruit crop will be exceptionally good, consisting of apples, pears and peaches. This county contains many orchards that are beginning to bear well, but it cannot as yet be classed as a large fruit-growing county. E. VAN R.

CLAREMONT, Surrey Co.—Outlook good for a very abundant fruit crop, including all kinds that are grown in this climate. The season favorable for all kinds of crops, particularly small grain and grass. E. D. A.

CLEEKS MILLS, Bath Co.—Wheat promises full average crop—far ahead of last year—average acreage. Rye about an average of other years. Oats more sowed than usual, not quite so promising as last year. Corn, much late-planted; weather too wet to work it enough; too little sunshine. Grass, our principal crop, above an average. Potatoes look fine. Apple crop must be light, many trees not having bloomed. Best fleeces brought 20 cents per pound. W. R. G.

DALEVILLE, Botetourt Co.—As compared with crops last year at the same date, the average wheat acreage is 25 per cent. more; average yield 30 per cent. more; corn area 10 per cent. less; yield 30 per cent. less; oats 25 per cent. more; yield 10 per cent. less; potatoes acreage the same; yield 10 per cent. more; garden truck area unchanged; yield 5 per cent. better; apples 10 per cent. less; peaches 5 per cent. less; tobacco area 15 per cent. less; condition the same; hay area 5 per cent. more; yield 5 per cent. less. D. C. B.

FREDERICKSBURG, Spottsylvania Co.—Wheat area about same as last year, condition 10 per cent. better; corn area small, due to wet weather at time of planting. If season continues good, crops will be better than last year. Oats, average area planted; best prospect for years; rye increased acreage; 10 per cent. better; potatoes and garden truck better than last year; orchard fruits prospect not good; grapes will be good unless the season should be too wet; hay, best for years if we can get sun enough to cure it; tobacco, an average crop will be planted. C. B. M.

GAINES' CROSS ROADS, Rappahannock Co.—We are just in the middle of wheat harvest; it is 90 per cent. better than last year. Corn, 25 per cent. better than last year; oats and rye 25 per cent. better; hay, 90 per cent. better; apples, 20 per cent. less than last year; garden truck, 10 per cent. better. C. B. W.

LEE, Goochland Co.—Owing to an almost unprecedentedly wet Spring, crops are all backward. All river-bottom crops seriously hurt, if not entirely destroyed by various floods in April. All corn on such lands had to be replanted; corn planting not yet done. Wheat earlier in the season promised a fair crop, but owing to ravages of the chinch bug it will be curtailed one-third. Upland grass exceptionally fine. No Timothy or clover on bottom land. Grapes alone of fruits promising well. Tobacco planting late, though, doubtless, a larger area than last year will be planted. On the whole, the outlook is exceedingly gloomy for farmers in this section. J. R. A., JR.

LOVELY MOUNT, Montgomery Co.—Crops of all kinds much better now than last year. Harvest will be 10 days to two weeks earlier. Wheat a fair stand and good heads, though some danger of rust owing to the continued rains for the past five weeks almost daily. Oats better than for five years past—heavy yield expected, though small acreage sown. Corn, large acreage planted—far advanced, though, owing to rain, not very clean. Clover abundant, damaged by lodging. Timothy bids fair to be very heavy. Apples good, in spots. Peaches, none. Potatoes, on small acreage, look well. Grapes more abundant than for years. Scarcely any rye. No barley. Pear trees full. Spring-sown grass a fine stand Everything too abundant for the farmers; prices very low. G. E.

MONTEITHVILLE, Stafford Co.—Corn, poor; wheat, 105; oats, very good; rye, 100; no barley; potatoes and garden truck inferior; apples, pears, peaches and other orchard fruits less than last year's crop; hay uncommonly good; tobacco promises well. J. O. L.

NORFOLK, Norfolk Co.—Garden truck, large crop, but low prices; potatoes nearly all sold; apples and pears very light; few peaches; corn about an average; what grass is grown is good; but little is raised; grapes, an average. E. E. B.

PEAKSVILLE, Bedford Co.—The condition of corn, compared with last year's crop, is about 80; wheat, 200; rye, potatoes and peaches about 100; apples, 85 or 90. Clover hay is plentiful, but the quality is injured by continued wet weather; none cut as yet and now two weeks behind. There will be very little choice Timothy hay this season, but a fair crop of second-class. Tobacco 20 per cent. less area, but condition far better; 90 per cent. of whole crop planted and living well. R. K.

WYTHEVILLE, Wythe Co.—Wheat is looking well and now being cut. On account of wet weather it may be a little damaged by rust. Last year not half a crop; ditto in 1884. Oats promise a good crop. Corn rather late, but looks well. Rye looks promising; two-thirds crop in 1885. Potatoes, promising with good season. Apples will be plentiful; large yield for 1885. Peaches, a fair yield; scarce in 1885. Grapes, promising; hay, a fair crop. Corn late on account of first planting being much destroyed by cut-worms. A good deal of grain destroyed by a severe hail-storm about May 15. W. H. R.

West Virginia.

CHARLESTON, Kerswha Co.—Corn, wheat, oats, potatoes, apples, pears, grapes, hay and tobacco—our principal crop—are all good. T. P.

KEYSER, Mineral Co.—Wheat is much better than for several years. Oats, very good; rye, very good; also potatoes, garden truck and fruits of all kinds. Hay only an average crop. R. M. W.

LITTLE FALLS, Monangalia Co.—Last year wheat was an entire failure, this year we will have far more than an average crop. Oats better than last year. Corn will be from one-quarter to one-third more than last year. Fruit will be also ahead. Berries and cherries in quantity. Potatoes and garden truck finer prospects by one-half at least. Grass one-third to one-quarter better than last year. J. M. J.

WEST, Wetzel Co.—Wheat more than double the crop of last year; area about the same. Corn good. Oats and grass look well, with a large acreage. Potatoes good. Tobacco nearly planted, with a large acreage. Barley, rye and root crops not much grown here. Garden truck good. J. H.

WELLSBURG, Brook Co.—Corn, average amount in ground, backward for time of year. Wheat, prospects better than for several years. Oats short and sowed; conditions favorable for the crop. Potatoes fine; prospect for a good crop. Garden truck, an abundant crop in prospect. Local hail-storms have done much damage to tender plants. Apples, short set of fruit, although a good bloom. Meadows very light and full of foreign growth. Rainfall in abundance. J. D. S.

North Carolina.

DOVER, Kent Co.—Corn looks well. Wheat excellent, much better than last year. Oats good. Rye excellent, but little raised. Barley none raised. Early potatoes excellent. Garden truck generally very good. Apples and pears abundant. Peaches, some orchards full, some but a few. Small fruits abundant. Grapes, prospect good. Grass excellent, better than last year. Tobacco, sorghum, hops, broom-corn, etc., none raised in this section. R. D. D.

HIGHLANDS, Macon Co,—Corn backward; fully a month later than an average on account of continued rains. Wheat good; harvesting begun, and crop fully up to average, and 100 per cent. better than last year. Oats and rye looking well and promising full crops. Potatoes better than last year—a full crop. Apples good; peaches none, buds all killed by cold spell in the Winter; grapes excellent; hay the largest crop ever known; clover exceedingly good; tobacco, the yellow-leaf variety being a staple crop in this region, is looking well, but is late and may suffer from an early frost. We have had the wettest season on record. rain every day for a month up to yesterday. H. S.

MOORESVILLE, Marshall Co.—We have had so much rain that crops are in bad condition. Cotton (our main crop) is backward and not a good stand; corn needs work but looks fine; oats, very fine: wheat, not better than last year; fruits of all kinds abundant, but droping and rotting badly; hay, especially clover, fine; but too much rain to save hay. S. A. L.

NEW BERNE, Craven Co.—Corn, 20 per cent. better; oats, better; potatoes and truck, short; fruit, not good. Cotton looks well, though some is dying. We are having too much rain. J. H.

RALEIGH, Wake Co.—The season has been excellent, and at present the crop prospect for the following must be at least 25 per cent. better than last year at this season. Corn, wheat, oats, rye, garden truck, apples, pears, peaches, hay, tobacco and cotton. The season has just suited cotton, and this crop was never better. If not subject to drought later in the season, crops will be better than in 10 years. J. N.

WOODSDALE, Person Co.—Corn, average better; wheat, three-quarters; oats, over an average; rye, barley, potatoes and garden truck, good. Apples, peaches and pears, an average. T. T. H.

South Carolina.

BLENHEIM, Marlborough Co.—The crops are an average acreage with the exception of hay; corn is very small yet, but promises well; wheat looks much better than expected in the Spring, will average about 20 bushels to the acre, throughout the section; oats look well, will be an average crop; potatoes good; apples an average crop; peaches and pears about an average; hay is light—three-fourths to one ton per acre. J. S.

Georgia.

AMERICUS.—Sumter Co. Not more than half an average crop of oats made. Corn shows average. Cotton not over three-fourths average, and very grassy. Irish potatoes, finest for years. Garden truck the same. Prospects for sweet potatoes very fine. The peach crop, I think will not equal early expectations, as at least half have either rotted on the trees or fallen off. H. W. S.

ATLANTA, Fulton Co.—Corn, 110; wheat, 40; oats, 85; potatoes and garden truck, 120; apples, 50; pears, 100; peaches late, 75; peaches early, 40; hay, 125; cotton, 75. W. C. A.

CAVE SPRINGS, Bibb Co.—Wheat with us is now ripe. Same area sown as last season. Grain poor; but with little over third of a crop. Oats usual area, full crop; heavy grain—the best in years. This crop not so good in middle and lower portion of the State; corn promising, but two weeks late. Cotton-plant healthy and vigorous, but small—two to three weeks late—Potatoes fine and large, but owing to continued rains, are rotting; sorghum good. Garden truck fully up to the average. Light crops of both pears and apples. A fine crop of grapes, but inclined to rot. Summing up the crop, we would put it down as fully up to last seasons, with the exception of wheat, 30.

GRIFFIN, Spalding Co.—Corn fully equal to last year's; wheat, a failure; oats, one-half crop; peaches, 60; apples badly injured by cold and insects. Grapes never had finer prospects, except that successive rains have brought on rot. Continued wet weather will destroy late cotton, but fine promise. Floods of rain S. W. M.

HARMONY GROVE, Jackson Co.—Corn 10 per cent. better than last year, area about the same; wheat, half a crop; oats and potatoes about the same; garden truck better. Outlook for apples, pears, peaches and other orchard fruits good. Sorghum a little better. Cotton, our main crop, is about 10 per cent. off, owing to cold rains. G. W. O'K.

Louisiana.

COTTONVILLE, East Baton Rouge.—Oats a poor crop. Corn looking fine, and a heavy crop assured. Cane doing well. Potatoes yielded poorly. Cotton is suffering from a three weeks' rain, and is badly in the grass and scalded out. All our crops are from two to three weeks late. R. G. B.

MONROE, Ouachita Co.—Corn good. Wheat, rye, barley, none. Few potatoes; these much inferior to last year. Fruit crop poor. Cotton 80. G.

Florida.

BOARDMAN, Marion Co.—The January freeze killed all the young lemon wood in this section, so there will be no fruit this season. The orange groves around Orange Lake will have perhaps two-thirds of crop, but away from the lake the crop is very small so that altogether there will be, say, one-half a crop. Oat crop very good, and corn also, and double the area of last year—will make nearly a supply. Vegetables plenty, but prices too low for profit.
F. G. S.

GREEN COVE SPRINGS, Clay Co.—The frost last Winter ruined most garden vegetables—melons are a month behind, only just commencing to ripen. There are but few peach trees set out yet besides native seedlings—such as Amsden, Alexander and Beatrice commencing to ripen the last of May and first of June. The orange trees were badly hurt with frost last January, and there will be no more than one-third to one-half a crop. Oats were good and cut first of June: corn is being hurt by drought. Rice looks well, cotton late and not much planted—we grow Sea Island altogether. Fruit trees of all kinds except the citrus are looking well and growing finely. J. M. M.

LAKE COMO, Putnam Co.—Oranges promise about a fourth of a crop. No lemons, or limes. Pecn-to and Honey Peaches good. Potatoes are just being set out. Garden truck poor. Watermelons a success.
R. W. G.

Alabama.

ATHENS, Limestone Co.—Crops are better than last year at this time, except cotton, there having been too much cool rains for it so far; but drier weather and a hot sun would bring it all right. Corn looks fine and is tasseling out. Oats are better than usual. Wheat is thin on the ground, owing to the hard freezes last Winter: but the berry is good, there being but little rust or other blights. Rye and barley not much grown. The average acreage of the above is more than last year. Almost every farmer has his small patch of sorghum, and it looks fine. Apples are an average crop. Peaches about one-half crop. Small fruits a fair average. Clover and hay crops are better than usual, the wet weather being in their favor. But few farmers grow them here, corn is our principal crop, and its blades are a general hay substitute, Garden truck is fair and plentiful. New wheat is selling at 70 cents; new Irish potatoes at 50 cents per bushel. W. M.

BIRMINGHAM, Jefferson Co.—Crops much better than last year at this date. Corn one-third; oats double; rye better; barley double; spring wheat one-third; clover and Timothy double. All garden truck one-third to double; Irish potatoes one-third; sweet potatoes double; apples one-third better; peaches short. Tobacco, broom-corn and sorghum I should think double. Cotton poor, but may come out. Grapes, tame and wild, are one-third better. A. W. P.

SELMA, Dallas Co.—Owing to unusually heavy rainfalls and high waters in all our streams, the prospects for good crops are anything but flattering. Late planting followed by so much rain as to prevent cultivation, has seriously delayed work on our principal crops, cotton and corn. Oats are usually sown in the Fall; what were sown were killed by January freezes, and the spring crop was light. Hay crop was good but not large. Compared with last year, the prospects are not as good for our main crops, cotton and corn. The sweet potato crop will be good. No grain raised except oats. Garden truck and fruits not much raised, although they could with profit. H. P.

Mississippi.

WEST POINT, Clay Co.—Prospect not so good as 12 months ago, three weeks rain has put all crops in grass and weeds. Corn, prospect poor; no wheat. Oats, poor crop. No rye or barley. Potatoes good; garden truck fine; peaches good; apples and pears poor; grapes good; no tobacco or broom-corn; sorghum good. I think a gloomy out-look general.
H. H. H.

Texas.

DENNISON, Grayson Co.—Corn, much better—never finer; oats 30 per cent. of last year, cut short by May drought; rye, one-half of last year's; barley much reduced by drought; potatoes, 25 per cent. of last year's crop; garden vegetables, 25 per cent. of last year's crop; strawberries and blackberries, about one-half last year's crops; apples, average crop; grapes, one-half usual crop set, but above average, from absence of rot, owing to dry weather; hay, one-half usual growth; cotton, never was better; sorghum, very fine. Cattle in excellent condition. Though the grass is short, yet it is more nutritious than in wet seasons, and fattens better. On the whole, our prospects are rather above the average, providing we have two or three more good rains in this and next month—July. It is very uncommon to have drought here in May or June. T. C. M.

EAGLE LAKE, Colorado Co.—Corn and cotton better than last year. Oats very good. Garden truck good. No wheat, rye or any small grain raised. Very little fruit.
R. B. D.

HILLSBORO, Hill Co.—Wheat harvested and thrashing 80 to 90 per cent.; oats, 50 to 60; rye and barley, very small amount sown; potatoes, 40; garden truck, 80; peaches, 25; hay, 60 to 70; cotton, 140 to 150, and increased acreage about 20 to 40; corn, 100. H.

LAURENCE, Kaufman Co.—Oat crop harvested now, 65; wheat, 75; corn tasseling, 90; sorghum, 100; cotton, 130; grapes, 150; apples, 130; peaches, 100; hay, 60: broom-corn, 80.
J. H.

MIDLAND, Midland Co.—Small grain a total failure; corn, very doubtful; sheep especially have done badly, one-fourth less wool clipped. J. S. C.

SHERMAN, Grayson Co.—Corn is looking finer than last year, though suffering for rain. Wheat not so good, averaging only 10 bushels to the acre; froze out considerably last Winter and suffered for rain this Spring. Oats are nothing to compare with last year, when they made all the way from 25 to 125 bushels per acre. Barley fair; average 35 to 40 bushels per acre. Potatoes and garden truck scarce—the worst outlook since I have been in the State, 10 years. Orchard fruits were mostly killed by late frosts. There will be considerable tame grapes. We raise nothing but wild prairie grass for hay; it will also be short for lack of rain at the proper season. Cotton far ahead of last year; in this neighborhood the prospect is magnificent; not much planted. Stock low; cows with calves at their sides are as low as $16, and not over $25. J. H. M'G.

New Mexico.

ALBUQUERQUE, Bernalillo Co.—All kinds of small grains average crops; oats, corn and orchard fruits, peaches excepted, good; grapes, the largest crop for five years. We raise not enough for home consumption. We need more and better farmers here. J. B. H.

Arkansas.

ARKADELPHIA, Clark Co.—Corn never more promising. Cotton good, with healthy plant. Oats below an average. Wheat and other small grains are also short. Strawberries injured from drought; raspberries injured from same cause. Peaches and apples only about half crops. The grape prospect is finer than ever before. V. M'G.

FAYETVILLE, Washington Co.—No barley, broom corn, hops, cotton or tobacco are raised to any extent in this section. Fruit-raising is mostly limited to apples and peaches. Corn, 90 per cent.; wheat, 65; oats, 70; rye, 65; potatoes and garden truck, 90; hay, 60; sorghum, 90; apples, 60; grapes, 50. A very dry spell in May and first of June cut down the per centage of wheat, oats, rye and hay. The quality is good, fully 90 per cent. We need more Rurals here, but oh, how hard to get them!
W. M. C.

SILOAM SPRINGS, Benton Co.—Corn prospects never better; wheat an average crop; oats cut short by drought; potatoes and garden stuff cut short by the drought; apples, prospect good; peaches none—killed in bud; small fruits injured by drought; hay and grasses cut short by drought. J. T. B.

Kentucky.

GRISSON'S LANDING, Daviess Co.—Corn, tobacco, wheat and rye in good condition and promise a good harvest. Wheat nearly all cut. Oats are short in straw on account of dry weather. Early potatoes will be short. Apples about the same as last year. Peaches and pears a failure. Hay about two-thirds of crop; clover hay about the same as last year.
M. G.

OAKLAND STATION, Warren Co.—Corn half eaten down by cut-worms; second planting up well and growing finely; outlook good; area average; old corn plentiful at 40 cents per bushel. Wheat, over average in yield; some fields extra heavy; some few not worth cutting, hurt by "fly" and rust; all cutting done; but it will be injured in the shock if this rain continues; been raining for a week; farmers would cut between showers, and consequently it was put up damp. Oats heaviest for years; down considerable; won't be cut till July 1. Rye and barley none planted. Potatoes fine, and gardens extra good; fruit a failure. Tobacco all set; good stand, but grassy, owing to rain. L. M. S.

PEWEE VALLEY, Oldham Co.—Corn generally good and forward. Wheat best for years. Oats short, owing to drought. Rye good. Potatoes suffered much from drought—same as last year. Plenty of fruit except peaches. Hay will be a short crop. Grapes more promising than last year. This year a good deal like last year so far. J. G. K.

Tennessee.

HOME, Greene Co.—Corn, prospect poor, continued rains prevented working; yield 33 per cent. below last year's. Wheat harvested, yield 50 per cent. greater than last year. Oats good crop, 25 per cent. better than last year. Grass and clover, good; potatoes and garden truck good; peaches, none; apples abundant; berries plentiful; tobacco promises fair, with an increase of acreage over last year. L. P. S.

HUMBOLT, Gibson Co.—Future outlook for crops was never better, with very few exceptions. Corn not quite so good, but looks well, wheat, 150; potatoes, 100; tomatoes, 105; apples, 50; pear, 25; cotton, 150; hay, 110.
M. C. R.

MCMINNVILLE, Warren Co.—Apples are the principal source of revenue. The indications are favorable for a much smaller yield than last season. Cotton, sorghum, tobacco, hay and Irish potato prospects unusually good—much better than last season. The wheat and oats are better than a year ago and will be over average crops. W. H. F.

TULLAHOMA, Coffee Co.—Corn, oats and rye, 120; wheat, 150; potatoes, 100; apples, pears, peaches and other fruits, 25. C. L. N.

WAVERLY, Humphreys Co.—Corn prospect fair; some damaged by rain. Wheat and oats better than for several years. Peanuts, a poor outlook; many fields almost ruined by excessively wet weather, commencing last of May and lasting yet. Peach trees greatly damaged last Winter; did not even bloom. Apples, light crop. J. W. S.

WESTERN STATES.

Ohio.

ATWATER, Portage Co.—Very dry since April until June 16 when it began to rain, and it has rained two-thirds of the time since then, and is raining now. Corn, acreage, 100 per cent.; condition, 100; wheat, acreage, 100; condition, 50; oats, acreage, 100; condition, 100; potatoes, acreage, 100; condition, 100; gardens are in good condition and clean; apples and pears, good crops, except Baldwin apples, which did not blossom this year as they were full of fruit last; peach trees full; last year none; hay a good crop. R. W.

BUCYRUS, Crawford Co.—Corn, better; outlook good if sufficient rain. Wheat two-thirds crop; some fields good; others medium; others very thin on the ground. Oats not as good as last year; rye same as last year; barley about the same as last year; potatoes half a crop as compared with last year; apples large crop; pears, good; hay half a crop. The crop of hay has been cut short by lack of rain. S. N.

CADIZ, Harrison Co.—Compared with last year, corn is about the same; wheat, many times better: oats not so good; potatoes about the same; apples better; pears scarcer; peaches plenty—a failure in 1885; orchard fruits generally plenty; grapes about the same; hay about half last year's; wool is by far the most valuable crop sold in this county; there will not be as much wool as last year: on account of short hay crop and low price of wool many sheep were sent out of the county. B. R.

CALCUTTA, Columbia Co.—The wheat crop is about 75 per cent. of full crop; corn, 120; oats, 100; rye, 100; potatoes, 100; garden truck, 100; apples, 50; pears, a total failure; peaches, 50; cherries and plums, full crops; hay, 50. Meadows full of sorrel and white-top weeds.
J. S.

COLUMBUS, Franklin Co.—All crops are a week or 10 days earlier than last year. Corn is good, equal to last year; wheat, much better; will be 400 or 500 per cent. greater on account of being almost entirely frozen last year; oats fair—about an average; not many grown here; rye, little if any grown; barley, fair average; not much grown; potatoes and all vegetables promise to be abundant crops; apples promise well; pears only a fair crop; peaches not grown to speak of; grapes not grown; hay, very poor, not half a crop, except clover, which is very heavy; Timothy meadows scarcely worth cutting. W. B. A.

DAYTON, Montgomery Co.—A heavy crop of fall barley is just harvested. Wheat will be ready in a few days—a magnificent crop too—after the complete failure of 1885, when from 80 acres I did not get seed back. Corn is doing finely; though there does not seem so much put in as usual. There is much spring barley too, and everything most promising. We are having wet weather for clover cutting. Clover is very heavy, as an offset for last year's failure. Broom-corn has been a regular crop with us until lately; this year we try it again, but it is too soon to tell of it; there is usually a considerable quantity raised hereabout. Tobacco also is a good crop in the Miami Valley. My crops never promised better. H. R.

HUDSON, Summit Co.—Wheat as good as last year, late. Some corn better than a year ago and more planted. Potatoes looking fair; more than as many again planted than a year ago. Oats looking fair; hay crop will be short; fruit about half crop. E. A. S.

LONDON, Madison Co.—Corn not so good as last year, but we expect a fair crop; last year's was extra. Outlook for wheat has not been so good for four or five years. Last year it was only two bushels to the acre; this year it looks as if it would average over 20. Not much oats or rye sown in this section. Oats are too rank. Hay heavier than last year. Potatoes and garden truck several weeks earlier and better than last year. Apples, peaches and grapes are in abundance; have not had so large an acreage for years. The army-worm has done much damage to the hay crop. H. W. L.

OXFORD, Butler Co.—Season very favorable; pasture good; wheat harvest began June 16th. The season promises to be a very fruitful one. As compared with last year, corn is 100; acreage, 100; wheat, 95; acreage, 95; oats, 75; acreage, 80; barley, 105; acreage, 75; potatoes, 100; acreage, 75; apples, 110; pears, 40; grapes, 100; hay, 90. W. B.

PLEASANT HILL, Miami Co.—Wheat will average about 18 bushels per acre. Corn, not so good as last year, will average about 45 bushels to the acre; oats will make an average crop, about 50 bushels to the acre; barley, 40; rye, 18; potatoes, about half a crop. Hay a fair crop, about two tons to acre. Most fruit good, such as apples and grapes, peaches, plums and so on. W. H. L.

RAVENNA, Portage Co.—Late rains have improved appearance of crops: wheat, 90 per cent. of last year's; oats, 50; corn, 100; potatoes look splendid; rye, but little sown, looks very well. G. P. T.

ROCKPORT, Cuyahoga Co.—The general outlook for corn is far ahead of last year; wheat is the best for years; oats are looking well; rye looks well; potatoes looking well, but feel the need of rain; apples promise largest crop for years; peaches very scarce, not more than half a crop. W. C. E.

TIFFIN, Seneca Co.—Corn is farther advanced by 50 per cent. and has much better color than at this date last year; wheat not favorable for an average of over half a crop; oats extremely short in the straw; hay, clover hardly an average crop and is being cut at least 10 days earlier than usual; apples, only half a crop; peaches, half a crop. T. G. B.

TONTOGANY, Wood Co.—Corn better than last year; wheat, about the same: oats, ditto; rye and barley but little raised here; early potatoes and garden truck injured by drought; Orchard Grass better, clover good, Timothy hay light. N. K.

YANKEE RIDGE, Coshocton Co.—Early planted corn looks well, prospects are good for an average crop; wheat is a little above an average, some Fultz already in shock; oats very short and will be a light crop; rye, none raised to speak of; barley, none raised; potato prospects slim on account of drought; garden truck where tended to is as good as common; apples, prospect never better; pears a failure; peaches, seedlings plenty, budded ones none; cherries, best crop for 20 years. All kinds of hay crop very light on upland; clover is very good on the bottoms. J. H. D.

Indiana.

BOURBON, Marshall Co.—Last year nearly all of our crops were half short. The fly is now working badly in wheat, and some was drowned out. Prospect, wheat, 75; oats, 110; corn, 100; potatoes, 90; garden truck, 100; apples, 125; cherries, 125 for Richmonds; others of little account; grapes, 100; hay, 85 for Timothy, and 100 for clover. The general condition of all small fruits as well as of field crops is the most promising. J. H. P.

BRIDGETON, Park Co.—Corn looks well; wheat about an average crop; oats, average; rye and barley, none; potatoes, a large crop; fruits generally not very good; hay, light crop. P. F. A.

COLFAX, Clinton Co.—Corn poor; wheat good, never was better filled; oats good; Timothy hardly as good as last year; potatoes look fine; garden truck about the average.
G. A. R.

COLUMBIA CITY, Whitley Co.—Wheat is 10 per cent. below last year; corn about the same; oats not so good; potatoes about the same as last year; garden truck the same average; apples will be an average crop; grapes the same; clover is a good average, but Timothy will be about two-thirds of last year's crop W. A. L.

EVANSVILLE, Vanderburgh Co.—Wheat, 120; corn and oats, 95; rye, barley, potatoes

and tobacco, about the same as last year, while hay and special crops will be better. G. G.

GREENSBURG, Decatur Co.—Corn, an average area; looks 20 per cent. better. Wheat average, seeded better than last year. Oats never better. Rye and barley little raised. Potatoes as good as we ever had. Apples 25 per cent. better than last year. Pears same as last year—full. Cherry trees full; grape vines full. Meadows and Blue Grass pasture as good as we ever had. Broom-corn and garden truck good. All crops two weeks earlier than usual. W. W. H.

GREEN OAK, Fulton Co.—Wheat is 10 per cent. better than at this time a year ago; oats, 15 per cent. better; corn, 20 per cent; potatoes, a larger acreage; condition good. Sorghum, larger area, condition good. Rye good. Fruit earlier. Garden stuff good. W. H. K.

HAW PATCH, Lagrange Co.—Wheat, 80; corn, 125; oats, 75; clover seed, 200; clover hay, 50; Timothy hay, 75, short, want of rain early; potatoes, 115, beetles few; apples, 115. J. N. L.

LA FAYETTE, Tippecanoe Co.—Corn not as good as last year. Wheat, 20 per cent. better. Potatoes and garden truck about the same. Orchard fruits and grapes at least 50 per cent. better. Hay crop will not be as good by 25 per cent. H. B. B.

LANESVILLE, Harrison Co.—Wheat is very heavy. Oats and grass will be very heavy, and there is a fine prospect for a good crop of corn. Potatoes promise a heavy yield. Grapes are rotting badly in consequence of the rainy weather. We have had heavy rains, and the outlook is gloomy. If the rainy, foggy weather continues, I fear we cannot save our crops. It is damaging wheat and oats badly. Fruit crops will be light. J. E. W.

MONTMORENCI, Tippecanoe Co.—Corn and oats, good; potatoes and garden truck, average—better than last year; apples, grapes and plums, better; no peaches; pear trees nearly all dead; hay, very good, and wheat is better. S. E. S.

MUNCIE, Delaware Co.—Corn quite late, and outlook not good; wheat, good, much better than an average; oats good, better than average. Potatoes very promising; garden truck good; apples, very promising; grapes, abundant; hay, Timothy, short, two-thirds last year's, clover good. P. C. H.

POPLAR GROVE, Howard Co.—Corn, 110; wheat, 95; oats, 85; potatoes and garden truck, 100; apples and pears, 125; grapes, 150; hay and clover, 100; Timothy, 85; sorghum, 80. W. M.

ROCHESTER, Fulton Co.—Corn, 100 per cent; wheat, 90; rye, 90; oats, 110; potatoes, 105; apples, 65; grapes, 90; garden truck in great abundance. R. D.

SPRINGPORT, Henry Co.—Wheat, 100; corn, 80; oats, 80; potatoes, 75; garden truck, 90; apples, 100; pears, 40; grapes, 100; hay, 99; sorghum, 100. W. H. V.

WINCHESTER, Randolph Co.—Crops will average about the same as last year, with the exception of Timothy, which will be almost an entire failure. W. A.

Illinois.

ALTONA, Knox Co.—Wheat good, oats average, vegetables fine, corn average, small fruit abundant, rye good, apples scarce, grass good, potatoes good. B. M.

ANNA, Union Co.—Wheat cut and in shock; will be stacked next week if weather permits. As compared with last year, acreage 110 per cent.; yield apparently 125 per cent. Clover cut and stored two weeks; acreage probably as last year; yield and quality probably about 80 to 90 per cent.; second crop in many cases promises to be ready in two weeks or less, and bids fair to make better hay than first crop. Such was the case last year. Timothy or Red Top not yet cut, except as in my own case, dominated by volunteer clover, and cut immature to prevent loss of clover. Oats, yield, 130 to 140 per cent.; acreage, 115 to 125 per cent. Corn, acreage, 100; condition, 100. Strawberries, yield simply tremendous, so much so that growers lost money; while pickers (at two cents per quart), transporters (R. R. or Exp. Co's), commission men and retailers in market, as well as consumers, divided the swag. Potatoes, early, acreage 125; promise 125; only a few late cultivated. Sweet potatoes, owing to low prices for last several years, only a small comparative acreage, say 40 to 50; look well. Apples, except Early Harvest or Red June, about as abundant as last year; and the trees were loaded last year, and the fruit remarkably free from blemish and of attractive appearance and quality. But thousands of bushels rotted because there was no demand at home or in the cities of St. Louis or Chicago. This was notably the case with summer and fall apples, which had in other years brought fair prices. J. M. F.

AURORA, Kane Co.—Fall grain good; Spring grain fair; corn fair; grass a good average; pasture good; season is 10 days earlier than usual; fruit good, all kinds. F. C.

BONDVILLE, Champaign Co.—Corn 100; wheat good, small acreage; oats 100; potatoes 100; garden truck good; apples 100; hay 100; sorghum 80; broom-corn 95. H. B. G.

CHAMPAIGN, Champaign Co.—The season has been a very favorable one from the start, both in respect to the weather, which has been relatively dry and cool, and the condition of the soil that a cold and rather frosty Winter put in the best condition for the crops. Winter wheat came through uninjured, and so of grass and clover. The first is equal in yield and quality to the great wheat crop year, 1882, but the acreage is very small, not half of the average of the past five years. The harvest is going on in the latitude of St. Louis, a week or 10 days earlier than usual. Cool and dry weather favored the seeding of oats and the plowing and planting of corn. A drought from the middle of May to about the same date in June prevailed quite extensively and shrank oats, late sown, a good deal. However, as warm and mellow rain came on the 13th, the oats were saved from serious disaster. Of corn, there is nearly a full stand, an enormous acreage, and the fields are clean, and the crop is now, for latitude 40, fully knee-high, and with 20 per cent. up to a man's hips, and the promise, if the weather is that of the average last half of June, that these fields will be showing tassels and silk by the Fourth of July—a very unusual and remarkable circumstance. In short, if the summer season keeps its early promise up to the first of September, no more magnificent corn crop will have been made in the Northwest since the phenomenal corn crop years of 1860, 1872 and 1880. Pastures are good; hay fair in some places, and enormous in others. Potatoes are suffering from the Colorado beetle, and cabbages from the European butterfly. The apple crop does credit to the even-number-year notion, and pears are making amends for the failure last year. The drought from the middle of May to that of June may be regarded as a special providence, since it was succeeded by warm and copious rains, and I shall expect to see a repetition of these providences till the crops are all made. B. F. J.

CLARENCE, Ford Co.—Corn about two-thirds, oats half; no rye sown. Barley and potatoes average; garden truck and apples about the same as last. Hay not as good. Flax average. W. S. S.

DOVER, Bureau Co.—As compared with last year, crops are somewhat in advance. The weather has for the most part been favorable to rapid growth of all cereals. Apples are doing well; small fruit of all kinds are abundant. Potatoes and all garden truck promise well. Grass abundant. T. W. L.

FREEPORT, Stephenson Co.—Corn, 70; wheat, 120; oats, 60; rye, 125; barley, 90; potatoes and garden truck, 50. J. R. W.

GEORGETOWN, Vermillion Co.—Corn about the same as last year. Wheat, one-half more. Oats, the same as last year. Rye, one-third more. Potatoes, one-third better; garden truck the same. Apples and pears, one-third more. Grapes, two-thirds more. Hay, one-fifth better. Sorghum the same. Raspberries, currants and gooseberries the same as last year. Blackberries, one-half better. H. E. H.

GURNEE, Lake Co.—Corn, oats, potatoes and garden truck average with other years. U. D. W.

HIGHLAND, Madison Co.—Wheat all cut; the last three weeks it was badly damaged by the chinch-bugs. A good many corn-fields are now being destroyed by these insects, and we are afraid that the corn crop failure of 1881 will be renewed this year. The same area has been devoted to sorghum cane as last season. The condition of rye and barley is fully up to the average, but the growing crop of oats is backward and does not promise more than a three-fourths yield per acre. Meadows and pastures are doing well and are farther than usual for June 12. Small fruits are in fine condition and will yield a large crop. The percentage of bloom this spring and the condition of fruit June 12, as compared with an average, is as follows: Apples, condition, 96; peaches, 40; pears, 90; plums 100; cherries, 83; grapes, 100; currants, 100. O. Z.

ILLINOIS CITY, Rock Island Co.—Wheat two-thirds of last year's crop; oats less than half; rye and barley about three-fourths; sorghum and corn look as well; potatoes look better, but need rain; garden truck suffering for rain. Currants and gooseberries full crops; strawberries, raspberries and blackberries cut short by drought. Cherries nearly full crop; fair last year; plums not half crop; fair last year. Apples about nine-tenths better; grapes about nine-tenths better; clover a full crop; Timothy cut short about one-fourth. T. H.

KANKAKEE, Kankakee Co.—Corn, 100; wheat, 75; oats, good; rye, good; potatoes, 100; garden truck, extra good; apples, good; hay, good. T. C. D.

MORRISONVILLE, Christian Co.—In comparison with same date last year, corn is 70 of a crop; Winter wheat, 500; oats, 60; rye, 100; potatoes, etc., 100; apples, 100; grapes, 120; hay, 75; small fruits, 100; pastures, 100. Stock looks well; enormous increase in poultry. Average number of calves, colts and pigs. Not enough wheat was harvested in this county last year for seed and bread. Fair breadth was sown last Fall; looks splendid; will yield heavily. Harvesting begun. Oats and hay short on account of drought. Very early oats good. Clover fine; 40 per cent. of corn injured by terrible storm May 14, and birds. Much replanted late. F. G.

POLO, Ogle Co.—Corn, oats and hay are two weeks earlier. Prospects good for more than average crops. J. F. B.

RIDGELAND, Cook Co.—Corn, splendid; oats and rye, good; of wheat we have none around here; potatoes never better; cabbage, good; have not been troubled with catterpillar this year; garden truck, good; hay, a good average; small fruit very good, R. A.

RIDGE FARM, Vermillion Co.—Corn, prospects flattering; average acreage, never better; wheat acreage 75 per cent of 1885; estimated average yield, 15 bushels per acre, against five bushels in 1885; oats estimated at 25 bushels per acre; three-quarters of 1885; rye, acreage small; estimated at 10 bushels per acre; potatoes one-quarters larger acreage than in 1885; prospects very good; hay light, owing to dry weather early in season; apples, grapes and small fruits abundant; taken altogether, our prospects were never better. B. H.

ROSEVILLE, Warren Co.—Average, present condition and future outlook as compared with last year, corn, 50 per cent. better; wheat, 20 per cent. better; oats, on account of dry season since May 15, 20 per cent. worse; rye and barley about the same; potatoes planted early will be better, can't say about late planted; garden truck, 25 per cent. better; apples, will be scarce; hay, prospect fine so far, suffering now for rain. General prospect good and farmers happy. C. F. G.

SPRINGFIELD, Sangamon Co.—Corn about an average, prospect good; wheat and oats look splendid; three times more of wheat than last year. Oats somewhat better. Rye good; not much sown. Potatoes and garden truck double the crops of last year. Apples last year none; prospect for fair crop now. Pears about an average. Peaches same as last—none. Grapes, a large crop. Hay about the same as last year. J. F. F.

Michigan.

ALBION, Calhoun Co.—Compared with last year's crops, corn is 100; wheat, 70; oats, 75; potatoes and garden truck, 100; apples and pears, 125; peaches, none raised; small fruit, 110; hay, 80. L. M.

BAY CITY, Bay Co.—Crops as compared with last year are as follows: Corn, 100 wheat 75; oats, rye, barley, potatoes, garden truck, apples and pears, 100. Peaches none; grapes, 100; hay, 75. An abundant crop of strawberries. A. M.

BUCHANAN, Berrien Co.—As compared with crops at this time last year, corn is about the same. Owing to drought, wheat and hay will be a little short. Grapes ahead; small fruits generally about average crops. E. S. R.

CLIO, Genessee Co.—Corn, usual area; wheat usual area, two-thirds of a crop; oats usual area, 100; potatoes, average area; garden truck usual average; apples, 150; but little other or hard fruit is raised, but promises 150; hay, two-thirds of a crop; peas, 50; greater area; promise well. D. S. H.

EAST PARIS, Kent Co.—Calling last year 100; corn, 75; wheat, 80; oats, 50; potatoes, 80; garden truck, 75; apples, pears and grapes, 100; hay, old meadows, 50; new seeding, 75. On account of severe drought all crops are likely to be short. Haying two weeks earlier than usual—wheat maturing very fast. C. T. F.

GRAND RAPIDS, Kent Co.—Drought very severe and affects some crops seriously, in our vicinity. Wheat, 85; corn, 90; oats, 45, rye, 90; potatoes light; garden truck shortened by drought. Apples, 90; pears, 65; peaches far better than last year; grapes abundant. Hay less than one-half crop. C. W. G.

HAGAR, Berrien Co.—Wheat, average crop. Corn looking well. Oats light crop. Potatoes, a large acreage planted; looking well. Hay very light. Apples better than the average. H. N. S.

HOBART, Wexford Co.—Hay a failure; for 50 days we have had no rain sufficient to wet the ground half an inch. Potatoes are looking fairly well where they were not cut by the frost. A very dry and frosty season, thus far oats looking bad; will not make more than half a crop; wheat is not making much straw; will probably head very low; crop below the average probably. Not much corn raised; what there is is looking very well. Grapes and currants have been pretty generally nipped by the frost. No apples as yet in this section; all garden crops are nearly at a standstill on account of the drought, and unless we get a change very soon, it will be difficult to get a living on the farm in this part of the country. W. H.

IONIA, Ionia Co.—Wheat an excellent crop. Oats injured by drought, but recent rains will help them; probably two-thirds crop. Barley the same. Potatoes coming on finely; not so many planted. Apples a very full crop. Small fruits abundant and market glutted. Grapes very promising; no rot here last year; we look for none this year. Pears promising. Few peaches; trees killed two years ago. On the whole, outlook good. R. M. K.

MENOMINEE, Menominee Co.—Compared with crops at this time last year, the outlook is: Wheat, 125 per cent.; oats, 100; rye, 110; potatoes, 110; apples, (Duchess) 125; hay, 120. M. N.

MUSKEGON, Muskegon Co—Corn good; wheat good; rye good; oats and barley fair; garden truck fair; apples full crop; hay, 25 per cent. J. E. R.

OCONOMOWOC, Waukesha Co.—Corn, fair; oats, fair; rye, fair; barley very poor; potatoes poor; garden truck fair; apples fair; pears, none; peaches, none; berries of all kinds fair; grapes fair; last year's seeding of clover good; old meadows all poor, but marshes; sorghum fair; hops good. S. F. G.

PIERPORT, Manistee Co.—Corn looks very well now; oats, 75; rye, 75; barley, 50; potatoes, 50; garden truck, 60; apples, 100; pears, 75; plums, 50; hay, very light, except new seeding meadows near lake shore. P. C. M.

ROCKFORD, Kent Co.—The present condition and future outlook of all crops grown in this section, such as corn, oats, wheat, potatoes, apples, peaches, cherries, hay and garden truck compare well with the same crops at the same date last year. Corn never looked better; wheat, ditto; potatoes, the specialty in this section, are looking fine and bid fair for a big crop, although the potato beetles have made their appearance in large numbers, but farmers know how to manage them, so we don't fear them. J. L.

SILVER CREEK, Cap Co.—Wheat, 95; corn, 125; potatoes, 75; oats, 50; apples, 100; clover fair, but Timothy suffered from the drought. J. M. F.

SOUTH HAVEN, Van Buren Co.—Apples, pears, plums and cherries, about as last year. Peaches will be a full crop. Away from Lake Michigan the crop will be light. Small fruits of all kinds are showing heavy crops. Grapes, at present, promise much better than last year. T. T. L.

ST. CLAIR, St. Clair Co.—Corn, 133⅓; wheat, 60; oats, 90; barley, 80; potatoes, 100; garden truck, 80; apples, 110; pears, 75. W. A. T.

Iowa.

CAMPBELL, Polk Co.—Wheat and oats will prove over half a crop; corn looking well but rather backward; potatoes looking nice; bugs are plenty; very little rye or barley raised here; clover very heavy: Timothy, fair crop; prairie grass also fair; apples midling, as are also plums. R. C. S.

CANFIELD, Hawk Co.—Corn, 150; oats, 50; rye, 120. Potatoes and garden truck the same; orchard fruits, 150; hay, 50. A. C. F.

CORNING, Adams Co.—Corn, 110; wheat, 100; oats, 100; potatoes, 110; garden truck, 100; apples, 50; grapes, 150; hay, 90; sorghum, 100. J. S.

COUNCIL BLUFFS, Pottawattamie Co.—Spring wheat, acreage has decreased four per cent; condition 98½ per cent; estimated yield 29,120,000 bushels; winter wheat, area very small, but condition 106 per cent; corn, increased acreage 5½ per cent; condition 101 per cent; oats, increased acreage 7 per cent; condition 101 per cent; flax, decreased acreage 4 per cent; condition 97 per cent; Timothy, increased acreage 10 per cent, with a condition of 105 per cent; clover, increased acreage 8 per cent, with a condition of 106 per cent; the crop of tame hay will be the largest ever known; potatoes, increased acreage 6 per cent; condition 100 per cent; sorghum, 5 per cent. decreased acreage, with a condition of 91½ per cent; garden truck of all kinds looking well and very early. Have had new potatoes and cabbages home-grown in market two weeks; raspberries and blackberries are suffering for rain; otherwise the crops would be immense; grapes are looking fine; my own vineyard gives promise of 10,000 pounds per acre; apples, a fair crop. A. W.

DAVENPORT, Scott Co.—Barley, 75; wheat, 80; oats, 60; corn, 75; potatoes, 50; meadow, 90. C. W. L.

DUBUQUE, Dubuque Co.-We have had no rain for over four weeks, and oats and wheat look bad: corn has been planted twice in many cases, but holds its own; hay will be but half a crop; potatoes will be short if no rain comes soon; strawberries less than half a crop; raspberries are full of blossoms and buds, but will be short of half a crop; grapes did look well in blossom, but it being so dry lots of the blossoms are blighted; grass in pasture is poor for stock; everybody praying for rain. H. R.

EDDYVILLE, Wafello Co.—The average yield of corn, oats, spring wheat, potatoes and garden truck will be very much below the average of last year, on account of drought for the past three weeks and too much rain in April and the first half of May. Winter wheat, rye and hay may be average crops compared with last year's. D. D. M.

EMERSON, Mills Co.—Corn prospect good; wheat and oats light; rye good; potatoes and garden truck fine; apple prospect good; pears and peaches, none; hay good; crops 10 days to two weeks ahead. Prices: corn, 16 to 18 cents; wheat, 40 to 50 cents; oats, 20 cents; butter, 7 cents; eggs, 7 cents; hogs, $3.35. W. G.

GRUNDY CENTER, Grundy Co.—Corn is in better condition than last year, and is earlier; wheat is not raised in this section; oats look well, but the straw will be short because of a very wet Spring and a very dry spell since; barley is good on upland, but short on low land; potatoes look well, but it is too dry for a full crop; garden truck is ahead of last year, and less weeds than usual; hay an unusually heavy crop; raspberries, blackberries, grapes, cherries, currants, strawberries, etc., are good crops; orchards nearly all killed out. Haying has already begun; some are finishing their corn plowing, and barley harvest will soon hurry everything along; oats are heading; everything earlier than last year; prospects good. J. L. B.

HAMBURG, Atchison Co.—Corn, average better, acreage smaller; Wheat, average not so good, acreage about the same; oats average good, acreage larger; rye, average good, acreage smaller; barley, average poor, acreage about the same; potatoes and garden truck about the same; apples, present prospect about half crop; hay, one-half better than last year; sorghum about the same as last year. A. M.

LE MARS, Plymouth Co.—Wheat, oats, barley, flax, potatoes, etc., are all doing nicely, and are a week or 10 days in advance of last year, with good prospects of much better yield than last year: should think from 10 per cent. to 15 per cent. advance. M. V.

NEW SHARON, Mahaska Co.—Corn is about an average; wheat and oats light and short; hay, average; potatoes and garden truck, poor; apples and grapes, light. J. L. H.

RENWICK, Humboldt Co.—Corn prospects the best for five years; pretty dry for wheat, oats and potatoes; gardens that are well tended are good; small fruits good; no apples; Timothy and clover light; wild grass is our principal hay; barley fair. O. E. F.

ROCK FALLS, Cerro Gordo Co.—The acreage of corn is somewhat less than last year, but it is fully two weeks ahead of the corn last year. Wheat and barley well, and there is more sown than last year. No rye is raised around here, and there is less flax sown than for several years past. Oats is the principal small grain grown in this section, and the outlook is as good as the average. Potatoes look well, but the bugs were never so numerous. Garden truck looks about the same as last year. There are but few apples or other orchard fruits. Hay is better than the average, and the acreage has been increased a great deal the last year. W. W. W.

UNION, Hardin Co.—As compared with last year, the average condition is as follows: corn, 100; clean and well worked; wheat, 75; straw, short; oats, 50; rye and barley, none; potatoes and garden truck, average crops; hay, somewhat shorter from lack of rain; sorghum, a full average crop. A. A. L.

Wisconsin.

ARCADIA, Trempealeau Co.—Corn, 80 per cent.; winter wheat, 90; spring do., 75; oats, 80; rye, 90; barley, 80; potatoes and garden truck, 90; apples, 50; hay, 80. G. C.

BELOIT, Rock Co.—Corn looking well; oats, good; barley and rye, good and larger quantity sown than in '85; potatoes not looking well; fruits, except cherries, fair; tobacco, just being planted, not so large an acreage by about one-third, as last year; hay, a large crop. B. C. H.

CASCADE, Sheboygan Co.—No rain since May 1, with the exception of a couple of light showers, scarcely enough to lay the dust. Corn planted over five weeks is drier than when planted. Not one-third of the usual area of corn planted; pastures are as if a fire had run over them; hay, new seeding, fair; old would hardly pay for cutting. Winter wheat and rye about the usual area, a good stand, all getting dried up. Spring wheat over an average—about worthless at present; barley about the same as last year, heading out a foot high and yellow; some fields worthless; oats in the same condition; potatoes stand the best; apples good: cheese, 6 cents; butter, 10 cents. If rain doesn't come soon, all crops will be failures. G. F.

EAU CLAIRE, Eau Claire Co.—Corn is better than last year, and as much was planted. Oats, wheat, rye and potatoes look well. Garden truck earlier and good. Hay on old meadows very light; on new seeding, not over half a crop. But few apples; no pears or peaches grown. Very dry; unless rain comes soon, all will be changed. H. H.

GREEN BAY, Brown Co.—Corn has a good stand; wheat, oats, rye and barley, favorable with last year; potatoes and garden truck, good. Apples much ahead of last year, together with small fruit; also wild fruits promise good. Grapes are setting well. Hay in old meadows is about half a crop; late seeded meadows are a little better. The average is a little more than half of last year's. Stock looks well. Season eight or ten days earlier than last year. T. B.

GREENBUSH, Sheyboygan Co.—The grain crop in this section, as compared with last year, is very poor. Late frosts spoiled the apples and cherries. Pears, peaches and grapes are not grown here to any extent. Corn and sorghum may be half crops. Pastures, except on low land, are all dried up. Potatoes and garden truck are far below the average. A. M. S.

LAMARTINE, Fond du Lac.—Grain of all kinds has but little growth as compared with last year; but looks favorable for as good a crop; hay is short on old meadows. Garden truck about the same as last year; fruits of all kinds look as though they might be average crops. C. S. N.

LIVINGSTON, Grant Co.—Corn is good, and will probably exceed that of last year by 15 or 20 per cent; wheat, small in acreage, quality equal to last year's; oats, short in straw, equal to 100 per cent. in grain; potatoes, early, less 25 per cent.; late, 100 per cent.; apples, but few; peaches and pears, none; grapes on upland, full crop, and all small fruits good; on low land badly injured by late frost. W. F.

MARSHALL, Dane Co.—No rain since April 16 Crops look about as well as they did last year at this time. Wheat, oats, barley, rye, potatoes and all garden truck not half crops, on account of the drought. No tobacco set out yet. Not over a third of a crop of hay. Cherries almost a failure. Sorghum poor. No apples to amount to anything. Cheese, six cents a pound, and butter 12½ cents. R. C.

MONROE, Green Co.—Corn, 114; wheat, 100; oats, 90; rye, 75; barley 80; potatoes, 110; garden truck, 110; clover hay, 100; Timothy hay 80. H. H.

NORTH GREENFIELD, Milwaukee Co.—Corn, wheat, oats, rye, and barley, good. Potatoes, early, good, late coming on, too dry. Garden truck good, but late. Apples good; cherries good. Hay crop first-rate. A. L. S.

OMRO, Winnebago Co.—Corn a full average; spring wheat, oats and barley 50 per cent.; winter wheat an average; hay about 40 per cent. of a full crop; potatoes 50 per cent. No apples last year. Small fruits a full crop. Have had two months' drought; first rain last week. Wool from 22 to 29 cents. E. R. N.

PORTAGE, Columbia Co.—Early planted corn compares well with last year's crop; late planted failed to get up on account of a drought; now in the sixth week; wheat and oats will be very short in straw and grain. Rye must be a poor crop, as it has been filling during this heated term; barley not raised; potatoes and garden truck look well where they have been well tended; orchard fruits will be light, on account of late frosts; hay will be very light. Many pieces of above are too short to cut. D. B. P.

RIPON, Fond du Lac Co.—We are having the severest drought we have ever known. Outlook for all kinds of crops discouraging. Pastures and meadows suffering for want of rain. With the most favorable weather, crops will be very light. N. M.

SAMEM, Kenosha Co.—Wheat looks unusually well; sorghum, good; corn, oats, rye, barley, potatoes and garden truck withered for want of rain; hay, extra heavy. R. H.

SHEYBOYGAN FALLS, Sheyboygan Co.—The dry weather has pinched crops severely. The growth of straw will be less; so will that of hay. Corn hardly up yet. Apples a double crop; small last year. Pastures dried up. Not as much milk as last year. F. H. P.

TOWN OF HERRUSON, Calumet Co.—Crops for this part of the country are little or no better than a year ago. Winter wheat and rye full crops, not much sown. Spring wheat about two-thirds of a crop. Barley one-half a crop. Oats, three-fourths of a crop. Potatoes and garden truck suffered for want of rain. Hay, one-half a crop. P. H. L.

WEST POINT, Columbia Co.—Corn, 110; winter wheat, 115; oats and barley short. Potatoes fair. Hay very short. B. M. S.

Minnesota.

CAMPBELL, Watkins Co.—Future outlook as compared with last year, we think about 15 per cent. better. Crops raised are wheat, oats, rye, barley, potatoes and garden truck, hay, etc. N. N. T.

HASTINGS, Dakota Co.—The early Spring was unusually favorable for seeding and planting. A very severe drought in May continued until it nearly ruined meadows and late-sown grain. At present the outlook may be summed up as as follows: Wheat, no hope for more than one-half average crop; oats, somewhat better, perhaps two-thirds crop; corn, all that sprouted before the dry time (and that is most of it), promises to be much better than the average, say 125; rye good; barley poor; potatoes, never saw them looking better; hay, about 60 per cent. of average crop. Chinch bugs innumerable. Every creeping pest possible is let loose upon us. W. G. L. D.

JANESVILLE, Waseca Co.—We had a wet April. Crops were put in when ground was in poor condition. May was dry, but we expect fair average crops of grain. Grass is good. Fruits are fair. A. P. W.

MANKATO, Blue Earth Co.—Corn, good; wheat, 75; oats, good; rye, light; barley, good; potatoes, good; tame hay, very light; flax, good. H. C. A.

SAUK CENTER, Sterns Co.—In the latter part of May, a severe drought began, and continued until about the middle of June, which seriously injured the crops. As compared with last year, there will be a decrease of one-third; the corn and potato crops may be much improved by future favorable weather; but wheat, oats, and barley are too far advanced to be greatly changed now. Hay is generally a light crop. This section is not much given to fruit raising. I. C.

WASECA, Waseca Co.—Corn better than last year; wheat fully as good; oats and barley about the same; potatoes, fair; strawberries hurt by the hot, dry weather; other small fruits as good; apples, very few raised here; hay, good. D. P.

WINONA, Winona Co.—The outlook for crops is decidedly unfavorable, with the exception of corn, which never looked more favorable. Wheat, oats and barley are short and thin—not more than half crops. Hay very short and thin—all for the want of rain. Have lived for 21 years in this county, and never saw as little rain in April, May and June. E. T. H.

Missouri.

AFTON, St. Louis Co.—Wheat, not much raised, but what there is of it is good. Oats, grass and clover, abundant. Early potatoes a full crop. Corn in good condition. Fruits, average crops, except peaches—all killed. Grapes rot badly, except those growing on poor land; Virginia Seedling free from rot. P. M.

BETHANY, Harrison Co.—Wheat acreage always small; 50 per cent. increase over last year; prospects 50 per cent better. Corn fully as good as last year. Oats very badly injured by drought; rye good; apples good; hay short, on account of drought. S. W.

BLUE SPRINGS, Jackson Co.—Corn is 25 per cent. better. Wheat an average crop. Rye, not grown here; barley not grown. Potatoes and garden truck the same as last season. Apples, 50 per cent. in excess of last season. Hay, 20 per cent. less than last year. Tobacco and sorghum about an average condition. Hops, broom corn and cotton not grown here. J. H. L.

CARTHAGE, Jasper Co.—On a basis of 100 for last year's crops, corn is 125; wheat, 60; oats, 50; potatoes 100; garden truck, 100; apples, 120; pears, peaches and grapes, 100; hay, 70; sorghum, broom-corn, all berries and cherries, 100. W. C. D.

ELDON, Miller Co.—Prospects for corn very good. We have had sufficient rain to secure a good steady growth, and it was nearly all planted in good season, and was well cultivated rather better than otherwise. Wheat is about all harvested and will make a full average crop. Oats are good, not as high perhaps as usual, but thick enough and well headed out. Potatoes and garden truck in good condition; sorghum fully up to the average. Plenty of grass. Meadows and clover stood the Winter well, and as considerable of both has already been cut, we are reasonably sure of a full supply of hay. A full supply of fruits of all kinds except peaches. N. J. S.

FULTON, Callaway Co.—Wheat about ten bushels on the average; oats, medium; corn, good. The hay crop short; potatoes and truck, good; small fruit, fair; tobacco promises well. H. C. M'C.

MOBERLY, Randolph Co.—Wheat, first-rate; oats, poor; rye and barley, none; potatoes and garden truck, good; apples, ditto; no peaches; grapes, fair; hay, tobacco and sorghum, good. S. L. A.

RYE, Adair Co.—Corn did not come up well about here, looks bad, will hardly be an average; rye and oats, great growth of straw, fear it will fall, in which case hardly an average; potatoes look bad, want more sun, hardly an average crop; apple crop will be short, pears an average crop; peaches not grown much here, but what few trees I have seen will produce a partial crop; grapes, very abundant, more than an average. B. M.

SPRINGFIELD, Greene Co.—Wheat, good to very good, but not more than 40 per cent. of the usual number of acres on account of two years' failures. Not much rye, barley, or oats sown here; what there is looks well. Corn is the great crop here this year in acres, and in quality of the crop, it is 100 per cent. better than last year at this time, and much cleaner. Potatoes, some early kinds are now being dug for market; quality good, yield light. Late varieties look very promising. Garden truck and vines are very good, much better than last year at this time. Apples a full crop. Pears about half a crop. Grapes are very full, and no rot at present; it was about the first of July they began to rot last year. The hay crop is good where the stock was kept off in the Spring, but too many farmers leave their stock on the meadows too late, and in every case there is no hay worth cutting. G. W.

TRENTON, Grundy Co.—Corn, 150; wheat, 150; oats, 100; flax, 100; rye, 100; potatoes, 120; garden and truck, 120; apples, 130; grapes, 150; hay, 100. W. R. S.

Kansas.

ALDEN, Rice Co.—Wheat will make from 10 to 20 bushels; quality better than last year—hurt some by chinch bugs. Corn waist-high; oats nearly a failure; a few plowed in are good. Potatoes as good as last year; some ready to eat now. Not many bearing fruit trees around here; but what there are, are full; small fruits hurt by three weeks of dry weather. R. M.

BEATTIE, Marshall Co.,—Corn, 100; wheat, 75; oats, about one-half a crop; potatoes look very well, yield, 90; garden truck looks fine; full crop of apples, and many grapes; no peaches; many trees frozen to the ground. G. H.

BELVUE, Pottawatomie Co.—Corn, more planted, but more backward than last year; wheat, four-fifths winter-killed in this vicinity; rye, about the same as last year; potatoes look well at present; apples about as last year, a full crop; peaches, none at all; grapevines are loaded with clusters; hay, not as good as last year; oats look remarkably well. A. S. W.

CLAY CENTER, Clay Co.—Wheat, 100; corn, good; oats, 50; rye, good; potatoes, average crop. Garden truck, grapes, small fruits, good; apples, fair; hay, good. J. A. W.

COFFEYVILLE, Montgomery Co.—Wheat all cut and thrashing commenced. It will average about half a crop. Oats, clover and grass half crops. Corn the best we have had for years; beginning to tassel. Some chinch bugs. Average crops of apples and grapes; no peaches. M. D.

COLUMBUS, Cherokee Co.—We are having very dry weather. About half the wheat is cut; will average three bushels per acre, balance not worth cutting. Less than half the stand of oats will be cut; a great many are pasturing them down. Chinch bugs destroying corn and millet; corn ground generally clean. Garden truck badly dried up. No peaches; prospect good for large crops of apples, pears, plums and grapes. Sorghum the only field crop that is growing 14 miles east on the river, where there has been plenty of rain. F. H. P.

EDGERTON, Jackson Co.—Weather very favorable for corn; large acreage planted; prospect never better; condition, 100. Wheat harvest all done. The State Board of Agriculture places wheat at 50 per cent. In my opinion it will not reach 25 per cent. Injured a great deal by chinch bugs. Oats never looked better; large acreage sowed; harvest begins in a week. No rye or barley sown. Potatoes and garden truck in splendid condition. Apples, good; peaches, none; abundance of small fruit of all kinds. J. R.

ELK FALLS, Elk Co.—Wheat not good.

Oats a failure. Potatoes and garden truck very good. Apples not more than half a crop. G. N.

EMPORIA, Lyon Co.—Corn prospects are now better than they have been in years. Last year this time our corn was very poor and sickly. In 1885 I finished replanting on the 20th of June. This year some of the corn is already pushing out tassels, and the crop as a whole is looking very promising. There are hardly any missing hills. The recent rains will carry the corn way into the ear, if we don't have another rain. Wheat is not as good as it was last year. Great deal of it was winter-killed; others have been ruined by the chinch-bug. The bugs are now working badly in the corn, and will do considerable damage. Oats will be a little short. The straw is short, but is headed out nicely. Some oats will be cut this week. Rye not much sown here only as pasturage. I sowed eight acres for feed, but as we had such a dry Fall last year, a good deal of it did not germinate. Then the Winter killed considerable. Potatoes are very fine. I have Beauty of Hebron, Early Ohio and Early Watson Seedling, a new potato from Iowa, all ready for use now, and I dig a good many large tubers. Every indication points to a bountiful crop. Garden truck is very plentiful. The cabbages are being eaten by worms, but they are growing so fast it does not hurt them badly. Apples will not be up to the average, as many of the trees are suffering from a blight almost similar to the pear blight. Pears are also suffering from blight. The standard pears have very little fruit on, and the dwarfs about three-quarters of a crop. Grapes will be a very large crop from all indications. Hay—the prairie grass is very fine, and as strong in nutriment as I have ever seen it. Cattle have done better on it in the same time than I have seen in six years. Taking all in all, the prospects for bountiful crops are as bright as one could wish for. W. N. D. B.

FREDONIA, Wilson Co.—Corn at least 75 per cent. better than the average last year, and three weeks earlier. Wheat 50 less, but quality of grain better. Oats 50 less, and quality of grain poor. Rye 25 less, and quality of grain poor. Potatoes—early, 25 better; late, 50 better. Garden truck 25 less; apples 50 less, extra quality; pears 50 less; grapes 50 better, of excellent quality; broom-corn 50 better. Area of planting: Corn 15 per cent. more than last year; wheat 25 less; oats 25 less; rye about the same; potatoes 50 more; broom-corn 75 more—a craze among farmers produced by last year's prices. Hay crop 50 less than last year. The outlook for corn is simply immense at this time. Wheat and rye about all in shocks. Never, to my knowledge, have we had a better season for cultivating growing crops. Corn nearly all "laid by," and 75 per cent. of it has been cultivated four times, which is unusual among Kansas farmers. J. H.

GENEVA, Allen Co.—Corn, 125; wheat, 50; oats, 90; potatoes, 100; garden stuff of all kinds, 100; apples, 100; pears, 80; small fruit, 100. W. McG.

GIRARD, Crawford Co.—Corn better by far than last year; wheat the same as last year; oats a good crop; potatoes good; an abundance of all garden truck. Apples lighter crop than usual. Pears the same. Not a peach in this vicinity. Small fruit an excellent crop. Grapes better than usual—vines loaded. Hay below the average. Castor beans above the average and a larger acreage. Sorghum about as usual. No cotton planted. C. H.

HARVEYVILLE, Wabaunsee Co.—In this part wheat is good. Rye, very small acreage. Oats good. Corn in fine condition. Orchard fruits, 30 per cent. of crop. J. J.

HAZLETON, Barber Co.—Corn, 90; wheat, 100; oats, 50; potatoes, 50; garden truck, 40. Peaches an entire failure. Country too new for apples and pears. Nothing but prairie hay cut in this part of the State. Oats, 35 cents; corn, 25 cents; wheat, 60 cents; new potatoes, $2 per bushel. W. F.

LAWRENCE, Douglas Co.—Average condition as compared with last year: Corn, 125; wheat, 80; oats, 90; rye, none raised; potatoes and garden truck, 100; apples, 100; pears, 75. Peaches, none either last year or this. Grapes, 125; hay and sorghum, 100. Crops of all kinds need rain badly. Chinch bugs very thick. J. P.

OSWEGO, Osage Co.—Wheat and oats will be an average crop. Hay, both tame and wild, very fair. Potatoes and garden truck good. F. R. S.

POPLAR HILL, Dickinson Co.—Owing to a very severe winter, dry weather in May and June, and lastly the chinch-bugs, not more than half of the wheat will be harvested, and that is of very poor quality. Early planted corn is looking very finely. The ground is free from weeds, and the corn is from three to four feet high. A great deal of the corn that was listed in the wheat ground is dead, and all covered with chinch-bugs. Before the late rain, oats looked very poor. They are now looking a little better, and will yield about half a crop. Potatoes are doing finely, and have been ready for use for the past two weeks. Peas have dried on the vines, but cabbage, tomatoes and other garden truck are doing well. There are very few apple trees in bearing, but those few will yield an average crop. Small fruits, especially strawberries and raspberries, did well, but were not nearly as large as they would have been if it were not so dry. As compared with last year, everything, excepting corn and potatoes, is poorer. F. W. T.

STRONG CITY, Clare Co.—Corn never looked better at this date. Oats not so good as last year, and will not make more than half a crop. Potatoes and garden truck splendid, and better than last year. Apples and pears not so good; peaches none; a few last year. Plums abundant, especially wild; grapes about an average—perhaps a little better than last year; hay about an average; raspberries good, and better than last year; hardy blackberries better; wheat, little sown, and that about as poor as can be. Of rye, barley, cotton, broom-corn and sorghum little or none is grown. J. S.

WICHITA, Sedgewick Co.—Wheat is about all harvested, but will not be more than half an average crop. Oats very short on account of dry weather all the Spring—not half a crop. Corn in good condition, clean and a good stand; prospects good for a large crop. Potatoes not very good, too dry; but they have been making a second growth since the rain on June 1st. Garden truck good. Apples a fair crop. Peaches and cherries nearly all winter-killed. Plums good. Grapes plentiful. But very little tame grass grown here; nearly all wild hay as yet. J. J. A.

WILLIS, Brown Co.—Corn, 110; wheat acreage less; quality and yield, 115; rye about the same; barley little sown; potatoes and other garden truck splendid; apples 60. H. F. Y.

Nebraska.

CAMBRIDGE, Furnas Co.—Crops of all kinds are looking well, with a few exceptions. Grain looks better than a year ago. Fruit is in its infancy here. Trees and small fruit put out last spring are making a fine growth. C. C. N.

DAVENPORT, Thayer Co.—Corn, 100; wheat, 75; oats, 80; rye, 110; barley, 75; potatoes, 100. A. M. M.

EXETER, Fillmore Co.—Wheat heading, thin, rusty; 60 per cent. of average. Corn backward, mostly replanted; 90 per cent. Oats, 100; barley, 80; flax, 110; rye not much raised, 80; millet, 120; potatoes, 90; garden truck, 100; hay, 100; grapes, 100; small fruit, 115; orchard fruits, 40. Cherries a failure. Peaches winter-killed. Late, backward spring in this section. Hot and wet with violent thunder showers. J. A. J.

HASTINGS, Adams Co.—The season has been more backward than usual. During the early part of the Spring rain was very abundant, and it was difficult for farmers to get in their small grain in first-class condition. Small grain grew well and was looking fair until about 10 days since, when the weather became rather dry, and spring wheat has been somewhat injured; but refreshing showers during the last three or four days will tend to help. Prospects now are that small grains will be fair crops. Corn is looking well and bids fair to be a good crop. Unless some unexpected calamity occurs, this section of Nebraska will be up to the average, all things considered. J. B. H.

HORNERVILLE, Gosper Co.—Compared with last year, corn is better; wheat about the same; greater acreage. Oats better; rye very good; potatoes the same as last year; garden truck very good, as is usual; grass very good; broom-corn good; great amount planted; sorghum good, not much planted. This being a newly settled country, there are not many bearing orchards. J. H. K.

NEBRASKA CITY, Otoe Co.—Crops are good. Wheat, corn, oats, rye, barley and garden truck, from 15 to 20 per cent. better than last year; apples, about the same; berries of all kinds are 50 per cent. better; grapes and hay a very heavy crop. B. F. H.

PICKNELL, Gage Co.—Corn shows 110; wheat, 80; oats, 80; rye, 100; barley, potatoes, 100; garden truck, above 110; apples, about 50; hay good, 100; flax 300 area. S. E. T.

PLATO P. O., Saline Co.—Small grains all look well, except the wheat, which will not make much more than a half crop; oats, barley and rye are looking splendid; corn is much advanced; fruit of all kinds will be plentiful; as to garden truck of all kinds, it never was better. Everything looks promising. J. A. B.

SCHUYLER, Colfax Co.—Crops look well. There is a large acreage of small grain. Wheat, corn, rye, oats, barley and potatoes are good. Fruit a success in some localities. Broom corn and sorghum good; garden truck excellent. E. J. D.

WILLOWDALE, Antelope Co.—As compared with crops last year: corn is 110; wheat, 110; oats, 98; rye, 100; barley, 105; potatoes, 115; garden truck, 120; hay, 120; sorghum, 90. A. K. F.

Dakota.

ARLINGTON, Kingsbury Co.—Wheat compared with last year's, will average only one-half crop; short, thin and uneven. Corn good and well advanced, but acreage low; oats heading too close to the ground and very light; rye not much grown here; barley poor and only half the usual acreage; flax 15 per cent. more acreage, but small; still the chances are good for clean fields. Potatoes are better than a year ago; garden truck always good here; orchards are yet too small to bear much; tame hay light; wild grass good; hops look good, but are raised only for household purposes; trees are putting out an extra good growth. Acreage of trees planted here this Spring 50 per cent. more than last year. W. A. P.

DE SMET, Kingsbury Co.—Crops of all kinds looking well and growing very fast. We are having warm weather with plenty of rain, but I do not think wheat will yield as well as it did last year, being somewhat thinner; but everything else, such as oats, barley, flax, rye, potatoes and garden truck, I think will be fully as good, and corn is doing a great deal better than last year. It looks as though we would get a big crop. Hay about the same as last year. F. J. P.

GRAND VIEW, Douglas Co.—Wheat, oats, barley and corn at this time promise full crops. Flax looks well. H. A. S.

HURON, Beadle Co.—Corn looks 150; wheat, 60; oats, 100; barley, 100; potatoes and garden stuff about 125. W. A. B.

MIDWAY, Moody Co.—It was quite dry here during May, and it will shorten the yields of wheat, oats and barley at least 25 per cent below last year's crops. I think one-third of the tilled land is in flax. The early-sown flax is looking exceedingly fine; but the late flax came up very unevenly, and will be a short crop. Corn is better than at this time last year. Potatoes never looked better. Small fruits doing well. Strawberries in abundance; never better. J. W. D.

ROCKERVILLE, Pennington Co.—Wheat yielded 35 bushels per acre last year; oats 75 bushels; barley 44, and a prospect for a better yield this year. E. S. G.

PLYMOUTH, Ransom Co.—Corn, 100; wheat, 105; oats, good; rye, none; barley, extra; potatoes good; garden truck good; small fruits good; hay, good. J. S.

Colorado.

FORT COLLINS, Larimer Co.—The crops as a whole this year look much more promising than last—wheat, 100; oats, rye, barley, perhaps crop not quite as good. Last year all fruits, such as apples, grapes, etc., were killed. This year there will be a full crop. Small fruits, strawberries, etc., will be a full crop. Hay is average. Corn not as good as last year. Other crops look well. * * *

WRAY, Weld Co.—This is a new country and there is nothing but sod crops to report. Sod corn looks well, where not cut down with hail. Millet and Alfalfa good. Pumpkins and melons cut down by hail. J. B.

California.

COTTONWOOD, Shasta Co.—Crops are better than they were last year. About the same acreage sown. All fruits in abundance, except peaches, which will be a light crop in some places. J. O. S.

NEWCASTLE, Placer Co.—No small grains are raised here except for hay. Potatoes and garden truck (except tomatoes) only in a small way. Tomatoes are grown quite largely—crop good. Apples, fair; pears, good; peaches, one-third of a crop; plums and prunes fair lots. Poor grapes. Very large field crops. C. M. S.

PENRYN, Placer Co.—This place is particularly devoted to the growing of fruit, and we think there is no place in this State where the varieties adapted to this climate are produced in a higher degree of excellence. Strawberries and raspberries are nearly all marketed, and while the crop is much less than last year, prices have been so much higher that more net money will be made this season. Blackberries are now being picked; crop about the same as last year, but prices are better. Crops of peaches and plums will not be half so large as last season in old orchards, but as there are many new orchards just coming into bearing, more than half as much will be sold, and prices so far have been more than double those of last year, with the prospect of being good throughout the season, as all our surplus can now be sent East through the California Fruit Union at a low rate of freight. Crop of hay unusually large and prices low—$8 to $10 per ton. Wheat, barley and oats yielding heavily. Corn and rye are grown only to quite a limited extent. The total amount of fruit shipped from the towns of Penryn and Newcastle last season was 283½ cars of 20,000 pounds each, and but a small proportion of our orchards are as yet in bearing. P. W. B.

Indian Territory.

OAK LODGE, Choctaw Nation.—Corn and cotton much above the average of last year. Oats a half crop; prairie hay short; garden truck good. G. W. B.

Washington Territory.

PORT TOWNSEND, Jefferson Co.—Wheat, 100. Oats, barley, garden truck and potatoes somewhat short, on account of drought. Hops looking splendid, about 125 per cent. of an average.. A good many raised in the valleys here. No corn raised; fruits, 100; no grapes grown here; hay, 75. J. C. C.

PUYALLUP, Pierce Co.—Everything is two or more weeks late. Compared with this date for 1885, all kinds of grains look fully as well with greater acreage—could not be better. Potatoes and all vegetables are looking fine, but owing to a cold, wet Spring, a good many seeds failed to come up, and the stand is at least 25 per cent. short in most cases. For some reason fruits will not be a big yield, though for size and quality they cannot be excelled. Small fruits are, and will be, abundant. The bushes are simply groaning under their immense loads of big berries, such as only Washington Territory can produce. Specialties are hops, looking as they always do, A 1, but later. Of specialties, many kinds of pears; prunes and all kinds of berries will soon have a pre-eminent place, and be as noted the world over as are to-day Washington Territory hops. J. M. F.

Canada.

BRAMPTON, Peel Co.—Fall wheat badly winter-killed; about half a crop. Spring crops sown when the ground was too wet, rather poor prospect, but they may improve. Barley looks much more promising than wheat. Apples promise an extra crop; other fruits not extensively grown, except berries, which promise well. Hay generally good. Everything earlier than last year. The very best we can hope for is 75 per cent. of last year's crops all round. D. J. M'K.

BRIGHTON, Ontario.—Corn poor; wheat, fall, extra; spring, fair; oats, good; rye, extra; barley, good; potatoes not so good as last year; truck very good; apples not as good as last year; pears and plums none; grapes good; hay extra; hops looking well. All crops are looking better than last year. Had it not been for last week's rain things would have been poor. R. P. J.

ELLESMERE, York Co., Ont.—Spring wheat, oats and barley are looking well, with prospects of good average yields. Three-fourths of fall wheat winter-killed. Hay below an average. Potatoes looking well. J. W.

HAWKINSBURRY, Ontario.—Have had an early favorable Spring, with seasonable rains. Wheat, oats, barley, corn, peas and potatoes look promising; apples and small fruits grown to a limited extent only; but will be full crops; hay, new meadows, good; old, only fair. J. G. H.

GRANTON, Ont.—Fall wheat looks well and is more forward than at this date last year, but late sown won't average half a crop, more having been put in than otherwise would, owing to the failure of spring wheat last year. Oats and barley look well and there will be a full average. No corn of any account sown in our locality. Hay will be about two-thirds the crop of last year. The frost of May 15th and 16th in most localities here injured to some extent apples, grapes, strawberries and early garden stuff. Potatoes are doing well, and not as many of the Bug family as formerly. J. L.

KOMOKA, Ontario.—Fall wheat, 66 per cent.; oats, 90; corn, 100; barley, 80; spring wheat, 70; rye very little sown; potatoes, 110; apples, 85; cherries 200; pears and peaches, very few grown; hay, 50. We have had several showers in the last few days which may increase the percentage. A. D. McL.

LLOYDTOWN, Ont.—As compared with last year, winter wheat is one-half crop; spring wheat, barley, oats and peas about the same. Orchard fruits one-half better. Potatoes better, but bugs worse than ever before. Garden truck better; hay a good crop, about the same as last year. Prices are very poor for all kinds of produce. Wheat 75 cents, and other grains in proportion. R. R.

MANCHESTER, N. S.—Hay promises more than an average crop; corn is not raised here

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THE
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JUDGING from the bloom of the chestnut trees about the Rural Grounds, chestnuts will be scarce this Fall. There is the usual quantity of male flowers apparently, but very few pistillates.

THERE is no oat that we have received better accounts of, both from the West and East, than the Welcome, or White Australian. Both names are wrong. It is an old oat, and never could have originated in Australia, which is not a country in which oats thrive. But it is known now as Welcome, and Welcome it had better remain. It is now at the R. G. the most promising of the many kinds now on trial.

Is it true that dried fruit fumed with sulphur is in any way unwholesome, or usually obnoxious to any sense? In some cases possibly the fruit may be over sulphured so that some of the mineral may condense upon it and affect its flavor, but the grocers say they have not heard and do not know of any such a case, or of any objection being brought against the bleached "schnitts." In other lines sulphur is found very beneficial, especially in destroying minute life that often imperils or distresses our own; as in throat and nose and skin diseases. Miners consider the presence of sulphur in a mine especially healthful, and in cider and wine countries the practice of pouring the liquor into vessels filled with sulphur fumes in order to bar germs of mold and of ferment, and to reduce the amount of oxygen included, is so old and so extensive as to have a special word in the language to express it—the verb to 'stum.' The American dispensary attributes no harmful effect to sulphur taken inwardly in the usual dose.

A NATURAL question which most of our visitors ask before seeing the rye-wheat hybrids is, "What do you expect to gain by the cross?" To this question no intelligent answer could be given, beyond the statement that it was merely an experiment which, if it didn't give us varieties of grain of economical value in one way or another, would certainly prove of scientific interest. We now find there are many plants with large heads bearing in each breast or spikelet an average of four kernels. In some there are five and even six. Other heads bear double spikelets, which are crowded upon the rachis as closely as possible. Among the purely wheat crosses there are splendid heads much thicker and longer than any we have ever seen grown in this climate. The Rural is entitled to have met with some success in its wheat crosses since the work was begun 10 years ago, and though diligently followed up, little of value was produced until the Surprise, Fultzo-Clawson and Dichl-Mediterranean were used as the male plants.

STIMULATED by the success of the Mississippi Agricultural College, various Southern States have made strong efforts to establish live industrial schools. These efforts have for the most part resulted in dismal failures. It would be well if the promoters of these schools would study the real causes of the success of the Mississippi College. There are two chief reasons. It is not attached to any literary institution, but dignifies agriculture to the extent of classing itself as a farmer's school pure and simple. It rigidly enforces the labor system. Every student, as we know from actual observation, is obliged to work on the farm. The college owes its success more to the strict enforcement of this policy than to anything else. Should it relax its vigilance and enthusiasm, we believe it would quickly lose much of its influence and power for good. The trouble with many of the Southern agricultural colleges, is that the trustees put a mouth-piece in the chair of agriculture. They appear to believe that a man can talk an unpopular institution into favor. This cannot be done. It is more work and less talk that is needed and the longer it takes the authorities to recognize this fact the harder the work will be.

ROTATION OF CROPS.

THE correct theory which underlies and explains rotation of crops is not yet determined. The farmer finds it an advantageous thing to practise, yet does not surely know why. It was considered of leading importance by the Romans, and many explanations of its use have been imagined and successively given up. De Candolle taught that the roots of each kind of plant gave off excreta poisonous to itself, while harmless or nutritious to some others. But Tull and Smith, of Lois Weeden, and later Sir J. B. Lawes, have grown the same crop in succession for many years, with no sign of such effect, and it has been commonly done in our own western culture. Gardeners frequently continue the same crop year after year. These facts disprove also another theory, viz., that minute insects and parasitic growth peculiar to each plant get the upper hand when it succeeds itself too continuously. Probably rotation is justified more by convenience than by any absolute necessity for it. Beginning with the turning down of a coarse sod, the farmer finds a strong free-growing plant best adapted to the rough bed, and the time of plowing, convenience of applying manure, etc., guide him in arranging the further succession. Plants that root deeply and bring nutriment within reach of shallower rooting cereals, should naturally precede them. But even that item of theory is hardly yet established. Another consideration is that crops sown in the Fall favor certain winter and spring weeds, which a plowing for any summer crop destroys. Here we find a very important advantage in alternating these, instead of repeating the same crop on the same land, additional to the advantage of famishing out parasitic organisms.

SPECIAL CROP NUMBER.

THE OUTLOOK FOR HARVEST.

IN this issue we present to our readers specimens of over 3,000 reports received between June 25 and July 1 from practical farmers in all parts of the country with regard to the comparative area, condition and outlook for farm, garden and fruit crops in their respective neighborhoods. A careful analysis of nearly all hitherto received, published and unpublished, indicates a very bountiful harvest. There appears to be no noticeable shortage of any crop, while none, except, perhaps, strawberries, is extraordinarily large. Here and there, there are, of course, local shortages or even failures of certain crops, as always must be the case in so extensive a country subject to so many vicissitudes of location, soil, storm, flood, insect depredations and climatic influences; but these mishaps, due to local conditions, however disastrous to particular individuals or locations, do not materially affect the outcome of any crop in the whole country. "Diversified agriculture" throughout the nation at large is evenly balanced, and all branches are thriving. As in individual cases of "mixed farming," a fair measure of success with the various crops goes far toward making the owner prosperous; so the good fortune that appears to attend all the chief crops of the country this year should greatly help to render the farming community prosperous, and to give an impetus to every industry and branch of business; for in this pre-eminently agricultural country, the prosperity of every calling and of every class depends mainly upon the prosperity of agriculture.

Wheat, the great money crop of the North as cotton is of the South, is a fairly good crop. The area of winter wheat is 24,727,087 acres against 22,148,543 acres harvested last year, when 25,975,659 acres were sown, of which nearly 4,000,000 acres were either plowed up or not harvested owing to the poorness of the crop. The yield is variously estimated at from 280,000,000 to 300,000,000 bushels. Our own estimate, formed from information from our own reports and from a multitude of other sources, is 295,000,000 bushels, against 212,000,000 bushels in 1885. Kansas has suffered severely from drought and insect pests; and the crop will not be much over 50 per cent. of an average. Michigan, which last year had the best crop in quantity and quality, falls away behind in both respects this year; while Illinois which suffered most severely in 1885, has a fine crop in 1886; California, however, appears to be the "banner" wheat State this year. Spring wheat has been seriously damaged by a protracted drought, and later rains have only partially made good the injury. The yield, on a somewhat smaller area than last year, is likely to be not over 140,000,000 bushels, making the aggregate wheat yield 435,000,000 bushels—78,000,000 more than last year's output. It is probable the wheat crop will move to market unusually early this year, because the harvest is from one to two weeks earlier than usual; and also because the short crop of last year left farmers short of money, and they wish to realize on this year's crop as soon as possible, and, moreover, the stocks on hand are unusually small, especially at interior points, and millers will take the wheat readily as soon as they can get it. More than usual has already passed from the farmers' hands, chiefly for milling purposes, and reports are general that the quality of the grain is better than usual. August 1 should be considered the beginning of the crop year, rather than September 1.

Corn, by far our most important cereal crop, promises a large yield per acre; but it can hardly be as large as the phenomenal output of 1,936,000,000 bushels last year. Then the yield was 26¼ bushels per acre on nearly 74,000,000 acres—the first full average in the rate of yield since 1880.

Last year the oat crop was the largest ever grown—629,000,000 bushels on 23,000,000 acres. On a slightly increased acreage, the crop will be much less this year—probably not over 600,000,000 bushels—as it has been seriously injured by drought and insect pests in many parts of the country, but especially in the West.

Rye, which is grown in both winter and spring wheat regions, for grain chiefly in the North and for pasture mostly in the South, will be a somewhat larger crop than last year. The area of barley has increased considerably, especially in Kansas, Minnesota, Texas, Tennessee and California. The average is high, especially in New York, Wisconsin, Minnesota and California, which States are by far the heaviest producers. Both rye and barley appear to be among the surest of cereal crops.

In New England there is a considerable decline in the area under potatoes, always one of the most important products of that section. The low prices of the tubers and the great prevalence of rot the past two seasons, have induced the farmers of Massachusetts and Rhode Island to substitute hay to a considerable extent, while those of New Hampshire and Vermont appear to prefer corn. The crop, however, in the country at large is likely to be heavy, especially that of early potatoes, and prices can hardly be high.

New England will have a large crop of apples, but the crop in the rest of the country is not likely to be very heavy on the trees. Owing to the cool weather the trees remained in bloom a long time, and from every quarter come complaints of the dropping of the young fruit. The crop is likely to be low throughout the South, and orchards were greatly injured by the severity of last Winter and late frosts in Spring in the Ohio Valley and the Northwest. As this is generally the "bearing" year, however, and a large number of apple trees have of late been annually planted, there is no fear of a scarcity of fruit. Pears are a poor crop, and the same might be said of peaches were it not that there is a cheap abundance every year in the markets in spite of repeated reports of great damage or utter ruin to the peach orchards. Strawberries everywhere extremely plentiful, so superabundant, indeed, that in many places it would not pay to pick and market them. In some places the beds have been thrown open to the public; in others the berries have been fed to swine, while in others they have been allowed to rot on the ground. In many places pickers put up their prices in spite of the low markets, so that growers could not afford to gather their crops. In spite of low prices, however, probably more money than ever before has been realized from the crop. Other small fruits are abundant.

Grass, the king of crops, for pasture and hay, has suffered greatly from drought in various parts of the country, chiefly in Texas, the West and Northwest. Injury from freezing is also reported from many quarters. The greatest damage has been done on old meadows, new seeding having generally done well. The season has been quite favorable to clover, and though there are reports of injury to this also, they are not nearly so numerous or widespread as those relating to grass. Increase of area has been quite extensive both in clover and the "tame" grasses, especially in the South and West where clover has to some extent taken the place of Timothy. Last year the hay crop was 47,000,000 tons; it is not likely to be very much less this year.

Although tobacco has hardly been a profitable crop for the past year, about the usual area has been planted, chiefly because it is difficult to get out of a long-continued routine, and because no other "money crop" can be so easily raised by the growers. The outlook is reported fair, though it is much too early yet to speak definitely. Hops have been a very unprofitable crop the past year. While it costs from 13 cents to 14½ cents a pound to raise and handle them, they have been selling for all the way from four and one-half to 12 cents. There has been some decrease in acreage, chiefly by the plowing up of old yards and the dropping out of those who were not regular growers, but who were induced to enter the business by the high prices that ruled a few years ago. Until a few days ago reports from all the hop-growing sections were exceedingly favorable, and a continuance of overproduction and low prices seemed inevitable; but for a few days complaints have been coming from Otsego County and the adjoining hop-growing parts of this State to the effect that the yards were in danger of destruction from insect pests and "honeydew" on the vines.

A slight decrease in the area of cotton in some of the older States is more than counterbalanced by the increase in the new States, especially Texas, and to a less extent, Arkansas. Every year resolutions are passed in public assemblies, and resolutions made in private to curtail the area under the staple, and devote more attention to food crops. Planters realize the advantages of raising their own provisions; but each waits for his neighbor to make the desired change. Even the low prices for cotton of late, instead of inducing a curtailment of the crop, have tended to produce an expansion; for as the planters are generally in debt to their commission men, they have to procure a certain amount of money, and the less they get for the product of an acre, the larger the area they have to plant. The present area is about 1¼ per cent. greater than last year, but the condition is considerably poorer.

BREVITIES.

PLANT a few Savoy cabbages for home use.

THOSE who have not raised their own celery plants may now purchase them of seedmen. For main crop, any time before the middle of August will answer.

WE doubt very much if there be any real profit in farmers or farmers' men working hard during hot weather immediately after dinner. And remember the horses, too.

WE are now (July 1st) spading up the soil between our strawberry plants that have been growing in matted rows, leaving only one foot in width of plants. Later, the inverted soil which will be enriched by the plants turned under, will be covered with stable manure, two inches or more in depth, and after frost, the plants will also be covered though not so heavily.

IN the pamphlet entitled "How to Grow Celery" by the Kalmazoo Celery Co., we find the following as to Perfection Heartwell Celery which was sent out in the Rural's Seed Distribution several years ago: "A strong growing variety, not so desirable as some others, though it answers for light and poor soils." We have grown it every year since its introduction, on moist, rich and rather heavy soils and we know of no better variety as raised under the same conditions.

PROFESSOR AUGHEY found, by careful test, that prairie soil, which had been broken up by plowing, contained, immediately after rain, nine times as much moisture as adjoining unbroken soil, and this seems to explain the extension of the rain belt westward. Let such broken-up soil become covered with shrubs and trees, and annually mulched by their falling leaves, and it will continue absorbent and retentive of moisture without losing any of its substance and its fertility, as it is always liable to do when turned over and left bare, excepting, perhaps, in the comparatively scarce level alluvions.

THE Sheffield (Eng.) School Board, after some experiments in supplying to the schools the "silent ministry of flowers," has ordered 10,000 plants—geraniums, fuchsias, petunias, and other sorts most easily and generally cultivated. They are all in pots of the same size and kind, and stamped with S. The pots weigh four-and-a-half tons, and take 12,000 gallons of soil. They will be delivered in equal and good condition, and distributed among the children, who will keep them about six weeks and then exhibit them to compete for prizes. Certainly an interesting experiment all through.

THE R. N.-Y. always tries to respect the opinions of those who write from experience, how widely soever such views may differ from its own. But there are many who own and work neither gardens nor farms who write either for the sake of writing or for the pay they receive from equally inexperienced publishers, who value such communications, as they are written in a plausible, interesting manner. Previous to experience, it is hard to see how such writers can sift the grain from the chaff, let them be ever so gifted in constructing theories and writing them in a forcible way. Thus it is, in great part, that worthless plants and silly methods are often advocated. When once started, they "go the rounds," and it seems next to impossible to head them off. Hundreds read the statements where scores read the contradictions.

SPECIAL CROP REPORTS.

(*Continued from page* 451).

as a field crop, the seasons are too uncertain; wheat is not sown here at present. Very little rye was ever sown here; oats, barley and potatoes promise well; but the potato crop will depend entirely on the weather; potatoes, early planted, now are fit to hoe, and they are seldom fit to hoe here before the 10th of July. Garden truck, especially potatoes and onions, are much further advanced than last year at this time. D. S.

NIAGARA, Ont.—Although the Spring opened unusually early, the opening was immediately followed by a long continuance of cold, wet weather, causing a late Spring seeding. Corn promises well: fall wheat a fair average: oats, though late sown, are growing finely; rye, very little grown; barley looking well; potatoes very good; garden vegetables doing finely; apples promise a fair crop; peaches very light but I think fully up to last year's; pears, plums, cherries and quinces, large crops; raspberries, both red and black, looking very fine and will be a very large crop; currants and gooseberries are likewise good; new meadows are good, especially clover; old meadows rather light. On the whole, I think the grain crops will be fully up to last year's, and fruit will be considerably more.

A. S. B.

OLINDA, Ontario.—Corn extra good; fall wheat, good showing; oats and potatoes good; barley, none; garden truck abundant; apples large crop; pears medium; peaches very large—first crop in three years; other orchard fruits good; grapes large; hay, newly sown, extra; old, not so good; tobacco three acres to one last year, fair; sorghum medium; broom-corn, late. E. C.

OSHAWA Ont.—Wheat, not much sown, on account of low prices. Barley, oats and peas promise good crops. Corn, potatoes and garden truck looking well. Apples and small fruits generally promise fair crops. Hay will average light through this part of Canada.

S. B. G.

PORT DOVER, Ontario.—Wheat, barley and rye, each about 70; corn, oats, potatoes and garden truck, 110; apples, pears, sorghum, grapes, hops, 100; hay and peas, about 100; wheat, 70. W. W. W.

ST. CATHARINES, Ontario.—Wheat will not be quite up to the average, only about three-fourths of a crop. Oats, rye and barley will be full crops. Potatoes will be a good crop. Garden truck is scarce and late. Apples and pears are showing a large crop of fruit. Peaches, a complete failure. Hay, a full crop on all light sandy land, but on the clay it will not be more than three-fourths of a crop. Corn will be a short crop. Tobacco is not grown around here.

SUPPLEMENTAL.

ARKANSAS.

HELENA, Phillips Co.—Corn, 110; wheat, none raised; oats, 90; rye, none; barley, none; potatoes, 100; garden truck, fruits, etc., same as last year; hay, 85; cotton (staple crop of this section), in uplands, 100; low lands subject to overflow, cotton planted late, but good stand; it will make fully three-fourths of a crop. Heavy rains past week, but all report no harm done so far. Western Mississippi land subject to overflow. Cotton planted late; too much rain since June 1st; condition, 50; hay, 100; corn, 75. J. B. R.

CALIFORNIA.

SANTA ANNA, Los Angeles Co.—Corn and barley full crops; potatoes and garden truck good; early peaches scarce; late peaches good; grapes fine; Alfalfa hay not so good as last year, but a fair crop; barley hay a good crop; hops, fair prospects. J. R.

IOWA.

PLEASANTON, Decatur Co.—As compared with last year, corn is 100 per cent.; oats, 90; potatoes, 90; apples, 125; cherries, 50; grapes, 100; Timothy, 75. We are having very dry weather. Meadows and pastures short; very bad for garden truck. Stock doing well; no hog cholera. W. E. P.

KANSAS.

HOWARD, Elk Co.—Crop prospects are better than last year. The acreage of corn is larger than ever before; early fields in silk and tassel. A big crop can be counted on with tolerable certainty. But little small grain was sown, and owing to ravages of the chinch bugs the yield will be below the average, especially with oats: many fields being left uncut. Potatoes will be plenty—at least double last year's crop; garden truck all around has done exceedingly well; apple trees are well laden; no peaches. Cherries and plums, and all kinds of small fruits have done well; hay crop, good. P. N. W.

KENTUCKY.

BOWLING GREEN, Warren Co.—Corn, 20 per cent. better; wheat, 30 per cent. and would have been better than this except for much rain during harvest, and since. Oats, 30 per cent. better; rye about the same as last year, but not much raised in this part of Kentucky. Potatoes, Irish, fine, full crop and good; sweet potatoes are too far from maturity to speak of. Tobacco, larger area, better stand of plants and earlier planted, but very foul; could not be worked for the rain; somewhat "frenched" of earliest planting, but with favorable weather hence will be a larger crop and better, as last year's was poor in quality. Apples, fair crop; no peaches; fire blight in pears worse than ever known, almost wholly destroying many orchards. W. L. D.

CLARKSVILLE, Campbell Co.—Corn looks well, acreage small; wheat, about average crop, if not injured by present wet weather. Rye about the same as wheat, but acreage small; barley, about an average crop; potatoes good, rather above average; apples, a large crop in good condition; pears, small crop; peaches, none; grapes about the same as last year, only in better condition—the best I have ever seen. Hay, poor, hardly half a crop; tobacco, acreage rather small, owing to scarcity of plants; oats, good—better than last year. A. A. W.

MISSISSIPPI.

JACKSON, Hinds Co.—Our corn crop is 10 per cent. better. We raise no wheat. Oats have been generally good; a full crop has been harvested. We raise no rye and barley. Potatoes have been good, and gardens generally are quite good. Apples and pears did not fruit well, while peaches are unusually good. The grape crop will be a good one. Hay has been hard to cure, on account of the rains. We raise no tobacco, hops or broom-corn. The cotton acreage is larger than last year, but the crop prospects not so good R. G.

NEW YORK.

COVENTRY, Chenango Co.—Dairying is the chief occupation here; cows are doing extra well. Grass on new seeding, fine; but on old meadows, poor. Oats and wheat look fine; corn and potatoes backward; acreage about the same as last year. Apples will be above the average, but not more than two-thirds of last year's crop. F. E. B.

NORTH CAROLINA.

RALEIGH, Wake Co.—Cotton, corn, potatoes and garden truck much better than at this date last year, with much more favorable prospects of full crops. Wheat and oats now harvesting; wheat generally a failure; Spring oats good crop; tobacco not as good, prospects less favorable. Fruit not as good; outlook far less promising. Frequent rains, unusual here at this season, have injured peaches and grapes, causing rot. Otherwise they have been, under prompt culture, rather beneficial. B. F. W.

OREGON.

WOODBURN, Marion Co.—The general condition of all kinds of grains, grass and fruits, is fully up to the average throughout Western Oregon. In Southern Oregon the fruit crop will be light. In Eastern Oregon the grain outlook is fair, though continued dry weather may cut grain short, but it is not seriously hurt by it. Taking the State as a whole, I may safely say wheat, oats, barley, rye, corn, grass, and the fruit crops will be a good average. J. H. S.

WASHINGTON TERRITORY.

COLFAX, Whiteman Co.—There has been no rain of any account in the Palouse section for months, and serious damage to crops is the result. Wheat two-thirds of a crop; early-planted potatoes and garden truck are looking well; apples were thinned out by late frosts; strawberries and other small fruits at least two weeks earlier than last year and yielding well. J. M.

WISCONSIN.

PLYMOUTH, Sheboygan Co.—No rain to speak of since May 18. Rain might make a good corn crop yet, but potatoes, wheat, rye, oats and barley won't be over one-fourth of a crop; hay half a crop; apples started well, and with plenty of rain bid fair to be a better crop than last year. S. E. C.

WHEAT CROPS OF THE WORLD.

THE wheat crop of the world for 1885-6, harvested last year in the Northern Hemisphere and early this year in the Southern, is calculated as follows:

	Bushels.
Europe	1,218,000,000
North America, including Can. and Mex.	409,000,000
South America	25,000,000
India	287,000,000
Australasia	37,000,000
Asia Minor, Persia, Egypt, Algeria, etc.	134,000,000
Total	2,110,000,000

This does not include the four to five million bushels of Asiatic Russia, or the unknown quantity produced in China, to which country a considerable quantity of flour is now shipped from San Francisco. Of the above production in "North America," the United States yielded 357,000,000 bushels. The following table shows, in millions, the yield of the various European countries, their average consumption, the surplus in some and the deficiency in others:

Countries.	Crop 1885. Bushels.	Consumption. Bushels.	Surplus. Bushels.	Deficiency. Bushels.
Austria-Hungary	154	144	10	—
Belgium	20	38	—	18
Denmark	5	3	2	—
France	313	343	—	30
Germany	107	117	—	10
Great Britain	82	225	—	143
Greece	5	10	—	5
Italy	118	136	—	18
Netherlands	5	12	—	7
Portugal	8	9	—	1
Roumania	23	18	5	—
Russia	209	144	65	—
Servia	5	3	2	2
Spain	114	114	—	—
Sweden & Norway	3	5	—	2
Switzerland	2	11	—	9
Turkey	45	40	5	—
Total	1,218	1,375	89	243
Deduct surplus				89
Absolute deficiency				154

In Continental Europe the tendency is strong to increase the acreage under wheat, each country being anxious to be self-supporting, and the Continent would require little from outside after the surplus of one section had been distributed where deficiencies exist in others. In several countries wheat is only a supplementary food crop, rye being the real "staff of life" in the Northern countries, as Norway, Sweden, Northern Russia, Denmark and parts of Germany, etc.: and corn in the Southern countries, as Italy, Hungary, Roumania, etc. The heavy import duties lately imposed on foreign cereals, especially wheat, by France, Germany, Austria-Hungary and several other countries, have greatly stimulated the home production of these commodities. The duty on wheat in France now is three francs per 100 kilograms, equal to about 16 cents per bushel, and French agriculturists ask a franc more. In view of the cost of rail and ocean transportation and other charges, these duties are almost prohibitory for American and other foreign grains, so that the supplying of the deficiency in the English markets is the great point of competition among all countries that produce a surplus of wheat in any part of the world.

From 1874 to 1881 the average yearly production of Europe was 1,144,000,000 bushels, and the consumption for food and seed 1,312,000,000 bushels, leaving an annual deficiency of 168,000,000 bushels. The annual production for the last five years, however, from 1881 to 1885, was 1,218,000,000 bushels, an increase of 74,000,000 bushels over the previous eight years. There has been an increase in population, and a proportionate increase in consumption, that of last year being 1,372,000,000 bushels, an increase of 60,000,000 bushels over the average for the eight years before 1881; yet a part of the former deficiency is provided for, and there has also of late been an increase of 63,000,000 bushels in the acreage and production of North Africa, India, South America, Mexico and Canada, stimulated greatly by years of European scarcity of home-grown wheat, and consequent brisk demand and high prices for foreign products, and two-thirds of this has been available for export; hence the foreign market for American surplus wheat is steadily growing less.

The rate of consumption of wheat in Europe which varies from one bushel a head in Norway to nine bushels in France, is about three-and-one-half bushels, with about half a bushel more for seed, or nearly four bushels a year per head for every man woman and child, for food, seed, manufacturing purposes, stock feed, etc.

The Department of Agriculture has lately been making special inquiries with regard to foreign wheat production, and it reports that on May 1 the prospects were good for a European product equal to that of last year, or about 1,218,000,000 bushels, so that there would still be a deficiency of 154,000,000 bushels to be supplied this year, putting the deficiency at the same figure as last year. The averages of yield in Austria-Hungary, France, Germany, Great Britain and Ireland and the Netherlands range from 15 bushels in Austria-Hungary to 28 in Great Britain, and the average of all for five years is nearly 19 bushels. Russia has an area of nearly 31,000,000 acres, and yields scarcely eight bushels per acre. Other countries have an aggregate of about 29,000,000 acres and produce an average of 11 or 12 bushels per acre. The average yield in the United States the present harvest is estimated at 12 bushels per acre, against 13 bushels per acre in 1884, the year of the heaviest aggregate wheat yield.

The area planted in wheat and now harvested or growing is probably very nearly as follows:

Divisions.	Acres.
Europe	94,000,000
North America	40,500,000
South America	6,000,000
India	26,000,000
Australia	3,500,000
Africa and Western Asia	13,000,000
Total	183,000,000

The supply of the commercial year 1886-7 must come from the crops harvested in the early months of this year in the Southern Hemisphere, and from those already harvested or to be harvested in the Northern Hemisphere. The crop of India, grown on a largely reduced area, is said to have fallen from 287,000,000 bushels last year to 265,000,000 this. Home consumption being estimated at 240,000,000 bushels, the exportable surplus is reduced from 47,000,000 to 25,000,000 bushels. According to the brightest early reports, the Australasian crop does not exceed 22,000,000 bushels, so that the exportable surplus has fallen from 17,000,000 to 2,000,000 bushels. Later reports, however, say that instead of a surplus there is a deficiency, so that importations of wheat will be needed.

In South America, however, the surplus for export has increased about 5,000,000 bushels, so that the entire quantity available for export in these countries is smaller by at least 32,000,000 bushels than it was last year. Reports from Europe yesterday say it is estimated that the French wheat crop will be three-sixteenths, or 58,000,000 bushels short, and if this is true, France may have to import 90,000,000 bushels this year, against 32,000,000 bushels last year. In Great Britain there has been a reduction of from eight to 10 per cent. in the wheat acreage, which would indicate a falling off of, say, 8,000,000 bushels in production. The latest advices say the wheat crop of the United Kingdom will be from 15 to 18 per cent. short, for owing to the cool weather a good deal is sure to be caught by early frosts before maturity.

The very latest reports from other European countries indicate that crops will not be above an average, and in view of the shortages, actual or probable, above mentioned, it is pretty certain that the foreign deficiency this year will be considerably greater than last year, while the foreign surplusage will be considerably less.

Last year our aggregate crop amounted only to 357,112,000 bushels, while our exports are estimated at 67,000,000 bushels against an average of 116,000,000 bushels for the last five years. As the demand for food was 271,000,000 bushels and for seed 51,474,906 bushels, there would be left only 24,638,094 bushels for export out of the whole crop, so that at least 42,000,000 bushels of the estimated exports must have come either wholly from the surplus of the enormous crop of 513,763,900 bushels of 1884, or from that and an unusual diminution of the stocks on hand. The aggregate crop of this country is estimated at from 425,000,000 bushels—88,000,000 bushels more than that of last year—to 465,000,000—108,000,000 more—we put it at about 435,000,000 bushels, about 78,000,000 bushels more. The stocks on hand after the remarkably short crop of last year, must be unusually small; there do not seem to be an uncommonly large stocks in Europe or on the way there; the shortages are likely to be greater than last year; and the surpluses are certainly smaller, therefore we see no reason why we cannot find a profitable foreign market for all the wheat we may wish to send abroad, so as not to leave too much on hand to compete with the harvest of 1887.

THE CORN CROP OF THE WORLD.

THE following table gives a fair idea of the corn acreage and yield of the world, the figures for the United States, Canada and Mexico being those for last year's crop, and those for the other countries the amounts given in their last official reports, which are made only occasionally:

Countries.	Acres.	Bushels.
United States	73,150,150	1,936,176,000
Canada	200,000	5,000,000
Mexico	10,600,000	213,000,000
Russia	11,361,000	70,234,000
Roumania	1,423,000	43,000,000
Austria-Hungary	5,458,757	105,640,810
Italy	4,240,264	75,645,857
France	1,525,787	27,689,976
Spain	2,300,000	87,378,388
Portugal	1,284,960	20,288,000
Total	114,521,915	2,535,043,156

Thus it appears that this country produces three-fourths of the corn of the world, and for the last five years the average yield has been 1,619,000,000 bushels, of which we have exported only an average of 56,000,000 bushels, or three-and-one-half per cent. Our principal foreign customer is Great Britain, which, in the last five years has imported 56,000,000 a year. Of this, the United States has furnished direct, 36,000,000, besides some that has gone through Canadian ports. Roumania, Turkey and Russia supplied the rest. Except here and in Mexico, corn is a minor product. There are also some areas of corn in South America, Northern Germany, Algeria, Egypt, Australia and the Cape of Good Hope. The total present area under corn in the world is approximately, 120,000,000 acres, [and the annual product 2,600,000,000 bushels, or about 22 bushels per acre.

Woman's Work.

CONDUCTED BY EMILY L. TAPLIN.

BE KIND TO THE LOVED ONES.

Be kind to thy father, for when thou wert young,
Who loved thee so fondly as he?
He caught the first accents that fell from thy tongue,
And joined in thy innocent glee.
Be kind to thy father, for now he is old,
His locks intermingled with gray,
His footsteps are feeble, once fearless and bold—
Thy father is passing away.

Be kind to thy mother; for, lo! on her brow
May traces of sorrow be seen;
Oh, well may'st thou cherish and comfort her now,
For loving and kind hath she been.
Remember thy mother; for thee she will pray
As long as God giveth her breath;
With accents of kindness then cheer her lone way,
E'en to the dark valley of death.

Be kind to thy brother; his heart will have dearth
If the smile of thy love be withdrawn;
The flowers of feeling will fade at their birth
If the dew of affection be gone.
Be kind to thy brother wherever you are;
The love of a brother should be
An ornament purer and richer by far
Than pearls from the depth of the sea.

Be kind to thy sister; not many may know
The depth of true sisterly love;
The wealth of the ocean lies fathoms below
The surface that sparkles above.
Thy kindness shall bring to thee many sweet hours,
With blessings thy pathway to crown;
Affection shall weave thee a garland of flowers,
More precious than wealth or renown.

—*Unknown Exchange.*

OF INTEREST TO WOMEN.

GAUZE fans painted in water colors, are very dainty and etherial. This work, though requiring much care and skill, is now engrossing many amateur artists.

The most popular beaufet scarfs are of cream or drab linen momie cloth, outlined in washing silk. Conventional flower designs are usually chosen.

A very pretty blotter is made in the shape of a pansy. Four pieces of blotting paper are cut in this shape each four inches across; the top piece is painted in water colors to resemble the flower. The paper is then tied together with lavender ribbon.

The erstwhile aristocratic pug-dog now has his atrevinted nose put out of joint by the setter, the latter being chosen companion of the fashionable damsel on the promenade. The girl accompanying the dog must wear a tailor-made gown and an aspect of British athleticism, according to the fiat of fashion.

For those possessing little hair the best mode of dressing is to comb it all up to the top of the head, pulling it loose in the nape of the neck; fasten it at the top with a plain comb put in slantwise; then divide into two strands and coil into a loose knot on each side. Short hair for women, unless an absolute necessity, is now considered bad style. In London many fashionable women now wear their hair low, in "basket plaits." For this mode the hair is made into fine braids and then flatly coiled in the nape of the neck, after the model of a braided rag mat. It looks as if glued onto the head and is anything but graceful.

The Living Church says that in the farming districts is developed the healthy blood of the people. Let the strong-armed, clear-brained farmers understand this: that to the industry, frugality and contentment of our rural homes we must look for the influences that promise peace and power. And let the young men and maidens, who are blessed with the quiet and healthy surroundings of country life, resist the temptations to swell the ranks of the discontented or unemployed in the noisy and dusty town. It should be noted also, in this connection, that the contrast between the conditions of employé and employer are far greater in the city than the country. The "hired man" in the country works by the side of his employer, has the same fare and much the same privileges. He is not made envious at every turn by the sight of luxuries he cannot share. But the toiler in the streets sees luxury on every hand; he sees men grow rich without apparent effort, and is unhappy, not because his reasonable wants are not satisfied, but because he sees that he is falling behind in the race.

Tell me, is the garden rose
A fairer flower of nobler worth
Than hedgerow pink or bluet frail,
Which lack the rose's garden birth?

Then why should maids of rustic birth
Give place before the city dame,
If garden rose and hedgrow pink
In worth and beauty rank the same?

FLOWERS IN THE SCHOOL-HOUSE.

Among the many refining influences which a thoughtful teacher may bring to bear on her scholars, there is nothing more potent than a taste for flowers. The same taste that will give a touch of refinement to the poorest cottage throws a much-needed grace over a bare school-room. And the children will soon begin to take pride in their teacher's floricultural efforts, whether it takes the form of winter window plants or outdoor summer gardening. As a general thing, the builders of a country school-house seem to pitch their tent on the most barren and sterile spot in the neighborhood, so outdoor gardening is well-nigh an impossibility. So the gardener must make the most of a sunny window. The plants may be contributions from parents who possess them; usually the children are very prond to supply "Teacher" with what she wants, if it is in their power. Simple plants of easy culture may be chosen; the ever-popular Wandering Jew is always pretty, and is not easily disconraged. Oxalis is another nice thing, while Scarlet Geraniums are always neat and thrifty, and turn their smiling faces to their grower through every change of season.

It is not merely for their intrinsic prettiness that we value flowers in the school-room; they will attract and retain the interest of the scholars in a marked degree. If the teacher possesses an intelligent knowledge of plants, she can give most entertaining object lessons on this theme. We do not mean the analytic botany so many graduates possess—that is merely the bleached skeleton of the subject. To engage the attention of children, one should know plants intimately, and enjoy their confidence—study after the system enjoined by Mr. Squeers; "When a boy knows b-o-t-t-i-n-n-e-y means a knowledge of plants, he just goes out and knows 'em." By a sort of anecdotal knowledge of botany and floriculture, a teacher can both interest and instruct. And the refining influence of dainty blossoms cannot be over-estimated. It may not turn rough boys into Chesterfields all at once, but it will be a change in their material lives, and it will help to satisfy that craving for beauty which is the natural dower of every girl.

THE PHILOSOPHY OF OPEN FIRES.

"SHUT in from all the world without,
We sat the clean-winged hearth about,
Content to let the north wind roar
In baffled rage at pane and door;
While the red logs before us beat
The frost line back with tropic heat.
And ever when a louder blast
Shook door and window as it passed,
The merrier up its roaring draught
The great throat of the chimney laughed."

Those lines of Whittier's are our text, and we now proceed to the body of our homily. Where, we ask, do you now see that glorious amplitude of chimney, that generous breadth of ingle, the poet paints?—and echo alone answers—Where? You read of them in stories descriptive of some charming rural hamlet in the New England hills, such as no one ever saw yet, save the writers of the aforesaid stories. No, those delightful relics of our ancestors have given way to the more civilized but unromantic coal stove,—"that red-hot friend of American civilization," as some one pathetically calls it; an ungainly black monster, rejoicing in some horrible inappropriate name, such as Morning Glory, or Dewdrop, or Star of the West.

Query; Are coal stoves a greater sign of advancing civilization than open fires? For in this age, one is nothing without being æsthetic or scientific, and viewing it from the first point, one can scarcely idealize into a harmony or symphony a "new patent action damper automatic regulator self-feeding parlor base burner," as the grimy stove man describes our latest acquisition, even when its beauty (and its cost) is enhanced by certain aggressive ornaments, resembling nickel coffin plates, and an ostentatious nickel-plated bulwark, supposed by students to be evolved from the primitive fender.

Viewed from the Gradgrind point, the coal stove is merely an iron box, more or less complicated in form, which heats so many cubic feet of air, and gives out so many more cubic feet of poisonous gases. As it communicates directly with the chimney, it affords no means of ventilation to the room, whereas the open fire, by means of the generous draught does really purify the air.

For all time, ever since the cacœthes scribendi came into fashion, the open fire has been a source of inspiration for scribblers. In every wintry idyl the heroine sits before the grate, or the wide hearth, with huge logs lying on the andirons, building bright castles in Spain, dreamy pictures demolished by the falling of a few coals. Or we read of the merry group around the hearth at Halloween burning nuts, and roasting apples, and going through all the incantations suitable to the season. But who ever heard of keeping Halloween around a modern coal stove? Why the very nuts and apples and melted lead would rise up to protest against it. I think open fires have a strong moral effect which is decidedly lacking in stoves. Did you ever hear of a mean griping penurious man, who had a wide, generous hearth? No, if he had one he bricked it up, so it would hold a mere slice of fire, like old Scrooge, in the Christmas Carol, and the first thing Scrooge did when he reformed and morally thawed out was to build a rousing fire on the hearth. Generosity and huge open fires always go together.

We can scarcely return to the fires of the middle ages—a hearth larger than the parlor in a city house, and a chimney wide enough and sloping enough to drive a coach and four up, the fire replenished with a whole tree at a time. Grandgrind tells us that in so many—so very many years our American continent will be entirely denuded of trees, at the present rate of consumption, but in spite of that terrible possibility—somewhat robbed of its terrors by its extreme vagueness, we long for a fire of fragrant cedar or crackling hickory with a mighty buck log, as the New Englander's call it, supporting the whole glowing superstructure of fiery coals.

We have all read of the humble but picturesque cottage, with its wide hearth, and shining andirons, while seated before the glowing fire is a trim and rosy damsel, busily knitting, or oftener, I am afraid, making patchwork quilts of fearful and wonderful design, and gorgeous brilliancy. Now that humble cot contains a stifling coal stove, and I fear the rosy-cheeked damsel is not altogether innocent of kindling the fire with the convenient but uncertain kerosene can. O tempores! O mores!

What was the ideal of comfort is now condemned as inconvenient and awkward, and like its contemporaries, the spinning-wheel and the stage coach, is only found either on the confines of civilization, or in the possession of the rich or curious. The recent revival of all old fashions seems to have brought open fires more into favor, but their palmy days are past, and we shall no more return to the glorious fires of our ancestors, than to a belief in witchcraft or the Philosopher's Stone.

GOLDEN GRAINS.

SUFFERING for the *right* is cleansing; as the waves of a stormy sea wash the bold rocks, so the storms of the soul wash out the stains of self .....

OUR troubles are like sharp edged tools, safe enough, and practically beneficial, but dangerous if handled too closely, and heedlessly. Every trial has in it a lesson of wisdom if we only learn it aright.....

BIOGRAPHIES are useful because, if truthfully written, they serve to show us that joys and sorrows are blended in every life.....

SO LIVE that thou shalt make the ground thou walkest over the house where thou dwellest, a sacred shrine for the children who shall outlive thee..... .. ..

BE sure you understand the import of the commands you make, and that your child understands them, before you exact obedience. Be not selfish in your requirements, but consider whether they are really for the best good of the child.....

IF you can do little else for a wicked world, pray! it is a great thing to pray aright. He who does so has a hold of the lever that can move the universe.....

AN exchange says the Rev. Phillips Brooks declined to accept the office of Assistant Bishop of Pennsylvania because Boston is so much nearer Heaven than Philadelphia. Dr. Brooks is an Evangelical churchman, and isn't it more reasonable to suppose that he declined the honor because he thought Boston in greater need of his ministrations than the "City of Brotherly Love?".....

FROM pity for others springs ardent, courageous benevolence; from pity of ourselves feeble, cowardly sentimentality.....

ENGLISH Methodism is beginning to protest with great earnestness against the three years' limit of its pastorate, and a prominent London journal says it is successfully emptying the largest chapels in city and country, and condemns it as being no longer necessary, and totally un-Wesleyan. .....

AS riches and favor forsake a man we find him to be a fool, but nobody could find it out in his prosperity.....

LIFE is too short to nurse one's misery. Hurry across the lowlands, that we may linger longer on the mountain tops.....

HARD speech between those who have loved is hidden in the memory, like the sight of greatness and beauty sunk in vice and rags.

AT a recent dinner party the subject of eternal life and future punishment came up for a long discussion, in which Mark Twain, who was present, took no part. A lady near him turned suddenly toward him and exclaimed, "Why do you not say anything? I want your opinion." Twain replied gravely, "Madam, you must excuse me; I am silent of necessity. I have friends in both places".....

MR. POWDERLY is very conservative. In the circular just issued he is very severe on strikes, boycotts, riots, anarchists, and intemperance.

Domestic Economy

CONDUCTED BY MRS. AGNES E. M. CARMAN.

HOUSE-KEEPING IN CALIFORNIA.—X.

MARY-WAGER FISHER.

AFTER dinner until half-past seven was the laddie's hour, when Anaximander read aloud for him his daily portion of "solid" reading, as the boy was in the habit of calling it. From November to March this reading embraced Huxley's Physiography, Geikie's Elements of Physical Geography, Lubbock's Ants, Bees and Wasps, and the first volume of Prescott's Conquest of Mexico—with all of which the child was greatly entertained—these books being quite within the mental range of a bright child of eight years of age, whose taste for reading has not been vitiated by Sunday School literature—which is all good enough morally, but vicious, intellectually. A volume from which he read aloud to me every afternoon was Parton's Captains of Industry—reading it twice through—a capital book for boys. While the evening reading was going on, I sat by and did the "darning and mending"—which increased in volume as the new clothes with which we had started from home began to show serious marks of wear. One morning I found a friend ripping apart a gown. "I wonder how it happened," she exclaimed, "that women are forever turning gowns upside down and backside before. Who ever heard of a man turning his trousers?" "I have—at least I have seen trousers legs cut off and turned front side back—but I suppose some woman did it," I replied. "The great drawback to us creatures, is our economy—in small things. We waste our time and our energies in patching and darning, and in trying to make one dollar go as far as ten. I do, I know, and I have to spur myself up to a great moral hight in order to be able to part with an old gown or an old pair of gloves." I was delighted the other day to find that at last there was a demand for old tin cans. A Chinaman came to the house, offering quite liberally for all the empty tin cans. They seem to have discovered that new tops can be put on, and the cans re-used, which will depopulate the back yards and dumping grounds. It forms also a new source of pin-money to women. Henceforth we will not only turn our gowns and darn our stockings, but carefully hoard tin cans! It is almost equal to a new avenue of employment.

"I think," continued, this young lady, "that I am not a normal woman. It seems to me every woman ought to like house-keeping; house work and the careful management required in a family. But *I* don't. I like study, and I begrudge every moment I have to give to such things. How is it with you?" If I am cogitating, or have a matter in my mind which I am turning over for thorough inspection, I enjoy doing housework and love dearly to sew. Having my hands occupied facilitates my mental activity. But when I am through with my thinking, I begrudge every moment I am obliged to give to manual labor, or to doing anything that I did equally well 20 years ago. If I had to earn my living at manual labor, I would prefer housework to a great many other things—to sewing, to serving as clerk, shop girl, or even school teaching. There is nothing degrading in housework—it furnishes variety, and it is an occupation in which one can make advancement. The objections commonly urged against doing housework by American girls are the sheerest nonsense. They simply allow one of the most profitable and agreeable occupations to be taken from them and absorbed by the scum of foreign lands. A thoroughly capable and efficient American girl, who is *well* trained, knows how to cook excellently, how to manage her work and keep tidy; can command from five to six dollars a week, with room, board and washing, in rich families, providing she is entirely responsible and trustworthy. It is very difficult to obtain such service, and a servant of that character never need fear that she will fail to be respected and valued by her employers. But as for *all* women liking housework, because they are women, seems to me absurd. We have the same ancestry as have men, and it is but natural that we inherit the same tendencies. I think more women would contribute to the arts and sciences, if the feeling and traning were not so general,

Miscellaneous Advertising.

When Baby was sick, we gave her Castoria,
When she was a Child, she cried for Castoria,
When she became Miss, she clung to Castoria,
When she had Children, she gave them Castoria.

that women should confine themselves to "women's work." I think some men who are very poor bricklayers might have made excellent cooks, and some women who are very poor housekeepers might have made very successful merchants. As things are now, we drop like so many pegs in so many holes; sometimes we harmonize with the environment and sometimes not. But every occupation is largely humdrum that is of much use. At least, men say theirs are monotonous and full of drudgery."

"In the millennium," laughed my friend "I suppose every creature will find his workin harmony with his disposition, and everything will be lovely! A way will have been found by that time to dispense with all disagreeable work, and the race will swim in a sea of happy delusion!"

Anent inventions by women, I noticed in the Report of the Women's Department at the New Orleans Exposition that a Rhode Island woman had a patent for an Improved Ventilating chimney; a New Yorker for a patent Invalid Bed; Pennsylvania women had patents for an Adjustable Window Cleaner, machine for Hooping Barrels, Improved Drawers for Children, Extension Stair-rod, Hot Air Vapor Apparatus, and model of Improved Railroad Car Seat; from Illinois women, came Portable Wire Screens, Combination Cottage and Arbor Folding Bed, Safety Rubbers, Portable Nursery Chair; from Iowa, Fly-screen Door Attachment, Step ladder, Thermometer to facilitate cooking and baking, Ironing Table, Silver-plated Carriage Tip and Wagon Tongue, patents and inventions from California women included Applied Button-hole, Hook and Eye, Reading Stand, Window Attachment and Dust Pan. The dust pan into which you can sweep the dirt without bending down to hold it, is very good. Among other inventions by women I noted Kitchen Maize Cutter, Flexible Halter, Soap Holder, Cistern Spout Trap, Self-Heating Flat Iron and Long Handled Dust Pan. Of those women inventors, who received awards, five belonged in Pennsylvania, three New York, two New Hampshire, seven Massachusetts, seven Illinois, one Iowa, three California, one Michigan, one Kentucky, one Connecticut and three Indiana. The variety and hope of the inventions are certainly creditable.

A JULY DINNER.

Tapioca Cream Soup.
Soles Stewed Jewish Fashion.
Veal Cutlets a La Milanaise. Potato Snow.
Bee Croquettes. Cucumber Toast.
Swiss Pudding.

Make one quart of white stock. This can be done with a ten-cent knuckle of veal, or from the water in which a chicken has been boiled, but no roasted or dark meats must be used, and only white pepper in the seasoning. Soak three even tablespoonfuls of tapioca over-night in cold water; add it to the stock, together with one small onion, two stalks of celery cut in bits, and a tiny piece of mace; stew these very gently for one hour; have in another vessel a pint of boiling milk or cream; strain the tapioca and stock and add it to this; season with salt, pepper and a tablespoonful of butter cut in bits.

Soles stewed Jewish fashion are a very nice fish course for warm weather. Cut up two large onions in slices, lay them flat in a stew-pan with an ounce of butter and just enough water to cover them, first seasoning with salt and pepper; simmer until tender. Cut in comely pieces a pair of flounders weighing about one-and-a-half pound each; lay them on the top of the onions and let them cook gently until the flesh lets loose from the bones; take out the fish and onions and lay them on a dish; strain off the liquor, and when cold stir into it the juice of two lemons beaten up with the yolks of three eggs; return it to the sauce-pan; let the whole get hot again but not boil; sprinkle the fish and onions with finely minced parsley and pour the sauce over the whole.

Veal cutlets are a delicious change from the ordinary methods, when prepared as follows: Trim some cutlets into a neat and uniform shape, and dip them in melted butter, then into bread-crumbs, to which grated Parmesan cheese has been added in the proportion of two tablespoonfuls of the cheese to six of the crumbs; the mixture should be salted and peppered. Dip again in beaten egg and again in the mixture of cheese and crumbs, and fry brown. Boil a small quantity of macaroni, about a quarter of a pound to eight or ten pieces of the cutlets; when done, drain it and pour over two tablespoonfuls of melted butter, two of grated Parmesan cheese, and half a cup of tomato sauce, to which has been added the well-beaten yolk of an egg. Place this macaroni in a pile in the center of a dish, and the cutlets in a circle around it. In the preparation of the maccaroni no mention was made of seasoning, but it must be boiled in salted water and salt and pepper be added with the butter, cheese and tomato sauce.

It is a strange thing that the simplest dishes are generally the most poorly done by the majority (and a big one at that) of cooks. There is not one in a hundred who will properly prepare a dish of mashed potatoes, a fact that I can only explain on the ground of laziness, for it really takes muscle to do it properly. After beating and mashing as fine as possible with a potato masher, have ready a small quantity of hot milk, into which a generous lump of butter has been melted, and the seasoning added. Then with a four-pronged fork, beat the potatoes as you would whip eggs, adding the milk and butter, until the whole mass is light and foamy. You can make it as soft as you like by adding the milk. If a great deal is used, it becomes potato soufflé. For the dish named above, it just requires to be light and feathery so that it can be heaped up on a dish in irregular masses. It is sometimes pressed through a sieve, which looks very pretty, but it is a great deal of trouble, and is very apt to cool too much in the process.

Beef croquettes make an economical little side dish at dinner. Take one cup of lean beef chopped as fine as possible, with half as much cold boiled ham and a little of the fat of the roast beef; season with a teaspoonful of finely chopped onion, salt, pepper, a trifle of sage and grated lemon peel. Put half a cup of stock in a stew-pan, and when it boils stir in a teaspoonful of flour wet with cold water, then the minced meat and a well-beaten egg. Form into croquettes, dip in egg and bread-crumbs and fry in boiling fat.

Peel crisp cucumbers, cut in slices lengthwise, lay for a half hour in salted cold water; drain and dip each slice in flour, and fry quickly to a light brown color in hot beef drippings or butter. Place each slice of cucumber hot from the pan between thin slices of hot buttered toast, seasoning them first with pepper, salt and a little mustard if liked, and serve at once.

Swiss Pudding.—Put a pint of milk over the fire in a double boiler, with the grated rind of a lemon; as soon as it boils, pour it slowly over a teacup of flour, through which four tablespoonfuls of butter have been rubbed; return to the boiler to cook five minutes, stirring for three minutes. Then stir in the beaten yolks of five eggs and three tablespoonfuls of sugar, remove immediately from the fire and set away to cool. When cold, add the whites of five eggs whipped to a froth, put it into a three-quart mould well buttered, steam for 40 minutes, turn out upon a hot dish and serve at once with a sauce made by beating to a cream half a cup each of butter and powdered sugar, then add a little at a time four tablespoonfuls of wine and a gill of cream.

PALMETTO.

HINTS ON HOMELY TOPICS.

SWEEPING AND DUSTING.

"Set thine house in order."

To the wise and experienced housekeeper these are trivial subjects, but since this is the season when "a young man's fancy lightly turns to thoughts of love," it is quite probable that there will be some housekeepers who will be willing to listen to "words of wisdom" from the RURAL. It is a peculiar fact that if a lady who may never have been called upon to handle a broom, should find it necessary to sweep a room, she will do it better than nine-tenths of the professed servants who have been to the manner born. This is because she will use some intelligence in the manner of performing her task. I am forcibly reminded of this fact every time the hotel chambermaid enters my room for cleaning purposes, an especial misnomer in this case. The dust routed from the floor whirls madly from the room, and then this "velvet bloom of time" settles quietly down again upon carpet and vase and easy chair, and truly the last state of my room is worse than the first.

But to proceed with my prosy details, since it is always quite as important to tell how a thing *should* be done as to tell how it should *not* be done: the first step is to dust all moveable pieces of furniture, with a large square of soft, old calico, or something that is not linty, removing them to another room. Rugs should be sent out-of-doors for a thorough beating, curtains and portieres shaken and pinned up, bric-a-brac dusted and placed upon a table or some article of furniture that is too large to be removed; all such pieces, after a good dusting, to be pinned up in old cloths kept for the purpose. Worn sheets or the skirts of old calico dresses, sewed together so as to cover each piece completely, can always be kept ready. I once knew a housekeeper who always had her beds changed on Friday so that she could use the soiled sheets for covering the furniture on sweeping days. I do not, however, recommend this practice. Having made these preparations, if the carpet is a very dusty one, tear some old, soft newspapers in shreds, soak them in water, squeeze them out lightly, and scatter over the floor, then with the broom sweep in long even strokes, letting each stroke end on the floor instead of in the air as is the usual fashion of housemaids. If it is a room that is only swept occasionally, it will pay to give it a second sweeping, omitting the wet paper, then take a large pail of clean warm water in which a handful of salt and a tablespoonful of pearline have been put, and an old flannel cloth, wring the latter out and wipe the whole carpet, a small piece at a time, rinsing out the cloth frequently and changing the water if it becomes too dirty. The carpet, even if an ancient one, will astonish you after this "Turkish bath," by its bright cheerful look. Allow a short time for the dust to settle and then finish the task so well begun, by dusting window frames, cornices and all the woodwork; if the latter is soiled wipe it with a soft cloth dipped in the same preparation that you used for the carpets. The work of dusting the furniture that had been covered will be very light, but it will pay to rub it well with an oily rag, using kerosene oil, but only a very little of it. The efficacy of this application depends not so much upon the oil as upon the amount of elbow grease that is employed, if you will excuse this homely expression.

There is so much more satisfaction in doing anything that has to be done in a thorough and workman like manner, that since "cleanliness is next to godliness," one may be excused if while performing a labor of this kind she should think of George Herbert's beautiful lines:

"Who sweeps a room as to thy laws
Makes that and the action fine."

BESSIE.

KEROSENE IN WASHING.

IN RURAL for May 29, a correspondent asks for information in regard to using kerosene oil for washing.

The rule as given to me is: one five-cent bar of soap shaved up fine, to four pails of water, and two-and-one-half tablespoonfuls of kerosene oil. Add the soap and water, when the soap is fully dissolved and the water boiling, add the oil and then the clothes, watching the clock to be sure they boil just 10 minutes, no more, no less. I was not satisfied with the result and experimented. My boiler was made for my stove and holds over a barrel of water, for 16 pails of water I use one or two cakes of soap, according to size and condition of wash. While the water is cold, I place the sheets on the bottom of boiler, then add the soap shaved finely, scattering it as evenly as possible, then the rest of the clothes, rubbing soap on the neck and wrist-bands of shirts, lastly adding the kerosene oil, four spoonfuls to the 16 pails of water, and let them stand until they have boiled 10 minutes, then take out of the suds, rinse, and hang out.

SUBSCRIBER.

I WAS greatly surprised in reading the short article with the above heading, in the RURAL of May 29th, to learn that our Eastern sisters have not discovered the excellent qualities of kerosene for cleansing purposes. I have used it for washing a long time, and would not wash without it now; my clothes are whiter than when I employed a wash-woman, and it does not hurt me in the least to do my washing, which I cannot do the old way, and by the time they are ironed the unpleasant smell has all evaporated. The night before, put clothes to soak in warm water with enough soap dissolved in it to make a good suds. In the morning wring out, if very dirty, rub lightly in the hands; put in the boiler with cold water, two-thirds of a bar of soap, and two large tablespoonfuls of kerosene, let boil at least 20 minutes after they come to the boil; when taken out, let cool enough to put through the wringer again, then rub through clean water, blue and starch (with a little of the oil in the starch) and your clothes will satisfy the most fastidious.

MRS. S. A. BROZENON.

BREAKFAST PUFFS.

Take in the proportion of one cup of flour, one cup of milk and one egg; beat the egg very light and have the freshest milk obtainable, and be sure to sift the flour. Put in well greased and well-warmed pans—gem pans or the small, narrow pans that savoy biscuit are baked in are the best, but cups or muffin-rings will answer—and have your oven very hot.

COTTAGE CHEESE PUDDING.

Take two cups of cottage cheese and mash it with a spoon; add to it three eggs, one at a time, beating well each one into the cheese, as much sugar to sweeten it to your taste, together with one tablespoonful of flour, a pinch of salt, a grate of nutmeg and sufficient milk to make the mixture a little thicker than custard. Have a pie-plate lined with rather rich paste and strewed with sugar, in which put your pudding, sprinkling the top before baking liberally with finely powdered cinnamon.

AUNT ADDIE.

Miscellaneous Advertising.

Debility

Languor, and Loss of Appetite, are cured by the use of Ayer's Sarsaparilla. It removes that terrible sense of *Constant Weariness*, from which so many suffer, gives tone and vigor to the stomach, and restores health and strength more surely and speedily than any other medicine.

Three years ago I suffered from Debility and Loss of Appetite, the result of Liver Disease. After having tried various remedies, and consulted several physicians, without benefit, I was induced to take Ayer's Sarsaparilla. The first bottle produced a marked change, and the second and third accomplished so much that I felt like a new man. I have, since that time, taken about one bottle every year, and had no recurrence of the trouble.—William E. Way, East Lempster, N. H.

Ayer's Sarsaparilla,

Prepared by Dr. J. C. Ayer & Co., Lowell, Mass. Sold by all Druggists. Price $1; six bottles, $5.

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HIRES' IMPROVED ROOT BEER. Packages, 25 cts. Makes 5 gallons of a delicious, sparkling and wholesome beverage. Sold by all druggists, or sent by mail on receipt of 25 cents. C. E. HIRES, 48 N. Delaware Ave., Philadelphia, Pa.

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LOCAL TREE AGENTS WANTED. Parties are doing well selling for us. Sell a bill of stock to your neighbors and by so doing get your own free. A. M. Purdy, Palmyra, N. Y.

News of the Week.

HOME NEWS.

SATURDAY, July 3, 1886.

WEDNESDAY last, June 30, was the end of the National fiscal year, as all government accounts run from June 30 to June 30, instead of from Jan. 1, to Jan. 1.....The Treasury statement issued Thursday shows a reduction of the National debt (less cash in the Treasury) of $9,061,818 for the month ending June 30. The receipts and expenditures for the fiscal year, compared with the last preceding one, show an increase of revenue of about $12,500,000, and a decrease in the expenditures of about $14,500,000. Customs receipts are some $11,000,000 better, internal revenue $4,500,000, and miscellaneous some $3,000,000 less. The ordinary expenses are $22,400,000 less than last year, interest is nearly $1,000,000 less, and pensions are $8,600,000 more..... ....The Fitz John Porter Bill which has passed the Senate by 30 to 17, has been signed by the President.....The Illinois Prohibitionists, in their State Convention at Springfield Thursday, adopted a cold-water platform, nominated Henry W. Austin, of Oak Park for State Treasurer, and U. Z. Gilmer of Quincey for State Superintendent of Public Instruction, appointed committees, and adjourned. Prohibitionists extremely active and independent everywhere; belligency, too, is not confined excessively to the "rum interests."..... The first through train on the Canadian Pacific Railroad for fire-swept Vancouver, the Pacific terminus, left Montreal on Monday night, June 28. It is not improbable that the first train eastward will bring with it a large consignment of tea for the Eastern States. About 100 carloads were offered some time ago to leave Yokohama for Vancouver. This fact was recently announced by Mr. Van Horne, the Vice-President of the railroad, who said that the teas were to be carried over his line and distributed not alone in Montreal, Ottawa and Toronto, but in St. Paul, Chicago, New York, and the New England States. This consignment will make a beginning of the trade which the managers of the Canadian Pacific hope to open up with China and Japan. The road will not only bind the extreme east and west of the Dominion—an immense advantage politically—but it will help to open up the intervening country, and afford a passage for British troops on British possessions around the globe. It will also bring much Eastern trade to Canada..... ....The manufacture of rubber has increased enormously of late. It is now very nearly five times as great in the United States as it was 16 years ago. In 1870 our imports were only 5,132,000 pounds, while last year they aggregated 24,871,000. We lead the world in the consumption of rubber goods, taking about 70 per cent. of all that is produced on the face of the globe. There are about 30 rubber factories in the United States..... ....When the Beck Railroad Attorneys' Bill was referred to the Senate Judiciary Committee, Senator Edmunds, Chairman, promised to report it for Senatorial action within eight days. He didn't do so; but so great is the outside pressure that it will probably be reported after the railroad Senators shall have so amended it as to remove all the "reflections" upon them, which they professed to recognize in it, especially if in the process it is emasculated of the best features.....Money to help the elections of Home Rule candidates in the United Kingdom is being generously contributed by all parts of this country and Canada ....Of the 214 church picnickers poisoned at Flemington, N. J., one has already died and several others are still in danger. It is now thought that the ice-cream, not the spring, was maliciously poisoned with arsenic. A man suspected, but no arrests yet..... From present appearances Blaine and Cleveland are likely to be again the candidates of the Republican and Democratic parties at the next election. It is thought, however, that the Democratic ticket should be: "For President, Mrs. Frances Grover Cleveland; for Vice-President, Mr. Grover Cleveland. Platform—In Union there is Strength." No doubt whatever that the union of Frances and Grover has added immensely to the political strength of the latter.....Another California petition, with 50,000 signatures, was presented to Congress Monday for a law prohibiting Chinese immigration absolutely forever. The treaty with China provides that such a law must not be passed, and one side alone cannot abrogate a treaty; it must run until its limit is reached, unless China will agree to the new legislation, and of course that's unlikely.....The will of Col. Folsom, Mrs. Cleveland's grandfather, was probated Monday. Property left among his eight grandchildren, share and share alike. Each, including Mrs. C., will get about $20,000, instead of the $50,000 expected. If the property improves they will get more. Some Western land has to be held till all are "of age."..... In Cuba 25,000 slaves were set free between May 8, 1885, and May 7, 1886.....The Knights of Labor appeal to Speaker Carlisle to urge the passage of the following measures before Congress, intimating that as the Democratic Party has a majority of "some forty" in the Lower House, it should be held responsible if the bills are not passed: 1. House bill repealing Timber Culture, Pre-emption, and Desert Land Acts. 2. House bill for the adjustment of railroad and other land grants. 3. Bills forfeiting all railroad land grants the conditions of which have not been strictly complied with. 4. House bill organizing the Territory of Oklahoma. 5. Senate bill opening a portion of the great Sioux Reservation to settlement. 6. Bills prohibiting aliens from holding land in the United States. 7. Bill making Presidential and Congressional election-days holidays, and punishing bribery. 8. Bill directing disbursement of at least $200,000,000 Treasury surplus, and substituting Treasury notes for bank notes retired..... .. ....Gov. McEnery, of La., appeals for help for the sorely distressed people in portions of the parishes of Rapides, Grant and Catahoula, which have been flooded and terribly afflicted by storms of wind and rain. The crops have been totally destroyed, cattle and hogs drowned, and the soil in many cases has been washed away to such an extent that it will be impossible to raise crops of any kind this year. .....A resolution of the Portland, Oregon, Board of Trade was lately presented to Congress protesting against the forfeiture of the Northern Pacific land grant for the uncompleted Cascade Branch. It turns out that the resolution was unauthorized and illegal, and it is to be expurged from the record..... ....There's a bill before the Senate to increase the annual allowance for arming the militia to $600,000 from $200,000, which was fixed before the year 1810, and is conceded to be inadequate in 1886. The House is likely to cut it down to $400,000, if it gets to it before the end of the session.....The Cardinal's cap was conferred on Cardinal Taschereau at Quebec by the envoy from the Pope last Thursday. Cardinal Gibbons, of Baltimore, has also been officially invested with the insignia of a "Prince of the Church."..... ....Some 12,000 bills have been introduced in Congress this season, three-fourths of which are House bills. Of the 3,000 introduced in the Senate, 448 are set down to Mr. Sawyer and 447 to Mr. Blair. No other Senator is guilty of half so many, though Mr. Sewell comes up with 205 and Mr. Van Wyck with 203. The Kansas Senators, Plum and Ingalls, respectively number 150 and 151. As to the character of these measures, Mr. Blair easily heads the list in the matter of nonsense. Mr. Sawyer's are doubtless mostly private pension bills, as he acquired great distinction some weeks ago in preparing an unprecedented number within a given time for presentation on the part of the Pension Committee. Mr. Kenna, of West Virginia, introduced the lowest number, two, if we except Mr. Jones, of Florida, who has been continuously absent, and who has presented none at all..... ....Mr. Morrison thinks that instead of a reduction of $9,000,000 in the customs revenue estimated by Randall to be brought about by his tariff bill, it would cause an increase, on the basis of last year's imports, of some $5,000,000. On the other hand, the loss of internal revenue he estimates at $36,000,000 in place of $20,000,000 as announced by Mr. Randall, the repeal of the tax on tobacco alone cutting off at least $26,000,000. There's no chance of any tariff legislation this session anyhow; but there's any amount of bitter talk about it, especially among the Democrats, to the immense joy of the Republicans.....Another Yankee fishing boat has been seized by the Canadians for getting ice and bait. Our neighbors say they have received no instructions or advice from the Imperial Government with regard to the fishery trouble, and that they intend to act just as they have been acting.....The President has approved the act to legalize the incorporation of National trades unions; the act granting a franking privilege to Julia Grant, and the bill to pension the widow of A. A. Semmes..... .....Assistant Sec. of the Treasury, W. E. Smith, of New York, has resigned, and Gov. Thompson, of S. C. has resigned the Governorship and accepted the place, which is very important during the illness of Sec. Manning. Smith goes west as chief counsel to the St. Paul and Manitoba R. R.; salary $15,000 a year. Thompson is young (comparatively) and has made an excellent Governor..... ... The "Breadwinners" was written jointly by Capt. Frank H. Mason and wife, now U. S. Consul at Marseilles, formerly journalist at Cleveland, O.—written abroad; brought over by John Hay, to whom the clever work was credited.....A good deal of disgust is reported at Amherst, Mass., over the shelving Prest. Greenough, of the Agricultural College. He didn't resign; nor was he removed; he simply failed to be re-elected..... Extraordinary romancing is telegraphed from Southern Dakota about an extensive military organization bent on setting up an independent State .. ....A part of last week and the whole of this have been consumed in trying to get a satisfactory jury to try the Chicago Anarchists. These have just made the convenient discovery that the rascal who threw the bomb was killed the next day in a struggle with a policeman.....The striking Chicago switchmen, backed up by the stockyard men, have been riotous several times during the week. Several trains on the Lake Shore Road derailed; others forced through under heavy guard of Pinkerton policemen and others. Considerable firing, and storms of stones.....

FOREIGN NEWS.

SATURDAY, June 3, 1886.

THE elections now going on in the United Kingdom are holding a dominant place in the attention of all English-speaking people, and a prominent place in that of all Christendom. The issue is now substantially narrowed down to some sort of Home Rule with land laws favorable to landlords under Salisbury, and a definite form of Home Rule with land laws favorable to tenants under Gladstone. Already, 87 Members of Parliament have been elected; most of whom were unopposed, and the majority of such are Conservatives. Of these, 52 are Conservatives, 10 Liberal-Unionists, 17 Gladstonians and eight Parnellites. The Liberals who do not favor Gladstone, generally do not vote instead of voting for his opponents. At the last election, the Conservatives started ahead in the same way, but were finally defeated. The cries now are, "The masses against the classes," on the Gladstone side, and "The safety of the Empire," on the other. The anti-Gladstonites have hitherto won two seats, but the Home Rulers expect to get 20 majority. The contest is extremely close, and both sides are fighting hard and well. It is still "anybody's battle," but the results of today's elections will indicate which side is likely to win. The first battle of the "masses," the poor, undisciplined, semi-ignorant masses, against the wealthy, trained, cultured "classes" is an up-hill fight, and with a divided Liberal party, it will be a glorious victory if Gladstone wins, and no shame whatever if he fails.

In France the expulsion of the Princes still continues to cause a great sensation. The Orleanists, Legitimists and Bonapartists are combining against the Republic. The Count of Paris's manifesto, in which he boldly asserts his rights to the throne, is held to prove the justice and expediency of the expulsion. The Republicans threaten to confiscate the property of the exiles, if they prove troublesome. Most of it is, however, invested in foreign securities, or so disposed of that it would be extremely difficult, if not impossible, to touch it legally.....The organization and movements of the French army are very active of late, as if some new step were contemplated. All the equipments, etc., are overhauled and put in prime order, all officers furloughed or detailed on special service have just been ordered to join their commands. General Boulanger, Minister of War, is very lively and energetic. Is it all through fear of a monarchical uprising, or on account of the late growls of Germany at French intrigue and hostility; or through some secret arrangement with Russia, which of all the European Powers would be most likely to side with France or seek French aid in a conflict with Germany and Austria, which are pretty certain to act together in the next war.

AGRICULTURAL NEWS.

SATURDAY, July 3, 1886.

OWING to heavy elevator charges on grain in Chicago, there was such danger of much of the grain trade going elsewhere that a change was made which went into effect on July 1, which cheapens the cost of handling grain for direct shipment fully 50 per cent. This aggregate of saving includes a remission of the charge hitherto made for switching the cars of Eastern lines to the elevators for loading, and the smaller fee for distributing the grain evenly in the car..... An immense swarm of June bugs settled down on Pekin, Ill., Monday evening. Millions of them flew against an electric light on a street corner and were burned to death. Five wagon loads were gathered up afterwards from the ground beneath the lights, and thrown into the Illinois River .... .. Gen. Boulanger, French Minister of War, having purchased foreign oats for the use of the army, was called to task in the Chamber of Deputies Thursday. He said the supply of French oats was insufficient, and that foreign oats were cheaper and more suitable. The Chamber declared, by 273 to 263 votes votes, that it was convinced the Government should henceforth give contracts to French farmers whenever it is possible to do so.....Some time ago the Penn. State authorities thought they had stamped out contagious pleuro-pneumonia among cattle in Lancaster Co.; but it has again broken out virulently among the herd of Henry Bend, of Turkey Hill, near Lancaster—affected animals killed.....The Collector of the Customs at Corpus Christi, Texas, reports that a total of 32,884 sheep were imported from Mexico into Texas from January 1 to March 31, of which 30,144 were admitted free "for breeding purposes," and every one of them had a heavy fleece. None will be admitted hereafter unless careful investigation proves that they are imported specially for breeding, in which case they ought to be choice animals.....The appeal of the Penn. Agricultural Society to the Legislature for State aid to get rid of its $25,000 debt, having been received unfavorably, it now asks subscriptions from 500 "prominent Philadelphians"..... ....The Senate Committee on Agriculture has reported favorably, with substantially no alterations, the House Oleomargarine Bill. Action will be urged upon it as soon as the pressure of appropriation bills is over. Some say it will be talked to death by the Senate on motion to refer it to the Judiciary Committee. Others say it will be amended so as to reduce the five-cent tax to three cents, and then passed; but even then the President's action is considered doubtful.....

Where Florida Failed.

ONE of the favorably known merchants of New York—one who has been planted and rooted for a long time in the same place—is Mr. J. H. Johnston, jeweler, of No. 150 Bowery, New York, where he has been established over thirty years.

Mr. Johnston has one of the cosiest suburban homes in the vicinity of New York, situated at Mott Haven, just across the Harlem River, in the northern part of the city. His wife is a most estimable lady, and is known as a writer of marked ability. Those who see her now, in the enjoyment of excellent health, would hardly suppose that four years ago she was an invalid wavering between the love of life and a constant prospect of death. To one of our correspondents who visited her Mrs. Johnston said:

"When I went to Washington to attend the inauguration of President Garfield I was exposed in stormy weather and caught a severe cold. It settled on my lungs, producing serious results, among which were an obstinate cough and sharp pains in my lungs. Mr. Johnston became alarmed and took me to Florida the following winter. I was by this time unable to sit up for a moment, and was with great difficulty conveyed to the steamer; overhearing the remark from a bystander, as I was being transferred from the carriage to my birth, '*there goes another to be brought back in a box.*" The sunny days partially restored my health, but on the approach of winter again my cough increased and strength vanished. My appetite was entirely gone. I swallowed food in daily decreasing quantities, and from a sense of duty only. Still, I fought the idea that I had entered on the decline that ends in death.

"I had heard of Compound Oxygen and I determined to investigate it. My husband and I went to Philadelphia to learn its merits at headquarters. Dr. Starkey examined me, told me what I already realized, namely, that my case was a serious one and that unless the hemorrhages were checked I would not live over three months. I was deeply impressed with his earnestness. I tried the Compound Oxygen at once and found a prompt benefit. This increased daily and the cure eventually proved permanent. I was inspired with an enthusiasm for life to which I had long been a stranger. The weary, nervous depressions to which I had yielded gave way to sunshine and hope. The pain in my lungs gradually faded away and the severe aches in my side no longer afflicted me. My sleep, before restless, became even and quiet. Shortness of breath was succeeded by a facility for using the full breathing power of my lungs. My capricious appetite became a natural one, and I began once more to enjoy life. Though I believe myself cured, I exercise care in avoiding exposure to colds. I always keep the Compound Oxygen in the house and take it on the slightest provocation. It always acts beneficially.

"I ascribe my cure to Compound Oxygen alone, as I took no other medicine, and the weather prevented any out-of-door exercise. However I never used it according to directions, but in sudden attacks of congestion or threatened pneumonia have taken it as it could be inhaled, every few minutes until relieved from the pain and suffocation, and when able to live in the sunshine took the Compound only before retiring. I really believe it is *the remedy* for all lung diseases, and you are at liberty to use my name in recommending it."—*Adv*

Crops & Markets.

SATURDAY, July 3, 1886.

Dispatches from Otsego County, N. Y., report that the hop vines generally throughout that section are literally covered with lice from the bottom of the strings to the top of the poles. Honeydew is also found wherever the lice are, and this is fully as bad as the vermin. So there are, in fact, two pests working the destruction of the crop. The dew is a companion of the lice, though there is an occasional vine on which only the dew appears. Either is ruinous. The extensive appearance of lice in June leaves no hope for the crop, and unless some sudden and unforseen change shall occur there will be no hops to harvest. The leaves attacked by lice curl up and dry, and mold follows in the hops before they mature. The lice usually appear in August. Then the growth of the hops is so far advanced that the vermin can do little damage. Reports from Southern Oneida and Madison Counties are also to the effect that lice are so numerous as to threaten the total destruction of the hop crop.

The interest in wool has gone westward from the Central Western States (Ohio and Michigan) to Montana, Wyoming and Utah, where prices are held comparatively higher than those in the Eastern markets. The clip east of the Mississippi has been mostly cleared up out of growers' hands, more largely by local speculators than by Eastern dealers and manufacturers, prices having risen from one to three cents per pound within 10 days, so that growers who heeded the information and suggestions here given have gained considerably. Favorable advices of the colonial wool sales at London help to stiffen figures. Manufacturers at Boston now readily pay two cents a pound more than was asked a fortnight ago. The general opinion is that although there may be slight reactions during the rest of the year, prices are not likely to drop much, if any, below current quotations. Mill owners are, therefore, stocking up freely.

Prices for leading descriptions of wool at Boston are as follows:

Ohio and Pennsylvania X	32@33c.
Ohio and Pennsylvania XX	33@34c.
Ohio and Pennsylvania XX and above	35c.
Michigan X	32c.
Fine Ohio delaine	33c.
No. 1 combing	36c.
Texas spring, 12 mos	21@24c.
Super A	31@37c.

The market at Philadelphia is very strong and for some grades one-half to one cent higher, with a general upward tendency in sympathy with the West. Demand is active but business is crippled by the light stocks. Supplies of old wool are about exhausted and receipts of new are very light and are quickly marketed.

MARKETS BY TELEGRAPH.

SATURDAY, July 3, 1886.

CHICAGO.—Compared with cash prices a week ago, "regular" wheat is 2c. higher; No. 2 Spring, 1¾c. higher. Corn, ¾c. lower. Oats, ⅝c. higher. Rye and barley steady. Pork, 90c. higher. Lard, 42½c. higher. Cattle, lower on all grades. Hogs, from 15c. to 25c. higher. Sheep, from 15c. to 30c. lower.

WHEAT, active; Sales ranged: July, 73@74¼c; August, 75@76¼c; Sept., 75¾@77¾c; No. 2 Spring, 72¾@74¼c; No. 3 Spring, 69@69½c. CORN brisk; sales: Cash, 33⅜@33¾c; July, 33⅝@33⅞c; August, 30@30¼c; September, 37⅝@37¾c. OATS.—Active. Sales ranged: Cash, 27⅞@27½c; July, 27¼@27⅜c; August, 26⅛@26⅜c; September, 26@26¼c. RYE.—No. 2 at 56c. BARLEY.—No 2, at 53c. MESS PORK.—Cash, at $9 75@10 15; July, at $9 90@10 15; August, at $10 02½@10 42½; September, at $10 20@10 45. LARD.—Cash, $6 45@6 60; July, at $6 50@6 60c; August at $6 70; September, quoted at $6 70@6 83½. BULKMEATS.—Shoulders quoted at $5 50@5 45; short rib sides, at $6 95@6 10; Short Clear sides, at $6 40@6 45. CATTLE—Market brisk and steady. Shipping steers, at $3 60@5 50; stockers and feeders, $2 50@4 35; cows, bulls and mixed at $1 75@3 90; bulk, $2 50@3 00; through Texas cattle, $3 80@3 85. HOGS.—Market active. Rough and mixed, $4 24@4 40; packing and shipping at $4 50@4 57; light, $4 25@4 75; skips, $2 75@4 00. SHEEP.—Market quiet and weak; Natives, $2 20@3 40; Texans, at $2 25@3 25; Lambs, per head, $1 25@3 75.

ST. LOUIS.—Compared with cash prices a week ago, No. 2 red wheat is 6c. lower, while July wheat is ⅛c. higher, and August, 1¼c. higher. Corn, ½c. higher. Oats, ⅜c. higher. Butter, Creamery and Dairy, 4c. higher. Eggs, steady. Flaxseed, 4c. lower. Pork, $1 higher.

WHEAT.—No. 2 Red, Cash, 71@71½c; July, 71c; August, at 74½@75c; September, at 77½c. CORN.—No. 2 mixed Cash, quoted at 30@30¾c; July, at 30⅝c.; August, at 35c. OATS.—Quiet; No. 2 mixed, Cash, at 27@28¼c.; July, at 24c; August, 24½c. RYE steady at 55c. BUTTER.—Quiet; Creamery, 15@16c; dairy, 12@14c. EGGS.—Quiet at 8½c. FLAXSEED at $1 00@1 01. HAY.—Timothy, $10 00; Prairie, $4 50. BRAN, 45c. at the mill. PORK, $10 50. BULKMEATS.—Long clear, at $6 10; short ribs, $6 20; short clear, $6 25. LARD.—Steady at $6 30@5 35.

BOSTON.—CORN.—Corn steady, but only fairly active; Steamer yellow, at 46@47½c, and steamer mixed at 46@46½c. OATS.—Firmer, with an improved demand and higher prices; No. 2 white, at 39½c; shorts and provisions steady and unchanged. HAY AND STRAW.—Choice prime hay at $18@19; fair to good, at $15 00@17 00; East, fine, at $14 00@17 00; poor to ordinary, $11 00@14 00; East swale, $10 00@11 00. Straw.—Rye straw, choice, $20 00; Oat straw, at $10@11 per ton. Truck.—Cabbage, per bbl, $1 25; Bermuda onions, per crt, $1 85; rhubarb, $1 per cwt; radishes, per 100 bunches, $2 50; lettuce, per box, 75c; native cucumbers, 4c; bunch beets, 4@5c; bunch turnips, 6@7c; native peas, $1 50 per bushel. Poultry and Game.—Western turkeys, frozen, No. 1, 14c; No. 2, 10@12c; spring chickens, 25@30c; fresh killed, near-by fowls, 12@14c; live fowls, 10c; Western frozen chickens, 10@12c; Western fresh killed fowls, 10@11c; green geese, 18@20c; green ducks, 18@20c. PRODUCE.—BUTTER.—Western extra fresh-made creamery, 17¼@18c; do. extra firsts, 17c; do. firsts, 16@16½c; imitation creamery extra, 14@15c; do. extra firsts, 12@13c; do. fresh factory, choice, 12c; fair to good, 10@11c; do. common lots, 8@9c; Eastern creamery, good to choice, 17@18c; Northern creamery, extra, 19c; extra firsts, 17½@17c; Vermont dairy, extra, 17c, do. firsts, 15@15½c; do. fair to good, 13@14c; New York dairy, extra, 16½@17c; do. extra firsts, at 15@16c; do. firsts, 14c; do. fair to good, 12@13c; low grades of butter as to quality; the above quotations are receivers' prices for strictly wholesale lots. Jobbing prices 1@2c. higher. CHEESE.—Choice Northern, 8c; do. sage, 8¼c; Western, 7¾c; lower grades according to quality; jobbing price, ¼c. higher. EGGS.—Near-by, 15@15½c.; East extra 14½@15c; New Hampshire and Vermont extras, at 14½c; New York extra, 14@14½c; Western choice, at 13½c; Michigan extra, 14c; Nova Scotia, 14c; Northern, 14c; Island, 13c; jobbing price, 1c. higher. BEANS.—Choice small New York, hand-picked pea, at $1 55@1 60 per bushel; choice New York large hand-picked $1 50@1 55; small Vermont hand-picked pea, $1 70@1 80; choice screened pea, $1 35@1 40; hand picked medium $1 45@1 50; choice screened, $1 15@1 20; common do, $1@1 10; choice improved Yellow Eyes, $1 45@1 50; old-fashioned yellow eyes, $1 40@1 45; Red Kidneys, $1 70@1 75; can peas, 85@90c, for roasting, and 95c@$1 for choice; green peas, $1 30@1 25 per bushel for choice West; 90c@$1 for North. Jobbing price, 10c. higher. POTATOES, old, 75@80c, per bushel; new, Norfolk, $3 00 per bushel; medium do, $2@2 25.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, July 3, 1886.

STATE OF THE MARKET.—Compared with cash prices last week, flour is 5c. lower; Ungraded Winter Red wheat steady; No. 2 Red ½c. higher; corn, 1c. lower; oats, ½c. higher; pork, 25c. higher; butter, cheese and eggs about steady.

FLOUR, FEED AND MEAL. FLOUR—Quotations: Fine at $2 00@2 75; Superfine, $2 25@2 90; Extra No. 2, $2 50@3 00; Good to Fancy Extra State, $3 00@3 90; Common to Good Extra Western, at $2 50@3 90; Good to Choice Extra Western, $4 00@4 80; Common to Fair Extra Ohio, $2 00@3 75; Good, $3 80@4 20; Good to Choice, $4 25@4 50; Common Extra Minnesota, $2 50@3 25; Clear, $3 25@3 75; Rye Mixture, $3 20@3 75; Straight, $4 00@4 50; Patent $4 35@4 80; Bakers' Extra, $3 75@4 15; St. Louis Common to Fair Extra, $2 50@3 65; Fair to Good, $3 70@4 50; Good to Very Choice, $4 55@4 80; Patent Winter Wheat Extra, $4 85@4 85; City Mill Extra for West Indies, at $4 25@4 50; South America, $4 20@4 40. SOUTHERN FLOUR.—Extra at $3 10@3 40 for Common to Fair, and $3 45@5 90 for Fair to Choice. RYE FLOUR.—Superfine, at $3 00@3 25, latter for choice. CORN MEAL.—Brandywine at $2 75, quoted at $2 70@2 75. Yellow Western at $2 50@2 75. FEED.—40 to 50 lbs. quoted at 65@70c., and from mill at 67½c; 60 lb. at 62½@65c; 80 lb. at 70@75c; 100 lb. at 80@85c; Sharps at 95c.@$1. Rye nominal.

GRAIN.—WHEAT.—Ungraded Winter Red, 75@83½c; No. 2 Milwaukee, 81½c; No. 1 Northern, 85⅝@86 1-16c; No. 3 Red, at 75c; No. 2 Red, at 85¼c; No. 2 Red for July, 81½@84c; do. for August, 81½@85c; do. for September, 84½@86¼c; do. for October, 85¼@86¾c; do. for November, at 86½@87½c; do. for December, at 87 13-16@88⅞c; do. for January, 89@89¾c; do. for February, at 90⅝@91½c; do. for May, 94@94½c. RYE.—Western, 55@57c; Canada at 58½@59c; State at 60@62c. CORN.—Ungraded Mixed, at 37@43c; No. 2 Mixed, at 46@47c; No. 2 Mixed for July, 45@45½c; do. for August, 45½@45¾c; do. for September, 45¼@46c; do. for October, at 46¼@46¾c. OATS.—No. 3, Mixed at 34½c; No. 2, 34½c; No. 3 White, 37½@38c; No. 2 39½@40c; Mixed Western, at 34@38c; White do. at 38@44½c; White State, at 42½@44c; No. 2 Mixed for July, 31c.

PROVISIONS.—PORK.—Mess quoted at $10 25@10 75 for Old and $11 25@11 75 for New; $11 50@12 50 for Family Mess; $13 00@14 75 for Clear Back; and $9 50@10 00 for Extra Prime. BEEF.—Extra India Mess, at $12 00@14 00; Extra Mess, in barrels, $8 00; Packet, $8 50; Fancy Plate, $8 50. BEEF HAMS.—Quoted at $2 50@22 00. CUT MEATS.—Pickled Bellies, 6c; Pickled Shoulders, 6@6½c; Pickled Hams, at 11c. MIDDLES.—Long Clear in New York, 6½c; at the West, Long Clear, 6.25c; Short Clear, 6 45c. DRESSED HOGS.—City Heavy to Light quoted at 6¼@6⅝c.; Pigs, 7c. LARD.—Western Steam spot quoted at 6.40c; July, quoted at 6.75c; August, 6.72@6.84; September, 6.82@6.94; October, 6.76@6.82c. City Steam higher at 6.35c. Refined quoted at 6.75c. Continent at 7@7.10c.

BUTTER.—Creamery—State and Delaware County pails, fine, 17½c; State and Pennsylvania, 17@17½c; Western best, 15½c; Western prime, 15@15½c.; Western good, at 14@—c; State pails at —@—c. State Dairy.—Half-firkin tubs, best, 15½c; do. do, extra fine, 14½@15c; do. do., good, 13@14c; do. do. common, 11@12c; Welsh tubs, best, 15c; do prime, 14c. Western.—Imitation Creamery, best, 12½@13c; do. do. fair and good, 11@12c; Dairy, fine, 12½—c; do, common, 9@11c; Factory, fresh, 11c; do. good, 9@10c.

CHEESE.—The quotations are for: New State Factory, best white, 7¾@7¾c; do. do, best colored, at 7¾@7¾c; do. do, fine, at 7@7½c; do. do, fair, at 6¾@6¾c; do. do., common, at 5½@6c; Ohio factory, fine, at 7@—c; State factory, light skims, at 4½@5½c.

EGGS.—Quotations are for: State, at 14@15c; Western, at 13½@14c; Canadian, at 13½@14c.

POULTRY.—LIVE.—Chickens, spring, per lb, at 16@20c; fowls, near-by lots, per lb, at 11½@13c.; fowls, Western lots, per lb, at 11@11½c.; fowls Southern lots, per lb, at 10½@11c; turkeys, per lb at 7@8c; ducks, western, per pair, at 50@60c.; geese, western, per pair, at $1.00@1.25.

POULTRY.—DRESSED.—Turkeys, per pound, at 8@10c.; Spring chickens, Philadelphia, per pound at 23@31c.; do. western, per lb, at 19@23c; fowls, Pennsylvania, prime, per lb, 13@14c.; do State and western, per lb, at 9@10c.

COTTON.—The quotations, according to the American classification, are as follows:

	Uplands.	New Orleans and Gulf.	Texas.
Ordinary	6¾	6 15-16	6 15-16
Strict Ordinary	6 3-16	7⅜	7⅜
Good Ordinary	8⅛	8 5-16	8 5-16
Strict Good Ordinary	8 9-16	8¾	8¾
Low Middling	8 15-16	9⅛	9⅛
Strict Low Middling	9 3-16	9⅜	9⅜
Middling	9⅜	9 9-16	9 9-16
Good Middling	9⅞	10 1-16	10 1-16
Strict Good Middling	10 3-16	10⅜	10⅜
Middling Fair	10 9-16	10¾	10¾
Fair	11 3-16	11⅛	11⅛

STAINED.

Good Ordinary	6 9-16	Low Middling	8 1-16
Strict Good Ord.	7¼	Middling	8 13-16

FRUITS.—FRESH.—Quotations are: Apples.—Norfolk, per bbl., at $2 00@2 50. Strawberries.—Western New York, per quart, at 8@10c; up river, per quart, at 8@8c; and at 8@12c. for extra choice lots. Cherries at 6@8c. for dark red, large, and 4@5c. for small. Gooseberries, per bush., at $1 00. Raspberries at 6@7c. per quart for Maryland, and 3@7c. per quart for blackcap. Huckleberries at 10@12c. per quart. Peaches at $1@1 50 for prime Georgia and South Carolina per crate; $2 50@3 for prime North Carolina per crate, and 50c@$1 50 for fair and good lots. Plums at $1 25@1 75 per crate.

FRUITS.—DRIED.—The quotations are as follows Apples—Fancy evaporated, at 7¾@—c; choice, at 7¼c; do. prime at 7@7¼c; fancy North Carolina sliced, at —; choice do. at 2½@3c.; choice Tennessee quarters at 1½@2c.; State quarters at 2½@3c.; southern sliced prime at 1½@2c; do. common, —; Peaches—Peeled North Carolina, choice, 11c; fancy, 12@12½c; extra fancy, —c; Georgia, choice, at 10@11c; do. prime, 8@9c; unpeeled halves, 2½@3c; unpeeled quarters at 2¼@2½c.; Delaware evaporated, peeled, —@—c; unpeeled do., at —@—c. Choice pitted cherries at 10c. Evaporated raspberries, at —@15c; sun-dried do. 13@—c. Blackberries—Prime at 6½@7c. Whortleberries at —c. Plums, at 5c.

PEANUTS.—The following quotations are: 7c. for best hand-picked; 4½@5½c. for farmers' grades.

HAY AND STRAW.—The following quotations are; for Choice Timothy hay at 80@85c; Good do, at 65@70c; medium 55@60c; shipping at 50c; clover mixed, 50@60c; clover, black, at —@—c. Straw.—No. 1 rye, 90@—c; short rye at 65@70c; oat, at 40@45c; wheat, at —c.

HOPS.—State, best, 15c.; State, good and prime, 12@13c; State, common, 9@10c.; State, old crop, 7@9c; Eastern, 9@13c; California, 9@13c.

VEGETABLES.—There is a good inquiry for potatoes at firm prices. Quotations are for: Potatoes.—Maryland, prime, per bbl, $3 00@3 50; Norfolk and North Carolina, prime rose, per bbl, $3 00@3 50; Norfolk Chili red, prime, per bbl, at $2 75@3 00; Eastern Shore Va., per bbl, quoted at $3 00@4 25; new potatoes seconds, per bbl, $2 00@2 25; new potatoes, culls, per bbl, $1 25@1 50; Rose, eastern, prime, per bbl, $1 75@2; Burbank, State, per bbl, $1 75@2 00; Burbank, eastern, per bbl, $1 75@2 00; Prolific, Nova Scotia and New Brunswick, per bbl, $1 50@2 00; Mercer, Prince Edwards Island, per bag, $1 25@1 50; Mercer, Prince Edward Island, bulk, per 180 lb, $1 25@1 50. Asparagus.—Oyster Bay, per dozen bunches, at $1 50@2 00; do, upper Jersey, prime, $1 50@2 00. Beets.—Long Island, per 100 bunches, $1 50. Beans.—Long Island, per bag, $2 25; Jersey, per bbl, $3 50@4 00; Maryland, wax, per bbl, $2 50@4 50; Norfolk, wax, per half bbl, $1 00@2 00; Norfolk, round, per half bbl, $1 50@2 00; Norfolk round per bush, cr, $1@1 25. Cabbages.—Long Island, per 100, $3 50@4 00; do, Norfolk and North Carolina, per bbl, at $1 50@1 75. Carrots.—Long Island, per 100 bunches, $1 50. Cucumbers.—Norfolk and N. C. per bushel crat, 60@75c; do, Charleston, per crate, 30@50c.; do, Savannah, per crate, 25@40c. Lettuce, Long Island, per bbl, 50c. Onions.—Bermuda per crate, at $1 25@1 75; do, New Orleans, per bbl, $3 00@3 50; do, New Orleans, per bag, $1 50@—; do, Maryland, per bbl, at $2 50@2 75; do, Virginia, per bbl, $2 00@2 50; do, Tennessee, per bbl, $2 50; Egyptian, per crate, $2 25@2 60. Peas.—Long Island, per bag, $1@1 25. Radishes.—Long Island, per 100 bunches, 50c. Rhubarb.—Long Island, per 100 bunches, $2 50. Spinnach.—Long Island, per bbl, 40@50c. Squash.—Norfolk, white, per crate, 40@50c. Tomatoes.—Illinois, per box, $1; Norfolk, per crate, $1 25@1 50; Savannah, per crate, $1 25@1 50; Charleston, per crate, $1@1 25; Florida, choice, per crate, $1 25; Florida, poor to fair, per crate, 75c.@1 00. Turnips, white, July and L. I., per 100 bunches, quoted at $2 00@3 00.

LIVE STOCK MARKET.

NEW YORK, SATURDAY, July 3, 1886.

BEEVES.—Extra Meal-fed Steer from Cumberland Co., Pa., 1,498 lb average, at $6 25 per 100 lb; Ohio steers, 1,214 lb, at $5 25; do, 1,245 lb, at $5; Virginia do, 1,261 lb, at $5 20; do. Bulls, 1,400 lb, at $3 25; Indiana Cows, 936 lb, at $1 20; steers and cows mixed, 1,151 lb, at $4 75; Meal-fed steers from Lancaster County, Penn, 1,527 lb average, at $6 10 per 100 lb; do, 1,441 lb, at $5 70; "Bandboxes," 950 lb, at 2c. per lb; Ohio Steers, 1,338 lb, at $5 60; Chicago steers, 1,255 lb, at $5 40; do, 1,265 lb, at $5 35; Ohio do, 1,381 lb, at $5 45; Oxen, 1,675 lb, at $5 12½; Bulls, 1,690 lb, at $3; Kentucky "Stillers" 1,212 lb, at $5 30; Buffalo steers, 1,146 lb, at $4 95; Kentucky do, 1,288 lb, at $5 11; Long Island "Stillers," 1,016 lb, at $4 75; Terre Haule "Stillers," 1,236 lb at $5 05; Cincinnati do, 1,259 lb, at $5 60; Still Bulls, 1,228 lb, at $3 75; St. Louis Steers, 1,205 lb, at $5 40; Chicago steers, 1,345 lb, at $5 38; State Cows, Stags and Steers, 986 lb, at $4 10; Cow, 1,130 lb, at $3 40.

CALVES.—Buttermilk Calves, 141 lb, 2¼c; do. 182 lb, 2¾c; Fed calves, 196 lb, 3¾c; do. 191 lb, at 4c; Veals, 144 lb, 6c; Buttermilk calves, 167 lb, at $2 25; Veals, 196 lb, 5¾c; do, 168 lb; 5¼c; Veals, 162 lb, 6c.

SHEEP AND LAMBS.—Total for six days, 39,651 head against 37,109 head for the same time last week. The demand was slack for nearly all grades, and while strictly Prime and Choice lots of both Sheep and Lambs sold at about yesterday's closing prices, the market was generally rated ¼c. lower on Common and Medium Sheep, and ½@¾c. lower on Ordinary to Good Lambs. State Sheep, 92 lb, at 4¾c; State lambs, 52 lb, 5¾c; State Sheep, 97 lb, at 4¼c; Western do, 113 lb, 4¾c; State Lambs, 66 lb, at 7¼c.; Ohio Sheep, 78 lb at $4 65; do. 82 lb, 5c; Kentucky Lambs 58 lb, at 9¾c; Virginia do, 58 lb, at 7c; do, 67 lb 7¼c; Pennsylvania Sheep, 88 lb, at $5 35; Ohio do, 91 lb, at $5 25c; West Virginia Lambs, 58 lb, at $7 10 per 100 lb; Virginia Sheep, 117 lb, 4c; Ohio Sheep, 108 lb, 5¼c; Virginia Ewes, 95 lb, 3¾c; Maryland Lambs, 62 lb, 7¾c; Jerseys do, 96 lb, at 7¼c.

HOGS.—Total receipts for six days, 38,105 head against 29,649 head for the same time last week. No sales reported on live weight. Fair to Good Hogs may be quoted at $5 20@5 50.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING June 26, 1886.

E. F. C.—G. S.—E. D. C.—J. A. W.—L. E. B.—E. P.—J. J. W.—F. S. N., thanks—J. R. H.—L. E. B.—L. C. R.—J. L. L.—S. T. S.—P. G. B.—J. P.—J. S.—E. D.—J. M.—Nadltor—J. B. F.—D. E. W.—L. J.—A. S.—J. G.—H. P.—R. R.—G. B.—D. G.—J. S.—G. A. C.—J. B.—L. S. E.—W. A. D. B.—W. W. W.—A. P. W—J. S. C.—E. P. S.—J. L.—J. F. J.—W. H., thanks—J. M. F.—W. F.—C. A. G.—E. Y.—F. C.—W. M.

SEND TEN CENTS IN POSTAGE STAMPS TO

E. & O. WARD,

PRODUCE COMMISSION MERCHANTS,

for Circular giving important advice about **shipping produce.** Also containing recipe for **preserving Eggs.** Established 1845.

No. 279 Washington St., New York City.

I WILL INSURE YOUR HOGS!

DR. JOS. HAAS'

HOG AND POULTRY REMEDY

[None Genuine without this Trade Mark.]

Is the only Practical Preventive of the so-called Swine Plague.

It has never been surpassed as an increaser of pork and general system tonic. Aiding digestion, stimulating the biliary organs, preventing torpor and engorgement of the liver, and regulating the bowels, it removes and prevents the formation of disease germs, and preserves to the well bred hog his natural constitution. Where it has been fed to such animals in the prescribed quantities, and other directions faithfully observed, it has proved a thorough preventive against swine disease.

AS AN EVIDENCE OF FAITH

In my remedy I make the following offer:

1. I will insure herds of swine of not less than one hundred in number against disease, at a small fee per head, provided they are fed my remedy under my direction and prove upon examination prior to contract that they are in a healthy condition, and are neither in-bred, close-bred nor the progeny of such.

1. I will forfeit $100.00 to any breeder whose offer to examine for insurance I decline, provided he forwards remittance to cover my expenses to and from location of hogs, or I fail to prove to the satisfaction of any disinterested party, that failure to respond to invitation is caused by prior engagement or by matters of at least equal importance.

2. I will forfeit $500.00 if I decline upon examination to insure such herds, if my judgment as to their condition of health is overborne by the result of an examination made by at least two properly qualified and graduated veterinary surgeons.

Facts are Better than Assertions.

Please read the following testimony:

GIBSONTON P. O., PA., Feb. 2, 1885.

Dr. Jos. Haas—Dear Sir: About a year ago our herd here numbered about 2,700 head. Disease broke out, and no remedy we had would arrest the trouble. Our losses were heavy and we had to give up feeding entirely for about two months. We then heard of your remedy and bought a trial lot, and began feeding again. We have used it constantly ever since. We have since April last received about 5,000 head of hogs into our herd and have not had a single death from swine disease. This is our experience. Our opinion is that the remedy has prevented disease, and we would not think of being without it. As an aid in fattening pork, we believe it to be good. On this point, however, we have not made an actual test, *as we would not risk feeding a pen of hogs without the Remedy.*

Yours very truly, WHITE & CO.

[N. B.—White & Co., since writing the above letter, have purchased $450 worth of the remedy.]

The remedy can be procured of all Druggists, or from my laboratory. Prices, $2.50, $1.25 and 50 cts. per package. 25 lb. cans, $12.50.

JOS. HAAS, V. S.

Member of Indiana State Veterinary Med. Associat'n

INDIANAPOLIS, IND.

A NEW BUTTER PRESERVATIVE.

KELLOGG'S ROYAL SALT.

Positively Prevents Butter from ever becoming Rancid.

Endorsed by George B. Douglas, Esq., Ex-President Mercantile Exchange; Putnam Conklin, Esq., Manager Thurber, Whyland & Co.'s Butter Department, New York City; Col. Wm. Crozier, Northport, L. I., N. Y., and others. Send for Circular.

BUTTER PRESERVATIVE SALT CO.,

OFFICE AND FACTORY, FOOT OF

West Eleventh St., New York City, N. Y.

MAPLE LAWN POULTRY YARDS AND KENNELS.

Wyandottes, Plymouth Rocks, Pekin Ducks —500 finely bred Chicks for sale. SCOTCH COLLIE (Shepherd) Pups, bred from imported stock. Write for what you want. Address

WESLEY B. BARTON, Pittsfield, Mass.

BLYTHECOTE FARM POULTRY YARDS.

INTELLIGENT BREEDING PAYS! BLYTHECOTE STRAIN OF WYANDOTTES.

Annual improvement sought by careful matings selected from the best. One setting of choice Eggs will produce more first-class birds than ten settings from inferior stock. A limited number for sale from the above yards this Season. Price, $3 per Setting of 13; Two Settings, $5; Five Settings, $10.

Address

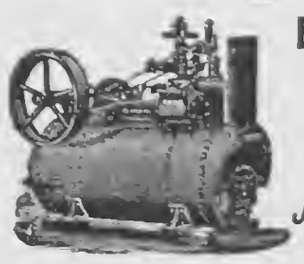
J. D. TOMPKINS, Brainard, N. Y.

TOWER'S TRADE FISH BRAND MARK

None genuine unless stamped with the above TRADE MARK.

SLICKER Is The Best Waterproof Coat Ever Made.

Don't waste your money on a gum or rubber coat. The FISH BRAND SLICKER is absolutely *water* and *wind* proof, and will keep you dry in the hardest storm. Ask for the "FISH BRAND" SLICKER and take no other. If your storekeeper does not have the "FISH BRAND", send for descriptive catalogue to A. J. TOWER, 20 Simmons St., Boston, Mass.



BOOKWALTER ENGINES

UPRIGHT AND HORIZONTAL,

3 TO 10 HORSE POWER.

OVER 3,000 IN SUCCESSFUL OPERATION.

Illustrated Pamphlet sent free. Address,

JAMES LEFFEL & CO., Springfield, Ohio.

Eastern Office: 110 Liberty St., New York.

IMPORTANT TO THRESHERMEN!

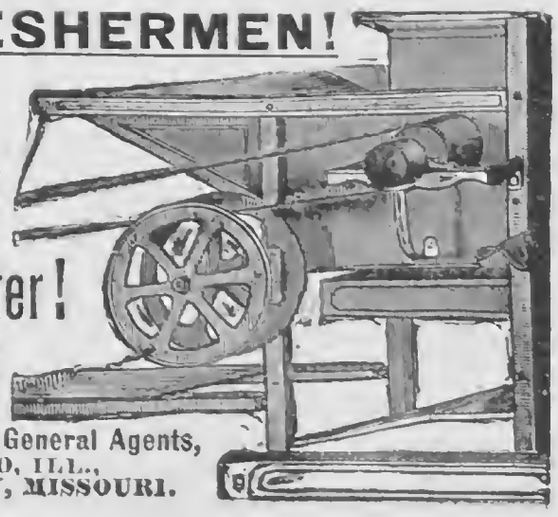
—RAY'S—

Patent Belt-Guide Reel!

A Perfect Guide to hold the Main Belt to the center of the Cylinder Pulley. A Perfect Reel to wind up and carry the Main Belt in compact form upon the Thresher. Adapted to all kinds of Belted Separators. Also

Ray's Patent Pulley Belter!

A cheap, simple and effective device for belting the Main Drive Pulley by steam. Adapted to all kinds of Thresher Engines, or other Engines driving a belt. Send for Circulars. Agents wanted everywhere for these useful devices. Address



THE H. C. STAVER IMPLEMENT CO., General Agents,

31 North Canal Street, CHICAGO, ILL.,

or **FRANK B. RAY, KANSAS CITY, MISSOURI.**

For the Young.

THE OLD SCRUB.

She stands there alone with her back like a rail,
Not a beautiful line from her head to her tail,
With one horn turning in, and the other a stub,
This bony old creature—the scrubby old scrub.

She hasn't an ounce of "blue blood" in her veins,
She don't know enough to go in when it rains;
Her hide bears the marking of stone and of club,
And yet she is patient—the scrubby old scrub.

Yes, these are her children, they haven't a trace
Of her scrubbiness left—see the scorn on their face
As they look at the patient old scrub by the gate,
And wonder and wonder what iron-willed fate

Has thrown such a bundle of bones in their track.
Could they turn the great curtain of weary years back
And see how the patient old scrub worked alone,
Without petting or praise, they would surely atone

For their conduct—they hook her and drive her about,
She is ugly you know—they would soon drive her out,
When a face shows the deeply cut markings of care
We are apt to forget it was once young and fair.

And yet, she's the best of the whole herd to me,
As I think of her long years of service, you see,
There's a soft spot on memory where she can rub;
She shall live her life out—this poor scrubby old scrub.

We are having pleasant weather again. How the plants enjoy the sunshine! You can almost see them grow. The corn seems almost alive and the melons are fairly racing with each other. Now is the time to pick out a strong melon vine and make it earn one of the prizes. I hope the weeds are all cut down. It seems a shame to let them grow up and enjoy this beautiful weather. Now is the time to make the hoe do double work. Work counts as it never will again during the season.

How did you spend the Fourth of July? I hope you all had a good time. I hope the cannon did not explode; that the fire crackers did not burn anybody and that the rain did not spoil the picnic. Somehow everybody seems to want to make a great noise on the Fourth of July. Why should they? I know a boy who used to think the world would all go wrong if he did not get a big tin horn to blow on the morning of the Fourth. He used to sit up all night before the great event and tire himself out, so that he was sure to go to sleep just when he wanted to be awake. One year he slept out in a barn and never waked up until it was broad daylight. Then it seemed as if the whole country was lost to him, but it never made any difference after all. I would gladly have all the tin horns thrown out of the celebration. We used to have great fun at the Fourth of July picnic. There was always a greased pig to chase and a tub race. Sometimes the pig would refuse to run and the tubs would all tip over, but that made all the more fun.

The bootblacks in the city always look at your feet. When they see a person with muddy shoes coming along, they are after him at once. Whenever they ask me if I want a "shine" I always begin to think that my shoes are not looking very well. Some of the bootblacks make considerable money. If they can save enough to buy a comfortable chair with a thick umbrella over it, so that their customers can sit at ease out of the sun, they think they have a good business. As in every other kind of business, it is the saving of the pennies and the little things that give them a start. Fortunes are not built up out of what we earn as they are saved out of what we refuse to spend. Bootblacks tell me that it pays well to keep their own shoes well blacked. I notice that they generally do this. Their faces and hands may be dirty, but their boots are always shining. A good polish acts as a fine advertisement. It shows that they understand their business. In any kind of business we always feel like trusting our work to those who give evidence that they know what to do. Bootblacking is pretty poor business, but I guess we would all do it before we would starve.

THE STORY OF A DISTRICT SCHOOL.

(*Continued.*)

It was to be my first season as a teacher. I knew nothing at all about the average district school. My own school-days had been passed at the East in a graded school where the pupils were held down to very strict rules. I had applied for the position in Bear Creek at the beginning of the Fall term, mainly because most of the other boys were making applications. The stories of putting the teacher out and of "boarding 'round," that the boys were fond of relating, had rather driven me away from the project. I had about decided to take a position on a stock farm, when the letter from the Bear Creek Director captured me.

Somehow the long, formal sentences and the legal rhetoric gave me an exalted idea of the position. I knew nothing about Bear Creek. A friend some 50 miles away had told me about the school, and I had sent my application without serious thought. To my eyes, viewed from the frame-work of this letter, the place seemed like an ideal community. No pupil capable of putting the teacher out could live in a district containing a man who could write such a letter as I had received. The boys had shown me letters from their school officers filled with dreadful writing and mis-spelled words. This pompous letter appeared to indicate a high state of education. I had yet to learn a valuable lesson that Bear Creek did much to crowd into my mind.

My acceptance of the position brought out another eloquent letter from Mr. Forest. He informed me that the school would open on Monday following the closing of our Fall term. Examinations would be finished Friday night, and by taking the night train I could reach Bear Creek on Saturday morning. This would give me time to "qualify myself as required by law" before taking up the reins of authority in Bear Creek. It was necessary for teachers in those days to pass an examination in the various townships in the State. The office of School Inspector being a political one, was frequently held by men totally unfit for the position. Some old schoolmaster, with ideas of 50 years before, which had grown rusty in his inactive brain, was the ideal candidate in many instances. The great delight of such an examiner was to have some smart young college boy appear before him for an examination. All the old questions that had puzzled the brains of teachers for years were brought out to hurl at the head of the hapless college boy.

It was the crowning event of a life with one of these old fellows to "tie up" a college boy with questions that no living person could answer satisfactorily and thus prove the great superiority of the old style system of education over the newer college training. These defenders of the old times were painted in their blackest colors and used as bugbears to frighten freshmen into hard study. Many a poor fellow worked far into the night for weeks in order to prepare himself for the great examination. I was a little frightened myself at the thought of running against an antiquated education in Bear Creek, in spite of the great letter I had received.

It was standing information at the college that we would surely be expected to prove that the earth is round. I have never been able to do that satisfactorily to a person who had fully decided that the earth is flat. I have found many such. We had hard studying at the end of the term. I found a whole room full of freshmen one night hopelessly tangled over the meaning of the words "concrete" and "abstract."

Frank and I talked matters over considerably. I was glad to get his views, for he had had considerable experience. His district, I thought, was sure to fall behind mine in intelligence, for his director spelled school "skool," and the letters ran up and down all over the page, yet in my superiority, I was glad to listen to his experience.

"The teacher's side of district school teaching," said Frank, "is about like this. His first business is to get his money. That is what he does his work for. He has no idea of following the work up for a living, and he simply does it because he can make ready money at it. He would like well enough to have his pupils make good men and women, but he knows that whatever good he may do them in four months may be entirely overcome in the following term. His great object is to make things pleasant for all hands and keep his place.

Suppose, for example, I have some great brute of a boy come to school—very likely the son of one of the school officers. I'm a small man and I would have no chance with him in a fight if he wanted to be unruly. If he whips me and puts me out of school I lose my money and all chance of coming back here next year. What am I to do—fight him and ruin my chances or humor him and thus get through the term? In my present condition, I'll make sure of the money first, and then start out to reform the world."

"But a teacher ought to have higher aspirations" I suggested secure in the thought of my literary friend the director and his probable influence in Bear Creek. "Of course he had, but he won't find it in most of our district schools, as you will soon find out. If you don't come back here in the Spring with your "high aspirations" toned down, I'll give you my pie for a month.

About the only species of gambling our finances would permit us to indulge in, consisting in wagering the dessert which was served in the college dining hall. Each day we were served with a piece of pie, a dish of sauce and a slice of cake. Those were wagered on every base ball game or other exciting event. I remember once, how, after an exciting game of base ball, the entire junior class went without pie for a month.

Examinations were over at last, and after an hour spent at singing college songs we shook hands and scattered for our winter's work.

(*To be continued.*)

LETTERS FROM THE COUSINS.

Dear Uncle Mark: I did wish to try and get the plow; but I was afraid that some one of the Cousins could spell out more words than I could and I would fail, so I did not try. I do not think that I shall ever try to escort one of the Cousins home from spelling school, for fear she'd refuse, and that I could not endure. I hope the Cousins will all write to Uncle Mark, and write the best letters they can, and help to clear our page of those long advertisements. It seems too bad that we cannot have one page for so large a club of young farmers who are doing so much to help carry on a great many farms and to make the Rural interesting every week. Let us write about how Father manages his farm, and tell us what you think about his way. I wish to know more about the Cousins—what they do and how they do it. I have a bed of onions, carrots, beets, Swiss chard and a lot of peas, and I sell them for 50 cents a peck in the pod. Besides, I have several kinds of potatoes that must grow very large, as they must show themselves at the County Fair next Autumn. I have some early sweet corn, the earliest grown. You must all get some seed and raise a good lot next year; it is the Cory Corn, and the very best. Now, write to Uncle Mark such good letters that he will keep that page clean for us. Your nephew on the farm.

Osage, Iowa. LEWIS SMITH.

[That's right. I want to drive all the advertisements off the page. Write again, Lewis.—U. M.]

Dear Uncle Mark: I thought it about time to write another letter to the Rural. We think the Alaska Peas are all that is claimed for them. The Garden Treasures did not do well. The corn is looking well. We have a good Sulky Plow, so I thought I would not run opposition to the rest of the Cousins. My Sister Olive thinks Uncle Mark answered her question (is there any Aunt Mark?) when he wished there was an Aunt Mark to help count. A golden robin saved an apple tree for us from caterpillars. It killed them all.

Your nephew, MONT. VAN FLEET.

[That bird is worth its weight in gold, surely.—U. M.]

Dear Uncle Mark: Once upon a time, (that's the way to begin, isn't it?) many years ago, I belonged to the Y. H. C., but it has been so long ago I am afraid I am forgotten. We have a large fruit farm here, principally of pears, though we have nearly every kind of fruit. Now, I know Uncle Mark is not partial to the LeConte pear, but we think them the great pear for the South. This place is only 14 miles from Galveston and on a railroad, which makes it a desirable Summer retreat. Our home is beautifully laid off with walks, trees, flowers, fountains and fish-ponds. During the Summer girls and boys from Galveston come up to enjoy a breath of fresh air and roll down the hay-stacks. One young lady who was visiting us, tumbled down and nearly broke her neck. I don't think she will try it soon again. Right behind our place is a beautiful bayou, with the trees hanging over the water and covered with long waving moss. The banks of this tropical stream are covered with palmetto fan palms, ferns, etc. Everyone has boats and bath houses: I have a beautiful yacht and skiff. So, Uncle Mark, I think I am justified in inviting you and all the cousins to come and have a picnic.

Your Nephew,
"TEXAS BOY."

Hitchcock Station, Texas.

[Wouldn't we like to come? We would not roll off the hay stack either.—U. M.]

Dear Uncle Mark: The Cousins' letters are very interesting. I thought I would write. I live in central New York. It is very pleasant, only a mile from Skeneateles Lake. There is a water cure and new hotel at the head, and a village at the foot. It is very pleasant to go around the lake on the large steamer. I put the melon seeds in cake boxes; they were about three inches high, the middle of May. We have a peach orchard containing 200 trees. I have some peach trees; they had some peaches last year that were very good. I raised them from the Stump the World pit. I have one grape vine, I drove in some posts and nailed on some boards and tied it up.

Mandana, New York. EVA BOWKER.

Dear Uncle Mark: As you made me a member of the Y. H. C., I will try my best to make the club as bright as possible. Thanks for the sweet peas you sent me. I gave them to my sister Fern to try her luck with them. She may write this Summer to tell how they are coming along. She wants to be a member of the Y. H. C. The freeze of January 7th, when the thermometer showed from four to six degrees below zero, killed the tender roses and fruit buds, but the later freeze, with mercury at 25 degrees above zero, killed most of the fruit buds that were remaining. When I entered school this Winter, for the first time, I entered the third grade, and I am now in the sixth grade. I will write again this Fall and send a report of my vegetable garden. I wonder how many of the cousins can write phonography or short-hand. I can write some—I am learning. Your nephew,

WILLIE B. MUNSON.

Dennison, Texas.

[You made pretty good work in school. I wish more of the cousins could write short-hand. It is a valuable art, and will be very useful to our coming farmers.]—U. M.

Dear Uncle Mark: I have not written for a long time, but I have been so busy going to school and helping in the house, and making my flower bed, that I have hardly had time to write before. I received the sweet peas, and thank you for them, but I did not get them planted very early: so they are only one or two inches high. My sister is 14 years old and I am 11, and we intend to keep house ourselves this Summer, for our house keeper is going home, and our Mamma died a year ago last March. My little brother Frank has not missed one day nor been tardy this Summer, his first term of school. Your Niece,

Rockland, Pa. KATIE JACK.

[I think you will make very nice little housekeepers. We all want to know how you succeed.—U. M.]

Dear Uncle Mark: I would like to join the Y. H. C., if you will let me. I live in the Judith Basin, M. T., about 170 miles from the Capital. Papa received the seed you so kindly sent him. The Alaska peas are in bloom and look very nicely. I see by the Rural, May 29, it will soon be time to fight potato bugs. I think I can tell you a better way to kill them than knocking them into pans. Run a furrow with a shovel plow by the side of the potatoes. Take a bunch of weeds and knock the bugs into it. As the bugs try to crawl out (the earth, which will be damp) will roll from under them and the hot sun will soon kill them. There will be a few to get back, but this must be done two or three times on hot sun-shiny days. We have 35 head of cattle, two horses, six pigs, and three pet lambs. We planted part of the Garden Treasures, but they never came up to do any good. We have two plants about five inches high, dark-green leaves, and are very thorny; can anyone tell me what they are? I have a new kind of peas; they are a cross between the marrowfat field pea and a garden pea I do not know the name of; they look like the Prince of Wales—only they are about a week earlier, but the new kind has a vine like the Prince of Wales, a flat light-green pod, and large flat smooth peas. If Uncle Mark would like to try some of them, I will send them this Fall when they get ripe, if the frost or bugs or something else do not take them. They are growing nicely now. We have about 30 seedling gooseberries, and one seedling strawberry.

Your Niece FLORA MONTGOMERY.

Philbrook, Montana.

[I will gladly plant the peas. I think it will be handier to poison the bugs.—U. M.]

Dear Uncle Mark: I'm a little girl nine years old, and I would like to be one of the Cousins. I live on a farm and Pa keeps a dairy. We keep 22 cows. We raise a great many chickens. We have three colts and two old horses. We have three little kittens just big enough to play. The woods are right in front of our house, and I can go in them any time I want to, and I can have lots of fun. I like to read the letters very much. We have a big dog named Jack. My sister would like to know whether you are a young or an old man. She would like to have you come out here so she could look at you.

FLORENCE CAMPBELL.

Dansville, New York.

[What do you think about it—am I old or young? A great many people don't like to tell their age. I guess I am both old and young. I have an idea that people would be disappointed somewhat in looking at me, so I had better keep out of sight.—U. M.]

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We do not claim that Hood's Sarsaparilla is the only medicine deserving public confidence, but we believe that to purify the blood, to restore and renovate the whole system, it is absolutely unequalled. The influence of the blood upon the health cannot be over-estimated. If it becomes contaminated, the train of consequences by which the health is undermined is immeasurable. Loss of Appetite, Low Spirits, Headache, Dyspepsia, Debility, Nervousness and other "little (?) ailments" are the premonitions of more serious and often fatal results. Try

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PERSONALS.

SECRETARY BAYARD, one of the best horsemen at the capital, rides frequently on one of the finest Kentucky Thoroughbreds

THE wife of Senator Cockrill, of Missouri, is credited with "having brought her husband out." She was a Miss Young, of Ohio, and is a relative of the Sherman family.

EX-CONFEDERATE GENERAL BUCKNER has a farm a 1,500 acres, 600 cultivated, in a quiet part of Kentucky. He lives there most of the time, on the spot that was his birthplace.

TAYLOR will probably be the name of the next Governor of Tennessee. The Republicans have nominated Alfred Taylor and the Democrats will put up his brother, Robert Taylor, if the latter consents to run.

A BLUE GRASS statesman—a widower, by the way—said bluffly: "What do I think of Mrs. Cleveland? Well, now, maybe you remember what somebody says to somebody else in the 'Colleen Bawn:' 'When you die leave your money to the poor, but leave your widow to me.' So say I to Grover."

EX-PRESIDENT ARTHUR is improving at his summer residence, where he does a little strolling about, a little fishing and a great deal of resting. He is terribly emaciated and without physical strength, and his prolonged illness has made him, who was always noted for his good nature and urbanity, a good deal irritable and brusk.

JUSTICE GRAY, of the U. S. Supreme Court, is said to be fitting up his fine new house at Washington for the reception of Mrs. Gray, now Miss Annie Van Vechten, who is at present in Europe. Justice Gray is 58 and Miss Van Vechten about 35 and very beautiful and accomplished. His particular attentions to her during her last visit to the White House were the subject of much comment at the time.

CLAUS SPRECKELS, sugar monopolist of the Pacific Coast and real King of the Sandwich Islands, denies the report that the nomiual King wants to sell the islands to that European syndicate for $10,000,000. Doubtless the real King, owning the best part of the land, thinks he can make more out of the place than by selling it for a paltry $10,000,000.

THE late David Davis, though his wealth was rated in the millions, continued to observe the frugal manners of his early days, even after being appointed a Justice of the Supreme Court and elected Senator. Punctually at one o'clock every day, when in Washington, he made his way to the stand kept for many years by a woman called "Dyspepsia Mary," and there ate his lunch, which consisted of two apples, a ginger cookie and a glass of milk, costing him 15 cents in all.

IT was Senator Van Wyck, of Nebraska, who secured the adoption of an amendment to the Northern Pacific Land-Grant Forfeiture Bill, which will make the land upon which stand the road, its stations, elevators, tanks, machine shops, etc., taxable the same as other real estate. The land-grant Senators had cunningly framed the bill so that these would escape taxation in the Territories; but "Old Van" was too smart for them. Doubtless the roads will try, for revenge, to defeat his re-election; but they'll find it a harder job to undo some of the legislation he has got through during his present term.

THE Grand Old Man is thus described as he looked the other night in the House of Commons; remember he is 78: "His mouth is drawn down and in, until the lips seem a thin, irregular, uncertain line; the face is broad, noble, all but majestic in its firm lines of vigorous old age; the scanty fringe of scattered gray around chin and cheeks meets the sparse silver locks upon his bald, great head. It is a great head physically, massive, square, broad, angled sharply at the cheek bones and ears—a head which would be chosen by a painter for a statesman's model, but not for that of an actor, artisan or merchant."

"ONE of the sensations of the Washington season has been the adoption of armorial bearings by Secretary Manning and Gen. Logan," says a Boston paper. The adoption of a "coat of arms" to which the adopter hasn't an ancestral right is forbidden in aristocratic Europe; but in this free democratic Republic, any man, woman or child can appropriate the heraldic device of Emperor, King, Prince, Duke, Marquiss, Earl, Viscount, Baron, or "Commoner," or make one to suit his or her own fancy, and paint it all over the house, print it on note paper, embroider it on handkerchiefs, engrave it on rings and watches, or even tattoo it all over the body. Shoddy plutocrats Bobbs and Snooks are assuming "armorial bearings" every week without creating much sensation, why shouldn't Manning and Logan follow so high-toned an example?

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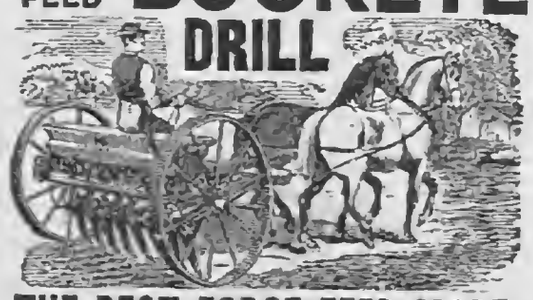

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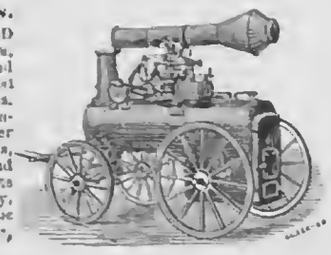

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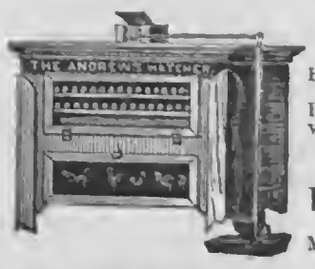

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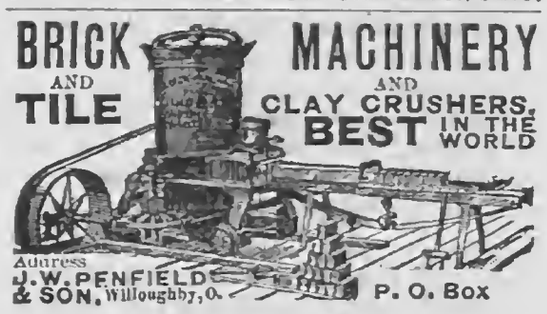

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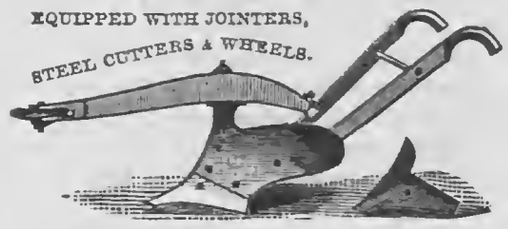

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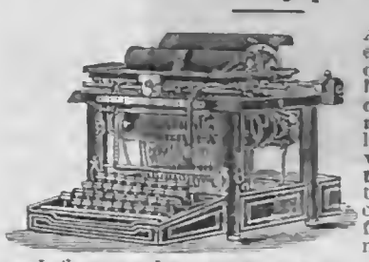

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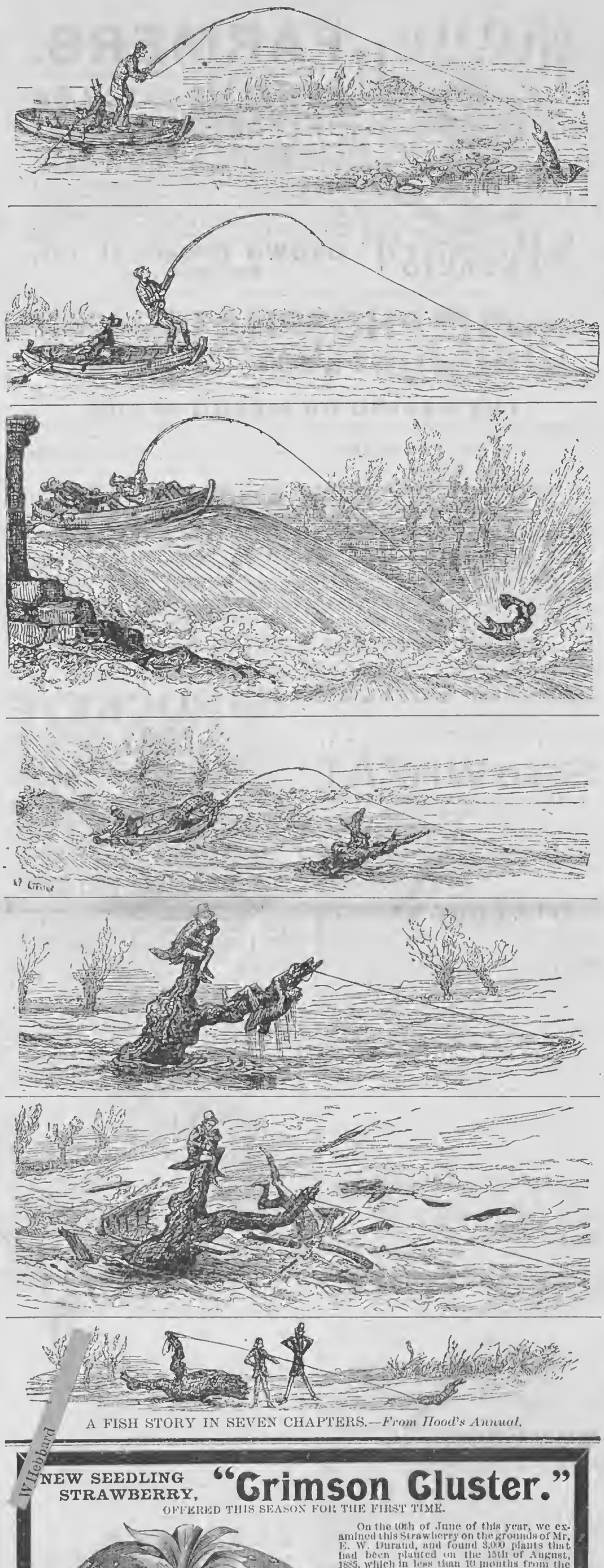
"Yes," said a husband sadly, "my wife is a devotee of the red flag. The very sight of one arouses her to the highest pitch of excitement." "Surely she cannot have any sympathy in common with such cut-throats?" "Yes she has." "What, Anarchists and Socialists?" "No, auctioneers."—*New York Sun.*

"No, sir," remarked the irate customer, banging the bottle down on the drug store show case; "I don't want any more of Pott's Liver Cure." "It's a very good remedy, sir," suggested the clerk, timidly. "Yes; maybe it is for Pott's Liver. Probably it is. But it wasn't worth a cent for mine."—*N. H. Patriot.*

"Oh, did I tell you about little Henry, Grandma? He's got a bicycle!" "Land alive! Well, don't get excited about it. Jest you put a big poultice of soap and sugar on it, and change it every morning, an' it'll be gone in three days. Your Grandfather used to have 'em, every hayin' time, reg'lar as June. They ain't nothin'; they'll do him good."

At a large and a would-be fashionable wedding recently held in a town in this State the solemnity was rudely disturbed by a rather unexpected answer. The bride had entered on her uncle's arm and was met by the groom at the chancel. The uncle then returned and took a seat in the body of the house. All went well until the clergyman asked the question: "Who giveth this woman to be wedded to this man?" He paused for an answer, and the uncle rose, and placing his hands on the pew in front of him, said, in accents louder than are common at weddings, "Me."



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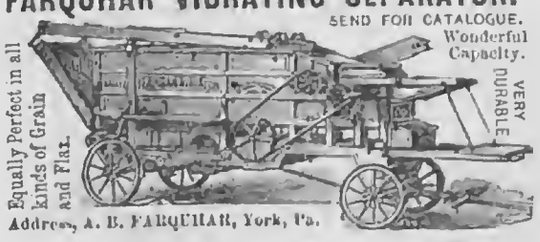

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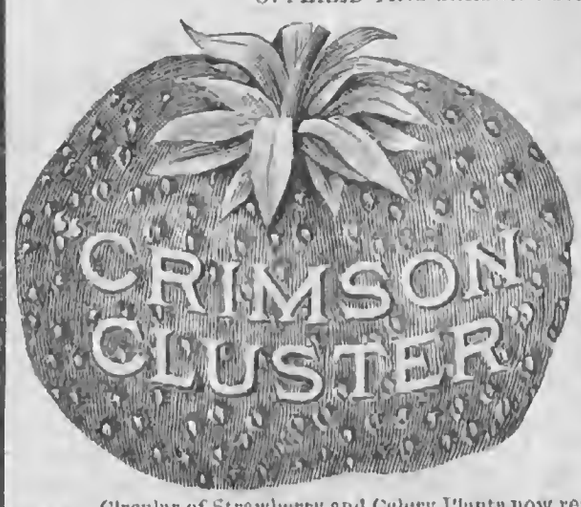

On the 10th of June of this year, we examined this Strawberry on the grounds of Mr. E. W. Durand, and found 3,000 plants that had been planted on the 15th of August, 1885, which in less than 10 months from the date of planting, were producing a crop that would average fully a quart to each plant; 3,000 quarts from the 3,000 plants, or at the rate of over 20,000 quarts per acre. The crop was so immense and the size of the berries so large, that the pickers, who were paid 2 cts. per qt., averaged 25 qts. per hour, or $5.00 per day—a fact beyond question, and which a dozen affidavits could be had to attest. When to this extraordinary production we add the further facts that this strawberry is of the richest crimson color, borne in immense clusters, and that it is one of the LATEST as well as the EARLIEST, as its great vigor prolongs its season of fruiting, added to its excellent quality, there is every reason to think that it is bound to be the most valuable strawberry ever raised by Mr. Durand.

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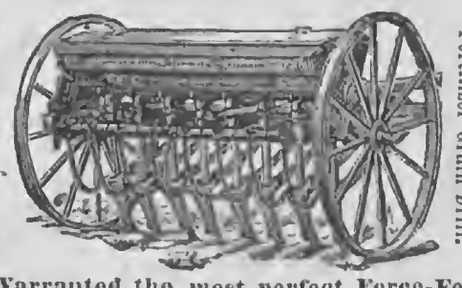

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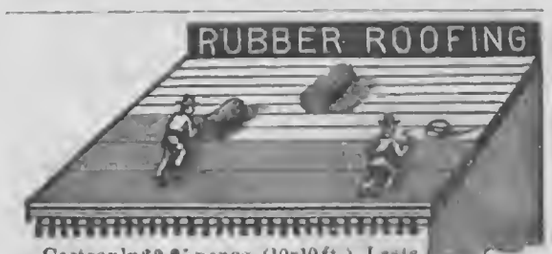

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THE RURAL NEW-YORKER

A JOURNAL FOR THE SUBURBAN AND COUNTRY HOME

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Rural Topics.

Experiment Grounds of the Rural New-Yorker.

NEW STRAWBERRIES.

THE HILTON. Plants of this were received from H. H. Alley, Hilton, N. J., in August of last year. (Shown at Fig. 280.) We have in this a remarkable berry — remarkable as to size of berry, and vigor and health of the plants. The flower is pistillate or nearly so. The plants here are fully as vigorous as Sharpless, the leaves quite as large. The habit of the plant is, in fact, like that of Sharpless. Mr. Alley raised it five years ago from, as he says, Great American, Sharpless and Champion; but we doubt not Sharpless is the father. He claims that it is very prolific, that the quality is good, and that it "can be grown with less fertilizing than any other large berry." As to the last statement, we have nothing to say. Our plants grow in an ordinary garden soil, where nearly all strawberries thrive fairly well. It is certainly more prolific than the Sharpless; the berries average as large and of better shape. From one of the plants the largest berry of the season was picked, being 6¼ inches in circumference. Some are ovate in shape, the largest often fan-shaped, sometimes covering the larger part of a semicircle. The peduncles are very large and strong, holding up six or seven berries of large size. Upon one peduncle, June 16, there were 20 berries, all green, six of which were large, one the largest of the season, as above stated, the rest as shown in our engraving, which is quite true to nature.

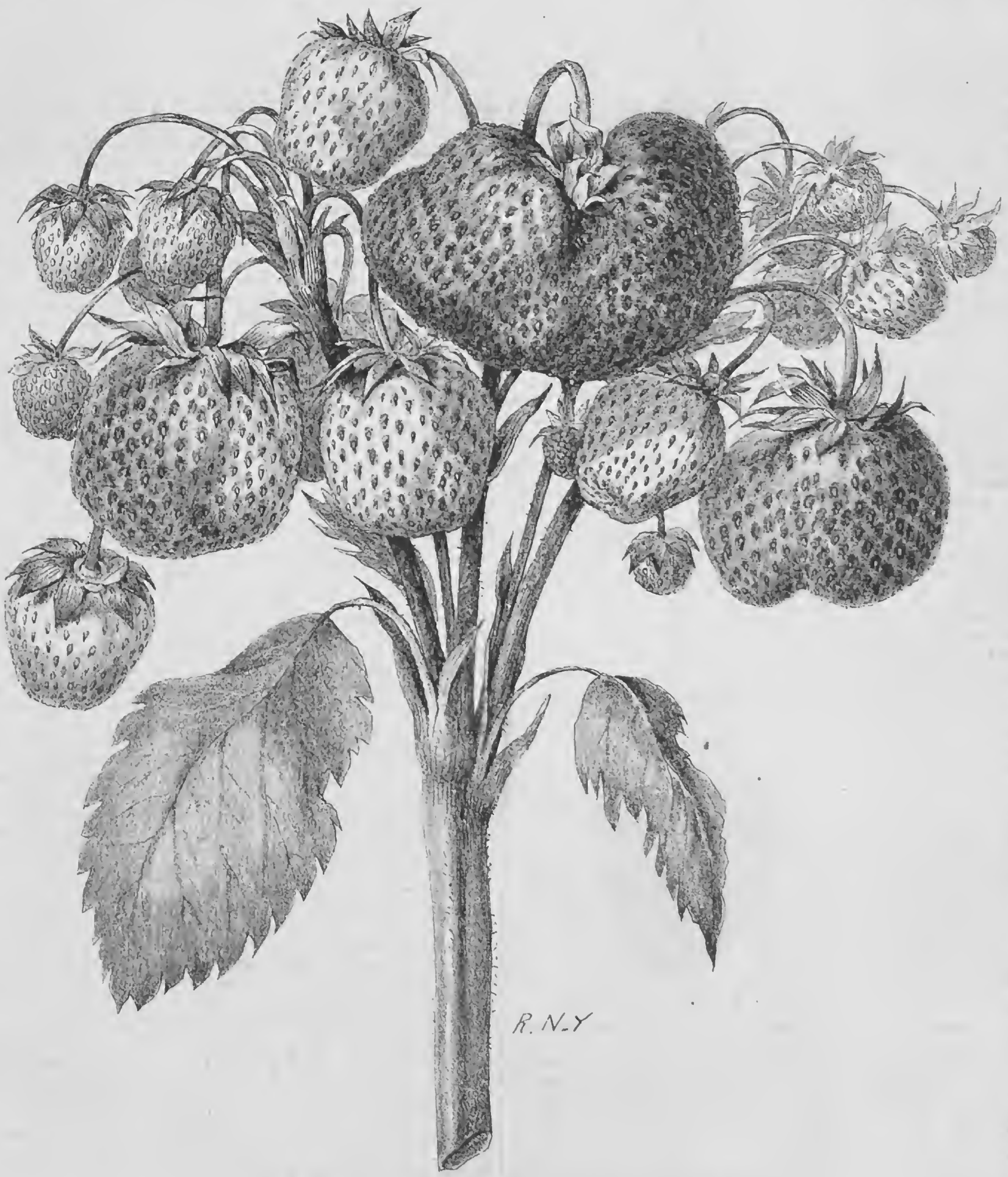
This berry begins to ripen when Sharpless is at its best, this year about June 16. The color is much like that of Sharpless, though not quite so bright. It is fully as firm. The flesh is red throughout; the quality, we regret to say, is not of the best. It is not quite so good as Sharpless. For a market berry of the largest size to follow Sharpless it may prove very valuable.

In these times, when scores of new berries are being offered every year, there seems to be little excuse for introducing those of inferior quality, unless they supply some need which is not supplied by any other variety. Judging by this season's fruitage, the Hilton is by far the largest berry of its season of ripening we have ever tested. The vines, as has been said, are remarkably strong, healthy and productive, and our friends must judge whether these characteristics, possessed all together in a degree rarely seen, will compensate for its one notable deficiency.

LIDA, BOMBA, AND PARKER EARLE.

PARKER EARLE.—Plants of this were sent to us by J. T. Lovett, in April of last year. The first berries were picked June 7. The shape, as shown in our illustration from nature (Fig. 281, page 462), is ovate-conical, and about as nearly perfect as may be. The berries average large, and of good quality. The color is a brilliant glossy crimson, seeds dark, not deeply imbedded. It is firm enough for a near market. Perfect flower. The foliage is variegated with light yellow, though quite strong and healthy. The fruit lasts until Sharpless ripens. We can not see that the Parker Earle, all things considered, is any more desirable than many other new varieties which we are testing this year.

LIDA (pistillate) was received from W. Parry, Parry P. O., N. J., March 20 of this year. It is a seedling of King Cluster (now changed to Early Cluster, and to be introduced this Fall by Mr. Henderson). Judging from these spring-set plants, Lida is a vigorous grower and very productive. The berries are of goodly size, as shown in the illustration from nature (Fig. 282, page 462), and firm enough for a near market. As to quality, some of the earlier ripening berries were rich and good—the later ones were watery and rather soft. The shape is ovate-conical, sometimes ovate; the color, when ripe, dark crimson; the flesh colored through; seeds dark, slightly imbedded.



THE HILTON STRAWBERRY. From Nature. Fig. 280.

BOMBA, also from Mr. Parry, is also a seedling of King Cluster. It is a strong grower apparently. The fruit averages large, dark in color; flesh red and fair in quality. First ripe berry May 31. The shape is generally regular and quite firm; seeds yellowish. It is sometimes Boyden 30-shape and green at tip; sometimes Crescent-shape. As to productiveness and quality, Lida is preferred. (Shown at Fig. 283, page 462.)

Readers will kindly note that we give the above as mere impressions formed from the behaviour of Spring-set plants of the present year.

RASPBERRY NOTES.

At this time, McComber's White Seedling of Antwerp is our best berry. They are so large and juicy that one scarcely knows whether they have seeds or not. Contrary to our expectations, it passed the winter sustaining no more injury than most other kinds. The Marlboro disappoints us greatly. The bushes show a decided lack of vigor, the berries are no larger than those of Turner or even Hansell. We are glad to know that in other places it is highly prized.

We now have the Crimson Beauty from three different parties. They all seem to be the same, and are without any particular merit of any kind except it may be earliness. The berries are of medium size, good quality, often imperfect. Beebe's Golden is a sweet yellow-cap berry, small and seedy.

SPRINGFIELD is a black-cap received from H. S. Anderson, of Union Springs, N. Y., Dec. 1st, 1884. It ripens with Doolittle, or a little before. The berries are black, without bloom, of good quality, but not quite so firm as those of Doolittle. The canes are thornless and hardy.

BELLE is a blackcap, received from L. C. Carlow, of Batavia, Ill., in May of 1885. It is one of the most hardy, vigorous, and productive caps we have ever raised. It is also among the earliest to ripen. The berries, which are borne in clusters of from eight to ten, turn first red on one side, yellow on the other, and then black with some bloom. They average as large as those of Gregg, and are firm, but as grown here are as nearly tasteless as a berry well can be. Mr. Carlow says that the quality is better than Gregg. It may be so with him, and may prove so with others. We must speak of the fruit of plants sent us as we find it, though it is often with great reluctance that, with many good qualities, we are obliged to point out a failing which renders a new variety unworthy of introduction.

Horticultural.

GARDEN NOTES FROM BOSTON.

We look upon Boston as the center of refined gardening, and expect to find there what is new among trees and shrubs, hardy and tender plants, and arrangement in gardening. With this object in view a few of us make an annual pilgrimage to the Old Bay State.

The Railroad Stations.—Entering Boston by way of the B. & A. R. R., we find that the grounds about the several stations for 10 miles out from the city, are laid out, planted and kept up in excellent garden style. There are broad patches of smoothly mown grass, shrubbery clumps, masses of roses, specimen trees and the like; but I did not observe at any of the stations so much as one coleus, one geranium or one verbena; nor did I see any of the abominations so common in gardens, namely, whitewashed stones or imitation flower beds made of various-colored kinds of gravel.

Spring Flowers.—The flower beds in the Public Garden had been planted with pansies, polyanthuses, daisies and forget-me-nots. All of these were pretty enough in their season, but in June they present a too poverty-stricken appearance to warrant their being retained so long.

Shrubbery Masses.—The Public Garden contains a goodly variety of trees and shrubs, some discreetly and others most stupidly arranged. A mass of lilacs is beautiful, so is a mass of rhododendrons, but I never could see beauty in a conglomeration of lilacs, honeysuckles, spiræas, viburnums, tamarix and other shrubs, with some stray phloxes or other perennials scattered along the outer edge. No one plant among them can display itself to its fullest advantage. And this is less excusable when we find the same incongruous grouping repeated again and again in the same garden.

The Crescent Strawberry.—At Mr. Hunnewell's, at Wellesley, the Crescent is the favorite and main crop strawberry. I was surprised at this, as I find the Crescent one of the most acidulous of berries, and without either quality or size to recommend it. But it goes to show that the variety that is first-class at one place is poor enough at another, and *vice versa*. [The Crescent was tried at the R. G. when first introduced. We have never cared to raise it since, on account of its acidity. But it seems to be gaining friends both East and West.—Eds.]

Red Top Grass for Lawns.—At Mr. Hunnewell's many acres of lawns have recently been turned under, graded, leveled and resown to grass. Red Top alone is the grass used. Mr. Harris, the gardener, considers it the best of all lawn grasses, and prefers it clean, without any mixture of other grasses or clover.

Kœmpfer's Irises.—I found at Mr. Hunnewell's and Mrs. Gardiner's large masses of these showy perennials growing in sunken beds that are frequently flooded two or three inches deep. In this way, by treating these irises as aquatics, vigorous growth and exceptionally fine flowers are obtained.

Premium Limas.—Mr. B. G. Smith (Treasurer of the American Pomological Society) is very successful with Lima beans, and for the past ten years has taken first premiums for them at the Massachusetts Hort. Soc. Exhibition. About the middle of April he sows his seed in 6x7 inch square, bottomless boxes, filled with rich earth and set on the floor of a cold grapery. About the end of May he lifts them on a spade and sets them out in his garden; having the holes previously prepared for them, he slips them through the boxes without damaging a root. They never wilt. They come in about a month ahead of those sown in the open garden. He selects the best and earliest beans for seed for the next season.

Schizophragma Hydrangeoides.—At the Botanic Garden, Cambridge, Mass., in 1878, I set out a plant of this in the rockery. It spread about over the stones a good deal, and the other day I found it in bloom. The inflorescence consists of large flat cymes, with a few white sterile flowers towards the margin. It is not showy, but in quantity would be attractive. WILLIAM FALCONER.

IS STRAWBERRY CULTURE FOR MARKET OVERDONE?

Strawberry shipments are over with us for this year, and I think there are few who have been shipping to our large cities, that will deny that the business is over-done. When the best berries that are grown sell for four to six cents per quart, there is nothing in them for the grower, and that is the price many have sold for the past week, while poorer stock went at one to three cents per quart—not sufficient to pay the expenses of shipping in most cases. The prospects are good for a large crop of raspberries and blackberries, and also of the larger fruits (with perhaps the exception of apples) and there is no reason for expecting much better prices on them. In the face of these facts, it is certainly not wise to attempt to induce people to engage in fruit culture. There are those who are interested in the sale of fruit plants, who will tell a long and exciting story about how Mr. "So-and-so" made $500 an acre on fruit, and they publish

Parker Earle. Fig. 281. (See first page.)

these statements year after year. The story no doubt may be true; but it is also true that some men have made a fortune in a little office on Wall Street. The fact that some have done these things, does not prove that everyone can.

Mr. Williams, Secretary of the N. J. Horticultural Society, made some very forcible re-

Lida. Fig. 282. (See first page.)

marks at the meeting of that society last Winter. He said: "If fruit-growing were such a profitable business as some parties pretend it is, would it not seem policy and good judgment on their part to stick to it, instead of urging all creation to enter into competition with them and divide the profits? Does it not look a little as though they looked for

Bomba. Fig. 283. (See first page.)

their profits from other sources than their own fruit-growing?"

I am glad the Rural does not urge the indiscriminate planting of large quantities of fruit for market, but it does urge people in town and country to plant for home use and to supply their home market. Small towns and villages will often take a quantity of fruit and at such prices as will make the supplying of the demand a remunerative business to some near-by grower, while if the fruit is shipped to them from the cities, it often arrives in bad order; and while the consumers pay a good price for it, the grower gets very little, the difference going to pay freight, commission, etc. But many already in the business are so situated that the bulk of their products must find sale in the large markets. What will be the effect of the present low prices of strawberries on these growers? There will be many old fields plowed up—perhaps some more than would have been had the prices been better—but this is always the case, and will only offset what were planted last Spring. The crop next year is likely to be large, if the season should prove favorable. There are many people engaged in the business who are easily discouraged. They say "strawberry-growing does not pay," and they will not plant next Spring. This is about the way matters have run according to my observations; and while there may be some improvement in prices next year, I shall look for still better prices two years hence, and they will then continue good for a number of years.

I only offer this as a word of encouragement to those who are already in the business, and depend upon it largely for a means of existence. And I should advise people who have other business not to change and rush into strawberry-growing with the idea that there are immense profits in it, as they are sure to be disappointed. F. S. N.

AIR FOR PLANTS.

Many soil cultivators are scarcely aware how necessary a circulation of air is about the roots of growing plants. A coating of ice, or an impervious crust proves fatal to growth by shutting off the access of fresh air. Stagnant water has the same effect. Yet we can grow many sorts of plants, even grain, in water without any soil, but the water must be replaced with a fresh supply well filled with fresh air, at least once a week. Plants will grow and extend their roots in the open air itself, provided that it be saturated with moisture and sheltered from parching winds and burning sun. Nurserymen prepare their cuttings of hard-wooded, slow-growing plants by putting them in the damp, still, even-tempera-tured air of a cellar, enveloped in moss or some similar open-textured covering preservative of moderate moisture, yet not liable to mold, and there they gradually callus, and the forming callus is not washed or dissolved by any watering. Cuttings of roses and other things that take more time to move in growth than merely herbaceous plants do, will root readily in Summer set in sandy mold in a flower pot, which is set in another in the manner of a glue-pot, the outer larger pot standing in a vessel of water which rises nearly or quite to the bottom of the inner one. The joint around the top of the pots is luted with a smear of clay, and a pane of glass may be laid on. In a place in full light, but sheltered from wind and direct sunshine, no further attention is requisite, unless to keep water in the pan. In two or three weeks the plants will be rooted and fit to set out. Wood that is getting hard, as just after flowering, is best for such cuttings. No watering being necessary, the young growth cannot be harmed by it. W.

THE DEWEY STRAWBERRY.

The Rural, in its issue of June 26, says the Dewey is the most productive of any of the 66 varieties planted on the Rural Experiment Grounds, and promises to have more to say about it. I do not know what the Rural will say in addition to this, yet I think it has supplied the only link missing to make the Dewey much sought after by those wishing a first-class strawberry. The Dewey is the best in quality of any of Mr. P. M. Augur's numerous seedlings. It more nearly approaches the Prince of Berries as to quality than any other berry I know off. We have too few really first-class strawberries to sacrifice any. I think the foliage of the Dewey on my grounds is too vigorous and thick to allow of the variety doing its best as to fruit. I shall keep the soil more loose, thereby retarding the growth of foliage, and see if next year I cannot have the same story to report as the Rural did this. J. T. ROGERS.

[We said it was the most productive *of that date*. Further notes with an illustration will appear in a short time. Its *shape* is a trifle against it.—Eds.]

Farm Topics.

CORRESPONDENTS' VIEWS.

Potato plants can be successfully transplanted. This Spring, at hoeing time, I found that the crows had sadly thinned my potato field. By taking one or two plants from hills that had enough and to spare, I secured an even stand. This pays better than replanting. E. C. B.

Windham Co., Vt.

"General purpose cow!" The expression is a nonsensical one. Every "Jack-of-all trades" is more of a nuisance than a convenience. Milk and beef qualities are as far apart as trotting and draft qualities are in the horse. Old Patchen did his trotting about as a dray horse pulls a load, by main strength, but I never knew of another like him. I never knew a typical Short-horn to make a good milker, and I never saw a milking Short-horn that would lay on flesh. The farmer does not want one of these "general purpose" cows at all. To care for either a milk dairy or a herd of fat cattle is all one man wants to do. I am a dairy farmer. Now and then I have to sell an old cow or a cripple for beef, but I never calculate upon it. I claim that my milch cows do so well that when their milking days are over I can afford to give them a decent burial and still be ahead. This keeping a cow for eight or 10 years and then being obliged to sell her for beef, in order to come out whole, looks to me like very poor business. We don't need any "general purpose" cows; aim at the bull's eye, and not at the whole target. Decide upon what you want—beef, milk or butter—and then breed for that special purpose. Have a definite purpose and a steady aim. D. P. H.

Auburn, N. Y.

My beginning in the stock business was humble enough. I got a few Plymouth Rock chickens and sold eggs enough to buy two little pigs. Then I got a sow. We saved everything. All the dish water was poured into the swill barrel and grain or mill feed mixed with it. We gave the pigs plenty of green food and crowded them right up to the market. They helped us to buy a young cow and calf. The skim milk went to the pigs and the surplus butter helped out our little treasury. In due time a pair of weaning mare colts could be bought, At two years old they did considerable work, and at three years they were a good, trusty team. It was easy enough to multiply and improve this stock after it was once paid for. It was like a young man's fortune; the first $100 comes the hardest. It has been my motto in breeding stock, if I could not afford to pay for the services of a thoroughbred male, to wait till I could, rather than send to scrub and run in debt. This policy has paid me well. Hundreds of good farmers never get a good start. They don't turn the waste into gain, and they won't look after little things. E. B.

Andrew Co. Mo.

You state that the practice of washing sheep is becoming less popular. No one will be better pleased than the wool-grower when the practice is abandoned, but certain grades of wool cannot be profitably sold unwashed. I sent some unwashed fleeces, that fairly represented my wool, to a Chicago commission dealer. The rest of the clip was washed. The unwashed sold at 22 cents and netted me about 82½ cents per head. The washed sold at home for 30 cents or $1.36 per head, nearly 65 per cent. more than the unwashed. J. D. S.

Whitewater, Wis.

You can't beat the Percheron grade as a farm horse. He is patient, and that is just what is wanted on the farm. Farm work is dull business, and it takes patience to stand it. The Percheron is of good size, has fine muscles, and can stand a good deal of hardship. He is easily reared, cheaply kept, no trouble to break, good at any kind of work and always marketable at the best price. He is the driver's favorite because he never balks, always takes a load with him when he goes, and with half a chance keeps in good condition. As a stallion he is gentle as a dog, a sure foal getter, while his size and color always make him popular. I can raise a good colt almost as cheaply as I can raise a Short-horn steer, and sell the colt for twice as much as the steer will bring. J. L.

Franklin Co., Mo.

Why try to catch a mole in a trap? You can get rid of him in an easier way. Moles are very fond of sweet corn. I found that out to my sorrow. I planted a furrow about 500 feet long to sweet corn, and as soon as the stalks were well out of the ground the moles went at it. They destroyed it all, working from one hill to another in curved runs. Like black-birds, they seemed to be after the sugar that forms in the germinating grain. I caught a mole and put him in a half-bushel measure and found by feeding him that he would eat sweet corn. I prepared a grain of corn with a small quantity of strychnine and put it near him. In 15 minutes from the first nibble he was deader than a dozen door nails. Now I am not troubled long with moles. I take a few grains of sweet corn and soak them for about 24 hours in warm water until they

are about in the condition most desired by the moles. Then with a knife I open the grain at the germ and put in as much strychnine as will lie on the point of the blade. Then close the opening with a slight pinch of thumb and finger. It is better to keep this operation a secret and put the grain away in a tight box where none else can find it. Find the ridge over the mole's road, and, making an opening with your finger or a stick, drop two or three of these "doctored" grains into the road. Press the soil gently together, and repeat the operation at intervals of 12 to 20 feet. There are seldom more than three moles that run the same road, and often there is but one. There will be none after this treatment. When the greedy little rascals eat this prepared feast, they will quickly be changed into fertilizer and left where they will do the most good.

Kingston, N. J. J. P.

FARMERS could help the sheep business by eating more mutton. If they would eat less pork and raise more mutton sheep, they would make more headway than they do trying to get help from Congress. Out here for years sheep were raised for wool alone. Sheep were allowed to die of old age, while the herders ate salt pork brought over the plains from Chicago. Not much economy in that. Wool mutton never can beat pork in the markets, and yet good mutton brings a higher price than any other meat. The sheep industry of this country can be helped by the more general introduction of mutton rams. The farmer may not get so much for his wool, but he will get more for his sheep, and his meat bill will be lessened. S. H. R.

El Paso, Colorado.

GOOD butter is still made on the farm, in spite of all the creamery folks may say. Our butter has won fame for us. People always begin a butter article by saying that everything should be "scrupulously clean." That is too suggestive of soap and no end of scrubbing. I want to keep soap out of butter-making as far as possible. We make butter in a cellar. The floor is just as the diggers left it. The walls are of stone. They get a coating of whitewash at intervals. Hot water is freely used in cleaning, but never soap or sand. It is better to clean frequently with very hot water than to wait till soap is needed. The tin pans are scalded out every day after the skim-milk has been poured out, and then put out in the sun. The wooden pails and tubs are scoured once a week with salt. Our butter is packed in tubs. These tubs are prepared by being filled for 24 hours with sour milk. This removes the taste of the wood. Then they are washed and scalded. This system of cleanliness is simple, but it has been sufficient with us. It is carefully carried out. Neglect of any of the details for a day or two would ruin the business. Our pasture is a field of June Grass with a stream running through it. We have carefully cut and dug the weeds out until there are none in sight. Weeds spoil good butter. The best butter "color" is found in a field of June Grass. Rye sown in early September makes a fine feed, and the butter made from it is excellent. It comes on early in Spring before the grass, and that helps the dairyman. A. E. S.

Clay Co., Kansas.

THE fence problem is a great one. What fence shall we use? The old rail worm fence had much to recommend it, but as timber becomes scarce, heavy fences must go. What makes the best substitute? Board fences get out of repair too easily. Many people who think a good fence adds something to the appearance of a place, do not like wire. Many farmers about here are making slat fences. These give good satisfaction wherever they are tried. They seldom get out of repair, the top rail is never knocked off, and there is poor chance for the snow to drift. Short timber that could not be used in any other way can be utilized in making the fence. Posts are driven into the ground in Spring just as the frost comes out, 10 feet apart. The slats are 2½ inches wide, of any convenient thickness, and four feet four inches long. They are fastened by weaving them into No. 10 wire. The two upper wires are placed some 15 inches from the top of the fence, and the lower wires the same distance from the bottom. The fence is fastened by nailing the slat that comes opposite each post. Experts can put up this fence with astonishing rapidity, and it will be hard to beat. K. A.

Ingham Co., Mich.

I HAD two fields of potatoes, as nearly alike in cultivation as I could get them. The soil was sandy—had been in oats the year before. It was plowed and harrowed. No manure was applied. From my irrigating ditch I let into one patch just enough water to keep the plants in a healthy condition. On the other patch water enough was run to drown the plants if they wanted to die that way. Water was turned off long enough to cultivate about every three weeks. The potatoes that had a light supply of water were just about eaten up with scab, while the others were as smooth, mealy, and fair as one could wish A. L. R.

Boise Co., Idaho.

FOR some years past I have been raising the "Shanghai" or big "English" clover, and I like it well. I pasture till about June 20, after that the clover will grow to a good size for hay and be ready to cut after wheat is harvested and the weather is generally favorable for hay-making. If the entire crop is not used for hay, it will be worth as much as common clover for seed. Plowed under green, it is worth more than common clover. That is my estimate of it. W. M.

Howard Co., Ind.

PICK the Kieffer pear eight or 10 days before ripening and put in a tight box or barrel, and keep in a dark room until ripe. Kept in this way they are quite good. Try this, and change your mind concerning the quality of this pear. My Japan chestnuts, grafted on native stock (pieces of roots,) are out-growing the trees I set at the same time. We get mostly "oleo" for butter here. If something is not done pretty soon, there will be neither "oleo" nor butter used, for one does not need to eat the bogus article many times to make him "swear off" from trying to eat butter in any shape. I don't think one-half the butter is used here now that there was before the era of "oleo," unless one is near enough to get it direct from dairymen. J. M. M.

Clay Co., Fla.

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not half as badly off as you might be. Poor crops, wet weather and the rest of it are bad enough; but they might be worse. We located here four years ago. Just as we got our vineyards and orchards into good shape the Apaches came down on us, killed a man and turned our beautiful place into a wilderness. We got things growing and down they came worse than before. The Government won't pay for the work of these human wolves. If a mad dog got away from its keeper and caused damage, the keeper would have to pay for it. The Government is supposed to keep these red dogs in check. It ought to pay for their damage.

Maricopa Co., Arizona. S. L.

THE books tell us that the onion is a shallow-rooted plant. I believed them until I investigated the matter for myself. Examining a freshly dug onion, I noticed that the roots went straight down. To satisfy myself I dug around a fine large onion and found that in spite of the books the plant sent its roots down. I dug to the depth of a foot and the roots were still going down, though too fine to follow. G. S. H.

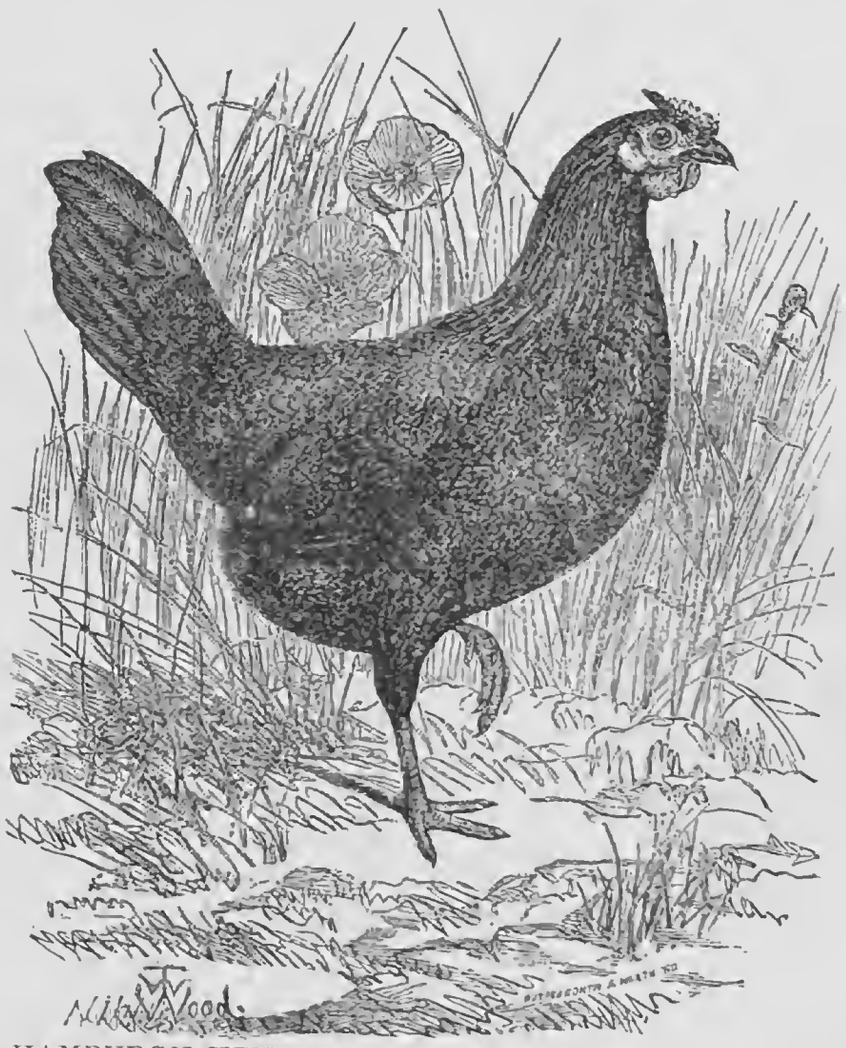
Charleston, S. C.

WHAT strawberry shall we raise? Growers are all at sea as to which variety to pin their faith to. Sharpless is the great favorite here, but it is the worst failure of all on our sandy soil. The small fruit craze is getting serious. Where will it end? Little money in the business, yet many are rushing into it. Somebody will be badly left. Wait till these new plants sell for as much per thousand as they now bring per dozen. This advice is taken from a diploma I have secured from the dear school of experience. E. E.

Beaver Co., Pa.

How about the fruit man who sends fruit to market in a package which he knows is under size? I know men who have had the fact proved to them that their quart boxes hold only a pint and a half. Still they continue to use them. Does it make things right to say that others do the same thing? Do we reform the world by imitating vice, or by standing up for morality? J. L.

Granton, Ont.



BLACK HAMBURGH HEN. Re-engraved from the London Fanciers' Gazette.
Fig. 289. (See p. 464.)

I CAN add a little to the advice recently given about throwing the refuse of our hay mows into the manure pile. By all means, don't do it, but before you burn or bury the refuse, clean the clover and Timothy seed out of it. In this way a farmer can get a good part of his seed free. I use a Bonanza fanning mill that does good work. There is a small size that a boy can turn with ease. G. B.

Ulster Co., N. Y.

MISS TREAT, in her book on "Injurious Insects," advises us to use Paris-green in attempting to destroy the Striped Cucumber Beetle. I thought that was good authority. I applied Paris-green, mixed one part with 10 parts of plaster, sifted over both young squash and melon vines. Result, total destruction of both crops, when too late to replant this season. Miss Treat advises the use of Paris-green one part to five parts of flour, yet my mixture only one-half as strong, destroyed my plants. Very poor advice this, to my mind. People who give such advise should keep it out of print. A. F.

Mastic, L. I.

AT our Grange we are trying to find out why farm laborers are so scarce in California. We pay $25 per month, the year round, which we think is far more than Eastern farmers have to pay. You say they are so many working people in the country that are practically starving. Let them come here and take the place of the Chinese at good wages. We don't want the Chinese here, and we have good reasons for wishing them to go, but we would like white laborers in their places.

Sonoma Co, Cal, C. N.

YOU people talk about hard times. You are

Dairy Husbandry.

HOME-MADE CREAMER.

AMONG the farmers in some parts of the country the old milk-trough and low, wide gallon crocks are being displaced by the more compact, convenient and infinitely superior apparatus shown at Figs. 285, 286. They have not yet adopted the patent creamer, chiefly because of its cost, but this contrivance is a long step toward it. It saves a large portion of the labor now expended over the clumsy crock and milk-trough system, is much cheaper, and requires less than one-half the amount of room. It is simply a barrel cut in two and having a faucet near the bottom to draw off the water, see Fig. 285. It should have a close-fitting, light cover to exclude dirt, vermin, etc. The cans can be made by any tinner. They are seven inches in diameter and sixteen inches long. At the bottom of each are three flanges three-fourths to one inch wide and about one-and-a-half inch long. See Fig. 286. To the bottom of the barrel are fastened seven blocks of wood shaped as shown at A. When the cans are set in the tank they are turned until the flanges slide under these blocks, which hold them securely in position, and down to the bottom, whether they be full of milk or contain only a small quantity. When they are

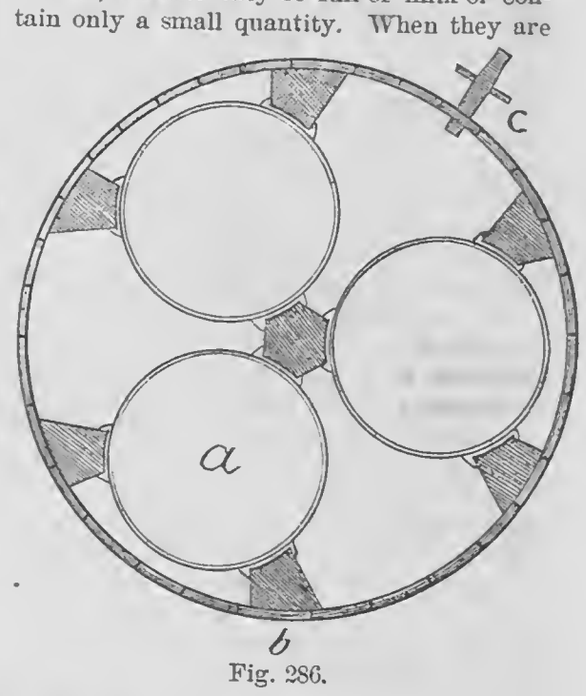


Fig. 286.

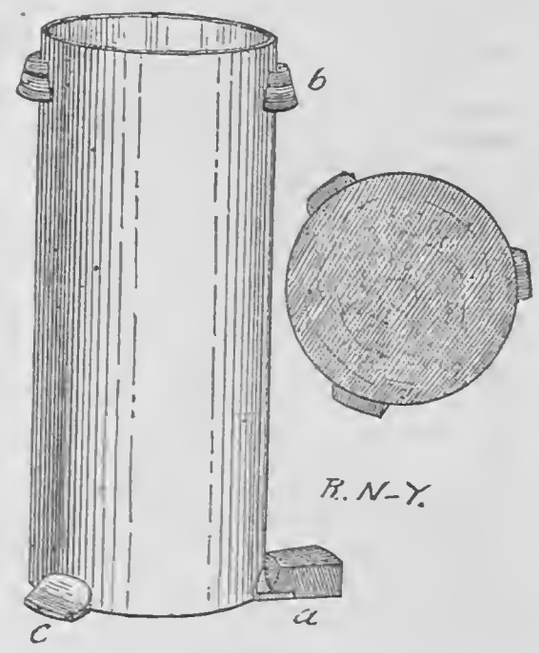


Fig. 285.

to be taken out a slight turn loosens them. Each can should have two strong handles near the top, and may have a cover or not, as desired.

The tank is filled with cold water up to within two inches of the top of the cans, and changed two or three times a day. Some farmers run all the water pumped into the horse-trough through the tank by means of inlet and outlet pumps, or simple spouts. It is a convenient and economical method of changing the water, and should be adopted where possible. This simple apparatus will be found a great convenience to those who cannot afford a patent creamer, and it answers a very good purpose in its stead. The tank should be set inside of some building and kept clean and sweet. FRED. GRUNDY.

Christian Co., Ill.

THE CHANGES OF MILK IN CHURNING.

HENRY STEWART.

THE alimentary value of milk, cream, butter, butter milk, and skimmed-milk is a question of much interest to dairymen and farmers, who should know precisely what benefit is gained from the use of the refuse of the dairy. Milk is a complete food; that is, it contains every necessary alimentary element in the right proportion to sustain life; the protein; the sugar and the fat which make up the carbohydrates; and the mineral matters which are needed to supply the growth of bone and tissue and to sustain the force and heat of the vital functions. It will supply all the necessaries of a young and growing animal, and consequently will maintain a mature one in full health and strength. Moreover, as all its solid substance is contained in solution, it is easily digestible. It is therefore a perfectly nutritious and healthful food. An average sample of good milk consists of 87½ per cent. of water, 3¾ per cent. of fat or butter; 3½ per cent. of caseine or cheesy matter; 4½ per cent. of sugar and one per cent. of mineral matter.

This valuable product seems to have been designed for the use of mankind as well as for a food for calves, for the fat which it contains is in excess of what is needed for the sustenance of a calf, for a calf may be quickly fattened upon new milk, and fat is not at all necessary for a young and growing animal, which requires muscle and bone rather than fat. So that the cream may be taken from the milk and made into butter, and the skimmed milk left may be used for rearing calves quite as well as the new milk, under certain circumstances. Cream consists of from 25 to

40 per cent. of butter or pure fat; 1½ to 2½ per cent. of mineral matter; 40 to 65 per cent. of water, and five to seven per cent. of caseine and sugar. It varies very much in accordance with the manner in which it is separated from the milk and with the quantity of milk which is held among the globules of which it is formed by what is known as molecular attraction. Butter consists usually of 85 per cent. of fat, one-half per cent. of caseine; three-fourths per cent. of sugar, 13 per cent. of water and a small quantity of mineral matter. When pure, cream and butter are both entirely digestible and are exceedingly rich and nutritious food; in fact there is no more nutritious food existing and no other that is perfectly digestible and assimilable.

Necessarily when the cream is taken from milk, the skimmed milk remaining is less nutritious than the whole milk, as it has been deprived of a large portion of its carbohydrates; but it is still an exceedingly valuable food, especially for young animals which are not taking much exercise, and which do not need so large a supply of carbon as animals which expend much heat in the process of respiration which is greatly accelerated by exercise. Skimmed milk contains 90½ per cent. of water, 3½ per cent. of caseine; 4½ per cent. of sugar, and about one per cent. of mineral matter and about one-half per cent. of fat. It is seen to be deficient only in fat, and still contains all the sugar of the milk, which supplies the carbon needed by the young animal to a large extent. When milk is sour a change has taken place. A part of the sugar has been changed to lactic acid, and the acid has precipitated the caseine before held in solution and made it solid. The acid of milk aids digestion somewhat, so that while sour milk is not so digestible as sweet milk, yet digestion of the solid caseine is helped by the acid of the milk. The nutritive value of the sour milk has been lessened somewhat by the change of a part of the sugar into acid, and also by the change of the soluble caseine into solid matter, which is more difficult of digestion.

Buttermilk is considered a better food than skimmed-milk, and probably because it contains 1½ per cent. of fat and the caseine is so thoroughly beaten up that while it is really precipitated and solid, yet the particles are broken up very finely and so much mixed up with the fluid portion, that it is more digestible than the ordinary sour skimmed-milk. The larger portion of lactic acid contained in it also improves its digestibility. Hence fresh buttermilk is often recommended by physicians as a healthful and nutritious food for persons of weak digestion, and if this is true of it, it must also be a good food for calves and pigs. It might also be mentioned that cream is also recommended for the use of persons suffering from lung disorders and weak assimilation, on account of the perfect digestibility of the fat contained in it, but it is for the fat only that it is valued.

The Poultry Yard.

BLACK HAMBURG HEN.

THE picture of a Black Hamburg (Fig. 289, p. 463), is taken from Prof. James Loug's book on poultry. The Blacks are considered the most profitable of all the Hamburgs. The Spangled and Penciled breeds are more beautiful, and are perhaps more highly prized by fanciers, but for practical results the Blacks are undoubtedly most valuable. It seems probable that this breed was produced by crossing with the Spanish. The breed is perfectly well established as a distinct variety, however, and good strains will breed true to color and other points. The plumage is black and glossy. The hens are square and "blocky," with short legs and sprightly carriage. We have tried the Black Hamburgs, as well as most of the other important breeds of fowls. They gave us as many eggs as any we have ever tried. The hens are small, and do not like confinement. Most of the books state that they can be readily confined, but it is evident that they will not do well in small yards. They are essentially non-sitters, and not so valuable for the table as most other breeds. The cocks are proud, fearless, beautiful birds, and devoted to the hens.

Farm Economy.

HOME-MADE RAKE.

MR A. F. MORSE, of Audriau Co., Mo., uses the rake shown at Fig. 287, and calls it the best in use. He says it takes the hay from the swath to the stack or puts it in shock rows much faster and with less horse power, and leaves the windrow cleaner and works no dust into the hay. The teeth are so limber that by means of the heavy point on them on uneven ground they hug the surface and take the hay clean. The rake, he also claims, is the most

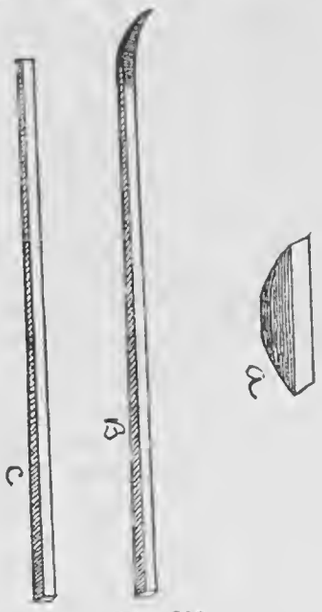
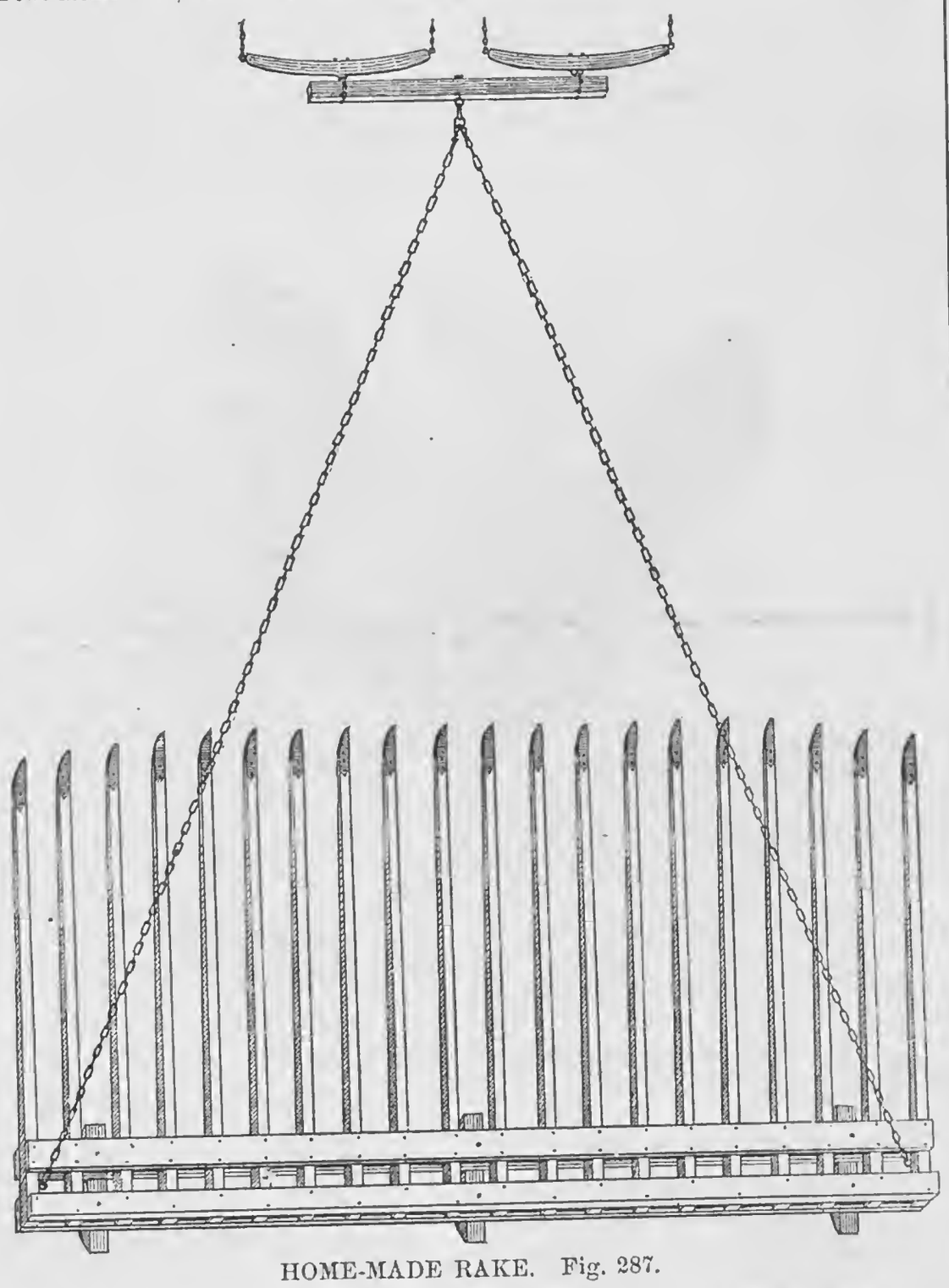


Fig. 288.

economical in cost and in using. Any farmer with good tools can make one in less than two days. Materials cost from $9 to $11. A boy 14 or 15 years of age can handle one with ease. The rake teeth are eight feet long, made of ash two inches wide, two inches thick at the



HOME-MADE RAKE. Fig. 287.

rear and tapering to one-half inch in thickness at the point. The points, shown at Fig. 288, *b* and *c*, are eight inches long made of band iron and riveted on. The shoes, Fig. 288, *a*, are two feet long and four inches wide, made of hard wood. The rake is 16 feet wide, the top pieces, 1x6 inches, are made of hard wood. The end teeth are 7½ feet long. The chains to which the horses are attached are 20 feet long. In using the rake in pulling hay to a stack in the field, start with horses in rear of rake, and drive to end of the piece to be raked. Swing horses around to the front. As they pass the end of rake, the driver lifts the slack chain so that it passes over the teeth, then drives ahead to the stack. Drive past until one end of rake is against the end of stack, then swing horses away from the stack and drive them around to rear of rake, lifting the chain as before. Then pull rake out from under the hay, and it is left all ready to be pitched on to the stack. In this way an immense amount of hay can be pulled together in the course of a day.

Field Crops.

EXPERIMENTS WITH POTATOES.

I HAVE been following the RURAL experiments with considerable interest—especially those on potatoes, and I propose to give you the results of my experiments on a small scale. I am much disappointed, in examining your rating of potato fertilizers, to find that your list does not include one that has given me very good results, viz. the refuse of glue factories known as hair manure. On the 3rd of April I planted a half bushel each of the Vanguard and Pearl of Savoy and two bushels of the Mayflower, adopting the flat surface culture and mulch system recommended by the RURAL About half of the patch was fertilized in the trenches with hair manure, and the other half with wood ashes, the ground having received last Fall a good dressing of stable manure which was plowed under in the Spring as soon as the frost left the soil. It occurred to me that the hair manure might be used to serve both purposes of fertilizer and mulch, and one trench was therefore treated in this manner, the potatoes being covered in without any fertilizer and a coat of hair manure spread over the top. In using hair manure as a mulch in this way, the application should not be made until the shoots have fairly broken the ground, as if it once receives a wetting it cements into a mat which it is almost impossible for the plants to penetrate. Not being as familiar with the nature of the material as I should have been, I did not observe this caution in my practice, and was somewhat chargrined when I saw the plants all shoot out on one side of this cover—the westerly side. Why they should have all struck for this side I cannot say, but such is the fact. [I should think this hair manure would make an excellent material for mulching strawberries and I propose to try it in this way next Winter.] I dug my first potatoes—the Pearl of Savoy, on—June 11th, and the result, as far as this variety is concerned exceeds in size and product my experience last season with the Beauty of Hebron. The potatoes averaged at that time in size as large as hens' eggs, and from a dozen to 15 to each vine. They were remarkably uniform in size and very few small ones among them. The Vanguard is about as early as the Pearl of Savoy, but not nearly as productive. The result as to yield I will give you later. I would say now, however, that there is a marked contrast in the vigor and color of the plants; those on which the hair manure was used being much more robust and of a healthier green in color.

Mercer Co., N. J. WM. HEWITT.

AGAINST ORCHARD GRASS.

I BELIEVE that nine-tenths of those who grow Orchard Grass grow it at a loss, if they could grow Timothy on the same soil. It is a gross feeder and needs a full meal every year. It makes neither a close sod nor first-class hay. Neither horses nor cattle are fond of it. It must be cut before the spring rains are over, and almost always gets caught in one of them. The second crop is always light. If grown with Red Clover it ripens before the clover is fit to cut. The seed is expensive and a good stand requires thick seeding. At the age of two years tussocks begin to form, with bare spots between on which no other grass can grow. It seems pleased to let weeds of all kinds grow with it and share the manure you have given it. It has some good points, I admit. As a farm lawn grass it is early to start in Spring, and a few days after being cut presents a green surface. After the second crop is cut it will keep green until very hard freezing weather. Sow Orchard Grass for looks rather than for profit. Horses and cattle will eat wheat straw on the same terms they eat Orchard Grass, viz.: if you give them nothing else. Tables of analysis give it a high rank, but it is about like the ammonia that chemists find in "leather scraps." They must have keener instincts than plants, for the latter never find it. Animals search hard and long for the nutriment in Orchard Grass but they seldom find it. I would advise farmers to try Orchard Grass in a very gentle manner. Put in an acre and keep account of its value, and at the end of four years see what it comes to. Dear experience prompts me to say this. I have had 30 acres of the grass. I have now got it all plowed under but one acre. That is now cut and mostly cured and the rain has been falling on it all day. This leads me to speak of another good quality possessed by this grass. It will induce a rainfall every time. If you want rain cut your Orchard Grass and get it nearly cured. You will then have all the rain you want. I never knew it to fail but once.

Catonsville, Md. A. L. C.

What Others Say.

FODDER MATERIALS.—Prof. Goessman, in a late bulletin, says that the peculiar character of our home-raised fodder articles is apt to conceal their special deficiency for the various purposes they are used for in general farm management. They all contain the three essential food constituents, yet in widely varying proportions, and they ought, therefore, be supplemented in different directions to secure their full economical value. To resort to more or less of the same fodder article to meet the special wants, may meet the case as far as an *efficient* support of the animal is concerned, yet it can only in exceptional cases be considered good economy. To satisfy the craving of the stomach and to feed a nutritious food, are both requirements of a healthy animal diet, which, each in its own way, may be complied with. The commercial fodder substances, as oil cakes, meal refuse, brans, and our steadily increasing supply of refuse material from breweries, starch works, glucose factories, etc., are admirably fitted to supplement our farm resources for stock-feeding; they can serve in regard to animal growth, and support in a similar way as the commercial fertilizer in the growth of farm crops, by supplementing our home manurial resources. To feed an excess of fodder materials, as roots, potatoes, etc., which contain a large proportion of *non-nitrogenous* substances, as starch, sugar, digestible cellular substance, etc., means direct waste, for they are ejected by the animal and do not even materially benefit the manure heap. In case of an excessive consumption of *nitrogenous* constituents, a part of the expense is saved in an increased value of the manure, yet scarcely enough to recommend that practice beyond merely exceptional cases. The aim, therefore, of an economical stock-feeding must be to compound our various fodder materials in such a manner that the largest quantity of each of the three groups of fodder substances which the animal is capable of assimilating, should be contained in its daily diet to meet the purpose for which it is kept. To compound the fodder rations of our farm stock with reference to the special wants of each class of them, is an essential requirement for a satisfactory performance of their functions; to supply these wants in an economical way controls the financial success of the industry. From these and similar considerations it will be apparent that the development of a more rational, and thus more economical, system of feeding farm live stock, requires the following kind of information:—1st. How much of each of the essential groups of food-constituents is contained in the fodder we feed? 2nd. How much of each of the essential food-constituents is digestible under existing circumstances, and thus directly available to the particular animal on trial? 3rd. How much of each of the three essential

food-constituents does each kind of animal require to secure the best results?

POULTRY MANURE.—Henry Stewart says, in the N. Y. Times, that every farmer values the manure from the poultry house for its use on corn, cabbages, and other field and garden crops. He knows how it is immediately taken up by these crops, changing the pale color to a deep green, and starting a luxuriant growth. It is one of the problems of the art of fertilizing that certain manures exert an effect quite disproportionate to their supposed fertilizing value. Thus, in 100 pounds of poultry manure there are two pounds of phosphoric acid, one pound of potash, and 2¼ pounds of nitrogen; in 100 pounds of fresh wood ashes there are six pounds of potash and three pounds of phosphoric acid; in 100 pounds of plaster there are 75 to 90 pounds of sulphate of lime in all, five pounds of phosphoric acid, 2¼ pounds of nitrogen, seven pounds of potash, 40 pounds of sulphuric acid, and 45 pounds of lime. Quite a poor and cheap fertilizer would be as rich as this, but the effect of this home-made mixture is often superior to that of a high-grade, costly fertilizer. The reason is not hard to find. It is that these substances are soluble and in an active condition, and furnish the crops with plant food suitable to their needs and readily available. This is a most important point that should be well understood, for it lies at the very bottom of the art and practice of manuring.

WELL-DESERVING OF THEIR FELLOW-MEN.—Peter M. Gideon describes, in an interesting letter to the Western Rural, his efforts during 30 years in Minnesota—after a previous 30 years of nursery and orchard experience—in the work of developing fruits of satisfactory quality, capable of enduring the blizzards and the cold of that arctic climate. Only two trees remain of all his first large planting. These were grown from Siberian Crab seed, and proved a godsend. Now there are many sorts with enough of the Siberian Crab in their composition to render them iron-clads as to hardiness, yet in quality of fruit "a match for the world, whether to eat from the hand or to make into sauce," and the State is likely to become famous for its yield of good apples. Long keepers are as yet scarce. The known long keepers from further south continue their growth too late there and perish. To enable them to produce blossoms there, to be fertilized with pollen from iron-clad sorts, Mr. G. sets grafts on the tops of trees which stop their sap-flow early, and in that way fruit and crossed seed have been produced, and entire success is in full prospect. These labors merit a monument. The orchards of the State will form one better than of marble.

Another of these faithful, silent workers in the horticultural field whose labors benefit all, is Dr. J. Stayman, of Leavenworth, Kansas. He has collected the vast number of more than 3,000 varieties of fruits, and has made, from the fruit in his own hands, cuts and minute descriptions of 2,146 different sorts. Few can appreciate the immensity of such a work, or the cost in time and money of making such a collection, or its value for horticultural reference when faithfully made. Besides these indoor labors, Dr. S. has originated new sorts of value by crossing and otherwise, and is still largely engaged in cultivating seedlings of crosses on up to the development of their fruit. Mr. Gideon's estimate as to the yield of such seedlings is that it takes from 300 to 500 in his line of effort to produce one first-class apple. Often the proportion is much larger.

THE USE OF SALT IN FOOD.—Dr. T. H. Hoskins, in referring to several of what he calls "cranky notions," in a late issue of the Vermont Watchman, says: "Still another piece of crankery is the prohibition of salt, which some ill-informed person, on the authority of an unnamed individual whom he (or she) calls 'a justly celebrated medical writer,' advocates in the RURAL NEW-YORKER. The editor replies to the correspondent with great good sense, saying: 'Whatever may be the conviction of an individual physician, however eminent, it is the nearly unanimous opinion of the medical profession that salt is a necessary stimulus in health.' This is entirely correct, but it is not one-half the truth. The 'justly celebrated medical writer,' quoted by the RURAL'S correspondent, exhibits his utter ignorance of physiological science in saying that 'salt never in any measure promotes digestion, nor any of the assimilating functions of the system;' and that it 'goes the rounds of the general circulation as an unassimilated mineral substance.' The simple facts, as agreed upon by the best authorities, are that salt is essential to digestion and assimilation, and that these processes must stop when salt, and the products of its digestion (muriatic acid and the organic salts of soda) are absent. Salt is composed of muriatic acid (hydrochloric or chlorhydric acid, according to more modern systems of naming) and soda (sodium oxide), and its chemical name is 'sodium chloride.' It is unquestionably 'digested' or decomposed in the body the muriatic acid going to the stomach to form the principal acid of the gastric juice, without which digestion could not take place, and the soda, in organic combination, being found in the bile, where it is supposed to aid in the absorption of fat by the lacteals.

FEED FOR WORKING HORSE.—Dr. Stewart says, in the Weekly Press, that the fast working horse exerts the lungs more freely than the slow worker; hence the food should be more concentrated but yet digestible: it should also contain a sufficient quantity of fiber mixed with the finer matter to give masticated food a porous consistence and prevent it from forming a too solid mass in the stomach. Oats are precisely the kind of food required to meet such a case. The husk of oats forms a large portion of the substance of the grain, while the kernel is rich in nitrogenous matter and has sufficient carbonaceous matter to supply all the needs of the lungs, which are stimulated by the muscular action to greatly increased exertion. The oats contain precisely the requisite proportions of fine and coarse matter for the horse's aliment in a sufficiently concentrated condition to avoid overloading the stomach, and are thus the best food for the fast-working horse, which needs no hay. But to get the best results from this grain it should be crushed, and should be fed four times a day, so that the system is never exhausted for want of food. The slow-working horse, on the contrary, the farm horse, for instance, does not require a concentrated food nor such frequent feeding, because its work is slower and the consumption of force is not so great.

TOO MUCH BUTCHERING.—The present bloodthirsty call for the butcher, according to Henry Stewart, is altogether too absurd. If a cow kicks because she has been ill-trained or not trained at all, or if she has her lungs diseased by vicious management, or has been in a stable with a cow which has been known to cough at some time or another, or if the swine are sickened by the filth which they have been forced to swallow with their food, or by injudicious feeding, the butcher is called upon to slaughter indiscriminately. Even the horses which are diseased through breathing foul air of filthy stables are to be butchered, and every other animal which is supposed to have been infected by any one which may have a nasal discharge which indicates some appearance of something similar to glanders. There is nothing said about a reform in the treatment of these animals; of good, careful, kind training, of humane keeping, of clean lodging, of nutritious and wholesome feeding, of any sanitary precautions against disease. Nothing of this kind at all, but only slaughter when our live stock have been made useless by our gross mistakes. And agriculture languishes and farming does not pay, or at least so it is declared. Perhaps there is some connection between these, as cause and result, to some extent.

CUTTING FEED.—A. W. Cheever says, in the N. E. Farmer, that some years ago there were many strong advocates of the practice of cutting hay, and, after wetting it, of mixing in the meal and feed, both for cattle and for horses. Hay and straw cutters were among the most advertised of farm implements, and one or more might be found in almost every stable where even a single animal was kept. But after a while it was found that it was no small task to cut all the hay for a large stock of cattle, even with a horse power cutter, and many who had never fed much grain till the cutter came in fashion thought that whole hay and the same amount of grain given separately might prove quite as beneficial, and set their cutters aside, until there are probably nine cutters stored away unused, in barn lofts or sheds, where there is one in daily use. Many who now advocate the cutting of hay or straw and the mixing with it of meal, argue that if fine meal is fed alone, it does not go to the first stomach, but passes on to the fourth stomach and is washed into the intestines, often only partially utilized. Experiments have been made which do not confirm this view. Cattle have been fed fine meal just before being killed and the stomachs carefully examined. The meal was found in the first stomach, thoroughly mixed with the coarser foods.

SAMPLES.

THERE is no word of three letters in the English language, or any other language, that is so voluminously suggestive as the word rum, says the Western Rural. As you value your happiness and honor and usefulness to yourselves and to the world, touch not, taste not, handle not the accursed stuff.....

BULLETIN No. 20 of the Massachusetts Ex. Station gives several analyses of articles of feed with reference to their fertilizing constituents. Wheat feed was shown to be worth $10.65 per ton; wheat meal, $6.65; corn cobs, $2.52; Vilmorin's sugar beet, $1.25; damaged cotton seed meal, $14.97.....

PROF. GOESSMANN says that herbivorous animals receive these substances directly from the plants; carnivorous animals indirectly, by feeding on herbivorous animals. We feed, at present, our farm stock too frequently without a due consideration of the general natural law of nutrition; to deal out our fodder crops only with mere reference to name instead of making ourselves more familiar with their composition and their particular quality, deprives us even of the chance of drawing an intelligent conclusion from our present system of feeding.....

WE are glad to see that J. J. Thomas, one of our best pomological authorities, condemns scraping the bark of trees for the purpose of benefiting them by killing the insects which harbor under the bark. This is advocated by many rural journals. But Mr. Thomas suspects that the tree is rendered more susceptible to the cold of Winter while few, if any, harmful insects are killed. The R. N.-Y. has always opposed scraping the bark from trees as well as slitting the bark in order to promote the growth of the trunk. Pray, don't waste your time and strength in this way. If you give your trees good food to eat and plenty of it, and cut out while young all the branches that interfere with each other, you have done all that *you* can do to promote their welfare. Leave the rest to nature.....

IT is now about six years or more since the R. N-Y. sent out seeds of the Argenteuil and Red Dutch Asparagus to all of its subscribers who applied. At that time we urgently pointed out to our readers that the best way to raise asparagus was from seeds sown in enriched plots where the seed was to remain, afterwards thinning out the plants as required. In this way we raised asparagus from seeds of all the so-called different varieties that we could hear of. Mr. Peter Henderson now advocates the same thing in a book soon to be published....

THE Farm Journal advises that we sow rye, three pecks per acre, with the buckwheat in June. It will not make much growth, but will live, until the buckwheat is taken off, when it will soon make good fall pasture. Feed it off so that it does not make any attempt to head out, or it will winter-kill. By judicious treatment a fair crop may be harvested next season. Seed with clover in the spring. Don't you see! you will have three crops with one preparation .....

A RAILROAD corporation, it says, has no right to discriminate between its customers than has a grist mill * * * If milk were used more, and beer and rum less, in this country, times would not be so hard, and millions in doctors bills and medicine would be saved.....

DON'T use salicylic acid to preserve fruits or anything whatever, that is to be eaten.....

THE N. Y. Tribune has reduced its Agricultural Department to four columns and the N. Y. Sun has given up an Agricultural Department altogether.

GOODALL'S Sun says: "Lettuce have peas."

S. K. EVERETT, of Cherryville, N. J., says the N. Y. World, one year ago sowed clover in his 12-year-old orchard, where he had muriate of potash and bone for four years. This season he plowed under the clover sod and applied lime. This orchard has put on a fine new growth of wood and promises well for another season.....

DR. HOSKINS says, in the Vt. Watchman, that we want protection that protects—not unconstitutional unworkable statutes, but a plain law that shall compel every ounce of bogus butter to be sold as such, so that every person who buys it shall know just what he is getting.....

Sow corn for fodder now .....

PREPARE for sowing Rutabagas. Large crops are secured by sowing in drills 18 inches apart and thinning out. One pound of seed to the acre.....

NIP off the ends of grape-vines; thin out the pears and apples; remove early peas and prepare the land at once and sow turnips, fodder corn or something else. Cut back the tall shoots of blackberries and raspberries, and pinch off the laterals.....

PROVIDE fresh water for the stock. If ever fresh, pure water is needed, it is needed now. Tie up the growing shoots of grape-vines. Pinch out all but the best shoot of young vines planted last Spring. Pinch out all starting shoots between the leaf and main shoot. Cultivate the late potatoes and see that the leaves are not injured by the beetle. Cultivate the corn field. Keep three inches in depth mellow and free from weeds. To go deeper is to sever the roots, all of which the plant needs.

As soon as the strawberry patch has yielded its fruit, cultivate between the rows or hills. Now is the time to do it. If in matted rows and the patch is to be preserved another year, cultivate between the rows, cutting off the runners. Keep free of weeds, and in the Fall fill the cultivated space with manure, and later the vines should be mulched. Give the young celery plants good attention. Do not allow the soil to become caked or the plants to suffer for water. Beans may still be planted. Sow beet seeds for late greens. The little young beets are among the sweetest and most tender of vegetables.....

NOW, for this latitude, make the last planting of sweet corn. Select a second-early variety, like the Concord. Taking the risks, it may be planted as late as July 15.....

MOVE the sweet potato vines. This is important, as to allow them to root will surely decrease the yield of potatoes.....

CAULIFLOWER plants may be set as late as late July.....

FOR winter cabbage, set the plants now. There are few better kinds than the Large Late Drumhead.....

FOR the late crop, July is early enough to plant celery. Plants intended for November's use may be set now. Remember they must have rich, mellow soil and plenty of water....

WE would repeat our advice to farmers not to sleep in the same undergarments worn during the day. It is more than worth the trouble to take off the undershirt as soon as day's labor is finished, rub the body thoroughly with a harsh towel, and put on underclothes which are perfectly dry.....

YOUNG HOUSEKEEPER (timidly to the butcher): "I will take some lamb to-day."

OBSEQUIOUS BUTCHER: "Will you have a forequarter, madam?"

Y. H. (with more confidence): "I think that is too much for our family: I will take a threequarter."—Life.....

ONE kind of egg plant: A chicken farm....

ORCHARD AND GARDEN is of the opinion that the Erie is the coming blackberry, because it has the iron-clad cane of the Snyder, and the large fruit of the Lawton. The form of the berry is roundish and its quality said to be good. Plants at the Rural Grounds were set last Fall, but they were enfeebled plants and have made but little growth yet.....

THE Farm, Field and Stockman says that if hens are fed but once a day, that one meal should be given at night. * * * The same journal says that there are six different breeds called Spanish, viz., Black Spanish, Andalusian, and four kinds of Leghorn—White, Brown, Dominique and Black. The Leghorns are really of Italian origin. Many prefer the American Dominique to the Dominique Leghorn.....

A GREAT deal of complaint is made by some writers and speakers at farmers' meetings because there are more lawyers in the Legislatures than farmers. Recently Col. Mannard read a paper before the State Board of Agriculture of Indiana in which, among other statements, he complained that only 12 farmers were sent to the Forty-eighth Congress against 273 lawyers. The New York Times sees no reason to complain of this. It is part of the business of lawyers to make laws, for laws are their stock in trade: farmers, on the other hand, are growing food and clothing for the lawyers. If the circumstances were reversed, and 273 lawyers were put to growing wheat and making butter for 12 farmers who were busy making laws for the lawyers, the farmers would be starved and the lawyers would become insane. Let the cobbler stick to his last, said wise old Æsop, and let farmers cultivate their farms while lawyers make and unmake laws. A good farmer growing large crops is a far more necessary individual than a member of Congress, and should feel more pride in the successful management of his business than if he were a poor legislator.....

THE Orchard and Garden has an article from A. S. Fuller about the Peen-to Peach. A reference to the R. N.-Y., page 432 of 1884, would have shown him illustrations from life with a full description from P. J. Berckmans, who sent us the specimen engraved, and Charles Downing. Last summer these peaches were sent to the N. Y. market. The quality is excellent.....

Everywhere.

TRANSCONTINENTAL LETTERS.—LVI.

MARY WAGER-FISHER.

Yreka; the Shasta Valley; mixing the babies; Mount Shasta; Butteville; a night ride; end of staging.

We reached Yreka on time—a town of 1,500 to 2,000 inhabitants, nestled in the mountains

with no outlook, not even a glimpse of Shasta. Here lives the superintendent of the stage company, and here we changed our stage for a large passenger coach, capable of accommodating sixteen, when full inside and out, and nearly every seat was taken. The change was speedily made, and we set out with a fresh and social driver. Yreka is a mining town, with some fairly good buildings—for it has age, such as California towns can boast of, that came into existence after '49. All about it lies the Shasta Valley, a great stretch of level agricultural land, of course requiring irrigation; and there is a water-ditch 96 miles long leading into Yreka, and furnishing water for a large section of country. As we were riding out of the town, I was reminded of an amusing story in connection with it, and upon retailing it, a young man who sat upon the seat with Anaximander, in rear of me, said that it was true; he lived in Yreka and he had often heard it. It was this: In the early mining days, the people, in order to furnish amusement for themselves, had amateur theatricals, and in the hall where they had their plays, they had a bedroom for the accommodation of mothers who could not leave the babies at home. Upon one occasion, a wag, during the play, changed the clothing of the infants, who, in the haste of leaving when the play was over, were recognized by their clothing and carried off. Of course, the parents found upon reaching their homes that each mother had the wrong baby, and it was several days before the children were properly redistributed.

We passed some fine farms, with large, two-story frame houses elegantly framed in trees, and the driver pointed out two as belonging to two of the richest men in Northern California—they were early settlers who had taken up land, and he added that all the men who took up land and farmed were rich, and nearly all who went into the mines were now poor. It is quite characteristic on this coast for farm houses to have a piazza for the upstairs rooms as well as for the ground floor—the upper veranda being generally without a roof. For quite a little distance after leaving Yreka, there were small pine trees scattered about much as in the country about Spokane Falls, in Eastern Washington. Peaches about Yreka have this season been killed by a late frost. The great fields—farms of thousands of acres—were nibbled bare of grass. Here there were fences along the road, and the driver said that the fences were called corrals. At length the sun went down on Mt. Shasta, which rose continually in front of us. The igneous rocks, the conical foot-hills, the near and far-away ranges, the many tints of varied hues were transfigured into a multitude of shades of such colors as yellow, red, and blue. It was a grand and novel sight, and quite unlike anything we had hitherto seen. So individual in its character, and so majestic, we had learned the lineaments of Shasta by heart, and were all ready to declare that we could draw it from memory, so long and intimately had we gazed upon it. Its ascent is not difficult, but tedious, and its summit has probably been visited oftener than that of any other lofty snow peak on this coast. Many tourists visit in Summer one of the valleys near its base—Strawberry—where there are excellent hunting and fishing.

When we left Ashland we intended to stop at Strawberry, a little beyond Butteville, and remain for a few days, but when we reflected that we would be obliged to make the remainder of the stage ride by night, that now the moon was full, the roads good, and ourselves in possession of the most desirable seats, we thought it the better part of wisdom to go directly through—a decision we had no cause to regret. In the summer season the stage company arranges its schedule so that passengers can make the trip by using only the day part of two days; but this arrangement came to an end at the close of what is called the tourist season. It was dark when we reached Butteville, the station for supper, and it was growing quite cold. We had an excellent supper, and a cheerful fire in a tidy, roomy house. There was in waiting a family of six, the father and mother invalids, going from Eastern Washington to California for their health. They had come thus far several days before, stopping for rest, and for a night when they would have more room in the coach—but they had finally to be packed in like sardines, one of the children coughing terribly from whooping cough. One of the drivers told me that a man who lives in San Francisco, and has "liver complaint" annually makes this stage journey to have his liver stirred up, and he refuses to make use of any other remedy. On the top of the stage the jolting was so light that I quite forgot about the miseries of those inside the coach.

After supper we prepared for the night ride, putting on all the wraps we could muster, for we had been warned that it would be cold riding over the mountains, and the Senator who was unable to procure a blanket for his legs suffered very considerably. At Butteville we were furnished with a night driver, a large, pleasant-faced man, who smiled good-naturedly when he saw the small passenger who was to sit at his left. The laddie had fallen into a doze before we had reached the supper station, but from that time on he was thoroughly alert the entire night through until nearly morning, when he fell asleep. Mt. Shasta stands at the separation of the two ranges—where the Coast Range diverges from the Sierra, and this spur of connecting mountains we had to cross, and our entire night seemed to be spent among the mountains—all wooded with magnificent pines—climbing up a mountain laboriously, and then flying down it with our six horses "lickity-split," as the laddie said, and the way in which the driver would turn his six-in-hand around the oft-recurring corners was so admirable that I would not have lost one for much. He knew where was every rough or wet place, and all the tricks played by the shadows, for scores of times it seemed to my eyes that we were driving straight into a river, or against a high wall or embankment, or over fallen trees, when, to the driver's eye, the road lay clear and unobstructed, as it so proved. At length our road lay along a deep gorge, in which rushed the head-waters of the Sacramento River. It was just to the left of the narrow road cut along the ledge, the mountains towering at the right. Many a time in fancy we saw bandits step out from the trees, the shadows of their forms thrown across the road, and at last, about one o'clock, there was no mistake, a live man was in the road ahead of us, in high-topped boots and with a pack on his back. "Your money or your life," cried the driver, laughingly. "Oh, it's only an Indian," assuringly observed the Senator, but when we passed him he proved to be a tramping Irishman. After midnight we passed a camp of railroad surveyors and Chinese, the latter working on the railroad construction, which is being pushed from the California terminus.

Magnificent as was the ride, we all began to feel greatly fatigued toward morning, and the last 25 miles seemed longer than the entire hundred we had traversed. But the end came at last, and we reached Delta in time for the train. We had had 10 relays of horses for the drive. I felt uncertain whether I should be able to stand up on my feet when Delta was reached, but I got down from my high perch safely, although painfully conscious of a reeling tendency. A glance about the dusty, windy, crude town showed evidently enough that it was no place for one to rest in, and covered with dirt as we were, our faces sunburnt almost to soreness, hungry and so weary that I, at least, from nervous exhaustion, was unable to look at the passing landscape, we at once got into the cars and rode on to Red Bluff, where the family of John Brown the martyr once lived for several years, and which an old woman in Ashland had assured me was the prettiest place in the world—could I but see it, I would want to make it my home! We reached it in a few hours, and going to the best hotel called for a quiet room, and after refusing three or four rooms because of the uncleanness of the beds—the one piece of furniture that I looked at with a critic's eye in a hotel—we finally secured an apartment where we could begin the work of ablution and the renewing of our souls and bodies. We slept all of that afternoon and all of the succeeding night, and the next morning were in fairly good trim for further journeying. After breakfast we had an hour or two for beholding the beauties of Red Bluff—so named from the red soil of the Sacramento River beds on which the town is built. There were oleander trees, high as the houses and in masses of bloom, both red and white, great fig and orange trees, superb roses, trimmed evergreens, eucalyptus trees overgrown with ivy—but so hot everywhere and so dry, the mercury in Summer rising in the shade to 116 degrees. Shriveled mountain apples sold for $1.50 the box. Fifteen years ago they sold for $33.00

RURAL SPECIAL REPORTS.

Arkansas.

POTEAU, Scott Co., June 29.—The past Spring was a little late, but a very favorable one for all crops grown here, except oats and potatoes. May was so dry that many failed in getting in a good stand of cotton. But June has been unusually wet throughout, therefore all crops that have been properly cultivated are looking well. Compared with last year, crops are about as follows: Wheat acreage less; yield about the same; oats acreage greater, yield less—about half a crop; corn and cotton acreage the same, prospects better; fruit of all kinds not so good as last year, except it be wild blackberries, which are fine. H. C. B.

California.

DUARTE, Los Angeles Co. June 20.—Corn and wheat good; oats not many grown here, and much rusted; barley the best crop for years; potatoes good; garden truck in abundance; apples and pears half crops; peaches almost a total failure; apricots a quarter crop; grapes promise a very large yield; hay, as well as blackberries, raspberries and strawberries, very heavy; oranges and lemons, our chief products, promise one of the heaviest crops ever gathered in Southern California; walnuts will be a very poor crop next year. Our fig trees are full of fruit—will be ripe in about one month from now. J. S.

Kansas.

STRONG CITY, Chase Co., June 20.—The RURAL'S Marlboro Raspberries all grew nicely last Summer, but all winter-killed to the ground. They are sending up an abundance of suckers which I shall try another winter. Our Greggs were somewhat injured, but are bearing pretty well. Some apple, peach and early Richmond Cherry trees were killed last Winter and others injured. Early in Spring I got $1.00 worth of Japan Chestnut trees—two about eight inches high. The tops of both seemed to have been dead for months; at this date they show no signs of growth. We thank the RURAL very much for its outspoken treatment of monopolies. If every paper would tell the whole truth there would soon be a commotion. Land-grabbers have done and are still doing untold injury to this country. If we want to go to a point three miles west of here, we must travel nine miles to get there, and about the same if we want to go east, or else we must trespass on large inclosed areas, and some places are much worse off than this.

Kentucky.

GREEN CO.—I find your Alaska Pea a very early variety. Planted the same time as American Wonder, it is now (June 19) several days ahead. It came up quicker and blossomed nearly a week earlier. Vines grow of good size and hang full. E. P.

BEDFORD, Thimble Co.—The weather for growing crops has been good through the whole season, but as harvest is now here, farmers are predicting serious trouble in saving their crops. Wheat is generally good, but considerably fallen down and but little has been harvested. It has been raining here most of the time for two weeks, and still raining, with but little indication of better weather. Clover is good; but very little has been cut, owing to the unsettled condition of the weather. Corn was made late and irregular by the cut-worm, and at present has been neglected and is in a very bad condition. Prospects for a good oat crop equal to last year's. Meadows generally good. Stock dull at almost any price, with the exception of good horses and mules, which are in demand. Hogs generally scarce throughout the country. F. M.

Massachusetts.

SOUTHFIELD, Berkshire Co., July 1.—Corn is not looking as well as last year. Oats, fair; potatoes look well. It was predicted that hay would be a light crop, as it was expected to be as forward as the season; I now think we will have a fair crop. Tobacco is doing well—some trouble with cut-worms. Last year was our apple year; prospect of a fair supply this year. E. B. G.

ANSWERS TO CORRESPONDENTS.

[Every query must be accompanied by the name and address of the writer to insure attention. Before asking a question, please see if it is not answered in our advertising columns. Ask only a few questions at one time. Put questions on a separate piece of paper.]

ANALYSIS OF SOIL.

C. L. N., Tullahoma, Tenn.—1. When chemical fertilizers are used, does any of the fertility remain in the soil for the following year, or does the present crop get all the good of them? 2. Has Tennessee any State Chemist, and how can I get soil analyzed so as to discover what fertilizer it needs? 3. Will bearing grape vines set out in Spring produce fruit the following season? Will they if set out in the Fall?

ANS.—1. Yes. Most of the phosphoric acid and potash remains in the soil if not taken up by the plants. Our friend should know that the three food constituents which chemical fertilizers furnish are the two above mentioned and nitrogen. Most of the nitrogen, if supplied in a soluble form, as in sulphate of ammonia, or nitrate of soda, is either used by the plants or leaches through the soil the first season. If supplied by farm manure, bones horn, hair, wool, etc., the nitrogen becomes soluble slowly and may therefore remain in the soil in a gradually available condition for years. 2. We do not think Tennessee employs a State Chemist. At least four "determinations" or separate analyses would be required to analyze any soil, and the "mean" of those would be the given analysis. They would cost at least $5 each. A serviceable analysis would cost in all about $30, and that would determine only the ingredients of the specimen analyzed. It would not determine the degree of solubility of the various plant foods in the soil, and it is well known that most soils contain a large supply of plant food—enough for many successive crops—but locked up in an unavailable form. You cannot, therefore find out what your soil needs by analysis. Chemists may tell you what it is made of, but they cannot tell you whether it is in such a form that plants can take it up. 3. No, not as a rule. Indeed it would not be well to allow them to bear before the second year. Generally they will not bear before the third season. If, however, grape-vines be taken up with great care, so as to preserve the root fibers, with soil about them, they might be induced to bear the first season. But, as we have said, it would be better to destroy any clusters that formed.

AILING TEATS IN A COW.

F. S., Blair, Neb.—My five-year-old Jersey is to come in in September, having dropped her second calf on June 21, 1885. While milking her three weeks ago, the flow from one teat suddenly stopped. Greater pressure forced out a lump of stringy matter, and the milk flowed freely again—no swelling, heat or soreness apparent about either teat or udder. In a few days it occurred again, and shortly afterwards the same thing occurred in another teat, the first affected appearing all right at that time. Since then it has occurred several times, first in one teat, then in another, and for several milkings all the teats appeared all right. She has not been hurt, so far as I can see; she is driven with a lot of others only a quarter of a mile to and from a good pasture; what is the trouble? How is it likely to affect her milking qualities hereafter? Is it safe to use the milk, especially as a drink for children? What is a remedy? Hitherto the milk from the affected teats has been kept separate, as soon as noticed, but several times a part has entered the pail before we noticed the teat was affected.

ANSWERED BY F. L. KILBORNE.

Judging from the symptoms and the fact that the Jersey is very liable to tuberculosis, we suspect tuberculosis of the udder. It may, however, be simple inflammation due to some unknown cause. If due to tuberculosis both milk and cow should be condemned. The milk is especially dangerous from such animals, being very liable to transmit the disease to any other animal or to persons drinking it. If the difficulty is due to simple inflammation, the cow should soon recover, after which the milk will be good. Try injecting into the teats, after each milking, a solution of five grains each of carbonate of soda and permanganate of potash, in one ounce of water. If the cow does not soon recover, tuberculosis may be suspected, and a competent veterinarian should be called to condemn her if such is the case.

RAISING HUCKLEBERRIES.

L. H. S. (no address).—How are huckleberries propagated—by seeds, layers, cuttings or offshoots? How should they be cultivated?

ANSWERED BY PROF. L. H. BAILEY, JR.

There is undoubtedly a bright future before our huckleberries. It is well-nigh useless to attempt to give any directions for their culture, however, as the sum of experience in the matter is very small. There are no less than 16 wild species of huckleberries in the United States east of the Mississippi. These are known under a most perplexing variety of names. Many of them produce fruit in every way superior to the wild originals of some of our garden fruits. It now remains for the horticulturist to succeed in cultivating them. The difficulties in the way of cultivating are not yet well understood, because almost no cultivation has been attempted. We have set aside an acre upon which to experiment with huckleberries. We shall try all methods of culture of which we can hear, and shall endeavor to grow all the species. We solicit suggestions, and also specimens of the best fruits of any of the species. This Spring I bought from a nursery a few plants of each of the several varieties, but they were evidently wild roots of common species. They amounted to nothing. So far as I know, there is not yet any reliable nursery-grown stock. We shall propagate from wild plants.

Ag. Coll., Lansing, Mich.

CHRONIC CATARRH OF WOMB OF A MARE.

G. H. B., Hearne, Texas.—I tried the remedy for catarrh of the vagina and womb

of my mare, given in the RURAL of May 8, and she improved under the treatment; but as it was getting late for breeding, I put her to a young stallion and over a gallon of malodorous stuff was discharged. I am still applying the remedy, giving little or no corn, but all the grass she wants, together with a little wet bran and nitrate of potash and sulphate of iron. Her stomach seems large; but she keeps up a continuous roaring there; what more should be done?

ANSWERED BY F. L. KILBORNE.

The difficulty is evidently in the womb, and you appear to have failed to reach the seat of the disease. When you introduce the catheter or tube, introduce the right arm with the tube into the vagina until you reach the neck of the womb; then, still guiding the tube with the hand, pass it through the neck of the womb into that organ itself. Now draw off any contained liquid, and make the injection as directed May 8. If you do not succeed any physician can help you. It would be better not to attempt to breed the mare this season.

FERTILIZERS.

J. B. F., Smyrna, Del.—1. We buy screenings from a bone mill for $10, $15, and $20 per ton, and use them on potatoes with excellent results (mostly the $15 kind, which we consider the cheapest of the three for the price). Would it be advisable to mix this kind with kainit and hen manure, and what proportion would be best? 2. What should be mixed with bone screenings and wood ashes to obtain such a proportion of nitrogen as would be needed in a well-balanced complete fertilizer? 3. Would it be advisable to make the mixtures some time before they are wanted? 4. Would they be as valuable as ordinary superphosphate?

ANS.—1. We should not mix the hen manure with the others, but spread it separately. The kainit or bone may be mixed for potatoes in the proportion of 200 pounds of each. But we do not know what the "bone screenings" may consist of—that is, how much bones or how fine or coarse they may be. We do not know whether your land needs more or less of potash. 2. Use 60 pounds of blood or nitrate of soda to 200 pounds of bone and eight to 12 bushels of ashes, or ground fish may be used for nitrogen, in which case one-third less of bone may be used, as the fish also furnishes phosphoric acid. Do not mix until ready to use, otherwise there will be an escape of nitrogen. 3. No, nothing would be gained by it. 4. We can not say. Superphosphate, as the word is used, unfortunately may mean a dozen things besides a fertilizer furnishing only phosphoric acid in a soluble form. Strictly speaking, a superphosphate should be burnt bone dissolved in sulphuric acid, which would furnish phosphoric acid alone.

AILING CHICKS.

J. W. H., Elizabeth, N. J.—What are the symptoms of sickness brought on chicks by eating musty grain? I lost a number from some disease which I can attribute to nothing else.

ANSWERED BY F. L. KILBORNE.

Musty grain is not particularly injurious to fowls, unless fed to young chickens or in large quantities, especially to fowls confined in small quarters. With the young chickens the only prominent symptoms will be the rapid drooping and dying. With the older fowls there may be ruffled and dull feathers, coldness of the skin, weakness or paralysis of the legs, constipation, general dullness or torpor, or perhaps nervous paroxysms. In many cases there will be merely the drooping and death without any marked symptoms. If your chickens are but a few days or weeks old they are probably dying from exposure or unsuitable food. If older, and the fowls of all ages are attacked, it is more like the cholera. By again referring to the late article in the RURAL on fowl cholera, you will find it there stated that any or nearly all of the common symptoms may be absent. While the symptoms of disease in poultry are generally *very unsatisfactory*, this is especially the case with the cholera, and also diseases arising from improper or unsuitable feeding.

SCRATCHES IN A MARE.

W. H. W., Edgerton, Wis.—What is a remedy for scratches in a six-year-old mare?

ANSWERED BY F. L. KILBORNE.

Soak the crusts or scabs with oil for a few hours and remove as much as possible by washing with tepid water and Castile soap. Then apply benzoated oxide of zinc ointment, and cover with a bandage. Repeat if necessary. When you have a clean, healthy-looking surface remove the bandage, and apply daily a spermaceti and almond oil or tar ointment. If the oxide of zinc does not succeed, replace it by a solution of sugar of lead and sulphate of zinc. Internally give five drams of Barbadoes aloes to open the bowels, and follow twice daily with five grains of arsenic in solution and one-half ounce each of powdered gentian and carbonate of soda, and one dram iodide of potassium. Confine the mare where her heels will be kept *clean* and *dry*. Feed moderately, and do not give corn or other heating agents.

GETTING RID OF SORREL.

E. Y., Turnsburg, Ohio.—How can I get rid of sorrel? It hasn't the slightest objection to a rich soil, so that "extra manuring" will do no good.

ANS.—It blooms in your climate in May and later, fruiting in Summer. It is plain that any treatment that will prevent seeding will reduce the crop. It is a perennial, however, and spreads by the roots also. Summer fallowing—the thorough cultivation of hoed crops will subdue it. Until of late lime has been recommended, but careful experiments show that it flourishes under lime dressing as well as in poor soil. Enriching land tends to subdue it simply because it gives other plants a chance to crowd it out.

SWEENY.

J. H., Big Mound, Ia.—My mare got lame in one leg five months ago. Her shoulder has shrunk away just below the top of the shoulder blade, on a space four inches wide and seven long. She is very lame, and in working she doesn't allow the foot to pass back of the center. When she eats grass she rests the foot on the toe. No fever, or swelling, or any signs of injury on frog or foot.

ANSWERED BY F. L. KILBORNE.

Evidently it is a severe case of sweeny, a sprain of the muscle filling the posterior cavity on the outside of the shoulder blade. See late numbers of the RURAL for treatment of mild cases of sweeny. In the present case a current of electricity from a galvanic battery, sent through the muscle for 15 to 25 minutes daily, would probably be the best remedy. In the absence of a battery, buy Spanish-fly blister, or, better still, place the mare in the hands of a competent veterinary surgeon for treatment.

Miscellaneous.

E. A. B., Talladega, Ala.—1. My horse was kicked on the hind leg at the fetlock joint. The place is swollen considerably; what should be done? 2. The fore-quarters of the udder of one of my cows that is about to calve, fill out; but the teats do not; what should be done if she fails to give milk through any of the teats?

ANS.—1. If no heat or tenderness remains, apply tincture of iodine twice a week for a month, or longer. You may, or may not be able to entirely remove the swelling, according to the extent of the injury. 2. The cow will not fail to give milk through these teats if there is milk in the corresponding quarters, unless there is some stricture or obstruction in the duct. In this case an incision will have to be made to open the duct or to remove the obstruction.

A Subscriber, Byron, N. Y.—An acid phosphate of South Carolina rock cut with sulphuric acid, and analyzing about 12 to 14 per cent. of phosphoric acid, with no potash or ammonia, is offered us at New York for $26 per ton. The agent says only $1 per ton is made on it. Isn't the price too high?

ANS.—If it contains 14 per cent. of soluble phosphoric acid, the price is not excessive.

P. S. B., Jonesville, N. Y.—No; there is no duty on imported eggs from poultry. Millions come in from Canada and Europe duty-free every year. Why shouldn't the American Hen be "protected?" Her products run high among millions of dollars every year—without a particle of protection. Foreign fish-eggs have to pay a duty of 10 per cent.

J. W. J., Allen, Md.—This year the May King Strawberry is not earlier than the Crescent. It is not quite so productive, but is better in quality.

J. A. W., Cecil Co., Md.—Spraying with tobacco tea is about the only remedy we know of for the "black beetles or lice" that infest cherry and plum trees.

DISCUSSION.

THE USE OF SALT ON FOOD.

L. C., PHILADELPHIA, PA.—A late RURAL says:

"The National Live Stock Journal, noticing a recent communication in the RURAL regarding the feeding of salt to stock, makes the point that water is wholly innutritious, adding nothing of substance to any structure of the body. It is utterly indigestible, is taken as water, goes the rounds of circulation as water, and is finally eliminated from the system as water. All that can be said of salt in this line can be said of water. But does it prove that water is injurious, or useless? Does it perform no important office in the body, although not digested or assimilated? Water is absolutely indespensable. Without it, neither vegetable nor animal organisms can exist. It is a medium for dissolving all foods, and assisting in their circulation and deposit at the points where needed. Remove the water and everything would be but crumbling dust, to be blown about by the winds. What, then, is the force of argument of the "justly celebrated medical writer and practitioner" against salt? He could not live without a certain per cent. of it in his blood, in which it is a constant element. It attracts water and keeps the blood fluid. In this respect, it undergoes more change than water does. Its crystals are dissolved, while water remains water still, from first to last. Yet one may injure himself by an excessive use of water, as he may by an excessive use of salt; and if he gets into water it will drown the life out of his body. Possibly he might smother himself in salt. But salt is nothing like as dangerous an element to deal with as water."

The National Live Stock Journal is, of course, all wrong. There is no sense in the above argument. I do not deny but that salt is needed in the system, but I do believe that there is enough saline matter in the food we eat to fulfill our wants in that direction. Such is not the case when we eat only the starch of the wheat, as in white bread, or when we pare the potato, boil it and throw the water away. Water is needed in the system, of course, and our food consists largely of water; and if we eat fruit largely, we must not drink if we do not use salt. I neither eat salt nor drink water, and am never thirsty. The use of salt and sugar causes a demand for drink, as I have found by experience. Animals would drink very little water if allowed to graze and were not given salt. You seem to think because the "scientific and practical world" approves of the use of this mineral as food, therefore it is right to use it. But that proves nothing. There are much false teaching and practice in the world, and will continue to be for some time. After a while the world will outgrow this error as it has others. Forty years ago, the use of calomel was considered indispensable to the cure of many diseases; now it is scarcely ever given by physicians. Other drugs have gone out of use, one after another, from time immemorial, because found to be pernicious. Salt will surely take its turn. I propose to think for myself, and not be tied to the opinions of old-fogyism, as the RURAL seems to be. You seem not to value the opinion and experience of "one person" in the matter, and yet are not the opinion and experience of one person who has tried doing both with and without salt, worth the "guesswork" of a thousand who have always used salt? I should say so. There are hundreds, and perhaps thousands, of persons who have stopped the use of salt, and their uniform testimony is that they have been the gainers thereby, and I never heard of one injured by the abstinence. The testimony of a hundred such persons, it seems to me, is worth that of a million bigots who use the drug and think it right because it is the custom approved of by a lot of ninnies of the "scientific" class who never have given a moment's attention to the subject, but simply have taken for granted what they saw in their college text-books. There is not a particle of doubt in my mind that salt, as it is placed upon our tables, is a poisonous mineral, unfit to be used as food, destroying the relish for food and damaging the human system that is brought in contact with it, and ought to be abstained from; but that the body and all its parts may be supplied with its requirements in this direction, our food should be so selected and cooked that its saline constituents be retained and not thrown away. The salts of the grains, fruits and vegetables are in their proper conditions for use, and are essential to health the same as are the magnesia, soda, starch, potash, etc. These last named constituents, taken as we take salt from the salt-cellar, are not wholesome, but as in our food, they play an essential part in our internal economy.

K. S. W., RAVENNA, OHIO.—As the RURAL calls for the experience of others in the use of salt for stock I will give mine. I lived about two years on a mountain dairy ranch in California. It is unusual to see any one there salting his stock, the opinion being that there is enough salt in the dew (being close to the ocean) to supply all that is necessary. The manner of milking there was rather different from ours. The cows were corraled, and in an adjoining yard were the calves. The milker would let one calf into the corral at a time, and as soon as the calf started the cow to give down her milk, the calf was taken away and tied to the fence with a short rope used in bailing hay. Unless we took good care of our ropes, the calves would eat them up. This called forth much argument between the owner and the writer. I, being recently from the East, maintained that the unnatural habit of rope-eating was due to the want of salt, and proved it to my entire satisfaction by feeding the calves salt, after which it was perfectly safe to lay the ropes down, and they would let them alone. Again, horses pastured in a field of Alfalfa would eat the top board of the fence, and I always claimed it was for the want of salt, but I never had a chance to prove it. We pastured about 80 horses in the Fall and Winter on Alfalfa and other rank grasses outside of the ranch. The first season I was there, the horses did not put on flesh as they ought, and their hair did not lie smoothly. I, of course, said it was for the want of salt, and got laughed at for saying so; but to convince me that I was wrong, and that the horses would not eat salt if they could get it, the owner sent over a barrel of salt, and by my instructions, a bag of bran. For two feeds I mixed two parts bran and one of salt. Owing to their greediness for it, I discontinued the bran and gave them a 16 quart pail of salt twice a week. Placed out at night, it would be all gone in the morning, and in a very short time it was apparent that salt was beneficial to them, and we always salted our horses after that. Of course, where cattle were close to the ocean, or where they could get the native salt grass, they did not need salt; but on rank-growing grass, such as Alfalfa, or the native grass in the rainy season, they needed salt. Again, I have never seen a horse or stock of any kind but what likes more or less salt, and I give them credit for knowing too much to eat so much of anything that is not good for them.

W. G. TYRONE, PA.—In May, every year, we see, in closely grazed pastures, luxuriant little mounds of tall green grass, while all around is pale and sere, showing only weak beginnings of growth. On examination we find that each of these verdant spots surrounds a little deposit dropped there last season by some cow or horse, and we are quick to infer that the vast improvement in growth is due to the deposit acting as manure. We feel that manure is everything, and that our meadow is worn out for want of it. Where or how shall we get enough of it to make the whole surface so productive?

In this we are on a wrong train of reasoning, and giving ourselves worry without reason. Manure has very little to do with producing this great and desirable spring of growth. The pile of droppings has yet become soluble but to a very small extent, and could not yet yield manurial nutriment. The growth is due to the cattle having avoided those spots while grazing so that the plants there had a chance to become strong in top and root, the latter having also the advantage of a partial mulch. Where any piece of soil is protected from cattle and from steel for a time it will soon show its gratitude in a bountiful and generous growth. This applies to lawns and door yards. No amount of manure will make up for the injury done to the plant, including its roots, by continual cropping, trampling or shading, without any chance of making a full growth of blades during any portion of the season.

R. N.-Y—Our correspondent's reasoning is partly correct no doubt, but we think not wholly so. The watery portion of the deposits contains more or less plant food in a perfectly soluble condition, and this is carried into the soil by every rain to enrich the land underneath and somewhat beyond the deposit.

E. D. C., THORNVILLE, MICH.—What is the matter with the Alaska Pea? It is a matter of wonder to me where the RURAL could have got the seed to supply all its subscribers with a paper. It is the puniest little object you ever saw. I should think it would take 500 acres of it to go around in the Free Seed Distribution. I inclose a specimen which was raised in good garden soil and well cared for. My market Garden Peas, which came in the Distribution, are the admiration of everybody who sees them. The row is five rods long, planted with the hand corn-planter—four abreast, five seeds dropped in a place, and well hushed. They are covered with flowers and pods, and the foliage is very fragrant.

R. N-Y.—Our Alaska Peas grew to the hight of four feet. All the seed sent out to subscribers was the same, so far as we know. If any other variety was sent, it was the mistake of the origiuator.

E. F. C. ELLSWORTH, WIS.—A poultry specialist in the RURAL recommends lard and sulphur to kill lice on chicks. My wife anointed a brood of a dozen chicks last year with such a mixture, and thereby certainly killed every chick—and perhaps some lice also.

R. N.-Y.—Too much was used, and too much of anything is bad in all cases and fatal in some. Lard stops the pores of chickens and lice alike, and thereby kills the lice, which breathe only through the spiracles or pore-like vents in their bodies. The chick is injured also by a liberal application over much of the body, and where the body is "anointed" with the stuff, fatal results are likely to follow. The usual way is to rub it under the wings and on the back of the chick; the lice congregate chiefly there, or in moving about soon get there, and are killed.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING July 10, 1886.

S. P. S.—H. S.—E. Y.—R. W.—E. C. B., thanks.—F. C. R. C.—G. F.—H. R. R.—E. W. S.—C. A. G.—H. E. C.—J. S. B.—H. S.—G.—J. B. R.—W. F.—J. E. S.—W. F.—J. S.—W. L. D.—B. F. W.—C. D.—W. E. P.—J. B. R.—F. G. W.—R. G.—S. A.—W. H. N.—H. B. M.—J. H. H., thanks.—J. C.—W. G.—W. H. N.—R. P. G., thanks.—J. C.—F. S.—M. H. A.—H. R. H.—J. S. B.—C. W. G.—S. Y. R.—C. B. G.—J. W. D., thanks.—J. E. C.—J. A. S.—T. S.—S. P. & L.—A. M. S.—T. W. L.—E. S. G.—A. S.—S. A. L.—W. D. G.—D. J. F.—J. M. D.—A. G. G.

THE
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A National Journal for Country and Suburban Homes.

Conducted by
ELBERT S. CARMAN.

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You can not have fine celery and yet let the plants suffer from drought.

The Rural's "Correspondents' Views," beginning on page 446, seem to us very interesting and full of valuable suggestions. We are always glad to receive such short, terse, meaty notes from our friends.

Mr. Lawson Valentine's Houghton Farm has always had the good of agriculture at heart. Its loss of Major Alvord is the gain of the Massachusetts Agricultural College. We hardly know whether to congratulate the college or sympathize with Houghton Farm.

Here is a half acre of Early Rose Potatoes manured with 10 loads of city stable manure at a cost of $27. An adjoining half acre of the same potato received three bags of potato fertilizer (1,200 pounds to the acre) at a cost of $13.50 for the half acre. Judging by the tops, the latter will yield one-third more potatoes. It is intended to sow rye on the acre this Fall. Which half will yield the better crop? We should guess the half acre which received the stable manure. Let us see.

We are glad to receive the following from Pres. Wilder, showing, as it does, that the Marlboro Raspberry is all that could be desired as to vigor in his grounds: "It is strange that the Marlboro Raspberry should be in your grounds no stronger than the Hansell. With me the Marlboro is the strongest grower of any raspberry, even stronger than the Schaffer. It is a remarkable plant for vigor and hardiness, early (productive if the suckers are kept down), handsome, but not quite up in quality."

A friend in Augusta, Ga., whose letter we have unfortunately lost, has sown carefully selected grains from the Diehl-Mediterranean Wheat and reaped heads both bearded and beardless. He asks us if we think it will continue to sport in this way. Were it not that our friend is positive that he sowed seeds of bearded heads only, we should reply that the seed was mixed. Our own five-acre field of last year was similarly mixed, and we accounted for it in that way. A new variety of wheat should never be distributed until it is fixed, since it is liable to give rise to differently named wheats that are essentially the same.

Judge Barrett, of this city, is gaining an enviable reputation as a "learned judge." Not long since he sent an Alderman to the State's Prison with a sentence ringing in his ears which, for strong and scorching English, has rarely been equaled. Last week he sent a half dozen boycotters to the same place. In sentencing them, he gave them about as much truth as could be poured into a ten-minute speech. This week he has sentenced another lot, and given them, and all law-breakers like them, a ringing warning. This work is well begun. The rich rascals hoped to place bank notes over the eyes of Justice. They are more likely to enter prison on the boots of the people. Foreigners must understand that this is a free country only for those who have sense enough to respect its laws. We have fooled with Anarchists and their kin long enough. Such fellows do not read the long editorials that are written at them, but when the leaders are thrown into prison, the followers are able to appreciate the situation.

This is an "off" year in politics. You can afford to think for yourself. In a presidential election, none but enthusiasts care to break away from party lines. There is no reason this year why you should not do a little training. The oleomargarine bill is the most important, in its bearings upon agriculture, of all that have been introduced of late into Congress. Make it an issue this year. If your Congressman voted against the bill, do your utmost to keep him at home. Vote against him, talk against him, and use all honorable means to bring about his defeat. Don't let him lead you away from the point by bringing up other issues. Pin him down to the subject. Take one thing at a time. Teach these bogus butter Congressmen a lesson, and do it this year. The question is simple. You desire an honest protection for an honest business. The present bill offers that protection more fully than anything that has yet been brought before Congress. If your Congressman opposed it, he is your enemy, and it is your business to try and replace him with a friend.

Farmers who have so much to say against our Agricultural Colleges, often have it in their power to right the very wrongs which they so loudly denounce. They never send their own sons to such schools. The boys go to some literary school and learn that their father uses poor grammer and is behind the times generally, and that their mother is not in style. Fill these despised colleges up with students and there is not one of them that would not rise to the occasion and "amount to something." Too many farmers are absolutely foolish about the education of their sons. There are in every State a dozen or more little institutions whose graduates are a strange mixture of pride, incompetence and conceit. Many a good boy is so thoroughly spoiled by such a course as these institutions have to offer, that he loses many of the best years of his life. Empty the cream of these schools into the Agricultural Colleges and the effect upon the State will be marked. Send your own boys to the Agricultural College. Make them earn a part of their education. Support these institutions if you want them to succeed.

In reading the reports sent out from our experiment stations, one is apt to ask himself, who are these reports intended for. Will they actually help farmers, or will they simply provide an opportunity for scientists to "split hairs" over some unimportant question? The authorities complain that hundreds of these reports are never called for at all. Small wonder, say we, after reading half-a-dozen of them. There is too much jumping at conclusions from a single experiment. The language is too fluent. One is given the idea that the report was to be paid for by the page. Long lists of fertilizers and observations are printed that not one person in 100 will ever read. There is a tendency to copy rather than to originate experiments, and to devote more space to telling how they were performed than to stating what may be learned from them. If such stations are to become popular, that is, if they are ever to gain the confidence of the farmers who really need their aid, they will have to learn the art of "boiling down" the records of their experiments and of expressing them in simpler language. The Directors of such institutions must be men who can "speak as the common people, think as the wise."

BLACKBERRY AND RASPBERRY HYBRIDS.

The anthers of the flowers of both blackberries and raspberries were removed before maturity, and pollen of each was applied to the stigmas of the other. The flowers so treated were covered with tissue paper until the berries set, when mosquito netting was substituted. The cross seems an easy one to effect. One day last week, the hybrid raspberry seeds (100 or more) were planted in a box. The hybrid blackberry seeds will be planted as soon as the berries ripen. We do not know where the idea of hybridizing these two species of the bramble originated. It was first suggested to the writer by Prof. Saunders, of Canada, who has effected the cross, though in what respects the seedling plants differ from the species we are not as yet advised.

A HEARTY GOOD WORD.

We desire to speak a hearty good word for a new blackberry, the Early Harvest. We have or have had nearly every kind of blackberry under test, and this is, without a question, the earliest. It is now, July 10th, ripening a good part of its fruit and the canes are laden. In the same row are Wilson Jr., Early Cluster and the Lucretia Dewberry. The latter has a few ripe berries, the others are merely beginning to change color. The quality of the Early Harvest is the best of any blackberry the writer has ever eaten. The berries are really sweet and the seeds so small that one crushes them between the teeth like those of a strawberry. Again, the form of this berry is perfect. The drupes are small and of the same size as if made in the same mold. They are a jet lustrous black, and though smaller than the Kittatinny, would we doubt not, outsell that variety if placed beside it in the market. The plants are evidently not as hardy as those of Snyder or Taylor, perhaps not as hardy as the Kittatinny. They were set at the Rural Grounds in the Spring of 1883. The canes this Spring seemed much injured by the past Winter, but are, nevertheless, bearing as has been said, an abundant crop.

A NEW WAY TO MULCH POTATOES.

Never until this season has the R, N-Y. raised potatoes under a mulch merely; that is, planted the seed pieces on the surface soil and covered them with (in this case) old strawy leached manure. It seems quite a success, though the wet season has probably made it so. One day last week the writer with a friend had the curiosity to remove the mulch about a hill or so to see what was going on underneath. It was presumed that the roots and tubers were mingled with the decayed straw and that the latter could not be removed without injuring the plant. It was not so, however; the mulch was raised as if it were the cover of a box, and there, crowded together like eggs in a nest, were the tubers and among them and beneath them the roots and the stems which bore the tubers. The sight was a most interesting and, indeed, instructive one. It seemed as if we had taken nature by surprise, and had, without notice, stolen her secrets. It is now evident enough that of the 35 plots or trenches planted to the same potato with different kinds of fertilizers, the one that will yield the most potatoes is one that is mulched in a peculiar way. We call it "valley" mulching. The soil is prepared and leveled. The pieces are placed on the surface one foot apart in the row—the rows three feet apart. The soil between the rows is then hoed or plowed (as preferred) over the pieces so as to cover them three inches. The valleys thus formed between the rows are then filled nearly to the hight of the soil over the seed-pieces with a "mulch" of some kind. In this case it was strawy manure that was spread on the surface last Fall, left there during the Winter and raked in a heap in the Spring. Thus about a foot of soil in width on top of the pieces is without any covering, and receives the sun's rays and the rain; while the mulch in the valleys is supposed to assist in retaining the moisture so received for the benefit of the roots. An objection to mulching potatoes on top is that the ground underneath is kept cold, the seed sprouts slowly and unevenly and the shoots find some difficulty in making their way through it. This particular trench has made the largest growth of vine and, judging from the way in which the soil is cracked above the tubers, will give the largest yield. By this method, the soil is not cultivated from the time the seed is put in, until harvest. All weeds must be pulled by hand. But if the mulch used is old, few weeds will grow.

THE TEMPERANCE AGITATION.

At no former time has the temperance agitation been so prominent, influential and widespread throughout the country. Straight Prohibitionists already control Maine, Rhode Island, Kansas and Iowa, and are running, or, according to present indications, are about to run at the next State elections straight tickets in New York, New Jersey, Delaware, Pennsylvania, Maryland, West Virginia, Kentucky, Tennessee, Missouri, Alabama, Minnesota, Oregon, and probably several other States, while a vigorous social and political movement in favor of "high-license," "local-option" and "anti-saloon" legislation shows the vitality and energy of the "temperance" party in most of the other States also. There is no State in the Union in which the advocates of greater restraints on the sale and manufacture of intoxicants, or even of the total prohibition thereof, have not been making great gains. Everywhere the Prohibitionists—the extremists of the party, who represent the legitimate conclusions of the "temperance" creed—are either forming or keeping up and strengthening their organizations, and preparing for a hot fight when next an opportunity presents itself at the polls. Theirs is a battle chiefly for morality, though it must also involve grave political consequences. In the North, the Prohibitionists at present draw more heavily from the Republicans than from the Democrats; in the South, where Prohibition and "high-license" are making marvelous headway, the case is reversed. Northern Prohibitionist Republicans, however, believe earnestly that their doctrine will be best supported outside old-party lines, and are prepared to run straight Prohibition tickets not only at State but also at Presidential elections. Southern Prohibitionist Democrats, on the other hand, generally think they can attain their ends without leaving their party, and comparatively few of them would vote a Prohibition ticket at a National or even State election.

Through fear of secessions from their respective parties, the stalwart newspaper represenatives of the Republicans in the North, and of the Democrats in the South have, since the last Presidential election, been unsparing in their ridicule, denunciation and vituperation of the Prohibitionist principles, leaders and party. Both the old parties, however, are now willing to concede nearly all the demands of the "temperance" men they can without alienating the "liquor" vote; but the temperance men and women (God bless them!) have "the courage of their principles," and refuse, so far as the Prohibitionists are concerned, to have any political relations with the supporters and propagators of the greatest evil of the age. Both parties have lately been bidding for the support or forbearance of the Prohibitionists. The Republicans of New Jersey are likely to indorse the Prohibition State ticket at the Fall elections, instead of nominating one of their own. The Democrats of Iowa have already indorsed the Prohibition platform in that State, with slight modifications in a few minor points. Both parties appear willing to embody "high-license" and "anti-saloon" planks in their platforms in States where a few years ago neither would listen to such a proposal. Where, as in this State, political parties are pretty evenly balanced, the Prohibition vote can easily throw a State or even National election to one side or the other. The probability is that ere long the out-and-out temperance men will hold the "balance of the power" in a majority of States in the Union, and consequently in the Nation. A party founded on temperance and morality and supported by the votes of the best men and the blessings of the best women in the country, cannot long hold a merely subordinate place in this Republic.

BREVITIES.

We have never known wheat to rust as it has rusted this season, owing, no doubt, to the wet weather. We do not hear of rust in the West.

Wherein does Fay's (Prolific) differ from the Red Cherry Currant? Simply in this: the berries average larger, the racemes longer. The quality is about the same.

At the N. Y. Strawberry Show, a berry of the Hilton, illustrated this week on the first page, measured nearly nine inches in circumference and weighed over two ounces.

July 4th, 5th, 6th, 7th, 8th. From 90° to 93° in the shade at the Rural Grounds, and we are in the middle of the rye and hay harvest. A blaze of heat and sunshine. Is this one phase of the "dark side of farming?"

According to the size of the plant (five feet high), our dwarf Shadbush has borne more fruit than any other plant, large or small. It has been literally loaded with its huckleberry-like fruit, and, unlike our experience in other seasons, the birds have not gathered the fruit for us.

The largest berries of the Nemaha cap raspberry measure (July 5) seven-eighths of an inch in diameter. They are borne in clusters like the Gregg. The berries have a lilac bloom where the drupes join together, above which the drupes are a glossy black. It is as late as the Gregg.

Early Harvest Blackberry gives the first ripe fruit July 3d. It is the earliest blackberry we have ever tested. Though the canes were much harmed by the Winter, the plants are, nevertheless, bearing lots of fruit. The drupes are small, but perfect and of the same size, so that the jet black little berries resemble rubber thimbles.

In speaking of new strawberries we do not feel at all inclined to spare their deficiencies. The introduction of new kinds is so overdone, that praise should be witheld unless the new claimant promises to fill a vacant place. A new kind with the vigor of a Sharpless, bearing more fruit of equal size and better shape and quality, or a Jewell of better quality, or a Parry with stronger plants, would, for example, prove a decided acquisition. But why add to the already thrice too long list of names without adding anything in the way of improvement?

The memory of the "oldest inhabitant" is badly strained in trying to remember a time when vegetables were earlier than they are this year. In old time, through this section, the securing a mess of green peas and a few small potatoes by the Fourth of July was considered a good performance. This year we had peas from our garden on June 19, while on July 3 we found potatoes as large as one's fist. The immense amount of thought given to the improving of early vegetables, the better culture of later years, and the use of concentrated and quickly acting manures, has greatly shortened the growing period of crops. In early maturity, horticulturists have kept pace with breeders of improved stock.

Educational.

THE DARK SIDE OF FARMING.—III.

HENRY STEWART.

THERE are "ne'er-do-wells" in farming as well as in other vocations, and many a farmer who feels that he is on "the dark side" might take aid and comfort, if in no other way, by studying well that delightfully natural and evidently faithful autobiography of Mrs. Mary Wager-Fisher, given on the first page of the RURAL of June 5th, in which she tells how she learned "if she wanted anything accomplished the only way to get it done was to do it, and she has never yet learned any better way." One class of men who live on "the dark side of farming" is made up of those who are given to the vice of procrastination—that "thief of time" which robs us of our best gift and which is ever tempting men to try how not to do it, just at the very time when some important work should be done. Farm work is especially one of times and seasons and opportunities, which, if permitted to pass, do not return until a year has passed. A young man may not think what a year is. He is full of hope—too full at times, living upon it too often. He may think: "Never mind, it is too late now for this year, but it will be all ready next season." Alas! he forgets the truth of that common adage: "The road to ruin is paved with good intentions."

Another man, forehanded, thoughtful, full of plans, but carrying all into execution in good season, lives in sunshine. His crops are good, being put in in good time they get ahead of bad seasons; his plowing is all done in the Fall; his spring seeding is finished while the land is in its best condition; his wet land has been drained in the Winter, and while his procrastinating neighbor has been always going to fix his fences, mend his tools, hang his gates, get his summer fuel into the shed, and do the thousand and one things which should have kept him busy all through the cold weather, and has been gossiping or idling his time away, the forehanded man has been doing all these things. This one has everything needed and ready for use. His hay and fodder got in in dry weather are the best of food for his cows and horses; the stables and barns have every convenience and safeguard; all his fields are well fenced and furnished with good gates; there is a place for everything and everything is in its place. Nothing goes amiss with him, because everything goes by rule and plan, all laid down ahead, and every work or arrangement is done or made before the necessity for it arises. The old story of the man whose barn roof leaked so badly applies just here: when the weather was fine the roof did well enough and didn't need fixing; and when it rained it couldn't be fixed—and so it was never done, until by and by the old shingles blew off in a storm and great damage was done and the cost was increased several times.

There is another old story, too, which has so useful a moral that I am tempted to repeat it. A man going on a journey noticed a nail in his horse's shoe was missing. He thought it would not matter and he could get that little thing fixed when he returned. He started; the roads were bad and the weakened shoe was soon torn from the horse's foot. Then the horse went lame, and in passing a steep, rocky bank it tripped, stumbled and fell and rolled down into the river, and horse and rider were drowned.

Indust'l Societies.

FRUIT GROWERS OF WESTERN MICHIGAN.

(RURAL SPECIAL REPORT.)

Clean cultivation of peach orchards; catching the curculio; marketing fruit; necessity of thinning fruit; trees for timber and fruit; the timber supply; tree peddlers; new fruits.

THE summer meeting of the "West Michigan Fruit Growers' Society" was held at South Haven, beginning on Wednesday evening, June 23d. This society rules over the fruit belt on the east shore of Lake Michigan. The Governor of the State, with his wife, spent one day at the meeting, riding through the orchards and vineyards. He called this shore the "Italy of America." There was a great laugh at his expense when he asked what crop they were preparing the ground under the trees so nicely for. He was not aware that this clean cultivation was continuous from early Spring to the first ripening of the peaches. He learned that after the crop is gathered, the ground is sown to winter rye, to blanket the earth for Winter and to hold the eaves as a mulch to protect the roots. The rye is plowed under in the last of May, and clean culture is practiced from that time until August. He saw the method of catching the curculio. Two sheets are nailed to frames 8x16 feet; four boys, one at each end, carry these on opposite sides of the row abreast of each other, and two men walk beside the sheets; one hits one side of the branches with a padded mallet and the other the other side, and no stop is made until the end of the row is reached, when the little Turks are placed in a tight box until all the rows have been gone over for the day. Hot water is then poured in the box on the accumulations of leaves, twigs and curculios, and left to ferment until the next day, when the chickens are allowed to scratch over the pile and pick out the insects. Sometimes the two rear carriers hang the frames to ropes about their necks and use the mallets. This needs but four persons, while the former method requires six. The trees are loaded with the green fruit and much thinning must be done to perfect it.

H. Dale Adams discussed the "Prospective Overproduction" of fruit this season, and what we are going to do about it. He advocated extending the markets to unoccupied territory, and gave some examples of the folly of sending everything to Chicago and to St. Paul.

Joseph Lannin, of South Haven, had seen many barrels of fruit sent to market that had better have been destroyed. He favored sending only the best, in full packages, as likely to sell readily and prevent a glut in the market. Mr. Bebee thought it better not to raise poor fruit at all. If we take out two peaches and leave one, the one will equal the three in bulk, and be more perfect in symmetry and color, and sell for more money. It is not the pulp, but the seed that exhausts the vigor of the tree, and if but one seed is grown, where three would otherwise have been, the tree is less likely to become exhausted from overbearing. J. N. Stern had never seen an overproduction of first-quality fruit. He never had No. 1 strawberries enough to supply the demand. To get extra-quality fruit, of either apples or peaches, we must thin them out when small; then there is no danger of overproduction. Mr. Williams had picked off 10,000 peaches from one tree and left sufficient for a crop still. If these peaches had remained on the tree, they would have caused the tree either to break with its burden, or become so feeble by the effort to perfect so much seed, that it would have been useless for a year or two afterward.

A. S. Dyckman had had some experience in digging gold in California, but the digging among his fruit trees was a source of much greater happiness. The days were a continuous recreation while in the peach orchard. As long as he lived he expected to be planting peach trees and caring for them. A. C. Glidden could not explain the transforming influences that surrounded the man who cultivated fruit. He only knew that it made a better man of him in every way. He could not be a mean man with everything in nature combining to educate him into a better life. There is a tie of brotherhood between fruit men stronger than the link that binds common humanity.

W. A. Smith made a plea for planting such trees as would furnish both timber and nuts as well as shade. Chestnut, black walnut and hickory were recommended. He believed that one-fourth of the area of every farm should be devoted to the growth of timber.

A. C. Glidden did not entertain such pessimistic views regarding the future timber supply as were usually expressed on this subject. He believed there was still timber enough growing to supply the probable wants of the world. Much of the timber the destruction of which we deplore, is mature, and would constantly decrease in value if left standing. It is a measure of economy to cut it, and work it up while it is sound. We have a good deal of sympathy for the fine trees that stand on some other man's land. We all would probably be as anxious to realize if we owned the timber ourselves. He believed the wants of the future would be just as they always had been in the past. Who knows but that the 100 or more feet of blue clay beneath our feet will yield up its alumina to some ingenious person present, from which our wagons, buggies and tools will all be made. This process once discovered will revolutionize the manufacture of all articles now constructed of wood. It would be a matter of no more astonishment than many things that have happened within the memory of all of us.

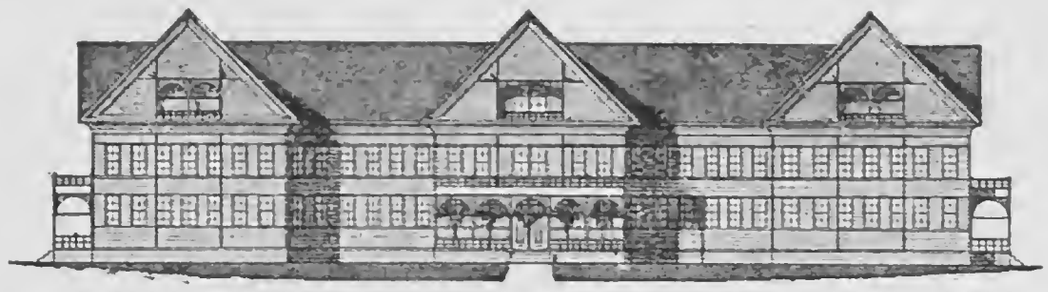
A. C. Merritt said the pleasure he derives from a chestnut tree is not due to the thought that it may make 100 rails to the cut, but it is from the thought that he can shake out the nuts from the trees the seed of which he has planted with his own hands. He gave instances of remarkably quick growth in chestnut trees.

J. N. Stern read a paper upon "The Relations of Nurserymen to Fruit-growers." The suspicion which the fruit grower has of the nurseryman has been engendered by the irresponsible or irrepressible tree dealer, for whose chicanery the nurseryman is in no way responsible. The man who grows trees and whose soul is in the work, cannot very well be a bad man. The discussion developed the fact that the fruit growers present had no reasonable complaints to make. Mistakes were sometimes made, but no more than are incident to other branches of business.

The discussion of new fruits of recent introduction was led by that veteran pomologist, T. T. Lyon, of South Haven. He was very conservative in his recommendations, and said there were many kinds that had been heralded with a flourish of trumpets, that must eventually go to the wall. W. A. Brown, of Stevensville, said there was an uncertainty attending the cultivation of new varieties, which prevented their acceptance to replace old favorites. We doubtless must bid goodbye to the Wilson Strawberry, on account of blight on the foliage, and it is a great question what variety shall replace it. Possibly if we had a thorough knowledge of some of those newer kinds, there might be some that would be acceptable. The Turner Raspberry still holds its own with the Cuthbert. It will stand on the plantation 15 years and remain good, while the Cuthbert will run out in two or three years. Mr. Bronsen, of St. Joseph, pinned his faith to the Sharpless. He had exhibited berries of that variety this year that made a quart with only 13 berries. One of them measured 8¼ inches around. He selected his plants from those growing on very rich soil, and believed in selection in strawberry plants as well as in anything else.

At the evening session statistics were given showing the number of peach trees in the counties of Berrien, Van Buren and Allegan. In 1885 there were 5,469 acres planted. The number per acre runs from 105 to 135. This would give over 600,000 trees in the three counties, but all are not yet in bearing.

A. C. G.



HORNELLSVILLE FARMERS' CLUB. Fig. 284.

Architecture.

HORNELLSVILLE FARMERS' CLUB.

A LIVE, practical farmers' club can work an immense amount of good in any community. The Hornellsville Club has been remarkably successful, and this success shows what grand results can be accomplished in any community when energetic farmers are disposed to combine. Less than three years ago a dozen practical farmers met at the City Hall at Hornellsville, N. Y., and "resolved" that it was the desire of the persons present to form a farmers' club. It was decided that the meetings should be held the first and third Saturdays of each month for the purpose of discussing topics relating to the everyday life of a farmer. The discussions were of the nature of plain business-like talks, with some well posted person to open and state his views, so that the others could oppose or substantiate his statements. These discussions were widely quoted and the result was that the membership was very rapidly increased. With this increased membership came an increased influence. It was soon felt that a larger meeting should be held each year, a meeting large enough to attract exhibits of manufactures from all parts of the country so that farmers might see and discuss the latest inventions in agricultural machinery. To secure the funds needed to hold these meetings, the club organized under the laws of the State, and issued shares at $10 each. Members were thus enabled to contribute large or small amounts as they desired. Stock was freely taken: and today the club holds, partly leased and partly as its own property, one of the finest exhibition grounds in the country. At every exhibition all available space has been overrun and an additional strip of land has just been bought for $4,000. On this land an exposition building is to be erected with many pens and stalls. A picture of this building is shown at Fig. 284.

Pomological.

THE HARDINESS OF TREES.

Hardy trees needed in the West; the kinds we can and can't grow; influences supposed to affect hardiness; of what does hardiness consist? hardiness an inherent quality.

THAT quality which enables a tree to endure a low temperature is an all-important one to the Western planter. Eastern men find comparatively little limit in their choice of the different fruits and their varieties, but on the broad Northwestern prairies the list is cut down by the extremes of climate to a few varieties and to fewer kinds. In pears, nothing is yet known. All selections introduced and tried have failed, either from blight or cold, or both. Our hopes now are that some of the Eastern Europeans being tried by Professor Budd at the Iowa State Ag'l. College, may succeed. Of apples, the only well-tried, profitable and productive variety we grow is the Duchess. A few others have been a partial success in congenial localities, but not to the general planter. Of course, there are great hopes of enlarging the profitable list, but it can be done only by meeting the cold Winters with something hardy. No peaches or quinces worth mentioning are grown north of the 40th parallel. The Early Richmond and English Morello Cherries are much planted, but we would have more fruit, if they were hardier. The large European plums are absolutely tender. Our wild native race is hardy, and offers so good a field for selections in size and quality that it is only a matter of time when we shall have all of this fruit we want. In this short outline of the existing conditions of our fruit trees is shown our need of inquiry into those questions which control the problem of hardiness. So many thousands of orchards are almost complete failures and so many of our planters have been disappointed that we are keenly awake to any light which will help to a practical solution of the question.

Many farmers who have suffered losses in their orchards have given the subject but a passing thought. Those who have studied it have placed more or less stress upon some particular condition, ignoring the fact that there is a multitude of these, each of which is more or less potent: growing Falls, dry Falls, wet weather just before freezing, spring freezing and thawing, sickly summer growth and many other causes are emphasized. These have led to a mass of theories and conjectures, some of which are directly opposite. Let us examine and try to get the facts. It is commonly held that trees which grow late in the Fall are tender. This is only half true, as established by experience. The quite rugged Roman Stem Apple is a late grower; Nos. 257 and 413 of the Russian apples are late in ripening their wood and very hardy. The never-injured Tetofsky and Whitney hold their leaves until freezing. Nor is the habit of early ripening of the wood a certain indication of hardiness; for many early-maturing varieties, like the Red June and the Chenango Strawberry, are quite tender. As to wet Falls and frozen wood cells, let the theorists settle as best they can. Some are now asserting, contrary to old belief, that the losses of past hardy varieties were from lack of water in the Fall. Some trees, like the Wallbridge, are great absorbers of water and grow soft shoots, yet are quite hardy. Others with like nature are tender. Among those which do not use much water, some are hardy and some tender; the same facts are found in comparing the different slow and fast-growing varieties. No tree is hardier than the vigorous crabs, nor more tender than the slow-growing Early Joe.

Since one tree will show a nature entirely different from another's growing by its side, we must conclude that it is owing to something different from the surrounding conditions. It is the nature of the tree, in the tree itself. It was inherited. Quality, shape, color of fruit, the leaves, the habit of growth, the hardiness to endure heat, cold and disease were all given it by its parents. If it is not naturally hardy enough to endure a low temperature, it is useless to conjecture, when its death comes. It comes in the usual order of events as a natural circumstance. We must aim to suit natural circumstances, and, because we do not succeed, we must not claim that they misuse us.

L. E. B.

Lincoln, Neb.

Miscellaneous.

NOTES AND NOTICES.

STOCKMEN all over the land, and especially those of the South and Southwest, will receive with gratitude and satisfaction Mr. Woodward's recommendation and indorsement of crude petroleum for skin diseases, wounds, and above all, for the scab. The doses used to cure the scab are many and various, half the time not effecting a radical cure, and always troublesome to prepare and bothersome to make use of. That the worst cases of scab can be readily cured with one thorough application of crude petroleum, and that it can be applied without danger to the animal or much expense or labor to the owner, are facts worthy of the widest publicity.

It was thought when the self-binding reapers came into general use, that the farmers' wives and daughters would be relieved of as much of the hardships and drudgery inseparable from the small-grain harvest, as they ever would be, nobody imagining the horrors of thrashing week would ever be altogether avoided. But the world moves, and though in some things we appear to be going backwards, in more the movement is in advance. Lately a new idea has been suggested in grain thrashing. It is for the organization of a company of men to do the thrashing, the stacking of the straw, and the delivering of the grain tied up in sacks, or put into the granary, at a fixed rate per bushel, the company to carry its own grain and forage for the horses, or to buy them of the farmer, furnish and cook the provisions for its men, carry a tent in which to cook and sleep, thus relieving the farmers' wives and daughters of the drudgery of cooking for a large gang of men and cleaning beds afterwards. This latter because the men are necessarily dirty from their work, and not infrequently so through carelessness and indifference, if nothing worse. When such companies organize in the regions where the small grains are leading crops, we may look forward to see them have a monopoly of the business, for it will suit the wife and daughters no less than it will the average farmer, whose experience has taught him thrashing week and the preparations that have to be made for it, are the most laborious, trying and exhausting of the year.

Have we reached the safe limit of the introduction of labor-saving machinery? Many seem to think so, and those so thinking are not, as might be supposed, laboring men or mechanics. Those I have heard so express themselves were farmers of means and intelligence, prosperous manufacturers, and some few who have read much, observed widely and thought long. The occasion was a contest of tile ditching machines, and the turnout to see it was a large one of every trade, occupation and profession. The machines did excellent work and enough of it to show their superiority to hand labor. Still the general sentiment of the majority was, or appeared to be, that there were labor-saving machines enough, and that something must be left for the laboring man. B. F. J.

Champaign, Ill.

Woman's Work.

CONDUCTED BY EMILY L. TAPLIN.

NURSERY SONG.

From Good Housekeeping.

PACE, pace, pace—
That's the way the ladies ride.
Foot hung down the pony's side—
Pace, pace, pace.
Pacing gently into town
To buy a bonnet and a gown;
Pacing up the narrow street,
Smiling at the folks they meet—
That's the way the ladies ride.
Foot hung down the pony's side—
Pace, pace, pace.

Trot, trot, trot—
That's the way the gentlemen ride,
O'er the horse's back astride—
Trot, trot, trot.
Riding after fox and hound.
Leaping o'er the meadow's bound,
Trotting through the woods in Spring,
Where the little wild birds sing—
That's the way the gentlemen ride,
O'er the horse's back astride—
Trot, trot, trot.

Rock, rock, rock—
That's the way the sailors ride,
Rock and reel from side to side—
Rock, rock, rock.
Jack Tar thinks he's on the seas,
Tossing in a northern breeze;
Thinks that he must veer and tack,
When he mounts a horse's back;
Rocking east and rocking west,
Jack tar rides, dressed in his best—
Rock, rock, rock.

Sleep, sleep, sleep—
That's the way boy Ned will ride,
Floating on the slumber tide—
Sleep, sleep, sleep.
Out upon the drowsy sea,
Where the sweet dream blossoms be,
Far away to Sleepy Isles
Sails by Ned. "Good night," he smiles;
Sinking down in pillows deep,
Little Ned is fast asleep—
Sleep sleep, sleep.

—ANNE M. LIBBY.

OF INTEREST TO WOMEN.

WE commend to those courageous sisters who agitate on Women's Rights, Women's Wrongs and everything for women with a capital W, the list of women's rights suggested by the Chicago Living Church:

The right to watch while others sleep,
The right o'er other's woes to weep,
The right to succor in distress,
The right when others curse to bless,
The right to love when others scorn,
The right to comfort all who mourn,
The right to shed new joy on earth,
The right to feel the soul's high worth,
The right to lead the soul to God
Along the path her Saviour trod;
Such woman's rights God will bless
And crown her champion with success.

These agitators on the question of feminine suffrage might profitably turn their attention to another field—the question of women's work. A Plainfield paper very pertinently asks why, in all the vigorous efforts now being put forth throughout the country for more wages and less work, the wives' side of the question is so little considered? The next time a procession of laboring men on a strike parade your streets, just hunt up their wives and ask them about their work. They will tell you that they rise at five or half-past in the morning, get their husband's breakfast, get the children off for school, do the washing, ironing, baking, sweeping, and scrubbing, care for the little ones, get dinner, do the hundred odd jobs so necessary to a pleasant home, yet of which the husband knows nothing, and then their sewing and mending till 10 or 11 o'clock at night. They work over hot stoves in Summer, and in cold rooms in Winter. Sickness even brings no release if they can possibly compel their wearied bodies to perform their appointed tasks. Sunday's work is but little less, and Thanksgiving and Christmas mean extra cares.

Week after week, year after year, with only an occasional afternoon or evening respite, the work goes on. What do these women know of leisure? What chance have they for self-improvement, for true growth? What compensation do they receive for such a toilsome life? Cheap food, poor shelter, poorer clothes. And what do they think of strikes? How many would there be if they were consulted? Few, very few. Having been forced to a life-long study of the subject they generally understand economy better than their husbands. They know that half a loaf is better than none, and they realize that no work means no pay. They know, too, that the burden of reduced expenses must fall most heavily upon them. When the income grows smaller they are told they "must economize." How can they do it? Not by reducing the expense of the table. Oh, no! their husbands don't mean that. It must be done by denial of self and little ones. The already shabby clothes must be worn another year. There must not be one concert or lecture, and not even one day's excursion to the woods or seashore. Fuel must be used most sparingly, when the husband is not at home, and not one cent must be spent for that which is not a genuine necessity. Meanwhile the husband goes on with his smoking and beer drinking. If the strikers gain their point, how long will it take them to make up what they lost in days of voluntary idleness?

CHILDREN WE MEET.

TAKING children as miniature men and women, some study of their peculiarities, characteristics, and naughtinesses is interesting to us all, and we are somewhat of the opinion of that writer who says: "Beware of the man who hates children and music. He is not to be trusted." Nor do we exactly echo the opinion of Charles Lamb, who, when asked by a proud mother, how he liked babies, answered with his amusing stutter: "Boiled madam," and who said he could not imagine what people made such a fuss about children for, "they are so common."

We might begin our discourse as the small boy begins his school composition, and say: There are a great many kinds of babies truly, there are babies and babies, crying babies, fretting babies, solemn babies, crowing babies. The kind we regard with the most unmitigated abhorrence is that variety which wrinkles up its small features until it looks like a map of the United States, stiffens its entire person as if it were petrified, and then delivers a yell that would curdle the blood of a Sioux chieftain. And then the fond mother proceeds to compose the nerves of that infant with the art and blandishments known only to mothers, just as if it were not the nerves of baby's audience that really required to be composed.

But it is only when children begin to talk that the full extent of their virtue or depravity can be known There are occasionally those pure, angelic children who seem, like Aldrich's "Babie Bell," to have wandered from Paradise; and, opposing them, are those infantile fiends, whose pitiless logic, keen sight, and precocious minds make them the terror of all who meet them. All children are apt to make startling remarks at times, for they view the great phenomena of the world from the standpoint of their own small experience; but these terrible children seem to do it as much from a desire to make people uncomfortable as anything else. Woe to the unlucky one who possesses some personal defect when in their presence. It was a little cherub of this description who publicly told a lady showing traces of the dentist's art, that she had copper-toed teeth. Upon the whole, we think little girls of this description are more dangerous than little boys. They go off more unexpectedly, as it were, and, true to the natural instincts of their sex, have more to say.

After all, these naughty children are more interesting to most of us than abnormally good ones, like those in moral story books who keep on getting better and better till they finally die. They always die, and the bad ones live on to an evil old age.

Many children are tryingly mischievous, simply because they have no proper outlet for their energy. Who has not seen some poor little victim at school nervously trying to fix in his slippery memory some incomprehensible rule, and looking the picture of youthful misery, laying up a series of penalties for negligence and inattention when he would be far better employed developing his mind and muscle at once out on some green hillside or by the shore of a breezy river. With all our fine methods of higher education, it seems we have not yet arrived at the proper means of producing the sound mind in a sound body. When we teach children to think and reason, instead of cramming their small brains with a mass of undigested knowledge, we shall be nearer the millennium in education than we are at present.

HEALTH AND HAPPINESS.

A SOUND mind in a sound body is the most desirable combination in the world; pity it is that they are not invariably associated. But alas! daily we see a little dwarfed, misshapen mind inhabiting a straight and shapely form, or a bright mind placed in an undeveloped body, like an ill-set jewel. If only our outer form—our earthly prison—could present a reliable index of our mind! but as Mrs. Gamp says: "Our characters is not writ on our foreheads, which is fortunate for some people." But though change of actual form is impossible to us, change of expression is not, and sound health, cheerfulness, unselfishness and purity develop a greater beauty than mere attractiveness of feature It sounds materialistic to put sound health before all other virtues, but really, everything else depends upon it. Perfect health gives serenity of mind; it gives the possessor a greater sympathy and helpfulness for others; that is, when accompanied by the well-balanced mind. The sound body only, without the cultivated mental power, produces a fine animal, but not a fine man, going to the other extreme, we have such educational monstrosities as Dr. Blimber's immaculate young gentlemen, who were forced into intellectual bloom so early that they speedily ran to seed, and spent the last year or two under his charge in forgetting all they had previously learned.

Moral qualities, as well as mental, greatly depend on one's bodily health. It is more than probable that Henry VIII would have disposed of fewer wives had he been free from suppressed gout, while his daughter Mary, of cruel fame had her rancor against the Protestants much increased by constitutional biliousness. According to some historians the great Napoleon lost Waterloo, not so much by his marshall's delay, as by an attack of indigestion caused by a surfeit of mutton, stuffed with onions—an impressive warning against that particular dainty.

What must we do to produce that sound body, which is the fittest temple of a sound mind? Ay, there's the rub, and it seems easier to say what not to do. We must remember first of all that in this case most surely are the sins of the parents visited on the children. A father intemperate in food or drink or disposition—a mother fretful or frivolous, or sickly, will transmit their own frailties of mind and body to their children in an increased ratio. And if children receive the happy birthright of sound health the added dower of sound mind depends much on their parents. If father and mother neglect in their own persons the attempt to advance mentally and morally, they scarce can wonder if their children neglect it.

It is almost pathetic to witness the sublime faith of children in their parents capabilities, and it is the bounden duty of every parent to deserve that faith, by all means possible. So, by advancing personally, in mind, body and estate, we are advancing the powers and possibilities of future generations, and blindly working for our ideal millenniums like the coral insect that unthinkingly toils and perishes, until a new land arises above the lonely sea.

GOLDEN GRAINS.

TEACHING by mere precept, in telling others what to do and what not to do, says the Independent, is much easier than teaching by a living example. It is the latter kind of teaching, however, that is generally the most effective, and best illustrates the sincerity of the teacher. Christ taught in both ways, and with equal perfection in both. .....

A GOOD many people act on the advice of the venerable philosopher who said: "My son, never waste your time—not a moment of it; always waste somebody's else."... .....

AT a recent meeting held at Bradford, England, to consider the question of non-attendence at church on Sunday, the following recommendations were agreed upon: Earnest and simple preaching of the Gospel; hearty singing, in which all can join; free seats; constant efforts on the part of Christains in the way of tendering invitations to others to come and worship with them or to go where taste directed; deeper interest in the spiritual welfare of the young, the necessity for prayer for the outpouring of the Holy Spirit.....

IF every member of the Knights of Labor would only pass a resolution to boycott strong drink so far as he is concerned, for five years, and would pledge his word to study the labor question from its different standpoints, we would then have an invincible host arrayed on the side of justice..... .....

RUSKIN says: "It is only by labor that thought can be made healthy, and only by thought that labor can be made happy; and the two cannot be separated with impunity"..

MR. RICHARD BAXTER, when on his deathbed was visited by a friend, who reminded him of the glory to which he was going, and that his many good works would attend him into a better state. The old gentleman lifting up his dying hand and waving it, replied: "Do not talk to me about works; alas! I have dealt too much in them already."..... .....

HAZLITT truly says: Prosperity is a great teacher, adversity is a greater. Possession pampers the mind; privation trains and strengthens it..... .....

THE deepest love is that which owes its origin to some sweet sacrifice. The strongest inspiration is that which owes its origin to such a love.....

WE should not halt between two opinions, or regret a choice after it is made. A good maxim is that of an old writer who said: "Never worry over what can be undone, but go to work and undo it; nor over what cannot be undone, because it cannot be undone."....,..

THE Rev. J. Heber Newton says religion is the bond of life; the bond between the actual man and the ideal man, binding effort loyally to aspiration; the bond between man and nature, holding will obedient to law; the bond between man and man, knitting men together unselfishly in a human brotherhood; the bond between man and God, rooting the finite spirit conscientiously in the Infinite Spirit .

WHAT could the Infinite Spirit, whom we call Father, do toward the higher life of man so effectual as to bring into being a child in whom all choicest influences should concentrate; on whom all favorable conditions should wait as spirits of benediction; who should thus grow into a model man, living as a son in the Father's house, walking as a gracious example before all the other children? This is the Father's gift to man in Jesus.....

THE pastors of Cleveland have united in an address to the Christians of that city, calling attention to the growing disregard of the Sabbath, which they attribute to "mental unrest, worldliness and spiritual apathy." They speak of the reading of secular newspapers on

Miscellaneous Advertising.

When Baby was sick, we gave her Castoria,
When she was a Child, she cried for Castoria,
When she became Miss, she clung to Castoria,
When she had Children, she gave them Castoria.

Sunday as causing great spiritual loss, and advise all members of churches to quit buying and reading secular Sunday newspapers.....

THE serene, silent beauty of a holy life is the most powerful influence in the world, next to the might of the Spirit of God.....

Domestic Economy

CONDUCTED BY MRS. AGNES E. M. CARMAN.

KITCHEN TALKS.

ANNIE L. JACK.

WE were talking of foods at table the other day and the head of the family advocated the free use of cheese during the summer months, as more suitable food. He was reminded of the fact that one Autumn not long ago the physician blamed cheese as the cause of a severe bilious attack. But he would not be convinced, saying in reply that one pound of skimmed-milk cheese, if cooked properly supplied more nutriment than three pounds of beef. It is a curious fact, said the Student, that every country has its favorite diet—or rather national dish. Now the Italian would enjoy your cheese grated with macaroni, while the Scotchman would rather have his oatmeal porridge, the Irishman his potatoes, and the Englishman his beef. Our French Canadian population enjoy pea soup, and the New Englander his brown bread and baked beans, while the Southern negro thinks there is nothing equal to hog and hominy. Scientists affirm that fish is the best brain food and that asparagus will restore exhausted vitality as nothing else but raw eggs can do. Yet how little we think of the ill or good our food will do when preparing, or when eating it. "I don't believe in pork and potatoes," said the Critic scornfully. "Yet I notice you can hide away quite a plateful" said the Jester of the family amid a general laugh. "Yes, on a cold winter's morning," he began in defence, and the Student interrupted, "That's where the difference comes in. Now it is Summer, and we need cooling fruits, boiled eggs, light, dainty dishes of various grains, such as are used in a tropical country all the year. There is no craving for fat meats, or heavy food with the thermometer in the nineties, but when it goes down to zero we are fain to mildly follow the example of the Esquimaux and take in some carbon to keep us warm.

But during the heated term, cooling salad, and juicy fruits are needed to allay fever and thirst. Strawberries and raspberries are wisely placed within our reach when the system requires ripe fruit, and it is only when unripe, or stale that it proves injurious.

It is strange how true the saying is that what is "one man's meat is another's poison" for one member of our family cannot taste strawberries, the very aroma causing nausea, and an attempt to taste one resulting in a sudden rash all over the body, and a tendency to fainting. Another, who is not easily daunted by anything, dislikes the smell and taste of milk. This, I consider quite an affliction as milk contains all the elements necessary to nourish the body and will keep up strength when other things fail to do so.

A good healthy appetite is a "consummation devoutedly to be wished," and none need despise it. "You look cross" I said to a gentleman lately, and he answered simply—"I havn't had my dinner." This may look absurd to some people, but the stomach doubtless influenced the mental faculties, and he was a man of consequent "crossness." True it is that "civilized men cannot live without cooks," and so we may be proud of our calling, who have to cater not only for the stomach, but for the brain and temper, and heart.

ODDS AND ENDS.

A VERY successful washwoman of my acquaintance puts a teaspoonful of kerosene into starch for from 12 to 15 shirts, to help gloss bosoms, says she has tried wax, etc., and different preparations, and likes this best. She certainly does excellent work.

How many of the RURAL readers know of and use pulverized borax as an addition to the toilet? One teaspoonful in a quart of water in which you bathe hands and face, removes dirt wonderfully and leaves a very nice feeling to the hands. Five cents worth lasts a long time.

Try a sweet potato pie; made much like pumpkin pie, but instead of (as many do) cooking potato, grate first the raw potato into the pie.

I found and tested a new and excellent remedy for diarrhea this Summer. Eat a handful of "sourgrass" or ground sorrel, and take a drink of water. If one dose does not check repeat later in day, or next day, usually one dose is enough. It is harmless, easy to take and much to be preferred to paregoric or laudanum.

E. E. BROWN.

DESIGNS FOR QUILTS,

Fig. 289 is known as the Philadelphia pavement pattern. Fig. 290—the basket—originated with me and is very much liked by those who care for elaborate quilt patterns.

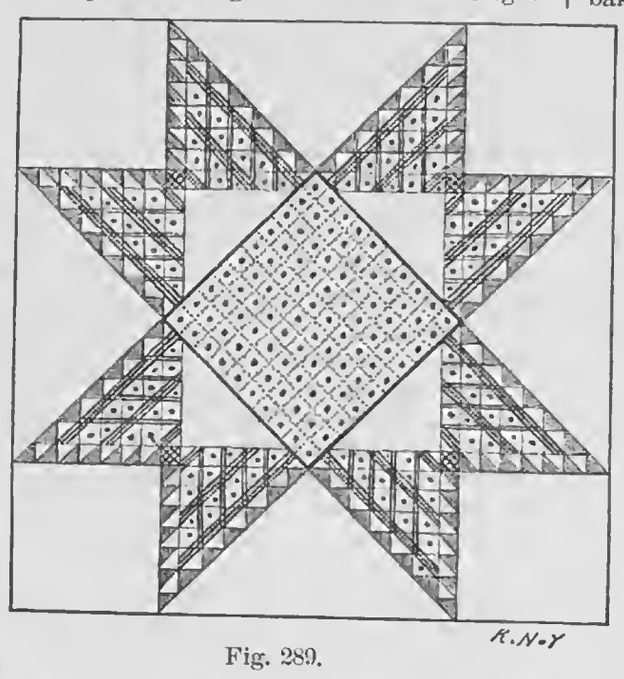


Fig. 289.

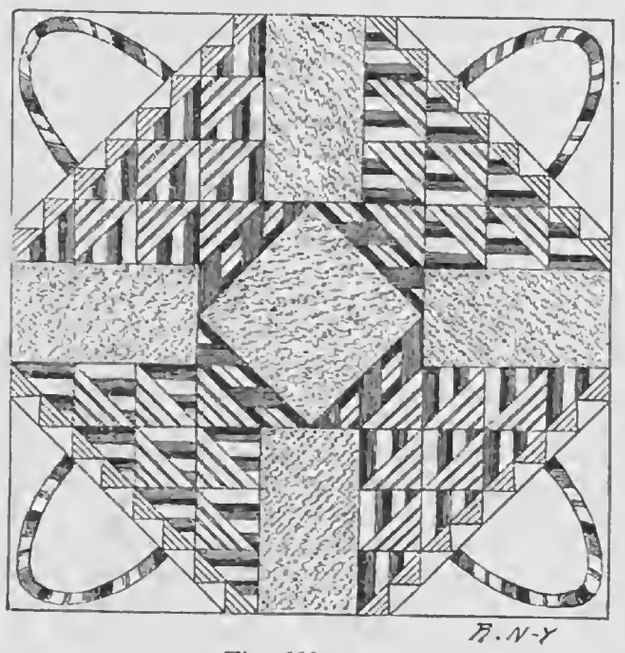


Fig. 290.

MRS. E. ANNIE WRIGHT.

BREAD AND BISCUIT.

"The Gods know that I speak thus in hunger for bread."

It is a trite expression that the fault of poor bread lies oftener with the cook than with the flour. One would think that since Shakespeare used the expression, "Crammed with distressful bread," he must at some time have had a cook not unlike many of the present day. A lady who has a reputation as a bread-maker *par excellence* furnished me with the following, which I send to such of your readers as may have trouble in making good bread, with the assurance that it may be relied on: One cake of compressed yeast is sufficient for four medium-sized loaves of bread. Crumble the yeast into a bowl, being very careful not to handle it too much; sprinkle on it two teaspoonfuls of sugar and pour over a pint of warm water. In the course of ten minutes the yeast will have risen to the top. Then stir it until it is all dissolved. Sift dry flour into a deep tray; the question of quantity is a delicate one, as various brands of flour are unequal as to the amount of gluten they contain, but it is safe to start with two quarts. Make a hole in the center of the flour and pour in the yeast. Stir in the flour lightly from the edges until you have a thick batter; sprinkle salt (a tablespoonful for each loaf) around the edges where the flour is heaped up, taking care to keep it away from the sponge, as it is apt to give it a slightly bitter taste. Set the pan in a warm place. It is most important to keep it from draughts. If the temperature of the room is warm and even, say 70 deg. Fahrenheit, the bread will be nicer if it is raised away from the fire; otherwise it must be kept moderately near. In an hour the sponge will be light and feathery. Knead the bread with slightly warm water, another pint at least. Never use entirely cold water, but always have it warmer on a cold day than on a warm one. Knead the flour in slowly; good kneading is essential to good bread. If kept at the right temperature it will be light again in three hours, when it should be again well kneaded and moulded into loaves and put into the pans. In another hour it will be ready for the oven, and if the above quantity has been divided into four loaves, they will bake in forty minutes. The oven should be sufficiently hot to brown the loaves in twenty minutes, after which the oven should be cooled somewhat and the baking finished slowly.

Almost every one has a way of her own of making biscuits, but a friend assures that neither with her own nor with anybody else's way can she succeed in making anything but a heavy and unpalatable article. I told her to try the following:—Sift thoroughly through one quart of flour, three even teaspoonfuls of baking powder and one of salt. Mix to a soft dough with very cold milk, and handle as little as may be; roll out an inch thick and cut with a small cake-cutter. Place them on a buttered tin, and bake in a quick oven. They are very nice if rolled less than half an inch thick, and placed one on top of the other two deep in the pan. Sour milk biscuits are made somewhat differently, and are nice for variety, as they also taste very different from those made with sweet milk. Sift three pints of flour into a bread pan, and make a cavity in the centre; pour into this one pint of sour milk in which has been dissolved a tablespoonful of salt, also four tablespoonfuls of sour cream, and one teaspoonful of soda, even measure, dissolved in two tablespoonfuls of hot water. Stir quickly together with a strong spoon. Dip the hands into dry flour and mold into small biscuits flattened to half an inch in thickness.

Corn bread is another much-abused article, but delicious if made after the following recipe: Beat one egg thoroughly with a tablespoonful of cold water, stir in a teaspoonful of salt and two of white sugar. Add two-and-a-half cups of sweet milk, two heaping cups of Indian meal, one even cup of wheat flour, through which has been sifted two full teaspoons of baking powder; lastly a tablespoonful of melted butter. Beat very hard for five minutes. Put in a quick oven and bake steadily.

A notable housekeeper has given me this recipe for making yeast, and as many of the readers of the RURAL live in the country where fresh compressed yeast cannot always be had, I think it may prove useful. Boil a good-sized handful of hops in two quarts of water for two hours. Mix one cup of flour smooth with cold water, and over this pour the water in which the hops were boiled. The hops should be tied up in a small muslin bag before being boiled. Stir in three tablespoonfuls of sugar and two of salt, and when cool enough, or rather when lukewarm, add a cake of compressed yeast that has been dissolved in a cup of warm water. To make bread with this yeast use half a cupful for five large loaves; set a sponge at noon, mix the bread in the evening, mold and bake early the following morning.

PALMETTO.

HELPS.

IF you do not use the patent perforated pie plates, make your old tin plates over by taking a hammer and small nail and putting some holes in the bottom of them, thus allowing the steam to escape and preventing the paste from being a soggy mass.

Rub the bottom of your sauce-pan in which you boil milk with a little butter to prevent the milk from sticking.

Before putting your rolls into the oven to bake rub the edges with a little sweet fat and you will find that they will not stick together when done.

A very delicate cake may be made by taking any good sponge-cake recipe and baking it as for jelly cake, allowing it to be about an inch in thickness when baked. Take one pound of almonds, blanch them and pound them in a mortar, a few at a time, using rose water to keep them from oiling. When all are done, stir them into a pint of cream, to which you have added sugar to sweeten it to your taste, and vanilla to flavor it. Let the cake be cool when you spread your almond cream between it and over the top.

Inexpensive, but very effective portiéres may be made of double-faced Cantou flannel. Any shade can be used, but peacock blue with a border of cream-colored felt with applique figures or flowers stiched on them, will be very handsome, costing but little time in the making and expense for material.

A bag for soiled linen may be made of linen crash lined with turkey red, having a hornet's nest embroidered on it in outline stitch.

AUNT ADDIE.

DOMESTIC RECIPES.

EXCELLENT EGGLESS PAN CAKE; MUSH; PIE.

TAKE two and one-half cups of flour, a little salt, and two teaspoonfuls of cream of tartar stirred into the flour; mix with buttermilk and part sweet milk until the batter will drop from the spoon, then dissolve one teaspoonful of soda in water, and beat well. Fry in hot drippings.

Mother makes the best dish of mush I ever ate, much healthier than fried. Take part sweet milk, part water may be added, let it come to the boiling point, add salt, then stir in cornmeal until thick, boil well. Put some butter in a skillet, break up some bread in very small bits and slightly brown, then put a layer of bread and a layer of mush, then serve. I think rather coarse cornmeal is best for this.

To-day for dinner we had pie made of a mixture of boiled dried apples and canned sour cherries, which was an excellent imitation of plum pie.

HARRIET BROWN.

Miscellaneous Advertising.

Ayer's Pills

Restore tone and strength to the Stomach and Liver enfeebled by disease, promote the Appetite, and cause the Bowels to move naturally. Ayer's Pills are safe to take, do not debilitate by excessive stimulation, and are not irritating in their action.

I have used Ayer's Pills for twenty years, and can truly say they have always given me satisfaction. Whenever I am troubled with Constipation, or suffer from Loss of Appetite, Ayer's Pills quickly set me right again.—P. N. Ward, Bath, Me.

Ayer's Pills have been my family medicine for fifteen years, and the result of that long experience is a complete vindication of your statements concerning them.—T. T. Nunney, West Point, Tex.

Ayer's Pills,

Prepared by Dr. J. C. Ayer & Co., Lowell, Mass. Sold by all Druggists and Dealers in Medicine.

MAKE HENS LAY

SHERIDAN'S CONDITION POWDER is absolutely pure and highly concentrated. It is strictly a medicine to be given with food. Nothing on earth will make hens lay like it. It cures chicken cholera and all diseases of hens. Illustrated book by mail free. Sold everywhere, or sent by mail for 25 cts. in stamps. 2½-lb. tin cans, $1; by mail, $1.20. Six cans by express, prepaid, for $5. I. S. Johnson & Co., P. O. Box 2118, Boston, Mass.

HIRES' IMPROVED ROOT BEER. Packages, 25 cts. Makes 5 gallons of a delicious, sparkling and wholesome beverage. Sold by all druggists, or sent by mail on receipt of 25 cents. C. E. HIRES, 48 N. Delaware Ave., Philadelphia, Pa.

FARMERS,

Send for Circulars and Price List of The BARNES PAT. IRON FENCE, the cheapest and most durable fence in the world. Address THE BARNES PAT. IRON FENCE CO., EASTON, PA.

Brewster's Patent Rein Holder.

Your lines are where you put them—not under horses' feet. One agent sold 12 doz. in five days; one dealer sold six doz. in 15 days. Samples worth $1.50 FREE. Write for terms.

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DYSPEPSIA.

My remedy sent free, the result of actual experience with Dyspepsia. JOHN H. McALVIN, Lowell, Mass. 14 years Tax Collector.

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WARREN MILK BOTTLES

Patented March 22d, 1880.

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A Long Needed Want at last Supplied.

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HUMPHREYS'

Homeopathic Veterinary Specifics for HORSES, CATTLE, SHEEP, DOGS, HOGS, POULTRY.

Used by U. S. Governm't.

Chart on Rollers, and Book Sent Free.

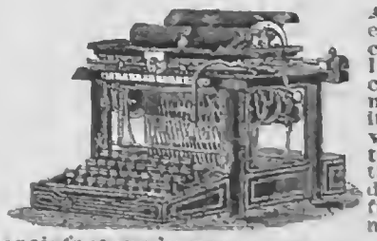
Humphreys' Med. Co., 109 Fulton St., N. Y.

HUMPHREYS' HOMEOPATHIC SPECIFIC No. 28

In use 30 years. The only successful remedy for **Nervous Debility, Vital Weakness,** and Prostration, from over-work or other causes. $1 per vial, or 5 vials and large vial powder, for $5. SOLD BY DRUGGISTS, or sent postpaid on receipt of price.—Humphreys' Medicine Co., 109 Fulton St., N. Y.

REMINGTON

Standard Typewriter.



Attention is called to the **increased excellence** of this **incomparable machine.** Buy it, with the **privilege of returning** it at any time within thirty days, C.O.D. for full price paid, if not **absolutely satisfactory in every respect.**

Handsome Illustrated Pamphlet on application.

Wyckoff, Seamans & Benedict,

339 BROADWAY NEW YORK.

News of the Week.

HOME NEWS.

SATURDAY, July 10, 1886.

THE Chicago Aldermen, Wednesday night, at 12.30, granted to the Philadelphia ex-convict and present millionaire, C. T. Yerkes, and his street railway syndicate, the use of the La Salle Street tunnel under the Chicago River, for $20,000 a year, less the cost of lighting and repairing it—about $10,000 a year. Votes: yeas, 23; nays, 11. All agree the "privilege" is worth many times the price, and all agree that the consenting Aldermen must have been heavily bribed. In every large city in the Union, the Board of Aldermen is a nest of tricksters, rum-sellers, bribe-takers, black-mailers, and disreputable political petty hacks, with a few—very few—honorable exceptions. Why should this crude form of municipal government, which originated in the Dark Ages, be permitted any longer to disgrace and injure the cities of the 19th century? However suitable to old times and conditions, it is utterly unsuitable to these days. Every year enough gross aldermanic scandals become public in every large town and city in the Union to justify the abolition of this form of municipal misgovernment..... ..... The National debt has been reduced $96,000,000 during the past year—one-third more than in any former year. Isn't the present generation paying a trifle too much to leave the next free from debt contracted for the benefit of it and its successors, and which they, with larger resources, will be better able to pay? As we have spent so much blood and money, why shouldn't they spend some money for the safety of the nation? ....The "Mitchell ring" in Oregon in the late elections knifed Republican Judge Waldo (who sought re-election to the Supreme Court,) because his decisions in land cases were against Hipple-Mitchell's friends, the railroads and other land grabbers.....The River and Harbor bill has grown so large by log-rolling that it is thought certain the President will veto it..... ....Thursday the Senate passed a bill to establish a forest reservation on the head-waters of the Missouri River. It sets aside a large tract of the public domain in Montana for the preservation of the natural forests about the head-waters of the Missouri and Columbia Rivers and their tributaries, and makes it unlawful for any person to enter the reservation for the object of cutting timber, settling or any other private purpose, except as a visitor. .....Judge Love, of the U. S. Circuit Court at Keokuk, Ia., has decided that where a person has invested money in a saloon when it was lawful to sell liquor, the property cannot afterwards be taken from him or rendered useless without compensation on the passage of a Prohibition law. Judge Brewer, some time ago, rendered a similar decision in Kansas, in the case of a brewery.....In trying Anarchists and boycotters, it has been found mighty hard to get a jury in Chicago, Milwaukee or New York. People seem afraid that either themselves or their business will be injured by the sympathizers with the accused, should a verdict of guilty be returned. The prisoners' friends are everywhere and always loud in their threats against judge, prosecuting officers and jury. Three Milwaukee "Raw Reds" have been convicted, however, and two sets of "boycotters" have been convicted and sentenced in New York. The first set of six musicians, convicted of having extorted $1,000 "for the expenses of a boycott" which they had agreed to raise on securing the above sum and all their other demands, were imprisoned from one to two years and ten months each: the other lot of seven Bohemian bakers, ringleaders of boycotters who burst up a fellow-countrywoman's bakers' shop, were sentenced to from 10 to 30 days' imprisonment. A jury hasn't yet been obtained for the Chicago Anarchists. There's a stern resolution everywhere to put an end to all illegal violence and boycotting on the part of strikers.....To July 1, 1,755 miles of new railroad were laid in the U. S., and it is thought from 5,000 to 6,000 miles will be laid during the year, which would be more than in '85 or '84. Think of the new engines, cars, stations, settlements, townships, farms, etc., etc., implied by the construction of every 1,000 miles of new road!.... Chicago's population, as indicated by the new directory, is 750,000—50,000 more than a year ago. Hurry up your new directory, St. Louis!.....The tonnage over the New York State canals in the last two months has been some 318,521 tons greater than during the same period last year. This increase was mainly in wheat and iron ore, and is remarkable because it came during the labor disturbances.....At Coulterville, Ill., Monday, 70 picnickers were poisoned by ice-cream. Four dead already; others seriously sick.....Nothing found out yet about that N. J. poisoning. A butcher accused, but he seems able to prove that he could not have been the poisoner.....The mixing building of the Atlantic Company's dynamite works at McCainesville, N. J., blew up the other morning with terrific force, killing 10 workmen and shattering the building. The bodies of the victims were blown into pieces so small that no distinguishable remnants could be found..... ....The workers in glass and iron at Pittsburg, Pa., (the two greatest industries of the city) and their employers have had more trouble than has occurred in any other line of business in the country—coal mining excepted. They have just come to a probably permanently friendly understanding, however, and their example is expected to be followed by other quarreling parties. The glass-workers of this country and Canada, however, propose to start six co-operative workshops on capital subscribed by workers—$30,000 are expected to be enough to start each shop. They intend to make all kinds of glass-ware, sell the goods at market rates and divide the profits among the stock-holders—mostly operatives. A large meeting of the trade is to be soon held in Canada to arrange matters.....Since Postmaster-General Vilas discharged those railroad postal clerks for combining to strike, most of the others are on the "anxious seat;" 103 of them placed their resignations in the hands of the Executive Committee to be sent in in case of any more discharges, and now they are trying their best to get them back. That "Union" is likely to be short-lived.....The largest Convention of Prohibition delegates ever assembled in Minn., met at St. Paul Wednesday, and nominated a full Prohibition ticket—platform the usual Prohibition article. ..In the State Convention of the Iowa Democrats, held at DesMoines the other day, resolutions were adopted favoring local option, and for the enforcement of prohibition where it was so ordered. Should the sentiment of a community be the other way, a license system was favored, the minimum fee to be $500. ....The Pennsylvania Republicans, in convention assembled, pledged themselves the other day to give the people at next election an opportunity to vote on a prohibitory amendment to the State Constitution..... The Republicans of Ohio seem determined to force Congressional inquiry into the Payne bribery case. They say $250,000 were needed to secure the election of the Great Standard Oil Monopolist to the Senate. Of course, he knew nothing about it—but his friends are likely to have known something.....Atlanta, Ga., has been a "dry" city since July 1; no liquor store open except a very few whose licenes have not yet run out; but no liquor must be sold in smaller quantities than one quart.. Fitz John Porter has been restored to the rank of Colonel in the regular army; the same he held when cashiered in 1862..... ....Chicago switchmen strikers still obdurate; but no longer violent. Railroads running and moving freight without them by the aid of "scabs" from other places.....Academy of Music and Rocky Mountain News buildings at Denver, Colorado, cremated—loss $150,000. .... The losses by fire in June, according to the New York Commercial Bulletin, aggregated nearly $10,000,000; while the average for many years past has been only $6,500,000. Numerous fires in all quarters on the Glorious Fourth, which was gloriously celebrated everywhere.....The President has vetoed 26 per cent. of the Senate bills that came to him, and only 8½ per cent. of the House bills—a bill takes its name from the House in which it originated.....The President has vetoed 90 pension bills and allowed 565 more to become law without his signature, under the 10 days' limit, as he had no time to examine them.....The House Ways and Means Committee will report against the Randall tariff bill.....The acts forfeiting the lands granted to the Atlantic and Pacific R. R., and to aid in the construction of a railroad and telegraph line from Missouri and Arkansas to the Pacific coast, and restoring the same for settlement, are now laws..... The total coinage of silver dollars during the fiscal year, ended June 30, was $29,838,905, against $28,528,552 the preceding year. The coinage of subsidiary silver during the past fiscal year was $183,443 against $320,488 the previous year.... ..... The K. of L. of Chicago have decided to expel all Anarchists from their organization. As they will not generally work with non-members, this may be a serious thing for the Anarchists.....The Knights are going heavily into politics this year, especially in the West. They will try their best to defeat the re-election of Governor Rusk, of Wisconsin, for his vigorous action in suppressing the strikes in Milwaukee..... ..

..The Pension Office has issued 81,422 pension certificates in the last 12 months, or 6,721 in excess of the year before—and this with a reduction in the force of 100 clerks. In June, 10,375 certificates were issued, or at the rate of 399 per day. It looks as if the end of the war was yesterday, instead of 21 years ago..... .....The first application in this country of Pasteur's rabbit virus for the prevention of hydrophobia took place Monday in this city at the Carnegie Laboratory, Dr. Valentine Mott operating. Harold Newall, seven years old, son of Dr. J. C. Newall, of Jersey City, was the patient; he was bitten June 24, by a pet dog, which, according to Drs. Newall and Mott, was surely afflicted with rabies. Dr. Newell signed a declaration taking upon himself all the responsibility.....Of the fund raised for the families of the Chicago wounded policemen, $13,000 have been spent for the cure of the wounded, which the city ought surely to have attended to. It is now proposed to give each widow $1,000 and each orphan $200, and invest the remainder for the benefit of the families of two or three others who are likely to die.....Still another Yankee fishing vessel has been seized by the Canadians, and those captured have been fined $400 apiece. The Dominion Government reiterates that it has received no instructions from the Imperial Government, and that it will make no modification in its policy. Not so much talk now about war on our side; but a good deal of grumbling because our Government does not retaliate, as Congress has given it the power to do.....The whole mackerel catch of the New England fleet this year is 5,000 barrels, against 26,000 barrels last year. ..Three reports have been made on the Pan-Electric scandal by the House Committee who investigated it. The smart Republicans got ahead of their slower Democratic fellow-Committee-men, the four uniting in a report which vehemently blames Garland, Harris, Johnston, Atkins, etc., for accepting over $500,000 worth of stock apiece for using their influence to push the concern and get the public to put money in its stock. Garland is especially blamed for bringing a suit in the name of the U. S., against an older rival, the Bell Telephone Co. The claims of the latter are supported; those of the Pan-Electric denounced. Four of the five Democrats on the Committee (the House being Democratic puts a Democratic majority on all committees) cannot see that Garland, etc., have been guilty of any "dishonorable dishonesty;" think the suit was brought justly, and while not supporting the Pan-Electric, charge the Bell Telephone Co. with fraud in procuring its patent, and extortion in working it. The "odd" Democrat agrees with his fellows in exculpating Garland, etc., but not altogether in their views of the telephone controversy..... The Granger roads are bitterly and persistently cutting rates west of Chicago. Here are the old and new rates for the various classes during the past week between Chicago and St. Paul, and the reduction to other competing points is proportionate:

Class.	1st.	2d.	3d.	4th.	4th.
Old rates.....	50c.	35c.	20c.	15c.	12½c.
New rates.....	30	20	15	12½	10

However low a rate a shipper can obtain from any road, the others will meet it..... ....Gen. Gordon's nomination for Governor of Georgia is assured.....Funds for the Parnellite election in the United Kingdom are being forwarded with marvelous generosity. The Rev. D. O'Reilly, of Detroit, Treasurer of the "American" Irish National League, sent over $100,000 within the 10 days ending July 6, and as much more was probably sent by other collectors within the same time..... .. ....The Senate has rejected the nomination of Solicitor-General Goode, who brought the suits against the Bell Telephone patent in the name of the Government ..... More than $63,000,000 were invested in business enterprises in the Southern States during the past six months.....Disastrous timber fires in Minn., Iowa, Michigan and Vermont..... ....The Broadway surface horse-car tracks in this city have finally passed under the control of the receiver appointed to manage the road. Jake Sharpe and the Philadelphia syndicate who have bought the Broadway and Seventh Avenue roads, pay weekly rent for the use of the tracks until the matter is finally decided by the courts.....

FOREIGN NEWS.

SATURDAY, July 10, 1886.

Gladstone and Home Rule are overwhelmingly defeated for the present. At midnight last night, the total number of Unionists elected in the United Kingdom was 319, and of Gladstonians, 210. The Unionists had polled 1,016,281 votes in all, and the Gladstonians, 949,592. At 4 P. M. yesterday, the Conservatives had elected 263 candidates; the Liberal-Unionists, 54; the Gladstonian-Liberals, 133; and the Parnellites, 70; 141 more elections, chiefly in the counties, had yet to take place, or had not been heard from; but there is no possibility of reversing the present results of the election. At the last election, the counties went almost solidly for Gladstone; now the Conservatives are taking nearly all of them. Up to midnight, the Liberals—Gladstonians and Unionists—had a majority of the Commons, and it is very likely they will hold it. Of the 141 elections to be heard from, 14 are certain for the Nationalists in Ireland. Of the remaining 127, the Conservaties must get 71 to give them an independent majority of 2, and it is not believed possible they can get that number. In last Parliament the Nationalists had 86 seats; they are now certain of 87, having gained a seat in Belfast, the head-center of Orangism. To the last House, Ulster sent 17 Parnellites and 16 Conservatives; it now sends 18 Parnellites and 15 Unionists, and the Parnellites came within three votes of carrying off an election in Londonderry. The Liberal Unionists who voted against Gladstone in the last House numbered 94; there are now but 54—and there won't be over 60 at the most. The Conservatives have gained therefore from all branches of the Liberal party except the Parnellites. For a "working majority," any party ought to have, say, 20 majority. In no case can the Conservatives carry on the Government without the aid of the Liberal-Unionists, under Harrington and Chamberlain. How long would these be likely to act with their old foes against their old friends? Gladstone and the Parnellites are in no way cast down. The agitation for Home Rule is to be kept up. Scotland, Wales and Ireland have shown by their votes that they are strongly in favor of it. England must be educated up to the necessity for it, as well as to its justice and expediency. The result of the elections are so unsatisfactory from a party stand-point, that it is generally believed another set must be held within 12 months.... ..Russia has lately been massing troops heavily in Bessarabia, the nearest of her provinces to Turkey. Some of the Imperial Guard, whose presence at the front generally indicates war, have arrived at the capital of the province. Batoum, in Asia Minor, which was wrested from the Turks in 1878, during the late Turko-Russian war, was then declared a "free port" where all nations could land goods without paying duty, and so trade on the best terms with Persia and the other country back of it. The other day the Czar declared it no longer a free port. This is a blow at the treaty of Berlin, which closed the Turko-Russian war. By means of lately built railroads and water transportation on the Caspian, Russian troops can be embarked at Batoum and arrive at Herat, Afghanistan, in 14 days; whereas it would take British four times that period to get there, and Herat on the road to India, is likely to be the next scene of battle between Russia and England. It is generally supposed that Russia's movements of late protend an early war, with Constantinople as the European objective point, while an army will be sent to India to rouse the natives against English rule, and so put England on the defensive at home, and prevent her from aiding Turkey.

AGRICULTURAL NEWS.

SATURDAY, July 10, 1886.

NOTHING has been done this week with the Oleomargarine Bill, contrary to expressed expectations of Congressmen. Congress is likely to adjourn July 20, though some say it cannot do so before the end of another week. The general impression is that the bill will be passed in some shape. If it isn't passed in a satisfactory form, farmers ought to hold their Senators and Representatives to a strict accountability..... A load of hay was being driven into the big barn of Schuyler Parish, of Naples, N. Y., the other day, when an iron bolt of the rack pressed so hard on a wheel, the tire struck fire and the hay was ignited. The driver had the presence of mind to back the load out of the barn and jump down. Then the frightened team ran through the village with the blazing load, setting fire to a bridge on the way. When they were stopped all of the wagon had been burned but the front wheels..... ..The Central Kansas Live-Stock Association; at a meeting at Emporia, the other day, opposed the Oleomargarine Bill, and requested the Senators from Kansas to use their influence to defeat the measure. It also favored the manufacture and sale of bogus butter. It has no interest in dairying, and thinks its cattle may be worth a trifle more per head, if their fat can be converted into "butter."..... ....The famous Hereford bull, "Lord Wilton," which died recently, won over $100,000 in prizes during his life.....Dakota fines a farmer who fails to destroy Canada Thistles, cockles and other noxious weed on his land. .....Owing to the greater profit in cross-bred sheep for market, and the competition of coarser but cheaper Australian wools, German flock owners are abandoning the production of the finest wool, for which they were famous.....The rise in Australian wools at the London sales is thought a great thing for the colonists, with many of whom even a rise of a cent or two a pound on their product makes all the difference between solvency and ruin.... ...It is now thought the shortage in our clip will not be less than 15,000,000 pounds.....Agricultural Com. Colman praises himself highly in his own St. Louis paper for ignoring the question of the proposed tariff on wool entirely. Colman is a Democrat; the bulk of the party favor free

trade. To go against his party might help the farmers, but it would also be likely to imperil his hold on his office..... ..Foreign markets, over-stocked with American cattle, are dull..... Inoculation for pleuro-pneumonia, on the Pasteur principle (that of attenuated virus) is being tried in England. In a single herd, 74 cattle were recently inoculated for this purpose.....The exports of live stock and dressed meats per steamships from the port of Boston for the foreign markets last week, were 1,103 cattle and 2,484 quarters of beef..... ....The Bureau of Animal Industry thinks that Colorado is over-stocked with cattle, that Wyoming can bear no more, but that there is still room for a considerable increase in Montana.....Major Alvord, late superintendent of Mr. Lawson Valentine's agricultural experiment farm, known as Houghton Farm, Mountainville, Orange Co., N. Y., has accepted the position of Professor of Agriculture at the State Agricultural College, Amherst, Mass.....

Crops & Markets.

SATURDAY, July 10, 1886.

THE Mark Lane Express says "the brilliant and unbroken summer weather" is "improving surviving crops;" trade still favors buyers; but price of wheat is only 97¼ cents per bushel, against $1,13 a year ago.

Late cablegrams report the crop outlook in the United Kingdom, France and India much less favorable than anticipated. Hence prices of wheat have been moving slowly but steadily upward in England, having advanced 1½c. a bushel wit in the last week. There has also been an upward movement in France, Austria-Hungary and Germany.

The past week has been torrid in nearly all parts of the country; but in the Northwest the early part of it was blazing, the thermometer registering all the way from 100 to 120 degrees! Most parts of Dakota and Minnesota were visited by a burning, sirocco Wednesday, the heat being the greatest ever known in that section. With the exception of a few local showers, the drought has lasted through the Northwest since early in June, and great damage has been done to small grains. Winter wheat has been seriously injured; oats have been cut short to a great extent; barley has been somewhat damaged; and grass and hay have suffered severely. The injury to crops is variously estimated at from 10 to 50 per cent.—probably 15 to 20 per cent. will turn out near the reality. In June, 1881, there wasn't a drop of rain from June 1 till harvest, and the injury to wheat was less than 15 per cent.; this year there were light rains nearly everywhere, and this morning's telegrams promise heavier rains to-day or to-morrow, so that the present prognostications of damage are likely to prove exaggerated. Oats are likely to suffer more heavily than wheat; the yield in Minnesota is not expected to be more than half that of last year. In parts of Wisconsin the crop is nearly a failure. In Iowa it is below the average. Flax is promising.

While the farmers of the Northwest have been suffering from drought, those of Georgia and the surrounding States have been suffering severely from the terrific rains which have fallen almost daily for three weeks or more. In many sections the watermelon and cantaloupe crops, from which so much has been expected, have been well-nigh ruined. Cotton, under the influence of the excessive moisture, has run largely to weeds and is in poor condition to withstand the July sun. Fields that should now be clean and well cultivated are full of grass, and resemble so many pastures, and the fertilizers, it is feared, have been swept away.

Since the alarming reports of the threatened destruction of the New York hop crop by lice and "honeydew" and serious reports of injury by drought elsewhere, the price of old hops has been going up rapidly. Thursday, however, consumers made a stand against a further advance in prices, at least there was a pause in the upward movement. Less credit has been given to the disastrous reports here than in the country, so that prices have often been higher in the hop-growing regions than in this city. About the middle of May last, State hops were quoted here at nine to 10 cents per pound, while sales were made at Waterville, the head-center of the New York hop section, at five to eight cents. About the middle of June reports of lice on the vines began to be considerably discussed, with the effect of stiffening holders and leading to offers of 11 cents at Waterville. On the 21st a Syracuse grower telegraphed: "Parties here offering 10 cents. My yards are past all recovery." Quotations in this market had meanwhile advanced to 11 and 12 cents per pound for State. By the 1st of July holders were asking 15 cents Wednesday last the advance had reached 20 cents, with one-half cent more paid at Waterville. Thursday, as already stated, the market remained in *statu quo*, with holders firm and confident. The following shows the range of prices for hops in New York during the month of July (average for the month) in a series of years mentioned:

	State. Per pound.	California. Per pound.
July, 1878	7 @12	10 @12
July, 1879	7 @12	8 @11
July, 1880	25½ @33⅝	28½@33¾
July, 1881	12 @23	19 @23
July, 1882	34⅛ @13 3-16	— @—
July, 1883	28½ @31	28 @ 31½
July, 1884	28 1-16@32¼	28¾@29½
July, 1885	9 5-16@11¾	5⅞@ 9⅞

The range of prices for State hops in December, 1882, was 89 15-16 cents to $1.02 per pound, and the average continued high all the Winter and Spring, until with the new crop in sight there was a drop from 47 to 55 cents as the range in June, to 28½ to 34 as that of July, 25½ to 30 in August, 23 to 27½ in September, not falling below 20 during the remainder of the year. There seems, therefore to be plenty of room for further advance before anything like the high prices of recent years is again reached.

During the week there has been a regular "boom" in the price of wheat, due to the conceded serious nature of the injury to the spring crop by the scorching weather in the Northwest, reports of unexpected shortness in Europe and India, and a decrease of 1,288,000 bushels in the visible supply. At Duluth, the highest price was reached on Wednesday, when August wheat sold at 85⅝. On Thursday it closed at 81¼ against 78¼ a week ago. In Chicago the excitement began Tuesday, and the wheat pit was wild on Wednesday. The advance in two days amounted to 4½ cents per bushel. Here the advance in No 2 Red, spot, was 1⅝ cent from June 25 to July 2, and 1 cent from last Friday till last night. Other grades went higher. All markets shared in the fluctuations. Yesterday there was a downward movement; but this morning, prices were again moving upward.

It is estimated by Bradstreet's that stocks of wheat in the United States and Canada were reduced 28, 151, 181 bushels in the quarter ending June 30, against a reduction of 5, 377, 735 bushels in the same part of 1885. The stock on hand now is placed at 35, 312, 653 bushels, against 48, 196, 667 bushels July 1st, 1885.

Indian corn has been active and excited in sympathy with wheat and on account of reports of injury by drought. It is generally thought, however, that it will be able to take care of itself if it gets a good rain within the next ten days. The visible supply fell away 269,000 bushels, which helped to stiffen figures.

Oats went up with the others; the visible supply declined 260,000 bushels.

Hogs are higher and cattle lower than at this time last year. Prices of hogs are considered good for summer packing.

Butter has advanced a little, as receipts have fallen off somewhat, owing to torrid weather. Export trade active, and better than last year. Firm feeling among holders of cheese.

In the interior most of the wool clip has already passed out of the hands of growers, at very full prices as a rule. Dealers, manufacturers and speculators have cleared up nearly all the clip even in the Territories. In Montana 20 cents per pound have been readily paid for wool that wouldn't bring over 17 to 18 cents last year. Prices in Europe have been very firm and advanced a little at the Colonial sales. It is generally felt that a new basis of value has been established. At Boston sales have been very heavy between dealers, and manufacturers have also bought heavily. There has been a further advance of one to two cents per pound. Demand continues to run decidedly to medium and low sorts, as there are no indications of a change in fashions, which would affect the selection of grades. Prices there for leading sorts compare as follows with two months and one year ago:

	July 9, '86.	*May* 7.	*July* 10, '85
Ohio & Penn. X	33c.	30@31c.	31c.
Ohio & Penn. XX	34@35	32@33	31@32
Ohio & Penn. XX and above	35@36	33@34	33 32@27
Michigan X	32	29@30	34
Fine Ohio delaine	35	32@33	34
No. 1 combing	38	35@36	33@23
Texas Spring, 12 mos.	23@27	19@23	19@23
Super A	31@37	31@34	30@31

MARKETS BY TELEGRAPH.

SATURDAY, July 10, 1886.

CHICAGO.—Compared with cash prices a week ago, "regular" wheat is 3¾c. higher, and a proportionate rise in "options." Corn, 4c. higher, and a proportionate advance in "futures." Oats, 3c. higher; advance in "options" a trifle less relatively. Rye, 4c. higher. barley, 6c. higher. Pork, from 10c. to 25c. lower.

WHEAT, active; Sales: July, 76⅞@79¾c; August 79½@82½c; Sept., 80½@83¾c; No. 2 Spring, 77¼@77½c, No. 3 Chicago Spring, 65¼@67½c. CORN.—Sales ranged: August, 37⅝@39c; September, 39½@40c. OATS.—Active. Sales ranged: Cash, 30@30¼c; July, 30@31c; August, 29@30½c; September, 29¾@30⅞c. RYE. No. 2 at 60c. BARLEY.—No 2, at 59c. MESS PORK.—Cash, at $9 65@9 70; July, at $9 65@9 70, closing at $9 65; August, at $9 60@10 05; September, at $9 70@10 15. LARD.—Cash, $6 37½@6 50c; July at $6 37½@6 50c; August at $6 40@6 55, closing at $6 42½@6 45; September, at $6 47½@6 65, closing at $6 50@6 52½. BULKMEATS.—Shoulders quoted at $5 80@5 85; short rib sides, at $5 02½@5 05; Short Clear sides, at $6 60@6 65. CATTLE.—Shipping steers, at $3 75@5 20; stockers and feeders, $2 50@4 10; cows, bulls and mixed at $1 75@3 75; bulls, $2 10@3 10; through Texas cattle, $3 50@4 00. HOGS.—Rough and mixed, $4 50@4 85, packing and shipping at $4 75@4 95; light weights at $4 50@4 90; skips, $2 75@4 40. SHEEP.—Market weak; Natives, $2 20@2 00, Texans, at $1 50@3 00; Lambs, per head, $1 00@3 00.

ST. LOUIS.—Compared with cash prices a week ago, No. 2 red wheat is 3½c. higher. Corn, ⅞c. lower. Oats, 2½c. higher, options or "futures" however, are lower, so that the rise must be due to some local cause of a temporary nature. Rye, lower; Pork, 25c. lower.

WHEAT.—Active: No. 2 Red, Cash, 77½@77⅝c; July, 77½c; August, at 78¾@78⅞c; September, at 80⅞c. CORN.—Dull; No. 2 mixed Cash, at 32@32¾c; July, at 32¾c; August, at 33½c. OATS.—Weak; No. 2 mixed, Cash, at 30½@31c.; July, at 26½c; August, 26½c. RYE steady at 51c. BUTTER.—Quiet; Creamery, 15@16c; dairy, 10@15c. EGGS.—Quiet at 8c. FLAXSEED at $1 02@1 03. HAY.—Timothy, $10 50; Prairie, $4 50. PORK, $10 25. BULKMEATS.—Long clear, at $5 20; short ribs, $5 30; short clear, $5 45. LARD.—Steady at $6 15@6 20. CATTLE.—Good to Choice Native Shipping Steers, $4 70@5 10; Native Common to Fair, $4 00@4 50; Butchers' Steers, $3 50@4 20; Cows and Heifers, $2 25@3 50; Stockers, and Feeders, $3 25@4 60; grass Texans, $2 85@4 25. HOGS.—Market active and lower; Lights, $4 60@4 80; Packing, $4 50@4 80; heavy, $4 85@5 00. SHEEP.—Market quiet at $2 25@3 75.

BOSTON.—CORN.—Steamer yellow, at 47@47½c, and steamer mixed at 46@46½c. OATS.—Have been in light demand, but prices are steady. Sales of No. 2 white, at 39½@40c; fancy clipped 44½@45c, and barley at 43½@44c per bushel. Rye is held at 68c. per bushel. Our quotations for bran are $14@14 50 for Spring, and $15 50@16 00 for Winter; Fine Feed and Middlings at $14@13, and Cotton Seed Meal at $23 on the spot, and $21 75 per ton to arrive. HAY AND STRAW.—Hay at $17@18 per ton for choice and fancy, $15 00@16 00 for fair to good, $13 00@16 00 for fine, and $9 00@13 00 poor and damaged, Western choice, $16@17, do fair to good $14@15. Straw.—Rye straw is held $19 00@20 00 for choice, and $14@18 for common to good. Swale hay at $10 00@11 00. Oat straw, at $10@11 per ton. PRODUCE.—BUTTER.—Northern and Eastern creamery, extra, 18½@19c; do. extra firsts, 17@18c; do. firsts, 15@16c; Western creamery, 16@18c, for extra firsts to extra; firsts, 14@15c; Northern dairy, 15@17c, for Vermont extra firsts to extra; firsts, 13@14c; seconds, 12@13c; Western dairy, 12@13c for firsts; seconds, 9@11c; imitation creamery, 11@15c for extra firsts to extra; ladle-packed, 8@12c, for extra firsts to extra; firsts, 8@9c; seconds 7@8c; grease, 3@4c. NEW CHEESE.—New York and Vermont extra, 7¾@8c; do. do. firsts, 6½@7¾c; do do. seconds, 4@5c; Western extra, 7¼@7¾c; do. firsts, 6@6½c. EGGS.—Cape and near-by, per doz. 16c.; Eastern extra 14½c; do. firsts, 13½@13c; Northern firsts, 14½c; Western firsts, 13c; Provincial, 13½c. BEANS.—Choice Northern hand-picked pea, at $1 50 per bushel; do. do. New York, small, $1 60@1 70; do. do. screened $1 15@1 30; medium choice, hand-picked, $1 40@1 45; do. do. screened, $1 15@1 25; Yellow Eyes, improved $1 45@1 50; do. choice flats, $1 25@1 30; Red Kidneys, $1 60@1 70; Canada pea, 65@95c. per bushel for common to choice; green peas, Northern, at 90@$1; do. Western, $1 15@1 20. POTATOES range at 70@75c, per bushel for old, as to quality, and $2 50@3 25 for new.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, July 3, 1886.

STATE OF THE MARKET.—Compared with cash prices last week, flour is 5c. higher; wheat, 2c. to 4c. higher; corn, 1c. higher; oats, unchanged; pork, 25c. higher; lard, 25c. higher; butter, a shade better; cheese and eggs a fraction higher; poultry steady; fruit steady; vegetables steady.

FLOUR, FEED AND MEAL. FLOUR—Quotations: Fine at $2 10@2 85; Superfine, $2 40@3 00; Extra No. 2, $2 70@3 25; Good to Fancy Extra State, $3 25@3 90; Common to Good Extra Western, at $2 70@3 90; Good to Choice Extra Western, $4 00@5 10; Common to Fair Extra Ohio, $2 70@3 75; Good, $3 80@4 20; Good to Choice, $4 25@4 75; Common Extra Minnesota, $2 70@3 25; Clear, $3 25@3 75; Rye Mixture, $3 30@3 75; Straight, $4 00@4 60; Patent $4 40@5 10; Bakers' Extra, $3 75@4 50; St. Louis Common to Fair Extra, $2 80@3 65; Fair to Good, $3 70@4 50; Good to Very Choice, $4 55@5 00; Patent Winter Wheat Extra, $4 40@5 10; City Mill Extra for West Indies, at $4 10@—; South America, $4 40@4 50. SOUTHERN FLOUR.—Extra at $3 10@3 60 for Common to Fair, and $3 65@5 10 for Fair to Choice. RYE FLOUR.—Superfine, at $3 10@3 25. CORN MEAL.—Dull; Brandywine at $2 70@2 75; Yellow Western at $2 50@2 75.

GRAIN.—WHEAT.—No. 2 Milwaukee, 57c; No. 1 Hard Duluth, 92¾@92¾c; Ungraded Winter Red, 75@89¾c; No. Red for July, 86¼@87⅛c; do. for August, 87@89⅝c; do. for September, 88@90c; do. for October, 88¼@90½c; do. for November, nominal at 80¾c; do. for December, 91@93¾c; do. for January, 93@95c; do. for February, 92@94⅜c; do. for March, nominal at 94⅛c; do. for April, 95½@96½c; do. for May, 96¼@97⅝c; do. for June, 97⅛@98¼. RYE.—Western, 55@56c; Canada 58½@59c; State 60@61c. CORN.—Ungraded Mixed, at 48@48c; No. 2 Mixed, 46@46½c, No. 2 Mixed for July, 45⅞@46½c; do. for August, 46¼@46¾c; do. for September, 46⅝@47¼c; do. for October, 47@47¾c. OATS.—No. 3, Mixed at 31½c; No. 2, 34⅜@36c; No. 2 Chicago, at 37c; No. 3 White, 35@35½c; No. 2, 40¾@42c; Mixed Western, 36@38c; White do, 38@46c; White State, 41c. No. 2 Mixed for July, 34⅜@34½c.; do. for August, 33⅝@34½c; do for September, 33½@34⅛c.

PROVISIONS.—PORK.—Mess quoted at $10 50@10 75 for Old and $11 25@11 75 for New; $12 00@12 75 for Family Mess; $13 00@14 75 for Clear Rack, and $9 50@10 00 for Extra Prime. BEEF.—Extra India Mess, at $12 50@14 00; Extra Mess, in barrels, $8 00; Packet, $8 50; Fancy Plate, $8 50. BEEF HAMS.—Quoted at $21 50@—. CUT MEATS.—Pickled Shoulders, 6¼c, City Pickled Shoulders, 6¼@6½c; Smoked Shoulders, 7c; Pickled Hams, at 11@11½c. Smoked Hams, 12@12½c. MIDDLES.—Long Clear in New York, 7c; at the West, Long Clear, 6.30c; short Clear, 6.45c. DRESSED HOGS.—City Heavy to Light quoted at 6½@6¾c.; Pigs, 6¼c. LARD.—Western Steam on spot quoted at 6.65@6.70c; August, 6.70@6.72; September, 6.50@6.53; October, 6.63@6.70c. City Steam at 6.35c. Refined quoted at 6.90c. Continent at 7.10@7.15c.

BUTTER.—Creamery—State and Delaware County, pails, fine, 17½@18c; State and Pennsylvania, 17½@18c; Western best, 16c; Western prime, 15@15½c.; West, ern good, 14c. State Dairy.—Half-firkin tubs, best, 15½c; do. do, extra fine, 14½@15c; do. do., good, 13@14c; do. do. common, 11@12c; Welsh tubs, best, 15c; do prime, 14c. Western.—Imitation Creamery, best, 12½@13c; do. do. fair and good, 11@12c; Dairy, fine, 12c; do. common, 9@11c; Factory, fresh, 11c; do. good, 9@10c.

CHEESE.—The quotations are for: New State Factory best white, 7¾c; do. do. best colored, 7¾c; do. do. fine 7⅜@7⅝c; do. do. fair, 6½@7c; do.do., common, 5½@6¼c; Ohio factory, fine, 7½@7¼c; State factory, light skims, 5¾c.

EGGS.—Quotations are for: State, at 11c@14½c; Canada, at 12¾@13¼c.; Western, at 13@13½c.

POULTRY—LIVE.—Chickens, spring, per lb, at 16@20c; fowls, near-by lots, per lb, at 11½@12c.; fowls, Western lots, per lb, at 11@11½c., fowls Southern lots, per lb, at 10½@11c; Turkeys, per lb at 7@8c; ducks, western, per pair, at 50@60c.; geese, western, per pair, at $1.00@1.25.

POULTRY.—DRESSED.—Turkeys, per pound, at 8@10c.; Spring chickens, Philadelphia, per pound at 28@31c.; do. western, per lb, at 19@23c; fowls, Pennsylvania, prime, per lb, 13@14c.; do State and western, per lb, at 12@13c.

FRUITS.—FRESH.—Quotations are: Apples.—Norfolk, per bbl., at $2 00@2 50. Strawberries.—Western New York, per quart, at 8@10c; up river, per quart, at 3@6c; and at 8@12c. for extra choice lots. Cherries at 6@8c. for dark red, large, 8@10c. for up river dark red prime, 7@9c. for do. white large. Currants at 7@8c. for up river large, and 4@5c. for small. Gooseberries, per bush., at $1 00. Raspberries at 6@7c. per quart for Maryland, and 3@5c. per quart for blackcap. Huckleberries at 10@12c. per quart. Peaches at $1@1 30 for prime Georgia and South Carolina per crate; $2 50@3 for prime North Carolina per crate, and 50c.@$1 50 for fair and good lots. Plums at $1 27@1 75 per crate.

FRUITS.—DRIED.—The quotations are as follows Apples—Fancy evaporated, at 7¾@—c; choice, at 7⅛c, do. prime at 7@7¼c; fancy North Carolina sliced, at —; choice do. at 2½@3c.; choice Tennessee quarters at 1½@2c.; State quarters at 2½@3c.; southern sliced prime at 1½@2c; do. common, —, Peaches—Peeled North Carolina, choice, 11c; fancy, 12@12½c; extra fancy, —c; Georgia, choice, at 10@11c; do. prime, 8@9c; unpeeled halves, 2¾@3c; unpeeled quarters at 2¼@2½c.; Delaware evaporated, peeled,—@—c; unpeeled do, at —@—c. Choice pitted cherries at 10c. Evaporated raspberries, at —@15c; sun-dried do. 13@—c. Blackberries—Prime at 6¾@7c. Whortleberries at —c. Plums, at 5c.

PEANUTS.—Demands are moderately active. The quotations are: 7c. for best hand-picked; 4½@5¼c. for farmers' grades.

COTTON.—The quotations, according to the American classification, are as follows:

	Uplands.	New Orleans and Gulf.	Texas.
Ordinary	6⅞	6 1-16	6 1-16
Strict Ordinary	6 5-16	7⅛	7⅛
Good Ordinary	8¼	8 7-16	8 7-16
Strict Good Ordinary	8 11-16	8⅞	8⅞
Low Middling	9 1-16	9¼	9¼
Strict Low Middling	9 5-16	9⅜	9⅜
Middling	9½	9 11-16	9 12-16
Good Middling	10	10 3-16	10 3-16
Strict Good Middling	10 5-16	10⅝	10⅝
Middling Fair	10 11-16	10⅞	10⅞
Fair	11 5-16	11⅛	11⅛

STAINED.

Good Ordinary	6 11-16	Low Middling	8 3-16
Strict Good Ord.	7⅜	Middling	8 15-16

HAY AND STRAW.—The following quotations are; for Choice Timothy hay at 80@85c; Good do, at 65@70c; medium 55@60c; shipping at 50c; clover mixed, 50@60c; clover, black, at —@—c. Straw.—No. 1 rye, 90@—c; short rye at 65@70c; oat, at 40@45c; wheat, at —c.

VEGETABLES.—Quotations are for: Potatoes.—Maryland, prime, per bbl, $2 25@2 75; Norfolk and North Carolina, prime rose, per bbl, $2 25@2 75; Norfolk Chili red, prime, per bbl, at $2 25@2 75; Eastern Shore Va., per bbl, $2 25@2 75. Asparagus.—Oyster Bay, per dozen bunches, at $1 50@2 00; do, upper Jersey, prime, $1 50@2 00. Beets.—Long Island, per 100 bunches, $1 50. Beans.—Long Island, per bag, $2 25; Jersey, per bbl, $3 50@4 00; Maryland, wax per bbl, $2 50@4 50; Norfolk, wax, per half bbl, $1 00@2 00; Norfolk, round, per half bbl, $1 50@2 00; Norfolk round per bush, er, $1@1 25. Cabbages, Long Island, per 100, $3 00@4 00; do, Norfolk and North Carolina, per bbl., at $1 50@1 75. Carrots.—Long Island, per 100 bunches, $1 50. Cucumbers.—Norfolk and N. C. per bushel crate, 60@75c; do, Charleston, per crate, 30@50c.; do. Savannah, per crate, 25@40c. Lettuce, Long Island, per bbl, 50c. Onions.—Bermuda per crate, at $1 25@1 75; do, New Orleans, per bbl, $3 00@3 50; do, New Orleans, per bag, $1 50@—; do, Maryland, per bbl, at $2 50@2 75; do, Virginia, per bbl, $2 00@2 50; do, Tennessee, per bbl, $2 50; Egyptian, per crate, $2 25@2 60. Peas.—Long Island, per bag, $1@1 25. Radishes.—Long Island, per 100 bunches, 50c. Rhubarb.—Long Island, per 100 bunches, $2 50. Spinnach.—Long Island, per bbl, 40@50c. Squash.—Norfolk, white, per crate, 40@50c. Tomatoes.—Illinois, per box, $1. Norfolk, per crate, $1 25@1 50; Savannah, per crate, $1 25@1 50; Charleston, per crate, $1@1 25; Florida, choice, per crate, $1 25; Florida, poor to fair, per crate, 75c.@1 00. Turnips, white, July and L. I., per 100 bunches, quoted at $2 00@3 00.

LIVE STOCK MARKET.

NEW YORK, SATURDAY, July 3, 1886.

BEEVES.—Ohio steers, 1,483 lb, at $5 65; do. 1,338 lb, at $5 20; Cows, 1,111 lb at $4; do. Bulls, 1,483 lb, at $3 50. Illinois steers, 1,397 lb, at $5 50; do. 1,583 lb, at $5 15; Indiana do, 1,184 lb, at $4 60; do, 1,273 lb, at $4 85; Kentucky do, 1,120 lb, at $4 85; Chicago do, 1,281 lb, at $5 10; do. 1,297 lb, at $5 25; Oxen, 1,612 lb, at $5 25; Kentucky oxen, steers and stags, 1,835 lb, at $4 85; Illinois steers, 1,408 lb, at $5 20; do, 1,286 lb, at $5 20; Chicago steers, 1,575 lb, at $5 25; do. 1,305 lb, at $5 15; Buffalo do. 1,410 lb, at $5 15; do, 1,408 lb, at $5 15; Terre Haute "Stillers," 1,309 lb at $5 37½; do. 1,363 lb, at $5 37½; Still Bulls, 1,265 lb, at $4; do, 1,170 lb, at $3 87½; Kentucky "Stillers," 1,289 lb, at $5 15; do. 1,289 lb, at $5 10; do. 1,095 lb, at $5 07½; Kentucky grass fed steers, 1,356 lb, at $4 95; do. 1,400 lb, at $4 90; Illinois "Still 76," 1,050 lb, at $4 70; do. 1,010 lb, at $4 55; do, 1,043 lb, at $4 50; Chicago steers, 1,311 lb, at $5 30; do. 1,379 lb, at $5 12½; Lancaster County, Penn., steers, 1,301 lb, at $5 45; do. 1,350 lb, at $5 35.

CALVES.—Buttermilk Calves, 232 lb, 2½c; Fed calves, 192 lb, 3c; Veals and fed calve, 162 lb, at 4½c; Veals, 151 lb, at 4½c, do. 212 lb, at 4¾c; do. 179 lb at 5c; Veals and Buttermilk calves, 145 lb, at 4½c.

SHEEP AND LAMBS.—Receipts for six days, 35,223 head against 39,651 head for the same time last week. Ordinary to Prime Sheep sold at 3½@4¼c; Poor to Prime Lambs, at 4½@6¼c. per lb; Virginia Lambs, 59 lb, at $5 50 per 100 lb; Kentucky do. 68 lb, at $5 75c; Kentucky Sheep, 86 lb, at $4 80; Ohio Sheep, 82 lb, at $4 25; Kentucky do. 88 lb, at $3 75; Ohio Sheep, 77 lb, at 4c. per lb; do, 74 lb, at 3½c; Kentucky sheep, 107 lb, at 4½c; Bucks, 95 lb, at 3½c Kentucky Ewes and Bucks, 101 lb, at $3 52½; West Virginia Lambs 62½ lb, at 6½c. per lb; do, 59 lb, at $5 80; Virginia do, 56 lb, at 5½c; Pennsylvania Lambs, 89 lb, at 5½c. per lb; do. Sheep, 91 lb, at 4c. Western Sheep, 92 lb, at 4½c; do, 93 lb, 4¾c; Maryland Lambs, 80 lb, at 6c; Kentucky do. 59 lb, at 6c.

HOGS.—Receipts for six days, 27,290 head against 28,103 head for the same time last week. None for sale alive. Nominally lower and Fair to Good Live Hogs may be quoted at $5 30@5 10.

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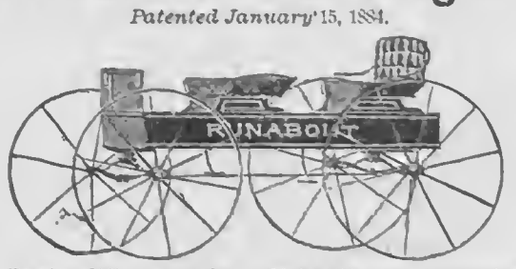

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Syracuse, N. Y.

For the Young.

TWO SONGS.

A WOMAN sang before a breathless crowd,
Her voice swept like an angel's anthem past.
A thousand voices shouted long and loud
In wild applause when hushed the song at last.

She sang again: beside her baby's bed
A simple tender lullaby—and low,
Till slowly drooped the dainty, golden head
To dreamland on the music's gentle flow.

None heard her save the dreaming babe alone.
There came no shouting voice, no wild recall,
And yet the angels listening at the throne,
Smiled at the song, and called it best of all.

THE weather is hot. Last week there were several "roasters." People went about with their hats off, mopping their heads with their handkerchiefs. The poor people in the lower parts of the city suffer greatly this hot weather. They are crowded into close rooms, where there is hardly a breath of air stirring. The sun just bakes the bricks and iron all day long, and at night enough heat is left to make the rooms like ovens. Think of little children being brought up in ovens! About the coolest place these poor people can find is far up on the Brooklyn Bridge. There is always a cool breeze there. Lots of people go there in the evening to get a mouthful of fresh air. Far up over the city, out of the noise and dust, they can get a little rest.

Thousands of city people went out to the country to spend the Fourth. I saw crowds of them at the stations and on the trains. They were excited enough. It was good for them to get a chance to run about a little. They came back Tuesday with lame joints and noses and hands as red as roses. Thoughtless city folks are apt to say that country people are awkward and behind the times. If they could only see themselves as they appear in the country, they would have nothing more to say. They are often ridiculous in their manners and talk, and the funny part of it is that they think all the time they are making people think they are regular farmers. It pays to be natural. Don't try to be something that you are not. You will deceive nobody and only make yourself ridiculous.

Take care of yourself this hot weather. Don't drink too much cold water while you are heated. The proper way to drink ice-water is to swallow it slowly. Pouring it down the throat as we would pour it into a jug is a kind of intemperance that I oppose. Bathe just as often as you can, but don't jump into cold water while your body is like a furnace. If you go in swimming wet your head at once. Don't sit on the bank in the sun with your hat off. It is a good plan to "duck under" as soon as you get into the water. Put some leaves into your hat while you are working in the harvest field, and pour water on your wrists. Don't eat too much meat this weather.

THE horses on the horse cars have a hard time in these baking days. There is very little shade for them and the sun scorches the pavements. They are glad enough when they get around to the end of the trip where they can get water. I saw one the other day at the watering trough, and those who think a horse can't talk and reason ought to have seen him. The driver sponged the horse's head off with cold water and rubbed his shoulders and legs with a damp cloth. It was worth a dinner to see how the horse enjoyed his bath. He rubbed his damp head against the driver's shoulder, with as plain a "thank you" as I ever saw. When he started off again he went as though he had determined to pay in extra work for his treat. How foolish some people are in supposing that horses do not appreciate good treatment. They do, and they pay for it too.

I begin to think that raspberries are about the best of all small fruits. I like them better than I do strawberries, and I feel sorry enough for any family that has to go without them. A great deal has been said about people who have no fruit, but I don't think we can say too much. When we have farms of our own, we will have fruit enough. Let there be a raspberry patch by all means.

I suppose the girls are going to have lots of canned fruits for next Winter. That's right. I would like to see the cellars well lined with jars of preserves. I would like to call around and help eat them too. Home-made food is so much nicer than that we get at the stores, that it always seemed to me that the "women folks" must feel themselves well paid for their trouble when they see how glad the "men folks" are to eat the food. I have no place for men or boys who never say that their food tastes good. I like to see them get up from a hearty meal and say, "I liked that; it was good." It don't hurt them any to say so, and it does the "women folks" lots of good. Whenever I see a boy who insists that his mother is the best cook in the world, I know that boy will never run away from home, and that he will be apt to make a strong, good man. I want all our girls to make first class cooks. The more good food we have in the country, the better off we shall be. When the boys have good food I want them to admit it, and praise the cooking. You had better show this to father, too. He may not think so much of what I say, but it won't do him any harm to think about it.

Many farmers do their work by the "signs." Sometimes it is a black cat, or the way a rooster crows, or the way the dog barks, that tells them what is going to happen. Such signs are very ridiculous. Cats and dogs never know what is going to happen to us, and the man who thinks they do, shows that he has neglected his mind. There are certain signs about the crops, though, that are pretty sure. Crops generally grow in about the same way every year. By watching them carefully you can tell pretty nearly how they will come out. Watch the potatoes. If the ground is cracked over the hills, just as if the growth had split the surface, you may safely make up your mind that there will be a fine yield. Look out that the crack is not made by a mole, though.

THE STORY OF A DISTRICT SCHOOL.

A COLLEGE BOY'S DIARY.

(Continued.)

BEAR CREEK, as I had been given to understand, was some five miles from the little town of Newbank. We changed cars at 12 o'clock at night, and I spent the tedious wait in walking about the little station, mentally reviewing my studies preparatory to passing that dreaded examination. It seemed strange, but the more I thought of the probable questions, the more they seemed to mix in my head; yet I foolishly went on reviewing and repeating my knowledge to myself. This work never pays. It is better to drop all thought of the examination, so that the mind may be fresh when the trial comes.

The station agent was a gruff man, with a grizzled beard and a shabby coat. He glared at me from his little window as I paced up and down the room. I never knew what he had against me; perhaps some thoughtless college boy had played a trick on him. He came out of his office at last and spoke to me.

"Yer frum the college, aint ye?"

I nodded.

"Gonter teach deestrict school, I 'spose?"

"Yes, sir."

"Well, I hope they'll throw ye out. Ye hear? I hope they'll pound the sand with ye. I'd like fer ter live in the deestrict where I cud help dog ye. I dun'no who ye be, but I jedge ye by yer class. You fellers set up thar to that college jest like bumps on a log, an' we farmers support ye. Then ye come out to show them that's raised ye how to farm it. I was puttin' in some tile onct, an' thar come along a book-agent. He done his best to sell me a book I didn't want at all, an' when he found he couldn't do nothin', he turns round and says, 'Why don't ye put that tile in right? That aint the way we does it up to the Agricultural College, by no means.' I sez, sez I: 'I owns that tile, an' I puts it in ter suit me. When ye git over yer smartness enough ter own somethin' of yer own, ye kin work yer own rules.' I want all these smart fellers ter git ketched up, an' they aint no better place fer it than a good rough deestrict school; an' I hope ye'll git it."

We should have had a long argument, I am certain, if the train had not carried me out of reach of his harsh voice. The last words I remember hearing him say were: "I hope they'll mop the floor with ye, an' dust the starch outer yer jacket." These words repeated themselves over and over in my head, in time with the clanking of the wheels, until I fell asleep.

We reached Newbank in due time. It was a small country town, with one long street leading up from the depot to lose itself at the top of a low hill just back of the town. The stores and offices were arranged along the street, while back of them on either side stretched the dwellings, the spaces and yards about them growing wider and wider as the distance increased, so that the dividing line between town and country was difficult to determine. A saloon stood on the most prominent corner, and gave the town a very bad black eye. The roads were deep with mud that seemed to have climbed up over the steps and platforms into the stores. I found a little hotel about half way up the street, where breakfast was waiting. The landlord was a fat man who had very little to say. He sat in his little office and regarded me with sleepy eyes when I came to pay my bill. In answer to my question as to the distance to Bear Creek, he turned in his chair and silently pointed across the street. Following the direction of his finger, I noted a man leaning against a post in front of the store. A farm wagon with two red horses attached to it stood near by. I waited patiently for the host to explain this gesture, but no explanation was forthcoming. He settled back in his chair and half closed his eyes as though he wanted to go to sleep. Even a compliment to the breakfast I had just eaten, dressed up in the strongest language I could think of, failed to bring out anything but a species of grunt, so I picked my way through the mud of the street, determined to investigate for myself.

The man marked out by the landlord's sleepy gesture regarded me curiously as I scraped the mud off my boots upon the steps of the platform. He was an old man. His head was thrust forward and his shoulders bowed with hard work. A thin tuft of gray hair thrust itself into view from under his chin. His upper lip was covered with a short, gray stubble that seemed to start angrily out to defend his great mouth. I remember thinking how useless this defense was. Nothing worth fighting about would have cared to enter that mouth through the black stumps of teeth that showed through the lips. His eyes were small and cunning. They seemed to be trying all the time to make themselves still smaller. In this effort they had pulled the face into a mass of wrinkles and hard lines, and pushed the nose to one side. I notice that people with small eyes are almost always selfish.

The man wore a torn fur cap, the visor of which, in its frantic efforts to tear itself away, had twisted the whole cap about so that it hung over one ear. An old blue army coat covered the rest of his clothes, with the exception of a pair of great boots which, guiltless of blacking, thrust themselves into view.

(To be continued.)

LETTERS FROM THE COUSINS.

DEAR UNCLE MARK: I am a boy 13 years of age. I would like to join the Y. H. C., if you will let me. I have four brothers and two sisters. I have been helping on the farm this Spring. My father has been a subscriber for the RURAL NEW-YORKER for over 30 years and is taking it now. My mother is very fond of flowers and has many different kinds. I live on the largest of the Thousand Islands, within three miles of the City of Kingston.

BURWELL J. COOK.

Wolfe Island, Ont.

UNCLE MARK: I have been reading the letters from the Cousins in the RURAL and I enjoyed reading them. I have got the mumps and can't go out doors to play, so I thought I would write a letter. I am 11 years old and live on a farm one mile from the St. Lawrence River. I go fishing in the Summer and sometimes catch a lot of fish. I have one brother and three sisters. We have 33 head of cattle, six horses, 26 pigs and 100 hens. I have a pair of ducks and a dog. Her name is Tip. I love flowers and I help my mother make her garden. I also have a small garden of my own. ERWIN P. ALLEN.

St. Lawrence Co., N. Y.

[I am glad you did not go out and thus make the mumps worse. I hope you are cooler up where you live than we are.—U. M.]

DEAR UNCLE MARK: I am going to try for one of the ten dollar prizes. I will tell the Cousins that are bothered with gophers a good way to catch them. Take a fish line 12 feet long, make a running noose in one end. When you see a gopher go in his hole, put the noose over the hole, then go to the other end and wait till you see him put out his head; give the string a jerk, and you have him. From your loving nephew, JOHN C. THOMPSON.

Ireton, Iowa.

[I fear the gophers are getting lazy. Those I saw years ago were too smart for that.—U. M.]

DEAR UNCLE MARK: I am 16, but I do not go to school. Pa died last January, and my brother and I have the chores to do. We have four cows, three pigs, and two horses; one of them is 26 years old. We have about 80 chickens. I am learning dress-making, and I am making two crazy quilts and a charm quilt. The cars came to Antioch last March for the first time, and they fired the cannon and the band played. How many of the Cousins can make lace? I can crochet some, called the pine-apple. DORA M. BARNARD.

Fox Lake, Ill.

[Dress-making is a good trade. How much more independent we feel with a good trade back of us!—U. M.]

UNCLE MARK: I am a little girl 12 years old. I go to school and study reading, writing, spelling, geography and language. I have only one pet, a canary bird. He is yellow, and sings very prettily; his name is Jimmie Mason. I have over 100 kinds of house plants. I wonder if any of the Cousins can beat that. My Grandma took the RURAL when Mamma was a little girl, and has been taking it ever since, till just a few years ago; since then Papa has been taking it, so I have been with the RURAL all my life. I have one sister, seven years old, whom I love. Last Summer I had some ground and I raised some very pretty flowers. I wash dishes, sweep, cook, and lots of other things. Well, I am afraid you will scold if I make my letter much longer, but there is a question which I would like to ask; it is this. May I join the Y. H. C.? Please don't throw this into the waste basket. I will close for this time, but will write again. ALETTA M. UPSON.

Noble County, Ind.

[Yes, indeed, you may join. What a lot of good housekeepers we have. You are a regular RURAL girl.—U. M.]

DEAR UNCLE MARK: I am one of your girls that does not chew gum. I think it is a filthy habit. I am learning to do all kinds of housework. I can bake pies nicely. I get up almost every morning to get breakfast by six o'clock. Last Winter I had a pet lamb; raised it by hand. I am 10 years old.

Mahoning Co., Ohio. LIZZIE B. LYNN.

[I am glad to know you are not a gum chewer. It is a bad habit.—U. M.]

DEAR UNCLE MARK: I can't say "R" yet, and my Papa said I'd better wait till I did before I'd write any more letters, but I'm 'f'aid you'll forget that little Sallie Palmer D'imes 'longs to the Club. I'm a big girl now; I am four years old. I'm going to help in Mamma's garden this year, for we are going to have "our house" and I'm going to raise a great deal, because Too Too is not but two years old, and she's so fat, and little Benjie can just sit up on the floor. My little hoe got broke, but I hope my Papa will mend it, and not say again that it had better stay broke, for I need it to make a good crop.

Your little niece,

SALLIE PALMER GRIMES.

DEAR UNCLE MARK: Would you like to hear from a little boy from Easton? I am eight years old, and have not started to school yet, but I can read in the second reader, and you can see how I write in this letter. We live two miles from town, on 118 acres of land. There is a large apple orchard on the farm. Papa has three-quarters of an acre of strawberries, and raised 100 bushels off of it last year. My brother raises peanuts. I have a little garden. Last year I raised a citron that weighed 15 pounds. I am going to try and raise a larger one this year. Papa is going to build a house and barn this Summer.

Yours truly,

Talbot Co., Md. RALPH E. SWARTZ.

DEAR UNCLE MARK.: We have five horses and two colts, three pigs, 20 cows and one calf. We own a farm of 98 acres. We live one mile from the main street. Pa sells milk in the village. I like to live on a farm, for then I can run in the woods and gather wild flowers and catch fish in the creeks. We have lots of black walnuts and butter-nuts and hickory-nuts. I do not go to school now, so that I have lots of fun. We have lots of chickens, so that we sell eggs.

We have a big black dog named Jack. I am 11 years old, and I would like to be a Cousin too. J. G. CAMPBELL.

Dansville, N. Y.

DEAR UNCLE MARK: My Papa has taken the RURAL ever since I can remember. I would like to join your Club and be one of the Cousins. I am a girl eight years old and have two sisters, Lizzie and Alice. I enjoy reading the children's letters. We have 11 pigs, one hog, four horses, 40 cows, 23 hens, one dog, two cats, and I have one Bantam, (and she has four chickens), nine calves and 48 hives of bees. If you would come here and see us I would give you all the honey you could eat. Yours truly,

Edmeston, N. Y. CHARLOTTE DENISON.

[I shall remember your promise when I come near you.—U. M.]

Miscellaneous Advertising.

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PERSONALS.

THE Grand Duke Nicholas, of Russia, is an enthusiastic entomologist, and has lately been butterfly-hunting in the Himalayas.

LOUISE MICHEL, ex-leader of the French Anarchists, says she hopes to come to America after death, when her soul migrates.

DAVID M. OSBORNE, head of the Mower and Reaper M'f'g Company, at Auburn, N. Y., and ex-mayor of the city, died there, Tuesday, of heart disease, aged 64.

IT is generally believed in Washington in official circles that during the Summer, Attorney-General Garland will resign, and that he will be succeeded by ex-Senator McDonald, of Indiana.

HOBART PACHA, late Grand Admiral of the Turkish fleet, and third son of an English earl, died in the arms of his wife, a young English lady only 27 years old. One of his dying requests was that he might be interred in Turkish soil.

BISHOP SPAULDING, of Peoria, is said to be the dean chosen for the new Catholic University at Washington; he is a Sulpician, and so is Cardinal Gibbons, and it is thought the Sulpician influence will outweigh the Jesuit in the University.

IT is said that Dr. Schweninger, Bismarck's physician, who was recently called to St. Petersburg, was promised by the Czar a large sum only on condition of his succeeding in his proposed treatment. If he fails to effect a permanent reduction in the Czar's weight, his own pay is to be materially reduced.

BEING asked in St. Louis to prognosticate the Republican Presidential ticket of 1888, John A. Logan responded: "I don't know, but you can say positively that I'm not a candidate for a place on the ticket. I'm not a a candidate for anything just now. I think the people will decide between now and then who will be the candidate."

"BUCK" GRANT was interviewed by a Denver reporter the other day and asked how he came by the nickname. The explanation was simple. When the Grant family moved from Ohio to Missouri he was a little boy, and some one called him in joke, "The Little Buckeye." The name stuck, but in the process of time "the little" and "eye" were dropped, and the name as it now stands remained.

ONLY three States west of the Mississippi—Missouri, Iowa and Minnesota—can claim Senators as their sons. Fourteen of the 72 were born in New England, five of them in the Old Bay State; while New York is credited with eight, Ohio and Virginia with six each, and Pennsylvania with five. Beck was born in Scotland, Jones, of Nevada, in Wales, Fair, Sewell and Jones, of Florida, in Ireland.

THE Hon. G. B. Corkhill, who as District Attorney at Washington, conducted the prosecution of Charles J. Gauteau, died of hemorrhage of the stomach last Tuesday (July 7), at Mt. Pleasant, Ia., whither he had gone to make political speeches in the district. Born in 1840, in Ohio; removed to Mt. Pleasant, Ia., when young; became a lawyer there; went to Washington in 1873, and divided his time between practicing law and editing.

GEN. S. H. HURST has been appointed Dairy Commissioner of Ohio, and L. N. Bonham has succeeded W. I. Chamberlain as Secretary of the State Board of Agriculture. The latter has left the great Buckeye State where he has "lived and labored for nearly 50 years," to assume the presidency of the Iowa Agricultural College. We heartily wish him success in his new position, confident that few men in the country are so capable of achieving it.

SEVERAL Congressmen who do not wish to use their positions to feather their own nests, do not want a re-election. Representative Collins, of Mass., is one, Martin Foran and Ben. Le Fevre, of Ohio, cannot afford to work in Congress for $5,000 a year each, when the former can make $10,000 a year at the bar, and the latter as much or more as Vice President of a railroad. Louttit, of California, wouldn't live East for the honor of being a Congressman, and will never step outside the Golden State again. But, bless you, most of 'em make the Congressional business pay better than any other they would get.

RECENT revelations leave no doubt whatever that the late King of Bavaria was outragiously insane. Among other things, for a whole year he made his valet wear a black mask as a punishment for some imaginary offence. Another servant was compelled to go about with a black mark on his forehead, to indicate that his brain was out of order. On one occasion the poor Bedlamite declared war against the King of Saxony, and professors of chemistry were sent for from Munich to transform one of the Hohenschwangau Mountains into a volcano. Of his lunatic vagaries there was no end.

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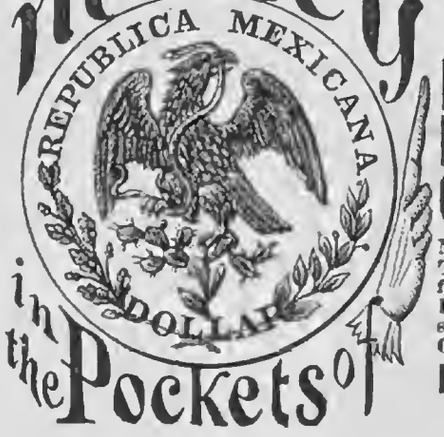

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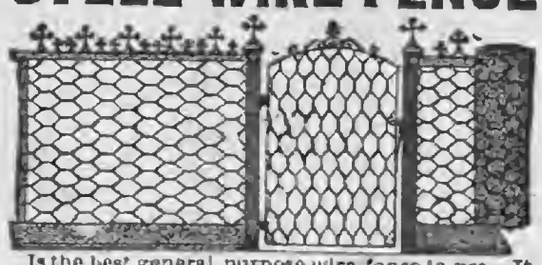

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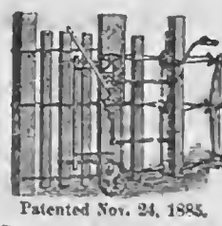

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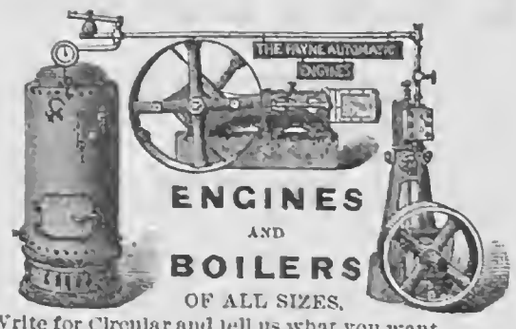

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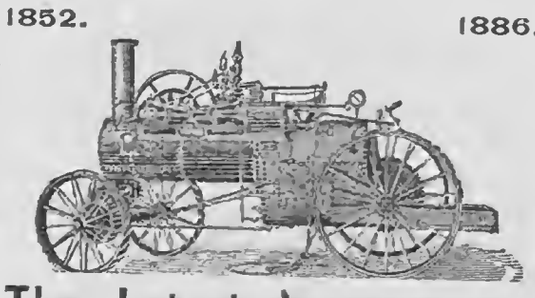

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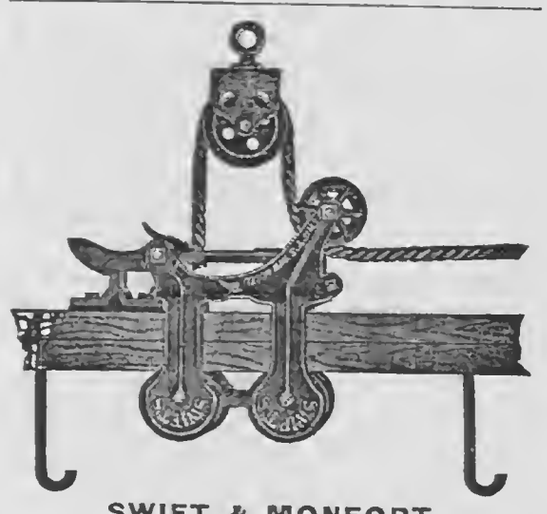

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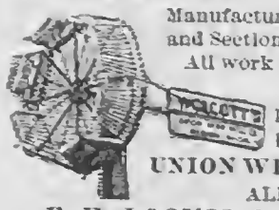

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Humorous.

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A LITTLE boy came to his mother recently and said: "Mamma, I should think that if I was made of dust I would get muddy inside when I drink."

THE venerable Hopkins has been connected with Williams College for 66 years, and yet he cannot sign his name without making his Mark.—*Lowell Courier.*

HUSBAND—"That fence wants painting badly. I think I'll do it myself." Wife—"Yes, do it yourself if you think it wants to be done badly."—*Texas Siftings.*

NOW that the excitement attending the President's marriage has somewhat subsided, let us return to the discussion of the question: "What sunk the Oregon?"—*New Haven News.*

"WHY, Allie dear, is that the way to begin your dinner?" asked a mother of her little daughter, as she began with the pie. "Well, I declare, Mamma, I was going to eat my dinner upside down wasn't I?"—*Farm Journal.*

HUSBAND (impatiently to wife)—"I told you I only wanted half a cup of tea, and, as usual, you've filled it to the top. Don't you know what half full is?" Mother-in-law (grimly)—"She ought to by this time."—*N. H. Patriot.*

MISS ROSE ELIZABETH CLEVELAND is getting a reputation for bon mots, such as this: A Western visitor remarking in his free-and-easy way, "You hail from Buffalo, I believe?" she replied, "Yes, we hail from Buffalo, but we reign here!"

YOUNG WIFE: "Mr. Poissom, I wish some nice smelts for dinner to-day." Mr. Poissom: "Yes, madame; how many?" Young wife: One will be plenty, for only last week I ordered two salmon and there was a great deal too much.—*Life.*

"WHERE are you going?" said his fond mother to Johnny. "Going in swimming, mother." "Going in swimming! why you silly boy you'll get yourself wringing wet in such a shower as this; wait till the rain is over."—*Farm Journal.*

"MY friend," he said in solemn tones, to the passenger in the seat ahead, "are you a Christian?" "Well, I hope so," replied the passenger, somewhat startled. "Ah! then you have been baptized in the church?" "No, sir; I was baptized in the river. I'm a baptist."—*New York Times.*

A GIRL at Olympia, Oregon, threatens to sue her own father for breach of promise. She says the old gentleman first gave his consent to her marriage with her lover and then withdrew it, and that in consequence her beau got tired of waiting and has gone off with another girl.

A SMOKER presents his open cigar-case to his neighbor on the right. "Thanks, I don't smoke." He then turns to his neighbor on his left. "I don't smoke; much obliged." His wife whispers in his ear: "Are you not going to offer one to the captain?" "No, love; he smokes—I know he does."—*L'Echo Liberal.*

"It is my unalterable decision, Clara," he said, firmly; "I cannot walk on the avenue with you if that poodle is to accompany us. You must choose between him and me. It rests with you, Clara, if our engagement shall be broken off." "Oh, George!" the girl replied, and her face assumed an ashen hue; "this is all so sudden. You must give me time to think it over. One week, George, and you shall have your answer."—*Ingleside.*

A WELL-KNOWN minister was sent South from New Jersey a few years ago to labor among the colored people. They received him with many demonstrations of joy, and at the first meeting which he held one old colored preacher prayed for him with great earnestness, thus: "O Lord! bress dis yer dear brudder what's come down from de Norf to preach the gospil to us. 'Noint him wid de kerosene ile ob salvashin, and set him on fire."

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Indignant Ticket Agent: "I've told you three times already that the next train leaves at six-thirty. Don't bother me any more!"

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Miscellaneous Advertising.

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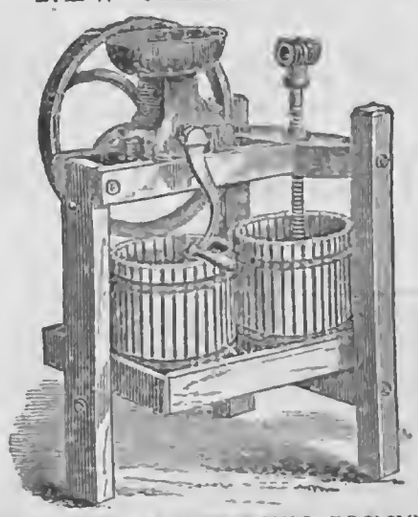

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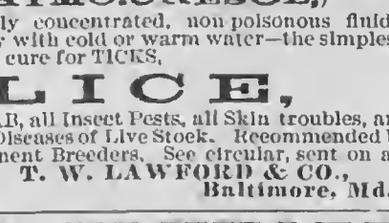

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We claim and GUARANTEE that a Plow attached to the Sulky and carrying the driver, is from five to 100 pounds lighter draft than the same Plow doing same work without the Sulky. Write for prices.

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A JOURNAL FOR THE SUBURBAN AND COUNTRY HOME

VOL. XLV. No. 1904. NEW YORK, JULY 24, 1886. PRICE FIVE CENTS. $2.00 PER YEAR.

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The Herdsman.

SWISS COWS.

HENRY STEWART.

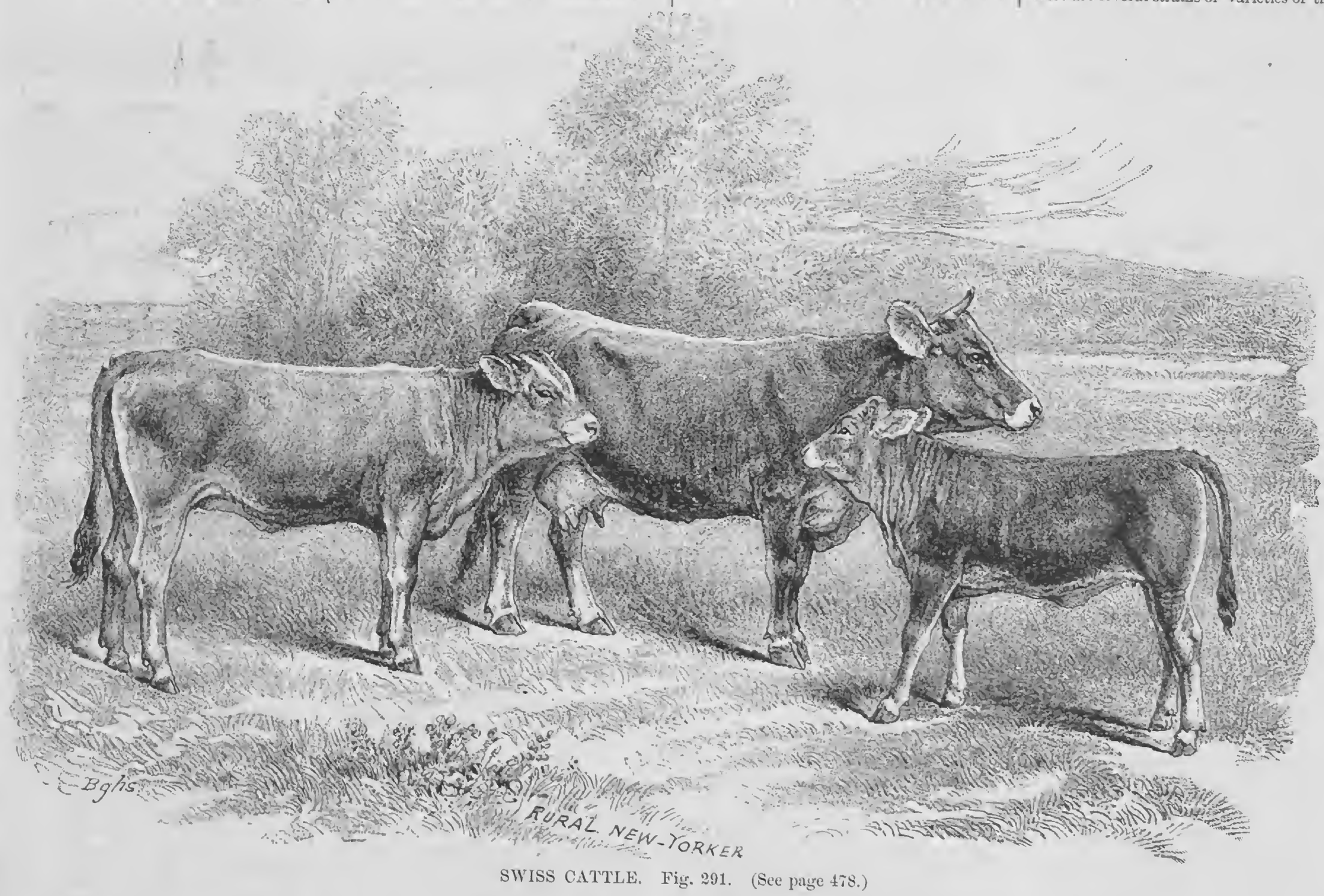
EVERYBODY has heard of the Swiss chalets. Many persons have seen pictures of them made of highly carved ornamental work, perched upon a crag or the mountain side, with a foaming cataract pouring into the back window and an overhanging avalanche all ready to fall and sweep down the almost perpendicular slope. And the gaudy neck strap and its big bell. This is the artist's idea of a Swiss chalet. When, years ago, I spent a vacation among the Swiss mountains, I looked in vain for all this, and yet I found lots of chalets and cows and cowherders of both sexes, but very different in their reality from those of the artist's imagination.

Fancy a mountain side, steep and rocky, with well worn paths among the rocks, leading from one little green, grassy slope or flat to another, the grass thick and short, but rich and succulent, and as you turn around a crag, a rough log hut built against the steep mountain side, which has been dug away to make the hut fit into the nook. The front projects several feet and is supported by rough posts; the roof is of split logs, covered by bright moss and grass in places where soil from above has lodged on it, and as you look up, a goat or two look down upon you, as they chew mouthfuls of grass they have bitten off from the grassy roof. This is a real Swiss chalet. All around are green grass and moss on the damp rocks, from which, among ferns and flowers, flows down a little rivulet of sparkling water, cold as ice and as pure. A little way off on the level bench is an open shed of logs and split slabs, in which the cows are milked, and which one sees is badly in need of being cleaned out.

A cooking pot hung upon three sticks and a few flat stones around it for seats, mark the site of the kitchen, which is airy, no doubt, but yet smoky, as the gusts which whirl down the mountain blow the dust and the sharp vapor from the smouldering, half-rotten wood fire into your eyes.

If you look into the chalet you will see its rough walls, the equally rough roof through which a stray sunbeam glints down through the smoke from a fire on the floor, on its way out through the open gable, which serves as a chimney and a window at the same time. The fire is built against a rock which projects into the chalet, and a part of the same rock makes the hearth. A wooden gallows frame supports a big iron kettle over the fire, in which the milk is warming in preparation for making a cheese of the kind known as Gruyère. The requisite utensils, all of wood, but all white and clean and sweet as hot water and sand can make them, lie around on benches and on shelves. An annexed shed, equally rough, contains the milk in earthern jars, which is set for cream, and the churn and ladles and some "chunks" of butter, which is of half-a-dozen wild, bare-footed, rosy-cheeked boys and girls, who clamber over the rocks here and there. But she has a long tin horn with which she calls the cows home, and they generally come when they hear it blown. But they are not far away, for while we talk with the man we can hear the bells tinkling and perhaps see the cows on a crag cropping grass, and the blue sky or a glittering glacier in the distance, as a back-ground behind them.

And this brings me to where I should have started—the Swiss cows. But it is interesting to note the kind of country and the circumstances which have made these cows what they are—hardy, rather coarse, but stout, robust and just suited for the life they lead. But as elsewhere there are cows and cows, so there are in Switzerland. For the native race have been selected and bred and fed and trained with great care and jealousy, and there are several strains or varieties of them,



SWISS CATTLE. Fig. 291. (See page 478.)

hardy mountaineer, in pink tights and yellow jacket, with slashed and embroidered sleeves and a broad hat with a big feather in it, blowing a horn to call the cows home; while the pretty red-cheeked mountaineeress, all picturesque in red stockings, short green skirts, and white bodice, laced wonderfully in the front, and open enought to show the snowy lace which covers the bosom, and a wide straw hat with a lot of gaily colored ribbons floating in the breezy air, waiting with her milk jar and three-legged stool for the cows which are seen away behind all, coming down the perpendicularly precipitous crags as carelessly as if they were on a level meadow, each with its

very yellow and very sweet and rich, and which the mountaineer tells us goes to the "pension" away up the mountain. The rich herbage of these mountain slopes, nooks and sometimes fields, where a cove sets up in the mountain side like a bay in the ocean, and the occasional open woods and forests, gives a fine flavor to both the butter and the cheese, and a high color as well. The herdsman is a blue-eyed, round-faced fellow, dressed in brown homespun and has wooden shoes; while the "Swiss maid" is sun-burned and has thick shoes and no stockings at all, and has homespun petticoats and no ribbons on her hat, and rarely a hat at all, and is the mother much alike in the main, but to believe their owners, differing very much in excellence, each being better than the others by a very great deal indeed. The variety known as Schwitz (including four sub-varieties of Gessenay, Simmenthal, Emmenthal and Erlenbach) has been bred with much care, and as the summer pasturage and the Winter keeping in the valleys are of the best kind, these cattle are the most valuable of all the Swiss races, and are sent abroad to the French and German dairies in large numbers. The prevailing color is a yellowish red and white, the frame is large and rather coarse, the disposition is quiet and docile, and the milking

capacity is large and rich, 18 to 28 quarts a day being a common yield. They fatten very easily, and will yield from 700 to 900 pounds of dressed beef. This breed is more interesting to us because it has been introduced here for some years past and has met with considerable favor in New England, Pennsylvania and other localities. The conditions of climate and topography, however, are so different here from those prevalent in Switzerland, that it must be expected some change at least will occur in the character of the cattle which have been imported, although we cannot say that this may not be for the better quite as easily as it might be for the worse.

It should not be forgotten that the winter care of these cattle in Switzerland is quite different from that in the Summer; for as Winter approaches they are brought down from the mountains to the villages in the valleys, were the pastures are fresh and smooth, and where, in the colder weather, they are fed in warm stables upon the sweetest of hay and some additional food. Here the milk is largely used for condensing, for which there are extensive factories upon the American system (American ways and methods penetrate everywhere.) This condensed milk is sent abroad where it competes with our product, and it has even made its appearance in American cities. On the whole, the Swiss cattle may not be a very valuable acquisition here, but at any rate we might easily go very much further and fare very much worse in getting a good herd of cows than to chose the Schwytzers, if we did not pay too dearly for them.

On the first page, Fig. 292, we present a group of Swiss Cattle, the property of John B. Eldredge, Middle Falls, Washington Co., N. Y. In the center is the cow Eva Burgi, imported by her present owner on June 1, 1885; dropped May 26, 1880, and bred by G. Burgi, of the Canton of Schwytz. Her record number is 248 in the first volume of the Brown Swiss Cattle Breeders' Association of America. On the right is the heifer calf Jennie Burgi, calved January 5, 1885, imported in her dam, Eva Burgi, 248. Her number is 264 in the second volume of the above Swiss herd record, not yet issued. On the left is the heifer calf Maggie Burgi, 262, imported in her dam, May Burgi. She was dropped Sept. 2, 1884.

LEADING STAFF FOR BULL.

MR. A. C. CARPENTER, of Dakota Co., Minn., sends us the design for a leading staff, shown at Fig. 294. A staff should always be used in handling an unruly bull. It is folly to do

Fig. 294.

without one. Too many lives have been lost in the attempt. The staff is made of hickory. The iron used to attach the harness to the hame is fastened to the wood as shown. To this is fastened a snap that can be easily caught in the bull's ring. Cheap, easily made and strong, is the best description we can give of this staff.

Dairy Husbandry.

FAULTY CONCLUSIONS FROM MILK COMPETITION.

THE London Live Stock Journal (Eng.) gives the annual report of the British Dairy Farmers' Association on the milking competition of some of the dairy breeds at the show of 1885, and the analyses of the milk, in which the "dairy" Short-horn, the Jersey, and the Guernsey are reported as follows:

	lbs. of milk per day.	Solids.	Fat.
55 Short-horns.....	42.89	12.68	3.62
42 Jerseys.....	27.34	13.70	4.17
23 Guernseys.....	27.43	13.87	4.52

The above-named paper then comments on the facts from the milk-yield stand-point per cow, and shows this conclusion, speaking of the Short-horn:

"Certainly no other breed in the country possesses such a record, and it goes far to prove this race to be the most profitable for the dairy farmer."

I am disposed to disbelieve conclusions when the statistics do not prove them, and so do a little figuring with regard to the above:—Premising the generally-conceded facts in cattle-feeding—to wit, that bovine animals consume food according to each 100 pounds of live weight, and especially so when they are devoted to the same work or purpose; and assuming that an average lot of cows of the breeds named weigh, Short-horns, 1,200; Jerseys, 800; and Guernseys, 950 pounds each, we have our data to proceed with, and see by the table that 100 pounds of Short-horn cow produces, per day, 3.57 pounds of milk; the Jersey 3.81 pounds; and the Guernsey 2.88 pounds. The milk of each cow, multiplied by the per cent. of fat the chemist found in it, shows that the Short-horn made 1.29 pound of butter per day; the Jersey 1.58; and the Guernsey 1.30 pound.

Applying the test according to weight of cow and weight of food, it shows that 1,200 pounds of Short-horn cow made 1.29 pound of butter per day; 1,200 pounds of Jersey cow made 2.37 pounds; and 1,200 pounds of Guernsey cow 1.64 pound. These are the cold facts from the table, as made by the officials, concerning 120 cows, and computing the breeds of cows at the average weight they are known to be. In giving the above figures it must be remembered they represent the butter oil of the chemist, and should have 15 per cent. of water added to each to represent butter as it is consumed.

Should not the London Live Stock Journal amend its conclusions, and wrestle with the conundrum whether it would rather have 3.81 pounds of rich milk, in pint cups, or 3.57 pounds of low-grade milk in quart measures, at the same cost of food; or 2.37 pounds of butter on a small plate, or 1.29 on a large plate?

This talking about so much yield per cow, regardless of the weight of the cow or of the weight of what she eats—though a mighty common thing with dairy writers and breeders of large cows—it is just as absurd as to compute the cost of potatoes, per bushel, by the size of the farm. Dairy farmers have been fooled by such stuff long enough.

It must be noticed that the cows in the competition were dairy Short-horn; those of the pronounced "milking strains," the bovine goddesses before which John Bull goes down upon his marrow-bones to worship; and presumably there are none of the breed better; but the pick of 55 show animals gave milk of which it took 28.90 pounds to make a pound of butter, even after 15 per cent. of water is added to the fat of the chemist. Such milk would be called skimmed at the American creamery or cheese factory; or if pro-rated with "scrub milk," the manufacturer or owners of scrub cows, would be robbed by the owners of Short-horns of such a "milking strain." BADGER.

A JOINT-STOCK CREAMERY.

THE Clayton Creamery, at this place, is owned by the farmers of the community. There are 400 shares, with a face value of $10 each. Five directors are chosen every year by the stock-holders. In the six months ending May 31 the creamery received 2,050,726 pounds of milk, or 11,267 pounds per day. From this 88,975 pounds of butter were made, or 4 1-3 pounds per hundredweight of milk. For this milk $24,592.10 were paid out, making $1.20 per hundredweight, or three cents per quart. All the expenses of the creamery, exclusive of milk, came to $2,839.66. Separators are used with satisfaction. Skim-milk is sold to patrons at one-third of a cent per quart. It is found better to have patrons bring their milk to the creamery than to gather the cream. There is less chance of adulterating the milk than the cream. A lactometer is used to detect the watering of the milk. For every degree that the milk test falls below the standard for the month one cent per hundred is deducted from the price of the milk. More cows are now kept by nearly every farmer. The house-wife is relieved of a great labor. Farmers learn to milk, and the sons relieve their mothers and sisters. Fields and meadows become more fertile. More attention is paid to breeding. Stock creameries open a way to more profitable farming in many communities. They are to be preferred to private parties. They may not, under all circumstances, be preferable to other means of dairying, but in some places they succeed admirably. Grain raising becomes more and more unprofitable. Good farmers say it costs one dollar to raise a bushel of wheat that must be sold for 95 cents or less. Have any of the RURAL readers tried to seed down their fields with a crop of oats? If it is possible to get a good "catch," would it not pay to raise corn—a silage crop—oats and hay in rotation, and let wheat go as long as we have to pay five cents or more per bushel for the fun of raising it? Is such a plan feasible? Let us hear from others. NADITOR.

Clayton, Pa.

A NOTE OF CORRECTION FROM MR. HENRY STEWART.

AS the statement made by T. D. Curtis in his Dairy Notes (page 430) to the effect that Prof. Stewart "has advocated the use of pulverized sugar with salt in making butter," may be credited to me by many readers of the RURAL, who have read articles of mine upon dairying, I beg to disclaim the credit of it, at least in the sense in which Mr. Curtis makes use of it. "Good wine needs no bush," and good butter needs no sugar; but I remember on one occasion, in describing the process of "milling" store butter for market, that this mixture of one-fourth part of white sugar with the salt was mentioned as being commonly used. "Necessity makes us acquainted with strange bed-fellows" as Trinculo said, and so it works the mischief in making up the mixed mess called store butter, which is gathered up in country stores from farmers' wives who trade it out. Some way of disguising the sourness, rancidity and overpowering want of sweetness in this various and varied butter is needed to make it salable, and no doubt the sugar, salt, pepper and other flavorings are justified. But merely mentioning the fact is not recommending it, and I beg Mr. Curtis to absolve me from any possible or supposed wrong-doing in this direction.

The Poultry Yard.

THOROUGHBRED POULTRY.

THE growing interest in thoroughbred poultry is by no means sectional, East, West, North and South having the same awakening to this pleasant and profitable business. I believe the United States have many advantages over other countries for the maintenance of poultry, yet the large amount of poultry products annually imported shows the need for the further development of poultry raising, and the RURAL shows commendable enterprise in promoting the work. Why should not every farm, village and suburban home be supplied with eggs from its own hennery? It is the small flock that gives the large profits. Poultry in large numbers are profitable, but not proportionately so. The man who can make a large flock yield in proportion to one of say, 10 to 25 in number, will be one of the most fortunate benefactors of the age.

Is there any specific for poultry diseases? Yes; cleanliness. It is a panacea for nearly every disease common to fowls; the ounce of prevention is worth a ton of all the remedies recommended for their cure. Of good breeds there are many, but he who ventures to name the best is certain to bring upon his head the wrath of many who are justly wedded to other varieties. After an experience, however, of upwards of 10 years in the care and management of poultry, with an eye ever open to the good qualities of the various standard breeds, I will name my favorite, and briefly state my reasons for believing it to be pre-eminently the practical business fowl of to-day. While a few may challenge my opinion, there are hundreds who will come to my support and bear willing and emphatic testimony to the high qualities of my choice.

That fowl is the Plymouth Rock. It is hardy—a quality that cannot be overestimated, yet one that is lacking in many breeds. In size the fowls of this breed are a happy medium between the over-large Asiatics and the small, restless Leghorns and kindred varieties. Their meat is juicy, and they take on flesh easily, so that they are well suited for table use. They bear confinement well, and possess in a high degree, that quality that forms three-fourths of the real worth of any fowl, being remarkable, often phenomenal layers. They are excellent for crossing with other varieties, their progeny always showing the marked characteristics of the breeds. I believe them to be fully entitled to the high position they have attained. A. C. K.

Cobleskill, N. Y.

Farm Topics.

CORESPONDENTS' VIEWS.

LAST Winter Salem, Merrimac, Diana, Alvey, Triumph and Jefferson Grapes were killed to the ground, when left on the trellis. Goethe, Norton's Virginia, Concord, Perkins and some other very hardy sorts had much wood and many fruit buds killed. The Ives and some of the Riparia family were left intact. Herbemont, Alvey and other semi-tender sorts, laid down in the Fall and simply weighted with a stone or brick—not covered in any way—did not lose a fruit bud. For strawberries, Cumberland, Longfellow and Sharpless were fine. Henderson is best of all for quality. W. L. DULANEY.

Warren Co., Ky.

THE quoted Japanese method of planting a tree by first filling the hole half full of water and then filling with soil, is not peculiarly Japanese. It is an old practice here, although perhaps less common than it deserves to be. It is often used by gardeners in setting out vegetable plants, strawberries, etc., in dry weather. But its advantages are not so much due to the supply of water to the feeding points of all the roots just where wanted, as to the floating of the fine soil into every interstice so as to completely prevent chambers of still air for the generation of destructive mould, and to the open condition of the surface soil, which is not compacted by surface watering—a practice which prevents the necessary entrance and circulation, in moderate stream, of health and growth-sustaining air. "W."

Tyrone, Pa.

FOR years my cabbages were spoiled by worms. Last season, '85, when the pests made their appearance, I put among the young cabbages a broad-mouthed fruit jar partly well filled with sugar and water. The millers went into the bottle, so that in 24 hours 125 were caught. I killed, perhaps, a dozen worms which had got on the plants before I put the bottle there, but scarcely one after that. I had good, clean cabbages for the first time for years. This season my bottles are in the garden getting filled with millers and wasps and my cabbages are clean.

Braintree, Vt. L. H. SPEAR.

THIS has been an extraordinary year for plant lice. The uncommon plum leaf aphis has swarmed on every plum tree. The cherry tree plant louse has badly injured cherries. The apple-peel fungus has covered everything. Trees that are struck with the blackened, burnt-up appearance have little or no fruit. Those with fairly healthy foliage are better. Trees that did not blossom did not escape a certain amount of the leaf attack. Trees blossoming the latest of all hold their fruit best.

Clyde, N. Y. W. X.

PEOPLE here are in no danger of starving because they can't sell bait to the Yankees. I have lived here 58 years and never knew anyone to starve yet. People go to the "States" to make money or because it is too "hot" for them here, but I never knew them to go because they couldn't get enough to eat up here. We are not compelled to sell bait in order to keep alive. D. S.

Manchester, N. S.

I AGREE with the RURAL that the Mikado and Turner's Hybrid Tomatoes are the same. I have them from both houses, and there is no difference. I also see very little difference between the Stratagem and Pride of the Market Peas. F. S. WILSON.

Des Moines Co., Iowa.

I HAVE an orchard of 1,300 fruit trees. Have good peaches. My trees came from Alabama and from Southern California. Those from Alabama are by far the best. We are 5,000 feet above sea level. Three years ago I started a carp pond: I procured small fry, two inches long, from the Texas State Fish Commissioner. We have now fish weighing from five to seven pounds and thousands of smaller ones. We find them equal to any fish for eating purposes. Johnson Grass makes, in my opinion, the best hay for my horses and cattle, better even than Alfalfa. Stock do not care much for it green, but they will quit grain for the hay. G. A. BREMER.

Presidio Co., Texas.

SOME of our best farmers about here are making big money raising English Blue Grass and flax. The two are sown together in the Spring. The flax is sold at $1.25 to $1.40 per bushel on board cars. The Blue Grass seed brings $2 per bushel, while the straw is a fair cattle feed and the stubble will support stock long after the prairie grass has died.

Lyons Co., Kansas. W. N. B.

YOU can judge a farmer by his scare-crows about as you can by his cattle or dog. In a recent trip through New England I found the fields filled with these would-be objects of terror. The most common object is a human effigy—"a live man stuffed with straw." These "men" vary from a fair representation of the *genus homo*, with hat and boots complete, to an old shirt hung on a stick. I doubt if crows ever mistake these objects for human beings. Some farmers put twine all around the field and tie pieces of cloth to it. I noticed a toy wind-mill with pieces of glass so arranged that they sparkled in the sun. Anything that will make a noise, like a bell or clattering sticks, will prove effective. A dead crow tied by the legs to a pole so that he will swing in the wind, will carry fright to the hearts of his companions. Early rising and a good shot-gun will prevent serious damage without any scare-crows. Tarring corn seems to have gone out of style. I doubt whether it pays for the trouble. If the present bird-slaughter goes on, the scare-crow question will surely be settled, for there will be no crows left to scare. The most ill-tempered corn-grower would rather let the crow steal some corn than to have him exterminated. I think the damage done by crows is largely over-estimated, yet it takes a very patient man to admit this when he finds part of his corn pulled up. For my part, I like crows

for about 11 months and 10 days in the year. The balance of the year—well, I wish they would let the young corn alone. J. H. G.

Queens Co., N. Y.

We send milk into the city. The greatest trouble we have is to keep the milk in hot weather. I put it down the well but it would not keep unless the can was plunged beneath the water. The foul gas just at the surface of the water caused the trouble. I had irons made to hook into the handles of a large milk can, put a windlass at one side of the pump house, ran a rope up to the roof, over two pulleys, then down to the well. I cut a hole in the side of the trap door so the hole can be closed when the milk is down the well. The milk now keeps well and the water is not injured. A good creamer would be fine for keeping milk. R. CRANE, JR.

Bucks Co., Pa.

I noticed an arrangement for pulling an animal out of a well in a recent Rural. Out here we must suit ourselves to circumstances. Oftentimes pulleys and stout mules are far away from the scene of action. Then we use what we call a Spanish windlass. Take a stout piece of timber, a round pole generally, bore two holes in each end and insert stout pins about four feet long. Crossed stakes are driven into the ground on either side of the well, and the timber placed on them so it will turn readily. The rope is fastened to the center of the pole over the object to be raised. Two men at the ends by pulling down on the sticks can easily raise a ton. Z. L. MARTIN.

Williams Co., Oregon.

PLAT EXPERIMENTS.

I was much interested in the remarks by Mr. Emery on plowing plats at Houghton Farm. Mr. Emery sees very clearly part way; but it seems to me that he does not see clear through the case. He says, "On all plots of ground which are to be differently fertilized, every possible condition, except that of fertilization, is made identical." This is first-rate. But does it follow that because we endeavor to make the conditions that are under control identical, all other conditions are thereby identical? Until by similar treatment we can secure duplicate results on different plats (and this has rarely been accomplished), it is evident that plat experiments are at best uncertain, and may be positively delusive. What the unknown conditions are, the wisest cannot always guess. It is rarely that we know the history of a piece of ground for more than a few seasons; while we know perfectly well that soil often shows the effect of particular treatment through many years. A ditch dug across a piece of ground, the site of a former fence, the corner of an old pasture where cattle were wont to pass their nights, or the site of an old barn often exerts an influence upon the soil that a generation of cropping is scarcely able to obliterate. Even if we know the history and character of the tillable soil, we cannot often know much of the sub-soil, and there are reasons for believing that this often exerts a considerable influence upon the crop. The fact should be more generally recognized by experimenters, that in plat experiments we must necessarily start with an unknown quantity. It is only through the use of a sufficient number of duplicates so that the variations may be assumed to balance each other, that results are to be depended upon at all.

Indeed, it is not so easy a matter to secure duplicate yields, under artificial conditions, which are, to all appearances, entirely alike. In the Spring of 1885, I had a quantity of garden soil, sand and muck thoroughly mixed, by repeated shovelings. I then sawed three 45-gallon barrels in two, in the center, making two large tubs of each. I then took five of these tubs, and bored four drainage holes in the bottom of each, measuring with the greatest care to have them equi-distant from each other, and from the outside of the tub, the distances being made the same in all the tubs. I next filled the tubs with the mixed soil, striking the top as we strike a measure of grain, and set them into the ground at such a depth that the staves reached about an inch above the surface of the soil. This was to prevent surface water from getting into the tubs. I then took five White Star Potatoes of very nearly equal size and shape, and cut off six single eye cuttings from the stem end of each, the first of which I rejected. The remaining five cuttings I made exactly of the same weight by paring off the heavier ones until all balanced with the lightest one, using a scale graduated to grains. I then planted five of these cuttings in each tub, so placing them that while each tub contained one cutting from each tuber, each tub also contained one second, one third, one fourth, one fifth and one sixth eye from the stem end of the tubers. The cuttings were planted by means of an instrument made for the purpose, which secured equality in depth, distance from each other, and from the sides of the tub. The plants were allowed to grow through the season, and when the tops were dead the tubers in each tub were weighed, with the following result: First tub, three pounds five-and-thirteen-sixteenths ounces; second, two pounds fourteen-and-eleven-sixteenths ounces; third, five pounds one-and seven-sixteenths ounces; fourth, three pounds nine-and-nine-sixteenths ounces; fifth, four pounds thirteen-and-fourteen-sixteenths ounces; giving a difference in the yield in different tubs of nearly a hundred per cent.

The difference was so striking that I determined to search for the reason. On lifting the tub that gave the heaviest yield, I discovered that two strong roots had penetrated through the drainage holes into the sub-soil. The one giving the next heaviest yield had put down a single rather slender root in the same manner. The roots in the other tubs remained inside, but it appears above that the yields from these were not similar.

I have given the details of this experiment to show how little we really know about the conditions that influence the growth of our crops. E. S. GOFF.

Geneva, N. Y.

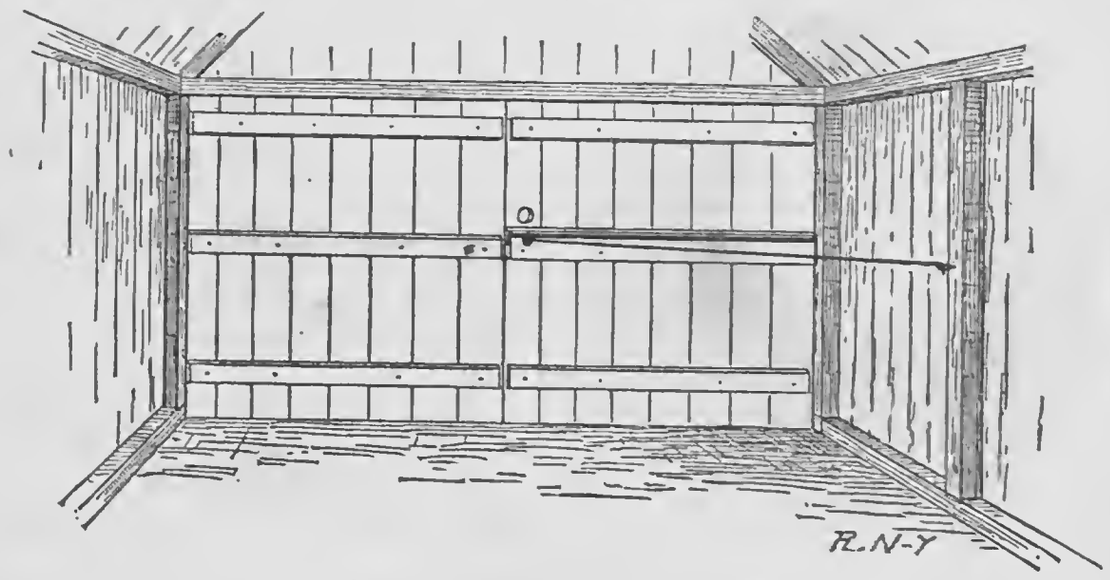
Farm Economy.

RYE AS A GREEN MANURE.

Experience with rye turned under; an unmanured piece gives results just as good; rye turned under, a fair mulch, but not a fertilizer; comparison of rye and clover roots and tops; chemical composition of both; rye returns only what it has taken; mechanical effects.

Noticing the inquiry of M. B. in a late Rural regarding the experience of others in plowing under rye to enrich the land, I am led to relate an experiment of mine some years since with much the same result. I was inclined to the belief that rye was valuable from that superficial kind of reasoning which we find in every agricultural paper at some time during the year, to the effect that no other plant will furnish so large a bulk to be turned under in so short a time, so surely and with so little expense. My land was growing poor from the effect of several dry seasons and the consequent killing out of the clover, and, like M. B., I sowed rye in the Fall in my corn the last time I went through. One field of 10 acres was all sown, so strong was my faith, but in another of 12 acres I only sowed eight acres, leaving four acres for the lesson a contrast would give me. These fields I plowed the next year for wheat. The rye was turned neatly under the first of June, just as it was fairly headed out, but before the grains had formed. All the field of 12 acres was plowed at the same time and treated alike in every respect. My faith was so strong that I could not help feeling sorry all the season for the poor four acres that had not been enriched by "green manure." The fields were sown to wheat in due season in the Fall, and to clover seed in the Spring, but I could never find where the "green manure" ended and naked fallow began by any perceptible difference either in color of leaf or size of plant. The clover made a good growth fortunately on both fields, but never was any better on the "manured" part than on the four acres that had received no rye treatment. I have plowed the fields several times since, but could never find any indication of any results from that application of green manure. The soil was sandy loam—just the character to be benefited, if we may trust the theories so often presented. This is not an individual failure here. I have never known any permanent benefit to come from the use of rye plowed under, except in the peach orchards along the shore of Lake Michigan. There the people depend upon it more for Winter protection than for the manurial value that is received from it.

This failure of mine led me to investigate into the causes which blasted such great expectations. I was satisfied that the benefit to be derived from green manuring must be sought in something beyond the bulk of plant growth thus furnished to the soil. There must be some affinity in the plant with the forces that nourish crops, to make it valuable as a fertilizer. This affinity clover posseses, while rye does not. Let us look at its value as compared with clover as a manural product. By actual test it has been found that the ratio of root to top in mature rye is as 10 to 135, and in mature clover it is as 10 to 15—the stubble in both cases is counted as part of the root. Here we have two-thirds as much root as top in the clover, and nearly 14 time as much top as root in the rye. As to the chemical composition of the roots of the two, this difference occurs. In an acre of the roots of rye, there are 62 pounds of nitrogen, and in clover 180 pounds. Of lime there are 69 pounds in the rye and 246 in the clover. Of potash there are 30 pounds in the rye, and 77 pounds in the clover roots. Of dry vegetable matter in an acre of roots of rye there are 3,400 pounds, and in clover 6,580 pounds. This from soil only 10 inches in depth. Where the rye roots extended only eight inches in the soil, clover roots were 16 inches long, so that in the computations, all the rye roots are included, and not all the roots for the clover plant. Now supposing both be turned under for a wheat crop, the rye will furnish 40 pounds more of nitrogen to the acre than is required by the wheat, but clover will give a surplus of 140 pounds. Of lime the rye fails to give enough within three pounds, while the clover leaves 174 pounds stored up after the wheat is grown. Rye, in my opinion, only pays back to mother earth, when it is returned as a green manure, its indebtedness for the pabulum required in its growth. I do not believe it adds anything to the fertility of a soil. A hard clay soil may be changed mechanically for the better by becoming more open and friable, but in my opinion the chances are rather in favor of a loss on sandy soil by turning under either rye, buckwheat, or corn. I know this is rank heresy, but M. B's experience is not an isolated case of damage. I know a field of 10 acres which was sown to corn, plowed under when it had begun to tassel and sowed to wheat. The owner believes that it actually injured the land, as the following crops were unusually poor for several years. There are plenty of such traditionary practices continually coming to the front, to wheedle the inexperienced. There is really no short cut to prosperity on a poor soil, and he who pins his faith to rye as a renovator will be sadly disappointed in not seeing waving wheat and corn following waving rye. A. C. G.



HANDY DOOR LATCH. Fig. 295.

HANDLING FENCE WIRE.

Mr. W. S. Smith, of Pleasant Valley, Ills., sends us the idea illustrated at Fig. 301. He found it very awkward for one person to unwind the wire from a reel when no team is at liberty to draw it. He had a two-horse cultivator, with hooks on the back ends of the double tongue to hold up the plow beams and shovels. He removed the beams, and, putting a strong round stick through the reel of wire, placed little blocks on each side of the reel to keep it from interfering with the tongue in turning over. The stick was then placed across the hooks, and one end of the wire fastened to the end post of the fence. The cultivator was drawn by one man with less work than two men would expend in carrying a reel between them on a stick.

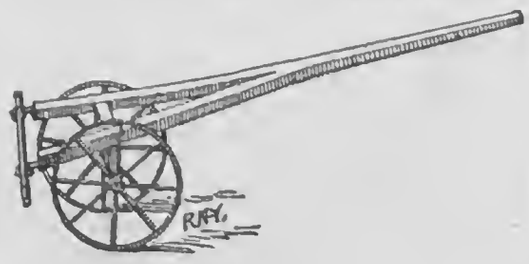


Fig. 301.

HANDY DOOR LATCH.

Mr. A. Freed, of Lancaster, Ohio, sends us the sketch illustrated at Fig. 295. He has the latch in use and is well pleased with it. Where doors can be mounted on pulleys and rolled aside on a track, the latch will not be useful. There are many places where no room can be found for track and pulleys, and where the doors must be hinged and swing out. In such cases this latch will be found strong and convenient. A rod of five-eighths inch iron is bent at right angles at each end; the sliding end three-fourths of an inch, and the fixed end 1½ inch. The fixed end is dropped into an eye bolted to the studding, as shown at Fig. 296, F, with the bent wire at E. The length of the rod varies, being the hypothenuse of a right-angled triangle, of which the door is one side. The free end slides in a groove or guide on the middle arm of the door. This is shown at Fig. 297. Boards are nailed on the arm, A, projecting three-fourths of an inch above it and raised at the top so as to form the guide. B is a notch into which the rod falls when at rest, thus holding the door. When the door is opened, the rod is raised out of its notch, and as the door opens the rod slides in the guide till the door is in line with the wall, when the rod is entirely out of the way, as shown at Fig. 298.

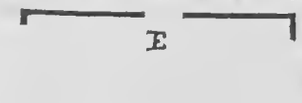


Fig. 296.

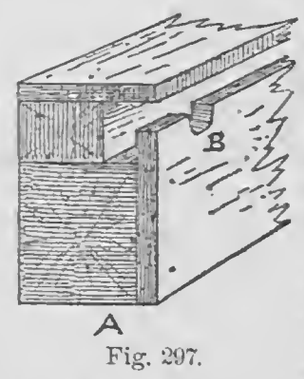


Fig. 297.

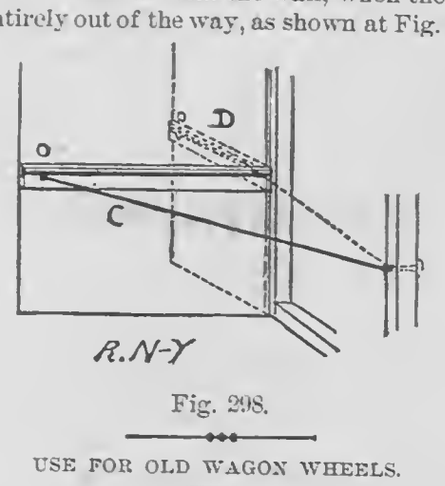


Fig. 298.

USE FOR OLD WAGON WHEELS.

At Fig. 300 is shown how an old wagon wheel can be turned into a revolving stand for drying milk pans, etc. The spokes, hub and rim are all painted red, while the tire is painted white. The axle is then buried in the ground so deep that the wheel comes to about the hight of a common table. Pans, jars and pails can be placed upon this in the sun. It can be readily turned about so that any article can be reached without moving.

Fig. 300.

SMOKE-HOUSE.

The smoke-house shown at Fig. 299 does not cost much and is easily made. Common barn siding, six feet long, will answer. The sides

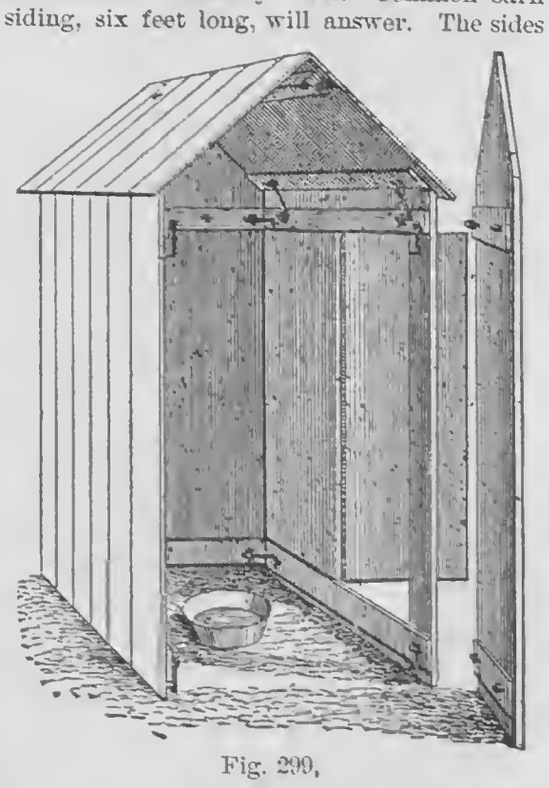


Fig. 299.

are made of any length desired. The siding can be nailed to stout cleats. They are then fastened at top and bottom with staples and hooks, as shown in the illustration. The top is formed of two pieces, and is hooked together in the same way. A small door at one side can be hung on leather hinges. A pan or small

brick arch at the bottom will hold the fire. This can be put up and taken down at short notice. It will not be in the way when not in use, and you can lend it to the neighbors if you desire so to do.

Pomological.

THE DUMAS PEAR.

BELLE EPINE DUMAS is the long French name for this pear. In size it is medium; in shape, pyramid and obovate, gaining its full swell about midway between the stem and calyx. At maturity it takes on a brilliant yellow tinge, with usually a red cheek. Its flesh is white, melting and pleasantly aromatic. The portrait, Fig. 292, with a cross-section at Fig. 293, is correct. The pear ripens gradually through November and December. Except for its lateness, it would not be sought because only medium in size. The Seckel, the Ott, the Dearborn's Seedling are the only small pears that people hunger for. Only large and luscious pears, as a rule, find ready purchasers. W. H. NOBLE.

Bridgeport, Conn.

THE DUVAL PEAR.

I FULLY agree with Hon. Marshall P. Wilder, the venerable head of the American Pomological Society, as to the quality of this pear—good to very good. The very good comes in in this, as in a great many pears, by the care you give to the growing, to thinning on the tree and to keeping. Not every pear shows, like the Seckel, excellence in its very nubbins. A good many only gain their best estate when thinned so as to average full size and get a complete development. Long keeping and reluctance to decay are qualities which should always call for choice in good or very good pears. These the Duval has equal to almost any one I know. It never takes on that inveterate rot to which some pears are "as prone as the sparks to fly upward." W. H. NOBLE.

Horticultural.

RASPBERRIES IN 1886.

HIGHLAND HARDY Raspberry showed the first ripe fruit this season on June 26.

MICHIGAN EARLY followed two days later. This proves to be hardy at the Lake Shore, and fairly productive. The fruit is of medium size, and of rather bright color, but not, so far, earlier than at least half a dozen others. In flavor it is poorer than almost any other variety I know. I see no reason to be flattered by the prefixing of Michigan to the name; nor do I understand why this is done, since, so far as I am informed, it is unknown in this State, coming to us from the East.

QUEEN is a variety without a sponsor, so far as I am informed. Although not attractive in color, it is of good size and excellent flavor, producing an abundant crop of very perfect berries. A desirable berry for the family garden.

SURPRISE (history unknown), Crimson Beauty, Superb, Brandywine, Cuthbert, Turner, Reder all ripened nearly together within the next three or four days.

HANSELL I shall abandon, as not earlier with me than several others, while it is comparatively unproductive, small, and not of high quality.

SUPERB may be confidently recommended for the family garden, for persons who desire high quality, since it is very large and abundantly productive, although too dark in color for market, and the berry is inclined to crumble in picking. It produces plants but slowly.

SURPRISE and CRIMSON BEAUTY are very similar in both plant and fruit. The former, however, has the young shoots clothed with purple spines; while those of the latter are greenish-white. In fruit, both these are quite similar to Herskine.

SOUHEGAN, Tyler, Doolittle, Hopkins, and several others among the cap varieties, have, this season, ripened very nearly together; while Shaffer is two or three days later, and Gregg several days later yet.

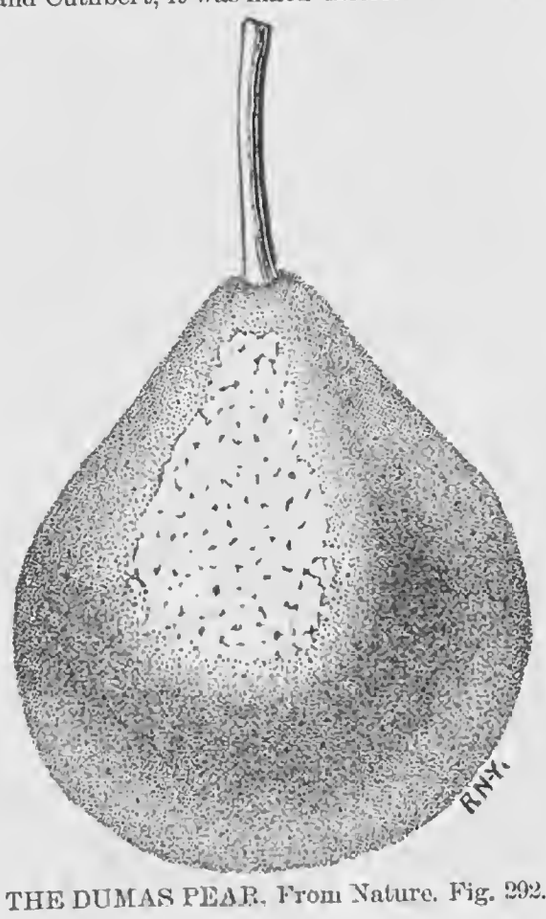
Of all the newer candidates for popular favor of this class, I regard the Hilborn as the most promising, whether for home use or market. Almost as large as Gregg, it is clear, glossy black, in flavor rich and juicy, and decidedly less seedy than any other black-cap I know, with the possible exception of the old Miami. Beebe's, like all the other "goldens" I know, although very productive, becomes offensive when a little overripe, on account of its dirty brown color, as well as its loss of flavor. Brinckel's Orange and Caroline are, so far as I am aware, the only exceptions to this rule. T. T. LYON.

MARLBORO RASPBERRY IN CONNECTICUT.

THE experience with the Marlboro on the Rural Grounds is similar to my own. Being one of the original shareholders of the berry, I received with the young plants from Mr. Caywood, half a dozen extra plants with earth on the roots. They were planted out with care and bore some extra fine fruit the next season, and made a fine strong plant growth; even more vigorous than that of the Cuthbert. In the season of 1884, what few plants we left for fruiting were well loaded with fruit that ripened early, was of fine large size, bright color and firm.

Last year the plant growth was weak and sickly, and the fruit crop a failure. This season the plant growth is even poorer than last, and, side by side with a dozen or more red varieties, new and old, the Marlboro is the poorest of the lot, the plant growth not being equal to that of the Hansell, which is a very poor grower.

Mr. C. C. Hort, of Southington, reports that the Marlboro is in much the same condition with him. And on a recent trip through the West, I failed to find a single plant of it showing the health and vigor of which it gave promise two years ago. Mr. C. A. Green and some others report that it is doing remarkably well near Rochester, New York; while F. H. Hillenmyer, of Lexington, Ky., told me that, side by side with Turner and Cuthbert, it was much inferior to either.



THE DUMAS PEAR. From Nature. Fig. 292.

I am sure we must look beyond the Marlboro for a valuable early market red raspberry.

South Glastonbury, Ct. J. H. HALE.

Miscellaneous.

THE DARK SIDE OF FARMING.—IV.

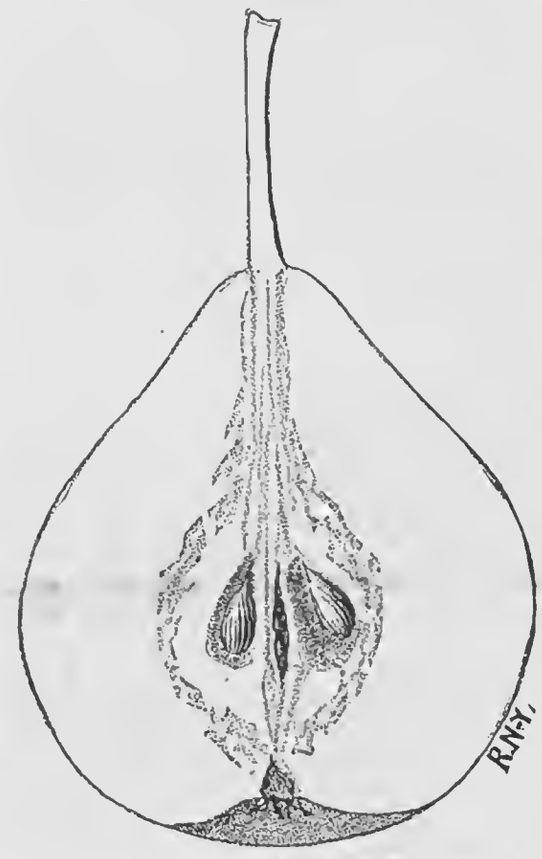
HENRY STEWART.

"ALL delays are dangerous" says one author, and another says "delays have dangerous ends." This is especially true of farming—of all work, of sowing and reaping, and in regard to live stock and the dairy, and all domestic arrangements. Disappointment, loss, vexation and infinite trouble come to the man who procrastinates, and his family suffer with him. Surely a man of this character is a misfit, and being unfitted to his work and place, everything goes on harshly and disagreeably and brings misery. There is no darker side of all the infinitely varied sides of life than such a one as this to the man who lives in this manner. To him and his it is

"Dark, dark, dark, amid the blaze of noon,"

and everything in nature—the blooming Spring, the kindly, genial sun, the gentle rains, the singing breezes, the Winter's snows, the storm which howls out of doors and makes the warm, well-lighted and snugly-draped parlor of the successful farmer all the more cheerful and pleasant by the contrast, and which pleases this man when he thinks of his work all done outside and his stock all warmly sheltered in good barns and beds and well fed, and he draws to the blazing fire and sees with pleasure and contentment his happy, beaming wife, and the girls and boys, with their books and papers, all enjoying the warmth and the bright light in their happy home, while the snow beats musically on the window-pane and rattles on the shutters—all these make the other man wretched, simply because they come to him when he is unprepared, and interfere with his belated work. When he wants dry weather for his spring plowing, it is rain ing. When his neighbors have their hay and crops harvested, and are rejoicing in the showers which refresh the shorn meadows and renew the verdure, he is lamenting for his over-ripe hay, drenched and rotting in the field.

Do we not know of such men? Is the character overdrawn? Alas, no. "'Tis true, 'tis pity, and pity 'tis 'tis true" that thousands of farmers live in unhappiness and poverty simply because they are behind in everything they undertake. They are not lazy or indolent. On the contrary, some of them work harder than any other men; they double their own loads, while they weaken their ability to bear them. Just now as I write I can look over the field of a neighbor who is mowing down weeds in his field of young corn. They have grown so with the excessive rains that they hide the young plants. His late-planted corn last year was caught by the frost. He took his seed out of the crib; frozen while damp in the crib, it did not grow; he replanted and replanted, and when the neighboring early planted fields were worked and hoed, his corn was not above ground, and then the rains, which pushed on the former, only retarded his, and his seed rotted in the ground, and he had a poor stand, and the weeds grew until to-day he is mowing and raking them off to find his rows of corn. What an excess of labor, and what a poor reward he has for his quadrupled work! He is dispirited; you cannot get this man to laugh; the lines of his



THE DUMAS PEAR. Cross Section. Fig 293.

face are drawn down, and he looks careworn and unhappy. He lives on the dark side of farming, and no sunshine brightens his heart and lightens his labor. He is a good, honest, truthful, kind-hearted man, for whom one cannot help being sorry, and the pity of it is that most of these easy-going, unhappy men, who are their own enemies, really evoke our sympathy, and while we see their faults we are sorry for them and want to advise with them and remonstrate with them. And this we should do by a word in season, by kindly expostulation, and especially by example and act, which

"Some forlorn and shipwrecked brother,
Seeing, may take heart again."

THE MEAT SUPPLY OF NEW YORK.

HAVE you any clear idea of the amount of stock slaughtered to supply the demands of a city of a million and a quarter population like New York? Well, the receipts of live stock at the slaughter houses here last week, exclusive of stock for export, amounted to 9,274 beeves, 7,213 calves, 35,223 sheep and lambs and 27,290 hogs, besides a vast quantity of poultry; and last week the receipts were unusually small, owing in great part to the torrid heat, as butchers do not like either to stock up heavily or to kill in very warm weather, and shippers, therefore, hold stock back so as not to glut the market. Large quantities of meat are also shipped in the carcass from near-by slaughtering points; but the heaviest shipments come from Chicago. Four large houses contribute nearly the whole supply from this source. Swift & Co., slaughter weekly in Chicago for the New York market 2,500 steers; Armour & Co., 2,000; Hammond & Co., 1,500, and Nelse Roberts about 1,000. These figures are given by William Ottman, one of the most extensive and best posted butchers in the city. Swift & Co. supply meat both to retailers and consumers (at different prices, of course); but the rest deal almost exclusively with local butchers, most of whom sell the Chicago dressed meat as home-killed. They have all large depots with huge refrigiators in different parts of the city; though the headquarters of the trade are at Washington Market.

The National Consumers' Meat Company is a new competitor for the dressed meat trade here. It proposes to deal directly with consumers without the intervention of middlemen, and by saving the profits made by these it professes to be able and willing to sell beef to the public at a price 20 per cent. below the figures of any other dealer. It is the agent of a large number of cattle companies and barons on the Western ranges, and it proposes to deal exclusively with the producers of the West and the consumers of the East. Oliver Sumner Teall, President of the company, is also president of nearly all the Western companies that supply the meat. General Manager Hammond has been extensively engaged in the dressed meat trade for years, and the company has already in successful operation 12 large shops in Baltimore, and has leased for five years three large depots in this city, intending to open more so soon as the growth of the trade shall demand the extension.

The prices will not vary with the season, as the Company believes that a fixed rate the year round will prove more satisfactory to its patrons. The Company will also supply mutton, lamb and pork as well as beef, and also poultry and everything else found in first-class butchers' shops. The concern has already constructed enormous slaughter-houses for the use of the combined cattle companies at Medora, Dakota; Kansas City, Mo.; Silver City, New Mexico; and Victoria, Texas. The cattle will be taken from the ranches of the various companies to the slaughter-houses, and the dressed meat will be promptly forwarded to this city in refrigerator cars, the transportation taking from five to eight days.

It is said by the large butchers here, as well as by the representatives of the Chicago shippers of dressed meat, that the new enterprise must speedily fail. There are now three different grades of beef in this market, and they say the far Western article will be a fourth. The first is the very finest grade of meat from the corn-fed steers of Missouri, Illinois, Southern Indiana, Kentucky, and Ohio. This meat is quoted in to-day's market at as follows: Prime sirloins, 24c. per pound; prime roasts, 18c. to 20c.; corned rumps, 12c. to 14c.; *a la mode* pieces, 14c.; chuck roasts, 12c. to 15c.; briskets and navel corned, 5c. to 8c. These are the meats supplied to the first-class clubs, hotels, restaurants, and private families. Ordinary retailers furnish a second-class article to boarding-houses and families, charging from 10 to 15 per cent. lower rates. Swift, Armour, Hammond, and Roberts, of Chicago, sell their refrigerator beef lower still, and the new company proposes to undersell these 20 per cent. All the company's beef will be from grass-fed range cattle, nearly all coarse brutes of the Texan type. The meat, it is said, will be stringy, with little fat or very rich matter, and will never find its way to first-class tables. Again, it is asserted that Swift, Armour, and the others, in spite of the enormous quantity of stock they buy, work on a very small margin (not over $1) per head, and that if the new company undertakes to undersell them, it must do so at a loss, which will prove ruinous in a short time. Last Tuesday, however, the company started two of its depots here, and will open the third within the week, and the managers stoutly maintain their ability to fulfill their promises.

The competition in the Western dressed meat is serious matter for the stock raisers of the Eastern and Middle States. Hitherto the discrimination against the trade exercised by the railroad companies has prevented, to a great extent, the depressing influence of the business on the prices of Eastern and Middle States stock, still a very considerable lowering of prices in the East is due to it; while it does not appear to have in the least raised the prices of Western stock. If the new company really fulfills its promise to sell meat at 20 per cent. lower than the other dressed meat dealers, the depression must soon tell on the prices of at least the poorer classes of Eastern and Middle States cattle, and to a smaller extent on the figures for other kinds of stock, for a low price for beef is sure to force down the prices for other meats also. This will be the case not in this market only, but in those of all the other places now supplied with Western dressed beef; for the increased competition is pretty sure to extend to these also ere long.

CATALOGUES, ETC., RECEIVED.

PETER HENDERSON & Co., 35 & 37 Cortlandt St., N. Y.—A summer catalogue of celery, cabbage, cauliflower and pot-grown strawberry plants, with a list of turnip seeds, and etc. The celery plants will be supplied in any quantities up to August 25; the pot-grown strawberry plants up to September. The new strawberry Crimson Cluster is offered for the first time. It has been fully described in the

R. N.-Y, as the "King Cluster of Durand," the originator. Judging by the claims made for this new berry, it is little short of perfection in every way. The catalogue will be mailed to all applicants without charge.

COTTON-WORM AND BOLL-WORM.—Fourth Report of the U. S. Entomological Commission.—This voluminous and finely illustrated report is entirely devoted to the history and habits of the above-mentioned insect enemies of the cotton plant. The various remedies known to science are well described and illustrated.

JOURNAL OF FISH CULTURE.—The first number of the above publication is at hand. It is to be published each month. Office at Philadelphia; price, $1.50 per year. The paper is issued under the auspices of the American Carp Cultural Association and edited by Milton P. Pierce, who is to-day the best posted man in the country on matters pertaining to carp culture. The new publication has a most admirable opportunity to fill a somewhat neglected field. Thousands of farmers are interested in the culture of carp, and reliable information as to the best conditions for propagation and the quality of the fish, is apparently hard to obtain. The new journal ought to do much good.

DEPATMENT OF AGRICULTURE.—Report for 1885 from Commissioner N. J. Colman, Washington, D. C.—This volume contains the reports of the Commissioner, Botanist, Chemist, Entomologist, Statistician and other officials connected with the Department of Agriculture. To the agricultural student, the facts, figures and experiments recorded are of great importance. The volumes are intended for general distribution, and farmers should avail themselves of the opportunity offered of seenring a copy of the report by applying for it to the Congressmen for their respective Districts or the Senators for their States.

WINTER CARE OF HORSES AND CATTLE. By T. B. Terry, published by A. I. Root, Medina, Ohio. Price 40 cents—This is one of the brightest and most readable additions to farm literature that we have ever read. It ought to be read by every farmer in this country. The subject is one of the most timely of all farm topics. It is always seasonable. When we are not actually engaged in handling cattle, we are busy preparing for the work. Both the raising and the feeding of stock-food are subjects of vital importance in modern agriculture. It is hard to say which is most important. Mr. Terry is a successful farmer. His success gives him confidence and enthusiasm, which crop out in the pages of this little book. We feel that these ideas are from the head of a man who "knows what he is talking about." He knows that stock must be kept comfortable in Winter. How true it is that thousands of farmers try to batten up cracks in the stables with grain and hay. We have decided opinions regarding the man who can sit near a comfortable fire without any thought of his cattle, that are shivering in a broken and windy barn. Mr. Terry discusses the use of stanchions for confining cattle. He concludes that cattle are satisfied with this method of fastening when they are well fed and carded, kept well bedded on a tight floor, and made warm and comfortable. Where they are placed on a slippery floor with great cracks in it, and where the wind comes in on them, the stanchion is a barbarous affair. It simply holds the poor brutes in the cold, where they cannot move about and warm themselves. The objection frequently urged that cattle cannot lick themselves when confined in a stanchion he would obviate by a thorough carding. For dairy cows he would have stanchions with a slightly sloping floor, and a gutter two feet wide and eight inches deep, that will hold manure for several days, so that in stormy weather the stock need not be turned out every day while the stable is being cleaned. There is far more satisfaction in carding a nice lot of thrifty cattle than there is in running the card over poor stock. Carding pays on cattle as well as it pays on horses. Anything that adds to the comfort of an animal adds to its value. Regularity in feeding is absolutely necessary to insure success. When the farmer is in the habit of throwing down a forkful of hay every time he goes to the stable, the cattle will become uneasy and jump up every time a person enters the barn. If they know just when their feed is coming they will be satisfied to wait till the proper time comes. Contentment is everything. Mr. Terry seems to think that the ordinary "chores" around the barn require more skill to do properly and well than almost any other branch of farm labor, and yet the work is always shirked, and the idea is general that any cheap boy, working for his board, is able to attend to the labor. Speaking of Sunday work, Mr. Terry says if you cannot get to church and give your stock their usual care and feed, you had better stay at home. If you hire some one to do the work and keep him at home, you do no better. We are advised to "speak to a cow as we would to a lady." Kicking cows are trained to evil doings by abuse or harsh words. A member of the church in Ohio boasted that when his cow kicked he took a trace out of the harness and pounded her till she begged. When cows come home from pasture on the run, with a dog at their heels, and when at milking time one can hear the sound of a milking stool falling on their hips and ribs, Mr. Terry does not wonder that "dairying does not pay." We would gladly print half the book if space would permit us to do so. We can heartily recommend it to our readers as the work of a thoroughly practical, humane and gentlemanly farmer.

What Others Say

FEEDING EXPERIMENTS.

PROF. SHELTON, of the Kansas Agricultural College, conducted a series of interesting experiments last Winter. The results are contained in the advance sheets of his yearly report—just issued. The main object has been to present facts without much attention to underlying theories or to the opinions that might reasonably have been formed. Prof. Shelton rightly states that these facts will prove useful just so far as they receive intelligent application. The unthinking adoption of experimental facts is as bad as the thoughtless rejection of the same. The professional experimenters should suggest and work out the groundwork that farmers may fill up with facts and observations from farm practice. This idea appears to us sound. Farmers do not care for opinions, but they desire simple facts which they may test to their own satisfaction.

Two years ago Prof. Shelton sought to determine, by feeding trials, the relative feeding values of corn meal and corn-and-cob meal. This question is of great importance in Kansas, in view of the vast corn crops of the State, and the narrowing margin of profit in feeding. Two years ago it was found that cob-meal gave the best results, taking cost into consideration. Last year there was a slight difference in favor of the clear corn meal. Two circumstances helped to bring about this result. The Winter was particularly long and severe, and the steers fed were in far better condition than those fed during the previous test. Two years ago the cattle were a lot of thin, half-grown natives, while last year high-grade Short-horns were fed. In the first lot the gain was largely in growth of bone and the coarser parts, for which it would appear that the cob-meal was well suited. The use of cob-meal in feeding a large herd of cattle, not as an experiment, but for practical results, has satisfied Prof. Shelton that it is a valuable food. It is more completely digested than the clear corn; it is eaten with as great relish, and cases of diarrhœa were practically unknown; cattle were seldom "off their feed" when fed upon the cob-meal. In order to obtain the best results, the cobs and grain must be ground into a powder. Too many feeders break the cobs into coarse pieces and then condemn the feed because it gives poor results. The great objection to the cob-meal lies in the fact that it is almost impossible to obtain a mill to grind it properly. Of five different mills tried at the Kansas College, not one has given complete satisfaction. The power that could shell, fan and grind 200 pounds of clear grain in 20 minutes, could grind only 77 pounds of cob and grain in the same time, and the mill was so greatly heated that a stop was necessary. If a mill can be produced that can economically reduce the whole ear to a meal there seems no doubt but that the use of cob-meal will be greatly increased.

IN feeding cooked corn and raw corn to pigs the advantage was decidedly with the latter. The corn was cooked by steam in a barrel, to which a pipe was run from the boiler. It was so thoroughly acted upon by the heat that each grain could be easily crushed between the thumb and finger. During the coldest weather the cooked corn froze in the troughs, often before the pigs could eat it. This objection has always been noted in cases where cooked feed has been given in cold and exposed pens or houses. It required 7.5 pounds of the cooked corn to make a pound of increased weight, while 6 3 pounds of raw corn produced a pound of increase. Every detail of the experiment goes to confirm the opinion that nothing was gained by cooking the food; that the trouble and expense were given for nothing. The result might have been different with younger animals, where the gain would have been chiefly in growth, but there is little evidence to prove this belief. Experience during this experiment shows that corn, while an easily accessible fattening food for mature animals, is, for young growing pigs, literally a starvation diet.

EIGHT good eight-months shoats were turned into a pasture of an acre and a half. About one-fourth of the pasture was covered with Alfalfa. The remainder was Orchard Grass with a slight admixture of Alfalfa and Red Clover. The pigs were almost "fat" when turned in. They lost in 25 days 125 pounds. The grass would keep them alive, but it would not "hold" flesh made from corn. When fed two pounds of ear corn daily apiece the pigs gained. This experiment shows that Orchard Grass is not profitable to use as a hog pasture. That point has long been admitted by hog raisers. The pigs ate the Alfalfa and clover to the ground, but the Orchard Grass was always luxuriant and abundant. The Alfalfa was so closely grazed that it was entirely destroyed, only a few plants showing life the following season. Where an ample range is permitted, however, there will be no danger from this trouble.

WARMING the water for dairy cows gave most satisfactory results. Common well water raised to a temperature of 80° was used at first. After a few days it was raised to 90° and even to 100°. The cows at first were reluctant to drink the hot water. It was found necessary to delay watering until the cattle were very thirsty. After two or three trials the cows became greedy for the warm drink, and would rush eagerly to it. A total increase of over eight per cent. in the milk product was noticed as the result of drinking warm water. One bushel of coals burned in an economical boiler was found to be ample fuel for heating the daily drinking water for 25 cows. Prof. Shelton suggests a most excellent use for that ever abundant farm product—woody fiber. It is found in spoiled fodder, stalks, cobs, etc. It is of small importance as food, but when in a suitable condition to burn, may be used in heating the drinking water. It is cheaper to warm an animal in this way, than to try and warm it by feeding the more expensive animal foods.

"IS THERE DANGER OF BREEDING ANIMALS TOO EARLY?" asks the National Live Stock Journal. In our desire for the progeny of valuable animals, are not their reproductive organs too often over-taxed, injuring the parents and weakening the offspring? It is often contended that the natural desire for reproduction is sufficient evidence of the fitness of an animal to perform that office. Of course, this must be the rule in the state of nature; but Nature is prodigal in her processes. How many seeds does she scatter for one that bears a mature tree or plant! But our animals are not in a state of nature, and this fact is too often lost sight of in drawing inferences from the condition of wild animals as to what should be the treatment of tame ones. Our domestic animals are subjected to a sort of pot-house growth and development, and judged by the natural standard, everything about them is immature. They come unnaturally early to maturity because man finds his profit in their precocity. Man, not Nature, is largely a law to our domestic animals, and there is no doubt there is danger that in his desire for gain he runs a risk of breeding animals too young, and thereby gradually weakening the constitution and reducing the size.

OLEOMARGARINE NOT WHOLESOME.—We learn by a telegram from Albany, N. Y., last Thursday, that the forthcoming report of Dairy Commissioner Brown goes far towards establishing, on the authority of Dr. R. W. Clark, Chemist of the Department, a constitutional right of the Legislature to enact a law prohibiting the manufacture of oleomargarine and spurious butter. The Commissioner says that the oleomargarine manufacturers made the law a nullity by persuading the courts to decide that the Legislature exceeded its authority when it forbade the manufacture of imitation butter, holding that its manufacture had not been proved prejudicial to health. Now victory, he says, is within the grasp of dairymen, as the Chemist of the Department has pronounced oleomargarine "unwholesome and dangerous to health." In this report Mr. Brown will say: "First, that oleomargarine is indigestible; second, that it is insoluble when made from animal fats; third, that it is liable to carry the germs of disease into the human system; and, fourth, that in the eagerness of manufacturers to produce their spurious compounds cheaply, ingredients enter into its manufacture which are detrimental to the last degree to the consumers' health."

NOTHING COMES FROM MUMMY WHEAT—We do not hear very much in these days of mummy wheat and barley, but many people firmly believe that the seeds of both plants found with Egyptian mummies, and supposed to be 3,000 or 4,000 years old, will sprout up if put in the ground. A few years ago what was claimed to be such wheat was commonly sold as a curiosity, and we believe that many purchasers succeeded in raising a small crop from it. Prof. Bentley, who has recently commenced a series of lectures on the physiology of plants, asserts most emphatically that no grains which with certainty have been identified as contemporaneous with the deposit of the mummified corpse have ever come to life. In cases where the so-called mummy wheat has germinated it has been introduced into the coffin shortly before or at the time of discovery of the body. Prof Bentley does not name a limit to the time during which seeds retain their vitality; but he thinks it is not generally over a few years.

THE BUREAU OF ANIMAL INDUSTRY.—The Department of Agriculture has obtained from Congress an appropriation of $100,000 for carrying out the provisions of the act of May 29, 1884, establishing the Bureau of Animal Industry. The Commissioner is authorized to use any part of the sum he may deem necessary or expedient, in such a manner as he may think best, to prevent the spread of pleuro-pneumonia, and for this purpose to employ as many persons as he may deem necessary, and to expend any part of the sum in the purchase and slaughter of diseased animals wherever, in his judgment, it is essential to prevent the spread of the disease from one State to another. The expenditure of last year's appropriation was limited to matters authorized by existing legislation (which confined the work mainly to investigation, of which there had been an ineffective excess), whereas the present appropriation may be expended, in part, to carry out the conclusions from the past investigations, by slaughtering animals where the disease is liable to spread from one State to another. While a considerable minority of those interested in stock raising believe that the dangers from contagious cattle diseases have been grossly exaggerated by the Bureau of Animal Industry for selfish purposes, and that the appropriation of even half the above sum would be excessive, the majority of cattle owners think the labors of the Bureau praiseworthy and even the present appropriation altogether insufficient. Speaking for these, the Breeder's Gazette says the present legislation is not enough. There is nothing said about the purchase and destruction of animals which have been exposed, but are not yet diseased, whose destruction is necessary to prevent a recurrence of the disease: there are no provisions relating to condemnation; no additional authority to secure inspection or to enforce quarantine, and, finally, there is but a meager allowance with which to carry on the work.

LIVE STOCK EXPORTS.—The Treasury Department report of the exports of live stock products for May, shows the export of 42,090 cattle for the past five months, against 58,047 head during the same period of 1885, with a total valuation this year of $4,049,319, against $5,806,682 last season. Of beef products, there have been shipped during the first five months of the year $1,361,672 in value, against $1,962,843 last season; fresh meats show a decline from $4,692,012 to $3,710,266; salted and cured meats show a falling off from $1,685,228 to $914,584, and tallow from $1,455,750 to $881,240. Pork products also show a marked decline, throughout the entire list, of from $12,934,838 to $10,256,520 in bacon; from $3,033,303 to $2,261,929 in hams; of from $2,430,437 to $2,292,577 in fresh and salted pork; of from $9,362,906 to $8,472,229 in lard. The totals show an aggregate falling off in exports of beef, pork and dairy products from $40,245,765 to $32,305,791. Part of this falling off is, of course, due to diminished values, but a large proportion is the result of a diminished movement.

WHICH MAY REMIND YOU.

THE Elmira Farmers' Club, as reported in the Husbandman, prefers Silver-hull Buckwheat. Several trials with this and the common side by side, have turned largely in favor of the Silver-hull. Very thorough tillage is the best security for a full yield. Prepare the land as soon as possible.....

AN important point was made by the club that all preparation for grain should precede sowing by a few days at least, so as to give the soil a chance to settle. There is no doubt about it.....

DR. GOESSMAN asks this question: "What is the use to cut up Indian corn for fodder while in bloom and containing only 13 per cent. solids, when, by leaving it till ears are formed and the kernels are beginning to glaze, we can get 25 per cent. solids instead?".....

THE best time to cut timber is said to be in July and August, says the Weekly Press. A correspondent of the Iowa State Register has been examining the wood cut by early settlers

in the West at every period of the year, and the summer-cut has been found most lasting. The practice of the best European foresters is to cut late in June, while the bark will yet slip, and to peel the bark as high up as the log is needed for timber. The leaves are left on to further aid in drawing the moisture from the cell structure of the wood. The log is sawed 10 days after falling and dried out as rapidly as possible. In August and Winter and early Spring the wood is full of starch stored to aid next year's growth, and this helps to hasten fermentation and decay.....

THE King Cluster of E. W. Durand took the first prize at the New York Strawberry Exhibition as the berry of "greatest comparative merit." This has been purchased by Peter Henderson & Co., and is now offered for sale under the name of Crimson Cluster. It is said that every yard of row the past season yielded a quart of fruit, and that the pickers at two cents a quart averaged 25 quarts per hour or $5.00 per day.....

THE U. S. Dairyman says that the disadvantages of the ordinary system of setting milk in shallow pans for raising cream are that a longer period elapses before the skimming is completed, too much space is required and in Summer the milk becomes sour before the whole of the cream is raised.....

A MINNESOTA dairyman thinks he can winter a cow on six tons of corn silage, and that he can secure the silage for 40 cents a ton. This gives $2.40 cents for wintering a cow.....

THIS is well to know in calculating the size to build a silo, says the Dairyman. A cow should be fed from 50 to 60 pounds of silage a day, if she receives no other fodder with her ground food. A cubic foot of silage weighs 50 pounds. From this data you can readily figure out the size of the silo needed.....

PROF. SHELDON, the eminent English authority on dairy matters, calls attention to the fact that if dairymen and farmers are to be subjected to the unfair competition of imitation butter, they will be compelled by force of circumstances to follow the bad example and mix in the margarine themselves. That will be the inevitable result everywhere, comments the Breeder's Gazette, if this manufacture is not prohibited, and in a few years there will not be a pound of genuine butter for sale in the markets, and everyone who desires it will be compelled to keep his own cow or go without it. Now the general public has a right to buy genuine butter if it wants to, and the proposition to tax these imitation butters out of existence is clearly justifiable on the broad ground of public protection.....

MR. WILLIAMS, in the Orange County Farmer, speaks of a Long Island (N. Y.) farm of 140 acres under the highest cultivation. The receipts from products were last year $8,000, which will be exceeded this. The stock is wintered largely on silage. The farm supports 24 cows, eight horses and a yoke of oxen. The milk is shipped to New York—no butter is made. Mr. Alburton, the owner, keeps 100 swarms of bees. The farm is now in part given to 14 acres of potatoes, three acres of tomatoes, apple and pear orchards. Sweet corn, cabbages and garden seeds are extensively grown. There is an acre of oats and peas raised for soiling, which, the writer says, contained more food than he ever saw on one acre. The amount of manure made is large, and yet large quantities are bought.....

ACCORDING to the Rural World 60 cows patronizing a small creamery, made in January 992 pounds of butter at a cost of $165.85 for food, consisting of hay, bran, corn-meal and corn in the shock. Thus the butter cost 16 cents six mills per pound. At the same creamery six cows fed on silage, chiefly, with hay, bran and corn fodder, made 158 pounds of butter at a cost of $13.02, so that the butter cost only 8¼ cents a pound. A single case is decisive of nothing; but even one such instance should start inquiry, and a number should contribute pretty strongly towards conviction.....

SOME dispute has arisen as to the keeping qualities of butter made from cream separated by the centrifugal machines. Various tests during the past season prove that if the separator is properly used, and the cream properly handled between the separator and the churn, the butter will be firm and keep at least as well as the very best creamery butter. The machines, however, are liable to fly to pieces and the butter is liable to turn out bad, unless the operator has carefully studied how to handle the machine and the cream.....

THE cheese suitable for the English market, writes T. D. Miller, from England, to the Ontario Dairyman, Canada, must by no means be such a stiff, dead and lumpy article as English merchants complain of as coming from Canada. A loose, free-cutting cheese is what's wanted, and if Canadian factories continue to make stiff cheese, he has no doubt "States" cheese will run the Canadian out of the market. As in other matters, the great thing is to find out what the market wants, and then supply precisely that.....

EPIZOOTIC abortion among cattle has been spreading so steadily in England of late years, especially in the northern counties, that it is sought to have the malady included among the others under the Contagious Diseases Act. The great trouble is that the bulk of the farmers would not report cases, because the news might stop sales of aborting cattle and young stock from the farms where the complaint may exist.....

THE great reduction of the amount of oil in linseed and other cakes, due to the use of improved machinery and chemical processes in expressing the oil (known as new process,) has caused considerable differences of opinion in regard to the influence of such reduction in the value of cake as food. Several practical feeders in this country maintain that, as the amount of albuminous compounds is proportionately increased, the value of the new-process cake is greater than that of the old, which contained more oil. Some even say that linseed oil is not a food at all; but a purgative. Sir. J. B. Lawes, however, who has studied the subject of cattle feeding closely in experiments and practice, says: "I should certainly myself be disposed to place a considerably higher value upon oil than upon albumen, and when I purchase cake for my own use, I select that which contains the most oil."....

LIVE stock insurance has been largely practiced in several States. It has entirely collapsed in Maryland, however, by the recent bankruptcy of two organizations, and the failure of a third to report to the State Insurance Commissioner within the time allowed by law. The Commissioner attributes the failure to the fact that people were induced to insure on misrepresentations, and good faith was not kept with them. After "a fair trial of two years," a Pennsylvania company also says that "despite an honest and earnest effort," the directors "are unanimously of opinion that live stock insurance on the assessment plan cannot be made a success." There is a warning in a failure of this kind of insurance in these two States..

WHEN hogs are eating clover or green stuff, give them access to charcoal or ashes. Charred corn-cobs make excellent charcoal. Dry corn is good feed with clover, as it balances the ration.....

ACCORDING to the Live Stock Record, of Kansas City, farmers who lately marketed grass-fed hogs there didn't find the venture satisfactory. They looked well, but killed abominably; and as a result were shunned by all buyers, and were taken only at ruinous prices. The Record says that while clover is a growing food, like all grass it makes watery flesh, and slaughterers say that the shrinkage in this class of hogs is something enormous. Hence, before sending to market, all hogs should be topped off with a little corn to firm up their lard and harden their flesh. If farmers will bear this in mind they will save themselves many disappointments and no little amount of money in shipping hogs the next two months.....

THE Texas Stockman, while expressing its belief that neither cattle nor sheep will ever be so high in Texas as they have been, declares its conviction that in less than three years the live-stock interests of that State will be upon a more satisfactory basis than ever. The Breeder's Gazette thinks this a reasonable prediction since Texas has much more to gain by the adoption of better methods and the breeding of better stock than she can possibly lose through any falling off or obstruction in the Northwestern markets. All that Texas need do is to produce cattle suited for the world's market instead of for the wild ranges.....

A CORRESPONDENT of the Tribune claims that although cows will eat sorghum greedily, it causes a loss of milk and butter, so that it is better feed for fattening animals than for milch cows. Is this so?.....

"WHAT would he thought if we were to walk over our bread and butter?" asked the witty Sidney Smith, speaking of cows grazing on pastures. Doesn't the cow's tread often destroy a good deal of feed by poaching on wet pastures?.....

Everywhere.

TRANSCONTINENTAL LETTERS.—LVII.

MARY WAGER-FISHER.

The Sacramento Valley; large and small ranches; Senator Stanford's Vina ranch; its management; Marysville.

THE Sacramento is one of the largest and most important interior valleys in California, and we rode through the entire length of it by rail in daylight, seeing it in its least attractive phase—after the long drought of the Summer, and before a drop of rain had fallen. Leaving Red Bluff—which is at the head of navigation on the Sacramento River—on the morning of Oct. 28, we rode for some time through what are called the Red Lands, from the color of the soil, and which produce fine wheat without irrigation. We were told that ten years ago this land was regarded as worthless—another illustration of the futility in calling any land worthless, simply because its value has not yet been ascertained. The level fields were dotted with oaks, and to the north rose the isolated peaks of Lassen Butte. The farm-houses were white, with green blinds, and a water-tower with a wind-mill formed a part of the out-buildings of every ranch. Horses were frequently seen pasturing in the wheat stubble—always tall, as the wheat is "headed."

As we desired to journey on the east side of the river, we left the "through train" for San Francisco at a station called Tehama, where the railway branches for each side of the river. At this point we boarded a freight train which had a caboose attached; but we preferred seats in the baggage-car, from which we had an excellent outlook, and after a party of Indians had left the rear platform, we took possession of that, and were as finely stationed for sight-seeing as we could have desired. (In most, if not all, the cis-Rocky Mountain States, the Indians are allowed to ride free in the cars, but are not permitted in the passenger coaches. This free riding is in consideration of certain privileges accorded to the railroads by the Indian Reservations through which the route lies.) We rode that day as far as Marysville, which town we reached at nightfall.

The Sacramento Valley is probably from 40 to 60 miles wide, and so far as we could see, it was one stretch of level land. Some of the largest and finest farms in California are here, and large ranches are generally regarded as hurtful to the best development of the State. They indicate large financial resources, and "respectable yeomanry avoid regions of immense wealth." A small farmer occupies a social position in comparison with the large farmer, very similar to that which the "poor white trash" in the South enjoyed in comparison with the planter. A small ranch consists of from 200 to 300 acres; a large one numbers its thousands of acres. One of the most notable of the large ranches we rode through is called Vina, and is the property of ex-Governor, now Senator Stanford, and consists of about 37,000 acres. I believe it is a part of the property which has since been included in his magnificent endowment for the Stanford University, which he has founded in memory of his dead young son. Nearly 4,000 acres of it are planted with grapes, which are made into wine on the premises. The products of the ranch are diversified: there are wheat, oats, barley, alfalfa, potatoes and fruit. The entire property is supplied with irrigating ditches, and the farming is of the finest character. Apple and fig trees are planted along the ditches. This ranch was in the line of devastation made by the grasshoppers last Spring, and we saw acres of wheat and of vineyards that had been stripped; but many of the vines were re-leafing. One of the railroad men said that the "hoppers" impeded the trains, their crushed bodies on the rails making them too oily for the car wheels to move on them. The damage done by them was very great and was fully reported in the newspapers at the time. Wheat is produced at an average yield of 30 bushels to the acre, and was selling at that time at what was regarded as a good price—$1.36 per 100 pounds. The wheat is thrashed in the field, put in sacks and lies on the ground until sent to market—as there is no danger of rain. On Mr. Stanford's ranch, I was told, are employed two superintendents, 75 whites, and from 200 to 300 Chinamen. The plowing is done by horses—steam plows being generally discarded—and the plowing we saw being done was by means of a sulky plow drawn by six horses. Four to six horses were used in harrowing. The land is valued at $100 per acre and taxed at a valuation of about $30. We were assured that the tax was invariably higher on small than on large ranches, which is probably true. Board fences are used and locust largely planted for shade trees, while the native oaks, beautifully scattered over the valley, have in large part been allowed to stand.

What is true of Mr. Stanford's ranch is equally true, with modifications, of all the other large farms we have seen in the State. So long as these large possessions remain intact the country will not increase in population where they are, and any movement that tends to their division is regarded by the people with satisfaction. Of course, in time they will be broken up, as the law of primogeniture does not hold in the United States, and the sons of rich men are not proverbial for their retention of riches. I am told, too, that farming on so large a scale has not been found profitable, and the recent numerous failures among farmers in the rich and fertile San Joaquin Valley are in large part attributed to too much land, the payment of interest on mortgages, which have eaten up the land itself.

Except for the remoteness of habitations, nothing could appear more prosperous and beautiful than this valley, under such admirable cultivation—"orchard fruits and fields of golden grain." But it is a general verdict that irrigation breeds malaria where the heat is so intense as in these inland valleys. At nightfall the dusky landscape was illuminated by burning stubble, which looked like so many prairie fires. Everywhere the dust lay thick, and however others may like rainless Summers, I am very free to confess that "I and my house" like a land of summer showers. It was half-past six when we reached Marysville, which town, as everybody knows, was a great point in the early mining day, when 50 stages daily left it for various "diggins." It lies between the Yuba and Feather Rivers, and is dyked to preserve it from the inundations of these streams. We had a fairly good dinner, and the waiter told us facetiously that the cook was a Frenchman from Hong Kong! He also ventured some comment on the weather, saying that the mercury rose in the Summer in the house to 120°, and that the water they drank came from the Feather and was very good, except when the "slickens" got into it, and "slickens" were washings from the mines. Before retiring, we each took a quinine pill, as we generally do when in malarious districts, and mine, as usual, stuck in my throat, while the laddie washed his down with laughter!

RURAL SPECIAL REPORTS.

Canada.

QUEBEC, Province of Quebec.—Owing to an early Spring, crops were put in fully two weeks earlier than last year, and although May was rather cold, all crops are looking remarkably well. Turnips and potatoes large crops. Hay and oats promise large yields. The pasturage is better than for many years, consequently milk and butter are plentiful and cheap. All garden truck doing well and much earlier than last year. Wild strawberries were in market June 25. Sharpless are of fine size. The blue plum and apple crops promise large returns. W. M. M.

Colorado.

LONGMONT, Boulder Co., July 5.—The prospects for crops in my immediate neighborhood are: corn, not so good by 10 to 20 per cent.; wheat, short by 20 to 30 per cent.; oats, ditto by 20 to 30 per cent.; barley, about on an average; potatoes, short by 40 to 50 per cent; garden truck, an average; apples, abundant; pears, not any. No peaches grown in this part of Colorado. Grapes and all small fruits full crops; hay ditto. R. S.

Indian Territory.

CADDO, Choctaw Nation, July 5.—Corn is very promising: acreage much larger than last year. I think the general average will be about 30 bushels per acre. Wheat and oats not good, owing to too dry weather last Spring—about one-fourth of a crop. Irish potatoes, half crop; sweet potatoes, very promising, and they are grown extensively here. Garden truck, such as cabbage, beans, peas, onions, etc., good; plenty for home consumption. Apples, peaches, pears, half crops. Grapes, more especially wild grapes, grow in abundance, and a better prospect I never saw. There is but little tame hay grown here, as we have such an abundance of wild grass. Stock of all kinds look fine and fat. Cotton very promising at present, though the stand is not good, owing to dry weather in Spring. Sorghum is grown to some extent—enough for home consumption, and it is very promising. F. B.

Michigan.

BEAR LAKE, Manistee Co., July 3.—We are having the worst drought for the time of the year, that has ever been known in this part of the country. Grass is entirely ruined, so there will be no hay, and wheat will be less than half a crop. Oats cannot hold out much longer against the scorching sun that sends the mercury up above 90° in the shade. Potatoes and corn planted three and four weeks ago, are still in the ground as dry as when first planted. Six weeks without rain mean hard times, not caused by "over-production" this season. Butter is worth 12 cents per pound, and eggs 12 cents a dozen; potatoes, 30 cents a bushel; oats, 45 cents and wheat 74 cents. M. E. A.

Minnesota.

VIVIAN, Wascca Co., July 5.—Soil deep, moist and rich. The latter part of April was warmer than usual. Crops put in well and

early. Weather in May as good as could be. Most of the time since June 1 it has been dry, hot and windy. Wheat leaves are rusting. Wheat, oats and barley must be light. All crops are suffering for want of rain, especially potatoes. Alaska Peas no earlier than American Wonder. Angel of Midnight Corn now ready to tassel; two feet high. Dent corn twice as high and as forward. Corey sweet corn silked July 29th. S. K. O.

Nebraska.

RUSCOE TOWNSHIP, Buffalo Co., July 9.—Our Spring was very backward. We had an unusual fall of snow on March 27th and 28th, and on April 2, 3 and 4, which remained for two weeks. We had considerable rain in April, and but little in May. In June we had no rain worth speaking of. We are just passing through a very severe dry spell, and unless we soon get rain the growing crops will be materially damaged. The following estimate of the crops in this section is given as compared with the condition at the same time last year:—Rye 100per cent.; barley 90 per cent.; wheat 80 per cent.; corn 70 per cent.; hay 70 per cent.; oats 50 per cent.; potatoes and garden truck about the same as last year, except that they are suffering from lack of rain. If we have plenty of rain this month the hay crop will reach 100 per cent. B. B. M.

New York.

ELMIRA, Chemung Co., July 3.—No rain to wet anything more than the surface since the first week in May here. All crops are suffering from drought. Corn came up very unevenly, owing to this cause and poor seed, and the stand is poor. But few fields in which there are not a great many missing hills. The use of corn planters has not proved favorable with me this season. That covered with a hoe came up much better. Wheat, with the exception of grain injured by floods on the river bottoms, came through the Winter better than last year and started finely, but has not done well since, and a great deal of it is very short in growth. The best pieces I know of are of Diehl-Mediterranean. Oats are heading out very short and will be a poor crop unless rain comes soon. Rye good; barley looks well, but there is not much of it. Early potatoes badly injured by drought; bugs plenty. Early in the season there was a good prospect for a hay crop, but it has all vanished and the crop is the poorest in many years. It is a rare thing to see a heavy meadow even on the river bottoms. It has been a hard season to set tobacco, of which there is a great deal sown about here. Where they have succeeded in getting a good stand of plants it is looking fairly well, and there is time enough yet to make a good crop if the balance of the season is favorable; good prospect for apples.

J. D. M.

North Carolina.

WALNUT COVE, Stokes Co., July 7.—We have had almost continual rain for nearly six weeks. The land has not been dry enough to plow since May 10. Crops have been "worked in mud," and some of the corn has not been plowed the first time yet. The excessive rains in May almost ruined the wheat crop with rust and scab, reducing it at least one-half, and now the continued rains since harvest have sprouted in the stack not less than one-third of the grain, consequently our farmers are asking, "Where will we get seed wheat?" We have had more rain during May and June of this year than we have had since "the rainy Summer of 1832." My patch of Johnson Grass stood a test of 10 degrees below zero the last Winter, and is now a finer growth than last year. I have a nice little patch of Angel of Midnight Corn, and I am going to try for the premium. R. P. McA.

Oregon.

AMITY, Yamhill Co., July 1.—Weather dry but pleasant. Have had a very cool, backward Spring. Winter wheat promises a full yield on over an average acreage. Rye the same. Spring grain of all sorts will be light on account of unusually dry, windy weather. A great deal of late potatoes are rotting in the ground after planting. Other garden vegetables look healthy. Fruit will not be so plentiful as usual. Some varieties of pears and plums will be almost a failure, while others will bring a full crop. The same may be said of apples. Cherries are abundant. Hay will be short, the pastures appear good, and stock looks well. Wheat is worth 60 cents; oats, 33 cents; rye, 50 cents; barley, 40 cents; new potatoes, 50 cents. J. C. R.

SHEDD, Linn Co., July 2.—We have had an unusually dry season; consequently crops are a little short. Fall wheat, 75 per cent of last year's crop; acreage about the same. Oats about the same as last year in yield and acreage. Barley a light crop—not much raised in this part of Oregon. Not much corn raised here—only for roasting ears. Only one-fourth of the usual crop of potatoes planted, but they are looking well. Gardens generally look well; apples, half a crop, owing to late frosts; pears, full crop; plums and prunes, short crops; cherries, full; small fruit, such as blackberries, raspberries and currants, heavy crops. Owing to the low price, only about a third of the hop yards were cultivated. Timothy hay, one-half crop; chess or cheat hay, a large crop. Grapes, very full, and looking fine. Spring wheat, 75 per cent. acreage, 65 per cent. of last year's. We are having a fine rain to-night. I fear it will spoil a large amount of hay if it continues long. P. W.

WALLA WALLA, Walla Walla Co., July 3.—The outlook for wheat—the main crop of Eastern Oregon and East Washington Territory—is not nearly so good as last year at this time, not having had sufficient rains. Many fields are looking fine, and upon the whole there will be an average crop, but last year we had an extra good yield of wheat and barley. Potatoes look well. Corn good—better than last year. The Angel of Midnight is growing as if it had wings—it stands from five to six feet tall already. Fruit prospects ahead of last year's, especially for pears, plums, peaches, etc. Some of the early strawberries were injured by frost, but the later varieties yielded well. Raspberries and blackberries about the same. Our Evergreen blackberry vines are loaded with fruit about two-thirds green; some of the young plants have made a growth of over 10 feet this season.

C. L. W.

Texas.

DENISON, Grayson Co., July 4.—Denison is the largest city north of Dallas in this State. It has continued to grow, and has been quite lively all through the strike and dull times. It is now putting in $200,000 water-works, as well as electric lights, and has recently secured the two other long lines of railroad to be speedily built across the Indian Territory, in addition to five trunk lines already centering here. It has gas, an ice factory, two telephone exchanges, and two telegraph companies, round houses, car factories, a cotton compress, foundry, machine shop, etc., and a magnificent system of graded public schools. The place has 12,000 population, and pretty much all modern city airs and conveniences. T. V. M.

Wisconsin.

GREENBUSH, Sheboygan Co., July 6.—We have not had a good shower since April 25. Not much wheat raised here. Oats and barley can't be more than half crops. Some corn has not come up yet; what was planted early came up well, but is now rolled up, owing to the dry weather. Unless we have rain soon, we will not have any corn or potatoes. Frost killed the cherry blossoms, and the dry weather is injuring small fruit. Apples are dropping. The thermometers stand 106 in the shade; wind in the east and south most of the time.

A. M. S.

THE FARMER'S CLUB

ANSWERS TO CORRESPONDENTS.

[Every query must be accompanied by the name and address of the writer to insure attention. Before asking a question, please see if it is not answered in our advertising columns. Ask only a few questions at one time. Put questions on a separate piece of paper.]

A NEW INSECT ENEMY OF WHEAT.

A. S., Level, Md.—What is the green, brown-headed worm (specimen inclosed) which has been devastating many fields hereabouts? It began its destructive work soon after the grain was formed and continued it till the stalk was hard. It ascended the stalk to a point near the head, where it cut the stalk quite through, allowing the head to fall to the ground. Then, climbing until its head and half its body rose above the headless stalk, it waited until the breeze brought another stalk within reach, which was eagerly grasped and instantly beheaded. Thus a single worm is capable of doing much damage. A field of mine which several weeks ago promised to yield 20 to 30 bushels, is injured probably to the extent of one-fourth. Our oldest farmers are unacquainted with the insect or its work.

ANSWERED BY PROF. A. J. COOK.

The specimen received was so blackened and obscured by decomposition that I am sure of only one thing—that it is a slug, or the larva of a Saw-fly. It is undoubtedly the same that is devastating the fields of Pennsylvania and New Jersey. It is a new enemy of the wheat plant. The cutting habit so well described as characterizing this larva wherever it works, is the more remarkable as it is not a characteristic generally of Saw-fly larvæ. As will be noticed, this is a relative of the currant slug, the raspberry slug, the cherry slug, and the pine slug; yet by all the above insects the foliage is eaten, and not simply cut off. Without doubt it is this same insect that is referred to in the Country Gentleman of June 24th by Prof. J. A. Lintner, as seriously injuring the wheat in New Jersey and Pennsylvania. It was spoken of in a late issue of the Philadelphia Press as doing great damage to wheat in or near Gettysburg, Pa. It seems very probable that it is an insect which has previously destroyed or fed upon some wild plant, and now has changed its habits. That it will prove transient and not a permanent pest, is to be hoped, but not expected. We find such changed habits usually come to stay.

RAISING A COLT BY HAND.

T. G. L. Essex, N. Y.—In raising a colt by hand, how long is it necessary to sweeten the milk? Will skim-milk from a Moseley & Stoddard creamer do after he is a month old? He has had a quart of new milk reduced with one-third water, to which is added a teaspoonful of sugar, six times a day, the last feed at 9 p. m. He is in perfect health and growing fast now when three weeks old. Last week he had two quarts of new and skim-milk mixed, with a little water added.

ANS.—The colt will do well fed on milk from which the cream has been taken, as all young animals will *grow* better on foods more nitrogenous than carbonaceous. The removal of the butter fats, therefore, does not make the milk unsuitable for the young colt, but fits it to make more bone, muscle and tissue and less fat. Fat is not necessarily a condition of health or perfect growth, and if there be too much of it, it is an evidence of a diseased or unnatural condition. With the skim-milk, as the colt has thus been fed, the sugar should be continued, giving less each day for a week, and at the same time teaching the colt to eat a gill of a mixture of wheat bran, oil meal and oats, three parts bran, two oats and one oil meal. As the colt grows older, increase this food, to two quarts a day, fed twice a day. The colt should be on a grass plot where it can get grass to eat, or be kept on a ground floor with plenty of bedding—leaves or straw—and be fed cut grass green. Colts are often weaned from the mothers when three months old, and left to live on grass alone, and they are considered fit to sell and are weaned when four months old. They must not be confined so as to be deprived of plenty of exercise. This promotes health and appetite. When running in fresh clover or good grass, a colt will eat considerable, and there is no food better for it aside from milk, as it is adapted to all the wants of nature; and when the young animal is old enough to eat all its system requires, there is no need of any other food to promote a good growth. After four weeks, the colt can be fed more milk at a time, and the times of feeding may be reduced to three—morning, noon and night—and between these feedings it should have the grass to pick at and the feedings of meal. It should not be exposed to rain-storms, and will do better if it has a shelter to go under at will, if it is nothing more than a rough shed.

GAS LIME.

D. M., So. Meriden, Conn.—Gas lime is not constant in composition and no satisfactory value can be placed upon an unanalyzed sample. When applied fresh, even in small quantities, it is deadly to plants. It becomes harmless by exposure to the weather. Six or eight months would serve to free it of the sulphuretted hydrogen which it takes from the gas. It will never be as valuable as pure lime. The best way to use any quantity will be to expose it to the air, under cover, for several months, stirring and working it over occasionally. It can be applied broadcast in the Fall, and left exposed until Spring.

Miscellaneous.

Subscriber, Newbury, Ont.—Kellogg's Royal salt is an excellent butter preservative. It may not do "all that is claimed for it," unless the utmost care is taken and all conditions for success are perfect; but it is far superior to the common salt used in so many of our dairies. We have used Kellogg's salt with success. A small piece of butter salted with this preparation, was placed in an ordinary cellar with a piece of cloth placed over the top of it. At the end of six weeks it was pronounced by three persons to be as sweet as ever. A part of the same churning salted with common salt and placed by the side of the other, was rancid. 2. We should prefer the wooden tubs. 3. It is impossible to say how many pounds of milk "from a herd of common cows on pasture" ought to make a pound of butter. There are cows and cows and pastures and pastures. In the reports of the tests of some famous Jerseys, it is claimed that a pound of butter has been made from six pounds of milk. With the majority of cows the limit is much nearer 30 pounds. A cow that will make a pound of butter from 20 pounds of milk is a good one.

R. C. M., North Hector, N. Y.—Such information "as a farmer's boy ought to obtain of Oregon and Washington Territory before settling there," can hardly be obtained without a personal investigation by visiting the section in which one is thinking of settling. For such general information as may give a person an idea of what part of the country it might pay him to visit, it would be well to write to the Professor of Agriculture, State Agricultural College, Corvallis, Oregon. If he cannot supply needed information, he will be able to give the name of the person best able and most likely to do so. There are certainly many excellent agricultural openings in both Oregon and Washington Territory.

G. W. W., Morrisonville, Va.—1. Who grows beans extensively in N. Y. State? 2. How near together should White Navy Beans be in the rows, when drilled between rows of corn that has been "laid by"? 3. What is the inclosed wild flower?

ANS.—1. A. B. Cleveland, Cape Vincent, N. Y. 2. This question is submitted to our readers. 3. Asclepias tuberosa. This is the Butter-fly Weed, a native of this country. If it were a foreigner it would be cultivated, as it well deserves to be. It may be found in English gardens.

F. H. V., (no address).—1. The Associated Fanciers, Philadelphia, Pa., deal in rabbits and fancy stock of all kinds. 2. The Practical Rabbit Keeper, price $1.50, may be obtained through the American News Co.

Subscriber.—Pilling's milking tubes are made of different lengths, but not of different sizes. The regular length is 1¾ inch, and there are special lengths from 2¼ to 4¼ inches.

DISCUSSION.

J. M. D., WINONA, MINN.—When the first colony settled in this region there was a family that took the "Water Cure Journal," and, like Tom Sawyer's aunt, who changed Tom's medicine every time she received a new "Journal," they tried to follow its teachings. Among other things they learned that salt was "unnecessary and even injurious to stock." Of course, they believed it. The result was that their cattle broke into a man's shanty and ate a lot of hams and shoulders, and into a house to steal a bag of salt.

"C," RUSSELLVILLE, TENN.—"C. S.," of Highland, N. C., page 418, either thinks too much of himself or keeps closely at home. He thinks the South lives from hand to mouth, and he is the only man there with a barnful of hay, etc. Over here, in the East Tennessee Mountains, we find our hands and mouths entirely independent. Our barns are full of hay and our cribs are full of corn. "C. S." must live in a mighty poor country, and his "barnful of hay" must look lonesome. He had better feed his hay to some of the poor racks of cattle he sees about him, and move over here into a good country.

C. H., BERGEN Co., N. J.—L. C., in last RURAL, admits that salt is needed in the system. Why should he say so emphatically "I am right, but of course you are all wrong?" He is like the one juryman who called his 11 fellows "obstinate." The only point "L. C." makes is that too much salt is bad. What intelligent human being thinks differently? The great difference between "L. C." and the rest of the world lies in his estimate of the size of the dose of salt that will produce injurious results. Of what value is his experiment upon himself unless he can show that he is stronger, heavier or healthier than he was before he quit using salt? He does not state this, nor does he state that he is exceptionally strong and vigorous, as he ought to be, if his ideas are correct. We do not hear that the trainers of athletes discard salt in moderate doses. Why do not our anti-salt friends attempt to prove that in instances where men or animals have performed remarkable feats of strength or endurance, no salt was eaten beyond what was contained in the food? Such evidence would be worth a dozen pages of the testimony of the "hundred persons" who will not take salt from the cellar. Practical cattle-men and feeders know well enough that stock eat and drink to better advantage when there is a constant supply of salt before them. We do not raise cattle for the purpose of seeing how little water they can drink. We want them to eat all they will and drink all they want. The object is to crowd all the food into them that they can digest. No man has yet known an animal to take too much salt when the substance was placed constantly before it.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING July 17, 1886.

T. W. L.—E. S. G.—F. J.—T. B. M.—M. E. A.—C. W. G. J. S. B.—W. J. C.—R. W.—C. C.—R. H. B.—T. D. C.—S. C.—D. H.—S. C.—D. W.—R. P. McA., thanks.—T. R. W.—J. E. M.—T. H.—S. K. O.—W. H. O.—L. S. E.—G. W. W.—C. L. W.—H. C. U.—R. S.—A. D. H. S.—S.—J. B. O., thanks.—T. R. W.—R. P. M. A., thanks.—J. M. O.—R. S. C.—A. M. C.—H. S.—P. P.—R. C.—W. Mc. D., goose berry rec'd.; no letter.—R. P. V. H.—W. F.—N. A. D., thanks.—S. T.—F. A. E.—C. A. Mc. D.—J. M.—O. H. A.—W. Mc. D.—S. P.—R. P. V. H.—W. Mc. D.—E. S. F.—R. V.—R. S.

THE
RURAL NEW-YORKER.
A National Journal for Country and Suburban Homes.

Conducted by
ELBERT S. CARMAN.

Address
THE RURAL NEW-YORKER,
No. 34 PARK ROW, New York.

SATURDAY, JULY 24, 1886.

It appears, according to a note from our trustworthy correspondent, Mr. Falconer, that the much-talked-of Deacon Lettuce is simply the White Summer Cabbage Lettuce. So it goes.

A NURSERYMAN near New York writes us that it will not do to sell seedlings of the Japan Chestnut. They are not reliable. He is grafting from one he fruited three years ago because it is so large and productive. "It beats all," he says, "for bearing, grafts set the past Spring being full of blooms."

SEE if any of the plants of your best potatoes bear fruit (seed-balls). If so, mark and gather them when ripe—just before the vines begin to die. They may appear green and immature, but the seed is ripe and will grow. If these seeds be planted *now* in boxes or frames, tubers will form before severe frosts. They may then be preserved in sand until next Spring.

THE presents which were given for clubs of subscribers gave, so far as we can learn, better satisfaction this year than ever before. We mean that every one who works for the RURAL shall be well paid. Many small clubs have been sent in, so many in fact that the list of presents was exhausted before all our agents could be supplied. To them our new premium list, soon to be issued, and which we think will contain the most liberal propositions we have ever made to our agents, will be available. We prefer that they should wait for this, as we are confident it will prove far more satisfactory than last year's list. If any agent has been overlooked, or if perfect satisfaction has not been afforded, we shall be glad to know of it, that the matter may be rectified.

THE R. N.-Y. showed, as the results of careful experiments made six years ago, that a large proportion of weevil-eaten peas will not germinate. It is now time to gather seed peas for another year, and we are reminded to tell our readers that the seed may be preserved without material injury if treated in this way: Place the seeds in a pan or other vessel. Pour a few drops of bisulphide of carbon (which may be bought at any druggist's for a few cents) upon a piece of cotton or sponge, and place this in the vessel, which must then be covered. Let the seed remain in this for a day or even two, shaking the vessel two or three times meanwhile. The carbon will kill the grubs (larvæ of the weevil), which up to this time have not done material injury to the peas. We tried it last year upon a dozen lots of seed peas, and, when planted last Spring, they did not show a single weevil hole, and all germinated well.

THERE is more practical benevolence in the various "fresh air" charities which are so carefully carried out in our large cities, than in any similar scheme with which we are familiar. Poor city children are carried into the country, where, for a week or two, in some bountiful farm house they fairly revel in happiness. Who can tell of the unspeakable happiness that comes to these little city waifs at this vacation! New thoughts, new hopes and new lives come up before them. Many of them find new homes in the country, and all are made better for the visit. It is a noble charity, and should be encouraged. Those who give money for the enterprise are no more truly charitable than the patient men and the motherly women who do so much to make the little ones happy on the farm. Life for many is hard and rough. The lamps of hope burn dimly in some lives. By pouring oil from our own full stores into these lamps we lose nothing, but help ourselves.

W. ORLANDO SMITH, of somewhere in Ohio, has received an immense amount of free advertising of late. He appears to have held a convention last month. He sent carefully printed reports of the proceedings of this convention to all the papers. The members appeared to have done nothing beyond indorsing a new fruit drier. They thought so much of it that they proposed sending cuts and descriptions free of charge to all persons who might care to look at it. The thing turns out to be a great scheme for free advertising, and nothing more. Some of our leading agricultural papers published the "proceedings," and touchingly referred to the liberality of the association. The report came here, but we saw through it at a glance. If we cannot get a report of a convention from some person whom we know to be reliable, we do not care to publish any. This incident goes to show how careless many editors become. This is an old game, and it is constantly being played. It looks as though editors are in the habit of publishing almost anything that may be sent in, without examination or comment. Such editorial management cannot breed a very extended confidence among subscribers.

THE advantages of the soiling system are now most apparent. In many dairies the cows are shrinking in their milk. The hot weather, the constant attacks from flies, and the fact that the pastures are giving out, all tend to bring about this result. Grain feeding will do much to remedy matters, but it will not do it all. Where cattle are fed green food at home, there is far less shrinkage in milk. There is no tramping over wide pastures, no thrashing through the bushes to drive away the flies, and no long journey for the herdsman at night. The cattle are always at hand in the yard. They rest in the shade during the hot part of the day, are gentle and clean, and do nothing besides making beef or milk. The soiling system involves extra work on the part of the farmer, but it is work that pays. He simply does the work that the cow expends in wandering about the pasture after food. Not the least of his compensations lies in the fact that the manure is all in one place, well sheltered and easily handled.

PROHIBITION.

WHAT is meant by prohibition? Prohibitionists are not agreed among themselves how far the interdict on intoxicants should extend. Some rest content with prohibiting the sale of distilled spirits; others would include all intoxicating beverages, such as wine, malt liquors and cider, among the drinks prescribed; while others go further and demand that not only the sale but the manufacture of all spirits, wines, ales, beers and cider shall be forbidden under the severest penalties. They claim that nothing but evil can come from the use of any of these stimulants, and that for its own protection, society is bound to strike this deadly enemy to its welfare at its source. These extremists are unquestionably the most logical; for if the sale of intoxicants is to be prevented by legislation, the policy they advocate is undoubtedly the most effective; for if the manufacture of such liquids is suppressed, the consumption of them must certainly cease; and experience in every State in which prohibition has been in force, from Maine to Kansas, leaves no doubt whatever that so long as intoxicants are manufactured, they will be consumed, in spite of the most stringent legislation. The great question that is agitating the temperance and political world just now is whether it is wiser to insist on legislation to carry out the views of the extremists, and run the risk of not obtaining it for years, if ever, or to combine with that one of the two great parties which, in its State and national platforms and legislation, shall yield most to the demands of the straight-out Prohibitionists—whether, in other words, it is better for the temperance cause to accept the acknowledged advantages of greater restraints on the sale of intoxicants, which are very likely to be obtained at once through one of the great parties; or to fight as a matter of principle for the greater advantages of total prohibition, which may never be obtained—during at least the present generation.

DISPOSAL OF SURPLUS REVENUE.

SECRETARY MANNING has always contended that the head of the Treasury Department should have full discretion in regulating the surplus in the National Treasury. The House of Representatives, however, has just passed a resolution providing that whenever the surplus, including the amount held for the redemption of greenbacks, shall exceed $100,000,000, it shall be the duty of the Secretary to apply the excess to the payment of the interest-bearing debts of the Government in sums of not less than $10,000,000 a month during the existence of the surplus. The Representatives who voted for the measure were almost exclusively from the West and South. The East, the center of capital, is bitterly opposed to it. "It is absolute repudiation," one paper says. "If it becomes a law, this country will go to the dogs," exclaims another. "It is a positive declaration of war by the Democratic party against the President," shouts a third. The trouble is that there is fear that the vast pile of silver dollars in the Treasury may in this way be forced into circulation, and the East is against silver, while the West and South are in favor of it. Again, the amount of the circulating medium will be increased, and capital is opposed to this, as its own value is enhanced by a scarcity of money among the people. While the resolution received its principal support from the Democrats, 64 Republicans voted for it and only 51 against it, so that it is in no sense a party measure. Moreover, according to the latest accounts, the Republican Senate is likely to pass it, as great pressure is being brought to bear on Western Senators to vote for it. It is thought the President will veto it; but that is yet a mere assumption. The surplus available for the purpose on July 1, was $75,191,109.95, and no financial disturbance should arise unless gold should ever again sell at a premium. So much needless excitement about this matter is manifested in the papers that it is well that our readers should have clear information about it.

THE RURAL'S METHOD OF IMPROVING CORN.

ALLOWING the pollen from barren corn plants to pollenate the silks of fertile plants is much the same, perhaps, as placing a poor scrub bull among a herd of good cows. If we wish to prevent a given kind of corn from suckering, we plant year after year the seeds only of the plants which do not sucker. The suckering propensities will be overcome in time. We can show one example of this, though 10 years have been required to effect the change. If we desire that a given kind of corn should bear its ears lower, we select the seeds of such plants. And so selections should be made to change corn in any other respect. If it is desired to increase the productiveness of corn, it is not sufficient that the best ears should be selected; the parentage also must be looked to. Sterile plants ripen more pollen than fertile ones. The tassels are larger. As, in the majority of cases, a given corn plant is not fertilized by its own pollen, it is just as likely to receive the pollen of sterile as of fertile plants. Hence it is that though we select the best ears, they may have been sired by sterile plants, and the effect will certainly appear in the progeny. It is about impracticable for the farmer to go over a large field and cut off all the tassels of plants which bear no sets. No better method occurs to us than the one we have often recommended to our friends, viz., growing a little patch by itself, as far as possible removed from other corn. In this little plot all tassels of faulty plants may be cut off, and, if necessary, the tassels of approved plants may be selected from the main field and shaken over the silks (pistils) of the best plants of the isolated plot. It is too late to plant the special plot now, but it is not too late for the grower to select a corner of his field as the best substitute for thus improving his seed corn for another year. We have practiced this plot system of improving corn for 10 years or more, and we propose to continue it as long as we live. The changes wrought are now very marked, and there is no other experiment at the Rural Grounds which interests our farmer-visitors more.

LEGITIMATE AND ILLEGITIMATE MIDDLEMEN.

LEGITIMATE middlemen and speculators are often confounded by producers and consumers in their denunciations of the intermediaries who unduly lower the price of products for the former and raise them for the latter. The distinction between the two is plain, however. In legitimate trade it is possible for both parties to make a profit; in a speculative deal one must lose at least as much as the other makes. The legitimate middleman adds to the value of the property or promotes public convenience; the speculator does neither, and if he wins he gives no equivalent for his gains. The grain merchant buys from a number of farmers their little stores and makes up a shipment for some large distributing center on better terms than a single producer could obtain. The exporter engages freight, handles the grain for shipment and secures a market beyond the ocean. In these transactions the measurers, inspectors, carriers and ship-owners fairly earn their support out of the moving produce. Or, if the grain is to be turned into flour, the middleman, through several agencies, collects it from the farmers, and delivers it to the miller. The latter cannot wait on small customers, and has to sell his products in large lots; the jobber divides it among the retailers and the latter sell it by the barrel or bag, or even by the pound. Each of these middlemen adds to the value of the article by relieving the producer of much trouble in marketing his raw material, and by bringing the finished product within the convenience of the consumer. Again, most of the middlemen collect a variety of needed supplies together, so that a customer, instead of visiting 15 or 20 different stores for as many different articles, can find them all in one. This, as in the case of the grocery or dry goods store, saves much time to the customer, and justly entitles the store-keeper to a percentage of profit. The tendency of late has been to increase this condensation, so that the multitude of goods which could formerly be found only in a dozen different stores, can now be often bought under the same roof. Should this continue, the number of middlemen who now handle the conveniences, comforts or necessaries of life and live on the tolls these pay as they pass through their hands, must be greatly diminished. The number now is, no doubt, very much too large, and many of them unquestionably exact too heavy a toll, still the great body of them are engaged in a legitimate occupation and are justly entitled to their earnings. The speculators are the "leeches" who suck the blood alike from producer and customer, and give nothing in exchange to either. They hold no legitimate place in the line between the two. They add nothing to the value of the property, nor do they promote public convenience. They are simply gamblers and mischief-makers, who keep the markets in a ferment with the view of making an illegitimate gain in the confusion. They are specially busy now, and will continue so while the crops are moving to market, reaping where they have not sown, and gathering where they have not strewed, accumulating fortunes simply from the labors of others. No form of denunciation is too severe for these leeches on the body politic.

BREVITIES.

THE "School Board" in the Bear Creek District selected a teacher as described in our Youth's Department. Do you know of any district where teachers are selected as he was?

READ Mrs. Story's article on the next page—you who would have your children remain on the farm and love farm life. Do not fail, good parents, we say, to read it, and read it carefully.

IF you intend to bag grapes, delay no longer. The chief object is to preserve the bloom and to protect them against the birds. We do not find that bagging is any protection against mildew or rot.

MR. J. T. LOVETT (New Jersey) writes us that he wishes that the Japan Chestnut did not have such a bitter skin. It is a bother, he says, to take it off, and the flesh is not good unless you do—too much like an acorn.

WE learn that the new yellow raspberry, Golden Queen—a seedling of Cuthbert—is this season larger than the Shaffer, very productive and a strong grower, while the fruit is simply beautiful. Our plants do not fruit this year.

EARLY Cluster Blackberry began to ripen at the R. G. July 12. It ripens before Wilson Jr. and Kittatinny, and is of value for this reason. It bears lots of berries of medium size, jet black and of fair quality. They are irregular as to size and shape.

ARE the merits of rye as a green manure really so insignificant as the article elsewhere in this issue indicates? Rye has always been highly commended for "turning under." Will its supposed advantages really stand the test of close observation, or had the season anything in particular to do with its failure in this instance?

ISN'T too much importance often given to the results of a single season's experiments in agriculture or horticulture? "The only thing that's certain, is the uncertainty of all things," is an old saying which seems specially applicable to the outcome of a single set of experiments, even when conducted with the most careful precautions to exclude all extraneous influences. What is said about "Plot Experiments" elsewhere forcibly illustrates this point.

A FRIEND writes us that he wishes that the agricultural papers would ventilate our experiment stations more than they do. They should speak out clearly against their faults, with suggestions for improvement. They should dissect and digest their work more than they do. He fears a fungus growth is slowly stealing over some of them already, because the public does not stir them up enough.

Educational.

HOW SHALL WE EDUCATE OUR CHILDREN AGRICULTURALLY?

ADELINE E. STORY.

What prevents farmers' sons from following their fathers' calling; if the fathers are content, the children are likely to be; drawbacks to farm life; overwork; need of studying a boy's "bent," and a girl's reasonable desires; the question of dress for both; why farmers should be proud of their calling; give the youngsters a chance to learn something; give them pleasures; wake in them an interest in farm work; social entertainments; a happy home the right end of all endeavors.

WHEN we consider how many of our young people annually forsake the farm for a life in the city, the question of education with a view to forestalling this tendency becomes of importance. Naturally a boy should follow the calling of his father. That the sons of farmers so exceptionally often refuse to do so, shows conclusively that there must be something wrong. What is this something? Is it an inherent feeling peculiar to the nature of the country-born child? Is it that farm life affords fewer opportunities for enjoyment than life elsewhere, or is it the outgrowth of a wrong system of training?

Education with the child begins the moment he is old enough to take notice of what is going on around him. His future course in life as well as his success in it must depend largely upon the training he receives. A parent's first duty, after providing for the health and comfort of his child, is to seek to promote, by every means in his power, its present and future happiness and usefulness. Do we, as farmers, desire that our children, in making choice of a way of living, should choose our way? Then must they be made to see by our actions that we believe it to be the best way. We cannot expect our boys and girls to see benefit in a course of life which we ourselves are for ever grumbling about. But we must be more than content with our calling. We must be in love with it. It is not enough that our children are born to farm life simply. They must be born into an atmosphere of love for it. They will be much more easily taught contentment if made to see that they have everything to be contented with.

Then, too, if a farmer is enthusiastically in love with his business, he will be pretty certain to make a success of it, and here he will find another and a strong incentive to his children to become farmers, for even young children are not slow to see the advantage of having plenty of money; and if their father has less of it, or less of the comforts it brings, than the man who keeps the corner grocery, then the natural conclusion is that it would be better to sell the farm and buy a corner grocery. As a rule, there is too much work and too little play on the farm. It is not that the work is too hard, or that in itself it is more disagreeable than work in general; but it is more constant—is begun earlier in the morning and kept up later at night. Then there is too little notice taken of *how* the work is done, provided the young workers merely keep going, and that acts as a damper on any little pride they might take in doing it well. Then boys are too often set to work alone, and isolation is a thing not relished by the young. The prospect of something pleasant to come, say at the close of each day, might help to quell many a feeling of discontent; but instead of rest and recreation, what does the night bring? First chores, then chores, then again chores! Many a farmer owes his son's leaving the old home, to struggle against the temptations of a life for which he is unprepared, to chores alone. Not that they need be so dreadful if rightly managed, but when left to be done by the boy who has worked in the field till it is almost dark, they loom up between him and any little pleasure he may have had for the evening, like a mountain of difficulty. It is doubtful if any one thing tends so much to the general discontent which prevails in so many country homes as this system of over-work which requires the doing of so much after a big day's work has already been "put in."

An exacting, abide-by-my-rule father may take it into his head to give his son a love for agricultural pursuits by sending him to an agricultural college. He will come back at the end of his course and tell you that he likes it all well enough as he saw it there, and in the next breath he will ask you if you happen to know where he would be likely to find a situation as clerk or bookkeeper. You, sir, made him hate farming when he was but a boy, and all the agricultural colleges in the world—excellent and every way worthy though they may be—would fail to make him like it.

Suppose you had brought him up differently? Suppose you had studied his "bent," as every parent is in duty bound to do? You might have found that in some special branch of husbandry he would have taken right hold. Did he show a particular liking for horses? If so, you missed it in not giving him the care of the horses. Or was a fat heifer or steer the perfection of beauty in his eyes? Then, sir, you were wrong not to give him some latitude in that direction. Did he delight in fields of waving grain? Then you should have done your utmost to make him feel an interest in every acre of grain grown on the place. Was he fond of trying little experiments to test this or that? If so, you made your widest miss when you failed to encourage him there. Was he in the habit of offering suggestions when you were at work together? You know he was, and you made fun of them always and pooh-poohed at him for his pains. In short, you threw cold water on every little scheme of his which, if not so chilled out of existence, might have made a farmer of him, and a better farmer, too, than you ever were.

His sister left the farm a good while ago to go to town and become a dressmaker. You do not know where she is now, though you wish you did. But there are some things you do know if you have a good memory. You know she was what you would call a home girl. She always liked best to be at home until you drove her away by your selfishness and want of sympathy. You know, if you will think about it, that you never tried to make her young life bright or happy. You know there were several things which she particularly wanted to have, things you could well enough afford, things which most of her associates possessed, but which you would not get for her—not you! She wanted a magazine, a croquet set and an organ. She wanted the house yard enlarged so she could have a flower-bed or two, and do you remember the little heifer calf she wanted? You gave her that, you know, because it was a weakling, and you knew she would tend it well. She did tend it, and when it stood among the two-year-olds, the sleekest and best-built of them all, you sold it for a round sum and pocketed the money!

Had this man been wiser he might so have trained and led his children that they would have counted it happiness to follow in his footsteps; but driving suited him best. He tried it and failed.

Life is made up of little things. This is especially the case with the young. It is the little things taken one with another that bring to them either content or disaffection. Good clothes to wear, pleasant society to enjoy, a comfortable home and surroundings, a neatly-kept room to which one may feel at liberty to invite a friend without the fear of a frown from mother or a black look from father—these things go a long way with many young people; and just here, in the matter of dress, a wise parent may find a golden opportunity for setting a young girl's face in the right direction by teaching her to discriminate between a tailor-made man and one made by the Almighty.

It is a pitiable sight to see a modest, and in most respects sensible country girl preferring a dude of a fellow from behind somebody's counter to the manly and every way worthy son of her neighbor, whom she really likes, but who, in the matter of dress, cannot "hold a candle" to the dude.

And here let me say that the boys have more to complain of in the way of dress than the girls. The latter can make over and in many ways so alter the appearance of their dresses that they seem to have more changes than they really have. A boy has seldom more than two suits, one to work in and one for "best." Now if, when he has occasion to go from home—say to town—on a week day, he wears his work suit, he is more than likely to display a few patches, and there is no mistake about it, a patch on a boy's pantaloons makes him feel meaner than two holes that need patching. If, on the other hand, he wears his best, he will feel like a simpleton. A suit, then, to correspond with the business suits worn by the young men about town is what his self-respect demands. Are these things of small account? Certainly not, if they help to make our children satisfied and contented with their lot in life.

Farmers should so train up their sons and daughters as to make them proud of their calling. First, because of its independence, its freedom from the petty annoyances that beset the great class of individuals who live, and who, in the order of things must live, from hand to mouth. Because of its freedom from temptation. Because it is the most important one in the world, the one which forms the basis of all others. Because it promises a surer living, with better health and greater freedom from care than any or all others. They should be encouraged to take pride in, to feel a sort of ownership in everything about the place—the orchard, the shade trees, the shrubbery, and as they will naturally feel most interested in what they have helped to produce, get them to help in the tree planting and let them, once in a while, choose the place and the tree to plant. As to the live stock, they seem to take to that naturally. I have yet to see the boy or girl to whom the coming of the lambs, or the calves, or the colts did not bring a genuine joy, and it is an act of wisdom on the farmer's part to make his children an occasional gift of one or another of these animals. But let it be a *bona fide* gift. Let it be theirs to sell or to keep.

An excellent plan to awaken and keep alive a boy's interest in operations of the farm—and without an interest on his part, the farm will hold him only till he sees his chance to get away from it—is to give to him a piece of ground to cultivate just as he likes, and for himself.

Said a farmer of my acquaintance to his son:—"Time was when that back lot would pay the taxes on the farm, but it won't do it this year. It is about run out." "May I have all I can get off of it above the taxes, father?" Consent was given, and the 16-year-old boy went to work. He bought manure and hauled it on to the land. He got the ground in good order and planted it to corn. When the corn was gathered he took hogs of a drover to fatten "on shares." He paid the taxes and had enough money left to pay them twice over again.

A wide-awake boy will not feel satisfied anywhere unless he feels that he is learning something. He should be given a good reason for every farm operation that comes under his eye. Many a young man leaves the farm because he has been suffered to grow up without the knowledge of the inner workings of the business beyond what he can guess at. He is conscious of his ignorance and goes to find something easier to master. Whenever it is possible children should be given work suited to their tastes. One boy might like nothing better than to spread manure from morning till night, day after day, while another would rebel at once, but would be quite willing to set cions in the orchard or plant out the young trees. Of course it would be a mistake to let the former do the grafting and make the latter spread manure. Such a course persistently followed would be almost certain to result in both boys having a distaste for farm work.

We should seek then to make our children happy and contented as well as useful. We should try to make our children wise above the wisdom which shows itself only in the cut of a coat or the looping of an overskirt. We should encourage them by giving praise when praise is due. We should give more holidays and have fewer days in which extra work must be done. We should provide an unexpected pleasure now and then, that will tide them over many stony places. They should be allowed liberty above that of an hireling. We should strive in all things wherein our children are concerned, to act the part of a wise person who has a great interest at stake. We should not be stingy with our children. If we are, and they have not lost respect for us, they will lay the blame of our parsimoniousness on our way of living, and so be brought to despise it. We should be progressive, always on the lookout for the very best means in husbandry. Thus our children will find one direction at least in which there may be ample scope for brains on the farm.

In talking to children it is not a good plan to always say *I*. If we only could say *we* occasionally we should find them more drawn towards us and our work.

"Well, Johnny, shall we try the plow today?" says a farmer to his little three-year-old son. They go, and Johnny, who trots along behind in the furrow, really seems to take as deep an interest in the turning of it square and straight as does his sire, because he feels that he is, somehow, helping to do it. A good way of creating an interest in farm affairs among the young people has been found in letting them take turns of a week about in "managing." This works as well indoors as out. The boys will vie with each other, not only in getting the greatest possible amount done, but in doing it in good style and "just as father would like," while the girls will do their best to convince you that they can not only attend to the milk and make the butter, but that they can make beds and keep the house in order as well.

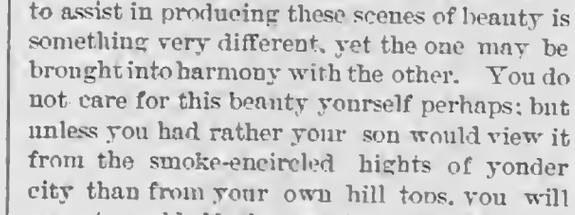
The tendency of the age is toward a higher education. Among native-born Americans a tolerable degree of learning is now the rule, and ignorance the exception. The time when a farmer might hope to keep his son on the farm by keeping him in ignorance has gone by. At the present day a young man feeling his lack in this respect would be likely to attribute it to the mode of life he had been nurtured in, and lose no time in getting away from it. And since we must all mingle more or less with the people among whom our lot is cast, and it is not in human nature for a man or woman of education or culture to live contentedly in a community of boors, it is every man's duty not only to give his children the best advantages in the way of schooling within his power, but to encourage his neighbors to do the same.

The social element in our nature must also be provided for. If young people find no amusement or entertainment aside from what they find in the nearest town, it follows that they will soon come to prefer the town to the country as a place of living. The Grange is a good place for the farmer not to *send* but to *take* his sons and daughters to, for, aside from its social advantages, their minds become familiarized, through the discussions held there, with various farm topics, and are thus led into sympathy and harmony with them. Then, neighborhood entertainments of a social and literary character should be encouraged. Reading clubs, singing classes and debating societies, if properly conducted, are excellent both socially and educationally. Games may be made a pleasant past-time for an evening at home, but they should be indulged in only occasionally, as at best they afford but idle amusement. The hours between supper and bed-time had much better be spent in reading, with now and then music for enlivenment, than in playing checkers or back-gammon.

Is your daughter of a romantic turn of mind? Then look well to her training; teach her to make herself useful at home first, and after that, in whatever good work the neighborhood may be engaged in. See that she has healthy reading, not such as is circulated to feed the sickly sentimentality that is spoiling her by unfitting her for all domestic duties. Does she long for society, as she imagines it to exist away beyond the stretch of field and farm? If so, happy are you if out of your broader knowledge you are able to show her what bitter struggles for place, what strivings after appearances, what coverings up and shieldings of weakness and sin, what emptiness, what hate, what vice lurk in and poison the atmosphere of the society she covets.

Does your son incline to be "poetical," as you are pleased to call it, rather that practical. Then be wise for yourself and him before it is too late. It is one thing to admire the works of Nature—the green fields, the vine-clad slope, the grazing kine—to be willing to labor, to assist in producing these scenes of beauty is something very different, yet the one may be brought into harmony with the other. You do not care for this beauty yourself perhaps; but unless you had rather your son would view it from the smoke-encircled hights of yonder city than from your own hill tops, you will cease to scold if the work stands still for a minute or two now and then while he watches a cloud shadow creep over the green wheat, or gazes at the summer sunset. Is your son ambitious, rejoice at it, providing his ambition is of a kind calculated to result in his best good; if not seek to make it so.

The desire to get on in the world, to surround one's self with the creature comforts necessary to happiness, to possess even of the luxuries of life should be strong in the breast of every tiller of the soil. He has health and strength. The free, pure air of heaven is his to breathe. Beautiful creations fresh from the hand of God are spread out before him. But these things should not satisfy him. He should seek to make his home a bower of love and beauty—flowers, birds and sunshine around it, within the peace and content which comes of a consciousness of making the highest use of the blessings God has given us.



There's another scheme to get money out of imaginary heirs to a great property in this city. At present it is being "worked" chiefly in the West, and the stake is an estate here valued all the way from $300,000,000 to $400,000,000. The property is alleged to be chiefly around Mercer Street, a poor street just west of Broadway. There it covers about 100 acres, and there's some more in Jersey. It was owned by Moses Mercer, a Scotchman, in 1750, and was leased for 99 years. The lease having expired some years ago, the "heirs" of old Mercer are invited to contribute funds to recover the property before the courts. It is said that several Western men of sense and standing have joined in the enterprise, but as the Vanderbilts and Astors own most of the N. Y. property now, claimants will have a hard job to wrest it from them.

TO SEVERAL INQUIRERS.—We do not recommend the nostrums of the Civiale Remedial

Agency of this city: or of Dr. A. Redsyn, Ilion, N. Y., nor do we recommend C. H. Harris, of Lawrence, Ind. In all cases where the medicines offered by these people are needed, it would be much safer, more economical and in every way wiser to consult a good local doctor; or, if this is objectionable, to visit a respectable practitioner in a neighboring town. ..We don't recommend the Crescent Art Co., or the Oriental M'f'g Co. of Boston, or J. F. Hill, of Augusta, Me. People by working for them often make a little money; but there is by far too great a risk of dissatisfaction and just grounds of complaint for us to recommend them..... We have never heard any complaints of Dr. W. H. Parker, of the Peabody Medical Institute of Boston, or of his manner of treatment..... ..We cannot recommend the Popular Monthly, Kansas City, Mo.....The Sherwood Novelty harness gives satisfaction, so far as we have heard of it. Mr. J. S. Woodward recommends it from personal experience.....We have nothing special to say against investment in Lakenwild lots near Bangor, Me. We wouldn't settle there ourselves, except, perhaps, for a summer vacation; but there doesn't seem to be anything fraudulent about the effort being made to secure purchasers of land there—and there's no accounting for tastes....Samuel Z. Cooper is the name given by a fellow who is traveling round the country selling a "corn, bunion and wart preparation." He is also selling what he calls "Death on Rats." He claims to be working for the Soldiers' Home, Dayton, Ohio. That institution stigmatizes him as an impostor. He was formerly connected with it, but was discharged for good reasons over a year ago. ... For the standing of the various mutual-benefit insurance associations in the different States, apply to the Insurance Superintendents at the capitals of the various States. It is altogether out of the question for us to "keep the run" of such institutions.

Woman's Work.

CONDUCTED BY EMILY L. TAPLIN.

THE SCARECROW.

In yonder field he stands erect,
No matter what the weather,
And keeps a watch so circumspect
On foes of every feather.
So faithful is he to the trust
Committed to his keeping
That all the birds suspect he must
Dispense with any sleeping.

Sometimes his hat tips down so low
It seems a cause for censure,
For then some old courageous crow
Believes it safe to venture;
But catching sight of either arm
Outstretched in solemn warning,
The crow decides to leave this farm
Until another morning.

Although his dress is incomplete,
It really does not matter;
Perchance the truest heart may beat
Beneath a patch or tatter.
And it is wrong to base our love
On wealth and name and station,
For he who will may rise above
His daily occupation.

We should not look with eyes of scorn,
And find in him no beauty
Who stands and guards our fields of corn,
And does the whole world duty,
But honor him for native worth,
For rustic independence,
And send a hearty greeting forth
For him and his descendants.

—*Harper's Young People.*

OF INTEREST TO WOMEN.

MANY a tired housewife will read with a sigh of personal application the epitaph seen on an old Surrey tombstone:

Here lies a poor woman who always was tired,
For she lived in a world where too much was required;
"Don't weep for me, friends" (thus she said), "for I'm going
To where there's no reading nor writing nor sewing;
Do not weep for me, friends, for when life's thread shall sever,
I'm going to do nothing for ever and ever."

The manifold complexities of modern city houses have called into being a new trade, says Lippincott's, that of the universal tinker. Now, with an extension of the same idea into the woman's kingdom, a correspondent sighs for a neighborhood darner. Most of us would agree as to the convenience; but the correspondent was not, perhaps, aware that the system recommended is in practical operation in Paris. In the family where our home was when there, punctually one day in the week came la raccommodeuse, and, having been established in a back room and given a cup of coffee, set to work on the ruin three children and an impatient man had wrought. She had for her pains her meals and twenty cents a day; and she had a clientele of nearly a dozen families, from whom she drew occasionally something beyond the daily franc. To some she gave but half a day; but matters were so systematized that she was rarely without work. Very convenient the American boarder found her for the ripping and cleaning of old gowns and the darning of hose, which, in her devotion to the monuments of Paris, she had no time to touch.

Since the reign of bric-a-brac set in we have professional dusters in the cities. It should be comparitively simple to introduce also professional menders. Perhaps a difficulty would arise as to the amount of payment, since the women who mend for their familes do not roll in wealth, and even 50 cents a day might seem to them extravagance. And the sewing woman who drags her life out on the same sum, boarding herself would probably scorn less. But, once given her patrons, she might find her life both easier and more healthful; and the tired housemothers, seeing the economy and the relief, would wonder why they did not do it before. Under the present system the thrifty women fret and tire themselves over the endless task; the sentimentally philanthopic and the unthrifty give away, to the increase of poverty often; and the old clo's men profit by the improvidence of the bachelors and husbands.

A little more co-operation everywhere would lighten women's work. Here, for instance, in a town of 2,000 inhabitants, one woman for years made her pin-money by the weekly brewing of yeast for her neighbors. She has gone out of the business now, her husband objecting; and the women are left lamenting the lost convenience. Yeast in plenty at the grocery—patent yeast; but they all prefer the home-made when they can get it. So, could they once get it, they would prefer the neighborhood mender.

A WOMAN'S RIGHT.

NOT a political right, by any means. Simply the right to life, liberty, and the pursuit of happiness in the path clearly assigned her; throwing aside, perhaps, the swaddling bands of conventionality, but never forgetting that the virtues which made a good woman priceless above rubies in Solomon's time are as valuable now. Solomon's virtuous woman is a type to be loved and honored now as then. She not only worked for her home and her household—she made her husband honored among men; seated at the gate with the elders. The wisest of men always shows intense appreciation of prudence and good sense in women—poor man! he probably had experience enough of the opposite in his too polygamous household.

Considering how few of us, men or women, are called to things the world considers great it seems the only true life is to live according to our highest and best, in the seemingly trivial round of every-day life. "A little leaven leaveneth the whole lump;" how can we tell that these things are trivial? It may not seem that dish-washing, and sweeping, and dusting, and cooking is doing the greatest amount of good for the greatest number in our power, but who knows? If great things are expected of us, the opportunity will surely come.

But we must not sink into mere anxious Marthas, cumbered with many cares—too anxious, like the Sister of Mary, to hear the Divine voice offering us wisdom and peace. The incentive to higher and better aims has always come from women; sad, indeed, would it be if we lose our power of inspiration through loss of the higher voice within ourselves. Purity and simplicity of mind in ourselves must ever awake it in others. Have you not noticed how a person of single mind and profound truthfulness, however unassuming, always affects others, driving away deceptions, like the summer mist before a powerful sun? Some cynical writer speaks of the danger incurred when a thinker is let loose upon the world. Danger? Yes, to the dark places among highways and hedges—to oppression and wickedness in high places. But there is danger to all these things when one simple woman takes it into her head that it is her duty to right whatever wrong lies in her power. A woman with one fixed idea, and that a good one, is likely to become a power, whether she be buried alive in an isolated farmhouse, or one of the toiling thousands in a great city. Nor will she ever know how much her thought and deed will influence this busy world. The modest woman who wrote from the fullness of her heart in the intervals of daily duties little thought she would create a living book to be the watchword of a great struggle—the evangel of that power which brought freedom to our slaves.

Do always the duty that lies nearest you—if you are faithful over small things you will surely be faithful over great. With truth and purity, high aims and faithful duty, our lives will leave their impress on heart and mind, until our little grain of mustard seed becomes a great and spreading tree.

OUR BROTHERS.

LET us begin at the beginning, at the first advent of the average boy on the world's stage. There he lies in his little crib, feebly squaring off with his tiny red fists at the world in general, and, at all times when we have been able to study him giving decidedly audible testimony as to the vigor of his lungs. A few years pass by and he becomes that object of terror to nervous people and old bachelors, the small boy. Probably at no time is he an object of greater anxiety to his affectionate relatives, not only from his cheerful disregard of personal risk, and general destructiveness, but also from his appalling candor. These awful qualities are the general characteristics of boys between six and fourteen—even the immortal Father of his Country was not exempt from them, as a certain little oft related moral fiction shows. At this interesting period of his life, a fondness for fishing and circuses, an intense appreciation of a life on the ocean wave, and an admiration of pirates and Indian fighters, forms the basis of his character. His appreciation of the fair sex is decidedly limited. We would not say he considers his own sisters and other boys sisters too, decided nuisances, but he has that half-contemptuous toleration for the sex in general that in later years he only shows toward his own feminine relatives. But the most critical period of his life is a few years later, when he ceases to look upon a Piccadilly collar as a relic of barbarism, becomes very particular as to his neckties, and, most momentous event of all, begins to raise a moustache. We believe that at this period he usually experiences a lofty adoration for some lovely being of the opposite sex, but as we cannot speak from personal experience, we will let this point pass. Notwithstanding their many weaknesses, brothers are very handy at this period of their existence. They are usually available on escort duty, and can be made useful in a variety of ways.

We make an anxious pause before beginning this next branch of our discourse. We want to say something about the most prominent faults our brothers possess. Let us at least give just a few words of advice, which, of course, will not be taken, as it is perfectly disinterested; and disinterested advice, as we all know, is from someone who knows nothing whatever about the matter. Don't praise up other girls to your sisters for the very qualities you believe your own sisters to be most deficient in. Don't talk to your sisters, because they happen to be girls, as if they didn't know as much as you do, and more too, perhaps.

We need hardly allude to the only universal woman's right allowed by man, that of "ladies first." As one cynical philosopher observes (let us hope he has no sisters.) "Who is it who has the first seat in the cars, the boats, the theatres? who is it who must be cared for, waited on, and dressed like Solomon in all his glory? Why, the ladies. Who is it who pays for all this? Man, the brute!"

Let us end with the toast—"Our Brother's." They halve our joys, double our sorrows, are the joy of one-half of our existence and the torment of the other—they are a joy forever when rightly managed, and a snare and delusion when they want to be—a silken thread will lead them, when you couldn't drive them with a chain cable—a well spring of delight in a house, who would'nt have them?

GOLDEN GRAINS.

IT is as true now as in the days of Johnson that money and time are the heaviest burdens of life, and the unhappiest of all mortals are those who have more of either than they know how to use.....

WHAT did Emerson mean when he said, "God himself does not speak prose, but communicates with us by hints, omens, inference and dark resemblances in objects lying all around us".....

GOD will do whatever He pleases; and what pleases Him ought to please us. It is above nature, it is contrary to nature to make full surrender of ourselves to His sovereign and absolute will. Grace alone can enable us to say from the heart, "Thy will be done.".....

IN one of the manifestos just issued in England, we find this unique sentence: "The voice of the people is the voice of God, and, therefore, the voice of freedom, justice, and right,".....

IN an insurance exchange we find this beautiful sentence: "All the revelations of nature may be regarded as the oil which feeds the flame of thought, burning continually in the secret shrine of man's mind; and countless affinities, mental, earthly and spiritual, verify the saying of the Greek poet

'O, earth, earth!
How art thou interwoven with that nature that first came from thee.' ".....

FOR, as so beautifully expressed by Pope,

"All are parts of one stupendous whole,—
Whose body Nature is, and God the soul," .....

THE more we know of God, the more we shall desire to resemble Him in holiness. Whoever truly loves another, will desire to be like the person he loves, and to do what that person likes..... ....

THE Tabernacle, London, Dr. Spurgeon's, has a membership of 5,214.....

FRANKLIN spoke doubtless from experience when he said, "A cheerful face is nearly as good for an invalid as healthy weather."....

BISHOP WILSON truly says, "A root that produces nothing is dead. Faith is the root of all good works.". ....

VICTOR HUGO, speaking from an entirely different stand-point, says: "Let us fear the worst, but work with faith; the best will always take care of itself." ... .

BITTER and untruthful words, instead of injuring the one at whom they are aimed, are very likely to rise up, perhaps after many years, in condemnation of him who gave them voice ....

WHILE we cannot be too particular about the daily observance of family worship, yet it sometimes conflicts with the good wife's culinary arrangement. One morning, when the husband's prayer was longer drawn out than usual, a suspicious smell of over-done biscuits was wafted slowly but surely toward the wife's olfactory organs. She wriggled and twisted, thinking of her biscuits, and at last, when the husband started off on a new tack, to which there seemed no end, she startled the good man by saying: "Lord! John, cut it short; I've bread in the oven."..... ....

THERE are a great many persons who never rise above the medium line of feeling. They are not excitable. They are not in anything enthusiastic. They appreciate the truth and they mean to obey it, and to conform their lives to the principles and commands of God; but it is not their nature to overflow with mere feeling . . ..

Domestic Economy

CONDUCTED BY MRS. AGNES E. M. CARMAN.

HOUSE-KEEPING IN CALIFORNIA.—XI.

MARY-WAGER FISHER.

A PECULIARITY of California houses—and the same is true of those in Washington and Oregon—is the way in which the occupant's name is put on. It is no uncommon thing to see it painted in large letters (which you can read distinctly across the street) on the window above the front door. To the new-comer it has a disreputable look; but one soon becomes accustomed to it, and recognizes its convenience.

The beautiful way in which the grounds about houses are kept is apt to make the admiring visitor feel that it must be easier to have fine grounds in California than elsewhere. But this is not altogether true. In Oakland, for example, there is hardly an ill-kept place in the city. The yards are not large, but so beautifully cared for, the grass being so even and green, and the flowers and shrubs in such perfect order, that everybody is necessitated, by the examples all around him, to keep his own domain in like manner. But in order to preserve this year-all-around beauty, eternal vigilance, water, pruning, tying plants to stakes, and the lawn mower are all needed. The grass plots between the sidewalks and the streets are mainly kept in the same way.

Although the sun is so essential to warmth and health, there seem to be just as many women here as elsewhere who shut the sun out with blinds and shades, presumably to save the color in carpets and the furniture. I never yet lived in a house where I had full sway into which I did not court all the sunshine to be had. As to furniture, I think most people are "idiotic." Take chairs and sofas, for example: either to be comfortable, should conform in shape to the outline of the body. The stuffed chair is convex in its seat, when it should be concave—exactly the opposite to what it should be—and still women go on generation after generation buying such monstrosities. I am very partial to a luxurious seat, but I detest upholstered things. They absorb dust, and to me never seem clean. Now-a days there seems to be no excuse for upholstered goods, as there are so many pretty chairs of bamboo, wicker, and honest wood with backs and bottoms of yielding material that can be beautified with cushions and quilted work.

I am reminded of this every time I dust the red stuffed chairs in our cottage here—and I flourish a whisk and dust cloth with mental irateness at the existence of such things. The one wicker chair in the room forms almost a cause for family feud—only the fact of possession is fully recognized as being nine-tenths of the law. Of course, as long as people buy ill-

adapted furniture, just so long manufacturers will feed the demand. But manufacturers are quick to respond to the requirements of the public. I chanced to visit a furniture manufactory on this coast, and one of the proprietors evidently desired some expression of commendation for his styles, which were simply atrocious, although, of course, I could not say so. However, I did venture to ask him why he left the corners of foot-boards of bed-steads and covers of wash-stands and bureaus and other things square, as such angles often result in great mischief. He confessed that it had not occurred to him to modify the sharpness of the corners, but he thought well of the idea. His very elaborate pieces of furniture he was particularly proud of, in proportion as they would require the greater time to keep the nooks free from dust. The furniture that most of us require needs to be plain, with rounded corners, well and gracefully shaped and easily kept clean. Most California housekeepers as yet, have the old-fashioned disdain for things of American manufacture. Take pottery, for instance. One may go into almost any shop and ask for American china, and the clerk will tell you in a pompous way, that they only keep English wares, when he knows very well, or should know, that with the exception of China, there are as fine china and porcelain made in the United States as in England or the world, and the only line in which China excels all countries is in the application of color. The finest kaolin for porcelain in the world, is found in Indiana, and in Missouri there are extensive beds of pure white silicon, naturally prepared for use. I have seen as beautiful china and porcelain made in Trenton, N. J., and at Green Point, Long Island, as any made in England. The pottery works in Cincinnati turn out some lovely things, and the richest woman in Ohio, Mrs. Nicholls, with an income of $200,000, works daily in her pottery there, which also gives employment to many artistic women.

One day a nice-looking youngish woman called at our cottage as an agent for a sewing machine. She said it was the first work she had been able to procure in California, where she found the avenues of employment for women much fewer than in the East. She had worked at dressmaking in St. Louis, but her health would not permit her to continue to sew and she came to this coast. I asked her why she didn't try housework—women received such generous wages, from $25 to $35 a month with board and lodging. "Oh you are such a prisoner at housework! and then too, the women of this coast don't know how to treat a domestic—they are not like Eastern women." I did not believe the final remark to be true—but I thought I had rather do housework for $15 a month, than to go about from house to house trying to sell sewing machines or anything else for double that salary.

A CONVENIENT KITCHEN TABLE.

FIG. 302 shows a table that was made out of a common bureau with drawers, by putting on a heavy pine top with leaf at back. The drawers do not take up any extra room, and

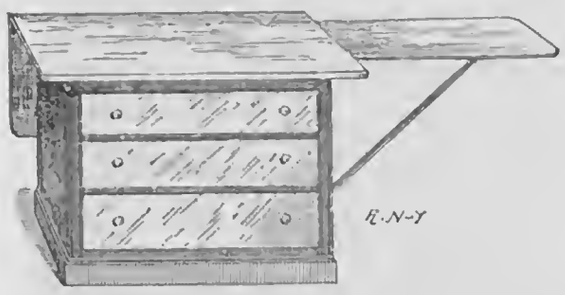


Fig. 302.

will be found convenient for many things. A skirt board can be attached at one end which when not in use can be let down or slid under the top. The board is held in place by a brace. F. W. WHITNEY.

KITCHEN TALKS.

ANNIE L. JACK.

WE have a little girl staying with us who has never had an opportunity to learn any of the details of housework. Her mother died in her childhood, and her crude ideas caught from school companions were that work was beneath her, and that she had no need to learn how to do the thousand and one things that the best housekeepers find necessary. "My Pa doesn't work, he writes," she said to our little ones, who are always proud of helping their father in whatever work he undertakes that is not beyond their strength. Of course her father worked in an office, and she did not understand any better, but was a victim to the pernicious teaching that despises manual labor. Slowly she is learning that bread and butter are made by someone's toil; that a housekeeper's *duty* is to attend to her household, and that little feet and hands must, unsolicited, be ready and willing to assist older people.

"I like to stand at the door and watch you all at work," she said one day, but the children of our home are unused to such "airs" and laughed in derision, asking her to be sure and look pretty, and be a respectable statue if nothing else.

This new inmate has often caused me to think how uselessly little girls are brought up. The love of dress is a leading feature of their lives, and they care for little else; but I always have hopes for a child, however artificially reared, who loves nature and lives close to the heart of all growing things. An observing child, one who is alive to the wonderful works of the Great Creator, will learn not to despise the lowest of His creatures, and will gain wisdom from the simplest flower.

Another child who lately visited us, seeing a girl peeling potatoes, asked "if every eye made new potatoes," and when we expressed surprise that she knew anything about it as she was city-born and brought up, she said that they were taught all these things at the Kindergarten. What a good thing such schools are to busy inquiring minds, and to stimulate dull ones. Frœbel was a benefactor to children when he invented that royal road to learning, and made a pastime of the study of small but practical things, and happy is that child who learns Botany young, by studying the trees and flowers, out-of-doors, with a wise teacher, learning by pleasant paths all the wonderful and varied works of Nature, and so up to Nature's God.

SOME BITS OF KNOWLEDGE GAINED AT THE FAIR AND IN THE KITCHEN.

LAST Fall, a group of ladies were examining a collection of fruit that looked almost as fresh and fair as though just picked from vines, bushes or trees, which ever they chanced to grow upon. One lady was very sure the fruit had never been cooked, but was well preserved in cold water. Another thought it might have been cooked in the cans. Still another was positive the fruit had been canned by the new process of using acids. Presently the lady who brought the really fine collection came within the circle, and being an old friend, I asked her to impart the secret of her success, for I knew that she put up large quantities of fruit for the market every year. She said there was no secret; the fruit was thoroughly heated without allowing it to boil. The cans were then filled and left open fifteen or twenty minutes, to give the fruit time to settle. After filling up, the covers were put on and screwed down tight. Put up in this way, fruit will keep for years, and if kept in the dark will retain its original color and form. She made cup-boards of dry-goods boxes for fruit cans to keep in the cellar, and these were kept closed. In the absence of the dark closets, she wrapped each can in several thicknesses of dark cloth or paper.

OLD potatoes are greatly improved at this time of year if they are pared and thrown into cold water and left to soak several hours before cooking.

I like my dish drainer very well though it has no patent. It consists of a good-sized wooden bowl, and an old tin pan with the bottom filled with nail holes; it was originally designed for a grater, and how nice and bright the dishes look, after their warm water bath and a good rinse, set up edgewise till they dry, in the drainer. And what a saving of labor in wiping dishes and the washing and wearing of wiping cloths. Of course the spoons, knives and forks must be wiped off immediately, but the chinaware may stand till the next meal, and this will save steps. Also to leave the scouring brick and silver polish upon the back part of the work table and save unnecessary steps should be every housekeepers motto.

The strawberries I canned last Summer in cold water were a failure. MAY MAPLE.

FLUTED LACE WITH HOLES.

CAST on 18 stitches. 1st row, knit across plain. 2nd row, purl 14, leave four stitches on the left hand needle, turn the work as if to begin at the end of the needle. 3d row, knit plain all the way across. 4th row, purl 14, turn the work as in the second row. 5th row, knit plain. This ends the first flute. For the second flute: 1st row, knit plain all the way across. 2nd row, knit four, purl 14. 3d row, knit one, * thread over, knit two together, repeat from * seven times, or until you have a row of eight holes, knit one. 4th row, knit four, purl 14. 5th row, knit 14. This finishes the second row of flutes.

AUNT ADDIE.

DOMESTIC RECIPES.

AN ACCOMMODATING CAKE.

IT sometimes happens that cake is wanted when there is neither butter nor milk in the house. With sugar, eggs, and flour a very good cake can be made, even when baking powder is omitted, as the eggs will raise the cake if baked in a steady heat.

For one medium-large loaf of cake use the following quantities: Six eggs, one and one-half cup of flour, one and one-half cup of sugar, and a little salt. One teaspoonful of baking powder may be added to the flour, and one tablespoon of vinegar stirred into the whole mixture, but they are not absolutely needful. The eggs should be beaten yelks and whites together until very light; if done with a Dover egg beater they can be beaten very quickly; add the sugar and beat again with the beater, then with a spoon stir the flour in lightly and slowly without beating. The whole will then seem light as though full of yeast. Bake thoroughly in a steady heat. Instead of lining the cake pan with tissue paper, grease it thoroughly, and sift flour into it, shaking off all that does not adhere to the grease: if well covered in this way with a powdering of flour, the cake will not cause any trouble by sticking to the pan. Jelly and muffin tins treated in the same way will turn out perfect cakes.

The recipe just given makes a good layer cake with either jelly or boiled custard between the layers, and it is sometimes baked in a loaf and eaten while warm with cream or a sauce over it, and then it serves as pudding for a dinner dessert. A. B.

SWEET PICKLED PEACHES.

Pare seven pounds of peaches and lay them in a preserving kettle with three-and-a-half pounds of sugar in alternate layers, letting them stand for an hour; drain off the sirup and put over the fire with a quart of vinegar and two ounces each of whole cloves and stick cinnamon tied in a small muslin bag. Boil and skim this carefully and put in the peaches; cook until you can perforate them easily with a straw. Lift out with a skimmer and pack in jars; reduce the sirup by boiling to nearly half; pour over the peaches and seal up.

SWEET TOMATO PICKLE.

This is one of the most delightful sweet pickles, and is very nice with cold meats. Peel and slice the tomatoes, or use the small egg tomatoes; take half the weight in sugar, and for seven pounds of the fruit add one ounce of cloves and one of mace and cinnamon mixed; cook all together with one quart of vinegar for an hour, and seal. Tie the spices in a small muslin bag.

BRANDIED PEACHES.

Make a sirup with seven pounds of sugar and a cup of water; boil and skim; put in seven pounds of peeled peaches and boil for 10 minutes, or until they are tender. Remove the fruit carefully with a skimmer, and let the sirup boil until it thickens well; add one-and-one-half pint of the best white brandy, and take at once from the fire. Pour the hot sirup at once over the fruit, which should have been packed in glass jars two-thirds full, and seal.

RUBY R.

BLANC MANGE.

A blanc mange with sea moss farina for the distinctive ingredient is very nice. Take a quart of milk and add to it one level teaspoonful of the farina. Stir it all the time until it comes to a boil; when put to it three tablespoonfuls of sugar and a teaspoonful of vanilla and a salt-spoon of salt. Strain into a mould and set in a cool place.

RICE CAKES.

Boil some rice until it is soft, then, when just cool enough to handle, roll it in your hands and form it into small cakes, which dip in beaten egg and afterwards in Indian meal. Fry them in very hot fat, and, if to be eaten as a vegetable, you may place them around your meat. Or they may be served as a dessert with a rather rich sauce of butter, sugar, flour and a wine glass of Madeira wine and a little nutmeg. AUNT ADDIE.

Miscellaneous Advertising.

When Baby was sick, we gave her Castoria,
When she was a Child, she cried for Castoria,
When she became Miss, she clung to Castoria,
When she had Children, she gave them Castoria.

"From His Own Experience in Preparing Ground for Winter Grain, by the use of the 'ACME' Pulverizing Harrow, the writer is quite free to say that had this implement been used instead of the common harrow, the loss of wheat by the hard winter would have been trivial, and that many a single acre which has not returned the seed sown upon it, might easily have made enough grain to have paid the whole cost of the implement." See advertisement on page 492.

Doctors Prescribe

Ayer's Cherry Pectoral, for three reasons:—it is perfectly safe for old or young,—can be relied upon in cases of emergency,—and possesses great curative powers.

I consider Ayer's Cherry Pectoral a medical success and a chemical triumph. I have found this medicine a powerful specific for Colds, Coughs, and Pulmonary Complaints. I use it in my own family and recommend it in my practice.—Parker Cleveland, M. D., Prof. of Chemistry and Materia Medica, Bowdoin College, Brunswick, Me.

Ayer's Cherry Pectoral is an invaluable remedy for Colds, Coughs, and all Pulmonary diseases. I use it myself and prescribe it in my practice.—A. S. Pettenger, M. D., Glen Gardner, N. J.

Ayer's Cherry Pectoral,

Prepared by Dr. J. C. Ayer & Co., Lowell, Mass. Sold by all Druggists. Price $1; six bottles, $5.

MAKE HENS LAY

SHERIDAN'S CONDITION POWDER is absolutely pure and highly concentrated. It is strictly a medicine to be given with food. Nothing on earth will make hens lay like it. It cures chicken cholera and all diseases of hens. Illustrated book by mail free. Sold everywhere, or sent by mail for 25 cts. in stamps. 2½-lb. tin cans, $1; by mail, $1.20. Six cans by express, prepaid, for $5. I. S. Johnson & Co., P. O. Box 2118, Boston, Mass.

HIRES' IMPROVED ROOT BEER. Packages, 25 cts. Makes 5 gallons of a delicious, sparkling and wholesome beverage. Sold by all druggists, or sent by mail on receipt of 25 cents. C. E. HIRES, 48 N. Delaware Ave., Philadelphia, Pa.

FARMERS,

Send for Circulars and Price List of The BARNES PAT. IRON FENCE, the cheapest and most durable fence in the world. Address THE BARNES PAT. IRON FENCE CO., EASTON, PA.

HARNESS. Hand-made. Best Oak Leather, $8.50, $10, $13.50, $15. Double Sets, $20, $25, $30. Shipped subject to approval. 64-page Catalogue free. Order one. KING & CO., Wholesale Manufacturers, OWEGO, N. Y.

Brewster's Patent Rein Holder.

Your lines are where you put them—not under horses' feet. One agent sold 12 doz. in five days; one dealer sold six doz. in 15 days. Samples worth $1.50 FREE. Write for terms.
E. E. BREWSTER, Holly, Mich.

REMINGTON
Standard Typewriter.

Attention is called to the **increased excellence** of this **incomparable machine.** Buy it, with the **privilege of returning** it at any time within thirty days, C.O.D. for full price paid, if not **absolutely satisfactory in every respect.**

Handsome Illustrated Pamphlet on application.

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For over 30 YEARS always using the
GENUINE YANKEE SOAP.
It has no equal."
K. MILLER, P. M., W. Farmington, O.
For FIFTY YEARS unequaled as a Shaving Soap. Standard for quality in U. S. Navy. Avoid imitations. Obtain it of your Druggist, or send 12c. in stamps for full size trial cake to the
J. B. WILLIAMS CO.
Glastonbury, Conn.
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SOLE MANUFACTURERS,
American Dairy Salt Co.
(Limited.)
Chemically purified and WARRANTED pure as any in the market. Used by a great majority of the Dairymen of the country. Unexcelled for Butter, Cheese, the Table, and all Culinary purposes. Took Medal at Centennial "for purity and high degree of excellence." Dairy goods salted with it took first premiums at New Orleans World's Fair, N. Y. International Fair; Milwaukee Exposition, and always wins when there is fair competition. It is American, and *cheaper and better* than any foreign salt. Try it. Address
J. W BARKER, *Secretary*,
Syracuse, N. Y.

A NEW
BUTTER PRESERVATIVE.
KELLOGG'S ROYAL SALT.
Positively Prevents Butter from ever becoming Rancid.

Endorsed by George B. Douglas, Esq., Ex-President Mercantile Exchange; Putnam Conklin, Esq., Manager Thurber, Whyland & Co.'s Butter Department, New York City; Col. Wm. Crozier, Northport, L. I., N. Y., and others. Send for Circular.

BUTTER PRESERVATIVE SALT CO.,
OFFICE AND FACTORY, FOOT OF
West Eleventh St., New York City, N. Y.

News of the Week.

HOME NEWS.

SATURDAY, July 17, 1886.

KANSAS Prohibitionists nominated a full State ticket at Emporia, Wednesday.....Same day the Dakota Constitutional Convention at Sioux Falls decided, 31 to 30, not to submit to a popular vote the proposition whether South Dakota shall not declare itself a State. Will, probably, wait now for admission to Statehood by Congress. ..Since Prohibition, bibulous Rhode Islanders get drunk in Massachusetts, just over the line—State so small that the "line" is not far from any part of it.... ..N. H., Prohibitionists go in for a straight State ticket.....A decision of the Superior Court at Atlanta Ga., Wednesday, says it is against the law to sell liquor by the quart, and furnish glasses so that it may be divided up and drank at the bar. Liquor stores closed in consequence. ..The system of leasing out convicts to contractors to labor on public works, in vogue in many of the Southern States, is generally considered barbarous by the best part of the population. Often atrocious cruelties are practiced on the wretched felons by overseers worse than the worst slave-drivers, and at best their hardships are almost intolerable—hence frequent mutinies, murders of guards and vain attempts to escape.....150 convict coal miners at Cole City, Ga., have been on a "strike" but after two days in a stockade without food or water, they surrended Wednesday..... ....The first tin ore ever mined in the Western Hemisphere arrived in Chicago Wednesday from the Black Hills on its way to Eastern factories. The tin deposits in the Black Hills are thought to underlie 7,000 square miles, and when the business is fully developed, we'll have enough tin for our own use and lots to export. Our imports now amount to $30,000,000 a year.....Over 3,000 strikers at the carrying shops and 54 tanneries at Peabody and Salem, Mass. Higher wages and shorter hours demanded—both sides firm.....A poverty-stricken cooper named Carlisle D. Graham, built a stout barrel and entering it, after the head had been fastened on, allowed it to shoot down the Niagara River below the Falls, and through the whirlpool, Sunday last. The foolhardy fellow is now making money by exhibiting himself and his barrel..... .....Five surrendered Apache Indians say Geronimo is severely wounded, and is now in the Sierra Madres, while his son has charge of the hostiles. These are divided into small bands, most of which are inside a triangle, with Mexican troops on both sides, and Americans at the base. Nearly all the cavalry of our army are worn out in hunting the tireless savages. A speedy surrender or annihilation is once more promised. More outraged, mutilated and slaughtered victims found..... ..... .Canadian Indians in the Northwest reported starving, as "large quantities" of the Government provisions sent them, stick to the hands of dishonest agents .....The Mass. Legislature has appropriated $20,000 for the entertainment of the President, should he visit the State this Summer..... .. Dr. Nott's experiments *à la* Pasteur, have been abandoned after four inoculations of the Newell boy. There ought to have been 10, but the boy became sick and nervous after each operation; and his father refused to have them continued. Dr. Nott says he can't afford to treat dog-bitten persons without public support. The boy is reported to be showing symptoms of rabies..Rear Admiral John A. Worden, the hero of the Monitor, died at Newport, R. I., Sunday night.....It is estimated that the use of natural gas in Pittsburg and vicinity now annually displaces 47,000,000 bushels of coal.....The losses by fire in the United States and Canada between January 1 and June 30, are placed at $53,900,000, or $3,000,000 in excess of the loss during the same period of last year..... ....Forest fires have caused great destruction of timber and crops near Marquette, Mich.... Numerous other fires are reported in various parts of the country, and others still more numerous and disastrous are feared owing to the dry state of all vegetation, due to the long continuance of torrid weather.....Sing Sing prison, N. Y., cleared $6,000 in June. With Ferdinand Ward and other financial geniuses within its walls, oughtn't it have cleared $6,000,000?.....The President has just announced that Government employés must not use their offices to meddle in politics..... ....The Committee of Ways and Means (Morrison Chairman) has reported adversely against the Randal tariff bill..... John T. Patrick, Commissioner of Immigration for North Carolina, is at No. 1 Broadway, this city, trying to induce immigration from the North and Northeast. He says: "North Carolina has 52,000 square miles of land and 1,500,000 people. A million are white and the balance blacks. The State can accommodate 10,000,000 people".. ..A revolution has broken out in the State of Tamaulipas, Mexico, and it is feared it will extend along the Rio Grande. Government troops flocking to suppress it; no conflict yet. It is thought the General Government has a hand in it, as it wants to put the State under military rule..... .....After three weeks of constant effort a jury of 12 men has been at last obtained to try the Chicago Anarchists. An attempt has been made to get a man on the jury who would be sure to vote for the acquittal of the miscreants, so as to "hang" the jury instead of the conspirators, $2,000 having been offered as a bribe, but the jury fixers are reported to have failed..... Reports that Powderly will run for the Governorship of Pennsylvania.....The Eastern Green Glass Bottle Association in convention at Atlantic City, N. J., have voted to join the Knights of Labor..... ....Suits are being instituted by the Federal Government against a large number of wealthy Saginaw Valley lumbermen for trespass on the Isabella Indian Reservation in Michigan, whence they are charged with taking timber. ....Frightened by the monstrous growth of the River and Harbor Bill, due to logrolling, the Senate Committee on Commerce offers an amendment scaling down every item, good and bad, 25 per cent.....It is reported that a new extradition treaty has been negotiated between this country and the British Empire, by which dynamiters will be surrendered. It is also expected that the dishonest rascals of this country will no longer find a safe refuge in Canada; nor those of Canada find one on this side of the line. Other provisions still unknown..... Severe wind storms raged, Wednesday, in Penn., Ohio, Ind. and Mich., being specially furious in Eastern Ohio and Western Penn., where many houses were wrecked and great damage done to crops. In one county of Ind. no less than 100 buildings were thrown down; while in some sections corn, oats and fruit are said to be a total loss. ..The Chicago switchmen are still "out" and resolved to stay "out" as long as they are paid while idle, by the labor organizations of the country. The Lake Shore Road still maintains guards, and the strikers threaten to renew their harrassing tactics as soon as these are removed.....Investigation now being conducted shows the St. Louis House of Delegates (Board of Aldermen) are just as corrupt "boodlers" as those of Chicago or New York. Bribery on all sides.....The death of Representative William H. Cole, of the Third Maryland district, removes the sixth member of the House who has been carried off by sickness during this session of Congress.....Mayor Harrison of Chicago, has vetoed the Aldermen's tunnel-gift ordinance, and no attempt has been made to pass it over the veto as the necessary two-third vote could not be obtained in face of the hurricane of public indignation. ....A remarkable raft of logs, bound together in the form of a cigar shaped cylinder, will be started by sea from St. Johns, N. B., in a few days for New York, towed by a steamer. The cylinder is 400 feet long and contains 1,500,000 feet of logs valued at $35,000. The object of this scheme is to save $8,000 duty, as sawed timber is taxed, and logs enter free..... .....During the past six months 5,192 miles of railway, under 17 corporations, have been sold under foreclosure to satisfy $190,000,000 of indebtedness, leaving out in the cold $128,000,000 in stock..... .....Drugs are selling at prices in some cases one-third less than those obtainable three years ago. Opium has fallen from $3.75 to $1.95 a pound; quinine from $1.70 to 50 or 60 cents an ounce, on account of the growth of richer barks in Ceylon and Java; cod liver oil from $97 to $27, and some other standard drugs equally..... ....The Gould Southwestern strike is reported to have cost the K. of L. $100,000 for contributions and expenses, while the men lost over $1,000,000 of wages; and the cost to the Missouri Pacific Road alone, against which the strike was chiefly directed, amounted to $3,500,000. The losses to merchants, farmers, manufacturers and the trade and industry of the country must have been enormous, the loss to Chicago alone being put at $1,500,000. What was gained for so enormous an outlay?. .....The act of Congress, approved June 29, 1886, reducing the fee from eight to five cents on domestic money orders not exceeding $5, goes into effect on July 29.....The Republican convention of Kansas has re-nominated Gov. Martin, and emphatically, but a trifle indefinitely, declared that "the saloon must go."..... .....A new colony of Oklahoma boomers was to start on July 15, numbering, perhaps, 2,500, with subscriptions said to amount to $62,000. Major Sumner, in command of the "boys in blue" there, has ordered the Indians on the west of Oklahoma to plow five yards around their ranges, as he intends to burn every spear of grass except that needed by the Indians and their stock, so that the invaders, having no feed for their stock, will be starved out.....Paul H. Hayne, the Southern poet, was buried Sunday, at Augusta, Georgia..... ....The Government has paid the fines of the fishing vessels seized by the Canadians and has made a demand on the English Government for re-embursement.....Yesterday Representative James Laird, of Nebraska, struck Representative Thomas R. Cobb, of Indiana, a violent blow in the face for "giving him the lie," in one of the lobbies of the House. More blood flowed from Cobb's nose that has been shed in Congress since Brooks assaulted Sumner nearly 30 years ago—a big scandal.....

FOREIGN NEWS.

SATURDAY, July 17, 1886.

THERE are this morning only three elections still to be held in Ireland and eight in Great Britain, and all will be closed to-day except those for the Orkney and Shetland Islands, which are fixed for July 26. The present position of the parties is as follows: Conservatives, 315; Unionists, 72; Gladstonians, 191; Parnellites, 83. The Conservatives and Unionists have polled 1,485,179 votes and the Gladstonians and Parnellites 1,416,612. Gladstone will probably resign either before Parliament meets on August 5, or immediately afterward. Neither he nor the Parnellites are a bit discouraged. In view of the shortness of the time for organization before election, of the dense ignorance and prejudices of many of the voters, of the split in the Liberal party, of all the hostile social influences of the aristocracy and plutocracy of the United Kingdom, and of the gross misrepresentations and falsehoods of his opponents, the G. O. M. has polled a splendid popular vote. Seven months ago Home Rule was advocated by only a handful of Irish members of Parliament; now it is the declared policy of the Liberal party of the United Kingdom, championed by the most influential statesman of Parliamentary history. The Conservatives are 21 votes short of an absolute majority, and in no case can they gain more than a few more votes. If they undertake the Government they must secure the support of the Unionists, and such a composite Cabinet cannot last. Home Rule is deferred, not defeated. Another disolution of Parliament and another election are probable ere long. Meanwhile the Liberals will educate the people up to Home Rule; many new voters—thorough Gladstonians—will be registered, and the results at next election are likely to favor the Old Parliamentary Hand. What the Conservatives and Unionists most desire is to stave off legislation on the matter until Gladstone dies or is unable to work. If he lives a few years more, not only is Home Rule assured, but the downfall of the House of Lords as is at present constituted, is pretty certain..... ..More riots in Belfast begun by an attack of Orangemen on Catholics. Police interfered. Catholics retired, and Orangemen attacked the police for preventing them from attacking the Catholics. Several deaths and a number of severely wounded in the hospitals—riots becoming chronic in the place. A Nationalist meeting at Stewartstown, Thursday, was attacked by Orangemen, and many were seriously injured. A number of other riots also reported. It is thought that there is a deliberate plan to force the Irish Catholics into violence, so as to give an excuse for coercion under a Conservative Government. The Nationalist leaders earnestly urge peace on their followers as by far the best policy..... The French Chambers closed last Thursday. The Duc d'Aumale and the Duc de Chartres, Princes of the Orleans family, having been expelled from the French army and from France, vigorously protested against their expulsion from the army, as an officer's commission is his property. Gen. Boulanger, the fiery Minister of War, said in the Assembly that he wouldn't tolerate an insolent letter like d'Aumale's. Legitimist Deputy Lareinty said to thus insult the absent was an act of cowardice, and all the monarchical members indorsed him. A duel between him and Boulanger takes place this morning. The latter is becoming extremely popular, on account of the energy with which he has placed the army on a war footing and his out-and-out republicanism. Many see in him the "coming man" in France..... ....Cholera is spreading in Italy. Yesterday the official returns were: Briudisi, 75 new cases, 44 deaths; Fontana, 37 new cases, 19 deaths; Latiano, 16 new cases, 7 deaths; Codigoro, 7 new cases, 2 deaths; Venice, 1 new case, 1 death. There were also eight new cases and three deaths at Trieste, which belongs to Austria, and six cases and two deaths at Fiume. The fatality among those attacked is greater than ever before; and the cramps in the bowels are excessively severe, death often occurring within an hour after the attack.... ..Fresh gold discoveries in the northern part of Western Australia. Glowing accounts in Sidney—likely to be the largest gold fields ever found in Australia. The Government geologist estimates the area of auriferous deposits at 3,500 to 4,000 square miles. A rush of diggers to Sidney on the way to the new fields... .....There was a tremendous series of earthquakes in the northern part of New Zealand the other day—the worst known in the present generation. Blazing volcanoes suddenly started along a mountain range 60 miles long. For hundreds of miles the country is covered with mud and ashes belched out to a prodiginous hight. Vessels 250 miles out at sea were enveloped in darkness produced by clouds of ashes which covered deck and rigging. At one time it seemed probably the whole island would sink, so great was the commotion of heaving earth, blazing mountains and scoria-charged air. Deaths numerous; damages heavy, though the section that suffered most was only thinly populated. Full particulars not at hand yet.....

AGRICULTURAL NEWS.

SATURDAY, July 17, 1886.

OSWEGO COUNTY, N. Y., has shipped 45 car-loads of strawberries this season to New York City, amounting to over 500,000 quarts—freight from $175 to $200 per car-load..... .....A colony of farmers, discouraged by the numerous droughts and the failures of many crops in succession, and the great ravages of chinch bugs, are about to start from Centralia, Ill., to settle in Oregon.....Reports still come of horrible sufferings from drought in Western Texas, where "rain hasn't fallen in some places for 14 months!" The surviving cattle are parched and starving. In some places "settlers are selling their farms for mere trifles and leaving for the east in abject poverty". The losses in cattle are put at over $6,000,000. Texas Congressmen are asking the Government for help for the suffering settlers.....In one day lately there were landed in London 10,000 baskets of cherries, weighing 700 tons, from Rotterdam. These cherries, grown in Holland, were valued at two gilders (about 80 cents) per basket..... A frost Thursday, at Warren, Mass., killed beans and potato vines.....In the lately civilized islands of Fiji is the largest sugar-mill in the world, crushing between its rollers 15 tons per hour, or nearly 7,000 tons in a week. The crop, cut annually, yields at the rate of two tons of cane per acre, and a fleet of three steamers, six steam launches, 50 iron punts of 60 tons each, and 10 lighters of 180 tons each, are engaged in transporting cane from the plantations to this mill. Nearly all the work is done by dark laborers.....Chicago's new dog-license law says: "License, one dollar; no license, no tag; no tag, no dog. $35,000 are expected under the law, against $11,500 under the old.....Over 700,000 pounds of English washed combing wool have been bought at the London sales for America. .....Only 13 bales of foreign wool were received in Boston last week, against 2,074 bales for the same week in 1885.....The English Privy Council Inspectors have been unable to discover any trace of contageous diseases in 68,000 cattle and 39,000 sheep imported from Canada.. ..Exports from New York last Friday and Saturday included 950 live cattle and 3,160 quarters of beef..... The exports of live stock and dressed meats from Boston for the English markets last week were 966 cattle and 3,320 quarters of beef. American cattle and dressed beef are unusually low-priced in England just now. Best American live cattle are dull in English markets at 12c. to 12½c. estimated dressed weight.....A cattle car has been patented which has an arrangement of food bins, feeding sack and water trough of novel construction, so contrived that the car may be used to carry cattle in one direction and freight or merchandise on the return trip, the feeding boxes being adapted to fold back out of the way.....

Hay Fever.

THIS malady is an index of a condition of the system which should be thoroughly changed. That this is possible is shown by many letters from patients. The following is an example:

From Rev. T. J. Taylor, Warrenton, N. C., Oct. 21, 1885.—"Some time in August I ordered a Treatment of Oxygen for my aunt. She had suffered with *hay fever* regularly every year for fifteen years. When I ordered the Compound Oxygen her annual attack of hay fever had already commenced, and as you did not promise relief after the commencement of the attack, we were not very hopeful. But to our astonishment and joy the Oxygen relieved her at once, and only on one evening after she commenced the Treatment, and then only for a few hours, did she have any considerable trouble with her hay fever. Though she really had hay fever, it was so slight after she commenced using the Oxygen, that she was scarcely conscious of it. I do not know what Compound Oxygen will do for hay fever in general, but *this case of fifteen years standing was mastered by it.* You are at liberty to use this in any way you may see proper, for the good of hay fever victims. I believe it will cure hay fever. It did it in this case at any rate."

DRS. STARKEY & PALEN, 1529 Arch St., Phila. Pa., publish a monograph on Hay Fever which is sent free to all interested. Numerous cures are reported.—*Adv.*

Crops & Markets.

SATURDAY, July 17, 1886.

The official report on the prospects of the crops in Hungary estimates the yield of wheat at 89 per cent. of the average. In 1885 the yield was 91 per cent. The prospects are excellent for rye and oats and bad for barley.

The official report says that while the prospects of the Prussian crops, especially those of rye and wheat, are generally highly satisfactory, the outlook in several districts of Silesia is bad. Oats, barley and potatoes generally promise normal crops.

The French Government has deferred till September, its proposition to put additional duties on imported bread-stuffs. It could hardly raise the price of wheat 12 cents a bushel at the beginning of the cereal year in which it will need probably 90,000,000 bushels of foreign wheat or its equivalent in flour.

The July report of the Department of Agriculture, made public on Saturday, confirms our Crop Special's estimate of the winter wheat crop—about 295,000,000 bushels. Our Special went to press on July 3, and as, therein stated, our estimates were based on reports received here between June 25 and July 1, and some of them were over a week in the mails. Those from the spring wheat region therefore referred to the condition of the crops about June 20, and most of the irreparable injury to them from drought has occurred since. We made allowance for the damage done before that time; but a good rain would not only have prevented further injury, but have undone some of the mischief already accomplished. We put the damage to Spring wheat on July 1, at about 5,000,000 bushels; Statisticiau Dodge of the Department of Agriculture, on July 12, put it at 6,000,000 bushels up to that date; but we are strongly of the opinion that it was greater.

The loss is variously estimated by different "crop authorities" all the way from 6,000,000 to 60,000,000 bushels. There is a tremendous amount of rough guessing, and a good deal of premeditated lying for speculative purposes. By exaggerating the damages, the "bulls" expect to raise prices temporarily; by belittling them, the "bears" are trying to keep or pull prices down. Many farmers' papers think it to the interest of farmers to underestimate the crops, under the idea that prices will then go up; but no paper has a monopoly of the "news," and the truth is bound to be approximated by some. They induce some of their readers, however, to hold on to their produce in hopes of better figures, ultimately losing thereby. Those who sold their wheat last harvest at current figures, did better than those who held on. "Tell the truth always as it seems to you" is the best motto in this as in other matters.

The July report on corn of the Department of Agriculture, is the first for the year. It says the acreage of corn has very slightly declined in the Middle States and in Maryland, Virginia and South Carolina, with some increase in other States of the South, which is largest west of the Mississippi. In the Ohio Valley the acreage is nearly the same as in 1885. West of the Mississippi the increase is heavy; in Kansas 20 per cent., Nebraska 10, Dakota 30. Total increase 3½ per cent., or about 2,500,000 acres. Corn is late on the Atlantic coast, from wet weather, cool nights and slow germination. In many situations the seed rotted, and replanting became necessary. Instances are reported of planting three times. Yet there is generally a fair stand, and the crop is growing and healthy, and with seasonable July weather will make a full yield. It has suffered quite as much on the Gulf coast, where the areas are still more unpromising. The great corn belt of the West reports medium to high condition, growing better from Ohio to Kansas. The Missouri Valley averages better than the Ohio River and lake region. There is a full stand in Missouri of vigorous and even growth, and 10 days earlier than last year. The Kansas returns are equally favorable. Insect injuries have nowhere been serious. The chinch bug is now threatening some localities in the West. The general average is 92, against 94 last year and 96 in 1884. The State average of the following States are: New York, 92; Pennsylvania, 88; Virginia, 93; Georgia, 92; Texas, 82; Kentucky, 91; Ohio, 93; Indiana, 95; Michigan, 96; Illinois, 97; Missouri, 101; Nebraska, 95, and Iowa, 99.

Oats have been more severely injured than even wheat; and grass has been burnt up, and the hay crop greatly curtailed. A heavy rain storm towards the end of last week throughout nearly the whole of the Northwest, put an end to the dry spell. Just now most of New England is suffering severely from dry weather, and crops will be greatly injured unless rain falls soon; considerable irreparable damage has been done already.

In spite of heavy rains last Saturday, which washed off much of the honey-dew in many parts of the New York hop-growing region, the crop is still reported in a very ruinous condition from hop-grubs, lice and honey-dew. Prices for old hops vary considerably in the different local markets, but are everywhere higher. Here sales have run up to 28 cents for best State and 25 cents for California. Several State lots have been returned from London. At San Francisco the new crop is reported sold at from 27 to 30 cents per pound.

In view of the current prices of farm stock, hogs are now probably the best paying animals on the farm, and the general impression is that the present high figures will continue throughout the season. With the prices of hogs high in face of a full supply, the prices of mutton sheep should soon advance, as there is some scarcity. The returns of summer pork packing show an increase of 285,000 hogs over the same time last year.

The wheat market is quieter, with prices fluctuating within a moderate range. Latest estimates of damage to spring wheat 10 to 20 per cent., earlier reports having been exaggerated. A strong under-currant of feeling that a higher range of prices for wheat is likely to prevail during the coming crop year than has been quoted for two years. This is emphasized by unfavorable crop reports from the United Kingdom, Russia, India, Australia and elsewhere. No. 2 red wheat at New York closed yesterday at 87c., against 86¾c. a week ago. The tobacco crop of Missouri needs rain. London wool prices are no higher. Domestic quotations are unchanged and holders very firm.

MARKETS BY TELEGRAPH.

SATURDAY, July 17, 1886.

CHICAGO.—Compared with cash prices a week ago, "regular" wheat is 1⅝c. lower; No. 2 Spring, ½c. lower. Corn, ⅛c. lower. Oats, 1c. lower. Rye, 3½c. lower. Barley, 6½c. lower. Pork, 7½c. lower. Cattle, shipping steers, about the same; stockers and feeders, 25c. to 35c. lower; best of other grades higher, poorest, lower. Hogs, from 5c. to 10c. higher.

WHEAT, active; Sales range: July, 76¼@78¾c; August 78¼@79¼c; Sept., 80@80¾c; No. 2 Spring, 77½c. CORN.—Active; cash, 37¼c; July, 37¼@37¾c; August, 38¼@38¾c; September, 39¼@39¾c. OATS.—Quiet; Sales ranged: Cash, 28½c; July, 29¼c; August, 29¼@29¾c; September, 29½@29¾c. RYE.—Quiet; No. 2 at 54½c. BARLEY.—September, at 65@66¼c. FLAXSEED.—No. 1, at $1 11, MESS PORK.—Steady; sales ranged; Cash, at $9 86½@9 90; August, at $9 82½@9 90; September, at $9 92½@10 00½. LARD.—Steady; sales ranged; Cash, at $6 55@6 60c; August at $6 62½@6 67½; September, at $6 70@6 75. Short Ribs.—Cash, at $6 35. Boxed Meats.—Dry Salted Shoulders, at $5 80@6 00; Short Clear sides, at $6 70@6 75. CATTLE.—Shipping steers, at $3 75@5 40; stockers and feeders, $2 25@3 75; cows, bulls and mixed at $1 50@3 75; bulk, $2 90@3 60; through Texas cattle, $3 35@4 30. HOGS.—Rough and mixed, $4 50@4 90; packing and shipping at $4 80@5 05; light weights at $4 50@5 00; skips, $2 70@4 40. SHEEP.—Market steady; Natives, $2 20@4 40; Western, $3 10@3 50; Texans, at $1 75@3 10; Lambs, per head, $1 25@2 25.

ST. LOUIS.—Compared with cash prices a week ago, No. 2 red wheat is ⅝c. lower. Corn, 3¼c. higher. Oats, 4c. higher. Rye and Butter, steady. Eggs, 1c. lower. Flaxseed, unchanged. Pork, 25c. higher. Cattle, slight variations up and down as to grades. Sheep, 10c. to 25c. lower.

WHEAT.—Active; No. 2 Red, Cash, 75½@77c; August, at 78¾c; September, at 80¾c. CORN.—Active; No. 2 mixed Cash, at 34½@35c; August, at 27¼c. OATS.—Dull; No. 2 mixed, Cash, at 30@25c.; August, 27½c; September, at 28¼c. RYE, 51c. BARLEY.—No. 3 Spring, 48c. BUTTER.—Creamery, 15@17c; dairy, 10@15c. EGGS, at 7c. FLAXSEED at $1 02. HAY.—Timothy, $10 50; Prairie, $7 50. BRAN, 46c, at mill. CORN MEAL, $2 90. PORK, $10 50. BULKMEATS.—Long clear, at $6 30; short ribs, $6 45; short clear, $6 50. LARD.—$6 30. CATTLE.—Market active; Good to Choice Native Shipping Steers, $4 60@4 90; Common to Fair, $4 00@4 50; Butchers' Steers, $3 50@4 35; Cows and Heifers, $2 00@3 25; Stockers, and Feeders, $3 25@4 25; grass Texans, $2 00@3 30. HOGS.—Market active; Lights, $4 65@4 85; Packing, $4 60@4 85; heavy, $4 90@5 00. SHEEP.—Shipments, none; Market quiet at $2 00@3 75.

BOSTON.—GRAIN.—Corn in demand. Steamer yellow, 50@50¾c, and steamer mixed 49c. per bushel. OATS.—In better demand, and prices higher; No. 2 white, 42c; No. 3 white, 40¾@41c; barley, 45c; fancy white, 46c. per bushel. Rye is held at 58c. per bushel. Bran, $14@14 50 for Spring, and $15 50@16 00 for Winter; Fine Feed and Middlings at $14@18, and Cotton Seed Meal $23 on the spot, and $21 75 per ton to arrive. HAY AND STRAW.—Market for hay has been firmer at $17@18 per ton for choice and fancy, $15 00@16 00 for fair to good, $13 00@16 00 for fine, and $9 00@13 00 for poor and damaged, Western choice, $16@17, do fair to good $14@15. Straw.—Rye straw is held $19 00@19 50 for choice, and $14@18 for common to good. Swale hay at $10 00@11 00. Oat straw, at $10@11 per ton. PRODUCE.—BUTTER.—Northern and Eastern creamery, extra, 18½@19c; do. extra firsts, 17@18c; do. firsts, 15@16c; Western creamery, 16@18c, for extra firsts to extra; firsts, 14@15c. Northern dairy, 15@17c, for Vermont extra firsts to extra; firsts, 13@14c; seconds, 12@12c; Western dairy, 12@13c for firsts; seconds, 9@11c; imitation creamery, 11@15c for extra firsts to extra; ladle-packed, 9@12c, for extra firsts to extra; firsts, 8@9c; seconds 7@8c; grease, 3@4c. NEW CHEESE.—New York and Vermont extra, 7¼c; do. do. firsts, 6½@7¼c; do do. seconds, 4@5c; Western extra, 7¼@7½c; do. firsts, 6@6½c. EGGS.—Cape and near by, per doz. 17c.; Eastern extras 15½@16c; do. firsts, 14½@15c; Northern firsts, 14¼@15c; Western firsts, 14c; Provincial, 14@c. BEANS.—Choice Northern hand picked pea, $1 75@1 80 per bushel; do. do. New York, small $1 60@1 70; do. do. screened $1 15@1 20; medium choice, hand-picked, $1 45@1 50; do. do. screened, $1 15@1 25; Yellow Eyes, improved $1 40; do. choice flats, $1 25@1 40; Red Kidneys, $1 60@1 70; Canada pea, 65@95c. per bushel for common to choice; green peas, Northern, 90c@$1; do. Western, $1 15@1 20. POTATOES range at $2 00@2 75 per barrel for new. Nothing of consequence doing in old.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, July 17, 1886.

STATE OF THE MARKET.—As compared with cash prices last week, flour steady; No. 2 Milwaukee wheat, 2½c. lower; No. 2 Red, 1c. lower; corn, ungraded mixed, steady; No. 2 mixed, ½c. higher; oats, No. 3 mixed, 1c. lower; pork, steady; lard, 15c. higher; butter and cheese, steady; eggs, 1c. higher; poultry, 1c. lower; fruit and vegetables steady.

FLOUR, FEED AND MEAL, FLOUR—Quotations: Fine at $2 15@2 80; Superfine, $2 40@3 00; Extra No. 2, $2 80@3 20; Good to Fancy Extra State, $3 20@3 90; Common to Good Extra Western, at $2 70@3 95; Good to Choice Extra Western, $4 00@5 00; Common to Fair Extra Ohio, $2 70@3 75; Good, $3 80@4 20; Good to Choice, $4 25@4 75; Common Extra Minnesota, $2 70@3 25; Clear, $3 25@3 75; Rye Mixture, $3 20@3 75; Straight, $4 00@4 60; Patent $4 40@5 00; Bakers' Extra, $3 75@4 50; St. Louis Common to Fair Extra, $2 70@3 65; Fair to Good, $3 70@4 50; Good to Very Choice, $4 55@5 00; Patent Winter Wheat Extra, $4 40@5 00; City Mill Extra for West Indies, at $4 25@4 40; South American, $4 40@4 50. SOUTHERN FLOUR.—Extra at $3 05@3 75 for Common to Good, and $3 80@5 10 for Good to Choice. RYE FLOUR.—Superfine, at $3 15@3 40, latter for very choice. CORN MEAL.—Dull; Yellow Western at $2 50@2 75; Brandywine at $2 70@2 75. FEED.—40 to 50 lb, quoted at 63@75c, and from mill at 67½c; 60 lb at 62½@65c; 80 lb at 70@75c; 100 lb at 80@85c; sharps at 95c@$1. Rye nominal.

GRAIN.—WHEAT.—No. 2 Chicago, at 85@87¾c; No. 2 Milwaukee, 85½c; No. 1, Northern, 89½c; No. 1 Hard Duluth, 90½c; New Red Kentucky, 90½c; Ungraded Winter Red, 87@89c; No. 2 Red, 85@89c; New No. 2 Red, 87@87¾c; No. 2 Red for August, 86½@87½c; do. for September, 88¼@88¾c; do. for October, 88¾@90c; do. for November, 90¾@90¾c; do. for December, 91½@92¾c; do. for January, 93¾@93¾; do. for March, 94½@95c; do. for May, 96¾@97¼. RYE.—Western, 55@56c; Canada and State, 57@59c. PEAS.—Canada, 66c; 7,500 bush. Michigan, at 63½c. CORN.—Ungraded Mixed, at 43@49c; No. 2 Mixed, 46¼@46½c, Ungraded White, 47½c; Low Mixed, 43½c; Yellow, 49c; No. 2 Mixed for July, 46@46½c; do. for August, 46¾@47¼c; do. for September, 47¼@47¾c; do. for October, 48@48¼c. OATS.—No. 3, Mixed at 35½c; No. 2, 95¾@96c; No. 3 White, 37½@39½c; No. 2, 40@42c; Mixed Western, 35@38c; White do. 40@46¾c; White State, 42c; No. 2 Mixed for July, 35½@35¾c.; do. for August, 33¾@33⅞c; do for September, 33¾@33¾c.

PROVISIONS.—PORK.—Mess quoted at $10 50@10 62½ for Old and $11 25@11 62½ for New; $12 00@12 75 for Family Mess; $14 00@14 75 for Clear Back; and $9 50@10 00 for Extra Prime. BEEF.—Extra India Mess, $12 00@14 00; Extra Mess, in barrels, $8 00; Packet, $8 50; CUT MEATS.—Pickled Bellies, 10 lb average, in tubs, 7c; Pickled Shoulders, 6¼c; Pickled Hams, 11½c; 24 lb average Pickled Bellies, quoted 6¾@6¾c; City Pickled Shoulders, 6½@6¾c; Smoked Shoulders, 7c; Pickled Hams, 11¼@11½c, Smoked Hams, 12@12½c. MIDDLES.—Long Clear in New York, 7c; at the West, Long Clear, 6.40c; Short Clear, 6.62½c. DRESSED HOGS.—City Heavy to Light at 6¾@6¾c; Pigs, 7c. LARD.—Western Steam spot quoted 6.82½@6.85c; August, 6.83@6.84c; September, 6.92@6.94c; October, 6.91@6.93c, November, 6.70c. City Steam, 6.30@6.35c. Refined, quoted nominally, 7c; Continent, 7.15c.

BUTTER.—Creamery—State and Delaware County' palls, fine, 18c; State and Pennsylvania, 17½@18c; Western best, 17@17½c; Western prime, 15½@16c.; Western good, 14@14½c. State Dairy.—Half-firkin tubs, best, 15½@16c; do. do, prime, 14@15c; do. do., good, 13@14c; do. do. common, 11@12c; Welsh tubs, best, 15c; do. prime, 14c. Western.—Imitation Creamery, best, 12½@13c; do. do, fair and good, 11@12c; Dairy, fine, 12c; do, common, 9@11c; Factory, fresh, 11c; do. good, 9@10c.

CHEESE.—The quotations are for: New State Factory, best white, 8½@8¾c; do. do, best colored, 8¾@8¼c; do. do, fine, 7¾@7¾c; do. do, fair, 6¾@7¾c; do.do., common, 6¼@6¾c; Ohio factory, fine, 7¼@7¾c; State factory, nightskims, 6@6½c.

EGGS.—Quotations are for: State, 15@15½c; Western, 14¼@14¾c.; Canadian, 14½@14¾c.

POULTRY.—LIVE.—Chickens, spring, per lb, at 14@66c; fowls, near-by lots, per lb, at 10@10½c.; fowls, Western lots, per lb, at 9½@10c.; fowls Southern lots, per lb, at 9½c; turkeys, per lb at 8@9c; ducks, western, per pair, at 50@60c.; geese, western, per pair, at $1.00@1.25.

POULTRY.—DRESSED.—Turkeys, per pound, at 8@10c.; Spring chickens, Philadelphia, per pound at 19@21c.; do. western, per lb, at 12@14c; fowls, Pennsylvania, prime, per lb, 12c.; do State and western, per lb, at 11@12c.

FRUITS.—FRESH.—Quotations are: Apples.—Norfolk, per bbl., at $2 00@3 00; do. Maryland and Delaware, per crate, at 60c@$1. Strawberries.—Western New York, per quart, at 8@10c; up river, per quart, at 3@6c; and at 5@12c. for extra choice lots. Cherries at 6@8c. for dark red, large, 7@8c. for red prime. Currants at 5@6c. for up river large, and 3c. for small. Gooseberries, per bush., at 75c@$1 00. Raspberries at 8@10c. per quart for Maryland, and 4@8c. per quart for blackcap. Huckleberries at 11@12c. per quart. Peaches at $1@1 50 for prime Georgia and South Carolina per crate; $2 for prime North Carolina per bush. crate, and 50c.@$1 50 for fair and good lots. Plums at 3@5c per quart.

FRUITS.—DRIED.—The quotations are as follows Apples—Fancy evaporated, at 7¾@8c; choice, at 7½c; do. prime at 7@7¼c; fancy North Carolina sliced, at —; choice do. at 2½@3c.; choice Tennessee quarters at 1½@2c.; State quarters at 2½@3c.; southern sliced prime at 1½@2c; do. common, —. Peaches—Peeled North Carolina, choice, 11c; fancy, 12@12½c; extra fancy, —c; Georgia, choice, at 10@11c; do. prime, 8@9c; unpeeled halves, 2½@3c; unpeeled quarters at 2½@2¾c.; Delaware evaporated, peeled,—@—c; unpeeled do., at —@—c. Choice pitted cherries at 10c. Evaporated raspberries, at —@15c; sun-dried do. 13@—c. Blackberries—Prime at 6¾@7c. Whortleberries at —c. Plums, at 5c.

PEANUTS.—The quotations are: 6½c. for best hand-picked; 4@5c. for farmers' grades.

COTTON.—The quotations, according to the American classification, are as follows:

	Uplands.	New Orleans and Gulf.	Texas.
Ordinary	6⅞	7 1-16	7 1-16
Strict Ordinary	7 5-16	7⅛	7⅛
Good Ordinary	8¼	8 7-16	8 7-16
Strict Good Ordinary	8 11-16	8⅞	8⅞
Low Middling	9 1-16	9⅛	9⅛
Strict Low Middling	9 5-16	9⅜	9⅜
Middling	9½	9 11-16	9 11-16
Good Middling	10	10 3-16	10 3-16
Strict Good Middling	10 5-16	10⅜	10⅜
Middling Fair	10 11-16	10⅝	10⅝
Fair	11 5-16	11½	11½

STAINED.

Good Ordinary	6 11-16	Low Middling	8 3-16
Strict Good Ord.	7⅜	Middling	8 15-16

HAY AND STRAW.—The following quotations are: for Choice Timothy hay at 85@90c; Good do. at 70@75c; medium 55@60c; shipping at 50c; clover mixed, 50@60c; clover, black, at —@—c. Straw.—No. 1 rye, 80@85c; short rye at 60@70c; oat, at 40@45c; wheat, at —c.

BEANS.—Marrows, $1 75; Mediums, $1 55; Peas, $1 50@1 75; Red Kidneys, choice, $1 80@1 85; White Kidneys choice, $1 55; California Lima, $1 70; Green Peas, $1 05@1 10.

VEGETABLES.—Quotations are for: Potatoes.—Long Island, rose, in bulk, per bbl., $1 75@1 87; Maryland, prime, per bbl, $1 75@2 00; Norfolk, rose, good to prime per bbl, $1 75@2 00; Norfolk, rose, poor to fair, per bbl, at $2 00@1 50; new potatoes, culls, per bbl, $—@1 00. Asparagus.—Oyster Bay, per dozen bunches, at $1 50@2 50. Beets.—Long Island, per 100 bunches, $1 25@$1 50. Beans.—Long Island, wax, per bag, 75c; Long Island, green, per bag, 50@75c; Maryland, wax per bbl, $1 50@2 00. Carrots.—Long Island, per 100 bunches, $1 00@1 25. Corn.—Sweet, Jersey, prime, per 100, $1@1 25; do. Burlington, Jersey, per 100, 50@75c. Cabbages.—Long Island, per 100, $2 00@3 00. Cucumbers.—Long Island, per 100, $1 50; do. Norfolk, per bushel crate, 75c. $1 00. Egg plant, Florida, per bbl., at $5 00@8 00. Onions.—Maryland, per bbl, at $1 50@2; do, Virginia, per bbl, $1 25@1 75; Western, per bbl, $1 75@2 00. Peas.—Long Island, per bag, 75c@$1. Squash.—Long Island, white, per bbl, $1 00@1 25. Tomatoes.—Norfolk, Acme, per crate, $1 25@1 50; do. Norfolk, common, per crate, 75c@$1 00; do. Savannah, per crate, $1 00@2 00; Charleston, per crate, 75c@$1 25; Florida, per crate, 75c@$1 00. Turnips, Jersey, Russia, per bbl, $1 25.

WOOL.—Active and strong. XX Ohio has sold at 35@36c; X do. at 34c, Mexican at 14@15c; Montevideo at 25@30c; Indiana Unwashed at 30c; and Eastern Oregon at 23½c.

LIVE STOCK MARKET.

NEW YORK, SATURDAY, July 17, 1886.

BEEVES.—Colorado steers, 1,140 lb, at $5 40; do. 1,091 lb, at $4 75; Des Moins, Iowa, "Stillers," 1,357 lb, at $5 35; do, 1,364 lb, at $5 50; Kentucky "Stillers," 1,301 lb, at $5 40; do, 1,310 lb, at $5 35; Kentucky grass steers, 1,174 lb, at $4 90; do, 1,186 lb, at $5 15; do, 1,244 lb, at $5 0; Indiana do, 1,702 lb, at $4 90; Oxen, 1,640 lb, $4 90; Chicago steers, 1,357 lb, at $5 65; do. 1,401 lb, at $5 60; Ohio steers, 1,421 lb, at $5 40; Kentucky steers, 1,179 lb, at $4 90; do, 1,153 lb, at $4 85; Ohio "Stillers" 1,158 lb at $5 05; do, 1,186 lb, at $5 05; Bulls, 1,587 lb at 4¼c; Terre Haute "Stillers," 1,316 lb, at $5 40; do. 1,222 $5; Still Bulls, 1,176 lb, at $4 St. Louis steers, 1,144 lb, $4 80; do. 1,187 lb, at $4 95; Kentucky steers, 1,067 lb, at $4 80; do. 1,365 lb, at $5 20; oxen, 1,324 lb, at $4 90; Virginia steers, 1,200 lb, at $5 15; bulls, 1,350 lb, at $3 90; Kentucky oxen, 1,165 lb, at $4 25.

CALVES.—Buttermilk Calves, 152 lb, at $1 75; Veals, 144 lb, at 5¾c; Buttermilk calves, 161 lb, at 3¾c.

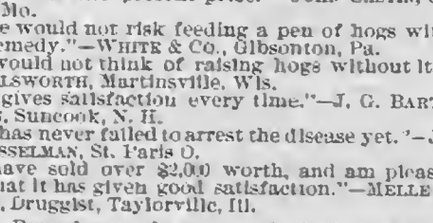
SHEEP AND LAMBS.—Receipts for six days, 35,924 head against 35,223 head for the same time last week. Sheep were in light supply, and wanted at full prices. Lambs were in less active demand, but ruled steady. Pennsylvania Lambs, 58 lb, at 7c. per lb; Virginia do, 56 lb, at 6¼c; Kentucky do, 52 lb, at 5½c; do, 60 lb, at 6c; Virginia Sheep and Lambs, 51 lb, at 4½c; Kentucky Ewes, 103 lb, at 4c, Virginia Lambs 56 lb, at 6¼c; Indiana Sheep, 84 lb, at $4 40; Michigan do, 113 lb, at $4 40; State Sheep, lb, at 4c; State Lambs, 57 lb, at 6¼c; State Sheep, 69 lb, at 3¼c.

HOGS.—Receipts for six days, 29,667 head against 27,290 head for the same time last week. None for sale Nominally firmer at $5 20@5 50 for Fair to Prime Hogs.

I WILL INSURE YOUR HOGS!

DR. JOS. HAAS'

HOG AND POULTRY REMEDY



[None Genuine without this Trade Mark.]

Is the only Practical Preventive of the so-called Swine Plague.

If used in proper quantities, it will

1. *Prevent Disease;*
2. *Arrest Disease;*
3. *Pay for itself with the increased pork it will put upon the hogs.*

AS AN EVIDENCE OF FAITH

In my Remedy, I make the following offer:

I will insure herds of swine of not less than one hundred in number against disease, at a small fee per head, provided they are fed my Remedy under my direction, and prove upon examination prior to contract that they are in a healthy condition, and neither inbred, close-bred, or the progeny of such.

WHAT IS SAID OF THE REMEDY.

"It has stopped the hogs dying and improved their appetite."—F. C. GOLDSBOROUGH, Easton, Md.

"Have used the remedy with success."—D. G. BARBER, Easton, Md.

This medicine has been thoroughly tested and its merits established on the eastern shore."—Record and Gazette, Pocomoke, Md.

"I will not be without Haas's Hog Remedy if it costs three times the present price."—JOHN CASTIS, Grant City, Mo.

"We would not risk feeding a pen of hogs without the remedy."—WHITE & CO., Gibsonton, Pa.

"I would not think of raising hogs without it."—J. M. ELLSWORTH, Martinsville, Wis.

"It gives satisfaction every time."—J. G. BARTLETT & SON, Suncook, N. H.

"It has never failed to arrest the disease yet."—JONES & MUSSELMAN, St. Paris O.

"I have sold over $2,000 worth, and am pleased to say that it has given good satisfaction."—MELLE WILLIAMS, Druggist, Taylorville, Ill.

The Remedy can be procured of all druggists, or from my Laboratory, upon receipt of price.

Prices, $2.50, $1.25, and 50 cents per package. 25 pound cans, $12.50.

JOS. HAAS, V.S.,

Member of Indiana State Veterinary Med. Association,

INDIANAPOLIS, INDIANA.

"**Summer fallows** receive one or two plowings only during the summer. The surface hardens into a crust and becomes a mass of clods when plowed; and weeds are allowed to grow and seed the land. The time required for repeated plowings prevent the necessary work. But with the 'ACME' Pulverizing Harrow, Clod Crusher & Leveler, work even better than plowing may be performed in one-fifth of the time, the weeds sliced up and killed, and the operation repeated so often that the field will be a clean mellow bed by Autumn." See advertisement on page 492.

Beautiful Maryland Homestead Farm.—280 Acres, $8,000. For full particulars, address H. P. Chambers, FEDERALSBURG, MD.

FARQUHAR VIBRATING SEPARATOR.

SEND FOR CATALOGUE.

Equally Perfect in all kinds of Grain and Flax. Wonderful Capacity. VERY DURABLE.

Address, A. B. FARQUHAR, York, Pa.

THE DANA

CENTRIFUGAL-GOVERNOR

WINDMILL

Is the best working and most powerful Wind-Engine in the world, because it is the only one which unites the most perfect form of wind-wheel with the most perfect method of regulation. Geared Mills a specialty.

For Descriptive Circulars apply to

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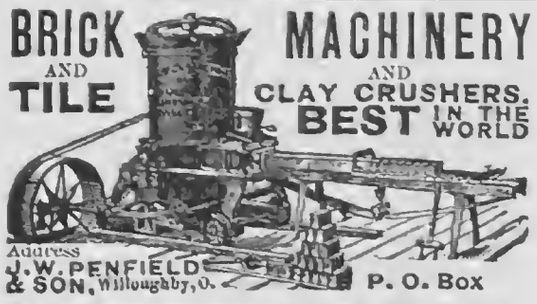
FAIRHAVEN, MASS., U. S. A.

BRICK AND TILE MACHINERY AND CLAY CRUSHERS. BEST IN THE WORLD



Address J. W. PENFIELD & SON, Willoughby, O. P. O. Box

MEXICAN HOG AND CHICKEN CHOLERA CURE

Formula prepared by State Medical Society, as will be shown. Formula and Treatise on the Disease, also Pamphlet "How to make Poultry pay" and "Home Cook Book and Family Physician" sent for 50c. in stamps. MEXICAN MEDICINE CO. P. O. Box 33, Cincinnati, O.

SEND TEN CENTS IN POSTAGE STAMPS TO

E. & O. WARD,

PRODUCE COMMISSION MERCHANTS

for Circular giving important advice about **shipping produce.** Also containing receipe for **preserving Eggs.** Established 1845.

No. 279 Washington St., New York City.

For the Young.

ABOUT the meanest thing that boys and girls can do is to make fun of their sisters when they have company. I don't want to see any of such work done. When I see boys and girls going about the house slamming doors, shouting and saying things that will make sister feel uncomfortable, I seem to lose my eyesight and see nothing but a lot of young bears who are doing their best to worry and plague those who love them. I like a brute bear far better than I like a human bear. The brute knows no better than to be selfish and cruel. It pays to be ladylike and gentlemanly. We can't possibly begin too early in life to make ladies and gentlemen out of ourselves.

ONE bad thing about cats is that they want to catch birds. A cat is far more cruel than a dog. There are two little birds that come about our house just after every meal. They seem to know the time of day. They will pick up crumbs and hop about almost within reach of one's hand. They are so tame that I fear the cats will pounce upon them some day. I should be sorry to have that happen, for I like to have the birds about. I don't think it would do any good to whip the cats even if they did get hold of the bird. It seems to be a cat's nature to be sly and cruel. One of our cats met with an accident last year. The dog snapped at him and broke his jaw. Now one tooth stands right out. He is a good mouser, though, but he hates all dogs, I can tell you.

D. WOODWARD & SON, of Clinton, Mich., write me that they would like very much to send a plow to every one of the Cousins who tried for the prize. It would cost a small fortune to do it, though, there were so many. They will send a plow at cost, though, to any who tried and failed. This is the best they can do, and those who want to know more about their offer should write them.

THE hens are very fond of purslane, or "pussley," as most people call it. Pull up a little and throw it into the hen-yard, and see if I am not right. I lived in a family once where the people saw in a paper that "pussley" would make very good greens. We had a very large mess cooked, but it was never eaten up, and we never had any more cooked.

I AM inclined to think that most mistakes are made because people try to do things in a hurry. People want to rush and get things done so that they can take up something new. That is frequently why they fail. It is what we do well that counts for us. I notice that people who are so anxious to do everything in a day are always discontented and unhappy. Take time and think out your work before you do it. One thing well done will count for more than a dozen things half done.

HEALTH is the most valuable thing one can ever have. I know it, because I have been both sick and well. Youth is the time to lay the foundation for a sound constitution. Take plenty of sleep. Most boys are glad to do that, anyway, I guess. Never use tobacco or liquor. I hate to see a boy put his brains into a paper and burn them up, yet that is just what these boys do who smoke cigarettes. At school the boys used to smoke hay-seed or grape vines. They thought it was great fun, but I notice that every one of them to-day carries the markings of tobacco on the face. It is cut there just as plainly as though some one had taken a knife and cut deep lines all over the face. Let tobacco alone boys, and drink red-hot iron sooner than take a glass of whiskey.

A GREAT many people think they must have something stronger than water to drink in the harvest field. I have never found anything better than good butter-milk. When I was a boy they used to make "switchell." This was a mixture of water, molasses and ginger, and it was pretty week stuff too. I think water would be stronger than that. It would certainly quench the thirst more completely. Lemonade is good when we can get fresh lemons, but it generally costs considerable to make it. Don't drink too much of anything. When you drink water it pays to stop and "taste" it. In that way it will go down the throat slowly and do you more good.

IT is hard to keep the flies out of the house now, isn't it? Good screens at the doors and windows are a great comfort. Some flies seem to wait, and when the door is opened, even a little crack, in they rush. They are bound to come where they can do the most harm. It is hard work sometimes to drive them out, yet out they have to go, or there will be very little comfort. I never thought much of "fly poisons" or traps. It always seemed to me easiest to guard the doors and windows with screens, and then drive out all the smart little fellows that got in. Driving out the flies is something like washing dishes in the fact that we seldom get any credit for the work, even though it is very important. I am sorry to say that some men appear to take "woman's work" just as if it was a matter of course. They never notice that nine times out of ten dinner is on time, but how they grumble when it comes a few minutes late. Such men ought to "change works" a few times. Then they would have more patience. My boys are going to make men of another stamp, I know.

I HOPE there is a croquet set at your home. There ought to be, I am sure. Croquet is a good game, and it does one good to play it. I like all these things that make life a little easier and brighter. I don't like to see people going about with great long faces, and taking many bottles of medicine when all they need is a little brightness and fun. Trouble and care are afraid of a good croquet ground, and they won't follow people onto it. I don't believe much in complaining or in "bad luck" you see. We can make life just about what we want to, if we will only make up our minds to do it.

I LIKE to see people figure on what I call a cash basis. You ask some people how much they are earning, or how much money they have, and they will tell you some great amount of money that fairly discourages one. On asking questions about it, we will be pretty sure to find that they included in this sum what they expect to get, and what they hope to own. That is a very poor way to do business. If you have five cents in cash, and property that you might sell for $5, if you could find a purchaser, it is a great deal wiser to say, "I have five cents," than it is to say, "I have $5.05." It is the same way with what you earn. If you get $3 a week, say so, and do not try to make it seem more by figuring like this: next year I may have $5, the next year $7, the next year $10 and the next $15, and so I am really getting $8 now. That is the way some people figure, and a poorer business policy, it would be hard to find. I knew a boy once who said he made $100 a month as a book agent. I found that he was out just half a day and sold one book, but he figured that had he kept on he might have made the $100. Men or boys who work on such a principle will never prosper. Remember it boys. Never go beyond your means, and be sure to understand just how much you are worth.

THE STORY OF A DISTRICT SCHOOL.

A COLLEGE BOY'S DIARY.

(Continued.)

"CAN you tell me how far it is to the Bear Creek school house?" I asked as I neared him.

"I reckon I kin—its nigh about four mild."

His little eyes seemed to run all over me as I stood before him. He examined me from head to foot. When his inspection seemed complete, his under jaw thrust itself out with a movement that I could hardly understand. He appeared to have formed some decided opinion with regard to my personal appearance.

"Yer the new master, ain't ye?"

He did not raise himself from his position near the post. The little eyes seemed to sharpen as he looked at me, and one boot advanced a little. He did not wait for me to answer, but went on with a voice that sounded like a saw.

"You jest bring yer baggage—whatever 'tis—an' pack it in that waggin. I'm goin' right out, 'cause our folks wanter finish butcherin' to-day."

He seemed to push the post away from his shoulder, which process brought him to his feet. The great boots savagely placed themselves in the best position for supporting their burden. He seemed like a man of very few words, and there was no reason why I should continue the conversation alone.

I walked back to the station and secured my satchel. As I came tugging back with it, I saw him sitting in his wagon waiting for me to come. He might easily have driven down to meet me, but that was evidently no part of his plan.

"Ain't got many cloes have ye?" he said, as I placed my burden in the wagon. "Jes' well, I guess; there ain't no call for dressin' up when ye go boardin' round. Ain't no reason why the master should dress up no mor'n the common run o' folks. I can make me a good livin' wearin' a pair of blue jeans pants, an' I don't see why you can't. I made up my mind a good spell ago that I wouldn't never take no prize to no beauty show, an' I expect that has saved me a heap. They is plenty more folks that orter come to the same mind."

I had no desire to combat this theory. What he said appeared to be true enough. It is never safe to engage an unknown opponent in debate when the issue can be avoided. It is not always the most fluent speaker that wins in a debate. I took my place on the seat beside my new friend. I hardly knew where we were going, but there was something in his manner that shut out all inquiry. He sat heavily on the seat with his head thrust forward, in advance and not above his round shoulders. Now and then he turned his head and allowed his little eyes to stray over me.

"Git up!" at last he shouted with a flourish of his whip. The fat red horses started at a lazy walk, which pace seemed to fully satisfy the driver. We passed out over the low hill, over a country road running among five farm houses and smooth fields. I began to feel that I ought to talk. It was quite uncomfortable to be thus silently riding with a total stranger. After thinking over what I had better say, I fell back upon the weather as most likely to create a discussion.

"This is a nice day Mr. ——" I paused to let him fill out the sentence.

"That shows ye aint no jedge of the weather, or else ye live in a swamp somewhere—it don't make no odds which as I knows of."

Having thus proved my inferiority, he went on.

"My name's Hardhack. I'm the moderator up to Bear Crick Deestrick. John Mouser's treasurer an they is a feller named Forest down by the school-house up fer director." I caught at this last name at once. It was that of the author of the letter that tempted me into Bear Creek.

"I had a letter from him. Nice man I suppose, and a good officer?"

"Don't know nothin. One of these yer city fellers come out here an thinks he's goin ter run us by haw an gee. We put him in fer director 'cause he's the last man ter move in. He can talk the juice outer a tree, but I low he'll quit a heap of it long afore school lets out. These fellers that wants things all sliced and dried, aint got no call fer Bear Crick, I kin tell ye.

Somehow I began to consider this as a gentle hit at me. I made haste to change the conversation a little.

"What sort of a school have you here—pretty well advanced?"

"School's all right ef the teachers hadn't been clubbin' it back fer the last five years. The last three Winters we've hed men teachers, and every one on 'em gut put out—last one gut whipped inter bed so'st he stayed there fer a spell others they hed hoss sense enough fer ter run. We tried a number o' years ago hevin' a woman teacher, but that didn't do no good. She undertook fer ter whip one of the big boys onct, an' he up an' kissed her; that bruck up school fer thet Winter. Forest up here, he wanted fer ter hire a woman teacher agin this Winter, but I see right through thet bizness—he lives nigh the schoolhouse, sos't the teacher'd wanter board to his house an' he'd git pay frum the deestrict.

"A heap of folks in the deestrict wanted a big fat feller as lives four miles south of town. He ain't no teacher at all, but he kin sing a good song an' speak a dozen pieces fust-rate. But John Mouser wouldn't hev him 'cause he licked his brother's little boy onct, and Forest he see how things was goin' so'st he voted agin him too. I wanted fer ter put in my sister's boy. Good, clever boy; ain't no scholard as I knows of, but it'll take an ox fer ter down him in a wrastle. He cud hev stopped to my house so'st his board wouldn't a cost the deestrict a cent.

"When it come ter pickin' out a master, we all sorter voted agin each other till we sorter settled on you. Didn't nobody want ye as I knows of, but we hed fer ter hev somebody, an' here ye be. If them other fellers hadn't stuck out so, we'd a ben well fixed."

(To be continued.)

NOTES FROM THE COUSINS.

DEAR UNCLE MARK: I am a little girl nine years old, and would like to join the Y. H. C. I like to read the nice letters from the Cousins, and if you will be so kind as to print this, I will write again sometime. My Mamma has 400 little chicks, Wyandottes, Hamburgs and Plymouth Rocks; I get up early every morning and help feed and water them. She has 10 little turkies, too. They are the Mammoth Bronze. We sent to Kentucky for a trio this Spring. We had some little pigs running out, and they ate up one nest of 18 eggs just when they were ready to hatch, and they got to eating Mumma's little chicks, too, so Papa had to shut them up. I have two sisters and three brothers, so I do not get lonesome. We love each other so much that we never quarrel with each other. Your little niece, BERTIE DILLE.

Edgerton, Kan.

[These pigs deserved a shutting up, I am sure. I am glad they got it. Write again.—U. M.]

DEAR UNCLE MARK: I wrote you a letter last Fall, and it was not printed, so I thought I would write again. I live on a farm of 240 acres. I am 11 years old. I have one little sister. She is two years old. Her hair is just as curly as it can be. We have three work horses, and are breaking two colts. We have three colts a year old this Spring, and one that is two years old. We raise a good many Shorthorn cattle. We have 10 little calves, and about 25 little pigs. I have two cows and a little pig. I received the Rural Garden Treasures, and we planted them, and there were a great many came up. School was out about three weeks ago. We raise the Plymouth Rock and Houdan chickens. We think the Houdans the best layers we have ever had. We had about 70 little chickens, and something caught them all but 50. We caught a skunk and two rats. I have a nice lot of pansies, and I had good luck with all of them excepting the ones I tried to raise in a box, and they nearly all died. I have some California popcorn planted, and some onions. The sets will soon be ready to pick. We set out a young orchard of cherry and apple trees, and they all lived but one. Your niece,

Sidney, Iowa. NINA A. DODGE.

DEAR UNCLE MARK: I wrote one letter to you and seeing only part of it in print, I thought I would write again. We had only three days of snow here, and only about two weeks of frosty weather. I think that is pretty good weather, don't you? I live on the bank of Nehalem River, it is very pretty in the Summer. We have a good many flowers here that grow wild. It would take too long to tell all their names, so I will not trouble you with them. I am getting my flower garden ready to plant my flower seeds. I will write and tell you how nice they are when they bloom. Papa catches lots of Salmon here in the Summer, also trout, flounders, lamprey, eels, crabs, clams, mussels, etc. Nehalem is a good climate for fruit, such as plums, apples, cherries, etc. The wild fruit are huckleberries, blackberries, gooseberries, etc. We have 21 head of cattle, two horses, four pigs, two cats, and 16 chickens. Your niece,

Nehalem, Oregon. DAISY DEAN.

DEAR UNCLE MARK: I do not see many letters from this State, so I would like to join the Y. H. C. I am nine years old and live on a farm of 200 acres. We have 16 cows this Summer, and seven horses. We raised over 1,000 quarts of strawberries last Summer, two kinds, Glendale and Wilson, I think the Wilson is the best, but the Glendale grew the larger. Ma canned 50 quarts, and preserved as many more; they are very nice. My little brother and I go to school Summers (the snow is so deep we can't go much in the Winter,) so we do not work as much in the garden as some of the Cousins, but we raised some turkeys and have not sold them yet for they only pay five cents per pound here yet; Isn't that cheap? There is a nice spring of water on our farm that never freezes; it used to be covered with a kind of rock (petrified moss) about the size of a cauldron kettle, with the bottom up, the water came out of a hole in the side I like flowers very much. My Mamma has a great many. Your nephew,

Albert Lea, Minn. RAY E. DILLS.

DEAR UNCLE MARK: We are two little girls—Katie, aged seven, and Florrie, aged 6 years—that wish to join the Y. H. C., as we are very much interested in the letters from the Cousins' and your answers and good advice. We attend school and can read the Cousins letters when the words are not too long. We have a pet canary named Pete; he is a grand singer. We are raising an Alderney calf which we call Pansy; its mother's name is Butternp. We raised some very fine peppers last Summer, and took some to Aunt Sis for pickles, as she hasn't any garden. She gave me (Katie) a very pretty Testament. As soon as we can write so that you can read it, we expect to write to you. Papa has written this for us.

KATIE B. & FLORRIE V. CLINE.

Catonsville, Md.

[Let us have a letter in your own handwriting.—U. M.]

Miscellaneous Advertising.

That Tired Feeling

The warm weather has a debilitating effect, especially upon those who are within doors most of the time. The peculiar, yet common, complaint known as "that tired feeling," is the result. This feeling can be entirely overcome by taking Hood's Sarsaparilla, which gives new life and strength to all the functions of the body.

"I could not sleep; had no appetite. I took Hood's Sarsaparilla and soon began to sleep soundly; could get up without that tired and languid feeling; and my appetite improved." R. A. SANFORD, Kent, Ohio.

Hood's Sarsaparilla

Sold by all druggists. $1; six for $5. Made only by C. I. HOOD & CO., Lowell, Mass.

100 Doses One Dollar

PERSONALS.

THE young Emperor of China is very ill with consumption.

THE King of Siam's new baby is named George Washington.

EX-PRESIDENT ARTHUR is growing stronger, more cheerful and better tempered.

SENATOR STANFORD, of California, it is said, will resign after Congress has adjourned. Tired of public life; lately had an attack of an apoplectic nature.

REJECTED Solicitor-General John Goode is to become a candidate for Congress for the District of Norfolk, Va., if Cleveland does not renominate him.

HARRIET BEECHER STOWE will write no more. Health impaired by constant attendance on her husband, who has been ill 18 months, and is expected to die at any time.

ATTORNEY-GENERAL GARLAND is tired out, and is going to take a two months' rest in Arkansas. The general impression is that it would be much better if his retirement were permanent.

ALICE FREEMAN is 28, pretty and President of Wellesley College. She knows more of the 'ologies and 'isms than most male professors of twice her age, and can tell what she knows in seven languages.

"NEVER has anybody heard Roscoe Conkling to better advantage in any court," is the general opinion with regard to the ex-Senator's late speeches against the outrages of the Western Union telegraph monopoly.

GEORGE B. LORING, the late handsome Commissioner of Agriculture, with some other capitalists, has bought several hundred acres of land about seven miles from Washington, and will establish there a new town, to be called Loring.

OUR correspondent, William Hale, of South Glastonbury, Conn., has this season sold 900 bushels of strawberries from a little over six acres, at an average price of 11½ cents for the season—largest packing and marketing in one day, 49 bushels.

PROF. L. B. ARNOLD has been lecturing, with much commendation, in England. He finds the butter in the Island of Jersey better than English butter, but so low-flavored as to be a disappointment. Genuine butterine—hog's fat and annatto—competes with it there under its genuine name.

REPORTS multiply that Nellie Grant Sartoris finds her English husband a loafer and a bully, who spends on himself the slender allowance allowed him by his father, and leaves his wife to shift for herself. Before the crash of Grant & Ward, Gen. Grant always sent his favorite child liberal remittances.

Col. Fred. Grant is working like a beaver to pay his debts and re-establish himself. He is employed by a house-finishing and wood-working concern, and also makes money by his articles on the war. "I shall not be satisfied," he says, "till every dollar lost through my advice shall be restored to the rightful owner."

GEORGE, of Greece, is ready to go out of "the king business" at the first good offer. He has saved up a tidy little sum which will net him $125,000 a year, is building a palace at his old home, Copenhagen, and is only waiting a good excuse to abdicate and leave the foreigners over whom he has ruled to their own destruction.

GOV. SWINEFORD, of Alaska, on a visit to his old home at Marquette, Mich., married, last Sunday, Mrs. Minnie Smith, a wealthy widow. He is 50 and has been a widower for several years. He will take her to Sitka in November, together with a colony of Michiganders to develop the mining resources of the region.

MORTIMER and Roland Bunting, of Madison, Florida, 13 and 11 years old, have this year rented 12 acres of land and planted it with corn and cotton, have worked the crops carefully, and have good prospects of an abundant yield, besides raising enough vegatables to supply the large family of their father, who is an invalid.

OTTO, the new crazy King of Bavaria, is confined in the castle of Furstenried, an hour's drive from Munich. He has lucid intervals in which he reads the newspapers. His chief amusements are smoking cigarettes and eating strawberries. He takes long walks in the park round the castle. A mad doctor and three guards follow him at a distance.

JOSEPH CHAMBERLAIN, one of the Members of Parliament for Birmingham, and the Radical kicker in the Gladstone Cabinet, though 46 looks hardly over 35. In speaking he is cold and unimpassioned, even when most "wrought up." He always dresses in the hight of the fashion, and a dudish eye-glass is his constant companion. He has become wealthy through a monopoly patent on a screw-making device. Strongly democratic, from principle or policy, he has for some years been a "power" in the land.

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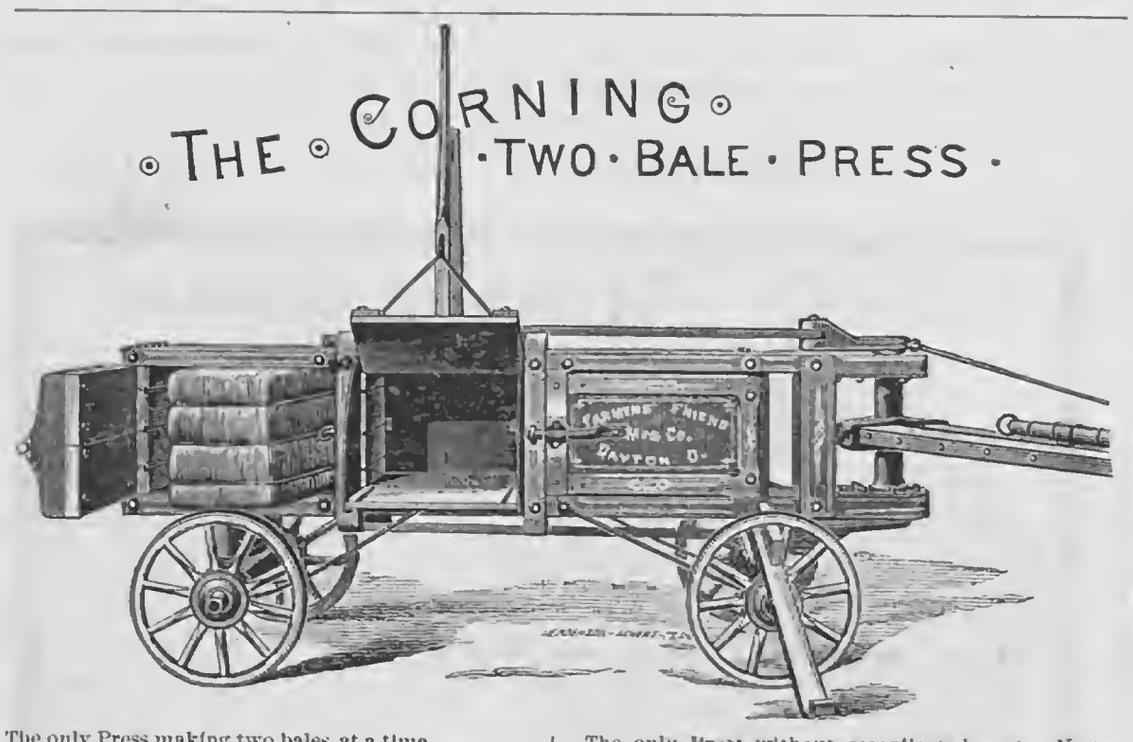

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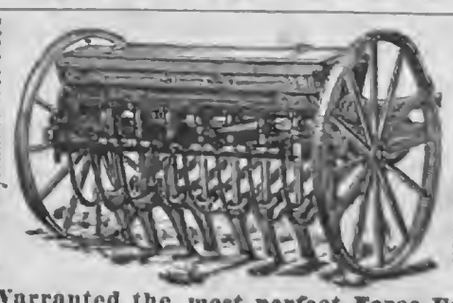

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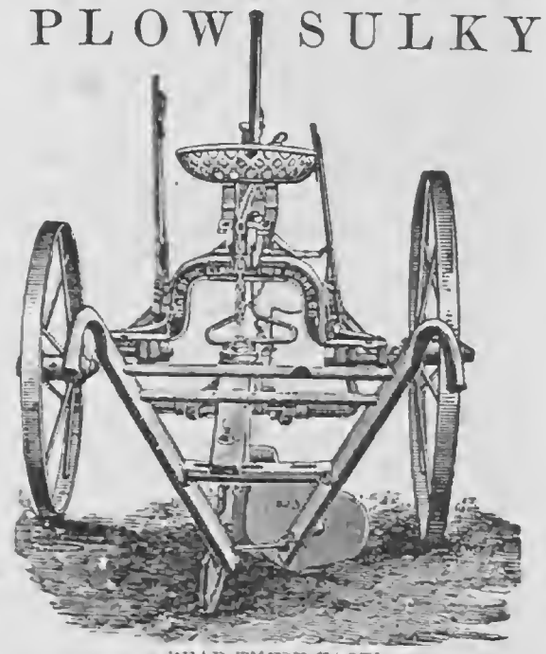
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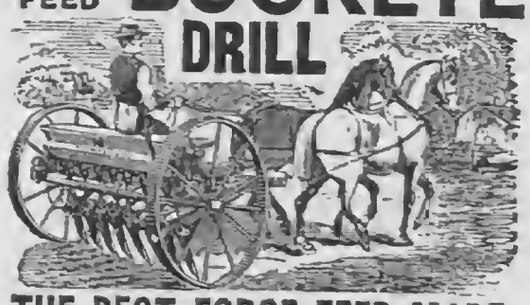
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Humorous.

THIS is the dude's own season. Everything is fresh and green.

POET—"And you will print my poem?" Editor—"Yes, sir; in the puzzle department."—*Tid-Bits.*

AT this season, when an arm of the sea encircles a neck of land, you may look out for (fishing) smacks.

THE funniest thing isn't a frog. The man who said it was, had never seen a fat woman try to run.—*The Ætna.*

WHEN an idler enters the sanctum of a busy editor, and the editor says, "Glad to see you're back," what does he mean?

THE man with a No. 15 neck and a No. 14 collar, has a hard struggle to make both ends meet.—*Detroit Free Press.*

"SALLY, what time do your folks dine?" "Soon as you go away—that's Missus's orders."—*Comic Weekly.*

YOUNG WIFE—"Won't you try some of my home-made bread, dear?" He—"I have tried and I'll try again, but it's a very trying situation to be placed in."

No, Ethel; when you hear of a young girl having made a good "match," it doesn't signify that she has got something that will get up every morning and light the fire.

HIT IT SQUARE.—"Wall, that's a new idee. I never heard o' puttin' spittoons on the side o' the houses before," remarked an old countryman, as he walked up to our telephone transmitter and made a bullseye the first shot.—*Palmer Journal.*

"Is Mike Howe on board of this train?" asked a man, approaching an engineer who was oiling up his locomotive. "I don't know anything about your cow," replied the engineer, sharply; "I am the engineer, and not the cow-catcher of this train."—*Exchange.*

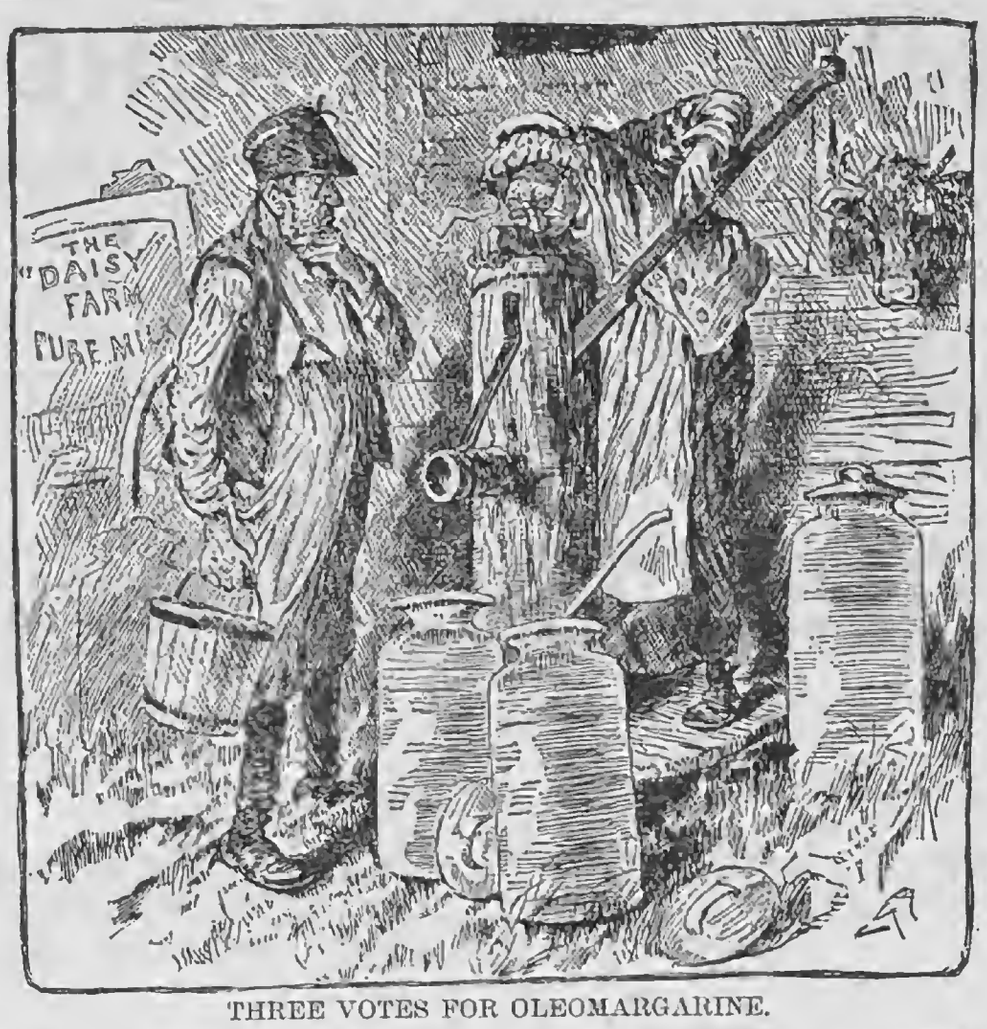
A FRENCHMAN thinks the English language is very tough. "Dare is 'look out,'" he says, "which is to put out your head and see; and 'look out,' which is to haul in your head and not for to see—just contraire."—*Comic Weekly.*

"PAPA, are you in favor of the eight-hour system?" "Yes, daughter, under certain circumstances. Why do you ask?" "Because, papa, George has only been staying four hours every evening, and he told me last night that if you favored the new system he needn't go home so early."—*Farm Journal.*

EIGHTEEN CARATS.—Jeweler (to new boy)—"Did you sell anything while I was out, Johnny?" New boy—"Yes, sir. I sold six plain gold rings." Jeweler (very much pleased)—"Good, my boy. We'll make a first-class jeweler of you one of these days. You got the regular price, of course." New boy—"Oh, yes, sir. The price was marked on the inside, 18c., an' the gentleman took all there was left, sir."—*N. Y. Sun.*

LAST week Gilhooly went to Onion creek, near Austin, to shoot quail. He got dinner at the ranch of Macbeth Simmons, a granger living in that vicinity. While at dinner Gilhooley remarked: "Isn't this rather early to be killing pigs?" "Of course it's too early to be killing hogs. Who is killing hogs such warm weather as this?" "Why, I've heard pigs squealing ever since we sat down to dinner." "Pigs squealing! Why, that's my oldest daughter practicing her singing lesson."—*Texas Siftings.*

"MR. FEATHERLY," said Bobby at the dinner table, "what's an average?" "An average?" "Yes. Pa says you come to see sister twice a week on an average." Featherly was very much amused. After explaining to Bobby the meaning of the word, he said: "I suppose you thought it was some kind of a carriage, Bobby?" "I thought perhaps it might be a bicycle, but I knew it couldn't be a carriage, because ma says you're too mean to hire— ——" "Bobby," interrupted his mother, "will you have another piece of pie?"—*New York Sun.*



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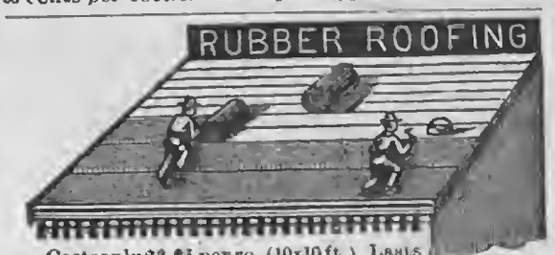

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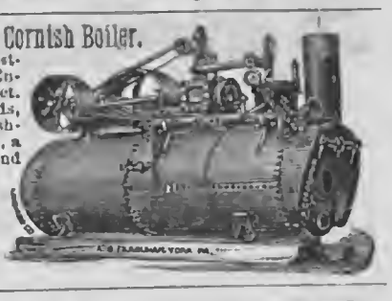

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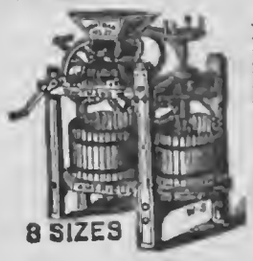
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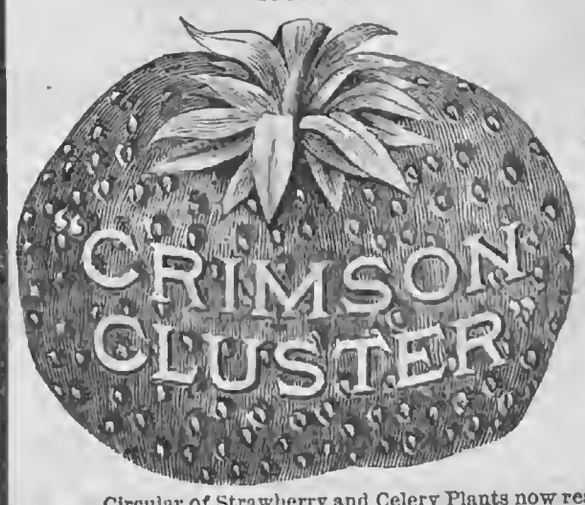

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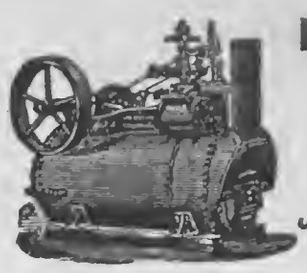
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Experiment Grounds of the Rural New-Yorker.

A QUESTION SUBMITTED TO OUR READERS.

IN February of last year half of a three-acre lot belonging to an esteemed neighbor was given 11 loads of city stable manure. It was spread evenly over the surface where it remained thus exposed until the following April. The same quantity of manure was placed in a heap on the other half where it remained also until April, having been turned often enough in the interval to prevent burning. It was then spread and the entire field (three acres) was plowed. The plowman noticed that the soil underneath the half upon which the manure was spread in February was mellow, yielding readily to the plow—while the other half upon which the manure had not been spread until April, was so much harder that it was easy to tell whenever the plow passed from one to the other. The manure pile had so shrunk during the Winter and covered the acre and a half so sparingly that Mr. Bogert, the owner, concluded to give it an additional spread of three bags of high-grade complete chemical fertilizer, that is, at the rate of 400 pounds to the acre. The entire field was then harrowed and planted to potatoes. The vines of the acre and a half which had received the stable manure alone, spread in February, were thriftier during the season than those on the other part, and the yield of potatoes was one-quarter more. The entire field was then fitted for rye and seeded to Timothy last Fall, and to clover last Spring. The rye on the half where the stable manure had been spread in February and which had received no chemical fertilizer, was appreciably heavier than that on the other half, and when the rye was cut as now, the clover was so much thicker as to mark the boundary distinctly. Previous to 1885, the field had been treated in every way the same for many years, and so far as had been noticed the yield on the two halves was the same.

Mr. Bogert called the writer to look at this field and to explain why the two halves should yield so differently under the treatment described. Why was the manure which was spread in February more effective than the combined chemical fertilizers and the same quality and weight of manure which had been kept in a heap and spread in April? We have no satisfactory explanation to offer, and the question is submitted to our readers. It should be considered that the soil under the manure spread in February was mellow and friable as compared with the other part. But is that a sufficient explanation?

THE CRESTED MOSS ROSE.

THE specimen of this shown at Fig 303, was received from Ellwanger & Barry, and is said to have been discovered on a wall of a Convent near Fribourg, and sent out by Vibert in 1827. This is very different from other moss roses in which the flowering stem as well as the calyx is covered with "moss." In the Crested Rose three of the five sepals of the calyx are crested as shown in our engraving from nature. The other two are not crested at all. One of the crested sepals is shown beneath the opening bud, much enlarged. These feathery sepals are very pretty and odd. Sometimes this peculiar growth appears on the petioles of the leaves below the flowering stem. The flowers are rose-colored and fragrant though, in themselves, of no unusual beauty. The plant is hardy and vigorous.

MADAME DE WATTEVILLE is a new Tea Rose, from Storrs, Harrison & Co., of Painesville, Ohio. It is of exquisite beauty. The coloring is hard to describe. The petals are yellowish-white, inclining to pink about the edges as they unfold, and of a deeper purplish pink about the petals of the yet unfolded bud, giving the flower a rich, distinctive beauty. The plant is vigorous and blooms freely. It is a pity such delicate coloring is not to be found among the hybrid perpetuals or Remontants.

CHESTER CO. MAMMOTH CORN.

IT is within the easy memory of our older readers that about six years ago the largest crop of corn on record, produced under similar conditions, was raised at the Rural Farm. There were five acres of Chester Co. Mammoth, which yielded by measurement 112 bushels of shelled corn per acre—the best acre yielding over 130 bushels of shelled corn. Another acre of Tennessee Prolific, or, as it is now called, Blount's Prolific, yielded 130 bushels of shelled corn. The ground was measured and the crop estimated and certified to by R. J. Dodge, L. E. Benedict, E. Williams, C. V. Mapes, Dr. Habirshaw and others.

We have now a field of 4.66 acres of the Chester Co. Mammoth which promises to equal, if not to excel, that yield. It had been in Timothy and clover for four years without any manure or surface dressing of any kind. It was plowed early in December last, and this Spring 20 tons of farm-yard manure (mostly cow) were spread and harrowed in with a spring-tooth sulky harrow, and once with an inclined-tooth harrow. Then six bags of complete fertilizer ($45 per ton) were sown, and the field was again harrowed with an inclined-tooth harrow and the corn planted with a corn-planter, dropping a kernel about every foot—the drills four feet apart. The stand is perfect, and the plants are the thriftiest we have ever seen so early in the season.

Chester Co. Mammoth Corn is peculiar in several ways. It is late to start, but makes a rapid and stupendous growth afterwards. The stalks, which are very large, will average 10 feet high in a good season, bearing generally one—sometimes two—immense ears. The kernels are yellow, dented and large—the cobs as large as those of any kind we know. It seems peculiarly adapted to this part of the country, as well as to Pennsylvania, where it originated. The better ears vary from 14 to 32 rows, about a foot in length and 1,000 kernels to an ear are not uncommon. We hope we shall be able to report to our readers as large a yield as is now fairly promised. We can not recommend this corn for other parts of the country, but the splendid yield it gives us shows that farmers everywhere should not take for granted that they already have the best corn; but experiment in a small way year after year with every good variety they can hear of until a kind is found that suits their soil and climate as well as the Chester Co. suits this farm. Had we been content with the corn generally raised hereabouts, this would never have transpired.

ORANGE GOOSEBERRY. (From Nature.) Fig. 304.

GOSSEBERRIES.

TRIUMPH was received from George Achelis, of Westchester, Chester Co., Pa. It is a large berry certainly; but it so mildews this season that a longer trial is necessary to make a report in other particulars.

CAYUGA and INDUSTRY, the former from H. S. Anderson, Union Springs, N. Y., the latter from Ellwanger & Barry, Rochester, N. Y., have not as yet fruited.

ORANGE is from H. M. Engle, of Marietta, Pa. "It is," he writes, "probably a seedling of the Houghton." This berry is with us of real value. It is one of the earliest to ripen, if not the earliest. It is of medium size, sweet and tender. The color is a dull yellow. Plant thrifty. See Fig. 304.

IMPORTED VARIETY from H. Sumner, Polo, Ill. He imported it 10 years ago from England. The berries average of fair size. Some mildew and some do not. A longer trial is needed.

DOUGAL No. 10, mildews badly.

DOUGAL No. 3, berries from medium to large—scarcely any mildew. Green when ripe. Ripens with Porter. Quality medium.

DOUGAL'S No. 2. Fruit of medium size and high quality, hairy. Color light green shaded with purple. See Fig. 305 (p. 494).

Horticultural.

SMALL FRUIT NOTES FROM PRES. WILDER.

THE season has been quite favorable for the strawberry. The Horticultural Exhibition was the best for 50 years. Among strawberries the Belmont carried off the Silver Cup, although it had powerful competitors in the Sharpless and Jewell. The Prince (of Berries) took the first prize for a new variety, and the Parry the second, but there was a silver medal also given to the Gold, which is larger, higher-flavored and handsome. It was raised by P. M. Augur & Sons. Among the new varieties was the Dorchester, which, although exhibited in a general collection, attracted special notice for its size and beauty, and as a very late, handsome kind the Omega received a first-class certificate of merit. Jewell fully justifies the high commendation it has received, and Sharpless is more popular than any other kind. Ellwanger & Barry conferred a great blessing on the world when they introduced it.

In regard to raspberries, the Carman is the earliest cap variety I possess. It is sweet and *very good*, a valuable acquisition. The Ohio comes in next, and is hardy and productive. The Marlboro is early and prolific, ripening its crop gradually, and when fully ripe, of good quality, good size, and firm enough for traveling to distant market; but to obtain these advantages the suckers must be constantly kept down. It is the most vigorous and robust of all raspberries. My favorite is the Souchetti, which I introduced 30 years ago. This and the Franconia lead in the prize taking. Cuthbert is good but no improvement over the Franconia. The Crystal of Caywood, a new white, is vigorous and prolific, handsome and firm, promises well for market.

MARSHALL P. WILDER.

THE GOLDEN AND BLACK DEFIANCE STRAWBERRIES.

I HAVE raised the former in connection with many other kinds for four years, and every year I find more and more reasons to like it. It is a fine, healthy plant, bearing bright scarlet fruit, which turns somewhat darker when very ripe, and though slightly acid, is of a rich, sparkling flavor and very refreshing to the taste. The plant bears abundantly, and is one of the very latest I have tried. Longfellow, though holding out as well, gets ill-shapen and stunted at the last, while it has a habit of laying its fruit on the ground so that one side of its magnificent berries is often imperfectly ripened. Ken-

tucky, too, always fails to ripen well at the close of the season, but Golden Defiance, especially on young plants, fills out its berries perfectly and ripens them equal to the very last with me.

I have also the neglected but most delicious Black Defiance, which, though not a very heavy bearer and inclined to furnish imperfect fruit towards the close of its season, I have not yet seen surpassed in flavor by any of the high-blooded new sorts, and I have tried nearly all of the prominent ones. Of course, strawberries for the private garden are one thing and for the market garden quite another; and the James Vick and Manchester, though healthy and prolific, do not give us the *kind* of return which we demand in the "home acre." E. S. F.

Dorchester, Mass.

VEGETABLE GARDEN NOTES, JULY 12.

POTATO BUGS were never more numerous than they are this year, but a little Paris-green in water kills them quickly.

SNAP BEANS.—From sowing time till eating time is about eight weeks.

POLE BEANS in low, moist ground run high and pod well. Peas in the same places will mildew badly.

CAULIFLOWER.—My best heads now are from April out-door sowings.

GROW SPINACH, RADISHES AND LETTUCES in the coolest and moistest spot in the garden.

SEED ONIONS look fine. Maggots went to work in May, but didn't stay long.

TURNIPS.—I got very clean turnips from late July and August sowings, and from ground in which they all get wormy before July.

EGG PLANT.—I have been using Early Long Purple for some time. The other popular sorts sown at the same time and grown under the same conditions, are not yet big enough to use.

PEAS.—I am now sowing this year's seed. The peas I didn't pick from my early sowings, I left for a week or two to ripen; these are now harvested, cleaned, and I am sowing them in succession for late crops.

EARLY PEAS.—From First of All (from Henderson) and Improved Daniel O'Rourke (from Young & Elliott) we gathered our earliest peas on June 3. If there is any difference between these two sorts, I cannot find it out.

ALASKA PEAS.—What on earth is there in this pea to make a fuss about? With me it is not any earlier or better than Daniel O'Rourke. And who would eat round peas like them after the wrinkled peas, like Alpha, are fit to use? My earliest Alphas came in about five days after my earliest peas of any sort.

THE DEACON LETTUCE.—I had the Deacon from Farquhar Brothers, Boston, and White Summer Cabbage from Peter Henderson, New York. Both kinds were sown on the same day and under the same circumstances, and both are now hearting alongside of each other, and not a particle of difference in appearance or flavor can I detect between them. In fact, both are the White Summer Cabbage as I have known and grown it for years. It is one of the very best summer lettuces grown, still that is no reason why we should make it a "Deacon."

THE OAK-LEAVED LETTUCE is good enough in its way, and to grow as an extra variety; but for general use it will never become popular.

THE SALAMANDER LETTUCE is my favorite for summer use; it never fails me. It is good to eat and good to look at, but it will "bolt" in hot summer weather, like any other lettuce.

HENDERSON'S NEW YORK LETTUCE is veritably a giant and the finest exhibition lettuce I have ever seen. But isn't this the same that I have known and grown under the name of Breen's Prize-taker since '84? Anyhow, I am now growing both side by side and cannot see a whit of difference between them. This Breen's is annually exhibited at the Queen's Co. (N. Y.) Summer Fair and I believe is always the prize-taker. When I first grew it I almost thought it would turn out biennial it was so slow to "bolt" in early Summer; but July came, and off it "bolted" quickly enough. Its size is enormous and it forms a very solid, white heart, but for my own eating I prefer Salamander.

ASPARAGUS.—Our main crop of asparagus is Argenteuil, but I don't think it is any better than Moore's or Conover's. My neighbor, Mr. M. Ham, who runs a large asparagus farm, has a decided preference for Conover's.

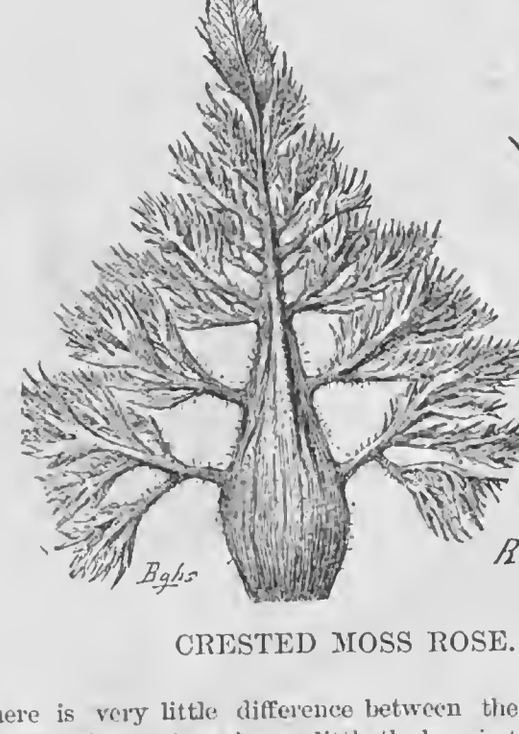
DWARF SHADBUSH.—An editorial note on page 468 of the RURAL reminds me that we have two clumps of little plants, 12 to 40 inches high. One lot is in an open, sunny place; the other in better but shadier ground. In both cases the little bushes bore an extremely heavy crop of fruit, ripe between the 20th of June and 1st of July. The fruit was in small clusters, large, nice-appearing, and not bad to eat, but at least two-thirds of it had been penetrated by insects. But apart from their use as fruit-bearing plants, these little bushes are worth growing for their wealth of white blossoms in earliest Spring. Amelanchier Canadensis v. oblongifolia also fruited freely with us. Its fruit ripened during the first days of July, was more palatable than that of the Dwarf Shadbush, and free from injury by insects.

CELERY.—I am planting celery to succeed potato, top, and other "set" onions, strawberries, peas, and potatoes. While I plant early celery in rows that are four to five feet apart, three feet is far enough apart for winter celery. I throw out trenches five or six inches deep, put a heavy dressing of finely-rotted manure into these, fork it into the soil, and plant in the afternoons, and always water well at planting time.

LEEKS.—I had resolved to have a trial of leeks this year, and from seed-houses far and near bought seeds last Spring. Result: a first-rate crop of large American Flag from Peter Henderson; a good crop of Rouen from Thorburn, and absolutely nothing from the other sources. "Reliable" and "tested" printed on seed bags don't amount to much.

SPINACH.—Growing alongside of each other in excellent soil, I have Savoy-leaved, Round-leaved, Viroflay and Long Standing. Savoy-leaved yields a lighter crop and runs to seed several days ahead of the others. There is very little difference between the others: Viroflay is perhaps a little the heaviest

JAPAN PERSIMMON.—We have two plants, one a nice-looking specimen six feet high, and well branched, the other rather a scraggy sample. The first we cover over with barrels in Winter; the last is in a sheltered place, and must not at all regard it as hardy around New York. WILLIAM FALCONER.



DOUGAL NO. 2 GOOSEBERRY. Fig. 305

unprotected in Winter. Both bloomed and set fruit, but I am disappointed to find that almost all of the fruit has dropped off. Mr. Thomas Hogg when here a few weeks ago told me that it ripened fruit out-of-doors in New York with him a few years ago. But we

THE MARLBORO IN N. J.

Mr. J. T. Lovett, the nurseryman of Little Silver, N. J., writes us as follows: "The Marlboro Raspberry is almost a failure here this year, and I hear the same reports from all over Jersey. It has at last gotten through the petting stage, and then put to stand on its merits; it *does'nt* stand at all but goes back on its best friends. Too much foreign blood 'that's what's the matter.'"

STRAWBERRIES IN CANADA.

THE following were sent to me for testing:

THE JEWELL STRAWBERRY I put first for size of berry, vigor of plant and productiveness.

CRAWFORD'S No. 6 is the largest, heaviest and best berry on my grounds.

AMATEUR is rather more productive than either of the foregoing, but not so large, though better-flavored.

HATHAWAY'S No's 3, 5 AND 9 do very well; but are not so large as any of the former; but they are prolific and keep fruiting longer than the others. J. L.

Granton, Ont., Can.

ONION RAISING IN MONTANA.

LAST AUGUST I sowed some red onion seed,

CRESTED MOSS ROSE. Fig. 303. (See first page.)

intending to have it right for sets in Fall; but it did not look worth gathering in October, so I let it go. In the Spring it looked nice and green, so I broke off the seed sprouts and when the growth was thick I thinned out and transplanted, and by the middle of July the onions averaged over two-and-one-half inches in diameter, and will be very large by September 1. So I have accidentally stumbled on to a way to raise nice, large onions here, and they are a valuable crop, never selling for less than five cents per pound, and generally for more.

Gallatin Co., Mont. B. P. VAN HORN.

Pomological.

HOW TO RENOVATE AN OLD ORCHARD.

IN the RURAL of December 5, an inquiry is made how to renovate an orchard. Allow me to state the following facts:

Many years ago, a Mr. Gerrish owned a large farm in Boscawen, N. H., on which he set out what at that time was the largest orchard in Merrimack County. Afterwards he divided his farm between his two sons, the dividing line running through this orchard, cutting it into nearly equal parts. Both parts were treated alike—with neglect. Subsequently the county bought the southern farm, on which is now located the Alms-house. Two years ago, when the present superintendent took charge, this orchard was a forlorn-looking place, grown up to bushes, the trees being covered with moss and dead bark, and for years the crop had hardly paid for harvesting. The superintendent took hold of this matter with energy, cut the bushes, trimmed the trees, scraped the bodies and large limbs with an old hoe, plowed the ground and applied unleached ashes at the rate of 75 bushels per acre, and seeded to grass. The result was astonishing. The difference in the color of the foliage of that part so treated and the remainder, could be distinguished at a long distance, and while several hundred barrels of first-class fruit were gathered from the part so treated, on the other part there were but few apples, and those of cider quality. The superintendent says that if there is never another spear of grass cut, or another apple gathered from this orchard, the county has lost nothing, for one year's crop has more than paid the whole outlay. The soil is a gravelly loam, underlaid by hard-pan—moraine clay. SILER.

Farm Topics.

CORRESPONDENTS' VIEWS.

MRS. FISHER speaks of some wonderful samples of Timothy seen at a fair at Portland, Oregon. I send you a few heads to show what our Northern Vermont soil and climate are in the habit of producing. [The specimens sent were over five feet high, with heads nine inches long.—EDS.] Mrs. Fisher's account of the fair gave me an idea that Oregon would be a fine State to immigrate to, but there is another side to it. A gentleman, a good farmer and botanist, who has been carefully through the West, smiled a very knowing smile when I told him about those wonderful heads of Timothy. "That is the way most tourists are apt to observe and write," he said. "They see the exceptional rather than the average. A fair is just the place to present an average that is equal to the best, and even the most candid and observant travellers are apt to be misled with reference to the natural products, manufactures, etc., of a country." He showed that the average production of many of the highly-praised sections of the West was really no higher than that of our Eastern and Middle States, and often not so good. He declared that the meadow, pasture, tillable and fruit-bearing lands of Oregon are confined to narrow valleys—a very small proportion of the entire area. Their productions will not average a whit better than those of Vermont. These valleys are sparsely settled, and their roads are killing to travel on. They are clear mud in wet weather, deep under snow in Winter and rough and dusty in Summer. Such things make us better satisfied to stay in Vermont. RICHARD NOTT.

Charlotte, Vt.

THE Crystal Creamer, which I secured for my list of subscribers, came in good order and I have given it a fair trial. It gives the best satisfaction of anything I have yet seen. Every farmer who keeps three cows should have one. It will pay to sell a cow and buy a creamer, if it cannot be bought in any other way. I never got better pay for so little work. Every housewife should insist upon having such a creamer. She needs it just as much as a man needs a mower or reaper. She can use it the whole year and make it pay well, turning out the best of butter and keeping sweet milk always on hand. One piece of ice, 8x12 inches, placed in this creamer will keep the milk cool all day, and all the cream rises in less than 12 hours. We gave it the hardest test it could have, for the weather has been very hot—95° in the shade. We have grade Holstein cows. They are half thoroughbreds, none of them over four years old. They give good satisfaction. I began grading up my stock a few years ago, and few things have paid me better.

Saginaw Co., Mich. HENRY BEYTHAN.

THE only "patent" I can get for bringing out a superior new plant or fruit is the credit that should go to any one who brings out something useful and permanent. The inventor of a useful implement is lauded by press and public, and the Government protects his rights by giving him entire control of his invention. That is all right and proper. It is a tribute to patience and brains. Yet the introducer of a new fruit has no such reward for his patient labor. The first dozen plants he sells give the purchaser a chance to disseminate the new variety. J. M. OGLE.

Pierce Co., Wash. Ter.

PEOPLE speak of the great advantages of irrigation. It is a good thing, but it is expensive here. It requires capital here, and money is scarce. We have to pay 25 cents for a miner's foot of water for 24 hours. Orchards and vineyards are slowly coming into culture. Grapes do fairly well without much water.

Lincoln, Cal. M. D,

SAY what you will, the LeConte Pear appears to be the "coming pear" for these parts. More and more are each year coming into bearing. There is a large breadth of land planted to peanuts. It becomes known to farmers that the most profitable way for them to make pork is to cultivate the nut freely and then let the hogs root themselves into fatness. J. M. C.
Palmer, Fla.

MY potatoes this year are splendid—as fine as any we ever had. When the ground was prepared, I made deep trenches with a plow, put in the potatoes and drove the Acme harrow lengthwise of the row once. Then I put in the fertilizer and mulch and harrowed the ground until level. The plants come up well. This is cheaper and better than covering the seed with a hoe. G. E. LOPER.
Suffolk Co., N. Y.

I FAIL to see how a farmer can make use of his carpenter's skill to better advantage than in putting up a grape trellis around the back door. A few vines trained over it will provide fruit, shade and comfort, as few other things can. S. J.
Essex Co., Mass.

THERE are plenty of men yet who will not take a farm paper. One man I know takes nothing but a county paper. He wants to know what the "folks" are doing. Another takes only a Sunday-school paper. It contains a list of white lies called stories. They both say my corn is better than theirs, because I have "good luck." The man who makes a business of taking a paper will get something out of it. The man who takes one just because it is cheap, is a penny man, anyway.
Wabash Co., Ind. R. L. M.

I WANT to utilize my hop kiln for drying fruit. The late description of a plan for drying raspberries in a greenhouse makes me think the thing can be done. I am raising hops and expect to continue in the business. I also raise small fruits, and want to extend the business. The home market cannot be depended upon, so I mean to dry the surplus. We can get tons of wild blackberries for the picking. I think it will pay well to dry them if I can make use of my hop kiln for the purpose. Others near me feel the same way. We want experience, hints and plans from others.
Cleveland, N. Y. E. P. T.

I HAVE killed lice and other insects on the hop vines with a solution of whale-oil soap. I take a piece of soap about the size of a hen's egg, and dissolve it in 10 quarts of water. I sprinkle or spray the vines with this, with good success. S. E. A.
Smyrna, Del.

THIS country will hardly do to "boom," but with industry and economy one can get a good living, if not riches. The Summers are a little hotter than in New York State, and the Winters a trifle milder. We were glad to look at Mrs. Fisher. She is younger than we thought, though she does not give her age. We would like to see "Anaxamander and the laddie," and thus get a glimpse of the whole family.
Macon Co., Mo. MRS. J. V. R.

WILLOWS to be used for baskets should be cut every year in the Fall. If allowed to grow two years or more, they can be used only for bottom sticks, and are not worth so much. If prepared for market, they should be peeled in the sap, which is a good deal of trouble. So many willows were raised last season, that basket-makers are all busy. I do not see how it could be made to pay to establish a business elsewhere, the price is so low. In this county we make more willow clothes-baskets than in all the rest of the United States. We handle at least 20,000 dozen each year. Some 25 years ago we began with handling 100 dozen a year. At that time willows were only grown along creeks and river bottoms. We now have great plantations. There is little money in the business, and it will not pay to raise them at any distance from a factory. L. L. T.
Syracuse, N. Y.

I KEEP my cows from sucking themselves by a simple device. Two leather straps, one inch wide, are buckled about the neck, one at the shoulder and the other just back of the head. To these, pieces of tough wood are fastened. The length of these pieces is arranged to suit the cow's neck from shoulder to jaw-bone. No chance for a cow to turn her head to the side, while she can move her neck up and down. W. H. B.
Iredell Co., N. C.

AFTER using the various preventives for grape rot, viz; paper bags, sulphate of iron, sulphate of copper, milk of lime and air-slaked lime, I find at least 90 per cent. of my grapes destroyed. The few remaining sound bags inclose sound clusters, but of 46,000 put on, not more than 1,000 are of service. The quality of the paper was too poor to withstand the rain and wind. I. C. S.
Aiken S. C.

OH for more fruit! Planters here with thousands of acres of land have not so much as a single peach tree. Blackberries and dewberries grow wild, but none are cultivated. I don't believe half the people know how strawberries grow. What fruit they use here is bought in cans. If they keep on, the next generation of Louisianians will want trees that bear canned fruit. T. W.
East Carroll La.

Sheep Husbandry.

MUTTON MERINOS: THE BLACK-TOP SHEEP: BETTER MUTTON AND WOOL.

COL. F. D. CURTIS.

IT is no wonder with me that Merino sheep fill so important a part in the sheep husbandry of the country. Now and then—rarely, however—some one has praise for them; but although the coarse-wools are much vaunted, the Merinos take the lead in numbers ten to one, and no doubt they will always exceed the others. To one who has kept both kinds the reasons are obvious. The Merinos will not only live, but do very well, under conditions where the open-wooled sheep would die. They seem almost to defy the storms and cold. The income from one sheep is not so much; but three, if not four, can be kept on the same amount of food which would be required to support two of the larger breeds. When this fact is taken into the account, the difference in the returns is not so great. American breeders should take hold of the problem and help to decide if the mutton qualities of the Merino cannot be improved. A real mutton Merino would be an ideal sheep, because it would be one which would be adapted to almost all parts of the country. Where vegetation is sparse sheep of this kind would deteriorate to a certain degree, unless extra food was supplied. The same is true of any large-growing breed of animals. Even Short-horns, when the pasturage is poor, will soon run down and become dwarfed, in spite of their propensity to rapid and large growth. The meanest-looking cattle I ever saw were some of these degenerated Short-horns. They had the expansive frames without the muscle and fat, and were not much more than living skeletons.

There has been no extended effort towards increasing the size of the bodies of the Merinos, as the efforts of Merino breeders have been more in the direction of securing heavy fleeces. Their success shows what skill may accomplish. In Washington County, Pa., for some years an effort has been made to increase the size also. A family of sheep were selected and named "Black Top Merinos," and an association of the best breeders has been formed to improve them both in body and fleece; in the latter respect not so much for weight as for quality. Individuals have also undertaken the same work, in different localities, to a small extent; but these Pennsylvania men have laid a broader foundation by a community effort, and are succeeding right well. They have already issued a herd book which does them great credit. There is no doubt that the character of the mutton of these sheep will also be improved, as the same law of improvement will apply with these as with all other animals. The famous South Downs were not once the desirable mutton sheep they are now, and the Leicester, the breed made by Mr. Bakewell, which for many years was called after his name, was built up from a much poorer foundation than the improved stock. Not only was the quality and the flesh changed and improved, but the fleece was also made much better. There is no impossibility about the improvement of the Merinos. The food has always a great deal to do with the character of the meat, and this law can be applied to the Merinos as well as to others.

A few years ago I started to breed a small flock of mutton Merinos from selected stock, and each year I am trying to show an advance towards larger bodies and more rapid growth. The enterprise involves care, selection and the application of the best principles in breeding. There must be established in them a constitutional aptitude for rapid growth, which is the opposite from the natural character of Merino, which is the slowest-growing sheep of all breeds. It is natural that the meat of these sheep should be dry and lacking in flavor when grown, as Merinos are usually reared on scanty pastures. I found that these sheep respond quickly to extra care, and that the quality of the mutton can be very much improved by feeding them roots and oil meal, which have helped so materially to improve the English breeds. The animals with gummy wool should be avoided in the experiment as well as those with wrinkles, and those only should be selected which, like the Black Top family, have white oil. These sheep do not have the rank smell of those with the yellow yolk, and their vitality is not drawn upon so much to furnish the yolk; neither do they secrete so much. They do not, therefore, coat the exterior of their fleeces with the dried oil, and consequently their wool is not so harsh and matted together. It is a longer staple, softer and more desirable.

SHEEP WASHING.

THIS subject has been discussed quite largely by wool growers in some sections this year, and many concluded to try the experiment of shearing their sheep without washing. It was an experiment which I don't think will be repeated; for but few would have tried it had they known how much loss they were to suffer by it. The old-time rule held to by buyers of the present day of deducting one-third for shrinkage of unwashed wool, is decidedly unjust to the wool grower. Here is my experience in this matter. My flock have averaged about 7¼ pounds of well washed wool for five years or more. With that amount of fleece at 27 cents per pound (which price it would have brought had it been washed), I would have realized $1.95 per head for the wool; as it was, I received less than $1.78 by selling it at 20 cents per pound. There is no doubt that the wool of some sheep will shrink more than that of others by washing; but in my opinion whoever sells his wool at a deduction of less than from 15 to 20 per cent. for the reason that it is not washed, is a loser.
Willow Creek, N. Y. W.

Dairy Husbandry.

COMMON-SENSE IN THE DAIRY.

Science undertakes to teach us a great many things about butter making. It is possible to be too scientific. With more common sense in the dairy, we should have fewer butter makers, but more good butter in the market. No set of dairy rules are worth a cent unless one is willing to temper them with common sense. A good sharp nose is often worth a $20 analysis. It is strange that people still think they can strain filth out of milk. It can't be done. Filthy milk will be filthy to the end of the chapter, and all the straining in the world will not make it pure. When a cow steps into the pail she steps into the butter plate. Milk collects all the foul odors about it and lands them safely into your mouth. When these facts are generally understood, there will be less trouble about "oleo." J. W. W.
Oceana Co. Mich.

MILK INSPECTION.

Milk inspectors examine the milk that goes into cities. They are anxious to see that it contains so much "solids." They would do the public a great deal more good if they would spend less time on the "solids" and more in finding out what the milk is made of. Disease is not poured into milk with water, but comes from feeding rotten and dirty food, or from filthy surroundings. If "oleo" factories are to be examined, why should not the barns where sickening milk is made be examined in the same way? The cry is that honest dairymen cannot compete with men who use cheap fats in making bogus butter. In the same way how can honest milkmen who feed pure, sweet grain, hope to compete with those who use rotten refuse or swill? Let milk inspectors extend their trips into the country and see what this milk is before it is milk.
Bergen Co., N. J. B. H.

BUTTER AVERAGES FOR HOLLAND CATTLE.

For the past 18 months we have tested 82 Holstein-Friesian cows and heifers in our herd for butter (which includes none of the records made prior to that time), and we find they make the following remarkable weekly averages: Five cows, 21 pounds 4-5 ounces; 10 cows, 19 pounds four ounces; 23 cows, 17 pounds one ounce; nine three-year-olds 13 pounds 2 1-5 ounces; eight two-year-olds, 13 pounds 1-8 ounce; 21 two-year-olds, 12 pounds 1-8 ounce; 37 two-year-olds, 11 pounds 4-5 ounces; 58 two-year-olds, 10 pounds 2-7 ounces. These facts show what selection, breeding and care will accomplish.
SMITHS POWELL & LAMB

The Poultry Yard.

A FEW SUGGESTIONS ON KEEPING POULTRY.

WE frequently see itemized statements of the enormous profits that can be made by running the poultry business on a large scale—"poultry farming" is the popular term. A recent writer in the RURAL set forth in glowing terms the result of $1,000 invested in poultry by a man "with any business gumption." Unquestionably, an experienced man could invest that amount and show handsome returns, but many a business man has not the practical knowledge of poultry requisite to engage in it successfully; and without this knowledge for a man to invest such a sum in the business, would be simply to afford another example of the truth of the saying: "A fool and his money are soon parted."

There are those who manage "poultry farms" successfully, and herald their triumph through the press. Of those who fail, however, we never hear, unless it be by way of an advertisement offering an incubator ("used but little") or other article for sale. My first suggestion to those who are beginning the business is, therefore, to be content to start on a small scale; for while there are a few who can run it on a large scale and make both ends meet, there is not a man, woman or child who cannot show a profit from a small number of fowls. I know of nothing which, on the actual capital invested, will bring such large returns as will 25 or 30 hens. The table scraps thrown away by so many families would furnish three-quarters of the food necessary for their maintenance, which is the secret of the profits from a small flock.

Our American fanciers have furnished us with a fowl exactly adapted to those who may wish to keep a flock that will furnish them with eggs the year round, and also with a chicken dinner of an excellent quality—a breed that requires no costly structure or artificial heat in order to lay well during the winter months, when eggs always command a high price and are too expensive for the laboring man's table. The RURAL has too often spoken of the great worth of the Plymouth Rock as a general-purpose fowl to make it necessary for me to say that it is also my ideal. The one important quality for a fowl to possess in order to be suited to the average poultry-keeper, is "hardiness," and I know of no breed that possesses it in so large a degree as does the Plymouth Rock. When one begins poultry-keeping, he should secure thoroughbred fowls, for he can't help but admire a flock of well-marked, symmetrical fowls, and he will therefore care for them the better. The stock will cost a trifle more than if a start were made with some common, worn-out stock, but the increased returns the first year will more than pay the additional outlay.
Cobleskill, N. Y. A. C. K.

A CHICKEN CURIOSITY.

I HAD a queer-looking chicken. It looked as though a hole had been made in its skin and then blown up like a bladder. It was one-third to one-half larger than it should have been. It was lively and the skin outside the air bladder full of veins. I pricked it over the left hip and let out the air, but the air around the neck remained. I pricked on the right side of the neck and the remaining air came out. In a few days it began to "blow up" again. As the result of a second pricking, it drooped and died. No bones were broken. I thought broken bones might have caused the trouble. R. E. D.
Tioga Pa.

GETTING RID OF GAPE WORMS.

YOU can get the gape worms out of a chicken's throat with a piece of fine wire. I take a piece about eight inches long, about as large as that used in making hair flowers. I double it and wind it on a stick, thus forming a loop which can be inserted in the chicken's throat. It is better than horse hair. Of the many proposed ways of curing the gapes, this one is sure anyway. If you get hold of the worm you can kill it at least. [We fail to see why dipping a feather in kerosene and brushing it about in the chicken's throat will not do the business. EDS.] P. S.
Passaic Co. N. J.

The Apiarian.

ROBBER BEES.

W. Z. HUTCHINSON.

SOME old man thus advised his son "Get money; get it honestly if you can, but get money." The bee always acts upon the principle of the above advice. It gets honey; honestly if it can, but it gets honey; that is if there is any to be got. It prefers to gather the sweet honestly from the flowers. During a good flow of honey I have seen it stand untouched in puddles on the ground where it had accidentally been spilled. But when the flow ceases, then beware! If there is a weak or queenless colony it is at once pounced upon, and a stout resistance

will be needed on the part of the inmates, or the robbers will carry away their hard-earned stores. If a comb is exposed, even for a few minutes, it is covered with bees eager to transfer its contents to their own combs. If a hive is opened, a crowd of robbers is soon on hand trying to force their way into the uncovered hive. At the close of the basswood honey harvest, robbers are usually the most troublesome. At this time, especially if the bees have become aroused by a taste of ill-gotten gains, it seems as though they would almost force their way through an inch board.

That "an ounce of prevention, is better than a pound of cure," was never truer than when applied to the robbing of bees. A taste of honey seems to arouse an almost demoniacal nature in them. If peace and order are desired, let not a drop of honey be exposed. Contract the entrance to all hives containing weak or queenless colonies. If necessary, the entrance may be made so small that only one bee can pass at a time. Queenless colonies should be given a queen, or some unsealed brood. If there is any colony that will make a weak defense, it is a colony with neither queen nor brood.

If a comb of honey should happen to be exposed for some little time until its honey is partly carried away, the most natural thing to do when it is discovered would be, of course, to remove it. Strange as it may appear, this is the worst thing that could be done. If left where it is, the bees will keep at work crawling over and examining the comb long after the honey is gone; finally they will gradually leave it, and are much more likely to go about their business than they would be were the honey removed. Then they seem to think they have made a mistake as to the spot where the honey was, and do not feel satisfied until they have forced their way into the nearest weak colony, or many bees have been slaughtered in the attempt. A weak colony that has been attacked and is succumbing, can sometimes be removed to a new location, and a hive with a little honey should be set in its place. The bees will soon clean out the honey, hang about the house for several hours until, concluding that that job is done, they will finally leave. Perhaps the best thing that can be done when a colony of bees is attacked and shows symptoms of being overpowered, is to wet several handfuls of straw or hay and place it in front of the entrance. The robbers, in trying to get into the hive, become wet, and this takes the fight out of them. One dry bee can "whip" half-a-dozen wet ones. For use when robbers are troublesome, a small tent, that can be set over the hive when handling the bees, is a great convenience. A light wooden frame-work, covered with mosquito netting, answers every purpose.

Genesee Co., Mich.

Field Crops.

MAKING AND PRESERVING PERMANENT MEADOWS.

HENRY STEWART.

Condition of meadow essential before seeding; general method of sowing grass seed; quantity of seed; Orchard Grass; Red Top; Blue Grass; seed for moist ground; seed for damp, rich land; seed for dry, sandy and gravelly soil.

WHEN the land intended for a permanent meadow, or indeed, for any meadow at all, is ready for the seed, it should present a level, smooth surface free from furrows or marks of any kind. When harrow marks are left on the surface, the seed will gather in these and the grass will come up in the lines of them, leaving these too thickly sown, and bare lines between them. This is especially objectionable when Orchard Grass is sown, for the habit of this grass being to grow in bunches, anything tending to increase the effect of this habit is to be avoided.

The sowing is to be done with the object of getting a perfectly even and regular distribution of the seed. This is effected by double-sowing as well as by careful scattering of the seed. It is better to take narrow strips and to be sure to leave no vacant lines between them. It is best to sow heavy and light seed separately, as the heavier seed will be cast further than the light. Moreover, the direction of the wind must be considered. It is best to sow across the wind. A broadcast seeder is very useful for sowing grass seed; but whether the seed is sowed with a machine or by hand, I would sow it double—one sowing across the other—and the clover seed should be sown alone.

My method is to use the first two fingers and thumb, and take up as much seed as can be held in that way for one cast, and to make a cast at every step. The steps are made by first advancing the left foot an ordinary pace, then bringing up the right foot on the line of the left, and as the right foot is moved to make the cast, throwing the seed up high and with a circular motion of the arm and a twist of the wrist, by which at the end of the cast and just as the seed is let go, the back of the hand is brought uppermost. This throws the seed in a level, broad sheet, which falls evenly from three to four feet on each side of the sower. A cast six feet wide is quite enough to make, and with the quantity of seed taken will use up a peck, or 15 pounds of clover seed and 12 pounds of Timothy, to the acre, which is the quantity I prefer to use, thinking some seed in excess is better than having too little. If less is sown, the pinch of seed may be made smaller and less taken at each cast. A very short experience will teach this part of the business to any man who can figure a little. A cast six feet wide will cover one acre in 2,420 yards, and exactly 11 casts across a 10-acre square field; or 22 casts across a square five-acre field 20 rods wide and long. Each pinch having one-fifteenth part of an ounce, or half a teaspoonful, will make up precisely 15 pounds of clover seed, and the same bulk at each pinch will expend 12 pounds of Timothy.

In sowing Orchard Grass seed, the quantity used is much larger, as two bushels per acre is the least quantity that should be sown This will give as much as can be taken in a handful with the third and fourth fingers kept always closed, and the seed grasped between the two first fingers and thumb and the palm of the hand. This will make a full tablespoonful to a cast. Red Top and Blue Grass are sown at the same rate, unless in a mixture with other kinds.

The choice of seed depends upon the kind of soil. Low, moist ground, that is overflowed at any time for a short period, is most suitable to Red Top (Agrostis vulgaris), Creeping Bent (Agrostis stolonifera), Fowl Meadow Grass (Poa serotina), Rough-stalked Meadow Grass (Poa trivialis), and Perennial Rye Grass (Lolium perenne), all of which do well on moist ground, and will not suffer from occasional flooding. Timothy will also do well on such land, and may be added to these in equal quantity; viz., an even proportion to make up two bushels by measure, or about 28 or 30 pounds to the acre. Orchard Grass does exceedingly well in damp, rich ground; but suffers from flooding. I have seeded a newly-cleared and drained swamp meadow with the above grasses, using six pounds of each to the acre, and it turned out very well, making an early and late crop of hay, and yielding fully three tons to the acre the first year, and before the grass had become firmly established. White Clover came into the drier part of this field naturally as soon as the drains had dried the land, and grew luxuriantly, making a thick, close bottom which helped the bulk of the crop considerably and improved the pasture afterwards. These grasses are in their prime from May to July, and the earlier ones are green again late in the Summer and in the Fall.

For drier land and sandy and gravelly soils, there is no better grass than Orchard Grass, and it is not improved by any mixture with others. It has a habit of stooling, or growing in bunches, but this is not particularly objectionable so long as the quantity of hay and pasture is satisfactory, and I have not yet known an instance in which any complaint of this kind has been made. It is no use fighting against Nature, and when the land is well prepared, the seed is sown as well as possible and covered evenly, and the grass *will* grow in bunches, it is foolish to make a fuss about it if we get the grass. Orchard Grass is ready for cutting—that is, in full blossom—at the same time as Red Clover, and if anything is sown with either of these it should be the other. But for a permanent grass I know of none better than Orchard Grass for hay or for soiling; and none for pasture, except Kentucky Blue Grass in those places only, however, where the latter thrives the best, as in the West and Southern mountains. Elsewhere Blue Grass will not afford as much pasture as Orchard Grass.

RYE.

A rye crop removed increases instead of decreasing the fertility of the land; on rich ground; excellent feed for horses; as pasture in Fall and Spring; as green manure—how to use it; the straw for binding; in a rotation.

FARMERS do not give this crop the attention it deserves. As a general rule, it does not yield as much per acre as wheat, and sells for two-thirds to three-fourths as much per bushel. The reason it does not yield as much is because it is usually sown upon ground too poor for wheat; but it yields a tolerable crop where wheat would yield next to nothing. Many of the old Dutch farmers who have long been in the habit of raising it, assert that a crop of rye taken off a piece of ground, instead of taking from, adds to the fertility of the soil. They argue that in seeding down with wheat, they often fail to secure a "catch" of grass; but by plowing down the wheat stubble to follow with a crop of rye, and seeding to grass with this, they invariably secure a good "catch" of grass, as well as a good crop of rye, and the ground is in better condition than it was before the rye was sown. Whether there is anything in this theory or not, I do not say, and yet the practice of such farmers would seem to confirm the faith that is in them.

Rye sown upon ground rich enough for wheat yields as much grain as wheat, and nearly double as much straw. Rye bread, when properly baked, is very wholesome and nutritious, and many people are very fond of it. Among the Dutch farmers in the eastern part of Penn., it is mostly used as chop to make cut feed for their horses, either pure or mixed, and chopped with other grains. The straw is run through a cutting-box, and about half a bushel of this cut straw wetted, and mixed with two or three quarts of rye "chop," fed to a horse three times a day, gives better satisfaction, and answers every purpose of both oats and hay. Especially is this the best kind of feed for a horse troubled with heaves. A pint of boiled rye fed twice a day is unsurpassed for putting a horse in condition, also calves, and cattle that have become hide-bound.

Then for tying up corn-fodder, it is almost impossible to get along without rye straw. Of course the crop must be thrashed out with a flail if the straw is intended to be used for this purpose.

As a green crop to plow under I find in it, perhaps, its greatest value. In this country, buckwheat is a standard crop in our rotation. After the corn is off, I sow rye [as it will do to sow it quite late even on the snow, and not harrow], to be plowed under about the middle of June; pack it down tight with a roller after it is plowed, then about June 20 sow buckwheat. This comes off so the ground can be ready to be sowed to wheat about September 20. Then I plow it again before sowing wheat, and roll; thus the rye that has been turned under in June, (quite a furrowful) comes on top, like well rotted manure, to top-dress the wheat. By fastening one end of a log-chain to the doubletree, and the other end around the beam of the plow, letting the chain drag in the furrow, every stalk can be covered out of sight; in fact, it makes it very pleasant work. Last Summer I raised 120 bushels of buckwheat off three and one-half acres, where rye had been turned under in June. It was all ripe before September frost, and buckwheat was buckwheat.

It will make good pasture for the calves this Fall, and I expect it will again next Spring. I may use a part of it for soiling purposes, and turn under for buckwheat, to be followed by wheat.

Some agricultural papers recommend the sowing of rye with a view of plowing under for corn. I do not hold very much on that line. Unless it is sowed very early, it will not amount to very much in time to plow under for corn, and you cannot get any suitable ground for corn on which to sow it early, except sod after harvest. If that sod were simply let alone, the grass that would grow up and rot down in the Fall and grow up again in the Spring before plowing for corn, would need far less work, and amount to more than the rye would by the time to plow for corn, as it is after that time rye makes its most rapid growth. Upon any other than sod ground, of course the benefit will be in proportion to the amount of growth secured by the time it is plowed under for corn.

Venango Co., Pa. T. S. STROHECKER.

MILLET.

MILLET will produce from two to four tons of cured hay on an acre of well-manured land. The common or Golden Millet is the best variety. It grows taller and with a finer stem than the German which looks like diminutive corn, and is two weeks later in maturing. Millet is better for stock than corn-stalks, when not allowed to get too ripe. It is a superior food for milch cows Seed is cheap, sold by all seedsmen. It is a good food for poultry, particularly for young chicks. From 10 to 12 quarts of seed per acre are ample on rich land. More seed will prevent too coarse a growth of stems. For sheep, the ground should be thickly seeded so as to make the hay finer. Seed should be covered slightly. Rolling will do the work well. Golden Millet will mature in two-and-one-half months. Always cut before a frost.

Saratoga Co., N. Y. F. D. C.

ALSIKE.

IT is well known that Alsike Clover, a hybrid between White and Red Clover, is one of our most desirable honey plants. By feeding in Spring, it can be made to blossom late, and it furnishes most excellent honey in great quantities. It is excellent for hay, being finer and of better quality than Red Clover. The blossom is pink, and in beauty and delicacy of perfume a field of Alsike Clover in blossom is hard to excel. Col. F. D. Curtis, in a late Country Gentleman, adds another virtue. He says the Alsike lasts much longer than Red Clover. As bees work on Alsike, the first crop of seeds develops which self-seeds the land, and continues the plants, which is not true of Red Clover. A. J. COOK.

Indust'l Societies.

SOCIETY NOTES.

The annual meeting of the American Horticultural Society, for 1886, will convene in the city of Cleveland, Ohio, September 7, next, and continue three or four days. This is expected to be one of the most important meetings of the kind ever held in this country. W. H. Ragan, Greencastle, Ind., Secretary.

The next annual meeting of the American Forestry Congress will be held at Denver, Colorado, Sept. 16-18. A better place for holding the convention could hardly have been selected. The members of the congress will both instruct and be instructed. If any portion of America stands in need of trees it is the "Great American Desert," and yet in the cities and towns where irrigation is practiced the trees are almost unapproachable for beauty. The question of preserving the forests of the Rocky Mountains is also of great importance. B. F. Fernow, Washington, D. C., is secretary of the congress.

The Kansas City Fat Stock Show will be held this year Oct. 23-30. Entries of fat stock promise to be large. The various cattle breeders' associations of the country have voted to duplicate all awards made at the exhibition, so that an animal winning a prize here will bring its owner a good sum of money. Many manufacturers have also offered implements to be given to the owners of winning cattle, both thoroughbreds and grades. The practice of offering prizes for graded cattle is a good one. The grade is the "farm breed" at present and deserves more encouragement. This fat stock show has heretofore been weak in its display of hogs and sheep. We hope to see a better representation of these animals this year. J. W. Sanborn, Columbia, Mo., is secretary of the association.

The Society of American Florists will meet this year in Philadelphia, Pa., Aug. 18, 19 and 20. The meeting will be very attractive to those who love flowers—and who does not? E. G. Hill, Secretary, Richmond, Ind.

THE Teachers of Agriculture met in convention at Perdue University, La Fayette, Ind., last month. Teachers and directors of Western experiment stations were present. These conventions are in the line of social talks. The object is to meet and exchange views in an informal way, make suggestions and criticisms, and to endeavor to arrange something of a uniformity in experimental work. A great deal of good has been done, in a quiet way, by this organization, and it would be well if our Eastern agricultural teachers could unite with those at the West, and thus make the society more national in character. The great object of the authorities of an agricultural college is to enlist the sympathies of the farmers. Without this sympathy they lose the best part of their work; with it they cannot fail. This question was discussed at the convention at La Fayette. The holding of Farmers' Institutes in different parts of the States was considered a most effective way of advertising the colleges. The institutes for the first year may not be largely attended, but by perseverance they can be made popular. Experimental work was also commended, particularly for the newer States, where there are fewer agricultural facts on record. Land in many parts of the country has gone through the various stages of decline and restoration of fertility. In many parts of the West this change has not been made, and it is the great duty of experiment stations to collect and digest facts from all sources, and present their results in a plain and readable form. Several speakers said that a college farm must be made to pay as a business venture before a certain class of farmers could be induced to send their sons to the college. The idea seemed general that more actual good could be accomplished by running the farm for experiment rather than for profit, but that the prevailing spirit among many farmers rendered it necessary to conduct most college farms on a dollar-and-cent basis.

Miscellaneous.

CATALOGUES, ETC., RECEIVED.

REPORT OF THE WISCONSIN EXPERIMENTAL STATION.—This experiment station has been of real value to the farmers of Wisconsin. The aim has been to condense the work of the station and combine its efforts in working out a few particularly important questions. Wisconsin agriculture has reached a point where a radical change is demanded. An exclusive grain growing has reduced the fertility of the soil. This fertility must be restored, and the officers of t'e station have wisely decided to make this question of restored fertility the leading one in their work. Naturally the feeding of cattle suggests itself as the most available agent in this work. It is a generally understood principle among good farmers that the fertility of a farm will be measured by the number of stock fed upon it. Commercial manures have, in some portions of the country, made it possible for farmers to produce bountiful crops with little barnyard manure, yet in the newer portion of the country, and on large farms, farm manure must still be depended upon almost exclusively. The work of the station has been extremely practical. Efforts have been made to ascertain the feeding value of sweet skim-milk for young animals, the value of the corn crop as fodder, the value of oil meal, bran, and other feeds for milk and butter production, etc. This work has been well and carefully done, and will be of value to Wisconsin farmers. There has always been a question in the minds of farmers as to the best method of feeding corn-stalks. It is easiest to feed them whole, but is it most economical, taking into consideration the trouble of removing the wasted stalks, in handling the manure into which they have been thrown, and even the feeding value of the refuse? Prof. Henry tested the matter carefully. He concluded that if ordinary corn-stalks were worth $4 per ton, the cut stalks were worth $5.20 for feeding. The farmer must decide for himself whether it will pay to cut a ton of stalks to save $1.20 in feeding value. We notice that in this experiment little notice was taken of the fact that the cut stalks make far better manure and that a larger proportion of the fodder is used up in this way. We are inclined to think that it will pay better to feed the stalks whole and to use the refuse, as Prof. Shelton, of Kansas, suggests, for fuel in heating drinking water for cattle. We speak now of stalks from which the ears have been husked. For ordinary fodder corn, grown in drills and fed ears and all, better results may be expected, but it is hardly thought, even in this case, that the cutting of the stalks would pay. Prof. Henry calculates that an acre of uncut stalks, without the grain, supplemented by 1,690 pounds of grain feed, will produce 158 pounds of butter. This grain feed is given as five pounds of bran to five of corn meal and two of shorts. An acre of drilled corn fodder, fed ears and all, uncut, with 2,256 pounds of bran, will make 290 pounds of butter. These facts are of great importance to Wisconsin farmers. Tons and tons of bran are shipped through the State to be fed out at the East. Acres and acres of stalks are wasted. Both of these sources of wealth should be utilized in the only practical way, viz.: in cattle feeding. Prof. Henry made an experiment to determine the value of soiling as compared with pasturing for dairy cows. We shall give the substance of his conclusions in a subsequent number. We commend this volume of experimental results to our readers. It is well worthy of study.

KENTUCKY HORTICULTURE.—PROCEEDINGS OF THE LAST MEETING OF THE KENTUCKY HORTICULTURAL SOCIETY.—We are indebted to our friend, Judge W. L. Dulaney, for this report, from which we learn much of the horticultural development of Kentucky. The meeting was well attended and the papers prepared were of interest. President Cook well said that he who gathers the fruits others have planted, only half enjoys them. The raising of Bartlett pears was said to be a very profitable business. Few precautions are taken to suppress the attacks of insect enemies of fruit trees. Farmers combine their energies against the tobacco-fly, thus protecting a crop that really pays less than a fruit crop would pay. In one Congressional District of Kentucky, 300,000 bushels of apples were distilled into alcoholic spirits, while but 5,000 were put through the evaporators for food. The Concord appeared to be regarded as the "general-purpose" grape. This advice, "if any of you haven't a grape-vine, plant one, and if you can plant but one, plant the Concord," appeared to be satisfactory, though Iona, Pocklington, Niagara, and others were mentioned. Members were advised to make use of old and standard horticultural literature, and to let private circulars, essays, etc., alone. Wild cherries were considered a popular fruit for birds, hogs and some boys. It was suggested that a few trees growing near the orchard might attract the attention of the birds from the other fruit. It was thought that sheep were the best scavengers to put in an orchard, but it is well to take them out before snowfall, otherwise they will nip the shoots and bark the trees. A story was told showing how, in old times, an orchard was renewed. Two or three loads of manure were put under each tree. In the Spring, with a stout staff, many holes were punched in the ground and half-a-gill of corn was dropped into each, and the openings closed. The hogs were then turned in, and they fairly turned the soil upside down and covered the manure in hunting for the corn. As a substantial beginning towards a better horticulture, it was suggested that each member of the society go home and proceed to turn his place into a small Eden, without a single tree of any forbidden fruit. The fruit tree peddler came in for his usual round of abuse. The President of the society was not ashamed to confess that he had paid out money for blue and green roses, strawberries that grew on bushes, and similar monstrosities. He has never seen them yet, and his money has not returned. The home nurseryman was informed that in order to cope with these glib-tongued fellows, he must show more enterprise, spend more for printers' ink and let people know what he has to sell and how he proposes to deliver it.

IMITATION DAIRY PRODUCTS.—Under this title is collected the testimony given before the Senate Committee on Agriculture in reference to the Oleomargarine Bill. That the hearing was extended and exhaustive may be inferred from the fact that the testimony fills a pamphlet of 275 pages, and fully covers every phase of the subject. As we have frequently stated, we do not think any measure has of recent years been brought before Congress, that is of more vital importance to the farming interests of the country than this. The question should be carefully studied. We advise farmers to secure a copy of this report. It can be obtained through their Senator or Representative.

What Others Say.

A CORRECT NOMENCATURE.—We find the following in the Philadelphia Weekly Press:

"As to hybrids, the Editor of the R. N-Y, makes protest against the free use of the word "hybrid," and wishes to restrain nurseryman and florists from characterizing the offspring of two varieties of the same species as a hybrid. He even goes so far as to accuse offenders in this respect with a lack of regard for "truth and propriety," and calls on various associations and societies to take action in the matter. But some people argue that a true hybrid has no power of reproduction any more than a mule has. And what is a variety or a species? Who is to decide? It is a matter of judgment only. New species and new genera are being erected constantly by botanists. When a florist or nurseryman or an amateur speaks of "hybridizing" for pastime or any other purpose, it is understood that the word covers the crossings of plants, whether nearly or more distantly related. It is not a serious offense against good taste or good morals to use any word in its ordinary, current meaning."

We are sory that our respected contemporary takes this view. We had thought it was a part of the duty of the press to point out errors just as much when they have become "current" as when they first appear. The words hybrid and cross-breed are as distinctly defined in botanics as are the words genus, species and variety. It does not matter whether or not we know what constitutes a genus, species or variety. Until we *do* know there is but one rule to follow, viz., the teachings of our leading botanists. According to such teachings the word hybrid and cross-breed are not interchangeable. Dr. Gray says (Structural Botany page 136) that "cross-breeding is effected by fertilizing the pistil of one variety with the pollen of another variety of the same species." Again he says that the "cultivator often proceeds one step further," in certain cases, "and gives rise to a different kind of *cross-breeds*, viz., *hybrids*." Again he says: "Hybrids are cross-breeds from different but nearly related species."

Sachs says (p. 816 Text Book of Botany): "We learn from experience that a fertile sexual union can take place between plants which are specifically distinct. A union of this kind is called hybridization and its product a hybrid." He proposes three words to express the results of a union between, (1) different varieties of one species, (2) different species of one genus, and (3) two species belonging to different genera, viz., variety-hybrid, species-hybrid and genus-hybrid. But such a set of terms would not help matters much. In the meantime we can do no better than to follow our own botanical authority, Dr. Gray. Pupils who study his text-book will naturally ask what is meant by hybrid corn, potatoes, hybrid cucumbers, tomatoes, peas, beans, squashes, peas, etc., when first they examine the catalogues of seedsmen and nurserymen or the rural journals and books of the day. They have to learn that the word "hybrid" has been substituted for "cross-breed" because it is a more *taking* word. In like manner we have pointed out the undesirability of calling all chemical fertilizers "superphosphates" or "phosphates." Nothing is more perplexing to the farmer who is trying to comprehend the whole subject of concentrated manures than the "current" signification of these words, for the reason that they are used by garrulous agents, and even manufacturers, in a sense quite at variance with their real meaning.

DECLINE IN STOCK VALUES IN GREAT BRITAIN.—English journals are lamenting the present general, and in some breeds serious, decline in values. Prices have shown a downward tendency for years. This was natural, from the fact that the demand, particularly for bulls, becomes year by year better and better supplied. But the decline in Scotland in 1885, says the North British Agriculturist, was the most unsatisfactory on record. This is clearly illustrated from the fact that while 18 head more of Scottish cattle of pure-bred stock were brought into the market last season than the previous one, something like £15,224 ($76,000) less were realized. It will be interesting to herders in the United States to know the impression in Great Britain in relation to depreciation. In this country the area to be supplied with pure-bred stock is immense. Prices have declined. As prices fall in the Old Country they must fall here, but this fall in prices will stimulate buying among a class of farmers who were not able to pay the great prices of previous years. In fact, the fall in prices in this country has already stimulated buying among farmers who heretofore seldom sought blooded stock. The Elgin (England) Courant and Courier gives its opinion of the causes of the decline, and in summing up says:

"The great importance, both financially and otherwise, to the country, of the trade among pure-bred stock will be gathered from the fact that last season no fewer than 1,610 Short-horn and polled cattle were spread over the northern counties, the total price realized for which was over £34,502. The previous year—season 1884-'85—1,592 animals brought a total of £49,427, which result has, as noted above, entailed a loss to breeders for the year of no less than £15,224. As a comparison, in the years 1883-'84 the sum paid for pure-bred stock in the same area was £37,409; in 1882-'83, £36,409; 1881-'82, £30,168; 1880-'81, £26,802; 1879-'80, £25,503."

The fact that about $100 each are realized for all cattle sold—good, bad and inferior, young and old—will not strike the average reader as being exceedingly low for stock from herds that have already made their owners rich.

Polled cattle seem to have depreciated most seriously. The average price paid in 1885-'86 less than in the year previous, was nearly £12 ($58.35), the average for polled cattle being nearly £22 9d. In only three instances did the price reach those figures.

Depreciation in Short-horn cattle was less than in polled cattle, but there were fewer public sales of these than of polled cattle. The speculation in polls in America probably caused them to be forced upon the market beyond a legitimate demand. Short-horns in no case are reported as bringing these figures, £84 being the highest price recorded by the contemporary named.

In conclusion, it is stated that Short-horn bulls in 1885-'86 averaged £19 11s, as against £28 5s 1d last year. Cows this year only averaged £22 13s 1d, whereas last year the average was £31 3s 7d. Two-year-old heifers showed the least difference in price. Last year they averaged £23 17s 5d, while this year they were £23 15s 9d. Yearling heifers on the other hand, were somewhat down. Last year they averaged £18 15s 7d, while this year they brought only £16 9d. Calves were much the same as last year.

TURNIPS AS A FIELD CROP.—Waldo F. Brown says, in the Farmer's Review, that for 25 years he has not made a failure with the turnip crop, and with the exception of perhaps two years, he has grown from 100 bushels up to as high as 1,500 each year. Although some years he has not been able to sell, and so has fed them to his stock, in other seasons they have paid him a larger net profit than any crop grown on the farm; and taking the years one with another, he has found an acre or two of turnips to pay better than most farm crops. He remembers one year that he sold a carload of 400 bushels at 33⅓ cents a bushel, on the track at his station, and as he was loading the car, was frequently asked by farmers the price and several times when he told it they said, "Can you make anything growing turnips at that price?" It so happened that corn was selling at the same price, and Mr Brown said to them, "You grew on an average less than 50 bushels of corn the acre, and gave it the entire season and several thorough workings; I grew an average of 200 bushels of turnips to the acre, and grew them as a second crop and gave them no cultivation at all.' Mr. Brown says that 200 bushels is a very moderate crop, and that he has grown 500 bushels on an acre of highly manured land that had grown two crops besides the same season, the first crop being early peas that were marketed by June 11, and the second crop pickles, and the turnips were sown about the 1st of August at the last working of the cucumbers. He believes that it is easier to grow 1,000 bushels of turnips on an acre than 100 bushels of corn.

As to the the time of sowing, the old New England couplet says:

"Twenty-fifth of July,
Wet or dry."

But the first 10 days of August is the best time for the latitude below Central Ohio, and Mr. Brown has grown excellent crops sown as late as September 1; but he would always advise sowing by the middle of August, as the Fall must be unusually favorable if a later sown crop matures so as to be gathered before cold weather. Another important direction as to the "when" is, *always sow after a rain*. The majority of farmers think it a nice saving of labor to sow turnips when they see a rain coming up, so it will wash in the seed and save them the trouble of covering it. It is the worst possible time to sow, and has caused the loss of many a crop. There are two good reasons for this. First, a rain always brings up a crop of weeds, and when they start with the turnips they always damage the crop. The second reason is, that a heavy rain packs the soil and forms a crust, and prevents the plants from making a thrifty start, and it is not uncommon for insects to destroy the plants almost before the eye can detect them; while if sown as soon after a rain as the land can be worked, few, if any, weeds will start with them, and they will make so vigorous a growth as to escape insect pests. The first 10 days is the critical time with the turnip plant, and it makes quite a difference whether during that time it is choked with weeds and bound by a hard, dry crust, or growing in a clean, moist and mellow soil.

Mr. Brown prefers to sow broadcast, and use no mixture of any kind with the seed. Use only the thumb and forefinger and sow a strip five or six feet wide, making one cast to every two steps, and you will not be likely to get them too thick. About one pound to the acre is right. Should the turnips be too thick they can be thinned by running over them with a light harrow, and the best time to do this is on a bright, sunny day, when the plants are two or three inches across. Run across with the harrow, and then wait a few moments to see how many plants wilt, and if once does not thin them enough, cross-harrow. A single plant to the square foot will give a larger crop than closer planting, and if he were growing for stock, and the land was rich, he should expect the largest crop from about one plant to each two square feet; but as a large turnip does not sell well in the market, when growing them for sale he leaves them thicker, say two plants to the square foot, and then gathers the larger ones as soon as the weather will admit, and lets the smaller ones grow longer. There are 43,560 square feet in an acre, and the legal weight of turnips is 50 pounds to the bushel. If we can grow a turnip weighing one pound on each square foot, it will give a crop of nearly 22 tons to the acre, or 871 bushels. He thinks it would be easier to grow turnips that would average two pounds each with two square feet to each plant, than one pound each with one to each foot. A compact seed-bed is absolutely necessary for turnips. The land should be plowed at least a month before sowing, and two months are better, and by the use of roller and harrow, it should be made fine and solid. When the time comes to sow, harrow so as to make two inches of the surface mellow; then sow the seed and cover with a light plank drag: this will cover the seed lightly and press the earth to it so that it will germinate at once. A crop of clover may be cut for hay and the stubble turned under in June, and at once rolled and harrowed flat; then during July top-dress with six or eight loads of fine manure, and harrow till thoroughly mixed. If the land is rich it will grow a good crop without the manure, or there is perhaps no crop on which commercial fertilizers can be used with as great certainty of good results as on this. Unlike beets and carrots, turnips are in the best condition for feeding in the early

part of the Winter, and will be valuable in finishing off beeves for the Christmas market, but if pitted they will keep in good condition for spring feeding. A little freezing, if not disturbed till thawed, does not hurt them. Pit them on land with a gentle slope, plow four furrows ten inches deep, and throw the loose earth out at the sides, then pile the turnips in the trench so the top will be about three feet high and the sides slope at an angle of 45 degrees, and then throw on the earth. It will take from 20 to 25 feet of pit to each 100 bushels, and a man should cover 500 bushels or more for a day's work.

BRINE FOR BUTTER.—A writer in the Husbandman who sells his butter for nearly twice quoted prices, prepares brine for butter in this way: He takes the best dairy salt and stirs in hot water as much as can be taken up or dissolved and a little more. When thoroughly stirred, so that the brine has become as strong as it can be made, he strains it through a tightly woven cloth, and then sets it away to cool. When cooled he pours it on the package, if a firkin, to the top of the chime that the supply may be sufficient for entering every vacant place. The same process is required when butter is packed in a jar or tub, the purpose being to exclude air, the brine serving this use effectually, and at the same time keeping its strength and operating in some degree as a preservative.

THE HOME-RAISED DAIRY is Mr. John Gould's ideal. The dairy of the future, he says, in the Press, must be bred for a specific end, butter or milk, and who can do this as well as the farmer, who knows just what he wants, and can direct his breeding in the line of closest adaptation to his needs? He need not pay the top price for fancy stock, but he can discard the nondescripts that are only profitable on $20 land and $3 hay. By careful selection he can breed up steadily so that more milk or butter will be produced by fewer cows. And, more than this, his dairy will supply something besides milk or butter. For the increase of this home-bred stock can be turned to profitable account. The slaughter of baby calves three days old will cease when the dairy is what it should be and the demand for good veal, and even of beef, can be supplied by dairy farmers at a profit.

The home-raised cow possesses many advantages over one that is purchased. The owner then knows her peculiarities, and can fashion her habits. Each one of Mr. Gould's little dairy of 12 animals is descended from one cow, the most perfect animal he ever owned, and his bull on one side inherits all these good qualities, and the result is that uniform messes of milk are received, varying one from the other scarcely more than a pound or two at most.

Then "breaking heifers" is unknown. When they come into the dairy all Mr. Gould has to do is to sit down and milk them. There is no tying legs, kicking over pails, or Indian club practice with a milking stool. The Winter before they calve the heifers are stabled with the cows, and are treated exactly as the cows with respect to care. Every few days he plays at milking them, handles their udders, teaches them to "histe," and when they are milkers they are cows in habit at once. Such a dairy is quiet, home-loving, and never breachy. They have their place, know it, and then one knows their qualities and worth, which he can never do when he steps into a "drift" herd to select a few "choice" cows for his dairy—cows about which he has not the remotest knowledge, and which when purchased three times out of five fail in meeting expectations. After 30 years' experience Mr. G. votes for the home-raised dairy every time, fully believing that the successful dairyman of the future will breed his own cows.

LITTLE PROFIT IN COTTON.—Our friend Henry Stewart, who is at present farming in North Carolina, says that the figures relating to the present cotton crop afford a most noteworthy example of wasted labor and resources. The area reported under cultivation is nearly 19,000,000 acres, and the expected crop 6,500,000 bales, which is one bale to three acres, or 150 pounds per acre. A Northern farmer or a thoughtful Southern planter should consider these figures with amazement. 150 pounds at the present price represent about $8, for which the planter spends $2.75 for fertilizer, $2.60 for rent, and pays out of the rest for all the work of planting, picking, ginning and baling the product. All this work must come out of the paltry sum of $2.65 per acre. As this is the average, and much of the crop must yield less than this, what a sorry recompense the poor cotton-planter gets for his exhaustive and long-continued work, lasting nine months in the year, before his crop makes a return!

LIGHTNING rods are now said to be simply dangerous. That is, a house furnished with rods is more liable to be struck by lightning than one without rods. It is said that insurance statistics prove this. "There's a pretty state of things!" The real trouble is that the lower ends of the rods are not properly "fixed." They should be embedded in moist earth, or be in connection with metalic pipes, or with a sheet of metal sunk in damp ground. In the ground they should branch out some distance, and charcoal, which is a good conductor, should be filled in round the branching rods. The rods should be made of pieces as long as possible; and unavoidable joints should be securely fitted so that the two ends are brought into close contact, and touch each other for several inches. Iron rods loosely joined together and resting in the joints furnish a bad conveyance for the electric current, and the lightning may dart off to some better conductor in the building, causing much damage in its course.....

A WRITER in the N. E. Homestead says that he has a small cold storage house that is inexpensive and adapted to the needs of the average farmer. It is 16 feet square, with a dead air space between the walls filled with sawdust. In the middle is a room 10x10 feet and six and one-half feet high, the ice being packed all around and above it. There is a passage way from the outside door to the door of the refrigerator room. He says that every ice house can just as well as not serve also for a cold storage house by the use of this system. It will keep strawberries for six weeks, raspberries and blackberries fully as long, Astrachan apples until Spring and Bartlett pears until Christmas.....

THE RURAL'S LUNCH.

F. D. COBURN, a good authority, says that the flavor of the pork depends on the last month's feeding of the pig.....

THERE seems an unaccountable discrepancy between the treatment of fever in swine and in the case of a human being suffering from the same disease, says a writer in the London Ag. Gazette. In one case we do everything possible to cure the patient, and condemn everything doubtful in the way of closets, drainage and ventilation: in the other, we condemn the animal to immediate slaughter and allow the suitability of the sties for receiving other occupants to remain almost unquestioned.....

THE value of crude petroleum to the farmer, stockman and shepherd can scarcely be overestimated, says a writer in the Times. It is most excellent for painting tools and implements, as well as board fences, farm buildings and the inside fittings of stables. It is the most effective and safest remedy to apply for external parasites, as lice, fleas and the scab and mange insects, curing the destructive sheep scab better than any other known remedy, and preventing it most effectively if applied twice a year. If used after shearing, it cures the unavoidable cuts made by the shears and keeps off the flies from the wounds, as well as protects the shorn sheep from the weather and the contagion of the scab. It is cheap, and every farmer should keep a barrel of it on hand for these and other valuable uses.....

SCENE—An editorial sanctum, editor writing at his dest, enter manager of the advertising department, rubbing his hands expressive of intense satisfaction:

Editor: "Well, Mr. Space, what is it?"

Mr. Space: "I have just closed one of the largest and best advertising contracts I have made since the paper started."

Editor: "Indeed!"

Mr. Space: "Yes, and it will run for a year."

Editor: "Who is the party?"

Mr. Space: It is a big Kentucky firm, you see, and they are booming their Pure, Copper Distilled, Instant Death Whiskey. They are the biggest advertisers in the country today."

Editor jumps to his feet, hurries to the pipe connecting with the composing room, and shouts, "Foreman!"

"Hello!"

Editor: "Have you got my editorial "Death to the Whisky Traffic" in type?"

Foreman. "Yes, and I am just putting it into the forms."

Editor (vehemently): "Kill it!"

The above was sent to us by a friend without credit .....

WE shall all rejoice when we see signs that the conflict between Labor and Capital has narrowed itself down to the true issue. "Puck" says there is no real conflict, and that there can be none. So long as one man has money, and another man wants to get money, so long will the man with money buy the labor of the man without money.....

THE "worst bird-enemies are women" is the caption of an interesting article in proof of it in the N. Y. Tribune.....

IT is a disgrace to civilization, the article says that American women are more deadly than European sparrows against our native birds. Millions are shot every year for feminine head-dressing. The slaughter has reached the South, where some of the birds are gorgeously plumed.....

THE damage to crops by insects is enormous and if the destruction of birds is continued, by and by there will be no fruit, and the garden, grain and grass crops will suffer more and more. He has posted his land against hunters and proposes to enforce the law rigorously and so preserve the valuable birds, and he earnestly advises all other farmers to do the same.....

IT appears that carp do bite at bait .....

A TEASPOONFUL of turpentine in a pint of meal made into a dough and fed to chicks is said by the Poultry Keeper to be a cure for gapes.....

MR. J. H. HALE while traveling West noticed in Ohio and Indiana several large fields of sunflowers, and states in the Homestead that they were grown as food for poultry. A farmer who has tried it for years told Mr. Hale that he can grow more bushels of sunflower seed per acre than he can of corn, and it is worth about double for laying hens.....

THE National Live Stock Journal thinks much of the opposition to the Bureau of Animal Industry is due to the manner in which its work has been done in the past, and to the character of some of the men connected with it, and that a radical change in this respect is needed to secure the hearty support which public measures like the recent legislation in support of the Bureau, should have.....

IN his testimony in favor of oleomargarine before the Senate Committee, Prof. Chandler acknowledged that he expected to get pay for his evidence, and that while oleomargarine could be got for 18 cents a pound, he paid 80 cents for the butter used in his family, although "oleo.," according to him, is "chemically pure and wholesome," better, indeed, than butter..

PROF. MORTON, before the same Committee, while giving similar testimony for similar pay, acknowledged that he couldn't tell by chemical examination whether a hog died of disease or a natural death, yet he declared that oleomargarine made of hog's fat is "healthy and pure, chemically." So there might be in the fat germs of disease in the worst form, yet the Professor's tests could not discover them. Doesn't all this show how utterly worthless is the testimony of chemical experts before the courts? They can testify for whichever side pays them best! .....

MR. C. G. PRINGLE, the naturalist, has a good word for the much abused daisy. At work the other day in a field of them, he said: "These daisies are not half appreciated. They never fail us in a dry season, and they will grow and thrive on soil where other forage plants could scarcely maintain even a sickly existence. Cut early and cured quickly, they are sweet and nutritious for cattle and horses, and stock will eat them with relish. They deserve to be more kindly viewed and treated." .....

CHICAGO Live Stock News says the dressed beef combination has done greater injury to the live stock trade of Chicago and the West than all the other rings that ever had an existence, and it is becoming more powerful, more exacting, more dangerous every day.

Everywhere.

TRANSCONTINENTAL LETTERS.—LVIII.

MARY WAGER-FISHER.

Marysville; Sacramento City; the Crocker Art Gallery; the Chinese quarter; Stockton; on the way to Oakland "the most beautiful city in the United States."

When we arose in the Marysville hotel next morning, we were "specked beauties" in a high degree, our sunburnt faces having been profusely bitten by mosquitoes. It was quite the finishing touch, but we found that comfort in the fact which is always to be had when the "worse has come to the worst." It was a cool morning, and as the train we were to journey in left soon after breakfast, our only view of the city was from the hotel 'bus—used here without the apostrophe—in the rather long ride to the station. There was nothing particularly distinctive—orange trees loaded with fruit and oleanders with blossoms. Our succeeding destination was Sacramento, the capital of the State, which we reached at eleven in the morning. The country between these two cities is less level and less attractive than that we had seen on the previous day. Much of the soil seemed to be in a sort of semi-disintegrated state, the surface being a succession of small hillocks, and much of it billow-like, with a sparse covering of fine brown grass.

Sacramento is the second city of importance in California, and its handsome granite State House is a matter of pride for the whole State. It was the first thing we visited, the laddie and Anaximander climbing to the very top of the dome, while I halted at an outside gallery surrounding the "cupalo" as nine persons out of ten call the cupola. The location of the city is in a great level plain with the mountains far away in the distance. It is well shaded, and has many attractive homes. In the rotunda of the State House is a marble group representing Isabella and Columbus—the Queen showing him her jewels, which she would pledge—the work of the sculptor Larkin G. Mead, and the gift of D. O. Mills, one of the rich Californians who have gone to live in New York; and it goes without saying that men who have grown rich here, and then gone elsewhere to enjoy their wealth, are not in high favor with Californians who stay in the State. The grounds about the State House are not yet entirely in order, but are sufficiently so for one to compare the geometrical style of landscape gardening with the curved lines so often quoted from Ruskin as being those of beauty. Here, at least, the straight lines, the parallelograms of grass, the square corners and triangles, were, to my eye, far prettier than the grass through which meandered winding walks. The great and surprising variety of evergreens that here bedeck gardens and lawns, and which are trimmed to suit the gardener's caprices, produce an oriental effect that seems altogether foreign. There is a large variety of palms and undeciduous trees so novel and beautiful as to exhaust one's adjectives in a very short time.

Much of the afternoon of our day in Sacramento, we spent in the E. B. Crocker Art Gallery. E. B. Crocker was a brother of Chas Crocker, another California millionaire gone to New York; he died several years ago, and his widow less than a year ago, gave to this city the large collection of paintings owned by them, as well as the beautiful gallery in which they are housed, and the grounds pertaining thereto, these being connected by a corridor with the Crocker family residence. This gift was rated, I think, at a valuation of half a million of dollars. The collection of pictures is a very interesting one, "containing many old masters" and some modern ones; but none of them are of special note. There is a series of portraits of noted Californians, railroad and money kings, politicians and historical characters, Thomas Starr King among them, and of the railroad men, the brainiest and shrewdest face is that of C. P. Huntingdon. In one of the rooms where there is the nucleus of a museum, we were much entertained in watching some rattlesnakes in a cage, which had been captured some time previously by a hunter, but in what manner we did not learn. Crackers and bread had been freshly put in for them to feed upon, and one of them held up his tail and rattled most of the time. The sound was very like that which precedes the strike of an alarm clock—or the escape of steam from a valve. The interior finish of the art building is fine, beautiful inlaid floors and carved wood-work, while the grounds are equally charming—enormous orange trees, superb palms and choice trees and shrubs. On certain days no admission fee is charged, while on others a nominal charge of 10 cents is made, and catalogues are loaned to visitors.

The weather was like July in Pennsylvania: strawberries, raspberries, persimmons and pomegranates were in market, and men were going about in their shirt sleeves. We found the best hotel in this city, that we had lodged in since leaving Seattle, and it is famous all over the State for excellence, cleanliness, order, perfect method and moderate charges, and it undoubtedly has more patronage than all the other hotels combined. People who travel much soon learn to appreciate the capabilities of the man or woman who keeps a good inn.

The next morning was misty up to almost half past eleven, our hour for leaving. Anaximander and the laddie went out and explored the Chinese quarter of the city, pronouncing it by far the worst as yet seen. Some kind of religious feast seemed to be going on, and the Mongolians were out in full force in the performance of their own peculiar ceremonials. There were many boats, steamers and barges on the river at this point, and the muddy water was used for drinking purposes. The city is claimed as being less affected with malaria than formally, but still far from being free from that dreadful foe. As we rode on toward Stockton, it was through vineyards and orchards, wind-mills, rows of Lombardy Poplars and vegetable gardens. Occasionally a wire fence was to be seen, but most are of boards. Stockton is a thriving city, and among its striking public buildings, is a State Asylum for the Insane, a class of patients in

which California has, I believe a larger p o-portion than any State in the Union. After passing Lattrop where the train stopped for dinner, we crossed the San Joaquin River and were in what is distinctively the San Joaquin Valley, which is but a continuation of the Sacramento. The two rivers flow into a swampy region south of Sacramento and west of Stockton, and on into San Francisco Bay. These two valleys are partly intersected by this swamp or *tule* land, consisting of 3,000,000 acres. The two valleys are 350 miles long from north to south, with an area of 14,000 square miles, and not over 500 feet above the sea level. The fertility of the soil is said to be far inferior to that of the loamy valleys of the Missouri and Wabash Rivers, and wheat cannot regularly be raised without irrigation. Crossing the San Joaquin Valley the train made its way through a mountanious region *via* Livermore Pass, and ere long we sniffed the fresh air of the coast valleys, and at five o'clock we were in Oakland, the most beautiful city in the United States.

RURAL SPECIAL REPORTS.

Canada.

SOMENOS, Vancouver's Island, Canada, July 9.—The weather for the last ten days has been very wet. Crops look very well. Wheat, oats and peas will be a good average. Roots of all kinds and fruit, as well as hay, good.

J. D.

Dakota.

RAYMOND, Clark Co., July 15.—I have just read your RURAL Special Crop Report. Things have gone from bad to worse since then only a few slight showers the end of May. Wheat put in early and in good shape may produce from one-quarter to one-half crop; late grain will be a total failure. Many are cutting it with the mower for fodder. Hay, extremely scarce, and the prospects, on the whole, very gloomy. Seven-eighths of the flax crop has gone up; oats and barley very light and thin. Hard times inevitable. T. M.

Idaho.

CALDWELL, Ida Co., July 11.—Taking as a standard the Boise Valley, whose soil is as rich as any in the Territory, the condition of all crops is not quite so favorable as at this time last year. Wheat, will fall far short of an average crop, Oats and rye, a fair average. Corn is not raised to any extent, not doing well here; not enough is raised for home consumption—nights are too cool. All kinds of garden truck are in excellent condition. Potatoes a full crop; apples, peaches, pears, plums, and German prunes, very large crops. Grapes are not a success in this section. Hay is the largest yield that has ever been known Alfalfa is raised to a great extent.

J. W. F.

Illinois.

GRANVILLE, Putnam Co., July 16.—Hay a good crop and about made. Wheat (Spring) good. Oats, fair. Corn, a splendid prospect.

J. A.

Minnesota.

LEROY, Mower Co., July 12.—The season has been very dry; no rain from May 10 to amount to anything till July 8, when we had a nice shower, but too late for many crops. Corn is fair—about the same as last year at the same time. Oats are the poorest I have ever seen, lots too short to cut and bind. Wheat is middling; chinch-bugs are operating in lots of pieces. Rye not much raised here; looks fair. Barley is short, and headed out poor; pieces turning out yellow; lots half headed. Potatoes—some look fair. The potato-bugs are multitudinous on account of dry weather. They sat on the fence and brush in the Spring, waiting for the potatoes to come up. Garden truck that has been sprinkled looks fair. Apple trees mostly all killed by a late freeze a year ago last Spring. The few that are left look fair; not many apples. Pears and peaches are not raised here. Berries are fair; not many. Hay is about one-third lighter than last year. From the way things started in the Spring, it looked as though we were going to have early and heavy crops, but dry weather soon made a change. F. A. V.

Montana.

FRIDLEY, Gallatin Co., July 14.—For the last five days the thermometer has been over 100° in the shade, and on the 11th it was 105°, and stood so for three hours. But our nights are cool, so we have the satisfaction of having good sleep. The oat and wheat crops will be below the yield of last year, as the water in streams has been scarce for irrigating. The measured bushel of oats here hardly ever falls below 40 pounds in weight. I don't know what kinds they are, only they are white. The old residents say that the warm spell has never been equaled in this country. Grain, cattle and horses are the main features here—fancy farming has not commenced much. There is hardly any dairying, and I wonder at it, as there is no better place for it in the United States. Butter and cheese bring fancy prices, but dairying, I suppose, takes too much work and is too confining. B. P. V.

Vermont.

CHARLOTTE, Chittenden Co., July 12.—We have been having very fine hay weather, and most of our farmers will finish harvest by the 16th. The hay crop is more than an average.

O. H. A.

THE FARMER'S CLUB

ANSWERS TO CORRESPONDENTS.

[Every query must be accompanied by the name and address of the writer to insure attention. Before asking a question, please see if it is not answered in our advertising columns. Ask only a few questions at one time. Put questions on a separate piece of paper.]

CUTTING DOWN ASPARAGUS; DISINFECTANTS.

T. R. W., Roselle, N. J.—1. Can I cut down asparagus plants any time before maturity of the seeds, without injury to the future growth and bearing of the plants: and if not, why not? 2. What is the best disinfectant and deodorizer for cesspools?

ANS.—1. It is true that fruit-bearing and seed-perfecting are exhaustive processes. It is also true that the roots or tubers of perennial, herbaceous plants need their foliage until it matures, in order to store up the needful amount of strength and food for the future. We should say that it is better to allow the fruit to mature in the case of the asparagus plant rather than to deprive it of its stem and leaves before they *begin* to mature. The best way would be to *cut off the flowers*, not such a difficult task for a small boy. 2. Dry earth, strong loams and clay, reduced to powder, are cheap and excellent. Cover the contents of the cesspool or other fetid substance with the earth. For privy vaults, cesspools, etc., powdered copperas is the best. One or two pounds will destroy the odor from an ordinary cesspool, and it is cheap. It is also the best disinfectant and deodorizer for sinks, drains and other ill-smelling situations. Carbolic acid or chloride of lime can be used in all places where the odor of those deodorizers cannot reach the rooms in the dwelling house.

HOW TO HARVEST AND CURE TOBACCO FOR HOME USE.

F. J. Dundas, Ont., Can.—How should I harvest and cure a small lot of tobacco for home consumption?

ANS.—When the plants shoot up to flower, break off the stalks low enough to take three or four of the upper leaves. Let the plants stand three or four weeks after topping and pick off the suckers that start from the axils of the leaves. Let the plants lie a few hours after cutting to wilt; then hang in a barn or other out-building, on scantling or poles, using coarse twine, wrapping the latter about the stems near the base. After the leaves have all assumed a cinnamon color, take the plants down on a wet day, strip the leaves from the stems and tie them into bundles, keeping the butts all one way. Pack the bundles into a double rank, lapping the tips in the center. Cover the top and ends of the rank with tobacco stalks, leaving the butts exposed to the air, and place a weight of boards or other material on the top. Let the tobacco lie in this condition for some weeks, say until February or March. Then pack the bundles into a box in moist weather, placing the butts outside and the tips in the center, as before. Use a lever and pack into the box very tightly. Nail on the cover securely and keep the box near the ground in a building without a floor until warm weather, then move it to a warm, close loft to go through the sweating process.

ONE AND TWO-YEAR-OLD BERRY PLANTS.

R. V., W. Flambro, Ont., Can.—I bought 100 two-year-old Hansell and 100 Gainor Raspberries from a tree peddler, and when they arrived I refused to pay for them, as I was convinced they were one-year-old; I expect to be sued soon for the price, is there any distinctive difference between one-year-old and two-year-old plants?

ANS.—We are afraid there is no difference between them that would pass as *positive* proof in law. We would advise you to have them examined by a professional grower. He should be able to show that one-year plants have produced but one growth of cane, the canes being biennial. The one-year plants might also show the root cutting from which the plant was grown.

THE MARTIN-AMBER WHEAT.

F. C. A., Austin, Mich.—In our soil the Martin-Amber will outyield the Clawson or Fultz one-third, the Velvet Chaf one-half. It's a good hardy productive variety. It is much like the Armstrong or Landreth in every way and there is little choice between them. For our soil and climate there are few if any better kinds. We should sow one and one-half bushel to the acre—not less unless the land is unusually rich, when a less quantity would do better.

KEROSENE EMULSION.

T. E. C., Norwich, Ont.—We suppose that by "coal-oil" emulsion you mean kerosene emulsion. There are two forms of this—one with milk and the other with soap, but experience has shown the latter is the better; for if properly made and applied, it can be used without injury to plants; while the milk emulsion is reported to be injurious to many kinds of foliage. To make the soap mixture, put a quart of soft soap with a gallon of water into a kettle and heat it to the boiling point, and while still boiling-hot, stir in thoroughly a pint of kerosene oil. Hard soap or whale-oil soap will probably do equally well. The preparation would kill with less soap; but this large proportion of soap makes the mixture more effective, and the miscibility of the oil and soap solution is thereby increased.

THE LUCRETIA DEWBERRY.

R. L., Provincetown, Mass.—The Lucretia Dewberry is a healthy vine and productive. The fruit is large and of fair quality. But really we should not care for it. Unless it is trained to a trellis, the berries lie on the ground and become soiled. Each vine, if not trained to a trellis, covers as much as two standard plants. Now what is the use of planting the Lucretia if we can get standard kinds which are as good in every way without the objections to the Dewberry.

GETTING RID OF RED ANTS.

R. W. D., Dunkirk, N. Y.—Red little ants swarm in millions in my milk-house, and all efforts to get rid of them have been in vain. Can the RURAL suggest an effective way?

ANS.—We have killed ants about bee-hives by putting sirup in which a little Paris-green had been mixed or, better, white arsenic (which is quite soluble), into a small box and covering with wire gause which was coarse enough to admit ants but not bees. This would soon poison all the ants. If we can reach the ant-nest, or ant-hill, we can easily disperse the ants by making a hole in the hill or mound with a crowbar, and turning in kerosene, carbolic acid, or boiling water.

Miscellaneous.

J. P., Kingston, N. J.—There would be little economy in sowing a plot of land already "in good condition," to turnips, for the sake of plowing them under as green manure. If you could grow the turnips and pasture them off with sheep, the land would be benefited; but as a "green manure," turnips would give little improvement. There must be something besides bulk in a green manure.

F. W. L., Trenton Mills, Va.—The Earhart Everbearing Rarpberry bore a full first crop. Up to this time, the buds for a second crop on the canes of this Summer's growth have not yet appeared. The berries were of medium size and quality and borne in close clusters. It can be had of J. H. Hale, South Glastonbury Conn.

W. McD., Joliet, Ill.—The gooseberries sent for name are of a foreign variety. These large foreign kinds generally mildew in this country so that they cannot be raised with profit. We have no native kinds to equal the size, though Houghton and Downing are better in quality.

B. V. H., Fridley, M, T.—The grasses sent for name are Hordeum jubatum, Squirrel-tail Grass—and Ericoma cuspidata—Bunch Grass.

W. J. C., Smethport, Pa.—The grass you inquire about is Festuca pratensis—Meadow Fescue.

DISCUSSION.

G. H., WORCESTER CO., MASS.—D. P. H., page 462, ought to tell us what breed of cows he keeps. I never heard of such cattle before. I am inclined to think that the great majority of farmers, who keep but a few head of stock, do want a "general-purpose" cow. Cattle raising with most of us must be more of a chore than a main business. Can we afford to use all the finer tools for dairying when we keep but two or three cows? I fail to see how. I want a cow that will provide milk and butter for the family, with a little to sell with the eggs, and which will sell when she is eight years old for decent beef. That is all most of us expect of a cow. We don't expect to bury our cows as a mark of respect for the good they have done, but we want them to pay right up to the last.

R. P. MCANALLY, N. C.—With thanks for your news as to oats and wheat turning to chess, we must beg to be excused from again discussing the question. With all respect for the opinions of those who think it possible or even that it often occurs, we cannot ourselves believe that it has ever occurred or ever will.

D. E. H., LEEDS, MASS.—The experience of "E. D. C.," page 467, with the Alaska Pea is a duplicate of my own. The vines are very slender, and have more the appearance of sweet pea vines than anything else. They were planted in good garden soil, well manured with old stable manure.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING July 24, 1886.

J. S. C.—C. N. L.—G. S. R.—T. J. C.—J. H. S.—W. G. B.—W. A. H.—R. L.—T. W. L.—G. P. C.—J. D. S.—B. P. V. H.—J. W. R.—T. M. A.—J. D.—J. A. B., thanks.—D. E. H.—"Hampshire," thanks.—F. A.—M. P. W.—C. E. D.—A. B. N.—J. W. F.—O. Z. M.—W.—E. E. B., thanks.—M. K.—S. E. C.—W. A. H.—F. K.—S. T.—S. C.—W.—T W. L.—E. C. U.—P. E.—L. E. B.—J. E. S.—A. W. L.—D. N.—A. W. C.—A. L. J.—N. B. & Co.—W. A. H.—J. E N.—W. G.—H. T. D.—A. D. S.—E. B.—R. S. C.

Miscellaneous Advertising.

Dyspepsia

Does not get well of itself; it requires careful, persistent attention and a remedy that will assist nature to throw off the causes and tone up the digestive organs till they perform their duties willingly. Among the agonies experienced by the dyspeptic, are distress before or after eating, loss of appetite, irregularities of the bowels, wind or gas and pain in the stomach, heart-burn, sour stomach, etc., causing mental depression, nervous irritability and sleeplessness. If you are discouraged be of good cheer and try Hood's Sarsaparilla. It has cured hundreds; it will cure you.

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MAST, FOOS & CO.,
SPRINGFIELD, O.,
BUCKEYE FORCE PUMP,
IRON TURBINE WINDMILL,
BUCKEYE WROUGHT IRON PUNCHED RAIL FENCE,
BUCKEYE LAWN MOWERS,
BUCKEYE HOSE REELS AND LAWN SPRINKLERS.
Send for Illustrated Catalogue and Price List.

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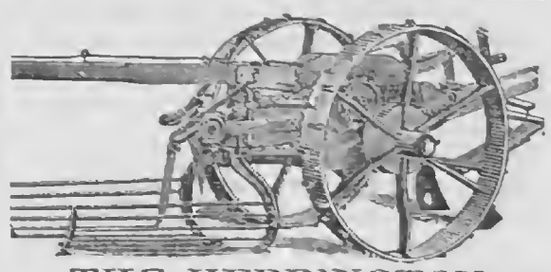

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SATURDAY, JULY 31, 1886.

The next Special Number of the R. N.-Y. will appear in about five weeks.

It may be well again to state that after having tried every way of raising celery, we prefer to dig trenches six inches deep, mix well rotted manure with the bottom soil and set the plants. This seems altogether better than the deeper trenches, as of old, or the new method of surface planting.

In the Rural New-Yorker of Aug. 3, 1884, appeared a portrait of Mr. E. W. Bull, and a sketch of his life. How he originated the Concord Grape was there detailed by our contributor, Ben Perley Poore.

A few weeks ago a dinner and testimonial were given Mr Bull in Boston, Marshall P. Wilder presiding. It was brought about by our respected friend Mr. C. M. Hovey, of that city. The occasion was a memorable one, and many were the kindly words spoken to cheer Mr. Bull in his declining years.

Pres. Wilder writes us: "I have been greatly interested in your experiments in hybridization. I hope you will go on pressing Nature to give us more of the secrets she has stored up in her laboratory for the use of mankind. The time was when I was censured for sustaining Mr. Rogers in his hybridization of the grape as conflicting with the laws which God had ordained for the Government of Nature. But those days have gone by and the field for improvement by cross-fertilization is as boundless as the imagination and enterprise of man."

Yes, buhach will kill the potato grub, or larva of the potato beetle. A teaspoonful of the powder was first wet with alcohol and put in a quart of water. This was blown upon the grubs through a spraying bellows at noon, and the leaves were picked off with the grubs on them and put into a tomato can. The next morning most of the pests were dead and the rest could scarcely move. But this is not an economical insecticide for the potato grub. The same solution was blown upon the tender new shoots of roses, which were infested with green lice. An examination the next day showed that few, if any, were killed.

For the past wet week we have been jumping from one thing to another, attempting much and accomplishing, oh, so little! Everything is neglected; everything behind. We do not like to find fault with our help, but they seem to show so little appreciation of the fact that in periods of bad weather everything should be *driven* during the intervals of sunshine. And then we read letters of our friends, who tell us of droughts in the West, where from causes at the other extreme the work of the farm also suffers. How prone we are to attribute to help the misfortunes that are unavoidable—yes, even the results of our own shortcomings.

We once heard of one farmer who was generally praying for rain. His farm rested upon a plateau in a high mountain range. Another farmer at the foot of the mountain had reason to pray for dry weather. God couldn't very well answer the prayers of both. Probably the "help" were in fault.

Temperance workers have a wide range of operations. From the extreme enthusiast who believes in the total prohibition of the liquor traffic without thought as to how the work is to be accomplished, to the drinking man who tries to avoid liquor in the presence of his children, all have practically the same object in view. All recognize the fact that liquor is a curse. Their different methods of fighting it are due to differences in education and life. Many practical and thoughtful persons believe that the one thing that will accomplish the best work for temperance will be the invention of a new drink. Something is desired that shall present as attractive an appearance as liquor, but supply nutriment and nerve food in the place of stimulation and intoxication. A great majority of drinking business men in the cities drink liquor, not because they court intoxication, but because the overworked system craves stimulants. In several of the larger cities "temperance saloons" have been established where various new drinks are compounded without the use of alcohol in any shape. Beaten eggs mixed with "soda" water or phosphate make the most popular of these new drinks. The objection to many of the lighter drinks is that they cultivate a taste for something stronger. The idea of using them to cure a taste for stronger drinks is surely worthy of thoughtful consideration. We welcome all measures that tend to diminish the quantity of liquor consumed.

The best Jersey cattle in the world are to be found in America. American breeders have, as a rule, bred for butter, disregarding beauty, external appearance or anything else that stood in the way of superior dairy qualities. In England, the Jersey cow has been the subject of too much poetry and romance. She has been considered too much of a pet and a beautiful plaything. As a result, the English Jersey cow is below the Short-horn as a dairy animal. The trying times through which English agriculture is passing, have taught Jersey breeders a useful lesson. The time has come for diminishing the number of pets and increasing the number of useful animals. Jerseys are to be used hereafter to aid in reducing what one writer calls "a national disgrace—a $40,000,000 butter bill." There are thousands of small land-owners who could easily keep a Jersey cow. Such an animal of an approved butter strain could provide milk and butter for a small family on food that would not sustain a cow of one of the larger breeds. The Jersey, thoroughbred and grade, seems well adapted to fill the position of a family cow. There are thousands of them kept on the small farms and "places" near the large cities, where, upon a very limited range, they thrive and supply an abundance of milk and butter. There is a growing market for these family cows, and Jersey breeders would do well to breed particularly for it.

We have been urged to come to the defense of J. H. Reall who was recently in trouble about money that was sent in to help push the oleomargarine bill through Congress. Mr. Reall has made himself very prominent in this legislation. We do not understand who gave him authority to lead in the matter, or who gave him authority to handle moneys donated by dairymen. With these points clear, we might feel more like defending him than we do at present. Mr. Reall has undoubtedly worked hard for honest butter. He deserves the thanks of the people for his labors. No sensible man believes that he worked solely for the benefit of the people. It was a matter of business with him, as it was with all others who made themselves heard in the matter. Mr. Reall's business will probably be increased by the passage of the oleomargarine bill. We hope so at least. We detest hypocrisy. We don't like to see men posing as public benefactors over legislation that is a plain matter of business. Now that the bill has passed Congress, we shall probably be treated to a month's discussion as to who did most to carry it through. Make no mistake on this point. The farmers of the country did it with their petitions and resolutions. The great lesson to be learned is that this country is still ruled from the farm, and that whenever farmers work earnestly and unitedly in support of a just measure they can carry it.

How many of us sometimes heartily sympathize with that pious old Brahmin who dashed to pieces the costly microscope which revealed to him the presence of minute animalcule in the water which he had been accustomed to drink all his life, although his religion forbade him to eat or drink anything possessed of animal life. Here comes Professor Vaughn, of the Michigan University, with the announcement that he has just discovered, by analysis, an irritant poisonous principle called tyrotoxicon in some ice-cream, by which 140 persons were lately poisoned in the Wolverine State. It is believed that this hard word, or rather the poison meant by it, is the result of the decomposition of milk, and may be developed in any milk kept in unclean vessels or in an unwholesome atmosphere. The germ giving rise to it propagates very rapidly, and a small amount will soon infest a large body of milk. It is thought this same principle is largely present in the milk and cream sold to the public, and that its presence may "account for much of the intestinal disturbance in children during warm weather, notably cholera infantum and similar conditions." It is to be hoped that further investigations may furnish house-holders with plain directions for detecting the presence of this irritant poison in milk and cream. We may then acknowledge that our first occasional impulses in such cases are as foolish as that of the pious old Brahmin.

WOOL.

The great London wool sale closed last Saturday. Such sales take place four times a year. Of the 355,000 bales that were offered, 350,000 were sold, leaving a phenomenally small balance to be carried over to the September sales. Of the entire quantity, 150,000 bales were taken for English consumption, and 200,000 bales by outside buyers. The attendance was large throughout, and the bidding spirited. The sales closed at an advance of fully 20 per cent. for Australian Merino, of from 10 to 15 per cent. for cross-bred, and of 25 per cen. for Cape of Good Hope and Natal wools, as compared with prices at the April sales. There was every prospect that prices will be maintained in the near future. Here, it is generally conceded that there has been a reduction of about 10 per cent. in the clip this year, though other estimates make the shortage still greater. The decline has been specially notable in Pennsylvania, Ohio, Michigan, Indiana, Kentucky and Tennessee. In Texas, and especially the Western part of it, the falling off has been still heavier, owing to the terrible drought that has prevailed there the past year, killing thousands of sheep. Indeed it is thought that, owing to the low price of wool everywhere and the consequent slaughter of sheep for the last few years, there is a falling off of the world's clip. The rise in the price of wool here has been a much needed godsend to flock-owners. The spring clip of 1880 was 155,681,751 pounds, and an advance of even three cents a pound on this quantity would amount to $4,670.452,-56. The clip this year, in spite of the recent reduction, is certainly as large as that of six years ago, and the advance has averaged over three cents per pound, so that there is a pretty good sum to be divided between the growers and dealers. All present indications point to a firm or advancing market.

PLAIN TALK ABOUT BLACKBERRIES.

Most of the varieties of blackberries now offered for sale, are abundantly prolific. The first desideratum is therefore quality; the second, size and hardiness. Any blackberry that is not of good quality should be discarded at once, no matter how productive it is, no matter how hardy. We rate size as a second consideration, because a large blackberry without quality is really worthless. The Lawton is perhaps the largest of blackberries, yet the Kittatinny is preferred, though smaller, because it is sweeter. Why should new varieties of blackberries be introduced, that are neither hardier nor better than those already well known! Among the later introductions we have had occasion to speak favorably of the Early Harvest. It is the earliest blackberry ever tested at the Rural Grounds, while the fruit is sweet, tender and of a peculiarly regular form and a jet black color, which give it an attractive appearance. It begins to ripen 10 days before the Kittatinny, and the best of the crop is gathered before the Kittatinny is in full bearing. It is, however, less hardy. We have the Early Cluster. It begins to ripen before the Kittatinny, but its main crop is borne after the latter begins to ripen. Though a bountiful bearer, the berries are comparitively small and of inferior quality. We do not therefore see that there is any legitimate place for the Early Cluster.

The Wilson Junior is also exceedingly productive, ripening somewhat before the Kittatinny without being in any other respect its equal for this particular climate. The Snyder ripens with the Wilson Junior. Its berries are smaller, but the quality is as good; it is fully as productive, while the variety is among the hardiest known. Taylor's Prolific ripens with the Kittatinny and what has been said of the Snyder can be said of this. The new Minnewaska, which will be offered for sale this Fall, does not, so far as we can judge, promise to fill any unoccupied space. The Lucretia Dewberry, after what we consider a fair trial, is not judged to be worthy of introduction. It ripens with the wild dewberries, somewhat after the Early Harvest and before the Wilson Junior. It bears berries enough of goodly size and fair quality. But unless protected by a mulch, the berries are spattered by sand and soil. Besides, it is far more trouble to pick them, while they take possession of three times the space required to raise standards.

IRRIGATION IN CALIFORNIA.

Governor Stoneman, of California, has just called an extra session of the Legislature to deal with the subject of irrigation. The Governor's action has been rendered necessary by a recent decision of the State Supreme Court, which applied the English common law doctrine of riparian rights to the rivers of the State, giving the owners of the property along the streams a monopoly of the water. Such a principle of law causes little hardship in a country like England, where rains are frequent and irrigation unknown; but in rainless regions where, without irrigation, the land would be irreclaimable, it is unjust, incongruous and fatal to all advancement. No English court in England's tropical dependencies would dream of applying it to the arid plains of India, Australia or South Africa. In all such countries custom and law regard all running water, not as the private property of the riparian land owners, but as the collective inheritance of the community at large as indispensable as the air they breathe.

On the Pacific Slope, the conditions of temperature and rainfall are the same as those in India, Australia and South Africa, and for 35 years Californians have been perfecting the most extensive, complex and costly system of irrigation the world has ever seen. By it, arid wastes have been transformed into teeming wheat fields, prolific vineyards and rich gardens. By it the agricultural wealth of the State has been developed to an extent that dwarfs its mineral riches in its flushest days It is this splendid result of labor, energy, enterprise and capital that the Supreme Court has attempted to destroy by the outrageous decision that every foot of water in California is the private property of those who chance to own lands along the rivers, streams and lakes. The decision has raised a storm of anger, protest and indignation all over the State, especially among the busy toilers in various agricultural pursuits, whose interests it threatens with utter ruin. Both political parties and all the fierce factions in each demand immediate legislation to right the monstrous wrong. The decision, on appeal from the lower courts, was reached only by a majority of one, and the terms of four of the judges who sat in the case will expire before the next election, in November. The people having the power to elect wiser judges can have the disastrous decision speedily reversed; while by an efficient amendment to their new Constitution, they should take precautions against any similar insanity in future. The representatives of the people on the judicial bench should be no more permitted to accomplish the ruin of their constituents than the representatives of the people in the Legislature.

BREVITIES.

Rain, rain, rain at the Rural Farm, and much of the wheat still in the field and sprouting.

Whatever others may say of the Diehl-Mediterranean Wheat, there are other kinds we prefer for the Rural Farm.

In the neighborhood of the Rural Farm sweet potatoes are raised every year. The Nansemond is preferred.

"Oakland is the most beautiful city in the United States." So says Mrs. Fisher in her Transcontinental Letter this week.

New Jersey strawberry growers say that their berries about paid for picking and freight. One must do a heavy business to make it profitable at that rate.

Some of our botanical friends may be interested to know that we found a double White Ox-eye Daisy plant. Nearly all the disc flowers were changed to ray flowers.

The commission merchants say: "Blast the raspberries! We can do nothing with them." So it was, in a measure, with strawberries and currants. So it is with gooseberries and will be with blackberries.

Plant some seeds of your best blackberries. Plant in boxes of mellow soil and cover with glass. The plants may be wintered in cold-frames or pits until Spring, and then set in the open ground. Raspberry seeds may also be treated in the same way.

Next to the man who fails to supply fruit for his family during the Summer, we put the man who will not go to dinner when the signal is given. Many good men seem unable to understand that house-work is as much of a business as their own work. They always wait to hoe another row, take another load, or do a little more after dinner is ready. This is all wrong. Nothing is gained by the extra work; the house-wife is often put out of patience, and the dinner may be injured. Stop work when you hear the bell, and go to dinner.

Horseman.

THE HACKNEY HORSE.

THE hackney is the general-purpose roadster in England, either under the saddle or in harness. He usually has a considerable proportion of thoroughbred blood, being often the produce of a mare designed to breed an animal more valuable in the market, but the offspring turning out unsuitable for the purpose intended, the breeder is obliged to sell him as a hackney. The characteristics of a good hackney are as follows: He must be about 15 hands high, compact, and strongly built, with fore and hind parts well muscled. He should be short in the back and well coupled. He should have a deep, wide chest, so that the lungs may have full play. His head should be light and his neck carried well up. His limbs should be clean and bony, with somewhat oblique pasterns. Excellent feet and legs are indispensable to stand the battering on hard roads on which he often travels at the rate of 10 to 12 miles an hour. His movements should be quick and springy. He should be good-tempered and easily controlled, so as to be safe under the saddle or in harness. An excellent specimen of the race is seen, at Fig. 306, in the mare Wild Rose, which has won several prizes at English horse shows; for at all such shows in Great Britain there is a special class for hackneys.

HORSE-BREEDING IN ILLINOIS.

PERHAPS the most conspicuous feature of agricultural development in Illinois at this time is the extension of horse breeding. For 10 years past the horse boom has been mainly confined to the heavy weights; lately the trotters and the thoroughbreds have received a due share of attention, and breeding stables have been established in every large town and every county in two-thirds of the State. These are facts going to show that Kentucky and even California will sooner or later find in Central or Blue-grass Illinois formidable competition both in running and trotting stock, for the State that leads in corn, wheat, grass, hogs, cattle and heavy horses, will not be content until it leads also in fast and fine horses.

Herdsman.

GALLOWAY CATTLE.

THE Galloway breed of cattle are noted for their lack of horns, their round, compact bodies, their short legs and, above all, for their thick, heavy, black, shiny and often curly coats of hair, which give the calves the appearance of Newfoundland dogs of solid color. For these hardy features their friends say of them, that while the Short-horns and White-faces, whenever they are sent west, tend afterward to move south, the Galloways take a contrary direction, and having their overcoats with them, they advance in face of rigorous winter weather, and find in the climates of Idaho and Montana just the bracing air that suits them. In addition to this, if late accounts are to be trusted, the Galloways are likely shortly to appear before the world in a form that will create a surprise and excite a sensation; for it is said that a very successful cross has been made with the buffalo, producing a metis: a cross-bred animal that yields a robe superior in every respect to the buffalo skin.

Those who have seen the Galloways in their best estate, and particularly those who have observed how much the coats of the calves of three or four months old resembles that of a large, well-bred Newfoundland dog, will be ready to accept as truth almost anything that can be claimed for the size, beauty and firmness of the robe of the progeny of the wild buffalo and the tame Galloway. B. F. J.

STOCK JOTTINGS.

IN Bremen, Germany, West Friesland butter sells briskly at 2½ to five pfennigs (between one and two cents each) above the running prices of local butter.

* * *

The *Milk Zeitung*, of Bremen, announces an address book of the breeders of horses, cattle, sheep and pigs. Such a book published here might be of assistance to our live stock breeders.

* * *

The Holland Cattle Herd Book Association, of East Prussia, Germany, held an exhibition of stock at Königsberg, June 3d—6th, at which 330 head were entered to compete for the prizes.

* * *

Last Spring the first cheese factory was established in the Beemster, North Holland, and in June it was working at its full capacity.

* * *

The North Holland Steam Edam Cheese Factory is another new departure in Holland, indicating that the Dutch are following the American plan of cheese factories, instead of each dairyman making his own cheese, according to the immemorial custom.

* * *

A new herd book has appeared in New Zealand recording six different breeds of cattle—among the number appear Holstein-Friesians.

* * *

The Holstein-Friesian bulls Solin and Boyes, owned by Mr. Vincente L. Cazares, carried off prizes at the recent International Agricultural Show at Buenos Ayres, South America.

The Swineherd.

HOG RAISING.

EXPERIMENTALLY, the Magie, or Poland-China, and Berkshire are found to be far in advance of the Suffolk and Chester White, on account of their superior hardiness and quicker maturity for market. Although the Chester Whites have excelled in weight, yet when the age to secure such large hogs is considered, the other breeds are more profitable, being better suited for packers or butchers in 9 to 12 months, averaging 225 pounds or upwards. The rapidity of growth and the cost of feed are very important items in the production of pork. Judicious selection in breeding is unquestionably of the utmost importance in order to secure form and size. In selecting a male, he should be well formed, thoroughbred, and as perfect as possible in all essential qualities belonging to his race. He should have a good supply of food, and be kept in a comfortable, roomy pen, where no hogs will annoy or worry him. His services should not be required more than twice a day.

Sows should be selected not less than nine months old. They should be strong, vigorous and well formed, for it's a sad mistake to select a thin, half-starved animal to obtain good pigs. She must be well fed and kept in good condition. When breeding, she should be kept apart from the drove, and be provided with grass, clover and vegetables, with a little bran and shorts daily, as these foods consist largely of muscle-forming substances. Four months are required for her delivery, and during this important period every preparation should be made by providing a light bed of straw or, better, leaves. If confined in a pen, provision should be made to prevent the loss of pigs by overlaying. The sides should be provided with a board running along each about 10 inches from the floor, jutting out 10 or 12 inches from the side of the pen. Sometimes sows eat their young. In many cases salt pork is found a preventive. [It is much better to feed on succulent or green food, or such as will overcome all tendency to costiveness, which is the great exciting cause.—EDS.] Successful hog-raisers find the business more profitable than any other, and its profits depend largely upon the management, and particularly in checking or preventing diseases, which have created sad havoc within the last few years.

"An ounce of prevention is better than a pound of cure." What are the preventives? A cool, airy place in Summer, and a warm and dry place in Winter, with occasionally small doses of sulphur, and antimony now and then, mixed with the feed. A supply of wood-ashes and charcoal is said to act as a preventive of the cholera. Sometimes lameness or weakness proceeds from the filling up of the "issues," on the inside of the forelegs, just below the knee, which are porous and serve as drains from which all humors of the body, and all superabundant fluids pass off. A cob and soapsuds will prevent this. Feeding on corn exclusively, has proven not only unprofitable, but very unhealthy. The great use of corn is to lay on fat, and it is most beneficial for about four months before the hog goes to the market or slaughter pen. The proper food is, or should be, a good supply of green food, such as grass, clover and vegetables, with slops of bran and shorts, and milk allowed to sour.

Care is of the utmost importance. We may have the best thoroughbreds or pure-blooded stock; we may feed all varieties of food in any style or condition; but without care, or with neglect, our labor of pork making is an entire failure. With favorable circumstances there is nothing that furnishes greater remuneration to the farmer than capital invested in swine.

C. G. BROWN.

Barton Co., Mo.

HACKNEY MARE, WILD ROSE. Re-engraved from the London Live Stock Journal. Fig. 306.

SEVERAL rascals, under the guise of men who have valuable agencies to offer, are flooding the country with blanks—asking a number of impertinent questions of those who receive their missives, with regard to age, occupation, etc., and demanding the names and addresses of "references." This is a favorite game of the sawdust swindlers, and indeed of regular "crooks" of all kinds who go into swindling as a business. The name and other information obtained in this way are quite profitable for use by themselves, or for sale to other sharpers on the outlook for simpletons. Generally a name and address are given—occasionally "high-falutin"—but in two circulars now before us gudgeons are invited to address their letters to a box in the city post office. No one with any just claim to ordinary gumption will confide private matters to a stranger, even in conversation; nobody but a simpleton will do so through the mails.....

We have received several complaints of the very unhandsome conduct of a dealer in seeds at Rochester, N. Y. He is in the habit of sending to perfect strangers whose addresses he has managed to secure, $1.00 packages of assorted flower seeds with a "special offer" permitting the receiver to make a selection at half the price marked on the packets, the rest to be returned by mail. Of course the annoyance is confined almost exclusively to ladies, in the expectation that ignorance of business and timidity predispose them to become dupes of such sharp practices. One lady writes us: "I did not want any of the seeds and did not care to pay postage in order to get rid of the articles. I did not wish, nor had I asked to have them sent to me. This, together with my natural indolence, caused me to do nothing, and the seeds remain on my hands, and now comes a letter saying they are charged to me. I don't care about the charging, but can the fellow collect? Are we to be at the mercy of any knave who may choose to pester us with undesired or possibly undesirable goods?" The seedsman's letter is printed to represent type writing, and is evidently one of a lot struck off to be sent out indiscriminately to all who, like our correspondent, refuse to take the trouble to bother at all with the seeds. It says:

> Some weeks since a small box of flower seeds was mailed you, from which to select such as you might desire, the balance to be returned. No reply has been received from you, nor has the package of seeds been returned, hence your account on my books still stands charged with the box. Kindly give this matter your immediate attention, that I may balance your account. A prompt reply will be truly appreciated.

Enterprise in business is an excellent thing; but in this case isn't enterprise carried to a disreputable extent? Of course, under such circumstances the goods are sent at the sender's risk, and the receiver need not bother at all about them.

A swindling scheme of which the E.-O. has heard several times of late, is the following: A man goes through the rural regions with a lot of salt, or other fine substance, put up in jars, which he calls a stump-consuming powder. His instructions are to bore a hole in the stump, put in the powder, plug up the hole, let it stand for six weeks and then set the stump on fire, and it will burn away down below plow line. The six weeks' provision is a wise one, for it allows the agent to get away. An examination of the powder, however, has proved its worthless qualities, and the farmers who invested in it can't find time to talk about it.

TO SEVERAL INQUIRERS.—We have never received any complaints about the "Perfect Hatcher" of Elmira, N. Y., and we have had several good reports of it. We cannot guarantee any "hatcher," however, as so much depends on the "engineering" of it.....

Various.

SPECIALTIES OF FARMING.

EDWIN TAYLOR.

Two ways of looking at a "terrible example;" widespread tendency towards specialities in agriculture; associated farming; instances; "fool" specialists; specialist John Johnson; advantages of specialization.

ALLUDING to the vagaries of farming, a late RURAL tells how a farmer in Massachusetts allured by the high price of onions one year, planted his entire farm in that crop the next Spring; but, as might have been expected—since one extreme follows another—his onions came in on a glutted market. Potatoes, however, this time were good property, so he dropped onions and went into potatoes the next year, and, as might have been expected, got left again. The item is an instructive instance of what too often happens; but to my mind it better points out the disasters of changeable farming than the unthrift of special farming. If this man, for example, had only held on either to onions or potatoes, he would have had one good crop out of two, and would have averaged reasonably well. It was the change not the specialty, that ruined him. "Unstable as water, thou shall not excel" was not written of the agriculturist of our time; but it is true of him—particularly if he is a specialist. Can the RURAL point to a specialist farmer who has persistently followed a well-selected specialty through a thorough trial—for five years, say (and there are numbers of them)—who now prefers to go back to mixed farming? [How about the cotton planters of the South; or Oliver Dalrymple, the great wheat farmer of the North!—EDS.]

The most noticeable present feature of our American agriculture seems to me to be its tendency toward specialties. It may not be so noticeable in the East as in the West; but in the

East even, what a multiplication there has been in the last 30 years of seed farmers, gardeners, milk-farmers, fancy-stock-men, bee-men, small-fruit-men, tobacco-growers in Connecticut and peach-growers in Delaware! Mixed farming there is itself responding to the prevailing tendency, and is year by year becoming less and less mixed:—that is, the average farmer instead of raising a little of everything, is coming down, more and more, to fewer and fewer things. But in the West "the old order changeth, yielding to the new" more markedly; a rapidly growing proportion of our farmers, are cattle-men, sheep-men, horsemen, wheat-men, fruit-men, etc. The extent and success of their operations, both as individuals and companies, furnish food for much cheerful reflection on the part of that otherwise discouraged "boy," of whom we hear so much, and whom it is so hard to keep on the farm. Since it seems easy enough for farmers to combine when they can get down to a manageable basis to combine on, why should they only fight their battle single-handed? Other forms of the world's work are done by companies or partnership—even to the publishing of the RURAL NEW-YORKER; why should not the producers of its bread and meat likewise avail themselves of the strength of union? Cattle companies are common enough among us. Recently there was chartered the "Kansas City Hog Company," for "the purpose of raising, feeding and selling hogs." The "Olden Orchard Company," of Kansas City, has 20,000 apple and peach trees planted, and aims at 100,000 in the near future. Perhaps that is the kind of farming which will keep the country boy at home? Without the specialty, however, where would the corporation come in? There would be no place for it.

There are specialists and specialists—fool specialists as well as fools who are not specialists. Some who have chosen occupations in harmony with their conditions, have persisted and prospered; others have made unfortunate selections which they have followed up feebly and fickly, and failed. When I came to Kansas, I found a man "going into" small fruits nine miles from a station with no home market, turning up for his mad purpose the very best of pasture seeded down by Nature before his time, and all but marked with the letters, "Reserved for Stock." Of course, he failed; he ought to have been brayed in a mortar. Not long ago, a correspondent was quarreling with his paper because it advised him not to rest his case on strawberries alone, he holding that if the "single idea" was good, the more single the better! Nobody would advocate building a mill on a stream that was dry nine months in the year; but this man, farming in a similarly fitful style (if he really carried out his threat), has no doubt furnished a frequent illustration of the fate in store for specialists. A specialist in farming, as I understand the term, does not limit himself to a single crop, but to what I may call a single line of agriculture; he follows a definite and harmonious programme in his operations—and sticks to it. Farming, like eloquence, cannot be learned from books, helpful as they may be to both; and colloquial speech compares to the flights of the orator as common farming does to the possibilities of achievement within reach of the zealous and studious specialist. There is more in every branch of farming than most people dream of.

I was a boy yet, but old enough to appreciate the "grind" and the narrow outlook of my birth-right—mixed farming—when I read the story of John Johnson, of Geneva, N. Y.—the first agricultural specialist I ever heard of. The story was, briefly, that having a farm adapted to wheat, located favorably for shipping, he raised wheat as his exclusive crop. The fertility of his land he maintained by the manure made from feeding his straw and Western corn to great flocks of wethers bought for the purpose. That was all—wheat and sheep. The more sheep he fed the more manure and the more wheat: and the more wheat he raised, the more sheep he could feed. That was a definite and harmonious programme. It had a beginning and ending. The man who followed it was not distracted by a swarm of side issues, nor frittering away his strength on a multitude of "littles;" and by it he transformed a drudgery into a business! That is how the new revelation looked to me then; and later observations have convinced me that I did not over-draw its advantages.

In no other way, that I know of than by a judicious specialty, can the farmer eliminate from his environment its disadvantages, since every location is particularly suited to some things and unfavorable to others. In no other way that I know of can the farmer hope to become an expert in his calling, or bring to his assistance those great aids to accomplishment—system and routine.

Wyandotte Co., Kans.

Woman's Work.

CONDUCTED BY EMILY L. TAPLIN.

CHIMES.

BY MARION B. ALLEN.

FAR above the fern and moss,
Fluttering birch and wee fir cross,
And the pine's low murmuring,
Where the frightened lichens cling
To the overhanging edge
Of the precipice and ledge,
Fearless in their dainty glee,
Wave the harebells merrily.

From their dusky rafters hung,
Ne'er in Belgian belfry swung
Bells more exquisitely wrought!
By the mountain breezes caught—
Tossing, swaying to and fro—
While beside them bending low,
Breathlessly I wait to hear
Echo of their chiming clear.

But the airy harmony
Is too wonderful for me,
And I cannot catch a strain
Of that rare and sweet refrain.
Yet the tiny bells still ring,
And they shall my greeting bring
Till, though ne'er so softly stirred,
Every trembling note is heard.

—*July Cottage Hearth.*

WOMAN'S WORK.

SECOND PAPER.

IN our last article we spoke about woman's work and the progress it ought to lend to, if we but "let our light shine out," as it seems to be required of us. And in order to do this we must volunteer all our energies and press forward to that goal which we would attain.

Horace Mann said: "In a world so full as this of incitements to exertion and of rewards for achievements, idleness is the most absurd of absurdities and the most shameful of shames. We that do not wish to be classed with the drones in this world should enlist for life's service as one of God's workers."

In the first place, before we try to work for the good of others, we should see that we "practice what we preach," so that the proverb may be proven, "By their works ye shall know them." Next, in preparation for this work we should see that we are making the most of the advantages which nature has given us, and the best way for improving these advantages is by educating and training the mind, so as to prepare ourselves for that work which we are most capable of performing. One might say, what can women do but wash, bake and brew, or else be an ornament to society? They can be all these and more, if they only develop themselves into that stamp of womanhood that the world will be the wiser for their being, and when they shall have passed away, the sweet essence of their blessed works and deeds shall be known through all ages to come.

If a woman studies to enlighten herself, she not only does it for her own soul's good, but for the benefit and good of others.

Suppose that when this country was new, when the red man roamed in the forests of our now productive soil, that no other inhabitants ever ventured to trespass upon that which they claimed their own, what then would be the condition of this Republic? If people from one source and another had not come forward, and tried to enlighten themselves, where would our progressive nation be to-day?

It has been said that "as is the quality of individual culture, so will be the character of the resulting nation." This seems to prove itself true, for since America's sons and daughters have educated themselves and tried to develop that intellect which God has given them, we see it progressing up the steps of time, and by wisdom, industry and valor the republic of the United States has risen to stand against the world. And to avoid a downfall of this prosperous nation like that of Greece and Rome, we should all strive to give it aid, so that it will *ever* continue to rise.

MARY D. THOMAS.

FLOWERS FOR THE TABLE.

Ungathered blossoms lie about everyone; treasures of knowledge, of affection, of beauty and of pleasure are ready for hands that never gather them, and they fade and are gone all unheeded.

These invisible things we are not always wise enough to recognize, but the visible flowers that beautify Spring, Summer and Autumn should not wither unappreciated.

A pleasant fashion, and one that is gaining in favor in even the busiest families, is to have a vase or dish of fresh flowers on the table at each meal.

There is no pleasanter time nor place to bring the first blossoms of each variety and the rare blossoms of individual plants, than the meal-time and the table.

A bright young lady of my acquaintance always asks for an instance to illustrate any such statements as that just made; and following her preference for facts rather than theories. I will give a few "instances."

A large caster occupied the center of a farmer's table, and the mustard bottle, with its wide top, had lost the lid, as mustard bottles in some households seem to have a provoking fashion of doing. It was therefore selected to hold the bouquets for the table, thus making its defect an advantage.

It was usually filled with small flowers and delicate leaves, such as Gilia tricolor, Lily-of-the-Valley, Whitlavia, Sweet Pea, the smaller buds of roses, Maiden-hair fern and Sweet-Brier leaves. Large flowers were always avoided, as having a tendency to give the caster a one-sided appearance.

In another family an old pitcher, handed down through three generations, and having a beauty of its own as well as antiquity to recommend it, was used to hold the flowers for the table. The pitcher was a small one, but large enough to hold the masses of roses, geraniums, chrysanthemums and ferns, and did its duty well.

A low glass dish is always used in another family, and pansies, daisies, for-get-me-nots, double balsams and the fragrant white clematis, known as Virgin's Bower, make the dish beautiful and fragrant day after day.

In a country home where the children all love wild flowers they vie with each other in bringing the rarest specimens of each variety found in woods and fields.

At a pleasant little tea given to a few friends by two sisters who are gifted with artistic talent and skill, the center of the table was ornamented with a vase of their own modeling in clay, and it contained instead of flowers the long-stemmed feathery spheres that succeed the dandelion blossoms.

Late into the Fall, and sometimes all Winter, evergreen leaves, persistent berries and winter ferns can be found in the woods, and bouquets made of these do not need replenishing oftener than once a week.

If anyone is on the lookout for something pretty for the table, he will find a greater variety than would seem possible if he never looked for beauty among the common wild growths of neglected places.

Adding beauty and pleasure to each day of life makes up the sum of happiness, and means to that end, however simple, should be seized upon gladly by every one. ALICE BROWN.

MIDSUMMER MODES.

AT this season, half-way between Summer and Autumn, it is impossible to find much that is absolutely novel. Fashions are perhaps more firmly set than in the fickle spring-time, but of novelties proper there is absolute dearth. The great importers drop mysterious hints of the wonderful fabrics and beautiful combinations that will dazzle the eyes of womankind in a month's time, but that is all. A study of the prevailing styles in wraps and gowns shows a greater regard for comfort and artistic fitness than formerly prevailed. Especially is this true as regards children's frocks:

If there is any prevailing color, properly speaking, we should give preference to gray. The majority of the traveling wraps show either some variation of this shade, or else a modest check. They are for the most part tight fitting, though some very pretty garments have loose sleeves.

Of summer costumes, washing fabrics take prominent rank, and here we see an infinite variety of style and material. Corded gingham is very handsome material having a plaid of raised cords. A pretty frock of this stuff was a combination of plain navy blue with corded blue and red. The skirt was of plain material, with panel of the corded gingham; bodice of the combination, with demi-vest, collar and cuffs of red velvet.

Very charming are the embroidered sateens. A pretty frock of navy blue sateen had side panel and overdress border of blue and white embroidery, the bodice was cut V-shaped, and filled in with embroidery sleeves of the same. Yoke waists in washing frocks are now almost invariably made with a V-shaped yoke. A very pretty almond-colored sateen, was made with vest and panels of figured goods, the design being a quaint oriental pattern in almond, cream, and brown. White muslin and lace frocks are inexpressibly dainty in appearance. As a rule, the make is simple in the extreme; its style depends entirely on the artistic taste of the maker. A very pretty and simple skirt was of knee-deep Swiss embroidery, with broad tucks above to the waist; sash black, and jacket bodice of all-over embroidery, with a vest of fine tucks.

Another gown of white India lawn had a sash back, side panel of embroidered ruffles, and front drapery hanging in straight side plait caught at one side by a large bow. The round waist was tucked back and front, the front V-shaped, bordered by an embroidered ruffle.

This long straight drapery is very popular in white gowns, but its beauty depends entirely on the grace of its draping. A charming gown of écru Egyptian lace hung in charming folds, which were gathered on one side, into a jabot, mingled with ribbon bows.

Washing frocks for little girls are made for the most part peasant fashion, and very picturesque they look. For older girls, a jacket bodice with loose vest is very becoming, worn over a round embroidered skirt, or full front drapery and sash back.

White flannel is a very popular material during the Summer, both for children and adults. We see some very simple gowns of this material, and some very elaborate ones. This white flannel makes up very smartly with white Yak lace. Woolen lace is much finer now than when it first came into vogue, and it often produces really charming effects. A pretty costume was of fine brown étamine, with the entire skirt of wool lace, mingled light and dark brown. The idea of draping heavy stuff over lace is a novel one. The familiar nuns' veiling is again coming to the fore in a variety of novel forms. It may be had woven in lace stripes, or beautifully embroidered in colors.

Coming novelties cast their shadows before, and the knowledge is borne upon us that stripes will soon be the order of the day, with bayadere stripes taking the lead. Panels, and even entire skirts, will be of graduated bayadere stripes, the latter having some suggestions of the aboriginal blanket. It seems as if nearly every dress-stuff now in vogue was some form of étamine. Not the primeval wire-netting like fabric which first went by that name, but every sort of variation from it. There is embroidered étamine, lace-striped étamine, brocaded étamine, and so on, *ad infinitum*. The embroideries and brocades all strive after oriental effects; some of them are beautiful in the extreme. Some of the étamine is woven with an oriental border in graduated stripes.

An almost indescribable fabric was shown as cactus cloth. It was woven in broad stripes of green and red, the entire surface being covered with little hairs, like the bristles of a cactus, green over the red stripes, and white over the green.

Argentine is simply old-fashioned barége revived in bayadere stripes, like our grandmothers' gowns; mozambique is another revival of striped gauzy stuff, and we are likely to see the resurrection of a good many old favorites during the coming season.

For information received thanks are due James McCreery & Co., New York.

GOLDEN GRAINS.

THE heart that is full of love to God can not be full of hatred to men. An atmosphere of perfect love drives out hate, as light drives darkness from the room.... ....

A HOLY life is made up of a number of small things—little words, not eloquent speeches or sermons; little deeds, not miracles or battles, nor one great, heroic act of mighty martyrdom, make up the true Christian life..

THE avoidance of little sins, little inconsistencies, little weaknesses, little follies, indiscretions, and imprudences, little foibles, little indulgences of the flesh—the avoidance of such little things as these goes far to make up, at least the negative beauty of a holy life.....

JUDGE no one by his relations, whatever criticisms you pass upon his companions. Relations like features, are thrust upon us; companions, like clothes, are more or less our own selection..... ....

NEVER fail to say kind and encouraging words to those whom you meet in distress. Your kindness may lift them out of their despair..... .....

ANYTHING which makes religion its second object makes religion no object. God will put up with a great many things in the human heart, but there is one thing He will not put up with in it—a second place. He who offers God a second place offers him *no* place.—*Ruskin*..... .....

R. J. BURDETTE thus hits off Philadelphia; It was one of the pastor's best sermons, and he was describing Heaven. "It was a place of marvelous, matchless, transcendent beauty," he said. "All the mansions were of red brick, with solid white shutters four inches thick, no cornice, brass door-knobs and white marble steps, with angels continually scrubbing them through the countless ages of eternity." "Eloquent preacher," said the stranger in the deacon's pew, at the close of the service. "Philadelphia man, ain't he?" "Ah," said the deacon, "somebody told you."....

THE CHURCH PRESS SAYS: There are journeyings that only increase restlessness. But they who journey in the faith of duty rest in the home of love. They who go upon God's errands are refreshed by His rewards of peace.

MANY of our failures and miseries in Christ-

ian living creep in between the clear hearing of God's command and the doing of it, or even the resolute, determined, hearty *attempting* to do it.....

THE Sunday-school statistics of the Methodist Episcopal Church are now in and footed up for 1885, with the following results: Schools, 22,490; officers and teachers, 246,054; scholars, 1,818,032. This is an increase of 314 schools, 8,582 officers and teachers, and 57,596 scholars..... .....

THE conflicting elements in the Diocese of Pennsylvania have been harmonized in the election of Bishop Whitaker, of Nevada, as Assistant Bishop. If he accepts, it will be a favorable change ....

Domestic Economy

CONDUCTED BY MRS. AGNES E. M. CARMAN.

MUTTON AND LAMB.

"A joint of mutton, and any pretty little tiny kickshaws, tell William cook."

The best mutton is firm and juicy, of a rather dark red color, and with a great deal of hard, white fat. The leg, though higher in price than any other cut, has a much smaller proportion of bone, and is, therefore, most economical. The loin includes six ribs, the meat being lighter and more delicate than that of the leg. The flank, which is attached to the loin, should be removed for roasting, as it dries up, while, if added to the soup kettle, it will be of some service. A "saddle" of mutton, which is a favorite Virginia roast, is simply the two loins joined. Chops are cut from the loin—called "long" when the flank is left on, and "short" when it is removed. Occasionally the bone is taken from the long chops, and they are sold rolled up, but let no one be persuaded by their attractive appearance to buy them, as they are tough and stringy and dear at any price. The fore-quarter includes both shoulder and breast; the blade dreaded by all carvers can be taken out with a small French boning knife, and the shoulder, stuffed and sewed or skewered in shape, makes a good and cheap roast. The breast is better cut into rib chops, or made into stews.

The above is for the benefit of those young house-keepers who may need some practical directions that will enable them to choose cuts of mutton discreetly.

A fore-quarter of lamb or mutton may be economically and tastefully prepared as follows: Have your butcher divide the shoulder and breast; from the latter, if your family is small, you may cut chops enough for a breakfast, and still have enough left for a stew for dinner. This latter can be made in several very nice ways, one of which is to cut the meat into small pieces; put a little dripping in a frying-pan, and when very hot put in the meat and a sliced onion, fry until turning rather brown, dredge on a tablespoonful of flour, and pepper and salt, enough hot water to cover the meat, and some sliced young carrots, and stew slowly for two hours. If your stew is made from lamb, a pint of shelled green peas may be added half an hour before it is to be done; if of mutton a quart of sliced potatoes.

The shoulder may be baked. Let the butcher take out the bone from the fore-leg; this will make a sort of pocket which you will fill with a dressing made by soaking some stale bread in tepid water; squeeze dry; fry a minced onion in a piece of butter, stir in the bread some chopped parsley, pepper and salt, and enough stewed tomatoes to moisten it sufficiently. Put the meat, after it has been stuffed and skewered into shape, in a baking pan, dash a little hot water over it, and bake covered with an inverted pan. About half an hour before the meat is done remove the upper pan, in order to allow the meat to brown, and baste frequently. This can be served with a tomato sauce, or with the gravy in the pan. The next morning take the gravy and bones and such bits of meat as may be left, together with any trimmings of meat or poultry, cooked or uncooked, that may be in the house, cover with cold water and simmer for two hours. Strain, put the broth over the fire and add a cupful of stewed and strained tomatoes, if you desire a tomato soup. The addition of a cupful of cooked green peas gives a delightful soup also.

An epigramme of lamb is an inexpensive and exceedingly good dish. Put an uncut breast of lamb, weighing about three pounds, over the fire in just enough boiling water to cover it; as soon as it boils up once draw the pot to the side of the fire, skim it, add one level teaspoonful of salt, an onion stuck with six cloves and the usual bunch of soup greens, and simmer gently until the small breast bones will pull out easily. Take it from the pot, pull out all the bones, lay it on a flat platter, set another on it, and press it down with heavy weights until the lamb is cold; next cut it in triangular pieces, roll well in cracker dust, shaking off all that will fall, dip into egg beaten with two tablespoonfuls of cold water, roll again in the cracker dust, and then fry in smoking hot fat. When the pieces are of a bright yellow color, lay them for one minute on a piece of brown paper, to absorb the fat, and then lay them evenly upon a dish of spinach, prepared as follows—wash and trim the spinach and boil in plenty of salted boiling water until it is tender, which will be in from five to seven minutes, according to its age. The water must be boiling fast when the spinach goes in. Drain and let cold water run over it, which keeps it green. Chop very fine and heat smoking-hot in a sauce-pan, with a tablespoonful of butter and two of gravy. The seasoning is pepper, salt and a little grated nutmeg or mace. I have eaten spinach at the best hotels of Washington, New York and San Francisco, and in no case did it equal the above, which is the way it was prepared at the New York Cooking School.

PALMETTO.

SUGGESTIONS,

Do not throw away your old ribbons because they are soiled. Wash them in a solution of fine toilet soap and cold water. Rub no soap on them, but squeeze them lightly through the suds. Place between two cloths and iron with a moderately hot flat-iron.

Pretty little wraps for the baby carriage are made from two pieces of flannel of contrasting colors (blue and white, for instance,) pink the edges of both, and on the one that is intended for the upper side, put a pretty design in outline stitch. Catch the two pieces together with a row of feather stitching about two inches from the edge. Put a bow of satin ribbon in one corner.

Wedding cake is now sent in little satin bags instead of paper boxes. Make them of pink, blue or white, and draw them together with a bit of narrow ribbon like the old-fashioned work bags. Decorate with the monogram or initials of the bride and groom, and wrap the cake in the kind of paper that confectioners use about fresh candies.

An inexpensive scrap receiver is made from a peach basket. Stain it in oak or leave it its natural color and coat with brown varnish. Pink the edges of strips of felt of contrasting colors, and interlace them through the slats; finish top and bottom with a full ruching. Ribbon can be used, but it is too costly, and the felt is very pretty.

I saw a large easy-chair decorated in a very effective way. It was the one bit of bright color in a room furnished in neutral tints, and was very striking. A large rose-colored silk handkerchief of soft Chinese silk, was drawn by one corner through an opening in the carving at the top of the chair, and the rest spread carelessly over the back. These handkerchiefs are very inexpensive here in San Francisco.

MRS. WORTH.

SOFA PILLOW.

Ladies who have not much time to waste on fancy-work will like this, which can be made in a few hours. Make and stuff the pillow and cover it with silesia or some durable stout material, but not ticking. Get one of the large Chinese silk handkerchiefs, which can be found at gentlemen's furnishing stores, and are inexpensive. The color must depend upon your own taste or the shade in which your room is furnished. Put the handkerchief smoothly over the pillow, and turn back toward the center the four corners. Fasten them with invisible stitches, and cover the exposed corners with black velvet or some contrasting colors. Put a ribbon bow on one corner, and finish with a silk cord. Line the under side with Canton flannel. The one I saw was made of gray silk, the corners were of deep cardinal, and on each corner of the handkerchief that was turned over was appliquéd one of the bright bits of silk embroidery that can be bought for a few cents each.

SUSIE.

HAYING AND HARVEST NOTES.

The scorching heat of July has come, and the hardest labor of the whole year must now be performed, getting in the hay and securing the crops of grain. To do this when the thermometer stands at 90° to 110°, is a serious matter. Now the farmer's wife, who understands something of sanitary matters, will look well after the comfort of the over-heated workmen. Tea for dinner, as well as at other times of the day (unless coffee is preferred), is more wholesome than so much cold water, as it is the failing of haymakers to drink too much of it. The meals are a matter of much thought and calculation, as nothing keeps up the health and spirits now like good, wholesome food. Let those who have never been obliged to labor during such oppressive weather, moralize on the sin and folly of making pies. If they knew the comfort these bring to the soul of the housekeeper as well as to the members of the family who gather around the dinner-table and partake of good pie-plant, cherry, raspberry and other pies, they would know that experience sheds light on everything, even on house-work.

A variety of vegetables is desirable, and may be easily secured if proper forethought is used in making the garden. Beet greens when the young beets have attained a little size, are universally relished, and at every one's command. Green peas and new potatoes may form a part of the dinner next day; and the Golden Wax Beans already in blossom, promise another change soon, while the rows of onions are ready to yield their share to the comfort of the family.

The tasselling sweet corn is refreshing to look forward to, for the coming days of harvest. An occasional dish of baked beans gives variety to it all. Fowls in every style of cookery should appear now and then, and what real farmer has not always a surplus of them for table. Eggs dropped in boiling-hot water, or seasoned and baked on a plate, are a nice addition to the supper table, unless the workmen tire of them, as they often do.

Then by taking proper precautions against sunstroke, and care in the use of the machinery used to help the work along, the farmer may hope to safely tide over the weary season until Autumn brings more endurable weather.

AUNT RACHAEL.

FLIES.

I am not a monomaniac on the subject of flies. I could with calmness face the fact that a fly might be roaming quite unmolested upstairs, and even the knowledge that a half dozen were in every room would fail to drive me so near the borders of distraction as it would some people. Nevertheless, I thoroughly detest the whole race, and do like to have them *comfortably scarce* in my house. Last year they were not, and there seemed no good reason why, either. With wire screens all over the house even to the cellar, and springs on the doors beside, it was rather strange that flies should be so numerous; but the screens seemed to keep them in rather than out. I murdered them in cold blood, and drove them till completely exhausted. Of all methods of getting rid of flies driving is the most profitless. Tis a weariness of body and vexation of spirit, and they won't all be driven anyway. For real soul-harrowing pertinacity there is nothing equal in this respect to the November fly. It hugs the chimneys and clings to the warm corners, and if driven from these, only sails tranquilly away to others—anywhere except where it is wanted to go. Fly-driving is a delusion and a snare, and traps don't seem much more successful.

As for insect powder, I would almost prefer flies to shutting out all the blessed air of Heaven and covering furniture and everything with mustard, or what looks like it. I am now a firm believer in old-fashioned fly-paper. I read somewhere this season that if every drop of liquid can be kept away from flies in any room they will all disappear in 48 hours. Of course, I could not keep all water away from those in my kitchen where the pump is; but in the other rooms I was careful to do so, and then by keeping a plate of fly-paper, covered with a little sweetened water, in each room, the truth of the statement was soon proved. In two days scarcely a fly was to be seen. Of course, just at first it was annoying to find dead flies around, but it was better than so many living ones, and after nearly all had been killed, that objection was slight. I keep the paper constantly prepared to beguile any stray wanderers that may come in, and hereafter—whatever others may do—give me fly-paper or give me—well—*give me fly paper anyway!*

RENA ROSS.

SHORT-CAKES, ETC.

I hope I am not too late to benefit some one by the following recipes for short-cakes, made with other fruits than strawberries. For all short-cakes I make a dough as for tea biscuits, only containing rather more flour; roll it into very thin, round cakes large enough to cover the bottom of a large pie plate; put on a layer, then flour that or rub it with melted butter; then put on another. Bake in a quick oven. When done, pull the layers apart, butter well and add the fruit. If you use huckleberries, stew them in a porcelain kettle while your short-cake is baking, adding a quart of well-washed berries, no water, but the juice of one-half of a lemon and a small pinch of ground cinnamon; stew a few moments; add sugar to taste, and put them between and over the cakes. Peaches, pared, sliced and sugared, are delicious to use. Let them stand a while in the sugar; then put them between and on top of the buttered cakes, and to the juice add cream or condensed milk and more sugar; stir well together, and pour over all. Blackberries stewed are also good to use. My Garden Treasures are coming on finely. The sweet peas are commencing to bloom, and are so lovely. Two nasturtiums grace a small rock-work I have made this season; one is a brilliant yellow; the other a deep, rich, velvety, reddish brown; both have been covered with blossoms for weeks. Poppies, coreopsis, zinnias, etc., are all coming on well. My pansies continue as beautiful as ever, and we all revel in their beauties. I never before tried to raise pansies from seed; but shall do so again, as I have succeeded beyond my expectations with them.

AUNT EM.

Miscellaneous Advertising.

When Baby was sick, we gave her Castoria,
When she was a Child, she cried for Castoria,
When she became Miss, she clung to Castoria,
When she had Children, she gave them Castoria.

Miscellaneous Advertising.

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Are restored to weak and gray hair, by the use of Ayer's Hair Vigor. Through its cleansing and healing properties, this preparation prevents the accumulation of Dandruff, and cures all scalp diseases.

When I commenced using Ayer's Hair Vigor my hair was weak, thin, and gray. My scalp was also full of dandruff, and itched incessantly. Two bottles of the Vigor removed the dandruff, stopped the irritation, restored my hair to its original color, and so stimulated its growth that I now have an abundance of long black hair. The occasional use of this remedy keeps my hair and scalp in perfect condition.—Florence J. Cannon, 759 Clinton st., Trenton, N. J.

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is, in every respect, the most cleanly of all preparations for toilet use.

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SHERIDAN'S CONDITION POWDER is absolutely pure and highly concentrated. It is strictly a medicine to be given with food. Nothing on earth will make hens lay like it. It cures chicken cholera and all diseases of hens. Illustrated book by mail free. Sold everywhere, or sent by mail for 25 cts. in stamps. 2½-lb. tin cans, $1; by mail, $1.20. Six cans by express, prepaid, for $5. I. S. Johnson & Co., P. O. Box 2118, Boston, Mass.

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KELLOGG'S ROYAL SALT.

Positively Prevents Butter from ever becoming Rancid.

Endorsed by George B. Douglas, Esq., Ex-President Mercantile Exchange; Putnam Conklin, Esq., Manager Thurber, Whyland & Co.'s Butter Department, New York City; Col. Wm. Crozier, Northport, L. I., N. Y., and others. Send for Circular.

BUTTER PRESERVATIVE SALT CO.,
OFFICE AND FACTORY, FOOT OF
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Grind your own Bone, Meal, Oyster Shells, GRAHAM Flour and Corn in the **$5 HAND MILL** (F. Wilson's Patent). **100 per cent.** more made in keeping poultry. Also **POWER MILLS** and **FARM FEED MILLS.** Circulars and Testimonials sent on application. **WILSON BROS., Easton, Pa.**

News of the Week.

HOME NEWS.

SATURDAY, July 24, 1886.

OUT of the 5,000 Canadian volunteers who participated in the suppression of the Northwest Rebellion, only 900 have accepted land warrants entitling them to 320 acres in the territory. Of the force, 3,500 have chosen scrip instead; 1,000 have made no selection, and according to the terms of the Bounty Act, can't do so after July 31 .....The famishing residents of Western Texas are streaming eastward in flight from the drought, abandoning homes and herds to avoid starvatiou..... The Indiana Soldiers' Orphan Home, at Kingston, was burned Wednesday afternoon—loss, $90,000; insurance, $25,000; usual number of inmates, 300; present, 167; rest off on vacation. .....Wednesday, Mgr. Taschereau was installed at Quebec as a Cardinal of the Catholic Church, with very imposing ceremonies—the first Canadian Cardinal.....Jay Gould has just watered Iron Mountain Railroad stock $3,000,000, and a short time ago he watered the Missouri Pacific $6,000,000—$9,000,000 of "water" on two roads in one year. The "dear public" will be expected to pay solid interest on all that liquid addition. The poor railroad men will also point to the low rate of interest on the railroad stock as proof positive that railroad stock doesn't pay .....Advices from Newfoundland say terrible distress still continues. Thousands are idle and petitioning the Government for work..... The $300,000 received by the Cherokees for grazing privileges, is being distributed among the full-blooded Cherokees—18,319—and the amount due each is $15.95. The negroes and other adopted citizens whose claims have been ignored, will appeal to the courts .....During the last week in June, there were mailed at 20 of the leading post offices in the country 9,567,649 letters; 26,404 sealed packages; 1,146,952 unsealed; and 2,493,780 circulars—total, 13,324,845. This is an increase of 21.7 per cent. in letters; 59.3 per cent. in the number of sealed parcels; 40.6 per cent. in that of unsealed parcels; and 3.1 per cent. in circulars—total, 19.1 per cent. This increase of mail matter and consequent revenue is attributed to the cheaper postage rates..... .....It is proposed to extend the Homestead Laws to Alaska.....More legislation of a retaliatory nature against Canada is being pushed forward in Congress.....Judge Thayer, Democrat, at Youngstown, Ohio, Monday, refused to grant the petition of the Liquor Dealers' Association for an injunction to prevent the County Treasurer from collecting the Dow tax or attaching the penalty. Of 208 saloon-keepers in Mahoney Co., only 10 had paid the tax, but on Tuesday there was a rush to the Treasurer's office, as it was the last day of grace before the adding of the penalty.....The three convicted Milwaukee Raw Reds who conspired to burn the Court House and incite the people to violence, have been sentenced to nine months' imprisonment each. Had their friends not threatened judge, jury and witnesses, the sentence would have been lighter.....There is a great deal of hubbub yet about the Morrison resolution as to the disposal of the Treasury surplus. The opponents of the measure say that it repudiates the public debt in so far as it provides for the payment of a part of it in silver or greenbacks while the understanding has been that it is to be paid in gold. There wont be gold surplus enough to pay at the rate provided. The supporters of the resolution say payments will be made by drafts on the Treasury; these will be deposited in bank like an ordinary draft, and collected in the same way by the bank. In any case the proposition, they say, is to take the spare money in the Treasury and use it in paying a part of the public debt, instead of letting it be idle and continuing to pay interest on that part of the debt..... A. K. Cutting, an American editor, has been for some time confined in a loathsome prison at El Paso, Mexico, for the publication of an article reflecting on a Mexican. The American Consul, Judge Brigham, demanded his release and was ridiculed; last Wednesday the Consul received a despatch from Sec. Bayard to demand his immediate and unconditional release.....That Mexican revolution has not been suppresed yet; but it amounts to little.....Wednesday the House voted, 145 to 36, to adjourn next Wednesday, July 28. The Senate must concur before adjournment takes place, and members protest they will not hurry the consideration of bills delayed too long in the House.....Vermont Prohibitionists nominated a straight ticket last Wednesday.....The National Potters' Association of the United States joined the Knights of Labor Wednesday.....No rain in Colorado for three months; rivers are drying up, crops and stock, as well as families, are sufferiug for water. The High Line Ditch Company has been taking the little water in the Platte River above Denver, causing great suffering to the ranchmen lower down. The Governor, however, has ordered the supply for irrigating purposes to be shut off till the domestic wants of farmers down the river are satisfied.....The week has been remarkable for very destructive hail storms in various parts of the country..... The Canadian authorities are still vigorously euforcing their views of the fishery laws. The captured fishermen have been released, the United States Consuls in some cases paying the $400 fine imposed on each, and the owners in other cases, all parties reserving the right to contest the matter in the courts, or to recover the amount from the Imperial Government.....Manitoba has extended municipal suffrage to its women. Within two years four Provinces of Canada—Ontario, Nova Scotia, New Brunswick and Manitoba—have quietly given a vote to "the best part of creation." The Provinces of Quebec, British Columbia and Prince Edward Island are likely soon to follow..... .....Troops are after Geronimo yet in the Sierra Madre—a long way after him. Reports of negotiations for his surrender denied. .....Canada is now pushing for a Pacific cable from Victoria, B. C., to Japan and Australia, by the way either of Sitka or Honolulu, and to be operated in connection with the Canadian Pacific. Sandford Fleming has gone to England to interest the Imperial Government and Australia.....The Lake Shore Road, unable to transact full business with the strikes on its hands, and bleeding heavily for pay of Pinkertou guards, without whom "scab" workmen won't work, are seeking a way to a graceful back-down in their struggle with the striking switchmen..... .....The Grant Monument Fund amounts now only to $122,472.92. The committee in charge of it expect Congress to appropriate $250,000 towards the $500,000 needed, and it is hoped that after this has been done, the public will respond more liberally.....A glorious time at Albany, N. Y., during the week. Grand celebration of the bi-centennary of the city. President Cleveland and Gov. Hill joined in the festivities Thursday. Greatest jolification the place has ever had. Multitudes of visitors from the adjacent country, and lots from a distance. Fireworks, parades great jubilation generally.....The St. Louis Grand Jury has found indictments against five members of the House of Deligates (Board of Aldermen) for drunkenness, and against three others for levying blacknail.... ....The Chicago aldermen have done nothing specially disgraceful during the past week.... ....The New York 14 indicted aldermen have not yet been tried, as the District Attorney is waiting Jaehne's appeal to the Courts. He is also trying to secure more evidence from some of the aldermen or the boodle-distributor Malony, on promise of immunity..... .....Master Workman Powderly says he would not accept the nomination for Governor of Pa., were it to come to him unanimously, and were he certain of election; nor would he go to Congress, for if there he would like to do his duty as a Congressman, but he couldn't do that now, "as the time of a Congressman is nowadays devoted to place-hunting."..... .....The new extradition treaty with Great Britain is now under consideration by the Senate Committee on Foreign Affair, and will doubtless be confirmed by the Senate. By it only four crimes are mentioned in addition to those for which criminals have all along been extradited under the treaty of 1842. These are: "1. Manslaughter. 2. Burglary. 3. Embezzlement or larceny of the value of $50 or £10 and upwards. 4. Malicious injuries to property, whereby the life of any person shall be endangered. The last clause is aimed especially at dynamiters, and that class of criminals. No clause applies to crimes committed before the treaty comes into force, so that the criminal American mob now in Canada and other parts of the British Empire are safe. Nobody is to be extradited if he can prove that his surrender is sought with a view to punish him for a crime of a political nature. No one surrendered for one crime can be tried for another committed prior to his surrender, until he has had an opportunity to return to the State which has surrendered him. Convicted criminals who have escaped imprisonment are to be surrendered as well as those that are only accused. The record of the conviction and the identification of the person are alone necessary in the former case; but in the latter, sufficient evidence must be given to afford a *prima facie* proof of guilt.. ....Boycotting has been declared a crime in three States—New York, Wisconsin and Connecticut, in each of which boycotters have been sentenced to imprisonment.....The Chicago Anarchists are still on trial. Several of the leaders have betrayed their associates, and made horrible disclosures of intended dynamite massacre of police and the innocent public by these cowardly foreign miscreants.. ....The Central Labor Union of New York City, representing 110,000 workmen, are secretly boycotting the beer made by George Ehret, the wealthiest brewer in the country, because he gave truthful evidence on the late trial of boycotters here, when summoned to do so by a subpœna, and because they think he could have prevented the prosecution and imprisonment of their fellows. Of his customers, 54 have dropped off, as the boycotters won't drink where his beer is sold.... .. The Kansas Prohibitionists take in all the reforms as they go along. Their full State ticket, nominated last week, includes a negro for State Auditor and a woman for Superintendent of Schools..... .....When Senator Miller, of California, died during the last recess of Congress, Democratic Gov. Stoneman appointed George Hearst (millionaire Midas) to fill the vacancy, until the first meeting of the Legislature, which would naturally have occurred on the first of next January. The Governor, however, has called an extra session of the Republican Legislature, and the National and State laws imperatively command the election of a Senator at that session to fill Senator Miller's unexpired term, ending March 4, next. If one is elected he will of course, be a Republican, and "Old George" must go—and that, too, after the passage of the Oleo Bill in spite of his prophecy, vote and efforts. It is thought, however, that as all parties wish the extra session, an agreement has been made to defer the election till January, especially as a Senator can then be elected for the full term of six years, after the assembling of the new Legislature to be chosen in November..... ....The Canadian Government has decided not to recognize any Indian chosen by the Crees to succeed the late Poundmaker as their chief. The intention is to gradually do away with the system adopted by the red men for centuries of selecting as their leader any brave who had especially distinguished himself in war.....

FOREIGN NEWS.

SATURDAY, July 24, 1886.

THE latest returns from the English elections make out the strength of the parties as follows:

Conservatives	319
Gladstone Liberals	192
Liberal-Unionists	74
Nationalists	85
Unionist strength	393
Home-rule strength	277
Unionist majority	116
Conservative lack of a majority	15

Gladstone has resigned; and the Queen has summoned the Marquis of Salisbury to form a Cabinet. Hartington and the other Liberal-Unionist leaders who were urged to join the Conservatives in forming a Ministry, have absolutely refused, so that the Conservatives, though in a minority, must act alone, trusting to the support of the Liberal-Unionists in the general line of their policy. Gladstone is personally to lead a strong, persistent Opposition of the Home-Rulers of all kinds. By his advice, Parnell will not adopt his former obstructive tactics in Parliament, but reserves full power to act as he pleases should the Conservatives attempt coercion.

.....There are ominous mutterings of political disturbances in Ireland. The "no rent" policy is likely to be again adopted. Agrarian outrages are threatened. Catholics are becoming bitterly exasperated against the Orange minority who have done so much to blast their hopes. Parnell and the best of the Nationalist leaders earnestly urge peace and resignation for a while, at any rate; but others are more hot-headed.... .....There has been for some months in London, a grand exhibition of the produce of the British Colonies and India, and vast numbers of people from all parts of the British Empire have been flocking to see it. They have been treated splendidly by the "classes" as well as by the "masses," and Royalty itself has deigned to show them numerous courtesies and marks of favor. Their presence has done much to foster the idea of the "confederation of the Empire." Thursday a special train carrying the "colonial officials" to a grand naval review at Portsmouth was derailed, and several "prominent persons" were seriously injured..... .. In France, that duel (with pistols) between Gen. Boulanger and Baron de Lareinty, both proved brave soldiers, was as harmless as French duels generally are. The Baron missed the General, and the General missed fire, or shot in the air—accounts, of course, differ. It has made Boulanger still more enthusiastically popular among the Republicans. He was a colonel when fighting against the Commune in '71—a rapid rise. The Defence Committee, however, has voted, 14 to 3, not to demolish the Paris city wall, although Boulanger was in the minority.....The French army is considered in prime condition for fighting. The Commander of the French Navy on Wednesday declared that in case of war, he would have no fear in matching the French fleet against that of any nation in the world—even the English..... .....Royalist agitation lively throughout France, and so turbulent at Marseilles that the troops had to disperse the rioters, capturing 200. Anarchists very busy. Louise Michel and several other leaders are again imprisoned awaiting trial for exciting to riot and outrage. Labor very discontented. ..Things quiet in Spain, Castillar, the exiled Republican, has several times lately tried to cause trouble to influence the public funds, so that he could make money enough to push on a revolution. That's his excuse. The Chamber of Deputies has just ratified, 148 to 16, a commercial treaty with England, and the prolongation of existing treaties.....In Italy the cholora returns for yesterday were: Brindisi, 5 new cases, 1 death; Fontana, 3 new cases, 3 deaths; Latiano, 5 new cases, 2 deaths; Ostuni, 2 new cases, 1 death; Codigoro, 2 new cases, no deaths; Massafiscaglia, 6 new cases, 4 deaths; Comacchio, 3 new cases, no deaths. .....In Trieste during the past 24 hours, six new cases of cholera and four deaths from the disease were reported, and in Fiume three new cases and one death..... ....Turkey has at last decided to diminish her army, as danger from Russia has grown less. Of the indemnity imposed on her at the close of the Turko-Russian war she has just paid $250,000. Whenever Russia is "mad" she demands some of that "fine." The surrounding States are discontented but peaceful—compulsorily so. Bulgaria and Eastern Roumelia are being consolidated in spite of Muscovite growls, for the Czar thinks they may form a barrier between him and the Porte some day. Turkey has also "given permission" to increase the Russian fleet in the Black Sea, and the Russian ports there have just been protected by electric apparatus placed in the sea to destroy hostile torpedo boats—the work of American engineers. The closing of the port of Batoum has drawn a "spirited protest" from the English Government, but it is an "accomplished fact" nevertheless. The general impression is that the fear of Germany alone keeps Russia from attacking Turkey..... .....Bismarck and Kalnocky, the Austrian Minister of Foreign Affairs, have had a very friendly meeting, and De Giers, the Russian Minister, is expected to meet the Chancellor soon. The three Emperors—of Germany, Austria and Russia—are to meet next month, and their chief Ministers will then have another meeting. The Emperors do the show business; the Ministers the work. Germany is thriving. Late elections show that the people of Alsace-Loraine are to a considerable extent becoming reconciled to union with the Fatherland. Military preparations for war are incessant. Occasional growls at France show in what direction it is expected.... ....

AGRICULTURAL NEWS.

SATURDAY, July 24, 1886.

AFTER a bitter opposition in the Senate lasting parts of three days, the Oleomargarine Bill passed that body last Tuesday, by a vote of 37 to 24, after the tax on bogus butter had been reduced from five to two cents per pound. As a body, the Democrats opposed and the Republicans favored the bill, the Southern Democrats being especially bitter against it, though none of them exceeded in the bitterness of their attacks Republican Ingalls, of Kansas. He made an outrageous attack on Senator Miller, of New York, and Representative Hatch, of Missouri, Chairmen of the Committee on Agriculture in their respective Houses, both of whom have earnestly and ably pushed the measure through Congress, thus incurring the wrath of the vitriolic Kansan, who fiercely assailed them on the ground that they were working for their own interests because, in sooth, each had a little herd of cows and made butter therefrom. Early in the history of the Republic, it was decided that Congressmen can properly legislate in matters in which they are personally interested along with any large class of citizens. The bill then went to the House for concurrence in the Senate amendment, and after a bitter opposition there on Thursday, it was passed yesterday by a vote of 174 to 75, the Senate amendment having been accepted, as Mr. Hatch feared delay otherwise. On the passage of the bill on June 2, the vote was 177 to 99, so that either the Senate amendment or the pressure of the people added to its strength. The bill is now before the President, who is expected to sign it. It can be passed over his veto in the House, but in the Senate the majority in its favor is 11 votes short of the necessary two-thirds..... .....

Out of 119 hogs being driven to the railroad in Nebraska, the other day, for shipment, 110 died by the way from heat.....Chicago had 200,000 cattle in two days last week. Short pastures are filling the market with un-

ripe stock and ruining prices..............In regard to the supply of hogs for the remainder of the summer season, says the Cincinnati Price Current, much will depend on the weather and its influence upon the corn crop and pasturage. The indications, from extended inquiry throughout the West, appear to be that the supply will equal last year's, but not show any essential gain............ By a recent law the Commissioner of Agriculture is authorized to adopt such measures as he deems best, in co-operation with State authorities, to prevent the spread of contagious pleuro-pneumonia among cattle. Maryland has accepted the plans of the Commissioner, and the work of stamping out the disease commenced Thursday. Three animals were condemned and killed, and post-mortem examinations in each case showed unmistakable evidence of pleuro-pneumonia. Arrangements were made to kill all sick animals found in the State, the Maryland authorities having agreed to condemn all that are found infected. Other States are likely to consent to co-operate with the Department...........The other day E. L. Dwyer caused a startling sensation in Chicago by "purchasing" nearly 1,100,000 bushels of wheat, raising quotations considerably. The lot was thrown on the market in a few days and helped to depress prices. Dwyer, it seems, couldn't put up a margin when asked to do so. It turns out that he had only $50, most of which he spent before asked to "show his hand." He now owes a debt of $35,500 for margins, etc., and has only $2.40 assets to meet it!...........................

....Wednesday night's rain ended the drought but did a great deal of damage to crops in many places. The storm appears to have been severe from the Mississippi to the Atlantic, and the lakes to North Carolina.............

.....The fourth wool series of London sales is to open September 7th, and the fifth and last for the year on November 23................A rate of 49c per cwt. from St. Louis to New York has been established for compressed wool—one-half the rate for wool in sacks....

..........The wool crop in the Territorial district about Salt Lake is reported to be 2,000,000 more than last year—the only place reporting an increase. Shrewd Mormons!......

.....The aggregate receipts of wool at Boston since January 1, 1886, have been 242,289 bales domestic, 59,907 bales foreign, against 263,700 bales domestic and 36,388 bales foreign for the corresponding period of 1885......The imports of foreign wool at New York from January 1 to July 1 this year show an aggregate of 30,560,239 pounds, valued at $3,373,780, against 16,719,000 pounds, valued at $1,858,044, during the corresponding period of 1885.........

.....During the past year 778,000 frozen sheep arrived in London, while the live sheep penned there amounted to only 603,000...... ....

...... Frederick William Wendenberg, of Bagenz, Prussia, has made application to the Canadian Government for a patent for a process of manufacturing cattle feed from sawdust and also to have patented the use, application, and employment of the same in Canada............Government taxes the distilling of apple brandy 90 cents a gallon. Sussex and Orange Counties, New Jersey, pay $100,000 a year taxes on their applejack, and a lot more is made illicitly. Some of the "moonshiners" have lately been detected, and stand a good chance of losing some of their illegal profits, as there is a fine of $1,000 or a long imprisonment...........The new meat shops of the Consumers' Company here are doing a tremendous business selling at 20 per cent below other dealers. All three shops are in full blast now. The local butchers are very angry, though they still pretend to pooh-pooh the new enterprise. They have got up a boycott against the new shops, the windows of which have been several times smashed during the nights.

Crops & Markets.

SATURDAY, July 24, 1886.

ACCORDING to the July report of the Department of Agriculture, the full text of which is just received, the area of potatoes is increased slightly; acreage 101.3, as compared with last year. The increment is large in Kansas, Nebraska and Dakota, and much greater than the increase of population in Missouri and California, and some other States and Territories. Condition of potatoes is low, averaging 96.6. It is usually high on the first of July, as the effects of drought, rot or insects always occur later. The excess of rain fall in many districts has interfered with planting, germination and growth. The destiny of the crop is in the future. Should it escape measurably its calamities of the later season, the crop may yet be a good one. The Colorado Beetles are in force from the mountains to the sea.

With regard to pastures, it says in all the Atlantic States and in the Gulf States, as far west as the Mississippi River, the pastures have in general been favored by moist, cool weather, and are in exceptionally good condition. West of the Mississippi, and in the States between the Upper Mississippi and the Ohio, the conditions, as regards rainfall, have been more varied. In Ohio there has been considerable injury from drought in a number of counties, and in a somewhat less degree the same is true of Indiana and Illinois. In Michigan and Wisconsin, complaints of drought are quite numerous, and the damage in a number of counties is serious. There is also considerable complaint on the same score in the States immediately west of the Mississippi, and in Kansas and Nebraska. In most of these States the condition seems to be favorable.

The Agricultural Department issued a supplementary crop report Wednesday. It puts the winter wheat crop at 295,000,000 bushels—just the RURAL's figure. In the first July report it was said that the condition of spring wheat had declined 15 points since June 1. The Department explains that a loss of 15 points in condition does not mean a loss of 15 per cent. of the crop if last year's crop of 145,000,000 bushels is to be used as the basis for calculation. The fact is that there was last year a similar decline of 10 points, and that the yield of 145,000,000 bushels represented a crop whose condition was only 86. This year's crop was, therefore, on July 1, less than three points lower in condition than the large crop of last year, so that its condition on July 1 indicated a loss of not more than 6,000,000 bushels, as compared with the crop of 1885. But serious injury has been inflicted since July 1. The supplemental report says: "A judicious and reasonable interpretation of the July report of winter and spring wheat would show a prospect for an increase of about 80,000,000 bushels above the official estimate for 1885 (which was 357,000,000). Results of thrashing of winter wheat and the meteorogical conditions of the next two months may easily add 10,000,000 to these figures or subtract quite as large an amount.

The RURAL's estimate of the increase, in the aggregate crop, was 78,000,000—within 2,000,000 of the Agricultural Department's report three weeks later. We now think, however, that the Department's estimate of the injury done by the Northwestern drought is considerably too low.

A telegram from Danville, Va., Thursday says reports from the tobacco crop in that section are discouraging. Continuous rains have put the crop in bad condition, and no doubt it will be cut short. The indications now point to a small crop and but little bright tobacco.

The Tennessee wheat crop has yielded much better than was anticipated, the crop being better than for many years. Corn is very promising. Much hay was lost on account of wet weather, but the crop was still very large. The oat crop was above the average. Cotton looks well, and the potato crop is good.

It is likely that the cranberry crop also will be very bountiful this year. The Massachusetts meadows are reported to be "in better condition than ever before." The abundant crop and low prices last year had a discouraging effect so that little new bog was prepared in comparison with former years.

The weather has improved in the South Atlantic and Eastern Gulf cotton-growing States. Louisville tobacco crop advices are favorable; the staple held there is firm, and while stocks are large receipts are light. Wheat, after some steadiness, has declined on increased supplies in sight on land and sea, and heavy receipts at primary markets. Corn and oats are relatively stronger. Improved crop prospects for beet sugar and large stocks have caused a further shrinkage in prices of sugar. The total visible supply is 1,252,331 tons, against 1,271,908 tons last week and 1,204,606 tons last year.

The Agricultural Department thus distributes the last crop of wheat:

Estimated consumption: food, 271,000,000 bushels; seed, 51,474,900 bushels; exports (from preliminary statement), 93,596,620 bushels—total, 416,071,520 bushels. Crop of 1885, 357,112,000 bushels; drawn from crop of 1884, 58,959,520 bushels. The "visible supply" has been decreased during the year about 13,000,000 bushels, leaving about 46,000,000 bushels to come from the surplus in the hands of the farmers.

Manufacturers are buying wool with more freedom at seaboard points and at Chicago. Prices are steady and so near the importing point, that an advance may induce imports of foreign. Current quotations for leading sorts are as follows at Boston:

Ohio and Pennsylvania X	32@33c.
Ohio and Pennsylvania XX	33@34c.
Ohio and Pennsylvania XX and above	35c.
Michigan X	32c.
Fine Ohio delaine	35c.
No. 1 combing	36c.
Texas spring, 12 mos	21@24c.
Super A	31@37c.

The sales of the week at Boston are reported at 4,600,000 pounds, as against 4,800,000 pounds last week and 3,700,000 pounds the same week last year.

MARKETS BY TELEGRAPH.

SATURDAY, July 24, 1886.

CHICAGO.—Compared with cash prices a week ago, "regular" wheat is 1¼c. lower; No. 2 Spring, 1⅞c. lower. Corn, 2⅜c. higher; "futures," about 2c. higher. Oats, 2½c. higher; rise does not affect "futures.". Rye, 1½c. higher. Barley, 1½c. higher. Flaxseed, 6½c. higher. Pork, 37½c. lower. Cattle, from 10c. to 25c. higher. Hogs, from 5c. to 20c. higher. Sheep, from 5c. to 25c. higher, except Texans, which are from 15c. to 50c. lower.

WHEAT, weak; Sales ranged: July, 74¾@76⅞c; August, 76⅝@78¾c; Sept., 78⅛@80¼c; No. 2 Spring, 75⅝c. CORN.—Active; cash, 40¼c; July, 39⅞@40⅝c; August, 40¼@41¼c; September, 41⅝@43c. OATS.—Firm; Sales ranged: Cash, 31c; July, 31c; August, 29@29¼c; September, 29¾@30⅜c. RYE.—Quiet; No. 2, 53c. BARLEY.—September, 67@68c. FLAXSEED.—No. 1, $1 17½. MESS PORK.—Sales ranged; Cash, $9 52½@9 55; August, $9 52½@9 60; September, $9 60@9 72½. LARD.—Steady; sales ranged: Cash, $6 55@6 57½; August $6 57½@6 62½; September, $6 62@6 67½. Short Ribs.—Cash, at $6 07½. Boxed Meats.—Dry Salted Shoulders, $5 95@6 10; Short Clear sides, at $6 70@6 75. CATTLE.—Market strong; Shipping steers, at $3 90@5 10; stockers and feeders, $2 40@3 90; cows, bulls and mixed $1 80@4 00; bulk, $2 70@3 00; through Texas steers, $2 60@3 87½. HOGS.—Rough and mixed, $4 25@4 70; packing and shipping, $4 70@5 00; light weights $4 20@4 90; skips, $2 70@4 00. SHEEP.—Market steady; Natives, $2 00@4 15, Western, $3 00@3 60; Texans, $2 25@3 25; Lambs, per head, $4 25@5 50.

ST. LOUIS.—Compared with cash prices a week ago, No. 2 red wheat is 2¼c. lower. Corn, 2½c. higher. Oats, 6c. lower; the fall is confined to cash lots; a slight advance in "options.". Rye, 1c. lower. Barley, unchanged. Butter, creamery, 2c. to 3c. higher; dairy, 1c. higher for best. Eggs, 1c. lower. Flaxseed, 8c. higher. Pork, 25c. lower. Cattle, a shade higher. Hogs, 10c. to 15c. lower. Sheep, from 25c. to 45c. higher.

WHEAT.—Active; No. 2 Red, Cash, 76¼@76⅝c; August, 76¾c; September, 78¼c. CORN.—Active; No. 2 mixed, Cash, 37@37½c; August, 37¾c; September, 39⅜c. OATS. Firm; No. 2 mixed, Cash, 28¾@29c.; August, 27¾c; September, 29c. RYE, 53c. BARLEY.—No. 3 Spring, 48c. BUTTER.—Creamery, 17@20c; dairy, 10@16c. EGGS, 6c. FLAXSEED.—$1 10. HAY.—Timothy, $10 50; Prairie, $4 50. PORK—$10 25. BULKMEATS.—Long clear, $6 15; short ribs, $6 25; short clear, $6 40. LARD.—$6 25. CATTLE.—Market active; Good to Choice Native Shipping Steers, $4 60@5 00; Common to Fair, $3 85@4 50; Butchers' Steers, $3 50@4 50; Cows and Heifers, $2 25@3 60; Stockers, and Feeders, $3 25@4 35; grass Texans, $2 25@4 00. HOGS.—Market active; Lights, $4 50@4 70; Packing, $4 40@4 75; heavy, $4 80@4 95. SHEEP.—Market firm at $2 25@4 00.

BOSTON.—GRAIN.—Corn.—Steamer yellow at 49½@50½c, and steamer mixed at 48½@49½c, and no grade at 40@46c. per bushel, as to quality. OATS.—Quiet; No. 2 white, 41@41½c; No. 3 white, 40@40½c; barley, 45c; fancy clipped, 46@46½c. Rye is held at 68c. per bushel. Bran, $14@14 50 for Spring, and $15 50@16 00 for Winter; Fine Feed and Middlings at $14@18, and Cotton Seed Meal $23 on the spot, and $21 75 per ton to arrive. HAY AND STRAW.—Hay is in light demand at $17@18 per ton for choice and fancy, $15 00@16 00 for fair to good, $13 00@16 00 for fine, and $9 00@13 00 for poor and damaged, Western choice, $16@17, do fair to good $14@15. Straw.—Rye straw is held $19 00@19 50 for choice, and $14@18 for common to good. Swale hay at $10 00@11 00. Oat straw, at $10@11 per ton. PRODUCE.—BUTTER.—Northern and Eastern creamery, extra, 19½@20c; do. extra firsts, 18@19c; firsts, 16@17c; Western creamery, $17½@19c, for extra firsts to extra; firsts, 15@16c: Northern dairy, 15@17c. for Vermont extra firsts to extra; firsts, 14@14½c; seconds, 13@13c; Western dairy, 12@13c for firsts; seconds, 9@11c; imitation creamery, 11@15c for extra firsts to extra; ladle-packed, 9@12c, for extra firsts to extra; firsts, 8@9c; seconds 7@8c; grease, 3@4c. NEW CHEESE.—New York and Vermont extra, 8@8¼c; do. do. firsts, 7@7¾c; do do. seconds, 4@6c; Western extra, 7¾@8c; do. firsts, 6½@7c. EGGS.—Cape and near-by, per doz. 18c.: Eastern extras 16½@17c; do. firsts, 15½@16c; Northern firsts, 15½@16c; Western firsts, 14½c; Provincial, 15@15½c. BEANS.—Choice Northern hand-picked pea, $1 75@1 80 per bushel; do. do. New York, small, $1 60@1 70; do. do. screened $1 15@1 30; medium choice, hand-picked, $1 45@1 50; do. do. screened, $1 15@1 25; Yellow Eyes, improved $1 50; do. choice flats, $1 25@1 40; Red Kidneys, $1 60@1 70; Canada pea, 65@95c. per bushel for common to choice; green peas, Northern, 90c@$1; do. Western, $1 15@1 20. POTATOES range at $3 00@3 25 per barrel for new. Nothing of consequence doing in old.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, July 24, 1886.

STATE OF THE MARKET.—As compared with cash prices last week, flour is 10c. lower; No. 2 Chicago wheat, ⅝c. lower; No. 1 Northern, ⅝c. lower; corn, No. 2, 1⅛c. higher; oats, ⅜c. lower; pork, 12½c. lower; butter and cheese, steady; fruits steady.

FLOUR, FEED AND MEAL—FLOUR—Quotations: Fine, $2 15@2 65; Superfine, $2 25@2 82½; Extra No. 2, $2 65@3 15; Good to Fancy Extra State, $3 30@3 85; Common to Good Extra Western, $2 70@3 95; Good to Choice Extra Western, $4 00@5 00; Common to Fair Extra Ohio, $2 65@3 75; Good, $3 80@4 20; Good to Choice, $4 25@4 75; Common Extra Minnesota, $2 65@3 25; Clear, $3 25@3 75; Rye Mixture, $3 30@3 75; Straight, $4 00@4 60; Patent $4 40@5 10; Bakers' Extra, $3 75@4 50; St. Louis Common to Fair Extra, $2 65@3 65; Fair to Good, $3 70@4 50; Good to Very Choice, $4 55@5 00, Patent Winter Wheat Extra, $4 40@5 00; City Mill Extra for West Indies, $4 35@4 40; South America, $4 40@4 50. SOUTHERN FLOUR.—Common to Fair Extra at $3 05@3 75, and Fair to Choice, $3 80@5 10. RYE FLOUR.—Superfine, $3 25@3 60, latter for choice. CORN MEAL.—Yellow Western quoted at $2 50@2 75; and Brandywine at $2 75@2 85. FEED.—40 to 50 ℔, quoted at 65@72½c, and from mill at 67½c; 60 ℔ at 62½@65c; 80 ℔ at 70@75c; 100 ℔ at 80@85c; sharps at 95c@$1. Rye nominal.

GRAIN.—WHEAT.—No. 2 Chicago, at 86@86½c; No. 1 Northern, 87c; No. 1 Hard, 90c; Ungraded Red, 81@90½c; No. 3 Red, 83¼c; Steamer, 85c; No. 2 Red, 87@87½c; No. 2 Red, July, 85¾c; do. for August, 85⅞@87 5-16c; do. for September, 86⅝@88¼c; do. for October, 87⅞@89⅜c; do. for November, 89⅛@90⅛c; do. for December, 90⅜@91⅝c; do. for January, 91¾@92⅝c; do. for May, 96⅛@97⅛c, do. for June, 96⅝@97⅞c. CORN.—Ungraded Mixed, at 42¾@48½c; Ungraded White, 46½c; No. 2 July, 47¾@48⅛c; do. for August, 47⅝@48⅝c; do. for September, 48⅛@49⅛c; do. for October, 49@50⅛c. OATS.—No. 2, 36½c; do. White, 39@41c; No. 2, 37½@37⅝c; do. White, 41½@43c; Mixed Western, 36@38c; White do. 40@45c; White State, 43c; No. 2 July, 37⅛c.; do. for August, 34⅜@34⅝c; do for September, 34⅜@34⅝c; do. for October, 34⅝@35c.

PROVISIONS.—PORK.—Mess, $10 37½@10 62½ for Old and $11 25@11 62½ for New; $12 00@$12 75 for Family Mess; $14 00@14 75 for Clear Back; and $9 50@10 00 for Extra Prime. BEEF.—Extra India Mess, $12 00@14 00; Extra Mess, in barrels, $8 50; Packet, $8 50; Plate, $8 50. BEEF HAMS.—$21 75. CUT MEATS.—Pickled Shoulders, 6⅛c; Pickled Hams, 11⅝@12c; Pickled Bellies, 6¾@6⅞c; City Pickled Shoulders, 6½c; Smoked Shoulders, 7¼c; Pickled Hams, 11⅝@12c, Smoked Hams, 12½@13c. MIDDLES.—Long Clear in New York, 7c; at the West, Long Clear, 6.20c; Short Clear, 6.45c. DRESSED HOGS.—City Heavy to Light at 6½@6⅞c; Pigs, 6⅞c. LARD.—Western Steam spot, 6.75c; Choice, 6.81c; August, 6.76@6.79c; September, 6.84@6.86c; October, 6.70@6.72c, November, 6.61. City Steam, 6.35c. Refined, quoted nominally, 7c; Continent, 7.10@7.15c.

BUTTER.—Creamery—State and Delaware County, pails, fine, 18½@19c; State and Pennsylvania, 18@18½c; Western best, 17½@18c; Western prime, 16@16½c.; Western good, 14½@15c. State Dairy.—Half-firkin tubs, best, 15c; do. do. about prime, 14@15c; do. do., good, 13@14c; do. common, 11@12c; Welsh tubs, best, 15c; do. prime, 14c. Western.—Imitation Creamery, best, 13c; do. do. fair and good, 11@12c; Dairy, fine, 12c; do. common, 9@11c; Factory, fresh, 11c; do. good, 9@10c.

CHEESE.—The quotations are for: New State Factory, best white, 8¼@8⅜c; do. do. best colored, 8⅛@8¼c; do. do. fine, 7¾@7⅞c; do. do. fair, 6⅞@7⅝c; do.do., common, 6½@6¾c; Ohio factory, fine, 7¼@7⅜c; State factory, nightskims, 6@6½c.

EGGS.—Quotations are for: State, 15@15¼c; Western, 14½c.; Canadian, 14½c.

POULTRY.—LIVE.—Chickens, spring, per ℔, at 11@16c; fowls, near-by lots, per ℔, at 11¼@12c.; fowls, Western lots, per ℔, at 11½@12c.; fowls Southern lots, per ℔, at 11½c; turkeys, per ℔ at 8@9c; ducks, western, per pair, at 50@60c.; geese, western, per pair, at $1.00@1.25.

POULTRY.—DRESSED.—Turkeys, per pound, at 9@10c.; Spring chickens, Philadelphia, per pound at 20@21c.; do. western, per ℔, at 14@16c; fowls, Pennsylvania, prime, per ℔, 14c.; do State and western, per ℔, at 13@14c.

FRUITS.—FRESH.—Quotations are: Apples.—Norfolk, per bbl., at $2 00@3 00; do. Maryland and Delaware, per crate, at 75c@$1. Red Astrachan, per bbl., $2@2 50; Jersey, $2@2 25 per bbl. Cherries, 4@7c. for western prime, and 3@8c. for up river large, and 2c. for small. Gooseberries, per bush., $1@1 50. Huckleberries 6@8c. per quart. Peaches, 75c@1 50 for prime Georgia and South Carolina per crate: $1 50@1 75 for prime North Carolina per bush. crate, and 50c.@$1 for fair and good lots. Plums, 8@4c per quart. Raspberries, 2@3 for up river per cup. 1½@2c. for do. native; 2@3c. for black cap, up river, and 3@5c. for do. Jersey.

FRUITS.—DRIED.—The quotations are as follows: Apples—Fancy evaporated, at 7¾@8c; do. choice, at 7½c, do. prime at 7@7¼c; fancy North Carolina sliced, at —; choice do. at 2⅛@3c.; choice Tennessee quarters at 1½@2c.; State quarters at 2¼@3c.; southern sliced prime at 1½@2c; do. common, —. Peaches—Peeled North Carolina, choice, 11c; fancy, 12@12½c; extra fancy, —c; Georgia, choice, at 10@11c; do. prime, 8@9c; unpeeled halves, 2¾@3c; unpeeled quarters at 2¼@2½c.; Delaware evaporated, peeled, —@—c; unpeeled do., at —@—c. Choice pitted cherries at 10c. Evaporated raspberries, at —@15c; sun-dried do. 18@—c. Blackberries—Prime at 6¾@7c. Whortleberries at —c. Plums, at 5c; California evaporated, —@—c.

PEANUTS.—The quotations are: 6½c. for best hand-picked; 4@5c. for farmers' grades.

COTTON.—The quotations, according to the American classification, are as follows:

	Uplands.	New Orleans. and Gulf.	Texas.
Ordinary	6 15-16	7⅛	7⅛
Strict Ordinary	7⅜	7 9-16	7 9-16
Good Ordinary	8 5-16	8½	8½
Strict Good Ordinary	8¾	8 15-16	8 15-16
Low Middling	9⅛	9 5-16	9 5-16
Strict Low Middling	9⅜	9 9-16	9 9-16
Middling	9 9-16	9¾	9¾
Good Middling	10 1-16	10¼	10¼
Strict Good Middling	10⅜	10 9-16	10 9-16
Middling Fair	10¾	10 15-16	10 15-16
Fair	11⅜	11 9-16	11 9-16

STAINED.

Good Ordinary	6¾	Low Middling	8¼
Strict Good Ord.	7 7-16	Middling	9

HAY AND STRAW.—The following quotations are for Choice Timothy hay at 85@90c; Good do. at 70@80c; medium 55@65c; shipping at 50c; clover mixed, 50@60c. Straw.—No. 1 rye, 80c; short rye at 60@70c; oat, at 40@45c; wheat, at —c.

VEGETABLES.—Quotations are for: Potatoes.—Long Island, rose, in bulk, per bbl., $2@2 37; Maryland, prime, per bbl, $2 25@2 37; Norfolk, rose, good to prime per bbl, $2 25@2 37; new potatoes, culls, per bbl, $1 25@1 50. Beets.—Long Island, per 100 bunches, $1 00. Beans.—Long Island, wax, per bag, $1 50; Long Island, green, per bag, $1 00. Corn.—Hackensack per 100, $1 00; Southern Jersey, prime, per 100, 75c.@$1 00. Cabbages.—Flat Dutch, per 100, $6 50@7 50; Wakefield, per 100, $3 00@4 00; Philadelphia, per bbl., $1 25. Cucumbers.—Long Island, per 100, $1 25@1 50; do. Norfolk, per bushel crate, 75c.@$1 00; Norfolk, per bbl., $1 25@2 25. Egg plant, Florida, per bbl., $3 00@6 00. Onions.—Potato, Jersey, per bbl., $2 00@2 75; Maryland, per bbl, $1 75@2 00; Virginia, per bbl, $1 50@1 75; Western, per bbl, $1 75@2 00; Long Island, red, per bbl, $2 00@2 25. Peas.—Long Island, per bag, 75@87c. Squash.—Long Island, white, per bbl, $1 00@1 25. Tomatoes.—Jersey, per basket, $1 25; Southern Jersey, per box, $2 00; Baltimore and Washington, per crate, $1 75@2 00; Maryland, per bushel crate, $2 00@2 25; Norfolk, Acme, per crate, $1 25@2 00; do. Norfolk, common, per crate, 60c.@$1 00; Savannah, per crate, $1 10@1 75, Florida, per crate, $1 00@1 25. Turnips, Jersey, Russia, per bbl, $1 25; White, per 100 bunches, $2 00@3 00.

LIVE STOCK MARKET.

NEW YORK, SATURDAY, July 24, 1886.

City Dressed Beef quiet at 7@8½c. for ordinary to prime native sides, and inferior light carcasses sold down to 6½c. Chicago dressed in fair demand at 7¼@8¼c. for native beef, and 6@6½c. for light Texas sides.

CALVES.—Veals, 151 ℔, at 6½c. per ℔ less $2; 54 do, 149 ℔, at 6½c. less $7 50; do. 116 ℔, at 6½c. Fed calves, 200 ℔, at 4¼c. Veals, 158 ℔, at 6¼c. Buttermilk and Fed Calves, 218 ℔, at 3½c.

SHEEP AND LAMBS.—Receipts for four days, 36,026 head against 31,743 head last week. State Lambs, 75 ℔, at 6¾c; Kentucky do. 65 ℔, at 6½c; State Lambs, 75 ℔, at 6¾c; Maryland do. 65 ℔, at 6⅝c; Maryland Ewes, 112 ℔, at 4½c; State Lambs, 63 ℔, at 6¼c; Pennsylvania Lambs, 56 ℔, at 6c. per ℔; Pennsylvania Sheep, 69 ℔, at 4¾c; Bucks, 115 ℔, at 3½c; Ewes, 91 ℔, at 4¼c; State Sheep, 78 ℔, at 4⅝c. per ℔; Kentucky Lambs, 72 ℔, at $6 15; Virginia do, 53 ℔, at $6; do. 54 ℔, at $5 40; Ohio Sheep, 81 ℔, at $4 80; Ohio Sheep, 76 ℔, at $4 85; do. 77 ℔, at $5; Colorado do, 77 ℔, at $4 25; West Virginia Lambs, 51 ℔, at $5 75; West Virginia Lambs, 57 ℔, at $6 25 per 100 ℔; do, 55 ℔, at $6 10; Western Sheep, 68 ℔, at $3 87½; Ewes, 90 ℔, at $4.

HOGS.—Receipts for five days, 21,969 head against 25,868 head for the same time last week. Feeling weak and market lower at $5 10@5 40 for Ordinary to Prime Hogs; State Hogs, 224 ℔, at $5 30; Roughs, 355 ℔, at $4 80; State Hogs, 265 ℔, at $5 10.

PRODUCE COMMISSION HOUSE
ESTABLISHED 1865.
S. H. & E. H. FROST,
100 PARK PLACE, N. Y.
Shippers desiring to favor us will be furnished stencils, shipping cards, etc., on application. Promptness guaranteed. References, RURAL NEW-YORKER, Irving National Bank, etc.

IRON ROOFING
Send for prices and Illustrated Catalogue of
CINCINNATI (O.) CORRUGATING CO.

For the Young.

SOME people wonder where the men and boys of the future are going to find work to do. We have so many men out of work now, and so many more who earn only just about enough to keep alive, that some people seem to be afraid the time will come when there will not be work enough to go around. What can be done then? I have found one thing in my life about work, and that is, there is only one place in every trade that is not crowded, and that is at the top. Good workmen are always wanted, and they are very seldom out of work. People with money always want good men that they can trust, and they are ready to pay good wages. The great crowd and rush comes in the classes of work that anybody can do. The poorest pay is given to those who just work with their hands and never think about what they want to do. To make a good workman a boy should begin before he is 10 years old to think about what he has to do. It takes a life-study to make a great man, or to excel in any line of work, and we can't begin this study any too soon. Some good man in every neighborhood is always watching for good, trusty boys. If he sees a boy who can be fully trusted about his work, who is saving and watchful, minds his own business and keeps his wits about him, he always keeps his eye on that boy, and the first you know there is some good position all ready. People are watching you, boys, to see what you amount to. If you stick to business and do the best you can, there will be a good chance for you, but if you neglect your opportunities and do nothing but play, you will never get out of the crowd where work is cheap and hard to get.

A great many boys think they know more than they really do. They are apt to make themselves appear ridiculous. Be careful about that. If you have learned something out of a book, don't be in a great hurry to tell people about it. It is safe enough to conclude that it is no new thing, or it never would have been put in print. Never volunteer information to older persons. That always looks bad, and it makes a poor impression upon strangers. If you are asked for your opinion, give it, and say nothing more. Don't be afraid that people won't understand that you know so much. Knowledge is one of the things that we can't hide. It is sure to be noticed. There will be plenty of time for you to make your mark after you are 30 years old. Boys who shoot up so quickly and appear to "know it all" before they are able to raise a beard, generally end like those plants that shoot up to a great height and then fall over because their stems are not large enough to support them. Don't think you can crowd into your head in a few years what it has cost others a lifetime to learn. It can't be done, boys, and you will be better and wiser men for finding it out. Go slow, take your time about learning things, but remember what you do learn.

Some boys always like to call "cry baby" when they see a girl crying. That is too mean and cowardly for any of my boys to do. Some girls cry too easily, perhaps, but most of them are braver than a boy would be under the same circumstances. The boy or the man who will stand by and laugh at the sight of a girl or woman crying, has no place with me. Girls should do their best to be brave, yet who wants a girl or woman to be as strong or rough as a boy or man? It is a man's business to do the rough and hard part of the work. That is what he was made strong and rugged for. Many women go dragging on through life without any kindness or sympathy. They stand it as long as they can, for years sometimes, and then they just break down. Nobody seems to understand how much they have done and how noble they have been. How about your mothers, boys; do they need help that you can give them? If they do, and you neglect to help them, what can we think of you?

Why should people always want to spend money when they go off for a holiday? I think the practice is a poor one. Most people, when they go to the fair or to a celebration of any kind, feel badly if they can't take along lots of money to spend. If they bought useful things it would be well enough, but half the time they won't do it. They buy cakes and candy, or a dinner not half as good as one they could have brought from home, and very likely make themselves sick for a day or so. I believe it is better to keep your money in your pocket at such places, or, better still, to leave it at home. I can remember the first time I ever went to a fair. I had 50 cents to spend. I bought some peanuts and some candy, not half so good as the candy we made at home. I saw a man selling great pieces of what he called Californuia gold. I bought a piece of it, because he said it was worth at least $5. Then I paid to sit on a horse while a man turned a crank and moved us around in a circle. The motion was not half so pleasant as that in a swing hanging on the limb of an apple tree. Then I saw a man with some little sticks standing up on a table. He said he would give 50 cents to any person who would knock down the sticks by throwing some little balls at them. I tried that, but I never could hit the stieks; the balls always just missed them. When I stopped throwing, I was surprised to find that I owed the man 30 cents, while I had only five cents in my pocket. A man gave me the money on condition that I would work for him when I got home. I think I worked several days before he was satisfied, and I lost my piece of "California gold." Now, do you think I had 50 cents worth of fun out of that? I don't, and I have never spent any more money in that way. If you ever expect to have any property, boys, keep away from all such business as that was.

THE STORY OF A DISTRICT SCHOOL.

A COLLEGE BOY'S DIARY.

(Continued.)

IT may be imagined that this announcement did not add to the pleasure of my ride. I wanted to turn back, but it was now too late for that. We rode on in silence for a short time. My companion seemed to feel that he had done his duty by stating so exactly the circumstances of my engagement as teacher. The pleasant Winter I had figured out as "principal" and "teacher of eloeution" had been rudely interrupted.

Suddenly the moderator pulled at the reins of his horses. These fat animals were only too glad to stop. We halted at a cross-road which ran its muddy length through a wide, flat pasture up to a thick grove, where it was lost from view under the trees.

"Ain't passed no examination yit, hev ye?" The moderator fixed his small eyes on me as he asked this question. "Cause ye can't never take up no school till ye kin show yer papers. That's a tied-up rule in Bear Crick deestrict. If ye ain't got no papers ye better git out an' foller that road through them woods, take the fust turn to the right an' the second to the left an' it'll bring ye to the super'tendent's house—he'll examine ye, I'll lay a hoss, so'st yer head'll swim when ye git through. Ef ye pass ye better find yer way over ter Wolf Crick deestrict. Ye kin stop to my house ef ye wanter, but its a standin' rule fer the director ter board the master the fust week fer nothin'. Super'tendent's name's Greening. He's et all the school books they is, an' a couple o' dictionaries, I reckon, an' I expect he'll put ye through a course o' sprouts."

There was something about the moderator's method of making these suggestions that made it impossible for me to argue with him. I got out of the wagon and he at once started his horses again. As I stood in the mud, he called back: "I'll take yer bag down to the director's house seein's I'm goin' by."

There was but one course for me to follow. Turning in the direction indicated, I picked my way as best I could through the mud toward the grove. There was a thin strip of grass at either side of the road, and I managed to make the journey without any serious damage to my boots.

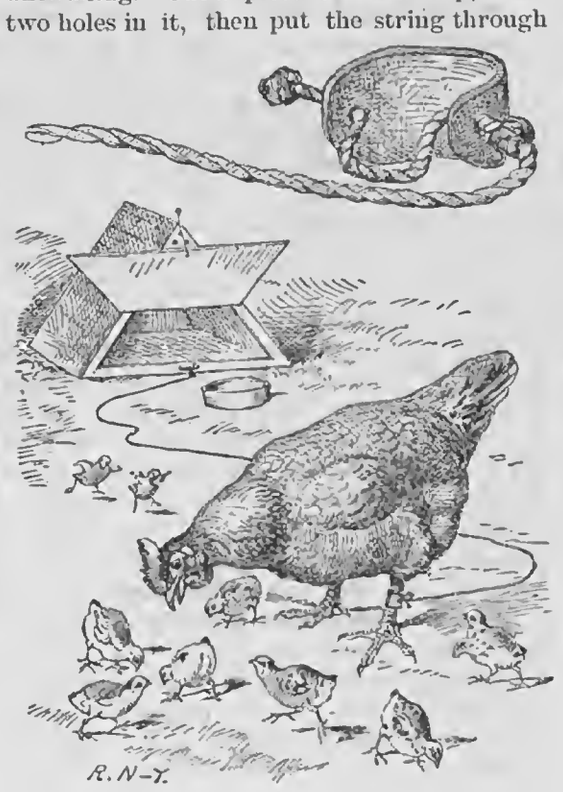
At last I found myself in front of a low, white house, about which the barns and other buildings were clustered so closely that the house seemed in danger of being pushed into the road. At first sight I was unable to detect any human being in sight; at last the upper part of a man started up from the side of a large pig-pen which stood conveniently near the kitchen door. His clothes were so nearly the color of the boards that I had been unable to tell the difference. I remember feeling how ridiculous it was to think of mixing a school officer up with a pig-pen.

"Hog! oh hog! you hog!" the figure shouted in a harsh voice, waving his hand at some occupant of the pen. I picked my way through the mud toward him, trying to convey the idea from my manner that I was not obeying his call. Just as I reached the little strip of grass that served for a yard, the man dropped again over the edge of the pen and called again, this time in a coaxing tone: "Oh hog! you hog! Hog! Hog! Hog!"

The only answer from within was a low grunt of contentment.

NOTES FROM THE COUSINS.

DEAR SIR: I saw the picture of a handy coop in your paper. I made one, but did not like it. I knocked off the slats that the door closed over and make a hopple and fastened it to the coop by a staple. I then took a piece of grape twine about nine feet long, twisted it and then tied a knot to keep it from untwisting. Cut a piece of boot top, made two holes in it, then put the string through



the two holes in the leather, slip it over the hen's foot and tie a knot close to the leather to keep it from slipping off. The whole thing is shown in the picture. Yours truly,

Vineland, N. J. FRED CHALMER.

DEAR UNCLE MARK: I was very much surprised when I received your notice that I had drawn the plow. I have received it from D. Woodward & Son, and it is something entirely new in this part of the country, for the jointer is on the other side of the plow. Everybody thinks it is very nice. We shall try it as soon as the wheat is drawn off the field. My Grandfather is going to make me a nice present for getting it. He is going to take my plow to Rush to try. We are having vacation now. From your niece,

ABBIE WARD.

DEAR UNCLE MARK: I am a little girl 12 years old. I would like to be a member of the Y. H. C. My Papa is a farmer, he takes the RURAL, and I read the letters from the Cousins with much pleasure. We have five cows, three horses and two mules, three calves and 27 hogs. This is the first letter I ever wrote to the RURAL and I don't know whether it will be a good one or not.

Your niece, BERTHA BANTA.

Oquawka, Ill.

DEAR UNCLE MARK: It has been nearly a year since I wrote my first and only letter to you. I have been very busy, but I have read the Cousin's letters, and often thought of you. We have a nursery, and raise small fruit and the hardiest kinds of apples. The severe Winters have killed a great many varieties. We have over 60 varieties of grapes. I like Moore's the best of the black ones, the Brighton of the red, and the Lady of the white. We have some grape cuttings which were set out about May 1, and some of them are 16 inches high. I like all kinds of fruit which I have tasted. Papa has a seedling raspberry. It came up among the grape vines three years ago. It bore last year for the first time. It was as large as the Gregg and more prolific. A tip took root near, and Papa left it. This Summer it is five feet each way and has over 100 fruit stems, and is larger than the Gregg. Papa has picked 2,300 off the old one, and 1,805 off the yearling, and there are a few which are not ripe yet. They looked beautiful before any were picked. We have several other seedling raspberries and quite a number of seedling grapes bearing, also a strawberry. We have about five acres of strawberries. They bore quite well considering the very dry season. I can make 500 or 600 berry boxes in a day. I like to make them. Papa sold his berries in Marshalltown. I went with him nearly every day for quite a while. It is seven miles. Marshalltown is the county seat of Marshall County. It is a city of about 12,000 inhabitants. It is a very pretty place located on the Iowa River. The Soldier's Home is located there. There are some saloons, but a great many of the people are in favor of Prohibition and think our county will be cleared of alcohol and tobacco before many years. There are no saloons in our town. We are temperance people. Mamma belongs to the W. C. T. U. I am a temperance girl, and I hope all the Cousins are. I water my flowers, but they are not as nice as they were last year. I guess that you are old and look young. Is that the way of it?

Your niece, CLARA CRIPPS.

Albion, Iowa.

[I hope you will do all you can to make temperance reign in your county. Every farmer boy and every farmer girl should help in this work, because there is nothing that can make farm life so bad as whisky.—U. M.]

DEAR UNCLE MARK: I fear I have long ago been classed with the "Silent Cousins"—if cousin I may be called—for my negligence. However, I'll try and do better in the future. We have not had a half-inch of rain since the 28th of April, and crops are suffering terribly. Corn is hardly two feet high and it is tasseling. Of the late potatoes we planted, only about one-third came up. Wheat and oats are very poor, about a third of a crop. Hay on an average yields about 200 pounds per acre. A neighbor cut 60 acres, and obtained about five tons. There will not be more than an eighth of a crop of apples, and they will fall from the trees unless we soon have rain. Berries are scarce, owing to the long drought. The Garden Treasures were planted, but not one of them came up, although they were watered. I guess the reason was because the sun beat down so hot that it dried the water away before the seeds derived any benefit from it. Away up here in Michigan the thermometer registered 101° in the shade. The earth has often been so hot that it would nearly blister my feet when I went barefoot. Some of my girl Cousins, in the city especially, may be surprised that a girl of 15 would go barefoot; but I do sometimes, and enjoy it, too. That recalls to my mind one day when a young man who was working on the farm said his shoes hurt his feet. I asked him why he didn't go barefoot for a while, just to rest his feet, and what do you suppose his answer was? "Because I'm afraid it will make my feet larger." I laughed at him, and told him that I had been barefoot a share of every one of the 15 Summers of my life, and his foot was larger than mine. Well, this isn't what I meant to write, but I let my thoughts run away with my senses. I guess I had better go back to my subject. The vegetable garden is quite fine; thanks to the watering Mother and sister give it nearly every night. Fires are all around. Many people have lost about all they have. One gentleman had an orchard of over 1,500 trees and he lost all but 15, and his house and barn. When fire once gets in a meadow it is almost impossible to put it out, the earth being so dry that it runs under the sod. Great damage has also been done to the forest, in fact nearly all of the woods have been burned over, and where the fire runs it not only destroys the trees, but the soil also. Good bye,

"BROWNIE."

[I am glad you are sensible about your feet. I would like to go barefoot myself if I had time. I don't think much of the people who are always afraid their feet will seem large.—U. M.]

DEAR UNCLE MARK: I have a little bird; it sings about all the time. We moved last December to Worcester, and the little bird is over to my Auntie's. He was 14 years old last Summer. I had two birds but one of them died. I have 43 chickens and a cow. Papa is taking care of a farm, he has six cows, nine calves, four pigs and three horses. I go to school. I have no brothers nor sisters. The corn came up and was doing nicely and one of our horses got out and went into the garden and ate the corn and broke it all down. I live at the Military Academy. There are 42 boys in the school. Your niece,

Worcester, Mass. ETTA L. GILBERT.

DEAR UNCLE MARK: Ever since I could read I have been reading the letters from the Cousins. As soon as the papers are brought home I always see what the Cousins and Uncle Mark have to say. Grandpa takes the RURAL and would not do without it. Unlike many of the Cousins I have neither brother nor sister. At present my pets are two canary birds, two pigs and one little dog. Last Summer I raised for myself eight ducks, one goose, and four turkeys. This year I want to get a setting of the Wyandotte eggs. I think I would like them. I am going to try for a prize on the Bird Cantaloupe. Your nephew,

Effingham, Ill. NOBLE MITCHELL.

[I wish everybody could get a prize.—U. M.]

DEAR UNCLE MARK: As I have not written for some time, you have probably taken my name off your list. In my garden last year, I had several kinds of radishes, lettuce, parsley, beans, peas, sweet peas (which were lovely), mignonette and zinnias. Most of my nicest flower seeds didn't come up, which was quite discouraging. I don't know what was the matter with them. Quite a good many of my radishes had a worm in the root. Could you tell me how to prevent it? We have had some very cold weather here. At one time it was 15 below zero. You ask how many think there ought to be a law against the use of tobacco. I think there ought to be, and I wish there was. I also think there ought to be a law against the use of intoxicating drinks. Don't you? It don't do people any good to drink it, but it does them lots of harm.

Duchess Co., N. Y. BESSIE C. UNDERHILL.

[Lime will kill the worms. I am glad you are for temperance.—U. M.]

PERSONALS.

IT is authoritatively announced that the President and his wife will take their only summer outing at an obscure point in the Adirondack wilderness. This may be "authoritatively" contradicted in a day or week, however.

IT is positively stated at Ottawa that Sir John Macdonald will resign the Premiership of Canada on his return from the Northwest, because of poor health, and that either Sir Hector McLean or Sir Alexander Campbell will succeed him.

A DAKOTA man by the name of Rose gave his daughter the name of Wild, that she might be called the Wild Rose of the Prairie; but she ran away with a man by the name of Bull the other day, and her name is a terror to the inhabitants.

NED BUNTLINE (Edward Z. C. Judson) died of heart disease at his home at Stamford, N. Y., last Saturday, in his 64th year. He served with distinction in the army and the navy, and subsequently acquired a fortune in literature, but most of it he spent lavishly.

MISS R. S. MILLS is the heroine of Dakota. She edits the Hawley Star, a weekly newspaper of considerable circulation, planted five acres of trees on a tree claim, built a saw-mill and when she has proved up her homestead will have 480 acres of land in her own name.

A HORSE of Otis Nelson, of Milford, Mass., kicked over a hive of bees, which attacked him furiously. Mr. Nelson went to the rescue, and they pitched into him; then Mrs. Nelson, bare-headed and bare-armed, rushed out and the bees attacked her. So badly was she stung that it was feared she would die from blood-poisoning.

THE late Benjamin Moran, Minister to Portugal, and for a long time Secretary of the United States Legation at London, was a familiar figure in London society. It is said that he kept a diary in which he recorded the dinners to which he had been invited, the names of the convives and something of the conversation which he heard or participated in.

MR. PENDLETON has been forced, since he took up his residence in Berlin as the American Minister, to study the German language persistently. In his youth he had some knowledge of this language, and even attended a course of lectures at Heidelberg. But what he had learned was soon forgotten, and upon his arrival in Germany he found himself in an awkward position.

ON the removal of Indian agent McGillicuddy from the Pine Ridge Agency the other day, Maj. Bell of the army, the new agent, took a census of the Indians and found there were only 4,500 Sioux and Cheyennes, though for years the Government has been furnishing rations, etc., for 7,300. Bad this for McG., his clerks and traders—must have dishonestly appropriated thousands.

THE heart of Ludwig, of Bavaria, was taken from the body, placed in a silver-gilt urn of spirits of wine, and conveyed through Munich streets in solemn procession with a great military escort, while the bells were tolled and minute-guns fired, to a special train that bore it to Alcotting. There it was consigned to the monks, who have had in keeping the hearts of the kings of Bavaria for centuries.

JUDGING by what the editors-in-chief of the great New York dailies say of each other over and over again with the utmost emphasis and gusto, Charles A. Dana, of the Sun, Whitelaw Reid, of the Tribune, George Jones, of the Times, Joseph Pulitzer, of the World, William Dorsheimer, of the Star, Horace White and E. L. Godkin, of the Evening Post, are individually and collectively the most unmitigated liars and double-distilled rascals out of the calabooze or in it, and no one but a fool would pay the slightest attention to what any of them may say editorially or otherwise.

MCNEIL, the prominent Mass. Knight of Labor, is mentioned by a multitude of papers as Mr. Powderly's successor as General Master Workman, in case the latter runs for Governor of Pennsylvania. And he will be pushed at the Richmond convention in October, it is said, as the fittest man for the leadership, no matter whether Mr. Powderly is a candidate or not. The Mass. Knights, however, have just voted for Powderly Delegates; Powderly will not run for Governor, and McNeil says he will not antagonize the present Master Workman.

LORD HARTINGTON, the Liberal-Union leader, who has been Mr. Gladstone's chief opponent in the recent political struggle, is the eldest son and heir of the Duke of Devonshire, and is a man of tireless energy, with a remarkable love and capacity for study, and with a most tenacious disposition. He does not court popularity, and affects a manner of indifference and *ennui* when he comes into contact with people. In debate he seldom indulges in personalities, and hence few bitter things are ever said about him, and he enjoys the respect even of his opponents.

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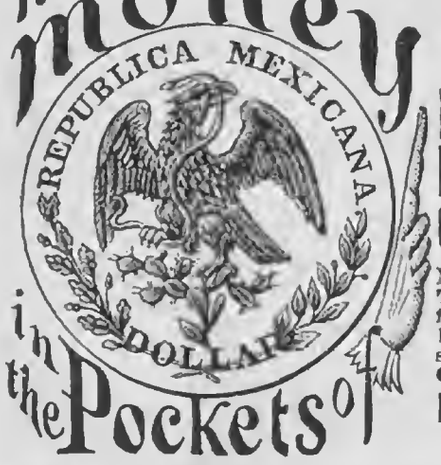

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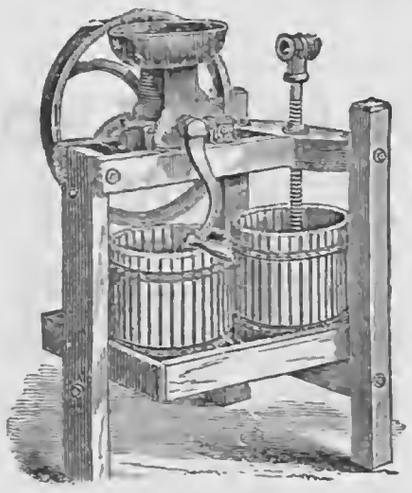

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GUEST—"I say landlord, your food is worse than it was last year." Landlord—"Impossible, sir!"

A NEW story is called "The Editor's Wallet." We have seen it. There is nothing in it.—*Exchange.*

"CHARMING little pink-tipped, shell-like ears you have, Miss Totty. Did you ever have them pierced?" "No; but I have had them bored."—*Exchange.*

ONE of the greatest delights of hot weather to a married man is that his wife never says anything about a new sealskin sacque.—*Washington Critic.*

JANE MARSH PARKER has written a book which she calls the "Midnight Cry." We have not read it, but we know all about it and Jane has our sympathy. The cats bother us too.

A LADY somewhere out West advertises for a gentleman for breakfast and tea. Shorthorn wants to know if she intends to make only two meals of him? Oh, the cannibal!—*Comic Weekly.*

"GRANDPA," said Teddy, as the old gentleman woke up from a loud sounding after dinner nap, "If you'd give your nose a spoonful of paregoric don't you think you could put it too sleep to?"—*Exchange.*

A COUNTRY paper in describing the effects of a squall upon a canal-boat, says that "when the gale was at its highest, the unfortunate craft heeled to larboard, and the captain and another barrel of whisky rolled overboard."

EDITOR (to foreman).—"What cuts have we up staire?" Foreman.—"None, sir, but a cut of Lydia Pinkham." Editor.—"H-m. Well, trim it up a little and put it at the top of the artiele on Ludwig of Bavaria."—*Exchange.*

"Do you know the prisoner, Mr. Jones?" "Yes, to the bone." "What is his character?" "Didn't know that he had any." "Does he live near you?" "So near that he only spent five cents for fire-wood in eight years."—*Comic Weekly.*

HIGH ART APPRECIATED.—Amateur artist, painting a bunch of apple blossoms, to small boy looking on.—"Well, Tommy, do you know what they are?" Small boy, with absolute certainty in his tone—"Yes, marm; hens."—*Boston Commercial Bulletin.*

THE strawberry is boycotted on the Pacific coast because it is picked by Chinamen. What if the Chinamen should take to making whisky, would that be boycotted, too? It is a most interesting question, and we should like very much to see the experiment tried.—*New York Graphic.*

"I WONDER why I can't make my kite fly," wailed the little brother of the High School girl. "It looks to me," replied Mildred, "as though its caudal appendage were disproportionate to its superficial area." "I don't think that's it," said Jim. "I think it's tail is too light."—*Pittsburg Chronicle.*

A WATERBURY gentleman was surprised while out on a drive on the Wolcott road recently by the conduct of a boy whom he asked to ride. The boy refused obstinately, and when prevailed upon for a reason, said he expected a whipping when he got home, and was in no hurry.—*American.*

THE small boy who furnishes the histor with a good deal of data watches his baby ter with constant curiosity. "She do know anything," he said. "She can't she can't think; she can't read." He at her a moment, meditating on his ow superiority, and then said, pityingly: "Po little thing; she's never been to a circus!"—*Toledo Blade.*

"Don't let Tige eat him, Billy. Give de purp somethin' nourishin'."

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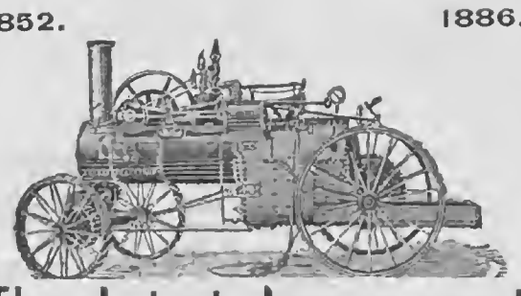

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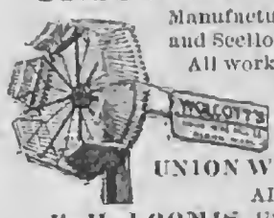

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If used in proper quantities, it will
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I will insure herds of swine of not less than one hundred in number against disease, at a small fee per head, provided they are fed my Remedy under my direction, and prove upon examination prior to contract that they are in a healthy condition, and neither inbred, close-bred, or the progeny of such.

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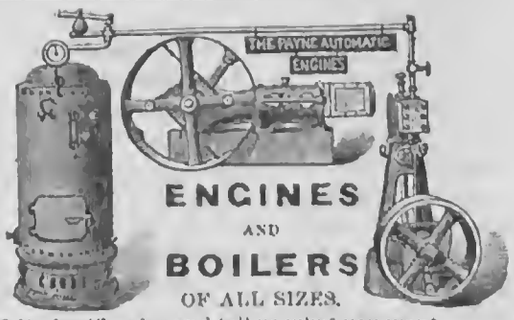

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THE RURAL NEW-YORKER

A JOURNAL FOR THE SUBURBAN AND COUNTRY HOME

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Horticultural.

Experiment Grounds of the Rural New-Yorker.

MORE NEW STRAWBERRIES.

DEWEY. Received from P. M. Augur & Sons, Middlefield, Conn., April 29, 1885. It is a seedling of Jersey Queen. According to our notes, it begins to ripen with the Sharpless, and continues later. The plants are low-growing, stocky and healthy. The peduncles are strong and often upright, and often hold the berries above and sometimes resting upon the leaves. Each plant produces a number of fruit stems which, having short pedicels, bring the berries in close clusters. The color when the berry first begins to ripen, is a bright crimson in the sun, and whitish in the shade; but when fully ripe, it is scarlet. It is firm enough for a near market, and perhaps for a distant market in a drier season. Seeds not deeply imbedded. The shape is variable. It is often nearly round and puckered about the tip, as if a flesh wound had been sewed together. It is rarely heart-shaped or regular; often broader than long. The neck is more or less stubby, reminding one of the Prince (of Berries). The flesh is slightly colored, quality good. The flowers are perfect. The size is very variable, the average being that of the largest berry shown at Fig. 308, p. 511, drawn from nature. The Dewey is very productive and is worthy of trial.

SEEDLING NO. 87. Also from Augur & Sons, and also a seedling from Jersey Queen. Plants received May 13, 1885 (pistillate). The foliage is strong and tall, remaining green and healthy through the season. Fruit ripens with Sharpless. The berries are large to very large and shapely, often broadly heart-shaped with short necks. They are sometimes contracted between the middle and tips like Crescent. Seeds yellow; flesh whitish; quality good to fine. Color scarlet; firm enough for near market only. This variety was at its best July 17 to 21. The berries were not then very firm, but of fine quality, large and rich. A later note states it was the best of our berries June 21. Our remembrance is that it continued to ripen its fruit as long and as late as any other kind. It is certainly a fine and desirable berry for home use, and is shown at Fig. 307.

GOLD. From same. Received and planted April 29, 1885. Same parentage as the above. Pistillate. It is a late berry, with tall, strong foliage, though less vigorous than that of seedling 87. Berries large, and of a light red color. The shape is roundish ovate, somewhat necked, not always fully ripened at tip. It is sometimes nearly round, sometimes larger in the middle than above; sometimes winged and broadly flat at tip. Seeds yellow; flesh colored and of good quality. The berry is not very firm. The vines are fruitful, and for home use it is a desirable late variety.

SEEDLING 65. From the same firm as the others. Same parentage—planted at the same time. Pistillate flower. Our notes are not very full as to this variety. The berry is light scarlet, broadly heart-shaped, sometimes winged, as in Fig. 309, page 511, and the quality is much like that of Jewell. It is quite firm. The plants are vigorous, though less so than those of Seedling 87. The following note explains itself:

"The history of the Dewey and the Strawberry Seedlings Nos. 87 and 65 is the same as that of Jewell, as they all came from the same batch of seed. The seed sown was one quart of Jersey Queen and one quart of Prince (of Berries). As it was sowed at one time, we cannot tell which are from one and which are from the other. Another time we shall keep seed separate when we sow it.

The seedlings you have from us were all raised in 1880. Jewell is the only one we have yet offered to the public. P. M. AUGUR & SONS.

For home use we should prefer either No. 87, Gold, or Dewey to the Jewell. The Jewell is earlier, firmer and perhaps more prolific. But No. 87, Dewey, and Gold are of good quality and as productive as need be desired. Of the three our first choice is No. 87, second Dewey, third Gold. Our illustrations show the berries true to life. If they seem small to the reader it must be considered that the portraits of all fruit (if not exaggerated) appear smaller in print than they really are.

SEEDLING STRAWBERRY No. 87. From Nature. Fig. 307.

STRAWBERRY NOTES AND EXPERIENCE.

E. WILLIAMS.

THE strawberry season of '86 has been conspicuous for its length, the abundance of the crop, and low prices. It commenced June first and ended July 10, a week later than usual and lapping that time on to raspberries. During all that time strawberries formed a prominent feature of our three daily meals very much to our satisfaction and enjoyment. In fact the only really satisfactory portion of the crop has been that consumed at home; the resulting profits, though not measured by dollars and cents, were none the less real. The quality of the crop may be likened to that of a modern barrel of faced apples—good at both ends and poor in the middle. For the first quarter, the weather conditions were favorable for a slow, well developed maturing of fruit of the best quality. Then followed 10 days of dull, rainy, misty and foggy weather, out of 14. This was a little too much of a good thing; the berries were gorged with water, the flavor impaired, and rust and rot attacked the plants and berries. During the last quarter less moisture and more sunshine prevailed, and the berries assumed their normal condition as to quality, and maintained it to the close of the season.

THE CRESCENT proved my earliest berry and was very productive and lasted till July 1, maintaining a fair size to the end and proving perfectly healthy. While the quality is not of the best, yet when served with sugar and cream (or without cream), cake, good bread, and genuine butter, as they usually are, I have never yet seen Crescents refused. I only wish every table in the land could be well supplied with as good.

THE SHARPLESS stands at the front as one of our largest and most attractive berries; but it is not very productive, and a large portion of the fruit rots before ripening during such weather as prevailed this season. The quality is not high, but as it has less acidity than some others, it pleases many tastes when fresh and not too ripe. Its popularity seems to be on the wane.

JERSEY QUEEN has proved to be one of the largest, handsomest and most productive of our late sorts. The plants are vigorous and healthy, and the fruit is of good quality, though acid. This acidity would be toned down in a drier season and there would be less loss from rot.

MANCHESTER was large, late and immensely productive but it blighted so badly that the bulk of its crop was lost. It has never been so badly affected with me before. If the tendency proves permanent the variety must be discarded.

THE JEWELL proves to be one of the most vigorous and productive, as well as the largest and handsomest varieties; but the excessive moisture proved too much for it in matted rows. Blight and rot injured it severely, though in single rows it withstood these troubles. While its flavor is not of the best, its other qualities promise to make it a leading popular sort.

THE ATLANTIC disappointed me early in the season, in its promises, and later it disappointed me in doing even better than it promised.

The preceding four varieties composed my last picking, and closed the season.

DURAND'S PRINCE maintains its position as the best in quality of all I have fruited this season, and gave a good crop. I was surprised to see the Editor of the RURAL report that it ripened unevenly. I have never seen any tendency of that kind, either on my grounds or elsewhere, and I incline to think it a break on the Rural Grounds, that will not prove permanent.

DOWNING. This old favorite bore a light crop and was badly affected with blight.

LARD'S (VINELAND) SEEDLING bore a large crop of medium-sized, soft berries of only medium quality. The foliage and fruit-stalks are very tall, exceeding any other I have.

CUMBERLAND TRIUMPH sustained its repu-

tation as a large, early, productive family berry of very good quality.

MRS. GARFIELD, a light cropper, is a good-looking berry of indifferent quality.

DANIEL BOONE is a much better cropper, but too poor in quality to be recommended, and both must go as has the Vick. Unless these three varieties have shown better qualities elsewhere, especially with the originators, it were better that they had perished at their birth-place. They are no compliment to the illustrious persons whose names they bear.

MISSISSIPPI VALLEY and DAISY MILLER are two new varieties. I have been trying for the past three years to find out what they were good for; but up to this time one word expresses all I have found, *viz;* nothing.

During the past 20 years I have written this epitaph, "Not worth a name," for a goodly number of seedlings. I hope the present movement to have new fruit tested by competent committees, and when introduced accompanied with a proper certificate of merit, will prevent the introduction of so many worthless varieties. If the purchasing public would demand this course, it would be money saved for them.

DURAND'S KING CLUSTER, among the new varieties which made so favorable an impression last year, has maintained its promises again this season and has secured the American Institute's prize for continued excellence. This I see is to be introduced as the "Crimson" Cluster, as has been stated in the R. N.-Y. As it has been known as King Cluster for years and widely known of late, a change at this time of name seems impolitic and totally at variance with all established pomological rules.

EXPERIMENTS IN WINTERING CELERY.

THE variety was Golden Heart, planted August first. The latter part of October the earth was drawn up to the plants as for blanching, but it was done to protect them from freezing on cold nights. The last of November, fearing that Winter might set in and freeze the earth solid, I dug the plants one warm afternoon. Grasping the stems in both hands, in such a way as to prevent injury to them, I beat the earth as clean as I could from the roots. Then after all defective stems had been plucked off, the plants were placed upright in bottomless boxes (old bee-hives) as compactly as possible. Next, about two-thirds of the foliage was cut off, through fear that the celery was so very densely packed that it would suffocate and rot. Then, having inserted the nozzle of a tin funnel here and there through the tops of the remaining foliage, sifted quicksand, such as is used for making mortar, was poured into the funnel till all the interstices between the stems were filled up to the foliage. The boxes were on the earth-floor of a dimly-lighted and cool cellar, where a little frost sometimes entered. Earth was banked up around the boxes three or four inches; a pailful or two of water were poured on to the sand in the boxes, and the operation was repeated every 10 or 15 days. It was three months before the plants blanched and were in nice condition. The hearts were solid by March 15, when they were sold. At the time of digging, the small plants were "heeled in" in a dark room of same cellar against sloping earth. First, a tier of plants was laid as closely as possible; then a layer of mellow earth sloping for a second tier of plants, and so on, earth and plants alternately. We used these in the family till May. Some of them were wet once or twice with water, and these commenced rotting first. The beating of the earth off the roots allows the packing of three or four times as many in the same space as with the earth left on, and the second experiment proves that a lighted cellar is not necessary. If the plants could be kept cold nearly down to the freezing point, we probably could have celery till June or July. S. D. N.

North Lansing, Mich.

Pomological.

CALIFORNIA LETTERS.

PROF. W. A. HENRY.

Climate of Southern California; olive growing; propagating the olive; longevity of the trees; orchards without irrigation and with; making olive oil.

I FIND in this portion of California an almost undeveloped country, but one of great possibilities and well worthy of the most careful investigation. With one of the most equable climates on the globe, semi-tropic at all times, but not so hot as to be enervating, fruit growing can be carried to a marvelous degree of perfection hereabouts, as shown by the small areas already in cultivation.

While many fruits flourish here, I will mention only the olive, at this time, as one well worthy of more attention. About National City on the Bay of San Diego, are growing some 12,000 olive trees, about half of which are now bearing profitable crops, but all are quite young. A large proportion of these trees are on the lands of Messrs. Warren and Frank Kimball, of National City, to whom I am indebted for many kind attentions and much that I have learned of this section. The olive resembles the willow somewhat in its leaves, which are long and narrow, being an olive-green above and whitish below. The trees are trained with shapely heads and present a fine sight in the long rows in the orchard. I notice quite a tendency to throw out shoots from the stem and at the ground, which is counteracted by free use of the knife. Trees have been usually set 20 feet apart, but this is now held to be entirely too close, and 25 feet is now the standard distance. A cutting as thick as a walking-stick, and from one to two feet in length, is placed in the nursery row, or, better, where the tree is to stand. In about five years the tree yields a little fruit, but for an olive orchard to begin giving good returns one must wait from eight to ten years. The longevity of the tree is remarkable, as we know from the history of the olive in Europe and Asia, and here there seems no exception to the rule. At the Old Mission near this place, which was built a century ago, there can be seen an olive orchard of about 300 trees set by the fathers at that early date. Through all the vicissitudes of a century this group of trees have stood, and to day the trunks are as sound as ever, the foliage as green as when it shaded the converted Indians that carefully tilled the soil beneath, and ripens fruit for the American as freely as it did for the Spaniard. These trees are the parents of about all the olives of this State, I am told, no imported variety proving to be of equal merit.

Though the olive will grow on poor soil, it responds to the best that can be given it, as do most other plants. In this section water is the one requisite, and though the olive cannot go without any, it will do with a very moderate supply if properly applied. As the small rainfall is confined to the winter months, the land in the orchard is carefully tilled at that season so that all the moisture from the clouds is caught and held by the soil; when the rain ceases the cultivation is kept up and the dry soil at the surface forms a mulch that in a most remarkable manner conserves the moisture below. Mr. Frank Kimball has an orchard of 10 acres now carrying a heavy crop of olives, that has had no irrigation for three years. To attain such results there must be a retentive subsoil and the best of summer cultivation. I thought, as I looked over this orchard so mellow that it resembled a garden just ready for seeding with not a weed in it, that we of the Eastern United States could take some lessons in cultivation of our California brothers. Yet most of the olive orchards will have to be watered once or more each Summer. Most of the water for irrigation purposes hereabouts is raised by large windmills from wells varying from 10 to 100 feet in depth; a few parties use steam engines. The water is stored in elevated tanks and supplied to the orchard through iron pipes and rubber hose. To irrigate a tree a cup, as it is called, is dug about it; that is, the ground is loosened and drawn back from the stem so as to make a cavity small if for a young tree, but often eight or more feet in diameter, for large ones. The water pours into this cup from the hose and soaks away to the roots below: when enough has been applied the soil is put back to its place again. Thus the tree is watered and the soil mellowed thoroughly about each, which is a great advantage.

So far all the olives raised hereabouts have been pickled; but this year the gentleman before mentioned will put up an olive press and extract the oil. This is, I understand, a simple process much like cider making, and the oil expressed is easily handled. So far the little oil manufactured in the State has found a ready market, I learn, at excellent prices. There seems to be no reason why olive growing should not become a business of great magnitude in California, and large orchards will no doubt be planted in many places. Thus another industry may be added to our list, and occupation be found for more people. Those who have studied it most, say that with present prices this business will pay about as well as orange growing. How this may be I cannot say, but I feel confident from what I have seen that the tree is at home in this section and that it fruits abundantly; so the primary condition of success is assured.

San Diego, Cal., July 10.

Farm Topics.

CORRESPONDENTS' VIEWS.

THE country along the coast here is well adapted to bean raising. We frequently see 100 acres in one field. Lima beans are raised here without poles. They are planted in rows four feet apart, and grow all over the ground. In the Fall they are cut below the ground with hooks or a plow made for the purpose. They are dried and then hauled to a tramping ground and tramped out. The yield is often from 15,000 to 20,000 pounds per acre.

Santa Barbara Co., Cal. G. H.

THE quality of our stock here is, as a rule, poor. It is improving, though. Quite a number of Jerseys have been brought in of late years, and have made their mark upon cattle, particularly on the town cows. Good grade Jersey bulls run at large and serve the cows. Grade Jersey cows are most esteemed in the towns for "family cows." A. G. N.

Marshall, Texas.

I LIKE the talk on butter-making by "A. E. S." Is it necessary to soak butter-tubs with sour milk? I always put in salt and pour on boiling water, let it stand covered till the next day, then turn the water off and scald again. [Many use sour milk, which is excellent for cleaning or removing the taste of wood. It is not "necessary," as hot water and salt will answer.—EDS.] The birds are unusually plenty here this Summer. We have a perfect colony of barn swallows, which seem to be disappearing in many places. We have 45 nests in a space of 30 feet. They ate the cherries faster than we could. Two robins had a most amusing quarrel with an old hen.

Tompkins Co., N. Y. E. L. B.

EVERY "practical" man enjoys hitting the agricultural colleges of the country. It is much easier to tell how to do a thing than it is to do it, and hence their advice flows as freely as water. Many of the agricultural colleges have been obliged to crawl under the sheltering wing of a "University" in order to die properly, but these same "practical" men are, in a measure, responsible for it. Farmers can safely make up their minds that they never will have any agricultural college until they interest themselves. In Michigan and Kansas where farmers have fought for such a college, sent their sons to it and defended it, there is very little growling about any failure. Farmers expect too much of these schools. They growl if a boy does not pick up in four years' time an amount of information that they could not acquire in a century. A college boy is obliged to invent answers or hear from all sides "you ought to know; you have been to college." These farmers would not trust their lives in the hands of a year's graduate at a medical school, and they would hardly put a law case into the hands of a young lawyer who had nothing but a college diploma to show. Why then blame an institution because it fails to disprove the old saying—"A fool can ask questions that a wise man cannot answer." Many of these same "practical" men are the most foolish specimens of humanity in regard to the education of their own sons. The little second-class colleges are filled up with farmers' boys. Will they make farmers? Not much! They are fitting themselves for cross-roads lawyers, country school teachers, and starving doctors. You can't make a first-class professional man out of a second-class scholar. The RURAL is right in saying that farmers can build up these neglected colleges if they really want to do so. Let them send their own boys there. There is a foundation for a good farmer's college in every State in this country. Send in students and there will be no cause for the growling we now hear. GRADUATE.

WHO have noted any ill effects from eating strawberries? We are told to eat all the fruit we can. I believe it is possible for one to eat too much. I am satisfied that several cases of severe constipation during the past season were caused by an excessive use of strawberries. It may be that some persons are more liable to be troubled in this way than others, or that the trouble was caused by the seeds rather than the berry itself, but that the fruit caused the mischief is beyond question. The fact is that the intemperate use of any article of food will render it harmful. C. H.

Bergen Co., N. J.

WE plowed up out of land that my father entered from the Government, a tool that makes the best thing we have seen for digging out burdock, thistles and such like weeds. The blade is four inches wide, eight inches long and three-eights of an inch thick. It is of metal like that of an ax. No one knows what it was originally, but for digging dock it is the best tool we ever saw. It does not tear up the sod like a spade. We fastened an old pitchfork handle to it. J. P. S.

Palmer, Ill.

I AM glad you speak well of the Early Harvest Blackberry. It produces a fine crop with me. Began to ripen June 16, and continued till the Snyder ripened. Snyder would not stand the drought, while Early Harvest was not affected. Glad to see that you begin to understand Prohibition. A. H. GRIESA.

Douglas Co., Kan.

I KILL rose bugs with a preparation consisting of one part sulphur and one part tobacco dust. Mix them well, apply in the morning when the dew is on the plants, three times a week. Dust the mixture over the plants. If rose bushes look yellow use barnyard water mixed with bone dust, one pail of the former to a pound of the latter. Put a half cup to each plant three times a week. It will restore the color. J. S. B.

Hightstown, N. J.

I SAW in a late RURAL an illustration of the Hilton Strawberry. I had a Sharpless that measured eight and one-half inches one way, seven inches around the other way, grown on a runner plant. Sharpless, Manchester, Parry, Atlanta are the four best out of 25 kinds. I have sold berries of these kinds up to the 16th of this month for 12 cents but when raspberries were selling for five cents. W. G.

Auburn, N. Y.

I PUT in two rows of Early Ohio Potatoes, flat culture. I wish now I had planted all my potatoes that way. Contrary to my expectations, they were easy to dig. No more hill business for me. J. I. C.

Detroit, Mich.

"HAY SEED."

T. H. HOSKINS, M. D.

I SEE that many of the agricultural papers are congratulating their readers upon the passage of the oleomargarine bill through the U. S. Senate. I fear the congratulation is premature. Among the Senate amendments I find, first, that the tax which made the bill ostensibly one for revenue, is retained, but lowered to two cents a pound. This retains the constitutional objection for whatever it may be worth, and at the same time makes the taxation feature valueless as affecting the profits of the manufacture to any practical extent. Certainly this was done in the interest of the oleomargarine men. But the fatal amendment was the insertion of the word "knowingly," which throws the burden of proof upon the Government in every persecution, to show that the dealer "knew" he was not selling genuine butter to his customer.

The old foxes of the Senate are happy, no doubt, at thus emasculating this "hay-seed" bill, which they feared directly to kill. Anyone who has ever been much about the halls of legislation, either State or National, knows full well the waves of ridicule and contempt that are set in motion there by the introduction of any sort of "hay-seed legislation." Such bills fare worse than anti-liquor legislation, because they, as a rule, have no such backing among the voters. They are despised, while the others are hated by our practical politicians; and this feeling is reflected in the general newspaper press, the witlings of which circulate the moldiest of "chestnuts" in reference to the subject.

"Why is this thus?" The business of agriculture holds at its control the bulk of the productive capital and employs directly and indirectly a large excess of the labor of the country. And, notwithstanding the current sneers that meet us daily in the press, the fact cannot seriously be disputed that far more men of intelligence and broad information are engaged in the conduct of American agriculture than in any other of our great national industries. That there are a large number of uneducated and more or less ill-informed men to be found upon our farms may be conceded, but facts will back this statement that the educated farmers of America constitute a very large body by themselves—a body that could numerously outvote any two or three other classes, I think any five or six of the leaders and directors of productive industry on this continent.

Why then are we so weak, politically? How is it that the legislative houses which are supposed to contain the ablest and most experienced of our public men are the houses where agricultural interests are least regarded, and agriculture (while often complimented to turn an elocutionary period) has no power to influence legislation? There can be no reason save lack of leadership and lack of union—of that union which is strength; strength that law-makers and law-dispensers will respect. Agriculture, politically speaking, is a giant—but a palsied giant.

It is the work of every agricultural journal, and of every agricultural organization, to make "hay seed" respected. Hay is our biggest crop, but where is "hay-seed" in politics? Away down in the bottomless pit of innocuous desuetude. It is said, in explanation, that the interests of American agriculture are so varied and dispersed that the farming element can never be made a powerful factor in our national affairs. I do not believe it. Old

political issues have died out, or have been settled. Industrial questions are now pressing strongly to the front, and are attracting the attention both of practical and scientific politicians, of legislators and political economists. The greatest of all industries is agriculture, and the greatest of all public questions is the question of agricultural prosperity. It should be the foremost subject of discussion, but it is hardly discussed at all. Even our best agricultural journals do not handle the political relations of agriculture with any mastery of the subject, while elsewhere in the press and the forum it is all but utterly neglected. What American political economist has made himself noted, or even known, as an educator of the farmers in the matter of their public rights and duties? Our greatest of industries, the fundamental industry of all, attracts the least intelligent attention, the least thought and the least activity of all. Are we going to do anything about it? Probably not until we are absolutely compelled to do so.

Orleans Co., Vt.

COOLING JACKET, A SUBSTITUTE FOR ICE.

THE hot weather is now upon us, and many have no ice to cool the drinking water. If they had ice-water, it is not a safe drink for perspiring harvest-hands, and on the other hand, warm water is not pleasant. Cool well or spring water is the ideal drink, and how to keep it cool in the far-away hot field, is the problem the cooling jacket solves.

Procure a large jug, and cover it to a thickness of half-an-inch with one or more layers of any kind of coarse cloth, carpet or other material. When filling the jug, saturate the jacket with water. Keep the jug in a windy, shady place, and the evaporation of the water in the jacket will absorb enough heat to keep the water in the jug pleasantly cool.

A tin pail, fitted with a very fine wire gauze lid, and a heavy saturated jacket, set in a raised, shady window, furnishes a far better place to keep milk pure and sweet than nine-tenths of the household refrigerators, which usually contain a little of everything else but sweetness.

I. P. ROBERTS.

Sheep Husbandry.

Notes from the Western New York Farm.

BETTER PRICES FOR SHEEP.

IN a recent trip into and through Central Michigan for the purchase of ewes for my winter lamb raising, I found sheep scarce, the market very strong and few for sale at any price. Those people who last year heeded the RURAL'S advice to hold on to the sheep for better times are now happy. Such sheep as one year ago were sold for $1 (many less) thousands of which were slaughtered for pelts, hams and tallow, are now quickly taken at from $1.50 to $2 each.

As might have been expected, the very persons who sold their sheep last year at these ridiculous prices are now eagerly paying double the money for sheep no better than those sold, and can hardly get what they want even then.

The immediate causes of this change are the real scarcity of sheep, and the rise of five or more cents per pound in the price of wool. The scarcity of sheep is caused by the insane slaughter of thousands, as before mentioned; the loss of millions of sheep in Texas, caused by the protracted drought and also by the neglect of hundreds of farmers to breed their ewes last Fall. The advance in the price of wool is caused by the short clip in this country due to the decreased number shorn and also by the diminished Australian supply due to the loss of millions of sheep by the excessive and long continued drought. It is needless now to preach a sermon on the folly of being disheartened and going out of sheep every time there is a depression in the prices of sheep and wool. Every one can now see the folly of such a course.

Those most badly discouraged last Fall are now most eager to buy, and as a result I think the prices of sheep likely to go unreasonably high, and unless men are very careful about what they buy, and how they care for what they buy, they may find that they have again made a mistake. It is a safe rule to keep steadily on with the flocks, carefully weeding out the poorer and breeding with a view to increasing the size, improving the form and securing increased length and fineness of staple and freedom from an excessive amount of grease, and the largest quantity of cleansed wool. Even in the worst years if the lambs are well cared for and sold, with wool even at the past low prices, sheep will pay as well as any other product of the farm, and sooner or later the change will come, as now, and then the profits will be beyond those from anything else. Besides all this, nothing so much assists in keeping the farm free from noxious weeds as a flock of sheep.

WILL THE ADVANCE BE PERMANENT?

I am asked this question daily and many times each day. Of course, everybody will now rush into sheep, and likely many will refuse to sell even the older and those that for other causes should be sorted out and fattened. The tendency of such a course is to rapidly increase the flocks; but it will take several years to make up the numbers lost by drought in the various sheep countries and those slaughtered, and before such time we are likely to have better times through a general revival of business, so that I firmly believe it will be many years before prices will again be as low as in 1885.

I have the ewes now all home and the males put with them, and some of them have been together for more than a month. I am greatly in hopes of being able to send some lambs this year in time for Christmas dinner.

Through the solicitation of Mr. James Wood, of Mt. Kisko, N. Y., who has one of the finest flocks of Hampshire Downs in this country, I shall try a male of that breed on one bunch of my ewes. The Hampshire has more size than either the South Down or Shropshire, and it may be that I shall find this cross superior to the Shropshire. I have just received a ram from Mr. Wood's flock, and shall try him carefully as a guide for the future.

Wheat is now all cut and is a correct index to the character of the farmers on those farms on which stock is fed and plenty of manure made, or on those farms on which plenty of fertilizers have been applied. The crop is good; on some very, very good. The field of hand-picked Diehl-Mediterranean is very stout and would not take second place in the very best wheat years. I think it will thrash out away above 40 bushels per acre. It has come very true and yet I have found a half dozen or less heads in every way like the other, except that they have no beards. I shall make a further selection, as this is without doubt the best wheat in this county, and is worthy of being perfected.

I have several of the RURAL'S crosses, and among them a cross between Fultzo-Clawson and Landreth; also one between Diehl-Mediterranean and Landreth. Each of these has already broken up into many very distinct types, some of which are wonderful in their promise. I shall be greatly surprised if from one or other of these crosses a wheat is not produced that will repay this country a thousandfold for all the RURAL ever cost. Few realize what its editor is doing in systematic, honest experiments.

J. S. WOODWARD.

Dairy Husbandry.

DAIRY NOTES.

THE same trouble exists among dairy farmers in England as in Wisconsin, according to Prof. Arnold. They, too, are struggling to make milk and beef from the same animal, and many of them eschew all the advantages they might reap through co-operative dairying. He says: "The idea of beef in a dairy cow appears to be inseparable from the minds of English dairymen generally, as well as from the minds of many dairymen in the United States; but beef dairymen, wherever met with, are the men most generally found struggling at the wrong end of the car of progress." He further says that he listened to an essayist who had for his subject the "Selection and Management of Dairy Cattle," and after describing 13 breeds of dairy cattle, in his innocence and hide-bound prejudice he outlined the pedigreed Short-horn as the model dairy cow, and gave her points and curved lines, so as to put in as much "beef and beauty" as her skin would hold! No doubt the old Professor gasped, and wondered whether he had crossed the ocean to be thunderstruck with such wisdom!

* * *

I hear of one sensible dairyman in Dodge County (W. T.), who, finding his pastures "brown and bare" from the parching drought, instead of lamenting that all was lost and proceeding to starve or sell his 40 good cows at half price, put them into the barn to keep them out of the burning sun's heat, and fed them all the bran-slop and old forage they would eat, and thus, in a sense, he defies the drought to dry up his cows. The result will be the milk will pay for the bran in cash down and he will have made a deposit of about 80 per cent. of the cost of the bran in the bank of the farm—the manure—which he has increased in value so much, and which he can draw checks on next year in increased crops. Besides, it is going to rain some time, and when it does, and his pastures are again green, he will have rollicking, well-fed cows to earn big money at making butter and cheese in the Fall, when the prices are higher. Why don't farmers who can add figures correctly and reason a little, see it, and save their cows? No matter what may be the price of butter and cheese to-day, if a man owns a good cow, it would be as stupid for him to let her starve, or half starve, as it would be to let his property burn for the sake of saving the water it would take to quench the flame. It doesn't take any long-invested capital, either, to save the cow; for her milk, if kept flowing, will pay every day in cash for what she eats. Unlike an unemployed horse, she works every hour of her milk-giving life at earning money; and to feed her is only to lend her money on the shortest of time and on the best of security.

* * *

I disagree with the cheeseman of the Chicago Live Stock Journal, in imputing fine pin-holes in cured cheese to tainted milk. They are present in the sweetest and cleanest flavored cheese, and are the result of putting the cheese to press with the curd not acidified enough to take them out. A badly tainted curd can be held till the cured cheese resulting will be as solid as butter. It is all a question of acid developed; though it is admitted it takes longer to eliminate the gas from sweet tainted milk than from that clean-flavored. Probably nine-tenths of the fine cheese of the world are not entirely free from fine pin-holes; and to teach the novice that when he sees them, he is to draw the conclusion there is rotten milk present, is to slander the cheese, and excite his disgust without cause.

* * *

With regard to the action or rather inaction of the dairymen of the country in relation to oleomargarine legislation, the Chicago Live Stock Journal says that dairymen and farmers generally are a wonderfully slow and impracticable class when it comes to defending themselves or their calling from assault. Scattered and unorganized, they stand with folded hands, wondering what is to be done, while the enemy goes on doing. Somehow, they expect somebody will rise up and defend them, or they will be saved by some sort of miracle. Witness the fight that has been going on for months against the counterfeit butter gang. What are the dairymen and farmers, as a body, doing? The whole brunt of the battle has been thus far borne by a few men, who have not only done the fighting, but furnished "the sinews of war."

The enemy is alert and energetic, while the dairymen take no active interest, and apparently expect somehow to be saved by a sort of miracle, or fortuitous turn of events. Let them remember the adage: "God helps those who help themselves," and come to the front and report for duty.

* * *

The truth is they are unorganized and partly dazed by the audacity of the assault upon the solid old industry the cow stands at the base of. They are like the mighty North before Fort Sumter was fired on—their wrath not yet kindled into a sweeping flame. But if betrayed now they will be like what the Massachusetts Captain said the North was—"Hard to start, but a sight harder to stop after they got to going."

The truth is the case is so plain that the mighty mass of farmers and consumers assume their representative Congressmen and Senators need no urging to pass the laws outlined by the House Bill. If these want to learn what scorn and wrath mean, they will have a chance if the bill fails to become a law. In such case there won't be any skepticism about there being a "hereafter" for such of the politicians in the dairy districts and dairy States as help to defeat or fail to stand up for it. "He who is not for us is against us," and will have to drain the political "hemlock" to the dregs.

"BADGER."

Wyoming Co., Wis.

DOING THE "ODD" THING.

MANY times it pays to do the "odd" thing, or that which others in the community neglect. A friend of mine went "out West" and located in a cheese-making district. He found that farmers sold all their milk to the factories and got rid of the calves as soon as they could. My friend had a little ready money to be used as capital. Instead of selling his milk to the factory, he went to raising heifer calves. He bought a fine Holstein bull and offered his services for a very low price on condition that the calves should be his if he wanted them. It kept him busy picking them up and bringing them home. The steers and the poor heifers he kept a few weeks and then sold them to the butchers. The best

DEWEY STRAWBERRY. From Nature. Fig. 308. (See first page.)

SEEDLING NO. 65. From Nature. Fig. 309. (See first page.)

heifers he kept and crowded them into cows. He fed his milk, oil-meal, bran and all the skim-milk he could pick up. People laughed at him because he did not turn his milk right into cash, but he beat them in the long run. The very men who gave him the calves came and bought the same calves back after they had grown into cows, and they had to pay a round price, too. A man could not do this unless he had money enough to carry him through a year or so, but he is sure to get his pay in the end. It seems to me that there are plenty of places yet where this plan could be worked. C. W.

Plymouth Co,, Mass.

A CONVENIENT ROOM FOR DAIRY WORK.

The room shown at Figs. 310—311 was built on the east side of the stable to have it conveniently near the house. The pump is the width of a carriage-drive from its door. No offensive odor reaches the milk-house from the stable, and if there did, it would not affect the

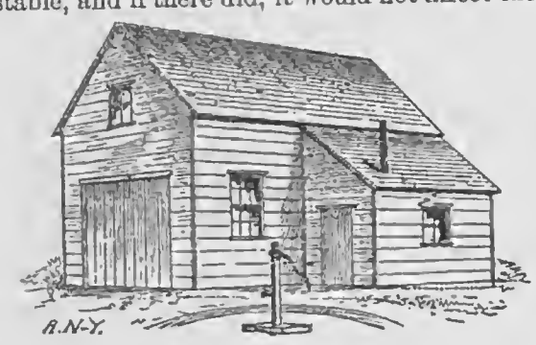


Fig. 310.

submerged milk, the cream being all raised in a Cooley Creamer. Most of the milk and cream is sold in town, so our milk-house is used to wash a large number of cans in, varying in size from one to eight gallons. Of course, in lifting the dripping cans from the tank, and in washing the large vessels, there is more or less slop every day, and to clear that away in the easiest way, I have made a slope in the floor in two directions, so that the spilled water makes its way toward a little outlet made for it in the north end of the building. The slant in the floor is not noticeable to the eye, but the water readily finds it, and when the room is ready to be left for the day, a little dashing on of water and broom service soon leave the floor clean. The little door where the water runs out (see Fig. 311),

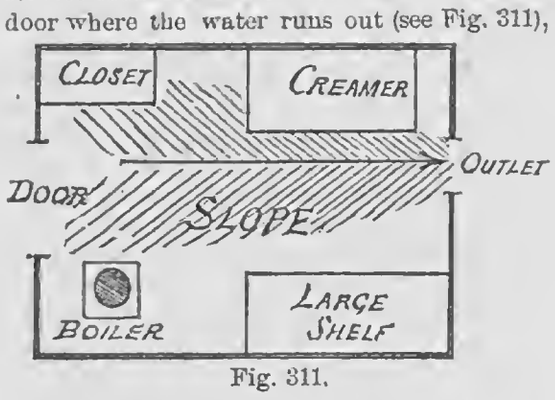


Fig. 311.

is 18 inches square. A drain carries the water away—that which is swept out and the overflow from the creamer. The sleepers were laid a trifle lower at the north end, and were hewn down a little to make the two slopes. In arranging the places for the cans, etc., no stands with legs were allowed. They would make trouble in moving when the daily floor washing is going on. Shelves are used, and where the largest utensils are placed, a large shelf was made, two feet from the floor, with bracket supports, and to make it stronger it is suspended also from the rafters above. Another shelf was made above this for covers, etc. In the corner near the door stands a large furnace boiler in which the water for washing the cans is heated. It is large enough to roll an eight-gallon can in it, and here the cans are scalded. MRS. S. E. H.

Greeley, Colo.

The Poultry Yard.

HINTS ON POULTRY.

HENRY HALES.

Caution needed in beginning poultry raising; poultry raising mania; exaggerations of profits; necessity of study and investigation; profits come from care and knowledge.

At the present time poultry is commanding more than usual attention. Poultry journals are springing up like mushrooms. It is only about twelve years ago that the first was published, when the Poultry Bulletin made its appearance as a new venture; now there are a great many all over the country. Incubators and brooders are being manufactured with many different devices for regulating the heat, each one claiming some peculiar advantage. The sale of these incubators has assumed large proportions, and the advertisements are of a captivating character, considering how many people like to make a living easily. Many people are embarking with great hopes and little capital in a business they are quite ignorant of. They see the chicks hatched in the machines (as they are called) and they suppose the hardest work is done. Now, I am not speaking to the fancier who well knows the uses of the incubator; but to those who have had no experience in the poultry business and are apt to suppose chickens are easily raised in Winter for early broilers at immense profits, nor am I saying this cannot be done. I would simply call attention to the expenses after a fair deduction for losses, and the labor that must be expended. In raising those early chickens few people without experience can tell the care, warmth, food and time it takes to raise 100 such chickens. They are apt to be carried away by their own feelings rather than to look fairly into the circumstances. In just the same way there was a trout-raising mania a few years ago, which led many people to spend large sums of money in preparing brooks and ponds for the raising of trout, which were to realize one dollar a pound in the market. The trout were easily hatched and those who were first in the business made money by selling the young hatched fishes, but who ever heard of a pound of trout so raised ever reaching the market? And it will be a long time before our markets are over-stocked with early hatched broilers.

In saying this I do not wish to discourage those who contemplate keeping poultry, or even raising them for eggs or for the market; but I wish to offer a caution against persons being led astray by misrepresentation or their own heedlessness. It is one of the chief objects of the RURAL NEW-YORKER to set people right in the various departments of agriculture, fruit-growing, stock, etc., without fear or favor, and I see many such general acknowledgments in the press that there is no doubt that it is doing the public a good service that should be generously acknowledged. In regard to poultry, the very highly-colored exaggerated accounts of the great profits and little labor in raising poultry, that appear from time to time in some papers, are apt to do more harm than good to the legitimate business of poultry-keeping, and should therefore be discountenanced by all fair, honest people, who are well enough informed. There is profit in poultry as an adjunct to the farm. Poultry-keeping is one of the most profitable departments of farm work when properly conducted. Most farmers know this, and many take fair care of their stock. But those who are totally unacquainted with the business should take good care to get well informed before embarking in it too deeply. They should find out the state of the markets in the locality where they wish to locate; the suitability of the land for such purpose; the amount of capital required, to say nothing of the many things to learn in respect to the practical part of the work, such as the best breeds for the purpose intended, whether for the production of eggs or the sale of the birds; the proper kinds of buildings, yards, etc. Then there are the interior fittings of nests, perches, dust baths, feed hoppers, water utensils and ventilation. Incubators do, and will play an important part in the business under proper management; but too much must not be expected of them. Too much is generally at this time claimed for them. Much stress is laid on their keeping the chicks free from parasites; but what practical poultry man will allow his birds to be tormented by such vermin? It is as much a poultry-raiser's business to look after such things (and to a practical person it is not as much trouble as some suppose) as it is to feed and otherwise care for his flock.

The feeding of the young chickens with suitable food, to keep them growing and in health, is something to learn. One should also know the best temperature and the right sort of ventilation for their health. He should also be well acquainted with the cause and symptoms of poultry ailments, so as to be able to tell what is the matter when any get sick, and to decide promptly what to give to check or cure the trouble before it infects the whole flock. When the birds are old enough to lay and eggs are scarce, then comes the test of the business capacity, to know how to induce the hens to lay, by judicious feeding, proper warmth, cleanliness, etc. All these things can be learned by a person of ordinary intelligence, but can only be put to practice by more than ordinary industry to make a successful business of poultry raising. The whole business is made up of apparently small details, which must not be in the least neglected if success is to crown the undertaking.

Rural Topics.

FARMING IN NEW ENGLAND.

I own about 110 acres of land away down here on Cape Cod, about the last place where one would think of farming for profit. I am a blacksmith by trade; have worked at it more or less for 40 years, but my farm has paid me better than my shop has ever done. The man who occupied the place before I bought it, kept one horse, one cow and sometimes raised a calf. The year I bought the place, I cut from a quarter to a half ton of grass; now I get eight or ten tons, and some seasons more. The farm is now worth four times as much as it was when I bought it, and here is some account of what I have done by way of improvement.

In 1853, I began to plant forest trees—mostly pine seed. I had hills and barren places which bore nothing but poverty weeds; there I planted the pine seeds. Now I have about 18 acres of quite valuable wood-land. On the place I had a swamp and boggy marsh of little account as it was. I commenced working it into a cranberry bog. From it I obtained a lot of muck and peat, a good material for cows, pigs and hens to work into dressing. My land joins a salt water pond, from which I get plenty of seaweed, which is quite an item for bedding and dressing. I keep six cows in Winter. I run a milk-wagon the year round. In the Summer I keep nine or ten cows. We have so many people from the cities at that time I can sell all the milk I can make, at seven cents per quart. My land is all within fence. I cultivate about 16 acres; the rest is for pasture for the cows.

Most of my fences are hedge, made from red cedars set when small; they are very easy to transplant. In some places I bend down oak and pine trees. If this is done at the proper, time they make the best of fence; but if neglected, as it often is, until the cows get out in June or July, and the trees are then cut that ought to have been bent down in February or March, they die out and the hedge is condemned. I have seen lots of this kind of management. I keep from 300 to 400 hens. We think they pay very well; but, like other things, they want care and attention. I set from one-quarter to half an acre of strawberry vines every Spring. I have apple, pear, peach and plum trees, also grape vines, all of my own setting. I have about three-fourths of an acre for garden truck.

We are not all alike. What may be satisfaction and enjoyment to me may not interest others. I am pleased to look out on the acres of green forest trees I have planted. I love to see the fields of green grass, of corn and oats and rye; and the cranberry bog, too, with its rich harvest. I enjoy the springtime when the fruit trees put forth their buds and blossoms.

Now I would not give to young men the advice Horace Greely gave, "Go West;" but I would say stay East, buy some run-down farm, or some place that has never been improved as it could have been. There are plenty of places here in the New England States, that can be bought very low. People still go West, and their farms are sold at auction for less than half the cost. The young men go off, thinking they can do better elsewhere, but the current will set back again in time. No, I would not exchange the rough and rocky hills and valleys and sandy shores of Cape Cod, here in New England, for the rich prairies of the West.

Our land is poor, I know, but what we raise is worth something. We don't raise corn for fuel, nor sell our milk for two or three cents per quart. We never yet have been exposed to cyclones or blizzards.

I think if a young man will settle down on some place with his mind fully made up to stay, then with proper management and economy, with willing hands, he will succeed in getting a comfortable living here.

Osterville, Mass. S. L. L.

Farm Economy.

TRAP FOR DRAIN.

Robert Crain, Jr., of Bucks Co., Pa., was greatly troubled for a time by having rats, snakes and other vermin crawl into his drains during dry weather. To prevent this nuisance he uses the trap shown at Fig. 313. The

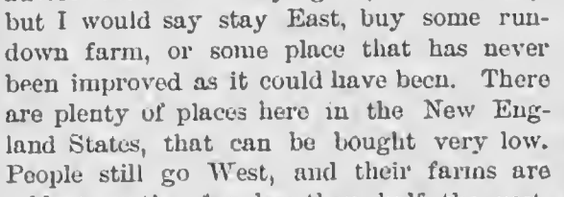


Fig. 313,

end of the tile is cut away, as shown. The trap is made of galvanized iron, heavily wired around the sloped end for the lid to rest on. A brass hinge is used, to prevent rusting. When the water flows down through the drain the trap is lifted by the force of the water until it assumes the position *a*. When the water stops flowing, the cap falls of its own weight until, when the water ceases, the opening is closed. Mr. Crane found that muskrats crawled up his drains into the fish pond to destroy the carp. One of these traps placed at the lower end of the drain prevented any further trouble. One placed on the end of the house drain will give good satisfaction.

HANDY PARING KNIFE.

F. H. Rood, of Wyoming Co., N. Y., makes a very serviceable knife for paring apples, potatoes, etc., as shown at Fig. 312. With a cold chisel cut a piece off an old scythe ¾x6¾

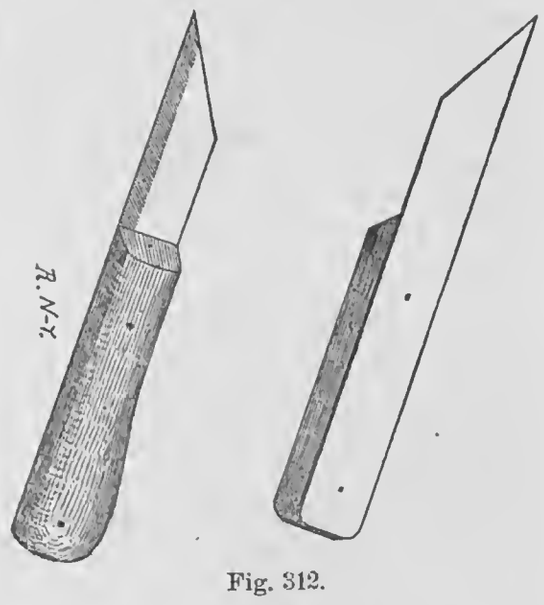


Fig. 312.

inches, and cut one corner away so as to make the point shown in the picture. Make two holes, one one-half inch and the other three inches from the handle end. For handle take a piece of hard wood—hickory, ash or iron-wood—one-half inch thick, three-fourths of an inch wide and four inches long, and fasten on with screws or rivets. This knife is much handier for paring than one having the handle on both sides of the blade.

What Others Say.

Wood Litter vs. Straw for Bedding.—B. E. Fernow, in a paper read before the American Forestry Congress, calls the attention of farmers to the value of what is known as lumberman's waste, which includes not only sawdust, but edgings, shavings, brushwood and other wood litter, for bedding and manurial purposes.

It is claimed in this paper according to the N. Y. World—we have not seen the paper—that wood litter makes a better and cleaner bedding for cattle than does straw; that the cleaning of cows requires only about one-fourth the time that it does when straw is used, for the liquids are at once absorbed and the dry excrements are quickly enveloped with wood fiber, preventing the soiling of cattle. The removing of the bedding requires less time and the air of the stable is less damp and kept purer in consequence of the total absorption of all moisture and the slower decomposition of the urine, which, especially in horse stables, where ammonia is quickly formed, seems to be of importance, and a guard against sore eyes and other diseases.

Mr. Fernow gives the assurance that the manure from wood litter is better than from straw because it binds the liquid excrements better and retards the decomposition and loss of valuable plant food, especially the nitrogenous compounds. The mechanical effect on the soil he believes to be in no way inferior to that of straw manure. That humification of wood manure goes on more slowly he does not deny, but he thinks this may even prove an additional benefit when the process of decomposition takes place in the soil instead of in the manure heap, and the soil profits from the heat due to the chemical action and retains the ammonia developed.

M. Pasteur's New Quarters.—A most extraordinary museum has just been opened in the Rue Vauquelin, of Paris, says the London Farmers' Gazette. It is difficult to say whether it should best be called a museum, or a factory, or a farm, or a menagerie. It is in fact all four combined and grouped together for a purpose hitherto untried, and presenting an appearance hitherto unparalleled. These are the new head-quarters of M. Pasteur, and here are to be found cow-houses, sheep-folds, fowl-walks, rabbit-hutches, and dog-kennels. They are all, moreover, fully occupied. On one side is a laboratory, where the vaccine soups and preparations are made up. Above it a museum, where specimens connected with the new cure are exhibited. There are operating rooms and rooms for post-mortem investi

gations and dissecting purposes. Two of the kennels are devoted to dogs in various interesting stages of early or advanced rabies. "Hen cholera" is communicated, watched, and cured in the fowl house. The cattle exhibit various stages of vaccination. Human beings have also their provided quarter. A spacious waiting-room is set apart for patients, who troop in daily in picturesque groups—according to the French press—representing all nationalities. In the meantime the great *savant* occupies the former quarters of the Pasteur Institute in the Rue d'Ulm, and devotes himself in dignified seclusion to scientific research.

How to Sell.—It is estimated that about one-half of those who sell farm produce get an average of 10 per cent. less for their goods than they otherwise would owing to inattention in selling. The National Stockman discussing this subject, says a great many people sell their grain and their live stock and their hay and their wool for a little less than they could if the matter of selling were more thoroughly studied; but the greater losses come in the handling of what are usually considered the lesser farm products. The time of selling is a most important consideration, and in the products enumerated is perhaps as great as any other; but in these the manner of putting up, shipping and placing in the hands of the consumer is of no less consequence, while in the lesser products these may be said to be almost everything. In butter and eggs and poultry and fruit and vegetables, nearly all of which must be sold when ready, a proper observance of all these things means a difference of from one-third to one-half in the prices obtained. Here are some questions which the farmer should answer: (1) In what form will my product best please the consumer? (2) How can I get it to him in the freshest and best condition? (3) How can I lessen the expense of transportation between us? (4) How can I most directly reach him without the intervention of too many others to share my profits? (5) How can I best become known myself as a prompt and careful shipper of a choice article of my own production? (6) What does my market most need that I can furnish it, and where can I find the best market for all I have to sell?

Good Health in Mating Stallion and Mare.—In breeding horses, and indeed other animals also, many failures may undoubtedly be attributed to ill-health of sire or dam at the time of coupling. A recent author on horses says: "We must begin by pointing out an old and commonly practiced act of negligence, which not only every veterinary surgeon, but every medical man, and all students of animal constitution, would concur in decrying, namely, the want of proper attention to the actual state of health of horse and mare at the time of mating. It seems never to strike breeders that before allowing a mare to be served they should at least take the trouble to ascertain if the horse is in good health; for it cannot be taken for granted that because when robust and in strong exercise a stallion has fathered an Eclipse or a St. Simon he will be capable of begetting similar stock when ill and uncared for."

A writer in the London Live Stock Journal says he believes it is essentially necessary to have stock in perfect health for breeding, and no matter how well you may have mated your mares, if they are out of health or badly fed on inferior diet, you cannot expect to get a well-developed fœtus that will grow into a good muscular horse.

Hurrah for Us! In a recent work by Andrew Carnegie, of Pittsburgh, a Scotchman by birth, and now an American manufacturer, the author gives many interesting facts showing the progress and prosperity of his adopted country. He states that during last year 74,000 more tons of Bessemer steel were produced in the United States than in Great Britain; that more yards of carpet are made in Philadelphia and the vicinity than in all England, Wales and Scotland; that the school libraries alone in this country contain 12,000,000 more books than all the public libraries of Europe combined; and that all the State and City debts of the Union added together, rating them according to valuation of property, do not amount to one-fifth of the city debt of Manchester, Eng., or one-tenth of the debt of Birmingham.

Public Official Seed Testing.—The French Government has opened a most valuable office in Paris, and the idea might well be adopted in this country. This office is for testing the quality of all seeds as to purity, soundness, vegetative power and freedom from weed seeds. If we had such officers, under proper control and backed by governmental authority, where for a fee of a few cents a farmer could have a legal test and a guaranty for his seeds, it would be a long step in advance. Why shouldn't we have such officers? Seedsmen might kick, but the public would be greatly benefited.

The Cows that Pay.—If a whole herd of say 20 cows will average 10,000 pounds of milk without weeding out or testing individual cows, then in all probability at least 10 of them yield 6,000 pounds, and perhaps the other 10 only 4,000 pounds each. In such a case it is easy to see, says the National Stockman, that the best 10 cows pay a liberal profit, but half of this is lost in making up the deficiency of the other 10. It is good practice to weigh the milk of each cow once a week for the season, and then weed out those that do not come up to a profitable yield.

BY THE SHORT WAY.

Prepare the land for wheat as early as practicable.....

Go over the field and sweet corn and cut out the plants where too thick for the cattle. This will help the corn crop as well as the cattle.....

Try buhach or Persian Insect Powder for the cabbage worm. Wet a tablespoonful of powder with alcohol—stir this in a pailful of water.....

Prepare the plots for strawberry plants. Cut out the old canes of raspberries.....

Thin out the beets, clear up the pea haulm and plant late cabbages or celery plants.....

Nip off the tops of Lima bean vines . . . Care for the tomatoes. If in the garden, three stakes to each plant with two cords around make a firm support. It is better to stake them now than to leave the plants to sprawl over the ground, unless the supply promises to be greater than the demand. As a matter of profit, it does not pay to stake tomatoes.....

It will pay farmers at this time to kill every potato-beetle and grub. The second brood of beetles is now appearing.....

Look to the branches of pear, apple and peach trees. If thinning the fruit is not desired, see that supports are provided to prevent the branches from breaking.....

We can never rid our gardens of purslane by merely hoeing up the old plants. They mature millions of seeds, which will germinate even when green. Either destroy the young plants, or prevent the seeds from growing by frequently stirring the soil.....

Carefully *cut* off the pickles when of the desired size. *Pulling* or twisting them off injures the vines.....

If the soil is dry, the early matured potatoes may remain in the hills, but if wet, they had better be dug and stored, or rot will surely ensue.....

It is now a good time to layer such plants as do not freely root from cuttings. We have sent hundreds of cuttings of the Victoria Grapes to friends, and many have reported that they did not "strike." It is the same with many other varieties of grape-vines. The lower strong shoots may now be easily bent into the soil and held there until well rooted.....

Henry Stewart's flock of sheep on his North Carolina farm has recently been damaged to a considerable extent by hounds, which were permitted to go at large, wandering abroad day and night and trespassing where they will. And yet there were four bell sheep in the flock. Those persons who write so fluently, but so falsely, that dogs will not attack a flock in which a few bells are distributed mislead their readers and do mischief. Bells are no safeguard whatever....

An Ohio onion planter says that he sowed half an acre to onions a few years ago. They came up splendidly, but soon the maggot commenced to prey on them, and continued to do so until he became discouraged, and he thought if they continued to eat one week longer his prospect for a crop of onions would be ruined. He sent and got five gallons of tar and put one gallon into 40 gallons of water, and stirred it up thoroughly so as to give it the tar scent. He sprinkled his onions over once with this tar water, doing it with a common watering pot. He saw no more effects of the maggots, and had a nice yield of onions. He thinks that the scent of the tar water drives the fly away, and it was by this means that he saved his crop of onions.....

Farmers will now be thinking of stowing eggs away for Christmas, says a writer in the London Farmers' Gazette. Some have already done so. Generally in this month, when hens are laying well, he begins to place a few away in small earthenware vessels. The simple plan adopted is adding 1¼ pound of salt to a gallon of water. Boil this 20 minutes, and add two or three spoonfuls of quicklime. When cold, place the eggs in the liquid. He finds them to keep excellent to taste and like new-laid eggs for six months. This is, he is sure, worth a trial.....

The hides of over 1,000 horses are used annually in New York for covering base-balls. From one hide, it is said, the covering for 12 dozen balls can be cut.....

"The New York Tribune has reduced its agricultural department to four columns" says the Rural New-Yorker. "It ought to be added," says Mr. Stiles of the Philadelphia Press, "that this reduction is only temporary. Mr. Crandell, the agricultural editor, who has never before taken a vacation, is now enjoying a little well-earned rest. When longer evenings and the season of lighter work give farmers more time for reading, Mr. Crandell, with regained health, let us hope, will fill his pages as he has done with such success for many years."

We are mighty glad to hear it, though Mr. Crandell did not mention anything of the kind in a late call. We did not suppose he could bring himself under any circumstances whatever to lighten his load even for a week. The farm departments of the Press and Tribune are turned to and read by the writer of this note with more alacrity than are the columns of the average agricultural paper, and we don't like to see them tampered with by the editors-in-chief.....

A correspondent of Puck says that a milkweed is the proper thing to plant on a milkman's grave. Puck suggests that a water lily is more appropriate.....

There are 150,000 milch cows in New Jersey, according to the 10th census of the United States, requiring annually about eight million dollars' worth of food, a large enough sum to justify the consideration of methods in feeding them and to warrant the examination of the kind and quality of feeding stuffs offered for sale in the State.....

Mr. J. M. White, of New Jersey, says that observation leads to the belief that many cultivators do not rightly discriminate between the "yellows" and the effects of the borer, and many times attribute the effects of the one to the other.....

It may be a pretty big job to keep the flies out of the stables entirely, but it ought to be done if possible. The annoyance from flies while in the stable is often harder on the horses than hard work in the field.....

India is shipping wheat to Australia: 50 tons left Calcutta for Adelaide the other day in one shipment.....

The House of Assembly at Melbourne has introduced a bill providing for a system of irrigation, embracing an area of 3,250,000 acres. The system is expected to prove of immense benefit to farming interests in the colony of Victoria.....

Last year New Zealand exported 24,923 cwt. of butter at about 18 cents a pound; in 1884, the exports were 15,205 cwt. at a little higher price. She sent abroad also, in 1885, 10,353 cwt. of cheese averaging about 10 cents per pound.....

In England "new milk" is being regularly sold at many railway stations. Boys take it round to the passengers in cans made for the purpose, and sell it at four cents per half-pint glass.....

For the last six years or more there has not been published an issue of any English agricultural paper—so far as we can remember—which does not contain at least one article on "Agricultural Depression."

An expensive "Guide Book to the Dominion" and immigration pamphlet just issued from Ottawa, Can., contains the following valuable agricultural information: "Seed time continues, according to the season, from the last week in April until early in May." The British farmer, for whom the work is particularly intended, will be apt to consider this a rather short seeding time.....

The Del Rio Dot is edited by a young lady She remarks: "Man proposes; but it sometimes takes a great deal of encouragement to get him to do so."

Everywhere.

TRANSCONTINENTAL LETTERS.—LVI.

MARY WAGER-FISHER.

A citrus fair; citrus growing in Northern California; hardiness of orange trees; the northern citrus belt; lemons and other fruits; licorice growth; seedling oranges and lemons.

All the way down through the Sacramento Valley we were surprised to see so many orange trees in fruit, as it had not occurred to us to see citrus fruits north of San Francisco. So when in January the announcement was made that Northern California would hold a citrus fair in Sacramento I was eager to see it. But a San Francisco gentleman said to me: "Oh, if you want to see citrus fruits, wait until March and go to Los Angeles and Riverside. They can't raise these fruits to any amount in Northern California." So I gave up going to the fair, but the fair, after "electrifying" Sacramento, was accommodating enough to come down to San Francisco, where, of course, I went to see it, and San Francisco in turn was "electrified." Southern California was quite up in arms that the northern and central counties of the State—Shasta, Sacramento, Butte, Yuba, Placer, Tehama, Yolo, Sonoma, Calaveras, Amador, Napa, Colusa, Sutter, Solano, Navada, Tulare, Lake, Santa Clara, El Dorado and San Joaquin—should presume to raise citrus fruits of splendid appearance and excellent quality. The fair was a popular exhibit, very hurriedly conceived and executed, but in every way a perfect success so far as the exhibits were concerned. Although oranges have been growing in a haphazard way—seedlings mostly—in Northern California for 20 years, it is but very recently that the people seemed awake to the fact that they might be raised to great commercial profit, as well as for ornament and home use.

The citrus belt extends from the base of Mt. Shasta to the San Joaquin Valley, extending to the eastward up into the foot-hills to a hight of one to two thousand feet, and has an area of about 40,000 square miles. Orange trees are hardier than lemons, and they are so hardy that they grow in some counties where the snow lies in their branches for five weeks in Winter. Indeed, the extent to which the tree may be rendered hardy, has probably yet to be thoroughly tested. The summer heat is great in the Sacramento Valley, the trees have to be irrigated, and the fruit is ripe early in December, so as to supply the market at Christmas time. Placards were up all around in the Exhibition Hall, to inform the public that land in the citrus belt could be had from $10 to $50 per acre.

After looking over the exhibit very carefully, I thought that the finest display of oranges was made by Placer County, although Sacramento and Butte were not far behind. One party in New Castle (Placer Co.) has an orange grove of 200 trees; another party one of 250 trees, from which 18,000 oranges were picked this season, up to January 2. The shipments of oranges from New Castle amounted to 53,378. St. Michael, Mandarin, Navel (a seedless orange and very large) and Mediterranean Sweets. In addition to oranges, the exhibits from this county included lemons in variety, very large and fine olives, olive oil, almonds, figs, dates, pumalos (a pear-shaped shaddock), chestnuts, walnuts, Japanese tea, tea seed, and January roses. Sacramento County sent soft and hard-shell almonds, walnuts, Japanese persimmons (they grow beautifully in Alameda Co.), a large variety of oranges and lemons, olives, olive oil and licorice root. The licorice root was grown six or eight miles from Sacramento City, and the grower told me that it grew like Alfalfa, with a very long tap root from 10 to 20 feet deep in the ground. The lateral roots are preferred by druggists, who sell it dry at one dollar a pound, and buy it of the grower, dried, at 14 cents. The top, he said, looked like a young locust tree. This same man had a fine exhibit of olives, fresh, in pickle, and olive oil. The ripe fruit is dark like plums, and the leaf of the tree resembles that of the willow. I do not care for olives, except the oil: the ripe fruit is disagreeable to my taste—very. Before the olives are pickled they are treated to a bath of lye, which leaves them a light green, when they are put in salt and water—a little salt. The exhibitor declared that one could live well on olives and dry bread and have no need of animal food, and that they are a sure cure for dyspepsia. The olive tree lives and bears fruit forever, or "next to it."

Yuba County sent very fine lemons, and one lady, from Marysville, sent 1,500 oranges and 1,000 lemons. There were lemons on trees—cut trees—trees two years from the graft, trees 12 feet high. This lady—Mrs. Karr—had 400 orange and 100 lemon trees. From this county come also pomegranates, almonds, persimmons, foliage of India-Rubber tree, olives, limes, and branches of loquat in bloom—a tropical fruit which ripens in July, and upon which the frost has no effect here.

Butte County sent from Oroville lemons, oranges, almonds, pumaloes, olives, persimmons, limes, bamboo, pomegranates, figs, plums, apples, and walnuts. From other towns came California black walnuts, resembling the English, but with smoother shell (native to the State), Eastern chestnuts, Italian chestnuts, pecans, hard and paper-shell almonds (almond is seed of a fruit that looks like a furzy peach), English and black walnuts, oranges, almonds, and walnuts from an altitude of 1,000 feet, and a lady sent oranges picked while three inches of snow were on the ground. A lady from Shasta sent oranges grown at an altitude of 1,150 feet. From Redding (Shasta Co.) came a very good exhibit of cotton grown without cultivation, and cotton can undoubtedly be raised in California as well as tea.

Some 18 varieties of oranges were on exhi-

bition, bnt the majority were seedling fruits, and it was the universal verdict of exhibitors that the seedling fruit is the best, the trees the longest lived, and the fruit improves as the tree grows older. A seedling lemon at Oroville, 17 years old, bore 1,200 this season. From Colusa and various other counties came superb raisins, muscallox and seedless sultana. Woodland, Yolo County displayed specimens of grape-vines three years old, which yielded a ton of raisins per acre. An orange tree, 30 years old, yielded 4,000 oranges this season, at Marysville.

A gentleman from Oroville told me the greatest cold ever known at Oroville occurred three years ago—the mercury falling to 20° below the freezing point. Orange trees at Oroville make a growth of from six to eight feet in a year, and sometimes bear at six years from the seed. At the time of the severe cold the orange trees were not injured; the lemon trees lost their leaves and did not bear fruit the succeeding year. On the Oroville counter were also photographs of orange groves at Christmas time—looking like a mid-summer scene in Peunsylvania. Pomegranates are liked by Mexicans and Spaniards—and not much by Americans. The Japanese persimmons are very ornamental, and the fruit here has an extraordinary keeping quality. A New Castle lady sold 10,000 oranges at Christmas time at two cents apiece. A Tehama County man has an orange grove of 200 bearing trees, 10 years old—trees thrifty, and fruit fine. Indeed if anyone asks:

"Knowest thou the land where the lemon trees bloom,
Where the gold orange glows in the deep thicket's gloom,
Where a wind ever soft from the blue Heaven blows,
And the groves are of laurel and myrtle and rose?

he may be truthfully answered that it is in California, from end to end, a strip between the mountains and the sea. But as to oranges, I would "trade" my orange every time for a genuine Eastern apple of New England flavor.

RURAL SPECIAL REPORTS.

Alaska.

FORT WRANGEL, July 10.—Crops of all kinds are two or three weeks later than usual. Oats and barley are just heading out and promise well. No wheat that I know of is grown in Alaska this year, though I raised good Spring wheat last year. Early potatoes, rutabagas, carrots and beets are doing well, but they are late. Cabbages and cauliflowers promise first-rate. Hay—Timothy and native Red-top—very heavy; just commenced harvesting the latter. We have had more rain than usual in this wet country. Cattle do well, and there ought to be thousands of them here. We have only to feed from three to four months in Winter. J. W. Y.

Dakota.

MITCHELL, Davison Co., July 15.—We have had a peculiar season for Dakota. Up to May we had three or four times the usual rainfall for the spring months, but since then we have had scarcely any. In June we had less than an inch and a half: in July so far not over a quarter of an inch. These are our wet months generally. Wheat and oats are making a brave effort, however, and will be from half to a full crop. Corn never looked better, barring a few localities; but unless we get rain it would seem it could not make a crop. Potatoes are nearly a failure; shipping stock will be small, and crop light. Flax is the worst, the moisture not being sufficient to sprout the seed and start it, especially the late seeding. There are opportunities here for persons of moderate means to secure farms, though government land is all occupied. W. H. S.

Illinois.

CHAMPAIGN, Champaign Co., July 23.—The grape crop this year in Central Illinois is a very remarkably good one, and so of almost every other kind of fruit, small and large. No rust, no blight, no mildew, no fungus, no insects, and one thing remarkable, only a few birds. B. F. J.

Michigan.

MENOMINEE, Menominee Co., July 17.—We have had a long and severe dronght with great heat, so that everything has suffered, and many vegetables are literally burned up. W. G. B.

New York.

STOCKTON, Chaut. Co. July 26.—Farmers are mostly through haying. The crop promises to be an average one. Pastures are very short on account of the dry weather, and cows are shrinking badly. Corn is looking well; most fields are tasseled out. Oats promise an average crop. Potatoes need rain; early ones about two-thirds of a crop; bugs plenty. But little wheat is raised around here. What there is looks well. Creamery butter averages 18 cents per pound; home dairy, 14 cents; cheese, from 7 to 8 cents. The Alaska Peas, planted the first of May, were large enough to eat the 11th of June. They are the earliest peas I ever raised. Compared with 11 other varieties of field corn, the Angel of Midnight was the fourth to tassel out, the Early Canada, Longfellow and Shaker's White Flint being ahead of it. F. M. V.

Pennsylvania.

ANNVILLE, Lebanon Co., July 24.—Spring was somewhat later than usual. Crops in consequence were put out late. but as we had abundance of rain and sunshine, they are better than usual. Hay was a very fair crop. Wheat, the very heaviest we had for years, and of good quality and housed in good condition. Some damage was done in some localities by the army-worm, which is on the increase. Oats, too, are an unusually heavy crop, although not yet housed. Potatoes a very fair crop. Paris-green was used judiciously in fighting the Colorado beetle, which turned out in greater force than ever. Apples are a very fair crop. Small fruits of all kinds, except pears (?), are generally quite plentiful. Pasture is all that could be desired, so that stock are doing well. Market prices for all kinds of grain and produce are low: New wheat, good, 75 cents per bushel; potatoes, 50 to 60 cents; other things in proportion. J. A. B.

Wisconsin.

REEVE, Langlade Co., July 17th.—Corn not much grown in this section. I raise some each year for my milch cows, and like it better than hay. Wheat not much grown, as there are no mills for flouring it, but it produces well and will be quite extensively grown. Oats, rye, barley and potatoes look well—as good as, or better than last year. Hay about half a crop. Rural Treasures look fine. The Alaska Pea is 10 days or two weeks earlier than Carter's Stratagem. I planted it May 5, and had peas for dinner July 8, and would have had them on the 5th, but saved the earliest for seed. They will grow in 60 days. F. F. L.

Wyoming Territory.

CHEYENNE, Laramie Co., July 24.—Reports from various sections of Wyoming Territory indicate that an unusually dry season has followed a snowless Winter. Up to July bnt little rain had fallen in any part of Wyoming. During the last two weeks there have been many cloud-bursts and copious rains in the eastern part of the Territory, filling streams bank-high. Thus far the Summer has been the average Wyoming Summer. As a whole, the Territory has not suffered from drought, while some portions of Central and Northern Wyoming have. The grass is fair, and has cured now, promising winter grazing where the country is not overstocked. Wyoming, from the line of the Union Pacific to the Montana boundry, is fully stocked, and cannot feed more cattle than are already within her borders. Importations of half-starved Texas cattle, such as have recently been brought to this Territory, are sure to suffer for want of sufficient food and water. The losses among that class of cattle must be very great, under the most favorable circumstances, next Winter. Cattlemen returning from a thousand-mile ride over the cattle ranges of Northern and Central Wyoming report beef cattle as rapidly improving, though somewhat later than usual. The calf crop is above the average. The hay crop is small, but of first-class quality. All agree that, while the season has been unusually dry, the grass is good in Southern and Eastern Wyoming, bnt the drought is affecting the large grazing fields in Johnson, Fremont, and Crook Counties.

Ranchmen and new settlers who immigrated to Wyoming this year intending to cultivate the soil, have suffered greatly from the drought. Their attempts to raise crops have generally proved failures, owing to the scarcity of water for irrigation purposes. This, however, does not affect Wyoming as a whole, as the energies and capital of the people are principally devoted to stock raising. L. H. T.

THE FARMER'S CLUB

ANSWERS TO CORRESPONDENTS.

[Every query must be accompanied by the name and address of the writer to insure attention. Before asking a question, please see if it is not answered in our advertising columns. Ask only a few questions at one time. Put questions on a separate piece of paper.]

MANAGEMENT OF THE TOBACCO CROP.

W. M. F., Belleville, Texas.—When should the tobacco plant be cut, and how can one tell by the appearance of the plant when it should be done? How is tobacco cured?

ANSWERED BY H. STEWART (NORTH CAROLINA).

This question brings up the whole intricate business of cutting and curing tobacco, and the answer depends largely upon the kind of tobacco grown, and the experience of the grower. In general, the managament of the crop is as follows: As the plant nears its full growth, suckers start from the axils of the leaves, and these suckers are pinched off as soon as they appear, lest they might interfere with the growth and ripening of the leaves. The blossom buds are also pinched off and the upward growth of the plant is stopped in this way at 6, 8, 10, 12 or 14 leaves, as the variety may vary or the fancy of the grower may dictate. In North Carolina where the yellow-leaf tobacco is grown all aloug the mountain region and foot-hill country, from six to ten leaves are left on the plant. In Kentucky and Virginia, where the dark tobacco is grown, from 10 to 14 leaves are left In Texas "a happy mean" would be 10 leaves, and when the fifth pair of leaves are about two inches long, the tip of the stalk is pinched off. Then the plants are watched to save them from the worms, the large green-striped larvæ of a sphinx moth, which are otherwise known as the tomato worms. The plant is meanwhile slowly maturing, and as it ripens, the leaves begin to turn yellow. It is then ready to cut. It is cut as follows: the stem at the lower part, for about 10 inches, is slit with a sharp knife, beginning about the stalks of the lowest leaves, and leaving about three inches of stem below the cut. The plants are strung upon a lath four feet long, one after another, by means of this slit, which is also made to help to dry the plant. When the lath is full of plants, so placed that they do not touch, it is hung in a rack on a wagon, and when the rack is filled, the load is taken to the tobacco house where the laths are ranged on beams placed lengthwise of the house so that as many plants can be hung in it as possible without touching. The lowest tier of beams is about eight feet above the floor, so that a man can move about easily under the plants.

The curing is now done by means of flues arranged as shown at Fig. 314. The O O

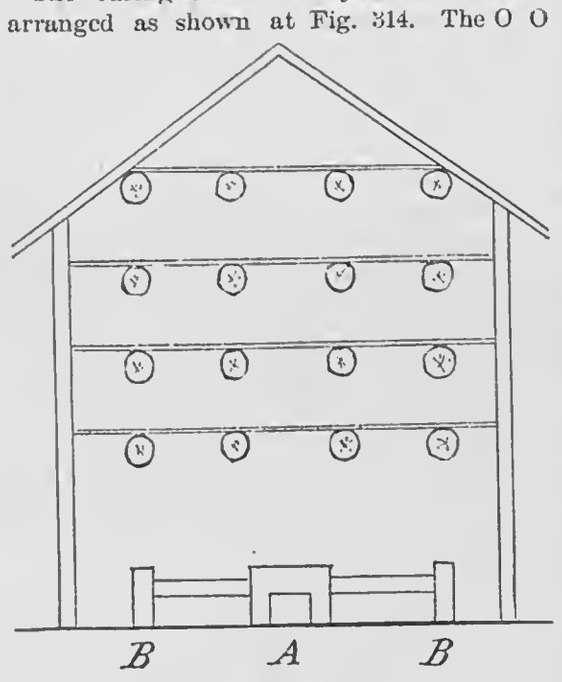


Fig. 314.

represent the beams, and the horizontal lines are the laths upon which the tobacco plants are hung. At A is a furnace having hot air-pipes leading from it to side flues, B B, and a central flue, all leading to the chimney or outlet at the back of the barn. Fig. O shows the arrangement of the tobacco, and the flues so placed as to supply the requisite heat in an even manner all through the barn. Fig. 315 shows the plan of the flues. At Figs 316-317

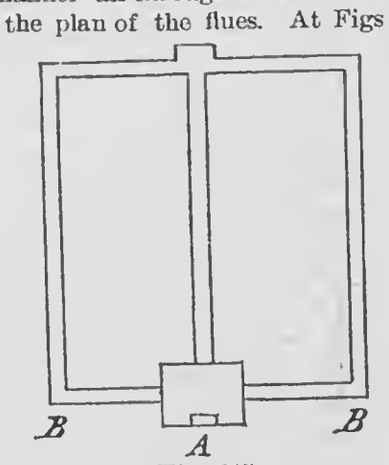


Fig. 315.

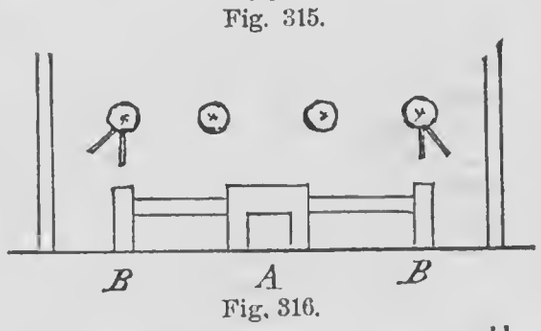


Fig. 316.

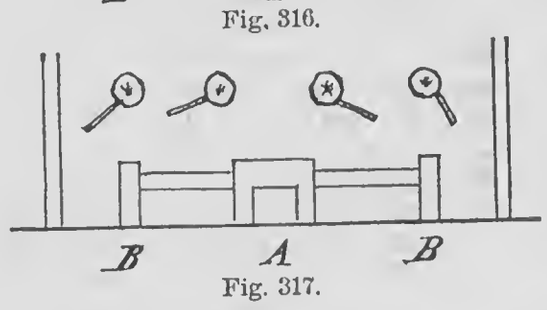


Fig. 317.

is an arrangement of guides to distribute the heat, which is my own invention (not patented and free for any person's use.) These guides are boards of sufficient width, which are hung to the lower beams so that by drawing on guiding cords fastened to the adjoining beams they can be deflected in such a way as to close partly or wholly any of the spaces and direct the warm dry current to any part of the barn. In case the tobacco at the center is drying and curing faster than the rest, the heat can be shut from it and turned to the sides. This arrangement was found exceedingly useful last season when it was first used.

The curing goes on slowly; the heat is raised at first to 80 degrees; then gradually to 100 degrees until the tobacco is nearly dry and of a yellow color, as desired. As soon as this appears, the heat is raised to 120 degrees, or 140 degrees to finish the curing quickly and fix the color. This is where the experience of the operator comes in, and no one can give exact rules for any one case because success depends upon many accidental conditions. After curing one crop one will know how to manage a second. After the tobacco is cured, it must come "in case" by which is meant it must be left to absorb sufficient moistnre from the air to sweat and become soft and pliable. It is then stripped from the stalk: put in hands and tied and bulked, or put in piles and weighted, when it undergoes a fermentation or sweating by which the flavor is brought out by some chemical change in the gum and other parts of the leaf. This is also one of the technical parts of the curing which can be learned only by experience. And at every point in all this intricate curing of the leaf the operator runs the risk of damage or destruction of his crop by some blunder or carelessness which ruins the whole bnsiness.

FRUIT QUERIES.

H. W., Wheeling, West Va.—1. Will it pay to plant an apple orchard on farm land worth from $80 to $100 per acre? 2. If so, what varieties shall I plant from earliest to latest? 3. What grape will make as good wine as Catawba, and ripen a week or 10 days earlier? 4. At what age does the Transcendent crab begin to bear?

ANS.—1. Where apples do well, and are treated with care, an orchard will pay extremely well on such land—better than almost anything else. 2. For market, no one should plant a large number of varieties, and as a rule extremely early apples do not pay, except one has a local market that will take them. We might give a list, but the best way is to look about in the immediate vicinity and see what apples succeed the best and are most in demand for market. There is such a variation in soil and climate even in a single county, that no one can tell as well as the man on the spot. For instance, on our farm, and not 100 rods apart, we have two plum orchards. One does extremely well and bears large crops; the other is worthless and the trees are dying out. The difference must be in the soils, and yet an expert could not tell the difference except by trial. 3. The Delaware makes a fine wine—as fine as that from the Catawba, and it is more than 10 days earlier than that. The Niagara is said by those who have tried it, to make a superior wine, and that is early. 4. We have seen the Transcendent bearing in the nursery rows, and it usually bears when not planted more than two or three years, and gradually increases its crop as it gets older.

BITTER MILK.

Subscriber, Leeds, Mass.—Three of my cows give bitter milk, and the cream from it won't yield butter when churned; what is the cause?

ANS.—Some cows—now and then one—will give bitter milk when well advanced in pregnancy. It would be singular to have three thus affected, and it may be only one, and the milk being mixed together, the whole mass is affected. Each cow's milk should be set separately to determine this matter, and if all are alike, then the trouble must be with the pasture or the water. Foul weeds would affect the milk, and so would bad water. In a dry time all water in small ponds or pools becomes more or less foul. Only running water or water drawn fresh from wells is good for cows giving milk. There is evidently some active principle of decomposition in the milk which works rapidly after it is taken from the udder. The water should be looked after first, and then the pasture should be changed if no other remedy is discovered. Most weeds are not unhealthy, but some, quite common, are very injurious, and affect the stomach and the blood. Rag Weed, St. John's Wort, lobelia, etc., are generally found in old pastures, and are injurious.

CRUDE PETROLEUM FOR SCAB IN SHEEP.

F. H. S., Reiley, O.—Will Mr. Woodward be a little more explicit in stating how he uses crude petroleum for the scab in sheep; what kind he uses and how much it takes to treat 100 sheep?

ANS.—The light green oil, like the Pennsylvania oil, should be got, and not the heavy West Va. lubricating oil, and the quantity

will depend much on how badly the sheep are infested. It needs no preparation at all, and can be applied from a can like an old-fashioned lamp filler, or by a swab made of soft cloth tied on to the end of a stick, or with a soft stiff brush, like a stencil brush, or a well worn paint brush. It makes but little difference how it is applied provided that plenty is put on, and that by some means the scabs, with which the sores are usually covered, are well broken up, so that the petroleum can reach and penetrate into every part of the sore. This it is sure to do, and to kill every scab insect if it only has a chance. It is also far superior to spirits of turpentine as an application to any sore on any animal, that through neglect has been attacked by the flies and become filled with maggots. Plenty can be put on, as it does no harm, and should not cost more than from 10 to 20 cents per gallon anywhere, as it is not worth more than $1.60 per barrel at the works, including the barrel, which contains 45 gallons.

ALSIKE.

P. R., Stroudsburg, Pa.—1. Would you recommend Alsike Clover as a hay-producing plant for meadows? 2. If so, how much seed per acre, and how should it be sown?

ANS.—1. Alsike Clover, when grown alone, makes, even on heavy, rich, moist soils (the soils best suited for its growth), only a moderate quantity (say a ton or less per acre) of only fair hay. It "looks big" when growing; but it is found to be very light when cut and cured, and we cannot, after much experience, recommend it for sowing alone, except when desired to produce seeds. It is very valuable for mixing with other seeds when seeding down the lands. Used in this way it fills in the bottom very nicely and stands wet and cold much better than other clovers; it fills up any spots from which they may be killed out, and in these ways it adds several tons to an ordinary meadow in the yield of hay. It should be sown in Spring, and if designed for growing a crop of seed, it should be sown alone, or with Timothy, using six or eight pounds per acre; but for other purposes it should be mixed with the other "grass seeds." Prepare as for ordinary seeding and then add two pounds of Alsike seed for each acre.

WHITE CLOVER AND BLUE GRASS PASTURE.

C. H. C., Chicago, Ill.—On a high rolling prairie pasture White Clover came in this Spring nearly as thickly as Blue Grass: 1. will the Blue Grass kill the clover—or *vice versa?* 2. Is the feeding capacity of the pasture lessened by the presence of the clover instead of Blue Grass? 3. Would it be worth the outlay to get rid of the White Clover—there's only a patch on a quarter section?

ANS.—The pasture is all the better for having the mixture of White Clover and Blue Grass. It should be let alone to remain as long as possible, so as to afford a greater variety of nutriment. Each is among the best. In time the Blue Grass will crowd out the White Clover. All Blue Grass might make a little more food as it grows early and late; but the clover will fill the ground until the Blue Grass has time to spread all over, and come to its full root, just as Eastern farmers sow clover with Orchard Grass and Timothy to fill up till the others mature.

GETTING RID OF OX-EYE DAISY.

A. L. S., Princetown, Ind.—How can I get rid of the Ox-eye Daisy, seeds of which were sent me mixed with Orchard Grass by an Eastern seedsman?

ANS.—It is a perennial hardy plant. In this case it seems to us that it would pay to carefully pull the plants up as well as to destroy the seeds. If the seeds have not matured, it will be very easy to destroy the plants, if the field be put in corn or other crop that can be cultivated. Ox-eye Daisy is to be avoided beyond question. Yet when cut early it makes a good hay.

Miscellaneous.

S. A., Mansfield, Ohio.—The specimens of the plant sent for name had no good leaves, and the flowers were abortive or rudimentary. The plant is some species of medicago—either M. maculata (Spotted Medick) or M. lupulina (Black Medick or Nonesuch). This genus includes Alfalfa and many others. The flowers of this are very small, and probably would never have grown larger. The development had been arrested from some cause. In cauliflower the branches are changed and the flowers abortive. The medicago is a case very similar to that of cauliflower, only in the former the flower stems are still slender. The whole matter of monstrosities has been admirably written up in "Vegetable Teratology," by Maxwell T. Masters, and published by the Royal Society, 1869.

"*W.," Greeley, Colo.*—How long will Alfalfa seed keep good? 2. What is the best kind of squash for stock? 3. What is the proper time to castrate a colt—age and season? 4. Which is the better to use for crossing for quantity of butter—a Jersey or Holstein-Friesian?

ANS.—1. Alfalfa seed will undoubtedly grow when several years old, if it has been kept dry. When allowed to get damp, to heat and become moldy, it will not grow—the same as other seeds. We once sowed ten-year-old turnip seed, and it grew well. 2. Hubbard Squashes will produce the most food elements, but they are too hard for stock. The large Yellow or Boston Marrow will give most bulk in a form stock can eat. 3. There is no general rule. If colts are lightly made forward, they are left till two or three years old. If well formed and precocious, it is best to castrate in cool weather when about one year old. They will do better and are less troublesome. Castration should not take place when there is danger of maggots; otherwise, any time, avoiding exposure to storms and extreme cold. 4. Jersey cows are almost always good cows for butter, while the H.-F. are noted for the quantity of milk they give. There are Holstein cows which have made excellent records as butter-makers, but the Jerseys are generally considered the best for a butter-dairy, and hence the best to cross with for obtaining quantity of butter.

W. G. B., Menominee, Mich.—I have quite a number of hardy apple trees of the Russian varieties, which appear to be dying. Many of the limbs of last year's growth which are loaded with fruit, are dead, and a good deal of this year's growth seems entirely dead. I have removed a good deal of fruit from those most heavily loaded. My soil is a light sandy sort. When I set them out I dug a large hole and put muck in the hole and have used muck instead of manure around them. They have grown very rapidly and have borne well as a general thing.

ANS. It seems to us the trees have been injured by the Winter, having made a late and rapid growth.

H. T. D., Dansville, N. Y.—1. Can I get roots of the Early Harvest? 2. Is the variety a good yielder? 3. What is the best red raspberry for market?

ANS.—1. Yes; of J. T. Lovett, Little Silver, N. J. 2. It is a good yielder of small berries of a peculiarly regular shape, with small seeds. It is the earliest blackberry we have tried, but not quite hardy. 3. The best late red raspberry for market is the Cuthbert. Hansell is as good as any for the earliest. Try the Marlboro, ripening between the two. It thrives well in many localities. The Rancocas is early and firm. The Fall catalogues will give the price of the Lucretia.

J. G. C., Millers, W. Va.—My two-year-old heifer continues to suck her mother, whenever she gets a chance. What can I do?

ANS.—Keep the cows apart as much as possible. If this is not possible, make a leather strap large enough to go around the heifer's nose, and fill it with sharp-pointed nails an inch and a half long. Fasten this strap to a halter, and put it on the heifer. The object is to make the cow refuse to stand. Heifers that have acquired this bad habit will frequently bother the other cattle exceedingly by chasing them about. If they are too troublesome, and cannot be kept by themselves, they had better be disposed of, as it is not probable that they can be permanently cured of the habit.

W. H. H. L., Harrisonburg, Va.—The disease affecting the grapes you send is the common rot. We should say that shade aggravated it in your case. We can suggest no remedy. Is the soil of the vineyard rich or poor? If the former, no further application of manure should be made; if the latter, we should try the effect of fertilizers in a small way. We should not destroy the vineyard until a further trial, unless it becomes apparent that too much shade was the cause.

A. D. S., Rockwood, Tenn.—The grass you sent for name is Panicum clandestinum, or Hidden Panic. We have often thought it would pay to raise it on low grounds which it prefers. It is perennial and highly relished by cattle and horses. One objection to its cultivation is that it is recumbent in its growth. If upright we should certainly have attempted its cultivation at the Rural Farm, where it grows luxuriantly on the lower lands.

H. H. L., Bainbridge, N. Y.—White Wyandottes are good hardy fowls, and belong to a general-purpose breed, such as the Plymouth Rock and the colored Wyandotte. They are not as hard to breed to feather as the latter, being solid white. They are not yet admitted into the "American Standard of Excellence" as a breed, but probably they will be soon.

W. H. S., Mitchell, Dak.—The grass sent for name is Panicum virgatum—Tall Panic Grass—Switch Grass. It is common on the sea coast, and also in the interior to the Rocky Mountains. It forms a constituent of the native grasses of the prairie, particularly in moist places. It is a good grass if cut when young, but harsh when ripe.

J. E. N., Minneapolis, Minn.—The package contains two grasses, Poa Serotina (Meadow Red-top or Fowl Meadow Grass) and Agrostis alba (White Bent, English Bent).

S. E. B., Amesbury, Mass.—The Marlboro is now offered by all nurserymen.

R. A., Thre Springs, Pa.—The plant sent is Cirsium arvense, or the Canada Thistle.

DISCUSSION.

S. E. PETTIMAN, DETROIT LINSEED OIL WORKS, DETROIT, MICH.—In the Farmers' Club, page 410, RURAL of June 20, J. T. asks, "Which is the better, all things considered, prices being equal, cotton seed meal or New Process linseed meal?" and the RURAL answers "Cotton Seed Meal." Now we claim that, "all things considered," new-process linseed meal is far superior in results, and in order to have the matter tested and accurately settled, we will supply for test feeding by some fair-minded, disinterested party, any required quantity without charge, the RURAL or any manufacturer of cotton-seed meal to furnish a like quantity of that also without charge: the report to be full, and the decision to be based on actual results, "all things considered."

R. N.-Y.—Our answer quoted above, and to which Mr. P. takes exception, was based almost wholly on the composition of the two feeds as shown by the average analyses, which are as follows:

	Cotton seed meal.	New Pocess linseed meal.
Water	8.33	10.12
Ash	7.25	5.93
Protein	42.06	32.94
Fiber	5.69	9.09
Carbo hydrates	23.43	38.35
Fat	13.24	3.57

It will be seen that cotton-seed meal contains 9. 12 per cent. more protein or flesh-forming elements, and 9.67 per cent. more fat, but 14.92 per cent. less carbohydrates; but the latter is much more than balanced by the greater value of the fat per cent, so that looking at the two feeds from a chemical stand-point only, our answer was correct. We must say, however, that in our own experience we greatly prefer the new-process linseed meal of which we feed from 25 to 30 tons each year. We regard either as a very cheap food at the prices for which they are sold, and we desire to feed them largely, but so far, we have been able to feed the cotton-seed meal in only very moderate quantities without producing ill effects upon the animals to which it is fed. We think this is greatly owing to the very large quantity of fat or free oil which it contains. In this respect it is much like the old-process linseed meal which with us has produced similar results, where fed in large quantities, viz. an injurious looseness of the bowels, and when fed to milch cows it has given a disagreeable, oily taste to the milk and also to the butter made therefrom. We think the offer made by Mr. Pettiman extremely fair, and we hope the manufacturers of cotton-seed meal will meet it, and that the two will be carefully and fully tested. We suggest that two or three of the Experiment Stations be selected, say Kansas, Missouri and New York, and that similar experiments be made at each, and that the results of each be published with all the data incident to the test. The trouble with us, or with any others of limited facilities, is that we have not the time or the appliances to give accurate results. We vote most emphatically for the trials.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING July 31, 1886.

J. S. W.—T. V.—K. C.—W. A. M.—D. D.—J. B. O.—H. S.—C.—"New Subscriber," no.—J. G. G., grasses received, see Farmers' Club next week or so—E. L. T.—E.—A. S.—J. H.—T. H. H.—H. H.—A. L. S.—S. C. M.—E. B. S.—J. J. W.—E. S. G.—W. F.—J. H. S.—A. H. S. E. Arnold, glad to hear from you—G. M. C.—C. H.—J. H. S.—W. F. B.—H. S.—J. E. S.—S. M. T., thanks—J. B. R., thanks.—E. W.—R. W. W.—W. H. S.—W. J. B.—J. S. C.—S. S. P.—W. B. G.—C. C. P.—G. S.—H. H.—W. H. H. S.—L. R.—E. C., thanks.—D. R.—W. D. T. J. W. Y.—K. T.—A. C. M.—J. C.—E. C.—A. E. M. C.—E. T.—H. S.—C. S. A.—R. M. C.—C.—"Subscriber"—"June"—H. M.—H. R.—E. C. S.—J. R.—B. H.—J. K. S.—E. F. R.—W. F. B.—A. B.—J. T. B.—J. D. D.

Miscellaneous Advertising.

Sent on Trial.—A Double Gang "ACME" Pulverizing Harrow, Clod Crusher and Leveler will be sent to any responsible farmer in the United States, and if it does not suit he may send it back at the expense of the manufacturers. No pay is asked until tried on the farm. Farmers should not, therefore, let dealers palm off on them a base imitation or some inferior tool under the assurance that it is better. See advertisement on page 524.

SALT. ONONDAGA F. F. SALT. SOLE MANUFACTURERS. American Dairy Salt Co. (Limited.)
Chemically purified and WARRANTED pure as any in the market. Used by a great majority of the Dairymen of the country. Unexcelled for Butter, Cheese, the Table, and all Culinary purposes. Took Medal at Centennial "for purity and high degree of excellence." Dairy goods salted with it took first premiums at New Orlean's World's Fair, N. Y. International Fair; Milwaukee Exposition, and always wins when there is fair competition. It is American, and *cheaper and better* than any foreign salt. Try it. Address
J. W BARKER, *Secretary*, Syracuse, N. Y.

Scrofula

Probably no form of disease is so generally distributed among our whole population as scrofula. Almost every individual has this latent poison coursing his veins. The terrible sufferings endured by those afflicted with scrofulous sores cannot be understood by others, and their gratitude on finding a remedy that cures them, astonishes a well person. The wonderful power of

Hood's Sarsaparilla

in eradicating every form of Scrofula has been so clearly and fully demonstrated that it leaves no doubt that it is the greatest medical discovery of this generation. It is made by C. I. HOOD & CO., Lowell, Mass., and is sold by all druggists.

100 Doses One Dollar

HAND PICKED SEED. **DIEHL-MEDITERRANEAN.**
The hardiest, best yielding and milling Wheat grown. Seed hand-picked and strictly pure. For sample heads and prices, address, with stamp,
H. M. JAQUES, Wright's Corners, N. Y.

SEED WHEAT.
1,000 Bu. Ten varieties. Prices low. Satisfaction guaranteed. Send for circular. Samples of all, 16 cts.
R. G. CRIST, New Market, Ind.

DEITZ LONGBERRY Wheat
Send stamp for sample of this valuable Wheat and Deitz Fruit Drier. G. A. Deitz, Chambersburg, Pa.

SEED WHEAT
And How to Grow It or Thirty Years in the Wheat Field.
Giving the origin, history, and description of the different varieties of wheat, the best and most popular modes of cultivation, **with samples of five** of the most hardy and productive kinds now grown in this county. All sent on receipt of 10c. in postage stamps or money.
Address SAML L WILSON. MECHANICSVILLE, BUCKS CO., PA.

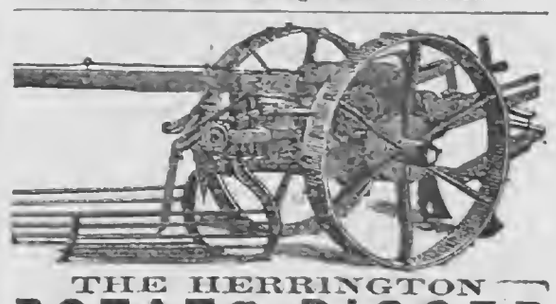
1838 **POMONA NURSERIES** 1886
Established 1838.
POT GROWN STRAWBERRIES.
Parry, Lida, May King, Henderson, Jewell, Belmont, Bubach, and Ontario ready for immediate shipment. Other varieties potted to order. Send for catalogue, with testimonials, etc. Also of **Lawson & Kieffer, Marlboro & Golden Queen, Erie & Wilson Jr., Niagara & Empire State,** etc., etc.
WM. PARRY, Parry, N. J.

Virginia Farms.—Mild Climate. Cheap Homes. Send for Circular. A. O. BLISS, Centralia, Va.

DAIRY AND TRUCK FARM FOR SALE.
80 Acres, within two miles of Baltimore, hard road-land in excellent condition; good House and out-buildings; absolutely healthy; possession Nov. 1st, '86.
H. W. ROGERS, BALTIMORE, Md.

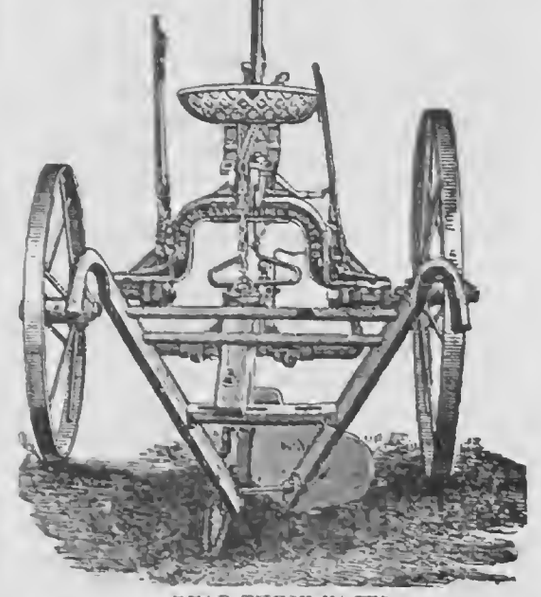
Beautiful Maryland Homestead Farm.—230 Acres, $8,000. For full particulars, address
H. P. Chambers, FEDERALSBURG, MD.

MAST, FOOS & CO.,
SPRINGFIELD, O.,
BUCKEYE FORCE PUMP.
IRON TURBINE WINDMILL.
BUCKEYE WROUGHT IRON PUNCHED RAIL FENCE.
BUCKEYE LAWN MOWERS.
BUCKEYE HOSE REELS AND LAWN SPRINKLERS.
Send for Illustrated Catalogue and Price List.



THE HERRINGTON
POTATO DIGGER
IS A SUCCESS.
Send for circular to PLANTERS' HOE CO., Troy, N. Y.

THE ELKHART PLOW SULKY



READ THESE FACTS.
Lighter Draft with Driver Riding than ordinary Plow with Driver Walking. Turns square corner without backing. It is wholly constructed of Iron except tongue and front lever.
We claim and GUARANTEE that a Plow attached to the Sulky and carrying the driver, is from five to 100 pounds lighter draft than the same Plow doing same work without the Sulky. Write for prices.
ELKHART IRON WORKS,
ELKHART, IND.
Mention Rural New-Yorker.

THE
RURAL NEW-YORKER.
A National Journal for Country and Suburban Homes.

Conducted by
ELBERT S. CARMAN.

Address
THE RURAL NEW-YORKER,
No. 34 Park Row, New York.

SATURDAY, AUGUST 7, 1886.

The most vigorous watermelon vines about the Rural Grounds are those of the Mountain Sweet. The seeds planted were six years old.

This year we have seen quite a number of little gardens of flowers raised from the Rural's Garden Treasures. There seems to be no end to the varieties which are coming into bloom daily, affording a deal of pleasure and, to those so inclined, instruction

We have this year raised the Early Ohio among 70 different varieties of potatoes, some of which are claimed to be the earliest known. The vines of the Ohio died at least 10 days before any other. This is a grand potato where it succeeds, as the R. N.-Y. has often said, and it is a pity that it does not thrive everywhere.

All who desire advertising space in the Supplement to our next Special are asked to send in their copy before August 15th. The issue will be distributed by mail and otherwise from the coming September until May of 1887. The price per agate line will be 50 cents. The Supplement will be complete in itself, and be provided with a cover printed in colors.

The objection has often been raised to the level cultivation of potatoes that some of the tubers grow above ground and become greened and worthless. This objection is not well founded, according to our experience. Perhaps it is because we plant the seed in trenches deeper than others. A few days ago the writer went through a greater part of the potato field and failed to find a single exposed tuber.

It has been stated again and again that bagging grapes prevents rot; that the bagged grapes ripen earlier and ship better to distant markets, etc. Inexperienced writers do a lot of harm in making such statements. The R. N.-Y. was the first American paper to advocate the bagging of grapes; to illustrate how it was done and the best way to do it. We wrote from experience and tried to impress upon our readers that while the objects of bagging grapes were (1) to preserve the bloom, and (2) to protect them from birds and insects, the bags afforded little protection against rot or mildew; that the bagged grapes ripened later and would not endure long shipments so well as the unbagged.

A friend writes: "We are (righteously, of course) bucking against oleo in our legislatures, without even thinking how unready we and our farms are to supply the place of the bogus with the genuine article, while every pasture within 10 miles of a factory is growing up to brush. Our oleo-bills are worthless—like a dam of white beans in the Hudson—unless we back them with a determination to make honest butter plenty at any price at all. That would mean more grass and a far greater knowledge of it and all its differing habits, for the common people of the land. A collection of grass-recipes which would give seedsmen a sure profit, while the sowers would never know whether they are right or wrong, wouldn't amount to a huckleberry. That track—that blind leading of the blind—has led us too far out of the way already."

Many portions of Chinese soil are very poor indeed, and yet the country is one of the best-farmed in the world. For thousands of years it has supported a vast population. Two points of Chinese agriculture are worthy of note; no weeds are grown, and every available substance is turned into manure. It will be seen that in our "high farming" of the present day both of these points are considered fundamental. The best crops are grown on soil that is kept free from weeds by clean culture, and kept strong and hearty by liberal manuring. The good farmer will as soon think of leaving dirt on his face as to let his fields grow up to weeds, and the sight of a crop trying to grow without sufficient plant food, gives him a feeling akin to that he would experience in depriving his own family of proper food. The successful farmer falls in love with his farm and treats it reasonably. The well used soil is grateful.

In 1861, Congress passed an act granting a vast aggregate area of land to be sold to aid the cause of agricultural education. Land to the value of $10,000,000 has been sold from this tract, and buildings and apparatus valued at $7,000,000 have also been given. The people have the right to expect vast results from this outlay. There are some 40 agricultural institutions in this country reaping the benefit of the original land grant. About 85 per cent. of the students in agriculture are found in five of these 40 schools. The majority of the remaining 35 schools are so completely under the wing of a "State University" that they are likely to die in darkness. These schools should either be killed off or filled up with students. This sum of money is too large to be thrown away. A certain class of farmers have tried for years to kill the schools without much success. It is time they tried a better plan, and sent their boys to make these schools what they ought to be.

What do you propose doing towards securing a good teacher for your school this Winter? Make an effort this year to improve the school. Find out what teachers can be secured before you go to the school meeting. Talk things over with your neighbors, and see what they want. Put some good business man on the school board, and support him heartily in all needed reforms. Make the grounds attractive and the house comfortable, even if it does cost a little to do it. Visit the school as often as you can. Tell your children to mind the teacher, and never encourage them in rebellion. If you think the school is unfit for them to attend, take them out of it, and do not send them there to carry on an authorized insubordination. Watch the teacher, and still be reasonable with him. If your boy does not learn as rapidly as he should, see if some of the fault is not in the boy. If you neglect the school, you neglect your duty as a citizen.

Statistics show that consumption, which has in years past made such frightful ravages in this city, is now on a decline. Between 1881 and 1885, though the population increased nearly 200,000, the deaths from consumption decreased 116. It is doubtless true that many consumptives who contract the disease here, go elsewhere to die, yet it seems probable that something has occurred to stay in part the ravages of the disease. Doctors attribute this decline to the fact that people know more about the disease than formerly. They are being educated up to the idea that in prevention alone lies the cure. It seems to be generally admitted that people, as a rule, have more regard for the laws of health. They are dressing more warmly and strive more successfully to avoid exposure and impure air. Women are wearing heavier shoes and shaping their dresses so as to allow more space for their lungs. Millions of dollars are spent each year for nostrums warranted to cure the disease. The consumptive is always hopeful, always imagining he is better. This hope lures him on from one treatment to another. The only "cure" for consumption lies in taking care of one's self, and thus resisting all inroads of the disease. Good food, good and warm clothing, shelter from severe exposure, plenty of sleep and a happy, restful mind, are the conditions needed to stay the disease.

TWO FARMERS.

Two farmers we know, own two farms which join. One farm contains 50 acres, the other 110. The farms are in New England. Farmer A, with his 50 acres has time to go to church, to the picnic and Grange. Time and again, while out riding with his family, he passes by farmer B, toiling in the field with never a thought for anything but labor. Farmer A's wife has a horse of her own, which she can drive as she likes. The boys and girls have books and magazines and the time to read them. Mrs. B. has to beg for days for a horse, and then must take the old mare that can only be induced to hasten out of her slow walk by a thorough application of the stick.

Every rod of the smaller farm does its work. Manure is a respected friend. The crops raised are those that sell for cash. The soil does not run out because the farmer makes a business of keeping it up. On the larger farm there are weedy pastures. The manure is put into small strips of the best land. The grass is never fertilized. The soil is expected to make up in area what it lacks in quality. Farmer B. makes money, for he never spends any. He looks across at his neighbor and sneers. Do these extra horses, these books and papers pay? Not a cent in cash. Farmer A. puts it like this: "Neighbor B's idea of true profit is different from mine—that's all. He wants his in hard cash; I'm ready to spend a part of mine in comfort. I can't spend my money to a better advantage than in making my family contented. I could save this money and buy more land, but I like my little farm. I feed it and it keeps its strength. Why should I spend the best part of my life in continually grubbing for money that will never benefit me?" Now friends, which plan do you like best? Which are you following? What is your idea of true profit? Is your money in the bank, or is it invested in happiness? Think it over.

PROPOSED CURTAILMENT OF INDIAN RESERVATIONS.

Under the late Indian Appropriation Act, the Secretary of the Interior has just appointed a Commission, consisting of the Hon. J. V. Wright, of Tenn., Bishop Whipple, of Minn., and Charles F. Larabee, of the Indian Office, to negotiate with certain tribes of Indians in Minnesota, Montana, Dakota and Idaho for the purchase of such surplus land as they may be induced to sell. The Commissioners are charged to make no arrangement without the full consent of the tribes concerned—that is, of course, the consent of the majority of each tribe—and no agreements will be binding until they have been approved of by Congress. They will first try to satisfy the Indians of Leach Lake, Fond du Lac, Grand Portage and a few other small reservations about the head-waters of the Mississippi, for damage done to their lands by the overflow from the reservoirs constructed by the Government half-a-dozen years ago. About 1,600 Indians have been ruined by these overflows, and an effort is to be made to remove them to the White Earth Reservation in Western Minnesota, together with a few other half-starved bands in the same section, indemnity being assured to them.

The Commissioners will next move west to the Fort Berthold Reservation on the Missouri, in Dakota. This has an area of 2,900,000 acres and a population of only 1,900—Blackfeet, Piegeans and Gros Ventres. These are about the most backward of all the Indians, and are supported almost entirely by the Government. They can do nothing with such a vast allotment of land, and would do better on a more limited range, aided by Government instruction and support in agriculture and stock-keeping.

Westward, in Montana, the Blackfeet Reservation contains 21,500,000 acres and a population of less than 7,000 Indians. Allowing 320 acres to each Indian family, the surplus land would equal the State of Maine, and if bought by the Government at $1.25 per acre, and paid for in bonds bearing four per cent interest, it would return an income of $1,000,000 a year. Under the same conditions the surplus land of the Crow Reservation, extending 200 miles along the Northern Pacific Railroad and thence south to the Wyoming, would produce annually $223,000. Now every buck, squaw and pappoose has an average of two square miles of land very well adapted to agriculture, especially with irrigation.

According to a report made by Gen. Sheridan, there are in the Indian reservations in Dakota and Montana an aggregate area of over 54,600,000 acres, and a population of less than 45,000! "The surplus area of 81,000 square miles would produce an annual interest of $2,500,000"—and be just the size of Kansas.

The Commissioners will then go further West into Idaho and Washington Territories and try to induce the Spokanes and Pen d' Oreillas to go on the Flathead Reservation in Montana, where they will have a magnificent country of noble mountains, frequent streams and rich lands, and be among the most advanced Indian farmers of the Northwest; for the Flatheads cultivate fine farms and live in comfortable log houses.

It is against the best interests of the Indians that they should be allowed such vast areas of land, of which they can make no use. They are not advanced enough in civilization, and are too poor and shiftless, to engage in agriculture or stock-raising successfully. The buffaloes, on which they mainly depended for support, have been nearly exterminated, and at present they would starve on the results of hunting over these large areas. Railroads and settlements are pushing westward, and the country all around the reservations is being rapidly taken up, and it will be better for the Indians and white men if the former get an allotment of a liberal area of land for each family, and are honestly indemnified for the surplus of their reservations surrendered to the Government, which can, in turn, sell it to *bona-fide* settlers. Railroad companies and cattle kings and syndicates are the most persistent advocates of the opening up of the Indian reservations at present. Hundreds of reckless adventurers, like the Oklahoma boomers, are either paid or encouraged by these to keep the subject constantly before the people. In whatever measures the Government may take, however, the interests of honest settlers—pre-emptors or homesteaders—must be always held paramount to those of all others. Nor should the interests of the Indians be for a moment neglected. The names of the Commissioners give universal satisfaction, and it is to be hoped that the results of their labors will also meet with the approval of all fair-minded men.

BREVITIES.

We repeat the suggestion already presented in these columns, that the very best way we know of to break a hen of the sitting propensity is to confine her in a yard with a harmless dog.

Don't you see how our pious political partizans are collecting all the benevolent Indian sentiment they can, so as to divide the reservations among themselves and add more fuel to the fires of railway greed that are consuming us?

The white blackberry Crystal White is now in fruit at the Rural Grounds. It is delicious in quality—the berries of medium size and as white as a White Mulberry. There are two pities as to this: one that it is not hardy; the other, that it is not prolific.

Four or five years ago the Black Champion Currant was advertised in England as in size of berry and raceme far ahead of any other black currant. We imported a plant which is now ripening its fruit. Beside it is the Prince of Wales, and they seem to be the same.

"Give us good mothers; they make us what we are," says Mr. Stahl in his article on next page.—"Did you ever see a baby that would not crawl towards a blossom?" Read Mr. Stahl's excellent paper, good mothers and fathers. The careful reading of it may do you a world of good by influencing your "policy" in the management of your children. It will interest you at any rate.

Mr. Stewart, writing us from his home in Highlands, N. C., speaks of the bright, sunny, brisk, invigorating Winters they enjoy there, "with cold enough to make the warm sunshine pleasant, and sunshine enough to make the cold bearable without thick clothing. And the water—the purest and softest; and the air the clearest and brightest, making the stars seem like lantern-lights floating midway in the atmosphere."

The fault of many journals now-a-days is that they consume so much space in giving human names to plants and personal authorities for facts when they should be quoting more direct from the ground, and let plants and animals have *their* say. The other way ministers to our absurd American egotism, which is really of no more account in science than the identity of the particles of water in the rising and falling tide.

The Rural, as has been stated, is now trying the Langshan breed of poultry. We secured three settings and have but nine chicks, seven of which are roosters. Oh! the perversity of eggs! We are prepossessed in favor of Langshans. The Black Cochin is itself a fine breed, though never a good glossy black. The Langshan comes from a country colder than the climate of some of our Northern States, and the breed is no doubt a very hardy one.

A well-known agriculturist and farm writer says, in a private note to the Rural, that we should try to teach our Government authorities something about grass. The education of our Government is the most fearful tax we have to pay in a republic. If our officials would only draw their pay and go to sleep comfortably when we get them into a snug office, we should be all right; but they won't. They are bound to do something, and ten to one it will be mischief.

The Oleomargarine gang are said to be determined to oppose the re-election to Congress of every Representative who voted in favor of the Oleo. Bill, wherever there is a chance of defeating him in the nominating conventions or at the polls. A large "corruption fund" has been collected for this purpose, and the first attempt is being directed against Representative Allen, of the Lowell District, Mass. It ought to be an advantage to candidates to be opposed by this unscrupulous, fraudulent monopoly.

At the recent Connecticut Prohibition Convention, our esteemed friend and contributor, P. M. Auger, was nominated for Lieut.-Governor. This is an admirable selection. We are glad to commend it. Mr. Auger is a sound, sensible man, with honest convictions and the courage to stand up and enforce them. He is a practical farmer—a man of the people. The farmers of the country are prone to complain that their rights are not respected as they should be. Here is a chance for Connecticut farmers to stand up and be counted, by voting for one of their own fellows. We shall see how much of their complaining is all "talk," and how sincerely they want a representative from their own ranks.

Educational.

HOW SHALL WE EDUCATE OUR CHILDREN AGRICULTURALLY?

J. M. STAHL.

Some new ideas; home instruction the prime necessity; to begin in the cradle; not to be taught in schools or colleges; nor from text books; the mother as a teacher; kindergarten with farm things as object essons; home influenees; fruits and flowers; the child must own something; a change needed in school books; papers as teachers; pictures; agricultural story books.

THAT our children "may appreciate the benefits of farm life and turn them to the best advantage," they must be educated in a love for the farm, and in the science of farming. They must be taught more, but these two things lie at the foundation: for the benefits of farm life lie in the ability to till the farm successfully (not to make money solely, as we shall presently see) and an appreciation of those benefits lie in the love of the farm.

This cannot be taught as a separate branch of instruction in our country commou schools. The art of farmiug cannot be taught there; there is no time for its science. School days are already too short for the farmer boy and girl to accomplish the legitimate work of the public schools. Nor can a love of farm life be instilled there. It cannot be taught in our agricultural colleges. The masses cannot attend them. Tho' every young man and woman could, the work must be begun long before they are young men and women. Colleges are not for children: this teaching must be. Neither could it be taught in primary agricultural schools, though we had them and there was room for them. The idea of school must be eliminated from this course of instruction. The teachiug must be unconscious to the child.

Neither can the lesson be learnt from strictly agricultural text books. We have these already. They do not teach this lesson. True, they are not for children: but make them so, and you will destroy the second part of this education. Children do not like that which must be learned, though you make a story book of it. You must conceal the study of theories and facts if you would at the same time awaken an appreciation of them, a love for the farm, its work and its benefits. I have condemned text books and schools—study. In justification I say that nearly all my life has been spent upon a farm; I love children, and I have kept school. I know the farm, the children, the school, and I kuow I am right in my coudemnation.

This must be taught first and above all else in the home. There will be several teachers in the home, but the most important is the mother. Who can teach as the mother? Ah, heaven! Give us good mothers, they make us what we are! I can uot tell of all the ways a mother can educate her children agriculturally, for it would be a recital as boundless as a mother's love. But let her siug agricultural baby songs like

"Little Bo-Peep has lost her *sheep*," etc.,

above the cradle. When the very little child comes to mother to tell it a story, very likely to go to sleep with, let her tell fairy tales or fables of the farm—what the birds, aud bees, aud flowers, and grass, and leaves, and wheat say and do, how they sleep, and grow, aud work; what the sunshine, and rain, and wind say to them—a thousand fanciful stories can be made of these. And what a wealth of material for little childrens' stories do the ducks, chicks, piggies, lambs, colts, calves, etc., afford! The child will learn to love the farm and all about it almost as it learns to love its mother, Its mind will dwell upon the farm, its thoughts be about it, and it will grow alert and ready for *instruction*. When this time comes, let the mother take a flower, a tuft of grass, a bird's nest, something of this sort, and tell the children all about it. Let her tell how the root eats and drinks; how the flower supports bees and moths, and finally perfects the seed; how the birds build their nests, rear their young and migrate. Let the subject be pleasant and the lesson will be pleasant, for the instruction will be pleasant, never fear. No one can talk and teach like "mother," you know; at least to the little child. And the child will continue to grow in the love and knowledge of these things—the birds, flowers, pigs, lambs, colts, calves, grass and grain. The children will tell each other what the birds say, inventing all sorts of fanciful tales; how the grass and the flowers grow. They will come and tell "mother" the very things she has told them, only embellished with all sorts of fancies, And they will wonder and want to know more. They will want to know all about these things. Oh, they will ask a thousand questions. And how can they help loving these things when they are so interesting? How can they help loving Nature's great picture-book and toy-house, more wonderful and pleasing than any work of man? How can they help loving the farm when it contains all these interesting and beautiful things? Why, the farm, I care not how small it may be, contains materials for interesting, loving iuvestigations for a life-time. Awaken the mind of the child to an investigation and understanding of these things, and you, while teaching the advantages of farm life, will also awaken an appreciation of them so strong that it will ripen into a love of the farm that will keep the children always there.

"But," you say, "that is all fanciful, no mother will do that." You do not know what a woman's ingenuity and a mother's love are. The mother amuses and instructs her child with and about other objects. Will she not take up for this purpose the things pertaining to the farm when she sees she can do so much for her child?

Co-existent with the influence of the mother is that influence of the home so well understood but impossible to analyze. Little things are responsible for it—sunshiny rooms, clean, white beds, flowers, pictures, rugs, birds, for examples. There must be an air of pleasantness and intelligence about the home. The child must learn to love it because it is pleasant, because it is a lovely epitome of all the advantages and benefits of farm life. How can the child learn and love these benefits if its home is devoid of them?

I can not go into details but let me mention two things—fruits and flowers. These belong distinctively to the farm. Children love them. I have yet to see a child that does not love fruit. The little stomach is grateful for it. Fruit to eat in abundance is one of the greatest advantages of farm life. It means pleasurable health. Fruit to cultivate is as great a benefit of farm life. It has a marked moral effect often noticed. Bring these benefits to the practical notice and consequent enjoyment of the child, aud of course it will appreciate them.

Flowers are as important as fruit. One pleases the palate, the other the eye. Both alike have a refining tendency. Flowers make the home, the farm beautiful. Children love flowers. Did you ever see a baby that would not crawl toward a blossom? Take advantage of this love for flowers. Make the farm home,—the house, the yard, the garden, full of flowers. Rest assured that the child will see and appreciate this advantage of farm life.

Here let me anticipate somewhat. Give the child a plat of ground all its own.—for flowers first, because it can cultivate them first. Take a seed—a bean and a grain of corn are best—and show it how it is formed—of plumule, radicle, cotyledons and food—and tell the child how it grows. The child will listen with wide eyes and mouth. It will ask questions. It will never plant one of its flower seeds afterwards without thinking of what has been told it. Then when the plant appears explain the use of the different parts—which eat and which breathe. It will soou learn the easier phenomena of the growth of its flower bed. Make this plat all its own. It will tend and love it, for it is its own, and it will blossom by and by. Later give it a plat in the vegetable garden, then some berries or fruit trees, and then a field of grain and some farm stock aud chickens, all for its own. Tell it all about these. It will listen and be interested, for these things are its.

But as it grows older there must be more aids. It goes to school. Its readers should be about the farm. Starting with the lowest the whole story of plant life could be taught without the child being conscious of it, and the book would be interesting. The child takes up arithmetic. Instead of the problems being about buying and selling bonds, exchange, custom-house duties, etc., as they are, let them be about something that will concern the farm. Such problems would answer every purpose better. His readers will have told him of the soil he is to cultivate, of the plants he is to grow, and the stock he is to feed, or the tools he is to use. Let the problems be such as he must solve to be a successful farmer. The readers will prepare him for this work. I cannot particularize; but suppose the problem be, How many pounds of pork will so many pounds of corn make? If corn contains so much of this element and that, milk, peas aud cotton-seed meal ditto, what proportions of each should be used for a ration for a pig, the elements to be so and so? Questions like these would be of incalculable benefit. And when the child comes to study geography, it should not learn the names and locations of all the towns and creeks on the globe, but rather the productions of each place. And it should not learn this by memorizing, but by *reasoning*, from a knowledge of the heat, rainfall, winds, latitude, seasons, and situatiou of the locality. And so with the other studies of the school. The pupil can learn the science of farming while learning to read and to spell, while learning arithmetic, grammar, geography, composition, etc. Let me say right here that composition may be made a powerful auxiliary. The subjects should be about the science, the art and the charms of farm life.

But the education of the child is not yet done. Papers have become the almighty school-masters. They go into every home to instruct and amuse. They will awaken a love for the farm life because they will make it pleasant and interesting. Children read and like papers. Put facts into a book and the child will despise them; put them into a paper and the child is delighted. Why? Because the book is associated with school, study, work; the paper with home, enjoyment, play. We must have agricultural papers for children. Make a story of the facts to be taught. Put pictures into it. Children like pictures. Pictures teach. One picture in a dictionary will teach more than a column of words. Hide the facts in humor, even. We all like fun—children best of all. The mind will absorb the fact, the fancy be pleased with the humor. It will be a mental sugar-coated pill. Make the first lessons easy: grade up to something higher. We must have children's, youths', young men's and women's papers—all agricultural. These will teach the facts of agriculture, and not create a dislike for farm life. Boys buy revolvers and run away from home from reading blood-and-thunder stories. Girls meet their ruin through the agency of trashy novels. These facts show the influence interesting stories have upon the youthful mind. Agriculture may be made an interesting story. Have not geology, zoology and chemistry? And when you make an interesting story of them, you will not only teach the child the benefits of farm life, but will awaken an appreciation of them.

Just a little in the rear of the story papers, after the child is interested, should come agricultural story books. And when the child is child no longer, it will ever read the papers and books we now have. It will be noticed that I have omitted to state how the moral benefits of farm life may be taught, and an appreciation of them be iustilled This work cannot be done by direct means. Don't preach. Get the child interested in the farm and loving it in the ways I have pointed out, and all else will come. Good books and a good home on the interesting, loved farm will never be forsaken for the sin and excitement of the city.

I have beeu compelled to omit many things; and what I have given are merely hints. Read and think, and you can supply what space forbade me to write.

Adams Co., Ill.

Miscellaneous.

CATALOGUES, ETC., RECEIVED.

DEHORNING CATTLE.—For some years past, Mr. H. H. Haaff, of Henry Co., Ill., has practiced "dehorning"—that is, the sawing off of the horn close up to the skull. This practice has been quite common for years in parts of Ireland and some other countries, but has always been looked upon with horror by the great majority of the people. Mr. Haaff has advocated his system publicly, and attracted considerable attention. Last Winter, in order to test the matter thoroughly, he was arrested for cruelty to animals. After a trial of four days he was discharged, as it became apparent that no case could be made against him. The evidence was peculiar. That for the prosecution was based on theory almost entirely. The operation was said to be cruel, because the witnesses could not see how it could be otherwise. On the other hand, witnesses who had seen the operation performed, were positive that there was no great pain, that the animals were at once ready to eat and drink, and that in milch cows the milk secretion was not in the least diminished. With such testimony, no other verdict could be possible. This little book has been published by Mr. Haaff in order to satisfy the questioners who have been attracted by the published account of the trial. It is asserted that dehorning tends to "gentle" cattle beyond all question. It is claimed that a "man-killer" bull was so cowed by the loss of his horns that a boy could lead him. It is claimed that the destruction of all the horns in this country would save 200 human beings and 100,000 cattle every year, that being the estimated number of lives sacrificed. Nearly all loss of calves by abortion, one-fourth of the winter feed, one half of the shed-room, all the manure now wasted about sheds and stables and all loss in shipping cattle would be saved by dehorning, if we may believe Mr. Haaff. Of course, these statements refer more particularly to Western stock raising, where larger herds are kept and where, consequently, less care can be given to individual animals. Speaking of polled cattle, Mr. H. believes that by a careful polling of calves, we may, in a very short time, have any breed of cattle polled. He thinks any organ not provided with full and direct arterial circulation is liable at any time to be not produced. He thinks that polled Holsteins or Short-horns could be obtained in six crosses, but that it would take 16 crosses to produce polled Herefords. He appears to think that dehorning should be done with the same spirit that causes us to trim trees, pare our nails, cut corns, castrate animals or ring pigs' noses. He thinks that "hollow-horn" is caused by the freezing or chilling of the horn. Dr. Law is quoted as saying; "I wish dehorning might become as common as castration is now." The great argument of the book is that sawing off the horn close to the head does not cause a fraction of the pain that comes when the horn is knocked off. The suture that divides the skull of the ox runs up and down the face. A heavy blow on the horn tends to open this suture and congests the brain. The pain is not so much at the place where the blow is struck as it is at the brain itself. Persons who have watched the agony of an animal that has received a blow upon the horn, have been quick to say that dehorning must be horribly painful, when really this would not necessarily follow. Interesting arguments to show that the horn is not particularly sensitive to pain, are introduced at such length that they cannot be repeated here. It is stated that the circulation of blood in the horn is extremely small, and that changes are very slow. The nerves that are sensitive to pain are distributed with increased supply to parts that undergo rapid waste and repair, and are diminished in a marked degree where the processes take place more slowly. The outside shell of the horn is as absolutely incapable of pain as the hair, or the free border of the nails. The central portion of the horn, in young life, consists entirely of cartilage, separate and independent of the frontal bone. As age increases, it is converted into true bone by the deposition in it of mineral matters. Cartilage and bone are not sensitive tissues, and cutting can be done in them with comparatively little pain. The only sensitive portion of the horn occurs at its base where the true skin unites with the periostal covering of the bone. The sensitive portion exposed in sawing off a horn three inches in diameter will not exceed 1⅛ square inch, so that the operation could hardly be so painful as where a red-hot iron is used upon a calf's head. Mr. Haaff states that as he performs the operation there is little bleeding, and comparatively little pain. He thinks old animals experience less pain than younger ones, as in growing animals the membrane at the base of the horn must be tender and more sensitive. Mr. Haaff disclaims any great interest in the present polled breeds of cattle. We can never afford to do away with Short-horns, Herefords, or Holsteins, but these same breeds, minus the horns, would be more valuable than they now are. Breeders are already at work upon the Holstein breed, as there is a demand for a polled dairy animal. Mr. Haaff, in giving directions for performing the operation, is not so clear as he is in proving that the pain is not very great. We do not believe we could follow his directions and not torture the animal. We should not care to try the operation until we had seen it performed and had studied the structure of the horn more carefully. It is easy for a surgeon to cut off a limb, but an amateur would make a horrible job of it, and we are of the opinion that farmers who follow Mr. Haaff's directions, without practice or study of the animal's head, will cause untold suffering. That dehorning can be done, by a practical hand, with comparatively little pain seems evident; that an amateur can take a saw and cut off horns with any pleasure or profit to himself or the cattle, we do not believe. The book is interesting, and will give any stock owner much to think about.

FANCIERS' HAND-BOOK.—Pamphlet from the Associated Fanciers, 237 S. 8th St., Philadelphia, Pa.—This book is given up to a description of the different breeds of dogs, with hints on handling and managing them. All breeds of dogs are represented and well illustrated. A short chapter on the disease of dogs contains many excellent hints for properly describing the symptoms of common diseases. This association possesses unsurpassed facilities for supplying good dogs at all times. Instead of being reared in close kennels, as many show dogs are reared, the breeding dogs are sent into the country where farmers take a contract for raising the puppies. In this way the dogs are stronger, healthier and much better than they otherwise would be. There are many interesting points in this pamphlet which should be studied by those who wish to procure a good dog. Having had business relations with the company, we can commend them to our readers as honorable business men.

Woman's Work.

CONDUCTED BY EMILY L. TAPLIN.

ONLY A WOMAN.

ONLY a woman! A delicate woman!
Who starts at the sight of a mouse;
Whose weight is four-score
(Not many pounds more),
And yet what a power in the house.

Calmly, serenely, she orders her household
With almost a soldierly drill;
From chaos she's bringing,
Yet all the while singing,
Sweet order, her part to fulfil.

Only a woman! a soft-hearted woman,
Whose bright tears are ready to flow;
And yet, whose small hand
Is made to command
In her womanly sphere here below.

Small things may try her and ruffle her temper,
And yet with great trials she'll rise,
And shame even man,
With some well devised plan
That must have dropped down from the skies.

Only a woman! a far-sighted woman,
Who strives to make *men* of her boys,
Who reads their young hearts,
The while she imparts
True principle in with their joys.

Training her daughters—their constant companion—
Softly leading them each by the hand,
Teaching them truth
In their innocent youth,
That their names may be *gold* in the land.

Only a woman! A beautiful woman,
Now gliding through chamber and hall,
Her laughter and song,
That to home life belong,
Robs many a heart of its thrall.

Joy of her children; queen of her husband;
Who else may claim such a throne,
Strong and enduring,
Sweet peace ensuring,
Who but fair woman alone?

[*Credit lost.*

OF INTEREST TO WOMEN.

PHILOSOPHERS from all time have had their fling at women's dress, but few are so unkind in their strictures as one who says: "By her habit, you may give a neere guesse at her Heart If (like a Coffin) shee be crowned with Garlands, and stuck with gay and gaudy flowers, it is certaine there is somewhat dead within."—GRIFFITHS ("Bethel, or a Forme for Families," 1634.)

Polydore Vergil says of mouruing garments: "Plutarch writeth that the Women in their Mournyng laied aparte all purple, golde, and sumptuous Apparell, and were clothed, both they and their Kinsfolk, in white Apparell, like as then the ded Body was wrapped in white clothes. The white coloure was thought fittest for the ded, because it is clere, pure and Sincer, and leaste defiled. Of this Ceremonie, as I take it, the French Quenes toke occasion, after the death of their housebondes the Kynges, to weare ouely white Clothyng, and if there bee any such widdowe, she is commonly called the White Quene. Mourning Garments for the moste parte be altogether of blacke coloure, and they use to weare them a whole year continually, onlesse it bee because of a generall triumphe or rejoysyng, or newe Magistrate chosyng, or else when thei bee toward Marriage."

Addison thus describes his woman of ideal dress; a description as applicable now as when written 170-odd years ago: "Flavia is ever well-dressed and always the genteelest woman you meet; but the make of her mind very much contributes to the ornament of her body. She has the greatest simplicity of manners of any of her sex. This makes everything look native about her, and her clothes are so exactly fitted that they appear, as it were part of her person. Everyone that sees her knows her to be of quality; but her distinction is owing to her manner, and not her habit. Her beauty is full of attraction, but not of allurement. There is such a composure in her looks, and propriety in her dress, that you would think it impossible she should change the garb you one day see her in for anything so becoming, until you next day see her in another. There is no mystery in this, but that, however she is apparelled, she is herself the same; for there is so immediate a relation between our thoughts and gestures that a woman must think well to look well."

Though Flavia existed long before Mrs. Merrifield wrote "Dress as a Fine Art" she expressed perfectly the ideas given in that work. Says the authoress: "The immediate objects of dress are twofold—namely, decency and warmth; but so many minor considerations are suffered to influence us in choosing our habiliments that these primary objects are too frequently kept out of sight. Dress should be not only adapted to the climate; it should also be light in weight, should yield to the movements of the body, and should be easily put on or removed. It should also be adapted to the station in society and to the age of the individual. These are the essential conditions; yet in practice how frequently are they overlooked; in fact, how seldom are they observed! Next in importance are general elegance of form, harmony in the arrangement and selection of the colors and special adaptation in form and color to the person of the individual."

Good St. Francis de Sales would have regarded the work quoted as a foolish vanity, if not worse, for he says: "The married woman may and ought to adorn herself when she is with her husband, and he desires it; but if she should do so when she is at a distance from him, it will be asked whose eyes she desires to please with that particular care? A greater liberty is allowed to maidens, because they may lawfully desire to be agreeable to many, although with no other outcut than to gain one by holy marriage. Neither is it esteemed amiss that widows who purpose to marry should adorn themselves in some measure, provided they betray no levity; for, having already been mistresses of families and passed through the griefs of widowhood, they are considered to be of a more mature and settled mind." However his protest against undue regard for dress in married women is more than counterbalanced by his opinion that maidens may be allowed more scope in the matter, though the pious monk is a little bit mean in suggesting that our only purpose should be the capture of a husband. This recalls one of the New Jersey blue laws, still extant, though we believe not enforced rigidly. This statute declares that any maid or widow who shall decoy into matrimony any of His majesty's subjects, by the use of paint, powder, false hair, high heels, or any attire calculated to deceive, shall be judged guilty of witchcraft, and punished for the same.

FITNESS.

"THEY'RE all farmers!"

The speaker, a ragged, dirty little fellow, was right; and I glanced instinctively around at our crowd, to see how he had found us out so quickly, and why he seemed so disgusted. In face, form, or expression, I saw no perceptible difference between this and a city crowd; a trifle more sunburn and rosiness, maybe, and not much either, for pink and white complexions are not the fashion at this season even in the city. So to my, perhaps, partial eyes, we looked quite as intelligent and bright as other people, and so I came to the conclusion that the difference must be in our clothing, for I was obliged to confess, that here was a difference, and not in our favor either. Not that the women were dressed in "caliker" or the men in "home-spun," as some writers are fond of picturing country folk. No, we had gone to the other extreme.

A city girl, would not think of going on a railroad excursion to a lake shore pic-nic, wearing a lace trimmed violet satin dress, and Gainsborough hat with snowy plumes: but a farmer's daughter at my elbow was thus attired; white dresses of swiss and cross-bar, elaborately trimmed with lace and embroidery were met at every turn, and on the elders, brocade and satin were more common than gray, brown and black cloth, which would have been so much more appropriate to the occasion.

Feeling as disgusted as the small boy looked, at the lack of fitness thus displayed, it made me think that it would be well to pay more attention to this subject—Fitness. Not alone in dress do we err, but in many other things, which not only make us almost ridiculous to thoughtful people, but also causes much outlay of time, money and strength, which we can ill afford.

It is no uncommon thing to see a low roomed cottage in the country furnished in imitation of its statelier sister of the city, with heavy curtains and stuffy upholstery, when light, tasteful chairs and tables and airy draperies would be so much prettier and agree with its surroundings.

If houses were studied and fitting articles selected without regard to prevailing fashions, more satisfaction for our money would be obtained and fewer changes desired. But some one will say:

"Yes if you have plenty of money you can do this but we cannot exercise our taste."

This may be true in some cases, but generally those who make this plea are the ones who scrimp and save in order to get some costly articles because their richer neighbor has them, without thinking whether they will fit or not such articles generally proving "apples of Sodom" to their possessor. If we would be satisfied at all, we must choose with discrimination everything from the food we eat to the sermon we listen to. If I am in the country I expect fresh fruit and vegetables—ices and costly confectionaries are not fitting. If I am tired, sad, discouraged, I want to listen to the minister, who will tell me of a Savior's love and care, not caring whether his sentences are well rounded and delivered with the gestures of an orator or not. If I go simply to be entertained, then I shall choose the orator. Farmers are not the only ones who blunder into unfitness, either of clothes, manners or furniture, but there is much room for improvement with us. Circumstances *do* alter cases, and we would be better, happier, and more useful if we studied them more and fitted into them better. Life is made up of small things, and nothing is too trivial to be thought over and made the best of. MARY MANN.

THE NECESSITY OF DESULTORY READING.

WE expect that all the wise people who believe strictly in the Gradgrind view of reading will look upon our title with cold scorn, to say the least. But we don't use the term *desultory* as meaning hasty, capricious, or vacillating; but returning to the Latin derivative we find that the name Desultor was applied to a warrior who leaped from charger to charger in battle, thus gaining increasing energy and activity. This is the true idea in desultory reading—not cramming a quantity of undigested knowledge, but obtaining a variety of information, while increasing the range of intellect by the same means.

An old proverb says: "Beware of the man of one book," and truth to tell, the person who only reads one book, or one author, has too often the capacity of becoming an unmitigated bore both to himself and to others. On the contrary, one acquainted, even slightly, with a wide range of subjects is usually able to converse pleasantly and intelligently with many people of diverse acquirements. Very few women having many household cares can give much time to reading, and we most strongly recommend so-called desultory reading for their stray half hours. If they confine themselves to one subject in solid reading, they are much in the position of a person only possessing a $50 bill when there is occasion for small change. We all ought to have a background of solid information, but we must also possess lighter weapons for conversational sharp-shooting. Heavy knowledge only is apt to give a formal pedantry very disagreeable in general society.

So, to a person of many occupations, newspapers and magazines are really the best literary food. True, you get a good deal of froth, but it is both sparkling and palatable, and there is always a sub-stratum of information, and that of the best. We hear many complaints of "newspaper English," but we think some of our "solid" writers are quite as apt to be slip-shod in their diction as these busy scribes who picture daily history as it flies. As a general rule, women do not read the newspapers sufficiently, and this is one branch of desultory reading they may find very advantageous; it gives a much broader outlook, removing prejudice and provincialism. As for the magaziues, they are always brimming over with good things, both informational and amusing, from the latest discovery of science to the most recent folly of fashion.

We should always give place in our desultory reading for a fair supply of good fiction. The proper study of mankind is man, and where can we find bright delineation of all our follies, frailities and virtues as in a clever novel? If we happen to be shut up in a box, as far as society is concerned, our faithful friend, the novelist, takes us by the hand and introduces us to a host of book friends, whom we soon regard with positive affection.

We end our little homily with the words of one who believed himself in desultory reading—and desultory writing, too—the great master who added Colonel Newcome to our list of book friends: "Might I give counsel to any young man, I would say to him, try to frequent the company of your betters. In books and in life that is the most wholesome society. Learn to admire rightly; the great pleasure of life is that. Note what great men admired; they admired great things; narrow spirits admire basely and worship meanly."

IN WOODLAND SHADES.

WHAT can be better for mind and body, these midsummer days than an impromptu picnic? Not the set, artificial affair that usually goes by that name, where a church or school or society takes a journey to some "grove," so-called, where lemonade venders and that ilk turn the face of nature into a Cockney imitation. No, we mean an occasion where a dozen or more congenial spirits, representing one or two families, take to the wood, accompanied by their hammocks and lunch baskets, there to spend a happy, gypsy day. We have assisted, to our sorrow, at one or two festive occasions of the first mentioned type, at which all the girls wore gay muslin and lace frocks, that made any attempt at gypsy abandon an impossibility, and where the artificial surroundings made the assumption of one's best society manner appear a necessity. But these were not real simon-pure picnics.

There was another joyous occasion, at which we assisted in the French sense of the word—where plain cotton frocks and spontaneous gayety were the rule. The scene was a picturesque grove, natural as Arden itself, with its leafy trees and sparkling spring. The picnickers came out for a day's relapse into primitive condition, consequently there were no society manners, no heart-burnings, no social fiction. Some botanized, some sketched, some read or wrote, according to their several fancies. The only material drawback was the presence of several objectionably tame cows, who possessed amiable and inquiring minds. One of them ate a doiley and a package of ham sandwiches early in the day, while another, an ingenuous beast with a terra cotta complexion and a fluffy bang, much embarrassed the student of the party, who was trying to read, by hovering around with a beseeching air that seemed to demand more sandwiches. Finally the student responded to her pleading with biscuits and ginger-bread, but as the result of this the entire herd hung round begging for biscuits, until the picnic party was obliged to request the removal of these too-confiding animals. A picnic of this type—barring the cows—is one of the best things to strengthen tired nerves and over-worked bodies; the pure air, novelty, and placidity will do much to rest nervous, worried people in city or country. Try it.

GOLDEN GRAINS.

IT is no virtue, but only luxury, to take away the crown of thorns from a lacerated brow, the prickly girdle from sore nerves.—*Jean Paul Richter*.....

Is thy friend angry with thee? Then provide him an opportunity of showing thee a great favor. Over that his heart must needs melt, and he will love thee again.—*Richter*...

I CHOSE my wife, as she did her wedding gown, for qualities that would wear well.—*Goldsmith*.....

BE loving, and you will never want for love; be humble, and you will never want for guiding.—*Dinah Mulock Craik*.....

AS a rule it will be found that it is not the poor who practice small economies. If they had the will and the skill to make the most of what they have they would soon rise from their low estate.—*Good Housekeeping*.....

No book is worth anything which is not worth much; nor is it serviceable until it has been read and re-read, and loved and loved again, so that you can refer to the passages you want in it, as a soldier can seize the weapon he needs in an armory, or a housewife bring the spice she needs from her store. —*Ruskin*.....

Domestic Economy

CONDUCTED BY MRS. AGNES E. M. CARMAN.

GOOD BYE.

AND must I leave the dear old home,
Afar on foreign shores to roam?
And are the moments drawing nigh
When I must give the sad good bye?
Each little tree, and bush, and vine,
Doth round my very heart entwine;
Each nook and corner seemeth dear,
Each bit of landscape far, or near,
Hath its own tale of love for me.
And, more than sad my heart shall be
To leave the dear familiar scene
Where much of life's best joy hath been.
Ah me! the world is large, and wide
And holdeth much of sin beside—
And here, within these sheltering walls
So much of peace, and comfort falls,
So much of beauty always nigh,
'Tis hard, old home, to say good bye.
Long years may pass ere we again
May gaze on thee—and yet not vain
Are all life's changing scenes, we know
Each hath his part and work below,
And not in vain the cross we bear—
It pointeth to a land more fair—
When we, with all our conflicts o'er,
Shall rest in peace, forevermore.

MRS. S. B. EATON.

HOUSE-KEEPING IN CALIFORNIA.—XII.

MARY-WARER FISHER.

ONE day a fair, young matron came in announcing herself as a next-door neighbor. "I have long wanted to come in and see you," she began, but I have been so very busy. You see I have four little children; my mother is an invalid and I have no servant. My husband won't let me have a Chinaman in the house on account of the children. We give out our washing, and I am supposed to have a colored woman come in every week for a day—only half the time she doesn't come; and as for a white woman in the kitchen, I can assure you it is impossible to get along with one. They are unwilling to do washing, they want very high wages, and are out every afternoon and can never be depended upon in the evenings; while their impertinence is intolerable. What the housekeepers on this coast will do if all the Chinese are driven out I don't know.

We shall all have to board, I fancy. I was born and reared in England and my mother never taught her daughters how to work, and she knew nothing herself practically of housework. After my father's failure in business, and his death, she opened a school for young ladies, was stricken with paralysis and is now very much of an invalid. She thinks it is wonderful how I turn off housework as I do. At first my hands—which I was so proud of—were in a terrible condition; for you see I can't bother to look out for my hands when I have work to do. And mother says that my husband—he is an American, you know—is the most extraordinary man she ever knew about helping; no Englishman would think he could do for his wife what mine does—wash and dress the children; and as for sweeping, he won't let me touch a broom. Once a week he is up at five o'clock and sweeps the whole house. He is a chemist and engineer, and the firm that employs him is not doing full work now, so that he has plenty of unoccupied time. A man can do so much if he only thinks so, and sets about it." And in such wise she rattled on, and I thought much of her cleverness after she went away. She had been college-bred in England; reared in luxury, and now, after a married life of eight years, had four children, was largely doing her own work and always looking in her person the real lady that she evidently was. Her children always seemed to be very carefully looked after and she was one of that large class of intelligent, tenderly-reared women who are forever equal to emergencies.

Anent Chinese servants, some of the women on this coast have had unusual experiences. Housekeeping friends of mine in a town on Puget Sound where the "Knights of Labor"—who are Knights of Sedition as well—endeavored to drive out the Chinese by violence, wrote me as follows: "I still have my Chinaman and shall keep him as long as I can. On Sunday while at breakfast, a Chinese rushed in saying that a policeman and a lot of men came into his wash-house, broke the dishes, knocked down the stove, gathered up blankets and everything they could hustle together and piled them into an express wagon, shouting that the Chinese must go, while going from place to place and gutting all the Chinese cabins. The papers stated that the Chinese wanted to go—with pistols pointed at their heads. For two days and nights we hardly slept or ate. In the afternoon of that same day, my servant went out to see if the mob had left anything in his house, and upon his return several of the rioters saw him and ran after him. He leaped the fence and got into the house, as white as a sheet. When he explained matters I sent him up-stairs, and then fastened up the house. My husband who, you know, is Mayor of the town, was out in the street and I was alone. Presently these seven men came to the kitchen door and banged away. I went to a window and asked what they wanted. 'We want your cook! your Chinaman.' I said no, you can't have him. My husband is Mayor of Seattle, and bound to uphold the law, and I as his wife must do the same. 'Mayor or no Mayor,' they shouted, 'we want your Chinaman and will have him. If we don't get him to-day, we will to-morrow.' I replied, 'this is my house, and I will 'defend it.' 'If you don't give up your China man, we will blow up your house,' repeating the threat many times. Well, you can imagine I was frightened. I had no weapons—and no one to whom I could call for aid. I dared not leave the window, for fear they would break it in, and so I stood there trying to think how to act, when unexpectedly some men came to my rescue. Of course we had the ring-leader of the mob arrested and he is in prison, but we can't feel safe for a moment. I don't dare to leave the house for fear my cook will be assassinated." And this lady's head is white with years—her servant a long-time trusted one, who relieved her of household care which she was quite unable to carry herself.

Another friend wrote: "We have had terribly exciting times since you left. I think you may congratulate yourself on not being here, for your husband would certainly have been on the law and order side, and you would have felt all the uneasiness that we did. My sons stood in the hollow square that protected the Chinese from the mob. I have told my Chinese cook that it is best for him to go, though, dear knows, we are sorry to part with him. I think they will all have to leave this part of the country, and the apology for servants that will be left us, will, I suppose, strike too, along with the miners. The eviction of the Chinese will not satisfy these miserable wretches of rioters, of course. The Home Guards had to shoot, or be overborne. It certainly would seem that if there was any place in the world that was the paradise of the working classes, this ought to be the one—high wages, land almost for nothing, fuel for the gathering, a fine climate and productive soil. If those pestilential Irish and German Socialists would let the people alone, I do not think there would be any trouble."

Still another friend wrote: "Poor Wong went to San Francisco. He was nearly frightened to death! I still send my washing to our Chinese laundryman, but each time I never know whether I shall see it again; I am now without help—the boys help me all they can out of school, but in a family like ours, you know there is no end to the work. How we are to get on without the help of the faithful Chinese, the mercy only knows, for the work they did, white men will not do, and women, as house servants amount to so little on this coast."

WOMAN'S UNNECESSARY WORK.

A SENSIBLE writer in an exchange says: "I am convinced that at least one-quarter of the work performed by women is unnecessary, and that the world would get along quite as well without it." I am inclined to go further still, and put it at one-half. "I never find time to read," said a lady, at whose house I was calling, and at the same time she sadly threaded a needle with chenille, and remarking that some people had so much leisure, she continued her work of embroidering impossible yellow peaches on a red plush mantle scarf. It had not even the merit of economy, for the materials were as expensive as they were hideous. Any work that serves to make home a charming and lovable place is a sacred duty to a wife and mother; but that which contributes to no comfort or enjoyment, frightful fancy work that has not even any artistic merit, is, indeed, a waste of time and energy—"busy idleness."

Husbands undoubtedly like to feel that their wives are good housekeepers, but husbands are very human, and once let a woman sink the wife in the housekeeper, and her husband will very likely fall into the same error. The "over-clean" woman is a nuisance to her family and friends. I once overheard a conversation between two gentlemen in a car, whose wives belonged to the above class, and, though estimable women, were about as close to godliness as cleanliness could take them. It was during the season of that annual horror—"house-cleaning," and they were condoling with each other upon its miseries. They both voted it an entirely unnecessary evil, and one of them said that during its progress at his house every-thigh was so wet that he always felt as if there was an incipient flood, while his friend said he could endure the water, it was the smell of yellow soap that he objected to.

A woman should never allow herself to become a mere household drudge, and when she finds that she has no time to read an occasional good book, to write a letter to a friend, to read a story to the children, or to walk or talk with her husband, she may conclude that there is something wrong somewhere in her domestic economy, and the more quickly she recognizes and remedies the evil, the better it will be for herself and family. If she is obliged to do her own family sewing, every tuck or ruffle that she puts on her children's clothes is a crime. The hour or hours spent in making an elaborate dress that baby will look "lovely" in, is a waste of energy that a mother who does her own work cannot afford. Baby will look quite as lovely in her eyes in a plain slip, and if he has only his elaborate dress to recommend him to the eyes of others, he might rather pass unnoticed. Give the matter serious thought, oh tired housekeeper; and see if you do not daily take many unnecessary steps, and do much that you might, without injury to any one, leave undone. Rest your body and improve your mind keeping your face and heart as fresh as possible, as you value the love of your husband and children.

Since this is a chapter of quotations, I will end it with the remark made by a sarcastic gentleman "Women seem to me to be divided into two classes, the over industrious, and the over indolent, and of the two evils, I would choose the latter as being the least."

"ONE WHO HAS TRIED IT."

A PRETTY LAMP SHADE.

A BEAUTIFUL lamp shade that almost rivals a porcelain one, is made out of fine thin Bristol board. Cut the sheets the shape of the wire frame, and make a scalloped edge both top and bottom by placing a spool on the edge and drawing around it. Take a number of pressed and beautifully colored Autumn leaves, either natural or the embossed, draw and paint a vine all around the shade, and join the leaves to it in natural order, sticking them on with gum tragacanth, or mucilage. When you have completed the wreath, let it lie under pressure for 24 hours, and give it a coat of colorless varnish. When thoroughly dry, join the shade together with gum, press it dry with a hot iron, and fasten it to the wire frame. It will give a soft mellow light, and if neatly done will repay the trouble.

WESTERN GIRL.

Beatrix in the Household says that if you would train your sons and daughters in the way they should go, you must travel the same road yourself.

DOMESTIC RECIPES.

CORN BREAD WITHOUT EGGS.

Two cups of corn meal, one cup of flour, two and one-half cups of fresh buttermilk, two and one-half teaspoonfuls of soda (just even full), one tablespoonful of salt. Beat thoroughly, add three tablespoonfuls of melted butter and bake.

LEMON HONEY.

One grated lemon, rind and all, one and one-half cup of sugar, one-half cup of butter, one cup of water, two tablespoonfuls of corn-starch. Cook till thick, stirring while cooking. Nice as a sauce or to put between layer cake.

CHEAP FLY SCREENS.

As I could not afford wire screens to my doors and windows, I cast about for a cheap substitute. A carpenter made me some door frames for 25 cents apiece. The window frames I made myself of lath. Measure across the window and saw two sticks for each window. Measure from the sill to as high as the window can be raised and cut off sticks one inch shorter, so that the screen can be put in place easily. Where the ends join, sink one piece into the other that you may have an even surface. Fasten together with eight ounce tacks, which will just go through and clinch. I covered my frames with mosquito netting at five cents a yard. My screens cost but a trifle and answer every purpose that more costly ones would. Of course they will not last as long as wire nets, but with care I expect to use them three seasons.

BED-BUG POISON.

Quick-silver mixed with the white of an egg will cause the bed-bugs to entirely disappear, if put in all the crevices and mattresses. A nickle's worth of quick-silver and the whites of two eggs will be sufficient for two or three beds.

IDA WILLIAMS.

CHOCOLATE CAKE.

One cup of sugar, one-half cup of butter, one-fourth cup of milk, whites of four eggs, one teaspoonful of baking powder, two cups of flour.

FROSTING FOR THE SAME.

Whites of three eggs, one-half cup of chocolate, one cup of sugar, and flavor when cold.

COFFEE CAKE.

Two cups of brown sugar, one of butter, one of molasses, one of strong coffee, four eggs, one teaspoonful of saleratus, two of cinnamon, one grated nutmeg, one pound of raisins, one of currants, four cups of flour.

CREAM CUSTARD CAKES.

One cup of sugar, one of flour, two teaspoonfuls of baking powder, three tablespoonfuls of cold water.

FOR THE CREAM.

One egg well beaten, one tablespoon of sugar, one of corn starch, one cup of sweet milk. Flavor with lemon.

AUNT RACHEL.

TO CAN CORN.

SELECT only tender ears, cut and scrape from the cob and pack as tightly as possible into glass cans. I use the handle of my potato masher. Fill the cans within one-half inch of the top, put on the covers and screw down, but not tightly. Put into a boiler of cold water, first placing something on the bottom. I have had a perforated board made for the bottom of mine. Heat gradually to boiling and boil three hours without stopping. Keep the water within an inch-and-a-half of the top. Fill up with hot water from a kettle kept for the purpose. When done, dip out a part of the water so that you can take out the cans and screw down the covers as tightly as possible. As the cans cool try to screw down the tops. Corn treated in this way *will* keep and be almost as good when opened as if freshly cut from the cob.

MRS. ECONOMY.

PUFF PUDDING.

Four eggs; yelks and whites beaten separately. To the yelks add three cups of sweet milk, a teaspoonful of melted butter and three cups of sifted flour. Stir in the whites the last thing. Bake in butter cups. Eat with hot sauce.

M. R.

Miscellaneous Advertising.

When Baby was sick, we gave her Castoria,
When she was a Child, she cried for Castoria,
When she became Miss, she clung to Castoria,
When she had Children, she gave them Castoria

Miscellaneous Advertising.

Catarrh

Is frequently an indication of a Scrofulous taint in the system. Ayer's Sarsaparilla purifies the blood, and thus restores health to the affected membranes. It also stops the nauseous catarrhal discharges, and prevents the infection from reaching the lungs and stomach. Catarrh should be treated as a blood disease.

I suffered for years from chronic Catarrh. My appetite was very poor, and I felt miserably. None of the remedies I took afforded me any relief until I commenced using Ayer's Sarsaparilla, of which I have now taken five bottles. The catarrh has disappeared, and I am growing strong and stout; my appetite has returned, and my health is fully restored.—Susan L. W. Cook, 909 Albany st., Boston Highlands, Mass.

Ayer's Sarsaparilla,

Prepared by Dr. J. C. Ayer & Co., Lowell, Mass. Sold by all Druggists. Price $1; six bottles, $5.

MAKE HENS LAY

SHERIDAN'S CONDITION POWDER is absolutely pure and highly concentrated. It is strictly a medicine to be given with food. Nothing on earth will make hens lay like it. It cures chicken cholera and all diseases of hens. Illustrated book by mail free. Sold everywhere, or sent by mail for 25 cts. in stamps. 2½-lb. tin cans, $1; by mail, $1.20. Six cans by express, prepaid, for $5. I. S. Johnson & Co., P. O. Box 2118, Boston, Mass.

HIRES' IMPROVED ROOT BEER. Packages, 25 cts. Makes 5 gallons of a delicious, sparkling and wholesome beverage. Sold by all druggists, or sent by mail on receipt of 25 cents. C. E. HIRES, 48 N. Delaware Ave., Philadelphia, Pa.

Brewster's Patent Rein Holder.

Your lines are where you put them—not under horses' feet. One agent sold 12 doz. in five days; one dealer sold six doz. in 15 days. Samples worth $1.50 FREE. Write for terms.
E. E. BREWSTER, Holly, Mich.

REMINGTON
Standard Typewriter.

Attention is called to the **increased excellence** of this **incomparable machine.** Buy it, with the **privilege of returning** it at any time within thirty days, C.O.D. for full price paid, if not **absolutely satisfactory in every respect.**

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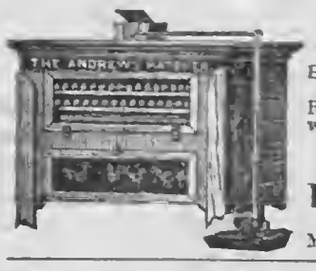

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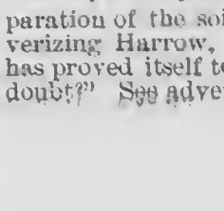

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DOG BUYERS' GUIDE.
Colored plates, 100 engravings of different breeds, prices they are worth, and where to buy them Mailed for 15 Cents.
ASSOCIATED FANCIERS,
337 S. Eighth St. Philadelphia, Pa.

"One Word in regard to the Profit resulting from a proper preparation of the soil. And as one example will go further than a great many precepts, the case of a farmer of Shawnee County, Kansas, may be mentioned. He took especial pains to make the soil compact for his wheat sown in October. At the harvest in July, he thrashed out 56 bushels and 30 pounds per acre of wheat, weighing 61 pounds per bushel. And no doubt the majority of farms in the United States are fertile enough to produce as much as this, if the crops were not damaged through the poor mechanical preparations of the ground, against which manure or natural fertility cannot prevail. The average yield of wheat is 15 bushels to the acre. No doubt with perfectly prepared soil this yield would be double. What then is the actual value to the farmer of an implement that is perfectly adapted to this requisite preparation of the soil, such as the 'ACME' Pulverizing Harrow, Clod Crusher and Leveler has proved itself to be beyond all question of doubt?" See advertisement on page 524.

News of the Week.

HOME NEWS.

SATURDAY, July 31, 1886.

DURING the fiscal year ending June 30, the appointments in the 53,614 Post-offices in the country amounted to 22,747, as follows: On resignations and commissions expired, 9,112—increase, 3,908 over the preceding year; on removals and suspensions, 9,566—increase, 8,756; on deaths of postmasters, 587—increase during the year 175; on establishment of new post offices, 3,482—increase, 1,361. Total number of appointments made during the year, 22,747—increase, 13,200.....Most disastrous storm for years in Western Pennsylvania Monday morning; floods, crops ruined or injured, fences, trees and buildings blown down or swept away—loss over $350,000.....Col. Bolton, superintendent of second-class matter in the Chicago Post Office, and Chief Weigher Stewart, were arrested Monday for embezzling about $100,000 of Government money. Receiving, say, 25,000 pounds of newspapers, they charged the publishers full price ($1.00 a pound), and reported to Washington only 15,000 pounds, pocketing in such a case $100. This swindling has been going on for years, and was discovered by inspectors from Washington, whose suspicions were first aroused by Bolton's violent opposition to an examination of his books..... ....The Supreme Court of Rhode Island sustains the constitutionality of the Prohibition laws. .....The Pennsylvania Democratic convention is likely to favor high-license..... .....It wasn't Admiral Worden, of Monitor fame, who died, as telegraphed the other day; but Admiral Warden—a different hero altogether.....There is no prospect of the passage of the Inter-State Commerce bill at this session of Congress.....The Court of Appeals of New York, has adjourned till October without deciding the appeal of ex-alderman Jaehne—three judges were for conviction and three against; while one was absent. ... .Connecticut nominated a straight Prohibition ticket, Wednesday.....Wisconsin, Michigan and Ohio Prohibitionists have done likewise.....West Virginia Republicans favor the submission of a prohibitory constitutional amendment to the people ... ...The House has appropriated $75,000 to pay the Land Office special agents who have been investigating land frauds. A strong movement was made to vote no pay; and an amendment to increase the amount granted to $125,000, was defeated. The bitterest opponents of the measure, and of all exposures of land frauds, have all along been the Congressmen from Kansas, Nebraska, Colorado and Minnesota, and it has been repeatedly very forcibly charged that some of them are interested in the land secured by fraudulent means..... The House appropriated $620,000 for national defences; the Senate has raised the amount to $6,630,000. The increase meets with widespread favor, as a third-rate foreign power could now safely bombard all our sea-coast cities, and exact heavy ransoms from them... .....There's little chance that the Senate will act on the new extradition treaty at this session—no time. A good deal of opposition to the "dynamiter extradition" clause has been developed among the Irish and Irish-Americans. The Dominion Government approved the draft of the treaty before it was finally formulated, and suggested the clause relating to the surrender of escaped convicts. .....Gen. John B. Gordon was nominated for Governor of Georgia, Wednesday, by 322 out of 322, votes on the first ballot. The vote was made unanimous, except two objecters. Gordon's rival, Maj. Bacon, was excessively bitter and begged his followers not to make the vote unanimous.....The Republican Legislature of California, at its extra session which began July 20, has resolved to elect a successor to United States Senator Miller, shelving "Old George" Sheard..... .... Prince Dom Augusto, eldest son and heir of the genial old Emperor Dom Pedro II. of Brazil, is on a visit to this country now, and last Monday made a trip from this city to Coney Island, a watering-place about 10 miles off, on Long Island. On his way back what some think was a burning bomb was found on the boat and thrown overboard; it is generally thought some one was playing a practical joke. District Attorney Martine, however, who convicted the boycotters, and against whom they have made violent threats, was on board, and some think it was intended to blow the vessel to pieces and drown most of the passengers for his special "benefit."..... The trial of the Chicago Anarchists is still "booming," and exposures of their nefarious plans, designs and plotting are being constantly made by "traitorous" confederates and detectives who, in some cases, had been for two or three years trusted members of the Anarchist organization. It is thought the "political pull" of the party (reckoned at nearly 15,000 votes in Chicago) will prevent hanging any; but the imprisonment of several seems certain. .....Senator Blair, of New Hampshire, great on appropriations for pensions and public education, now wants an amendment to the Constitution of the United States prohibiting, after A. D. 1900, the "manufacture, sale, and importation of distilled alcoholic intoxicating liquors."....Oregon pays a bounty of two cents for every squirrel killed, and one man was recently paid for 125,000 squirrel tails which he had collected..... ....The Maine Knights of Labor have elected delegates to support Powderly at the great convention at Richmond, Va., in October.... ... So many outrages on white women and girls have been committed of late by negroes in Comanche Co., Western Texas, that all colored people have been notified to leave the county at once. A few bad men are causing much suffering and loss to innocent darkies... ....Ned Buntline's estate amounts to about $20,000 in farm and personal property. Two wives claim it. He made as much as $64,000 a year by his pen at one time..... ..... Chicago physicians have presented bills amounting to $9,528 for attending victims of the Anarchist slaughter at Haymarket Square at the county hospital..... .. ....Hon. J. A. Chapleau, Dominion Secretary of State, in seeking re-election by the French-Canadians at Chambly, the other day, denounced Riel as a rebel, miscreant and renegade, and met with the fiercest opposition and personal threats of violence. He says he was offered high office and big money bribes to forsake his party and lead the opposition, but that he patriotically refused to be "corrupted." Intense bitterness marks the election—the first since Riel's execution..... Nova Scotia is still insisting on "home rule" and trying to form a confederation of the Maratime Provinces. Some advocate annexation to this country, but the vast body of the people take no stock in the notion .....All along the Northern coast of Newfoundland there is desperate want. The inhabitants, chiefly Esquimaux, depend mainly on fish for a livelihood. For two years the supply has been insufficient; and this year the coast has been blockaded with ice from 20 to 25 feet deep, and fishing has been impossible.....So far as heard from in July the temperature was below freezing point; no crops were put in, no fish caught, supplies always barely enough for winter use, were some time ago exhausted. The number of deaths from starvation—sheer starvation—is variously estimated from 1,500 to 3,500. Some of the settlements have been exterminated; hundreds of bodies will not be found for months, if ever. Winter opens in September; what's to become of any survivers? The coast is not included in the Canadian Confederation; but private Canadians are sending tardy relief, as there are no public funds for the purpose. The distress was known months ago, but not the terrible mortality caused by it. Why doesn't the Dominion settle the starvliugs on its millions of unoccupied acres in the Northwest..... ....What a tremendous amount of attention all the political papers are now giving to the Prohibition movement. Little county and town prohibition meetings are respectfully reported at length by big Dailies that a short time ago had only a few words of ridicule or contempt even for State conventions..... After all the Morrison surplus resolution is likely to be forced through the Senate by outside pressure, perhaps as it passed the House, making $100,000,000 the limit of the cash to be kept in Treasury. The Senate may, however, increase the reserve by $10,000,000 to $20,000,000, on the ground that the $100,000,000 are held as security for the greenbacks in circulation; and that there should be some more reserve to be drawn on in case of emergency .....Judge George A, Jenks, of Pa., has been nominated Solicitor General instead of Goode, of Va., whom the Senate refused to confirm. Jenks was confirmed Friday..... ....With regard to the fishery difficulty with Canada, Secretary Bayard has investigated every case of alleged seizure, and whenever the facts justified such action, demands for redress have been made. The President has appointed counsel for citizens in the Canadian Courts, and has entered into negotiations with the British Government, which, he believes, must terminate in an amicable settlement equally just and honorable to both countries.. .....With regard to the Mexican trouble, Editor Cutting has not been surrendered yet by the Mexican authorities at El Paso del Norte, Mexico. Some doubts are cast on that peremptory demand of Sec. Bayard for his surrender. It is said the Mexican Federal authorities have ordered his surrender; but the State authorities of Chihuahua refuse to obey—just as if Gov. Hill of New York refused to surrender to Canada a prisoner on he order of President Cleveland. Texans are clamoring for war, and Mexicans along the Rio Grande are bitterly hostile; but no sensible man expects anything but a peaceful and friendly settlement of the difficulty. Other outrages by Mexicans in their present feverish state may, however, lead to more serious complications ....

FOREIGN NEWS.

SATURDAY, July 31, 1886.

LORD SALISBURY has formed a strictly Conservative Cabinet, as the leaders of the Liberal-Unionists have all declined to take office, though Lord Hartington was offered the position of Prime Minister, Salisbury being willing to serve under him as Minister of Foreign Affairs. It is thought a strong Cabinet by its friends, and, of course, a weak one by its enemies. Impartial critics say it is quite strong in parts and weak in others; but fairly strong as a whole. Here it is: Secretary of Foreign Affairs, the Earl of Iddesleigh (better known as Gathorne-Hardy); Chief Secretary for Ireland, Sir Michael Hicks-Beach) Chancellor of the Exchequer, Lord Randolph Churchill, who, by virtue of his appointment, becomes the recognized leader of the Conservative party in the House of Commons; Secretary for War, Rt. Hon. W. H. Smith; First Lord of the Admiralty, Lord George Hamilton; Lord High Chancellor, Baron Halsbury; Secretary for India, Rt. Hon. Frederick Arthur Stanley; Prime Minister and First Lord of the Treasury, the Marquis of Salisbury; Lord Lieutenant of Ireland, the Marquis of Londonderry..

AGRICULTURAL NEWS.

SATURDAY, July 31, 1886.

PRESIDENT CLEVELAND referred the Oleo Bill to Attorney-General Garland for his opinion as to its constitutionality. Garland has returned it, but his "opinion" is not definitely known. He is believed to have said that it is not unconstitutional, but that he is strongly opposed to it as a matter of policy and justice. So are nearly all the Southern Senators and Representatives, among others the two Senators from his State. Some say the President will sign it, as he is disinclined to antagonize the demands of the 8,000,000 farmers of the country. Others say he will veto it; as his party as a whole, is opposed to it, and vast corporate interests are pressing him in that direction. Others say he will neither sign nor veto it. In that case it will become law at the end of 10 days after its passage by Congress, unless Congress adjourns before the end of that time. If he does not sign it, its friends in the Senate and House will prevent the adjournment of Congress before next Tuesday, when it will become law without his signature. Farmers are pouring in upon the President petitions in favor of it by thousands. We shall have something to say about the Bill, editorially, when final action shall be taken on it..... ....A special dispatch from Fort Worth, Tex., says many exaggerated reports have been sent out from North and West Texas in regard to the suffering of cattle from drought in Western Texas. Unusual droughts have existed in the different sections of West Texas, but these have all been broken by good rains within the last two weeks. Moreover, it is said stockmen, to avoid enormous losses from excessive drought, drove their cattle to better sections. This whole report seems to us to be written for a purpose, and meant to deceive. It is against all previous reports from widely separated parts of the State, and also against the burthen of other reports received within the last two days. There's a "nigger in the fence" here somewhere..... Abundant rains have put an end to the drought in Colorado and to no end of wrangling among farmers and stockman, irrigation companies and riparian land-owners. Probably the next legislature will have to pass laws or provide for a constitutional amendment regulating, once for all, the subject of irrigation—a paramount one in that State where agriculture, owing to the light rainfall, is dependent nearly altogether for success upon irrigation .....The crofters (small tenant farmers) of Tiree Island (one of the inner Hebrides), Scotland, have driven away a newly-settled, large farmer, whose land they wished to divide among themselves, and frightened away a squad of police sent to back him up. A man-of-war with a force of marines is on its way to the Island to "make short work of all opposition."..... ..... It is reported that thousands of cattle and sheep will be brought from Montana into Dakota this Winter, as the grass on the ranges has been entirely burned out. Arrangements have already been made to winter 150,000 head of cattle, and stockmen are going into Dakota every day in search of feed for their stock.....Sixteen head of cattle infected with contagious pleuro-pneumonia were killed, the other day, near Lancaster, Pa. ... .The Audubon Society is growing and new branches are rapidly being formed. The members pledge themselves not to kill or capture any wild bird not used for food, not to disturb or destroy the nest or eggs of any wild bird, and not to make use of the feathers of any wild bird as ornaments of dress or furniture..... .... Watermelons have been shipped to Chicago in such quantities that commission dealers cannot realize enough on consignments from Florida to pay freight charges ... ... The Secretary of the Illinois Board of Agriculture has received the medals forwarded by the Clydesdale Horse Society of Great Britain to be awarded at the Chicago Horse Show in September.....A dispatch from Little Rock announces that a refreshing rain has fallen in all sections of Arkansas, after a drought of six weeks, insuring good crops of corn and cotton..... ....

The Fountain of Youth.

IN all the searches for the fabled fountain of youth there has been disappointment in the final result. This has been more or less keen, according to the state of health of the seeker. But *modern scientific research has found a real "fountain of youth."* In Compound Oxygen the old ideal so long sought for has been found to be attainable. One who has tested its value writes from Waukan, Wis.: "I sleep better; *dyspepsia* is less troublesome, and I think I can say my heart is better. I am stronger, and I am losing that worn and haggard look; perhaps I may say *I am growing young again. It must be that Compound Oxygen is the fountain of youth.*" Another writes from Clinton, Mass.: "It has given me so much strength that *I feel like a new person.*" A clergyman at Queen City, Mo., writes: "My wife has used your Compound Oxygen with the best of results. Her cough is not entirely removed yet, but with that exception she has become *the strongest and healthiest woman of her age in this community.*" The editor of *The New South*, W. H. Worthington, of Columbus, Miss., says:

"You will doubtless remember my getting your Compound Oxygen for my mother (who is *very aged*) in February or March of last year, and its happy effect upon her. When I wrote you my mother was very low. When she commenced taking the Treatment she began at once to improve and this improvement was steady. She is now in good health. Last week she made several visits to her friends, walking several squares. Her restoration to health from the use of Compound Oxygen has attracted considerable attention in this section."

Curiousity as to this remedy may be fully gratified by any one who will take the trouble to write to Drs. STARKEY & PALEN, No. 1529 Arch Street., Philadelphia. They publish a brochure of nearly two hundred pages, entitled *Compound Oxygen—Its Mode of Action and Results.* This will be sent, post-paid, to any address on application.—*Adv.*

Crops & Markets.

SATURDAY, July 31, 1886.

THERE is a great deal of complaint at Chicago about the inspection of the new winter wheat. It is claimed that considerable wheat which ought to pass as No. 2 Red is inspected as No. 2 Turkish, and a loss of two to three cents caused thereby. Receivers say that the harvest having been completed during the clear hot weather, the kernel is exceptionally hard and dry, even the soft varieties being almost as hard as California samples. Exporters and millers agree that this is not detrimental to its value, but the inspectors place it in the same grade as Turkish wheat, which was intended to include the flinty varieties. Conferences between the parties interested and the Chief Inspector have not so far tended to remedy the trouble, which is drawing considerable of the trade from that city.

A telegram last Tuesday from Canajoharie, N. Y., in the center of the hop-growing region, said: "The last ray of hope entertained by the hop growers throughout New York State vanished this morning. During the night a heavy rain occurred. The growers thought that this would have a good effect, but, instead, yards which yesterday appeared green and healthy are now black and utterly ruined. Many growers destroyed their yards a week ago, and their example will now be followed generally."

A telegram from Cedar Rapids, Iowa, Tuesday, says that most of the small grains had been harvested with better results than had been anticipated. Wheat is better in quality than it has been before for 10 years, and the yield is equal to last year's crop. Hay in many places is burned, but in others is of superior quality, but only about 80 per cent. of last year's yield. Oats yield well, and none is poorer than best grade No. 3. Barley and rye also

good, but flax is not more than three-quarters of a crop. No rain had fallen in many places for 11 weeks, but a light rain fell Monday night west and north, doing the corn much good. Corn had stood the drought remarkably well.

Reports of the damage done to spring wheat in the Northwest by the protracted drought, still vary so much that it is very evident many of them are made up for speculative purposes. It looks now, however, as if the injury since July 1, the date at which the RURAL report was made, would amount to about 15,000,000 bushels, so that the aggregate spring wheat crop is likely to be about 125,000,000 bushels, instead of 140,000,000 as indicated by the condition on July 1, according to our reports. The crop is very uneven, being in fair condition in some places, and nearly utterly ruined in others. Corn, too, is reported very uneven in Michigan, Illinois, Wisconsin, Iowa and Nebraska, and the probability of injury to it has helped to stiffen prices. Wednesday there was a corn panic in Chicago, and prices jumped up 4c. a bushel. Reports of very serious damage to the crop, especially in the great-corn-growing States, are multiplying. Some say the crop is "ruined;" all say the injury is great. Potatoes appear to be in bad condition nearly everywhere in the West, except in Minnesota. In parts of Wisconsin cattle have been given feed for over a week past, owing to the poverty of the pastures. Fruit crops of Illinois, Michigan and Wisconsin very promising.

It is estimated that the grain ruined by Friday's hail-storm about Portland, Dak., will aggregate 750,000 bushels, which at the present price means a loss of $450,000.

The July cotton report to Bradstreet's shows that the late heavy rains in the Atlantic States, Alabama and Mississippi, have left the plant in a condition well towards bad, as against good at a like period last year. The crop is equal to last year's in other States except Louisiana, where it is fair only. The weather is hot and dry throughout the cotton belt, a condition which must operate unfavorably if long continued.

Delaware and Maryland Peninsula peach growers will begin marketing their crop in less than a week. Reliable authorities put the crop at about 3,000,000 baskets—somewhat less than an average crop, but enough to meet the demand. Some early kinds are now being sold, but the quality is poor. Some ripened prematurely through unhealthy condition of the trees, are bringing better prices than prime fruit later on. Beatrice, Louise, Early Rivers, Amsden's June, Alexander and Waterloo are expected in a day or two. Nearly the entire yield of these varieties has been sold for $1.50 a bushel, which is considered a high figure for these sorts. The peach season here is usually inaugurated when Throth's Early is ripe. This and Crawford's Early are highly prized for eating, and Crawford's Late for canning and preserving. Oldmixon and Smock are also favorites. The system of "exchanges," now established through nearly all the fruit-growing section, greatly facilitates shipment and prevents the overstocking of the markets. Representatives of the big houses in the large cities are already on the ground, constantly watching the ripening fruit. Generally the dealers buy outright instead of securing goods on commission. The Pennsylvania R. R., by its system of fast freight deliveries has extended the market throughout all the Eastern and Northern cities and as far west as Chicago. The market is further kept up by innumerable evaporators and canneries in the peach belt, and these will use so many that peaches, it is thought, will not go below 80 cents per basket. It is thought that with all these means of selling the fruit, the days of low prices and glutted markets are at an end. This has so encouraged growers that many more young trees have been set out in the Peninsula than ever before, and some expect the area will be doubled next year. The dismal failure of profit from small fruits of late, owing to over-production, will cause nearly all the land to be set to peaches. Peach pluckers expect to earn $3 to $4 a day, and are flocking to the peach section.

The very latest:—Earlier reports as to damage to the spring wheat crop are believed to have been exaggerated, and Dakota and Minnesota are now thought likely to yield over 45,000,000 bushels. The Wisconsin yield is better than expected. Heavy receipts of winter wheat and moderate export demand, hold quotations in check. The drought West and Northwest has damaged the Indian corn crop to some extent, and in such localities general trade is checked. Recent local rains have improved the prospect some. Special telegrams to Bradstreet's place the total California hop yield at 40,000 bales. The Louisiana rice crop is expected to be of fine quality, and to reach 800,000 sacks, and the Louisville tobacco market is firm inasmuch as the crop needs rain and stocks are smaller. The tobacco crop in Chemung Co., N. Y., (a heavy tobacco-growing section) was greatly injured by storms, Thursday.

MARKETS BY TELEGRAPH.

SATURDAY, July 31, 1886.

CHICAGO.—Compared with cash prices a week ago, "regular" wheat is ⅞c. lower; No. 2 Spring, 1⅝c. lower. Corn, 4¼c. lower; Oats, 3c. lower. Rye, ½c. lower. Barley, 6c. lower. Flaxseed, 5½c. lower. Pork, 30c. higher. Cattle, from 10c. to 25c. lower. Hogs, from steady to 25c. higher, according to grade. Sheep, a slight rise, except in Texans which, have dropped from 50c. to $1 a head. Lambs from 25c. to 50c. higher.

WHEAT active; Sales ranged: July, 73⅜@76c; August, 74⅝@75⅝c; Sept., 76⅛@77⅛c; No. 2 Spring, 74c. CORN.—Active; cash, 44⅛c; July, 42¾@44⅛; August, 43⅜@45⅜c; September, 45⅞@47⅛c. OATS.—Weak; Sales ranged: Cash, 28c; July, 28c; August, 28@29c; September, 29⅝@30⅝c. RYE.—Quiet; No. 2, 53½c. BARLEY.—September, 61@61½c. FLAXSEED.—No. 1, $1 12. MESS PORK.—Active, sales ranged: Cash, $9 80@9 85; August, $9 77½@9 91½; September, $9 85@10 10. LARD.—Firm; sales ranged: Cash, $6 65@6 67½; August $6 65@6 70; September, $6 70@6 77½. Short Ribs.—Cash, $6 17½. Boxed Meats.—Dry Salted Shoulders, $6 10@6 15; Short Clear sides, $6 60@6 65. CATTLE.—Market dull; Shipping steers, $3 50@5; stockers and feeders, $2 40@3 70; cows, bulls and mixed $1 50@3 60; bulk, $2 50@2 90; through Texas steers, $2 50@3 85. HOGS.—Market weak, rough and mixed, $4 20@4 90; packing and shipping, $4 75@5 20; light weights $4 20@5 05; skips, $2 75@4 00. SHEEP.—Market slow; Natives, $2@4 20, Western, $2@3 40; Texans, $1 75@2 50; Lambs, per head, $1@5.

ST. LOUIS.—Compared with cash prices a week ago, No. 2 red wheat is 1½c. lower. Corn, 4c. higher. Oats, 1c. lower. Rye, 2c. lower. Barley, steady. Butter, unchanged. Pork, 15c. higher. Cattle, from 15c. to 45c. lower. Hogs, all classes from 15c. to 30c. lower, except "heavy," which are from 10c. to 20c. higher. Sheep, steady.

WHEAT.—Dull; No. 2 Red, Cash, 75@75⅛c; August, 75⅝c; September, 77¼c. CORN.—Active; No. 2 mixed Cash, 38⅝@41¼c; August, 41c; September, 43¾c. OATS. Weak; No. 2 mixed, Cash, 27¾@28c.; August, 27½c; September, 28¾c. RYE, 51c. BARLEY.—No. 3 Spring, 48c. BUTTER.—Creamery, 17@20c; dairy, 10@16c. EGGS, 6c. FLAXSEED.—$1 05. HAY.—Timothy, $12 00; Prairie, $5 00. PORK—$10 40, BULKMEATS.—Long clear, $6 20; short ribs, $6 30; short clear, $6 45. LARD.—$6 25. Receipts.—Flour, 3,000 bbl; Rye, 2,000 bush; Barley, 1,000 bush. CATTLE.—Market active; Good to Choice Native Shipping Steers, $4 50@4 75; Common to Fair, $3 50@4 40; Butchers' Steers, $3 25@4 25; Cows and Heifers, $2 25@3 50; Stockers, and Feeders, $3 25@4 35; grass Texans, $2 25@3 85. HOGS.—Market firm; Lights, $4 50@4 85; Packing, $4 30@4 85; heavy, $4 90@5 15. SHEEP.—Market firm at $2 25@3 75.

BOSTON.—GRAIN.—Corn.—Steamer mixed at 50½@51c; steamer yellow is scarce and quoted 52c. per bushel. OATS.—Are in fair demand and firm, fancy clipped are particularly firm at 48@49c; sales of No. 2 white at 42@42½c. as to location, and No. 3 white, 40½@41c. per bushel. Rye is quiet at 68c. per bushel. Bran, $14@15 00 for Spring, and $15 50@15 75 for Winter; Fine Feed and Middlings at $15@18, and Cotton Seed Meal at $23 on the spot, and $21 75 per ton to arrive. HAY AND STRAW.—Market for hay has been firm at $17@18 per ton for choice and fancy, $15@17 for fair to good, $13@16 for fine, and $9@13 for poor and damaged. Western choice, $16@17, do fair to good $14@15. Straw.—Rye straw is held $19@19 50 for choice, and $14@18 for common to good. Swale hay at $10@11 per ton. Oat straw at 10@11 per ton. PRODUCE.—BUTTER.—Northern and Eastern creamery, extra, 20c; do. extra firsts, 18@19c; firsts, 16@17c; Western creamery, $17@19c, for extra firsts to extra; firsts, 15@16c; Northern dairy, 15@17c. for Vermont extra firsts to extra; firsts, 14@14½c; seconds, 12@13c; Western dairy, 12@13c for firsts; seconds, 9@11c; imitation creamery, 11@15c for extra firsts to extra; ladle-packed, 9@12c, for extra firsts to extra; firsts, 8@9c; seconds 7@8c; grease, 3@4c. NEW CHEESE.—New York and Vermont extra, 8@8½c; do. do. firsts, 7@7¾c; do do. seconds, 4@6c; Western extra, 7¾@8c; do. firsts, 6½@7c. EGGS.—Cape and near-by, per doz. 19c.; Eastern extras 17c; do. firsts, 16c; Northern firsts, 16@18c; Western firsts, 15c; Provincial, 15½@16c. BEANS.—Choice Northern hand-picked pea, $1 75@1 85 per bushel; do. do. New York, small $1 60@1 70; do. do. screened, $1 15@1 30; medium choice, hand-picked, $1 50@1 55; do. do. screened, $1 15@1 25; Yellow Eyes, improved $1 50; do. choice flats, $1 25@1 40; Red Kidneys, $1 60@1 70; Canada pea, 65@95c. per bushel for common to choice; green peas, Northern, 90c@$1; do. Western, $1 15@1 20. POTATOES range at $1 75@2 25 per barrel for new.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, July 31, 1886.

STATE OF THE MARKET.—As compared with cash prices past week, flour is 15c. higher; No. 2 Chicago wheat, ¼c. lower; ungraded red, 3c. lower; corn, 4c. higher; oats, steady; pork, 12½c. higher; butter, 2@2½c. higher; cheese, ½c. higher on best grades; poultry steady; fruits and vegetables steady.

FLOUR, FEED AND MEAL—FLOUR—Quotations: Fine, $2 00@2 65; Superfine, $2 30@2 90; Extra No. 2, $2 65@3 15; Good to Fancy Extra State, $3 20@3 85; Common to Good Extra Western, $2 70@3 95; Good to Choice Extra Western, $4 00@5 00; Common to Fair Extra Ohio, $2 65@3 75; Good, $3 80@4 20; Good to Choice, $4 25@4 75; Common Extra Minnesota, $2 65@3 25; Clear, $3 25@3 75; Rye Mixture, $3 30@3 75; Straight, $4 00@4 60; Patent $4 40@5 10; Bakers' Extra, $3 75@4 50; St. Louis Common to Fair Extra, $2 65@3 65; Fair to Good, $3 70@4 50; Good to Very Choice, $4 55@5 00, Patent Winter Wheat Extra, $4 40@5 00, City Mill Extra for West Indies, $4 30@4 45; South America, $4 40@4 50. SOUTHERN FLOUR.—Common to Fair Extra at $3 00@3 75, and Fair to Choice, $3 80@5 10. RYE FLOUR.—Superfine, $3 35@3 75, latter for choice. CORN MEAL.—Yellow Western quoted at $2 60@2 85; and Brandywine at $2 85@2 95.

GRAIN.—WHEAT.—No. 2 Chicago, 86½c; Ungraded Red, 75@87c; No. 3 Red, 82½@83¾c; No. 4 Red, 76c; No. 2 Red, 84½@85c; No. 2 Red, for August, 84⅞@85 1-16c; do. for September, 85¾@86c; do. for October, 86⅞@87½c; do. for November, 88¾c; do. for December, 89¾@90c; do. for January, 90⅞@91⅛c; do. for May, 95½@96c. RYE.—New State and Jersey, at 56½c. CORN.—Ungraded Mixed, at 46@52c; No. 2, 50c; Western Yellow, 52c; No. 2 for July, 50½c; do. for August, 50⅝@51⅜; do. for September, 52@53c; do. for October, 53⅜@54c. OATS.—No. 3, at 36½c; do. White, 38½@40c; No. 2, 37c; do. White, 41@43c; Mixed Western, 36@40c, do. White, 40@47c; White State, 43c; No. 2 for August, 34@34½c; do for September, 34⅛@34⅜c; do. for October, 34⅜@35c.

PROVISIONS.—PORK.—Mess, quoted at $10 62½@10 75 for Old and $11 62½@11 87½ for New; $12 @$12 75 for Family Mess; $14@14 75 for Clear Back; and $9 50@10 for Extra Prime. BEEF.—Extra India Mess, $12@14; Extra Mess, in barrels, $8 50; Packet, $8 50; Plate, $8 50. BEEF HAMS.—Quoted at $20 50@21. CUT MEATS.—Pickled Shoulders, 6¼c; Pickled Hams, 12c; 12 lb average Pickled Bellies, quoted 6⅝@6¾c; City Pickled Shoulders, 6¼c; Smoked Shoulders, 7¼c, Pickled Hams, 11½@12c, Smoked Hams, 12½@13c. MIDDLES.—Long Clear in New York, 7c; at the West, Long Clear, 6.40c; Short Clear, 6.65c. DRESSED HOGS.—City Heavy to Light at 6 11-16@6 15-16c; Pigs, 6 15-16@7c. LARD.—Western Steam spot, 6.82½@6.90c; August, 6.83@6.86c; September, 6.93@7c; October, 6.83@6.87c, November, 6.75@6.77. December, 6.75c. City Steam stronger, 6.45@6.50c. Refined, quoted nominally, 7c; Continent, 7.10@7.25c.

BUTTER.—Creamery—State and Delaware County, pails, fine, 20@21c; State and Pennsylvania, 19½@20½c; Western best, 18½@19c; Western prime, 16½@17c.; Western good, 14½@16c. State Dairy.—Half-firkin tubs best, 17c; do. do, about prime, 15@16c; do. do., good, 14@15c; do. common, 12@13c; Welsh tubs, best, 16@16½c; do. prime, 15c. Western.—Imitation Creamery, best, 13c; do. do. fair and good, 11@12c; Dairy, fine, 12c; do, common, 9@11c; Factory, fresh, 11c; do. good, 9@10c,

CHEESE.—The quotations are for: New State Factory, best white, 8c; do. do, best colored, 8c; do, do, fine, 7½c; do. do, fair, 6⅞@7¼c; do.do., common, 6¼@6¾c; Ohio factory, fine, 7¼@7⅝c; State factory, night skims, 6@6½c.

EGGS.—Quiet and steady; State, 14¾@15c; Canada, 14½c; Western, 14@14½c.

POULTRY.—LIVE.—Chickens, spring, per lb, at 14@17c; fowls, near-by lots, per lb, at 13@—c.; fowls, Western lots, per lb, at 12@13c.; fowls Southern lots, per lb, at 11@11½c; turkeys, per lb at 9@10c; ducks, western per pair, at 50@60c.; geese, western, per pair, at $1.00@1.25.

POULTRY.—DRESSED.—Turkeys, per pound, at 10@11c.; Spring chickens, Philadelphia, per pound at 20@22c.; do. western, per lb, at 17@19c; fowls, Pennsylvania, prime, per lb, 14c.; do State and western, per lb, at 13c.

FRUITS.—FRESH.—Quotations are: Apples.—Norfolk, per bbl., at $1 75@2 25; do. Maryland and Delaware, per crate, at 75c@90. Red Astrachan, per bbl. $1 50@2; Jersey, $1 25@1 75 per bbl. Huckleberries 7@8c. per quart; do. Maryland, 4@6c. per quart. Peaches, $1@1 50 for prime Georgia and South Carolina per crate; $1@1 50 for North Carolina per bush. crate, and 50c.@$1 for Maryland and Delaware per basket. Plums, 3@5c per quart. Raspberries, 2@3 for up river per cup. Grapes—Delaware, per lb, 20@22c; Ives and Hartfords, 4@6c. per lb. Blackberries, 5@6c, for best, per quart, and 3@4 for Maryland and Delaware. Pears, $2 50@3 50 per crate, and $2 50@3 50 per bbl.

FRUITS.—DRIED.—The quotations are as follows: Apples—Fancy evaporated, at 9c; do. choice, at 8½c; do. prime at 8c; fancy North Carolina sliced, at —; choice do. at 3½@3c.; choice Tennessee quarters at 1¼@2c.; State quarters at 2½@3c.; southern sliced prime at 1½@2c; do. common, —. Peaches—Peeled North Carolina, choice, 11c; fancy, 12@12½c; do. Georgia, choice, at 10@11c; do. prime, 8@9c; unpeeled halves, 2¼@3c; unpeeled quarters at 2¼@2½c.; Delaware evaporated, peeled,—@—c; unpeeled do., at —@—c. Choice pitted cherries at 10@10½c. Evaporated raspberries, at —@15c; sun-dried do. 13@—c. Blackberries—Prime at 6¾@7c. Whortleberries at —c. Plums, at —c; California evaporated, —@—c.

PEANUTS.—There are free sellers. The quotations are: 6½c. for best hand-picked; 4@4½c. for farmers' grades.

COTTON.—The quotations, according to the American classification, are as follows:

	Uplands.	New Orleans. and Gulf.	Texas.
Ordinary	6 15-16	7⅛	7⅛
Strict Ordinary	7⅜	7 9-16	7 9-16
Good Ordinary	8 5-16	8½	8½
Strict Good Ordinary	8¾	8 15-16	8 15-16
Low Middling	9⅛	9 5-16	9 5-16
Strict Low Middling	9⅜	9 9-16	9 9-16
Middling	9 9-16	9¾	9¾
Good Middling	10 1-16	10¼	10¼
Strict Good Middling	10⅜	10 9-16	10 9-16
Middling Fair	10¾	10 15-16	10 15-16
Fair	11⅜	11 9-16	11 9-16

STAINED.

Good Ordinary	6¾	Low Middling	8¼
Strict Good Ord.	7 7-16	Middling	9

HAY AND STRAW.—The following quotations are for New hay at 55@70c; Choice Timothy, old, 85c; Good do, at 70@75c; medium, 55@65c; shipping at 50c; clover mixed, 50@60c. Straw.—No. 1 rye, 90c; short rye at 60@65c; oat, at 40@45c; wheat, at —c.

BEANS.—Marrows, $1 75; Mediums, $1 55; Peas, $1 50½@1 55; Red Kidneys, choice, $2 25@ —; White Kidneys choice, $1 55; California Lima, $1 70; Green Peas, $1 05@1 10.

PEAS.—Green are quoted at $1 15@1 20.

VEGETABLES.—Quotations are for: Potatoes.—Long Island, rose, in bulk, per bbl., $1 50@1 87; Jersey, rose, per bbl, $1 50@1 87; Maryland, prime, per bbl, $1 50@1 87. Beets.—Long Island, per 100 bunches, $1 25@1 50. Beans.—Long Island, wax, per bag, $1 25@1 75; Long Island, green, per bag, $1 25@1 50. Carrots.—Long Island, per 100 bunches, $1 00. Corn.—Hackensack per 100, $1 00@1 25; Southern Jersey, prime, per 100, 75@87c. Cabbages.—Flat Dutch, per 100, $3 00@4 00. Cucumbers.—Long Island, per 100, $1 25@1 50; do, Philadelphia per bbl, $4 00; do. Norfolk, per bbl. $3 00; Norfolk, per bushel crate, 75c.@$1 00. Egg plant, Philadelphia, per bbl., $6 00@7 00; do. Southern, per bbl, $3 00@5 00. Onions.—Potato, Jersey, per bbl., $2 25@2 50. Maryland, per bbl, $2 00@2 25; Virginia, per bbl, $1 50@2 00; State, per bbl, $2 00@2 25; Western, per bbl, $2 00@2 25; Long Island, red, per bbl, $2 00@2 25. Peas.—Long Island, per bag, 75c.@$1 00. Squash.—Long Island, white, per bbl, 75c; do. Long Island, yellow, per bbl, $1 25@1 50; do. Norfolk, yellow, per bbl, $1 25@1 50. Tomatoes.—Monmouth County, per box, $1 50@1 75; Southern Jersey, per basket, 80@90c; do. Southern Jersey, per box, $1 25@1 50; Maryland, per bushel, crate, $1 50; Norfolk, Acme, per crate, 75c.@$1 00; do. Norfolk, common, per crate, 50@75c. Turnips, Jersey, Russia, per bbl, 75c@$1 00; do. White, per 100 bunches, $2 00@2 50.

LIVE STOCK MARKET.

NEW YORK, SATURDAY, July 31, 1886.

BEEVES.—Kentucky "Stillers," 1,357 lb average, at $5 25; do, 1,342 lb, at $5; do. heifers, 1,235 lb, at $4 50; Indiana steers, 1,115 lb, at $4 45; Kentucky do, 1,277 lb, at $4 85; do, 1,260 lb, at $4 70; Indiana steers, 1,390 lb at $5 35; Ohio do. 1,464 lb, at $5 25; do. 1,332 lb, at $4 75; Chicago steers, 1,275 lb, at $5 32; do. 1,440 lb, at $5 20; State do. 1,056 lb, lb, at $4 10; do, 1,187 lb, at $4 50; stags, 1,565 lb at $4; Texans, 951 lb, at $4 10; St. Louis Natives, 1,189 lb, at $4 90; Western steers, 1,506 lb, at $5 45; do. 1,301 lb, at $5 30; Texans and Colorados, 919 lb, at $3 60; Kentucky steers, 1,365 lb, at $4 90; Indiana do. 1,183 lb, at $4 75; Bulls, 1,100 lb, at $3; do, 996 lb, at $2 85.

CALVES.—Fed calves, 140 lb, at 4c.; Veals and Buttermilk Calves, 167 lb, at 4½c.; Veals, 150 lb, at 6c; Veals, 148 lb, at 5¼c; Veals, 167 lb, at 5¾c; Grassers and Fed Calves, 215 lb, at 2½c.

SHEEP AND LAMBS.—Receipts for six days, 39,201 head against 41,984 head last week. West Virginia Lambs, 60 lb, at 6¼c; do. 57 lb, at 5½c; Kentucky do. 69 lb, at 6c; West Virginia Ewes, 84 lb, at 3½c; do. 93 lb, at 3¾c; Ohio do, 70 lb, at 3¾c, Western Sheep, 98 lb, at $4 40; Kentucky do, 138 lb, at 4½c. State Lambs, 60 lb, at $5 80; Pennsylvania Sheep, 75 lb, at $4 30; do. 90 lb, at 4c; Virginia do, 65 lb, at 6¼c, Ohio Sheep, 91 lb, at $4 65; Kentucky do, 222 lb, 5½c; Bucks, 138 lb, at 2½c; Jersey Lambs, 61 lb, at 6¼c; Ewes, 113 lb, at 4c, State Bucks, 101 lb, at 3c; Michigan Sheep, 89 lb at 4c; Canada Lambs, 66 lb, at $5 85; Canada Lambs, 69 lb, at $6 20.

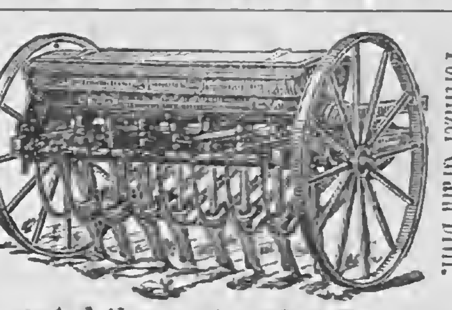
HOGS.—Receipts for five days, 27,918 head against 26,876 head for the same time last week. Feeling firm. About half a car-load of State Hogs sold at $5 20@5 25, and dealers quote $5 00@5 25 for Ordinary to Prime; State Roughs, 375 lb, at $4 25; State Hogs, 257 lb, at $5 20, do, 149 lb, at $5 25.

SEND TEN CENTS IN POSTAGE STAMPS TO
E. & O. WARD,
PRODUCE COMMISSION MERCHANTS,
for Circular giving important advice about shipping produce. Also containing recipe for preserving Eggs. Established 1845.
No. 279 Washington St., New York City.

WANTED.—An experienced Partner in Stock and Dairy Business, with about $3,000 to put in. Address A. B. MOFFATT, Le Sueur, Minn.

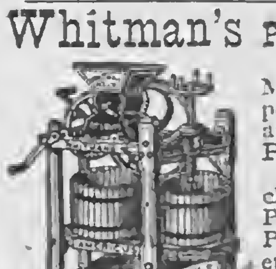
The Improved
"RIGHT SPEEDY"
(STYLE NO. 2)
CORN SHELLER
will shell the largest and smallest corn perfectly; shells 12 to 14 bushels per hour. It is the best hand Sheller made and I warrant it for 5 years. Price $5 or handsomely nickel-plated, $6.
Agents Wanted.
If no agent in your vicinity, I will send Sheller, express paid, on receipt of price. Send for circular.
CURTIS GODDARD, Alliance, O.

JONES
HE
PAYS the FREIGHT
5 Ton Wagon Scales,
Iron Levers, Steel Bearings, Brass Tare Beam and Beam Box for
$60.
Every size Scale. For free price list mention this paper and address
JONES OF BINGHAMTON,
BINGHAMTON, N. Y.



The Pennsylvania Force-Feed Fertilizer Grain Drill.
Warranted the most perfect Force-Feed Fertilizer Drill in existence. Send for circular, A. B. FARQUHAR, York, Pa.

Whitman's Patent Americus.



8 SIZES
The best Cider and Wine Mill made. Will make 20 per cent. more cider than any other. Geared outside. Perfectly Adjustable. Prices as low as any first-class Mill. Mfrs. of Horse-Powers, Corn Shellers, Hay Presses, Feed Cutters, Mills, etc. Send for circulars.
Whitman Agricultural Co., ST. LOUIS, MO.

JACKSON ARCHITECTURAL IRON WORKS.
Iron Work of all kinds for Buildings.
Office 315 EAST 28TH STREET, NEW YORK.
STABLE FITTINGS A SPECIALTY.

DON'T BUY A HARNESS Until you have FIRST sent to KING & CO., OWEGO, N. Y., for their new Wholesale Catalogue. Best quality and the lowest prices.

LION CUTTER.
THE BEST
Ensilage & Fodder Cutter made.
Also GALE'S CYLINDER and LEVER CUTTER. We make besides, the old and popular self sharpening
FEED CUTTER
For full description send for Illustrated Circulars and Price List. Address

The BELCHER & TAYLOR Agricultural Tool Co. (Box 75), Chicopee Falls, Mass.

THE ONLY BAGGER IN THE WORLD.

$50 REWARD
will be paid for any Grain Fan of same size that can clean and bag as much Grain or Seed in one day as our Patent MONARCH Grain and Seed Separator and Bagger or our Improved Warehouse Mill which we offer cheap. Price List mailed free.
NEWARK MACHINE CO. Columbus, Ohio.

THE NEW FORCE FEED **BUCKEYE DRILL**

THE BEST FORCE FEED MADE.
Plain Drills, Perfect Force Feed, No Change of Gears, a Perfect Lifting Lever. Force Feed Grass Sower, an Improved Hoe Shifter, an Accurate Surveyor. Also
The Famous Glass Feed Fertilizer DRILLS,
Buckeye Walking and Riding Cultivators, Seeders, Sowers, Double Shovel Plows, Cider Mills, Hay Rakes, Horse Hoes, Bag Trucks. SEND FOR CIRCULARS.
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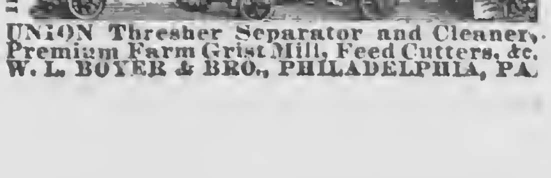
LATEST IMPROVEMENT
Machines for THRESHING and CLEANING GRAIN; also Machines for SAWING WOOD with Circular and Cross-Cut Drag Saws.
Acknowledged by all to be THE BEST

considering EASY DRAFT, DURABILITY, QUANTITY & QUALITY of Work.
48 page pamphlet FREE. Address A. W. GRAY'S SONS
PATENTEES AND SOLE MANUFACTURERS,
MIDDLETOWN SPRINGS, Vermont.

THE UNION HORSE-POWER
Has the Largest Track Wheels, DOUBLE GEARED, NO RODS. CHILLED BEARINGS, and LEVEL TREAD.
ILLUSTRATED CATALOGUE FREE



UNION Thresher Separator and Cleaner, Premium Farm Grist Mill, Feed Cutters, &c.
W. L. BOYER & BRO., PHILADELPHIA, PA.

For the Young.

I NOTICED a deformed leaf the other day. It was all out of shape, all twisted and crowded. It seemed ashamed of itself, hanging down and not standing up with the others. When it was young and growing, a spider had thrown a web over it and drawn it together. It had been drawn in and cramped so that it never got a fair start. The result was that it never had a chance to grow properly, and here it is now, all out of shape. Some men I know grow up in about the same way. They let laziness or some other fault put a web over them, and before they know it they are tied up for life. There are plenty of spiders all around you that would be glad to tie you up. They are all the time looking out for smart boys and girls that they can put their webs upon. Look out for them; keep out of their way by doing what you know is right. Whenever you do something that you know is wrong, one of these spiders gets a good bite at you.

How many of our boys and girls have to be told to "sit up straight?" Some people never sit in a chair at all. They just rest on the shoulders and on the end of the spine. That throws the back all out of shape. We have lots of things about us that will fail if we do not attend to them. The teeth and the eyes are most important and they can be saved or destroyed, just as we see fit. Boys and girls who do not want to have broken or false teeth some day, must remember to keep their teeth clean. Good tooth-brushes are cheap and they should be used every day. It doesn't take much time to brush the teeth, but the time so spent saves many an hour of the toothache and much trouble at eating. Many a good pair of eyes have been weakened by reading in the dark or in a bad light, or reading while the eyes felt tired. I don't think any of us will look well in spectacles, so we had better take care of our eyes now.

WHEN I was a boy I never liked to have my hair cut. The cutting was not as pleasant as it might have been. The old man who cut hair in our village could not see very well, and sometimes he would get so interested in his talk that he would forget what he was doing, and the first you knew the shears would come up against your ear. His shears were dull too, and they would pull pretty hard. Sometimes when he was in a great hurry he would take a big tin basin he had, clap it over my head and just trim off the hair that came below it. You can imagine what a looking head I had then. It never seemed to matter, however, for nobody cared much how the "boy" looked. Whenever I wanted to let my hair grow, they would tell me a story about an old farmer who lived a good many years ago. He was mowing one day, and after using his whet-stone he put it back of his ear and forgot where he put it. He blamed everybody for losing it. His hair grew long and covered his neck and ears, but he never would have it cut, until one day he was taken sick, and the doctor came and cut his hair. There behind his ear they found that whet-stone It is a foolish story isn't it?—and yet did you ever know people to do foolish things, blame others for doing them, and at last have the proof of their own mistake come right back to them? I have. It is a good plan to see what we are doing.

THE STORY OF A DISTRICT SCHOOL.

A COLLEGE BOY'S DIARY.

(*Continued.*)

"HOG! oh hog! you hog!"

Mr. Ezra Greening, the school inspector of Clay Valley township, still continued his conversation with the occupant of the pen. My ideal school system had been badly shaken during the journey from town, but it did not stand completely paralyzed till I walked up to the great black patch that appeared to stand guard while its owner bent over the pen.

Just as I came near, the great sow within the pen rose lazily and came forward to eat her dinner. This desirable object accomplished, Mr. Greening appeared free to devote his mind to educational purposes. He slowly straightened himself and the patch cautiously turned about until it was hidden from view.

Mr. Greening looked like a horse in the face. He had the large nose, bulging eyes, wide mouth and comparatively narrow forehead of that animal. Still there are horses and horses. Some have more intelligence than others. What they lack in intelligence they make up in obstinacy, and the ability to render their companions uncomfortable.

A shock of red hair stood up about the head, nearly lifting the hopeless hat in its efforts to deceive the observer by pretending to add to the size of the head. A blue flannel shirt, a red vest, brown overalls, and great boots appeared to be the costume in which education was clad in Clay Valley. The inspector held a large wooden paddle in his hand which he waved vigorously as he caught sight of me.

"Go 'way!" His voice was thin and high. "Go 'way! I don't wanter buy no book. I'll lay a hog you can't sell me none. I aint gut no money, crops is bad, sickness in the family, eyes is givin' out an' I ain't gut no time fer ter read noway."

I made haste to assure him that I was no book agent, but had come for an examination. It seemed hard to convince him that I was not armed with a "sample copy." He examined me critically, holding the paddle before his face to shade his eyes from the sun.

"You look jest like a book peddler, I declare ye do. We've jest shifted school books. I've gut me a Receipt book, a Lives of the Presidents an' a History o' Bible Times, an' aint read none of 'em. They aint no market here at all."

It was a long time before I could convince him. I do not think he was fully satisfied during the entire conversation. I think he fully expected to see me produce a "sample copy" and proceed to tell my "story." No doubt that fact tended to make my examination shorter.

"Gonter teach school to Bear Crick be ye?" He asked after I had made my errand known to him. "Sorter rough place over yonder. Plow them big boys is whales. Licked the last teacher an' drug him out an' jumped on him. A feller to teach in that deestrict orter be jedged by his muscle. Folks over there seems ter sorter get the bit betwixt their teeth and all pull sorter cornerways. They fite by sorter doggin' the boys onter the teacher. When one side quits, 'tother picks it up. Where ye frum?"

"I came down from the agricultural college," I answered a trifle doubtfully. This man seemed the perfect picture of the examining ogre we had come to dread.

"Oh, ye did? Wall, then, I 'spose ye must be putty well posted. Jest step up here an' I'll ask ye yer fust question in 'rithmetic. What do ye figger thet hog'll weigh? I'll lay they ain't another such in this county."

I saw my opportunity at once. There are various ways by which the heart of man can be reached. The avenue in some instances lies through a hog. I walked up to the pen and examined the lazy animal, and made a few figures on my note book before rendering a report.

"Well, sir, that is as fine a hog as I have ever seen. She can't weigh an ounce less than 400 pounds."

A smile of pleasure spread over the examiner's face at this answer.

"Sho—you ain't bad on figgers, be ye? Like enough she dooes weigh that much, but I wouldn't a put her down fer more than 375. Walk in! walk in!" and he put down his paddle and led the way into the house. From the expression on his face I was well satisfied that I had made a "10" on the first question. Once inside the house Mr. Greening proceeded to don a rusty black coat and to place a pair of spectacles on his nose. The coat was too tight for him and the spectacles sadly pinched his nose, yet he seemed to feel that the examination would never be a success without them.

"Gonter teach to Bear Crick, be ye? Now you've got quite a chore afore ye. I expect ye'll go back ter college with quite an appytite fer stayin' there."

"Why, what is the matter with it?"

"Oh, deestricts all right 'nuff I 'low, if a feller sorter watches an' keeps things sorter evened up. The gineral run o' teachers don't seem ter fit worth a cent. Putty strainin' place, 'cause everybody gets a holt on teacher an' yerks him all ways. A feller can't get no chance fer ter pull back, an' thar he is."

LETTERS FROM THE COUSINS.

DEAR UNCLE MARK: I am a little boy 10 years old. I live in Florida. I came from Tennessee nearly two years ago. We have a nice place here, on the bay, in sight of the Gulf of Mexico. We can stand in our yard and see the white caps of the Gulf. If you ever come to Florida you must visit us. We have nice fruit here; we have ripe peaches now. The Peento peach does well here. I shipped some tomatoes this year. I want to ship some egg-plants this Fall to your City; can you send me a reliable house to ship to. I have a nice garden coming on. I help my Mamma. I have two sisters and a little brother. If you come to see us I will give you all the tropical fruit that you can eat. Your nephew, MANSON T. DYE.

Clear Water, Fla.

[You may be sure that I will see you when I come your way. I will write about the commission house.—U. M.]

DEAR UNCLE MARK: I thought you all would forget me if I did not write before long. There are many raspberries this year here. Uncle Mark, I would like to have you see our flowers. Do you love flowers? We have eight canary birds and four small ones just hatched. We have eight horses, six little guineas and seven ducks. We have a large pond in our woods with carp fish in it. I don't think I would like to live in the city these warm days. Here in the country we can go in the woods and lie on the green carpets and hear the birds singing in the trees over our heads. We live a mile from town. I don't believe Uncle Mark is very old. I read the Y. H. C., every week. Your niece

Alexandria, Ohio. ADAH.

[I love flowers. I am older than you think. U. M.]

DEAR UNCLE MARK: I would like to join the Y. H. C. Father takes the RURAL. He says he could not get along without it. I have four brothers besides myself; four of us go to school Father raises lots of celery to sell. We have lots of strawberries. Father has a large Seedling strawberry that looks like the picture of the Jewell strawberry we see in the catalogue. Father gave me a little piece of ground, and I raised some watermelons and muskmelons. I sold my largest watermelons for 25 cents each. My muskmelons were nice. We are all busy in the Summer. Father has been to Florida, to a place called Palmasola, on the Gulf coast. He was there three years ago. He stayed there a year. He says it is a nice place to spend the Winter. Insects are bad in the Summer. Oranges and vegetables won't grow everywhere there. Brother Harry is going to write and tell you how father bleaches his early celery for market, and the kind's he uses. I am 10 years old.

Dover, N. J. WILLIE BYRAM.

[We want to know all about the celery, and shall expect that letter.—U. M.]

DEAR UNCLE MARK: I planted the Garden Treasures and they are growing nicely, some of them are in bloom. We have a very nice garden this year. We have a splendid pink. It is dark red and very double—had 49 flowers on at one time. I think the seed came with the Garden Treasures. Will some of the Cousins tell me how to keep rose bushes from freezing down in the Winter? I have one that I cover with straw, but it always dies above the ground. I think Uncle Mark is right about raspberries being the best of all small fruits. We have bushels of them here, and our cellar is always lined. We have about 800 cauliflowers set out. We would like to have you come and help eat them. Mamma thinks Ella Turner's Mamma and herself would agree, for Mamma is a temperance woman too. I have to stop for I have to help get dinner ready. EMILY COCKERAM.

Menomiuee, Wis.

[Let us hear from our rose friends.—U. M.]

DEAR UNCLE MARK: I would like to join the Y. H. C. I am a little girl eight years old. I have a little flower garden. My mother gave me a few of the Rural Garden Treasures, but I did not have luck with them, and one Bird Cantelope seed, but it did not come up. I have six brothers and three sisters. We have three cats and two dogs. We have eight milch cows. I have 10 little chickens. My Papa has five working horses and four colts, and nine yearling calves.

Dubuque Co., Ia. EFFIE A. BORN.

DEAR UNCLE MARK: As we all want to crowd that advertising column off of our page, I will add my mite. I received the package of sweet peas that you so kindly sent me. I planted them April 23, and they came up real well and are now in bloom. The Garden Treasures I planted April 21. I spaded the dirt all up, and then I went to the wood-pile and got dirt from under the wood; then I sifted it through an old coal sieve and planted my seed. They came up slowly, but now they are in bloom. We have pink and white candytufts, ragged sailors, poppies, zinnias, marigolds, phlox, and many others of which I do not know the name. The blackberries are ripe now, but we have to look sharp for them, or the city folks will come up very early in the morning and get them. My sister-in-law and I started out before six o'clock the other morning, but we did not get many, because it began to rain and we had to scamper home.

Your niece, BESSIE HOPE.

Perth Amboy.

[April 21 is my birthday. The city folks like berries.—U. M.]

DEAR UNCLE MARK: I have been reading the letters from the Cousins and enjoy them very much. I am 11 years old. I live about a mile from Topeka. My Father and Mother are dead, but I live with some nice Christian folks. I have one pet, a cat; his name is Daniel. He is maltese and white; and I have two dolls. I have a garden of flowers. Your affectionate niece, LUCY G. PIERSON.

[I am glad you have a good home.—U. M.]

DEAR UNCLE MARK: I have sent the picture of the trap that I think is the best to have on the farm. It catches rats, mice, gophers, squirrels, etc. Our cat (for that is the name of the trap) is well trained. She comes in the morning for some new milk, and as soon as she has as much as she wants she goes off until noon; then she comes for her dinner. At evening she wants milk again. We have a very nice vegetable garden this year. We live where we can see the steamers go over to Monterey Point, and the cars go by. The grain is ready to thrash now. One thrashing machine has started to work and there are two more that have not commenced yet. I would like to join the Y. H. C. My brother and I have a watermel on patch; the vines are very young yet. I will write again and tell you how they get along.

From your niece, LIZZIE SMITH.

Santa Cruz Co., Cal.

[The picture is very well drawn. She is a fine trap certainly. How she must make the rats and mice run.—U. M.]

DEAR UNCLE MARK: I am a girl 11 years old. I have been taking music lessons five months. I am improving very fast. Grandpa has sent me the RURAL for two years. I received the seeds and planted them; they all came up but the flower seeds. I have no brothers or sisters. All the pets I have are two canary birds. We are living in Kansas near Walnut. The timber surrounds us on the north and west. We live one mile from the school house. I went to school the last term seven months and did not miss a day. I studied reading, history, grammar, arithmetic, writing, geography and spelling. I got the prize for attendance, a large book, Swiss Family Robinson. HATTIE M. CULBERTSON.

Crawford Co., Kas.

[That is a good book. I hope none of us will ever be cast away as that family were.—U. M.]

DEAR UNCLE MARK: I wish to write to you about my rabbit. He was black. My uncle gave him to me four years ago. I had a small park for him, where I kept him for three years. When he wanted to come out, he would burrow in the ground till he got outside of his park, then he would dig out. I let him live in the yard almost a year, but he got so destructive in our flower garden that, as the last hope to keep him, I chained him with a long, very light chain, and put him where he had good shade, grass, and water, and watched and fed him often. He seemed very well contented and lively, but Sunday afternoon when I went to see him he was dead. He was to all appearances quite well that morning. Now, do you think he grieved himself to death? I think he was quite old, as he was getting some gray.

Pentz, Cal. ALICE SNYDER.

[It may be that he did die of grief. The chain must have seemed harsh enough to him. I am glad you wrote about him. We must have more to say about rabbits. They make good pets.—U. M.]

Miscellaneous Advertising.

MELLIN'S

TRADE FOOD MARK.

FOOD

FOR INFANTS AND INVALIDS.

The only perfect substitute for Mother's Milk. The most nourishing diet for invalids and nursing mothers. Keeps in all climates. Commended by physicians. Sold everywhere. Send for our book "The Care and Feeding of Infants." Sent free.

DOLIBER, GOODALE & CO., BOSTON, MASS.

"AN EXCELLENT JUDGE"

The late Gordon W. Burnham of New York, after his return from an extended tour through Europe, said: "I have bought and tried the finest Shaving Soaps made in England and on the Continent, but for months have been longing to be where I could again enjoy the Luxury of Shaving with the GENUINE YANKEE SOAP."

All Druggists keep it. Avoid Imitations. Trial Samples by Mail, for 12c.

The J. B. Williams Co.,

(Formerly Williams & Bros., Manchester, 1840.) Glastonbury, Ct.

INVENTORS and MAN'F'RS. Send for large pamphlet containing U.S. PATENT Office Rules for obtaining Patents. F. B. BROCK, Atty., Washington, D.C.

PERSONALS.

SENATOR BLAIR is a total abstainer from intoxicating drinks, but is a good smoker of 25-cent cigars.

PUBLIC PRINTER ROUNDS has bought the Omaha (Neb.) Republican for $100,000, and will soon resign his position at Washington.

MRS. CLEVELAND says the White House is "an awfully nice place to keep house in," and every woman in America agrees with her.

MRS. FOLSOM, the President's mother-in-law, is a guest at the White House. She arrived Wednesday morning and will remain several days.

REPRESENTATIVE RANDALL smokes a cigar now and then to "keep company" with his friends, but the process seems very distasteful to him.

JOHN M. BRUNSWICK, the head of the greatest billiard-table factory in the world, expired Sunday, at Cincinnati, of heart disease, in his 67th year.

EX-GOVERNOR WARMOTH, of Louisiana, is visiting his boyhood's home at Salem, Ill. It is said that he now has more than $1,000,000 invested in sugar interests.

MRS. GRANT is about to send Thomas Murphy, once Collector of the port of New York, but now sadly reduced in circumstances, the amount of his contribution toward the purchase of the Elberon cottage.

JOHN RUSKIN has persistently overworked himself, in spite of the warnings of his physicians and the entreaties of his friends, during the late years of his life. He is afflicted with a form of disease which runs into temporary insanity.

PRINCE FUSHIMI, the heir-apparent to the throne of Japan, is on a visit to this country, after spending a year in Europe—on a tour of sight-seeing, pleasure and instruction. The future Mikado of Japan is dividing public notice with the future Emperor of Brazil.

GEN. CLINTON B. FISK, the Prohibition candidate for Governor of New Jersey, says he is for organizing a Prohibition party that will fight a consistent battle for Prohibition this year and every coming year until the battle is won, if such a battle can be won.

"I NEVER," Senator Ingalls is quoted as saying, "did a lick of work until I had received a thorough education. My father and mother supported me until I was quite able to support myself. I belonged to the Brahmin class of New-England and am a sample of genuine Yankee training."

THE Prince of Wales, as future head of the Established Church, is sharply scored by the English Churchman for a recent Sunday dinner he gave to 40 guests, followed by a variety show, at which Japanese jugglers exhibited and a string band played, "carefully avoiding sacred music."

A SON of Senator Beck, of Kentucky, is one of the prominent candidates for Governor of Wyoming Territory. He has started for Washington to press his claims, as against Capt. Baxter, of Cheyenne, Mr. Holiday, of Laramie, and ex-Delegate Post, of Cheyenne—all seeking the place.

DR. GIONANNI SUCCI, the African explorer, claims to have made a most remarkable discovery. He has turned up in Africa a liquor which renders the human body independent of food and drink. It is said that Dr. Succi, after drinking a few glasses of this wonderful beverage, fasted for 10 days.

THE Prohibitionists of Michigan are making much ado over the fact that in the new private car of Gov. Alger wine lockers have been built. They aver that this is a slap in the face of the temperance people of the State, without regard to party, and that it will lose the Republican party thousands of votes.

THE unlucky number figured conspicuously in the career of Richard Wagner. Born in 1813, he died after 13 years of married life on Feb. 13. On March 13, 1861, his opera "Tannhäuser" was hissed in Paris. The number of letters forming his full name is 13, and his royal protector, Ludwig II. of Bavaria, was drowned on the 13th of June last.

MR. BEECHER is lecturing industriously in England. His first appearance at Bristol attracted a rather small audience to the hall; but one of the principal London journals did justice to the lecturer: "Mr. Beecher's magnificent presence, the mobility of his face, the modulation of his voice, his splendid diction and original thought, combined to make the man greater than the occasion."

W. M. EVARTS, lawyer, was bitterly opposed to the New York oleomargarine law, and argued against its constitutionality before the courts; W. M. Evarts, U. S. Senator and aspirant for the Presidency, strongly favored the National oleomargarine bill, and argued for its constitutionality before his fellow Senators. The points involving the constitutionality of both bills are substantially the same.

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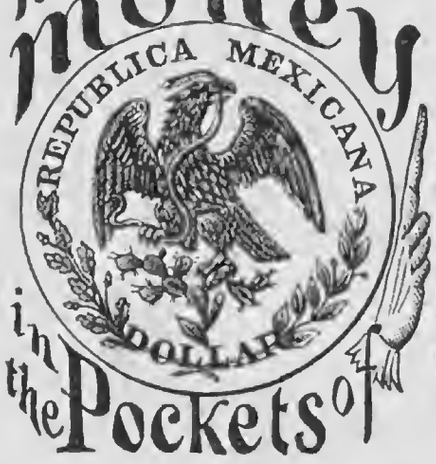

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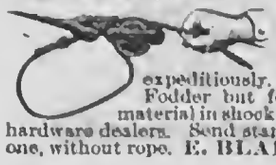

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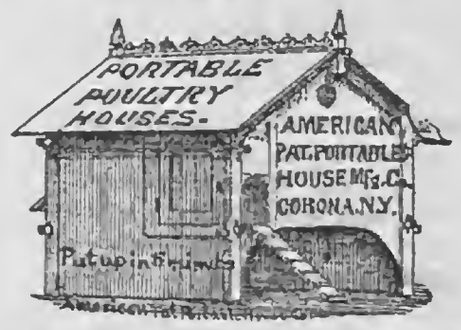

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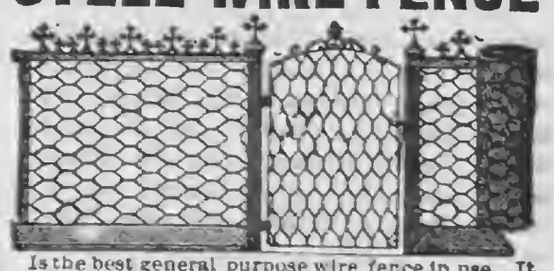

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A WOMAN never will be "the oldest inhabitant." She wouldn't admit it.

"WHAT would a woman do without a looking-glass?" is asked. Use another's. You can't stick a woman as easy as that.—*Chicago Ledger.*

MARRYING a woman for her money, says a philosopher, is very much like setting a rat-trap and baiting it with your own finger.—*Church Press.*

LITTLE NECK clams were invented by a Rhode Island man who didn't want the darned things stretching themselves into other States.—*Fall River Advocate.*

A POROUS-PLASTER has been boycotted. We defy the best organized boycott in Americe to discourage a porous-plaster after five minutes start.—*Burlington Free Press.*

"MAMMA, did you say the angels soar?" asked little Jennie Caution. "Yes, dear." "Well, what makes 'em sore—is it because they fly so much?"—*Pittsburg Chronicle Telegraph.*

AN original way of answering two questions at a time: "Here, Biddy, my darlint, what's the time o' night, and where's the pertaty pudding?" "It's eight, sir."—*Exeter Gazette.*

A BACHELOR advertised for a "helpmate; one who would prove a companion for his heart, his hand, and his lot." A fair one replying, asked very earnestly, "How big is your lot?"—*Church Press.*

DINNER TABLE.—Little Millie to her father, who has given her the smallest piece of pie on the plate: "Papa, why is my piece of pie like Europe?" Papa, thoughtfully: "I don't know; why is it?" Millie: "Because it is the smallest of the grand divisions."—*N. Y. Telegram.*

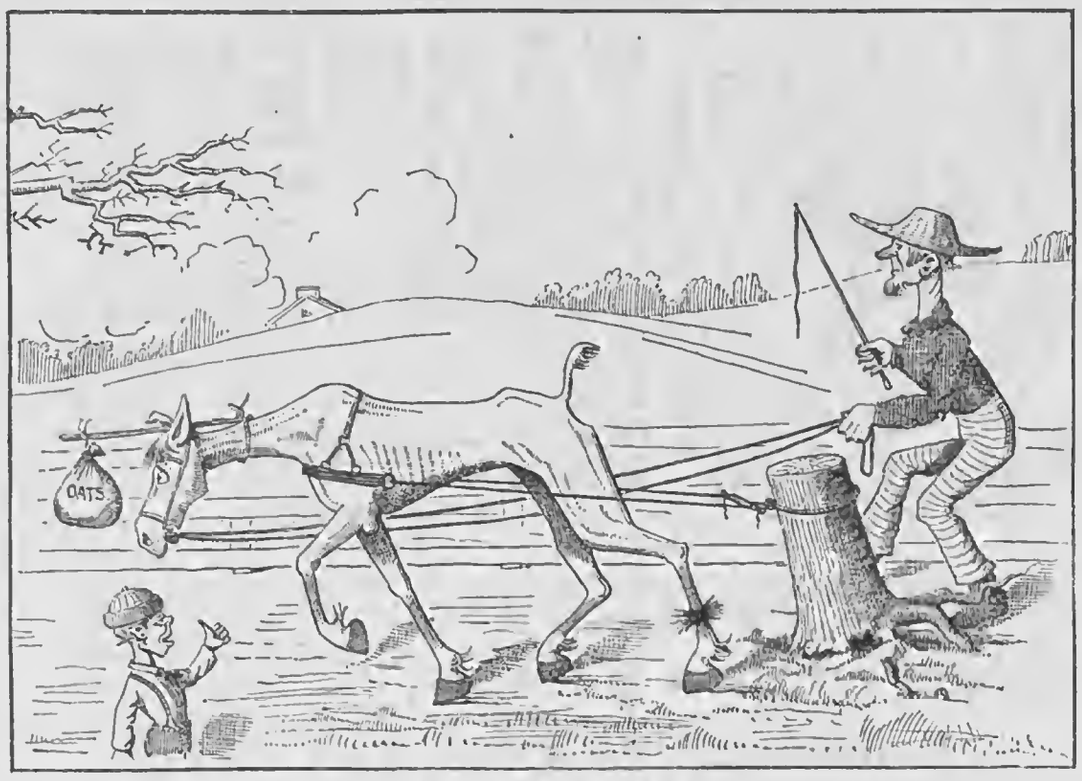
"WHY did General Washington cross the Delaware on the ice during the storm of an awful night?" asked a teacher of her young class in history. "I reckon," piped a small voice in answer, "it was because he wanted to get on the other side."—*Church Press.*

DISCOVERY IN NATURAL HISTORY.—A little girl from the city was on her first visit to the country. While riding near Clifton Springs she saw a lot of cat tails near the road. "Oh, auntie," she exclaimed, "I never knew before that sausages grew on sticks!"—*Harper's Bazar.*

THERE'S a new baby on Deer-Hill Avenue. It arrived the other day. It is a small one. Its little five-year-old sister watched it carefully for a few minutes yesterday, and then turned to the maternal head of the family and said: "Mamma, couldn't papa have paid another dollar and got a larger one?"—*Danbury Democrat.*

"ARE we all here?" inquired Mr. Brutal Jones of his landlady the other morning at the breakfast table. "I think so; one—two—three—four—yes, you are all here, I believe," and she smiled sweetly; "why?" "Nothing much, only I see by the morning paper that a human skeleton was picked up just outside the city limits." The smile vanished.—*Merchant Traveler.*

A THIN old man, with a rag-bag in his hand, was picking up a large number of pieces of whalebone which lay on the street. The deposit was of such a singular nature that we asked the quaint-looking gatherer how he supposed they came there. "Don't know," he replied, in a squeaking voice; "I 'spect some unfortunate female was wrecked hereabout."—*Exeter Gazette.*



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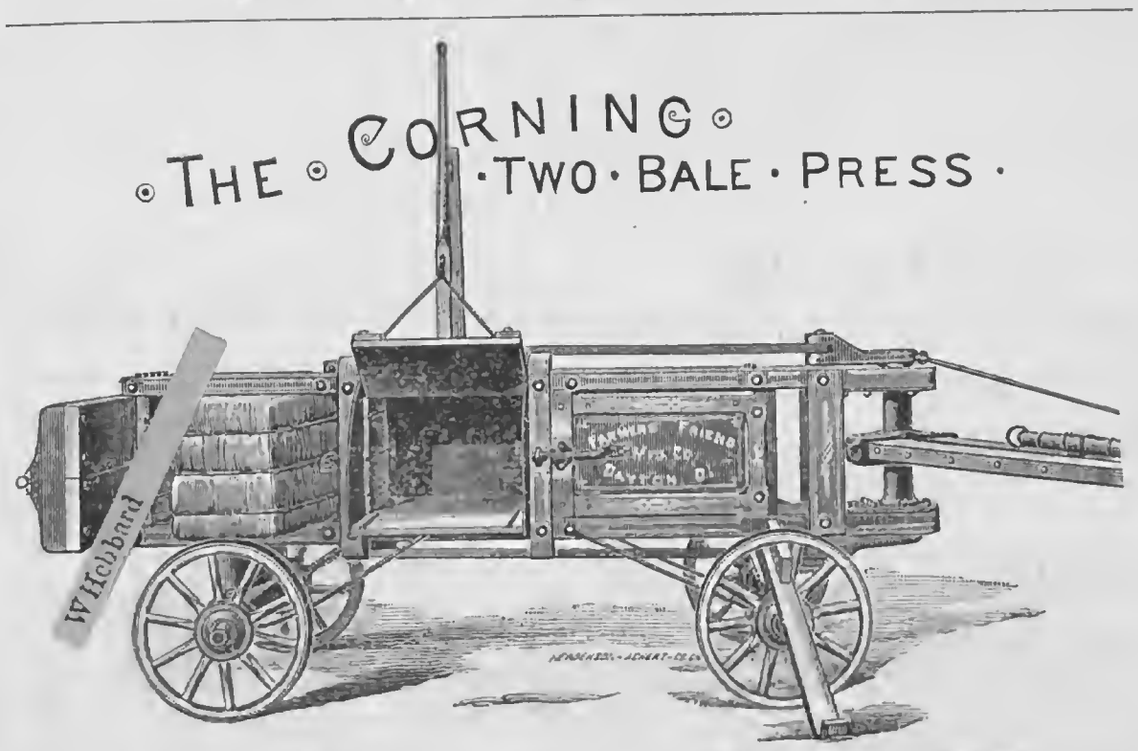

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THE RURAL NEW-YORKER

A JOURNAL FOR THE SUBURBAN AND COUNTRY HOME

VOL. XLV. No. 1907. NEW YORK, AUGUST 14, 1886. PRICE FIVE CENTS. $2.00 PER YEAR.

Entered according to Act of Congress, in the year 1886, by the Rural New-Yorker in the office of the Librarian of Congress at Washington.

The Herdsman.

THE HORN QUESTION.

THE story told by the pictures shown at Figs. 318 and 319 needs but little explanation. It can be understood at a glance. It may be claimed that both pictures are exaggerated, and yet we believe that there is much food for thought in this drama so graphically placed before us by our artist. Whenever we stop to consider the matter, the utter uselessness of horns upon domestic cattle becomes more and more apparent. Why should cattle carry these deadly weapons about with them? No man has yet been able to give any satisfactory answer, and it is probable that there is hardly a prominent cattleman or breeder in the country who would not gladly let the horns go, if by their loss his cattle would not, for a time, lose value from being different from other specimens of the breed. We fully believe that the public could in time be brought to look upon polled cattle of every breed with satisfaction. One mistake is made by the advocates of polled cattle in ascribing too much gentleness to their favorites. The picture of the little girl leading the great bull by the ear is purely an ideal one. Polled cattle are, as a rule, more gentle than than their horned companions, but they are by no means lambs. They can strike a terrible blow with the head, and in many instances have beaten horned animals. Still they are quicker and more easily handled, and far less dangerous, as a rule.

COW FAIRNESS AND COW SENSE.

COL. F. D. CURTIS.

THERE is a great reaching out for a family cow, or as some writers put it, "a general-purpose cow." "A jack-of-all-trades" never succeeded yet in the human family, and I doubt if such a nondescript in the cow kind would be the thing. The idea, to my mind, seems ridiculous. We don't want any such cow with divided interests; but, on the contrary, what we want is a cow all the intensity of whose blood is applied to one thing or another. We have it, if folks would only be satisfied; and we have it in a thoroughbred form, and this ought to satisfy every practical mind, but the unpractical want two sets of machinery and two results from the same in one body—butter and beef. The admirers of some breeds of cattle are too greedy. They want everything. I am satisfied to call the Jersey simply a *butter* cow, and rest there. Let other breeds produce the beef, and others again give us the cheese. I am willing to be liberal and to accord to some breeds, such as the Devon and Red Polls, the ability to give a fair mess of milk and to make good beef, in which respect, however, I believe the Red Polls excel. The Devons are superior for oxen, and this is a very excellent quality.

The most touchy and determined cattlemen, who are bound to put all of the virtues of the cow kind into their cattle, are the Short-horn breeders. They won't be satisfied with the title of "nphead" on beef, but want to squeeze out the distinct butter and family breeds and occupy their ground. I begin to suspect that the Stort-horn breeders are seeing a handwriting on the wall, like that of old, and they are troubled in spirit. The ghost of the popular Herefords, the coming Angus, Galloway and Norfolks worry them, and they want to enlarge the scope of the Short-horns and put them in the milking-yard as well as the shambles.

There are such things as principles of breeding, and I supposed the Short-horns were an illustration of breeding for a purpose, and that for beef; but it seems when we would breed for milk and butter—for a family cow—we must breed for beef—for carcass. I always found that when I made a good veal of a calf or a good beef of a heifer, it made a beefy cow. And I supposed that breeding on this line for generations would fix beef types and characteristics for taking on flesh, not filling milk pails and butter tubs. There used to be old-fashioned "Durhams," which were good milch cows, but this was before the beef idea had taken hold of breeders with such intensity that they began to breed the milk-producing capacity out of the cows, and the result is that the modern "Durham"—the Short-horn of to-day as a general rule does not give milk enough to raise her own calf well. There is no disgrace in this. And why not own it, and concede the butter kingdom to others. It is really the result of science, and something to be proud of, as the counterbalance is to be found in thickened loins, broader hips, and fuller muscles, with a nature for growth, and to fill out just in the right places.

A Jersey or any genuine milking breed doesn't do this. When fed for fattening, they fill up inside, and never fill out and expand as do the beef breeds. To do so is not in their nature. They are not adapted to it, and have not been bred for this sort of development and growth. A modern Short-horn in milk has the capacity to increase her milk flow but little more, however well fed, and her food goes where her nature and breeding design it should—to fat and flesh. The Jerseys make nice beef, and fatten in their way with little food; but attempts to convert them into beef cattle would be just as absurd as to make out the Short-horns to be good family cows.

HORNS. Fig. 318.

NO HORNS. Fig. 319.

The Vineyard.

CALIFORNIA NOTES FROM PROF. W. A. HENRY.

California rains; El Cajon Valley; superiority of grapes grown without irrigation; growing raisin grapes; winter preparations for summer drought; picking raisin grapes; making raisins; rapid increase of vineyard; planting the vines; profits from raisins; grape yield per acre.

I SEND the RURAL by to-day's mail a small package of raisins, which I hope will reach you safely. They were grown in the vineyard of Mr. Geo. A. Cowles, of El Cajon, this county, and are a sample of several thousand boxes made by him last season. [They are of fine quality, meaty, sweet, tender. The stems are notably small.—EDS] Through the kindness of Mr. J. M. Merrill, Secretary of the El Cajon Valley Land Company, I was shown the wonders of this mountain-locked valley, and will try to give your readers some idea of what it is and is to be.

El Cajon means a box, I believe, and was applied to the valley because it is shut in by high, rocky walls. Originally a stock ranch, it was changed to a grain farm, and soon is to be a great raisin factory owing to its peculiar adaptability for making that article. In the valley are some 40,000 acres of land, fully one-half of which grows the grape without irrigation, and so makes the cost of production very small. Besides this, a grape grown without artificial water is higher-flavored and less watery than one grown by irrigation, as might naturally be supposed. In El Cajon water can be had by wells dug from six to twenty feet deep, showing that water is near the surface of the ground.

I visited the raisin vineyard of Mr. Cowles, and was greatly interested in his methods of growing the grape and making raisins. He has 150 acres of grapes in bearing, and every vine was an example of thrift and productiveness. The vines are set 12 feet apart and the stem, or trunk, is cut off close to the ground, and all arms are kept very short, so that the new wood sprawls over the ground like a melon vine. Mr. Cowles gives his reasons for this by saying that the heavy clusters of the Muscat of Alexandria, which he grows for

raisins, would be injured if they grew up in the air, by the swaying of the vine in the wind, and when nearly ripe, the vines would bend so as to let in the sun, which might scald the fruit; so the rich clusters lie on the ground just as a melon or squash would. Not a weed can be seen in the vineyard, and the reddish soil is very mellow and in fine tilth. The vines are planted by setting cuttings 12 feet apart. In three years these bear fruit and by six or eight years are in full bearing. As before noted, the vines when trimmed are but short stumps, about four inches high, and have a few buds left for producing fruit wood. In consequence of such trimming, cultivation is very easy in the Winter when the rains come and the ground is thoroughly prepared for the long drought of Summer.

Though no rain had fallen for some ten weeks before my visit, the vines were wonderously green and growing rapidly. No rain is expected until after the raisins are cured. This explains why weeds do not trouble at this season. There is no moisture in the top soil for the weeds to start. This dry top soil acts as a mulch and prevents evaporation: at six inhces I found it as damp as one could ask.

At picking time the great clusters of Muscats are laid on hurdles made of boards, two by three feet "square," resting on the ground between the rows of vines. These hurdles are inclined slightly to the south so as to get the full force of the sun. In this valley the air is dry and the temperature high at the curing season. Mr. Cowles claims for it better conditions than those of any locality in the State for making a fine sun-dried raisin. After lying a week or ten days, the grapes are turned by placing an empty hurdle on top of that holding the grapes, and quickly inverting them. At the end of three weeks the grapes are cured, and are gathered into boxes holding a couple of hundred pounds each. In these sweat boxes the brittle stems gather enough moisture from the fruit to become flexible and pliant so as to handle without breaking.

The raisins are sorted and pressed into five-pound layers, which are put four in a box ready for market. These grapes grown without irrigation are so firm in flesh that only four two and a half to three pounds are required for one of our raisins.

El Cajon seems to me a paradise for raisin making, for there is a wonderful combination of soil and climate for that purpose. Some 600 acres of vines were planted last Winter, and from two to three thousand more will be set the coming season. Planting is a simple process here. After the ground has been thoroughly prepared, it is marked in checks 12 feet square. A hole is made with a crow-bar, and a cutting, about 15 inches long, is inserted. Great care is necessary to get the soil firmly pressed about the cutting. The vines are tended much as corn is in the West, and when they are properly started, no difficulties seem in the way.

There are already some beautiful homes in this valley, and it will have many more ere long. I predict it will be given up to raisin making entirely. Mr. Cowles came to it in search of health, which he regained, and is working faithfully to advance the good name of the valley and fill it with settlers. Lands cost from $75 to $100 per acre. Mr. Cowles sets the net profits from raisins at from $50 to $150 per acre per annum. With such results the lands are not dear yet, though rising in value. So far, the raisins put in the market have sold readily at high prices. As to the yield, Mr. Cowles is ready to prove that he has grown from a single acre 15 tons of grapes. The usual yield is from three to six tons.

St. Diego Co., Cal. W. A. HENRY.

Farm Topics.

THE DARK SIDE OF FARMING.—V.

HENRY STEWART.

ONE of the greatest drawbacks to prosperity and pleasure in the business of farming is the want of stability and persistence in any chosen pursuit. Some men cannot even make up their minds as to how they should go about any necessary business, and consequently perform it in a most inefficient manner. They change their minds with every fancied reverse of fortune, and break up plans that have become settled by lapse of time, so that the breaking up is productive of loss and perhaps disaster. "Unstable as water thou shall not excel" might be said of many farmers who blame their chosen pursuit for their partial failures, instead of blaming their own mistakes. There is the man who begins business as a dairyman, let us say; he goes into it with a rush; perhaps he succeeds moderately well, but he finds it hard work, needing the closest application. While it is novel he is interested, but as the novelty wears off and he finds he is only making a bare living and is not laying up money, or able to indulge in luxuries, he becomes dispirited and wants a change. He declares that the dairy is an unprofitable business; that bogus butter ruins it, and that something else pays a great deal better. There comes a boom in hops; the price goes up to a dollar a pound, and he gets rid of his cows at any sacrifice and buys hop roots and poles, and reads up hop-growing. By the time he has any hops to sell, spared through painful effort from the lice and mildew and the various other troubles incident to their culture, the price is down to eight or 10 cents, and again he is discouraged and on the ragged edge which separates hope from despair. His hop yard is plowed up and he tries something else which is better, but always with the same result. He tires of it, or perhaps utterly fails, which is probably because of the unfortunate want of persistence, and losing at every change and turn, he is soon in distress and goes over to the dark side.

Perhaps there is no other cause of failure that is so prolific and common as this. If we examine into any special business in the grand industry of farming, we find the men enter-

it mostly of this class, and who have given up pursuits in which thousands of farmers live happily in sunny homes. We find the Florida orange groves *in futuro* chiefly hoped for but not seen—as yet) occupied by many such men. Fancy cattle men make money out of them. They are the chief purchasers of novelties in seeds, plants, implements, and all are restless, looking and hoping for some readier way of making money than persistent, effective work. The crowds of frauds, like parasites which live upon diseased matter, prey upon such misguided men and make victims of them, and every disappointment adds to their misery. Those persons who are in a position to know, the editors who receive so many urgent letters of inquiry about this new place, or that new pursuit, and which is best to be done under such circumstances as no stranger could possibly form an opinion of, know how many such unhappy, unstable, undetermined men there are existing, but not living, upon farms. A time comes to many of them at last when, like old Eneas, "tossed and driven by adverse fates," they are cast upon some shore, wrecked amid storms and clouds. Then a ray of light breaks through upon them; for they are where they cannot get away and must stick at least, and like men, go to work at whatever they are driven to, and persisting by force of adversity they finally find that they have been wasting a life in seeking. But it is thrust upon them in spite of themselves.

Many a man who has thus suffered, or who is now suffering, may look back to his childhood and see how his early training led to this instability and consequent failure. In his boyish pursuits many things were begun but none finished, and as he grew in years the habit grew, and became confirmed. This is a matter for parents to consider. They have the forming of the character of their children, and if any child has fallen into this habit they should correct it at once. To finish what has been begun, to adhere to a choice which has been made after mature and careful consideration, to persist and persevere, and never lose sight of the end in view or turn aside from its straight pursuit, are indispensable to success. Think of the men who have made a mark in the history of the time; of the leading farmers, stock breeders, horticulturists, dairymen, all of whom are sought as advisers, leaders, teachers, examples, and what is their history? An unbroken course in pursuit of aims which they have reached, and of ends which have brought prosperity and success and honor to them.

The business of farming has two sides; one lies full in the glow of the warm bright sunlight; the other is on the shady side, buried in gloom and darkness. Every man can choose which side he will live upon. The path to each diverges from a plain road plainly, so that it cannot be mistaken. The business of farming is one in which no man can fail who uses common prudence, who is industrious, persevering, careful, foresighted, economical. It has the world's wants to supply. The farmer feeds and clothes the world, and every product of the soil has its wating consumers.

CORRESPONDENTS' VIEWS.

I DON'T like the way pitchfork handles are made. The handles are too large round towards the fork. I had one such and the men all shunned it. I used it and my hand was cramped grasping so large a hold. I could get no others at the store, so I bought two of the usual size and shape. I took them into my shop and with plane and spoke-shave altered one-third of the lower part to an oval, the widest way up and down. These forks are now the favorites in the field, as the hand easily grasps the handle and it will not turn. Try one and you will like it. Some manufacturer might use this idea to his advantage.

Creedmore, L. I. H.

PEOPLE complain about our poor country roads. My opinion is that the principal cause for this is the laziness of the men when working out their taxes. They lean on a hoe handle and talk, as though they had plenty of time. They ought to work for the public as they work for themselves. F. R. L.

Prospect, Me.

I HAD a few vines of Agawam, Brighton, Catawba and Concord Grapes in bearing last year and this. Agawam has been suitable for table use four weeks now. Bags on the bunches prolonged their use about 10 days. All fine, large and well flavored. Having only a few vines of each, I disposed of the grapes here at 10 to 15 cents per pound. Another year I ought to have quite a crop. Do you think they would bear shipment from here to Northern cities during the time they ripen here, while the weather is so hot? [If packed in refrigerator cars they would doubtless go through all right.—EDS.] J. M. M.

Green Cove Spring, Fla.

MANY good farmers think they must leave their comfortable homes and move into the town or city, so that the children can have the advantage of city schools and city ways. At first they do not mean to leave the farm permanently, but almost before they know it, the city becomes the home. The farm is rented and runs down. When at last the children grow up to be a little ashamed of father and mother, and the old folks go back, they have to spend their old age in bringing up the neglected farm. This plan is all wrong. Why not improve the country schools so that there will be no need of running to the city for an education? The farmer's place of business is on the farm. E. D.

Fairfax Co., Va.

I KNOW men about me who think they must have their own reapers when they have not work enough to keep such machinery busy, and have to run in debt for it. It would pay them better to have their grain cut by a neighbor, but they have a pride in doing it themselves. They get into debt for the implement, and the note is sure to fall due just at the wrong time. They have no place to house such a machine, and the consequence is that it is about destroyed by the weather. They had better wait till they can buy the implement right out. M. J.

Lawrence Co., Kan.

ON page 465 the N. Y. Times is quoted as advising farmers to let law-making alone. We have heard this old story about farmers being the "salt of the earth" about long enough. It is getting stale. We have had our backs patted until they are sore. Such palaver does not make us forget that farmers have to carry the heaviest part of the burden of supporting these "law-makers" and paying their junketing bills. We also have to bear the heaviest part of unwise legislation. We can't hide our property from the tax collector as the holders of stocks and bonds can. The question of law-making is not merely a question of morals and principles, but a question of finance as well. The farmer should devote as much attention to such questions as he does to any proposed expenditure of his capital. We shall always have those among us who will swallow anything in the line of political bait. We want to increase the number of those who will not forget the action of many legislators on railroad matters, oleomargarine, and the various questions directly affecting farmers. Extortionate charges for transportation and monopoly oppression, are legalized and made possible by these legal legislators. It is the direct business of the lawyer to make money, and he cannot help being the sworn friend of monopoly. I say do not follow the advice of the Times. If we did there would be no use in our going to the polls at all, unless to vote upon some question that affects farming directly. Let us rather take more interest in politics and protect our own rights.

Norfolk Co., Va. E. E. B.

MANY farmers who complain of lame horses have themselves to blame. They start into town and forget to oil the wheels. Before they start home they oil themselves up with a little cider or something stronger, and home they come too fast for the horse. In the morning the horse shows a little stiffness in front. They hitch up the old mare in his place, and throw a foot of straw under him to induce him to lie down. Such treatment is all wrong. Better take him out and exercise him a little. His stiffness is likely to become permanent if he is left too long. I like a medium-sized horse. I don't want one so small that he has to strain every muscle to keep his end up, nor one so large that he never has to make an effort. W. R. T.

Franklin Co., Kans.

HOG cholera visits this section quite frequently, yet I have never had a case among my hogs. In the majority of cases that have come under my observation, the hogs were in small pens, which, as a general thing, were not kept clean, or in places through which ran weak, dried up streams of water. Stagnant water is always unfit for hogs. Many persons bed their hogs in stable manure or under the straw stack. This does not pay me. If they are too hot in their beds and come right out into the frosty air, they are sure to suffer. A hog is a good deal like a man in his make-up.

Montgomery Co., Va. J. M. E.

COAL ASHES AS A FERTILIZER.

COAL ASHES possess little real value as a fertilizer, but the mechanical effect which they have on some soils is truly surprising. For loosening up stiff clays, that have stubbornly refused to yield to all attempts to break them up, there is nothing that can be compared to coal ashes. I have seen clay soils which would resist everything else, become friable and as loose as an ash heap after receiving a liberal application of coal ashes.

When seeding such land down to meadow or pasture, a heavy application of coal ashes will be found invaluable. It renders the soil porous, so that the roots of the grasses readily permeate it in search of food, while it assists very materially in carrying off the superfluous water in the Spring of the year, which, if left to escape by the slow process of evaporation, will carry with it many valuable elements of fertility. If the readers of the RURAL who have stiff clay soils, and who have been trying in vain to break them up, will give coal ashes a trial, they will be agreeably surprised at the result. They are easily handled, and if they can be had without hauling too far, it does not cost much to apply them. Of course, the application must be heavier than that of lime or anything similar, three or four hundred bushels per acre being the proper amount. One such application will be sufficient. Experience has shown that where such application was made 10 years ago, the soil is as loose and as easily worked as when the ashes were first thoroughly incorporated in it. I have often thought, after observing the effect of coal ashes on clay soil which had been seeded down to grass, that the ashes contained some valuable fertilizing elements, notwithstanding the fact that a chemical analysis fails to show anything of value in them in that line. The effect which they have on the soil is much the same as that of lime. Those of the RURAL readers who can procure the ashes without too much difficulty should try them as an experiment J. C. P.

Blair Co., Pa.

Field Crops.

SPORTS OF THE DIEHL-MEDITERRANEAN WHEAT.

I SEND the RURAL some samples of the product of the Diehl-Mediterranean Wheat, received from it two years since. The ripe wheat came from one grain of the first year's planting, and from the only heads that were not bearded that year. The crop of it was ready to cut for four or five days before it was harvested, and but for the exceedingly cold Winter and Spring, would have been ripe May 1. The samples of the unripe heads show that this year there is not only a great variety of bearded heads, but that there are also many kinds that are not bearded. In looking over the patch, which was planted in 12-inch rows, 12 inches in the row, anybody would be forced to the conclusion that the cross is not permanent, and that if the change continues as rapidly as it has this year, it will only take a few seasons to render the bulk beardless, and on the remainder the beards will be diminished to a great extent. With the heads, I send you a few of the plants with roots attached, from which it appears to me that in some cases the same plant bore bearded and beardless heads. To one acquainted with wheat-growing and its characteristics, I think my patch would have been an interesting study, on account of the wide variations in the heads produced from one variety of seed. I have never grown any wheat except from the D.-M. sent me by the RURAL. The heads sent, which are no better than those in the rest of the patch, were raised on light, sandy soil, without fertilizers except what was put on it in September, 1884.

Americus, Ga. "GREYBEARD."

R. N.-Y.—We were enabled to separate the seemingly one plant bearing both bearded and beardless heads into two—the one bearded, the other beardless. We have raised five acres

of the Diehl-Mediterranean Wheat. The seed was somewhat mixed, as we believe. We fear this was the case with yours. Still, it may have sported in both cases.

HOEING SWEET POTATOES.

At this time of year, sweet potatoes should be taken great care of. They should be well weeded out, and the ground should be made very loose, without disturbing or interfering with the plants. For hoeing, use the back of the hoe, which should always be used simply to loosen the earth around each hill or plant to the depth of one inch—no deeper. Hold the vines in one hand, and hoe with the other. A great many use the sharp, or front side of the hoe. This is certainly a great mistake. I have raised sweet potatoes for the last 10 years, and find this will not do. While I who work with the back of the hoe have fine potatoes, my neighbors who use the edge have small and poor ones. This is easily explained. After the vines have become four to five feet long, they put forth small fibrous roots which, in a short time, form potatoes, and, of course, if these are cut or bruised, it would stop the growth or injure the plants, and at the same time ruin the prospect for large potatoes, and produce only a small quantity in each hill. I have tried both ways and have satisfied myself on this point. More sweet potatoes would be raised with the same quantity of manure if the back of the hoe were used.

Hightstown, N. J. J. S. B.

Farm Economy.

FODDER CLAMP.

Every farmer has realized the inconvenience of handling loose fodder. To obviate this trouble the clamp shown at Fig. 322, has

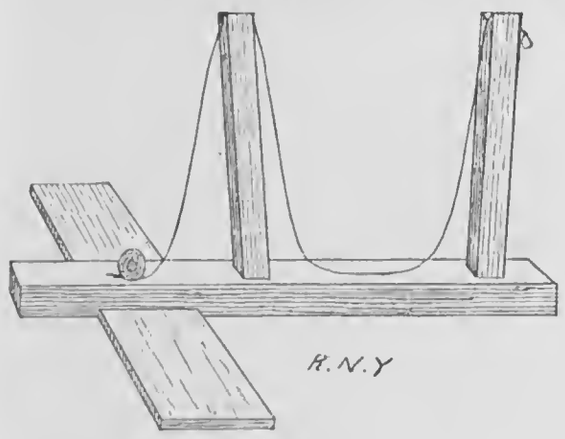


Fig. 322.

been used by me for a short time. By its use much is gained in time, when handling, and there need be very little waste, as all loose blades can be gathered and placed in the clamp, and bound with the longer fodder. The clamp is made from a piece of scantling 2x3 inches by three feet long, having two uprights and a board nailed crosswise to the bottom, to prevent the clamp from falling over. The uprights are 18 inches high and placed in mortices 14 inches apart, and nearer one end than the other. The uprights should stand two inches farther apart at the top than at the bottom. A saw kerf is made half an inch deep in the top of each to receive the twine. (I use reaper twine). The clamp is light and valuable in field or barn. To use it, make a loop at the end of the twine, and place it in the kerf at the top of one upright; leave the slack as shown, and pass the twine on through the other kerf. Husk an armful of fodder and lay it in the clamp, and so on until it is full. Place one knee on the bundle, and bring the twine together, and tie by passing through the loop and making a simple knot. Cut the twine; place one foot on the board and lift the bundle out, and replace the twine as before. The bundles can be easily bound as tight as the twine will bear. A clamp of this size will make about four bundles from a shock of 100 hills, and once used will always be wanted.

Oregonia, Ohio. W. C. S.

CARE OF TOOLS.

It is good advice to tell us to keep the tools sharp, but we must keep them clean as well. I am a great hand for keeping my tools bright. I hate the sight of rust, and, as a consequence, my workmen say that work at my place is very easy. I keep an iron kettle within a few feet of my tool house, and every workman is expected to wash his tools after using them. They are then dipped into a box of powdered slaked lime, and then hung up. Large tools, like plows, are washed and then have lime dusted over them. They keep bright and clean till wanted. I have had a shovel in use since 1831. It is now as bright as when it came from the maker. Farmers might save hundreds of dollars by taking care of their tools properly. One Spring I saw two strong men, with pick and crowbar, digging a plow out of ground where it had been frozen in during the Winter. In this township there are thousands of dollars' worth of machinery just eaten worthless by rust. It all might have been saved by proper care. There should be a good tool house on every farm. A. L. O.

Brockport, Ill.

Rural Topics.

Experiment Grounds of the Rural New-Yorker.

A GOOD WORD FOR THE KIEFFER PEAR, AND A GOOD METHOD OF GRAFTING.

Near the Rural's Farm on Long Island is that of our good friend, Augustus T. Hewlett. He is one of those farmers who have never had occasion to complain that farming doesn't pay, and any one who knows something of his methods; of his intense interest in all that may have to do with an improved agriculture; of his trials of new grains, potatoes, roots, poultry and fruit, albeit they are made in a small way, is not long at guessing the reason why.

Seventy-five yards from his house stands a pear tree 100 years old. Three years ago, last April, this was grafted to the Kieffer. A 25-foot ladder was needed to reach and saw off the higher branches, many of which were six inches in diameter. The cut was made parallel with the land, or at right angles to the stock. Slits from four to a dozen (according to the size of the stems) were then made through the bark from the top downward (as in budding), and the cions, beveled only on one side, inserted, as shown at Fig. 324, and as often before described in the R. N.-Y. The cions are not bound with bast or anything whatever. They are merely covered with grafting-wax, and 90 per cent. so treated unite and grow. The Kieffer cions are now from five to six feet high. They bore the second year two peach baskets heaping full, though many pears were blown off. They were picked October 1st, and, placed in a cool, dark cellar, ripened in from two to three weeks as yellow as gold, with the bright red cheek characteristic of this variety at its best. They were juicy, and pronounced very good by all who ate them. This year the tree is laden, and Mr. Hewlett promises to send some of the fruit to the Rural.

Mr. Hewlett grafts old cherry trees in essentially the same way, with entire success. On account of the exfoliation of the bark of the cherry, however, it is necessary to cover the wax with something. He prefers tarred paper which is bound around the grafts and raised above the top of the stock, forming a rim an inch high. This is held in place by a

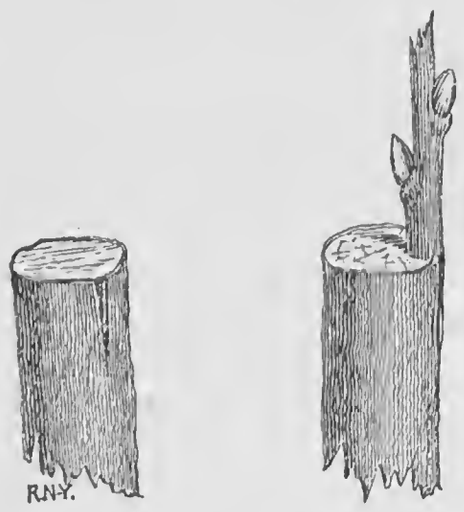


Fig. 324.

cord tied tightly about it, while the space between the top of the stock and the paper is puddled with mud even with the rim, forming a round layer of soil an inch deep The cord and paper in a year or so decay and fall off, leaving the clean stem with its thrifty cions.

THE RURAL'S SEEDLINGS.

Here in one box we have seeds of Rosa rugosa crossed with Jack and Harrison's Yellow. The Ramanas Rose has but one row of petals and forms lots of fruit when self-fertilized, and "takes" with foreign pollen readily. Something desirable ought to come out of crosses with this rose. Its foliage is peculiar, is rarely attacked by insects, and the plant is hardy and long-lived.

In another box we have seeds of the raspberry crossed with the blackberry; in another seeds of the blackberry crossed with the raspberry. In still another, seeds of a thornless blackberry are planted, and, finally, those of a large foreign gooseberry.

These boxes are six inches deep and of various sizes. They are filled with garden loam, placed in water until the whole mass is wet and then glasses are placed over them to retain the moisture. It is proposed to winter them in pits.

Horticultural.

A NEW STRAWBERRY OF PROMISE.

E. WILLIAMS.

The best-looking and most attractive seedling I have seen this season, was shown by Mr. Walton, of Moorestown, N. J. Owing to its bright scarlet color, conical form, slight neck, reflexed calyx and very uniform size, it comes nearer to my ideal of perfection than any berry I know of. Every berry seemed almost an exact copy of every other. I subsequently had an opportunity to sample and examine it freely at the table of the originator, and in his field, and it seemed to be deficient only in two features to constitute a perfect strawberry. The quality is fair to good, but not the highest, and the flower is pistillate. Growing in field culture, under very ordinary care, with Monarch (of the West) on one side, and, I think, Atlantic on the other as fertilizers, it proved a vigorous, strong grower, abundantly productive. Berries large and very uniform. I tried in vain to find one of abnormal growth. I gathered numerous samples with a view to illustrate it, but Mr. W. objected, fearing they would not fairly represent future possibilities under extra high culture, and thus do it an injustice. In deference to his wishes, I abandoned my intention, but not the idea that a fair average representation of what a berry will do under ordinary treatment, as compared with possible results under high culture, is much the fairest and most honest, no matter what the custom is. I do not know that Mr. W. has determined to send it out, or whether

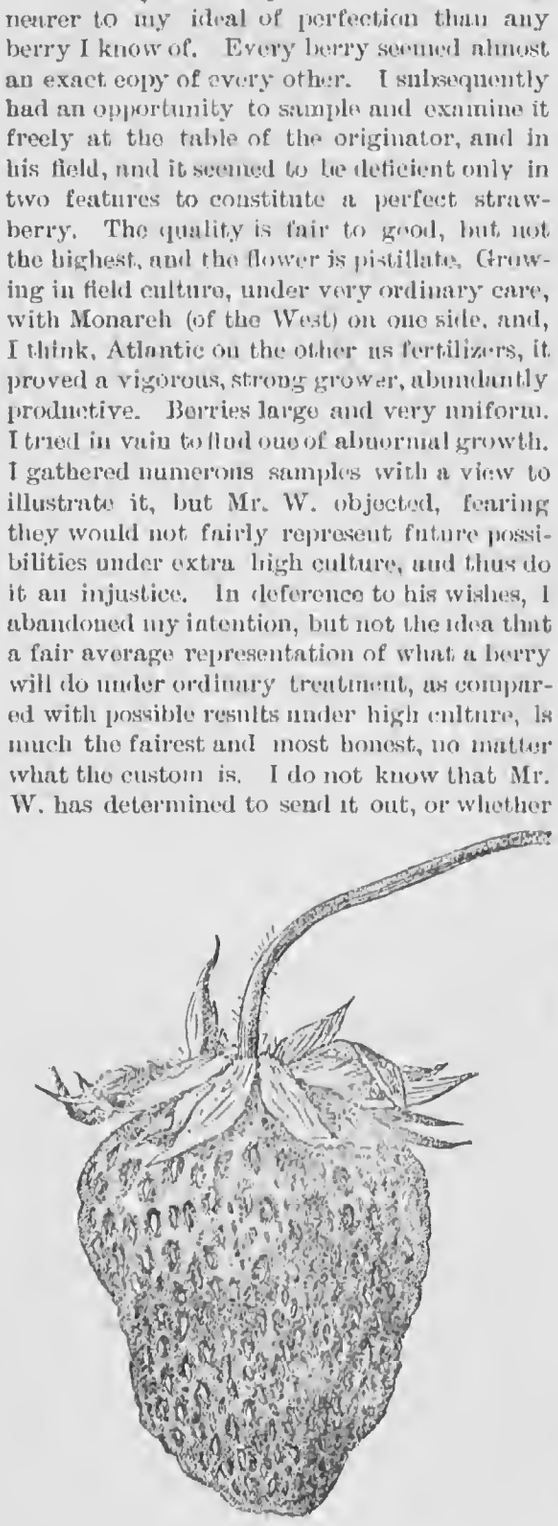


Fig. 320.

he has even named it yet; but he will himself try it on a much larger scale and more thoroughly as a market fruit, first. In this he is right. Meanwhile, if, in view of the prevailing condition of our market, any berry-grower is verdant enough to see a prospective fortune, large or small, in strawberry growing, this berry of Mr. W.'s may be worth looking after; but, as a large grower remarked to me, the present low prices do not justify much attention or expenditure for new varieties; the old ones are just as good to lose money on. My position is, that the certain and sure profits in small fruits are found in an abundant and free home consumption.

Montclair, N. J.

[A box of the berry above referred to by Mr. Williams, was sent to this office June 10. Fig. 320 is true to nature, and Fig. 321 shows

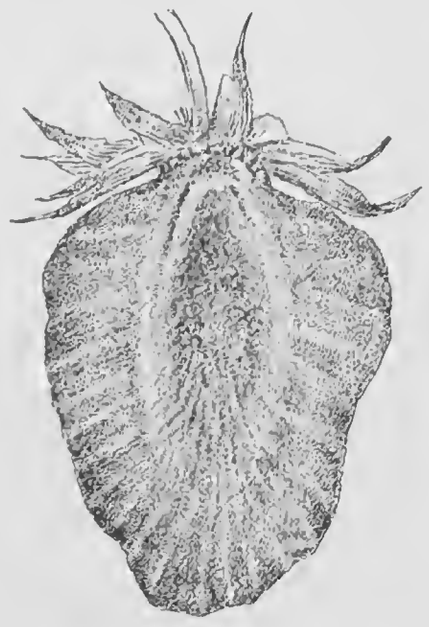


Fig. 321.

a half section. The following notes were made at the time: "Color, bright scarlet; shape, ovate-conical, rounding at the top; flesh solid and colored; seeds a little darker than the flesh, and imbedded somewhat deeply; calyx ample and slightly reflexed; quality fair—as good as the Jewell. The remarkable things about this berry seem to be, first, the size, which averages very large; second, uniformity of shape."—Eds.]

THE LUCRETIA DEWBERRY.

In your "Plain Talk on Blackberries," in the Rural of July 31st, the Editor says, "The Lucretia Dewberry, after what we consider to be a fair trial, is not judged to be worthy of introduction." Can it be possible that you have the true Lucretia? I am almost sure you cannot have it, but some of the spurious plants that have for years been mixed up with the genuine Lucretia. This, as I have seen it growing in several States, is to my mind the most valuable of all the blackberry family yet introduced. With us the plant is as hardy as the Kittatinny, very productive of berries as large as Lawtons (some berries picked here last week were 1¾ inch long, by one inch cross-diameter), ripening as early as the Gregg Raspberry, and far better in quality than any other blackberry I know of. I must confess to being charmed with it as a family berry; and being so large and productive and so extremely early, it must prove valuable for near markets. It is not firm enough to stand long shipment. Having often visited the Rural Grounds, and knowing how fair and impartial your tests are, I cannot think you have ever seen the real Lucretia, and shall take the liberty of sending you some of the plants at the proper time for planting, in October.

So. Glastonbury, Conn. J. H. HALE.

Remarks.—We are always very glad to be corrected, and thank Mr. Hale for the above important note. We fancy that we have the true Lucretia. The berries are large, ripen early, etc., as Mr. Hale states. The vines are great bearers. But the *space* they cover should be considered. Suppose that one Lucretia plant covers twice the space of a standard, and yields twice as much fruit; do we gain anything? It is certainly harder work to gather the berries of the Lucretia than those of standards. Its earliness and hardiness, however, are certainly points in its favor, which should be duly considered.—Eds.

THE INTRODUCTION OF THE SHARPLESS STRAWBERRY, ETC.

In the Rural of July 31 I notice that President Wilder gives Ellwanger & Barry credit for introducing the Sharpless. That is a mistake. I offered them the control of it, but as they did not accept my offer, I disseminated it myself, and sold to other nurserymen, who put it on the market at the same time. I mention this in justice to other parties.

The Alaska Pea with me seems to be identical with Early Kent. The Triumph Gooseberry does not mildew in our place, where it is said that it originated.

Catawissa, Pa. J. K. SHARPLESS.

"THE MUCH TALKED OF DEACON."

If Mr. Falconer's Deacon Lettuce is the same as the White Summer Cabbage, it is quite different from the one that I have grown. The most careless observer would hardly call them the same. Although the White Summer is an excellent heading lettuce, with me Deacon has surpassed it in the size and neatness of the head. The Deacon that I have grown, the seed of which I secured directly from the introducer, more resembles the old Imperial than any other that I have seen. Indeed, I think it has probably been developed from that variety by selection. Until this season, I have not seen a synonym, of the Deacon, but a lettuce called West Indian, received last Spring from a European seedsman, appears to be the same.

Geneva, N. Y. E. S. GOFF.

Floricultural.

FLOWERS AND SMALL FRUITS.

Almost every one that has any room, grows something to give flowers, and my customers, at least, like to read and talk about them; but they complain that they can not understand half the books and papers they buy. I don't wonder, for I get puzzled myself sometimes. So many things are recommended for amateurs to get, that require the care of an experienced gardener, that failure must be the sure result, and I am only surprised that more do not get disgusted. We have so many beautiful things that grow easily, that there seems no need of coaxing people to buy plants that one knows cannot succeed. I know of a case where a dozen fancy caladiums were bought, by advice of the gardener, for a rockery, and when I expressed my surprise, he laughed and said he did not expect they would grow; but the lady might as well spend her cash in that way as in any, if she liked them. I like to try novelties, and do every year, still I do not

think I am justified in pushing them on customers, until I find out something about them.

The RURAL small fruit notes have been a great help to a great many, and I know of one lady who reads the paper, who took a small strawberry bed into her own hand, did the entire work, and this year picked over 100 boxes of as fine Sharpless and Wilsons as I ever saw shown at any fair. Many of the Sharpless would measure four to five inches, and for a wonder were of good shape and color. They were kept from runners, and mulched with hay, and this last I think the cause of their extra fine shape, as it kept them off the cold soil, and so made both sides of the berry grow more uniformly, besides allowing them to ripen without a white spot or sign of decay on the under-side. It was the largest crop I ever saw for the space taken, and she was very proud of it, and reading the RURAL encouraged her to try it. Bulbs of all sorts seem to be doing extra well this year. Ever since the early tulips and jonquils showed themselves, I have had plenty of flowers from Dutch bulbs and lilies of different kinds. Just now I have quantities of L. Humboltii, and they ought to be grown more: for in masses they make a grand show. Soon the Japan Lilies will come in, and in spite of the hard Winter I never saw them better, Alba in particular. Melpomene is not as good, but that is inclined to be weak. With me it is as tender as Auratum. For the last four years there has been such a display at the public gardens of tulips, hyacinths and lilies that the people about Boston seem to have taken a new interest in them. Of all classes of flowers, I consider bulbs the easiest to grow, either for open air or to force, and they seem to be the least understood; for I have to answer more questions about them than anything else. A GARDENER.

E. Braintree, Mass.

The Poultry Yard.

MANAGEMENT OF YOUNG TURKEYS.

OF all classes of poultry young turkeys are the most difficult to raise; yet when fully matured, turkeys can endure greater extremes of cold and heat, and subsist with less assistance than any other class of poultry. Although it is often overlooked, yet much depends upon the parent stock. Young turkeys hatched from eggs laid by hens only one year old do not possess the vigor and hardiness of those produced from eggs laid by fully developed birds. It is better, therefore, to use gobblers and hens over two years old for breeding purposes.

If we can get at the root of the difficulty in the way of raising young turkeys, much of the loss may be avoided. To do this it must be considered that young turkeys feather very rapidly. It is this quick growth of feathers that often debilitates them, and causes them to drop off suddenly. They require a large quantity of food, which must be given often, and consist of that which contains a large proportion of those elements essential to growth. Hence corn meal is insufficient food for young turkeys, as every farmer's wife knows. Like chicks, hard-boiled eggs, finely chopped, and mixed with onion-tops, are excellent for the first two days. Wheat bread, soaked in milk, may then be given, varied with cooked oatmeal containing lettuce or onion-tops. As they require close attention, owing to the rapid development of feathers, the safest mode of feeding is to give them four meals daily. As soon as they begin to run about they should have not only a variety of cooked ground grain, with milk; but also meat three or four times a week, with all the chopped vegetables they can eat, as well as ground bone in the soft food. Turkeys thrive best on both animal and vegetable food, and cannot endure confinement. When very young, they may be given liberty; but the hen should be confined in a small yard to prevent wandering off. The little turks should not be allowed in the wet grass, and on the appearance of indications of a shower, they must be kept shut up until the danger is over.

Dampness is fatal to young turkeys, and causes greater loss than anything else. The essentials to success are, nitrogenous food, warmth, dryness and frequent feeding. If produced by the union of vigorous parents, and given careful attention until after the critical period, fewer losses will occur. When three months old, they will be able to take care of themselves without assistance. Many persons recommend keeping the young turkeys confined, but they cannot be easily raised unless given liberty, as the turkey is naturally addicted to foraging; but if there are a number of them, it will be profitable to watch them until they are well advanced. The milk and drinking water should always be so given that the birds cannot wet themselves. When the young ones are put with the general flock, and are made to forage for themselves, it will be found an advantage to give them a good meal of grain when they come up at night, especially of ground oats and midlings, moistened with milk and baked. This is not absolutely necessary, but if so treated they will grow faster and attain larger size, and be induced to come up regularly of evenings. If insect food is not abundant, a feeding of chopped meat twice a week will be very acceptable. If hatched under hens and raised with the chicks, they can be taught to roost in the poultry-house at night, but they prefer the open air, if well protected from winds and enemies. When being fattened they should not be confined longer than ten days, or they will worry and become discontented, thereby losing flesh. P. H. J.

HENS WITHOUT ROOSTERS.

SOME persons say hens will lay as well without cocks as with them. Some years ago, two neighbors, both keeping poultry, with only a picket fence between their places, were on pleasant terms till one killed off all his cocks and kept plenty of hens. These enticed the cocks from his neighbor, and with them many of his hens, who laid on the wrong side of the fence, to the great disgust of their owner.

MORAL: If you are within hearing distance of any neighbor's poultry, and wish to live in peace, keep cocks with your hens. H. H.

REMEDY FOR LICE ON HENS.—Crushed coal with carbolic acid on it will make lice scarce in hens' nests. I take a square, stout box, and crush the coal in it by pounding with a round-ended stick. For half a bushel of coal five tablespoonfuls of carbolic acid will do the work. A handful of this thrown into the bottom of the nest will make the lice run for their lives. J. S. B.

Hightstown, N. J.

Indust'l Societies.

THE ROYAL AGRICULTURAL SHOW.

(RURAL SPECIAL REPORT.)

GENERAL FEATURES.

EVER since its first show, in 1839, the Royal Agricultural Society of England has held its annual exhibitions each year in a different section so as to give an opportunity to the people of the various parts of the country to visit the show with the greatest convenience and at the least expense, and draw from it the many useful lessons taught by the great number of exhibits there brought together as object lessons. The present year the show opened at Norwich, the capital of Norfolkshire, on Monday, July 12, and closed the following Friday. In 1885 it was held up north at Preston; in 1884 it drew crowds to Shrewsbury, in the West; and in 1883 York was for once waked up to liveliness by its presence.

Norwich is a quiet town of about 87,000 population, the center of a rich agricultural country. It was hardly thought that the number of exhibits or visitors would come up to the average; but expectations were in both cases exceeded. The live stock exhibits compared as follows with those at other recent meetings:

	Norwich, 1886.	Preston, 1885.	Shrewsbury, 1884.	York, 1883.	Reading, 1882.	Derby, 1881.	Carlisle, 1880.
Horses.....	495	438	407	611	239	266	487
Cattle.....	692	539	579	462	598	392	434
Sheep.....	448	433	490	412	492	414	434
Pigs.....	205	203	211	200	188	167	146
Total....	1840	1613	1687	1685	1467	1229	1501

Last year the number of visitors at Preston was 94,192; this year there were 104,910 at Norwich. The daily attendance was: Monday, admission fee, 5*s.*, 625; Tuesday, 2*s.* 6*d.*, 8,077; Wednesday, 2*s.* 6*d.*, 11,043; Thursday, 1*s.*, 42,774; Friday, 1*s.*, 42,394. Although the show is held at the hight of midsummer, it is almost always greatly injured by wet weather; and on Monday, the opening day, and that on which live stock was judged, there was a regular downpour in the afternoon, and an extremely uncomfortable drizzle in the morning. Occasional showers also marred the pleasure and kept visitors away on Tuesday and Wednesday; but on the last two days of the exhibition the weather was all that could be desired. As the show is always held in the open air, the condition of the weather is of great importance, for the number of visitors is small during bad weather and they can derive but little benefit from the display with rain overhead, mud under foot, and discomfort all around.

The crown and half-crown days usually attract the "more select" class of visitors in sufficient numbers to compensate for the smaller attendance common when the admission fee is so high; but the wet weather kept this class, to a great extent, away this year, and, moreover, neither Norwich nor the surrounding country is blessed with a superabundance of wealthy people. On the brilliant shilling days, excursion trains brought crowds of visitors from a distance; but the financial exhibit, though fair, was not flattering. The receipts, exclusive of the proceeds of season tickets, amounted to £6,784 3*s.* The corresponding take at Preston was £8,474 9*s.* 6*d.*; at Shrewsbury, £7,088 1*s.*; at York, £9,774 9*s.* 6*d.*; at Reading, £6,017 7*s.* The grounds, lent by Mr. J. J. Colman, Member of Parliament, were admirably adapted for show-yard purposes. The classification of the entries was better than ever before, and the city and railroad authorities had made excellent provisions for enabling the crowds of visitors to enter and leave the exhibition without confusion. The Prince and Princess of Wales, from their neighboring estate at Sandringham, were present three days with a large number of distinguished visitors, and on Wednesday over 60 of the Colonial and Indian visitors to the great exhibition of Colonial and Indian products now held in London, went down on a special train by special invitation of the Society. On the whole, the show is considered a success, though not a brilliant one.

HORSES.

In this home of the Thoroughbred, horses take the first place among domestic animals, and at the Norwich show there were no less than 493 entries, against 438 at Preston and 607 at Shrewsbury. Of these, 78 were Shire horses, 56 Clydesdales, 93 Suffolks, 8 "agricultural horses," 8 Thoroughbreds, 84 hackneys, 35 ponies and 123 hunters. The Shire, or Cart horse of England is a massive, compact, round-bodied animal, with stout limbs, enormously broad chest, and short neck and back. For pulling heavy weights, he cannot be excelled; but his steps are short and his motions slow. It is only of late that any special attention has been paid to his pedigree, the first Shire Stud Book having been published in February, 1880, and the issue of five other volumes since then shows that those interested in this massive race are now fully alive to the importance of recorded pedigrees. Of late years, considerable shipments of this breed have been made to the United States, and breeders here expect to increase the trade as their favorites become better known on your side of the Atlantic.

A short time back a splendid show of the breed was made in London by the Shire Horse Society, and all agree that the display at Norwich was considerably inferior. Most of the prominent studs, however, were represented, though not in some cases by their best specimens.

Of Clydesdales the display was excellent both in number and quality, considering the distance from the home of the breed. Prince Avondale, an easy first prize winner, for whom 500 guineas ($2,550) had been paid, was generally considered the finest animal among all the heavy draft horses in the show.

The short-legged, compact, round-bodied Suffolk, smaller than the Shire or Clyde, and probably the best established of all the British breeds of heavy draft horses, was out in great force, as Suffolk is an adjoining county, and no other breed has ever been so popular there. Moreover, the County Society merged its own exhibition with the Royal, so that the exhibition was certainly the best ever witnessed of this chunky, spirited and resolute breed. Very few Suffolks have ever been taken to the United States, nor have they ever become very popular here beyond the county from which they take their name. The first Stud Book was published half a dozen years ago, and several other volumes have come out since then.

The "Agricultural Horses" class is composed of draft horses belonging to no particular breed, or whose breed is not known. Meg Moir, the first prize winner among "Agricultural Mares," was of the latter class; no one could tell whether she was a Shire or Clyde, which shows that in appearance there is not much difference between the two. Such an admirable animal would be an honor to either.

Among the Thoroughbreds were some remarkably fine animals, but they were exhibited as getters of hunters, rather than as winners of races.

The Hackneys were divided into three classes according to their size and age. The Hackney is a trotter, and Norfolk has long been famous for its trotters, so most of the prizes went to the horses owned there. A Hackney Stud Book was started a few years ago, and the third volume was issued last February by a Society of Hackney breeders now numbering 322. Ponies are very numerous in this country, as the children (male and female) of the "nobility and gentry" are nearly all expert on horse-back, and begin to learn on ponies. Hunters are a valuable class in a country where hunting is an indispensable pastime with a large class of gentlemen at a certain season every year, and a great deal of interest is always exhibited in the display. Some hunters are Thoroughbreds; but as few of these can carry weight, the bulk of the class are half-breds or have a still larger proportion of thoroughbred blood. Many have seven-eighths of pure blood.

CATTLE.

Of the 681 cattle on exhibition there were 187 Jerseys, 146 Red Polled, 82 Short-horns, 73 Herefords, 41 Sussex and the same number of Guernseys, 28 Devons, 25 Welsh and 58 "other breeds" for which there were no classes. These included Aberdeen-Angus, Galloways, Ayrshires, Kerries, etc. There were also 17 cows in the special class of "Dairy Cattle." In view of the fact that Norfolk and the surrounding country is not a "Jersey" section, the large number of Jerseys present was a matter of surprise. At the first Royal Show in '49 there was only a single specimen, and it was not until 1864 that the Channel Island cattle got separate classes at the Royal Shows, and not until 1871 that the Society first divided these cattle into separate classes for Jerseys and Guernseys. The animals on show at Norwich were excellent specimens, and the display will doubtless still further popularize this first-rate dairy breed. It was noticeable that less attention than usual was paid to "fancy points," and more to what you Americans would call "practical" features.

Never before was there seen such a display of Red Polled cattle. This was quite natural, as Norfolk and the adjoining county of Suffolk are the homes of this fine beef-and-milk breed, the reputation of which has been growing at home and abroad of late years. The last time the Royal Show was held at Norwich—in 1849—there were separate classes for Short-horns, Herefords and Devons only, all the other breeds competing together, and at that time this breed was still divided into Norfolk and Suffolk Red Polled, and of these local breeds, only 16 animals were exhibited. Of the eight prizes then given to the miscellaneous class, these breeds took one each, the Ayrshires two, and the Long-horns four. This year there were eight classes of the Red Polled breed alone, with an average of 18 animals in each class. It seems to me that there is still a noticeable difference between the cattle of the two counties. Those of Norfolk have shorter legs, thicker flesh, a deeper color and greater symmetry; while those of Suffolk are larger, a trifle coarser and more of a wedge or "milk" shape. Animals of the latter type were the favorites with the judges, as they took all the prizes. In the class for Aged Bulls, Mr. Garrett Taylor's 10-year-old bull, Falstaff, thick-fleshed, symmetrically shaped, fine in all points, and especially in the rib, took the first prize from 10 competitors, and also the champion prize as the best bull of the breed. This animal was generally considered the finest specimen of Red Polled bulls ever seen in a show-yard. [At Fig. 323, p. 529, an excellent likeness of this champion prize-winner is presented to our readers, re-engraved from the London Live Stock Journal.—EDS] Mr. Colman's Midsummer Rose also won first prize in her class and champion prize as the best cow of the breed, and was an equally fine specimen of female excellence.

The Short-horns, as usual, made a splendid show—nothing extraordinary to be sure, but still, what with any other breed would be so considered. In whatever part of the English-speaking world exhibitions of fine cattle are held, what other breed ever makes so fine a display, both with regard to number and quality, as this cosmopolitan race? It is the standard, the criterion by which all other breeds are judged. Its popularity and pre-eminence are not transitory "booms"; they have stood the test of a century or more. As at Preston last year, Royal Ingram was the champion bull of his breed and he won the same honor again this year, while Lady Pamela won the first prize in the class for cows in-milk or in-calf, and also the champion prize (£25) as the best female Short-horn in show. These names, and many others distinguished at this show, are household words among stock-owners, and especially Short-horn men, in England, but must, I suppose, be strange to ears beyond the water.

Herefords were finely represented, the pick of the best herds in the county being present. The contest for honors was one between prize-winners, for almost every show-yard animal in the Kingdom competed. Usually the White-faces are not seen in full force beyond their own home; but this occasion was an exception. At the Norwich show of 1849, the Hereford bull, Sir David, won the first prize, and his blood now flows in nearly all the winners at the present exhibition—thirty-seven years afterwards. To Hereford men Sir David has become what Favorite has long been to Short-horn men—the source to which the best strains trace their distinguishing merits.

The Devons made a small but select exhibition. This breed is probably the most prepotent in England, having been established

nobody knows how long. Among the winners was her Majesty the Queen, who took first prize with Fanciful in the class for yearling heifers.

The Sussex display was excellent, the average quality of the exhibits being high. As a beef breed, this has many supporters; but in view of the excellence of the Short-horns, Herefords and Devons in the same line, the Sussex is not making much headway outside the county in which it originated.

Guernseys have hardly been treated fairly at Royal Shows. Though specially a dairy breed, just as much as the Jersey, the only class for cows was that for "Cows or Heifers in-milk or in-Calf," calved in 1883. Thus adult cows are excluded from the show. This blunder gave rise to so much just complaint that it is hardly likely to be repeated in subsequent shows. Most of the animals exhibited, especially the bulls, were fine specimens of the breed.

In view of the fact that the show was held at the other side of the kingdom, the exhibition of black Welsh cattle was very praiseworthy. While matured stock of this breed look well, young animals are very ungainly. There are several local breeds of cattle in the different counties in Wales, and a good deal of pains has lately been bestowed on their improvement, with promising results.

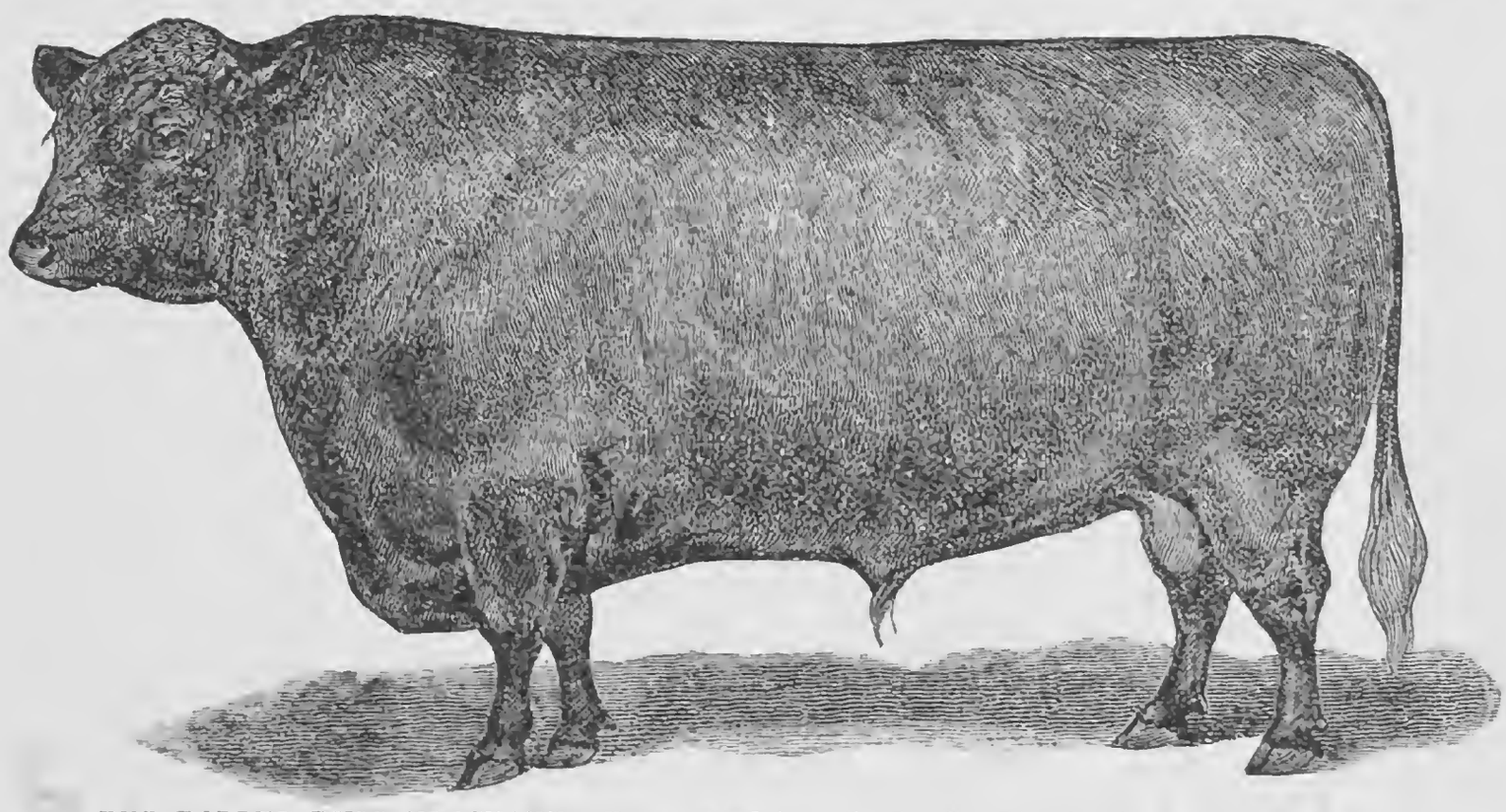
In the class for "Other Breeds," considerable trouble must have been found in awarding the prizes, as it included beef and dairy breeds, natives as well as foreigners. The English Aberdeen-Angus breeders contributed 10 of the 39 entries, and bore away all the first prizes. There were some splendid specimens of this breed, some of them frequent prize-winners at other shows both in England and Scotland. It is thought that the black polled cattle will have separate classes next year. Silver King, a splendid Ayrshire bull, considered by many the best living specimen of the breed, had to be content with a second prize.

In the "Dairy Classes," a preliminary proviso that all competitors, to be qualified, must give 18 quarts of milk, and that the milk must give a total of not less than 12 per cent. of solids, barred out most would-be competitors. The excessive demand for milk shut out some excellent Guernseys, and the high production of solids did the same for several Red Polls. A big Short-horn cow received the prize (£25) for the largest yield of milk—18 quarts one pint in a day, with a 12.11 percentage of solids. The second prize (£15) was awarded to a Red Polled heifer, which yielded 15 quarts and half a gill of milk, with 12.33 per cent. of solids. People in the United States greatly underrate the Short-horn as a dairy cow. Here, where her many merits have been developed, she is the dairy cow *par excellence*. English farmers are quite well acquainted with the Ayrshire, Jersey, Guernsey, Dutch and other dairy breeds; but they prefer the Short-horn. The others, of course, have been introduced to a considerable extent, but with the butter, cheese and milk farmer, the Short-horn and her crosses and grades are the favorites. They yield large messes of milk which is good for any purpose, and fatten readily when turned off for the butcher—always an important consideration with an English farmer. This preference is not a result of prejudice, but of practical experience. Times have lately been so hard for the agricultural classes that they have been forced to economize in many ways, and they would long since have discarded the Short-horn as a dairy cow, were it not that they have found her the most profitable. In America, you have been breeding Short-horns almost exclusively for beef, so that the cows have, to a great extent, lost their great capacity for milk production; but here they have been always bred for milk as well as beef, and have given equal satisfaction in both lines.

There were fine exhibits of sheep and swine, but this letter is already too long.

Just a word, however, as to the future. The next Royal Show will be held up north at Newcastle, and as that country is densely populated a large attendance is expected. The Prince of Wales' third term as president of the society ended with the show, and he has been succeeded by Lord Edgerton, of Tatton, a great territorial magnate who has been a member of the society's council since 1871, and a trustee since 1883. He was born in 1832, and was Member of Parliament from 1858 to 1883, when he succeeded his father to the barony, and took his seat in the House of Lords.

London, July 19. HERBERT LANGDALE.



RED POLLED BULL FALSTAFF. Re-engraved from the London Live Stock Journal. Fig. 323.

What Others Say

KINDS OF GRASS SUITABLE AND UNSUITABLE IN KANSAS.—In his late report Prof. E. M. Shelton, of the Kansas Agricultural College, says that in general, it may be said that no grass or clover can be permanently successful in Kansas that has not the ability to withstand high temperatures and droughts as well as severe freezing. Such peculiarly Southern sorts as Johnson Grass and Bermuda Grass are totally worthless in Kansas, because if not wholly destroyed by the severity of the Winters, they are so completely crippled as to be of no practical value. In the course of a long experience with tame grasses in Kansas, the idea has steadily grown with Prof. Shelton that Orchard Grass is generally the best and most useful grass, and that for mixed pasture and mowing ground Orchard Grass and Red Clover have a position in Kansas as permanent as that held by Timothy and clover further east. Alfalfa is also sure to be a favorite with Kansas cultivators, although a wider experience is needed to determine accurately its place. Of the many other sorts favorably known in different localities, and which have been the subjects of persistent trial upon the College Farm, not much needs to be said. Timothy, though uncertain, frequently gives a large yield of valuable hay, but it suffers from dry weather and insects (particularly chinch-bugs), and it gives no pasturage worth mentioning. Kentucky Blue Grass is a persistent grower in Kansas under almost every circumstance of climate and soil. It will in time drive almost every other sort from the soil in which it gets foothold. Despite these good qualities, it is, except for lawns, of little use to Kansas farmers. It yields no hay, of course, and the amount of pasturage yielded by it is inconsiderable. Perennial rye-grass (Lolium perenne), although repeatedly tried, often with good prospects of success, has never survived the second winter. Tall Meadow Oat-Grass (Avena elatior) is, on many accounts, a useful grass. It gives very early and excellent pasturage, and a stand with it is easily obtained, but the yield of hay is light and apparently not very palatable, and it suffers greatly from "dry spells." Common White Clover starts early in the Spring, and for a time makes abundant pasturage; but as the Summer advances, it fails rapidly, frequently perishing, but re-seeding and almost certainly reappearing the following Spring. A stand of Red-top has proved quite difficult to secure doubtless on account of the smallness of its seeds. Except in swales, or other like moist situations, this is not a promising sort. Many other sorts might be referred to, but the list given embraces nearly every kind that is likely to be the subject of trial in Kansas.

PRUSSIA.—Prof. Budd, of Iowa, says that the farmers of America are not educated to the point where they appreciate the value of agricultural education. The little kingdom of Prussia has 68 technical schools, and there are openings for all the graduates. The editor of the Review notes that Prussia has a population less than that of the State of Ohio; but this is a gross mistake. According to the census of 1873, the population of the "little kingdom of Prussia" was even then 24,693,497; while that of Ohio, according to the census of 1880, was then only 3,198,062. The area of the "little kingdom of Prussia" is 134,493 square miles; that of Ohio is only 39,964 square miles, being in size the 23d of the States in the Union. In the Kingdom of Prussia one of the provinces bears the same name, being the original nucleus around which later additions accumulated. This has an area of 24,114 square miles, and had in 1874 a population of 3,137,540—a much denser population than that of Ohio. But this Province must not by any means be confounded with the Kingdom.

COST AND VALUE OF SOME FERTILIZERS.—According to recent valuations of fertilizers sent to the Connecticut Experiment Station, Peter Cooper's pure bone dust, which cost $32, was estimated to be worth $42. James Green's (N. Y.) Common Bone, which cost $25 per ton, was valued at but $12.90. Quinnipiac boue meal (New London, Conn.), which cost $38, was estimated to be worth over $39 per ton. Here is a further list of those fertilizers which cost over $8 per ton more than they ought to cost:

	Cost per ton.	Valued at
Adams & Thomas' (Springfield, Mass.) Market Bone	$38.00	$30.46
Victor Phosphate A 1 (Waterbury, Ct.	35.00	26.27
Baker's (N. Y.) Complete Potato	45.00	33.00
Bowker's (Boston) Ammoniated Bone Superphosphate	36.00	27.40
Stockbridge Vegetable Manure (Bowker & Co.)	45.00	34.43
Bradley's Patent Superp. (Boston)	38.00	28.66
E. Frank Coe's High-grade Ammoniated Superp.	34.00	26.65
Common-sense Fertilizer No. 2 (Boston, Mass.)	35.00	18.80
Cecrops or Dragons' Tooth Fertilizer (Newton & Ludlum, N. Y.)	40.00	31.29
Cereal Fertilizer (same)	34.00	24.70
Cooke's Blood Guano (Read & Co. N. Y.)	37.00	23.94
Charter Oak Fertilizer (P. Thomson, Hartford, Ct.)	30.00	15.77
Quinnipiac Fish and Potash—crossed fishes brand—(New London, Ct.)	38.00	27.98
Wilkinson's Patent Ammoniated Superphos. (N. Y.)	38.00	25.69

NO HARDY BLACKBERRY.—Pres. Lyon says, in the Michigan Farmer, that the most popular so-called hardy blackberries, Snyder, Taylor, Stone, and others, failed of a crop last season, from injury by the previous winter's cold, while those who relied upon the confessedly tender Lawton and Wilson, by protecting the plants at a very slight expense, reaped a heavy and highly remunerative crop. From this and other experience he has become thoroughly convinced that a strictly hardy blackberry is yet unoriginated, if not in fact unattainable, and that the sooner we abandon such expectation the better for all concerned.

RURAL LIFE NOTES.

OUR Canadian friend, Prof. Brown, in selecting a dairy cow prefers a long face, especially from the eye downward, also a wide nostril. He likes a cow with a face that will hold water when brought to a horizontal position, but would avoid a dish face on a bull. He likes a flattish or oval horn rather than a round one, but likes far better to see no horns at all. Horns are not needed upon cattle kept in domestication. We do not want our animals to fight each other. A cow's neck should be lady-like, not heavy and masculine. The idea of a general-purpose cow is in a measure absurd, yet there is something in it, he thinks.

IF a heifer calf has a head and neck like a young buffalo, a skin covered with shaggy hair and milk veins that are conspicuous by their absence, don't keep her even if her pedigree is as long as from Dan to Beersheba, says the Kansas City Live-Stock Journal.....

THE Seattle (W. T.) Daily Post Intelligence publishes an article justly complimenting the Trans-Continental letters with which Mrs. Fisher has favored this journal. "Active in the bustling business of a Western life," the article begins, "we are apt to overlook the help of many a friend who, by mouth or pen, renders us a service the benefit of which cannot be calculated. The RURAL NEW-YORKER —probably the best agricultural paper in America—published in its number of June 5th, a portrait and autobiographical sketch of Mrs. Mary-Wager Fisher. The editor takes advantage of this occasion to pay a fitting compliment to the lady, who has been a valued correspondent from the time she was a girl 15 years of age."... . ...

A BILL now before Congress—but which can hardly pass—provides that ranging cattle is unlawful, and that if cattle ranging on the public domain trespass on the unfenced land of settlers, the owners of the cattle shall be liable for such damages as may be done.....

ALL stock driven into Her Majesty's dominions of the Northwest must cross the line before Sept. 18, or pay a duty of 20 per cent....

A COMPANY has been incorporated at St. Paul, Minn., with a capital stock of $1,000,000 to build stockyards, sheds, etc., for the feeding and slaughtering of cattle, sheep and swine. It will be known as the St. Paul Union Stock Yard Co.....

KANSAS CITY beef sells in New Mexico for 25 cents a pound, alongside of beef of local production at 15 cents. The Socorro Bulletin says: "Well, the fact is that the average of New Mexico beef from range is poor, thin and lean. But when fat, the beef is just as good and juicy and palatable as Kansas City beef. The trouble is we do not produce enough of fat beef. It looks as though, in many instances, the ranges are overstocked. In any event there is money in raising Alfalfa and other grasses, and establishing feeding farms. We repeat, there is money in it! Think of it!"...

C. M. HOVEY tells the London Garden that he has fruited more than 1,000 varieties of pears in the last 40 years. He has in bearing more than 100 kinds.....

WE have been watching a man gathering sweet corn. He twists off the ears, and in so doing breaks the stalk of about one plant in five. Is that economy?.

WE hear fine accounts of the Earhart Everbearing Raspberry. We shall have our say ere long..... ....

MR. MEEHAN, of the Gardeners' Monthly, elects the Hyacinth President of the Bulb Republic. He speaks of Hyacinthus candicans as well worthy of cultivation for its own beauty, as well as because it may be the parent of a new class some day. We must say that as to beauty, we see little in it to admire, and the odor of the flower is disagreeable. With us the flowering stems grow about five feet high, bearing about 25 drooping, bell-shaped flowers that, though smaller, resemble those of Yucca filamentosa. The flowers are at their best now (July 26)..... . ...

THE experiments of Prof. Shelton, of the Kansas Ag. College, with pasturing pigs, show that they could not be induced to like Orchard Grass. The field contained both Alfalfa and Orchard Grass, and while the former was closely cropped, the latter was always luxuriant and abundant..... ....

OTHER experiments show that cooked corn fed to pigs is less useful than the raw grain, and the conclusion is arrived at that the cooking is an injurious process, so far as its use for fattening animals is concerned..... .....

THE experiment to determine which is the better feed for beef-making, corn-meal or corn-and-cob meal, was repeated, and again resulted in favor of the corn-and-cob meal; but until Prof. S. can find a machine that will economically reduce ear-corn to the condition of a fine meal, he will prefer to use the clear corn-meal as a stock food. When the right mill is found, he is equally confident that he will use the corn-and-cob meal.....

WHAT is there peculiar in your crops, RURAL readers, this season? How do you account for it? Did you raise an unusually large or small crop of potatoes, wheat or rye? What was the reason? We want our readers to tell us about such things for the good of all.....

WE learn by the College Speculum (Michigan Agricultural College) that our associate editor of several years ago, C. C. Georgeson, has arrived in Japan and entered upon his duties as Professor of Agriculture, and likes it much thus far.....

PROF. ARNOLD says that the best way to remove grubs from a cow's back in Spring, is to enlarge the opening made by the grub enough to admit of pulling it out, and then draw it forth with a small hook, such as might be

made by bending up the point of a large pin. The grubs can be easily killed in their nest by touching each with a drop of kerosene on the end of a pointed stick, but a long and tender sore will follow before the grub will rot out so as to allow the sore to heal.....

PROF. MAYNARD finds pyrethrum a very valuable insecticide for destroying cabbage worms, plant lice, currant worms, etc., says the N. E. Farmer: but he finds it more economically used when mixed with plaster-of-Paris, as the mixture can be spread further and appears equally effective. For many kinds of plant lice he uses one part pyrethrum to four parts plaster, and on cabbages he uses nine parts plaster and rids the plants completely of the green worms. We wish Prof. M. would state whether he has reference to the imported article or the California Pyrethrum sold under the name of Buhach... .....

ACCORDING to a table prepared by the Farmer's Review, the following are the colors of prize ribbons on winning animals at the fairs mentioned:

STATE.	WHERE HELD.	COLORS,		
		FIRST.	SECOND	THIRD.
Kentucky..	Lexington...	Blue.	Red.	None.
Ohio.....	Columbus...	Red.	Blue.	White.
Indiana.....	Indianapolis.	Red.	Blue.	White.
Michigan...	Kalamazoo..	Blue.	Red.	White.
Illinois.....	Chicago.....	Blue.	Red.	White.
Wisconsin..	Madison.....	Blue.	Red.	Cream
Minnesota..	St. Paul.. ...	Blue.	Red.	White.
Iowa.....	Des Moines..	Blue.	Red.	White.
Nebraska...	Lincoln.....	Red.	Blue.	Yellow
Kansas.....	Topeka..	Blue.	Red	White.
Dakota.....	Huron	Blue.	Red.	White.
Montana	Helena... ...	Blue.	Red.	Green.

There certainly ought to be uniformity in these matters, otherwise, as noticed by the Breeders' Gazette, an Illinois animal returning from Indianapolis with a red ribbon would be set down, by most people, as a second-prize winner, and, of course, the same would be the case with regard to other States also.....

ABOVE the din of the conflict, says the U. S. Dairyman, might be heard the voice of science as it is the voice of common sense, saying as Prof. Arnold has lately said, that the farmer may rely on the truth of the statement that a cow decidedly poor for butter, is also poor for cheese production.....

"ALL of our kinds of wheat belong to one species, and therefore cannot be hybrids one with another. They may be cross-bred." So says Prof. Beal, in the Michigan Farmer. The attention of the Ag. Ed. of the Weekly Press is called to the above paragraph.....

MANY thousands of farms in the West are mortgaged to Eastern capitalists, who extort 10 per cent. interest for the loan, says the Orange County Farmer. This is a most outrageous rate. Ten years of interest-paying and the entire amount of the mortgage has been paid, but they owe it all the same...

THE tomatoes of the Editor of the above journal, which are neatly trained to pole, had grown six feet by June 16, and the fruit was beginning to ripen. His Turner's Hybrids were a curiosity, their foliage being so different from that of the standard sorts. On some plants of this sort, the fruit is very badly wrinkled, while on others they are very smooth and fair. The Editor must have written June for July. It reminds us that for several years we trained both red and yellow tomatoes to the barn, and the vines grew about 15 feet high, bearing an abundance of both yellow and red tomatoes ....

As to Turner's Hybrid, the Editor may be interested to know that we have planted three different lots of tomatoes under differnames all of which are the same, viz: Mikado, Turner's Hybrid and plants sent to us by Mr. Livingston of tomato fame.....

OF thirteen varieties of grasses sown late this Spring, May 15, by Mr. Stiles, Tall Oat Grass has made the most vigorous growth, standing straight up two feet high.... ....

JOHNSON GRASS—Sorghum halapense -has become an inexterminable pest in some parts of California, says The Rural Press. The farmers find that as they tear the roots in pieces each one sets up on its individual hook for a new plant, so that the more it is hacked and hoed the more it spreads. The Press gives an illustration of a potato which has been pierced clean through by a millet root. This indicates a murderous energy beyond that of any weed with which we are acquainted.

We find the above in the Philadelphia Weekly Press. In at least a dozen cases we have had our potatoes "pierced" by Quack, Couch, Quitch, Quick or Rye Grass—Triticum repens. Speaking of Johnson Grass reminds us that a little patch sown four years ago in a corner of our garden is now five feet high. In this case cultivation prevents its spreading.....

PROF. SANBORN, of the Missouri (Columbia) Ag. College, prefers Fultz to any other kind of wheat, though he has tried 150 kinds.....

TRIALS with flint corn have always given Prof. Sanborn as much corn when it is put into shocks at the glazing period, as when allowed to ripen on the stalk. The dents must be well dried, he thinks, to the center, before cutting up the stalks.....

Everywhere.

TRANSCONTINENTAL LETTERS.—LX.

MARY WAGER-FISHER.

A nursery near San Francisco; bearing ages and prices of fruit trees; California grape-growing; Chinese and white labor; the rainy season; malaria; the "glorious climate" of California.

WE went one day to visit a large nursery a few miles out of Oakland, and found that the foreman had come from Ellwanger & Barry's, Rochester, New York. He very kindly gave us considerable information, of which I made notes at the time, as being of possible interest to RURAL readers. The nursery contains 200 acres, and the number of shipments of trees last year was half a million. For long distances the trees are packed in tule—a tall, coarse growth of marsh land. For more delicate packing, considerable Oregon moss is used. More fruit trees have been planted within the last two or three years than in the previous 20. The greatest foe to fruit trees is a spidery-looking insect known as the San José scales—a scale forming over the insect—and as yet no effective remedy has been found beyond burning the tree. This scale destroys a tree in about three years. The one fruit tree which it has not yet attacked is the Black Tartarian Cherry. Trees are delivered, as a rule, one year from the bud.

Deciduous trees remain dormant from two to three months, while evergreens grow all Winter. Apple trees bear at ten years of age (from the seed); apricots and cherries at four years; pears at five; peaches at six(?); and oranges at eight years. Apple trees sell for $12.50 per 100; grapes range from $8 to $40 per 100. Three hundred varieties of grapes are raised in this nursery, but there are about 400 varieties in the State. Wine growers put in their own cuttings where they are to remain, and all grape stocks are cut very low and so kept that a California vineyard is a very prosaic-looking spectacle. The California seedless raisin is said to have originated at Riverside, near Los Angeles, and is mostly cultivated in Fresno. But very fine raisin grapes are raised in many parts of the State, and the drying is largely done in the open air. Apples have been invariably inferior as to quality, and the foreman spoke of eating a Bellflower which was about equal to eating a sponge. The great hindrance to fruit-growing has been the cost of transporting fruit by rail, and last year it cost $600 a car to freight it East. This year the cost will be not over half those figures.

In this nursery at the time of our visit 18 white men were employed, and from 30 to 40 Chinamen. The latter do budding and grafting, and weed and hoe. For the plow a white man is required. The Chinamen were paid 80 cents per day and boarded themselves. The white men were being paid 75 cents a day and board, their usual wages, however, being $30 per month with board. The foreman said that in New York $1.25 were paid for the same work. He was evidently not friendly to Chinese labor, and we questioned him as to their employment. "The trouble with white men on this coast," he said, "is that they drink, and can't be depended upon. They are worth more, and are in the long run cheaper;-but employers can't depend upon them in pressing times, as upon the Chinese. For the latter we always have a white foreman, and as for honesty, they are not as conscientious as the lowest of the whites. We can't leave a knife or a tool about but they will appropriate it, if they can. They do exactly as you tell them to do, never varying their methods according to circumstances."

This nursery is in Alameda County, in rather a sheltered locality, near the bay. The foreman said that the mercury rarely fell below 28 degrees above zero. In some localities, such as Fruitville, near Oakland, where the elevation is greater, frost is comparatively unknown. The shipping of trees from the nursery begins in November, and planting continues during the Winter—called Winter because it is the rainy season on the coast. For cold and snow, one must go into the mountains. California has 20 different climates—the climate depending altogether upon the locality. It must not be inferred that during the rainy season it rains continuously. When it rains, however, the fall is heavy and steady, succeeded by days of cloudless skies, so that Winter is by far the most agreeable season.

As the RURAL in answer to some inquiry in a February issue concerning California climate, stated there was no malaria on the coast touched by the sea breezes, it may not be amiss for me to say that Californians suffer greatly from malaria, even in San Francisco and some parts of Oakland. This may be due to bad sewerage alone, but the practice of irrigation in most parts of the State, breeds malaria—at least this explanation is offered for its prevalence.

The equability and mildness of the coast climate are altogether delightful. But after a few years' residence so various persons have assured me—the physical system suffers from lack of the tonic that is supposed to belong to a marked change in the seasons—the snapping cold and terrible blizzards of the Eastern Winters. As for myself, I am very sure I should tire of the sameness of things—unending flowers the year around and eternal beauty. The popular idea of heaven is to me wearisome in the same sense. But this is to be said for California mildness—one need not lose any time in trying to keep warm: I think in the East, too much time goes in shoveling in coal, piling up wood, thawing ice and removing snow—work that has no permanent value. I think, too, California is a good climate for intellectual activity. Business men complain that it is peculiarly hard on them, as there is no dull season for a vacation, but one unceasing grind. Wherever the sun shines it is warm; wherever it does *not* shine it is damp and cold. A little fire is needed in San Francisco, for example, the year around, particularly in the morning and evening. The women make more distinction in dress—there are fewer seal-skin coats and lace shawls brought into juxtaposition in the streets in January, than formerly.

RURAL SPECIAL REPORTS.

Canada.

ST. GILES, July 27, 1876.—The frost of last Winter was so severe that neither strawberries, raspberries, gooseberries, nor, in fact, any newly planted shrubs or canes came through, and the ground was frozen to a depth never seen before; but, strange to say, comparatively little grass was winter-killed. The snow went away very early and we had a dry Spring, so that the work was done early and a great deal of grain was put in, but in very bad order, there being no rain at all until June 17. The first inch or so on top dried, but the remainder was too cold; in consequence the ground was quite lumpy and hard, and we have a very poor stand of corn and potatoes. My potato field is a river bottom, and I have lost certainly one-quarter of my seed. From June 17 when we had a day and a night of rain, we have had a succession of showers; but never enough to saturate the soil. Except on two occasions in June, when for three or four days the thermometer marked up to 100° to 106°, the weather has been quite cool. Everything is quite late. On the first of July last year we had potatoes and other vegetables in abundance; as yet we have only lettuce, radishes and peas. I generally commence haying on July 5 or 6; now Timothy is only fairly in bloom: there will be rather above an average crop. All the grains, of which there is rather more than an average quantity sown, are splendid, oats especially. I expect fully one-quarter more than an average. Late roots look well. Stock is in splendid order, but everything is much too low. Pork, $3 50 to $5.00; beeves and sheep can scarcely be sold; butter from 8 to 12½ cents; eggs were 13 cents till last week; now they are 15. Old potatoes went down to 15 cents. Garden truck commands somewhat better prices, but we have little to sell as yet.

Georgia.

SOCIAL CIRCLE, Walton Co., July 31.—The RURAL melons all did well. Peas a grand failure for this climate. Flower seeds gave great satisfaction. Angel of Midnight Corn, planted April 20, is now matured, and a second crop has been planted. Longest ears, 10½ inches; 364 grains to the ear. Who excels that? Corn on low lands a failure; on up-lands, good. Cotton, poor, M. R. S.

Illinois.

PLEASANT VALLEY, Jo. Daviess Co., July 26.—Some of your surplus rains would be highly prized here, though during last Summer and Winter we got more than our share. On May 12 a severe hailstorm passed over this section from four to six miles wide, killing many young pigs and other stock. Many hailstones were from three to three-and-a-half inches in diameter. It was thought then that wheat was ruined, but both spring and winter wheats are fine crops, though they did not stool much—heads well filled with plump grain. Since then we have had two showers, but no soaking rain, and lots of hot, smoky weather. Hay is nearly all cured and stacked, and though a light crop, there has been more first-class hay secured than ever before in one season. Many are feeding hay to their cattle, which are thin in flesh. Creeks and wells are not so low as in some former seasons, but the surface is parched so that the stubble in some meadows would burn over if set on fire. Corn is in tassel and looks bad. Fruit mostly spoiled by hail and drought. Hottest day, July 6th, 105 degrees in the shade. Potatoes, 50 cents to $1 per bushel; oats, 25 cents; corn, 30 cents; wheat, 70; live hogs, $3.50 per hundred. W. S. S.

Michigan.

SILVERCREEK, Cass Co., July 31.—It has been very dry this season in Southwestern Michigan, but not so dry as in other localities, for we have had a few sprinklings to moisten the parched ground; still we are pretty nearly dried up. If we could have rain even now, corn that is not too far gone, and late potatoes would be helped. Wheat crop a good one. Those that have thrashed report a yield of from 20 to 40 bushels to the acre and of splendid quality. Oats are light on account of the dry weather. Fruits of all kinds plentiful. Apples have fallen off badly owing to the hot weather. The blackberry harvest is now in full blast; a fair crop considering the dry weather. Clover seed will be scarce in this part of the country. Pastures are almost entirely dried up, and cows are shrinking in their milk. Some farmers are feeding their cows mill feed-bran and meal. Hogs are being shipped out of this county at a rapid rate, owing to fear of failure of our corn crop. Buyers are paying from $3.75 to $4.25 for them, according to quality. The people of Niles District are making preparation to attend the camp meeting at Crystal Spring, commencing August 10th and lasting 10 days. A great many of our farmers go there to spend a few days in the woods and rest from the every-day toils of the farm and to enjoy the meetings. From 1,500 to 2,000 people take up their abode on the grounds. J. M. F.

Montana.

BOZEMAN, Gallatin Co., July 25—Stockraising is so nearly the exclusive business of this whole section that no other industry attracts wide interest. All our talk is about the condition and outlook for stock in this neighborhood, and in the other parts of the Territory tributary to this place. On account of the severe and continued drought the grass is much shorter and drier than ever before known at this season. Cattle are not suffering to any great extent now, but grave fears are entertained regarding the coming Winter. If the snow should be deep great loss will inevitably result. The shortness of the grass has driven the stock out on the uplands and the usual winter ranges, so that the outlook is somewhat discouraging. If heavy rains should fall early next month it would materially change matters for the better. It would start the grass to a vigorous growth before Winter sets in. L. H.

North Carolina.

HENDERSON, Vance Co., July 26.—The excessive rains of June and early July injured all, or nearly all, crops. Where not directly injurious, they prevented proper cultivation, consequently much corn is "laid by" well set with grass and weeds. We never had finer weather than the past 10 days, and with occasional showers expect average corn, cotton and tobacco crops. Grapes light. Apples and pears better than last year. Watermelons drowned, especially the early planted and those on low lands. Will commence shipping grapes this week; a few sour Champions already gone. Some of our grape-growers are so crazy to be first that I think they injure the reputation of our fruits by shipping them before they are ripe. M. B. P.

ROCKY POINT, Pender County, July 30.—The huckleberry (whortleberry) crop of this county is immense this year. The berries are large and perfectly sound and the bushes are loaded down. The gathering and exportation of this crop is now one of the moneyed industries of Pender, Sampson, New Hanover, Cumberland, and several other counties in Eastern Carolina. During the past six weeks the huckleberry fields and swamps have been crowded with negroes, who have deserted the cotton and corn fields for the increased wages they get for these berries. Great quantities are eaten here, and more still are expressed North for immediate consumption and to be put up as other canned goods. The swamps whence these berries are obtained are incapable of drainage, and the money from this source is all the revenue obtained by the owners from these swampy lands. R. M. L.

Ohio.

DENT, Hamilton County, Aug. 3.—Wheat is all harvested, and the early sown is yielding well. Clover, a large crop; Timothy, three-quarters of a crop. Potatoes and oats good. Corn promises to be a fine crop. Weather dry, but threatening rain soon. Pears and apples about half crops as compared with last year. The experience of E. D. C., page 467, with the Alaska Pea is the same as mine. The rest of the RURAL seeds are all right. J. H.

Pennsylvania.

CHAMBERSBURG, Franklin Co.—Business in the Cumberland Valley is very good, and the crop prospects haven't been better in years. In some respects this is the best farming section in America. J. H. G.

THE FARMER'S CLUB

ANSWERS TO CORRESPONDENTS.

[Every query must be accompanied by the name and address of the writer to insure attention. Before asking a question, please see if it is not answered in our advertising columns. Ask only a few questions at one time. Put questions on a separate piece of paper.]

THE COW KILLER INSECT.

L. P., Palmer, Col.—What is the strange, stinging insect, a specimen of which I send the RURAL in a box. It is quite common here and is always found traveling on the ground as if in a great hurry. It has no wings. When teased it squeaks like a mouse.

ANSWERED BY PROF. A. J. COOK.

This ant-like, wingless insect with a formidable sting, is the cow-killer (Mutilla coccinea) of the South and West. I have received this insect from Southern Illinois and south as far as Texas. It is reported in some sections to be a serious enemy of the bee. It is said that it enters the hives and fearlessly attacks the bees and feeds on the brood. The female is hairy and looks somewhat like a wasp devoid of wings. The male has no sting, but has wings. The specimen sent is a female. She is an inch long, quick in her motions, and is marked with red and black as follows: The top of her head, thorax and the base and tip of her abdomen are red, while the remainder of her body is black. It seems strange that this insect can safely enter a bee-hive; but her hard crust makes her secure against the savage darts of the bees. Mr. P. speaks of the noise which this strange insect makes when disturbed. I received the insect alive and plainly heard it making the noise when I could see that there were no movements of legs, mouth-parts, antennæ or segments of abdomen. I am led to conclude that the sound comes as a result of forcing air through the spiracles; in other words, that it is a real voice.

FERTILIZING CORN.

L. S., Thibadeaux, La.—1. Will not corn produce a larger yield if fertilized successively, the fertilizer being each time placed farther from the stalks where the roots can take it up, than by simply enriching the ground at the time of planting? 2. Shouldn't the last application contain a large amount of phosphoric acid to make the large ears?

ANS.—The plant food of fertilizers is (or should be) in a highly soluble condition. If much rain occurs in the earlier part of the season, much is washed through the soil and lost to the crop. Again, if fertilizers are applied late, and dry weather follows, the corn will receive little benefit. When the trouble of subsequent applications is considered, we should prefer to spread our fertilizers before the corn is planted, though in some cases the crop might be materially increased by subsequent application. 2. There is little danger of giving land too much phosphate, still, if it needs potash and nitrogen as well, the land *must* be supplied with all, and it needs them *all* while the grain is forming more than at any other time. We should use a fertilizer containing three per cent. of ammonia, 10 per cent. of phosphoric acid and three per cent. of potash, at a venture, not knowing in what the land was rich or poor. Other questions will be answered later.

ASPARAGUS CULTURE.

R. W. W., Knob Lick, Mo.—I want information about asparagus culture. I sowed some seeds in Spring, and don't know what to do next.

ANS.—Did you sow the seeds in the bed where the plants are to remain? If so, keep this bed free of weeds until Fall. Then apply a heavy mulch of well-rotted manure, and in the Spring thin out the plants so that they will be two feet by four apart. If they are not intended to remain in the seed bed, then enrich a plot of the proper size. You need not fear spading under too much manure. Spade up the soil as deep as you can, and set the plants just so as to cover the crowns. This may be done in November or next Spring.

KILLING SORREL.

B. B., (address lost).—One of my fields is covered with horse sorrel, and I cannot get rid of it nor get seeding to catch; what can be done to kill the pest?

ANS.—Try this: plow the land deep this Fall. In the Spring plow shallow. Spread three bags of kainit and two of raw-bone flour to the acre and harrow in. Nitrogen in the form of nitrate of soda might be added—say 100 pounds to the acre, besides that contained in the raw bone. If our friend can afford to spread farm manure, do so in the Fall *after* plowing, and allow it to remain on the surface all Winter. We are presuming the land is level.

STRAIN OF HOCK IN COLT.

A. B. T., Monticello, Ia.—My three-year-old colt has been somewhat lame all the time, and sometimes she has been hardly able to walk owing to a strain in the hock-joint while playfully racing about this Spring. Applications of liniment and Kendall's spavin cure did no good. Blistering relieved the lameness for two weeks, but it returned as bad as before. She has been running to pasture until the last week, when I thought it better to tie her up. How should she be treated?

ANSWER BY F. L. KILBORN.

If you had repeated the blister a few times, and kept the colt quiet, you would probably have cured her. Apply a Spanish fly blister to the swellings and over the point of the hock. As soon as the effect of the blister has passed off, repeat until all lameness disappears. If a puffy swelling still remains, paint it twice a week with tincture of iodine. Keep the horse in a box-stall or small yard where she *cannot run* for at least two months after recovery Feed grass or other laxative food.

NAIL IN HORSE'S HOOF.

"Subscriber" (no address).—Two weeks ago a horse stepped on a nail which entered the foot about half an inch, and she has been lame ever since. I cut into the foot, and the sore is wet from matter oozing out. What shall I do for her?

ANS.—Pare away the horn around the opening to allow free escape of the matter. Wash out with an astringent, antiseptic wash (chloride of zinc or sulphate of copper, etc., one-half dram in a quart of water) and stuff with tow rolled in tar. If necessary put the foot in a small sack to keep the stuffing in place, and to keep the foot clean. Keep the animal quiet in a small yard or pasture until fully recovered.

BLOOD SPAVIN.—BOG SPAVIN.

A. H. T., Jamesport, L. I.—1. What will cure a blood spavin on a farm horse? 2. Are advertised spavin cures any good.

ANSWERED BY F. L. KILBORN.

1. Blood spavin is simply an enlargement of or dilatation of a vein which crosses the seat of spavins, and does not cause lameness. Treatment is not advisable. If your animal is lame it is due to some other cause. A fluctuating swelling on the artero-internal aspect of the upper part of the joint would indicate bog spavin, due to inflammation of the hock-joint proper. In treatment, first subdue active inflammation, if present, by fomentations and rest, and then blister extensively or preferably in five points. 2. While some advertised "spavin cures" may possess merit, others are worthless. As a rule we cannot recommend "patent specifics" of any kind.

ABSCESS IN A COLT.

S. F. R., Brogneville, Pa.—My eight-weeks-old colt has a yellowish, sticky discharge from the urinary organs, but it isn't urine. What should be done?

ANSWERED BY F. L. KILBORN.

There is evidently an abscess, the nature and cure of which we cannot tell from your description. If you can reach the cavity or surface from which the discharge comes, wash it out daily with a weak solution of chloride of zinc (one-half dram to each quart of water), or carbolic acid, one part acid to 50 parts water. After a few applications, dilute the wash one-half, and continue until all discharge ceases.

GARGET IN A COW.

H. R. R. (no address).—How many drops of tincture of aconite is a dose for a cow troubled with garget, and how much saltpeter should be given with it? How often should the dose be given?

ANS.—Tincture of aconite, 20 to 40 drops; salt-peter, one to two tablespoonfuls. The size and frequency of the dose should vary with the fever. In ordinary cases 25 drops of aconite tincture and one large table-spoonful of salt-peter, three or four times daily. With little or no fever neither is required. Special attention should always be given to the manipulation of, and local applications to the udder.

RUPTURE IN A COLT.

J. W. O., Cora, Pa.—What can be done for a rupture just forward of the navel in my sucking female colt?

ANS.—Return any protruding organ after carefully washing with a one per cent. solution of carbolic acid or other disinfectant; stitch the edges of the rupture together with white silk or cat-gut, and apply a bandage around the body until the rupture is healed. Dress as an ordinary wound. Keep the animal as quiet as possible. Are you sure the rupture is not *at* the navel?

TREATMENT OF KNOCK-KNEED COLT.

C. H. F., Queenstown, Can.—My eight-weeks-old colt has been weak in the front legs since he was a week old; and is now knock-kneed; how should he be treated?

ANS.—Apply splints to the limbs to keep them in the natural position, until able to go without them. See that the mare gives plenty of milk. Such colts sometimes entirely recover, but very frequently they are not worth working over, being constitutionally weak and not easily strengthened.

BRITTLE HOOFS IN A COW.

A. B. D., Edgerton, Kans.—The hoofs of one of my cows are all cracked in several places, and a part of one has fallen off, and more threatens to do so. They are as brittle as if burnt. She runs in the same pasture with the other cows, none of which are affected in the same way. What is the matter?

ANSWERED BY F. L. KILBORN.

There appears to be a natural predisposition to brittleness of the hoof, which may or may not be aggravated by unknown general or local causes. Try keeping the whole hoof well covered with an ointment of equal parts of tar and lard or vaseline. Around and just above the top of the hoof, apply a blister of equal parts of oil of turpentine, ammonia and linseed oil. Repeat once a week, or often enough to keep the hair standing erect, but not sufficiently to raise a scab.

BLOATING IN A CALF.

F. H. B., Dudley, Wis.—Every time I feed a four-weeks-old calf, she bloats up and acts as if she was in great pain. Whether I feed new milk, skim-milk or hay tea, the effect is just the same. What should be done?

ANS.—Feed often and in small quantities. At each feed, add two or three tablespoonfuls of lime-water. As soon as the difficulty is checked, gradually diminish the dose and finally cease giving, if the trouble does not return.

Miscellaneous.

X. Y. Z., Madison, Ind.—My eight-year-old mare has, at times, gone lame for the last two years in front. Her feet show fever and the hoof gets as hard as a shell. She goes as lame on soft as on hard ground. Her shoulders appear perfectly sound; and all say she is not foundered, nor are her hoofs contracted. What is the matter?

ANSWERED BY F. L. KILBORN.

It is usually impossible to diagnose such obscure lameness from description. In the present case navicular disease is suspected, but we cannot state definitely. If such is the case, and being of so long standing, treatment would probably be unsatisfactory, and any treatment that would be most likely to be successful would require the service of a veterinary surgeon.

J. H. S., Hillman, Mich.—A short time ago the ends of the limbs of an apple tree were literally covered with small green lice. I put half a tablespoonful of Paris-green in a pail of water and sprinkled the tree thoroughly with it by means of a Whitman pump. I killed nearly all the lice and entirely killed every leaf on the tree. How can I get rid of the pests?

ANS.—Paris-green will not kill insects by contact. They must eat it. Aphides or lice suck the juice of plants, and are therefore not hurt by the Paris-green. We have tried it repeatedly. Fresh hellebore (powder or in water) will kill them, but it is expensive. The best thing we know of at present is tobacco tea.

T. H. S., Mannsville, N. Y.—When my calf was two weeks old a hard, slightly movable lump appeared on its jaw, slowly disappeared, but soon returned again. It is now about the size of a butternut. How should it be treated?

ANS.—If the bunch is on the side of the jaw, and movable with the skin, it can best be removed through a vertical incision in the skin, the skin to be stitched together after the operation. If beneath the lower jaw, it is close to important structures and should not be disturbed except by a veterinary surgeon.

W. A. S., Tyre, N. Y.—Mr. Plumb, of the New York Experiment Station, says the Washington Glass Wheat is the same as the Surprise sent out by the RURAL some years ago in its Free Seed Distribution; is it, and where can it be obtained?

ANS.—We think the Surprise (sent out by the R. N.-Y.) is *not* the Glass. We raised this wheat years ago. We are not aware that the Surprise is offered for sale. If any of our readers have it for sale, we will state the fact upon being so advised.

C. E. B., Northville, Tenn.—My six-year-old cow, usually once in about two weeks, has great difficulty in voiding urine. She strains hard, and sometimes takes five minutes in voiding. There is nothing unusual in the color or quantity of the urine. Salt appears to give temporary relief. What ails her?

ANS.—We cannot tell the difficulty from the description. Consult a veterinarian, if possible.

R. L. B., Reform, Mo.—What will make a cow come in heat?

ANS.—Very little, if anything can be given a cow to make her come in heat. The most you can do is to keep her in a good healthy condition—not too fat—and give her time. If, after several months she does not come in heat, she is probably sterile, owing to some disease or abnormal condition.

C. G., Melrose, Kans.—What ails my pigs? They become stiff in the hind ankles and walk with the ankles bent forward, and finally walk on the ankles, with the foot bent back growing worse until they die.

Ans.—Without a knowledge of the post-mortem lesions we are unable to diagnose. The weakness may be due to any one of several causes.

J. H. S., Hickory, W. Va.—1. How are Diehl and Probsteier pronnced? 2. Are the roots of apple trees affected with bitter rot suitable for grafting stock?

Ans.—1. Deel. 2. Probsteer. 3. Nobody can say. It is better to propagate from other stock.

J. D. D., Eldred, Pa.—The grass sent for name is Festuca elatior—Meadow Fescue, Randall Grass, Evergreen Grass. It ripens its seeds early and gives an early bite to cattle. It is one of the chief English meadow grasses and cattle are fond of it either green or as hay.

John W. W.—We do not quite understand the question as to grass roots. Are the roots to be used as sod for other parts, or is it merely desired to rid the place of grass roots. If the latter, nothing but cultivation will do it or the use of expensive liquids such as coal oil, etc.

DISCUSSION.

E. P., GREENE CO., N. Y.—As to the question of spreading manure in Winter or leaving it in piles, I notice, about here, that farmers who leave manure in piles and spread it in Spring, get about half the crop that is obtained where the manure is spread as soon as possible after it is made. The land is certainly more mellow. The soil under manure is always more mellow than that which is uncovered. It is due to the action of the manure on the soil. Very rich soil is seldom hard or lumpy. I claim that the sooner you get the manure out on the land, the more rapidly it will be decomposed, and the more friable the soil will be. Farmers make a great mistake in not saving their liquid manure. I throw my horse manure in the alley behind the cows. It is like a sponge to soak up all the moisture. The cows are clean and dry. They never were before the manure and bedding were thrown behind them. The warmth from the horse manure keeps the heaps from freezing. I can haul in Winter without freezing. The cow manure is so damp that the piles will not burn, and the cut straw makes the manure handle easily. I carry my horse manure several rods in a basket to place it back of the cows, and consider myself well repaid. Farmers waste millions in letting their liquid manure go. Use chemical fertilizers, but save your barnyard manure first. You can save ammonia in liquid manure cheaper than you can buy it. The only way to make farming pay now is to double the crop that can be grown on an acre and thus save labor. Save the manure and make it work for you.

W. F. K., BATON ROUGE, LA.—The RURAL is in error in saying that people here plow with sticks. It is true that our people are a long way behind farmers in some parts of the country, but we are not so far down that we have to plow with sticks. [We said "cultivate" with sticks, meaning that sticks or wooden hoes are used by some of the negroes in place of our lighter hoes.] Our nights are not "sweltering hot." It is rare for us to have a hot night. They are, as a rule, cool and pleasant. This climate is not understood. The thermometer seldom goes above 90°, and then only for a few hours. In this part of the State we have very few mosquitoes, the great pest of the lowlands. Those from France say this section is very similar to that of Bordeaux.

K. S., HILLSBOROUGH, N. H.—R. C., Jr. should clear out his well or dig a new one. If there is enough foul gas in it to spoil milk, the water can hardly be fit to drink. Hot charcoal thrown down the well would absorb the gasses, or if he could force a stream of air through the water his well would be all right.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING July 31, 1886.

"Hampshire."—B. B.—E. S. G.—J. A. W., thanks—W. A. S.—C. A. G.—H. S.—H. S.—T. H. H.—C. S.—W. G. H.—J. S.—B.—W. J. G., thanks—A. W. B.—H.—R. C.—A. E. M. C.—E. T.—T. D. C.—B. R.—G. T.—R. S. M., the special will be issued Sep. 1st.—H. S.—C. S. S.—C. A. G.—W. F. K.—O. R. W.—G. W. P. & Sons—R. G. B.—E. B.—W. H. T.—F. G.—L. W. P.—J. A. W.—J. H. W., thanks—W. S. S., thanks—H. B.—W. S. C.—T. V. M., grapes rec'd—J. D. D.—J. G. H.—J. J.—C. W. K.—C. A G.—P. H. J.—J H. H.—J. D. D.—H. S.

THE
RURAL NEW-YORKER.
A National Journal for Country and Suburban Homes.

Conducted by
ELBERT S. CARMAN.

Address
THE RURAL NEW-YORKER,
No. 34 Park Row, New York.

SATURDAY, AUGUST 14, 1886.

Johnson Grass, started from seed at the Rural Grounds four years ago, is now (August 3) in bloom.

Profit and beauty are combined in the Japan Chestnut. Why not plant it on the lawn or in the garden as well as the maple, ash, beech, birch or linden?

The strawberry plants of our present collection quickest to recover after fruiting, are Augur's 87, Sharpless, Hilton, Ontario, Bubach No. 5, Ironclad and Belmont.

Some of our ensilage friends ought to try Prickly Comfrey. Horses and cattle do not like it raw, but they might take to it as it comes from the silo. We don't know of any plant that would give more green leaves to the acre. Then, besides, it is a hardy perennial, and, according to chemical analysis, very nutritious.

We wish that this simple fact, abundantly proven by reiterated experiments, were better known and acted upon by farmers. It is that the failure of nitrogenous fertilizers to increase crops is often due to a deficiency of phosphoric acid and potash in the soil; that the failure of phosphoric acid to increase crops is often due to a deficiency of nitrogen and potash in the soil; that the failure of potash to increase crops is often due to a deficiency of phosphoric acid and nitrogen in the soil; that, finally, the failure of any two to increase crops is owing to a lack of the third.

There is no reason in the world why the farmers of New York State should not send their boys to fill up the agricultural department at Cornell. The course is an excellent one, the instructors are all men of note, and the small expense necessary to complete the course renders it possible for any farmer's boy to attend. The terms of admission are easier than ever before, why not send your boy there? You are bound that he shall have an education. Perhaps you were unable to acquire a college education yourself, and for that reason are doubly anxious that your boy shall have every advantage. Do not make any mistake in the matter. Agricultural education is as legitimate and necessary as legal education. True agriculture is the most intricate trade in the world. It requires a broader education, a truer groundwork in science than any other occupation. A boy who loves the farm, who delights in handling stock or in experimenting will not be led away from farming at Cornell. Let him take the course in agriculture and he will make a better farmer to pay for it. If you have a genuine farm boy, friend, don't try to make a lawyer or a doctor out of him, encourage him to make a farmer out of himself, and give him every chance you can of mastering all the details of his profession.

WHEAT SOWING.

During our farm experience of 20 years, every year of which we have raised wheat, we fancy we have learned one or two things; that is for a light or sandy soil, though as a matter of fact a sandy is heavier than a clay soil. One of the things we have learnt is to plow the oat stubble as soon as possible after harvest. Oats in our rotation always precedes wheat and Timothy seeding. Whether farm manure is spread or not, our wheat seems to be benefited by a light dressing of a complete fertilizer just before sowing. The land is then rolled and harrowed. For several years we rolled both before and after seeding, but were convinced that it is not a good thing to do. The rolled surface *bakes* and causes the rain, instead of soaking directly into the soil, to form gutters and to run in little streams here and there. It also appeared that wheat rolled after seeding did not stand the Winters so well, being killed out in places.

Who can rationally advise farmers in general as to the quantity of wheat that had best be sown per acre? We can not. Some wheats tiller little, others a good deal. The amount of seed wheat must be determined accordingly. Is your land light or heavy, well or imperfectly drained; rich or poor? Every farmer must consider these questions for himself and sow accordingly. From careful experiments made years ago, we settled upon 1½ bushel to the acre for either Clawson, Silver Chaff or Fultz.

LAST NOTICE.

TEN DOLLARS

for the largest Bird Cantaloupe from the Seed of the Rural's last Seed Distribution.

TEN DOLLARS

for the largest Watermelon.

TEN DOLLARS

for the longest ear of the Angel of Midnight Corn containing the greatest number of kernels

TEN DOLLARS

for 10 of the heaviest pods from the Alaska Pea.

The prizes will be awarded October 1st. All competitors will be required to *advise* us as to the weight or size of their peas, melon or corn by postal card. *Those who take the prizes may be required* to send the prize-taking articles by express to this office, though at our expense.

EXPERIMENT STATIONS.

The ideal Experiment Station would be a blessing indeed to the farmer. It would be a fountain of knowledge to which he could scarcely apply without receiving benefit. It would be a place to which he might put questions on all subjects connected with agriculture, with the surety of being truthfully and disinterestedly instructed as to all that is known on the subject. Should an unfamiliar, destructive insect appear, the Experiment Station should be able to tell the farmer what it is, and how best to fight it. Does a farmer wish to know the merits of a new grain or fruit, the Experiment Station should be able to give him the result of careful comparative trials. Does he desire to set out a collection of ornamental trees, the Experiment Station should be able to show him samples of all, with the whole truth as to their healthfulness or hardiness; and so on through the whole range of agricultural matters. Not only so, but the Experiment Station report should give him practical information on many subjects of which he had not thought to ask.

But where is the ideal Experiment Station? Let us not despond because it has not yet arrived. We have several young Experiment Stations that are doing all in their power to advance the interests of agriculture. Their motives and efforts are the best that their managers can think of. It is to be regretted that most of them are as yet hampered through want of means. But we hope a brighter day is dawning.

An Experiment Station of all other places requires men of energy and ability, and men who are willing to use these gifts in the pursuit of discovery for the public good. The Director who habitually sits in his office, trusting all responsibility to his subordinates, and writes reports and bulletins of experiments of which he has not seen a single detail performed, and of which he has made no attempt to verify a single figure, proves thereby his unfitness for his position.

An Experiment Station is no place for political, or any kind of dead-beats. Politicians, send your salary suckers anywhere else, but for heaven's sake keep them out of our Experiment Stations. We want nothing but pure gold there.

STORY WRITERS.

In the early part of the year, a prominent paper offered very liberal prizes for stories. The design, in part, was to develop amateur story writers and to encourage youthful aspirants for literary fame. Some 6,000 manuscripts were sent in. The prizes must, of course, be won by a few practiced writers, while the great many amateurs must be doomed to disappointment. It is a question whether this prize-story business does not work serious harm. Many a young man or young woman, without the first qualities of imagination, experience or insight into character needed to make a good story writer, are induced to spend hours of valuable time at hopeless writing. This same time, applied to regular work or systematized study, would bring a thousand times the satisfaction that the hours spent at story writing can ever bring. It is well to be able to express one's thoughts strongly upon paper; practice at letter-writing and description is always desirable. To write a good story, however, requires qualities of mind and heart, experience and careful drill, not possessed by one person in ten thousand. The young men and women who are lured on by these attractive prizes to neglect plain, wholesome work, are doomed to the most hopeless disappointment. They cannot succeed any more than a raw workman can jump into a skilled mechanic's place and hold it. There are hundreds of highly educated men in all our large cities, capable of doing the very best of literary work, who would be utterly unable to support themselves at story writing. The tendency of too much of our educational system is all wrong. Somehow, the graduate of one of our schools gets the idea firmly fixed in his head that manual labor is degrading, and that he must get into some business wherein he can keep his hands clean. The mania for story writing that is sweeping over the country is sure to add to this contempt for manual labor. The healthy young men and women who sit down with the deliberate intention of becoming authors without a willingness to spend years in careful study and observation, are to be pitied. Their days of usefulness are limited. Literature as a recreation is a success; as a business, it means failure for nine out of ten.

THE NATIONAL OLEOMARGARINE LAW.

Last Monday the President signed the Oleomargarine Bill, and sent to Congress a rather lengthy message giving his reasons for doing so, and suggesting several amendments to be made promptly. He does not think the definition given of oleomargarine clear and distinct enough, and he has some doubts as to the constitutionality of sections 14 and 15, as they may be construed as interfering with the police powers of the States. Although if they were found invalid, it would not vitiate the whole measure, yet he urges amendments to remove all doubt in the matter. "There is certainly no industry," he says, "better entitled to the incidental advantages which may follow this legislation than our farming and dairy interests, and none of our people will be less begrudged than our farmers and dairymen. The present depression of their occupation, the hard, steady and often unremunerative toil which such occupation exacts, and the burdens of taxation which our agriculturists necessarily bear, entitle them to every legitimate consideration." True, every word of it; and yet there's a howl from the partisan press that this clear statement of fact is only a bid for the farmers' vote! Well, the more "bids for the farmers' vote," the greater the likelihood that due consideration will be given to the farmers' needs and demands. Both the great parties are bidding quite lively for the soldiers' vote, the Prohibitionists' vote, the labor organizations' vote, and are making large concessions to secure it; why shouldn't they bid still more eagerly for the farmers' vote, which is by far greater than all the others combined? When both parties appreciate more keenly the importance of the farmers' vote, and neither party can feel sure of it, more "bids" will be made for it, and more inducements held out to obtain it.

With regard to the frequent misstatement that the real purpose of this measure is to destroy one industry for the protection and benefit of another, the President says he is convinced that the tax cannot possibly destroy the open and legitimate sale of the product on which it is levied. If the article has all the merits claimed for it, and if the people want it under its real name, the tax will leave a fair profit to manufacturer and dealer. If its existence and profits depend on disposing of it for something else which it deceitfully imitates, "the entire enterprise is," he says, "a fraud, and not an industry; and if it cannot endure the exhibition of its real character which will be effected by the inspection, supervision and stamping which the bill directs, the sooner it is destroyed the better, in the interest of fair dealing."

That is precisely the opinion which the Rural has all along expressed. Hitherto the enormous growth of the oleo business has been secured almost entirely by fraudulent misrepresentation. The manufacturers and dealers have made exorbitant profits by palming off on the public the counterfeit for the genuine. Instead of blustering and whimpering because the new law tries to prevent them from continuing this "sawdust" sort of swindle, they should rejoice that it does not force them to disgorge their dishonest gains, or clap them in prison for their "mercantile knavery."

We do not think this law will be as great a restraint on the bogus butter men or as great a benefit to dairymen as many imagine. The reduction of the tax to two cents a pound; the insertion of a provision in several sections throwing upon the prosecution the burden of proving that the offender "knowingly" violated the law, and the rejection of the provision giving a moiety of fines to informers, have all weakened the force of the bill as originally introduced in the House. We would have commented on these errors at the time, but thought it bad policy to weaken our own side by carping criticisms while they were battling with the enemy. The matter of paramount importance was to secure the passage of a national law regulating the manufacture and sale of oleo products in every State and Territory of the Union, and thus settle once for all the constitutionality of oleo legislation, so far as the question can be settled outside of the Supreme Court. To the amendments suggested by the President such others can be added as experience may prove necessary for the enforcement of the law and the accomplishment of the objects for which it was passed. Moreover, the passage of this national law does not abrogate or in the least weaken the various State "oleo" laws already in force, or in any way prevent the amendment of these or the enactment of new ones. The farmers of the country have shown their dominant influence, when roused to vigorous action, on national legislation; surely they can secure the passage of efficient supplementary laws in their respective States to piece out the shortcomings of this "oleo. law."

BREVITIES.

Wool will probably go higher.

The European apple crop is far below the average.

The dwarf nasturtium is a fine flower for rock-work.

What we want is a *thornless* blackberry as good in quality as the Kittatinny, as hardy as the Taylor or Snyder.

The market gardeners about the Rural Grounds are now getting $1.25 per 100 ears of sweet corn. Eggs bring 2½ cents each at wholesale.

It will be a difficult task for the New York Hort. Society to find another secretary so competent, so energetic and so well beloved as the late James Y. Murkland.

The wet weather continues at the Rural Grounds. Tomatoes rot as they ripen. The ears of green corn were never before so much injured by the corn worm.

Indefinite Quantities.—A barrel of apples, a quart of strawberries, a basket of peaches, a box of cranberries, a box of huckleberries, a quarter's worth of eggs, a dozen eggs.

It seems that a large attendance at the approaching convention of American florists is promised. It will meet in Philadelphia the 18th, ending the 20th. The Colonnade Hotel will be the headquarters of the society.

Some of our neighbors are trying the White Wyandottes. Whatever superiority they may possess over the Spangled Wyandottes does not as yet appear. The variety will, no doubt, become fixed and be admitted to the Standard of Excellence.

We are ready to commend the Mikado Pear as an ornamental tree. It is beautiful in blossom (the blossoms are twice the size of the ordinary pear's) and the pears, so uniform in shape, with their long, slender stems, hang like so many pendent balls. The leaves are large, thick and glossy, and hang on until frost. The fruit is good for canning.

J. M. Ogle, of W. Territory, sent us a root of the Evergreen Blackberry, which seems to thrive so well in his county and to bear such wondrous quantities of fruit. It was received and planted last May. It has made a fine growth, and is really a handsome, ornamental vine. It is bearing a few clusters of berries. This is the European blackberry (R. fruticosus) often called Evergreen, Cut-leaved, Parsley-leaved, etc.

Among the visitors at the Rural Grounds are some who desire to see everything—shrubs, trees, grapes, small fruits, as well as our field experiments. They have lots of questions to ask and are interested listeners. There are others who walk about apparently seeing little and talking much. We sometimes wonder when they go away what they learnt and what they came for.

Our list of fairs this year is the most complete we have ever issued. It will be of service to exhibitors who wish to be represented in all parts of the country. The balance of the list will be printed next week. We shall be glad to have the Rural exhibited at all the fairs named in our list. Those of our friends who wish to talk up the paper at the County Fair will be supplied with posters, samples, etc., upon application.

It has for many years been considered essential that lightning rods should not touch the building they are designed to protect, and where support has been necessary, glass tubes, which have been thought to act as insulators, have been placed within the iron supports driven into the building. It is of late years thought safer to connect the building with the rod. Why not? The lightning rod is a better conductor of electricity than the building, else it would afford no protection whatever, and lightning will not leave a better for a poorer conductor.

STATE AND PROVINCIAL FAIRS.
1886.

Alabama, Montgomery....Nov. 8, 13
Am. Horse Show, Chicago....Nov. 8, 19
Am. Fat Stock, Chicago....Nov. 8, 12
Californin, Sacramento....Sept. 6, 18
Canada's Exposition, Toronto....Sept. 6, 18
Central Ontario, Hamilton....Sept. 27, Oct. 1
Connecticut, Meriden....Sept. 14, 17
Dakota, Huron....Sept. 6, 10
Connecticut, Danbury....Oct. 5, 9
Delaware, Dover....Sept. 27, Oct. 2
Eastern Alabama, Eufaula....Nov. 15, 20
Georgia, Macon....Oct. 25, Nov. 6
Illinois, Chicago....Sept. 6, 10
Illinois Dairy Show, Chicago....Nov. 8, 19
Inter-State Indust., Chicago....Sept. 8, Oct. 20
Indiana, Indianapolis....Sept. 27, Oct. 2
Iowa, Des Moines....Sept. 3, 10
Kansas, Lawrence....Sept. 6, 11
Kansas City, Mo, Fat Stock....Oct. 23, 30
Kentucky, Lexington....Aug. 31, Sept. 4
Maine, Lewiston....Sept. 14, 17
Massachusetts Hort....Sept. 14, 17
Michigan, Jackson....Sept. 13, 17
Michigan State Horticultural, Jackson....Sept. 13, 17
Minnesota, St. Paul....Aug. 30, Sept. 4
Minneapolis Industrial....Aug. 23, Oct. 4
Montana, Helena....Aug. 23, 28
Nebraska, Lincoln....Sept. 10, 17
Nevada, Reno....Oct. 4, 9
New England, Bangor....Aug. 31, Sept. 3
New Jersey, Newark....Sept. 13, 17
New Mexico, Albuquerque....Sept. 25, Oct. 1
New York, Utica....Sept. 23, 28
North Carolina, Raleigh....Oct. 26, 29
North Dakota Exposition, Grand Forks....Sept. 13, 18
Ohio, Columbus....Aug. 30, Sept. 3
Ontario Provincial, Guelph....Sept. 20, 25
Oregon, Salem....Sept. 13, 18
Pennsylvania, Philadelphia....Sept. 6, 18
Percheron Horse Show, Chicago....Sept. 6, 10
Rhode Island, Providence....Sept. 20, 24
St. Louis, St. Louis....Oct. 4, 9
South Carolina, Columbia....Nov. 9, 12
Southern Ex., Louisville, Ky....Aug. 28, Oct. 3
Texas, Dallas....Oct. 26, Nov. 6
Tri-State, Toledo, Ohio....Sept. 6, 11
Vermont, Burlington....Sept. 6, 10
Virginia, Richmond....Oct. 20, 22
Washington Ter., Walla Walla....Sept. 6, 11
West Michigan, Grand Rapids....Sept. 20, 25
West Virginia, Wheeling....Sept. 6, 11
West Virginia Cen., Clarksburg....Sept. 14, 16
Wisconsin, Milwaukee....Sept. 20, 24
Wyoming, Cheyenne....Sept. 14, 17
Bay State, Boston, Mass....Oct 5, 8

NEW YORK COUNTY FAIRS.

Hornellsville, Hornellsville....Sept. 7
Putnam, Carmel....Sept. 21, 24
Erie, Hamburg....Sept. 21, 24
Broome, Whitney's Point....Sept. 7, 10
Sandy Creek, Sandy Creek....Sept. 1, 3
Otsego, Cooperstown....Sept. 20, 22
Niagara, Lockport....Sept. 23, 25
Oswego, Mexico....Sept. 14, 16
Chenango Valley, Randolph....Sept, 20, 23
Steuben, Bath....Sept. 28, Oct. 1
Jefferson, Watertown....Sept. 14, 17
Warren, Glen's Falls....Aug. 31, Sept. 3
Orleans, Albion....Sept. 23, 25
Fulton, Johnstown....Sept. 7, 9
Ontario, Canandaigua....Oct. 12, 14
Oneida, Rome....Oct. 4, 8
Carthage Union, Carthage....Sept. 7, 9
Schoharie, Schoharie....Sept. 28, 30
Orange, Newburgh....Sept. 14, 17
Lewis, Forest Park....Sept. 14, 17
Columbia, Chatham....Sept. 7, 9
Montgomery, Fultonville....Sept. 11 16
Schuyler, Watkins....Sept. 29, 30
Chautauqua, Jamestown....Aug. 31, Sept. 3
Alleghany, Angelica....Sept. 7, 10
Duchess, Washington Hollow....Sept. 28, Oct. 1
Queens, Mineola....Sept. 21, 24
Tompkins, Ithaca....Sept. 14, 17
Seneca, Waterloo....Sept. 28, 30
Suffolk, Riverhead....Sept. 29, 30
Genesee, Batavia....Sept. 23, 25
Onondaga, Syracuse....Oct. 5, 8
Western N. Y., Rochester....Sep. 29, Oct. 1
Penn Yan, Penn Yan....Oct. 5, 7
Livingston, Geneseo....Oct. 6, 7
Essex, Westport....Sept. 6, 8
Franklin, Malone....Sept. 28, 30
Schenectady, Schenectady....Sept. 13, 16
Wayne, Lyons....Sept. 16, 18
Oswegatchie, Ogdensburg....Sept. 7, 9
Rensselaer, Lansingburg....Sept. 21, 24
St. Lawrence, Canton....Sept. 14, 16
Seneca, Waterloo....Sept. 28, 30
Washington, Fort Edward....Sept. 14, 17
Westchester, White Plains....Sept. 27, Oct. 2
Saratoga, Ballston Spa....Sept. 7, 10

PENNSYLVANIA COUNTY FAIRS.

Tri-State, William's Grove....Aug. 30, Sept. 4
Adams, Gettysburg....Sept. 21, 23
Armstrong, Kittanning....Oct. 5, 8
Beaver, Hookstown....Aug. 24, 26
Berks, Reading....Sept. 21, 24
Blair, Hollidaysberg....Sept. 14, 16
Bradford, Towanda....Sept. 28, 30
Bradford, Canton....Sept. 21, 23
Bradford, Troy....Sept. 14, 17
Bucks, Doylestown....Oct. 5, 8
Butler, Butler....Sept. 14, 17
Butler, Zellenople....Sept. 21, 21
Carbon, Lehelghton....Sept. 21, 24
Chester, West Chester....Sept. 23, 25
Chester, Oxford....Sept. 29, Oct. 1
Clarion, Clarion....Sept. 28, Oct. 1
Columbia, Bloomsburg....Oct. 13, 16
Columbia, Berwick....Sept. 28, Oct. 1
Crawford, Conneautville....Sept. 29, Oct. 1
Crawford, Cochranton....Sept. 15, 17
Crawford, Titusville....Sept. 21, 24
Cumberland, Carlisle....Sept. 28, Oct. 1
Erie, Erie....Sept. 21, 24
Erie, Corry....Sept. 28, Oct. 1
Fayette, Uniontown....Oct. 6, 8
Greene, Carmichaels....Oct. 7, 8
Greene, Waynesbury....Sept. 21, 23
Greene, Jacksonville....Sept. 8, 10
Indiana, Indiana....Oct. 5, 8
Jefferson, Brookville....Sept. 14, 16
Jefferson, Punxsutawney....Sept. 21, 24
Luckawanna, Scranton....Sept. 14, 17
Lancaster, Lancaster....Aug. 31, Sept. 4
Lebanon, Lebanon....Sept. 14, 17
Lehigh, Allentown....Sept. 27, Oct. 1
Luzerne, Wyoming....Sept. 21, 24
McKean, Port Allegheny....Sept. 7, 10
Mercer, Stoneboro....Sept. 28, 30
Mercer, Mercer....Sept. 22, 24
Montour, Washingtonville....Oct. 19, 22
Northampton, Easton....Sept. 14, 17
Northumberland, Milton....Sept. 29, Oct. 2
Potter, Coudersport....Sept. 29, Oct. 1
Schuylkill, Ringtown....Sept. 15, 18
Sullivan, Dushore....Oct. 6, 8
Susquehanna, Montrose....Sept. 22, 23
Harford....Sept. 28, 29
Tioga, Wellsboro....Sept. 21, 24
Union, Lewisburg....Sept. 22, 24
Warren, Warren....Sept. 7, 9
Warren, Sugar Grove....Sept. 14, 16
Washington, Washington....Sept. 14, 17
Washington, Burgettstown....Oct. 5, 7
Wayne, Honesdale....Sept. 3, 10
Wyoming, Tunkhannock....Sept. 8, 10
York, York....Oct. 5, 8

VERMONT COUNTY FAIRS.

Upper Coos & Essex, Colebrook....Sept. 7, 10
Winooski Valley Agr'l Asso., Waterbury....Sept. 7, 10
Orange, Bradford....Sept. 28, 30
Caledonia, St. Johnsbury....Sept. 21, 24
Poultney Industrial Society, Poultney....Sept. 14, 16
Lamoille Valley, Morrisville....Sept. 28, 30
Orleans, Barton....Sept. 28, 30
Addison, Middlebury....Aug. 30, Sept. 1
Springfield Agr'l Socy, Springfield....Sept. 21, 22
Franklin, Sheldon....Sept. 1, 3
Bolterkill Valley, Manchester....Sept. 28, 30
Rutland, Rutland....Sept. 21, 23
Windham, Newfane....Sept. 21, 23

RHODE ISLAND COUNTY FAIRS.

Aquidneck, Newport....Oct. 5, 7
Woonsocket, Woonsocket....Sept. 14, 16
Washington, West Kingston....Sept. 14, 16

NEW JERSEY COUNTY FAIRS.

West Jersey, Wordslown....Sept. 15, 16
Burlington, Mt. Holly....Oct. 11, 16
Sussex, Newton....Oct. 5, 8
Monmouth, Freehold....Sept. 7, 9
Egg Harbor, Egg Harbor....Sept. 23, 26
Somerset, Somerville....Sept. 28, 30
Hunterdon, Flemington....Sept. 21, 23
Mooreslown, Mooreslown....Sept. 21, 23

MAINE COUNTY FAIRS.

Cumberland, Portland....Sept. 27, 30
Franklin, Farmington....Sept, 28, 30
Kennebec, Readfield....Sept. 28, 30
Lincoln, Damariscotta....Sept. 28, 30
Penobscot, East Eddington....Sept. 29, 30
Waldo, Belfast....Sept. 22, 23
York, Biddeford....Sept. 28, 3
Cumb, Farmers, West Cumberland....Oct. 6, 7
Franklin Cent. Strong....Sept. 29, 30
Kennebec and Somerset, Fairfield....Sept. 28, 30
Norridgwock, Elmwood Park....Oct. 1, 2
North Aroostook, Presque Isles....Sept. 14, 16
North Kennebec, Waterville....Sept. 21, 22
North Penobscot, Lee....Sept. 30, Oct. 1
North Somerset, Bingham....Oct. 8, 9
Ossipee Valley, Cornish....Sept. 14, 17
Somerset Central, Showhegan....Sept. 21, 23
West Franklin, Phillips....Oct. 5, 7
West Penobscot, Exeter....Sept. 28, 30
West Washington, Jonesboro....Sept. 29, 30
Sagadahoc, Topsham....Oct. 14, 15
Washington, Pembroke....Sept. 15, 16
Woodstock, Woodstock....Sept. 14, 17
Knox, Rockland....Oct. 5, 8
West Oxford, Fryeburgh....Oct. 5, 7
Aroostook, Maple Grove....Sept. 30, Oct. 1
Oxford, Norway....Sept. 28, 30

CONNECTICUT COUNTY FAIRS.

New London, Norwich....Sept. 21, 23
Fairfield, Norwalk....Sept. 14, 17
Windham, Brooklyn....Sept. 21, 23
Tolland, Rockville....Oct. 5, 6
Chester, Chester....Oct. 6
Clinton, Clinton....Oct. 6
Farmington, Collinsville....Sept. 30, Oct. 1
Guilford, Guilford....Sept. 29
New Milford, New Milford....Sept, 8, 9
Pequabuck, Bristol....Sept. 30, Oct. 1
Simsbury, Simsbury....Oct. 6, 7
Southington, Southington....Sept. 28, 29
Union, Huntington....Sept. 22, 24
Watertown, Watertown....Sept. 21, 23
Westbrook, Westbrook....Oct. 13
W'le & Bethany, Woodbridge....Sept. 29
Woodstock, South Woodstock....Sept. 14, 16
Wolcott, Wolcott....Sept. 30
Highland, Middlefield....Sept. 8, 9
Polland, Brockville....Oct. 5, 6

MASSACHUSETTS COUNTY FAIRS.

Middlesex No. Agr'l Socy, Lowell....Sept. 15, 16
Eastern Hampden Agr'l Society, Palmer....Sept. 14, 15
Hampshire Agr'l Society, Amherst....Sept. 23, 24
Hampden Agr'l Socy, West Springfield....Sept. 22, 23
Franklin, Greenfield....Sept. 30, Oct. 1
Berkshire Agr'l Socy, Pittsfield....Sept. 14, 16
Worcester, South, Sturbridge....Sept. 16, 17
Bristol, Taunton....Sept. 28, 30
Attleboro F. & M. Asso., Attleboro....Sept. 14, 16
Plymouth, Bridgewater....Sept. 22, 23
Brockton Agricultural Society, Brockton....Oct. 6, 8
H. F. & H. Agr'l Society, N. Hampton....Oct. 6, 7
Barnstable, Yarmouth....Sept. 28, 29
Union Agr'l Society, Blandford....Sept. 15 17
Fitchburg Agr'l Society, Fitchburg....Sept. 28, 29
Housatonic Ag. So., Great Barrington....Sept. 29, Oct. 1
Hoosac Valley, North Adams....Sept. 21, 23
Martha's Vineyard Socy, West Tisbury....Oct. 5, 7
Spencer, Spencer....Oct. 6
Deerfield Valley, Charlemont....Sept. 15, 17
Worcester, West, Barre....Sept. 30, Oct. 1
Hillside Agr'l Socy, Cummington....Sept. 28, 29
Hingham, Hingham....Sept. 23, 29
Marshfield Agr'l Socy, Marshfield....Sept. 15, 17
Hampden, West Springfield....Sept. 22, 30
Worcester, Northwest, Athol....Sept. 1
Nantucket, Nantucket....Sept. 8, 9
Housatonic, Great Barrington....Sept. 15 16
Worcester, Worcester....Sept. 23, 24

OHIO COUNTY FAIRS.

Allen, Lima....Sept. 21, 24
Ashtabula, Jefferson....Sept. 21, 24
Athens, Athens....Oct. 6, 8
Auglaize, Wapakoneta....Sept. 28, Oct. 1
Belmont, St. Clairsville....Sept. 1, 3
Brown, Ripley....Aug. 24, 27
Butler, Hamilton....Oct. 4, 8
Carroll, Carrollton....Oct. 5, 8
Champaign Urbana....Aug. 24, 27
Clarke, Springfield....Aug. 24, 27
Clermont, Owensville....Sept. 7, 10
Clinton, Wilmington....Sept. 7, 10
Columbiana, New Lisbon....Sept. 28, 30
Coshocton, Coshocton....Oct. 12, 15
Crawford, Bucyrus....Sept. 21, 24
Cuyahoga, Chagrin Falls....Aug. 31, Sept. 3
Darke, Greenville....Sept. 13, 17
Defiance, Defiance....Sept. 28, Oct. 1
Delaware, Delaware....Sept. 14, 17
Erie, Sandusky....Sept. 21, 24
Fairfield, Lancaster....Oct. 12, 15
Fulton, Wauseon....Sept. 15, 18
Gallia, Gallipolis....Sept. 16, 18
Geauga, Burlou....Sept. 14, 17
Greene, Xenia....Sept. 8, 10
Guernsey, Washington....Sept. 22, 24
Hamilton, Carthage....Aug. 17, 20
Hancock, Findlay....Sept. 29, Oct. 2
Hardin, Kenton....Sept. 7, 10
Henry, Napoleon....Sept. 14, 17
Highland, Hillsboro....Aug. 3, 6
Holmes, Millersburg....Sept. 28, Oct. 1
Jefferson, Smithfield....Sept. 22, 24
Lake, Painesville....Sept. 21, 24
Lawrence, Ironton....Sept. 15, 17
Licking, Newark....Sept. 28, Oct. 1
Logan, Bellefontaine....Sept. 28, Oct. 1
Lorain, Elyria....Sept. 28, Oct. 1
Mahoning, Canfield....Oct. 5, 7
Medina, Medina Village....Sept. 14, 16
Mercer, Celina....Aug. 31, Sept. 3
Miami, Troy....Sept. 28, Oct. 1
Monroe, Woodsfield....Sept. 22, 24
Morgan, McConnelsville....Sept. 14, 17
Morrow, Mt. Gilead....Oct. 5, 8
Noble, Sarahsville....Sept. 8, 10
Paulding, Paulding....Sept. 21, 24
Perry, New Lexington....Sept. 28, Oct. 1
Portage, Ravenna....Sept. 21, 24
Preble, Eaton....Sept. 27, Oct. 1
Putnam, Ottawa....Oct. 5, 9
Richland, Mansfield....Sept. 28, Oct. 1
Ross, Chillicothe....Aug. 10, 13
Sandusky, Fremont....Sept. 28, Oct. 1
Scioto, Portsmouth....Sept. 20, 24
Seneca, Tiffin....Sept. 28, Oct. 1
Shelby, Sidney....Sept. 21, 24
Stark, Canton....Sept. 27, Oct. 1
Summit, Akron....Oct. 5, 8
Trumbull, Warren....Sept. 9, 11
Tuscarawas, Canal Dover....Oct. 5, 8
Union, Marysville....Sept. 28, Oct. 1
Van Wert, Van Wert....Sept. 7, 10
Warren, Lebanon....Sept. 21, 24
Washington, Marietta....Sept. 22, 24
Williams, Bryan....Sept. 28, Oct. 1
Wood, Tontogany....Sept. 28, Oct. 1
Wyandot, Upper Sandusky....Sept. 28, Oct. 1
Tri-State, Toledo....Sept. 6, 11
Southern Ohio, Dayton....Sept. 27, Oct. 1
Central Ohio, Mechanicsburg....Sept. 7, 10
Sabina, Sabina....Aug. 23, 27
Hartford, Hartford....Sept. 7, 10
Youngstown, Youngstown....Sept. 14, 17
Pataskala, Pataskala....Aug. 24, 27
Jamestown, Jamestown....Aug. 17, 20
Clyde, Clyde....Oct. 5, 8
Ada, Ada....Sept. 14, 17
Greenfield, Greenfield....Oct. 12, 15
Washington C H, Washington....Aug. 21, 27
Hicksville, Hicksville....Sept. 21, 24
Napoleon, Napoleon....Sept. 14, 17
Smyrna, Smyrna....Sept. 14, 16
Adelphia, Adelphi....Sept. 7, 10
Georgetown, Georgetown....Oct. 5, 8
Somerset, Somerset....Oct. 20, 22
Montpelier, Montpelier....Sept. 21, 23

IOWA COUNTY FAIRS.

Adams, Corning....Sept. 20, 24
Benton, Vinton....Sept. 20, 23
Boone, Ogden....Sept. 28, Oct. 2
Bremer, Waverly....Sept. 14, 17
Cass, Atlantic....Sept. 28, Oct. 1
Cerro Gordo, Mason City....Sept. 14, 16
Chickasaw, New Hampton....Sept. 15, 17
Clarke, Osceola....Sept. 14, 17
Clayton, McGregor....Sept. 7, 9
Clinton, DeWitt....Sept. 14, 17
Crawford, Denison....Sept. 15, 17
Dallas, Adel....Sept. 14, 17
Davis, Bloomfield....Sept. 28, Oct. 1
Decatur, Leon....Sept. 14, 17
Des Moines, Burlington....Sept. 13, 18
Fayette, West Union....Sept. 14, 17
Floyd, Charles City....Sept. 22, 24
Grundy, Grundy Center....Sept. 21, 23
Guthrie, Menlo....Sept. 21, 24
Hamilton, Webster City....Sep . 28, Oct. 1
Hancock, Britt....Sept. 21, 23
Hardin, Eldora....Sept. 14, 17
Harrison, Missouri Valley....Oct. 4, 7
Henry, Mt. Pleasant....Aug. 30, Sept. 2
Humboldt, Humboldt....Sept. 28, 30
Ida, Ida Grove....Sept. 15, 17
Iowa, Marengo....Sept. 14, 16
Jackson, Maquoketa....Sept. 21, 24
Jasper, Newton....Sept. 21, 24
Jefferson, Fairfield....Sept. 21, 24
Johnson, Iowa City....Aug. 30, Sept. 3
Jones, Monticello....Aug. 30, Sept. 2
Keokuk, What Cheer....Sept. 14, 17
Kossuth, Algona....Sept. 28, 30
Louisa, Wapello....Sept. 14, 17
Lucas, Charlton....Sept. 13, 16
Madison, Winterset....Oct. 5, 7
Mahaska, Oskaloosa....Aug. 30, Sept. 3
Marion, Knoxville....Aug. 24, 27
Mills, Malvern....Sept. 28, 30
Mitchell, Osage....Sept. 15, 17
Monroe, Albia....Sept. 14, 17
Montgomery, Red Oak....Sept. 13, 18
Muscatine, Muscatine....Sept. 1, 3
Page, Clarinda....Sept. 7, 11
Palo Alto, Emmettsburg....Sept. 22, 24
Sac, Sac City....Sept. 15, 17
Shelby, Harlan....Sept. 22, 24
Sioux, Orange City....Sept. 21, 24
Story, Nevada....Sept. 14, 17
Tama, Tama City....Sept. 14, 17
Union, Afton....Sept. 22, 24
Union, La Porte City....Sept. 14, 16
Union, West Liberty....Sept. 14, 16
Van Buren, Keosauqua....Sept. 14, 17
Wapello, Ottumwa....Aug. 16, 20
Washington, Washington....Aug. 31, Sept. 3
Winneshiek, Decorah....Sept. 6, 10
Worth, Plymouth....Sept. 13, 15
Council Bluff Driving Association....Aug. 31, Sept. 3
Agency, Agency....Sept. 14, 17
Boone, Boone....Sept. 14, 17
Brooklyn, Brooklyn....Sept. 16, 18
Cent. Western, Odebolt....Sept. 22, 25
Mechanicsville, Mechanicsville....Sept. 15, 17
Mt. Joy, Mt. Joy....Sept. 7, 10
Dunlap, Dunlap....Sept. 29, Oct. 1
Eastern Iowa, Winfield....Sept. 28, 30
Grand River Val. Lineville....Sept. 7, 10
Manning Union, Manning....Sept. 13, 17
Milton, Milton....Aug. 31, Sept. 3
Moulton, Albia....Sept. 21, 24
Nevinville, Nevinville....Sept. 14, 17
New Sharon, New Sharon....Sept. 22, 24
North West Iowa, Sheldon....Sept. 22, 24
Richland, Richland....Sept. 21, 24
Strawberry Point, Strawberry Point....Sept. 21, 24
Traer, Traer....Sept. 1, 3
West Point, West Point....Sept. 7, 10

MICHIGAN.

Allegan, Allegan....Sept. 28, 30
Bay, Bay City....Sept. 28, 30
Branch, Coldwater....Sept. 20, 24
Berrien, Niles....Sept. 27, Oct. 1
Barry, Hastings....Sept. 28, Oct. 1
Clinton, St. Johns....Oct. 5, 8
Eaton, Charlotte....Sept. 21, 24
Hillsdale, Hillsdale....Sept. 28, Oct. 1
Lenawee, Adrian....Sept. 21, 24
Lapeer, Lapeer....Sept. 28, Oct. 1
Midland, Midland....Sept. 28, 30
Manistee, Bear Lake....Sept. 21, 23
Macomb, Mt. Clemens....
New Monroe, Monroe....Sept. 21, 23
Oakland, Pontiac....Sept. 28, Oct. 1
Oceana, Hart....Sept. 14, 17
Osceola, Evart....Sept 28, Oct. 1
St. Joseph, Centerville....Sept. 28, Oct. 1
Shiawassee, Owosso....Sept. 21, 24
Tuscola, Vassar....Oct. 5, 8
Van Buren, Paw Paw....Sept. 22, 24
Armada, Armada....Sept. 29, Oct. 1
Avon, Rochester....Oct. 12, 14
Brighton Park, Brighton....Oct. 5, 8
Central, Hubbardston....Sept, 21, 24
Central Michigan, Lansing....Sept, 27, Oct. 1
Dowagiac Union, Dowagiac....Oct. 5, 8
Eastern Michigan, Ypsilanti....Sept. 21, 24
Fenton Union, Fenton....Oct. 5, 8
Hadley, Hadley....Oct 5, 7
Milford Union, Milford....Sept. 21, 24
N. Bor. & M. L. S., Benton Harbor....Sept. 14, 17
North Eastern Flint....Sept. 20, 24
Northern Michigan, Greenville....Oct. 5, 8
Oakland and Wayne, Farmington....Sept. 21, 24
Plymouth, Plymouth....Sept. 28, Oct. 1
Petersburg, Petersburg....Oct. 5, 7
Stockbridge Union, Stockbridge....Oct. 6, 8
Union, Litchfield....Oct. 5, 8
Union, Plainwell....Sept. 28, Oct. 1
Western Michigan, Grand Rapids....Sept. 20, 25

INDIANA.

Boone, Lebanon....Aug. 16, 20
Cass, Logansport....Sept. 14, 18
Clark, Charlestown....Sept. 27, 30
Clinton, Frankfort....Aug. 23, 27
Daviess, Washington....Oct. 4, 9
Dearborn, Lawrenceburg....Aug. 24, 28
Decatur, Greensburg....Aug. 31, Sept. 4
Delaware, Muncie....Aug. 17, 21
Elkhart, Goshen....Sept. 14, 17
Fulton, Rochester....Sept. 22, 25
Gibson, Princeton....Sept. 13, 18
Grant, Marion....Aug. 31, Sept. 3
Greene, Linton....Oct. 4, 8
Hamilton, Noblesville....Aug. 28, 27
Harrison, Corydon....Sept. 6, 10
Hancock, Greenfield....Aug. 24, 27
Henry, New Castle....Aug. 10, 14
Howard, Kokomo....Sept. 13, 17
Huntington, Huntington....Sept. 21, 25
Jackson, Brownstown....Sept. 7, 11
Jasper, Rensselaer....Sept. 7, 11
Jay, Portland....Sept. 28, Oct. 1
Jennings, North Veruon....Aug. 10, 13
Knox, Vincennes....Oct. 11, 16
Lagrange, Lagrange....Sept. 28, Oct. 1
Lake, Crown Point....Sept. 14, 17
Laporte, Laporte....Oct. 5, 7
Lawrence, Bedford....Sept. 15, 18
Madison, Anderson....Sept. 6, 10
Monroe, Bloomington....Sept. 21, 25
Montgomery, Crawfordsville....Sept. 6, 10
Newton, Morocco....Sept. 7, 11
Noble, Ligonier....Oct. 12, 15
Orange, Paoli....Sept. 1, 4
Parke, Rockville....Aug. 16, 21
Perry, Rome....Oct. 4, 9
Perry, Tell City....Sept. 28, Oct. 2
Pike, Petersburg....Aug. 28, Sept. 4
Porter, Valparaiso....Sept. 14, 17
Posey, New Harmony....Sept. 14, 17
Randolph, Winchester....Sept. 14, 17
Ripley, Osgood....Aug. 17, 20
Rush, Rushville....Sept. 14, 17
Shelby, Shelbyville....Sept. 7, 11
Steuben, Angola....Oct. 11, 16
Sullivan, Sullivan....Sept. 6, 11
Tippecanoe, Lafayette....Aug. 30, Sept. 4
Tipton, Tipton....Sept. 20, 24
Vigo, Terre Haute....Sept. 14, 17
Wabash, Wabash....Sept. 14, 17
Warren, West Lebanon....Aug. 31, Sept. 4
Warrick, Booneville....Aug. 24, 28
Washington, Salem....Sept. 14, 17
Acton, Acton....Aug. 30, Sept. 3
Bridgeton Union, Bridgeton....Aug. 24, 28
Dunkirk Union, Dunkirk....Aug. 31, Sept. 3
Eastern Indiana, Kendallville....Oct. 4, 8
Edinburg Union, Edinburg....Sept. 20, 24
Fairmount Union, Fairmount....Sept. 20, 21
Fountain, Warren and Verm., Covington....Sept. 21, 24
Francisville, Francisville....Oct. 5, 8
Henry, Madison, & Delaware, Middletown....Aug. 24, 27
Inter-State, Fort Wayne....Sept. 14, 17
Knightstown Union, Knightstown....Aug. 31, Sept. 3
Lawrence, Lawrence....Sept. 14, 17
Loogootee, Loogootee....Sept. 7, 11
Miami and Fulton, Macy....Oct. 6, 8
New Ross, New Ross....Aug. 9, 14
North East Indiana, Waterloo....Oct. 1, 9
North. Ind. and South. Mich. South Bend....Sept. 30, 24
N. Manchester Tri-Co. Agr., N. Manchester....Oct. 5, 8
Orleans, Orleans....Sept. 21, 25
Patrons and Far Kentland....Aug. 31, Sept. 3
Poplar Grove, Poplar Grove....Sept. 6, 10
South East Indiana, Aurora....Aug. 17, 20
Switzerland and O. East Enterprise....Sept. 14, 17
Union City, Union City....Sept. 30, 24
Urmeyville, Urmeyville....Oct. 7, 9
Warren Tri-Co., Warren....Sept. 7, 10
Wayne, Henry, and Randolph, Dalton....Sept. 7, 10
Wells and Blackford, Montpelier....Sept. 28, Oct. 1
Xenia Union, Xenia....Sept. 7, 12

ILLINOIS COUNTY FAIRS.

Adams, Camp Point....Aug. 31, Sept. 3
Boone, Belvidere....Aug. 31, Sept. 3
Brown, Mt. Sterling....Aug. 23, 27
Bureau, Princeton....Sept. 14, 17
Carroll, Mt. Carroll....Sept. 28, Oct. 1
Cass, Virginia....Aug. 24, 27
Champaign, Champaign....Aug. 24, 27
Christian, Pana....Sept. 21, 25
Coles, Charleston....Sept. 7, 11
Crawford, Robinson....Sept. 23, 24
Cumberland, Toledo....Sept. 15, 18
DeKalb, Sycamore....Sept. 21, 24
DeWitt, Farmer City....Aug. 31, Sept. 3
Douglas, Tuscola....Sept. 15, 17
DePage, Wheaton....Oct. 5, 7
Edgar, Paris....Aug. 30, Sept. 3
Edward, Albion....Sept. 23, Oct. 1
Ford, Piper City....Sept. 21, 23
Franklin, Benton....Sept. 21, 23
Fulton, Avon....Sept. 21, 24
Fulton, Canton....Sept. 7, 10
Gallatin, Shawneetown....Aug. 31, Sept. 4
Greene, Carrollton....Oct. 19, 22
Hamilton, McLeansboro....Sept. 14, 18
Hancock, Carthage....Sept. 6, 10
Hancock, Warsaw....Aug. 23, 26
Hardin, Elizabethtown....Aug. 24, 27
Henderson, Biggsville....Sept. 21, 24
Henry, Cambridge....Aug. 30, Sept. 3
Jasper, Newton....Sept. 14, 17
Jefferson, Mt. Vernon....Sept. 7, 10
Jersey, Jerseyville....Oct. 12, 15
Jo Daviess, Warren....Sept. 21, 24
Jo Daviess, Galena....Oct. 5, 8
Kankakee, Kankakee....Sept. 21, 24
Kendall, Yorkville....Aug. 31, Sept. 3
Knox, Knoxville....Aug. 30, Sept. 3
Lake, Libertyville....Sept. 22, 25
Lake, Waukegan....Sept. 27, Oct. 2
LaSalle, Mendota....Aug. 30, Sept. 4
Livingston, Fairbury....Sept. 13, 16
Logan, Atlanta....Sept. 7, 10
Logan, Lincoln....Aug. 30, Sept. 3
Macoupin, Carlinville....Aug 31, Sept. 3
Marion, Salem....Sept. 21, 24
Marion, Centralia....Sept. 14, 18
Marshall, Wenona....Sept. 20, 24
Massac, Metropolis....Oct. 13, 16
McDonough, Macomb....Sept. 7, 10
McHenry, Woodstock....Sept. 14, 17
McLean, Bloomington....Aug. 31, Sept. 3
Menard, Petersburg....Sept. 7, 10
Mercer, Aledo....Sept. 21, 24
Montgomery, Hillsboro....Sept. 28, Oct. 1
Moultrie, Sullivan....Sept. 21, 24
Ogle, Oregon....Sept. 21, 24
Ogle, Rochelle....Sept. 14, 17
Peoria, French Grove....Sept. 8, 10
Perry, Pinckneyville....Oct. 5, 8
Piatt, Monticello....Aug. 16, 20
Pike, Pittsfield....Sept. 7, 10
Pope, Golconda....Oct. 1, 4
Randolph, Sparta....Oct. 13, 15
Richland, Olney....Sept. 7, 10
Rock Island, Port Byron....Sept. 14, 16
Salina, El Dorado....Aug. 24, 28
Schuyler, Rushville....Aug. 17, 20
Shelby, Shelbyville....Sept. 14, 18
Stark, Toulon....Sept. 14, 17
Stark, Wyoming....Sept. 7, 10
St. Clair, Bellville....Oct. 12, 15
Tazewell, Delevan....Sept. 13, 17
Tazewell, Mackinaw....Sept. 14, 17
Union, Jonesboro....Sept. 14, 17
Unton, Anna....Aug. 31, Sept. 3
Vermillion, Catlin....Aug. 31, Sept. 3
Vermillion, Hoopeston....Aug. 23, 27
Warren, Monmouth....Sept. 14, 17
White, Carmi....Sept. 7, 11
Whiteside, Albany....Aug. 31, Sept. 3
Whiteside, Morrison....Sept. 7, 10
Whiteside, Sterling....Sept. 14, 17
Williamson, Marion....Sept. 28, Oct. 1
Winnebago, Rockford....Aug. 30 Sept. 3
Woodford, El Paso....Sept. 20, 24
Bushnell, Bushnell....Sept. 13, 17
Carbondale, Carbondale....Oct. 11, 15
Ottawa, Ottawa....Aug. 3, 6
Southern Ill, Chester....Oct. 19, 23

KANSAS COUNTY FAIRS.

Anderson, Garnett....Aug. 24, 27
Bourbon, Ft. Scott....Oct. 5, 8
Brown, Hiawatha....Sept. 14, 17
Chase, Cotton Wood Falls....Sept. 13, 17
Cherokee, Columbus....Sept. 7, 10
Coffey, Burlington....Sept. 13, 17
Cowley, Winfield....Aug. 30, Sept. 3
Crawford, Girard....Sept. 28, Oct. 1
Davis, Junction City....Sept. 21, 23
Decatur, Oberlin....Oct. 12, 14
Dickinson, Abilene....Aug. 31, Sept. 3
Elk, Howard....Sept. 9, 11
Ellis, Hays City....Oct. 5, 8
Franklin, Ottawa....Sept. 27, Oct. 1
Harvey, Newton....Sept. 21, 24
Jefferson, Oskaloosa....Sept. 28, 30
Jewell, Mankato....Sept. 28, Oct. 1
Johnson, Edgerton....Sept. 20, 23
Linn, Mound City....Sept. 21, 24
Linn, Pleasanton....Sept. 14, 17
Marion, Peabody....Sept. 14, 17
Marshall, Marysville....Sept. 21, 24
McPherson, McPherson....Sept. 14, 17
Miama, Paola....Sept. 21, 24
Montgomery, Independence....Sept. 14, 17
Morris Co Ex., Council Grove....Sept. 7, 10
Norton, Norton....Sept. 28, Oct. 1
Osage, Burlingame....Sept. 14, 17
Phillips, Phillipsburg....Sept. 21, 24
Pottawatomie & Wabaunsee, Louisville....Sept. 21, 24
Riley, Manhattan....Aug. 24, 27
Rice, Lyons....Oct. 5, 8
Rush, LaCrosse....Sept. 29, Oct. 1
Salina, Salina....Sept. 7, 10

(*Continued next week.*)

Woman's Work.

CONDUCTED BY EMILY L. TAPLIN.

HER GIFT.

THE great Artificer in putting together your individual nature, did not forget this crowning gift any more than He forgets to add its own fragrance to the arbutus, or its own song to the lark.—*F. E. Willard, in "How To Win."*

What was it then for her,—
This matchless thing,
Which nothing should deter
From taking wing?

What power latent still
Lay folded in
The chrysalis of will
To help her win?

No rhythmic melody of thought
Was hers: no speech,
Quick flowing at the moment sought;
Nor could she teach.

No special duty came
To view. Alway
Her work-days were the same,
Day after day.

Then bowing low she prayed:
Lord show me light,
For truly thou hast made
This opened sight.

And since I see, wilt Thou
Grant further gift,
And teach me where and how
Mine eyes to lift?

After long weary years
Of earnest seeking,
She found with quiet tears
Her gift in keeping.

For patience—gift so rare—
Had crowned her days,
And brought her now to share
The winner's praise.

—*The Chautauquan.*

OF INTEREST TO WOMEN.

AN exchange tells us that New York has 8,557 licensed saloons—one to every 23 voters. Philadelphia possesses one for every 20 voters. A pithy argument for more temperance work.

As an agreeable offset to this, we may cite the example of a temperance bar-room in Boston. It is well located, and everything served is of the best quality. There is a lunch counter and a drinking counter. The drinks, soda in every form, lactarts, acid and egg

phosphate, nerve food, beef tea, chicken tea, etc. As a business affair, this place is a grand success.

Lady Harberton and her rational dress is exciting much interest in London. It is proposed to give a bazar or garden party at which all the women are to appear in this attire. But according to the illustrations in the London Queen, apron draperies are so arranged that the divided skirt is entirely hidden. This removes any eccentricity of appearance, but it must also remove the freedom of movement, which is to be the great boon of this new style.

Very practical directions for home nursing were given before the National Health Society in London. We are told that a sick-room should have a south-west aspect and little furniture; a single bed is better than a double one. It is important that the chimney should be clear. In place of fire-irons there should be a wooden poker, the coal wrapped in paper in pound packets, to be put on without noise. Cheerful pictures on the wall, often changed. Oil-painted walls are better than paper of distracting patterns. A fire is the best ventilator, for the foul air when cooled falls to the floor, and passes out through the fire-place. Doors are made to shut, windows to open: air without draught is what is needed. The room should be kept clean by dusting with a damp cloth, rubbing the floors in the same way: the less carpet the better. Fresh flowers are not deleterious. Visitors should sit between the door and the patient, getting the benefit of the air, and not between him and the fire, thus getting in the direct current of foul air rushing towards the fire-place; they should be well in sight of the patient, and never admitted at meal times. Amateur nurses should not show over-anxiety or hover continually over the patient, asking what they will take, or wear creaking boots or rustling silks, or be bustling or fussy, nor stealthy nor cat-like, and whispering should be mercilessly tabooed. A nurse should be of all things, cheerful, compassionate, kind, but never sentimental Decision and firmness are needed. Medicine must be given with the regularity of clock-work. A sick-room should be kept tidy; plates, cups, etc., that have been used should be turned out at once. In case of faintness, where stimulants are not ordered, the patient should be made to sip some liquid slowly; the mere effort of sipping accelerates the action of the heart. A reaction is setting in against beef tea; to make it veritably nutritious, it should be mixed with Dr. Ridge's or some other farinaceous food. Milk is the most nutritive of all such diets. The several symptoms should be written down by the nurse from time to time on a slip of paper, always at hand, for the doctor. In infectious disorders, nothing should be kept in the room except for use. Clothes in a wardrobe under such circumstances have been known to spread infection ten years after. A sheet should be kept suspended outside the door always wet, by keeping one end dipped in carbolic or Sanitas Handkerchiefs should be replaced by rags, burnt when used. Letters from the patient should be baked, or written on post-cards dipped in carbolic; they are capable of spreading disease otherwise.

DRESS AS AN ART.

UNDOUBTEDLY it is the greatest mistake in the world for any girl to regard dress as her sole end and aim in life. It begets a host of frivolous cares, none the less galling in that they are really absurd, and pitches one's life and purpose in a trifling key. But too great a carelessness in this matter is equally to be deprecated. Outward appearances have much to do with first impressions, and a woman with the wisdom of Portia and wit of Rosalind would be the reverse of attractive if she displayed a crumpled collar and ill-fitting gown, composed of colors that "swear," as the French say.

"Costly thy habit as thy purse can buy," says the worldly-wise Polonius, and he continues with unimpeachable advice on style. There is nothing where the fitness of which our recent correspondent writes can be more fully regarded or ignored than in this matter of dress. Not only fitness for social condition, but personal appearance and peculiarities. Really, it is rarely that any two persons can dress alike becomingly, unless some very unostentatious style and color is chosen; color and fit are the two prime requisites in a becoming gown. This matter of color is always trying, in more senses than one, unless one is born with an artistic sense of harmony—which, alas! is not the good fortune of all. Thrice blessed is the woman whose eye instantly sees the harmony of color; who can always pick out the correct hues for every combination.

To make dress truly an art, we must take into account all the personality of the wearer. Thus, a young girl should wear simply made frocks of some unostentatious material. During the Summer she should confine herself as much as possible to thin light-colored fabrics; in the Winter, soft woolens; if she desires silk, it should be soft surah, or else India silk. I am sorry to say a great many country girls look upon a stiff black silk gown, cracking with jet, as the hight of their ambition in dress. A plain black silk is a very useful gown, and often has a sort of demure dressiness about it—don't you remember Polly?—Miss Alcott's "Old Fashioned Girl," with her best black silk—but there are plenty of other things, more suitable for a girl. An older woman who has lost her youthful bloom, may wear richer fabrics, of dark and undecided colors.

We must always take figure into account. A large person, inclining to corpulence, must use light colors very sparingly, and carefully avoid straggling figures, large plaids, or bayadere stripes. Perpendicular stripes, if not too large, will appear to lessen the bulk of the wearer. Consequently, a thin woman must avoid these stripes, which would make her appear like unto a gridiron. Velvets and brocades may be recommended to slender women: silks and satins to their plumper sisters. But excessively stout women must not wear very shiny fabrics; stuffs which absorb rather than reflect the light should be chosen. Similarly, short or stout women must avoid fussiness in trimming. Conspicuous ruffles or fichus must not be worn on the street. A plain ruche or linen collar only is admissible. Some women cannot wear the stiff collar: the ruche is allowable with them. In colors, one sober hue may be chosen for the gown, lightened by some little touch of brilliant color, as a sort of key-note.

Brown is a color universally becoming to blonde or brunette, but dirty-looking, undecided brown should never be chosen. Light colors increase the wearer's color; darker ones reduce it. Thus a pale blonde may wear light blue or green, but navy or myrtle would give a sallow tint. Pale brunettes must wear very light or very dark colors. Ruddy brunettes may wear decided tints—no neutrals. White is very becoming, and so is clear yellow. If not natural, the sense of harmony in color may be acquired, and since the art of dress is incomplete without it, it is one of the necessary trifles in a woman's education.

GOLDEN GRAINS.

CHEERFULNESS makes the mind clearer, gives tone to thought and adds grace and beauty to the countenance.....

GEORGE ELLIOT says: "Failure, after long perseverance, is much grander than never having a striving good enough to be called a failure".....

HE who shows the most loving nature toward everybody, is almost always the man who has gained the power of loving all by loving one as if there were none other to love..... .....

KINGSLEY says: "As the rays come from the sun, and yet are not the sun, even so our love and pity, though they are not God, but merely a poor, meek image and reflection of Him, yet from Him alone they come. If there is mercy in our hearts, it comes from the fountain of mercy. If there is the light of love in us, it is the ray from the full sun of love".....

ISN'T there too much truth in the statement of an exchange which says: "Our church festival is over. The treasury has $53.19 net gain—that is the credit side. The debit shows an appalling list of misunderstandings; several cases of dyspepsia, aggravated by late suppers, eaten on the supposition that church suppers are not injurious; a thin attendance at prayer meeting the evening following; a spirit of exultation because we cleared $1.79 more than our Baptist neighbors; a spirit of bitterness because some one said their singing was better than ours".. ....

RELIGION which does not restrain evil tendencies and produce a sober life, which does not lead a man to love and practice justice and mercy, which does not teach and preach supreme love and service to God, is a form of godliness without its power, a garment which hides a skeleton, a useless machine.....

IT is said the doorways of some of the Oriental Churches are not more than three feet high, to teach men that they should humiliate themselves by entering into the house of God upon their knees.....

IT is only those who have character and principle themselves that are qualified to praise character in others. What does it avail for a deceitful man to praise truthfulness in another, for a mean man to commend another's liberality, for a swindler to shower plaudits on one who is the soul of honor. If any one should give praise worth having he must know of what he speaks ....

THE N. Y. Journal of Commerce says: there is no royal road from want to possession. Whatever the desired acquisition may be, if it is worth having, it can only be gained by long and wearisome toil..... .....

As whole acres of Persian roses are required to make one priceless ounce of the pure attar, so the soul's balm is the slow product of a long course of right living and thinking, every separate thought and act contributing its own minute but precious particles of sweetness to the rich result.....

Domestic Economy

CONDUCTED BY MRS. AGNES E. M. CARMAN.

HOW PHILADELPHIANS COOK.

MARY-WAGER FISHER.

A FEW years ago, if my memory serves me aright, I gave a short description in this column of the RURAL, of the Cooking School in Philadelphia so ably conducted by Mrs. Rorer, who has also for several years demonstrated the fine art of cookery to aristocratic classes of young ladies in the Seminary at Agoutz, near Philadelphia, as well as elsewhere. The charming deftness and clearness, the economy and healthfulness of her methods, and the deliciousness of her products raised in the minds of all persons familiar with her work the persistent query, "Why do you not embody in book form, for the benefit of everybody, the delightful knowledge you have of domestic economy?" The suggestion, in course of time, took root, and within the last few months has blossomed forth in the shape of a handsome volume of 600 pages, bound in oil-cloth, and bearing the title "Philadelphia Cook Book." At the bottom of the paper in which the book comes covered, is this legend: "If the wrapper should stick to the oil-cloth it can be removed with a damp cloth"—a sentence that in a way illustrates one very important feature of the contents—you are told how to proceed in case of emergencies, as well as under ordinary circumstances. In referring to this book, it may not be amiss to say that Mrs. Rorer has more than justified the high expectations of her friends, for the book is capital from cover to cover, and as interesting in its way as Webster's Dictionary, which is one of the most interesting books of which I know. It is written in a very terse, captivating style, and will do more than any other cook book that I know of, to dignify and make attractive the noble art of gastronomy, while at the same time it is thoroughly practical in every detail, and not only inculcates economy, but teaches us how to utilize everything to the smallest scrap, besides being an invaluable encyclopædia for "family use."

I don't know that every housekeeper enjoys a good cook-book so much as I do, but the mere reading of a toothsome recipe gives me almost as much pleasure as does participating in the dish when prepared. If all women could cook as does Mrs. Rorer—making hardly a mark of her occupation on her dress or in her cook-room, a lady among pots and pans, in spotless array, everything moving and harmonizing like clock-work, and odors escaping from oven and stew-pan, that make one's "mouth water" to think of, even—why, then it would be easy to imagine all women accomplished cooks. As it is, with schools for cookery and lectures on cookery (not always good and practical, as they should be), it has become fashionable among aristocratic young women to learn how to cook. And still it is surprising that among so many intelligent women looking about for means of earning a livelihood, so few turn their attention to the preparation of food. One young woman in a town in New Jersey not only supports herself, but is amassing a snug little competence in making and selling sponge-cake, and her orders are always larger than she can fill. A few women in the United States put up fruit in various ways, and make pickles that are always in demand. The pretty story that went the rounds of the newspapers a few years ago, of the New York lady reduced from riches to poverty, who supported herself in great comfort by taking charge of fine dinners in the houses of people where she was once a guest, is worth repeating. She knew how, to the last detail, to have the dishes served, to arrange the table, and what instructions to give the waiters, if any were needed, so that the givers of the dinners were relieved from all care and anxiety in the matter. But in how many neighborhoods or towns is there a woman to be had, in case of need, with sufficient intelligence, discretion and training to prepare and serve an elegant dinner, breakfast or luncheon economically and tastefully?

The wholesome preparation of food is one of such vast importance that it is a little curious that it has been left so long in the hands of ignorant hirelings. It is unquestionably true that a bright and intelligent woman can quickly become an accomplished cook; but intelligence and perception are absolutely required. Some of the best cooking in the country is that of the wives of farmers, and some of it is of the worst! I have often heard Anaximander say that he never enjoyed his meals more than in a cabin in Western Pennsylvania where the mother of twelve children did her own work and the cooking, without the help of a housemaid. Of course, there were no accessories of fine china and table linen or "style"—and the food was rated according to its unadorned merits. Everything was done to a turn and seasoned deliciously. Such food makes strong bodies, and strong bodies go a long way in producing and upholding strong minds.

HINTS FOR THE HOUSEWIFE.

TORTOISE shells, or those of the small fresh-water turtle, some of which are very beautiful, are becoming quite fashionable as parlor ornaments. To clean and polish the shells, first wash them in warm, soft water, to which a little ammonia has been added, using a common hand-brush. When clean, rub them with a cloth and paste made of whiting and a little water. When the shells feel smooth to the touch, wash this paste all off and dry, after which apply a few drops of sweet oil and rub them briskly with the ball of the thumb or the palm of the hand—or a piece of soft leather will answer.

It is generally recommended to clean sad-irons by rubbing them over a paper on which fine salt has been sprinkled. This cleans them very well, but it renders them very liable to rust on exposure to the least dampness or even to damp air. A much better way to "smooth" them is with emery. Purchase a few cents' worth of the flour of emery—about No. 120. It can be obtained at the hardware stores at about 20 cents per pound. Take a piece of softish pasteboard—an old box cover will do—a foot square, more or less. Moisten it with glycerine or oil, and sprinkle on the emery quite thickly. When the iron is rough, rub it over this, laid on a table or bench, for a few moments. Then finish by rubbing its face with a piece of cloth, in which is tied a small piece of bees-wax or paraffine. This will give the finest polish imaginable, and the iron will not rust again with any fair treatment.

Now, in the fruit-canning season, the women of the household, to whom we are so deeply indebted for the good things we eat, should be told that the trouble so many of them take in warming glass cans before putting hot fruit into them, to prevent breaking, is all needless; that, in fact, it results in breaking more than it saves. By placing the cold can on a *wet* cloth taken from a dish of cold water, it may be filled with fruit boiling-hot without the least danger of breakage. The only requisite is, that the cloth be fully saturated—and with cold water. This is by no means new; but still, there are thousands who either have not heard of it, or have not faith enough to try it. I know it to be a safe way.

The rubber rings by the use of which fruit cans are made air-tight, after being used, become hard and unyielding, so much so that fruit seldom keeps as well when they are used the second time. Though new ones cost but little, it is not always convenient to get them. Every one should know that the elasticity of the old ones can be restored, and that they can be made as good as new by soaking them a half-hour in a mixture of ammonia and water — two-thirds ammonia and one-third water. Try it.

During the hot weather the less meat we eat the better for all of us. The reverse is true in regard to fruits. With the ease and little expenditure of time and muscle with which they can be grown, there is no excuse for any farmer who does not provide a bountiful supply for his table at all times. UNCLE J.

KITCHEN TALKS.

ANNIE L. JACK.

THE old labels on shrubs and plants are fast fading, and likely to cause confusion if not renewed. So the Florist of the family painted some sticks with white lead, and wrote the names while yet the paint was wet, and they are said to endure all sorts of weather. To etch a name on steel tools, is best done by spreading a thin coat of bees-wax over the place where the name is to be written, and then with a sharp-pointed needle write through it. This is then to be painted over with nitric and muriatic acids in the proportion of six to one, and when bubbles cease to rise, the writing is fixed. Wash afterward in strong soap-suds, and it will keep the name upon it to the great inconvenience of any borrower or thief, and both classes of people are found to be inconvenient at times.

A neighbor suffering from a severe burn found relief by an instant application of the

yelk of egg and glycerine in equal parts. It formed a kind of varnish to keep out the air, and the burn healed underneath.

Everyone is lamenting that we had rain on St. Swithin's Day, but though a good deal of hay is cut, we have faith that the superstition will not prove true. It is strange to read of the different phases of weather in different places, and we are content to have a little rain, when we read of a 14 month's drought in Texas. I spoke, in my last "Talk," of drinking water, and since then we have sent the water from our own well to be analyzed. It was quite a comfort to find by the report of the analytical chemist that "the sample of water is a thoroughly safe one—and remarkably free from organic matter." I did not expect it to appear so well, and was agreeably surprised. From such authority this was highly gratifying, and I mention it that others may be induced by the same method to learn if impurities exist—a knowledge that may be of great value to them in reference to health.

The cook, who is an amateur, as all RURAL readers know, has a serious grievance this hot weather. It is that the supply of light wood has run short and she has to stand over the stove with the heat of the hard wood in it. Besides being a waste as regards domestic economy, it is a waste of strength, and is just as if the men folks wore their overcoats in bringing in the harvest. As a consequence, we have tried to utilize the fire as much as possible when a large fire is on, and to save when possible. Tapioca, sago or corn starch can be made for two days, using it cold after being in a mould, on the days one has cold meat. It is a good thing to contrive in this way, and on very hot days the tea can be made at noon and set away on the ice for tea-time, when with fruit and other delicacies one can get along without lighting a fire except to wash up the dishes later in the evening. Preserves are made up before breakfast; it is by far the most satisfactory method, and the fruit can be prepared over-night, and all be out of the way early if breakfast is not needed at a very early hour.

INDOOR DECORATIONS.

UP to half a century ago, antique furniture in England was relegated to the storehouses and garrets, and even now the houses of the peasantry contain some fine specimens, while at the present day the rage for old furniture is so great that manufacturers are engaged in making *old new* furniture.

Very pretty and convenient parlor screens are so made as to slide downward, and so almost disappear from view.

Portraits and engravings are picturesquely draped with India silk with deep fringes.

If the prospect from a window is not good, a little pale amber and very faint blue or green stained glass can be made to fit into a neat frame, and so arranged as to cover over the other glass. OBSERVER.

BOOTS.

OLD, new, big, little, fine, coarse, dry-weather boots and rubbers—what *shall* we do with them? Unfit to go in my lady's chamber or the closet off it, not handy up-stairs and untidy in the kitchen, where can we put them out of the way? If they are very old, unwearable and nobody wants their legs, then the cook-stove is a good place, for they are excellent to make the pot boil. We've tried a box in the wood-shed, but when wanted, those wanted were always in the bottom, and *he* never stopped to put back those not wanted. A long shelf in the cellar-way was voted too damp, and now we are in despair. If any one has a plan or an "Aladdin's Lamp" that will cause them to appear and disappear at will, I would like to try it. If I ever plan a farm-house, I shall begin with a bath-room and a room for old boots, and both shall be light, well ventilated and convenient.

MARY MANN.

FRUIT PIES THAT WILL NOT RUN OVER OR "SOAK" THE CRUST.

ONE cup of butter-milk, one even teaspoonful of salt, one of soda dissolved in a little water. Stir in one cupful of flour, then add one cupful of fresh suet, melted and hot. Beat well together, then stir in quickly enough more flour to make the dough of the right consistency to roll out. This will make the under crusts for four or five pies. Roll thin. For the upper crusts, rub together one-half cup of lard or butter, and two cups of flour with a little salt; add enough cold water to make the dough right to roll nicely. Roll it all out on the board, spread all over with butter the size of a hen's egg, roll it up into a bundle and lay it on one side until you are ready to use it. Your fruit is, of course, looked over and ready. A large pie, of pie-plant, strawberries, cherries or plums, requires a cupful of sugar; raspberries and blackberries, one-half cup. To each cup of sugar add a heaping tablespoonful of flour; mix thoroughly; then stir thoroughly into the fruit before putting it into the crust. Wet the edge of the lower crust, cover with the upper, which you must handle as little as possible when rolling, if you wish it to be flakey, and bake in a moderate oven. If too hot, the pies will run over, and if too cool, the under crust will not be done.

For pie plant and apple pies I prepare the sugar the same way, but sprinkle it on after the fruit is laid ready for the upper crust. Apples at this season of the year require a cupful of sugar and one tablespoonful of water to each pie; later, less sugar and more water until March, when one cupful of sugar will sweeten three pies nicely. Use about four spoonfuls of water to each pie.

Elderberries mixed with cherries, plums, or cranberries are nice; some like a little cinnamon on them. We like elderberries so well that I can a good many in the season; sometimes with, sometimes without sugar. They keep well either way. The essentials for keeping fruit are, put it up well, then keep in a dark, dry place. I keep mine in a cupboard near the floor, against an inside wall, in a room where there is a coal fire in Winter, and never have any work or mould unless the rubbers are defective. It is economy to replace with new rubbers as soon as the old ones become cracked or hardened.

To return to pies: Apple pies can be flavored with anything you wish; some think a little butter improves them. When using butter or lard for cooking, never *melt*, but simply soften it enough to handle easily.

I keep in my cupboard a little paper bag containing strips an inch wide of fine white cotton cloth (old, of course), which I wet and place around the edge of pies if by any mischance they do begin to run over a little; some cooks always put them around their pies, but I use them very little, as they injure the appearance of a pie somewhat.

If butter is used instead of lard for the upper crusts, pies made in this way are as digestible as puddings, and dyspeptic lovers of pie may eat with impunity. MATER DOMI.

CAKES.

FOR a cake that is wanted for immediate consumption, pine-apple cake is a desirable delicacy. Beat one cup of butter to a cream, with two of sugar; add five beaten eggs and half a cup of milk. Sift two teaspoonfuls of any kind of baking powder through three-and-a-half cups of flour, and add to the eggs, sugar and butter. Bake in jelly tins. Grate a pine-apple, using a coarse grater; pour off the juice; add a cupful of dessicated cocoanut; sweeten with powdered sugar and spread between the layers of cake. Cover the top layer with a plain icing, and sprinkle thickly with dessicated cocoanut.

Orange cake is also nice. Beat together two cups of sugar and the yelks of five eggs; add the whipped whites of three, one-half cup of water, the juice and grated rind of an orange, and two cups of flour through which two small teaspoonfuls of baking powder have been sifted. Bake in three tins, and spread between the layers a frosting made of the whipped whites of two eggs, two teacupfuls of fine white sugar and the grated peal and juice of an orange. Ice the cakes as soon as they come from the oven.

Pound cake should not be attempted by an amateur. Beat to a cream one pound of sugar and one of butter; add the whites and yelks of ten eggs beaten separately; one pound of sifted flour (this should be stirred in alternately with the whipped whites); a gill of brandy, eight ounces of chopped almonds, and four ounces each of candied lemon and orange peel shredded. Beat all well together; seed a pound of raisins, wash and dry three pounds of currants; dredge both with flour and stir into the batter. Line a large cake pan with buttered tissue paper and bake in a moderate oven for at least two hours. The excellence or at least much of it will depend upon the baking. Cover with a buttered paper to prevent its browning too rapidly.

An excellent Sally Lunn is made by beating together four eggs with a quarter of a pound of butter; add a little salt, one cup of yeast or one small yeast cake dissolved in a cup of luke-warm water. Mix immediately after breakfast to a batter as stiff as can easily be stirred with a spoon, pour it at once into the pans in which it is to be baked. Let it rise ten hours, and bake. PALMETTO.

Miscellaneous Advertising

When Baby was sick, we gave her Castoria,
When she was a Child, she cried for Castoria,
When she became Miss, she clung to Castoria,
When she had Children, she gave them Castoria

Miscellaneous Advertising

Vitality and Color

Are restored to weak and gray hair, by the use of Ayer's Hair Vigor. Through its cleansing and healing properties, this preparation prevents the accumulation of Dandruff, and cures all scalp diseases.

When I commenced using Ayer's Hair Vigor my hair was weak, thin, and gray. My scalp was also full of dandruff, and itched incessantly. Two bottles of the Vigor removed the dandruff, stopped the irritation, restored my hair to its original color, and so stimulated its growth that I now have an abundance of long black hair. The occasional use of this remedy keeps my hair and scalp in perfect condition.—Florence J. Cannon, 759 Clinton st., Trenton, N. J.

Ayer's Hair Vigor

is, in every respect, the most cleanly of all preparations for toilet use.

Prepared by Dr. J. C. Ayer & Co., Lowell, Mass.
Sold by all Druggists and Perfumers.

MAKE HENS LAY

SHERIDAN'S CONDITION POWDER is absolutely pure and highly concentrated. It is strictly a medicine to be given with food. Nothing on earth will make hens lay like it. It cures chicken cholera and all diseases of hens. Illustrated book by mail free. Sold everywhere, or sent by mail for 25 cts. in stamps. 2½-lb. tin cans, $1; by mail, $1.20. Six cans, by express, prepaid, for $5. I. S. Johnson & Co., P. O. Box 2118, Boston, Mass.

HIRES' IMPROVED ROOT BEER. Packages, 25 cts. Makes 5 gallons of a delicious, sparkling and wholesome beverage. Sold by all druggists, or sent by mail on receipt of 25 cents. C. E. HIRES, 48 N. Delaware Ave., Philadelphia, Pa.

Brewster's Patent Rein Holder.

Your lines are where you put them—not under horses' feet. One agent sold 12 doz. in five days; one dealer sold six doz. in 15 days. Samples worth $1.50 FREE. Write for terms.
E. E. BREWSTER, Holly, Mich.

DO YOU WANT A DOG?

DOG BUYERS' GUIDE. Colored plates, 100 engravings of different breeds, prices they are worth, and where to buy them. Mailed for 15 Cents.
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SCOTCH COLLIE PUPS. No. 1 Stock. Free circular of leading varieties, Fowls, including Turkeys, Ducks, Guineas, Bantams, etc. Address, with stamp, C. C. PAINE, EAST BETHEL, VT.

HUMPHREYS' Homeopathic Veterinary Specifics for HORSES, CATTLE, SHEEP, DOGS, HOGS, POULTRY. Used by U. S. Government. Chart on Rollers, and Book Sent Free.
Humphreys' Med. Co., 109 Fulton St., N. Y.

HUMPHREYS' HOMEOPATHIC SPECIFIC No. 28

In use 30 years. The only successful remedy for **Nervous Debility, Vital Weakness,** and Prostration, from over-work or other causes. $1 per vial, or 5 vials and large vial powder, for $5. SOLD BY DRUGGISTS, or sent postpaid on receipt of price.—Humphreys' Medicine Co., 109 Fulton St., N. Y.

RUSTLESS IRON WATER PIPE.

Send for catalogue.
THE WELLS RUSTLESS IRON CO., 7 & 9 CLIFF STREET, NEW YORK.
BRAMAN, DOW & CO., Boston, Ag'ts for New England.

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WARREN MILK BOTTLES
Patented March 23d, 1880.
Adapted for the Delivery of Milk in all Cities and Towns.
A Long Needed Want at last Supplied.
DESCRIPTIVE CIRCULARS ON APPLICATION.
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72 Murray Street, NEW YORK.

"Taking the Lowest Estimate, of five bushels increase per acre, with one dollar's worth of extra pulverization of the soil, or four dollars above cost, the great benefit conferred on farmers by a general introduction of the 'ACME' Pulverizing Harrow becomes obvious If the five hundred million bushels of grain raised annually in the United States, on forty million acres of land could be so easily increased but three bushels per acre above cost, it would add more than a hundred million bushels of wheat to the product of the Union above actual expense. By assisting in the wider introduction of this efficient implement, enterprising farmers and citizens would promote the substantial interests of the whole country." See advertisement on page 540.

HAND PICKED SEED. DIEHL-MEDITERRANEAN.
The hardiest, best yielding and milling Wheat grown. Seed hand-picked and strictly pure. For sample heads and prices, address, with stamp,
H. M. JAQUES, Wright's Corners, N. Y.

SEED WHEAT.
1,000 Bu. Ten varieties. Prices low. Satisfaction guaranteed. Send for circular. Samples of all, 15 cts.
R. G. CRIST, New Market, Ind.

FRUIT and ORNAMENTAL TREES, SMALL FRUITS, GRAPEVINES, &c.,
In great variety, thrifty and true to name, at prices that all can afford to buy and plant first-class stock.
Our stock embraces all that is to be found in a first-class Nursery, which we carefully pack for safe delivery in all parts of the country, by mail, express, or freight. "Illustrated Descriptive Catalogue and Guide to Successful Fruit-Growing," sent for ten cents in stamps. Price List is free to all who mention this paper. Address
The Randolph Peters Nursery Co., WILMINGTON, DEL.

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80 Acres, within two miles of Baltimore, hard road-land in excellent condition; good House and out-buildings; absolutely healthy; possession Nov. 1st, '86.
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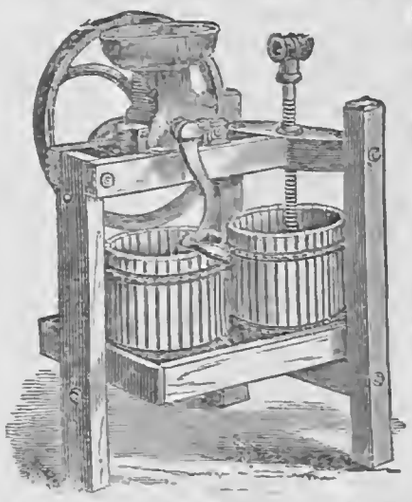

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THREE NEW PATTERNS.
Send for New Illustrated List, just issued.
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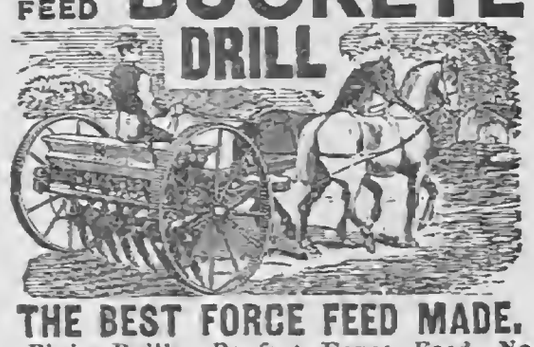

THE BEST FORCE FEED MADE.
Plain Drills, Perfect Force Feed, No Change of Gears, a Perfect Lifting Lever, Force Feed Grass Sower, an Improved Hoe Shifter, an Accurate Surveyor. Also
The Famous Glass Feed Fertilizer DRILLS,
Buckeye Walking and Riding Cultivators, Seeders, Sowers, Double Shovel Plows, Cider Mills, Hay Rakes, Horse Hoes, Bag Trucks. SEND FOR CIRCULARS.
P. P. MAST & CO., Springfield, O.
BRANCH HOUSES:
Philadelphia, Pa., St. Louis, Mo., Omaha, Neb., Peoria, Ill., St. Paul, Minn. Kansas City, Mo., San Francisco, Cal.

WHITMAN'S NEW PATENT REBOUND PLUNGER PERPETUAL
GUARANTEED SUPERIOR to any LEVER PRESS NOW MADE.

Received First Premium at N. Y. State Fair, in 1880, 1881, 1882, 1883 and 1885, including the Grand Gold Medal and two Silver Medals, over Dederick and others; also World's Fair at New Orleans, and California State Fair. The most rapid, powerful and durable press made; puts over ten tons in car; bale every three minutes; fully warranted and protected; three bales to any other press's two. Send for illustrated circulars. Also Horse Powers, Cider Mills, Corn Shellers, Feed Cutters, &c.
WHITMAN AGRIC'L CO., St. Louis, Mo.

7,000 CHALLENGE WIND MILLS.

IN USE IN EVERY State and Territory of the U. S. It is a sectional wheel, has been made by us 15 years, and has never blown down without tower to skim, a record no other mill can show. MILLS SENT ON 30 DAYS TEST TRIAL. BEST FEED MILLS, CORN SHELLERS, ETC. GOOD AGENTS WANTED in all unassigned territory. Catalogues free. CHALLENGE WIND MILL AND FEED MILL CO., Batavia, Kane Co., Ill.

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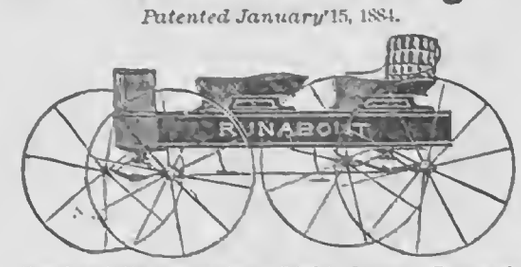
Patented January 15, 1884.



Twelve different styles. *Light, Strong, Convenient* and *Low-priced.* The popularity of the RUNABOUT is such that its sale exceeds that of all other vehicles of its class combined.
Send for illustrated Catalogue and price list direct to the manufacturer. ORVILLE H. SHORT, Syracuse, N. Y.

SPAIN'S CHURNS. Star Churns, Rapid Ice Cream Freezers, Improved Tree Tubs, all made of CEDAR. Send for illustrated circular and prices. Clement & Dunbar, Philadelphia, Pa.

News of the Week.

HOME NEWS.

SATURDAY, August 7, 1886.

THE first session of the 49th Congress came to an end Thursday. Outside of the regular appropriation bills, it passed only two conspicuous laws. One is the Oleomargarine Act, the other provides that in case of the death of both the President and Vice-President the succession shall be from the Cabinet. The session began Monday, Dec. 7, 1885, and covered seven months and 28 days. Of this time the Senate was in session 164 and the House 168 days. There were introduced in the House 10,014 bills and 214 joint resolutions, and in the Senate 2,891 bills and 83 joint resolutions, or a total of 12,202. Most of them were private and local bills. The total number of measures that passed both Houses was 1,101, being 241 Senate bills and 860 bills which originated in the House. Of these 1,095 were received by the President, and of that number 814 were approved: 157 became laws without the President's signature; 115 were vetoed, and nine failed for want of signature at time of adjournment, 10 days not having expired since they reached the President. Of the new laws 746 were House measures and 241 Senate measures. The laws that became such by limitation were, with two exceptions, private pension and relief bills.....
....Of the measures vetoed by the President, 36 were Senate bills and 77 House bills. Twenty-eight of the Senate bills vetoed were private pension bills. Of the 77 House bills disapproved by the President, 74 were private pension bills. The number of measures vetoed during the session was four times more than have been vetoed from the foundation of the Government to the beginning of the session just closed. While nearly all of the vetoed bills of the Senate were reported back from committees with the recommendation that they pass notwithstanding the President's objection, and, while similar action was taken on some of the House bills, only one (that granting a pension to Joseph Remiser) was passed by the two Houses over the veto..... .....
Samuel J. Tilden died at Greystone, Yonkers, near this city, last Monday. Born Feb. 9, 1814; entered Yale 1832: left there after two years on account of poor health, and graduated from the University of New York; admitted to the bar in 1841; founded the Morning News here in 1844; elected to the N. Y. Assembly in 1846; was defeated for Attorney-General in 1855; was Member of the Constitutional Convention in 1867. Had little to do with politics for 30 years, but was very successful as a lawyer, especially in business connected with mines and railroads. Was a strong union Democrat, and was often consulted by Lincoln. Became known to the whole country by his action in exposing the great Tweed frauds in 1868. Was chosen Governor of N. Y. State in 1874 by 53,000 plurality, and gave such satisfaction that he was nominated for the Presidency by the Democratic Convention at St. Louis, June 28, 1876. Had the electoral votes necessary for his election, but the Southern carpet-bag returning-boards cut them down to a minority, and the Electoral Commission at Washington refused to go behind the returns. Never again appeared in public life, except to decline the Presidential nomination in 1880, and again in 1884, and to support the claims for sea-coast defences in 1885 and again this year. Never married; a luxurious but nearly hopeless invalid for nearly 10 years. Left behind $8,000,000 to $10,000,000..... ...
....A call went out, Thursday, from Indianapolis, Ind., for a national convention in that city, on September 1, of Knights of Labor, Grangers, National Greenbackers, Farmers' Alliances, Anti-Monopolists, the Wheels, (a Texas organization,) and all other associations which may harmonize outside of the old political parties. According to the present programme delegates from these orders will meet to organize a new political party, with the rights of labor as the chief cornerstone. The new party is to take the field as a political power, will provide for the nomination of national and State tickets, and will call upon its followers to cut loose from all old affiliations.
.....Reports of Asiatic cholera in Madison, Chippewa Falls and Miladore, Wis., eight deaths at the last. State Board of Health doubt reports; but good local physicians have no doubt.....The Chicago Anarchists have been proving during the week that they were innocent or absent during the riot, and that the cowardly police were the aggressors. Case still on.....Labor organizations going into politics everywhere. .....Snow fell heavily for a short time at Rome and Kingston, N. Y., on August 3.....The Morrison surplus resolution failed to become a law because Congress adjourned before the President had taken action on it. Will come up again when Congress meets in December.....
Chicago being in need of more money, the Commissioners of Cook County, including Chicago, have ordered the assessors to increase the value of the city and outlying towns in the country by just $100,000,000. The assessment now is notoriously too low, and with the addition, the valuation will still be under the reality; but the property owners grumble....
....Congress has appropriated $55,000 for the relief of the Chippewa Indians of Leech and Winnibigoshish Lakes, Minn., who were driven to great straits by the overflow of their reservation by the back-water from the dams built by the Government on the tributaries of the Upper Mississippi half-a-dozen years ago, to form reservoirs for regulating the flow of the river in wet and dry seasons. Five years ago, another appropriation of $15,000 was made as compensation in full when the damage was first done.....The Dominion Government has paid $50,000 for John Roach's steam yacht, Yosemite, which cost twice that sum She can steam 17 miles an hour, and is to be used to look after the Yankee fishing vessels..
.....The Canadians want a reciprocity treaty with us very badly, and are pretty sure they can force us to make one by the restrictions on fishing. It has been a very bad season for our fishermen, and our Northern friends chuckle at the success of their efforts to make it so, and will henceforth try their best to make it still worse. The "Down Easters" are mad at the Government's delay in enforcing the retaliatory measures against Canadian vessels in our ports, which Congress authorized the President to employ at his discretion. No Canadian vessel can now take freight from one of our ports to another, but Canadian freight cars come on our roads to New York, Boston, Portland and other American cities, and load with freight for St. Louis, Chicago and other Western markets, passing through Canada *en route*. An agitation is now under way to stop this practice, which puts millions every year into Canadian pockets. The Dominion Government owns about $200,000,000 in Canadian railroad property, and is, it is urged, making a profit on American land traffic while hampering American water trade.....That huge Nova Scotia timber raft has been hopelessly grounded while being launched.....Monday the House passed the Senate Bill increasing by from 20 to 25 per cent. the pensions of veterans wounded on the arm, hand, leg or foot—consequent annual increase in pension list, $615,204.....
....The Cherokees are bitterly disappointed because they number 18,318 full-bloods instead of less than 18,000 as expected. Hence their $300,000 grass rent gives them only $15.95 a head instead of $16.50 on which they relied. The increase of over 300 in their numbers is a sorry offset to a decrease of 55 cents a piece in their receipts.....
.....So great has been the fall in the price of silver of late that one-eighth of its value has been lost within the past 12 months. A lump of silver bought for $100 a year ago, would now be worth only $87.50. About 50,000 people are dependent on silver mining in Montana and owing to the recent depreciation of the value of the metal, it is feared the mining companies will have to close down.....
....Sunday last, Mrs. Cleveland was admitted to membership of the First Presbyterian Church, Washington, D. C., Dr. Sutherland, pastor.... .....A "Pet" hotel has been opened here on Broadway, and is now full to overflowing. Canaries are charged 25 cents a week, parrots 50 cents, monkeys 75 cents, cats $2.50, dogs from $2 to $5.50. The owners are mostly in the country or at watering places...
.....The Attorney-General of Newfoundland has sent word to Mr. Foster, the Canadian Minister of Marine and Fisheries at Ottawa, that his government will co-operate in measures for the protection of the coast fisheries; so they have given warning to all foreign or American vessels seeking bait and supplies. This, they think, will bring matters to a head at once.....The Grand Army and Army of the Potomac are having a grand time at their re-union in California.....
....The trouble with Mexico has been aggravated by the brutal murder of an alleged horse-thief named Rasures by the Chief of police, at Piedras Negras, Mexico. He had been surrendered by the Texas authorities, although he is said to be a naturalized citizen, and the Chief of police, a personal enemy of his, had him shot without trial shortly after reaching the Mexican side of the Rio Grande.
....Editor Cutting is still in prison. He has been convicted of contempt of court and will receive a heavy sentence, and be at once pardoned by Pres. Diaz. In Mexico, the President can pardon a person convicted of any offense in any of the States, but he cannot interfere with the course of justice until conviction. Texas is very belligerent, and Governor Ireland has officially called the attention of the Government to the trouble. The Cutting affair has also caused a spirited debate in Congress. In Texas troops are being enrolled here and there for the "war." The general impression is that the matter will be settled peaceably, as the Mexican Government is disposed to do what is right, although there is much bellicose vaporing among some of the greasers, especially along the Rio Grande.....
....The reports of starvation on the Coast of Labrador are now declared to be absolute fabrications.. .....

FOREIGN NEWS.

SATURDAY, August 7, 1886.

THE British Parliament opened on Thursday—the day our Congress closed. The Conservatives occupied the Treasury benches; the Liberals took the benches opposite and facing them—always held by the Opposition or the party out of office. The Hartington and Chamberlain Liberal-Unionists sat with the Gladstonians, and Gladstone shook hands cordially with both the leaders. It is thought the Liberals will all act together, except on the Home Rule question, and when the Conservatives are in danger of defeat on that matter, the Unionists will quit the House in a body, leaving the Conservatives in a majority over the Gladstonians and Parnellites. The latter will try to force the Ministry to declare their policy towards Ireland; but the Conservatives will endeavor to get supplies voted, and then adjourn till February, in hopes that something may turn up meanwhile.....
....The Earl of Aberdeen, late Lord Lieutenant of Ireland, and his wife won tremendous popularity by their courtesy, liberality and hearty concurrence in Gladstone's policy. The greatest demonstration since O'Connell's time occurred in Dublin to bid them good-bye the other day. Delegations from all parts of Ireland. Intense enthusiasm. The Marquis of Londonderry, the new Lord Lieutenant, is the grand-nephew and heir of Lord Castlereagh, who brought about the union of Ireland with England in 1801 by the most outrageous bribery, treachery and intimidation. He has been the worst-hated wretch Ireland ever produced, and fittingly ended his life by suicide. His grand-nephew, though a good enough fellow personally, is unpopular owing to his relationship.....
Elections held in France early in the week for General Councils (local bodies who will elect the next batch of Senators) were decidedly in favor of the Republicans, in spite of the combined efforts of the Monarchists and Imperialists The results are as follows: Republicans elected, 768: Royalists elected, 366; second elections required, 150. It is estimated that when all the returns are in there will be, of the 1,432 Councilors to be chosen, about 1,000 Republicans, a number equal to that returned in the departmental elections in 1883, so that the Republicans will have a majority of 79 in the Councils.....
....Minister of war Boulanger has got himself into very hot water. In the discussion about the Duc d' Aumale's letter to President Grévy, Boulanger charged the Duc with impertinence. A monarchist retorted that it was the Duc who had made him a General, as he was a Colonel on his staff in 1880. This Boulanger denied in the Chamber of Deputies, and again in three Republican papers. A letter of the newly fledged General to the Duc, dated in 1880, has been produced in which he said, "Monsigneur, it is to you that I owe my appointment to the rank of General. Happy will be the day which shall place me again under your orders." Boulanger now admits the letter is genuine, but says it contains nothing but the ordinary forms of courtesy. For a soldier, a general and a Minister of War to equivocate or lie in this way is considered hardly honorable, and though the Republicans accept his explanation, he has lost greatly in reputation and a good deal in popularity..... De Lesseps has launched a new loan to continue the Panama Canal, and has been offered much more money than he asked for. Investors all French.....

AGRICULTURAL NEWS.

SATURDAY, August 7, 1886.

The Oleomargarine Law, as signed by the President, consists of 21 sections, and would fill over three columns of the RURAL. Section 1 defines butter as a food product made exclusively from milk or cream, or both, with or without coloring matter. Sec. 2 defines "oleomargarine" as all mixtures and compounds of oleomargarine, oleo, oleomargarine oil, butterine, lardine, suine and neutral; all lard extracts and tallow extracts; and all mixtures and compounds of tallow, beef fat, suet, lard, lard oil, vegetable oil, annatto and other coloring matter, intestinal fat and offal fat made in imitation or semblance of butter, or when so made, calculated or intended to be sold as butter or for butter. Sec. 3 imposes a special tax of $600 on every person who manufactures oleomargarine for sale. Wholesale dealers (all who sell "oleo" in the original packages) must pay $480. Retailers (those who sell less than 10 pounds at one time) must each pay a tax of $48. The manufacturers must register with the Internal Revenue Collector of the District, and the tax is due on May 1 each year; but if business began after June 30, the special tax is reckoned from July 1 of that year, and shall be $500. A Federal license, however, does not exempt anybody from any penalty or tax imposed by any State, or in any way authorize the commencement or continuance of business prohibited by any State. Sec. 4 provides that when business is carried on without the payment of the special tax, in addition to the payment of this, every guilty manufacturer must be fined not less than $1,000 or more than $5,000; every wholesaler, not less than $500 or more than $2,500; and every retailer not less than $50 or more than $500. Sec. 5 ordains that every manufacturer of "oleo" shall conduct his business in accordance with regulations issued by the Commissioner of Internal Revenue, with the approval of the Secretary of the Treasury, and shall conduct it under the surveillance of such officers as may be appointed by the Commissioner, bonds to be given by satisfactory sureties for not less than $5,000, to be increased as the Commissioner may desire. Sec. 6 orders all "oleo" to be packed in firkins, tubs or wooden packages never before used for the purpose, and holding not less than 10 pounds each—all to be "marked, stamped and branded" as the Commissioner may prescribe. All sales by manufacturers and wholesalers must be in such packages. Retailers must sell only from such packages in quantities not exceeding 10 pounds, and must pack the "oleo" in wooden or paper packages marked or branded as the Commissioner may direct. Every dealer who violates this section shall be fined for each offense not more than $1,000 *and* be imprisoned *not less* than six months nor more than two years. Sec. 7 imposes a fine of $50 on every manufacturer who fails to affix on each package a label giving notice of its contents and a warning against destroying or removing the label; and a like fine is imposed on any one who does this. Sec. 8 imposes on "oleo" a tax of two cents per pound, to be paid by the manufacturers by means of coupon stamps, and the existing laws relating to stamps for tobacco and snuff shall apply to "oleo" stamps also. Sec. 9, authorizes the Commissioners of Internal Revenue to collect any tax which may have been evaded, in addition to the penalty imposed by law for such evasion. Sec. 10 imposes an internal revenue tax of 15 cents per pound on all imported "oleo," in addition to any import duty it may have to pay. The importer or owner is liable to all the penalties prescribed for manufacturers in the United States. Imported "oleo" must be put up in packages like those for the home product, and any dealer selling it not so put up shall be fined not less than $500 or more than $5,000, and be imprisoned not less than six months or more than two years. Sec. 11 imposes a fine of $50 on every person who knowingly purchases or receives for sale any "oleo" not branded or stamped according to law. Sec. 12 imposes a fine of $100 on all dealers who knowingly buy from any manufacturer who has not paid the special tax, and it forfeits the goods or the full value thereof. Sec. 13 ordains that any person who has an empty package of "oleo" must utterly destroy the stamps thereon under penalty of $50 and imprisonment of not less than 10 days or more than six months. Any one who fraudulently gives away, accepts, sells, buys or uses for packing "oleo" any such stamped package shall, for each offense, be fined not over $100 and be imprisoned not more than one year. Sec. 14 ordains that the Secretary of the Treasury shall appoint a chemist and microscopist at $2,500 a year each, for the office of the Commissioner of Internal Revenue, who may also employ other chemists and microscopists at suitable salaries. In contested cases he is authorized to decide whether a substance is or is not "oleo;" and as regards taxation his decision is final. He may also decide whether any imitation butter contains ingredients injurious to health; but in this case, if his decision is contested, an appeal can be made to a board composed of the Surgeon-Generals of the Army and Navy, and the Commissioner of Agriculture, and their decision shall be final..... .....
Sec. 16 provides that "oleo" for export need pay no tax, but every package containing it must be branded with the word "Oleomargarine" in plain Roman letters not less than half an inch square. Sec. 17 ordains that when any manufacturer defrauds or attempts to defraud the United States of the tax on his oleo, he shall forfeit the factory and apparatus together with all the oleo and raw material found in the place, and be fined not less than $500 or more than $5,000, and be imprisoned not less than six months or more than three years. Sec. 18 provides that if any manufacturer or dealer knowingly or willfully shall in any way whatever by commission or omission violate any provision of

the law he shall pay $1,000, if no specific penalty is imposed in other sections, and moreover, guilty manufacturers and wholesalers will forfeit all the oleo they own. Sec. 19 provides that all fines, penalties and forfeitures can be recovered in any court of competent jurisdiction. Sec. 20 charges the Commissioner of Internal Revenue to make all needful regulations to carry the act into effect. Sec. 21 provides that the act shall go into effect 90 days after the passage, and that all stocks of oleo on hand at that time must pay the two per cent tax, and be put up and branded as provided by section 6. The act was signed by the President on August 2, and will therefore go into effect on November 1.....The Vermont Horse Breeders' Association will have their annual meeting and races September 8, 9 and 10. Entries close August 30.....The New England Agricultural Society and the Eastern Maine State Fair will unite in a big cattle show and fair at Bangor, August 31, and September 1, 2 and 3, which will probably be the largest exhibition ever made in New England. Some of the best known horses of the Maritime Provinces and New England have already been entered.....John Brainbridge Booth, of Killerby, Catterick, Yorkshire, England, nephew of Richard Booth and brother of the late J. C. Booth, of Warlaby, died the other day. The Booths and Warlaby and Killerby are all famous in Short-horn story. J. B. B., was well-known as a Short-horn breeder, but still better as a breeder of horses.....

Considerable trouble at the Michigan Agricultural College between students and the Professor of Agriculture. This trouble is one of long standing, being handed down from class to class. The students preferred charges against the Professor, and the State Board of Agriculture met to investigate. The students presented their own case. The Board did not consider the charges well grounded enough to justify them in removing the Professor. For refusing to divulge the names of students connected with a cowardly trick played upon the Professor, one student was expelled. His class-mates at once demanded his re-admission. They were given a week to take back their demand. The senior class informed the Board that unless the student was taken back there would be no commencement exercises. At last the students concerned in the trick came forward and gave their names. They were turned over to the faculty for punishment. The juniors took back their demand, and the expelled student was taken back. Then the seniors voted, 18 to 11 to stay by their previous decision. The 18 who voted to make trouble were at once suspended. There was great excitement for a time, but the Board remained firm and the suspended students left college. Students who imagine they are running a State institution are apt to have their convictions rudely shaken.....

....A telegraut from Chicago this morning says 11 Chicago manufacturers of butterine and oleomargarine met yesterday to talk over the recent action of Congress regarding their industry, and to agree upon a plan to test the validity of the Oleomargarine Bill. The bill was discussed, and it was agreed that its constitutionality ought to be tried before the United States Supreme Court. Before the law goes into effect on Nov. 1, it is said, the manufacturers will probably take the first steps for redress, and a meeting of the National Oleomargarine and Butterine Association will be called within the next 30 days in Chicago. There are 25 firms in the National Association .....

....Last Saturday, the House by a vote of 209 to 6 passed the Alien Landlord Bill. It provides that no non-resident alien or foreigner, nor any resident alien or foreigner, who has not declared his intention to become a citizen of the United States, nor any corporation nor association when nt most one-tenth of its stock or right of property is owned or controlled by aliens or foreigners, shall acquire or own, hold or possess, by right, title or descent, accruing hereafter, any real estate in any of the Territories of the United States; provided that the provisions of this act shall not apply to the real estate necessary for the construction and operation of any railroad..... The Commissioner of Agriculture has decided to locate the new silk factory, to be established in connection with the Agricultural Department, in the annex to the Department building, and to operate it with the Department employés. While the manufacture will only be on an experimental scale, the machinery, though not extensive, will be complete. The Department will make no effort to furnish the the raw material, but will purchase it wherever obtainable, being content, at present, with experiments in the manufacture of silk..

A CHURCH at Cornwall, Ill., has long been inhabited by swarms of bees. They finally became so plentiful that they drove out pastor and congregation. Last week a party of men ripped open the side of the church and found that the bees had piled up honey in the wall to the hight of 16 feet. The honey was confiscated and the bees were driven out.....

..At a meeting of the Parnellites in Dublin, Wednesday, a resolution introduced by Parnell, was unanimously passed, warning the Government that the low prices of farm products since the present rates of rents were fixed makes it impossible for tenants to pay their rents, and an immediate revision of the rates was urged with a view to lower them still more and give greater security to tenants, and a suspension of eviction for non-payment of rent was "recommended."..... ....

At the recent picking of the ostriches on the farm near Norwalk, Cal., 50 pounds of feathers were obtained, worth $160 per pound, or $8,000 for the pick. The birds are picked once in about six or seven months, and they are doing well.....

Crops & Markets.

SATURDAY, Aug. 6, 1886.

The prolonged and serious drought, says the Chicago Farmer's Review, which has materially shortened the spring wheat crop and caused a serious menace to the corn crop, was partially broken this week, copious rains having fallen in Kansas and part of Missouri. The injury which corn has sustained cannot yet be determined from the reports. Nearly one-third of the counties of Illinois, Missouri and Kansas report that corn, while showing the effect of the drought, has not been seriously injured, and will make a fine yield if rain should come in time. The remaining counties report more or less injury, the tenor of the reports being very discouraging, declaring that many of the fields have already felt the blight, and predicting not to exceed one-half the ordinary yield. The outlook is reported especially gloomy throughout the entire corn belt for all late planted corn. One-half of the Iowa counties report that serious injury has already befallen the corn-fields, and that the yield for the State will fall short of an average by from 25 to 40 per cent. In Ringgold and Warren Counties, corn does not promise one-half of an ordinary yield. The corn outlook in Minnesota is more favorable, with the prospect of an average yield with continued rains. In Wisconsin the tenor of the reports does not indicate to exceed two-thirds of an ordinary crop. In portions of the State there has been no rain for six weeks, and all the crops are a bad failure. In Ohio, Indiana and Michigan, the outlook is still favorable for an average yield of corn. The reports indicate a very short flax yield, and in the entire Western and North-western belt, the outlook for potatoes is very poor. Texas crops are better this year than last. The severe drought prevailed mostly in Western Texas in the cattle region, and in some instances settlers have abandoned their homes, going eastward to escape starvation. Very few cattle have died, and the pitiful stories of starving people are without foundation. Crops in Eastern Texas are better than in years.....

..Yesterday the Omaha Bee published the results of crop reports from nearly every county in Nebraska, and it appears that from 15 miles west, south and north of Omaha to the boundaries of the State, there has been a large amount of rain. In a few instances it came too late for corn, but the general average will be fully three-fourths of the usual yield of corn. Barley has been unusually productive. Wheat has thrashed at the least 18 bushels to the acre throughout the State. There has been a fair crop of oats, and root products are in fine condition and abundant. The wild grass has suffered the most, but all tame varieties sown are equal in every respect to a bountiful yield. Farmers everywhere are well satisfied, arguing that it is better to have an average crop with good prices than a large yield with no paying market.

The grape growers of Southern New Jersey claim that this year's yield will be almost entirely destroyed by black rot, a dreaded scourge, caused by wet weather. In the lowlands and in the timber country the devastation has been most severe. In the vicinity of Egg Harbor City, the greatest wine-producing district in the Middle States, the loss will be about $50,000, mostly wine grapes.

A cablegram from London, Wednesday says, an active demand has prevailed for wool. Six thousand bales of Australian and Cape have been sold at a penny advance. A series of sales was opened at Antwerp on August 2; prices were 25 per cent. dearer than those of May.

Less doing here in raw wool, but the market favors holders. Prices depend on the results of the openings of light-weight fabrics, which are not fully known. There has evidently not been so general an advance as expected, though late London and Antwerp sales have been at full figures. Latest advices from the spring-wheat crop are more favorable than previously anticipated. Heavy receipts continue to depress prices. The damage to corn from drought is also less than was recently reported, the probable yield being nearly 1,600,000,000 bushels against 1,940,000,000 bushels last year. There has been slight damage to the cotton crop from shedding. The plant has improved in the Carolinas, Georgia and Alabama. Hot weather has threatened central and western Texas. The Louisiana rice crop promises to be heavy. The weather of late has been unfavorable to the growth of the sugar cane in that State. The price of sugar has gone to the lowest point on record, with a light demand and with heavy probable supplies.

Telegrams this morning: St. Louis, good showers have improved crops; corn and tobacco not yet beyond recall, if rains are general. Milwaukee, Wis. Barley and rye fine crops; oats and wheat light, but of excellent quality. Farmers in better spirits. St. Jo., Mo. Drought still greatly injuring corn. Kansas City, Mo. Late rains have assured good crops. More hopeful feeling everywhere. Davenport, Ia. Recent rains have revived crops much damaged by drought. Duluth, Minn. Harvesting progressing; feeling about grain better than since harvesting began. Omaha, Neb. Crop reports from all over the State still favorable. Plenty of rain everywhere. Minneapolis, Minn. Weather cool and very favorable for harvesting. Spring wheat of the best quality ever grown. Crop much lighter in Dakota than in years.

MARKETS BY TELEGRAPH.

SATURDAY, August 7, 1886.

CHICAGO.—Compared with cash prices a week ago, "regular" wheat is ½c. higher; No. 2 Spring, ¾c. higher. Corn, ⅝c. lower; Flaxseed, 1½c. higher. Pork, 25c. lower. Cattle, a shade lower. Hogs, average steady. Sheep, some grades higher; others lower.

WHEAT.—Firm; Sales ranged: August, 74¼@75¼c; Sept., 76⅛@77¾c; October, 78¼@78¾c; No. 2 Spring, 74½c. CORN.—Firm: cash, 43⅜c; August, 42⅝@43⅜c; September, 43¼@44⅝c; October, 44¼@45⅛. OATS.—Steady; Sales ranged: Cash, 31¼c; August, 27¼@27¾c; September, 28¾@29⅛c; October, 29⅜@29¾c. RYE.—Quiet; No. 2, 53c. BARLEY.—September, 62@62½c. FLAXSEED.—No. 1, $1 13¼. MESS PORK.—Steady; Sales ranged. Cash, $9 55@9 75; August, $9 55@9 57½; September, $9 47½@9 62½; October, $9 52½@9 72½. LARD.—Steady; sales ranged: Cash, $6 00; August $6 90@6 95; September, $6 00@6 95. CATTLE.—Market strong; Shipping steers, $3 25@5 20; stockers and feeders, $2 10@3 70; cows, bulls and mixed $1 65@3 70; bulk, $2 40@2 75; through Texas steers, $3 00@3 50. HOGS.—Market lower: rough and mixed, $4 10@4 75; packing and shipping, $4 75@5 20; light weights $4 10@4 90; skips, $2 50@4 00. SHEEP.—Market strong; Natives, $3@4 00; Western, $3@3 90; Texans, $1 75@3 90; Lambs, $3@4 75.

ST. LOUIS.—Compared with cash prices a week ago, No. 2 red wheat is ⅞c. higher. Corn, 1⅜c. higher. Oats, ⅜c. higher. Rye, 1c. lower. Butter, steady. Eggs, 2c. higher. Flaxseed, 5½c. higher. Pork, 15c. lower. Cattle, all a shade lower, except stockers and feeders, which are from 35c. to $1 higher. Hogs, from 5c. to 35c. lower. Sheep, 15c. higher.

WHEAT.—Active; No. 2 Red, Cash, 75⅞@76c; August, 76c; September, 77¾c. CORN.—Active; No. 2 mixed Cash, 40@41¾c; August, 40c; September, 40⅞c. OATS.—Firm; No. 2 mixed, Cash, 26⅜@26½c.; August, 26⅜c; September, 27¼c. RYE, 50c. BARLEY.—Nominal at 75c. BUTTER.—Creamery, 17@20c; dairy, 10@16c. EGGS, 8c. FLAXSEED.—$1 09½. HAY.—Timothy, $12 00; Prairie $7 00. PORK—$10 25. BULKMEATS.—Long clear, $6 25; short ribs, $6 35. CATTLE.—Market steady; Good to Choice Native Shipping Steers, $4 00@4 75; Common to Fair, $3 80@4 30; Butchers' Steers, $3 50@4 25; Cows and Heifers, $2 25@3 50; Stockers, and Feeders, $3 25@4 00; grass Texans, $2 50@3 50. HOGS.—Market slow; Lights, $4 65@4 75; Packing, $4 30@4 65; heavy, $4 75@4 95. SHEEP.—Market firm at $3 25@3 75.

BOSTON.—GRAIN.—Corn,—Steamer mixed at 54@55c. per bushel, and at the close 56 was asked; high mixed has sold at 57@60c; and steamer yellow would be worth 57c. OATS.—No. 2 white at 41@41½c, as to location; No. 3 white, 40@40⅝, and fancy clipped at 47@48c. per bushel Rye, 68c. per bushel. Bran, $14@15 00 for Spring, and $15 75 for Winter; Fine Feed and Middlings at $15@18, and Cotton Seed Meal at $23 on the spot, and $22 per ton to arrive. HAY AND STRAW.—Market for hay has been firm at $18 per ton for choice and fancy, $15@17 for fair to good, $13@16 for line, and $9@13 for poor and damaged, Western choice, $16@17, do fair to good $14@15. Straw.—Rye straw is held at $18@18 50 for choice, and $17 for common to good. Swale hay at $10@11 per ton. Oat straw at $6@11 per ton. PRODUCE.—BUTTER.—Northern and Eastern creamery, extra, 20@21c; do. extra firsts, 18@19c; firsts, 16@17c; Western creamery, 18@19½c, for extra firsts to extra; firsts, 16@17c; Northern dairy, 15@18c, for Vermont extra firsts to extra; firsts, 14@14½c; seconds, 12@13c; Western dairy, 13@13c for firsts; seconds, 9@11c; imitation creamery, 11@15c for extra firsts to extra; lallepacked, 9@12c, for extra firsts to extra; firsts, 8@9c; seconds 7@8c; grease, 3@4c. NEW CHEESE.—New York and Vermont extra, 8c; do. do. firsts, 7@7½c; do do. seconds, 4@6c; Western extra, 7½c; do. firsts, 6½@7c. EGGS.—Cape and near-by, per doz. 19c.; Eastern extras 18c; do. firsts, 16@16½c; Northern firsts, 16@18c; Western firsts, 15c; Provincial, 15½@16c. BEANS.—Choice Northern hand-picked pea, $1 75@1 85 per bushel; do. do. New York, small, $1 60@1 70; do. do. screened, $1 15@1 20; medium choice, hand-picked, $1 50@1 55; do. do. screened, $1 15@1 25; Yellow Eyes, Improved $1 50; do. choice flats, $1 25@1 40; Red Kidneys, $1 75@2 00; Canada pea, 65@95c. per bushel for common to choice; green peas, Northern, 90c@$1; do. Western, $1 15@1 20. POTATOES range at $2 25@2 50 per barrel for new.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, August 7, 1886.

STATE OF THE MARKET.—As compared with cash prices last week, flour is 5c. lower; ungraded red wheat, 2c. higher; No. 2 Red, 1½c. higher; corn, ungraded mixed, ¾c. higher; oats, ¼c. higher; pork, steady; butter and cheese, slight advance; eggs lower; fruit about steady.

FLOUR, FEED AND MEAL.—FLOUR—Quotations: Fine, $2 00@2 60; Superfine, $2 90@3 00; Extra No. 2, $2 65@3 15; Good to Fancy Extra State, $3 20@3 85; Common to Good Extra Western, $2 70@3 95; Good to Choice Extra Western, $4 00@5 00; Common to Fair Extra Ohio, $2 65@3 75; Good, $3 80@4 20; Good to Choice, $4 25@4 75; Common Extra Minnesota, $2 65@3 25; Clear, $3 25@3 75; Rye Mixture, $3 30@3 75; Straight, $4 00@4 60, Patent $4 40@5 00; Bakers' Extra, $3 75@4 50; St. Louis Common to Fair Extra, $2 65@3 65; Fair to Good, $3 70@4 50; Good to Very Choice, $4 55@5 00, Patent Winter Wheat Extra, $4 40@5 00; City Mill Extra for West Indies, $4 30@4 45; South America, $4 40@4 50. SOUTHERN FLOUR.—Common to Fair Extra at $3 05@3 15, and Fair to Choice, $3 30@5 10. RYE FLOUR.—Superfine, $3 25@3 60. CORN MEAL.—Yellow Western quoted at $2 60@2 55; and Brandywine at $2 80@2 95. FEED.—40 to 50 ℔, quoted at 70@75c; 60 ℔ at 65@70c; 80 ℔ at 75@80c; 100 ℔ at 80@90c; Sharps at 65c@$1. Rye, at 75@80c.

GRAIN.—WHEAT.—Ungraded Spring, 82c.; Ungraded Winter Red, 78@93c; Amber Michigan, 88@90c; Ungraded Red, 85¾c; No. 3 Red, 82¾@83¼c; Steamer No. 2 Red, 82¾@83c; No. 2 Red, 85¾@86¼c; No. 2 Red, for August, 85@85¾c; do. for September, 85½@86¼c; do. for October, 86¾@87⅛c; do. for November, 88¾@88¾c; do. for December, 89⅝@90 3-16c; do. for May, 96@96¼c; do. for June, 96¾c; do. for July, 96¾c. CORN.—Ungraded Mixed, at 47@52¾c; No. 2, 50½@51c; No. 2 for August, 50¼@50¾; do. for September, 50½@51¼c; do. for October, 51¾@52¼; do. for November, 51¾@52¼c; do. for December, 52½c. OATS.—No. 3, at 36c; do. White, 41@43c; No. 2, 36½@37c; do. White, 42@43c; Mixed Western, 37@40c; do. White, 40@47c; White State, 44½c; No. 2 for August, 32¾@33¾c; do for September, 32¾@33¾c; do. for October, 31¼@31¾c.

PROVISIONS.—PORK.—Mess, quoted at $10 62½@10 75 for Old and $11 62½@11 87½ for New; $12 @$12 75 for Family Mess; $14@14 75 for Clear Back; and $9 50@10 for Extra Prime. BEEF.—Extra India Mess, $12@14; Extra Mess, in barrels, $8 50; Packet, $8 50; Plate, $8 50. BEEF HAMS.—Quoted at $23 50@24. CUT MEATS.—12 ℔ average Pickled Bellies, quoted 6¾@6¾c; City Pickled Shoulders, 6½@6¾c; Smoked Shoulders, 7½c; Pickled Hams, 12c, Smoked Hams, 12¾@13c. MIDDLES.—Long Clear in New York, 7c; at the West, Long Clear, 6.35c; Short Clear, 6.80c. DRESSED HOGS.—City Heavy to Light at 6½@6¾c; Pigs, 6¾c. LARD.—Western Steam spot, 7.05c; August, 7@7.03c; September, 7.02@7.05c; October, 6.81@6.83c, November, 6.76@6.78; December, 6.71@6.73c, City Steam, 6.60c; Refined, 7.20c; Continent, 7.40c.

BUTTER.—All really fine grades bring very full prices. Creamery—State, 20½@21c; Pennsylvania, 19½@20½c; Western, 14½@19½c. State Dairy, half-firkin tubs, 13@18c; Welsh tubs, best, 16@17c; Western Imitation Creamery, 11@13c; Western Dairy, 10@12c; do. Factory, 10@12c.

CHEESE.—The quotations are for: State 6¼@8½c; night skims, 6@6½c; Western choice, 7¼@7½c.

EGGS.—A shade lower with a moderate demand; State, 14½c@14¾c; Canada, 14; Western, 13¾@14c.

POULTRY.—LIVE.—Chickens, spring, per ℔, at 13@14c; fowls, near-by lots, per ℔, at 11@11½c.; fowls, Western lots, per ℔, at 11¼@12c.; fowls Southern lots, per ℔, at 10½@11c; turkeys, per ℔ at 9@10c; ducks, western per pair, at 50@60c.; geese, western, per pair, at $1.00@1.25.

POULTRY.—DRESSED.—Turkeys, per pound, at 10@11c.; Spring chickens, Philadelphia, per pound at 19@20c.; do. western, per ℔, at 16@17c; fowls, Pennsylvania, prime, per ℔, 13c.; do State and western, per ℔, at 11@12c.

FRUITS.—FRESH.—Quotations are: Apples.—Norfolk, per bbl., at $1 25@1 50; do. Maryland and Delaware, per crate, at 60c@75. Red Astrachan, per bbl. $1@1 50; Jersey, 75c.@$1 25 per bbl. Huckleberries 6@8c. per quart; do. Maryland, 4@6c. per quart. Peaches, $1@1 50 for best down to 50c. for poor; Delaware per basket $1@2 25 for best and 50c@75c. for poor. Plums, at 4@5c per quart. Raspberries, 1@3 for up river per cup. Grapes—Delaware, per ℔, 15@30c; Niagara, South Carolina, per ℔, 10c; Concord, North Carolina, per ℔, 7@8c. Blackberries, 4@6c. for best, per quart. Pears, $1 50@2 50 per crate for best Bartlett's, and $5 00@6 00 per bbl.

FRUITS.—DRIED.—The quotations are as follows: Apples—Fancy evaporated, at 9c; do. choice, at 8½c; do. prime at 8c; fancy North Carolina sliced, at —; choice do. at 3½@3c.; choice Tennessee quarters at 1½@2c.; State quarters at 2½@3c.; southern sliced prime at 1½@2c; do. common, —. Peaches—Peeled North Carolina, choice, 11c; fancy, 12@12½c; do. Georgia, choice, at 10@11c; do. prime, 8@9c; unpeeled halves, 2½@3c; unpeeled quarters at 2½@2¾c.; Delaware evaporated, peeled,—@—c; unpeeled do., at —@—c. Choice pitted cherries at 10@10½c. Evaporated raspberries, at —@15c; sun-dried do. 13@—c. Blackberries—Prime at 6½@6¾c. Whortleberries at —c. Plums, at —c; California evaporated, —@—c.

PEANUTS.—There is a moderate business at steady prices. The quotations are: 5½c. for best hand-picked; 4@4½c. for farmers' grades.

COTTON.—The quotations, according to the American classification, are as follows:

	Uplands.	New Orleans and Gulf.	Texas.
Ordinary	6 15-16	7⅛	7⅛
Strict Ordinary	7⅛	7 9-16	7 9-16
Good Ordinary	8 5-16	8⅛	8⅛
Strict Good Ordinary	8¾	8 15-16	8 15-16
Low Middling	9⅛	9 5-16	9 5-16
Strict Low Middling	9⅞	9 9-16	9 9-16
Middling	9 9-16	9¾	9¾
Good Middling	10 1-16	10¼	10¼
Strict Good Middling	10⅜	10 9-16	10 9-16
Middling Fair	10¾	10 15-16	10 15-16
Fair	11⅜	11 9-16	11 9-16

STAINED.

Good Ordinary	6¾	Low Middling	8¾
Strict Good Ord.	7 7-16	Middling	9

HAY AND STRAW.—The following quotations are for New hay at 55@70c; Choice Timothy, old, 85c; Good do, at 70@75c; medium, 55@65c; shipping at 50@55c; clover mixed, 55@60c. Straw.—No. 1 rye, 57@80c; short rye at 50@65c; oat, at 40@45c.

VEGETABLES.—Quotations are for: Potatoes.—Long Island, rose, in bulk, per bbl., $1 87@1 62; Jersey, rose, per bbl, $1 50@1 75; Maryland, prime, per bbl, $1 37@1 57; sweet potatoes, Va., yellow, per bbl., $4; sweet potatoes, Va., red, per bbl, $4; Yams, Va., per bbl, $4. Beans.—Long Island, green, per bag, 75c@$1. Corn.—Hackensack per bu, $1 00@1 25; Southern Jersey, prime per 100, 75c@$1c. Cabbages.—Flat Dutch, per 100, $2 00@2 50. Cucumbers.—Long Island, per 100, 75c@$1 00; do, Philadelphia, per bbl, $2 50. Egg plant, Philadelphia, per bbl., $4 50@5 00; do. Southern, per bbl, $1 00@3 50. Okra, per 100, 20c. Onions.—Potato, Jersey, per bbl., $2 25@2 50; do. Maryland, per bbl, $2 00@2 25; do. Long Island, red, per bbl, $1 75@2 25; do. State, per bbl, $2 00@2 25; do. Western, per bbl. $2 00@2 25. Peas.—Long Island, per bag, $1 00@1 75. Squash.—Long Island, yellow, per bbl, 75c@$1 00; do. Long Island, white, per bbl, 75c@$1 00; do. Norfolk, marrow, per bbl, $1 25@1 50. Tomatoes.—Monmouth County, per box, $1 50@2 00; do. Southern Jersey, per basket, 50@65c; do. Maryland, per bushel, crate, 75c@$1 25; do. Norfolk, Acme, per crate, 75c.@$1 00; do. Norfolk, common, per crate, 25@40c. Turnips, Jersey, Russia, per bbl, 75c@$1 00; do. White, per 100 bunches, $2@3.

LIVE STOCK MARKET.

NEW YORK, SATURDAY, August 7, 1886.

BEEVES.—Kentucky steers, 1,361 ℔, at $5 30; Ohio do 1,191 ℔, at $5; do. 1,198 ℔, at $4 50; Indiana cows, 1,020 ℔, at $3 20; Indiana bulls, 1,140 ℔, at $2 75; Kentucky steers, 1,465 ℔, at $5 20; Ohio do, 1,240 ℔, at $4 80; cows, 1,133 ℔, at $4 25; oxen, 1,833 ℔, at $5 12½; Kentucky oxen, 1,485 ℔, at $4 25; Missouri steers, 1,323 ℔, at $5 35; do, 1,323 ℔, at $5 25; Illinois do, 1,153 ℔, at $5 15; Kentucky steers, 1,153 ℔, at $5 50; Slate do, 1,445 ℔, at $5 15; do, 1,270 ℔, at $4 70; 2 bulls, 554 ℔, at $2 85; Kentucky steers, 1,110 ℔, at $5 25; Indiana cows, 1,124 ℔, at $4; Indiana bulls, 1,093 ℔, at $2 62½.

CALVES.—Veals, 162 ℔, at 6c; do. 161 ℔, at 6½c; But termilk Calves, 105 ℔, at 2½c; Veals, 146 ℔, at 5c.; do. do. 224 ℔, at 3½c; Veals, 105 ℔, at 5½c.

SHEEP AND LAMBS.—Receipts for six days, 36,470, head against 33,201 head last week. Western Sheep, 53 ℔, at 4½c; Maryland Sheep and Bucks, 115 ℔, at 4c; Maryland Lambs, 66 ℔, at 5c; Ohio Sheep, 80 ℔, at 4½c; do. 80 ℔, at 4½c; Western do, 84 ℔, at $3 87½; do. 82 ℔, at $4 87½; do, 83 ℔, at $4 50; Kentucky Bucks, 95 ℔, at $3 50; Kentucky Lambs, 58 ℔, at 6c; Pennsylvania do, 54 ℔, at $5 25; Jersey Lambs, 64 ℔, at 7c; Indiana Sheep, 108 ℔, at $4 50; West Virginia do, 98 ℔, at $4 75; West Virginia Lambs, 55 ℔, at 5½c; Indiana do, 58 ℔, at 5½c.

HOGS.—Receipts for five days, 26,059 head against 27,918 head for the same time last week. The market is reported about steady at 5@5¾c; State Hogs 819 ℔, at $5 20, State Pigs, 46 ℔, at $6 50.

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Its Nature, Causes, Prevention, and Cure.
Being the result of actual experience with Dyspepsia
By JOHN H. McALVIN, LOWELL, MASS. Fourteen years Tax Collector. Sent free to any address.

For the Young.

THINK THIS OVER.

"Now here's the secret that doth lie
In every great life's plan,
His work—it was a man's work
He did it like a man."

There's a point for you young man
In this short verse above—
It will help you when you plan,
To win at work or love.

All the blanks of life come in
To those who try to shirk;
And the only men who win,
Take off their coats and work.

For the world is like a rock,
Where each must carve his name,
The strong with a sturdy shock,
The weak with fear and shame.

And the gray moss hides the work
Of those who strike in fear,
Of the men who run or shirk
When trouble's form comes near.

But the years can never hide
The work of these who know
That their strength, their hope their pride
Goes into every blow.

Get up from your chair, young man,
Don't sit like a lazy Turk,
Success has a better plan,
Take off your coat and work.

THE weather is much cooler. We have had a very sudden change in this part of the country. These quick changes from heat to cold and from cold to heat are dangerous. People are apt to take cold, for they are not prepared for the change. A summer cold is very disagreeable. It seems to throw things all out of shape. The sun is shining and the air is warm and pleasant, and yet your nose and head are all "stuffed up." Be careful during this changeable weather. If the temperature changes so that the mercury drops 30 degrees, you will need more clothing on. Don't think you know more about such things than your elders. You do not.

ALMOST every person drinks tea or coffee, but I never could see what good it does them to do so. I think it is more of a habit than anything else—it may grow into a very bad habit. I have seen men and women who had injured themselves severely by drinking too much tea and coffee. Of course they drank great quantities of a very strong mixture, but they all had to begin with small doses. As I have often said, I believe in temperance even in the use of water. I think milk is the best drink. Some people want a warm drink in the Winter, and I am sure that a cup of warm water with a little sugar and milk in it will do just as much good as a cup of coffee. I have lived in places where they made a drink out of roasted rye or beans or carrots. The people appeared to like these drinks, but it always seemed to me that they wanted them because they were warm, rather than for any nourishment there might be in them. I am always sorry to see people giving coffee to a baby or a young boy or girl. I think such a practice is all wrong.

WE have a parrot at our house. One morning we heard a very strange noise down by the barn, and on hunting it up we found this parrot perched up in a tree. A man walked up unseen and caught the parrot by the leg. How he did scream and bite. We have him in a large cage now. He can't talk, but he keeps up a great screaming, particularly when he is hungry or angry. He is very fond of corn. It is funny to see him eat the grain. With his hooked upper bill he tears the germs out of all the kernels. He seems to like the germ best of all; then he eats the rest of the grain more slowly. I have an idea this parrot flew away from the city. He is not a country bird by any means.

EVERY farmer's boy in this country, who has good health, holds in his head and hands the chance to make a fortune. Don't ever forget that. The fortune may come in various ways—money, a good farm, knowledge or other good things. The point to be understood is that any stout boy can make about what he wants to out of himself if he will only think so. It takes patience, perseverance and courage, but it is worth all it costs to be able to say: "I made myself." I want our boys to think this over. There is no use in giving up and saying: "Its no use, I can't do these things." You can do them if you will only think so. Boys must save all they can. Get a bank account started just as soon as you can. No matter if you only have 10 cents to put in, make a start. Take care of your health. Keep out of all bad habits. Think about your work and don't let your mind run to play, except while you are playing. Read all the good books you can and let all dime novels go into the fire, where they belong. Watch your chances and keep cool, and you will come out all right.

I WANT our girls to can corn enough to last all Winter. I am very fond of sweet corn. There can't be too much of it in the house—in my estimation. It is as good as canned fruit. There should be enough put up so that the family can have some every day. I don't believe in doing such things by halves, you see. This idea of putting up a little fruit and a little corn so that the people get only a taste of it now and then, doesn't suit me at all. I want enough to eat, and I don't believe in playing the miser with any healthful food just because it is good. I don't feel much like telling how to put up corn, because our girls know a great deal more about cooking than I do. I know how our folks prepare it though, and I know it is good enough for me. They cut the corn from the ears and place it in glass jars, crowding it down hard. Then the tops are screwed tightly on, and the jars are placed in a wash boiler of water. Cloths are placed between the jars, and the water is boiled for three hours. When that corn comes out in the Winter it is fit for kings. I hope our boys and girls will have tons of it to eat this Winter. If there is any better way of cooking it, I want to know about it.

THE STORY OF A DISTRICT SCHOOL.

A COLLEGE BOY'S DIARY.

(Continued.)

"BUT why can't a man go in there and reform the school? If he minds his own business he'll get along all right;" I said, strong in my belief.

"I expect ye ain't never taught no deestrict school hev ye? Don't you never try no reformin' over yunder. You keep yer bones hull an' git through yer time an' you'll find you've hed job enough fer one year. Ye needn't tell nobody I told ye so, but I'd jes as soon teach in Africky as ter teach to Bear Crick. I went over thar last Winter fer ter visit schools, an' thar set a big feller, 50 pounds heavier'n you be, an' them boys hed him so'st he didn't dare fer ter wink. I set thar till a piece o' sweet cake hit me in the neck, an' then I gut up and went out. I never sed nothin', but thet's jest what Bear Crick is."

I shall always think he took pity on me in his examination. Doubtless he felt that he who took his life in his own hands and marched against Bear Creek ought to have his burden made as light as possible.

"I ain't a gonter give ye no searchin' examination; I'll jest ask ye a few ramblin' questions so'st ter go through the motions. Now, you take the word 'please.' Kin that be used in any other way than as a verb?"

"Yes," I answered after a moment's thought —"as a noun."

The spectacles fairly slipped down over the nose in their excitement at this answer. The examiner leaned back with a loud laugh of satisfaction. The tight coat improved the opportunity to grasp his shoulders with a tighter grasp.

"I sorter figgered on that. I knowed that would ketch ye. Ain't many on 'em kin git round that. Ain't much on grammar up to college, be they? Now I've gut me a dictionary here—I wish you'd sorter pick it up an' show me where please comes in fer a noun."

He laughed again as he brought a rusty old dictionary and placed it in my hand.

"You fellers don't know it all yet, do ye? We kin stump ye yet. I'm sorter hungry to see that noun please."

I turned over the leaves and pointed to the word p l e a, and read the definition, and then gave the plural, p l e a s.

"But that aint what I sed. I sed please—the verb—jest like please do this, and please do that. I aint talkin' about nothin' else."

The spectacles crawled back on the nose, and the coat took another grip at the shoulders. The examiner was wise in his way. He had run for office in Clay Valley too many times to push anything that savored in the least of uncertainty. He made haste to take the book away.

"Gut a putty fair grip on grammar, aint ye? 'Pears ter me ye must hev made a meal or so o' dictionary. Now, I'll see how ye be on figgers. Guess I kin pass ye on grammar, seein's they aint no great call fer it over to Bear Crick."

He handed me a large slate that had been resting on the shelf over the stove.

"Ye kin do yer figgerin' on that. Now, 'sposin' I had three hosses worth $100 apiece, and six cows worth $50 apiece. The hosses kin earn $2 a day workin' on the road. 'Sposin' them cows ter everage 10 quarts o' milk a day, which pays the best, figgerin' hay, an' grain, an' milk, an' butter at the goin' prices? That's the sort o' figgerin' we want done down here. You work that out, and I won't ask ye no more questions."

My work on the college farm helped me here. I had handled stock enough to form a fair idea of the amount of food consumed by an animal and the proportion of butter to milk. I worked the question out carefully, knowing that it would lead to a long discussion. I threw in all the long chemical terms I could remember, hopelessly jumbling them together for the benefit of the examiner. I think I proved the advantage to rest with the cows. Mr. Greening came and studied the problem when I put the slate down. He appeared surprised to think that I had worked it out at all. He was bound to find fault. That, in his opinion, was what his office was created for.

"Gouter feed them hosses on medder hay, aint ye? Ye can't get no sech hay ez I've gut fer no sech price. Then agin, 'pears ter me ye gut them cows givin' solid butter, an' ye gut my family drinkin' nigh onter a gallon o' milk apiece. Then agin, what's them?"—and he pointed to a long list of crippled chemical terms that would have injured my reputation forever in the eyes of my professor of chemistry.

"I thought I'd put in a few of the chemical elements, so that we could get nearer the cost of feeding. There's a phosphatic carbo-hydrate, a nitrogenous albuminoid, and a double sulphate of a sesqui-oxide, and"—

"I guess that'll do. I expect you've figgered it down clos't enough. Them big words sorter shave the profits off en the hosses. Guess I'll make me a copy o' thet, so'st I kin use it when the next teacher comes by."

The examination was over, and armed with the precious certificate, I started at once for Bear Creek.

(To be continued.)

LETTERS FROM THE COUSINS.

DEAR UNCLE MARK: I live on a farm of 175 acres, and a large river runs through it, full of all kinds of fish. We have 10 cows and 18 steers. Just now we are making lots of butter. We have 40 hens; one lays such a small egg and there is no yelk in it. Don't you think that is funny? I have to walk a mile to school. We have seven months' school in the year. I am 13 years old, and the only one at home. I have one sister, but she is married. I have planted the Rural Treasures, and hope they will do better than they did last year. Only a few blossomed, it was so cold. I had a lovely canary bird. I hung it out-of-doors, and a wild bird flew against the cage and killed it. Papa said if I would try for the plow and get it, he would get me two new pairs of shoes. I have looked all through the big dictionary and found all I could. Your niece, MAUD RAYMOND.

[That egg is queer enough. Too bad about the bird. Sorry you did not win the plow.—U. M.]

DEAR UNCLE MARK: I would like to join the club if you would let me. I am 13 years old, and live in Schuyler Co., two miles from Burdette, on a farm with our Grandfather. I have one sister. Mother says Grandpa has taken the RURAL more or less since it first started, and we like it very much. We cultivate a great many summer flowers. I have a nice bed of pansies. I have not done much in the line of gardening. I like to raise stock and poultry best. We keep three cows. One of them is a Jersey, and Grandpa gave her calf to sister and I. We keep her in a stable most of the time. Her name is Flossie. I feed her milk three times a day, with cooked oil-meal morning and night, and a cup of oats at noon; then the curry-comb and lots of kindness will do the rest. Sister and I sold two yearlings for $30, and we have a fine young cow which we call Topsy. I have raised 51 chickens this Summer, and expect some little turkeys soon. Sister and I always save some of the money to take a paper. The name of it is the Youth's Companion. I have raised 13 canary birds, and have sold some of them. They make lots of music. I like all kinds of farm work, and house-work, too. I will stop, for fear of the waste basket.

Hector, N. Y. LENA BENNETT.

[You are fine stock farmers. A great many men could learn lessons from you.—U. M.]

DEAR UNCLE MARK: As I have not seen very many letters from this State, I hope you will not forget to print this. It is very dry here. We must go 1⅝ miles in order to get our cattle watered. We live 14 miles from Green Bay, and one mile from Neshoto River. You may wonder why I say we have to go 1⅝ miles in order to get our cattle watered. It is because there is a large field of wheat just near the river. In the Summer we can find many wild fruits, such as strawberries, raspberries, blackberries, cranberries, etc. The cranberries are of two kinds—high-bush cranberries and low-bush cranberries. But it is too dry to grow anything, and also too dry to keep water in the wells. There will hardly be any berries this year. My Papa is in Iowa at present, visiting my uncle. My uncle has 200 hens, 64 cattle, and I don't know how many turkeys. They have also four horses and one colt. Your nephew.

Brown Co., Wis. LEWIS W. PETERSON.

[We must have plenty of water. Without it we can do little work.—U. M.]

DEAR UNCLE MARK: I am a little girl 10 years old and I want to ask you if I can join your club. My brother gave me the pea seed that you sent him and I planted them and they came up, but the rabbits ate them. I have a flower garden, a pet hen, a cat, four kittens and a calf and two mocking birds. I have two sisters and three brothers.

Dennison, Texas. FERN MUNSON.

[We are glad to hear from you. What a lot of pets you have.—U. M.]

DEAR UNCLE MARK: I am a little boy 11 years old. I took your advice and set that hen on 11 Guinea eggs. I will tell you her success. I am going to try for the melon prize. I have beds of carrots, onions, lettuce, beets, peas, radishes, corn, melons, tomatoes, cabbages and beans. The Alaska Peas are in pods. I planted the Garden Treasures, but the calves got in and killed them all. I go trout fishing sometimes.

Your nephew, JAMES STEVENS.

Kirkdale, P. Q.

UNCLE MARK: My other letter was not printed, but I am not discouraged. We are having a rainy season now, it has rained so much on some of the hay it is not fit to put in the barn. Some of the farmers have spread their hay on the fields to rot. We have a great many flowers this year. There were a great many poppies among the Garden Treasures. A great many of the flowers we did not know the names of. We do not like the Horsford pea, it is bitter after it is cooked, we like the Prince Albert the best. We have three colts, their names are Prince, Jenny and Nell. I should think you would have quite a time to keep in memory all the nieces and nephews.

Your niece, INEZ G. MOON.

Oswego Co., N. Y.

[It is lucky my memory is good—U. M.]

DEAR UNCLE MARK: If I will not tire you I would like to ask if you found 105,000 different words in "Clinton Chilled Plow," or, that was the whole number which you received from all the Cousins. My sister thinks they could not have been all different. I think you must have been completely tired out with them. Too bad you had not an Aunt Mark to help you. You are so patient with the boys and girls I thought you must have several of your own. Those were funny verses about "A Memory" in the RURAL. Mrs. Brooks said she should think they might to be spoken in our school. I think that boy and girl must feel very happy at receiving their plows.

Your niece,

HATTIE BELLE HOTCHKISS.

[I added all the words, on all the lists together.—U. M.]

DEAR UNCLE MARK: I suppose you will say another "county heard from." This is King County, W. T. As I was reading the letters from the Cousins, I wondered what they all looked like, or what Uncle Mark was like. I wish you would have your picture in the RURAL, as Mary Wager-Fisher did, then we could all see our uncle. I will not describe myself until I see if this makes its appearance in the paper; then I will tell you what I am like, and see if you want me for a niece. We live four miles from Seattle, that Queen city you read so much about. My Father has a hop ranch, and I have raised 31 canary birds to sell to the Indians when they come to pick hops. I get $5 a pair for them. The young Indians are very fond of pets. I will not write any more at present, but if I hear from this I will describe our place and my occupation while out of school.

Duwamish. MAUD M. HORTON.

[Let us here from you again by all means. I guess I had better keep my picture out of print.—U. M.]

Miscellaneous Advertising.

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The warm weather has a debilitating effect, especially upon those who are within doors most of the time. The peculiar, yet common, complaint known as "that tired feeling," is the result. This feeling can be entirely overcome by taking Hood's Sarsaparilla, which gives new life and strength to all the functions of the body.

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PERSONALS.

COL. FRED. GRANT denies that there has been any serious disagreement between Mrs. Sartoris and her husband.

THE Princess Dolgorouki, widow of the late Czar Alexander II., is credited with possessing a fortune of $20,000,000.

SECRETARY LAMAR is going to make personal inspection of the Indian country to aid him in solving the Indian problem.

C. P. HUNTINGTON, the great millionaire and railroad magnate, was once a poor country boy, and presided at one period over a small shop at Litchfield, Connecticut. He is a remarkable civil personage.

"I AM too old to quarrel, too old to boast. 'The man of sense in his old age likes to be let alone.'" Thus writes Jefferson Davis from his Mississippi plantation. Wasn't that what he and the South wanted some years ago?

EX-LIEUT. GREEN, who struck John Brown murderously with his saber after the old man had surrendered at Harper's Ferry, was made an Indian agent, but has turned out such a poor one that Secretary Lamar will get rid of him.

GEN. HARNEY, of the United States Army, is the oldest man on the register. He became a soldier in 1818, and participated in every war in which the country has engaged since that time. He is 86 years of age and very rich.

SINCE the death of King Ludwig, of Bavaria, the insane King Otto has been under delusion that he is a bird. He has called himself the great "German double eagle," and he has even built a nest of straw and dry leaves in his apartment.

AT Shanesville, Pa., Elizabeth Trout, aged 92; Maria Updegrove, 82; and Maria Trout, 76, while the harvesting was being done this Summer, assisted the men during the whole of one long day, and each of them bound the heavy sheaves, such as are usually left for the strongest men.

THE Rev. E. C. Haddock, of Sioux City, Ia., was shot and killed in the street Tuesday night by some unknown assassin. He was an earnest worker for the enforcement of the prohibition laws, and had been frequently threatened by the rumsellers, and his death is attributed to them. Great excitement throughout that section.

THE United States Senate has authorized an investigation of the international fishery question this Summer, and appointed a very strong committee to carry it out—Edmunds, Frye, Evarts, Morgan of Alabama and Saulsbury of Delaware. Mr. Edmunds says "This means business" and that the "committee will go to the bottom of the matter."

A MINNESOTA farmer became enraged a few days ago at an old hen that had sat for six weeks in his barn on a door-knob and two iron spikes. He manufactured a bomb and exploded it under her. The result was strikingly successful. The hen has not been seen since. Neither has the barn. There was no insurance on either.

THE Republicans of California, in the extra session of the Legislature, have elected A. P. Williams, a prominent San Francisco merchant and Chairman of their State Committee, United States Senator to succeed the late Senator Miller. Makeshift Hearst, the Democratic candidate, got only 24 votes in both Houses, against 70 for Williams.

PROF. FERAND and Maj. Alvord have accepted, respectively, the Presidency and Professorship of Agriculture to which they were elected in the Mass. Agricultural College. Ex-President Greenough's friends on the Board of Trustees wished him to remain, teaching the course he taught before; but after a vigorous debate, the opposition was so strong that the motion to that effect was withdrawn without a vote.

GENERAL BOULANGER, who has suddenly flashed up so brightly in France, was born at Rennes, the old capital of ancient Brittany, and had an English mother. His father was a lawyer. The very name Boulanger (signifying baker) has started the wits of Paris, who do not happen to admire the General, at their usual task of satire. A military club he lately founded is called the Boulangerie (bakery) and the witlings are playing on the name in a hundred other ways.

THE French aeronaut L'Hoste and a companion, the other day, or rather night, traveled across the English Channel from Cherburg to London in a newly invented baloon capable of being steered through the air. The baloon landed within a few miles of the open space for which it started, and passed within a mile of it, but couldn't land on account of the houses. "Toy" torpedoes were dropped on vessels, forts, etc., over which the baloon passed; and in war the same could be done with dynamite bombs. Such baloons, it is thought, are likely to be very destructive in war, and very sensational at all times. Is it the beginning of a new era in aeronautics?

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"We would not risk feeding a pen of hogs without the remedy."—WHITE & Co., Gibsonton, Pa.
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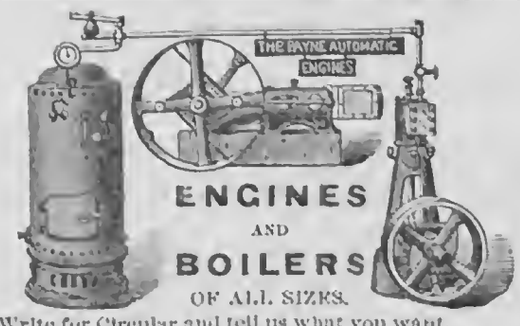

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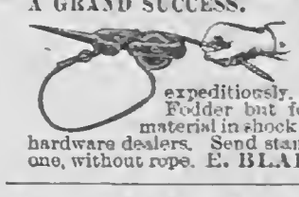

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Humorous.

WHEREIN manufactories differ from clocks: It is the hands which strike in the former.—*Lowell Courier.*

"CARPETS are lower than ever," says an advertiser. How can that be? They were on the floor before.—*Farmer's Call.*

A POETESS sings: "I threw my love to him, and it hath gone astray." Of course; a woman never can throw straight.—*Credit lost.*

"SIXTY million people in America mostly fools," said Mr. Carlyle. Ah? We didn't know so many Americans had bought Mr. Carlyle's books.—*Cambridge Chronicle.*

THE difference between a cat and a comma is that one has the claws at the end of the paws, while the other has the pause at the end of the clause.—*Credit lost.*

"A THOUSAND and One Words" is the name of a new novel. We presume it is the description of the parting of two women at the railroad depot.—*Yonkers Statesman.*

"AIN'T that a lovely critter, John?" said Jerush, as they stopped opposite the leopard's cage at the Zoo. "Waal, yes," said John; "he's dreadfully freckled, aint he?"—*New Age.*

THIS ambiguous notice adorns a ladies' cabin in a Hoboken ferry-boat: "These seats are for ladies. Gentlemen will not occupy them until the ladies are seated.—*New Age.*"

"ARE we going to have a picnic this year?" inquired a youngster of his Sunday-school teacher. "Why, what do you want of a picnic?" "Nothing much, but I can get six new scholars in a hurry if you are going to have one."—*Hartford Post.*

"MR. JONES," said little Johnny to the gentleman who was making an afternoon call, "can whisky talk?" "No, my child; how ever can you ask such a question?" "Oh, nothing, only ma said whisky was beginning to tell on you."—*Hotel News.*

THE Fortnightly Review says brain work should be forbidden after dinner, and the interval between it and bed-time be devoted to recreation and amusement. Them's our sentiments, only we want the dinner hour fixed at noon, sharp.—*Free Press.*

SCHOOL TEACHER—"Now, Master Thompson, tell me the denominations into which the money of the United States is coined." Master Thompson—"Don't know." School Teacher—"Don't you know how the money your father brings home every Saturday is divided?" Master Thompson—"'Taint divided. Ma takes it all."—*Phila. Herald.*

LITTLE Jenny's big sister is entertaining Mr. Skibbers, and thinks she can get along without any assistance; so she pats the little one on the head, and says: "Come, little pet, it's time your eyes were closed in sleep." "Guess not," said Jenny, "Mother told me to keep my eyes open when you and Mr. Skibbers were together!"—*Credit lost.*

"WATTLE I do for quiet?" said a setting hen to her guardian rooster. "Chanticleer the barnyard?" he suggested. "Cackleate that may do some good." "Very well, I'll do so and comb back at once." "Thanks, I'm on nest in this matter, and speak eggs-actly as I feel, when I say I hope you will always be so kind." With a rosy blush the rooster went and shooed the chickens over the fence and quiet reigned.—*Merchant Traveler.*

As a train was approaching Cleveland it parted in the middle and the bell-rope snapped off like thread, the end of it striking an old lady on her bonnet. "What is the matter?" she exclaimed. "Oh, the train broke in two," replied a gentleman who sat in the next seat. "I should say so," the old lady said, looking at the broken bell-cord. "Did they s'pose a trifling little string like that would hold the train together?"—*Credit lost.*

A SMALL Somerville boy goes frequently to a neighbor's house to buy fresh eggs. He is always given eggs of the Plymouth Rock variety, which have a shell of chocolate hue. On the last occasion that he was sent after eggs three of the ordinary white-shelled variety were given him with the Plymouth Rocks to make out the dozen. He received them with a great deal of suspicion, and a few minutes later rushed into the presence of his mother, highly excited: "O, mother!" he cried, "what do you think? They've cheated us! They've given us three that ain't ripe."—*Credit lost.*

VIVISECTION.

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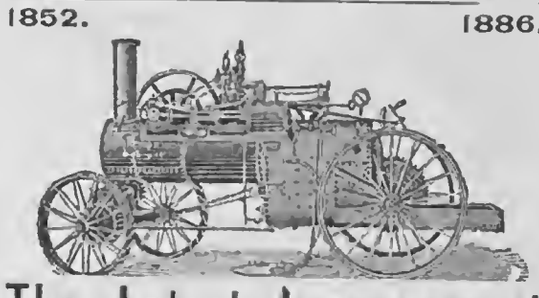

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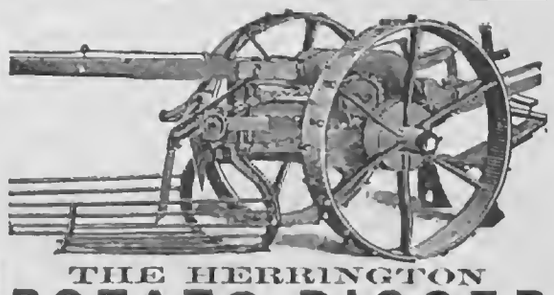

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THE RURAL NEW-YORKER

A JOURNAL FOR THE SUBURBAN AND COUNTRY HOME

VOL. XLV. No. 1908. NEW YORK, AUGUST 21, 1886. PRICE FIVE CENTS. $2.00 PER YEAR.

Entered according to Act of Congress, in the year 1886, by the Rural New-Yorker in the office of the Librarian of Congress at Washington.

Floricultural.

VIBURNUM PLICATUM.

A FEW words as to the hardy shrub, Viburnum plicatum — Plicate-leaved Viburnum, or Japan Snowball. As to foliage and habit there are few finer shrubs. To develop its full beauty, specimens should not be crowded or shaded by other plants. The leaf is shown in Fig. 325, true to nature. But its rich, dark-green color, which becomes purplish in the Fall, and is held until frost, can not be shown in a mere engraving. Its balls of flowers begin to open the middle of May—earlier or later as the season may be, lasting a full month fresh and perfect. Even after they have fallen they often retain their bloom. With many flowers the petals drop or wither on the stem; but with this the entire head drops. In favorable situations the flowers will average four inches in diameter. These balls are made up of two kinds of flowers. The outer ones are nearly an inch in diameter without either the rudiments of pistils or stamens. Beneath these and almost sessile upon the pedicels are little flowers a quarter of an inch in diameter, which bear five stamens though no pistil, and but the rudiments of an ovary. When first opening, the flowers have a faint tint of green, which, later, disappears, leaving them snowy white. The leaves are roundish-ovate on the old wood, elliptical on the new. They are strongly creased or plicated and sharply toothed. Our several specimens are perfectly hardy, and, except that the flowers are without odor, the shrub seems faultless. Few would care to preserve the old Guelder Rose (Viburnum opulus), with its coarse leaves and crooked stems, after seeing good specimens of the Japan Snowball, as it has been called, though it comes from Northern China. The specimen from which our illustration was drawn and engraved was cut June 1.

Arboricultural.

TREE NOTES.

THE GOLDEN ELDER, when in perfection, is a beautiful shrub, hardy, vigorous and showy, and it retains its yellow color all Summer long. But it now has, and has had all Summer long with us, a lot of "scalded," unsightly leaves that no amount of golden coloring can compensate for.

THE OAK-LEAVED HYDRANGEA is in good bloom with us just now, and has been so since about July 7. When in vigorous and healthy condition and in full leaf it is a good-looking shrub anyway; but its habit of blooming conspicuously as it does in July, renders it exceptionally welcome. It is a native of the Southern States and hardy with us, but it is not considered generally hardy in the North. [It is not quite hardy at the Rural Grounds. But the roots are never killed.—EDS.]

THE DWARF HORSE-CHESTNUT is one of the most conspicuous of July blooming shrubs, and is seen to best advantage when in a mass by itself. But although I regard it as one of the most desirable of garden shrubs, I would not recommend it for a little suburban garden.

SOME ASH TREES.—The leaves of the Aucuba-leaved Ash are much speckled with yellow and in masses are effective, but between bark scales and borers the tree with us is a nuisance. The Fern-leaved (Scolopendrifolia), Single-leaved (Monophylla), Potamophylla and some others have been so afflicted with borers, that I have grubbed them up and burned them.

CATALPAS.—C. bignonioides is just going out of bloom with us; C. speciosa bloomed with us four weeks ago; C. Kœmpferi isn't worth growing as an ornamental tree; nor unless you want a bunchy bush of leaves is C. Bungei. No other July blooming tree surpasses the common catalpa in floral display. But I don't know of a dirtier tree in the garden; every day in the year it makes a mess with its falling "bean" pods.

THE YELLOW-WOOD.—The RURAL spoke recently of the Yellow-Wood being a messy tree, dropping some of its leaves during Summer. With us it is better behaved. We have several fine specimens twelve or fourteen years old. They retain their leaves better than most trees and bloom lavishly every second year. There is a Yellow-Wood tree in the Botanic Garden, Cambridge, which I measured in 1878. It was then 47 feet high and 6 feet five inches in circumference of trunk at three feet from the ground. It didn't drop its leaves to any noticeable extent in Summer. But no matter how bad it may be in this direction, surely it cannot compare with plane trees, horse-chestnuts and elms. I regard the Yellow-Wood as one of the loveliest and most desirable of all hardy trees for ornamental use, and I am glad you concur with me in this opinion.. [And we are glad to be be supported in our views by Mr. Falconer.]—ED.

W. FALCONER.

VIBURNUM PLICATUM (JAPAN SNOWBALL). From Nature. Fig. 325.

BASSWOOD *vs.* YELLOW-WOOD.

I AM interested in what the RURAL says of the beauty and charms of the Yellow-Wood—Claadrastis tinctoria—otherwise Virgilia lutea. But considering it is a native farther South, and therefore not hardy North in exposed situations, is it to be preferred to the basswood—Tilia Americana. On the black soil prairie this is one of our most valuable soft-wood trees. It transplants readily, grows fast, recovers quickly from accidents to trunk and limbs, successfully resists the tramping of stock; the roots do not seek wells, nor enter and stop drains, like the willow, and it is perfectly hardy on high land and low. Besides, being round-headed and symmetrical in shape, it attains large size and lives to great age; and for two weeks in June, well-grown trees show a mass of fragrant bloom sought for by innumerable bees. B. F. J.

Champaign, Ill.

Horticultural.

KILLING PLANTS WITH KINDNESS.

WE have been applying nitrate of soda to spring-planted strawberries. Where the nitrate touched the leaves it burned holes as though the leaves had been pierced with red-hot irons. [Similar effects upon corn plants at the R. G. occurred three years ago.—EDS.] Two rows, side by side, one Crescent, one Daniel Boone planted much later than the others, were destroyed by the same application of nitrate of soda given to all the other varieties, and which benefited all the others, a small teaspoonful being applied to each plant, in a circle six inches distant therefrom. We are at loss to know why the two rows should be so differently affected from the others. Our foreman thinks it is owing to the immature condition of the roots of the plants most recently planted. If this is the cause it is important, teaching that the nitrate should not be applied until the plants have made two months' growth. Nearly as many plants are killed by kindness as by neglect. A man sent to plant the Earhart Raspberry put too much hen manure (composted with muck) about the plants and many died. A friend writes that all the plants we sent him last Spring started well, but he destroyed them by applying liquid manure not sufficiently diluted. How often trees are killed by placing manure in contact with the roots, or in excess near them, by excessive surface watering, causing the soil to bake; how often plants and vines are injured by some fanciful experiment, by too close or deep culture in Summer, or smothering in Winter. The safest time to enrich the soil is before planting, having the manure well rotted and mixed through the mold when wanted. Further fertilizing after planting will often largely increase the growth; but such work should not be left to careless or inexperienced help. CHAS. A. GREEN.

THE "CRIMSON CLUSTER" STRAWBERRY.

I NOTICE that your correspondent, E. Williams, in the RURAL of August 7, criticises the change that we have made in the name of this strawberry from King Cluster to Crimson Cluster. Had the King Cluster (as Mr. Williams claims it should be called, been sold and distributed, then his censure for the change of name would have been perfectly proper and deserved; but inasmuch as Mr. Durand had not sold or given away a single plant of this strawberry until we purchased it of him this season, I do not see why we had not the right to change the name, which we did with his consent. I have had some experience in the nomenclature of plants, and have always held that as far as possible, there are two things to be considered in a name, if they can be applied: first, that it should be descriptive as far as possible, and, second, that the name if consisting of two words, should be euphonious. Consequently, when we call a cauliflower Snowball, a celery White Plume and a rose Sunset, in every case the name answers the purpose of a partial description of shape or color. It was for this reason we took the liberty of changing the rather unmeaning name of King Cluster to that which so well

describes this beautiful variety—Crimson Cluster. PETER HENDERSON.

A GOOD WORD FOR THE LUCRETIA.

I CAN hardly agree with the RURAL in its estimate of the Lucretia Dewberry. In mild climates where the finer sorts of blackberries can be grown without protection, the objections the RURAL urges against it may have some force, but not in localities where the Lawton, Kittatinny and Wilson winter-kill about four years in five. With us there is no hardy blackberry that equals the Lucretia in size of fruit; hence it fills a very important place. It is earlier than the Snyder and is nearly gone before wild blackberries become plentiful, therefore it is almost without competition in the market throughout the greater part of its season.

There are some objections to it surely, but we can bear with its failings until we find something better. When the vines are pruned in the Spring some sort of litter should be scattered alongside to prevent the fruit from becoming dirty. The pruning may be done in the Fall and the litter be thrown over the plants and then raked off in the Spring and placed alongside. Whether the cost of mulching the dewberry is less than that of bending down and covering blackberry canes with dirt, I am unable to say, but one thing is true—that with the system named above the Lucretia gives good fruit and plenty of it, and for this latitude it is a real acquisition.

Ex. Sta., Columbus, O. W. J. GREEN.

THE BAGNARD BLACKBERRY.

ON July 29, we received from Muscatine, Ia., specimens of a blackberry twig bearing four ripe berries. It originated on the grounds of Mr. Bagnard, and will be called the Bagnard Blackberry. We are told that it is a seedling of the Snyder, and that it possesses the peculiarity of not sprouting from the roots. It propagates itself from the tips like black-cap raspberries. Pruned, the bush is quite stocky and upright in habit. This is the first season it has fruited, and when it is taken into consideration that the drought there has been so severe that the blackberry crop (Snyders, etc.), is almost a failure, the specimens were excellent. They were received in good order, and were as large as Wilsons and much the same shape. Very sweet and tender. The plant is reported to be perfectly hardy at Muscatine, where it is growing among a lot of Snyders.

MARLBORO AND SNYDER IN KANSAS.

MARLBORO Raspberry partly killed last Winter. The berries are large, but I do like the flavor; still I prefer them to the Turner. I don't recommend the Snyder blackberry for this section. It is worthless. Half of the fruit dries on the bushes when Kittatinny ripens every berry. E. M. C.

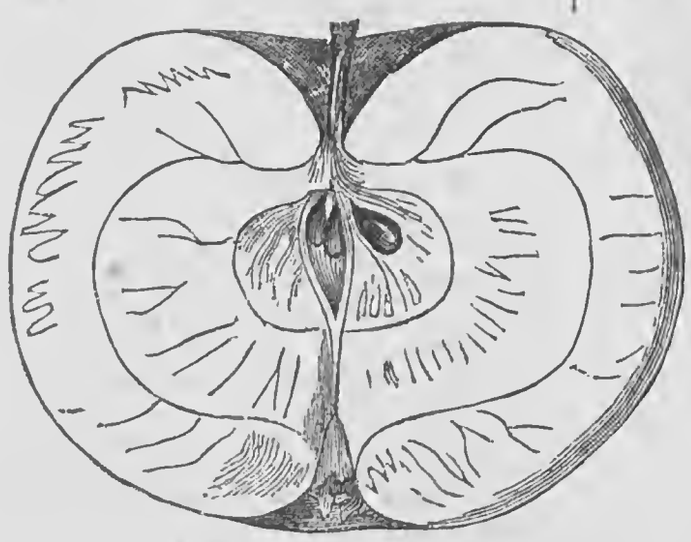
Crawford Co., Kans.

Pomological.

THE ANIS FAMILY OF THE APPLE.

PROF. J. L. BUDD.

WE have reason to believe that the hardiest race of really good winter apples in the world, for the far North, is found in the Province of Kazan on the upper Volga, in Russia. A glance at the map will show that the city of Kazan in near the 57th parallel of north latitude, and fully one thousand miles inland. It is difficult to imagine a more trying climate, as the prevailing winds of Summer are from the desert plains of Central Asia and Southeast Russia, and the extreme cold of Winter often reaches 50 to 58 degrees below zero with little or no snow; yet on the bluffs and high prairies, within 12 miles of Kazan, may be found hundreds of orchards—some of them covering at least 30 acres—which rarely fail to produce bountiful crops of fine, high-colored fruit of really good quality.



ANIS ALUI APPLE. Fig. 326.

The king winter apple of this region, grown in immense quantity for home use and export, is the Anis. As it is an ancient variety of this region, it naturally has sported into a number of sub-varieties differing slightly in color and season; but not materially in size or quality. The cut, Fig. 326, traced from an average specimen of the Pink Anis (Anis alui), will give a fair idea of the size of thousands of bushels we saw on the trees in Kazan. In size and weight it does not differ materially from our Fameuse; but its rich pink color, with heavy blue bloom, is more attractive to the eye. As to quality Mr. Gibb says: "The flesh is fine, white, firm, and it is really a dessert apple of fine quality." Its season here at Ames, Iowa, is about that of Fameuse. To become a first-class winter apple it must be planted as far north as the north half of Minnesota and Dakota, where we have the best reason for believing it will prove a bonanza. If this fails, when grown on hardy roots, at the far north, the last hope in our day of growing dessert winter apples profitably may be relinquished.

In tree all the varieties of the Anis are half dwarf in the nursery and orchard. When three years old in the nursery the Anis is a pretty round-topped bush rather than a tree. It comes into bearing when the tree is very small, and in orchard the trees will not crowd each other in 20 years if planted 16 feet apart, each way. While it seems to hold perfect foliage, and to be free from blight when grown south of its natural limits, these notes are specially written to attract the attention of northern planters when even the Wealthy has recently failed to stand the test Winters.

It may prove useful to Northern readers of the RURAL to add that numbers 317, 372, and 987, of the Department list of cions imported in 1870, as fruited at Ames, are true varieties of the Anis. They are finely colored fruits, yet one is named White Pigeon, another Russian Green, and the last Yellow Anis. Possibly these absurd mistakes originated with Dr. Regel, who, at that time, was a better botanist than pomologist; but it is more probable that the cions and names were mixed by Department clerks at Washington. While the nomenclature of Russian fruits is faulty, yet this general remark does not apply to noted commercial varieties grown by the million bushels for use in the large cities, such as Anis and Antonovka. We have propagated but few trees of the Anis which have been sent mainly to the North, hence the extended trial of the family will depend on the importation of cions by northern propagators.

Ag. College, Ames, Iowa.

THE ROBINSON PLUM.

LESS than a week ago we received from Messrs. Albertson & Hobbs, Bridgeport, Ind., a box of Robinson Plums, taken from trees set out four years ago when very small. The above firm say: "They were planted 12 feet each way, and now average eight to ten feet in hight and nearly ten feet in spread of top. Every tree in the orchard of over 100 trees is loaded with a very heavy crop of fruit, bending the limbs almost to the ground, every tree being supported by five to twenty props, to keep the fruit from breaking the branches. This extremely heavy crop has caused the plums to be a little under size. The trees where not propped are in many instances breaking. It is hardly likely the Wild Goose would be much, if any, larger if loaded nearly so full. We think there is much less astringency in this than in the Wild Goose or any other of the Chickasaw family that we have tested. For this reason it is much preferred by the women for jellies, preserves, or canning. Where the finer plums or gages, etc., do not succeed, this will be welcomed. The trees this season are all loaded, regardless of any care or protection from curculio. We believe this plum to be more nearly free from the curculio than any yet introduced. The trees in this orchard planted four years ago are now bearing their third crop, having also borne a full crop the second year after planting.

The large green cluster we send is, we think, a Lombard. Did you ever see a load to beat it—18 large, fine plums on about six inches? This was taken from one of three trees in the back-yard, from 12 to 15 feet high, and spreading almost to breaking with their heavy load of fruit, having to be propped up. There were four to six bushels of perfect plums on them, without the slightest care or protection against the curculio.

REMARKS: The Robinson Plums average 1¼ inch in diameter. The flesh is tender, sweet and juicy, the skin papery and bitter. The flesh immediately about the pits is sour. As to the Lombard, we have never before seen plums crowded upon the same length of stem (seven inches) that would weigh as much. There were 18 plums, weighing one pound two ounces. The Lombard originated in N. Y. The color is purplish, with a light purplish bloom. The flesh is yellow and juicy, but not of the first quality. It clings to the stone. This plum ripens in this climate in late August. The tree is a strong grower and wonderfully productive. It is a profitable market sort, Mr. P. Barry says, and succeeds first-rate in Vermont, New York, Michigan, Penn., Ohio, Kentucky, Colorado, and moderately well in many other States, notably Ark., Miss., La., Cal., Ks., Neb., Mo., Ills., Md., Minn., Wis., Ont., R. I., Conn., N. S., Me., Mass.

Farm Topics.

CORRESPONDENTS' VIEWS.

WE have in mind the kind of paper needed in these parts. It should be anti-whiskey, anti-political, anti-big-sugar-farm and anti-white-man-sit-on-fence-smoking-pipe-and-watching-nigger-hoe-cotton. That's as near as I can put it. W. W. G.

Baton Rouge, La.

Too many people talk about their successes and have too little to say about their failures. It is a great blow about the former and perfect silence about the latter, that make a fair average, they think. There is more to be gained in discussing a failure then there is in magnifying a success. D. B. S.

OUR Hereford bull on the college farm makes a good policeman. We had him at the Nebraska State Fair. One hot day, small holes were cut in front of cattle in the stock stables to give them air. This bull by getting a horn in this hole broke off a board. A negro came along looking for a place to "sly" in. He saw this broken board. Just as he got ready to crawl in, he saw the big white face looking up at him, and he went back like a shot. He stood for a while thinking whether the pleasure of the show would compensate him for the risk he would run in passing those horns. He gave it up and went on.

Lincoln, Neb. L. E. B.

I HAVE been poisoned by Poison Ivy and have cured myself easily. Take lime, slake it as for white-wash, and rub the parts affected two or three times. This is a sure cure. A. J.

Lincoln Park, N. J.

SPREADING MANURE.

IN regard to the question submitted to RURAL readers on page 493, I would say: The manure spread in February acted primarily as a mulch; frost came out slowly, leaving the soil open and porous, and the covering prevented heavy rains from beating it down and packing it. All the active constituents of the manure were leached down through the pores to the sub-soil, where their chemical action set free valuable plant-feeding elements lying there inert, and these were quickly appropriated by the roots of the plants, and caused the luxuriant growth. On the other side of the field, frost came out of the soil rapidly, leaving it in a semi-liquid condition. Rains packed it solid and closed the pores, effectually preventing such of the active constituents of the manure as remained in it when applied, from leaching down to the sub-soil and acting as in the other case. These constituents remained near the surface, and were, to a great extent, dissipated by sun and wind. Nature, through the agency of frost, opens the soil for the reception of the active elements of manure. If the manure is on the land when the pores are open, and the soil is in a receptive condition, we obtain the full benefit of it.

We can, in a small measure, imitate Nature by plowing the manure in, but no such results are obtained as when it is absorbed through the pores of the soil by Nature's own processes. Manure spread upon the soil when its pores are closed, is, to a considerable extent, wasted. Its active chemical constituents are dissipated by the action of sun and air, which at that time are very powerful, and only the humus remains. FRED GRUNDY.

Morrisonville, Ill.

WHEN TO SPREAD MANURE.

THE RURAL'S inquiry as to spreading manure reminds me of an experience of mine 12 years ago on land in Alabama. The lower part of a 20-acre hillside field was planted to corn; the upper part was put in cow peas. In our manner of planting corn, one stalk to the hill, Crab Grass always comes in and fills the ground after "laying by." The corn was cut, and the whole field plowed, turning under the grass and peas. Wheat was sowed. The part that had been in corn produced twice as much wheat as the other part. Three years afterwards the ground was sown in wheat again with the same results. The difference in the yields was noticeable up to the very line between the two sections. In the Spring of '72 I planted an acre of cotton on land so poor that it would not produce anything without manure—one shovelful of a compost consisting of stable manure, cotton seed, and red clay from a well, was put in each hill. The seed failed to grow. The acre lay and grew a heavy crop of grass. The balance of the field being in cotton and corn, also ran to grass. I turned this under, and since that time the land has produced fine crops without any more manure. It ruins clay land to work it too wet. Twelve years ago we started plowing a piece of heavy clay just after a shower. We had to give it up, but the part that was plowed has been poor ever since, in spite of all the manure that has been put upon it. If I could only get a good stand of some green crop to turn under I think it would be all right. [Can't you drain it?—EDS.] J. M. M.

Green Cove, Fla.

MANURE IN THE WEST.

I HAVE just had a letter from a man who left our town and went out West. He bought a farm that had just about starved the last man to own it. Wheat, and but little of that, had been raised on it. The man I speak of found a great pile of manure, almost as large as a house, in the barnyard. It had never been carted out. He began at it and spent the best part of a month hauling that manure out on to the land. The neighbors all laughed at him at first. At last they came and said they would haul their own manure out on his land if he would only say the word. They hated to see a man suffering for manure. So he had about all the manure in the neighborhood dumped on his farm. He raised a crop of wheat that beat anything ever seen out in that country. People who gave him manure then are like misers over it now. They see that when prices go down the point is to raise a bigger crop on the same or on a less area of land, and get their profit in labor saved. There is only one thing that will do the work, and that is manure. H. B.

Bergen Co., N. J.

NOW SOW RYE FOR GREEN MANURE.

ON nearly every farm and garden there are beginning to be vacant places growing up to weeds where the crops have been gathered. It is too late to sow turnips, but if wanted for nothing else, such places may now be sown to winter rye. This will keep down weeds, prevent washing, and furnish a heavy growth of green manure in time for next season's crops.

The best crop of musk-melons I ever grew had no other manure than two feet of green rye plowed under. The best patch of early cabbages I have seen this season has just been marketed from land where a heavy growth of rye was turned in May, as it was beginning to head. Rye is to the gardener what clover is to the farmer. It is nearly equal to clover as a manure plant, and is specially adapted to the needs of the gardener, as it can be grown in months when the land is otherwise idle. It may be sown at almost any time when the land can be worked, but is sometimes uncertain if sown too late in the Fall. I once sowed a piece on heavy soil, on November 7, and a long cold rain coming on, it nearly all rotted, though the seed was grown the same season. But whenever weeds will grow, rye will. Keep the land doing something. It loses its fertility faster when lying naked than when growing the most exhaustive crop. Weeds are better than nothing, but rye is better than weeds.

Kent Co., Mich. A. A. CROZIER.

RYE A POOR GREEN MANURE.

I SHALL have to give my vote on rye as a green manure with A. C. G., page 479. I have plowed under heavy crops of it at various times but never could see much benefit from it. We need something besides bulk to improve our soils. I fail to see why green manures may not differ as widely as do other manures. V. H. J.

Orange Co., N. Y.

Farm Economy.

SAVE AT HOME FIRST.

I AM satisfied that the best manure the farmer can secure is what he can make and save on the farm, provided, of course, that proper pains are taken in the making and saving to secure all the valuable properties. You can save and apply manure made on the farm and receive but a very small amount of benefit; while, again, a very large amount of benefit can be derived in a short time if the work is properly done. In order to get all th

benefit from stable manure, it must first be saved in the proper manner and then be applied so that the growing crops can derive the largest amount of benefit therefrom. I have tried commercial manure, and while a considerable benefit can be derived—and that, too, in a short time and with very little labor in applying—yet the benefit is only for a short time.

Liquid manure can be applied, but the benefit lasts generally only for one season, while a good application of well rotted stable manure, that has been saved so that all the valuable properties are retained, thoroughly incorporated with the soil after it has been plowed or spaded up, will confer a benefit for a number of years.

While in some cases it may be advisable to purchase and use commercial fertilizers, and such can be used very profitably, yet it is important to impress upon the farmer that every means should be first taken to save all that can possibly be secured on the farm. This is the most valuable manure, and until one has secured and applied all this I consider it unnecessary to purchase anything else.

Miller Co., Mo. N. J. SHEPHERD.

HUSKING-JACK.

JAMES R. ADAMS, of Wayne Co., N. Y., sends us the design for the excellent husking-jack shown at Fig. 329. He has used it five

Fig. 329.

seasons, and likes it well. It seems to us like an excellent implement, although we have not used it. Our illustrations show how it is made better than we can describe it. To use it, place it beside the shock, as shown at Fig. 329. Pull the shock over into the middle. Two good seats are thus left. When the shock is partially finished, let each man take hold of the side-arms and raise them to the position shown at Fig. 330. The weight of the men

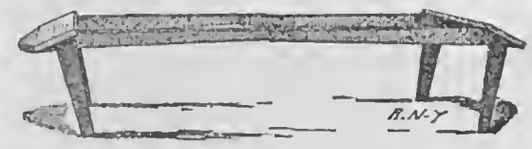
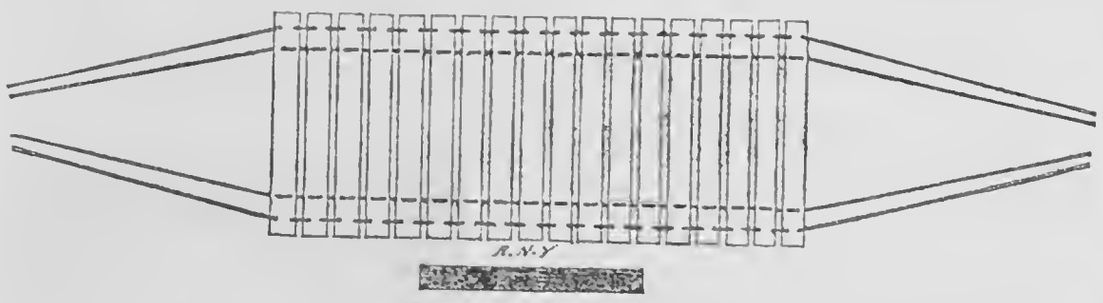


Fig. 330.

will hold the jack in position. When the shock is all husked, tip the jack over and carry to the next shock. It works just as well on the barn floor, and one man can handle it. Dimensions: width, 30 inches; hight of seats, 18 inches; length of side-arms, 33 inches. The jack should be put together with bolts, and the legs braced with iron braces. Persons who find it uncomfortable to kneel or sit on the damp ground, will be greatly pleased with this jack.

A CHEAP HAMMOCK.

THE hammock shown at Fig. 328 is cheap, easily made and exceedingly comfortable.



A CHEAP HAMMOCK. Fig. 328.

There should be at least one hammock on every farm. Swung under the trees or in other shady places, they form very centers of comfort. The one shown in our picture is made of old barrel staves, strung upon ropes which pass through holes near the ends of the staves, the staves being placed several inches apart or close together, as desired. One rope or two, with one or two sets of holes, may be used. When but one rope is used, the holes are liable to split. A soft blanket or mattress placed on the staves, renders this hammock exceedingly comfortable.

Architecture.

BUILDING BARNS.

CAN THEY BE TOO WARM?

THE RURAL'S good friend, R. E. D., Tioga, Pa., is going to build a barn, and proposes to first side it with second-quality lumber, putting boards on the roof. Then cover the whole with building paper and over this put first-quality matched lumber for sides, and good shingles for roof; but his carpenter and the neighbors are fearful he will overdo the "warmth business," and that his hay will not keep in such a tight place, and he asks advice.

R. E. D's plans are first-class, and if he carries them out to completion he will have a superior barn, and if I were to suggest any change it would be to match the inside boarding as well as the outside. So long as proper ventilation is provided for, a barn cannot be too warm. The sole object in housing stock is to keep them warm. The temperature of their bodies must be kept at blood heat (98°), or they will soon become diseased, and as the only way nature has provided for doing this is by the combustion of a portion of their food in their breathing apparatus, and this consumption will be in proportion to the exposure, it follows that when in warm quarters much less food will be used in this way, and the surplus will go to the increase of body or the production of milk, meat or wool. Any man who provides for any stock, quarters in which frost is ever seen, is simply wasting a portion of the hay and grain given, and if he has "brains enough to think," must know that lumber and building paper are much cheaper than hay or grain. I keep thermometers hanging in every part of my barns, and when I find any of my thermometers below 55°, I begin to look about to see where the heat gets out and the cold gets in. Cold is like a "thief in the night," and soon steals away all the profits of wintering any class of stock, and the wise stockman will as jealously exclude the cold as he would the thief.

The other notion—that hay will not keep in tight mows—is equally absurd. There is only one real agent of decay, oxygen, and if we exclude that we prevent all injury to our hay. Moisture assists the union of the oxygen with the starch, sugar and woody fiber of the hay, and when we cure the grass sufficiently to drive off the most of this we can put it into stacks or have it anywhere exposed to the air and it will take no harm. If, on the other hand, we had receptacles entirely air-tight, we could put the grass when first cut and full of juice into them, and by treading it down solid, and then excluding the air could keep it any length of time in good condition. This is what is done to a certain degree in the silo, and this is what should be done as much as possible in our barns. When single-boarded, and with cracks between the boards, air is as freely admitted as though the hay was in stack, and if put up with much moisture, whether in juice or external wet, the oxygen attacks the carbohydrates, and this generates heat, and this only increases the rapidity of action of the oxygen while the current of air all around drives heat and moisture towards the center. The result is that a large proportion is nearly or quite ruined. When the barns are made as tight as possible and are kept tightly closed, but little air can gain access, and consequently but little oxygen reaches the hay, while what little heat is generated rises gradually and evenly through the mow and the hay slowly dries out with no injury. The fact is, the tighter the barns, the less danger of injury, and the greener the hay can be put in, the better the quality in Winter or Spring.

It is an old-fogy notion that barns can be made too warm or tight, and the sooner farmers are educated above it the better.

J. S. WOODWARD.

The Herdsman.

RELIEVING CHOKING COWS.

TO-DAY a valuable Ayrshire heifer got a small turnip down her throat and could move it neither up nor down. After working some time, but failing to remove it, I procured the appliance shown at Figs. 332 and 333, and re-

Fig. 332.

moved it in a very few moments, and the heifer is all right and doing nicely.

The appliance consists of a piece of heavy 1¼-inch rubber steam pipe or hose, about six feet long, with a wooden pusher fastened in each end. See Fig. 332. This wooden pusher is about 4½ inches long and projects beyond the hose about 2½ inches, tapering up to 1¾ inch at one end and 1½ inch at the other, turned out concave or hollow at the large end. There is also a jaw-holder made of one-

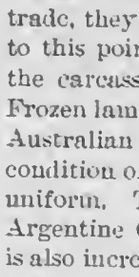


Fig. 333.

half-inch iron rod with a wooden handle attached, shown at Fig. 333.

When a cow is choked, place her under jaw in the opening at *b*, and her nose at *a*. This will hold her mouth open and give you a chance to work the rubber pipe through the hole, *c*. Let one or two men hold the jaw-holder and her head firmly, while some one puts the rubber pipe with the wooden pusher down her throat through the hole, *c*, until it reaches the obstruction; another man places his hand on her throat and guides the pusher, so it will not slip by the obstruction, which is pushed down into the stomach.

The jaw-holder is 5½ inches across by 12 inches high; the oblong hole, *c*, for the pusher is 4¼x3¼ inches. This home-made device may be an old one, but I have never seen one like it before. The pipe is quite limber, but stiff enough to do all the pushing necessary.

Oneida, N. Y. E. B. B.

BROWN SWISS CATTLE.

WE claim that the Brown Swiss Cattle cannot be excelled for hardiness and for combined milk and beef qualities. They have been bred for generations in a mountain region, and inured to cold and storm to a remarkable degree. They have never been injured by "fancy feeding." Imported animals refuse to eat grain when first brought to America. They have been carefully bred for years for milk qualities in a country remarkable for its dairy goods. They cannot be beaten for beef. Calves are larger and stronger than those of any other breed I have seen. They grow well. This breed is worthy of general attention.

Washington Co., N. Y. J. B. ELDREDGE.

Sheep Husbandry.

ENGLAND'S FOREIGN MUTTON SUPPLY.

NEW ZEALAND has virtually the foreign mutton trade of England in its hands. During the past year 778,000 head of frozen New Zealand sheep were landed in London, while only 603,000 native sheep were penned there. When the trade commenced, two or three years ago, the mutton was considerably better than it is now. The meat used to be full of flesh; now it is often too full of fat. If New Zealand shippers are anxious to preserve the trade, they are warned to pay more attention to this point, as a large proportion of fat in the carcass is unprofitable to the consumer. Frozen lamb and even kidneys find ready sale. Australian mutton is less esteemed, and the condition of the shipments has been far from uniform. The frozen mutton trade of the Argentine Confederation and Bonda Oriental is also increasing, as the enormous flocks there are being graded up. Until lately sheep were raised there almost exclusively for wool, pelt and tallow. Whenever sheep go up in England, large importations from North Germany, Holland and the Netherlands soon knock down prices. The meat supply of the United Kingdom last year was 1,825,000 tons, or 112 pounds to each inhabitant; the home produce amounted to 74.6 per cent. of the whole; the United States supplied 16. per cent; Europe 5.3 per cent; the colonies, 3.7 per cent. and South America .4 per cent.

FEEDING LAMBS.

IN feeding lambs in cold weather a bottle or a flat flask is a handy tool. We find no trouble in thus feeding hungry lambs. If we let them stay at the sheep barn and tug away at their mothers, whether they get enough or not they soon become a nuisance when taken to the house. When left with the sheep they learn to eat hay and other foods in a short time. I put a quill through the cork of the bottle, and then attach an ordinary gun nipple. The nipple must be tied to the cork to prevent the lambs from pulling it away. My little daughter feeds lambs with this arrangement successfully. N. H.

Goshen, Pa.

Dairy Husbandry.

COST OF MILK.

SOME time since the RURAL mentioned the fact that we had produced milk at 1½ cent per quart. I am asked to give the kind, quantity, proportions and prices of feeds needed to produce such milk. I give them below:—

In March, 1884, three cows which had been in milk about five months, and whose average weight was 1,192 pounds, were selected for the purpose of ascertaining the quantity and value of their solid and liquid droppings. In order to have normal conditions the food used was the same in quantity and quality as had been fed during the Winter. As everything consumed and produced by the cows was weighed, it was an easy matter to get at the food cost of a quart of milk. The food consumed in three days and its market value in the barn at the time are set forth below:—

125 lb clover hay at $8.00 per ton	$ 49
41 lb corn stalks at $4.00 per ton	08
45 lb cotton-seed meal at $26.00 per ton	59
42 lb corn meal at $26.00 per ton	55
42 lb malt sprouts at $14.00 per ton	29
	$2.00

Yield of milk of three cows, three days, 285 pounds—133.5 quarts, at 1½ cent, $2.00. The cows were fed and watered twice daily. The hay was fed dry, the corn-stalks were cut, damped and mixed with cotton-seed meal, corn and sprouts in the afternoon of the day preceding that on which they were fed. Of necessity, the cows were allowed no exercise in the covered yard, and their yield of milk was 8½ pounds less than on the three days preceding those of the experiment. The food of each cow cost, per day, 22 2-9 cents. The manure of each cow per day, at commercial values at the time, computed according to Wolff's tables, was worth 16⅞ cents.

I. P. ROBERTS.

Cornell University, Ithica, N. Y.

A GOOD JERSEY GRADE.

IN the hunt for the "general-purpose cow," never overlook the Jersey grade. I have a half-blood Jersey six years old, fourth calf, fresh April 12. She was sired by the Jersey bull "Buckeye." I gave her a fair test. She had for feed fair pasture, nine pounds of bran daily, five weeks previous to and during the test, also six pounds of corn meal three days before and during the test. Her record was as follows:

Tuesday, May	25th,	milk,	39	pounds,	9	ounces.
Wednesday, "	26th,	"	39	"	4	"
Thursday, "	27th,	"	43	"	6	"
Friday, "	28th,	"	37	"	1	"
Saturday, "	29th,	"	40	"	11	"
Sunday, "	30th,	"	38	"	4	"
Monday, "	31st,	"	38	"	6	"
Total milk for 7 days:			276	pounds	9	ounces.
Average milk daily,			39	"	8	"
Butter churned from above,			15	"	3	"

You can see that this feed was not "forced." The milk was rich enough for anybody. Where do you go to find a butter machine of this capacity so cheap? P. O'C.

Youngstown, Ohio.

The Swineherd.

SELECTING THE BREED OF SWINE.

THERE is no better time than during the summer growth of swine, or during the annual fairs, for the intending beginner to select a breed to adhere to. It may not be to his interest to grow very large swine; but it certainly is to every man's interest, not only to select a breed, but the specimens of a breed that will grow to a fair marketable size at an early age. The color, as in cattle, is mainly a matter of fancy, for, while it may not be denied that some swine are liable to ailments of the skin, that do not commonly affect others having the hair and outer coating of the skin differently colored, yet the color cuts no figure in fixing the fattening tendency or in determining the quality of the flesh. By examining different herds of breeding swine, and the offshoots of those that are being fed for markets, the latter on some farms being made up of the leavings—such as did not meet the demands for breeding purposes—as these are upon grass, depending mainly upon this for sustenance, one can make a better estimate of the value of a given herd, as "self-tenders," than where they are kept up in close quarters and fed on rich food prepared from grains, oil cake meal, etc.

Then again, it is an aid of no mean importance in making selections, to be able to look over a lot of brood sows having their litters with them, as in this way we are enabled to see what the tendencies are in breeding; that is, whether they are inclined to bring good litters as to numbers, and good also in the matters of growth, form, and tendency to fatten promptly. If one will keep an eye out for pointers that will aid him, he will get these by observing a not unusual sight—namely: that a portion of the sows so fine-looking themselves, are followed by one or two good pigs, another not so good, and a puny runt. These are some of the advantages secured by visiting herds in the Summer, as one can then most easily trace family characteristics, in the matter of prolificness, not only of the older sows, but of the offshoots of those that have been put to breeding. There is a natural tendency to variation in all kinds of domestic animals, and swine stock coming into breeding so early and maturing so rapidly, it is not unreasonable to expect strik-

ing variations. Hence, if we can find within a given herd, a family line more uniform in important features than other family lines in the collection, reasonably prolific as breeders, good growers and shapely in form, these are the families out of which we should select, getting our male from a different, and if necessary, distant herd. "WESTERN."

The Poultry Yard.

PRESERVATION OF POULTRY MANURE.

POULTRY droppings very quickly lose their value if not carefully preserved. If the coops were cleaned daily, instead of occasionally, the gain in the value of the manure would compensate for so doing more, as the droppings contain a larger proportion of valuable matter that readily escapes than many suppose. It has been recommended to compost the droppings with dry earth; but dry earth, though an absorbent, does not wholly preserve them. Nor will plaster answer fully for that purpose. The best dry absorbent is kainit, and as it is of itself an excellent fertilizer the cost need not be considered.

It is well known that water absorbs many times its volume of ammonia, and that it quickly causes all substances in the shape of manure to decompose and change their forms and conditions. If, then, instead of keeping the droppings perfectly dry, we keep them moist with soap-suds, we not only cause them to decompose (which is really desirable), but the water absorbs and arrests the ammonia, and prevents its escape. The soap-suds combine, also, with the manure, first forming fat acids, which in turn react on the insoluble matter of the manure, and render it more available as plant food. It is not suggested to keep the droppings *wet*, but only *moist*. They may be mixed with dry earth, if preferred, with a small quantity of kainit added, the whole to be saturated with strong soap-suds, and kept moist afterwards, using additional suds as the heap increases. For this purpose a large bin or box should be provided, or barrels may be used, but under cover as a protection against rain and sun. Poultry manure and night-soil, though very rich in nitrogen, lose by exposure, and when allowed to become dry the loss is quite an item. Analysis shows this to be the case with night-soil, which seldom compares favorably with animal manure, although it is known to be produced from food that is really more nutritious than that fed to animals. If it could be preserved daily, in a fresh condition, so as to absorb and retain the liquids and volatile matter, it would give better results. The same applies to poultry droppings. If allowed to become dry under the roost, they decrease in value, but if preserved in a fresh condition much of the nutritious matter will be saved. If those who desire to save the droppings will try the method suggested, keeping them moist with strong soap-suds, the ammoniacal odor which will greet their olfactories when about to apply the manure to land will be convincing. P. H. JACOBS.

WHITE LEGHORNS.

WE have had, first and last, a good deal of experience with White Leghorns. They are the favorite breed among the farmers of Bergen Co., New Jersey—not for the table or market, but for their large, white eggs, which find a ready sale in the chief cities and towns. No other breed of its size lays so large an egg. Of course the color of the shell would be an objection in some markets where the brown shell is preferred or demanded. Eight eggs will, on the average, weigh a pound. Leghorns are generally non-sitters; still there are many strains that show the proclivity though they can not be relied upon. Our illustration (Fig. 327) is re-engraved from the London Fancier's Gazette. Our experience teaches us that the White Leghorns will not bear confinement as well as Light Brahmas, Cochins, Plymouth Rocks, or Wyandottes, and that they will not lay as well in the Winter.

WATER PAIL FOR POULTRY.

MR. H. GRIFFIN, of New London Co., Conn., uses the arrangement shown at Fig. 331 for watering his poultry. A common pail is used. Holes six inches wide are cut like those shown in the illustration, down to the upper hoop. The cover is made of half-inch white wood with cross-pieces of some hard wood screwed

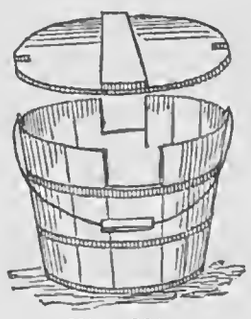


Fig. 331.

on to prevent splitting. Small pieces cut in the cover pass it over the bail. The hens can drink from this without getting dirt into the water and without tipping the vessel over.

A POULTRY FRAUD.

WHAT constitutes a fraud in the poultry business? I ordered a setting of eggs from a well advertised dealer, put them under a good hen and hatched three chickens. Now only one of the three even slightly resembles the breed I thought I was buying. The only redress I can obtain from the dealer is an offer to sell me more eggs at a reduced rate. If such practice is common, I must lose respect for hen men.

Licking Co., Ohio. G. C.

WHITE PLYMOUTH ROCKS AND WYANDOTTES.—I think the White Plymouth Rocks are the coming breed. They are snow-white, with yellow skin, bill and legs, and single, erect combs. The White Wyandottes are hard to breed true to color. Dark colors are almost sure to show. I do not notice this so much in White Plymouth Rocks. H. W.

Coxsackie, N. Y.

[It is much to be regretted that so much importance is attached to color and markings. It is all right in its way—but we shall never increase the size or number of eggs by such breeding.—EDS.]

WHITE LEGHORNS. Re-engraved from the London Fanciers' Gazette. Fig. 327.

Miscellaneous.

CATALOGUES, ETC., RECEIVED.

AMERICAN APPLES IN EUROPE.—CIRCULAR FROM DELONG, MAYER & CO., NEW YORK.—It is expected that the English apple crop will be very small this year, and that consequently a profitable market will be found for many of our apples abroad. Last year in the nine months between August, '85, and May, '86, 862,000 barrels of apples were shipped to England. Prices were not entirely satisfactory, however, and many were disappointed. This year, in consequence of the reported failure of the English crop, it is expected that prices will be more satisfactory. Messrs. DeLong, Mayer & Co., of this city, are the principal apple shippers. Their circular of instructions, recently issued, contains many useful suggestions. The most important point is the packing. Only new barrels should be used, and the filling should be done on a platform of boards and not on the ground. No wormy or bruised fruit should ever be used. Fine, uniform apples should be placed in the first layer with the stems down. The bottom becomes the head when the barrel is filled. After the first layer, the fruit may be poured in from baskets, care being taken not to bruise it. Place enough on top to project half the thickness of an apple above the top of the chime of the barrel. Place the top on these apples, and with a screw-press gently force it into the barrel. Mark on the head of the barrel; a plain stencil makes the best mark. Use the brand only on the best parcels. If inferior fruit is to be sent, it is better to vary the mark. A reputation for good fruit may be destroyed if the regular brand is used on inferior sorts Some brands are so well known that the fruit does not even need to be sampled at the sale. Let an inferior lot go to the sale with the brand affixed, and this reputation will surely be lost. The expense of sending a barrel of apples from New York to the market at Liverpool is about $1. To this must be added the freight from the point of packing to New York, and cost of handling in the city. The agents charge five per cent. commission. All good keepers will do to send. Baldwins, Russets, Jonathans, Kings, Greenings, Spitzenburghs, etc., all do well on the trip.

SWINE RAISING IN HUNGARY.—Pamphlet from the State Department.—The swine of Hungary are famous throughout all Europe. Pork is the favorite food with Hungarians, and great pains are taken to prepare it in large quantities of good flavor. The object is to produce a very fat animal, less regard being had to the proportion of lean meat, bones, etc. Pure fat is most highly esteemed. There are two races of Hungarian swine, or really one race with two distinct markings, since the only difference between them lies in the color. Those of one sort are white all over except the foot and snout, which are black, while the others are black all over except the bellies, which are white or yellow. Experiments have been made in attempting to improve or change these breeds by the introduction of foreign-bred animals, but without success. The imported hogs thrive well and appear to be well adapted to the climate, but after a few crossings the progeny lose the imported characteristics and go back to the fixed type of the Hungarian hog. Consul Sterne writing, from Buda-Pesth, sends to the State Department an interesting account of the methods employed in handling hogs for the markets. The pigs are weaned and driven to pasture where they are fed, at times a little barley. Later, they pick up what they can find in the harvested fields. Then they are supplied with beets, pumpkins and second-class corn. About six weeks before the time for fattening, the pigs are gradually put upon better rations to prepare them for the forced feeding of the fattening period. Pigs from 12 to 14 months old, weighing from 110 to 143 pounds, are picked out in Summer, and driven to the fattening establishments. These establishments are located near the cities and close to the markets. But little salt pork is eaten in Hungary, and with the exception of the hams and a little bacon, all the pork is eaten fresh. The largest establishment is located near Buda-Pesth, and will accommodate 125,000 hogs at one time. It is divided into sections which are separated by means of strong fences. A section capable of holding 160 hogs is 60 feet wide by 90 feet deep, thus giving nearly 35 square feet to each hog. One-third of this space is reserved as a resting place, and covered with a low shed. The floor is covered with a layer of two feet of clean sand, which is renewed as often as it becomes earthy or damp. Instinct prompts the hogs to keep this place clean. Animals that ignore the rules of cleanliness are promptly driven out by the others and sometimes offenders are bitten to death. Sand has some advantages over straw for bedding. It has natural cleansing qualities, and cleanliness helps out the price and promotes health and appetite. The floor of the yard outside of the shed is made of brick. This floor is kept clean by sweeping and washing. In one corner a square place is left for a bath. This is large enough for 20 animals at one time. Once a week it is cleaned out and filled with clean water. The feed consists entirely of corn and barley ground and mixed. The food is mixed with cold water in Summer and with warm water in Winter. Once each week the hogs receive common salt. There is always a lump of rock salt hanging up where all can lick it as they like. The amount of food varies from seven to 10 pounds for each animal per day. The hogs are kept in good appetite, the test being the contents of the trough after the meal. A dozen hogs are fed from one 15-foot trough. The fattening period lasts from five to six months. Animals are considered ripe when their shape has become compact, when they stop eating heartily and remain closely in their resting place. They gain, on this mixed corn and barley meal, nearly 20 pounds in weight for every 100 pounds of feed. In experimental feeding much higher gains have been reported. The best gain comes in the earlier part of the feeding. Summer fattening is considered most profitable by far. The diseases most dreaded are erysipelas, a disease somewhat similar to our hog cholera, colic and a sort of distemper. In erysipelas the hogs receive cold baths, and crystallized carbolic acid is added to their drinking water. This, with a change of pasture, proves a very satisfactory treatment. There appears to be no profitable treatment for cholera, prevention by cleanliness being considered the only way of avoiding it. In cases of over-feeding, doses of hydrochloric acid are given, and for indigestion hogs are simply treated to a short spell of starvation. The loss during the fattening period will average about three per cent. The inspection of imported animals is very strict, and Government officials are appointed to oversee the production and handling of the meat. Carbolic acid is the great disinfectant. The production of Hungarian pork is marked by a system and economy that might well be studied in this country. The custom of fattening large herds of hogs near the cities may never come into general practice, as most farmers believe they can manufacture their corn into pork at home most economically. If they do this they might learn from the Hungarians that the hog thinks as much of cleanliness as does any other member of the family. Clean, dry, warm quarters for the hog should always be provided, or no hogs should be kept. A hog should be permitted to bathe and keep itself clean. A good selection of breeds, good food and good care are necessary for profitable swine husbandry in large or small herds, in Hungary as well as in America, for the lessons of one country are good in another.

What Others Say

WHICH WAY SHALL THE ROWS RUN?—Prof. Armsby, of the Wis. Ex. Station, in the Farmer (St. Paul, Minn.) gives an account of an elaborate investigation upon the influence of the direction of the rows upon the warmth and moisture of the soil and the growth of crops, made by Prof. Marek, of Koenigsberg It was found, when the rows, ridges or beds had a north and south direction, the soil was decidedly warmer and drier during the day than when the east or west direction was followed. This difference was greatest with ridge culture, and least with level culture. The higher the ridges the greater the difference. As was to be expected, the ridges became warmest and driest while the furrows were least affected. The effect was the greatest during the hottest months and days. On the other hand, the soil which became warmest during the day cooled off most rapidly during the night, so that in the early morning hours, hardly any difference in the temperature of the soil was observable in the two cases. The observations upon the growth of crops were made chiefly with sugar beets. It was found that the greater moisture and coolness of the rows running east and west were most favorable for the young plants. Later in the season, however, the plants in the north and south rows overtook those in the east and west rows. At the time of harvest,

the east and west rows were found to have produced the greatest average weight of leaves per plant, while the north and south rows produced the heavier roots, and roots of a better quality for sugar making, the percentage of sugar being greater and the amount of impurities less. The experiments with other crops were less extensive and gave less decisive results. One with corn indicated that for the production of fodder an east and west direction was to be preferred. Obviously, however, the practical application of these results would require good judgment. On a soil inclined to be dry, for example, or with a crop which flourishes best in a moist soil and moderate temperature, the east and west direction might be preferable. On the other hand, the ripening process for grain and fruit, and the development of seed rather than stalks or leaves, might be favored by a north and south direction of the rows, especially upon moist land.

WORKING TEN HOURS ON THE FARM.—"If you should call on us aboutseven o'clock some evening this Summer, and see our young men all dressed up, you would hardly think we were farmers who had been at work in the dirt all day, perhaps. If you suspected from the color of our hands and faces that we were farmers, you would certainly think that we were 'expecting company.' Our boys visit the bath-room after work is done and sleek themselves up, often putting on clean clothes entirely, and then go in for a good time until nine or 10 o'clock." So writes Mr. T. B. Terry to the Albany Cultivator. He insists that farmers may be just as neat and tidy, when the day's work is over, as though they lived in town or city.

On a dairy farm one cannot make the ten-hour system work as well, on account of the milking. The morning milking must be done outside of the 10 hours; but all work may be closed up at night soon after six, usually, unless one has to go to the factory.

Mr. Terry's men have only to feed and care for the horses and milk the cows before breakfast, at 6:30, so as to begin work at seven. They often get a little time to sit down and read the papers or magazines, a good supply of which is taken, and at night they can have three hours to read if they wish.

Of course, on every farm there will be times when we have to work a little later than six o'clock. One cuts a little too much hay to get through in time, or there are only two or three rows more potatoes to cultivate to finish the piece. But Mr. Terry notices that his men "let out a link" to get through in time if it is possible. If they let out a little too much and get through at 5:30, or even five o'clock, they are not asked to do any more that day, and they know they will not be, so there is encouragement to hurry up. Even granting that those farmers who work from sun to sun do accomplish more, cannot enough be done now-a-days in ten hours? Can we not take a little more time for rest and recreation and reading, now that machinery has made it possible for us to accomplish so much more than our fathers did in the same time. Must we put in as many hours a day as they did when they had to mow and cradle by hand, now that we can mow an acre in 30 minutes, plant an acre of potatoes in two hours, one man and team doing all the work of marking out, dropping and covering, or dig the same ground in about the same time? Let us use machinery so as to make farm life a little more pleasant by having more time for recreation. The time has come when the farmer and his men can be, and should be, more social as well as reading and thinking beings. The reports from the cities, for some time past, must show a thinker that on the farmers largely depends the future welfare of this great country; hence, farmers should be well-balanced and posted men—that they may overbalance the evils of the city and take more hand in the making and executing of our laws.

EDITOR CHEEVER says, in the New England Homestead, that Mr. Isaac A. Carver, of Leeds Center, Me., writes that he has obtained very satisfactory results from crossing Galloway cows with Jersey and Short-horn bulls. Five years ago he began with five Galloway cows, using a Jersey bull for one and a Short-horn for the other four. Last year he patronized a pure-bred polled Angus, and has a fine lot of black polled cattle of various ages, from calves upward. The grade cows have proved very good butter-makers, and Mr. Carver's milk is admitted to be the best that goes to the cheese factory in the vicinity. He is very much pleased with the results of his experiments in breeding grade polled dairy cows.

PROF. JORDAN, of the Maine Experiment Station, makes the following good point in regard to the comparative value of chemical fertilizers:

There is one point in connection with the excess of selling price, to which attention should be called, which is that the same excess of selling price over valuation in two cases does not necessarily mean that one fertilizer is sold as cheaply as the other. This can be illustrated as follows: A's fertilizer is sold for $40 per ton, and values at $32. B's fertilizer sells for $21 per ton, and has a valuation of $16. The excess of selling price is $8 in both cases, but this is only 25 per cent. of the money value of the ingredients in A's fertilizer, while it is 50 per cent. of a similar valuation of B's fertilizer. In other words, B is charging the farmers twice as much as A for handling a given quantity of plant food.

THE RURAL NEW-YORKER ON GAPES.—The editor of the Rural New-Yorker, says the Poultry Keeper, has been at work among a brood of "gaping" chicks, and after experimenting comes to the following conclusion:

It is probably true that the disease known as "gapes" kills more chickens than any other. Most of the remedies offered are uncertain, such, *e. g.*, as obliging the ailing fowls to inhale lime dust and tobacco smoke. Will kerosene kill the worm that causes gapes? Will it kill the chicken if a drop of kerosene be dropped in the trachea? We can answer "no" to the latter question, and from a single experiment we are inclined to say "yes" to the former. The writer dipped a small feather (about two inches long) into kerosene, and then carefully pushed it down the windpipe, carefully turned twice or thrice and then withdrew it. The chicken which had the gapes recovered in a few hours. The experiment is worthy of repetition.

The editor of the Poultry Keeper commenting on the above, says that the remedy is a simple one, and that he has tried it with success, and also used spirits of turpentine with benefit, but the kerosene is the safest material. What is desired is to avoid the use of the feather. To thus handle several hundred chicks is quite a job.

INTEREST ON FARM INVESTMENTS.—Editor A. W. Cheever remarks, in the New England Farmer, that Secretary Gold was right when he stated in a public agricultural meeting that the returns from labor expended are both greater and surer in agriculture than in mining. And Secretary Russell was right, too, when he said, in another agricultural meeting, that a farmer ought to be ashamed of himself if he could not get a bigger interest for his capital than the four per cent. the savings banks are now rather reluctantly paying their depositors. A cow, a hog, a sheep, or even a hen, ought to pay more than four per cent. interest on capital invested, and it will in the hands of any intelligent, willing worker who has faith in his business.

SEVERAL VARIETIES OF OATS AND WHEAT.—Mr. C. S. Plumb, whose dilligent, thorough work at the N. Y. Ex. Station is the kind to do good service to farmers, talks of wheat and oats in a late issue of our respected contemporary the Albany Cultivator. Of the many varieties of the oat that he has tested, none show a weakness of stem equal to the White Australian or Welcome. Of 79 so-called varieties, but few have had serious damage done them, excepting the White Australian, on his plot. It has been, he says, the same all through Western New York, and in 1885, from Geneva to Niagara Falls, extensive fields of this variety were to be seen lying flat on the ground. Admitting that the White Australian Oat has a splendid grain, and is a good cropper, it most certainly cannot be as profitably grown as other varieties, Mr. Plumb says. Any variety whose straw is so weak as not to enable it properly to uphold the head of grain in an average storm, has a very great weakness. Hence he freely condemns the White Australian for a grain variety, though for an early fodder crop for soiling, its soft, succulent stem, and its very foliaceous growth, make it especially desirable. He is aware that this oat is being boomed extensively; yet he insists that an oat crop that has to ripen lying flat on the ground, and be cut with a scythe, cannot be cultivated with profit.

The RURAL NEW-YORKER raised a quarter of an acre of the White Australian before it was introduced. The land was good, the season favorable. We remember that Henry Stewart visited the farm just as it was well headed out. Mr. Stewart is not a tall man certainly, but he could not see over the grain. It promised to yield, he thought, over 100 bushels to the acre. A storm a few days after lodged the most of it. Again we sowed a five-acre field to Russian White, Washington, White Australian, Probsteier and Schœnen, giving equal parts of the field to each. The season was favorable and the Australian stood as well as any. In our plots of the past season, the Welcome (White Australian) stood up as well as any, ripened and yielded as early as any. At the Rural Farm (Long Island, N. Y.) we sowed, last Spring, four acres of Clydesdale. The seed sown weighed plump 40 pounds to the bushel, and the grain harvested was the heaviest we have ever raised, though less than 40 pounds. The plants stood up quite well, though lodged in places. If there is any difference between the Clydesdale and White Australian or Welcome, we can not distinguish it.

Mr. Plumb has raised, this year, what is without doubt the finest collection of oat varieties ever grown at one time in the United States—nearly 80. Among these, he says, the strongest and best growing are the "Horse-mane" or "Side-head" oats. As in past years, they this year resist wind and rain far better than the open-panicled varieties, and certainly experiments thus far have not shown them second-rate yielders. He advocates this type of oat for general farm use, because he believes it the most profitable one a farmer can grow. Mr. P. says that with plenty of manure and good soil, no matter what the variety, so long as it be a "side-head" oat, other things being equal, it will give better results than the open-panicled.

In this we must disagree with Mr. Plumb. All the side oats that we have raised are later than the spreading-panicled oats, and will not do as well, on our land at least, in unfavorable seasons as the latter. Besides, there is more chaff and less kernel. The best yield, it is true, we have ever raised was of the Mold's Black Tartarian, a side oat; but the season was just right. The oats weighed, per bushel, about 26 pounds.

Mr. Plumb considers the question of how much seed wheat should be sown to the acre. They have at the Station four experimental plats of one-twentieth acre each, situated side by side. Alternately they were seeded with an ordinary grain drill, at the rate of one and two bushels per acre. They passed the Winter equally well, and at the time of Mr. Plumb's writing it would have been difficult to say which plats would yield the most. At the Rural Farm we sowed on six plats all the way from half a bushel to four bushels per acre. The plot which received a bushel-and-a-half yielded most.

Mr. Plumb praises the Mediterranean Hybrid (better call it Diehl-Mediterranean) Wheat as a vigorous grower, with very erect habit; head bronze, bearded and very compact, though short; averaging about 2½ inches long; grain plump, short, amber-colored and fairly heavy.

HE says of the Landreth (Armstrong) that it is one of the more recent and best candidates for public favor. Heads white, beardless, having a loose tendency; grain white or slightly amber color, of medium size and plump. This variety has a very erect growth he says; much more so than any other that is at present prominent before the public, excepting Martin's Amber, which it much resembles in almost all respects, and one is about as meritorious as the other.

As we were examining the heads of our Martin's Amber a few weeks ago we were struck with this close resemblance. Are they not the same?

Mr. Plumb says that the Washington Glass "is synonymous with the Surprise, which was sent out in the Seed Distribution of the RURAL NEW-YORKER several years ago. It is a white, beardless wheat of great excellence. The head is compact, and the spikelets produce more grains than the average wheat, often yielding four. The grain is light amber, very large and plump." He is sure more farmers could grow this wheat with profit.

We raised a lot of the Glass Wheat about eight years ago from seed secured from the Ag. Dep. at that time. The heads were of the shape of Clawson or Armstrong, *i. e.*, not larger at the top than at the bottom. The Surprise is partially club-headed with the spikelets crowded towards the top. Again, according to Mr. Wysor, the originator, the Surprise came from the same head as did the Fultzo-Clawson.

FULL AS A TICK.

MANY think favorably of the Lucretia Dewberry, and therefore dissent from the RURAL'S estimate of it. We are glad of it.....

HAVE you occasion to dig up any sods along the roadside, under the fences or in any part of the garden? Save them. Spread a layer of sods and sprinkle on it a light dressing of potash (ashes) and bone; then another layer of sods, then ashes and bone, etc., until the heap is completed. This will give you a perfect soil for flower pots.....

TEN or a dozen young ewes and lambs would be enough for a start on most places, says a writer in the Farm Journal. A good ram should be hired or purchased, and about the first of December, placed with the flock. Do not try for early lambs the first year! May is the safest and *easiest* month, and a very large per cent. of all the lambs will live if the ewes have been running about in the pasture a month, while a large per cent. will die if dropped in February, under ordinary care....

TAKE your children to the fair? Yes, by all means, unless horse-racing and lager beer selling, etc., are allowed. If so, keep them at home, and stay at home with them.....

MUCH is said at present about using the roller on land which is being fitted for wheat. The roller is good to pulverize and firm the soil. But *harrow after rolling.* That is our experience.....

SLUG-SHOT is recommended by one of our esteemed contemporaries as sure death to the cabbage-worm. It may be, but is it safe? Its killing property is arsenic in one form or another.....

THE Japan Chestnut. Don't forget it, friends, in the Fall. We have been talking with many who have been raising seedlings since our late pressing advocacy of this tree, and have nothing to take back. The Japan Chestnut, or the best varieties of it, will have its day—a near day and a long one, unless we are greatly off the track. Our contemporaries will come in line after a time.....

THE N. Y. Times says that pasturing cows has been found a wasteful practice, and will soon be abandoned for a better way. "What would be thought if we were to walk over our bread and butter?" said Sydney Smith, speaking of cows grazing in pastures. "The cow's tread, unlike that of the sheep, does not turn the land to gold, but often destroys an immense amount of fine pasture." Sydney Smith took a very reasonable way of looking at the unclean and wasteful practice, and many a farmer will confess that pasturing cows ought to be obsolete as being the reverse of economical.....

PROF. GOESSMANN, of the Massachusetts Agricultural Experimental Station, says that as long as the vital energy of an annual plant is still essentially spent in the increase of its size, as a rule, but a comparatively small amount of valuable organic compounds, as starch, sugar, etc., accumulates within its cellular tissue.....

THE amount of vegetable matter in a given weight of green fodder corn, cut at the beginning of the glazing of the kernel, is known to be not only nearly twice as large as compared with that contained in an equal weight of green corn fodder cut when just showing the tassels; it is known to be pound for pound more nutritious, for it contains more starch, more sugar, more of valuable nitrogenous matter, etc.....

IN the Orchard and Garden, Mr. D. B Wier mentions the American chestnut as an example of an individual tree ripening and shedding all its pollen six to fourteen days before there are any stigmas on the tree mature enough to receive it. Young, isolated trees, as a rule, he says, do not become fertilized therefore, but bear great crops of burrs without nuts in them. According to the past season's observations of the writer upon a few trees, the earliest catkins do bloom before the stigmas of the cone-like female flowers seem to be receptive, while the later ones bloom and shed their pollen at the same time. We know of single trees far away from others that bear full crops.....

DR. HOSKINS thinks that one of the strangest of the many strange trade conditions of this country is the importation of potatoes. We have a duty of 15 cents a bushel, or at present prices in New York, 32 per cent *ad valorem*, yet this does not prevent the importation of an average of about $4,000,000 worth every year. England, Germany, Bermuda and Nova Scotia are sending potatoes into this country every day, and at the same time our farmers cannot get a remunerative price for this product. What is the cause? The same cause that is deciding many other agricultural problems in this country against the agriculturist—internal transportation. It costs more to take a bushel of potatoes by rail from Albany to New York, than from Liverpool to New York by steamer.....

GALVANIZED barb wire, which costs five cents a pound (75 cents will buy 220 feet), is acknowledged by all scientists to be a very good conductor of electricity. Double the wire and twist into a cable, which will make it four-ply, or four strands. Put one end in the well, cistern or moist earth, and carry the other up over your buildings and along the gables, passing over the chimney or highest points of the building. Fasten to the woodwork with common fence staples. The electricity will not leave as good a conductor as galvanized wire to follow dry lumber. Thus you have the best lightning rod that can be made for less than $1.00, all told. So says the Vermont Watchman.....

DR. MARCKER is quoted by Prof. Johnson as saying that since by the absorption in the soil all potash salts pass into combination with silica, it is of no consequence as far as supplying a deficiency of potash is concerned, whether muriate or sulphate is used. Frequently, therefore, the cheapest form of potash is the best .....

DR. MARCKER also says that there is no reason to believe that the potash salts containing chlorine are injurious to vegetation; on the contrary, the muriate is often to be preferred because its potash is more thoroughly diffused in the soil. He excepts, however, potatoes and sugar beets, since their starch or sugar production is decreased by muriates. Tobacco is also injured by muriate of potash. Low-grade salts, Dr. Marcker says, or the

muriate if used, should be applied upon potato land as early as possible, at the latest in December. If the potash must be applied near planting time, only sulphate should be used. In some cases he found that potash lessened the starch and the starch diminished as the potash was applied nearer planting time.....

PROF. S. W. JOHNSON says that the best time for manuring with muriate of potash depends chiefly on the quality of the soil. For heavy soils manuring in Autumn and Winter is to be recommended; while for light and sandy soils, early Spring is the most suitable time. For meadows and all kinds of land liable to be flooded, manuring in the Spring is best.....

THE best method for employing muriate of potash for field or garden cultivation is to strew it by hand, broadcast, on the unplowed field or the rough furrow. To place the muriate near the seed in drills or hills is not advisable. It is better to mix it with an equal or double quantity of dry earth.....

THE quantity required for potash manuring is, of course, dependent on the chemical condition of the soil and also the amount of potash the crop requires. It may be taken as a general rule that 250 to 450 pounds of 80 per cent. muriate of potash for one acre are necessary.....

SUPPOSE farmers should form a society and strike for fewer hours of labor and higher prices for their products, says Mr. Biggle in the Farm Journal. Suppose the society should resolve that the price of wheat should be $1.50 per bushel, of corn $1, of potatoes $1, and that all vegetables and fruit should bring remunerative prices. Suppose they should put every farmer's life in jeopardy who sold below the scale of rates fixed by the society, and should boycott every corporation that carried the low-priced produce, and every firm and individual that bought or used it; wouldn't things be lovely then?.....

A WRITER in the Cultivator says that stock husbandry must be the foundation of all long-continued successful farming. Any other system is one of slow exhaustion and ultimate sterility.....

HE further estimates that a ton of pea meal will yield in the manure $14.28 worth of fertilizing elements, while one ton of Swede turnips will give only 91 cents. ... .

WE presume that 99-100 of all the wheat heads selected as "different from the variety sown," and again sown as new wheats, are old kinds: that is, old in other parts of this country or some other.....

NO, IF imitation-butter people had sold their compound for what it is, the idea of taxing it would never have been entertained.....

PUT your skim-milk and buttermilk into calves or pigs, supplementing them with corn meal and a sprinkling of oil meal, says the U. S. Dairyman. Give both calves and pigs room to move around in and keep clean. Both will be benefited by having good grass to feed on in addition to what is carried to them. It will keep them healthy and contented, and promote growth. Plenty of clover is a good preventive of hog cholera.....

MAJOR ALVORD is of the opinion that irregular milking affects the size of the fat globules. When milked irregularly, the globules are smaller, though more numerous .....

THE oleomargarine people tell us that half the wine sold is not real wine at all, but an imitation of wine. Why, then, they ask, should the law not oblige them to sell it for what it is? Truly, why not?.....

AT this season of the year swale and swamp water is simply abominable, says the Dairyman. It is full of germs of decay, corruption and disease. Bacteria, and all sorts of disease-engendering spores are contained in stagnant water. When drank by human beings its effects are said to be malarial. The effect on cows is similar. It makes them sick and feverish, and causes them to give feverish and unwholesome milk. Pure brook, spring or well water is a requisite in the production of sound, wholesome milk. And the water must be easily accessible, for cows will not travel long distances for water, in the hot sun, until they suffer badly for want of it. When they reach it they will drink to excess. This will also make them feverish and sick and spoil the milk. See that they have plenty of clean, sweet water, easy to reach .....

Is there any valid reason why, by proper selection and breeding, the large milk flow of the Holstein-Friesian may not be made as rich as the smaller one of the Jersey, asks the above journal? She does not give more milk in proportion to her size, than the Jersey does. If we can add the secretion of a little more fat, all drawn from carbonaceous material, why should it be any more of a tax to her system than it is to that of the Jersey? It looks reasonable that by breeding and feeding more fat may be secured. This done, the Holstein-Friesian cow would be the ideal "general purpose" cow of the world. Is not a hint to the owners of that breed sufficient.....

CHEESE that is easily crumbled is digestible, and may be eaten without fear. It is the India-rubber article that gives one a fit of the blues.....

BUTTER, butter, wondrous fair!
How I wonder what you are.
Are you really what you seem,
Are you made of grease or cream?.....

Everywhere.

TRANSCONTINENTAL LETTERS.—LXI.

MARY WAGER-FISHER.

Professor Hilgard; Department of Agriculture in the California University; exotics in California; mixed husbandry needed; silk culture, a failure in flush times, a possible success now; females in agriculture; felling trees with giant powder; ground-squirrel nuisance.

I HAD a talk with Professor Hilgard, of the California State University, concerning the outlook of silk culture in this State. Professor Hilgard's name is a familiar one to RURAL readers, and I was delighted to find him to be a very charming gentleman, and he has the reputation also of being "a very good man." He is of German birth, and speaks with a noticeable but entirely pleasing accent. He is of medium hight, rather slight in figure, has blue eyes and is a man of quick and active temperament. He is at the head of the Agricultural Department of the University, which, so far as I have been able to judge, does for California very much what the Agricultural Department at Washington does for the United States, omitting its blunders. So far as training young men for agricultural pursuits, it accomplishes little. Occasionally a young man, after finishing his collegiate course, tarries a little longer for agricultural lore, if he purposes farming, studies the analyses of soils, and learns where to plant almonds and where not to try olive culture.

The great value of the Department is in its experimental and distributing station—sending out plants, cuttings, etc., all over the State. It is probably due in large part to this that California has become so rapidly the home of a multitude of exotics, ornamental and useful in a striking degree. In the experimental grounds, one can see some things growing that he has probably not seen elsewhere in the United States—cinchona, for example. This plant, although growing finely in the open ground, had been furnished with winter protection by a rampart of earth and a framework around it covered with bagging; but the Professor thought this provision might have been dispensed with. Chinese bamboo, a very graceful plant, does well here. Professor Hilgard believes in the cultivation of cotton, which has been successfully grown all the way from the Mexican boundary to Shasta County, and even tea for California; and it is quite evident that the agricultural resources of the State have only begun to be developed. Asia, Japan, Australia, the islands of the sea, are all being levied upon to increase the variety of California products, and it is surprising to note the variety of fruits that flourish in any one nursery. Times have so changed since the days of '49, that one rarely hears of mining, but on every hand of the production of fruit and grains.

But to return to silk culture. Mulberry trees do admirably here, and the rainless Summers are good for silk-worms, as rain and wet tend to mold and mildew. The climate of China and Japan is more equable, but the California climate, in its way, is the worst drawback the State has. The people depend too much upon it, and place too little reliance upon industry and economy for success. It is a common remark, that the reason so many farmers fail in California is because they plant but one crop—and then "go fishing." If that crop fails, all fails, and they have nothing left to depend upon. But more versatility in farming is being practiced. The climate in another way is not good for silk-worm eggs—it is not cold enough, and the eggs hatch the worms before the mulberry leaves are out, and they have to be fed on lettuce—which is something like rearing a baby on a bottle. But the women who form the silk culture association—and women have a peculiar persistency in trying to make a success of indifferent things—have impressed Prof. Hilgard into their service. An experimental and distributing silk-worm station has been established at Piedmont, a beautiful region near Oakland, where the hatching of the eggs will be retarded by artificial cold—and whence they will be distributed at the proper time. So far, so good. But the successful and profitable cultivation of the silk-worm has so far only been compassed in countries with a comparatively dense population, and where every penny is carefully looked after, and small profits are kindly regarded. But in a State sparsely as yet populated, and where until only recently nothing less than a $20 gold piece was thought worth picking up, it was nonsense to talk of silk culture. True, it was tried—on a large scale. There were shanties of silk-worms with Chinamen put in charge. It was proposed to produce cocoons on a large scale—on the wholesale plan—but the experiment was a complete failure. Now things are different. Finances are down to a nickel basis and the penny is even talked of, and will soon arrive, and there are many women in California as elsewhere, who are desirous of being able to earn a little money in an easy, quiet way, and it may be that there will be enough patience and industry developed to supply the State with cocoons for home manufacture. At San José there is a silk factory run by French weavers from Lyons, and they make very nice silk from imported material. The quality of both California cotton and silk is excellent. The cotton, so far, has been absorbed by the woolen manufacturers in mixed goods.

I don't know how well broken-down Eastern "school ma'ams" have succeeded here generally, in an agricultural way, but there are some distinguished farmerines in the State. Mrs. Hill is credited with having made a fortune of half a million in raising pyrethrum insect powder (she has invited me to visit her at harvest time in May, and if I am able to do so, I will be able to write definitely of this industry) and other women have achieved money and fame in raisins, goats, honey, citrus fruits, etc. But, after all, it is the *woman*, as it is the *man* who succeeds—and the success might come in the East as well as in the "West, by the sea."

During a stroll through the experimental garden at Berkeley, the seat of the University (open to both sexes equally) we came upon a tree that had been felled by giant powder—a method, Professor H. said, that was frequently employed in California because of its cheapness. A hole is first bored under the tree, in which the powder is placed—six pounds costing 70 cents had been used for this tree. When the tree comes down, there is no stump left to be grubbed out by hand labor, it is out of the ground, roots and all.

A great annoyance is caused to farmers by the ground squirrels which burrow in the ground. One mode of exterminating them is to smoke them to death, and there are machines for driving the smoke in their holes. These squirrels are particularly destructive to wheat.

RURAL SPECIAL REPORTS.

Delaware.

DOVER, Kent Co., August 7.—The Summer thus far has been the wettest and coldest we have had for a great many years. It is so wet that it is almost impossible to get wheat dry enough to thrash. Much that has been thrashed has to be spread and stirred in order to dry it so as to make it fit for market. Corn has not been worked as it ought to have been in consequence of the rain, and early potatoes are rotting. In this neighborhood what few peaches are left are rotting badly, and the low prices of farm products make a bad show for farmers. Corn is looking well, all things considered. I never saw young clover look so promising. Many fields are fully knee-high and in full bloom. Wheat a fair crop. Oats good. Hay fine. Millet is doing finely; some fields two feet high, while others sowed late, are six to ten inches. Berry crop good; price, low. Apple a fair crop. Quinces blighted badly; many trees nearly killed. Grapes rotting. Prices about as follows: Wheat, 75c. to 78c.; corn, 40c.; oats, 40c.; potatoes, 40c. to 45c.; butter, 16c. to 20c.; eggs, 14c.; chickens, 10c. to 12c.; cabbage, $2 to $3, per 100; other things about in proportion.

S. T. S.

Illinois.

STERLING, Whiteside Co., Aug. 4.—Frequent rains in the forepart of the season made farmers late with corn planting and late potatoes Some of the ground we could not plow until after June 1; but since the middle of May, there has been rain enough to wet the ground only once, and then only an inch, and it did not reach the potatoes. Result a very large crop of tame hay; less than half a crop of early potatoes; wheat and rye good. Oats very short and not extra filled. Strawberries stopped off at half a crop; raspberries, one-third; blackberries one-eighth. Early sweet corn fair; late field corn must have rain soon or fail. Late potatoes a failure anyhow. Pasture as dry as a bone and almost all are now feeding hay as in "Winter." Fall hay will be nothing, so we are not feeling as bright as usual, but I think we will get over it.

JAS. H. W.

Iowa.

OLIN, Jones Co., August 3.—We have had a long and severe drought, and it still continues. Grass moderate or light in quantity, but of extra quality. Small grains generally an average yield and of good quality. Corn promises to be a light crop unless it gets rain soon. Buckwheat and Hungarian, of which there is generally more or less raised every year, very poor, principally a failure. Potatoes to some extent past help. Early ones very light, indeed. Beans and onions failures. Garden vegetables generally, of very little account. Melons promise a short crop—only very few raised. Not much cane raised, must share the fate of the corn. Rural seeds promise fairly well.

I. A. B.

Missouri.

ELDON, Miller Co., July 31.—Wheat, oats and hay are all harvested and are full average crops. Corn, which is really our staple crop, is being very seriously damaged by continued dry weather; in fact, unless we have rain in a very short time the corn crop will be a failure. Pastures are getting short on account of the weather, and stock will begin to lose unless farmers commence feeding. Potatoes are good, especially early ones. Cane also promises a good crop. Considerable wheat will be sown this Fall, though not more than the average. I notice quite a number of farmers are improving their farms, so that times cannot be so very hard with all of them.

N. J. S.

South Carolina.

COLUMBIA, Richland Co., Aug. 10.—The Department of Agriculture has received 257 special reports, covering every County in the State, on the condition of the crops, and furnishes the following summary: The reports of the cotton crop with few exceptions are unfavorable. The correspondents generally concur in the opinion that a larger yield than is now anticipated will be realized if the Fall is late. The condition on the 1st of August is in Upper Carolina, 62, Middle Carolina, 66, Lower Carolina, 73; average for the State, 67, which is lower than it has been at any time since the war. Corn in many places on bottoms was totally destroyed by the Spring floods, and only a part of these was replanted. The condition is reported in Upper Carolina at 68; Middle Carolina, 74; Lower Carolina, 83; average for the State, 74. The condition of the rice crop is generally favorable, except where it has been injured by the freshets. One-half the crop is estimated as destroyed. In Georgetown the condition is reported at 84. Other crops as follows: Sorghum, 85; sugar cane, 89; peas, 80; Irish potatoes, 91, and sweet potatoes, 91.

P. A.

ANSWERS TO CORRESPONDENTS.

[Every query must be accompanied by the name and address of the writer to insure attention. Before asking a question, please see if it is not answered in our advertising columns. Ask only a few questions at one time. Put questions on a separate piece of paper.]

RAISING WATER BY POWER OF A CURRENT.

H. S. C., Harvall, Dak.—My farm is at a point on the Missouri River where there is a strong current. The house and garden are 100 rods from the river and 60 feet above it. The water is very muddy, would that make any difference? 1. Is there any inexpensive way whereby sufficient water can be forced up, by the power of the current, to irrigate two acres of garden? Would a hydraulic ram work in such a place? Would it be cheaper to use a wind-mill, and pump water out of a well 60 feet deep into a tank? How large should the mill and tank be?

ANSWERED BY HENRY STEWART.

It is quite an easy matter to raise water from a swiftly flowing river for the purpose of irrigation, and at a very small expense. Indeed, the ancient and modern system of irrigation in Egypt consists largely in the use of a wheel turned by the current and having buckets upon the rim, which raise the water and pour it into troughs that carry it on to the fields. These fields are called norias, and are exceedingly frequent along the banks of the Nile. In the case mentioned, however, the hight above the river of the land to be irrigated would call for some other device to be used with a wheel for lifting the water. This would be a force pump operated by a crank fitted to the axle of the wheel. A wheel of eight feet diameter, for instance, might be fitted in a frame built in the river; it would be provided with floats or paddles a foot square—as the paddle wheel of a steam vessel—which would be moved by

the current, thus turning the wheel. The wheel, being fitted with a fixed axle, which turns in proper bearings, would easily operate a crank, and work a force pump attached to the wheel frame. This pump, with such a wheel and a current flowing four miles an hour, would easily elevate water enough for two acres of land 60 feet above the water level. A two-inch pipe might be used which would furnish water enough for perhaps four or five acres. The whole arrangement, including pump and pipe, might cost not more than $10; and a cheap pump and iron pipe would cost perhaps $10 or $12 more. There is no reason why a competent person should not adopt this simple method to raise water enough from such a river to irrigate a whole farm, furnishing water for 200 acres at a very reasonable expense, and with less cost than that of making a long ditch. A two-inch pipe would discharge about three square inches of water, and supply about 2,000 cubic feet every 24 hours. In a very dry climate one cubic foot per second of water is sufficient to irrigate 200 acres of land. The mud in the water would be an advantage, as it would make a valuable fertilizer. A hydraulic ram would not operate in such a case as this. The power of the stream would be cheaper and more desirable than a wind engine, giving more power for the same cost, and a constant power instead of a variable one. The method of raising water above described might be varied by using the submerged propeller motor, which would work at any stage of the river, in high or low water; or by fitting the wheel on a floating platform, which would rise and fall with the river, and could be held to the bank or anchored in the river, and could be adapted to thousands of cases where water could be made useful in irrigating meadows and crops, market gardens, etc., in dry seasons. The present season is prolific of instances of this kind.

HEN MANURE, ASHES AND PLASTER.

E. E. B., Norfolk, Va.—In a quotation from Mr. Henry Stewart in a late RURAL, we are told of the great value of a mixture of hen manure, ashes and plaster; now, would not the addition of wood-ashes to hen manure liberate the ammonia, so that it would be lost?

ANSWERED BY HENRY STEWART.

The mixture of the common home-made fertilizer, poultry manure and wood-ashes, is really one of the most valuable manures, because it contains every element of plant food. But it has somewhat of the quality of soda water, viz., that it must be used as it is made, because, like this exhilarating beverage, the mixture produces a gas which escapes very rapidly and leaves a "flat, stale and unprofitable" residue. It is one of the peculiarities of alkaline substances that they have a strong action upon nitrogenous substances, converting inert nitrogen and nitrates into ammonia, which is volatile and so rapidly escapes into the atmosphere. Hence to mix ashes or lime with manure of any kind, is to start an effervescence, so to speak, as in the soda water; then is produced a volatile gas which is lost, unless the mixture is used immediately. This activity of the mixture is one of its good and useful points when one understands it, but otherwise it is a dangerous one. In all cases it should be guarded against and controlled, and this is best done by adding plaster to the mixture. Plaster is sulphate of lime, a combination of sulphuric acid and lime, and when it is brought into contact with ammonia (the carbonate is usually the form in which this exists in manures), the lime and sulphuric acid separate; the former takes carbonic acid, for which it has a stronger affinity than for sulphuric acid, from the carbonate of ammonia, and the ammonia and sulphuric acid then unite and form sulphate of ammonia, which is not volatile. The mixture is then safe, and can be kept without loss until it is used. Hence the great usefulness of plaster as a deodorizer and purifier of stables and poultry houses, as well as domestic cess-pools and drains. My own practice has been to mix plaster with the manure by dusting it thickly over the floors of poultry houses, horse stables and cow stables, thus using it where and when it will do the most good most conveniently.

SAVING CLOVER AND SORGHUM SEEDS, AND CRIBBING CORN.

L. S., Thibodaux La.—1. What is the proper way to save clover seed? 2. How are sorghum seeds saved? 3. Is there any device for putting corn in the crib direct from the wagon instead of dumping it on the ground, and then throwing it by hand into the crib? Could the corn be elevated by hydraulic pressure from water pumped into a tank by a wind engine?

ANS.—1. Clover seed is saved from the second cutting. It can be very easily gathered by using a mower with a cloth attached to the cutter-bar, upon which the heads gather, and can be raked off by a boy following, with a light, wide rake. To separate the seed, it is run through a machine called a huller, which rubs the pods and breaks them, and so liberates the seed. Except for market and for ordinary sowing, the rough, unhulled seed may be used, sown on the freshly harrowed soil and covered with a brush harrow or smoothing plank frame. We have separated the seed from the hulls reasonably well by using a common thrashing machine with a bag over the discharge opening, so confining the chaff and choking the machine, and making it discharge so slowly that the hulls are rubbed to pieces and the seed freed. So much seed always remains in the chaff that it pays to sow it on the meadows and pasture lots as a reinforcement. 2. The seed of sorghum is thrashed out with flails, the heads being cut when the canes are trimmed, and saved for the purpose. 3. The most effective way of unloading corn is by elevating the whole load, the wagon-box with its contents, and dumping it into the crib. This can be done by simple machinery made to wind up a rope running through some blocks, and then tipping the wagon-box. An elevator with large cups could be made, into which the corn could be shoveled; but this method would not be much saving of labor. An excellent method is to have boxes holding each a bushel, made light of strips, and easily lifted. The corn is thrown into these boxes as it is gathered; they are lifted into the wagons and taken to the crib, and emptied very quickly. A hundred or more of these harvesting boxes would be exceedingly useful for this and other purposes. There is no gain in using water for the purpose mentioned, but a loss of power, and it would be better to use the power directly.

SMALL FRUIT QUERIES.

F. C., Leomenster, Mass.—1. What are the best varieties of black and red raspberries for home and market in this section? 2. Is it true that the Shaffer throws out no suckers? 3. What are the best sorts of strawberries? 4. Who is a reliable nurseryman near here? 5. Can upland or other wild cedar be transplanted this Fall? 6. Can the tall sort of shadbush be successfully transplanted in August or September? 7. My quince trees bear a great many small, dead twigs, some say the cause is fire blight; isn't the injury due to the lack or presence of something in the soil, which is wet? 8. Is the Versaillaise the largest and best currant? 9. What is the best gooseberry free from mildew? 10. What is the surest way to kill Crab Grass? 11. What is the best blackberry? 12. Is any thornless raspberry or blackberry profitable for market?

ANS.—Red: Hansell, Marlboro, Cuthbert. Yellow: we are inclined to think that Golden Queen will prove the best. Black: Souhegan. Try the Hilborn and Earhart Everbearing. 2. It throws out suckers sparingly. 3. For market we should name the Crescent, Jewell and Sharpless. For home the Cumberland, Downing and Parry. 4. Stephen Hoyt's Sons, New Canaan, Ct.; Hale Bros., South Glastonbury, Ct. 5. We should wait until Spring. Select small plants with all the earth about the roots possible. 6. Yes, in September. 7. We cannot say. 8. We prefer Fay's as the best red. 9. Downing. 10. Cultivation when the soil is dry. 11. Probably the Dorchester is best for you. We prefer the Kittatinny, its only failing being tenderness. The Snyder and Taylor are hardy. Fruit good, but not large. 12. No. We do not know what the berry which you speak about is from your description. We should like to try a plant.

"BLIGHT" IN CURRANTS AND CHERRIES.

J. J., Toronto, Can.—A blight fell on some of my cherries and currants this year when the fruit was half-grown in some cases, and well formed in others. The Cherry, White Grape and Fay's Prolific Currant were nearly all destroyed, while Prince Alberts in the same row were not touched. Coe's Transparent, Downer's Late and Governor Wood Cherries were all badly blighted, while the Dukes and Morrellos in the same rows were not touched in leaf or fruit. The fruit of the affected trees shriveled up and fell to the ground. What was it?

ANS.—The description of the "blight" referred to is not sufficiently full and clear to give us a clue to its nature, especially as it attacks species so distinct as currants and cherries. We have seen the foliage of currant plants badly injured, and the crop made nearly abortive, by thrip, seemingly identical with that of the rose and the apple. This season, our currants, both Fay and Red Dutch, have lost their foliage sooner than usual, but not to the injury of the present crop, though probably weakening the plants for next season. We have also noticed the appearance of a partial russeting of the fruit, especially of the Fay, which is perhaps the work of a mite such as produces the russeting of the orange. Unless the blight spoken of is general in our correspondent's neighborhood, it is probable that it may be due to some local cause, either in the soil or air. Are there chemical works near by, or some manufacture from which fumes noxious to vegetation might arise? Does the soil need under-draining, or is it a clay soil, heavily manured from the stable? The latter would be likely to damage cherry trees, but hardly currants.

FOOD FOR POULTRY.

G. C., Summit Sta., Ohio.—It is not desirable to depend upon any single grain as a food for poultry. Wheat gives the best satisfaction where eggs are required or for the feeding of young chickens. Rye fed alone would not give as good returns as the wheat, but mixed with wheat, or fed on alternate days or weeks, it will prove valuable. The value of rye as a food for stock is not generally understood, and only rarely considered. In many places it is very successfully used for fattening hogs, and many farmers esteem it highly as a food for horses. Compared with other grains, the chemical constituents of rye are found as follows in the tables prepared by Dr. Jenkins:

	Total dry matter.	Protein.	Fat.
Rye	88.40	10.60	1.70
Wheat	89.56	11.87	2.13
Corn	89.51	10.62	5.49
Oats	89.30	11.30	5.00
Sweet Corn	91.41	11.71	8.31
Barley	88.90	12.40	1.80
Buckwheat	87.40	10.00	2.25

Judging from the chemical analyses given, rye ranks low as a stock food, but practical feeding shows better results.

WOOL WASTE AS A FERTILIZER.

H. H. Somerville, N. J.—I can buy wool waste for 50c. a load half a mile away; will it pay to use it as a fertilizer, and what is the best way of utilizing it? A good deal of it is wasted, because farmers don't think much of it.

ANS.—Here is a mine of wealth going to waste. Wool contains 17 per cent. of nitrogen; in an unavailable form at the moment, it is true, but in the form of the waste of woolen mills it slowly decomposes in the soil and gives up its nitrogen to the crops. Its nitrogen is in such a form that it is one of the most lasting of fertilizers. It is highly valued, and hop growers find it the most useful manure they can procure for their gardens—and English hop growers pay $25 to $50 a ton for it. If H. H. is wise he will make a long contract without delay for this waste and secure a bonanza. It can be used for any crop, spread on the plowed ground and harrowed in. It is excellent for wheat when thus used; also for corn, turnips and garden crops as well as for a top-dressing in the form of compost for grass land; and, in fact, for anything, any where.

Miscellaneous.

J. W. W., St. Mary's, Pa.—1. Does hemlock saw-dust keep moisture in the soil? 2. Does it warm or cool the soil? 3. Does it do any harm? 4. How does it compare with leaves as an absorbent of ammonia in liquid manure when used for bedding stock? 5. Would it be well to use it, after it leaves the stable, on a clay-loam truck patch?

ANS.—1. If applied as a mulch it would tend to prevent evaporation from the soil, and would therefore keep it moist. 2. Cools it by intercepting the sun's rays. 3. Yes, it harbors insects of various kinds; makes the soil sour and mouldy. 4. It is a better absorbent than leaves by far. 5. No, we should not use it unless rotted in a compost heap.

E. M. C., Pittsburg, Kan.—My white grape vine, a week earlier than Concord, regularly blasts, having never borne more than two pieces of clusters. It is about the size of the Delaware and sweet, with a thin, deeply serrated leaf, and is a rampant grower. I suppose the cause of its blasting is that it isn't properly fertilized; what would be a good sort with which to fertilize it?

ANS.—Yes; no doubt the flowers are imperfect. It *may* be, however, that the pistils are imperfect, in which case there is no help. Try Moore's Early, Lady, Cottage, Elvira, El Dorado, Florence, Early Victor or Jessica.

W. F. K., Clinton, La.—Of the grasses sent for name, No. 1 is Panicum Texanum, Texas Millet, native of Texas, first described by Prof. S. B. Buckley in 1866. It is of vigorous growth, with many culms crowded at the bottom, succulent and yielding a large amount of forage. It is by some considered far superior to any grass for that climate. It is an annual, growing five feet high. It is a much more certain crop than millet. All kinds of stock relish it. It requires rich soils. Mr. Ravenel has cultivated it in South Carolina, where it is naturalized and freely seeding and propagating itself. No. 2, Leptochloa mucronata—Feather or Slender Grass. This is not of much agricultural value. It is nutritious, but several acres would be required to produce a ton of hay.

J. H., Dent, Ohio.—On new, rich land, will Diehl-Mediterranean Wheat lodge? Velvet Chaff did not on similar soil.

ANS.—Velvet Chaff Wheats, with us have always developed weak culms. The Diehl-Mediterranean does not yield as well on the RURAL'S Long Island Farm as it appears to do in other climates. It has never lodged, however, and we fancy that the straw is as strong as that of any other variety. On Mr. Woodward's (Western N. Y.) farm the D.-M. is highly prized.

E. E. B., Norfolk Co., Va.—To make white-wash, take a peck of salt dissolved in water, one-half bushel of well-burned, fresh quick-lime and two buckets of boiling water. Put the water and salt and lime into a barrel and put on a cover to keep the steam inside. Make the wash about as thick as thin cream, and strain through a cloth. Soak a pound of glue in water. Add three pounds of rice flour and mix. Add this to the white-wash and put in enough hot water to make the mass of the right consistency.

DISCUSSION.

W. H. T., ST. GILES, CANADA.—To pick up the salt question again. In Summer my cattle are fed salt, because my wife, like others, will not believe it is unnecessary. The cows are enticed to eat it by putting it into their feed. Then they only eat a tablespoonful once in 10 to 15 days. My horse eats none at all, but the sheep want it every day. My pasture contains about everything in the vegetable kingdom, and the cattle eat more or less of everything in it. In Winter my cows and calves get a feed daily of roots, and the latter have oats. They average about a tablespoonful of salt every week. The other cattle have two feeds per day, one of hay, cut green, and one of straw cut before full maturity and the lightest grains left at thrashing. These cattle get no salt at all during the six months of Winter. They keep in fine condition, slick and fat. I do not pretend to say that they keep in good condition *because* I feed them no salt, but that they are so notwithstanding the fact that I feed no salt. The argument that salt goes through the body unchanged is no argument against its utility. It is certainly separated from the other food before being evacuated, and does not follow the greater vessels of the body to be as speedily gotten rid of as possible, as the injurious or neuter bodies are. It is taken up and found, if not utilized, in the most minute vessels of the body. I firmly believe, however, that by far too much salt is fed to stock ordinarily. I would not on any account allow my cattle free access to salt. My idea is that cattle, like men, inherit a predisposition to several tastes and habits. Salt-fed cattle will be sure to bring forth salt-desiring young. After feeding salt to stock for many generations, it would be cruelty to deprive their progeny entirely of it. It seems evident to me that plants in more inland counties do not contain as much saline matter as do those nearer the sea coast. This may explain why animals on the prairies or in mountainous countries will travel so far after salt. I claim that when we feed an unnatural diet containing a less proportion of salt than is found in well cured green hay, and light grain cut with the straw, we should make up the deficiency and not otherwise.

J. M. M., Clay Co., Fla.—J. C. S., page 495, should renew the wood of his grape-vines by growing new wood each year, and cut away the wood that has borne fruit at the close of each season, near the ground. He will thus avoid all danger of his grapes rotting on the vines if the soil is properly drained and fertilized. I use cloth for bags for grapes, to keep off birds and insects. These bags will last five years if taken care of. I have 500 vines that I shall trellis with bird-proof galvanized wire.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING August 14 1886.

H. H.—F. B. G.—G. M. W.—A. G. B., potatoes received and planted.—E. W. S.—M. E. S.—S. H. R.—E. L. S.—W. W. F.—J. M. W.—T. H. H.—J. J.—W. F. B.—S. E. K.—E. M. C.—H. A. R.—P. H.—E. T. I.—C. S. P., thanks.—A. & H.—S. H. R.—N. J. S.—F. C.—R. J. F.—D. B. S. thanks.—R. W. F.—J. H.—R. S. C.—A. E. M. C.—S. H. R.—W. F. B.—H. S.—E. R.—J. R.—R. C. H.—M. J. C.—C. S. B.—A. S.—J. A.—G. B.—H. H.—W. H.—I. S. W.—S. L. F.—E. C. M., special will be dated Sept. 4.—F. D. C.—R. M. C., the RURAL'S next Seed Distribution will be announced probably in October.—E. M.—E. T. -R. C.—W. F. B.—E. M. R.—C.—T. F. C., we have received the corn.—E. B.—O. S.—L. C., thanks.—G. L. D.—"Atlantic."—S. C. C. —F.—J. R.—M. W., we should be glad to have any of our readers send us flower seeds in small quantities for our Seed Distribution. The Garden Treasures can not be too varied.—E. T. I.—E. W.—N. L.—A. S.—O. S. B.—W. F. B.—P. W. J.—M. D. H.—E. R. C—G. K.—E. P. P.—J. W. W.—H. M.—P. O. C.—I. S.—I. S. N.—C. A. G. —E. N.—J. M. B.

Miscellaneous Advertising.

LIVER COMPLAINT
CURE GUARANTEED

Dyspepsia, Constipation, Indigestion, Jaundice, Sick Headache, all result from a diseased Liver, and are symptoms of Liver Complaint. To all suffering, I will send a Valuable Treatise, with full particulars for home treatment, **FREE**

Dr. H. C. TYLER, DEEP RIVER, CONN.

THE
RURAL NEW-YORKER.
A National Journal for Country and Suburban Homes.

Conducted by
ELBERT S. CARMAN.

Address
THE RURAL NEW-YORKER,
No. 34 PARK ROW, New York.

SATURDAY, AUGUST 21, 1886.

HAS Simon's Plum fruited with any of our readers? If so, we would be glad to hear about it.

☞ *The SUPPLEMENT of the RURAL NEW-YORKER Special to be issued Sept. 4th will be mailed to subscribers and all applicants from its date until next May or June.*

Advertisements for the Supplement should be sent in at once. The price will be 50 cents per line to all. Advertising patrons need never apply to us for special rates. We have no special rates.

THE plot upon which our experiments with different fertilizers upon potatoes were made this year, is about one-eighth of an acre. Two men were engaged 16 hours of last week in digging, weighing and counting these potatoes. The yield of the entire plot will not exceed 90 bushels to the acre. Some of the trenches yielded not over 25 bushels—others as high, probably, as 400. The longer we are engaged in purely experimental farming, the more evident it becomes that the average farmer can not afford to experiment in a careful, systematic way for himself. Hence the value of Experiment Stations, if only they be conducted by intelligent, earnest, practical men.

IN the RURAL'S potato experiments of the present year, the potatoes fertilized (separately) with acid phosphate and muriate of potash were more corroded, so to express it, than those fertilized with bone or sulphate of potash. Whether this corrosion of the surface was due to wire-worms or to a fungus, or both, we cannot say. The entire report, which, we think, will be of special interest to all readers who use, or intend to use, concentrated fertilizers, will appear in a few weeks. It strengthens our previous experiments, which, in the worn-out soil where they were made, tell us that only *complete* fertilizers will materially increase the crop.

DOES SCARLET FEVER COME FROM THE COW?

EARLY this year, something like an epidemic of scarlet fever occurred in a part of London, and strict investigation showed that it started among the customers of a certain dairy. The supply of milk from that source having been stopped, the cases grew fewer. The strictest search, however, could find no cases of fever among the people at the dairy, and the cows appeared in fairly good health. At length it was noticed that there were sores on the milk bags of some, and that along the back and on the tail, the hair did not grow firmly. The beasts were killed, and it was found that their lungs, livers and kidneys were affected. The loose hair and the local sores, like the red skin in man, were only outward signs of a disease tainting the entire system. A dog and a calf were inoculated by virus from the sores on the udders, and in each case the diagnosis was confirmed by the post-mortem. It has long been known that the cause of scarlet fever is as specific as that of yellow fever or dyphtheria; that it is carried very easily for long distances, and that milk can be a medium of carrying it from house to house; but it was thought it must be first contaminated from a human source. Beyond this, science has never hitherto been able to conjecture how or where it originated. From the above discovery, however, the honor of which is due to Drs. Power and Klein, it is now claimed that it starts from the cow, like cow-pox, or like rabies from the dog or glanders from the horse. The disease was identified in the cows by well known symptoms; it was made to reproduce itself in other animals, and it was shown that it produced scarlet fever in man. The doctors believe the milk in the udders of affected cows is wholesome; but in milking, it becomes charged with disease germs which rapidly multiply. They claim to have seen the chain-like disease germ (streptococcus) and to have cultivated it in pure milk more easily and as certainly as plants can be raised from seed. Years ago Dr. Peters, of New York, during a virulent outbreak of the disease here, concluded that it afflicted the lower animals as well as man, and another physician declared it could be prevented by inoculation. Have the English physicians drawn too wide an inference from insufficient data? In any case, what American doctor will earn the great honor justly due to the discoverer of some antidote against this most deadly of children's diseases.

MORE VETERINARIANS.

IF a fair proportion of the young men who graduate at medical schools each year would devote themselves to the practice of veterinary science, the world would be better off. The last census gave us 64,137 lawyers and 85,671 physicians, and these numbers increase at the rate of 1,000 or more each year. At the same time there were but 2,130 veterinary surgeons. We have doctors enough already. The more we have the more easily shall we be inclined to believe ourselves sick. We need better treatment for our animals. The live stock of the country is increasing in value with great rapidity. Over $300,000,000 have been added to the value of our cattle alone by care in selection and breeding. Where men have $500 or more invested in a single animal, they will be careful to consult authorities as to its health. The business of the veterinarian will be sure to grow. Every large stableman or breeder will eventually be forced to employ some one to look after the health of his animals. There will be money in such a position; it is an honorable profession and it offers a wide range for usefulness. Farmers' boys who desire to obtain an education and enter some profession may well turn their attention to veterinary science. Boys brought up on the farm, accustomed to watch animals in health and disease, will find no inconsiderable portion of the course in veterinary mastered when they come to attend the lectures. It will not be like making a complete change in his habits of thinking and living as he would be obliged to do in order to enter one of the so-called genteel professions. There is hardly a line of work in which success is more likely to follow hard and earnest labor. Some of the young men who have turned their thoughts towards the work of experimenting with the health of their fellow men will do well to consider the chances for energetic and studious men in veterinary science.

OLEOMARGARINE.

NEARLY three-fourths of the oleomargarine made in this country is turned out at Chicago. The large local manufacturers met there Wednesday last to consult with the Collector of Internal Revenue about the new law and its effects. It was at first determined to test the constitutionality of the law; but on due consideration it seems hardly probable this step will now be taken. A test case would be expensive and could not be decided under three years; and even if successful would certainly lead to the passage of another statute less open to legal objection and more grievous to them. The great objection is to the tax of $48 a year on retailers. It is thought that many of these will decline to pay this impost for the privilege of selling bogus butter under present risks and restrictions. The wholesale dealers also want the retailers to be allowed to put the concoction into any dish or jar brought by a customer simply putting a printed statement around it before putting it in the vessel.

The Commissioner of Inland Revenue has sent out circulars to the makers of oleo and the local collectors in the chief centers of the trade, asking for suggestions as to the most convenient yet effective means of carrying the law into effect. The Bureau of Printing and Engraving has begun to prepare the plates for printing the oleomargarine internal revenue stamps. They are to be in form and design like the tobacco stamps, and to be for 10, 20, 40, 80 cents and $1. The stuff is, it seems, to be put up in packages of from 10 to 60 pounds generally, and in Winter in barrels of 200 pound. It is under consideration whether it can be put up in stone jars. Thursday last, the Civil Service Commissioners at Washington gave directions that the examiners should devote their entire time to the examinations of candidates for clerkships and other appointments rendered necessary to carry the law into effect.

In this city, the directors of the self-constituted American Agricultural and Dairy Association, composed of a handful of large butter and salt dealers, but which has put itself very prominently forward in advocating the measure, met the other day, and passed resolutions of thanks to the Congressmen and others who were the most energetic supporters of the bill. It reported that it had spent $7,090.32 in championing the bill, of which $5,659 had been collected from the butter and salt dealers of this city, and the remainder has still to be contributed.

As a result of the passage of the law the price of butter has gone up two cents a pound within the last fortnight. The Commissioner of Internal Revenue says that if "moonshine" oleo factories are suppressed as vigorously as illicit distilleries the law may have an effect entirely different from what its advocates anticipated. One of its first effects will be to drive small manufacturers out of the business, thereby increasing the profits of the larger establishments which will have a monopoly of the trade. It is thought they may entirey evade the law by coloring the stuff pink or green; for, as the President pointed out, the statute applies to a substance "made in imitation or semblance of butter," and they would thus escape the reproach conveyed in another part of the President's messsge—that "hardly a pound ever entered the poor man's house under its real name and in its real character."

FOREST FIRES.

DURING the past few weeks, forest fires, nearly unequaled in extent and in the value of the property destroyed, have raged in different parts of the Northern States. From Maine to Minnesota the air has been black and heavy with the smoke and ashes of burning forests of white pine, spruce, beech and hemlock. A few weeks ago, the forests in the upper counties of Maine, the slopes of the White Mountains in New Hampshire, and to a less extent in parts of Vermont were sadly laid waste by extensive fires, which destroyed hundreds of thousands of dollars' worth of timber, besides much other property. Smaller fires have darkened the sky by day, and lit it up by night, along the timber regions of Northern New York, and westward through Ontario, Canada. The most destructive of all, however, have been raging for the last week in the great pine belt of upper Michigan and Wisconsin. Here lay the most valuable and productive white pine in the world, while beech and maple also abounded. The reports of disaster come from widely separated parts of both States. The two Michigan peninsulas are equally affected. Thousands of acres of valuable timber have been destroyed all along the Lake Superior water-shed of the upper Michigan peninsula, while reports tell of widely scattered devastation in various parts in the northern part of the lower peninsula also. Bay, Mecosta, Newago and Lake Counties have been heavy sufferers, and the fires are still spreading.

Still greater has been the devastation in Wisconsin. Vast areas of timber have been destroyed on the waters of the Upper Chippewa and on the streams that flow into the Menominee both from Wisconsin and Michigan. A great line of flame and smoke with a frontage 100 miles in extent, is reported along the St. Paul Railroad east of Ashland. Other conflagrations are reported from various widely separated parts of the upper section of the State.

The destruction of standing timber must be enormous. A careful estimate of the pine burned in the Menominee region alone places it at upwards of 100,000,000 feet, and this is a small area compared with the vast region devastated. An enormous amount of cut-timber, lumber, shingles and cord wood has also been destroyed. A great deal of dressed lumber has met with the same fate, 150,000 feet of chair stock, for instance, were burnt up, with the factory, at Marshfield. Farm-houses, outbuildings, fences, standing and harvested grain and all kinds of fixed farm property have been swept away. Several towns have been threatened with destruction, and some have been injured to a greater or less extent, while a few villages have been entirely destroyed. Such was the fate of Spencer where the loss was over $300,000. It is greatly feared that some lives were lost among those traveling, hunting or working in the forests and settlers in isolated clearings.

Great as must be the present loss, however by the destruction of these great areas of timber, and of prosperous villages and farm property, it is probable that the country will suffer more from the permanent injury done to the soil by the conflagration. Forest fires destroy not only the forests, but the soil that produces them. Many years, perhaps generations, must pass away before the slow growth and decay of humbler vegetation can build up a fresh soil rich enough in plant food for new forests to thrive and mature. The devastated region is naturally a forest country. Its severe climate, sandy and often barren soil, and inadequate natural drainage, render it unsuited for ordinary agriculture; while pine and several other species of trees grow there to perfection, and the most profitable use to which nearly the whole region could be devoted, would be the perpetual production of forests.

The area of forests burned in the census year of 1880, as estimated by Professor Sargent, was 10,274,089 acres, involving a loss of $25,462,250, besides the incalculable injury done to the soil by rendering it, in most cases, incapable of reforesting. It is highly probable that the forests consumed every year by fire are as extensive as those removed by the axe. The most numerous causes of fire in Michigan and Wisconsin, as in the rest of the country, are the burning of trees and brush-wood to clear the land; carelessness on the part of hunters, who leave the embers of their fires unheeded, or throw brands or lighted matches among the dry grass, or set this ablaze with ignited gun wadding; sparks from locomotives; fires made by settlers for improving pasturage; and fires kindled from sheer malice. The wide extent and rapid course of the fires in Michigan and Wisconsin, are also in a great measure due to the methods pursued by the lumbermen of the region. Long ago they cut down all the trees that answered their purpose, trimmed them up and left the trimmings behind. These in course of time became as dry as tinder, and only a spark was needed to make a blaze.

What can be done to put an end to or minimize the danger from these causes? Evidently settlers must be more careful about clearing land and improving pastures by means of fire. They and their fellows will be the greatest sufferers through carelessness; but in addition to this cause for caution, heavy penalties for recklessness should be enacted. The carelessness of hunters and travelers should also be severely punished, whenever detection is possible. Unless laws are made and enforced in this direction forest fires must increase with the increase of our population. Railroad corporations operating in forest regions should be compelled by law to provide safeguards against the needless spread of fire. If carelessness deserves punishment, how much more so does malice? Little mercy should be shown to the wretches who purposely start a conflagration which may cause an incalculable loss of property and even life.

The lessons taught by the misfortunes of Michigan and Wisconsin should teach the people of every well-timbered State the importance of passing appropriate laws for the protection of forest property, and make their enforcement possible by teaching a true appreciation of the value of forests to the community and nation. Our forests have been too much reduced by a century of mismanagement, to allow the country to regard with indifference the losses incurred within the last few weeks.

BREVITIES.

A FIT subject for our agricultural Ex. Stations to investigate: the relative value of sulphate and muriate of potash.

SUPPOSE you exclude from the food of any animal either phosphoric acid, potash or nitrogen. Would the animal thrive? No more than the plant, we believe.

THE American Agricultural and Dairy Association, which was started here a short time ago by some butter and salt dealers, who were disgruntled at the refusal of the old American Agricultural Association to permit them to run it, has called "a National Convention of all interested in agriculture," etc., to meet in Philadelphia, next September 15 and 16. It says "proposals are now making to combine all the agricultural, dairy, live-stock and wool growers' associations in this organization for the most perfect work, and we shall yet see in it the most powerful institution for good the country has ever had." Well, nobody could ever justly charge the President and mouth-piece of the Association with too much modesty.

ACCORDING to the August report of the Department of Agriculture the winter wheat crop amounts to 295,000,000 bushels, and there is no likelihood of any considerable variation from this estimate. The spring wheat crop is estimated by the same authority at 136,000,000 bushels, or an aggregate of 431,000,000 bushels. Our estimates on July 3rd were: Winter wheat, 295,000,000 bushels; spring wheat, 140,000,000 bushels; aggregate, 435,000,000 bushels—difference, 4,000,000, altogether in spring wheat. Our estimate was made on reports up to July 1. This was before the great injury to spring wheat by the long-continued drought; but we made allowance for considerable injury from the drought then in progress.

A COMMON dodge of swindlers, male and female, is to pretend they are begging donations for some real or pretended charity, or for some real or pretended unfortunate. Great caution should be exercised in giving anything to persons begging for known charitable institutions, unless one is acquainted with the "begger." Many impostors preteud they are authorized agents for such institutions. In case of doubt it is always best to say "No" emphatically and stick to it. Even if the agent is authorized to make collections, he or she is working, not for charity, but for the percentage allowed out of the amount collected, so that there is really no reason why one should be over-sensitive with regard to the person's feelings. The percentage varies from 15 to 50 per cent., averaging probably 25 per cent. The less known or less meritorious the charity the greater the percentage, because the harder must be the agent's work to weedle the shekels out of the public's pocket. If you want to give a donation, give it personally or send it direct.

Years ago the E.-O. was taken in by a charitable fraud, and has several times refused to be taken in by a similar trick since. Quite a ponderous, well dressed and respectable looking man called with another rather shabbily attired. No. 1 very blandly introduced No. 2 as a poor man who had just lost his wife and some children by an accident in a different part of the town, and who was seeking charity to bury them decently. In a fine Tuvydrop style he expauded on the hardship of the case and the merits of the petitioner, and was superbly thankful for the contribution given. It was only after the pair had left that it struck the E-O that he knew nothing about either of the men, and "just for fun" he followed them and had soon ample proof that they were a couple of rascals. The swindle varies considerably in details; but is always fundamentally the same. What, in the name of common seuse, is the use of an introduction of a stranger by a stranger? The latter stranger may be an acquaintance of a couple of days' or even weeks' standing, but if you know nothing about him or his business except what he tells you, he is really a stranger still. A great many of the swindles perpetrated on poor, simple-minded people are successful, because the dupes are taken in through the introduction of one stranger by another. The more benevolent, honest, open-hearted and in every way plausible stranger No. 1 is, the greater the danger and need of caution. The man who looks, talks or acts like a rascal or worthless fellow, can have little influence for evil in this line; it is the oily or brusk talker, the dapper or pouderous embodiment of respectability or jolly-good-fellowship, that does all the mischief. Beware of all strangers, and consider every man a stranger till you learn a good deal more about him than he has told you himself.

About a year ago, the RURAL urged the Department of Agriculture to take up the exposure of swindles on farmers, and gave some very cogent reasons why it should do so. It followed our advice shortly afterwards, mentioning a number of frauds already exposed in the RURAL. Though no credit was given, we were glad of the wider circulation thus given to our exposures, and are very much pleased that the Department has again had recourse to this department in a late issue of its monthly report. Old readers of the E.-O. will remember that the following frauds have been denounced here, some of them several times. We mention them briefly as a reminder to old and a caution to new readers: One fraud is the taking of orders for some subscription book—in some cases the revised New Testament—and converting such orders into notes. Still another is the one operated by the pretended agent of a Bible or tract society, who presents himself at a farm house about dinner-time, and accepts an invitation to dine on condition that he may be allowed to pay for his meal. The society, he says, requires that he should pay his way, and to prove that he has done so he asks the farmer's signature to a form of receipt which he carries with him. In course of time this receipt comes back to the farmer in the form of a note for some money filled in by the plausible swindler. A lightning-rod agent agrees to put lightning-rods about a house for $5, and presents a bill for $105—$100 for the rods and $5 for putting them up. The collection of royalties on some patented article found in the farmer's possession, the sale of worthless recipes for the manufacture of fertilizers, the sale of rights for a worthless patent process for curing tobacco, the collection of fees by pretended officials, such as boiler inspectors, the "drive-well fraud," a variety of insurance frauds, and the sale of worthless recipes for the cure of "hog cholera" or other animal diseases, are among the numerous swindling devices mentioned by the Department.

As long as there is rascality on the one side and undue credulity on the other, such swindles will continue to be practiced to a greater or less extent; but they are now practiced successfully in many cases where they might be frustrated by the simple rule of refusing to deal with irresponsible parties without any known business standing or any fixed local habitation. The only additional precautions that suggest themselves as available to the individual are the exercise of reasonable care, the use of proper means to keep informed of agricultural matters, the education of farmers' children in business law, and the use of facilities for mutual protection offered by such associations as the Patrons of Husbandry, or other farmers' organizations. There are, however, some classes of frauds—such as the sale of fertilizers under false names and the manufacture of oleomargarine for sale as butter—which demand the efficient intervention of State or national authority. But even in this matter much must depend upon intelligent concert of action among the farmers themselves, both in suggesting the proper legislation and in bringing to bear on legislature the influence necessary to insure the proper action.

STATE AND PROVINCIAL FAIRS.

1886.

(*Continued from page 533.*)

KANSAS COUNTY FAIRS.

Sedgwick, Witchita	Sept. 20, 24
Shawnee, Topeka	Sept. 28, Oct. 1
Smith, Smith Center	Sept. 14, 17
Sumner, Wellington	Sept. 7, 11
Washington Ex., Washington	Sept. 21, 24
Washington, Greenleaf	Sept. 28, 30
Blue & Kans. Valley, Manhattan	Aug. 24, 27
Emporia, Emporia	Sept. 24, 25
Kaw Valley, St. Mary's	Sept. 24, Oct. 1
LaCygne, LaCygne	Sept. 7, 10
Mystic Driving, Marion	Sept. 28, Oct. 1
Nemaha, Seneca	Sept. 14, 17
Western Kan., Hays City	Oct. 5, 8
Arkansas Valley, Witchita	Sept. 20, 24
Kansas, Central, Junction City	Sept. 21, 23

MISSOURI COUNTY FAIRS.

Audrian, Mexico	Aug. 10, 14
Charlton, Keytesville	Aug. 5, 9
Clark, Kanoka	Aug. 30, Sept. 3
Daviess, Jamesport	Sept. 7, 10
Franklin, Washington	Sept. 16, 18
Greene, Springfield	Sept. 27, Oct. 2
Johnson, Holden	Sept. 29, Oct. 3
Knox, Edina	Aug. 30, Sept. 3
Lafayette, Higginsville	Aug. 24, 28
Lawrence, Pierce City	Sept. 21, 24
Lewis, La Grange	Sept. 28, Oct. 2
Marion, Palmyra	Oct. 12, 16
Monroe, Paris	Sept. 14, 18
Montgomery, Montgomery	Sept. 14
Nodaway, Maryville	Aug. 23, 28
Platte, Platte City	Aug. 24, 28
Saline, Marshall	Aug. 30, Sept. 4
Scotland, Memphis	Sept. 7, 10
Shelby, Shelbyville	Aug. 23, 27
Tri-County, Sarcoxie	Oct. 5, 8
Union, Newark	Sept. 13, 18
Atchison, Tarkio	Sept. 14, 17
Bates, Butler	Sept. 15, 18
Callaway, Fulton	Aug. 24, 27
Carroll, Tina	Sept. 21, 24
Clay, Liberty	Sept. 7, 9
Clinton, Plattsburg	Aug. 10
Gasconade, Hermann	Sept. 6
Holt, Maitland	Sept. 6, 9
Laclede, Lebanon	Oct. 13, 16
Lincoln, Troy	Aug. 24
Macon, Macon City	Aug. 31
Montcau, California	Sept. 21
Mercer, Princeton	Sept. 1
Pettis, Sedalia	Sept. 20, 25
Phelps, St. James	Sept. 4, 7
Ralls, Hannibal	Aug. 24
Sullivan, Milan	Sept. 25, 28
Boone, Columbia	Aug. 17, 21
Brownsville, Brownsville	Aug. 16
Canton, Canton	Aug. 6, 10
Central Mo., Tipton	Aug. 31, Sept. 4
Inter State, Kansas City	Sept. 13, 18
LaBelle, LaBelle	Sept. 21, 23
Moberly, Moberly	Sept. 7, 11
N. E. Missouri, Williamstown	Sept. 13, 18
N. M. C., Trenton	Sept. 14, 17
Ridgeway, Ridgeway	Aug. 31, Sept. 3
S. E. District, Cape Girardeau	Oct. 13, 16
St. Joseph, St. Joseph	Aug. 30, Sept. 4
St. Clair, Bates, Henry, Appleton City	Sept. 7, 10
Shelbina, Shelbina	Aug. 16, 20

MINNESOTA COUNTY FAIRS.

Brown, New Ulm	Sept. 13, 15
Carver, Chaska	Sept. 23, 25
Clay, Glyndon	Sept. 29, Oct. 1
Dakota, Farmington	Sept. 29, Oct. 1
Dodge, Kasson	Sept. 22, 24
Faribault, Winnebago City	Sept. 16, 18
Fillmore, Preston	Sept. 22, 24
Isante, Cambridge	Sept. 22, 24
McLeod, Hutchinson	Sept. 21, 23
Meeker, Litchfield	Sept. 7, 10
Morrison, Little Falls	Sept. 16, 18
Mower, Austin	Sept. 14, 16
Olmstead, Rochester	Sept. 13, 18
Redwood, Redwood Falls	Sept. 22, 24
St. Louis, Duluth	Oct. 5, 7
Scott, Shakopee	Sept. 7, 9
Todd, Long Prairie	Sept. 21, 23
Washington, Stillwater	Aug. 24, 27
Wright, Howard	Sept. 14, 17

WISCONSIN COUNTY FAIRS.

Chippewa, Chippewa Falls	Sept. 14, 17
Grant, Lancaster	Sept. 22, 24
Green, Monroe	Sept. 8, 11
Iowa, Dodgeville	Sept. 14, 17
Monroe, Tomah	Sept. 28, 30
Outagamie, Hortonville	Sept. 29, Oct. 1
Portage, Amherst	Sept. 21, 23
Racine, Burlington	Sept. 21, 24
Richland, Ithaca	Sept. 15, 17
Rock, Janesville	Sept. 14, 17
Sauk, Baraboo	Sept. 28, 30
Sheboygan, Sheboygan Falls	Sept. 21, 24
St. Croix, Hudson	Sept. 15, 17
Vernon, Viroqua	Sept. 15, 17
Walkworth, Elkhorn	Sept 28, Oct. 1
Waukesha, Waukesha	Sept. 7, 10
Boscobel, Boscobel	Sept. 28, Oct. 1
Central Wisconsin, Watertown	Sept. 13, 17
Inter-State Ag. and Mech., Madison	Sept. 13, 18
Northern Wisconsin, Oshkosh	Sept. 13, 17

NEBRASKA COUNTY FAIRS.

Adams, Hastings	Sept 28, Oct. 1
Antelope, Neligh	Sept. 28, 30
Brown, Long Pine	Sept. 28, Oct. 2
Buffalo, Kearne	Oct. 5, 8
Butler, David City	Sept. 21, 24
Cass, Plattsmouth	Sept. 21, 24
Cedar, Harlington	Sept. 14, 16
Clay, Clay Centre	Oct. 5, 8
Custer, Broken Bow	Sept. 21, 23
Dixon, Ponca	Sept. 21, 23
Dodge, Fremont	Sept. 22, 24
Franklin, Franklin	Sept. 8, 10
Gage, Beatrice	Sept. 7, 10
Hall, Grand Island	Sept. 28, Oct. 1
Jefferson, Fairbury	Aug. 31, Sept. 3
Johnson, Tecumseh	Sept. 21, 24
Kearney, Minden	Sept. 28, 30
Knox, Creighton	Sept. 21, 24
Lancaster, Lincoln	Sept. 10, 18
Madison, Madison	Sept. 22, 25
Nemaha, Auburn	Sept. 6, 9
Otoe, Syracuse	Sept. 6, 9
Polk, Osceola	Sept. 7, 10
Richardson, Salem	Sept. 28, Oct. 2
Sarpy, Papillion	Sept. 21, 24
Sheridan, Gordon	Oct. 6, 8
Wayne, Wayne	Sept. 15, 17
Webster, Red Cloud	Oct. 5, 8
York, York	Sept. 6, 9
Friend, Friend	Sept. 6, 9
Fairmont, Fairmont	Aug. 31, Sept. 3
Columbus Driving, Columbus	Sept. 28, Oct. 1
Inter-State, Wymore	Sept. 21, 25
Nemaha Val., Falls City	Sept. 6, 11
Omaha Fr. and Ex., Omaha	Sept. 6, 11
Weeping Water, Weeping Water	Sept. 21, 25

DAKOTA COUNTY FAIRS.

Sanborn, Diana	Sept. 22, 24
Spink, Ashton	Sept. 22, 25

OREGON COUNTY FAIRS.

Eastern Oregon	Sept. 27, Oct. 2
Union Co.	Oct. 4, 9

WASHINGTON TERRITORY COUNTY FAIRS.

Clarke	Sept. 7, 11
Lewis	Sept. 28, 30
Walla Walla, Walla Walla	Oct. 19, 23

TENNESSEE COUNTY FAIRS.

Murfreesboro	Sept. 7, 11
Dickson	Sept. 15
Lebanon	Sept. 30, Oct. 2
Alexandria	Sept. 23, 25
Pulaski	Sept. 28, Oct. 2
Montgomery, Clarksville	Aug. 24, 25
Shelbyville, Shelbyville	Sept. 16, 18

ARKANSAS COUNTY FAIRS.

Drew, Monticello	Oct. 13, 16
Western Arkansas, Ft. Smith	Oct.

ALABAMA COUNTY FAIRS.

Huntsville, Huntsville	Oct. 11, 16

NEW HAMPSHIRE COUNTY FAIRS.

Grange Fair, Tilton	Sept. 28, Oct. 1
Upper Coss, Colebrook	Sept. 29, 30

SOUTH CAROLINA COUNTY FAIRS.

Chester, Chester	Oct. 26, 29
Darlington, Darlington	Oct. 27, 29

MISSISSIPPI COUNTY FAIRS.

Noxubee, Macon	Oct. 20

MARYLAND COUNTY FAIRS.

Talbot, Easton	Sept. 21, 24
Harford, Balair	Oct. 12, 15
Cecil, Elkton	Oct. 5, 8
Hagerstown, Hagerstown	Oct. 19, 22

VIRGINIA COUNTY FAIRS.

Botetourt, Fincastle	Sept. 28, Oct. 1
Loudoun, Leesburg	Sept. 14, 16
Baldwin District, Staunton	Oct. 12, 15
James River Valley	Oct. 6, 8
Lynchburgh, Lynchburg	Oct. 12, 15
Roanoke, Roanoke	Oct 5, 8
Shenandoah Valley, Winchester	Oct. 12, 15
Southwest Virginia, Wytheville	Sept. 29, Oct. 1
Tidewater, Franklin	Oct. 26, 29
Grange, Loring	Sept. 8, 15
Abingdon, Abingdon	Sept. 29, Oct. 1

WEST VIRGINIA COUNTY FAIRS.

Ravenswood, Ravenswood	Aug. 31, Sept. 2
West Virginia, Central, Clarksburg	Sept. 14, 17
Jefferson, Shepherdstown	Sept. 8, 10

KENTUCKY COUNTY FAIRS.

Adair, Columbia	Aug. 17, 20
Barren, Glasgow	Sept. 29, Oct. 2
Bourbon, Paris	Sept. 7, 11
Daviess, Owensboro	Oct, 13, 16
Jefferson, Fern Creek	Aug. 25, 26
Mason, Marysville	Aug. 19, 21
Nelson, Bardstown	Sept. 7, 10
Shelby, Shelbyville	Aug. 24, 27
Warren, Bowling Green	Sept. 1, 4
Anderson, Franklin & Salvisa, Lawrenceburg	Aug. 17, 21
Latonia Agricultural, Covington	Aug. 24, 28
Latonia Driving, Covington	Oct. 1, 6
Pendleton A. & M., Falmouth	Aug. 31, Sept. 4
Union Agricultural, Germantown	Oct. 13, 16

Woman's Work.

CONDUCTED BY EMILY L. TAPLIN.

WE FLING AWAY OUR GOLD.

WE fling away our gold.
Ease, comfort, pleasure never beg in vain.
From starving, homeless ones our mite withhold:
When seed thus sown might whiten all the plain!
We fling away our gold.

We send away our thoughts,
Half clothed and senseless, soft they speed away;
When, like the gorgeous tapestry inwrought,
They might add lustre to each passing day.
We send away our thoughts.

We throw away our time.
That golden gift we never know to prize
'Till life's high goal unreached, too weak to climb,
The last few moments pass our closing eyes,
We throw away our time.

We cast away our love—
We plant its flowers upon life's shifting sands—
We bend the tender blighted blooms above,
Watered by tears within our feeble hands—
We cast away our love.

—Lydia L. A. Very, in Salem Gazette.

OF INTEREST TO WOMEN.

THE great problem of how women clerks are able to work for lower wages than men has at last been solved by the San Francisco Chronicle. They do not play billiards, smoke cigars or drink cocktails. When they go to a theatre, somebody else pays. When they meet each other in the street, they do not "adjourn." Hence 40 dollars are to a girl as much as 60 dollars to a young man; while, of course, to the employer, they are just 20 dollars cheaper.

English philanthropists are discussing the eligibility of women as poor-law guardians. The great difficulty is the political qualification, candidates for this office must be parish ratepayers. It is the general opinion that in the treatment of the poor, women are both more prudent and more sympathetic than men. The chaplain of Clerkenwell prison particularly strengthened this argument from the experience of a want of womanly help he had known in just these sort of cases which had come under his care. No two girls are alike; each wants individual treatment, especially with the hereditary taint of drunken, dissolute parents. Go where you will, over the length and breadth of the land, it is impossible to visit a work-house without discovering some weak spot, owing to the want of just the housewifely experience which comes within a woman's province. To guage the misery now existing in the metropolis, it is only necessary to see the thousands of waifs and strays, who every night have no other lodging but the archways and out-of-the-way holes and corners of the great city. There is no end of work waiting for womanly effort, and the sex should be ashamed to waste life in the mere enjoyment of social pleasures. The busiest women are the happiest; they have no time for aches and pains and discontent.

Invention seems to have no end in the matter of lamp and candle shades. For lamp-shades, the silk and lace-trimmed parasol ones get larger and more elaborate, and for candle shades, exact representations, full size, of the Lilium auratum, or of a monkey's head, or enlarged colored pansies, or of butterflies, are much in vogue. Another form of the candle shades, or candle screens, as they should be called, for they only shade one side of the flame, are small colored paper screens, having in the centre a transparent medallion, with a group of Kate Greenaway figures, which, with the light shining through them, are seen to advantage.

The newest wall pockets are either plush, embroidered with bright colored flowers in the shape of an envelope with the flap cut off, or small baskets made to hang on the wall and fitted with pincushion, scissors, etc. Our grandmothers used to say every woman should be provided in every room with a pincushion, pair of scissors, and a duster. As regards the two first-named articles most ladies, if they have seen the scissors now being made with handsome brass handles and brass sheath, will, I am sure, be wanting a pair, and also one of the brass pincushions to match; but as to their requiring the duster nowadays "*Je m'en doute*," unless, indeed, it should be a particularly artistic one.

Of all the new materials produced in recent years, probably there is nothing prettier or more artistic than that now used in place of silk for ribbons, scarfs, sashes, etc. It is a material called canvas, and has various silky colors mixed with gold threads introduced into it. Some of these canvas materials make very pretty chair backs, borders for curtains, etc., as the colors are blended with such excellent taste that they look like the productions of some Eastern loom. English and French manufacturers seem year by year to improve in the art of arranging colors, and in this respect can no longer be considered as in anyway inferior to the far-famed natives of the East.

Ruskin asks: "What do you think the beautiful word 'wife' comes from?" It is the great word in which the English and Latin languages conquered the French and Greek. I hope the French will some day get a word for it instead of that of *femme*. But what do you think it comes from? The great value of the Saxon words is that they mean something. Wife means 'weaver.' You must either be housewives or house-moths, remember that. In the deep sense, you must either weave men's fortunes and embroider them, or feed upon and bring them to decay. Wherever a true wife comes, home is always around her. The stars may be over her head, the glowworm in the night's cold grass may be the fire at her feet, but home is where she is."

WHILE WE HAVE TIME.

OVER the fire-place in the sewing-room of a certain busy charity guild, is a panel of brass, bearing an inlaid scroll with the society's motto: "While we have time let us do good unto all men." A noble text, even without its prophetic ending—"for the night cometh, wherein no man can work." While we have time—that is the key-note of our success or failure. Not only material success, but also in the finer graces of the spirit. Our kindly words and gentle deeds; thoughts of sweetness and works of charity—all must be accomplished—while we have time.

But perhaps we spend all our lives in a hurry of seemingly sordid cares, too much absorbed to think even of these finer graces. How many women say they would gladly do something, anything, for suffering humanity, only they can never find time! Dear anxious Martha! cakes and pies are good things, and so are well-kept rooms and tasteful gowns; but they are very small and trivial if they cause us to neglect the Lazarus within our gates. And suppose your duty to your neighbor does not seem very plain in this direction. Perhaps there is no one actually in physical want within your range of vision—though this Utopian condition is rare. Then you must cultivate mental charity; kindly words and gentle deeds, whether in the home circle or in society, will make life easier for yourself and others. And you need not look very far for objects of material charity. We do not recommend Mrs. Weller's charity circle, which supplied red flannel waistcoats and moral pocket-handkerchiefs for the benighted Africans. "Charity begins at home," as the much-quoted and much-abused maxim says. We must first care for the stranger within our gates; then turn our attention to far-off lands. We once read of a generous woman who kept a certain savings which she called her love-purse. It consisted of money obtained by self-denial—all sorts of trifles which would be overlooked by other women. This she devoted to charitable works. Her generous plan might be followed by many; we can all offer our mite.

We must always bear in mind that if we ever

see *any* opportunity of doing good, either by word or deed, it is plainly our duty to do it. We must not think that perhaps somebody else would do it better, or that it is not really our business. We may rest assured that no good deed or generous impulse is ever lost, though we may not see its immediate fruition. If it does not appear to have the effect we intended the feeling that prompted it will "strike in," to use a homely phrase; we shall feel its grace in our own personality. Organized charity is a great power; but it merely represents in the concrete the deed and impulses we may all personally represent. "How far yon tiny candle throws its rays; so shines a good deed in this naughty world." So, believing that there is no time like the present, and no duties like those lying near us. "While we have time let us do good unto all men."

ROSE NOMENCLATURE.

FROM AN AMATEUR STANDPOINT.

THIS is a subject that will no doubt interest your young lady readers, and it is not to be wondered at. I suppose that they take such a deep interest in these flowers, as roses, like girls, are somewhat capricious in their nature, but as some one has said: "a thing of beauty is a joy forever," and with all their peculiarities we love them still. I trust the latter qualifications will atone in a measure for the former and keep me out of any difficulty with your fair friends.

They are certainly an interesting study (I refer to the roses, of course) as well as delightful ornaments, either on the lawn or in the parlor. It is an unceasing source of enjoyment to me to watch these beautiful flowers as they grow and blossom, to note their various habits and characteristics, or to admire their delicate tints and delightful fragrance. But when I come to classify them I am met with "confusion worse confounded." Turning to the catalogues of the florists, one man says a certain rose is a Tea, another a Hybrid Tea, another a Hybrid Perpetual, and another, perhaps, a Hybrid Noisette, till I am at a complete loss to know what it is. Of one thing, however, I am pretty well convinced, and that is that it is a Hybrid of some kind. This leads me to look up the botanical classification and history of the rose, which, although very interesting, fails to throw much light on the particular plant in question. The fact is, I suppose, as I find stated in the article on the rose in Appleton's Cyclopædia, "The roses of our gardens and greenhouses are for the most part varieties obtained by selection and by hybridizing and crossing (and I might add recrossing), and this has been continued so long that often all traces of their original parentage are concealed."

Under this state of affairs the best that we can hope for is a garden classification, but let us have one that will give the purchaser some idea of the nature and habit of the plant he is asked to buy.

All florists admit that the term "Hybrid Perpetual," under which, perhaps, the most interesting of our roses are classed, is a complete misnomer. These roses are not perpetual bloomers, as the term implies, but bloom at intervals or stated periods, usually in the Spring and Fall, although they are frequently treated in ways best known to the florists, so as to bloom in the Winter and other periods of the year. The French term "*Remontant*" (meaning literally "to grow again") is more significant and certainly a much better term than "Hybrid Perpetual."

The Ever-blooming or Monthly Roses are not strictly ever-blooming, but bloom at random, or apparently without any definite periods. This term, however, is not as objectionable as that used to designate the preceding class, and conveys a tolerably accurate idea as to the blooming habit of the varieties it comprises, but I should consider "random-blooming" a better term.

The term "Bourbon" designates a class of roses which originated on the Island of Bourbon [here we have a geographical name], and was undoubtedly the result of a cross between the Damask and Bengal roses. It is usually classed as an Ever-blooming Rose. It does not, however, possess the same habit of bloom as the Bengal and Tea Roses, but blooms periodically, the periods being more frequent than with the Remontant Roses.

The Noisette Roses are a class supposed to have originated from a cross between the White Musk and the China or Bengal Roses, and created some excitement when first introduced. They are certainly a remarkable and beautiful class of roses, but there appears to exist some confusion in these with the Climbers and Teas, and they are usually placed in the catalogues as a distinct class. Most of the Noisettes I believe are climbers, but some are not, or at least are not so distinctly characterized. They were named in honor of the man who originated the variety; but historical and geographical names are not wanted in our catalogues; we want something indicating the nature of the plant.

The Hybrid Teas are roses of recent introduction, the result of crosses between the Remontants and Teas, and are undoubtedly destined to supplant some of the older varieties in popularity, as they combine in varying degrees, according as they favor the Damask or the Tea, the robust habit and brilliant coloring of the Remontants, with the exquisite perfume, delicate tints, and more constant blooming habit of the Teas. The La France and Bennett are types of this class. By the way, I would like to ask as a matter of curiosity, how the yellow shades in our Tea Roses are derived. Are they natural to the species Caninæ, or do they originate from crosses of this species with some other, the Sulphurea, for instance, which is distinctly characterized by its deep yellow flowers?

The Hybrid Noisette is another class of recent introduction. The Ball of Snow, Coquette des Alpes, and Coquette des Blanches belong to this class. The white musk origin is apparent in the pale tints of the flowers. The last two classes are in some confusion and are indiscriminately classed by florists as Hybrid Teas or Hybrid Perpetuals.

But it is easier to find fault, I suppose, than to apply the remedy. It does seem to me, however, that some effort should be made to extricate the most beautiful and charming flower that nature has given us from the confusion into which it has so sadly fallen.

It has occurred to me that roses might be divided according to the character of their bloom into annual, semi-annual, quarterly, and monthly bloomers; but I fear the flowers would not appear at the appointed intervals, as regularly as the sheets of the RURAL, and it might lead to weekly, daily, minutely and secondly roses. This is cutting the year up too precisely for the capricious nature of the plant.

After revolving the matter in my mind for some time I have finally, for my own convenience, adopted the following classifications:

First, I divide all roses under two heads—shrubs and vines or climbers—as all the varities can be readily assigned to one or the other of these divisions, which indicate the habit of the plant. These divisions I subdivide into three classes each, significant of the bloom: 1. Annual blooming roses, or those which bloom but once a year: 2. Periodical blooming roses, or those which bloom at certain periods, more or less defined as the case may be, such as the Remontant and Bourbon Roses; and, 3. Random or Ever-blooming Roses, or those which bloom apparently at will, such as the Bengal and Tea Roses. [I prefer to retain the title "Ever-blooming", as it is a term in common use and pretty generally understood.] This gives me six distinct classes.

First; annual blooming shrubs, which may be designated by the general title of "Shrub Roses," including the Damask, Provence, Moss, French, White, Hybrid Chinese, Hybrid Bourbon and Hybrid Provence, or most of those now classed as "Garden Roses."

Second; periodical blooming shrubs, including the Remontant and Bourbon Roses. If the term "Hybrid Perpetual" must be retained; let it be a title for this class.

Third; ever-blooming shrubs, including the Bengal, Tea, some of the Noisettes, and perhaps also the Macartney and Microphylla Roses, which may be designated under the general title of Ever-blooming Roses.

Fourth; annual blooming climbers, including the Sweet Brier and Hardy Climbing Roses.

Fifth and sixth respectively; periodical and ever-blooming climbers, including the Musk and certain of the Noisettes. I am not sufficiently familiar with the latter varieties to say just which class they should be placed in, nor can I say from my present limited knowledge under what classes the Hybrid Teas and Hybrid Noisettes should come, but I imagine it would lead to a division of these now popular roses.

I offer these remarks as a suggestion to our Horticultural Societies, with a faint hope that they may lead to a better classification of the Rose than we have at present. I think it would be interesting if the RURAL could some time give us a *special* on the Rose.

WM. HEWETT.

[Rosa Canina is never yellow. The yellow tint in many Tea Roses is derived from the original Yellow Tea, introduced from China in the early part of the century (Rosa Indica Odorata). Many amateur rosarians among the fair sex will doubtless echo our correspondent's plaint; however, some study of Ellwanger's excellent text-book, "The Rose," will show the *raison d' être* of our present classification].

GOLDEN GRAINS.

CULTURE is something large and generous, which takes a man out of his narrow specialty and floats him into the deep current of human life.....

FOSTER says an observant man in all his intercourse with society and the world carries a pencil constantly in his hand, and, unperceived, marks on every person and thing the figure expressive of its value, and, therefore, instantly meeting that person or thing again, knows what kind and degree of attention to give it. This is to make something of experience.. .....

HOPE is like the sun, which, as we journey towards it, casts the shadow of burden behind us.. .. ..

THE memory is perpetually looking back when we have nothing present to entertain us; it is like those repositories in animals that are filled with stores of food, on which they may ruminate when their present pasture fails.....

THE way to gain a good reputation is to endeavor to be what you desire to appear.....

EVILS in the Journey of life are like the hills which alarm travelers upon their road; they both appear great at a distance, but when we approach them we find that they are far less insurmountable than we had conceived them..... ....

HE that does good to another man does also good to himself: not only in the consequence, but in the very act of doing it; for the consciousness of well doing is an ample reward...

THE chains of habit are generally too small to be felt till they are too strong to be broken.

THE blessings of fortune are the lowest; the next are the bodily advantages of strength and health, but the superlative blessings, in fine, are those of the mind..... ....

IT is said a wise man should have money in head and pocket, but not in his heart.....

THE hills of lofty endeavor and high achievement lie all around us, and if we never catch a glimpse of the views they afford we need not complain that it is because of the insuperable limitations of our surroundings..... ...

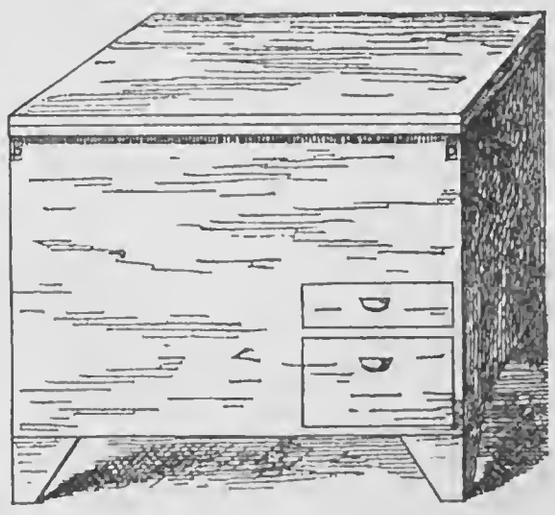
NEWTON says there is inestimable blessing in a cheerful spirit. When the soul throws its windows wide open, letting in the sunshine, and presenting to all who see it the evidence of its gladness, it is not only happy, but it has an unspeakable power of doing good. To all the other beatitudes may be added, "Blessed are the joy-makers." ... .

OUR lives are like some complicated machine, working on one side of a wall and delivering the finished fabric on the other. We cannot cross the barrier and see the end. The work is in our hands—the completion is not....

Domestic Economy

CONDUCTED BY MRS. AGNES E. M. CARMAN.

The truest homes are often in houses not especially well kept, where the comfort and happiness of the inmates, rather than the preservation of the furniture, are first consulted.



FLOUR CHEST. Fig. 334.

THE above cut shows a very handy flour chest that my mother has. It is 36 inches high, 18 wide and 42 long. It will hold one barrel of flour, one peck of meal and one of buckwheat flour. The solid bottom is six inches from the floor. A partition runs from bottom to top, 14 inches from right end. The smaller space has a solid cross partition just above the drawers. The larger drawer, 14 inches wide, 16 long by 8 deep is for bread. The smaller one, 14 inches wide, 16 long by 4 deep, is divided off into six different compartments.

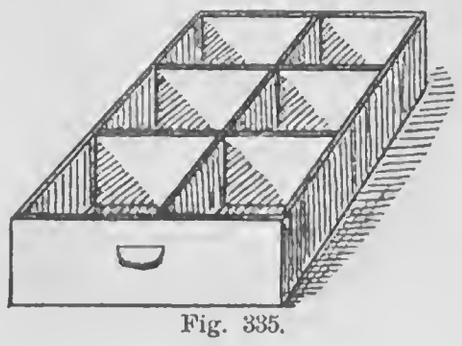


Fig. 335.

There are two covers which are held together by small brass hinges. Strong wooden supports, one inch by two (ends are three inches thick), and length the same as width of chest, run into groves on inside of either end to hold covers when open. The covers are attached to chest by two rods of iron 12 inches in length, with screw holes in ends. One end of each rod is fastened to the front corners of bread board, which is the lower cover, while the other ends are fastened to outside of chest in the middle of sides as far down as they will reach when the covers are in place. To open chest (Fig. 336, pull out the supports—these

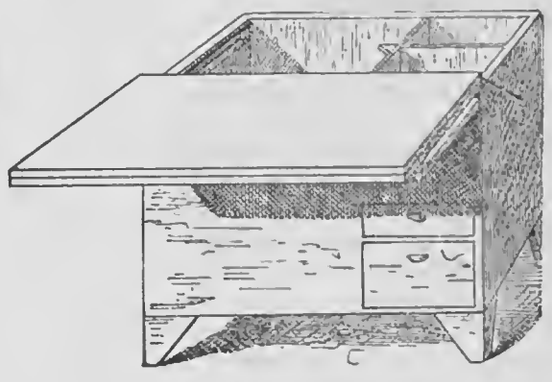


Fig. 336.

should have rings in them for the purpose. Open the first cover and you have a table; the inner cover turned over opens the chest, with bread-board up. If you wish a more solid place for kneading bread, the iron rods permit the covers to be turned upside down over the chest, with bread-board up.

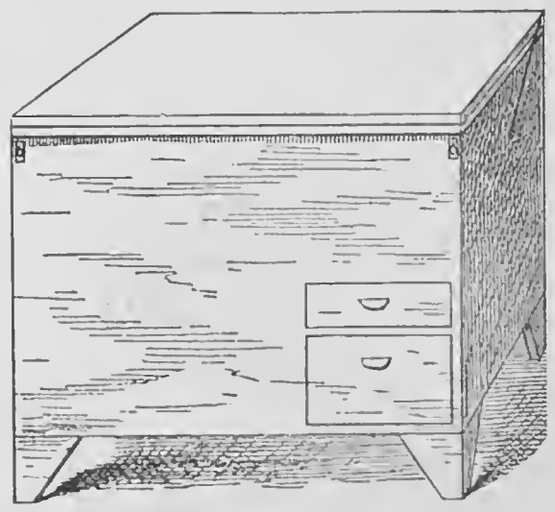


Fig. 337.

Put two small brackets about six inches down on inside for boxes of baking powder, soda, etc. MRS. R. W. WILLIAMS.

HOUSE-KEEPING IN CALIFORNIA.—XIII.

MARY-WAGER FISHER.

On Sundays our church going was chiefly confined to the First Congregational Church. The laddie liked the Sunday school, and never missed either the school or church service. The church edifice was very large and beautiful, and had a membership of nearly 1,000 and 600 children in the Sunday school. There was an orchestra of 12 pieces or so, played by Sunday-school boys, besides the piano and organ. I was always interested in the floral decorations of the altar, which excelled anything I have elsewhere seen—even in Plymouth Church, in Brooklyn. Half a hundred Calla lilies, massed in their green leaves, banks of roses, pyramids of violets, or of French marigolds were no uncommon display at one time, and sometimes only ferns would be used. About 40 Chinese were members of this church, and the pastor said that, taking them all in all, their Christian lives were as creditable as those of white men of their intelligence. When a Chinaman embraces Christianity on the Pacific Coast, it entails upon him a heavy sacrifice. If he is a laundryman he has to close his wash-house on Sundays, and it touches his pocket very deeply. He is also persecuted by his own countrymen, sometimes beaten and imprisoned by them. There is no doubt whatever of the sincere conversion of many of these people, who, in their gentleness of manner, are far more Christ-like than the "Christian white men," who have treated them so brutally. I was told of one Chinaman who learned the English alphabet at Sunday school in Oakland in one hour, so that he could give the name of any letter in any way it might be presented to him—a prodigious feat, truly.

Sunday in California has very few Puritan aspects. True, there are a few people of religious habits, or of aristocratic tendencies, who do not drive on Sunday for pleasure—it is not respectable so to do! The theatres are open on Sunday night as on Monday night—how far they are patronized by Americans I do not know; but there is a large French, German and Italian population which regards Sunday as a holiday, as it is observed in Europe. Boys fly kites in the streets, men have their games of base ball or cricket, venders

hawk their fruit about in the streets, and Sunday is not very different from other days. The morality of the people is lower than that on the Eastern Coast, which is not high enough to boast of, the mercy knows! and if the various so-called labor organizations continue to tyrannize over their members, affairs will grow even worse. In San Francisco, and presumably in other large towns, fathers are not permitted to allow their own sons to learn their trades, and the boys grow up in idleness and swell the hoodlum class. California schools are creditable to the State, but the great need, after all, is technical schools where boys, in particular, can learn trades—how to work. If every boy in the land could have what he should have, it would be a rearing on a farm, and every mother who has her children about her in a country home may well be thankful that their lot has not been cast in the town.

As the days wore on, and our stay in Oakland overran the allotted time, the laddie longed to go home with an ever-increasing desire. One day we went off into the country for wild flowers, and on our return he captured a small bull-frog in a stream, and came shouting after me "Only see, mamma! it is the first bull-frog I have had in my hands since I left home!" and he resisted all my pleadings to let the frog go, as it would soon perish in his hands. "How would you like to be carried off from all your friends?" I asked. "The froz will have friends" came the sturdy reply. "He will find friends and companionship with my tadpoles"—and so all the way until the horse cars were reached that frog was immersed in every mud hole we came to, in order to give him "a taste of his native habitat, mamma." Finally, an old tin can was found, and the frog put in it, in which vehicle he reached the can which held the tadpoles. The acquaintance however, was fated to a short duration, for next morning the boy came to me with "A very peculiar thing has happened. The frog has disappeared and the screen that I put over the can is still on."

During the last week of our camp life, the laddie had an added task which he enjoyed. It was to go for milk, at a house near-by. The occupants kept two Jersey cows, which were brought each night from pasture and led through the cellar into a stable back of the house for milking. It was quite an event to see those cows march quietly through the narrow door that opened into the basement. The milk was excellent, and a great improvement on the country milk which we had previously. It was entirely free from sediment, and although it cost 10 cents a quart, it was cheaper than the other at eight cents. I remember that a young student in Washington Territory took with him into Seattle two cows from his father's farm, and the money he received from the sale of the milk went a long way in defraying his expenses at school. In the parlance of the West, I thought it a capital "scheme." The food for the cows came from the farm, he took care of them himself and delivered the milk. There is always a way to success, and this was his way, and well worthy of imitation.

DON'T neglect to "dress up" a bit in the afternoons.

A DAINTY TOILET SET.

A VERY pretty thing in this line is made from white Java canvas, the mats being cut either oval or oblong, as taste or the shape of the toilet set may direct. A parti-colored design of simple crazy patchwork stitches in fine worsteds of old gold, dark-blue, cardinal, sea-green and pale blue and pink, was very effectively placed in each corner, and a shell stitch of blue worsted with an outer one of pink silk crocheted around the edges. The effect was very oriental, and the time spent in the manufacture should not exceed two hours.

DAISY.

A FARMER'S DAUGHTER'S DOMESTIC REVERIES.

CHARITY SWEETHEART.

I WONDER if all country girls get as tired of the routine of farm work as I do. Sometimes when I see other girls who earn their living easily, all well dressed and having plenty of pocket money, I am "real" envious. I can't help it. I hate my brown hands and the roughness that will come to my fingers from doing all kinds of work. And I know all the time people don't mean it when they say they "admire tan," as some folks do. When Beatrice Bustler comes up to visit us she likes to put her lily-white hands beside mine and show me two sparkling rings she wears that some of her gentlemen friends have given her. Her father works hard and her mother does dressmaking to help keep this only child in idleness and finery. Some people have queer notions of happiness, and I don't think I should enjoy her way of living anyway—picnics and drives and going out nights seem to be all she cares for. Now my way would be to have plenty of books, some pocket-money, a little leisure to enjoy things as they come, and the company of refined, superior people: not all kinds of superior people, however, for there are some that make you feel so ignorant, and speak so patronizingly that it takes away all the pleasure of learning from them. Just as some ministers do when they explain simple terms and treat their hearers as if they did not know anything.

Then I think it would make me very much happier if the boys were a little more tidy in appearance, and more considerate for me. Fancy my having to go out and chop kindlings in the morning—and sometimes after it rains it is not very pleasant—and to light the fire, get water from the spring, and those boys in their beds! Sometimes I half feel like not lighting it, and just doing without; but then there is father, and I can't make him suffer. Oh! if it wasn't for *father*, I couldn't put up with it at all. As Burt grows older, he is more particular with his neck-tie and collar on Sundays, and less particular with his dirty boots, and untidy ways on week days. I can get father to put a coat on to come to meals. It is very little trouble, though his arms are stiff with rheumatism; but the boys will hardly take the trouble to roll down their shirt-sleeves, and as for washing their faces—oh! that is only needed when they go to the village. Burt is awfully particular if there is a chance of meeting Mina Finmore anywhere about. I don't see why farmers' boys need be so careless of their every-day cleanliness, and I wondered very much one day in Spring, when they were hauling manure to the corn-field, and didn't take off their boots when they came in to dinner, if God had deprived them of the sense of smell, or made mine more than usually acute. For after I had worked in the heat preparing the dinner, I could not taste it, but had to go out-of-doors to the pure air feeling deathly sick, while their appetites were unimpaired. When Beatrice Bustler is here, Burt puts on a coat, brushes his hair, and slicks up generally. And why not show as much respect for his sister? I like people and things to be nice, and he knows it, too; and so I get discouraged, and if I say a word, the boys call it "nagging."

Good advice or persuasion is all classed under that term, and if they are found fault with at all, they say, "Oh, we're going off to Montana in the Fall," or Spring, as the case may be. Sometimes I wonder if they would have treated mother so if she had lived. But I don't think it, for boys generally love their mother too well to be rude to her.

The garden is very pretty this year. We have flowers all the time to put on the table, and I am always able to give Burt a pansy or geranium for his button-hole. He is very fond of flowers now, and I think that is a good sign, and if I am sick he is very kind. If I was to die, I am sure he would wish he had been kinder and done more for me; but then that wouldn't do me any good. That's the worst of it. What we want is to be able to give and receive kindness now as we go along life's journey; it helps and cheers one very much. And I often think when I see families flinging satire and sneers at each other, and provoking each other to anger, and sometimes to blows, that if they only knew the future, and what is in store for them, they would spare each other,

"For hearts are broken by harsh words spoken,
The morrow can ne'er set right."

WASHING WITH KEROSENE.

MRS. S. E. D. says she has tried the methods recently given in these columns for washing with kerosene to her entire satisfaction, and that she has thereby been enabled to do washings which she could not have done in the old way.

SUMMER SWEETS FOR WINTER USE.

PINEAPPLES make the most delicious preserves and marmalades for those with whom this fruit is a favorite. Pare the fruit, then hold it firmly by the crown with the left hand, take a large three-tined fork in the right, insert it above the eyes of the fruit, beginning at the base, and pull the separate sections off from the core. This leaves the pineapple tender and juicy, without the core, and is much the best way to prepare it for the table. Weigh the fruit, and allow three-quarters of a pound of sugar to each pound of pineapple. Put in alternate layers in a preserving kettle with a cup of water for every two pounds of fruit. Heat to boiling, and let this process be a slow one; take out the pineapple with a perforated skimmer, and lay upon flat dishes in the sun. Boil and skim the sirup for 20 minutes; return the pineapple to the sirup, and boil all together for half an hour. Take out and put in jars, cans, or bowls, filling them two-thirds full, thicken the sirup by simmering for 15 minutes longer, and pour over the fruit, covering it to keep in the heat. When cold, cover with tissue paper wet with brandy. Paste stout paper over all, or you may seal up at once in self-sealing jars. For a rich preserve of this kind the small pint jars are the best size.

For pineapple marmalade, select well ripened fruit, but without decaying spots. Pare and grate with a coarse grater or mince with a chopping knife, leaving out the core. Allow a pound of sugar to every pint of pineapple. Make a sirup by adding a cup of water to every two pounds of sugar. Boil and skim. Put the fruit in a porcelain-lined vessel closely covered, and heat by setting it over the fire in a large pan containing boiling water. When it is smoking hot all through, add the sirup and boil all together until it is a clear light-colored, almost white paste, stirring almost constantly with a wooden spoon. It will take from half to three-quarters of an hour. Glass cans or tumblers are always preferable to china bowls for preserves and marmalades, as you can see the first signs of fermentation.

Watermelon rind makes a very unique preserve, pleasing to both the eye and palate. The large dark green melons with the thick rinds make the best. Peel off the green skin and cut the rind into strips or fanciful shapes; throw into a large vessel with cold water, and let it stand for 12 hours, changing the water four times. Drain and weigh. Use four lemons, a quarter of a pound of white ginger root, and six pounds of sugar for six pounds of rind. Wrap the ginger in a muslin bag and boil in a quart of water until the water is highly flavored; put in the sugar and boil until no scum arises; put in the pieces of the rind and the lemons which have been peeled, sliced thinly and the seeds removed, and simmer gently for an hour; take out the rind and lay upon dishes in the sun until firm and almost cool: put back into the sirup, simmer half an hour, spread out again and when firm pack into cans, pour over the boiling sirup and seal. In preparing the lemons for this sweetmeat, peel them with a very sharp knife, and take off first the very thin yellow rind; par-boil this and then add it to the sirup with rind. It adds greatly to the flavor and beauty of the sweetmeats.

PALMETTO.

Miscellaneous Advertising.

When Baby was sick, we gave her Castoria,
When she was a Child, she cried for Castoria,
When she became Miss, she clung to Castoria,
When she had Children, she gave them Castoria

Miscellaneous Advertising.

Pain in the Side

Is a symptom of disease. It may be caused by Rheumatism, or by Neuralgia, but it usually indicates a disordered condition of the Stomach, Liver, or Kidneys. Ayer's Sarsaparilla corrects the action of the vital organs, and removes every trace of disease from the system.

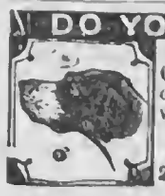
Last fall and winter I suffered from a dull, heavy, pain in my side. I did not notice it much, at first, but it gradually grew worse until it became almost unbearable. During the latter part of this time, disorders of the Stomach and Liver increased my troubles. I began taking Ayer's Sarsaparilla, and, after faithfully continuing the use of this medicine for some months, the pain disappeared and I was completely cured.—Mrs. Augusta A. Forbush, Haverhill, Mass.

Ayer's Sarsaparilla,

Prepared by Dr. J. C. Ayer & Co., Lowell, Mass. Sold by all Druggists. Price $1; six bottles, $5.

MAKE HENS LAY

SHERIDAN'S CONDITION POWDER is absolutely pure and highly concentrated. It is strictly a medicine to be given with food. Nothing on earth will make hens lay like it. It cures chicken cholera and all diseases of hens. Illustrated book by mail free. Sold everywhere, or sent by mail for 25 cts. in stamps. 2½-lb. tin cans, $1; by mail, $1.20. Six cans by express, prepaid, for $5. L. S. Johnson & Co., P. O. Box 2118, Boston, Mass.



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DOG BUYERS' GUIDE.
Colored plates, 100 engravings of different breeds, prices they are worth, and where to buy them. Mailed for 15 Cents.
ASSOCIATED FANCIERS,
237 S. Eighth St. Philadelphia, Pa.

"The Farmer will find that thorough cultivation of wheat ground is manure, and that each of his teams earns $10 each day they are thus employed." If this is true, how important it is that the farmer should use proper implements for the purpose of pulverizing the soil. See advertisement of the "ACME" Pulverizing Harrow, Clod Crusher and Leveler on page 556.

CARMAN RASPBERRY This NEW Extra Early Black Cap is now offered for Sale, and is likely to work a REVOLUTION in in market growing. VERY PRODUCTIVE. Fruit of **largest size, Jet Black**, and the **earliest** *of all to ripen*. Sells at highest price. **Best** quality for family use. Also **EARHART** Rasp., a valuable novelty—fruits from June to Nov. Pot STRAWBERRIES and all best varieties Small Fruits for Fall planting. Cheap for choice stock. Circulars free. **Hale Bros.**, South Glastonbury, Conn.

HAND PICKED SEED. **DIEHL-MEDITERRANEAN.**
The hardiest, best yielding and milling Wheat grown. Seed hand-picked and strictly pure. For sample heads and prices, address, with stamp,
H. M. JAQUES, Wright's Corners, N. Y.

NEW STRAWBERRIES Summit, Covill's Early, Bubach's No. 5, Belmont, Lida, Jewell, Ontario, Sunapee. Send postal for history and description, to
M. CRAWFORD, CUYAHOGA FALLS, O.

Diehl-Mediterranean Seed Wheat.
Raised from seed purchased of the originator, for sale at $1.50 per bushel; bags, 20 cents. Address
A. H. LYTLE, DERBY, ERIE CO., N. Y.

SEED WHEAT.
Pure DIEHL-MEDITERRANEAN, from the Originator. Best Wheat known. $1.25 per bushel; bags, 20 cents. Address Walter O'Dell, SOMERSET, MICH.

SEED WHEAT
And How to Grow It or Thirty Years in the Wheat Field.
Giving the origin, history, and description of the different varieties of wheat, the best and most popular modes of cultivation, **with samples of five** of the most hardy and productive kinds now grown in this county. All sent on receipt of **10c.** in postage stamps or money. Address SAMUEL WILSON, MECHANICSVILLE, BUCKS CO., PA.

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Established 1838.
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Parry, Lida, May King, Henderson, Jewell, Belmont, Bubach, and Ontario ready for immediate shipment. Other varieties potted to order. Send for catalogue, with testimonials, etc. Also of **Lawson & Kieffer, Marlboro & Golden Queen, Erie & Wilson Jr., Niagara & Empire State**, etc., etc.
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DAIRY AND TRUCK FARM FOR LEASE.
80 Acres, within two miles of Baltimore, hard road-land in excellent condition; good House and out-buildings; absolutely healthy; possession Nov. 1st, '86.
H. W. ROGERS, BALTIMORE, Md.

Beautiful Maryland Homestead Farm.—230 Acres, $8,000. For full particulars, address
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HOUSEKEEPER'S TIME SAVER. Send 25c. to JAS. L. RHEES, Wheeling, W. Va., and get "The Housewife's Book of Labels for Preserves and Jellies, Gummed and Perforated."

$12.00 will Buy the Best Single-Strap Buggy or Road-Cart Harness in the United States for the price. Rubber or Nickel Trimmings. 64-page Catalogue Free. Order one. King & Co., OWEGO, N.Y.

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$7 Handiest, Cheapest, Best. Agents Wanted. 12 sq. ft. of Trays. Weight 25 lbs. Circulars free.
AM. MF'G CO., Waynesboro, Pa. Box P.

FRUIT DRYERS
THE ZIMMERMAN QUICKEST AND BEST.
ZIMMERMAN MF'G CO., BURLINGTON, IOWA.

THE GRANGER FAMILY FRUIT & VEGETABLE EVAPORATORS.

$3.50, $6.00, and $10 00.
Send for Circular. EASTERN M'F'G Co., 208 So. 5th St., Phila., Pa.

The **"Two Knife" Apple Parers** pares doubly fast. "Champion" and "Simplicity" slice in half circles. "Champion" very fast. Sold by Dealers.

HIRES' IMPROVED ROOT BEER. Packages, 25 cts. Makes 5 gallons of a delicious, sparkling and wholesome beverage. Sold by all druggists, or sent by mail on receipt of 25 cents.
C. E. HIRES, 48 N. Delaware Ave., Philadelphia, Pa.

Brewster's Patent Rein Holder.
Your lines are where you put them—not under horses' feet. One agent sold 12 doz. in five days; one dealer sold six doz. in 15 days. Samples worth $1.50 FREE. Write for terms.
E. E. BREWSTER, Holly, Mich.

UNION COLLEGE OF LAW
The Full Term will begin Sept. 22d. For circular address H. BOOTH, CHICAGO, ILL.

NOTRE DAME OF MARYLAND,
Collegiate Institute for **Young Ladies** and Preparatory School for **Little Girls**, EMBLA P. O., Three Miles from **Baltimore, Md.** Conducted by the Sisters of Notre Dame. Send for Catalogue.

SALT. ONONDAGA F. F. SALT. SOLE MANUFACTURERS.
American Dairy Salt Co. (Limited.)
Chemically purified and WARRANTED pure as any in the market. Used by a great majority of the Dairymen of the country. Unexcelled for Butter, Cheese, the Table, and all Culinary purposes. Took Medal at Centennial "for purity and high degree of excellence." Dairy goods salted with it took first premiums at New Orleans, World's Fair, N. Y. International Fair; Milwaukee Exposition, and always wins when there is fair competition. It is American, and *cheaper and better* than any foreign salt. Try it. Address
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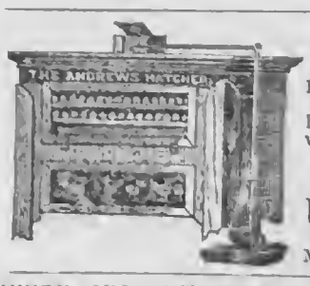

Best Hatcher ON EARTH.
Hatches Ducks, Turkeys Geese and Chickens. Received First Premium where exhibited. Send for Circular.
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Elmira, N. Y.
Mention RURAL N. Y.

INVENTORS and MAN'F'RS. Send for large pamphlet containing U.S. PATENT Office Rules for obtaining Patents. F. B. BROCK, Atty., Washington, D.C.

News of the Week.

HOME NEWS.

SATURDAY, August 14, 1886.

THE import duty on canned mackerel has been raised from 20 to 100 per cent. ad valorem by the local custom-house authorities at Boston. The case is to be appealed to the Secretary of the Treasury. In view of the small catch of mackerel by American fishermen, this is an important matter. It is a blow at Canadian fishermen and at American fish consumers.....For some weeks there has been a strike or lockout at the immense pork-packing establishments of John B. Squires, at East Cambridge, near Boston. The men wanted better terms; and Squire would not tolerate the K. of L. or any other labor organization, as they were likely to ruin his business by frequent strikes and incessant growling. The men (about 4,000) all returned to work Tuesday last on better terms; but they had to treat not as an organization, but individually, so Squire gets all he wanted, and the men nearly all they wanted...The Standard Oil Company has leased 2,000 acres in Northern Pa., extending along the natural depressions from Corry to Erie—a part of a scheme to monopolize all the available gas and oil lands in the country..... Of the Canadian Volunteers against Riel only about 900 have taken land warrants entitling them to 380 acres of land in the Northwest territory, while 3,500 have preferred to take scrip worth only $80. Nearly 1,000 of those entitled to scrip or warrants have appeared for neither. The issue of land warrants closed on July 31; but the men can still take scrip..... .....At the annual session of the Grand Army of the Republic at San Francisco the other day, a resolution in favor of pensions for all surviving soldiers of the late war was voted down by a majority of four to one, as a similar motion had been at the meeting of last year.....Workingmen have no reason to find fault with the session of Congress just ended. It passed every labor measure presented to it. It passed an arbitration bill, it prohibited the importation of contract labor, prohibited the contraction of contract labor in Federal prisons, and ordered an investigation of convict labor in the prisons of every State and Territory, as a basis for future legislation ....Of the 4,000 men who went on a strike on the Gould system of railroads in Missouri, it is said that only 200 have been re-employed ....A rich oil belt has been discovered at Livermore, Cal....It is said large numbers of Chinamen are continually entering the United States over the Mexican border, in violation of the law...Arrangements are being made at the Treasury Department for a large call of bonds in a few days, in addition to the usual monthly call of $4,000,000 to meet the requirements of the sinking fund. The amount will probably be $10,000,000....In an election, Tuesday, Jackson, Miss., gave 300 majority against prohibition, but the county was carried by the Prohibitionists by 800 majority. That's the tale nearly everywhere—the towns vote for rum or high license; the country for local option or prohibition..... The Audubon Society was duly incorporated under the York State laws last Saturday..... ....The Blaine fight against Edmunds in Vermont, in spite of the late declaration of the Republican State Convention in the latter's favor, still continues. Nominations for the Legislature are now being made—for 30 Senators and 240 Representatives—and the Blaine-Smith men are doing their level best to secure anti-Edmunds nominations. Edmunds still ahead, however.....In Tennessee, the Republicans nominated the Hon. Alfred Taylor for Governor on June 15, and Thursday the Democrats nominated his brother, Robert L. Taylor, now Pension Agent at Knoxville, for the same position, while the Prohibitionists propose to nominate the father of both these men as their candidate. Good for the Taylor family!..... ..... Japan having recently voluntarily surrendered a fugitive from justice to the State of California, the American and Japanese Governments have negotiated a very complete extradition treaty, which was sent to the Senate by the President June 9. The treaty was negotiated by ex-Gov. Richard B. Hubbard, of Texas, our Minister to Japan, and Count Inouye Kaoru, the Japanese Minister of Foreign Affairs. This is the first extradition treaty ever negotiated between an Asiatic and a civilized power, and marks the highest advance yet proposed by our Government, which has always been highly favorable to extradition .....The law requires the Treasury to purchase each month $2,000,000 worth of silver and coin it into as many silver dollars as it will make. In June, the average price paid for silver was 98.77 cents per ounce, and $2,000,000 worth of silver produced in silver dollars $2,617,981. This gives an intrinsic value per dollar of 76.42 cents. The intrinsic value of a $10,000 greenback, however, is a mere trifle; but the credit of the United States makes it worth its face value in gold—so say the "silver men."..... The National Association of prisoners of war meets at Buffalo, August 18 and 19. It is claimed 100,000 were at one time or another prisoners. Only 22,000 survive; of these, 11,000 can't get pensions. 46,000 are said to have died of exposure and starvation..... The people of Georgia, in the October election, will be called upon to vote on a constitutional amendment authorizing the Legislature to pension Confederate soldiers ....The President signed the River and Harbor Improvement Bill on the ground that the amount, $14,473,000 was moderate, being the smallest for some years, and upon the assurance of Gen. John Newton, the Chief Engineer, that if the appropriation failed, it would require $500,000 to keep important works from deteriorating. Gen. Newton assured the President that all the appropriations in the bill were for meritorious works, except perhaps in the case of 18 items, for which the sum total did not exceed 1 per cent. of the whole appropriation. Others do not agree with this view, but anyhow it has lately become too much the custom to vilify Congress and those in executive places for nearly everything they do or do not do ....Daniel Magone, of Ogdensburg, N. Y., 55 years old, of Irish descent, and a lawyer by profession, has been appointed Collector of Customs at this port to succeed Hedden, requested to resign—one of the most important appointments in the whole country owing to the immense amount of patronage at the disposal of the Collector Prof. Foster, meteorologist, Burlington, Ia., predicts that one of the greatest storms in 1886 will begin August 16 and continue till August 27, during which time the great drought will be broken by heavy rains, hail, tornadoes, and heavy gales. He predicts a tropical hurricane on the southeast Atlantic coast between the 16th and 20th. These storms will be general, and Iowa, Illinois, New England States, Eastern Canada, and Labrador will lie in the danger path. Vivid sun-spots are predicted from the 18th to the 20th, and brilliant auroras on the 20th and 23d Has the Union as well as the Dominion a Wiggins?..... .....Ex-Gov. W. Stevenson, of Ky., died at his home in Covington, the other day, aged 73. Had been an able lawyer, member of both branches of the Legislature, Lieut. Gov., Gov., Member of Congress and U. S. Senator..... ....Very likely Sec. Manning will resume his official duties in Oct.—steadily recovering.... ....The Prohibitionists of N. C. are about to nominate a State ticket.....The anti-riparian party which induced Gov. Stoneman to call the extra session of the California Legislature has failed to carry one point in its program—the Legislature refuses to re-organize the Supreme Court. It is hoped to secure relief from the Court's decision by special legislation..... Geronimo and his Apaches are being hard pressed by Capt. Lawton's pursuing force in the Sierra Madres Mountains. One of his roving bands recently attacked a wagon train near Ures, Mex., and killed the Mexican teamsters and two wood choppers. The country for miles around has been terrorized by his depredations. The Mexican troops are co-operating with the American forces in pursuing the hostiles..... .....Samuel J. Kirkwood, the "War Governor" of Iowa, has consented to become a candidate for Congress in the Second District of that State.... .....Leading Knights of Labor are discussing the propriety of reorganizing the management of the order. The plan most favored is to give Mr. Powderly, or whoever may be at the head, the privilege of selecting the members of the General Executive Board. The matter will be considered at the Richmond convention in October. Here the K. a fortnight ago ordered out all the trade union cigar makers who refused to give up their Unions altogether and become Knights exclusively. Some belonged to both Unions and K., but all—over 5,000 "went out" as the manufacturers preferred to deal with the K., who promised to fill the places of the "outs." This they have been unable to do, and the Unionists are returning to work on their own terms. In a great number of other cases also the K. are getting the worst of it; for of late the "striking" and "boycotting" faction has been coming prominently to the front, and employers and public are getting "tired" of their tyranny. After all, if public opinion is against them, their ultimate ruin is certain... Editor Cutting is still in prison at Paso del Norte. He is held for circulating the libel in Mexico, not for printing it in Texas. He has been sentenced to a year's imprisonment and a fine of $600, with 100 days' extra imprisonment if it isn't paid. His record is by no means a good one, and it's a pity such a fuss should be made over a fellow of that sort. The Chief of Police at Piedras Negras has been acquitted for the killing of Rasures. It seems he was given in charge of a deputy to be carried up country, tried to escape and was shot. It is now alleged he was not an American citizen; but he was well known as a horse thief and a worthless desperado. Very contradictory reports from all along the border about almost everything. A great deal of excitement along the Rio Grande and Texas, and volunteers offering themselves "for the war," from Buffalo to San Francisco. The Southern States, especially Texas, are hot for hostilities. Not much fear of war, however, unless the countries are dragged into it by border adventurers, speculators and desparadoes. European and American speculators in Mexican lands and mines would make millions by the appreciation of property they bought for a song, if their section of Mexico were annexed to the United States, and they are trying to bring that about. The Mexican Government is acting well, and in any case arbitration must be tried before war..... .....Mrs. Robinson, arrested at Somerville, Mass., on a charge of poisoning her son, is now suspected of having caused 100 deaths during the last four years, including husband, children and other members of her own family. The insurance on their lives, in which she was interested, was generally the cause... ...A portion of the New Orleans Exposition Building, falling, killed one man and seriously injured others, yesterday.....Cardinal Taschereau, of Quebec, has sent a circular letter to the bishops of his Province announcing that the Roman See has finally condemned the Order of the Knights of Labor..... ..... Secretary Whitney has ordered the construction of the most highly powered cruiser in the world..... .....The long drought in portions of the West was yesterday broken by a storm that did much damage to property and worked serious injury to the crops. .....A telegram as we go to press says the forest fires in Michigan and Wisconsin are abating.....

FOREIGN NEWS.

SATURDAY, August 14, 1886.

FROM last Saturday to Thursday, very disastrous riots raged in Belfast. There have been 42 known deaths, and over 300 people have been treated for severe injuries in the hospitals, besides a great many more at their own homes. The number of deaths and injuries will never be known, as both parties, whenever possible, hide their misfortunes, as the knowledge of them would gratify their opponents. The town has about 175,000 Protestants to 50,000 Catholics; but though the former are undoubtedly most to blame, both parties are at fault. In addition to the late reinforcement of constabulary, 500 fresh policemen have been sent there from other parts of the island. The reinforcements are chiefly Catholics, and the Belfast Protestants hate them worse even than they hate their Catholic fellow-townsmen. Over 5,000 troops patrol the town, disperse mobs and try to keep the peace. Government is to make inquiry into the trouble. The Magistrates are 37 Protestants to 11 Catholics, and the majority decides, and Catholics say they are treated very unfairly..... .....In England Parliament has been prorogued to September 19. Lord Salisbury intimates coercion for Ireland. The Conservatives are preparing a Home Rule Bill for England, Ireland, Scotland and Wales, leaving each to take care of its own legislation, while the General Government will act like Congress here. The federation of the United Kingdom and all its colonies is gaining headway, and this is a move in that direction..... ....When a Member of Parliament accepts office under Government he has to be re-elected either by his former or some other constituency. All the Conservatives who took office have been re-elected without opposition at the polls.....Cholera is growing more violent than of late in Italy. At Trieste 17 new cases yesterday and five deaths; 131 new cases and 63 deaths at Barletta; 36 new cases and nine deaths at Ravenna, and 61 new cases and 30 deaths in other parts of the country..... The Emperors of Germany and Austria-Hungary have had a three-days' interview at Gatsein, but the Emperor of Russia was absent, and Russia is very much displeased because Germany backs up Austria in checking her designs on Constantinople, and war may show her displeasure at no distant day.....

AGRICULTURAL NEWS.

SATURDAY, Aug. 14, 1886.

ACCORDING to the Alexandria Produce Association's Report, the cotton and corn crops of Egypt are an average, but two weeks late owing to the lowness of the Nile..... .....The Canadian Government is to make a collection of the best early autumn fruits and vegetables for the great Colonial Exhibition now delighting and instructing London and the rest of England. The first shipment will be made Sept. 23, from the Industrial Show at Toronto, and the Horticultural show at Montreal. The second shipment will be made Sept. 30, from the Provincial Fair at Guelph, and the Dominion Exhibition at Sherbroke. All the English papers are enthusiastic over the magnificent display of raw and manufactured mineral and vegetable products made by Canada at the Colonial and Indian Exhibition—the Colonind, as it called, for short. .....The Winnepeg Packing and Provision Company has applied for incorporation. It is to go into the pork and dressed beef packing business, and wants a bonus of $10,000 from Winnepeg for starting there—entire capital, $75,000. Unless a packery is started there soon, some other place is likely to get ahead, as there will be plenty of stock soon in the Canadian Northwest.....According to carefully prepared estimates, the sugar crop of Cuba amounts to 661,697 tons against 631,967. Bad weather spoilt the June estimate of 700,000 tons in '85.....Pleuro-pneumonia has appeared among another herd of cattle in Manor Township, near Lancaster, Pa. Dr. Bridges, of Philadelphia, State Veterinarian, Wednesday killed four head on the farm of Cyrus Mann and inoculated the remainder of herd. The other herds infected are improving. ....Up to date fully 3,000 cattle belonging to intruders have been driven from the Chickasaw Nation, Indian Territory, by the police. A large number of intruders who made a pretense of selling to the Indians to enable them to keep their stock in the country have been compelled to take their herds and go. The Indians who attempted to shield them have been placed under arrest..... .... Commissioner Colman has appointed his predecessor, the Hon. George B. Loring, of Massachusetts, to represent the United States at the exhibition of the American Percheron Horse-breeders' Association in Chicago, September 6.....Wily farmers in Litchfield County, Ct., it is alleged, are having more than two tons of oleomargarine sent them from New York every week to be used in adulterating butter.....Rainy weather in Russia is rotting the grain in the fields, and the crop outlook is bad... .... For 15 points in the West and Northwest, the records of the Signal Service show an average of 6.53 inches of rainfall during May, June and July of this year. The average of the same points for 11 years past, is 12.52 inches for those three month. The supply of moisture this Summer, thus far, has been but very little more than half the average of the season. .....The watermelon crop of the South will hardly be very profitable this year. Last year's crop was very profitable, and a large increase was made in the area; hence the oversupply now, and melons often don't pay freight and charges. South Carolina alone is expected to send over 3,000,000 melons to this city, besides loads to the West and other sections..... ... The wheat crop of France is estimated at 106,000,000 hectoliters against 210,000,000 in 1885'.....

Restoration of Hearing.

Do you hear well? If not, it will be interesting to read what several patients have to say of how their hearing was improved:

A gentleman in San Francisco, Cal., who had for a few months used Compound Oxygen, wrote as follows: "My left ear had always been to me a useless organ. Yesterday I made several prolonged tests on the telephone. Although formerly I had been unable to hear at all in that ear, *I am now able to hear in it* more distinctly than in my right ear."

A patient at Indianapolis, Ind., writes: "I have used three-fourths of the Compound Oxygen you sent me, and have derived much benefit. My catarrh I think about cured, and *my hearing has also been benefited.*"

A physician of Shreveport, La., says: "Compound Oxygen is the best remedy I have found for my troubles. To first time I used it I was relieved of a very severe catarrh trouble, which kept me awake all night. My *defective hearing has been very much improved* and my lung trouble promises to be a thing of the past."

A gentleman in Des Moines, Ia., writes: "Compound Oxygen has improved my general health. The periodical *attacks of deafness are not so frequent* nor so long continued."

A Virginia physician writes: "*My wife* has been for twenty-five or thirty years deaf in one ear, and under the use of the Oxygen *can now hear well.*"

"Compound Oxygen—Its Mode of Action and Results," is the title of a work which gives a full and interesting explanation of what may appear mysterious about this remedy, and also gives letters from patients cured

of various chronic diseases. It is furnished free to any address on application, either personally or by letter, to Drs. STARKEY & PALEN, 1529 Arch Street, Philadelphia, Pa.—*Adv.*

Crops & Markets.

SATURDAY, Aug. 14, 1886.

The visible supply of grain August 7, as compiled by the New York produce exchange, was: Wheat 36,752,874 bushels, increase 2,095,910; corn 8,695,346; decrease 545,813; oats 2,021,231, increase 266,457; rye 420,847, increase 49,311; barley 252,884; increase 25,996.

The Department of Agriculture at Washington reports that the spring wheat returns for August show an improvement in condition in Iowa, a small decline in Wisconsin and Nebraska, and a heavy reduction in Dakota The causes of deterioration are drought and chinch-bugs. Heat has been excessive in many districts that have produced a fair yield not withstanding. The harvest is two weeks earlier than usual, and the quality is unusually good, except in sections where heavy loss from blight has occurred. The average has been reduced from 83.2 to 80.1, while last year at the harvest the average was 86. Iowa's present average is 97, and no less than 25 counties, each producing from 200,000 to 1,000,000 bushels, report the condition at 100 or over. In Minnesota there is an increase from 78 to 80. The reduction in Wisconsin is from 75 to 72; in Nebraska from 83 to 82, and in Dakota from 85 to 62. The condition of corn has declined heavily in Illinois, Wisconsin and States west of the Mississippi since July 1. In the Eastern and Middle States the condition is well maintained. The general indications point to a crop of 22 bushels to the acre. The average of spring rye is 88. There has been no material decline in oats, the average being 87. Barley has maintained its condition, and a nearly average crop is assured. The condition of buckwheat averages 94, of tobacco 82, of potatoes 88. The cotton crop has suffered from wet weather in all States east of the Mississippi and in Louisiana. The average of condition had been reduced from 86 to 81; Virginia 75, North Carolina 74, South Carolina 67, Georgia 80, Florida 86, Alabama 77, Mississippi 79, Louisiana 75, Texas 88, Arkansas 96, Tennessee 95. There has been a slight advance in Arkansas and Texas. The decline is heavy in the Carolinas. The Government's London agent telegraphs that the European harvest will be 10 per cent. less than last year.

THE Cincinnati Price Current of Thursday says in Kansas the general outlook for corn has been improved by rains. Nebraska continues to give a poor promise. In Iowa scarcely any locality promises over three-fourths of a crop. Missouri is more variable, but not averaging over three-fourths of a crop. Some rains have fallen in Illinois, but the situation remains poor, averaging two-thirds of a crop. In Indiana there will be but little short of an average yield. Ohio generally fairly good. Michigan somewhat short, Kentucky nearly an average and Tennessee rather poor in condition of crop. These States represent 75 per cent. of last year's production, and if present indications are fulfilled will be about 77 per cent., compared with last year. This means a total of 1,115,000,000 bushels for the 10 States, or an average of of 23½ bushels per acre. The remaining portion of the country is in fairly good condition; 450,000,000 bushels, or 10 per cent. below last year, closely approximates the promise of this portion of the country. This implies less than 21 bushels per acre as a general average for the whole country.

The Price Current calculates the exportable surplus of wheat this year from the Atlantic division of the country at 70,000,000 to 75,000,000 bushels, and for the Pacific division approximately, 50,000,000 bushels, as available during the year now opening in excess of domestic requirements for consumption, seeding and reserves.

Telegraphic advices from Winnipeg, Manitoba, on the 11th, concerning nearly every station in the Northwest, indicate that the wheat harvest is already well advanced, and that it will be nearly finished during the week. All reports agree as to the superior quality of the crops, though the average yield will likely be under 20 bushels per acre. Good for the Dominion!

Other reports from Ontario, Canada, say there has been exceptionally fine harvest weather in Western Ontario, and already the bulk of the fall wheat and barley has been housed in excellent condition. Thrashing has commenced, and from reports received both the samples of wheat and the yield are all that could be desired. Some few fields of early oats have been cut, but generally speaking they are light in the straw. Spring wheat is ready for the reaper. The hay crop has been harvested in the finest condition that was ever known, as the majority of that cut hardly got a sprinkling of rain. One week more will see the grain harvest pretty well through with in Ontario—one of the earliest remembered.

A special from St. Paul, Minn., on the 12th, says: Scattering reports from the Southwest of the State, where some thrashing has been done, are generally encouraging. In many places in the James River country, where the crop was supposed to be very badly damaged, wheat is turning out fairly well. It is now apparent that the crops in the immediate vicinity of Millbank are damaged about 50 per cent. by the hailstorm of a month ago. Around Ortonville, the wheat will yield 12 to 13 bushels. The quality is good, as there is no smut this year. Around Webster, Dakota, wheat will yield 15 to 19 bushels of excellent quality; oats about 30 bushels. Along the Fargo southern crops are turning out very well, and the yield of wheat and oats will be about an average. In Watonwan County thrashing is well under way, and the quality and yield of grain are better than expected. Corn is maturing rapidly, and is in a fine condition. Some farmers about Shakopee are already thrashing, and report the yield perfectly satisfactory, one man obtaining 26 bushels per acre on a 10-acre field. The weather is very dry, and the chinch bugs are damaging the corn to a considerable extent. It has been reported that Walsh County, Dakota, will not raise half a crop this year.

LATEST BRIEFS.—Fears of serious effects from the drought are stiffening corn prices. The actual yield of spring wheat appears to be in excess of the quautity lately anticipated. Cotton is doing well in Arkansas, Tennessee, and the eastern cotton belt, except Alabama, where worms have done some damage. In Texas the hot weather continues, and has caused shedding. Rain is still needed in some sections of the western tobacco region. Special hop crop reports to Bradstreet's point to a probable total crop of 65,000 bales in the United States, 20,000 bales in New York State, and the remainder on the Pacific Coast. Old hops on hand aggregate 120,000 bales, and the probable consumption the coming year is placed at 140,000 bales. The old hops are of very poor quality. Sugar is again lower in price, owing to heavy supplies in sight.

After two months of advancing, followed by firm prices, without material change, the wool markets begin to show symptoms of weakness. Takings by manufacturers have been very moderate for some days past, and sales have occasionally been made at small concessions on the terms which were strenuously insisted on earlier in the month. Reaction will probably not be lasting.

MARKETS BY TELEGRAPH.

SATURDAY, August 14, 1886.

CHICAGO.—Compared with cash prices a week ago, "regular" wheat is 1½c. higher; No. 2 Spring, ½c. higher. Corn, 1½c. higher. Oats, ¼c. higher. Rye, 1c. lower. Barley, ½c. lower. Flaxseed, 2c. higher. Pork, 5½c. lower. Cattle, somewhat lower. Hogs, a little lower. Sheep, considerably higher, according to quality.

WHEAT.—Strong: Sales ranged: August, 75⅝@76¼c; Sept., 76¾@77c; October, 78½@78¾c; No. 3 Spring, 75¾c. CORN.—Strong: cash, 44¼c; August, 43¾@43¾c; September, 43¾@44⅝c; October, 45¼@46. OATS.—Quiet; Sales ranged: Cash, 27¾c; August, 27⅜c; September, 25⅞@25¾c; October, 29⅜@29¾c. RYE.—Quiet; No. 2, 51c. BARLEY.—September, 61@61c. FLAXSEED.—No. 1, $1 15½. MESS PORK.—Firm: Sales ranged: Cash, $9 67½@9 70 August, $9 67½@9 70; September, $9 70@9 77½; October, $9 80@9 87½. LARD.—Strong: sales ranged: Cash, $7 15; August $7 12½@7 15; September, $7 12½@7 25. SHORT RIBS.—Cash, $6 30. Boxed Meats.—Dry salted shoulders, $6 10@6 15. Short clear sides, $6 60@6 65. CATTLE.—Market Steady; Shipping steers, $4 65@5 12; stockers and feeders, $2 40@3 50; cows, bulls and mixed $1 50@3 70; bulk, $2 60@2 90; through Texas steers, $2 75@3 50. HOGS.—Market strong, rough and mixed, $4 50@4 80; packing and shipping, $4 80@5 20; light weights $3 90@4 85; skips, $2 50@3 90. SHEEP.—Market strong; Natives, $3 75@4 25, Western, $2 50@3 65; Texans, $2@3; Lambs, $3 75@5 25.

ST. LOUIS.—Compared with cash prices a week ago. No. 2 red wheat is ¾c. higher. Corn, 1½c. lower. Oats, ⅝c. higher. Rye, 2½c. higher. Barley, 4c. lower. Butter, steady. Eggs, 1c. higher. Flaxseed, unchanged. Pork, 10c. higher. Cattle, shippers, 10c. to 15c. higher; butchers' best, 10c. higher; others lower; Texans, 25c. lower; others steady. Hogs, somewhat lower. Sheep, unchanged.

WHEAT.—Firm: No. 2 Red, Cash, 76¾@76¾c; August, 76¾c; September, 78¼c. CORN.—Active; No. 2 mixed Cash, 39⅝@40c; August, 40c; September, 41¾c. OATS.—Dull; No. 2 mixed, Cash, 26¾@27¼c.; August, 26¾c; September, 27½c. RYE, 52½c. BARLEY.—Nominal at 61c. BUTTER.—Creamery, 15@20c; dairy, 10@16c. EGGS, 9c. FLAXSEED.—$1 09½. HAY.—Timothy, $7 00; Prairie, $7 00. PORK—$10 25. BULKMEATS.—Long clear, $6 25; short ribs, $6 30; short clear, $6 45 LARD, $6 70. CATTLE.—Market strong; Good to Choice Native Shipping Steers, $4 50@4 95; Common to Fair, $3 75@4 40; Butchers' Steers, $3 25@4 35; Cows and Heifers, $2 25@3 50; Stockers and Feeders $2 25@4 00; grass Texans, $2 50@3 60. HOGS.—Market firm; Lights, $4 50@4 80; Packing, $4 40@4 80; heavy, $4 85@5 05. SHEEP.—Market steady at $2 25@3 75.

BOSTON.—GRAIN.—Corn.—Steamer mixed at 55½c. per bushel, and the close a firmer tone; high mixed has sold at 57@60c, and steamer yellow sold at 56½c. OATS.—No. 2 white at 41@41½c. as to location; No. 3 white, 39@39½ and fancy clipped at 42@42½c. per bushel Rye, 68c. per bushel. Bran, $14@15 10 for Spring, and $15 75 for Winter; Fine Feed and Middlings at $15@18, and Cotton Seed Meal at $23 50 on the spot, and $22 per ton to arrive. HAY AND STRAW.—Hay, $18 per ton for choice and fancy: $15@17 for fair to good, $12@16 for fine, and $9@13 for poor and damaged; Western choice, $15@17, do fair to good $14@15. Straw.—Rye straw is held at $16@17 for choice, and $15 for common to good. Swale hay at $10@11 per ton. Oat straw at $8@9 per ton. PRODUCE.—BUTTER.—Northern and Eastern creamery, extra, 20@21c; extra firsts, 18@19c; firsts, 16@17c; Western creamery, 19½@20c. for extra firsts to extra; firsts, 18@19c; Northern dairy, 14@17½c. for Vermont extra firsts to extra; firsts, 14@14½c; seconds, 12@13c; Western dairy, 12@13c. for firsts; seconds, 9@11c; imitation creamery, 11@15c for extra firsts to extra; ladle-packed, 9@13c, for extra firsts to extra; firsts, 8@9c; seconds 7@8c; grease, 3@4c. NEW CHEESE. New York and Vermont extra, 8@8¼c; do, do firsts, 7@7¾c; do do. seconds, 4@6c; Western extra, 7¾c; do. firsts, 6½@7½c. EGGS.—Cape and near-by, per doz. 19c; Eastern extras 17½@18c; do. firsts, 15½@16c; Northern firsts, 15½@15c; Western firsts, 14c; Provincial, 15½@16c. BEANS.—Choice Northern hand-picked pea, $1 75@1 85 per bushel; do. do. New York, small $1 60@1 70; do. do. screened, $1 15@1 30; medium choice, hand picked, $1 50@1 55; do. do. screened, $1 15@1 25; Yellow Eyes, Improved $1 50; do, choice flats, $1 25@1 40; Red Kidneys, $1 75@2 00; Canada pea, 65@95c. per bushel for common to choice; green peas, Northern, 90c@$1; do. Western, $1 15@1 20. POTATOES range at $1 75@2 00 per barrel.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, August 14, 1886.

STATE OF THE MARKET.—As compared with cash prices last week, flour is unchanged; ungraded spring wheat, 2c. higher; No. 2 Red, ½c. lower; corn, 2c. higher; oats, ½c. lower; pork, unchanged; butter and cheese, 2c. to 2½c. higher; eggs steady; fruit a shade lower; vegetables steady.

FLOUR, FEED AND MEAL—FLOUR—Quotations: Fine, $2 00@2 60; Superfine, $2 10@2 80; Extra No. 2, $2 50@3 10; Good to Fancy Extra State, $3 20@3 85; Common to Good Extra Western, $2 70@3 95; Good to Choice Extra Western, $4 00@4 90; Common to Fair Extra Ohio, $2 50@3 75; Good, $3 80@4 20; Good to Choice, $4 25@4 75; Common Extra Minnesota, $2 50@3 25; Clear, $3 25@3 75; Rye Mixture, $3 30@3 75; Straight, $4 00@4 50; Patent $4 40@5 00; Bakers' Extra, $3 75@4 50; St. Louis Common to Fair Extra, $2 50@3 65 Fair to Good, $3 70@4 50; Good to Very Choice, $4 55@5 00; Patent Winter Wheat Extra, $4 40@5 00; City Mill Extra for W. I. Indies, $4 20@4 45; South America, $4 40@4 50. SOUTHERN FLOUR.—Common to Fair Extra at $2 85@3 60, and Fair to Choice, $3 65@5 00. RYE FLOUR.—Superfine, $3 00@3 30. CORN MEAL.—Yellow Western quoted at $2 60@2 85 and Brandywine at $2 80@2 95. FEED.—40 to 50 lb, quoted at 70@75c; 60 lb at 65@70c; 80 lb at 75@80c; 100 lb at 80@90c; Sharps at 95c@$1. Rye, at 75@80c.

GRAIN.—WHEAT.—Ungraded Spring, 85c.; No. 2 Chicago, 85¼@86¼c; Ungraded Red, 75@86¼c; Steamer No. 3 Red, 8 c; No. 3 Red, 83¼@83½c; Steamer No. 2 Red, 83¼@83½c; No. 2 Red, 85¼@85½c; No. 2 Red, for August, 84¼@85c; do. for September, 86@86¾c; do. for October, 87¾@87 11 16c; do. for November, 88⅞@89¼c; do. for December, 90¾@90¾c; do. for January, 91⅝@92c; do. for May, 97@97½c. CORN.—Ungraded Mixed, at 50@51c; Damaged, 40c; No. 2, 51¾@51¾c; No. 2 for August, 51½c; do. for September, 51¾@52¼c; do. for October, 52⅞@53⅛; do. for November, 53¼@53⅝c. OATS.—No. 3, at 32c; do. White, 36@37½c; No. 2, 33½@33¾c; do. No. 2 White, 37½@38c; Mixed Western, 34@36c; White, do. 37@41c; White State, 40c. No. 2 for August, 33c; do for September, 32¾@33½c; do. for October, 34¼c.

PROVISIONS.—PORK.—Mess, quoted at $10 62½@10 75 for Old and $11 62½@11 87½ for New; $12 @$12 75 for Family Mess; $14@14 75 for Clear Back; and $9 50@10 for Extra Prime BEEF.—Extra India Mess $12@14; Extra Mess, in barrels, $8 50; Packet, $8 50; Plate, $9 50. BEEF HAMS.—Quoted at $25 for new. CUT MEATS.—Pickled Bellies, 10 lb average 6¾c; Pickled Shoulders, 6¼c; City Pickled Shoulders, 6½@6¾c; Smoked Shoulders, 7¼@7¼c; Pickled Hams, 12c, Smoked Hams, 12¾@13c. MIDDLES.—Long Clear in New York, 7c at the West, Long Clear, 6.45c; Short Clear, 6.70c. DRESSED HOGS.—City Heavy to Light at 6¾@6¾c; Pigs, 6¾@6¾c.

BUTTER.—Creamery—State, pails, fine 22@22½; do. and Pennsylvania, tubs, 21½@22c; Western, best, 20½@21c; do. prime, 18@19c; do good, 15@16. State Dairy, half-firkin tubs, best, 19@20c; do. do, about prime, 17@18c; do. do. good, 15@16c; do. common, 13c; Welsh tubs, best, 19c; do. prime, 17@18c Western Imitation Creamery, best, 18c; do. fair and good, 11@12c; Dairy fine, 13c; do, common, 10@12c; do, Factory, fresh, 11½@12c; do. good, 10½@11c.

CHEESE.—The quotations are for: New State Factory, best white, 8¾c; do. best colored, 8¾c; do. fine, 8½@8¾c. do, fair, 7¾@7¾c; do. common, 6¾@7¼c; Ohio Factory, fine, flat, 7¾@7¾; State Factory, night skims, 6½@6¾c.

EGGS.—State, 14½c; Western, 13¾c; Canadian, 14.

POULTRY—LIVE.—Chickens, spring, per lb, at 13@14c; fowls, near-by lots, per lb, at 11@11½c.; fowls, Western lots, per lb, at 10½@11c.. fowls Southern lots, per lb, at 10½@11c; turkeys, per lb at 9@10c; ducks, western per pair, at 50@75c.; geese, western, per pair, at $1.12@1.50.

POULTRY.—DRESSED.—Turkeys, per pound, at 10@11c.; Spring chickens, Philadelphia, per pound at 19@20c.; do. western, per lb, at 16@17c; fowls, Pennsylvania, prime, per lb, 12½@13c.; do State and western, per lb, at 12@13c.

FRUITS.—FRESH.—Quotations are: Apples.—Nyack, d-h bbl, at $1 50@1 62; do. open heads at $1 00@1 25, Orange Pippin, per d-h bbl, at $1 25@1 50; do. open heads, at 75c@$1 25; Gravenstein, per d-h bbl., at $1 25@1 75. Red Astrachan, Jersey, per bbl. $1 25@1 50, Sour Rough, Jersey, per d-h bbl., $1 00@1 25; Sweet do. do., per d-h bbl, at $1 00@1 50; Rough, Jersey, open heads, at 75c@$1 00; Maryland and Delaware, red, per crate, 60@75c; do. green, per crate, 40@60c. Peaches.—Troth, Md., per crate, at $1 25@1 57; do. per basket, at 75c.@$1 00; Mt. Rose, Md. per basket $1@1 50; Crawford, Md. per crate, at $1 50@2 00. Maryland and Delaware, inferior, per basket, 50@75c; Jersey, choice, per basket, at 75c.@$1 00; do, poor to fair, per basket, at 35@50c. Pears.—Bartlett, Va., good to choice, bushel crate, at $2 00@2 50; do. fair, per bushel crate, at $1 00@1 50; do. Md., per crate, 75c.@$1 00; do. Jersey, per bushel crate, at 75c@$1 00; do. do., per bbl, at $2 50@3 50; Clapp's favorite, per bbl, $2 50@3 00; Le Conte, Ga., per case, at $1 25@1 37; Bell, per bbl, $1 75@2 00; Scooter, per bbl, at $1 25@1 75; Buff, per bbl, at $1 00@1 50. Grapes.—Niagara, South Carolina, per lb, 8@13c; Delaware, South Carolina, per lb, 12@20c; Perkins, North Carolina, per lb, 7@8c; Martha, N. C., per lb, at 8@10c; Concord, N. C., per lb, at 5@7c; other black varieties, N. C., per at 3@5c; Moore's Early, Va., fancy, per lb, at 10@12c; Hartford and Ives, Va., fancy, per lb, 5@7c. Plums.—Egg, up-river, per bbl, at $3 00; Damson, Md., per quart, 3@4c. Currants.—Up-river, large, per lb, at 1½@3c; up-river, large, per quart, at 2@4c. Blackberries.—Wilson, Freehold, per quart, 7@10c; Wilson, Keyport, &c., Jersey, per quart, 5@7c. Huckleberries.—Shawangunk Mountains, per half-bushel box, at 75@87c; Shawangunk Mountains, per quart, at 5@7c; Jersey, per quart, at 5@6c; Jersey, per 8 to 10 quart box, 40@50c; Maryland, per quart, at 4@5c. Watermelons.—Georgia, prime per 100, at $22@24; Georgia, poor to good, per 100, $15@18; South Carolina, good to prime, per 100, at $18@25; South Carolina, poor to fair, per 100 at $12@16; North Carolina, poor to prime, per 100, $8@20. Muskmelon.—Norfolk and North Carolina, prime, per bbl, at $1 50@2 00; Norfolk, inferior, per bbl, at 75c.@$1 25; Baltimore, poor to good, per bbl. crate, $1 00@2 00; South Jersey, per bbl, at $2 25@2 75.

FRUITS.—DRIED.—The quotations are as follows: Apples—Fancy evaporated, at 9c; do. choice, at 8¼c; do. prime at 8c; fancy North Carolina sliced, at —; choice do. at 2½@3c.; choice Tennessee quarters at 1½@2c.; State quarters at 2½@2c.; southern sliced prime at 1½@2c. Peaches—Peeled North Carolina, choice, 11c fancy, 12@12½c; do. Georgia, choice, at 10@11c; do. prime, 8@9c. unpeeled halves 2½@3c; unpeeled quarters at 2½@2½c. Cherries, pitted, at 10@10½c. Evaporated raspberries, at 15c; sun-dried do. 13c. Blackberries—Prime at 6½@6¾c.

PEANUTS.—A small trade demand noted. Quotations are: 5½c. for best hand-picked; 4@4½c. for farmers' grades.

COTTON.—The quotations, according to the American classification, are as follows:

	Uplands.	New Orleans and Gulf.	Texas.
Ordinary	6 13-16	7	7
Strict Ordinary	7¼	7 7-16	7 7-16
Good Ordinary	8 3-16	8⅜	8⅜
Strict Good Ordinary	8⅝	8 13-16	8 13-16
Low Middling	9	9 3-16	9 3-16
Strict Low Middling	9¼	9 7-16	9 7-16
Middling	9 7-16	9⅝	9⅝
Good Middling	9 15-16	10⅛	10⅛
Strict Good Middling	10¼	10 7-16	10 7-16
Middling Fair	10⅝	10 13-16	10 13-16
Fair	11¼	11 7-16	11 7-16

STAINED.

Good Ordinary	6⅝	Low Middling	8⅛
Strict Good Ord.	7 5-16	Middling	8⅜

HAY AND STRAW.—The following quotations are for New hay at 55@70c; Choice Timothy, old, 80@85c; Good do, at 70@75c; medium, 55@60c, shipping at 50c; clover mixed, 55@60c Straw.—No. 1 rye, 70@75c; short rye at 40@50c; oat, at 30@40c.

BEANS.—Marrows, $1 75; Mediums, $1 55; Peas, $1 52½; Red Kidneys, choice, $2 25, White Kidneys choice, $1 55; California Lima, $1 70; Green Peas, $1 15.

PEAS.—Green are quoted at $1 15@1 20.

HOPS.—State, best, 27@28c; State, good and prime 23@25c, State, common, 19@22c; State, old crop, 14@22c; California, 23@25c.

VEGETABLES'—Quotations are for: Potatoes.—Long Island, rose, in bulk, per bbl., $1 37@1 62; Jersey, rose, per bbl, $1 50@1 75; sweet potatoes, Va., yellow, per bbl., $3 25@3 75; sweet potatoes, Va., red, per bbl, $2 75@3 25; Yams, Va., per bbl, $3 00@3 50. Beans.—Long Island, green, per bag, 15c. Corn.—Hackensack per 100, $1 00@1 25; Southern Jersey, prime per 100, 65@85c. Cabbages.—Flat Dutch, per 100, $2 00@3 00. Cucumbers.—Long Island, per 100, 50@65c. Egg plant, Philadelphia, per bbl., $1 50; do. Southern, per bbl, $1 00@2 25. Okra, per 100, 15c. Onions.—Potato, Jersey, per bbl., $1 75@2 25; do. Maryland, per bbl, $1 75@2 25; do. Long Island, red, per bbl, $1 75@2 25; do. State, per bbl, $2 00@2 25; do. Western, per bbl, $2 00@2 25. Peas.—Long Island, per bag, $1 50@2 25. Squash.—Long Island, yellow, per bbl, 62½@$1 00; do. Long Island, white, per bbl, 75c@$1 00; do. Norfolk, marrow, per bbl, $1 25@1 50. Tomatoes.—Monmouth County, per box, $1 20@1 50; do. Southern Jersey, per basket, 50@75c; do. Maryland, per bushel, crate, 50@75c. Turnips, Jersey, Russia, per bbl, 75c@$1 00.

WOOL.—Quiet and finer grades rather lower, while brokers report that medium grades are steady. Spring California sold at 22½c; medium Unwashed, at 30c; medium fleeced, at 37½c.

LIVE STOCK MARKET.

NEW YORK, SATURDAY, August 14, 1886.

BEEVES.—City Dressed Beef had rather a slow sale at 6@7c. for Texan sides, and 6¾@8¼c. for Inferior to Prime Native carcasses; with a limited amount of Choice selling at 8¾c. Chicago Dressed quiet at 7@8¼c. for Native Beef, and 8¼c. reached for Choice stock. Texas Beef sold at the refrigerator at 5½@6c. Grass Bulls, 790 lb, average, at 2c. per lb; do. 810 lb, 2½c; do. 851 lb, at 2½c; State Bulls, 944 lb, at 2⅜c.

CALVES.—Veals, 136 lb, at 6½c; do. 176 lb, at 6½c; Buttermilk Calves, 198 lb, at 3c; do. (few Grassers), 209 lb, at 2½c; Buttermilks, 238 lb, at 2¾c; Grassers, 199 lb, at 2½c; Fed Calves, 292 lb, at 3c; do. 266 lb, at 3¼c; do. 153 lb, at 4c.

SHEEP AND LAMBS.—Receipts for five days, 35,396 head against 31,086 head for the same time last week. The general market was dull, with Good Sheep and Choice Heavy Lambs just about steady. Dressed Mutton slow, at 7@9c., with most of the sales at 7@8c. per lb; Dressed Lambs quiet at 9@11c. for Common to Good stock, while Choice quality brought 12c, at the slaughter houses; State Lambs, 72 lb, at 6¾c; do, 61 lb, at 5¾c; State "Culls," 47 lb, at 4½c; State Sheep, 73 lb, at 3½c; Pennsylvania do. 81 lb, at 4c; West Virginia Lambs, 59 lb, at 5¾c. per lb; Western do, 84 lb, at 5¼c; Michigan Sheep, 97 lb, at 4½c; do. 72 lb, at 5¾c; West Virginia Ewes, 120 lb, at 3½c; Kentucky Sheep, 110 lb, at 3½c; do. 70 lb, at 3½c; Canada Lambs, 69 lb, at 6¾c; do, 61 lb, at 5½c; Ohio do. 59 lb, at 5½c; Michigan do. 89 lb, at 4½c; Western do. 106 lb, at $4 25.

HOGS.—Receipts for five days, 27,499 head against 22,910 head for the same time last week. Country Dressed steady, at 6¾@7¼c. for Medium, and 7½@8c. for Light; State Hogs, 259 lb average, at $4 90; do. 244 lb, at $5; Roughs, 314 lb, at $4 10; do. 334 lb, at $4; do. 346 lb, at $3 90; Slags, 405 lb, at $3 62½.

SEND TEN CENTS IN POSTAGE STAMPS TO
E. & O. WARD,
PRODUCE COMMISSION MERCHANTS,
for Circular giving important advice about **shipping produce.** Also containing recipe for **preserving Eggs.** Established 1845.
No. 279 Washington St., New York City.

For Sale.—A Fine Bred **BROOD MARE.** 15½ hands. Fast. Has by her side the finest MARE COLT in Bergen County. Has been served by the same horse again,
A. D. BAKER,
MILBROOK POULTRY YARDS,
Wyckoff, Bergen Co., N. J.

LINSEED
OIL-CAKE MEAL.
ABSOLUTELY THE BEST FEED FOR
CATTLE, HORSES,
CALVES,
SHEEP AND HOGS.
The Oil Meal from the mills of the undersigned is found by many Feeders of
LIVE STOCK
to be of great service during the
SUMMER MONTHS
when grass is good. No room here to give particulars; but try it, and you will see the good results. It is sold by all leading feed dealers.
Mr. JOHN KING, NORRISTOWN, PENN., is General Eastern Agent.
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St. Paul Linseed Oil Co., St. Paul, Minn.
Cincinnati Linseed Oil Co., Cincinnati, Ohio.

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HE
PAYS the FREIGHT
5 Ton Wagon Scales,
Iron Levers, Steel Bearings, Brass Tare Beam and Beam Box for
$60.
Every size Scale. For free price list mention this paper and address
JONES OF BINGHAMTON,
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BRANCH HOUSES:
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SCOBIE & PARKER, Pittsburgh, Pa
C. KNOBLOCK, 230 E. Water St., Milwaukee, Wis.
E. A. ALMOND, Gen'l Ag't, Indianapolis, Ind
H. F. CONDE, Indianapolis, Ind
R. L. HICKS, Gen'l Ag't, St. Louis, Mo.
J. WILDER & CO., 159 & 161 W. 6th St., Cincinnati, O.
D. C. LONG & CO., Lexington, Ky
STAUNTON, THOMSEN & CO., Sacramento, Cal.
BROWN & FOSTER HARDWARE CO., Los Angeles, Cal.

Two Hundred Thousand Farmers in the United States know from practical observation what the "ACME" Pulverizing Harrow, Clod Crusher and Leveler is—how efficiently and cheaply it does the work—and how its use increases the wheat crop by thoroughly pulverizing the soil. The remaining farmers should post themselves in reference to this valuable implement.—See advt. on page 556,

For the Young.

I NEVER yet saw a boy who liked to turn the grindstone. I have known boys to run and hide when the tools wanted sharpening. They were always found out, though, and made to work harder than ever. Whenever the hired man has a spite against the boy he likes to get him to turn the grindstone. By bearing down hard on the axe or scythe, the work is made a great deal harder than it otherwise would be. Whenever I see a hired man doing that, I want to see him served as I once saw one served. He was "bearing on" as hard as he could, when the axe slipped and his finger went up against the stone. The skin on his finger was well ground off, and he had to go light for a while. While grinding is about as hard work as any on the farm, the tools cut enough better for the sharpening to pay for the extra work. Sharp, clean tools are what we want on our farms. We are going to have them when we have farms of our own. Remember that your hard work at the grindstone counts towards good crops as much as anything you can do. You may not get much credit for the work, but the help is there, just the same.

YOU remember the story Franklin told about the man who wanted him to turn a grindstone? Franklin was a boy, going to school, when he met a man who called him a "smart boy," and wanted him to take hold of the handle and turn, just to show how smart he was. Franklin turned like a good fellow, proud enough at this praise, while the man put his axe on the stone and sharpened it well. When the axe was done, the man stopped and said: "Clear out, you little rascal, or you'll be late to school." Now, when we see a person coming about very polite, and praising our work, we are apt to say he has "an axe to grind," that is, he wants to get us to do something for him. Look out for the people who do nothing but praise you. They are poor friends. I always want my friend to tell me what my faults are, and not praise me to my face and then go and tell somebody else how foolish I am to believe what he says. When you pick out your friends, avoid those who have nothing but praise.

SOME people have queer notions. When I was a boy they used to tell me that if I ate milk and cherries, or milk and lobsters, or milk and tomatoes I would be poisoned. I thought it was so. I can remember that in all our neighborhood, people never dared to drink milk after eating any of these three foods. They just believed what had been told them. One year a man came in from another town. He went up into a cherry tree and ate all the cherries he wanted. Then he came into the house and saw a bowl of milk on the table. Being thirsty he drank it about all up. Then there was a great commotion. Everybody supposed he would be dreadfully sick. But he never was sick, and people gradually found out that they had been deceiving themselves for years about food. They had taken for granted all that people had told them, without trying to see for themselves whether things were so or not. Our minds were given us to reason and think. We must not settle that a thing is so just because somebody else says it is. Things that we prove for ourselves are worth twice as much as things somebody else proves for us.

I ALWAYS feel sorry for a boy who has a "cow lick." I have seen some bad ones. The hair *will* stand up straight, in spite of all the combing and brushing you may do. There is no use getting discouraged about them, for they are sure to go down in time if you will only persist in combing and brushing the right way. Keep at them and brush them down.

THE STORY OF A DISTRICT SCHOOL.

A COLLEGE BOY'S DIARY.

(Continued.)

AFTER a long walk over the muddy roads, which ran for most of the way through the woods, I came to a brick schoolhouse which proved to be my "institute." There was a general air of decay about it. The bricks appeared to be weak and discouraged. At the corners of the house they were in tears—crumbling away. Several of the windows held broken panes of glass. The doors were stained and cracked. The sills were worn flat to the floor. A broken fence surrounded the yard. A large belfry had crowned the structure, yet no bell had ever been placed there. The whole premises showed the marks of neglect in every feature.

A large house stood directly across the road from the school house. I was somewhat surprised to see my satchel lying upon its side directly in front of the gate. I judged from this mark that I had reached the director's house. I pushed open the gate and walked up to the front door where a large, pleasant-looking man sat reading a paper. As he saw me he rose and came out to meet me.

"Ah! my worthy young friend, the teacher, I presume? Proud to greet you sir—proud to greet you. Excuse me for not offering my card. Since I came to live in this abode of wild beasts, sir, I have not been able to continue many of the usages of refined society; but I treasure them in memory, sir—I treasure them in memory. I recognize in you, sir, a friend in need—a brother in misery. Your misery has not yet begun, sir, but it will come upon the stage 'ere long. Walk in, sir."

We went inside where I met the rest of the family. I was tired after my long walk and gladly accepted a seat in the old-fashioned parlor. I had little need to talk. The director seemed like a man who had been kept silent for a long time and who now found a chance to liberate his voice.

"I came out from the city six months ago. This place belongs to us, and as it was running down I determined to see if I couldn't bring it up. I don't know anything about farming, and these hounds seem to appreciate the fact. If I go to them for advice they deliberately lie to me and do their best to make me go wrong. The society here is so far below the standard that the standard has closed over it. There is only one thing that would start out a crowd here, and that is a dog-fight. They elected me director—what they did it for I don't know—and I'll show them before I get through what a director is. They have built up the worst school in this part of the State. It is the direct result of their system of doing business. When one side gets a teacher in, the other side just makes it a business to get him out, if they can. We haven't had a good school for the past 10 years, for this very reason. The young folks here show the result of it. Now I'm in this office and they can't put me out. I want you to back me up in this matter, and we'll clear things up. We want reform, and you are just the man to start it."

In the evening, Messrs. Hardhack and Mouser came over to make the final arrangements. They walked solemnly in and took seats by the fire, keeping their hats on, as if afraid that some of the demoralizing influence of the Forest family might enter their heads unless well protected. They looked at each other and shook their heads sadly, as we laughed and talked over the meal. No such levity was to be allowed at their tables. Eating was a solemn business with them.

"We don't want no fancy teachin' in this decstrict," said Moderator Hardhack, after the School Board had adjourned to the parlor. "We aint got no call fer all this here grammar, history and sech like. Jogerfy's all right 'nuff, but cyferin' gits ahead of 'em all. Ye wanter learn them boys so'st they kin git the pitch to a ruff, how to figger interest and git the number of foot in a log. We aint never gonter make no presidents uer no ministers to Bear Crick; they aint no timber fer it, an' I aint in no favor of spilin' good farmers by runnin' truck inter 'em. Them's my idees—what's yourn?"

Mr. Mouser, who had been selected to care for the finances of the district, gave his opinion next.

"I don't want spellin' crowded out. Spellin's a big study. You take a good speller, an' he can go anywheres an' stand up 'longside of any of 'em. I used fer ter be a boss on spellin' myself, when I went ter deestrict school. Whenever I went out to a spellin' school, I was the bell weather, an' got me a seat by the fire every time. I don't want spellin' froze out. Anything that boosts a feller up amongst folks, and puts him on a high seat, wants ter be cosseted. Spellin'll do it, I'll lay a hoss."

A KANSAS VIEW.

DEAR UNCLE MARK: Long ago I sat down to tell you all about an afternoon I spent on the prairies, which seemed more characteristic of Kansas than any one of the pleasant outings I have had.

It was a bright Saturday in May when the good uncle came in the big wagon to take another of the ladies here and myself for our first experience on the open prairie. We went to Burnett's Peak, commonly dubbed "The Mound," which on a clear day may be distinctly seen some five miles to the southwest, but to reach it we must cross the river and so pass through Topeka, which takes us some miles out of a due course. There were six of us, or seven, if I include the very important factor, a big jug of water. Right merrily we rattled off, the three small boys and their older companions all in the best of spirits. It seemed a little windy when we started and by the time we had ridden seven miles through city and country there was no room to doubt that it was a windy day. When we were fully a mile from the great green mound it rose before us so distinctly I am sure that a man on the highest point would have stood out plainly against the sky. A more lovely day to enjoy a view of Kansas could not have been had for the air was remarkably clear, the sky cloudless. About half a mile from the mound we turned off the road and drove for a short distance across the treeless prairie, then hitched the team to a fence at the base of the mound, and began our ascent on foot, which proved more of a climb than I imagined Kansas could afford. There is a much worn path to the summit, for no one who takes in the city of Topeka is well informed unless he visits Burnett's Peak. Pansy, among other notables has stood there and seen "the whole State of Kansas," which indeed seems little exaggeration of the truth. It was so windy when we reached the top that our only safety lay in dropping flat to the ground and holding on to some one of the many huge stones which in this rockless country are one of the many features of the mound.

I cannot describe the view which met my eyes when once I was firmly enough seated to pay attention to something besides my feet. I presume the least distant point of the horizon is 20 miles, while toward the east I would venture to guess 60 miles as the limit of vision. The mound itself rising like a great mole hill, has on it neither shrub nor tree, and at its base I should judge it to be a mile, at least in circumference, rich, fertile fields and the open prairie on the east, spread out for miles. The country is by no means one unbroken level, but hills, big and little, rise on all sides in imitation of the mound, and just as far as the eye can reach one can see tiny houses which multiply like mushrooms in this new country. We found attractions near at hand, too, for the wild sensitive plants and numberless strange flower—especially of the pea family cover the hill sides. Altogether I was disappointed in Kansas spring flowers and found not one-fifth of the varieties we have in Ohio, but the Summer flowers quite make up for the lack of earlier ones. On our way home from Burnett's Peak, we stopped on the banks of the Shunganunga, and made careful examination of the contents of a certain large satchel.

It was a picturesque little nook—and the mosquitoes thought so too. Topeka spreads over so much ground, fully half of our ride seemed in the city. New houses are going up every day and appear in most surprising locations. I am acquainted with but a small part of Shawnee County, but that I love right well, and have a good word for Kansas at all seasons. We are much in need of rain now, but who ever saw a Summer without any drawbacks, even in old Ohio. I wonder if any of the Cousins had a jollier Fourth than we and our boys had this year. Just imagine the fun and noise produced by a hundred boys. Rhyme entirely accidental—such genius!

Truly yours, BERTHA KNOWLTON.

Topeka, Kans.

LETTERS FROM THE COUSINS.

UNCLE MARK:—I see by Brother Willie's letter in the last RURAL, that you expect an article on celery culture from me. For first early we use "Nellis' Self-Bleaching," now advertised by most seed houses as "New Golden Self-Bleaching." We make the beds seven feet wide, and make the ground very rich with barnyard manure and hen manure. The barnyard manure alone being too slow for the quick growth we expect in the Fall. We set the plants about seven inches by one foot apart in rows across the bed. The stalks of this variety grow upright and stalky. When the plants get large enough to market, we board one-third of the beds two feet high and hold them in place with stakes driven down in the ground. We then dig the remaining beds, leaving dirt on the roots as much as possible, and pack it between the plants in the frame, upright. We then cover the frame with a supply of seven-foot boards we keep for the purpose, and cold frame shutters. In eight or 10 days they will do to use, taking out that which was packed in, leaving that which is growing to remain until the last. Care must be taken in warm weather that it does not sweat too much and rot. If it does, why take off the cover and give air until dried off. For next early we use Henderson's White Plume. We plant it about one foot apart each way, and at the same time we plant Hartwell and Goldenheart for use in Winter and Spring.

Dover, N. J. HARRY BYRAM.

MAKE plans early this year for getting a good supply of nuts. They will go well next Winter.

Miscellaneous Advertising.

Purify the Blood.

We do not claim that Hood's Sarsaparilla is the only medicine deserving public confidence, but we believe that to purify the blood, to restore and renovate the whole system, it is absolutely unequalled. The influence of the blood upon the health cannot be over-estimated. If it becomes contaminated, the train of consequences by which the health is undermined is immeasurable. Loss of Appetite, Low Spirits, Headache, Dyspepsia, Debility, Nervousness and other "little (?) ailments" are the premonitions of more serious and often fatal results. Try

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Sold by all druggists. $1; six for $5. Made only by C. I. HOOD & CO., Lowell, Mass.

100 Doses One Dollar

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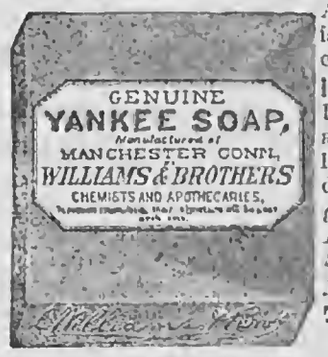

After half a century is still without an equal, AS A SHAVING SOAP. Its rich, mild and lasting lather leaves nothing to be desired. *All Druggists keep it. Avoid Imitations. Trial Samples by Mail, for* 12 cts.

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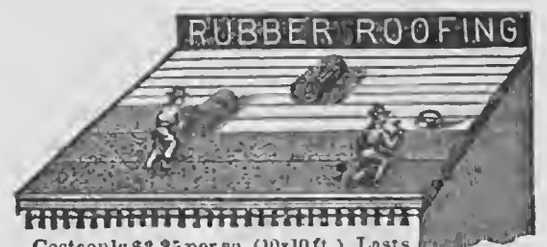
Formerly Williams & Bros., Manchester, 1840.



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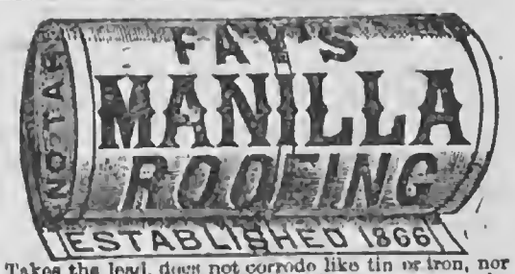

Takes the lead, does not corrode like tin or iron, nor decay like shingles or tar compositions, easy to apply, strong and durable at half the cost of tin. Is also a SUBSTITUTE for PLASTER at Half the Cost. CARPETS and RUGS of same, double the wear of oil cloths. Catalogues and samples *free.*

W. H. FAY & CO., CAMDEN, N. J.

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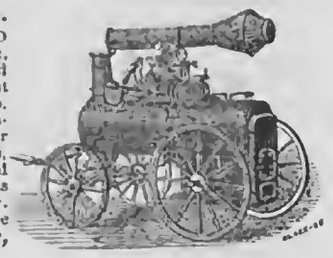
AUTOMATIC AND PLAIN SLIDE VALVE, Stationary, Portable and Traction. Cheapest and best for all purposes. Simple, strong and durable. No Farquhar boiler ever exploded. Saw Mills, Threshing Machines and Agricultural Implements and machinery generally. Send for Illus'd Catalogue

A. B. Farquhar, York, Pa.



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BEST, CHEAPEST and MOST IMPROVED in the market.

We also manufacture Mowers, Reapers, Twine Binders, Rakes, Field Rollers, Plows, Feed Cutter and Crusher, Hand and Power Corn Shellers, etc. Send for Illustrated Catalogue and Price List. S. S. MESSINGER & SON, Stockertown, Pa.

Whitman's Patent Americus.

The best Cider and Wine Mill made. Will make 20 per cent. more cider than any other. Geared outside. Perfectly Adjustable. Prices as low as any first-class Mill. Mfrs. of Horse-Powers, Corn Shellers, Hay Presses, Feed Cutters, Mills, etc. Send for circulars.

Whitman Agricultural Co., ST. LOUIS, MO.

PERSONALS.

HENRY WARD BEECHER is to lecture next Winter on Ireland.

GENERAL BOULANGER, the French Minister of War, has been presented by comrades with the insignia of the Legion of Honor in diamonds.

DR. FRANK ERASTUS HAMILTON, M.D., LL. D., widely known through the country as one of the chief physicians attending dying President Garfield, died here Wednesday, aged 73.

ONE of Henry Ward Beecher's sisters, Mrs. Isabella Beecher Hooker, is a vigorous advocate of temperance on the platform. She delivered a lecture recently at Saratoga on "The Duty of Women to their Country."

EX-PRESIDENT ARTHUR is now declared by his friends to be really regaining health. He has put on flesh and weighs nigh 175 pounds, takes a good deal of exercise and "looks like a man who has many years of life before him."

THE death of Franz Liszt, the great pianist, the other day at Weimar, was quite sudden, after his return from a triumphal visit to London and Paris, where he had received the greatest consideration from the highest in both countries.

FUNDS are being raised in Texas for a monument to the memory of General Thomas J. Rusk, who was Secretary of War, Commander-in-Chief and Chief Justice, successively, of the Texan Republic, and afterward United States Senator.

ALL the royal princes of Germany have learned trades. The Crown Prince, for example, is an expert jeweller, Prince William has studied the art of glove-making, and Prince Henry, besides being a brave sailor, is an excellent watch-maker.

AUGUST LANGLOIS, a farmer of Pointe Aux Trembles, while feeding his fowls a day or two ago, was attacked by a Game cock. In lifting his hand to push the bird away it was pierced by the bird's spurs. Langlois died after suffering terribly from lockjaw.

JOHN T. ELKINS, of Kansas City, a brother of Stephen B. Elkins, died suddenly of heart disease near Salida, Colorado, on Tuesday, while on a fishing excursion. He owned large silver and cattle interests in Colorado and had served a term in the Senate of that State.

MME. CHRISTINE NILSSON was quietly married in Paris the other day to Count de Miranda, a Spanish nobleman, and has gone to Spain with her husband. She is making a scrap-book of one room of her house, whose walls she is papering with old play bills in which her name appears.

MR. J. F. STUDEBAKER, of the great wagon firm of Studebaker Bros., South Bend, Ind., who is now in Europe with his wife, daughter and niece, last week purchased 180 fine Percheron horses for his extensive ranch in Colorado. The ladies will make an extensive tour in Europe and afterward go to the Holy Land.

CONGRESSMAN LEWIS BEACH, representing Orange, Rockland and Sullivan Counties, N. Y., died at Cornwall-on-the-Hudson, Wednesday, aged 51—typhoid fever complicated with Bright's disease. Though always a Democrat, he was a strong supporter of the Oleomargarine Bill, and earnestly advocated that bogus butter should be colored pink.

THE pretty Countess of Aberdeen, who is one of the most amiable and popular of British gentlewomen, was pelted and covered with flowers by the people of Dublin at the demonstration in honor of the retiring Lord-Lieutenant of Ireland. The Earl of Aberdeen is one of the idols of the Irish, but his wife is quite as popular as he. Her kindness, charity and simple manners won the Irish heart.

A MEMORIAL statue to the late blind Postmaster-General of England, Henry Fawcett, erected exclusively by contributions from women, has just been unveiled in London. He not only opened post-office and telegraph appointments to women and made himself a leader in the cause for their higher education, but he was their spokesman in a thousand instances where his voice was of authority, and where theirs could not be heard.

SENATOR Jones, of Florida, though absent in Detroit during the whole of the late session of Congress, drew his pay regularly on the fourth of every month through a Detroit bank, and still continues to do so, though he says he will never again appear in the Senate or in the State that sent him there, intending to open a law office in Detroit. The law says that "the Senate shall deduct from the monthly payments of each member the amount of his salary for each day that he has been absent from the Senate, unless such member assigns as the reason for such absence the sickness of himself or of some member of his family." Jones refuses to resign; shouldn't the fellow's pay be cut off?

It is money in the Pockets of FARMERS.

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NO TROUBLE. Any boy, in ONE HOUR, can mix a TON ready for use. Intelligent, prosperous and leading farmers in every State as references. CHEAP, GOOD and PURE. Fully two-thirds of the usual Fertilizer bill can be saved by using POWELL'S PREPARED CHEMICALS. ☞A book giving full information, mailed Free.

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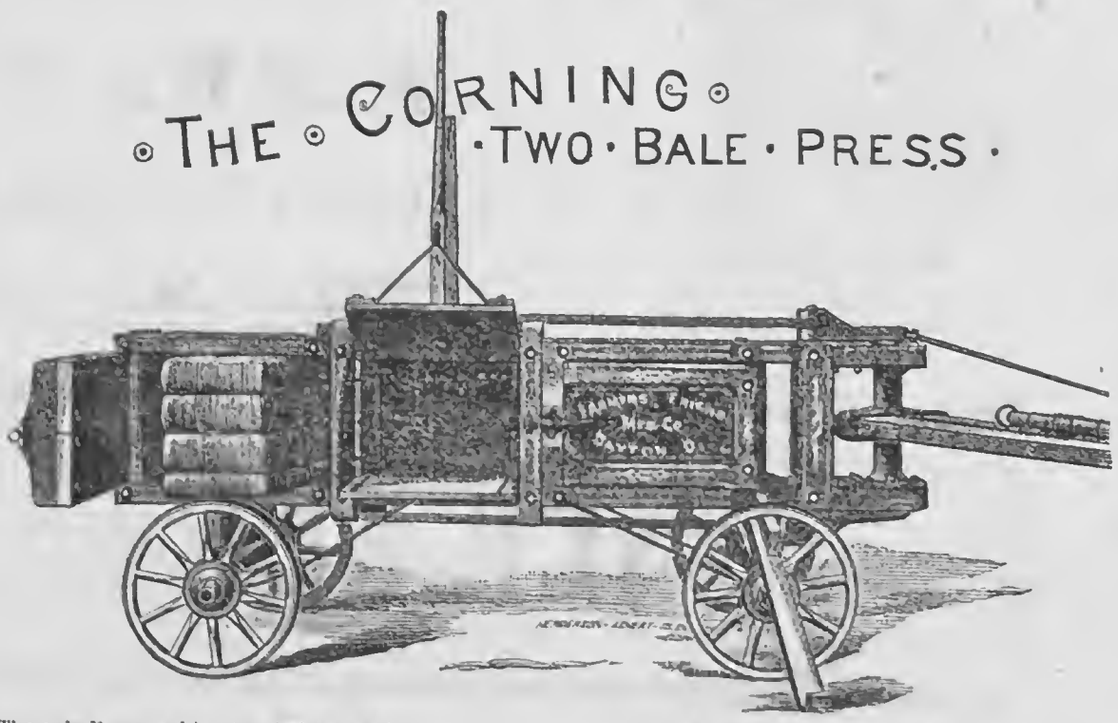

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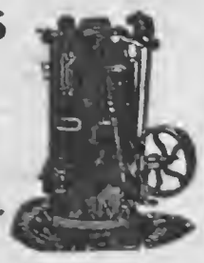

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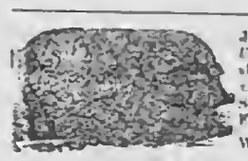

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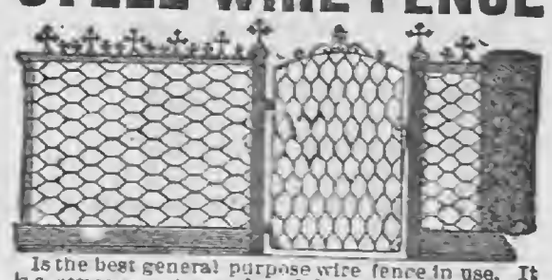

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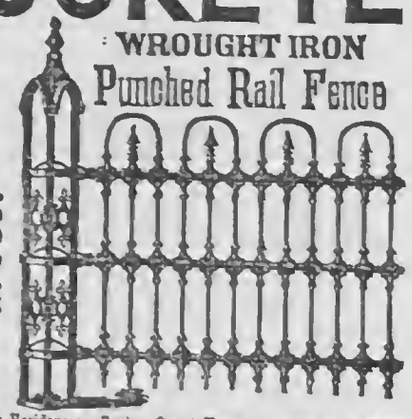

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Humorous.

RHODE ISLAND is now 250 years old, but is very small for her age.—*Philadelphia Call.*

YES, my child. Weddingsday was put immediately after Chooseday on purpose.—*Washington Post.*

ALTHOUGH your doctor may say you owe your life to him, he will not take it in settlement of his bill.—*The Critic.*

THE man who died of spontaneous combustion must have come to the conclusion that Nature was making light of him.—*Boston Budget.*

"MOTHER, this book tells about the 'angry waves of the ocean.' Now, what makes the ocean get angry?" "Because it has been crossed so often, my son."—*Exeter Gazette.*

"SAY," called old Mr. Crochet to the new boy; "bring me my boot-jack." "My name ain't Jack," replied the boy quickly, "an' I ain't got your boot, neither."—*Harper's Bazar.*

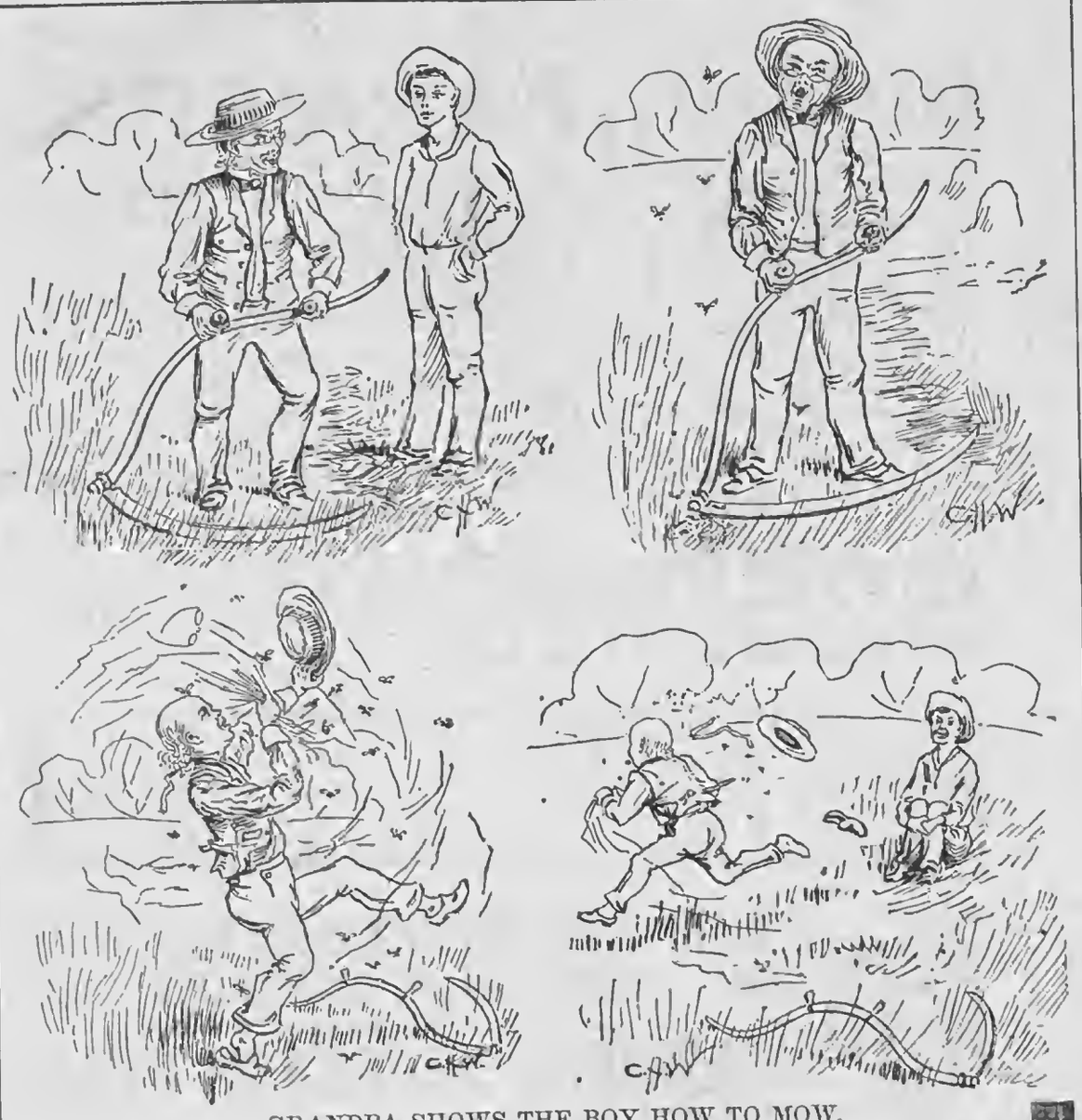
"WHAT power will the Prohibitionists exercise in the coming political campaign?" asks an exchange. Well, If they are true to their principles, it will be a water power.—*Norristown Herald.*

SMITH—"I saw you carrying home a couple of nice-looking watermelons last night, Brown. How much did they cost you?" Brown—"I don't know yet. The doctor is up at the house now."—*Life.*

"WHY," exclaimed the Professor, picking up the tail of a shad, "is this like a famous French Emperor?" "Give it up," answered the Doctor. "Because it's a bony-part."—*Peoria Transcript.*

TO BE TAKEN IN SMALL DOSES.—Some tasteful individual very correctly remarks that the best lip salve in creation is a kiss. The remedy should be used with great care, however, as it is apt to bring on affection of the heart.—*Ont. Free Press.*

"I TELL you its a great thing to have a girl who knows enough to warn a fellow of his danger." "Have you?" inquired one of the company. "Yes, indeed; Julia's father and mother were laying for me the other night when she heard me tap at the window, and what do you suppose that girl did?" "Can't think." "She just sat down to the piano and sang the insides out of 'Old Folks at Home.' You can just bet I didn't call that evening."—*Tid-bits.*



GRANDPA SHOWS THE BOY HOW TO MOW.

Miscellaneous Advertising.

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(NO. 436)

FOR SEPTEMBER, 1886,

CONTAINS:

SHORT-HORN CATTLE.

By LEWIS F. ALLEN.

ILLUSTRATIONS:

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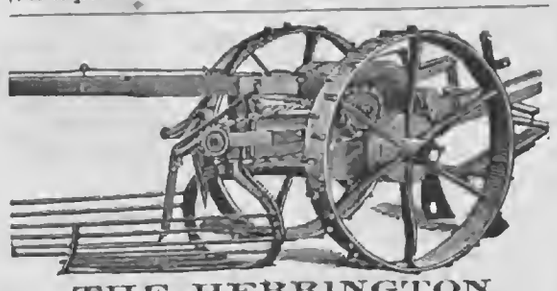

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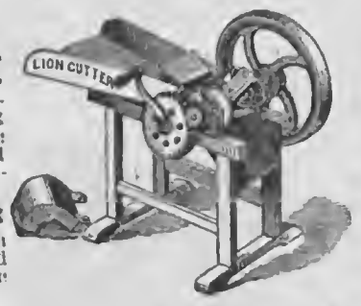

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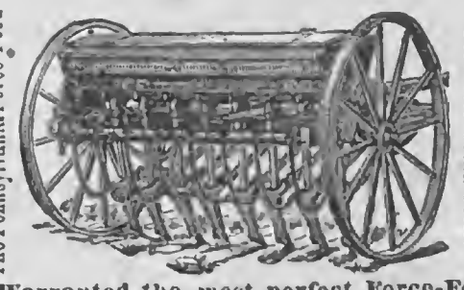

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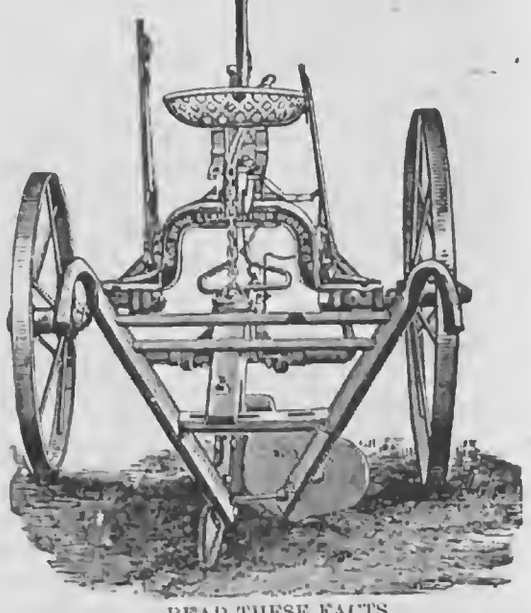

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A JOURNAL FOR THE SUBURBAN AND COUNTRY HOME

VOL. XLV. No. 1909. NEW YORK, AUGUST 28, 1886. PRICE FIVE CENTS. $2.00 PER YEAR.

Entered according to Act of Congress, in the year 1886, by the Rural New-Yorker in the office of the Librarian of Congress at Washington.

Dairy Husbandry.

THE HOLSTEIN-JERSEY "CLOVER."

THE cut of Clover (owned by Col. Chas. D. Miller, Geneva, N. Y.), in this week's RURAL, (Fig. 338), though quite attractive, fails in doing justice to the subject, particularly in the head and hind-quarters. Clover's head is strong and vigorous, with the perfection of fine finish, not perceptible in the cut. The but appears in the cut round and full, which formation is technically known as "pumpkin but." This is not true of Clover, as she is straight and well formed in the hind-quarters. The picture was drawn from an inferior photograph, in which the cow was very poorly placed.

PEDIGREE.

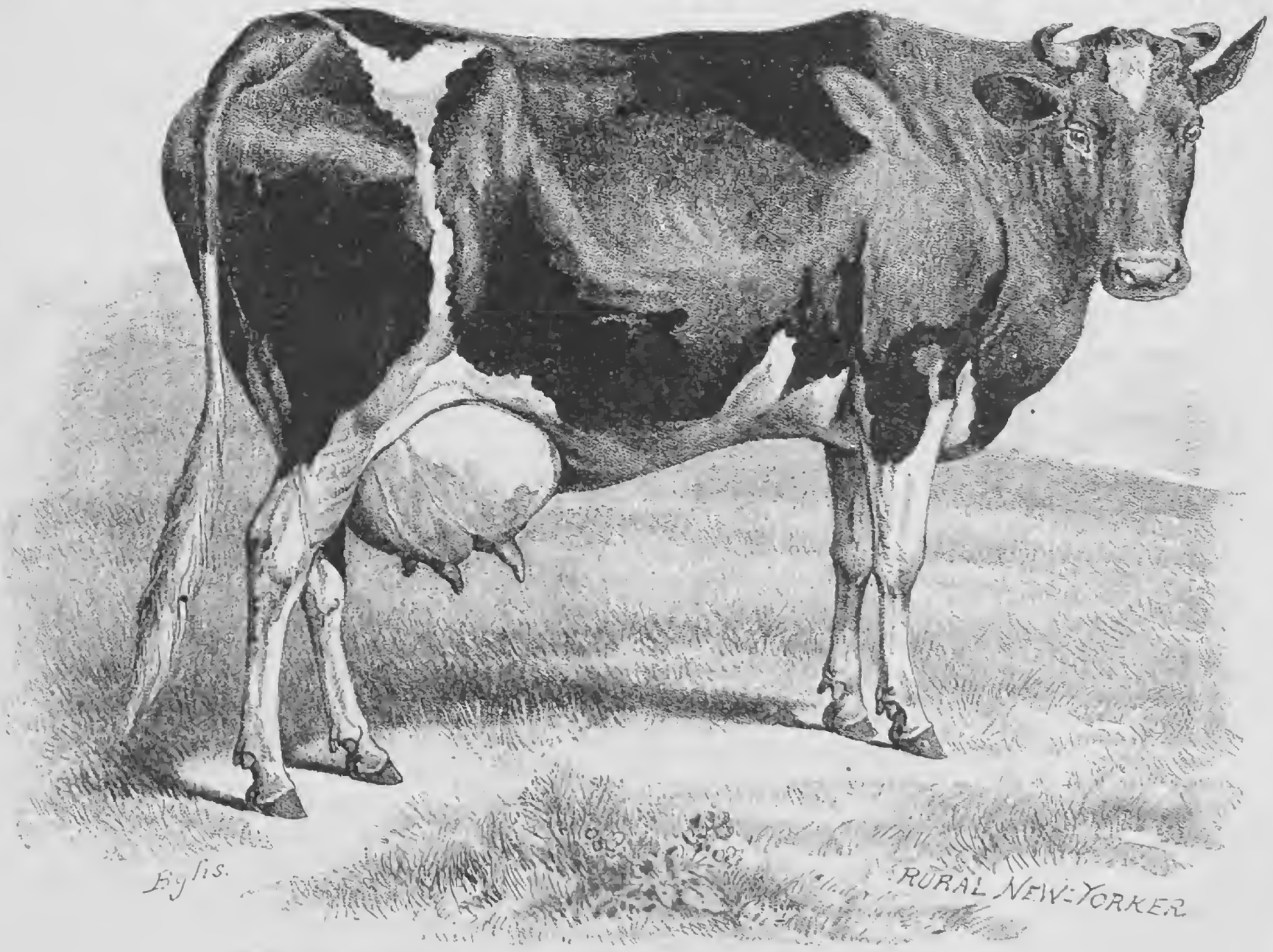
Clover,	Holstein,	Rip Van Winkle,	Friesland Bell
	Stentor,	Dowager,	Fraulein.
	Jersey Buttercup.		

Clover's dam, Buttercup, a full-blood Jersey, was sent to Peterboro, Madison Co., N. Y., as a calf, where she was raised. She has dropped seven fine calves, all sired by full-blood Holstein bulls. Buttercup gave from 30 to 32 pounds of milk per day at her best. Dandelion, her second calf, owned by Malcolm Forbes, Esq., Milton, Mass., gave 42 pounds in a day as a two-year-old, and 50 pounds at maturity. Strange to say, the quantity was not only greater than that produced by her full-blood Jersey dam, but her milk was of a richer yellow color. Clover was the next calf, and has grown into a wonderfully attractive and useful animal. Her greatest day's milk record is 59 pounds, and her milk is very rich. The sire of Clover (Stentor) is half brother to Echo, so she comes naturally by good milking qualities.

The third heifer and fourth calf Buttercup had was Tansy, sired by Conqueror, the great escutcheon bull. Tansy's escutcheon is enormous.

The fifth calf was the heifer Butterwood, also sired by Conqueror, and now owned by Chas. P. Bowditch, Esq., Boston, Mass.

Daisy, the next heifer, was very promising, and milked 30 pounds in a day as a two-year-old. This heifer is owned by Mr. Clifford Watson, Milton, Mass. Thistle, sire Hullemau, was the next heifer, which is very fine and promising, owned by Dean Sage, Esq., Albany, N. Y. Her first calf could not drink all her milk. She and all the others are excellent milkers and make most useful family cows. Their color is invariably black or black-and-white. If one desires cross-bred Holsteins we know no better cross than the Jersey, unless it be Guernsey, for a family cow.



HOLSTEIN-JERSEY COW "CLOVER." From a photograph. Fig. 338.

HOLSTEIN-FRIESIAN COUNTERBLAST.

WILL those apostles of the Holstein-Friesian breed who keep talking and writing about the unchurnable butter-fat or "richness" there is in their milk, which, because of the minuteness of the butter globule, as they allege, will not rise when the milk is set for creaming, but, which they allege, is utilized when the milk is devoted to cheese-making, explain how it comes to pass that the Massachusetts official chemical analysis of Holstein milk yields only 3.29 per cent. of fat, while the Mass. Jersey milk yields 4.34 per cent. The story about there being elements in milk that vanish in the hands of a chemist and a butter-maker, and "materialize" in the hands of a cheese-maker, is good "flap-doodle" to feed fools with. Square honesty is the best policy. If neither a common churn, nor a chemist, nor an oil test churn can make butter fat "show up" in "common scrub" proportions in Holstein milk or cream, how metallic is the "cheek" that assumes that in some charmed way it puts in an appearance in a cheese!—as though rennet had more than mortal power to evoke something out of air, to abstract something from nothing!

Cheese is a solidification of the elements in the milk of which it is made, commingled with a per cent. of water. Rennet is no creator of solids. All it can do is to seize, for the time being, a per cent. of water with the solids, and it takes the fat in the cheese to hold the water for any great length of time—long enough for the rennet to "cheese" the caseine, and keep it moist while the process goes on. The reason a skim cheese dries to chips so soon after it is made, is, that there is so little fat to resist the process of evaporation. The reason it does not digest easily, is, that it is short of fat to act as a lubricant. Two kinds of milk different in butter-fat, make a cheese different in butter-fat, as inevitably as alloy incorporated with pure gold, compromises its purity.

Let the Holstein fraternity address itself to the sensible and honest work of developing some of their magnificent cow-frames into producers of milk as rich, proportionally, in butter-fat, as the common cow gives, and we will have respect for them, and bid them God-speed. A few have done this already, unless the world is fuller of able-bodied falsifiers than I wish to believe. But when they attempt to crowd the fallacy down our throats, that low-grade milk will make high-grade cheese, and try to persuade the dairymen to believe so, they insult the common-sense of every cheese-maker who ever made the milk of the same cows into cheese in both the Spring and Fall, and saw the difference in the yield and quality of the cheese. "Grapes do not grow from thorns, or figs from thistles." "BADGER."

PASTURING COWS.

J. S. WOODWARD.

GIVING EXTRA FOOD WHILE AT GRASS.

IT has been conceded that inasmuch as grass is a complete food, containing the albuminoids and carbohydrates, as well as the mineral elements of animal growth in the proper proportions, therefore stock, and especially cows, when at pasture, need nothing besides what they can pick, to produce the largest amount of milk, butter, or cheese. From the experience of several years I am convinced this is not true, even when pasturing on the most luxuriant growth of the richest fields, let alone when running on the old and half worn-out soils now the rule on most farms.

Conceding that mixed grasses as found in the best pastures do contain everything in the best proportion for making perfect milk, yet in proportion to its bulk, the amount is so small that the cow cannot eat and digest enough to furnish her with enough of these elements to enable her to produce a maximum yield of milk, butter or cheese. This is clearly shown by the numerous tests of cows both for milk and butter yield, which have been made in the past year or two. In every case the best results have been reached only when the cows have had rich foods of some kind to supplement the pastures or soiling when green forage is given. I have also proved it to my own satisfaction by feeding my cows a daily ration of a mixture of bran, oil meal (new-process) and corn meal. This is fed at night, at milking time, and is given dry, although I have no doubt it would produce better results if made into a mash and allowed to soak for a few hours before it is eaten. It largely increased the product of butter on the flushest feed and now that the pastures are suffering from drought it would double the product. This is with me no new experiment as I have practiced it often and always with the same satisfactory results.

WILL IT PAY?

This is the question first asked, and one very pertinent, for butter is at present very low and few wish to increase the production unless it can be done at a price yielding a small profit, or at least without loss. When running at pasture the maintenance ration must first come from the food, and the butter made is surplus product; so that when extra food is given, if the cows are able to digest and assimilate it, the whole available nutritive value should be returned in the churn, if making butter, and I think that two pounds of bran, one pound of new-process oil meal and two pounds of corn meal, mixed and fed daily to a fairly good cow, will give, on an average, an increase of at least four pounds of butter per week. In fact, it has done much better than this with me this year. Now this ration cost at the prices paid here for the various foods, 1.2 cents for the bran, 1.2 cent for the oil meal and 1.9 cent for the corn meal daily, making an aggregate cost of 30 cents per week. Now suppose I sold the butter in our local market at only 12 cents per pound (the lowest price) I should get 48 cents, or a profit of 18 cents on each cow. But we must not forget that my land must be fed, and that the above food is all returned to the soil except what little enters into the

butter. The extra manurial value of the feed is $9.00 per ton for the bran, $19 per ton for the oil of meal and $6 per ton for the corn meal. The aggregate value of the week's ration returned to the soil as plant-food is more than 17 cents, so that I must get 13 cents for my increased butter product to be even. Now supposing I am mistaken one half in my estimate of the increase attributed to the extra ration and that the difference is really only two pounds, and that this is sold at the lowest price, or 12 cents per pound, there would still be a profit of seven cents, and this is worth saving. Some may say I have put the price of feed too low, and others that the price of butter is too high. I have given prices prevalent here, giving the highest price for feed by the ton and the lowest price for butter, and as a rule the prices of butter and feed will be found in nearly the same proportion, so that it is fair to claim that extra food, if judiciously given, will pay even when the cows are in flush pasture.

The Herdsman.

ABERDEEN-ANGUS COWS.

While Aberdeenshire and Angus or Forfarshire, Scotland, have long been contending for the honor of having been the first to produce superior polled cattle and of having done the most to develop the great merits of the breed now known by their joint names, it is known that in Ballindalloch, in Banffshire, on the north of Aberdeen, in the Valley of the Spey and at the foot of Ben Rinne, there has been a race of superior polled cattle for nobody knows how long. For generation after generation the Grants of Ballindalloch and Inveresbie have taken no small pride in the high standard to which their herd has always been kept as long as any record of it remains. The late Mr. McCombie, of Tillyfour, in his book on Cattle and Cattle Breeding, says that perhaps the Ballindalloch polled cattle are the oldest in the north, and in the time of his earliest recollections (and his recollections went back to the first decades of the century), they were superior to all other stock. At present the Ballindalloch herd of Aberdeen-Angus is, the London Live Stock Journal says, acknowledged to be the first in the kingdom, if not in the world. It is composed of over 10 tribes or families, each descended from a famous ancestress, and distinguished for some special characteristic. The first of all in merit is the Erica family, which traces back its pedigree to Erica 843, bought in 1861 for $265 by Sir George Macpherson Grant, the present owner of Ballindalloch. She soon founded the Erica family, which at once took the leading place in the herd and has kept it ever since.

The entire herd numbers 140, including calves, and of these there are no fewer than 49 Ericas, forming a magnificent family, with scarcely a common-place animal among them. They have been frequent prize-winners at all the great cattle shows both in England and Scotland. Though not the largest animals of the polled race, or indeed the largest family in the herd, the Ericas have great excellence peculiarly their own, which they infuse conspicuously in their descendants. Even crosses from them partake largely of their special features, turning out deep, thick, short-legged, heavy-weighing beasts of the best quality. They are constitutionally hardy, and easily kept and fattened. They ripen early, and on moderate keep remain in fine condition; and in the London market fetch the highest prices. Two fine specimens of the family are shown at Fig. 349, page 565. Eugenia 4,170, in the background is considered one of the best of the herd; while Electra 4,196, a very pretty cow in front, was second at the Centenary Show of the Highland Society at Edinburgh two years ago. The likenesses have been re-engraved from the London Live Stock Journal, which is deserving well of British stockmen on account of the excellent series of animal portraits with which it has of late been embellishing its pages.

LIVE STOCK NOTES FOR SEPTEMBER.

HORSES AND COLTS.

THE average horse stable at this season is a cruelty. It is filled with the overpowering pungent odor of ammonia, and infested with those cruel flies which bite like a lancet and from their provoking the constant kicking of the tormented beasts, are known as Stomoxys calcitrans. How can the tired animals rest under these inflictions? This question should be considered by every humane farmer. The remedy is a simple one. Keep the stables clean, litter the stalls with fine dry earth, clean sawdust or dry swamp muck, and spread plaster over the floor liberally once a day. This does much to keep down the flies, but wire gauze over the open windows, a tight door, or one protected in this way, and some Persian insect powder will do the rest.

Did you ever give your horse a bath on the hot days? If not, and there is a river or pond near, let him swim out a little now and then, and then run and roll in the clear grass to dry himself. If he cannot have this privilege, give him a sponge bath in the creek or with a pail of water and wash off the foulness gathered from the sweat and dust. Do to him as you would be done by if you were the horse and the horse the owner. It is a great incentive to do right, to think how it would be were we to change places with other men and even with our animals.

It is difficult to realize the enormous quantity of matter which transpires from the skin of a horse during a day's work in the field on a hot day. A man who works hard often discharges one pound of perspiration per hour from his skin. As this fluid contains about five per cent. of salts, soda and potash and organic acids, some quite offensive, and this solid matter dries upon the skin as the water evaporates, a little figuring and some imagination will give a pretty fair idea of what will be the result to the horse of a hot day's work in the field before a plow.

It is a disputed question, what causes the active salivation or slobbering of horses pastured on meadows and clover fields about this time of the year. It is worth while to consider how this can be avoided, because the loss of saliva is exceedingly weakening and is almost as injurious as the loss of so much blood. Saliva is a very complex fluid, intended as a digestive agent to prepare the food for the action of the stomach. Hence the loss of a few quarts of it every day for a month or more is a serious tax upon the vital forces. This effect is due to several causes all of which may be avoided. The most frequent are acrid weeds, as lobelia, St. John's-wort, pennyroyal, dog fennel, etc., in the pasture. Second growth clover, both red and white, also causes it. It is something to be prevented with care by keeping the horses off from such fields. A small quantity of bran or corn meal with a handful of salt stops the flow of saliva at once. The great advantage of having a crop of something green to cut for horses, as well as other animals at this season, is that any trouble of this kind can be avoided and yet the horses may be supplied with palatable and nutritious food. Millet is perhaps the very best of all the green crops. It is not as laxative as clover, while it is even more nutritious and does not produce a softness of condition which favors excessive perspiration, and is sufficiently nitrogenous to supply all the needs of a working animal.

New oats are commonly considered unwholesome food for horses. This is perhaps due to the irritating effect upon the bowels of the sharp points or beards which are found at the extremities of the grains and which dry up and disappear as the grain grows older and drier. If this result is feared, crushing the oats and adding an equal quantity of coarse wheat or rye bran will avoid any ill effect from feeding the new oats. This mixture is the best food for young colts which should now be weaned and which should have at least a quart—to begin with—daily of some nutritious and easily digestible food.

COWS.

ARE the cows well supplied with green fodder at this season when the pasture fails? If not, how can they be expected to keep up the supply of milk? The growth of green fodder crops is one of the most indispensable "new-fangled notions" which a farmer should take up with. "New-fangled" is by no means a term of reproach. The railroads, telegraphs, telephones, and even the mowing machines were all new-fangled things at one time; but the world could not get along without them now. There are old fogies who pretend that any new device or idea in agriculture is "too foolish for anything," and that what the old gray beards do not know is good for nothing. "Old things are passing away and everything is becoming new" in agriculture as in other matters, and pasturing one cow abundantly on five acres of poor grass mingled with weeds in the month of September, is an old thing that should pass away as quickly as possible. A crop of fodder corn and the early mangels just now will reverse the order of things and make one acre carry five cows for the month, which is doing just 25 times better than the old way.

Those farmers who have a fresh cow or two coming in in September, should by all means compare the product and its value with that from as many cows coming in in March or June. The price of dairy produce in the Winter is about double that of the summer prices, and cows not yet in-calf may well be kept over for three months more to bring them in this time next year.

There are a great many things in the management of live-stock which depend upon calculation and forethought. How to make the most of our farm animals at the least labor, is the grand point to aim at. It is enough to suggest the idea and set thoughts in motion in every owner's mind. One thing may, however, be referred to particularly, which is that the time of the year has come when it is easy to let stock fall off in condition and so go into the Winter, three months hence, under the most unfavorable circumstances. An old proverb says it is time to think of getting over a ditch when you come to it. This is not wise, but otherwise. Ditches are most easily got over when a man thinks betime to carry a plank with him for the purpose, and just now it will be quite wise to be preparing for Winter and get the young stock as well as the old into the best possible condition, and also get their lodging places prepared for them.

SHEEP AND LAMBS.

This is the season for coupling the ewes. Sheep are looking up. In fact they never looked down; it was the foolish owners who got up a panic, and became more scared than ever their sheep were. Now is a good time to select the best possible ram for the flock, and so grade the flock up to a high standard. Every sheep owner has his pet breed, and it is probably the most satisfactory to him. But one thing is needful, and that is, to consider what kind of wool is wanted, for, after all, the fleece brings in the most profit from the flock, and then select a ram advisably. The long-wool sheep are not in favor just now, anyhow.

If a sheep is found limping about or feeding on its knees, the feet want attending to. Paring off the old half-rotten hoof and picking out the gravel under the crust will often remedy the trouble. If the horn is decayed and the feet sore, a little powdered blue-stone and then a dash of tar will be useful. Foot-root needs no description; it is too serious to be mistaken. If it appears in a flock, refer to a good work on sheep, and apply the remedies advised.

A division of the flock should be made this month. Wethers intended for market should be kept by themselves, and the lambs, which require good feeding, may be turned with them. The ewes and their mate are then given the best treatment and feed, the results of which will be apparent when the lambs come in due season.

A supply of roots is essential to success with sheep. With a few roots every day from this time forward, a flock will produce more than the value of them in the quantity and quality of the fleece.

Dipping as a remedy against ticks and other parasites should be done this month, if at all. Soft soap mixed with crude petroleum, in equal parts, is a good dressing for this purpose. So is crude petroleum alone applied as described in the RURAL of August 7, page 515.

To refer to damage from dogs is always in order when thinking of sheep. A ewe badly bitten on the rump by a dog became fly-blown and the maggots were down to the bottom of the deep wounds and in the wool, about them. Some kerosene oil was injected into the wounds and into the wool with a squirt can. Most of the maggots squirmed out and fell to the ground; the rest were picked out with a needle and the sheep was turned loose. In a week the deep wounds were all closed and soon healed nicely. The wool all came off, but it is growing on again all right.

SWINE.

Fat is made most rapidly in mild weather. Swine put up to fatten as soon as the corn is cut, will make weight faster than if given much more food two months later. It pays to have especially for this purpose a piece of corn planted twice as thickly as usual. The stalks with the soft, sweet milky ears will be eaten with the best relish and the pigs will fill out apace and make very sweet pork and firm fat. There will be no cholera in a herd thus fed, unless it is brought in by contagion. This feeding may and should begin in September. The immature ears and half-grown nubbins may be used healthfully while they are fresh, but when, later, they become sour or moldy, they are apt to be unwholesome. It cannot be too strongly urged upon feeders of swine that cleanliness in food and water is indispensable to health, and that pens and yards should be put into the best condition at once for early occupation. Some persons believe that a hog is naturally a filthy animal, and cannot be kept cleanly, and that filth being "second nature" to the beast, cannot be hurtful. It is not a great thing to try differently for once, and note the result.

The Poultry Yard.

A GOOD POULTRY HOUSE.

EVERY farmer should keep at least 100 hens, for I am confident that no stock will pay as well in view of the capital invested. I have a plan of a poultry house which has some points much better than any I have seen. Make the building 16x25 feet, with 8-foot posts and a peaked roof at least one-third pitch, with large windows in the south side. Make the sash to be opened up and down, with wire net-work, to keep out the rats, cats, etc. The windows should fill a large part of the south side. Divide it into two apartments with drawers for nests. The nest boxes should be 12 inches wide, 12 deep and 24 long, so they can be slid through and used on either side of the frame or partition. This is to be made like a chest-of-drawers or bureau, less the back. One room is to be for the laying and the other for the sitting hens, so that when a hen wants to sit she can be set where she has been laying, and the drawer or nest can then be shoved through to the other side. Now make, over the nest boxes, a platform to catch the droppings, sufficiently wide to allow roosts enough for the hens—and a hen ought to have at least one foot for roost room. It should be 6½ or 7 feet high, so that one can walk upright under it. Put the roosts all on a level two feet above the platform, and have ladders on which the hens can walk up. It is a great mistake to put the roosts at different hights, as the hens crowd on the highest roost. They should be made so as to be taken out and washed to keep them clear of vermin. A good shape for roosting poles is octagon about 1½ inch in size. The platform should be cleaned often and put out of the hen house.

This plan may seem expensive for a hen-house, especially to those who are in the habit of allowing the hens to select their nests in the barn, manger, under the barns, in the weeds and the tall grass which are permitted to disfigure their premises; and to find roosting places on the shade, apple and pear trees; but it will pay. W. M.

MORE CARE IN BREEDING POULTRY.

WYANDOTTES are losing their popularity. They do not lack merit—they are splendid fowls. Too many people have had bad luck with the eggs, which they bought from so-called "breeders." Out of three settings I obtained but six chicks, and only two of these were fit to breed from. One setting from a thoroughly scientific breeder would have given more and better fowls. Wyandottes are doomed if the present system continues. There are thousands of amateur breeders who advertise to sell eggs from fowls of noted strains without knowing whether they are fertile—or if fertile, whether they are from properly mated fowls. Such eggs, sold at low figures, are almost sure to give dissatisfaction, and the breed suffers. Many Wyandotte eggs produced a bad mixture of chicks. If this is continued, the breed will suffer more than the breeders. A real breeder works with some definite object in view. To accomplish anything like good results, requires unlimited time, patience and skill. It has taken years, for example, to produce a strain of Light Brahmas like the "Autocrat." People who complain about the high prices asked for first-class poultry are not ready to consider how much patience and skill it takes to fix characteristics. It is no more than fair that the breeder who has spent years in developing a breed or a strain should be rewarded. A dozen eggs for $5 or $25 for a breeding pen may seem like high prices, yet a novice may be making more money selling eggs at $2 per clutch, or fowls at so-called reasonable prices, than a scientific breeder makes at the "fancy" price. The fact of the matter is that if we expect to get something that is good, we must pay for it. When we buy a really good breeding bird or animal, we pay the seller for the time, patience and skill he has spent in previous years; and we pay a small price for them too.

Queens Co., N. Y. J. H. G.

Rural Topics.

GREEN MANURING.

HENRY STEWART.

Difficulty of restoring fertility to poor soil; objections to statements in regard to rye as a green manure, in a late article; the experience of one not applicable to all; rye good where clover won't grow; no crop returns to the soil more than it has taken from it; clover too valuable for hay to be turned under; mature clover roots and stubble contain more nitrogen than the immature crop at cutting time; how to use rye as a green manure; effects of plowing under.

EXPERIENCE WITH RYE.

THE most difficult part of farm-work is to restore poor soil to a condition of moderate fertility so that it can, so to speak, be put upon its feet and help itself, ever so little

When an unfortunate farmer reduces his soil to this condition, or comes into possession of exhausted land, he must begin at the very bottom and work up by slow degrees. It is wise to let such persons know this fact and not mislead them into believing in any short-cut to the improvement of the land by any impracticable method. I am writing not for those who have a pocketful of money to buy fertilizers or manure with, because money is a road to anything and everything; but for those who must wring from an unwilling and unable soil such results as they can, by slow, gradual methods. And I write to neutralize as far as possible the errors made and expressed by A. C. G. (page 479) in reference to this subject.

First, he writes disparagingly of superficial reasoning in agricultural papers to the effect that no other plant than rye will furnish so large a bulk to be turned under in so short a time, so surely and with so little expense,

Second, he then relates an experience of his own which proved to him that the above allegation is wrong and he defies the "allegators."

Third, he then gives the result of his (?) investigations of the failure of rye to benefit his land, and his conclusion thereupon that rye only pays back what it gathers from the soil and adds nothing to the fertility of the land; while clover does very much more, and he thus leaves it to be inferred that clover is much more useful crop for green manure than rye.

Fourth, he very wisely says there is no short-cut to prosperity on a poor soil (I suppose he means fertility and not prosperity) and very unwisely says he who believes in rye, as a renovator will be disappointed in not seeing waving wheat and corn following waving rye. Who ever expected or thought of it?

Now, A. C. G. starts out by casting a slur upon a class of estimable men, who state a fact when they write that no other crop than rye will furnish so much green matter to be turned under in so short a time, at such a convenient season and so cheaply. I know this to be a fact for I have grown several crops of rye for plowing under during my experience with one of the poorest of the New Jersey sandy farms for nearly ten years, and if any person doubts the fact let him tell the RURAL circle what other crop can be sown on poor land to be plowed in early in the Spring, that will give more bulk of matter to the soil or that can be grown for so little cost. I don't know of any.

One man's experience goes for no more than it is worth; no rule can be laid down as a guide from it; because the conditions are probably different from those of others and at any rate every circumstance—the most trifling apparently—will have a bearing upon it. One who neglects this truth in making statements is speaking or writing superficially; hence A. C. G. is superficial and his experience must be weighed and judged carefully. Moreover, he proves this by his statement that he based "great expectations" upon the plowing in of a crop of rye when, had he read with care "*every* agricultural paper," he would have probably seen that no great expectations should be based on rye for the purpose mentioned, because it is, as it were, the first brick of the structure which is to be reared upon it.

A. C. G. argues very illogically upon the subject of his investigations. He calls them his, but the figures seem very much like those of Dr. Weiske, and if he quoted him, he should have acknowledged it. Then we should have seen that he had wandered from his subject and was pasturing in clover grown for other purposes. What he says of the manurial value of rye and clover is true, but it has nothing whatever to do with the question at issue. No farmer who can grow a clover crop of which 26,580 pounds of dry matter exist in the roots, would borrow much trouble as to the choice between rye and clover as a green manuring crop.

But leaving this point, I wish to show the fallacy of the reasoning of A. C. G. in the course of his very superficial investigations. He became satisfied that "something more than bulk of plant growth is needed to be turned under; that there must be *some affinity* in the plant with the *forces* that nourish crops to make it a useful fertilizer. This affinity clover possesses, while rye does not." What is meant by affinity? Is it any secret, mysterious force or attraction, or merely the contribution of so much plant food to the soil, together with a certain chemical and solvent action upon the soil exerted by the decaying vegetable matter? If this is meant, then are not the potash, lime and nitrogen of the rye quite as useful to the soil as those of clover, as far as they go; and is not the carbonic acid developed by the decomposition of the matter of the rye equally effective as a solvent agent upon the mineral particles of the soil, so far as the quantity goes, as that of the clover? If not, why not; and in what respect does clover act with greater and mysterious force than rye beyond the quantitative difference? It is also another misleading fallacy to say that rye only pays back to mother earth just what it receives, in such a way as to lead readers to suppose that clover does more. It does not and cannot return to the soil any more than it takes from it; it does, no doubt, get its valuable substance from a lower depth than rye or any other plant, and is therefore a much more valuable manurial crop for plowing under or for feeding.

But what is the farmer to do whose soil will not produce clover? I have tried repeatedly to grow clover on poor soil and failed; the land was too poor. I believe clover can be turned to better use than to plow it under. Dr. Lawes says the soil is actually richer in nitrogen after a crop of clover hay and the second crop cut for seed have been taken off, than it was after the first crop—that is, that matured clover roots and stubble contain more fertilizing matter than the half-grown crop; and, moreover, the manure made from feeding a ton of clover hay is worth in money and fertilizing value more than the hay is. Then it is folly for a farmer who can grow a crop of clover, which is as valuable as is stated by A. C. G. to plow it under, because his soil is past that stage and only needs reasonably good ordinary management to produce good crops of all kinds and to increase steadily in value. I have now nearly thirty acres of clover, and I am cutting it all to the last stub for feeding and am not plowing it in, and hope to keep my land improving by this practice. But when I could not grow clover, and the young growth died out in its infancy from utter poverty and starvation, I could grow rye, and by plowing it under in June, and then sowing buckwheat and then plowing that in, and sowing a second crop and plowing that in, and then spreading thirty or forty bushels of lime per acre, I have raised forty bushels of corn the next year on soil where previously not one ear could have been grown. It was this sort of culture, with the addition of manure made by feeding clover, hay, bran, corn and cotton-seed meal to cows, which brought up the lightest kind of blowing sand to a dark brown loam, which would produce eighty bushels of corn and two tons of clover hay and more of Orchard Grass to the acre. It was slow work; but nothing else could be done, for there was no alternative, and the rye was the beginning of it.

Finally, what is effected by plowing in a crop of rye? Several things: First, we get something where nothing else can be procured and at a season when we can get nothing else, and at a most trifling cost; second, we get a certain quantity of fertilizing matter. Taking A. C. G.'s figures we get 62 pounds of nitrogen, 69 pounds of lime, 30 pounds of potash, (and 24 pounds of phosphoric acid which he forgets) and all these cannot possibly be of any less value in the soil than as much procured from any other crop. Third, we get a large quantity of organic matter which in its decomposition produces carbonic acid and other acids which act upon the soil, dissolving the mineral elements and liberating more lime, phosphoric acid and potash, so that the crops can avail themselves of these for food and so flourish to a corresponding extent. This result well known to occur in the soil has been ignored by A. C. G. There is no doubt that for its purpose, and as far as it goes, rye may be made very useful in this way. A starving man would thank you for a crust, poor and dry, which a hearty man would throw to a dog, and he would find in it nourishment that would give strength and enable him to make efforts to hunt or work for better food. In like manner a starving soil will thank you for a crop of rye plowed under, and will be nourished by it; while a soil that will grow a crop of clover may reject it and gain no benefit from it (but I doubt it, for everything of the kind is useful to any soil as far as it goes) and indeed does not need it; but the poor starved field will be nourished by it and will be helped to do better by it. A. C. G. should remember that circumstances alter cases, and if he has never come across land so poor that it will not grow clover and will find much benefit from a crop of rye, the only crop that can be used under some circumstances and which really gives the most for the least given, I can assure him that there is such land and lots of it and the owners are anxious to know what to do with it.

RICH FARMS ABANDONED.

ALLEN NORTON LEET, PH. D.

AFTER running through most of the Western portion of Connecticut, and observing the agrarian condition of the locality, I am simply amazed at the situation, especially at the state of affairs in Fairfield County, indeed, through the whole Housatonic and Naugatuck region. Here is found as fine land as the sun ever shone upon; the soil is rich and ripe for tillage, the land cleared, with sufficient timber, however, for all purpose of utility, undulating with an unequaled landscape, water—that great desideratum sought for so frequently on Western prairies—abounding everywhere. The most favorable conditions for farmers and cattle abandoned, for the most part uncultivated, and with farm-houses, fences, barns dilapidated and falling into ruin. Yet there is a market at hand, and with hay bringing $20 a ton almost on the spot, there were never finer opportunities for profitable farming than in this region. It seems that New England is passing through the same condition as that which the Archbishop of Canterbury recently spoke of as prevalent in his own country. Said he: "In England there are hundreds and hundreds of farms for which no tenant can be found—farms which landlords would willingly hand over to any solvent tenant for a nominal rent, and in many instances for no rent at all, merely to get rid of the obligation of paying local rates."

Riding along the main road from Norwalk to Danbury, past incomparably fine farms, I noticed farm-house after farm-house vacated, while the owners were willing to rent them with contiguous land varying in area from 15 to 100 acres, at prices ranging from $100 to $500 per year. A farm of 75 acres, consisting entirely of arable ground and rich soil with only 15 acres cultivated, comprising besides a large house of 14 rooms and two barns, one of which cost over $5,000, the cellar being blown out of solid rock, is vainly offered for sale at $7,000—hardly the value of the buildings. And so the story is repeated all through Western Connecticut. The superior inducements offered to young men in factories in the way of increased wages are not alone to blame for this condition of affairs. The ordinary Connecticut farmer is wedded to old modes and the conservatism of scythes and hand-sickles, in spite of the fact that the principal inventions in agricultural implements are the products of Yankee intellects. Abandoned by the young men, the old farmers become supine and are dying off, while the stream sweeps onward to find lands over-occupied and superabundant crops in the West, where corn is so cheap that it is burned for fuel, and wheat-growers are impoverished by the glut or diminished demand for the American products.

Shakespeare has shown how the fool among his neighbors became the wise man of history. One such farmer near Danbury, applying the energy, thought, perspicacity and force to the work of farming that as a merchant he had exercised in business, two years ago bought up a fine farm of about 100 acres, with a farm-house, for $3,000. He determined to make his new acquisition profitable. He went to the Labor Bureau at Castle Garden, and told Superintendent Jackson that he wanted half a dozen German immigrants from the agricultural portion of the Fatherland, agreeing to pay them $10 a month wages for six months—from April to October. Two of the number he wanted, however, for a year. Among the multitude who desired such places there was no difficulty in obtaining the needed help, and they were sent forward. One of their number understood a little English and acted as interpreter for the rest. The farmer found them tractable, hard workers, skillful and profitable. With their aid he made $4,000 clear profit—mostly from straw, hay, buckwheat, corn, potatoes and tobacco—the first year. When the year had rolled around the men went off for higher wages in another line of labor, and he replaced them with other help from Castle Garden, so that last year the farm yielded a profit of more than $5,000. He expects still larger returns this year.

What was done by him could be done by others, and thus the problem of obtaining help could be solved. It is one of the mysteries of mysteries why men should be as gregarious as the thoughtless sheep that quietly follow their leader; and it is rarely that one of the flock is found independent and thoughtful enough to look back and see that the "land of promise" is behind him, and the prospect ahead is delusive and full of difficulties. Perhaps, after wandering in the wilderness for forty years, like the Children of Israel, the native and the foreigner alike may discover the land of Canaan to be at the very threshold of their starting place—in the land of the Pilgrims and the Puritans, ready at the touch of the agriculturist to flow with milk and honey, and to thrive as the "garden of the Lord."

Farm Topics.

CORRESPONDENTS' VIEWS.

SOME seven years ago, merchants doing business here bought 25 acres of waste land. They paid $25 per acre. The land was in very bad condition, grown to bushes and wild apple and cherry trees. The hay was cut this Summer from 5¾ acres of this land, and the crop amounted to 24,620 pounds. Seven years ago this same piece yielded only 4,000 pounds. This result has been brought about by putting in practice the same principles that have made the business of the owners a success. Every tree and bush was cut and the plows started through the soil. The stones and stumps were cleared off, and the land was heavily manured and sowed to grass. This cost nearly $100 per acre, but it has paid, for almost every year since then, in two cuttings, about four tons of first-class hay have been taken from every acre. With hay at present prices, one can figure on the profit of such crops. None of the hay is fed in this lot, but every year a moderate dressing of manure is applied. The manure is carted to the lot from the stables in town. These 5¾ acres are more profitable than a $5,000 Government bond would be, and quite as safe. They did not cost, improvements and all, more than $150 per acre. There are plenty of folks around here who could learn valuable lessons from these facts. Thousands of acres of hill lands in this county are just as good as this lot was seven years ago, and they can be bought for from $10 to $40 per acre. They can be made as profitable as this now is by the same care and labor. There is no reason why raising good hay in New England should not be as profitable as raising cotton at the South or wheat at the West.

Terryville, Conn. C. W. C

IN looking over farms about me, and reading the articles from those who claim to make money at farming, I am led to believe that the people who really make money at farming are very few. Most of the moneyed farmers that I know of got a start in some other line of work. They have been agents for some machine, or have been in regular business. Many of them have regular trades at which they can work at times, and thus secure a little cash. Such men come before the public and tell us what to do to make money on the farm. To follow their advice we should have their capital, their business training or their trade. How can we secure these things?

Gratiot Co., Mich. H. B. G.

I GAVE my experience last Spring, favoring greatly the Shaffer Raspberry. With a larger crop to dispose of, I have changed my mind. The color, as the RURAL said, does spoil it for a general market berry, until the people are educated up to it. I was obliged to sell it at the same price as the black raspberry, and this will not pay as it is not firm. The moldy color does not please the eye. The Cuthbert sells at sight. The Marlboro with me makes poor growth, and is almost tasteless. C. M.

Fairmont, N. Y.

A NEW SWEET.

I presume not all the readers of the RURAL NEW-YORKER have heard or read of the new saccharine, invented or discovered by Dr. Constantine Fahlberg. A great deal—a very great deal—is claimed for the new sweet which is said to be neither a nutriment nor a poison; it is simply a flavor, and stands in the relation to cane sugar as 220 to 1, the new saccharine representing the larger figure. Its chemical name is benzoyl sulphuricimide. It "does not decay, mold or ferment, neither is it attacked by bacteria, and has no injurious effect upon the human system," says a reporter in the American Analyst, who caught and interviewed the celebrated doctor. It is manufactured in Germany, and is selling at from $10 to $12 per pound. It is a product of coal tar, is not a sugar, as we are informed, and "contains carbon, hydrogen, sulphur, oxygen and nitrogen."

What an effect this product will have upon the canning of fruits, if, as it is claimed, it will both flavor and preserve! Even the curing of meats comes within its scope, while bitter medicines are rendered sweet without changing the action of the drugs. In these days of progress we hardly know whether to be conservative or radical—to believe all we hear, or to take every new thing with the customary grain of salt. P. O. C.

A FEW CONCLUSIONS IN ANIMAL NUTRITION.

PROF. J. W. SANBORN.

I. THAT some important law in animal nutrition is as yet either wholly or mostly unknown.

A. Throughout many years of careful work I have found that neither the total of organic matter, nor the ratio of albuminoids to carbohydrates has given the uniformity of results to be expected, for there were very radical differences.

B. Chemistry can give only rough approximations to real nutritive values.

C. The character of the food given and the

combination in which it is given varies the amount of water drank, but varies more radically the direction in which it leaves the body.

C. 1. Coarse foods give in the urine a low percentage of the water drank.

C. 2. Concentrated foods increase the percentage of the water drank, that is found in the urine.

C. 3. Coarse foods increase the amount of water that is vaporized from the skin and lungs.

C. 4. As the water vaporized requires many times the food per pound vaporized that is required to warm it up to blood heat, this loss is very great.

C. 5. These are conclusions reached as the result of experimentations which I have not had the means to continue.

II. The belief that a pound of organic matter in green food is worth more than it is in dry food is without proof, and contrary to much exact data.

A. The belief that cooked food is more valuable than uncooked food, is opposed by the solid facts of trial.

B. The belief that a pound of organic matter as silage, is worth more than the same original amount would have been if properly preserved, is contrary to II and II *A*, and is without demonstration, as yet.

C. Many silage rations with grain have been shown to be more effective than hay, but so too have I found that eight pounds of organic matter in certain forms of dry food combinations, are as effective as 12 pounds of organic matter in the form of hay.

D. No proof of the superiority of silage in certain combinations over certain dry foods, hay especially, has been yet given that is superior to other proofs of the superiority of similar certain combinations of dry foods over certain other combinations of dry foods, hay especially.

D. 1. The law that controls in this domain no one has as yet fully found out. The relation of exit of water from the system may afford some explanation of the matter, and may not. It certainly has an influence, but its relations are as yet unknown.

Ag. Coll., Columbia, Mo.

Farm Economy.

THAT QUESTION.

On the first page of the RURAL of July 31st a question is submitted to its readers concerning the yield of two plots of land belonging to a neighbor. On one plot a given amount of manure was spread in February and on the other plot the same amount of manure was put out in February in a heap and allowed to remain until April, when it was spread. The yield was decidedly in favor of the lot on which the manure was spread in February, and we were asked why this difference?

I do not know that I can give a satisfactory answer, but I would suggest that manure exposed to rains and snows leaches very rapidly and loses to a great extent its fertilizing property, and but little if any value is left except the insoluble portion. The manure spread in February leached as much as, and perhaps more than that in the heap, but it did so in the right place, and fertilized the entire lot, while that in the heap was confined to the space it occupied. Again, there is decided virtue in shading the soil during the Winter. I do not know how this comes about, yet I believe it to be a fact. Several years ago I planted a five-acre lot to corn. In the Fall the corn was cut and put up in shocks. It was fed from the lot during the Fall and Winter, many of the shocks remaining in the field the entire Winter. The following Spring the lot was seeded to oats. The lot made a fair yield, but on the spots of ground covered by the shocks of corn during the Winter the yield was extra. On these points the oats were twice as tall as anywhere else in the field. No fertilizer was used, neither was there any leaching of the shock, the drainage being perfect and the corn and fodder sound and sweet until all was consumed. I believe any covering for the soil, whether straw, grass, weeds, brush, leaves or anything else, is a decided advantage during Winter. There is more virtue wrapped up in the mulch than in anything else of the same size and strength. A. B. C.

Kentucky.

A GOOD GATE.

I SEND a sketch of a labor-saving device (shown at Fig. 339, 340, 341) for use with slide gates. It is simply a new way of hanging the old slide gate. The posts are set diagonally to each other the same as in the old way, only they are set closer together so as to leave just enough room for the gate to swing. This requires but little more than the thickness of the boards each way. Just below the top board the two posts are joined by a piece of bar-iron about one-and-a-half inch wide and a quarter of an inch thick, bent and fastened as shown at *f* Figs. 339 and 341. The upper board of the gate has a piece of iron plate fastened on near the end, with a notch or slit cut in it, of suitable size, so that when the gate is in place, it

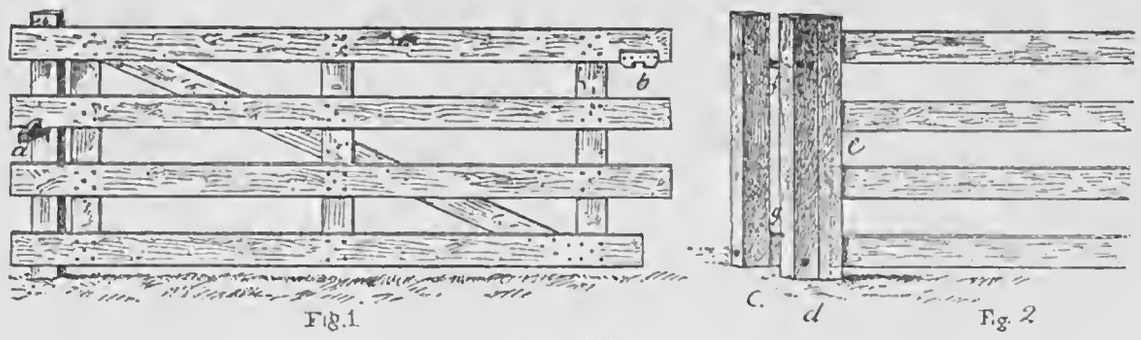


Fig. 339.

catches on to the bar or strap between the posts, shown at *b* Figs. 339 and 341. At the bottom of the gate-posts a block is fastened between them so that the bottom board of the gate, which is cut to the right length, abuts against it. This is shown at *g* Figs. 339 and 341.

That is all there is of it. The gate swings as easily as any gate you ever saw, or is lifted out of place and removed entirely if desired without trouble. It does not slide like the old slide gate, but swings like any gate hung on hinges. When closed it is held by an old-fashioned catch (at Figs. 339 and 341), which holds it clear from the ground. When it is desired to open the gate it is lifted out of the catch, when it may be easily swung around.

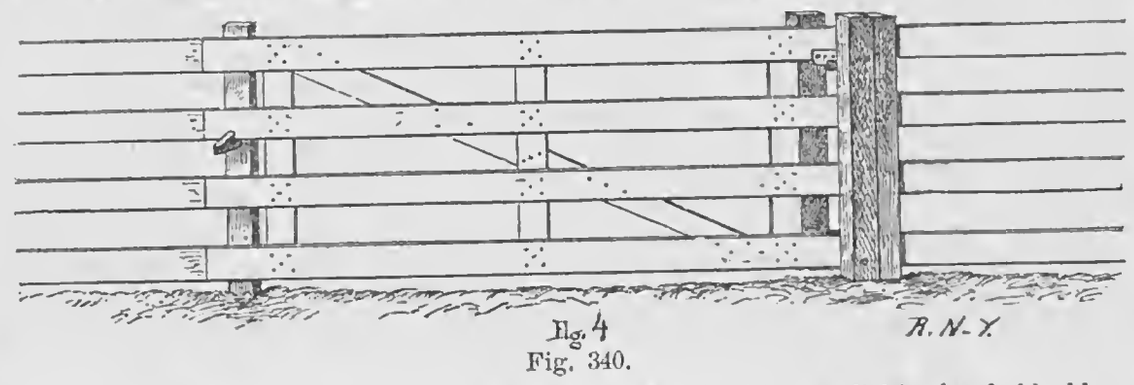


Fig. 340.

This gate hanging was invented by a Mr. Healey, of Kalamazoo, Michigan, and has been in use on his farm for several years. It is not patented. F. HODGMAN.

FRAME FOR SLAUGHTERING HOGS.

Mr. A. Freed, of Lancaster, Ohio, has built an arrangement like that shown at Fig. 342, which is very convenient at slaughtering time. It will pay farmers to put up something of the kind before the time comes for killing hogs. The best place for the frame is on a low hillside where there is a slope of, say, two or three feet in 12. Any good posts about eight feet long will answer. These properly notched and sunk into the ground make about all the

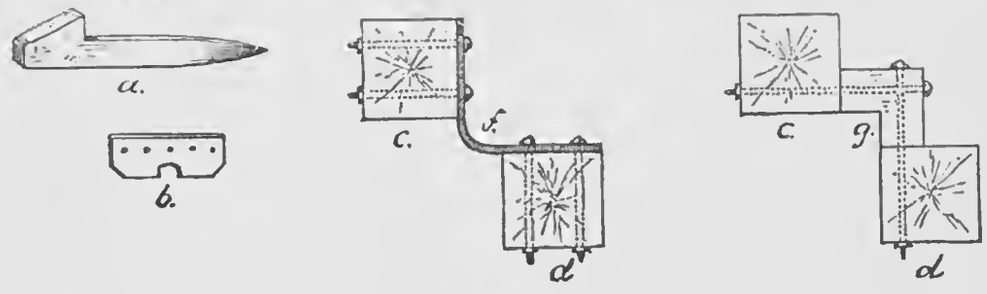


Fig. 341.

labor required. Studding (2x6) from eight to 12 feet long are spiked to the top of the posts, as in the illustration. They should be about two feet apart. Spike the end pieces on and the frame is done. The cross-pieces that the scaffold boards are placed on, are three feet or less from the top. The scalding tub is placed and fastened as shown in the picture.

Horticultural.

RURAL LIFE NOTES.

THE MINNEWASKA BLACKBERRY.

OUGHT we to condemn or speak disparagingly of any new fruit in advance of its introduction before thorough trial and without giving some definite reason? I am led to ask this question after reading the following in a RURAL editorial on blackberries, page 500: "The new Minnewaska, which will be offered for sale this Fall, does not, so far as we can judge, promise to fill any occupied space." It is not clear from this remark that the RURAL has made a personal trial of the variety, though it may have done so. The great point which has been claimed for the Minnewaska, as I understand it, is hardiness combined with the usual vigor of growth, great productiveness, size and quality of fruit. As to the latter qualifications, no one who has seen it thus far will be likely to raise any question. As to hardiness, I can only say I never saw a dead branch on any new cane in this latitude during the three years I have known it without protection—never saw it growing farther north. I have a plant of it in my garden now loaded with splendid fruit with great thick canes growing so high that next season I expect to pick the fruit from a 10-foot ladder. If asked why I don't pinch it back I may say it was done weeks ago, and now I shall "let it go," and if injured during the Winter fruit men shall hear of it. Now, among the present needs of fruit growers north of the 41st parallel is a hardy blackberry of good size, quality and productiveness. Nothing so far introduced fills the bill except in isolated cases in a few favored localities. Since 1884 I have been inclined to believe the Minnewaska was the variety needed. Let us give it a fair trial and then report.

[By all means. We have eaten the fruit of the Minnewaska a number of times. It is not as good as that of the Kittatinny. The berries are no larger. Is not the Kittatinny or the Dorchester or the Snyder, Taylor, Wilson, Jr., Lawton, Early Cluster, etc., sufficiently prolific? The Minnewaska may be hardier than any of the above. That is what we want to know. We have tried in vain to procure plants that we might test them and report upon them at the Rural Grounds. Its value will depend upon its hardiness.—EDS.]

THE CRYSTAL WHITE BLACKBERRY.

Regarding the Crystal White Blackberry, which attracts many by its novelty, it is just as well to have people understand that it is a delusion in this latitude. I tried for years to grow it, but never got a single berry either ripe or green. The canes were killed to the ground each Winter. Now the RURAL says the fruit is delicious but the cane neither hardy nor prolific. That settles it. Don't let us bother with a shy-bearing, tropical fruit at the North. In fact I don't believe it would sell in market if we could raise it. Look at the white and yellow raspberries, delicious and beautiful as some of them really are, their color is against them in market, and yet they are very prolific.

Fig. 342.

ABOUT MARKETING FRUIT.—OVERPRODUCTION OR UNDER CONSUMPTION.

The subject of marketing our fruits to the best advantage is, if I mistake not, one of the most important—if not, indeed, the most momentous—which confronts the fruit-growers of our country to-day. For years and years we have been hotly discussing the merits and defects of varieties, raising new sorts and improving the old, trying new methods of culture, increasing the yields, fighting insect enemies and warding off insidious diseases. Now we get the fruit in abundance, and what shall we do with it? How shall we market the crops at a profit, or even without becoming in debt to either the picker, carrier or seller? These questions may seem frivolous, and even sensational, to many. But when the grower of small fruits here along the Hudson, in the shadow of the great metropolis of the Union, with its million-and-a-half consumers, is forced to let his fruit rot in the field for want of a market, the question becomes of serious import. Beginning with the strawberry crop this year, if the number of bushels that were sold at a loss, together with the quantity which it did not pay to pick, were known, few would believe the statement. I recall an instance where 100 crates were sold at $1 for the lot—one cent a bushel—while the poor grower stood by protesting that it cost him $64 to have the fruit picked. It was on Saturday, and an exceptional case, doubtless; but nearly every strawberry grower in this valley can probably produce instances of like nature from his returns of 1886. Then, as to raspberries, which have usually been so remunerative in past years, bushels and bushels have been allowed to remain ungathered because the grower could not afford (!) to market them. A large part of the cherry crop has shared a like fate; and tons and tons of currants have been left to rot upon the bushes for a similar reason, many of which are still hanging there, sound and good. A Highland grower says he came out $4 in debt to the seller on a consignment of one ton of fine fruit. And now what shall be done with the large grape crop which is maturing? I have no desire to discourage growers of small fruits, nor am I prepared to admit that there is in reality an over-production if the annual supply could be properly distributed. But the question to be solved lies right here. Thousands of people everywhere are yet scantily supplied, if at all, with fresh fruits in their season, and yet tons of fruit rot in the fields or on the way to market without a buyer. The American Horticultural Society is soon to meet; other associations of fruit men and growers will gather in every State and county. Is there a more important question to growers and consumers, which should be fully discussed, than the proper adjustment of this difficulty? H. H.

Kingston, N. Y.

Field Crops.

SQUANTUM SUGAR CORN.

I SHOULD like to speak a good word for the Squatum Sugar Corn. Among the many novelties that are continually being introduced, so many are worthless that often a good thing is catalogued by seedsmen for several years perhaps before its merits are generally known to the public. How much of a novelty the Squantum Corn is I cannot say, but it is not planted to any great extent in this section that I know of, and I notice that it is not generally catalogued by seedsmen, or if it is, it does not appear under this name. I have planted this corn now for several years, and no other is acceptable on my table while it is in bearing. If it has any faults I have never discovered them. It is what I suppose would be called a second early, coming in after the Early Minnesota. The ears are about the same in size as the latter—perhaps a trifle larger—well filled with eight to twelve straight rows of pearly-white grains. It is exceedingly productive bearing three and often four ears on a stalk, and remarkably sweet; in fact the flavor is wherein it principally excels. What more a person wants I cannot see, and I know of nothing more delicious than a dish of this corn fresh from the garden. Some may prefer the larger ears of the Evergreen, Egyptian and Mammoth, but they are more fond of distending their jaws than I am. As long as corn is sold by the hundred, however, I suppose the larger eared, late varieties will gain the preference in the market, although for my part, if I had to buy my corn, I would rather have the smaller ears of the Squantum even at the same price per hundred. I have sent some of this corn to the grocers on several occasions each season, and it is the same old story every time—the customer sends back word that he wants some more of that kind of corn, and one even went so far as to say that he would have no other. It seems to me that if our farmers would pay more attention to quality some-

times, and less to quantity it would pay them, at least in certain markets. WM. HEWITT.

Mercer Co., N. J.

MANSHURY BARLEY.

THIS year Manshury Barley has very markedly shown its superiority over the other six-rowed kinds. While they ripened prematurely and are light in weight—some very seriously so—Manshury, by its strong growth and deep-rooting stood the burning heat and drought, and has ripened a fine crop. I think ours will go considerably over 50 bushels per acre for the whole crop. Besides this, the malsters have got over their prejudice, and are offering from five to 10 cents per bushel more for it than for common six-rowed. One at Phelps, N. Y., told me the other day that it was by far the best barley he had ever handled.

Lockport, N. Y. J. S. W.

JAPAN CLOVER.

JAPAN CLOVER—Lespedeza striata—is the plant for the South. It is self-propagating, and affords valuable and inexpensive pasturage. In 1865 we found it occupying a small space near the roadside surrounded by broom sedge. It soon displaced the sedge, gave good pasturage, and covered thousands of acres. It ran out noxious weeds and grasses, and rendered worthless land profitable. It appears to grow anywhere, stands drought, and even grows luxuriantly at an elevation of 4,000 feet above the sea. It requires no cultivation, and will not run out. Grazing does not appear to injure or retard its spreading. It is a perennial, and as a stock-fattener and improver of soil, we have never found its equal. J. W. W.

Macon Co., N. C.

Miscellaneous.

CATALOGUES, ETC., RECEIVED.

RUTGERS SCIENTIFIC SCHOOL.—This school enjoys the income from the U. S. grant for colleges. There are 56 students in attendance; how many of these are studying agriculture we are not told. The course in agriculture is designed to afford young men "the scientific knowledge necessary to success in practical farming." Free tuition is afforded for 40 students from New Jersey each year. The college farm consists of 97 4-10 acres. Last year 90½ acres were under cultivation, producing good crops. The stock consists of six horses, 47 cows, eight hogs and 117 head of poultry. The stock products were 119,487 quarts of milk, $98.60 worth of pork and $82.32 worth of eggs and poultry. Many interesting experiments with soils, grasses, etc., are carefully conducted. Parties desiring information regarding the workings of the institution, should send for the catalogue to Prof. G. H. Cook, New Brunswick, N. J.

COLORADO AGRICULTURAL COLLEGE.—Seventh Annual Register.—This institution is located at Fort Collins, Colo. There were at the close of the last session 87 students, representing seven counties of Colorado and six other States and Territories. The college appears to be doing excellent work, and its influence is increasing. C. L. Ingersoll, President, W. F. Watrous, Secretary.

FAIR PLAY.—Messrs Lord & Thomas issue an attractive circular giving a list of the agricultural papers that issue special fair editions. According to the circular nearly 4,000,000 papers will be given out at the various fairs of the country. The circular wrongly states that the RURAL'S Special Premium List will be distributed in part at fairs. The papers will not be so used. They will be sent direct to the best farmers in America.

NEW YORK EDUCATION.—Thirty-second annual report of the Superintendent of Instruction of New York State.—This well-printed volume of 600 pages is sent us by Superintendent A. S. Draper. It should be read by every teacher in New York State. In the various reports from schools and colleges some excellent hints may be secured. Teaching is a profession, and teachers should aim to master every detail of it. The trouble with too many teachers is that they never try to rise out of the common routine. They teach children by machinery that has been in use for generations. We need brightness, originality and tact in the school-room. We would gladly have every teacher in the State study this volume carefully. The educational system of New York State is a wonderful affair. The office of Superintendent is really one of the most important offices in the State in its bearings upon the welfare of the people. We had, in 1885, 11,254 school districts, 11,912 school houses, and a total school population of 1,721,126. The number of pupils attending school for some portion of the year was 1,024,845. The aggregate value of school houses and sites in 1885 was $33,347,581. The total expenditures for the maintenance of New York schools for 1885 was $13,896,650.59. There were employed 31,399 teachers (6,021 males and 25,378 females) who received as salaries, $8,762,950.23. These figures show the magnitude of our school system and the vital importance of carefully handling this vast yearly expenditure. No public expenditure can be so easily reached and controlled by the people and none can be made to accomplish so much when properly handled or to accomplish so little when neglected. Few public documents are of more importance than these reports. In one of the reports we find these words: "If men are in need of a doctor, they want not only an educated man, but one who understands the practice of medicine. Why not use the same common sense in selecting a teacher?" Why not indeed! That strikes to the very root of the matter. Instead of selecting a teacher because he is a friend of the family, because ho is a good singer or a "nice fellow," pick out a good *teacher*. Every teacher and every school official in New York State should secure this report and study it.

NEW YORK DAIRYING.—Second Annual Report of the New York State Dairy Commissioner.—Many papers in this State have been loudly asking what Commissioner Brown has done in return for the appropriation granted him last year. They should read the report and find out. We think the Commissioner is doing a good work, and heartily approve his work in behalf of dairymen. There are people in the State who appear to think that so long as a single pound of oleomargarine is sold in this city, or if the Commissioner does not personally inspect every suspected grocery store, he does not earn his salary. For such people this report will be valueless; but for thinking and progressive dairymen it is a valuable document. The figures showing the extent which the sale of bogus butter has injured the dairymen are appalling. In 1882 there were handled in New York city 79,864,840 pounds of butter, valued at $23,025,295.05. The receipts increased in 1885 to 93,506,850 pounds, but the value decreased to $19,502,977. If this one market can show such a loss, what might the total loss of the country amount to! It is estimated that the total loss to the dairy interests of the country, in consequence of this bogus trade, cannot be less than $70,000,000. During 1885, 8,072 samples of suspected butter were purchased. Agents spent 3,885 days in the work of convicting dealers in dishonest butter. It is almost impossible to convict a dealer in New York County. The course of procedure in the courts is too complicated. To bring an offender to trial in this city requires three times the labor that it does in Brooklyn. The success of the operations should not be measured solely by the number of absolute convictions. The activity of the agents in the city, and the acknowledged honesty of their purpose, have kept oleomargarine in an unpopular position and prevented much dishonesty. It is estimated that the enforcement of the law has reduced the amount of oleomargarine handled in New York by about sixty per cent, while the quantity manufactured in the United States has increased over fifty per cent. In the report on milk we are told that during the year ending December 21, 1885, 197,219,560 quarts of milk, 3,758,320 quarts of cream and 3,088,320 quarts of condensed milk were brought by rail into this city. One can readily understand how, without supervision, the milk could be easily adulterated and a vast amount of disease sent in with it. The State agents have spent 1,978 days, traveled 88,165 miles, examined 19,409 samples of milk, and inspected many dairies, creameries, condenseries and stables. We believe the department is doing good work—one worthy the support of the people.

What Others Say.

RATHER MIXED AS TO WHEATS.—We have received bulletin No. 16 from the Ohio Agricultural Experiment Station. It treats of "Tests of Varieites of Wheat." These tests began in the fall of 1882. The present harvest is therefore the sixth successive crop of wheat grown upon the same land. The plots are one-thirty-second of an acre in size. Of the Diehl-Mediterranean Wheat the Director says: "The seed was received from Department of Agriculture. A tall-growing variety, straw rather weak. The heads are not large, but are square, close-set on the rachis, bearded, bronze-colored glumes, kernel red. This variety has been recently introduced, and we have it, or something almost exactly identical, under four different names. It has nothing to commend it over the best well-known varieties." At the Rural Farm (Long Island, N. Y.) we have given this wheat a good trial and, as we have thrice or more said, don't see anything remarkable about it. But the above remarks are rather indefinite. It is *not* particularly a tall-growing variety in most places. The straw is not weak. The heads are not set on the rachis at all. The head includes the rachis. If the Director has four other kinds "almost identical" he should state what they are. The writer of this does not dispute that the so-called Diehl-Mediterranean is an old variety. He has questioned from the beginning the fact of its being a new variety, but has not felt at liberty to state his doubts until now.

The Director speaks of the Landreth (Armstrong) as having strong straw and large, loose heads. It is superior, he says, to the old Silver Chaff which it closely resembles. Then he describes Silver Chaff as a well-known variety not desirable for his section and as "quite similar to Landreth (Armstrong) and Martin's Amber." Silver Chaff is by no means "well-known" as such, out of Ohio at least. Its straw is weak and it differs materially from Armstrong or Landreth in other important respects. It is, for instance, by no means as hardy; it stools less, the kernel is smaller, and it is later; the culms and leaves are of a silvery green color.

The Director says that "Golden Grains Wheat was all killed but a few stalks, and these were about equally divided between the old Black-bearded Centennial and another smooth sort." Are not Golden Grains and B-b. Centennial for his climate spring wheats? Again, the Black-b. Centennial is a densely bearded kind. Hs speaks of it as smooth. The Director says "it is unworthy of cultivation." By no means. It may be in Ohio, but in California, Colorado, etc., it is one of the choicest kinds.

Of the Surprise, he says: "Medium to tall-growing sort, strong, stands perfectly. Heads large, closely set and well-filled, beardless, glumes white, kernel white. Looks very fine. A fine variety to be sure." But then the Director adds—"but it will hardly become a favorite." Why not pray? Why praise a variety to the skies simply to tell us it isn't worth cultivation? He says that Martin's Amber is similar to Landreth." Are not they the same? The Station has grown them for "several years" and ought to know. The report says that both Martin's Amber and Landreth are superior to Silver Chaff, which they closely resemble, implying they are the same. But in describing Silver Chaff, he remarks that it is not desirable. Does he find Silver Chaff the same as the old Treadwell? And is this the reason why he says it is "well known"? Are Martin's Amber and Landreth desirable? We should suppose they were since the report makes the following statement:

> Landreth, 39.9 bushels per acre.
> Martin's Amber, 36.7 bushels per acre.

the latter weighing 63.5 pounds per bushel, the former 60.5 per bushel. We fancy that the variety described as Golden Prolific is an old sort; that the Egyptian is not Egyptian, that no particular variety is understood by Velvet Chaff. It seems to us impossible for any one to make a valuable report on wheats until more pains have been taken to learn the true and synonymous names of the kinds described.

HYBRID OR CROSS-BRED.—The RURAL NEW-YORKER replies to our recent note on this subject that, while there may be differences of judgment as to what may be a good species and what a variety only, nevertheless, when crosses are made between plants which botanists class as different species we should adhere rigidly to the term "hybrid." That is what "hybrid" means. When fertilizing the pistil of one variety with the pollen of another variety of the same species we are "cross-breeding," and we should say so. With more light in the future these varieties may be erected into separate species, or what are now species may be reduced to the rank of varieties. It will then be time enough to designate what are now cross-breeds as true hybrids and vice versa. Upon the whole, we think the RURAL has the best of the argument. There will always be enough careless language, and there is little danger of being too accurate. And yet if any one should willfully or carelessly offend in this particular we would not vote to have him burned at the stake.

The above is from a late number of the Weekly Press. The very best evidence in the world that an agricultural editor is striving to do his best for farm interests is shown when he fully acknowledges himself in the wrong. There are some "farm" papers and some men who can *afford* to confess their errors. There are others who can't afford to confess anything.

SOWING GRASS SEED IN KANSAS.—Our friend Prof. Shelton, of the Kansas Ag. College, says, in his last report, that the time to sow grass seed in Kansas is, without exception, in the Spring, and recent experience shows that this work should not be undertaken too early in the season. Seed sown after the spring rains have fairly set in has never failed with him since 1874 to give a good stand of grass. In a few instances, and where the Winter following has been warm and open, he has had good success with clover and Timothy sowed in the Fall, but the result of sowing Orchard Grass, Alfalfa and Blue Grass in the Fall has certainly been disastrous. The seed germinates rapidly if sown in the Fall, even more quickly than in Spring, but as the native vegetation fails from the action of the frosts, the young grasshoppers collect upon the young grass, doing it serious damage; what remains, suffers seriously and is often destroyed by the action of wind and frosts. On the other hand, when the seeding is sown too late in the Spring the young and tender plants are consumed by the sun as soon as they appear. Seed sown any time during April will rarely fail to germinate and succeed well in making a vigorous growth. However, he does not advise seeding before the warm Spring rains have set in. He has sown both Orchard Grass and Alfalfa during the early part of May with most excellent results. Fall seeding may be said to be better than spring seeding in the case of all plants which make a growth in the Fall sufficient to withstand the rigors of Winter. This, corn and oats and most of our grasses will not do. But at whatever season the seed is sown, nothing should be put in with the grass seed. Rye, wheat or oats, among which grass seed has been sown, are a serious detriment to the growing grass, and the grass plants, without doubt, are injurious to the growing grain. It is often argued that the tall grain will shade and protect the young grass. But grass does not need shade when grown in proper season; it needs the sun, and especially it needs moisture: and this the vigorous grain is continually taking from the soil, thus robbing the young grass from the start. Every farmer knows how spindling, sickly and lacking in strength of root and stem is a grass or clover plant growing in a dense mass of grain. When this grain is harvested in June or July, just when the summer heats are greatest, the delicate, starved grass plants are certain to perish, unless long-continued cool and cloudy weather prevents. He is aware that, in favorable seasons, considerable success is obtained by seeding the grass with another crop. But, even during these favorable seasons, a better and more vigorous stand may be obtained without the rivalry of vigorous grains; and, upon dry seasons, a failure of the grass is almost certain when seeded with a grain crop.

HONEY FOR SWEETENING.—A writer in the Pacific Rural says that during the 16 years in which he has been in the bee business he does not remember having bought a single pound of sugar for his own use. He uses honey as sweetening for tea and coffee, for stewed fruit, and anything else where sweetening is required. If a good article of honey is used, having no strong or pronounced flavor, one can soon become accustomed to it and never miss the sugar. At the present low price for extracted honey it ought to be used in every bee-keeper's house, if only as a matter of economy and to save the expense of sugar.

THE English Commission appointed last year by the Conservative government to inquire into the causes of the depression in trade arrives at the conclusion that, as a matter of fact, low prices and consequent diminished profits constitute the only evidence of depression. The commission does not believe that legislation regarding labor has injured trade. It deprecates any increase in the hours of labor or any diminution of wages, and it looks with favor on labor organizations.

MIXTURE FOR LIMING EGGS.—To four gallons of boiling water add half a peck of new lime, stirring it some little time. When cold, remove any hard lumps by a coarse seive; add ten ounces of salt and three ounces of cream-of-tartar, and mix the whole thoroughly. Let the mixture stand a couple of weeks to temper before using. Pack the eggs as closely as possible, and they should be kept closely covered with the preparation. If treated when newly laid, nine months after they will taste nearly as good as when fresh. Eggs to be preserved by any method should be treated the same day they are taken from the nest; their quality depends upon this being observed. This is Dr. Hoskins's recipe, as we find it in the Vermont Watchman.

FARMYARD MALARIA.—The editor of the New England Homestead recently visited a farm upon which there had been much sickness, one child having died of diphtheria and there being a general complaint of "malaria." He found that the sink spout emptied into a sickening pool directly under the kitchen window, while above was the bed-room that had been occupied by the deceased child, with its window also opening upon this scene of filth and source of disease. Now, if instead of this wastiness and waste of fertilizing material, the farmer had rigged up a barrel on wheels to catch the drip from the sink and the house slops generally, and had emptied it in his garden as often as full, we think there

would have been much less sickness, the child's life might have been saved and all the family made healthier by the liberal use of the garden products thus freely fertilized.

A MISCONCEPTION CORRECTED. — Our friend, Waldo F. Brown, writing of Purdue University to the Farmer's Review, says that among farmers at large there is a feeling that the Professors of Agriculture are a set of soft-handed, kid-gloved men, with broad-cloth coats and silk hats, whose interest in agriculture is expressed by the promptness and regularity with which they draw their salaries. Nothing, he says, could be father from the truth. There is not a man among those whom he met that does not understand thoroughly the details of farm work, and without a single exception they were brought up on the farm, while many of them were for years practical farmers; and although their work is now that of instructors rather than of farmers, they go to the fields with their students and direct their work and often work with them. Personal contact with them by our intelligent farmers would at once banish suspicion and correct the false views which are held by many concerning these men and their work.

CLEANING WOOL.—The United States Consul at Sydney reports that an improved machine has recently been erected in Victoria for cleaning wool on the skin. It is modeled after the English machines used for the purpose, and consists of a series of beaters forming a cylinder. The skin is made to pass between two rollers revolving at a high rate of speed, but which hold in position and feed it against the beaters. The gearing apparatus is so arranged that the rollers can be reversed and allow the skin to be worked in and out. The machine is said to leave the pelt in a softened condition, thus helping to improve the quality of the basil.

CALIFORNIA WHEAT FLEET.—From a lengthy review in the San Francisco Bulletin upon the above subject it appears that 237 vessels cleared from California during the cereal year just ended. Of these, 231 were for Europe, 4 for Australia, and 2 for South Africa. This was the smallest in any year since 1878-79, when only 109 were cleared. The registered tonnage of last year's vessels amounted to 377,473. The freight earnings amounted to $4,123,091, or a little less than $11 per registered ton. There were only 11 vessels that went at over 35s., and 142 went at or under 30s. The classification of the vessels according to nationalities, was as follows: British, 145; American, 77; German, 11; Norwegian, 3; Italian, 1; Total, 237.

SOUTHERN FRUIT-GROWING.—The Charleston News says that increased attention has lately been given in South Carolina to the cultivation of fruit and the vine. Thousands of acres are planted each year with watermelons. During the past four years more than 100,000 peach trees have been planted in Barnwell and Aiken Counties, and it is estimated that at least 70,000 of these trees are now in bearing condition. As early as 1884, 3,000 acres of South Carolina farm land were planted with watermelons. Owing to bad returns on that crop the area in 1885 was only 2,348 acres. The profits on the crop last year were so large that there have been more than 5,000 acres planted with melons this year. It is estimated that under favorable conditions each acre will yield at least 500 melons, and that the total crop grown for shipment this year to outside markets will amount to 2,500,000 melons.

AUSTRALIAN WOOLS.—Though it is generally known that the wool and wheat are the staple products of the Australian colonies few particulars have been published concerning the former. Though efforts looking to the reduction of duties on wool in the United States have been frequently suggested for several years, no definite action has been taken, the wool-growers of the United States fearing the competition that they would thus have to meet. It is believed, however, that there are some grades of Australian wools which are not grown in the United States, but which it is found necessary to import for the purpose of mixing with the home-grown article, and it has been stated that a reduction of the tariff on such grades would be beneficial. The imports of wool into Great Britain are valued at £31,500,000, almost the same value as the cotton imports. The increase in the exports from the colonies has been considerable within the past quarter of a century, as is shown by the Australian Times and Anglo-New-Zealander. While in 1861 the number of sheep was 24,000,000 and the export 73,000,000 pounds of wool, last year there were 75,000,000 sheep and the export reached 435,000,000 pounds. The exact number of sheep, according to official returns, is as follows:

New South Wales	30,37.,871	Tasmania	1,720,027
New Zealand	14,650,000	Western Australia	1,547,061
Victoria	10,630,178	Fiji	5,869
Queensland	8,994,000		
South Australia	6,996,406	Total	74,913,407

The average yield per sheep is five pounds in grease or two-and-a-half pounds washed. The weight of the bales varies in the different colonies from 244 to 270 pounds for scoured, 294 to 374 for washed and 370 to 450 for greasy. The merino fleece is heavier in weight than an equal quality of other varieties, and appears to have improved under the Australian climate. Prices vary, of course, according to market fluctuations, but they are fortunately now ruling higher than has been the case for some time past. Different varieties grow best in the different colonies to which they seem adapted. For instance, while New Zealand produces excellent luster wools, those of Western Australia meet best the requirements of the worsted trade.

ALSIKE CLOVER.—Our friend J. S. Woodward writes the Press that this plant is valuable on certain soils and for certain uses, but much of what is just now being said in its favor is not justified by the facts. Mr. W. first sowed it more than twenty years ago, and as it has been quite extensively grown in portions of Niagara County, N. Y., where he lives, during all the time since, he knows something of its advantages and defects. It is peculiarly adapted to the moist, black, heavy soils of the black ash and soft maple swamps which once covered a considerable portion of the country, and for a long time it was extremely profitable for its seed, which often yielded as much as five, and sometimes seven, bushels per acre, which at first sold for $20 per bushel, and for a long time for as much as or more than $10. These days, however, are past, and it now seldom sells for more than $5, and sometimes for less than $2. It delights in rich, heavy clays, even if they are quite wet, especially in Fall and Spring. It does fairly well on heavy uplands, but is of feeble growth and short duration on light, sandy lands, and does not amount to much on light, dry gravel.

As a pasture plant it is far inferior to Red or White Clover, for it does not endure the trampling of stock so well. After the middle of Summer it makes but little growth and none if the season proves dry. As a meadow plant it makes a great show, beginning to blossom quite early, and continuing in bloom until after Red Clover should be in the mow, and during the whole time its solid bed of pink flowers leads the owner to think it will give him about three tons of hay per acre. But it lodges badly, and when cut and cured it is light and chaffy and seldom yields a single ton to the acre on the richest soil. Its hay is of only medium quality, not nearly so good as Medium Clover, while it yields hardly more than half as much per acre. After cutting for hay it makes no growth, affording no second crop or any after-feed. Its form of growth is creeping, like White Clover, with only small surface roots, and it puts nothing into the soil if plowed after haying, and only a very small quantity if used for green manuring when in full growth. Its true uses, Mr. Woodward thinks, are as a honey plant and for mixing with other "grass seeds." Being such a persistent and abundant bloomer, it has no superior as a honey producer, it being estimated that it will yield 500 pounds per acre in a good year. It grows well along with other clovers, filling in the bottom, and if they are killed in spots by the wet or in others by cold the Alsike fills up wonderfully, as it is entirely hardy and at haying time it will add several hundred pounds to the weight of hay on each acre. The proper method is to apportion the seeds the same as for ordinary seeding, and then add two pounds of Alsike seed per acre. Let this be extra, as you will then have none too much seed for the best results. When sown with Medium Clover and that is cut, as it should be, when only in full bloom, the Alsike will again start up, giving a large second bloom and perfecting so much seed that it will fill the land, and on soils well adapted to growth will become nearly as persistent and permanent as White Clover.

A TRANSFORMATION. — The editor of the New England Farmer tells of a horse that was owned by a shiftless, lazy farmer for many years, and which from colthood up always looked like an old-time horse. It was thin in flesh, rough of coat and poor in spirit. It had a lazy gait that was recognized by all the neighbors as it passed. Neither the continual jerking of the reins, nor the repeated touch of the driver's whip would make any lasting impression on the rate of speed. After getting along into his "teens" the owner concluded he must sell or swap him off for what he would bring and buy him a new and young horse. The animal went for a low price of course, but he fell into the hands of a different sort of a man, one who fed well and took good care of all his animals. In six months the former owner did not know his horse when it was driven by. It was nearly 200 pounds heavier, its coat was smooth and glossy, its head was up, eyes bright, and in general appearance the animal was the picture of vigor and good health. He had dropped his old gait and traveled like a horse that is proud of his blood and breeding. We have always felt that people who are not willing to give good care to their animals have no right to own them.

BRIEFS.

It is told in St. Paul, that the children in Minneapolis, its near-by and hated rival, have refused to read the Bible in the public schools because it is "filled full of talk about St. Paul," while from Genesis to Revelation there is no mention made of Minneapolis.....

DR. HARVEY says, in the Weekly Press, that if tired in one place, tired in all. If you tire a horse's neck by checking him high you tire him all over. When a man has a toothache he has no comfortable cubic inch in him, from scalp to sole.....

"NEW JERSEY is to have a horticultural society that will hold its first exhibition in Orange the coming Fall. Messrs. Barr, De Forest, T. J. Slaughter and James R. Pitcher are at the head of the organization."

So says a late number of our esteemed contemporary the American Florist. Is it possible the Florist does not know that New Jersey has already a horticultural society, and has had for 10 years past. The gentlemen named are not all ignorant of this fact, for some of them have had personal invitations to attend its meetings. If Orange is to be favored with a society of its own, it is all well enough, but to imply that the State has to this time been without one, is to ignore the large amount of work and good done by the earnest labor of the members of the State Society and its indefatigable Secretary.....

The Editor of the American Garden is informed that the arsenic of Hammond's Slug Shot is so mixed with its antidote as to render it harmless to all except insects. A correspondent of that journal states that certain horses were hitched to the back of his wagon and before he knew it had eaten over half of a ten-pound package of Slug Shot. Beyond a slight physicing they were not harmed. Dr. F. M. Hexamer, it seems, recommended the formula to Mr. Hammond and he should be able to state whether it is or is not poisonous. The statement made by the New York Experiment Station after having analyzed a package sent there by the RURAL NEW-YORKER appeared several months ago.....

THE experimental stations of the country, says the New England Farmer, where already established, have not cost the farmers more than from ten cents to a quarter of a dollar per year on each farm in their respective States. We must remember that the stations are young, and there has not been time for the great amount of good to come from them which we hope to receive in the future. Do not let us find fault unreasonably till the preliminary stages of the work are passed.....

MR. ROE says, in Harper's for August, that the quotation, "Doubtless God could have made a better berry than the strawberry, but he didn't," has been quoted by the greater part of the human race, and attributed to nearly every prominent man from Adam to Mr. Beecher.....

Mr. A. M. PURDY has sold his paper, the Fruit Recorder, to the publisher of Popular Gardening. .....

BERRIEN CO., of Michigan, has started a Fruit Exchange, as we learn from Mr. Libby's Garden. Each package sent out by members bears the inspector's stamp—thus:

The Michigan Exchange hereby guarantees the contents of this package to be uniform and true to appearance; and the buyer will confer a favor by reporting any fraud detected in any package bearing this stamp. W. A. Brown, Inspector, Benton Harbor, Mich.....

MR. FAIRCHILD, of Connecticut, says in the Connecticut Ex. Station Report, that if he had farm manure enough to manure one acre well, and he wanted to plant three acres, he would spread the manure over the whole and make up the other two-thirds with commercial fertilizer. .....

MAKE cuttings of pelargoniums for winter and spring blooming. Pansies may be induced to bloom freely during these hot days if the soil is kept moist. Otherwise the plants will burn and the flowers become very small. A little bed at the RURAL Grounds is now as bright and fresh as earlier in the season. The soil is very rich, mellow and *moist*. It is well to sow the seeds of pansies now for next year. So also, seeds of hardy perennials and biennials may now be sown—pinks, hollyhocks, aquilegias, delphiniums, &c., &c.....

Everywhere.

TRANSCONTINENTAL LETTERS.—LXII.

MARY WAGER-FISHER.

The coast valleys of California; Saucelito; San Rafael: Duncan Mills; the dairy region of California; the "white Chinese," prices of dairy land; Tomales Bay; timber waste; rural scenery.

I think there can be but one opinion in regard to the preferableness of the coast valleys of California for country living. Irrigation is not required as a rule, and the midsummer heat never reaches that excessive degree which obtains in the valleys of the interior. Between the Sacramento Valley and the coast are three regions of country lying between ranges of mountains—none of great hight and traversed by as many different railroads, that have considerable repute for their climate and products. The smallest of these is Napa Valley, in Yolo County and the furthest inland from the sea, and the hottest in Summer. An aximander made a jaunt through it, finding it largely planted with grapes, and very attractive. Of the two other regions I can speak from personal observation, having spent two days in each.

It was about March 10th when we left San Francisco by ferry for Saucelito, which lies on the opposite side of the "Golden Gate" from San Francisco. All the ferry trips from San Francisco are of the most charming character, delightful boats, and the bay with its islands and its shipping always an imposing and spirited sight. Among the vessels at anchor lay the "Bear," one of the boats that was engaged in the Greeley relief expedition. The United States Government, I believe, owns the islands in this bay and a number of them are utilized for purposes of defence. Saucelito is a small town perched on the side of the steep hill, or mountain rising up from the water. The views from it are superb, but its climate of winds and fogs is too much like that of San Francisco to render it a favorite place of suburban resort. By rail from this point it is nine miles to San Rafael, the road running in to this town from San Anselmo and out again—simply a spur. San Rafael has a population of 5,000, and this population largely does business in San Francisco. The town is built in a basin of the mountains, the chief peak of which is Mt. Tamalpais with a zigzag carriage road to the summit. A lady who lives here told me that the views to be had on this drive equal anything she saw in the Yosemite Valley. The climate is very equable and mild, there is a sea breeze, but no fogs, and people in not robust health speak of San Rafael as quite a paradise. It is a pretty place; there is no outlook except one mounts the hills, but the hills are vine-clad, and beautiful villas are planted up the mountain sides, in the midst of beautiful trees and flowers. All in all, it is very like a southern French or Italian town. Shop-keepers sat on the sidewalks in shirt sleeves, reading and smoking, and women were on piazzas with their sewing.

From San Rafael we went to the extreme northern terminus of the North Pacific Coast Railroad to Duncan Mills, in the Redwood Forest. Duncan Mills is eighty miles from San Francisco and six miles from the sea-coast. The road follows for fifteen miles Tomales Bay and is never more than fifteen miles from the sea, and for sixty miles of the way runs through Marion County, and the remaining twenty miles lies in Sonoma. This region is considered the best dairy country in the State, the butter being of fine quality. There is comparatively little land suited for tilling, but the great hills and canyons are covered with grass, upon which the cattle graze the entire year around. It keeps green about a month longer in Summer than does the grass in the interior valleys, and there seems to be abundant water furnished by springs in the canyons. At intervals there are Redwood forests, and then miles of country devoid of trees, except along the water-courses, the principal being the Russian River. The entire route is of a very picturesque character, and the road, from necessity, a narrow-gauge. The conductor on the road told me that in the previous week, from one station, he had taken to San Francisco 175 boxes of butter of 50 pounds each, and at various stations were stacks of butter boxes. They are of wood, painted on the outside, about four feet long and from twenty to twenty-four inches wide, with a lid shutting over the top. The butter is made into rolls actually weighing less than two pounds, but called that, and these rolls are stood on end in the box, and about twenty-five fill it. There are many Swiss and some Italians engaged here in dairying, and the Swiss I have heard called the "White Chinese" of the coast. They are industrious, economical, frugal, and confine their association chiefly with the Swiss colony around them.

Butter, at the time of our visit, was unprecedentedly low, selling at twenty cents; and, taking the cost of producing it into consideration, there could not be much room for profit. Somebody said that the climate was too damp and cool for successful cheese making, and it was too far to ship milk to market. A dairy ranche of 600 acres had been sold by the railroad company, near Duncan Mills, for $22.50 per acre.

At Point Reyes, a very desirable locality, dairy ranches were held at from $40 to $50. As every where on this coast, land is high—much too high—although the expense of farming here, where no special provision must be made for Winter, is much less than in the East. A ranch of 2,500 acres on Tomales Bay was stocked with from 300 to 400 cows, many of choice breeds. On account of the mildness of the climate Jerseys do well here. This ranch rented for about $6,000. Churning is done chiefly by horse power.

Tomales Bay is a great place for ducks, and we were told that some farmers thereabouts made $1,000 a year from ducks' eggs. They shut up the ducks at night, and on salt water it costs little to feed them. Camp Taylor on this road is a famous camping ground for parties and the picnic excursions sometimes number thousands of people. It is in the Red woods, on a creek, with fish, quail and deer for the sportsman—if taking innocent life is sport.

We staid all night at Duncan Mills, and upon reaching the town at once took to the forest by way of what is called School Ma'am Canyon, from a schoolhouse having been built in it years ago for the children of the lumbermen. We walked for a mile over logs, corduroy and rude bridges in the bottom of the canyon and up the mountain side. I found a beautiful oxalis growing abundantly in the forest, a large magenta flower and leaves spotted with white on top and purple beneath. In the parlor of the hotel was an openwood fire and a grand piano. A Chinaman served at the table; he said his name was Louis Doe, that he had been five years in the country. But as "the Chinese must go," was the cry of the white laborers and written even on the Redwood stumps, Louis Doe's gentle reign will probably soon come to an end.

The saw-mill at this point is of only moderate capacity, cutting 40,000 feet per day and upward. The trees are more carefully harvested than formerly, although to the eastern mind the waste of timber on all this coast seems absolutely wicked. Wood for burning is cheap enough in the forests, but by the time it reaches San Francisco it costs rather more than coal, and the latter is largely transported in colliers from Seattle, and sells here at $9 per ton. Red-wood lumber costs about the same as White Pine in the East, possibly a little less. It resists decay admirably, but is a soft wood. In selecting real estate in California various things need to be considered. Both the land and the climate vary greatly within a short radius. Both are good or bad in spots. There is no malaria in this region, but it is damp and the trees are covered with moss and lichens. The peach trees were coming into bloom, and the roadsides were resplendent with the blossoms of golden poppies, pink mallows, hemp and the exquisite nemophila, while there were miles of buttercups and wild mustard. The hills were adorned at intervals with oaks, madrona and the manzanita. Eucalyptus trees were in abundance—millions have been planted in the State, but it is said that they exhaust the soil like black walnut, and are growing into disrepute except for roadside purposes. The white farm houses had a thrifty, tasteful and well cared for appearance. The conductor said that California farmers lack in patience—that when a field becomes overrun with weeds they turn it over to pasture—it tires them to death to plow around a tree or stump, and they have not yet learned that it requires brains and skill to farm well. A beautiful shrub in full bloom was the California Lilac, Ceanothus thyrsiflorus.

RURAL SPECIAL REPORTS.

Georgia.

PERRY, Houston Co., August 12.—This is a great place for water-melons; but they haven't paid this year as the market is overstocked. Nineteen persons shipped some, but it has not yet been demonstrated that as many dollars clear profit have yet been realized from the business. One party shipped three car-loads, and not a cent has yet come to him in return. Another paid $25 for half a car-load to ship with a similar amount of his own mellons. In return the commission merchant asked for a remittance of $17 to help pay freight. It is the opinion here that Cincinnati commission merchants played a "grab" game against the shippers. L. M.

Illinois.

CHAMPAIGN, Champaign Co., Aug. 14.—This county has suffered much less from drought than many other parts of the State; but we were needing rain too, and as I write, we are having a delightful down-pour—the third within three days. We have had good crops—hay, oats, and especially wheat, of which there was but a small acreage. The prospect for corn is now good. In many parts of the State the dry weather has done great damage. G. E. M.

Missouri.

SEDALIA, Pettis Co., August 12.—Owing to a five weeks' drought the crops in this county will be very light. Corn one-third crop; oats, fair crop; wheat small yield but good grain; very little rye sown, no barley, potatoes one-half crop; hay good; broom-corn two-thirds crop, grapes rotting badly. People very much discouraged, but we are having some rain now which will help out a little. Prices low. W. K. R.

New York.

LOCKPORT, Niagara Co., August 12.—We have the most severe drought for many years. There has been only one good rain since May 10th, and none since June 15th. The result is that corn is being injured; early potatoes are being ruined. Much seeding is burned out *dead*, and pastures are very dry and poor, and cows that have not been fed extra have nearly dried up and are thin in flesh. Harvest is now over, and crops were never put in in better order. Not a drop of rain on most of them from the time they were cut till put into the barn. Wheat is yielding very well for the amount of straw. Many fields are going over 30 bushels per acre. Oats are a fair crop of extra fine quality, and the straw where well housed will be worth half as much as hay. J. S. W.

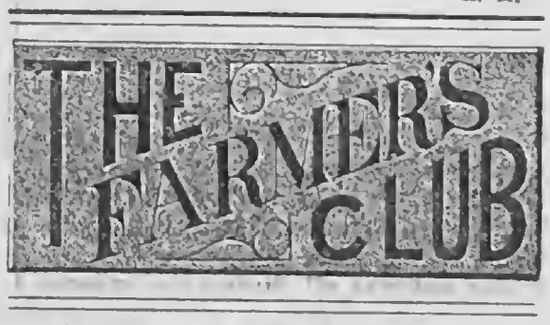
CLINTON, Oneida Co., August 10.—Potatoes, a moderate crop; some cry of rot, but not extensive. Hops obliterated; not a bale in Oneida County. Hay was a light cut, but second crop will be fine to compensate. Corn stalks are short, but the stand is good for yield. E. P. P.

Oregon.

JASPER, Lane Co., August 4.—The prospects for crops in my neighborhood are not as good as last year. Fall and winter wheat will make an average of 15 bushels per acre, while Spring will not make more than half a crop. Oats ditto. Barley will make an average. Hay not half a crop. Potatoes an average. Apples, pears and all orchard fruits not more than a fourth of a crop. Hops are about as good as last year. W. F. S.

Pennsylvania.

READING, Berks Co., Aug. 16.—Reports coming in from the country districts to-day show that last night's cloudburst and storm were unprecedented. Many thousand bushels of unripe fruit are now lying on the ground. The streets of Hamburg presented the appearance of rivers. Hundreds of cellars were flooded, wagons and agricultural implements were washed from farm yards into the Schuylkill and carried away. Corn fields were washed away, leaving not a vestige of the crops, and tobacco fields were riddled. The fruit crops are a total loss. Three barns valued at $12,000 were struck by lightning and destroyed, together with several animals and the roofs of three churches in the western section of Berks County were partially blown off. L. M.



ANSWERS TO CORRESPONDENTS.

[Every query must be accompanied by the name and address of the writer to insure attention. Before asking a question, please see if it is not answered in our advertising columns. Ask only a few questions at one time. Put questions on a separate piece of paper.]

LAYERING GRAPE-VINES.

S. R. Sanborn, N. Y.—One of the papers I take recommends us to grow grape-vine layers from the wood of this season's growth, and I would like to know what the RURAL says of this course, having more faith in its teachings.

ANS.—We cannot recommend the growing of layers from green wood or that of the present season's growth. It may be admissible where no other wood can be got to the ground, and it is very necessary to grow from a particular vine; but such plants are never so strong, require extra care for a year or two, and are much more liable to insect attacks and disease. We would use as layers only wood of last year's growth from which canes have grown this year. A trench about four inches deep should be dug along where the cane can be lowered into it. When the canes of this year's growth have reached a length of fifteen to eighteen inches, the cane bearing these should be placed in the bottom of the trench and fastened end down, if necessary, with pegs of wood or twigs or anything that will hold them down. The trench should then be filled with fine soil, which should be packed closely around each young shoot, care being taken to have as few leaves as possible covered. The roots will mostly grow from the old wood just at the place from which the young cane grew. It is now quite too late for layering. It should be done in June or the first of July when done in a large way. When anybody tells you that grape-vines grown from green wood are in any way better than those from older wood don't believe him; he doesn't know what he is talking about.

MULCH IN A VINEYARD.

F. E. H., Canker City, Kans.—Which is the better treatment for a vineyard—to cover the whole ground with a heavy mulch, dispensing with cultivation; or to mulch along the row and cultivate between the rows? Soil a loam, with heavy clay subsoil so that water stands within one to one and a half foot of the surface for some weeks in Spring. We often have drought in mid-summer. Is there a better way than either of the above?

ANS.—Mulching is, at the very best, but an indifferent substitute for cultivation. Whether as a stimulus of the growth, or as a protection against drought, a clean or well pulverized surface is always preferable; although in case of long-continued dry, hot weather the addition of a mulch upon a well pulverized surface, will doubtless prove beneficial. There is grave doubt if the health and vigor of a vineyard can be maintained upon a soil in which water stands for a considerable period so near the surface. Such soil should have been thoroughly underdrained, to a depth of at least three, or three and one half feet; and the subsoil well broken up for fully one-half that depth, before planting the vineyard, if the best results are to be had.

TRANSPLANTING APPLE TREES.

A. S., Beechwood, Pa.—About four years ago I ignorantly set out some apple trees in a bad situation; would it be safe to remove them now to a better place; and should this be done in the Fall or Spring?

ANS.—We should remove them. For your location probably Fall would be the better time. Prepare ample holes and preserve all the roots you possibly can. Don't expose the roots to the sun or wind for a moment if it can be avoided. Cover them with blankets as soon as the tree is dug out. Use the finest soil about the roots, the poorest on top. When the roots are *covered* pour water enough in the holes to puddle the entire mass of soil. Then fill to the surface and compact it the *next* day as firmly as you choose and again fill to the surface with soil, this time leaving it mellow. Cut the trees back to within a foot of the main stems and stake if necessary.

Miscellaneous.

JAMESBURG, N. J.—In this vicinty we are using for clover marl which is said to contain from 8 to 10 per cent. of potash and about two per cent. of phosphoric acid. To receive marked benefit we have to apply from 75 to 100 bushels per acre, costing seven cents per bushel delivered at the station. One man can draw and spread 100 bushels per day. Would it not be cheaper to use muriate of potash, applying the worth of the same amount in money to the acre? If so, at what time should it be sown?

ANS.—Our friend does not tell us in what form the potash exists in the marl. There is at least one cent per pound difference in price between muriate and sulphate. In a loose way of figuring, we should say that the potash in the marl would cost just about the same as the potash in good muriate of potash when the cost of carting and spreading is taken into the account. The phosphoric acid is probably not worth more than two cents per pound, being insoluble. We should prefer to use either kainit, sulphate or muriate of potash, for the potash; and raw bone flour for the phosphoric acid. The bone would also give some nitrogen.

W. M. P., Bluff Point, N. Y.—In our vineyards we encourage the growth of Canada Thistles for winter protection and also for their manurial and mechanical effect upon the soil. How do they compare with clover as a manurial crop.

ANS.—In mechanical effect upon the soil we cannot see why Canada Thistles would not be as good as the same bulk of clover and also in adding carbon to the soil; but as a gatherer of ammonia, both in foliage and root, clover is much superior. The thistles have the advantage in so much that they can be plowed down two or three times during the Summer and they will spring up rank and strong while the clover could hardly be grown to sufficient size to add much if anything to the soil, unless allowed to grow into the second year more or less. We should greatly prefer clean culture during the earlier part of the Summer and then the sowing of rye as a winter protection. It is at least much pleasanter to work among and over it, and it will have as good a mechanical effect upon the soil.

A. S. S., N. Greenfield, Wis.—What are the varieties of barley, heads of which are inclosed?

ANS.—It is very difficult to tell the variety of grain from only a portion of a single head, and without leaf or stalk, but we think No. 1 is the Manshury. The kernels toward the the upper portion of the head are smaller and longer than the others, and in general have the same appearance as that variety. No 2 looks like an inferior head of Manshury, or else common six-rowed.

G. K., Zanesville, Ohio.—Does the RURAL reserve the right to include in its Free Seed Distribution any of the plants sent to the Experiment Farm for testing purposes?

ANS.—By no means. We fancy that plants or seeds sent to the Rural Grounds to be tested are as safe as if in the originators' grounds. We have no more right to give them away than to sell them. It would be an unpardonable breach of trust were we to do either.

P. W. J., Pontiac, Mich.—The chief works on "wine-making on a large or small scale," are "French Wines and Vineyards," an English work; Haraszthy's "Grape Culture, Wines and Wine-making"; Shaw's, "The Wine and its Cellar," Husmann's "Grape Growing and Wine Making." 2. The grass sent for name is Cenchrus tribuloides—Bur Grass, Hedgehog Grass. It is a grievous nuisance and should be extirpated on its first appearance.

L. C. D., Emery, Ill.—1. We do not know of any Sparta Branch Nursery at Sparta, Wis. 2. The common apricot is not hardy enough to do very well in the West, north of Central Illinois, and owing to the curculio is not profitable. The Russian apricot is said to be hardier but has not been thoroughly tested. Trees should not cost more than 25 to 40 cents each.

L. P. N., De. Ruyter.—The box with the beans has not been received; but from your description of the insect coming out of the beans, we have no doubt it is the bean weavil.

R. H., Seneca Falls, N. Y.—To get one of the Government consular reports address Worthington C. Ford, Chief of Bureau of Statistics, Washington, D. C.

S. S. I. F., East Carver, Mass.—The specimens of Arbor-vitae you send us are the seed-bearing vessels or cones.

C. C., Warrenton, N. C.—1. The American News Co. of this city can supply all books. 2. F. S. Gibson, 108 Spruce St., Philadelphia, Pa.

DISCUSSION.

P. O. C., YOUNGSTOWN, OHIO.—"Who have noted any ill effects from eating strawberries"? asks a correspondent in the RURAL for August 7. I have noted both good and ill results. The effects of eating strawberries upon two ladies of different constitutions during the season of 1885, were different to a very marked degree. The younger lady weighed about 180 pounds, and was 39 years old. The other weighed about 90 pounds, and was 79 years old. The system of the younger and more corpulent lady was strongly acidulous, while that of the elder was alkaline. The acidity of the strawberries aggravated the case of the younger lady, completely disarranging the digestive organs, and producing a severe case of irritation of the kidneys. The elderly lady feasted and fattened upon the delicious fruit. In fact her health was greatly improved. The younger lady was compelled to use a corrective under the advise of a physician, who prescribed borax water, flax-seed tea, and abstaining from further use of the berry. Both cases occurred under my own observation, and aptly illustrate the chemical axiom that an acid will neutralize an alkali, and *vice versa*.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING August 21, 1886.

W. F. B.—C. S.—A. G. B.—Yes, we have the Geanga—P. H. J.—L. E. B.—H. M.—F. C.—J. M. B.—S. C.—G. M. W.—F. B. G.—R. P. G., thanks—F. C.—Henry Young, plants rec'd—M. Southard, plants rec'd—H. H.—O. S. H.—F. L. K.—M. G.—E. & B.—J. M. W—G. M. V.—C. V.—A. E. M. C.—E. T—A. L. J.—O. S. H.—S. C. B.—W. F.—H. G.—A. O.—C. A. G.—W. H.—E. P. P.

Miscellaneous Advertising.

LIVER COMPLAINT
CURE GUARANTEED
Dyspepsia, Constipation, Indigestion, Jaundice, Sick Headache, all result from a diseased Liver, and are symptoms of Liver Complaint. To all suffering, I will send a Valuable Treatise, with full particulars for home treatment. FREE
Dr. H. C. TYLER, DEEP RIVER, CONN.

THE
RURAL NEW-YORKER.
A National Journal for Country and Suburban Homes.

Conducted by
ELBERT S. CARMAN.

Address
THE RURAL NEW-YORKER,
No. 34 Park Row, New York.

SATURDAY, AUGUST 28, 1886.

Please send all fruits and perishable articles to the editor, River Edge, Bergen Co., New Jersey.

The Rural's statement that the new tomatoes Mikado and Turner's Hybrid are the same will not be disputed. The plants are highly productive, the tomatoes very large—sometimes quite smooth—but *generally* as irregular as the fruit of the old Trophy.

August 15: The Jessica (white) grape is fruiting at the Rural Grounds for the first. The berries are beginning to ripen the earliest of any we have ever raised unless it may be those of the Early Victor, which is also fruiting for the first. It is a close race between them.

There is an Osage Orange growing in the New York Central Park that, six inches from the ground, measures six feet in circumference, with a round head about 20 feet high. The foliage is dense, and this Osage Orange is one of the finest tree specimens in the whole park.

☞ *The SUPPLEMENT of the RURAL NEW-YORKER Special to be issued about Sept. 4th will be mailed to subscribers and all applicants from its date until next May or June.*

Advertisements for the Supplement should be sent in at once. The price will be 50 cents per line to all. Advertising patrons need never apply to us for special rates. We have no special rates.

One hundred thousand dollars for the Washington seed distribution, two-thirds of the seed to be distributed by members of Congress; for forestry, $7,000; for silk culture, $10,000! We conscientiously believe that the Rural's little seed distributions have done more good to the country during the past eight years than have those of the Washington politician-humbug affair. Had the one hundred thousand been appropriated to forestry, and the silk business been ignored, members of Congress would have shown some sense.

From seed *gathered* and sown in early May we have now lilacs a foot high. Is there anything in a floral way more delightful than a good specimen of the lilac in full bloom? Is not the delicate fragrance of its abundant panicles enough to repay one for the cost of raising lilacs about the home? Lilacs vary considerably from seed in habit and foliage, as well as in the color of the flowers and size of the panicles. The seeds may be collected and sown now. They will germinate in 10 days and the plants will winter safely if lightly covered with straw or loose manure.

Seven of the eight Anarchists on trial for weeks at Chicago were yesterday condemned to death. For all who respect law and order this is the best intelligence we have printed for many a day. These wretches gloried in their antagonism to law, reason, decency and the peace and welfare of the civilized world, and in the pursuit of their nefarious designs wantonly and willfully destroyed valuable lives for which their own worthless lives are but a poor compensation. Their execution on the gallows will be a stern warning to a class of exotic criminals for whom there is no room in any corner of this broad land. Would that the punishment could be inflicted promptly, and that the force of the lesson should not be weakened by the law's delays!

The majority of the fair catalogues come to us this year with the words "no liquors allowed on the grounds" plainly printed. There will be more temperance fairs this year than ever before. This fact is very gratifying. The temperance sentiment of the country is growing stronger and stronger. Men who sneered at it a few years ago are now afraid of it. The coming generation of farmers will carry temperance so far into politics that politicians will be the most ardent advocates of reform. What do the managers of our New York State Fair propose to do about the saloon business this year? They have made a heap of money out of "beer privileges" in times past. They ought to be able to get along without liquor this year. We shall see what they will do.

CONDITIONS NECESSARY FOR MAXIMUM POTATO YIELDS.

We are now digging and weighing the potatoes of our rich-soil plot, where, perhaps, about 500 different kinds have been raised during the past eight years. The average yield seems to increase every year, and the question arises whether it would not pay to treat large areas just the same as this little plot has been treated. The entire yield this year will certainly exceed 800 bushels to the acre. Our treatment of this land seems to indicate that potatoes, to give maximum yields, not only need *complete* fertilizers, but that they need every *form* of plant food, the effects of which the chemist may not be able either to estimate or recognize. We have used upon this plot every available form of potash, phosphoric acid and nitrogen, as well as sulphur, magnesia, salt, lime, sand and muck.

No matter, however, what the soil is made up of, if we could raise such immense potato crops year after year evidently it must not only be retentive and moist, but also well drained. Such land is rarely to be found. But, when it *is* found, we should not, with our present experience, hesitate to supply the conditions of this plot; and we should feel that the money could scarcely be more wisely invested upon the farm.

THE EFFECT OF EMASCULATION ON THE YIELD OF CORN.

If any reader were to doubt our statement that cutting off the tassels of the corn plant induces the rapid development of "sets" which in many cases would otherwise remain dormant, he should try the experiment. We are thinking, therefore, whether it does not follow that a field of corn if every alternate plant were so treated would not produce more grain than if all the tassels were left in the usual way. The writer first observed this effect of destroying the male flowers (or "tassels") several years ago. The variety which we have been working to improve for 10 years is always planted in a plot of about one-tenth of an acre.

When the tassel first appears and before the pollen is ripe, the plant is examined. If it suckers, is too tall, or the sets do not develop, or only the higher sets develop, or the stalk itself is too tall, the tassel is cut off in order that such plants may not mate with others which are less faulty. It would appear that the plant vigor required in perfecting the tassel must be very great, for no sooner is it cut off than not only do the sets which may have shown themselves grow rapidly, but other sets are forced into growth. We have plants which have been thus treated with from three to eight sets all showing silk, though the sets had not appeared above the sheath when the tassels were cut off.

Evidently the plant nourishment which was required to mature the male flowers was, after emasculation, at once directed to the female flowers.

If every other plant in a corn-field were deprived of its tassels, no doubt the perfect plants would furnish pollen enough for all. Whether the yield of grain would be increased or not is a fit subject for experimentation.

THE "WHEEL."

The Agricultural Wheel is an organization of farmers started by three of them in Prairie County, Arkansas, in 1882. It is devoted to the promotion of the special interests of the farming class, and none but farmers have been hitherto admitted to membership. Within a year of its organization every county in the State had a Wheel of its own. In 1885 the State Wheel was very much strengthened by the consolidation with it of the Brothers of Freedom, an organization like that of the Grangers. There are now over 1,200 Wheels in the State, with a membership of 55,000.

In June last a State convention of Wheelers at Little Rock nominated a State ticket, though many members objected to enter politics as a party, and bolted, though willing to become factors, as Wheelers, in local, county and State elections. All the nominees declined, while generally expressing sympathy with the movement. Another convention was held at Litchfield, Ark., on July 28, when a National Wheel was formed, representatives from Missouri, Tennessee, Texas and Kentucky being present. After adjournment, the Executive Committee of the State Wheel met the other day and nominated a State ticket. If it receives the full Wheeler vote it is thought it will be elected; and in spite of much dissatisfaction it is expected to receive 20,000 votes.

The appearance of the Wheel in politics indicates a tendency on the part of the farmers of the country to break away from old political connections and to organize on new lines. This is the first agricultural organization that has taken any prominent part in State politics since the Granger movement against railroad extortion in the Northwest. It is rolling rapidly over the South, where it is meeting with much opposition from the Democratic party, as its members are drawn chiefly from that organization. Its independence of old parties is salutary, and will do much to promote a much needed reorganization of parties in the South.

THE DROUGHT IN WESTERN TEXAS.

Two or three weeks ago telegrams from several parts of Western Texas greatly belittled the injury which numerous previous telegrams had reported to have been done to the live stock and agricultural interests of that section by the long-continued drought. At the time we ventured to doubt the truth of the denials in face of reiterated accounts of the immense damage done. We now learn that in response to an earnest appeal from Gov. Ireland, a movement has been quietly started in most of the cities of the State for the relief of the people rendered destitute by the drought. The Governor is severely criticized by many for having issued the proclamation, as most Texans think it will tend to keep many actual settlers out of the State. In Shackleford County, where farmers were entirely dependent on their crops, employment has been furnished by the County Commissioners by giving farmers work on the public roads. A fund has also been raised to be lent to farmers without interest to enable them to buy seed this Fall. Other counties are likely to follow the same course. The distressed people of Callihan County, who have lost their cereal crops, cotton, hay and grass, driven to desperation by want, appeal to the world for help.

There are 10 counties in the State where absolute destitution prevails. Provisions are being sent forward from various towns in Northern Texas; but everything is being done very quietly so as not to alarm intending settlers. Cattle, sheep and horses have been nearly the only sufferers in the stock-raising counties, and of these the deaths have been very heavy; but men, women and children have been the great sufferers in the agricultural counties of the drought-afflicted section. It may possibly be a shrewd measure, but it can hardly be an honest one, for a large State like Texas to try to conceal for selfishly deceptive purposes the extent of this disaster. With States more emphatically than even with individuals, "honesty is the best policy."

DANGER TO THE WATER SUPPLY OF CALIFORNIA.

While the miners and farmers of California are hotly disputing about the right to use the rivers of the State for hydraulic power or irrigation, a third class is destroying the capacity of the rivers to furnish any water at all during the summer months, when water is most essential. There is no summer rain in the Golden State, and during the long, hot, dry, brown Summer both farmers and miners are entirely dependent on the supply of water stored in the basins from which the rivers are supplied. These storage basins are the coniferous forests that cover the California mountains. If these are allowed to remain in something like their natural condition, the heavy snows on the mountains, gradually melting, will slowly pass down through the streams the year round. In the census year California had 4,152,349 sheep—more than any other State except Ohio. For many years a great part of these, as well as countless herds of cattle and goats, are driven every Summer up from the parched valleys into the moist mountain meadows and woods.

There they eat up every blade of grass and stamp down and gnaw away every bush and young tree along the entire length of the Sierras, thus ruining the reproductive power of the forests. After the destruction of the grasses and shrubs, the shepherds and herdsmen, for the purpose of more rapidly renewing the supply, set fire to the forests in hundreds of places, so as to get rid of the shade which checks vegetation. Thus, what with the grazing of stock, the reckless fires of the stockmen, and the wasteful ways of the lumbermen, the mighty forests of California are disappearing with alarming rapidity. The destruction of the forest reservoirs will convert the short, deep, rapid California rivers, running through long, narrow, hot, dry valleys, into spring torrents, and leave them dry the rest of the year, and without a permanent summer supply of water the greater part of California will be uninhabitable. Before deciding to what use the rivers of the State are to be applied, would it not be wise in the Legislature to take measures to secure their permanence?

BREVITIES.

Moore's Early is now (Aug. 18) beginning to ripen.

We are planting early peas as an experiment. We presume that they will mildew.

Are you budding any fruit or ornamental trees? Now is the time. See how many pears or apples you can bud upon a single tree—just for the fun of it—how many kinds of roses upon a single bush. Bud the white lilac upon the purple, or *vice versa*; the privet upon the lilac; the double red-flowering thorn upon the white; the different colored Japan quinces upon the white.

Those of our friends who can afford the expense should now be thinking of planting hardy bulbs. Let the soil be mellow, deep and rich. Hyacinths should be planted deep and not disturbed until they fail. Good bulbs will bloom three to four years. Tulips may remain two years in beds. Then it is best to take them up after the leaves fade in early Summer, separate them and replant.

This is the season when full crop reports are of the greatest use to those who have produce to sell. Last week we gave the gist of the latest and most trustworthy reports on cereals; this week we do the same for fruits, potatoes, tobacco, etc. Special attention will be given to this business every week, until most of the marketable produce has passed from the growers' hands.

In Germany great care is taken to prevent the spread of trichinosis among the people, who are greatly addicted to the eating of raw or underdone pork in the shape of ham, sausage, etc. Every hog slaughtered for market is carefully examined by an official microscopist, whose duty it is to detect trichinæ, and by condemning every affected animal prevent the disease. If this occurs from the use of pork examined by any microscopist, he is held responsible and is punished. Couldn't even this wide-awake Republic learn a lesson from this "primitive custom?"

The Grain Shippers' Association, of Kansas, includes nearly every big grain buyer in the State. It was organized in a small way two years ago; but the low prices of wheat and other farm produce of late have increased the necessity for such an organization, and its strength has been greatly augmented within the last five months. Delegates from it visited St. Louis the other day, and tried to get such rates from the Missouri Pacific Railroad as would permit them to ship the entire grain crop of Kansas to St. Louis. The result of their negotiations is not yet known. Why cannot the farmers in every section form organizations to secure low rates of transportation on their produce to market? Such organizations would very likely be successful wherever there is any competition in transportation, either by rail, river or canal. If wide-spreading, like the Kansas association, it could, probably, often influence rates where there is no competition by bargaining for rates for all its members, competition or no competition. Where this cannot be done by farmers themselves, they should encourage the buyers of their produce to do so; for low rates of freight for the latter will enable them to pay better prices for what they buy.

In 1875 there was inserted in the Nebraska State Constitution a provision that at the general election immediately preceding the expiration of the term of a United States Senator from that State, the electors should express by ballot their preference for some person for the office. For the ten years since then no action had been taken on this provision until last Monday, when Senator Van Wyck, who is a candidate for re-election, in a spirited manifesto appealed to the people for an expression of their preference under the proviso. This will be the first instance of a direct vote of the people of any State for a United States Senator, and it is supposed that the choice thus made will, as a matter of honor, be binding on the next Legislature elected. The Senator well says that, "while the National Senate represents the sovereignty of the States, each Senator should be the true representative of the sovereign people of the Commonwealth." There has of late been a great deal of scandal with regard to the election of United States Senators by the Legislatures of the various States. The members of these Legislatures are comparatively few, and are, therefore, much more easily influenced in their choice by pressure from wealthy individuals or corporations, as well as by direct or indirect bribery or other corrupt incentives, than the great body of electors who choose them. The composition of the Senate, and its action with regard to many measures affecting corporate interests brought before it, lead to the conclusion that undue influence has often been exercised by these forces in their election. On direct appeal to the people, like that just made in Nebraska, their choice would be directly indicated, and the danger from improper influences in the election of United States Senators would be minimized without any constitutional change in the mode of electing them.

Indust'l Societies.

SOCIETY NOTES.

THE American Institute of this city will hold its 55th annual exhibition from September 29th to December 4th.

THE New York State Dairyman's Association will hold its annual convention at Norwich, Chenango County, December 14th.

THE exhibition of the Massachusetts Horticultural Society last week was largely given up to flowers. Some magnificent gladioli were shown, one long table running the entire length of the room being given up to these beautiful flowers. They were of innumerable colors and shades. A collection of 30 or more vases of sweet peas was much admired. The fruit exhibition was small but fine. William's Favorite apple and Rostiezer, Tyson and Clapp's Favorite pears were most numerous. Two magnificent bunches of Black Hamburg grapes, raised in a hot-house, attracted much attention. The Acme tomatoes were very attractive, and the Crosby sweet corn made a good display.

THE Premium List of the Orange County Fair contains the points of excellence in cattle. The "scales of points" for use in judging Jerseys, Guernseys, Holstein-Friesians and Ayrshires are given. A good move. Orange County is essentially a dairy district, and it is impossible to do too much to develop the milk and butter qualities of the cattle.

AT many fairs a new class has been opened, viz., one for dogs. The Tri-State Fair calls attention to a "canine congress," and other organizations are preparing to recognize the dog as a legitimate member of the farm family. This plan may result in much good. A good, well trained dog stands pre-eminent in the brute creation as the friend of man. He stands above some men in intelligence and affectionate regard. Such exhibitions will tend to show the public what care and training will do for the dog, and will serve to point out the deficiencies of the savage mongrel curs for which the farmer should have nothing but a charge of shot.

AT the recent meeting of the American Society of Microscopists held at Chatauqua, N. Y., Dr. Thomas Taylor, of the Department of Agriculture, read a valuable paper on butter fats and oleomargarine. Dr. Taylor has for some years conducted a series of experiments seeking to discover a sure test for oleomargarine. He discovered that there was a distinct difference between crystals of butter and those of other fats. This difference is shown by a powerful microscope, and it was thought by many that the surest and simplest test for bogus butter had been found. Recently Prof. Weber, another distinguished scientist, has declared that in samples of oleomargarine sent to him for examination, he can find no great difference between the physical characteristics of the fat globules of butter and its substitutes. This called out a reply from Dr. Taylor, in which he practically repeats his statements and combats the theory of Prof. Weber. He insists that the butter crystal has several peculiar characteristics which he has not yet found in connection with any other crystals of fat, animal or vegetable. Dr. Taylor's argument was elaborate and strong.

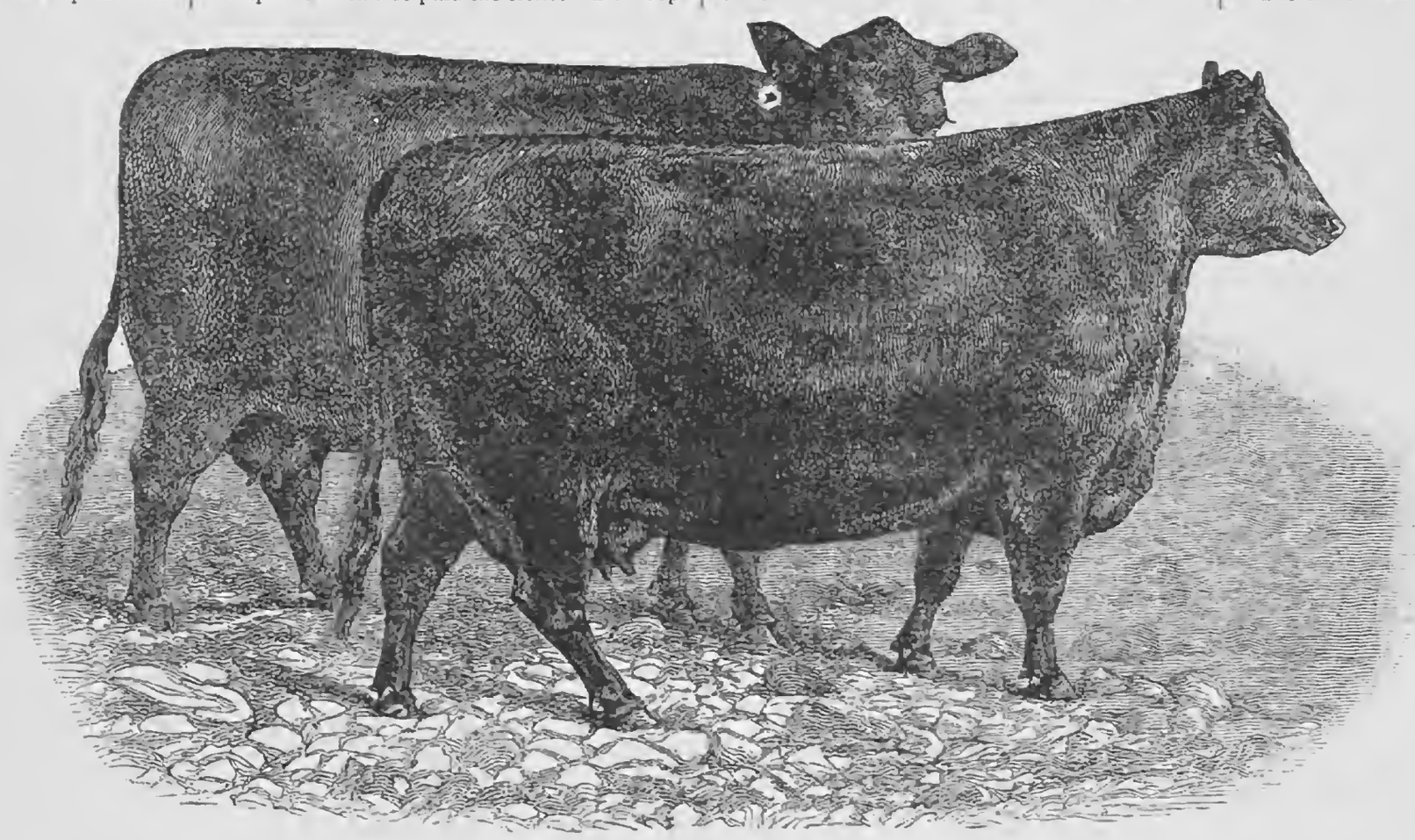
THE Holstein-Friesian Association of America offer special premiums for butter, cheese and fat cattle to encourage breeders to push the black-and-white breed into notice. All premiums awarded for butter or cheese at the Massachusetts, New York, Ohio, Wisconsin, Minnesota, Illinois, and Iowa State fairs, won by Holstein-Friesian cows will be duplicated. Premiums are offered at the Fat Stock show for beef Holstein-Friesians, both thoroughbreds and grades. These premiums will also be duplicated. Full particulars may be obtained from T. B. Wales, Jr., Iowa City, Iowa.

THE Mercer Co. Agricultural Fair Association will hold its first fair at Trenton, N. J., Oct. 5—8. This is a new association but it starts right. The constitution informs us that: "No races, trots or trials of speed for money or other valuable things offered or provided by any person other than the Association shall be allowed upon the fair grounds, nor will any gambling or lottery schemes of any kind or liquor selling—beer or strong drink—be tolerated." The constitution is an admirable one.

THE coming meeting of the American Horticultural Society promises to be a great success. The meeting will be held at Cleveland, Ohio, September 7. Horticulturists from all over the country will be present. Twenty-five papers will be read by men well up in the profession. Various excursions have been planned about Cleveland. The business meetings of the society will be held in the hall of the Board of Trade. The best hotels in the city offer reduced rates.

THE Illinois State Board of Agriculture issue a neat pamphlet giving dates and other necessary information relating to the various exhibitions under their direction. The Illinois State Fair will be held at Chicago, September 6-10. The Fat Stock show, the American Dairy Show and the American Horse Show will be held November 8-19. Entries are to be made by writing C. F. Mills, Springfield, Ills. The Fat Stock Show this year promises to be the most remarkable agricultural exhibition ever held in this country.

THE premium list of the Nebraska State Fair, issued by Sec. Rob't. W. Furnas, is the neatest we have ever yet seen. The same compliment can be paid the ticket which represents a half-husked ear of golden corn. Those who want to learn how to conduct a fair will do well to secure this little pamphlet. We consider it an excellent plan for the managers of fairs to secure the catalogues, and premium lists of other associations. There is always something that somebody else has thought of that can be made useful at home. At the Nebraska fair, liquors and gambling devices are not only prohibited on the grounds, but they are not allowed within 40 rods of them. We are sorry to note, however, that "Roman Chariot Races" and kindred spectacles are advertised. The classes for educational display, ladies' work, art and housework are ample. The residence of the Secretary is at Brownville, Neb.



ABERDEEN-ANGUS COWS. Fig. 349. Re-engraved from the London Live Stock Journal. (See page 558.)

Various.

THE QUESTION OF CALIFORNIA IRRIGATION.

I AM not a lawyer, and I have no interest in the irrigation question at present so prominent in the affairs of our friends of the Pacific Slope, except as a general friend of law and justice between men, but I fear the RURAL'S position in the editorial entitled "Irrigation in California," is not based upon equity or sound law. The men who contest the right to divert the waters of the rivers lying along the borders of their lands, own their lands in fee simple with all the privileges and appurtenances thereto belonging. The only right the State has to them is that of eminent domain, under which it taxes them, and may take them for public but not for private purposes. But it has not the right to take them even for public purposes without first assessing and paying the damages. The State cannot constitutionally pass any law to deprive these owners of their rights under the laws existing at the time their rights were acquired. I have no right, much less has any influential journal the right to place expediency above law, and counsel disobedience or resistance to existiug law, or the enacting of unjust laws. It does not make any differeuce what laws they may have in India or any other country under the sun. The common law is constitutionally adopted in this country in the absence of statutory enactments, and a common law title to property once acquired cannot be set aside by any *ex post-facto* enactment.

The conflict between might and right, which is every day coming to the front in some part of the country, should warn every honest man to stand up, firm as a rock, for the defence of every vested right. To yield one point to-day is to yield two to-morrow. God's just displeasure with a compromising nation has shaken it to its very foundation once, and shall we not heed the warnings of the coming storm? California would much better let every irrigated acre become desert than imperil her very existence by wronging one portion of her population at the demand of another.

Every civilized nation, whatever its form of government, recognizes in its judiciary the conservator of the people's rights. But in these times of terrible unrest, dissatisfied men appeal their cases without scruple from the highest courts to the most ignorant and prejudiced of the populace. The purest and truest judges are held up to popular odium, and appeals are made to the ignorant and unthinking to kick them out. To whom shall the people look for justice, when the populace dictate the decisions of the highest courts of the State? It is a terrible misfortune to a State that any considerable change in the organization of its courts should rest in the hands of the populace in times of great popular excitement. The appeals which are made to the passions and prejudices of men at such times, are more subversive of Republican institutions in their tendencies than all the teachings of avowed Anarchists. Men often offend thoughtlessly against law and right, especially when there is a popular drift in the wrong direction, and it stands us all in hand to look well into a subject before condemning the deliberate action of those who have had the largest possible opportunity of acquiring correct information in regard to it. California is fortunate in having a Legislature already elected which may reasonably be expected to act with more deliberation, and under a deeper sense of justice to all parties, than one chosen in the present disordered state of public sentiment. Let us hope that it may be fortunate enough to adjust the difficulty upon principles of justice and equity to all parties interested. Possibly the Legislature may be able to satisfy itself that irrigation is of so much importance to the State that it will justify itself in pronouncing it a public use of the water, and condemn it under the law of eminent domain. This would be straining the point tremendously, but it is the only way out of the difficulty that I can see. Even in that case, the State would have to stand between the parties in interest and adjust the damages. No settlement of the difficulty not based upon the principles of right, will ever stand. The interests involved are too stupendous to be trampled under foot. God reigns and the right always comes to the top sooner or later.

O. S. BLISS.

R. N.-Y. The RURAL'S position is that where the interests and welfare of the great majority of the people of any State conflict with those of a small minority, those of the latter should yield; but without entailing any unjust loss. The right to the waters of a stream or lake under even a fee simple ownership of the abutting land is quite restricted according to the common law. The riparian owner has only a right to use the water for any reasonable purpose not inconsistent with a similar right in the owners of the land above, below and opposite him. He has no right to make such use of the water as would sensibly and injuriously affect its volume. Even this is a mere privilege running with the land, and not a property in the water itself.

Whatever right he may have in the water, however, there is no doubt that the State has the right to take it for public use, compensating the riparian owners for whatever legal claims they may have on it. The State does this in case of canals for the purpose of transportation; why shouldn't it do it in case of canals for the purpose of irrigation? If it does so in a constitutional way, how can it be against law or equity? If it does so in an unconstitutional way, the courts of the State will declare the law invalid; and if they fail to do so, is there not an appeal to the U. S. Supreme Court? In no case, therefore, can the legal rights of the property owner be infringed by any legislation counseled by the RURAL.

The American common law governing this subject comes from England, and it certainly seems reasonable that, in interpreting it, California judges should have regard to the interpretation placed upon it by English judges in English possessions where the conditions are the same as those in California.

In past ages so much importance was given to "vested rights," that little or no importance was given to any other rights. As the world advances, however, the former are losing a good deal of their sacred, inviolable character, and the latter are attracting much more attention. When Bismarck the other day decreed that all the Polish landowners must quit Posen by a specified date, what regard was paid to their "vested rights" in the land which he insisted they should sell at whatever price they could get? When the British Parliament a short time back fixed the maximum rent for Irish land, what consideration did it show in this *ex post-facto* legislation for the "vested rights" of rack-renting landlords? There is just now across the water a good deal of talk of compelling the land-owners of Ireland to sell their property outright at a specified figure, and it is the cost of the measure in money, not in morals, that stands in the way.

A high respect for the judges of the country is quite desirable. In England a good deal of it arises from the fact that the judges there are appointed, not elected: that they hold office for life, not for a term; that much official homage is shown them in the courts and on the road: and that wig and gown distinguish them from the commonalty. All these adventitious sources of reverence are lacking in this country. Our judges must depend on their own learning, intelligence, impartiality, and incorruptibility to secure public regard. They are elected by the people from among the people, and after a time return to the people. While in office no antiquated trappings or special ceremonial distinguish them from their fellow citizens. It is good for the country that the vast majority of them are worthy of high respect; but there is nothing sacred or infallible about their decisions. They are reversed every day by higher courts. Where several judges sit in the same court, it is a rare thing to find a unanimity of opinion in any case. In the California Supreme Court, the decision in favor of the riparian owners was made by majority of only one out of nine. If public opinion drifts occasionally in the wrong direction, it drifts much oftener in the right. Why assume that the public opinion of California is drifting in the wrong direction now? A new Legislature will be elected in California in November; are the present members who want to be re-elected less likely to be swayed by public opinion before election than after?

Woman's Work.

CONDUCTED BY EMILY L. TAPLIN.

WHAT RULES THE WORLD.

They say that man is mighty,
He governs land and sea,
He wields a mighty sceptre,
O'er lesser powers that be;
But a mightier power, and stronger,
Man from his throne has hurled,
"For the hand that rocks the cradle
Is the hand that rules the world."

In deep, mysterious conclave,
'Mid philosophic minds,
Unraveling knotty problems,
His native sphere man finds
Yet all his "ics" and "isms"
To heaven's four winds are hurled,
"For the hand that rocks the cradle
Is the hand that rules the world."

Behold the brave commander,
Staunch 'mid the carnage stand,
Behold the guidon dying,
With the colors in his hand:
Brave men they be, yet craven,
When this banner is unfurled:
"The hand that rocks the cradle
Is the hand that rules the world."

Great statesmen govern nations,
Kings mould a people's fate,
But the unseen hands of velvet
These giants regulate.
The iron arm of fortune
With woman's charm is purled,
"For the hand that rocks the cradle
Is the hand that rules the world."

—*From the American Israelite.*

OF INTEREST TO WOMEN.

An ingenious woman recently made a pretty easel to stand upon the floor, out of swamp cat-tails. Stout ones about four feet long were chosen. The tripod of supports was made of nine cat-tails, three in a bunch, fastened together by almost invisible bouquet wire. The three bunches were fastened together; a bar composed of two cat-tails pointing outward, was placed across about four inches from the bottom. Another bar was placed across higher up, to hold the picture. More cat-tails were laid carefully against the two front pieces of the tripod, to prevent a bare look. An unframed etching was placed on the easel, with a scarf of crimson silk carelessly draped around it. The effect was very good.

English charitable societies make a feature of "lending bags," to be loaned to poor women during confinement. A writer in the London Queen gives the following list of contents, which may be of use to charitably disposed women: Two pairs of cotton sheets, two pillow cases, two night-dresses, a short jacket for sitting up, two nightcaps, two bed-gowns, two flannels; in addition, a flannel petticoat, six squares, a dressing gown made of flannel lined with calico for the mother. For the child, two shirts, two flannel gowns, two binders, four squares, two flannel squares, one head flannel. One pound of yellow soap, some tea, and sugar are generally added. The bag can be kept six weeks; but must be returned with everything clean, and application for the loan to be made two months beforehand. If the articles are returned in a satisfactory state, it is well to give the baby a frock, a flannel petticoat, two pinafores, and one shirt. A jug of gruel two or three times during the first week, and afterwards a good meat dinner, are much appreciated. A card with the list of articles should be placed in the box, and a Bible is sometimes added, also Fuller's-earth, and any useful medicine.

London shops are beginning to display the Indian baskets, such as we see purchased at Niagara.

They are of thin white chip, with a "knobby" surface, made by the plaited lengths being twisted preparatory to being passed through the perpendicular ones. All are finished off with rosettes and tassels of the same. The dried "seg" or rush baskets are the fashionable ones, and this Winter they quite formed one of the principal items in the Christmas gift list. There were long, narrow ones, called knitting baskets, but used by amateur artists for carrying paint brushes: others in the semblance of a crumpled, wide-brimmed hat, spiked on three rush-twisted sticks, forming a tripod; or a French horn supported on some short stout twigs; an upturned beehive, neatly ensconced in the center of crossed sticks; a large leaf folded partially over, with the stalk forming the handle: tall, rounded ones, for waste paper, with a gigantic velveteen butterfly placed on one side, with silk embroidered wire-edged wings. They are all made much in the style of the common rush door-mats, and their beauty lies principally in their novelty. Everybody likes a basket, from the old lady with her hoard of wools to the child with its pebbles and daisies.

A pretty way of brightening up the round baskets, whether Oriental or British, is to make a bag consisting of four pieces of satin, of two colors alternating, such as black and orange, or red and blue, grey and cerise, with a ribbon drawstring of both colors. Square and other shapes have a canvas scarf (such as was used for dress purposes last Summer) arranged round them, caught up with good-sized butterflies made of velveteen, with beads and silk embroidery on their wings and a wire run round: or else with long pointed pieces of plush or velveteen, edged with silk cord or iridescent beads.

THE NEW BABY.

Everyone felt happier at her coming. Pride and prejudice, family jars and family worries, were all subdued and mollified. New hopes and ambitions were awakened; dead-and-gone sensibilities revived. Strange, that all this should be the work of one weaker than the weakest; a hapless little mortal more frail than a month-old kitten. But somehow, a baby does appeal to one's feelings, worn out though they may seem. As Mark Twain feelingly remarks, here we meet on common ground; we have all been babies at some period of our existence.

Woman's divinely maternal instinct, prompting to very genuine "gush" over each individual baby, meets with much masculine comment, more or less good-natured. Perhaps it is rather ridiculous to the superior being to hear each and every babe "mewling and puking in its nurse's arms," described as "just too cute for anything," this phrase being qualified by a shower of chirruping kisses. But we all have our weaknesses, and of this fondness for babies one may say, as Mr. Weller said of his fondness for widows, after all, its an amiable weakness.

And then to watch the baby's growth from day to day; it is to watch the dawning of an immortal soul. A soul given into the mother's, a charge from Him who gave it life—can aught be occasion for more solemn joy? She must think of her charge from day to day—guard it from evil, guide it to good. On her depends the growth of every good impulse—the correction of any inherent perversity. Truly, as our little poem says, "the hand that rocks the cradle is the hand that rules the world." But it is not only the inherited traits of immediate relatives that the mother must take into consideration. The traits of remote and unknown ancestors will crop out, and, alas for poor humanity! they are very often the last one would wish perpetuated. We may fear that our natural perversity is often stronger than our good impulses. So any mother who overcomes noticeable faults in her children may rightly congratulate herself on doing something for posterity. Dr. Oliver Wendell Holmes says of inherited disease, that it may be cured if the doctor is called in time—about 300 years before the patient is born. The same may be very truly said of mental and moral weaknesses. There is one universal rule in the training of children—and that is, that no two can be trained precisely alike. Bringing up children by the rule and plummet is all very well in theory, but it comes but poorly enough in practice. There is one thing, however, we must bear in mind—the necessity of absolute truthfulness and honor in dealing with children. If the child is promised a reward or a punishment nothing should be allowed to prevent the fulfillment in either case. And the many foolish little falsehoods so many—too many mothers use to prevent trouble, should *never* be resorted to, if we wish to preserve the child's integrity.

So the advent of the new baby is a solemn joy, perfecting our character, even as we may develop and perfect the little life entrusted to our care.

CAN MONEY BE MADE BY FARMING IN NEW ENGLAND?

Under the above heading a few weeks since, was a gloomy article that would lead one not familiar with New England farming to think that the bottom had fallen out of old New England as far as that industry was concerned.

But why ask about New England only? Are any of the other States getting such fabulous returns at present that New England is made to seem poor by comparison? If there are, tell us gradually, so that everybody won't start at once, for fear other parts of the country will be left empty. Having spent the greater part of my life in New England, and having also lived in States hundreds of miles from there, and in others nearer, I am ready to answer yes to Claude's question; and I will go further and say that I would select New England in preference to any other section that I know of (and I have lived in several of the garden spots of the U. S.), for the purpose of getting a living, making money and having the most comforts and social advantages.

The fact is, that all sections have some advantages over others which are usually balanced by correspondingly great disadvantages. For instance, some parts of Southern California are considered almost perfect for farming; mild, even climate, good soil, long seasons, large crops, etc.; but in these parts, land with buildings and improvements is valued at $1,000 per acre. In New England 100 acres is considered a proper size for a farm. Now, if a man had money enough to pay for 100 acres at the above prices, why would he want to bother with farming—or any other business—anyway? Ranching on the plains has for some years past brought large returns, but one must be entirely isolated, give up society, all life, except eating and drinking, simply to pile up money. A few years ago, market gardening brought large profits about Norfolk and other Southern cities; but at present competition has so reduced it that there is often not enough received to pay expenses of the crop. Still, there are many in New England who, knowing only the price that retail buyers have to pay for these articles, imagine that the country where they are grown is paved with dollars, and needs only a rake, basket and market wagon to carry off the wealth. Now, let us examine Claude's article, and see if we cannot - partly at least—make it answer itself.

The first illustration is of a family on a heavily mortgaged farm.

Any one familiar with the financial economy of agriculture, knows that a heavy mortgage is one of the most serious drawbacks to farming, and often an absolute bar to success; not only in New England, but in any part of the States. Many of the Rural readers know of farmers who have made partial, or total failure, simply because they paid more for a farm than it was worth, and were obliged to put a large part of payment in shape of a mortgage; and it is very up-hill work trying to carry a two story mortgage on a one story business—of any kind. This is often done by men who have accumulated a few thousands in some other business, and concluding to try farming, select a farm costing about twice the amount of cash they have. Many seemed to think that "war prices" would last, and bought farms at inflated prices, which have tried them sorely to pay for. I have in mind an industrious stone-mason who, on good wages, had accumulated $3,000, and paid $6,000 for a farm hardly worth $4,000, and, of course, gave a mortgage for $3,000. Although a hard worker, there is at least $2,000 dead load, that the farm as a financial investment is not able to carry. If the mortgage had been as it should, for only $1,000, he probably would have soon cleared it, but now the annual interest amounts to such a large part of what the principal should have been, that it is doubtful, with the prices that are now, and have been ruling—if he can ever do more than meet the interest. Claude admits that those who are industrious and economical are successful, and are to people our farms. But at the same time we are led to infer from the first part of Claude's article, that the settlers of New England led an easy life compared with the present generation. But a look at some of the massive stone walls surrounding New England fields, which were built by them in addition to clearing the land, would be apt to dispel any such delusion. They labored 50 years ago under many hardships, that the present generation would think too hard to bear. The fact is New England farmers have more of the comforts and conveniences of life than the average farmers throughout the United States.

It is quite a common trait of human nature to be wishing for something that we do not have. This tendency has operated quite largely as a cause of failure in New England and elsewhere. There has been a tendency in many farmers, both in good circumstances and otherwise, to hold up to their children's view; the idea that a mercantile or professional life was an easier road to wealth and more genteel than farming; and, educating them for that end, the parents were looking forward to the time when they could retire and follow the children to the village or city. It is needless to say that success ought not to be expected, when, the heart, mind, and ambition are elsewhere. This craze for gentility and ease has placed many a mortgage on farms once free from debt, that never has been removed since.

On the other hand, I can point to farmers in New England, many of whom started a few years ago with small amounts, sometimes nothing, and are to day making money, are young yet, while they live well and are happy. One young farmer married about 12 years ago on a very small capital; and for many years since has saved $500 in cash, besides all expenses of living, raising a family, and there are fair prospects of his being able to do as well by his children as those 50 years ago whom Claude mentions. This is certainly better than many mechanics do on $3 a day. Another case is of a widow, left about the same time, with six children, from 15 years to 15 months of age. All have not only given, and are giving all of the children a good education, but have increased the fertility of the farms, repaired buildings and built new ones, cleared off brush from pastures, and added to the number of stock. They have improved tools, planted a variety of fruits, etc., with a view to increased health and pleasure, which have also proved a source of considerable revenue as well. They have dressed well, and lived as well as, or better than their neighbors, entertained many friends, and made some money. Of course *all* of these families have *worked* for their success. No rational person expects success in these times in any other way. Our most successful business men do not sit in the back door, and let their business care for itself. Neither can we hope to make money by farming in New England, or elsewhere by sitting on the fence and letting the farm run itself.

But to those who are willing to gain honest success, by work, and who will use the same forethought, good judgment, and push, that are requisite in any other business to make a success, I am ready to say, that money can surely be made by farming in New England.

Everett E. Brown.

GOLDEN GRAINS.

Colton says: "that those who have finished by making all others think with them, have usually been those who began by daring to think for themselves."....

A contemporary wisely advises travel because "a too continuous residence in one place conduces to provincialism, and a community has made a great step in advance when it recognizes the fact that its own corner of the earth, however agreeable, is not absolutely the centre."....

A correspondent of the Inter-Ocean who is a boycotter, wants workingmen to boycott every saloon kept open over eight hours. He thinks they have no more right to work 18 hours than other people....

If a man empties his purse into his head, no man can take it away from him. An investment in knowledge always pays the best interest....

The warm sunshine and the gentle zephyr may melt the glacier which has bid defiance to the howling tempest; so the voice of kindness will touch the heart which no severity could subdue....

Charlotte Bronte says: "I consider there is no more respectable character on earth than an unmarried woman who makes her own way through life, quietly, without support of husband or brother, and who retains in her possession a well regulated mind, a disposition to enjoy simple pleasures, and fortitude to support inevitable pains, and sympathy with the sufferings of others."....

He who strives after a long and pleasant form of life, must seek to obtain continued equanimity....

A celebrated writer says: "We never see a tear in the eye but we are reminded of a warm heart."....

Whatever else we neglect let us keep up the habit of communion with God. Prayer is the key of the position....

Lose not thine own for want of asking for it; 'twill get thee no thanks....

At a little gathering of young folks in North Carolina last Summer there was a new-fledged Presbyterian minister present, who, more mindful of fun than clerical dignity, amused the company with sundry pranks of a very unclerical character, winding up by tossing a piece of watermelon in the air and catching it in his mouth. At the conclusion of this dexterous feat he proposed that the hat should be handed around for his benefit, when a young lady from Richmond quietly remarked, "Mr. M., in our city the monkey hands around the hat himself." The young man subsided.....

Domestic Economy

CONDUCTED BY MRS. AGNES E. M. CARMAN.

Home is not a name, nor a form, nor a routine. It is a spirit, a presence, a principle. Material and method will not, and cannot make it. It must get its light and sweetness from those who inhabit it, from flowers and sunshine, from the sympathetic natures which, in the exercise of sympathy, can lay aside the tyranny of the broom and the awful duty of endless scrubbing.

THE POETRY OF DINING.

A VEGETARIAN DINNER AND ITS DELIGHTS.

Last week I had the pleasure of partaking of a vegetarian dinner that was quite enough to make a less enthusiastic person than myself fore-swear forever the vulgar charms of "roast and boiled," or the treacherous ones of French side dishes.

A Kentuckian's breakfast is said to be "three

whisky cocktails and a chew of tobacco," and I must confess that I had some curiosity to see what people who ate neither "fish, flesh nor fowl" would have for dinner. That theirs was not a starvation diet, the well-rounded form of my hostess, and the plump and rosy cheeks of her daughter, could testify. As the dinner hour approached, I could not help noticing that the coming event of this dinner did not cast its shadow before, which is too commonly the case in American houses, and European ones, too, for aught I know. Many an owner of a classical stomach has had his appetite knocked from under him by the smell of a cooking dinner. In my friend's house this was conspicuous by its absence, although as we neared the dining-room there were faint and delicious odors from the fresh vegetables that were steaming on the table.

It was a hot July day, and there was no boiling soup to make one perspire with its heat or disgust with its greasiness. Our plates were supplied with the most delicious peas, whose excellence was attributable as well to the butter and cream used in cooking as to the fact that in California peas are nearly always of superior quality. New potatoes, steamed until each was like a ball of snow, with tiny flecks of finely chopped parsley sprinkled over them, were there. Corn cut from the cob and stewed with cream, surely was never so good before. A dish of crimson tomatoes, sliced and mixed with the pale green of sliced cucumbers, had its beauty enhanced by globules of mayonnaise, like amber beads strewed over its surface. There were plates of delicate home-made white bread, Boston brown bread in thin half-moon slices and triangular cuts of crust from a French loaf, with plenty of sweet butter.

Our dessert was composed of great dewy blackberries luscious in their coolness, and served in rose-colored glass dishes; raspberries fresh from their own garden, in dishes of palest sea-green, and over all thick rich cream, real cream and lots of it. We had beside triangular cuts of delightful cocoanut cake, over which one of our party poured cream, thus "out-Heroding Herod," and quite vanquishing our vegetarian friends on their own grounds by showing them this novel use of cream. There was tea of exquisite flavor, and pale amber in color served in dainty bisque cups of shell pink, although this I more than suspected was a concession on the part of our hostess to her Philistine guests. (I mean the tea, not the cups.)

I have had many a dinner of a dozen or more courses, but I never remember to have felt so delicately satisfied as I did after this banquet. I would advise all young wives who are about to begin housekeeping and husband-training to see if they cannot glean a useful hint from this dinner. The drudgery of housework is very much lessened if one has no greasy pots and pans to wash, to say nothing of the saving to one's temper if meats that *will* be either over or underdone, are omitted from the bill-of-fare. I suppose, since it will be hard to find a vegetarian landlady, that I shall in course of time, and after a certain amount of starvation, again eat "boiled mutton," but I shall always think with the servant who in reply to his complaint of its frequency on the kitchen table, was told that it was, "substantial" answered, "Substantial: yes, sir; it is substantial, but a little coarse.

PALMETTO.

KITCHEN TALKS.

ANNIE L. JACK.

"Our remedies oft in *ou selves* do lie
Which we ascribe to Heaven, the fated sky
Gives us free scope; only doth backward pull
Our slow de-ligns, when we ourselves are dull."

So read the Novice to us the other evening as we sat beside the fire, for the night was chilly even in August, and the bright light and warmth were quite cheerful. The Amateur Cook had been making doughnuts, and volunteered to pass them around as we discussed the situation. "Yes, there's plenty of scope," said the Sportsman "and no game here." The Plowman grumbled in an undertone because the fields were limited—nothing but boundless prairie would suit him. "The earth is what we make it," said the Poet, and the Critic scornfully observed, as he brushed a fly from his nose, "Who is responsible for this pest?" "Your neighbor's back-yard "said the Student; and he gave us quite an essay on the value of this scavenger of neglected localities.

It is quite refreshing when the thermometer is not too high, to sit and listen to the wisdom of the newly fledged scholar. It refreshes one's memory and recalls half-forgotten bits of knowledge. So we let them talk—while in the meantime "cook" passed doughnuts and attended to the practical part of life. And while the Novice read on I thought only of the first line. Do our remedies lie in ourselves? It is a hard question to answer and reminded me of a neighbor in whose family diphtheria had been prevalent in Spring. "What do you think," I said, "is the cause of all your children taking the disease? They were not exposed to the infection—the house is on a dry hill, your cellar is dry, and your vegetables are stored under the barn," I was about to suggest the drinking water when she leaned back in her chair and remarked resignedly, "Oh! I suppose it *had to be*, and what is to be, will be." Such people are dangerous to the health of others, for they will not take the trouble to search out causes, or guard against evils, imbued as they are with the theory of predestination.

But while I moralized, the fire burned low, and my attention was arrested by a yarn I heard the "Gourmand" telling of eating, one night, 42 doughnuts. Let us hope they were small ones, for he says he sang a song afterward and was praised as having done so well that he never would believe again that they induced indigestion. But what is one man's meat is another's poison, and what a youth can digest, accustomed to out-door life, to Canadian winter sports, and work, is different from what it would be possible for a delicate youth leading a sedentary life to assimilate, and the stomach is a severely tried friend, capable of enduring a good deal; but subject also to rebellion after oppression. And it is a good motto in feeding as in every other circumstance in life, to be contented with small things, and not be too grasping after a surfeit. A stomach fed with a small quantity of nutritious food is like a little farm well tilled, a source of the most satisfaction.

Mr. E. P. Roe, in Harper's of August, says that for currant jelly the fruit should be picked before it is fully ripe and before it has been drenched by a heavy rain, and that it is the over-ripe, water-soaked currants that break up families and demolish household gods.

He also finds blackberries improved if picked in the evening and kept in a cool place for breakfast.

A WORD TO MOTHERS.

"It sounds materialistic to put sound health before all other virtues, but, really every thing else depends upon it." This quotation from a recent article in the Rural gives me a text for a short sermon to mothers in the farm-houses. I am most interested in you though it may apply to other mothers as well. I wonder how many of you think of your responsibility regarding the health of your children *before* their birth as well as after. How many think whether or not they are expending their vitality, that should go to the embryo infant, in over-work and over-worry? How many of you having weak or ailing children, either small or grown up, know that they are the result in great part of your effort to "get your work done up." Now, I'm not "a paper farmer's wife," but know all about harvest-time, with its crowd of hungry workers; all about house-cleaning, soap-making, butchering, canning fruit, butter-making, etc., etc., and that with even good "help" which is scarce, it seems almost impossible for the "house-mother" to take much care of herself. But is there in the world any work to compare with the value of a human soul? A dwarfed soul may not exist in a dwarfed body, but if, as my text says everything depends on health—its a sound text too—ought not you, having evoked a human life into being, make it your first duty to give it as fair a start as possible? Mrs. Fisher's directions for housekeeping would fit in well right here, but as you have all read them, I will not repeat.

Some people may not think this a proper subject for general reading and that it should be confined to medical works, but the people who have most need of this advice would never see it there. Moreover, the Rural gives advice as to the production of the best grades of horses and cattle, pigs and poultry, and are not human animals of equal importance? If we could regulate the breeding of human beings as we do that of domestic animals, the results would doubtless be even more remarkable.

A VICTIM.

DOMESTIC RECIPES.

AN ITALIAN DESSERT.

The following dish is called Zabajone (pronounced Zab-i-o-ne), and is most delicious, although more suitable for a winter than a summer dessert. Allow two yelks of eggs for each person, one tablespoonful of sugar, and one wine-glass of white wine, preferably Catawba. Put the unbeaten yelks, wine and sugar over the fire in a porcelain vessel, and stir continually without allowing it to boil. As soon as it becomes of the consistency of cream it is done. Serve while hot in cups or glasses with lady-fingers.

FARINA JELLY.

This is not altogether a delicacy for invalids, but also a very good family dessert. Boil three pints of milk, and while boiling stir in slowly four large tablespoonfuls of farina. It should be cooked in a double boiler, and should boil slowly for three-quarters of an hour. When done pour it into a jelly mold and place it in cold water or on the ice to stiffen. Serve with cream, or with the following sauce: Beat up well two eggs with four tablespoonfuls of sugar, add one quart of milk, a teaspoonful of vanilla or bitter almond, and one of brandy.

POTATO SALAD.

Potato salad if properly made is an appetizing dish. The potatoes must be boiled in their skins and peeled and sliced before they get cold. Put a quart of these slices in a salad bowl with four tablespoonfuls of good vinegar and six of table oil, one of chopped parsley and salt and pepper to taste. Stir together until thoroughly mixed, and set aside for two hours.

SUCCOTASH.

I have eaten so many vile compounds under the above name, that I cannot consider it unnecessary to give directions for making it properly. String, and cut in small dice enough delicate snap beans to fill a pint bowl, and cut from the cob twice as much corn. If possible have a cupful each of shelled lima and string beans. Parboil the green beans, and shelled lima and bush beans in a little salted water, cover again with boiling water, add the cobs from which the corn was cut, and boil until the beans are almost done—at least three-quarters of an hour. A quarter of a pound of salt pork added during this process improves it. Take out the cobs, add the corn, cook twenty minutes longer, add one gill of cream, a generous lump of butter, and salt and pepper and you have the best preparation of vegetables known to the modern science of cookery.

Chicago. MRS. C. R. H.

DELICIOUS CAKE.

At one of the lessons given by Miss Parloa in Boston, the following cake was made. A generous cupful of butter was beaten to a cream, two of sugar added gradually, the juice of a lemon, the yelks of five eggs, and the whites of three, a small cup of milk, and three cups of pastry flour through which was sifted two teaspoonfuls of baking powder. The whole mixture was stirred rapidly and thoroughly, and baked in two sheets in a moderate oven for twenty-five minutes. It was then cut into small squares, a portion of the crust removed from each, and the cavity filled with preserved strawberries. This was not done until the cake was cold. The crust was replaced and covered with an icing made as above. This is called Viennois cake.

Fairy gingerbread will be appreciated by the little ones. Beat until light a cup of butter and two of sugar, stir in one tablespoonful of ginger and one cup of milk, in which has been dissolved three-fourths of a teaspoonful of soda. Stir in four small cups of sifted flour, turn the baking pans upside down, wipe very clean, butter lavishly and spread the mixture upon them very thinly. Bake in a moderate oven until brown, and while still hot, cut into squares with a case knife and slip off the pan. The two important points to remember are that the batter must be spread very thin, and cut the instant it is taken from the oven. It should be kept in a tin box. A large dish can be made with the quantities given above.

It is quite possible to make very delightful cream cakes in the precincts of one's own kitchen, as I know from experience. The friend who gave me this recipe superintended the first operation, and the result was very satisfactory indeed. Boil together one pint of water with half-a-pound of butter; as soon as it reaches the boiling point, stir in three-quarters of a pound of flour; let it cook a moment, and when cool add ten eggs well beaten, and a scant teaspoonful of saleratus and one of salt, dissolved in a very little boiling water. Drop with a spoon on buttered tins a little distance apart. Bake in a quick oven; they will puff in baking. When done and cold, cut one side large enough to insert the cream with a spoon. This will make 60 cakes. The cream is made by beating two cups of sugar with four eggs; add a cup of flour and as much of a quart of milk as is required to make a smooth and thin paste; heat the remainder of the milk to boiling, and pour the above mixture into it; stir constantly until it is sufficiently thickened; flavor with vanilla. Do not use it until it is cold. It should be made in a custard or farina kettle.

MRS. A. G.

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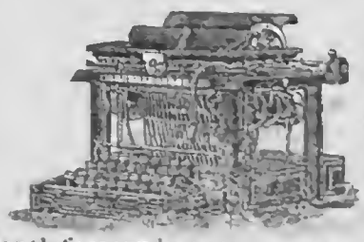

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News of the Week.

HOME NEWS.

SATURDAY, August 21, 1886.

THE fund for Mrs. Hancock now amounts to $46,396.....The Canadian Pacific Railroad is cousidering the question whether it can carry wheat and flour into British Columbia to compete with American flour and wheat, which is sent up from Oregon.....The White Earth Indians in Minnesota, have signed a treaty, to be binding only when signed by those on the other reservations. It provides for the removal of the Red Lake, Leeeh Lake, White Oak Points, Boisford, Winnibagoshash, Rat Portage, Mille Lacs, and Gull Lake tribes to White Earth Reservation, heads of families to have 160 acres, minors aged eighteen 80 acres, and children 40 acres, with buildings, oxen, and rations for two years: at the end of fifty years the land to be deeded in fee simple. The other reservations are to be surveyed and sold by sealed proposals in forty-acre lots, the money to be held by the United States at five per cent. as a fund for the benefit of all. Only the Red Lake and Leech Lake Indians are expected to demur to this, their reservations being more valuable than the rest.....The Nebraska State Prohibition Convention met at Lincoln, Thursday, with over 400 delegates, representing 45 counties. After the adoption of a platform which touches every phase of the liquor question, besides setting forth the views of the party on labor, pensions, Sunday observance, and other questions, full State and Congressional tickets were nominated..... New York labor organizations are to hold a convention at Syracuse, September 14, to force the Legislature to abolish the laws against boycotting, and give due attention to suggestions made by workingmen's associations..... Geronimo is reported to be at Frontierez, Mexico, trying to make peace with the Mexicans, for the professed purpose of having a retreat to which he and his followers could bring their plunder after having made raids into New Mexico and Arizona. The old reprobate had his right arm in a sling and was accompanied by 40 bucks and two squaws. Gen. Miles has hurried forward two troops of cavalry to demand the unconditional surrender of the outfit. Lieut. Lockett with the Pima Indians will occupy such positions in the mountains as to prevent escape. The Mexicans will co-operate, and as the "hostiles" "looked worn and hungry," they may be captured or surrender. The Arizonians are warmly endorsing Miles's plan for the removal of all the Chiricahua Indians from Arizona as the only means of securing lasting peace from these wild, fierce and indefatigable braves. The National Assoeiation of Ex-Prisoners of War at Buffalo, appointed a eommittee to investigate the present pension laws with a view to their amendment in the interests of all disabled ex-Union soldiers and sailors, said committee to confer with a similar committee of the Grand Army of the Republic. Chicago was designated as the next place of meeting.

....A shipment of cotton by rail from Memphis to New Orleans, and thence by water to Liverpool, was made recently on through bill of lading at 26¾d., or 53½ cents a hundred. The rail rate from St. Louis to Boston is 54 cents, and this slight discrepancy promises to create a disturbance in the local cotton and transportation circles.....In Havana Cuba, 68 cigar factories working Partido tobacco have been closed, 6,000 workmen having struck for higher wages. The strike threatens to extend to the Vuelta Abajo factories. The manufacturers have united to resist the demands of the workmen..... .....Cardinal Gibbons, of Baltimore, denies that Cardinal Taschereau, of Quebec, in his late declaration of the Pope's sentiment towards the Knights of Labor represents the real attitude of the Catholic Church towards that organization. The Canadian Cardinal's hostility he considers due to some local law or conduct of the Knights; but his Church favors the Knights and all other organizations of labor which have no laws opposed to the doctrine or discipline of the Church.....The President and wife are in the Adirondacks and have very fair fishing. .....The 140th call for the redemption of bonds was issued Thursday. It is for $10,000,000 of the 3 per cent loan of 1882.... . It is claimed that the Iowa Prohibitory law is in conflict with the Fourteenth Amendment to the Constitution of the United States..... Five persons were killed by a boiler explosion at Oshkosh, Wis., Monday..... Sunday night's storm originated in Kansas and Nebraska. At midnight it was central in Iowa, and at 6 A. M. Monday it was central over Lake Michigan. Thence it swept eastward over Northern Indiana and Ohio. Much damage was done all along its course, except in the burning woods of Wiconsin and Michigan, where it extinguished the fires..... Of the eight Anarchists on trial at Chicago the jury yesterday found August Spies, Michael Schwab, Samuel Fielden, Albert R. Parsons, Adolph Fischer, George Engel and Louis Lingg guilty of murder, and fixed the penalty at death. Oscar W. Neebe was found guilty as an accessory, as charged, and the penalty was fixed at imprisonment for 15 years. Parsons is the only American among them. There will no doubt be one appeal at least, probably several. Money for expenses has been liberally contributed by Anarchists here and in Europe. It may take over a year—yes, even two—before a final decision is reached. The Anarchists of this city met last night and made martyrs of the Chicago murderers. They also resolved to overthrow the present "society of robbers," and urged the resistance of force by force. They will, however, shoot off their mouths much oftener than their pistols.... ....Dispatches from Galveston, Texas, reported that a violent easterly gale prevailed there yesterday. The city was partially inundated, and serious apprehensions were felt for the safety of the shipping anchored in the outer roads. Six people were drowned, houses floated about the streets in the lower part of the town near the Gulf, and the street railroad along the beach was torn up. Heavy losses..... ....The Mexican trouble is quieting down somewhat. Secretary Bayard has sent Mr. Sedgwick, a lawyer of this city, to investigate the state of affairs at Paso del Norte; perhaps it would have been better if he had done this before making a peremptory demand on Mexico for the unconditional surrender of the editor. The general opinion is that hitherto Mexico has had the best of the argument Little or no danger of war. Even fire-eating southern volunteers are becoming less belicose. .....The Canadians are still "persecuting" New England fishermen. Occasionally one of these is caught knowingly breaking the Dominion regulations, but most of them do so with the utmost impunity. It is the detected sinner that howls, the others sin on in silence. .....A great meeting of the Irish National League of America has been held at Chicago. Representatives of the Irish in Ireland and elsewhere were present. All went on harmoniously. Parnell's conservative course was heartily indorsed and he will continue to receive the earnest support of "Irish-Americans" and all sympathizers with the cause he so ably advocates. The dynamiters had to take a back seat. Still there were all along subdued indications that policy alone checked violent utterances and threats against the opponents of Home Rule. There were also abundant signs that many of the delegates would be satisfied with nothing short of the complete independence of Ireland..... .....Ex-Postmaster General James is said to have cast in his lot with the Prohibitionists, who talk about nominating him for Mayor of New York..... The Civil Service Commission are considering the project of extending the rules to post-offices that employ less than 50 men, the present minimum limit under cover of the service. Many offices employ 49, 37 and 40 men, and the scheme is to extend this minimum limit from 50 down, say to 25. The Hartford (Ct.) and Columbus (O.) offices have been found to be now within the limits of the law, and will soon be brought under the Civil Service rules. Clerks, letter-carriers, messengers and special delivery boys all are counted as employés in making up this Civil Service limit.....Keiley, the Minister rejected by Italy and Austria, will go to Cairo, as Judge of the International Court of the Khedive.....Measures for relieving the sufferers from forest fires in Northern Wisconsin have been taken. Houses will be built for them and clothing and food supplied sufficient to last them through the Winter. The loss of farm property is very heavy; that of timber up among the millions.....

FOREIGN NEWS.

SATURDAY, August 21, 1886.

LITTLE foreign news of general interest this week—fortunately as there's little room left for news here. Parliament has re-assembled, as it had adjourned to August 19, not September 19, as misstated by some of our dailies. The session is likely to be short, as it will end as soon as supplies to run the Government are obtained The Conservatives insist that late elections settled the impossibility of Home Rule for all time; their opponents deny this. Coercion is not probable. A Local-Self-Government Bill for the three kingdoms is promised—Home Rule probably under a new name; but not so wide as Gladstone's. Belfast riots over for the present. Local authorities greatly blamed, especially the Mayor. An investigation is to be made into the cause of the chronic turbulence of the town. A Royal Commission is also to investigate the Irish land system, and to obtain information as to the best way to develop Irish industries. As Gladstone says, "the Irish Question is the question of the day", and bars all general legislation for the rest of the Empire..... .....England congratulates America, and especially Chicago, on the conviction of the Anarchists. Englishmen are angry at the resolution of the Chicago Irish Convention to boycott English manufactures. It is suggested that the delegates from Canada and other British subjects should be prosecuted for treason on their return home. Negotiations for a friendly settlement of the fishery question are proceeding between England, the United States and Canada. ..... Burmah, which the British rapidly conquered some months ago, is still giving a good deal of trouble, owing to the boldness and persistence of the Dacoits, robber bands, who overrun the country outside of the British lines. The forces there are to be increased by 5,000 troops as soon as the cold season comes on. Major-General Herbert MacPherson is to be given supreme command. Ten thousand policemen will also be sent from India to maintain order, after the troops have subdued the insurgents.. The tenants of the London Salters Company's estates at Magherafelt, Londonderry, have purchased their holdings under the terms of Lord Ashbourne's Land Purchase Act. The price is £220,000, or nineteen and a half years' purchase at the net annual valuation, which is 20 to 25 per cent. below the present rents. ....The Duke of Leinster has arranged to sell to his tenants a large portion of his Kildare estates on an eighteen years' purchase plan .. ..In Italy the cholera is increasing. There is a rumor afloat in Rome that Queen Margharita is using her influence to bring about a reconciliation between the Italian government and the Papacy. Under the arrangement contemplated the Pope will, it is said, receive from Italy arrears of endowment to a large amount, which will be devoted to extending Catholic missions.....The French government after having confiscated millions of dollars' worth of Church property, exiled the Jesuits, lowered the salaries of the clergy, secularized education and in innumerable other ways despoiled and insulted the Catholic Church, is now angrily indignant because the Pope has sent a Nuncio to China to represent the Catholics in that Empire. Hitherto all, of whatever nationality, were under the "protection" of France, which greatly increased French prestige in the country, and in the East generally. The Chinese wish the change and all other countries approve it except France..... ..... A number of presidents and ex-presidents of the Central American republics of Salvador, Nicaragua, Honduras, Costa Rica and Guatemala are in the city of Mexico trying to arrange a plan for the union of those States in one confederation, with the ultimate view of annexation to the Mexican Republic.....

AGRICULTURAL NEWS.

SATURDAY, Aug. 21, 1886.

A TELEGRAM from Quebec, Wednesday, says, that all the cattle in Levis quarantine will be at once killed to prevent the spread of contagious pleuro-pneumonia. The herds are owned by Andrew Allen, Dr. Clark and A. Dawes, of Montreal; Senator Cochrane, of Compton, and J. J. Hill, of St. Paul. The cost of the herds foots up $200,000 The entire appropriation made by Congress for our National Bureau of Animal Industry for the entire current year is $150,000. Out of this must be paid all the salaries and legitimate expenses of the staff, and the cost of diseased animals slaughtered by their direction. Canada with its 4,000,000 population pays $50,000 more for one effort at one place to get rid of pleuro-pneumonia among her herds than the United States, with 60,000,000 population, pay for numerous efforts during the whole year to get rid of pleuro-pneumonia, Texas fever, hog cholera and other contagious diseases among the live stock of the entire country. The disease, whatever it may be, is the same on both sides of the St. Lawrence; but the number of animals endangered is a dozen times greater on this side of the boundary line than on the other.. ....Favorable reports are being received from the experimental tobacco crops in South Carolina. Tobacco of good quality is being produced in some parts of the State, and the opinion is entertained that it will pay handsomely A new industry has recently been started at Los Guindos, Chili, in the shape of an establishment for the manufacture of sugar from beet root.....The biggest shipment of lard ever arranged for was contracted for last Tuesday at Chicago by the Plankinton-Cudahy Milwaukee clique which is running the September lard deal. Room was engaged for 50,000 tierces of lard on one contract. This is $1,500,000 worth of property. If it went by rail it would take 800 freight cars. It is a contract by which nearly one-half of all the lard in store at Chicago moves out. It will go east by propellers, and all the propeller lines participate ....Oliver Dalrymple, the bonanza wheat grower of the Northwest, thinks there will be little or no shortage in the Dakota wheat crop, for the decrease from drought will be made good by the increase of acreage.....The United States troops at Fort Washakie Wyoming, have orders to clear out all range cattle from the cultivated parts of the Crow Reservation, about the Big and Little Wind Rivers—an area 25 by 30 miles. The Indians complain that their crops are destroyed by white men's cattle that have no right there..... The census returns of the United Kingdom for 1885 give a total of 29,940,200 domestic fowls in the British Isles, of which about two thirds are hens, etc., and one-sixth are ducks. There were a little over 3,000,000 geese and 1,288,000 turkeys..... .....

Crops & Markets.

SATURDAY, Aug. 21, 1886.

THE latest reports of the fruit crop confirm the forecast of the Rural Crop Special, dated July 10. Although this is generally the "bearing" year for apples, the yield of the trees will hardly be up to the average of bearing years in any part of the country. From 1,500 reports the New England Homestead says that in New England, although there is a large yield of Fall fruit, the reports indicate that the crop of Winter apples will be about 70 per cent of the usual even-year yield in the six States. In the best apple counties of Vermont, along Lake Champlain, not two-thirds of a full even-year crop will be secured, while Maine reports a decrease of 20 per cent, but both these States and New-Hampshire will have a large surplus. Connecticut has but half a crop and Massachusetts only 89 per cent of a crop. The falling off in New-England, however, will be partly made up by the great crop in the apple sections of Nova Scotia. Anapolis and King Counties last year exported only 40,000 barrels, but this section will have a surplus of 100,000 barrels. The great apple counties of Western New York promise the lightest crop in twenty years, but the quality promises to be comparatively poor. The great apple counties of Orleans, Monroe, Niagara, Wayne and Wyoming are reported as having scarcely 50 per cent of the average yield. In Eastern New York there is a better prospect, but the average for the whole State—400 reports—is only 52 per cent. Pennsylvania has 80 per cent of a full apple crop and there is a good crop in Ohio, but from further West the reports are discouraging and the Northwest and Southwest have such a small supply as to offer a remunerative market for the surplus of the Middle States, much of which was last year available for export.

Pears will be considerably below the usual yield and peaches for the third time are practically a failure north of the forty-first parallel. There is a fair crop of plums and they will be cheap, while grapes in New Jersey are light and a good crop in Southern New-England should bring fair prices.

The Michigan peach crop in the vicinity of Ganges, Douglass, Saugatuck, and South Haven is reported to be very heavy. Outside of those localities there is scarcely any fruit, according to the last reports.

The fruit crop of California is very heavy, and large quantities are sent East. Grapes are so abundant that they are sold to the distillers at $8 per ton.

Florida oranges will not begin to come in until toward the end of October. The crop is said to be fine, but the yield will not be more than a moiety of what it was last year, owing to the large number of fruit buds destroyed by last Winter's frost in the orchards north of Lake George.

Cable reports from various points in England and on the Continent confirm the earlier predictions of rather a short apple crop there, especially of good fruit in England. The orange crop of Southern Europe, however, will be large and will affect the demand for American apples somewhat. Last year nearly 900,000 barrels of apples were exported to England, the supply being so large that prices were barely remunerative. American Orange Pippins sold in Liverpool at $3.60 per barrel. This was the first sale of the season and the price was equivalent to about $2.25 net on this side, which is a slight advance on current values.

The average condition of potatoes is worse than in any former August, though it was quite good in July. Usually from early in August to early in October is the critical period with the crop; so that the present poor condition of the crop, while rather discouraging, does not necessarily foreshadow a bad harvest. In New England the condition is good, ranging from 95 to 100. In New York

the average is 96, and it is still higher in the Middle States. It is very nearly a full average in the Southern States, except in Louisiana, where the crop has been damaged by overflows in low areas. The great loss has been suffered in the West, owing to the drought. The injury has been not very heavy in the eastern part of the Ohio Valley; worse in Michigan, and quite severe in Indiana, especially in the western part of it. In the drier sections farther west the damage has been still heavier; but abundant rains of late may restore, at least in part, what has been lost. Sweet potatoes make a good show everywhere except in some of the Western States, where attempts were made to grow them north of the 40th parallel.

THE hay crop last year turned out fairly in in the West, but was generally light throughout the East. From present indications the reverse will be the case this season. The long drought has seriously affected the crop in nearly all the Western States. The gist of numerous late reports goes to show that the crop in Illinois will be from one-half to three-fourths the average yield. It will be equally short in many parts of Ohio, Michigan and Indiana. In the East, however, the weather has been more favorable. Throughout this State the crop, though lighter than it has been in some years, will be quite up to the average. Along the line of the New York Central Railroad it will be fair and of an unusually fine quality—better in fact than it has been in years. This is also true in regard to Jefferson County, one of the great hay sections of this State. In some of the Hudson River counties the crop will be a trifle light, but less weedy than it was last year. Favorable advices have also been received from Montgomery County, where the crop is described as fair. Throughout Long Island and New Jersey the crop is much better than it was last year, and in some parts it is extra heavy. There is also general satisfaction with the yield in the Eastern States, so that it is not likely that the price of hay here will be materially affected by the short crop in the West. One prominent dealer said Wednesday that the price would range from $11 to $17 a ton all the winter. "I don't see how it can go above the latter figure," he added, "on account of the lot of old hay that is still on hand. In one county I know of over 6,000 tons of last year's growth still in the barns. This was kept out of the market by the low price that prevailed last spring." The current prices are: No. 1, Timothy prime, per hundred, 85c.; No. 2, Timothy, good, 70c. to 75c.; No. 3, Timothy, 55c. to 65c.; Clover mixed, 55c. to 60c.; shipping grades, 50c.; inferior, 30c. to 40c.

The Department of Agriculture says hay in New England and New York was generally a large yield and well secured, though cut short in some localities by drought; while in others wet weather interfered with harvesting. In the Southern States from the Atlantic to the Ohio and Mississippi there has been plenty of rain. Considerable damage from floods in low lands; but generally there have been good crops of clover and the various grasses. In Maryland, West Virginia, and Kentucky excellent crops have in many cases been secured in good condition, but a considerable amount was damaged by excess of rain before or after cutting. In Virginia and Tennessee the proportion damaged was much larger. In all these States clover suffered most, and was left to rot in the fields in some localities, particularly in parts of Virginia and Tennessee, where a fine crop of Timothy was saved in good condition. Less complaint of loss in the Gulf States than further north. The Michigan crop was cut "considerably" short by drought and a number of counties in Ohio had scanty crops. Reports from Indiana and Illinois are mostly favorable, especially as regards the securing of the crop. "Some are raising Alsike Clover, it makes excellent hay." The Wisconsin crop is generally light, but saved in good condition. Minnesota hay has "suffered quite severely" from drought, though heavy in "some counties." "Crop generally good" in Iowa, though light in several counties and a failure in a few. Conditions in Missouri much the same as those in Iowa.

In tobacco there is danger of a reduction of one-third in the Atlantic States owing to excessive rains. A failure in Maryland on clays and hillsides. In some parts of North Carolina replanting has been done three or four times. A good average condition of the crop in Tennessee. Much rain, followed by drought checked growth and weakened the plants in Kentucky, causing spindling and premature flowering. Outlook better in Ohio and West Virginia. Cigar leaf looks fairly well in Massachusetts, but not so good in Connecticut; good in New York and Pennsylvania, but suffering from drought in Wisconsin. Abundant rains there within the last few days will help to improve condition.

The acreage of buckwheat is nearly the same as in 1885, with a slight increase in New York, New Hampshire, Maryland, Virginia, West Virginia, and Dakota, and a slight decrease in most of the Western States. Condition high in New York and Pennsylvania; quite good in the Eastern States; but comparatively low in the West.

A telegram from Louisville, Ky., last Monday, says there had been a sharp advance in hams in the past two weeks and a rumor gained circulation on Monday that McFerran, Shallcross & Co. had bought all in that market. The firm admitted that they held nearly all the stock there, and said Armour had all in Chicago and that there were no large lots in St. Louis, Kansas City nor Cincinnati. These cities, especially St. Louis, had been buying heavily in the Louisville market. The firm denied any attempt to "corner" hams, and attributed the scarcity to the cheapness of hams early in the season, causing a heavy consumption, and to the summer packing not yet having gone upon the market.

The official return of exports of breadstuffs from the principal ports, which report in the aggregate about 98 per cent of the entire exports of bread stuffs from the country, is not quite as encouraging for July as it was for June, but shows a decided gain, nevertheless, in comparison with last year. The exports of wheat and flour were equivalent to 10,915,113 bushels of wheat, against 6,287,574 in July of last year, which is a good beginning for the new crop. It may be noticed, also, that while the shipments from the Pacific coast were nearly 60 per cent greater than those of July, 1885, those from the Atlantic coast were about 77 per cent greater. The decline in prices seems to have been rather greater on the Pacific than on the Atlantic coast, for the average export price for July from Atlantic ports was 96.9 cents per bushels last year, and only 86.8 cents this year, but it was 85.9 cents from the Pacific ports last year and only 74.8 cents this year. The movement of corn was smaller than a year ago, and there was a specially large decline in oats and oatmeal. The value of all breadstuffs exported in July was $11,570,649 this year against only $8,721,811 last year.

There is a good deal of talk just now of the range of prices of farm products at present and "before the war." In making a comparison, the period taken should be just as far beyond the war as to preclude any possible influence from anticipations of the "inevitable conflict." Hence we have taken the average of last week's market reports and of those for the corresponding week in 1858:

Breadstuffs—	1858. Prices.	1886. Prices.
Wheat flour, superfine, per bbl	$1 25	$2 80
Rye flour, per bbl	4 00	3 30
Corn meal	3 25	2 75
Wheat, No. 1 spring, per bush	95	85
Rye, Western, per bush	1 10	54
Oats, State, per bush	43	43
Oats, Western, per bush	46	45
Corn, Western mixed, ungraded, per bush	65	51
Cotton, middling uplands, per lb	8¾	9 7-16
Hay, shipping, per 100 lbs	65	50
Hemp, Manila, per lb	7	8¾
Hops, per lb	10	28
Pork, mess, per bbl	15 40	10 62½
Pork, prime, per bbl	13 00	10 00
Beef, prime mess, per lce	10 00	12 00
Hams, pickled, per lb	8½	12
Lard, Western, per lb	9¼	7 3-10
Butter, Western, per lb	16	20½
Butter, prime State, per lb	20	22
Cheese, fine factory, per lb	8	8½
Seeds, clover, per lb	9½	10½
Sugar, refined, hard, per lb	10⅜	6 5-16
Tallow, per lb	10	4 1-16
Wool, Ohio fleece, per lb	27	37½

LATEST BRIEFS.—Wool is quiet and unchanged from last week. Buyers are holding off, and transactions are smaller than one year ago. Light-weight goods, on which prices of raw wool are asserted to depend, are no higher. The speculative wheat market is being influenced chiefly by the increased sales for export, backed by renewed advices of short crops abroad; consequent rise in price everywhere of from 2½c. to 4c. Indian corn is quiet and lower, with an improved crop outlook. Hog products are featureless, except lard, in which there is an effort to corner the product for September, which results in a fictitious advance. The extreme heat has not been favorable to the cotton plant in Louisiana and Alabama. The prospects are not so bright in Texas for a like reason. Sales of tobacco at New York are more active at unchanged prices. The Western tobacco markets are dull, rains having benefited the crop. At San Francisco 2,000 tons of wheat changed hands Thursday afternoon. There has been an advance of 9¼c. a cental during the week.

MARKETS BY TELEGRAPH.

SATURDAY, August 21, 1886.

CHICAGO.—Compared with cash prices a week ago, "regular" wheat is 3½c. higher; No. 2 Spring, 3⅜c. higher. Corn, 1⅜c. lower. Oats, ¼c. lower. Rye, ½c. lower. Barley, steady. Flaxseed, 4c. lower. Pork, 25c. higher. Cattle, Shippers, 55c. lower for poor kinds; 5c. higher for best; stockers and feeders 10c. lower; other sorts about the same. Hogs, 10c. lower all around. Sheep, from 50c. to 75c. lower.

WHEAT.—Active; Sales ranged: August, 78@79¼c; Sept., 78⅝@80c; October, 80⅝@82c; No. 2 Spring, 78¼c. CORN.—Cash, 42¾c; August, 42⅜@42¾c; September, 43½@44½c; October, 45@45¾. OATS.—Easy. Sales ranged: Cash, 27½c; August, 27½c; September 27¾@28½c; October, 29¾@29½c. RYE.—Quiet; No. 2, 50½c. BARLEY.—September, 61@62c. FLAXSEED.—No. 1, $1 11½. MESS PORK.—Sales ranged: Cash, $9 42½@9 45; August, $9 15@9 37½; September, $9 47½@9 60; October, $9 57½@9 70. LARD.—Firm; sales ranged: Cash, $7 42½; August, $7 37½@7 45; September, $7 37½@7 45. SHORT RIBS.—Cash, $6 15. BOXED MEATS.—Dry salted shoulders, $5 75@5 87½. Short clear sides, $6 60@6 65. CATTLE.—Shipping steers, $3 90@5 15; stockers and feeders, $2 20@3 50; cows, bulls and mixed $1 50@3 25; bulk, $2 30@2 60; through Texas steers, $3 75@3 85. HOGS.—Rough and mixed, $4 00@4 70; packing and shipping, $4 70@5 15; light weights $3 80@4 80; skips, $2 50@3 80. SHEEP.—Market low; Natives, $2 00@4 00, Texans, $1 75@3 00; Lambs, $3 75@4 75.

ST. LOUIS.—Compared with cash prices a week ago, No. 2 red wheat is 2¾c. higher. Corn, and Oats, unchanged. Rye, ¼c. higher. Flaxseed, ¼c. lower. Pork, 5c. lower. Cattle, a trifle lower. Hogs, from 5 to 10c. higher.

WHEAT.—Active; No. 2 Red, Cash, 78¾@79¾c; August, 78⅝c; September, 80¾c. CORN.—Quiet; No. 2 mixed Cash, 39¾@40c; August, 40c; September, 40¼c. OATS.—Dull; No. 2 mixed, Cash, 26@27½c.; August, 27c; Sept, 27¼c. RYE, Sept, 52¾c. BARLEY.—No market. BUTTER.—Creamery, 17@22c; dairy, 15@17c. EGGS, 9c. FLAXSEED.—$1 09. HAY.—Timothy, $10 00; Prairie, $7 00. BRAN.—49c. at mill. CORN MEAL.—$2 20. PORK.—$10 30. BULKMEATS.—Long clear, $6 20; short ribs, $6 30; short clear, $6 45. LARD, $6 60. CATTLE.—Good to Choice Native Shipping Steers, $4 30@4 75; Common to Fair, $3 65@4 25; Butchers' Steers, $3 50@4 00; Cows and Heifers, $2 25@3 50; Stockers, and Feeders, $3 25@4 00; grass Texans, $2 25@3 50. HOGS.—Market quiet; heavy, $4 90@5 15; Packing, $4 40@4 85; Lights, $4 30@4 80. SHEEP.—Market steady at $2 25@4 00.

BOSTON.—GRAIN.—Corn.—Steamer mixed at 55½c. per bushel, and the close a firmer tone; high mixed has sold at 57½c, and steamer yellow sold at 56½c OATS.—Steady; No. 2 white at 39½@41½c. as to location; No. 3 white, 39@39½ and fancy clipped at 47@47½c. per bushel. The market for rye is fair at 70c. per bushel. Bran, $14@15 00 for Spring, and $13 75 for Winter; Fine Feed and Middlings at $13@18, and Cotton Seed Meal at $23 50 on the spot, and $21 75 per ton to arrive. HAY AND STRAW.—The demand moderate, with sales of choice Northern and Eastern at $18@18 50 per ton, $15@17 for fair to good, $13@16 for fine, and $9@13 for poor and damaged; Western choice, $16@17, do fair to good $14@15. Straw.—Rye straw is held at $16@16 50 for choice, and $14@15 for common to good. Swale hay at $10@11 per ton. Oat straw at $8@9 per ton. PRODUCE.—BUTTER.—Northern and Eastern creamery, extra, 20@21c; extra firsts, 18@19c; firsts, 16@17c; Western creamery, 19½@20c. for extra firsts to extra; firsts, 18@19c; Northern dairy, 14@17½c. for Vermont extra firsts to extra; firsts, 14@14½c; seconds, 12@13c; Western dairy, 12@12c. for firsts; seconds, 9@11c; imitation creamery, 14@15c for extra firsts to extra; ladle-packed, 9@12c, for extra firsts to extra; firsts, 8@9c; seconds 7@8c; grease, 3@4c. NEW CHEESE. New York and Vermont extra, 8½@8½c; do. do. firsts, 7@7¾c; do do. seconds, 4@6c; Western extra, 7¾c; do. firsts, 6½@7¼c. EGGS.—Cape and near-by, per doz. 15½@19c; Eastern extras 17½@18c; do. firsts, 15½@16c; Northern firsts, 15½@15c; Western firsts, 14c; Provincial, 15½@16c. BEANS.—Choice Northern hand-picked pea, $1 75@1 85 per bushel; do. do. New York, small, $1 60@1 70; do. do. screened, $1 15@1 30; medium choice, hand-picked, $1 50@1 55; do. do. screened, $1 15@1 25; Yellow Eyes, improved $1 50; do. choice flats, $1 25@1 40; Red Kidneys, $1 75@2 00; Canada pea, 55@65c. per bushel for common to choice; green peas, Northern, 90c@$1; do. Western, $1 15@1 20. POTATOES range at $2 00@2 25 per barrel.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, August 21, 1886.

STATE OF THE MARKET.—As compared with cash prices last week, flour is 5c. higher; ungraded red wheat is 4c. higher; No. 3 Red 3c. higher; No. 2 Red, 4c. higher, corn, ungraded mixed, ½c. higher; No. 2, ¾c. higher. Oats, steady. Pork, 12½c. lower. Butter and cheese, 1c. to 1½c. higher. Eggs, ½c. to 1c. higher. Poultry, steady,; Fruits and vegetables steady.

FLOUR, FEED AND MEAL—FLOUR—Quotations: Fine, $2 00@2 65; Superfine, $2 15@2 90; Extra No. 2, $2 65@3 15; Good to Fancy Extra State, $3 20@3 70; Common to Good Extra Western, $2 65@3 70; Good to Choice Extra Western, $3 90@4 70; Common to Fair Extra Ohio, $2 65@3 75; Good, $3 80@4 20; Good to Choice, $4 25@4 75; Common Extra Minnesota, $2 65@3 00; Clear, $3 25@3 75; Rye Mixture, $3 30@3 75; Straight, $4 00@4 60; Patent $4 40@5 10; Bakers' Extra, $3 75@4 50; St. Louis Common to Fair Extra, $2 80@3 65 Fair to Good, $3 70@4 50; Good to Very Choice, $4 55@4 90; Patent Winter Wheat Extra, $4 25@5 00, City Mill Extra for West Indies, $4 40@4 55; South America, $4 30@4 60. SOUTHERN FLOUR.—Common to Fair Extra at $2 80@3 60, and Fair to Choice, $3 65@5 00; Patent, $5 25. RYE FLOUR.—Superfine, $3 20@3 40, latter for fancy. CORN MEAL.—Yellow Western, at $2 50@2 75; and Brandywine at $2 80@2 95. FEED.—40 to 50 lb, quoted at 70@75c; 60 lb at 65@70c; 80 lb at 75@80c; 100 lb at 80@90c; Sharps at 95c@$1. Rye, at 75@80c.

GRAIN.—WHEAT.—Ungraded Red, 81@83½c; No. 3 Red, 81½c; Steamer No. 2 Red, 85¼c; No. 2 Red, 89½@89¾c; Ungraded White, 88c; No. 2 Red, for August, 88¾@89¾c; do. for September, 89¼@90¾c; do. for October, 90¾@91¾c; do. for November, 92¼@93½c; do. for December, 93¾@94¾c; do. for January, 95@95¾c; do. for February, 96½@97¼c; do. for May, $1@1 01¼; do. for June, $1 02¾. CORN.—Ungraded Mixed, at 51¾@53c; No. 2 53¾@53½c; ungraded white, 55½c; No. 2 for August, 52c; do. for September, 51¾@52½c; do. for October, 52¾@53c; do. for November, 53¾@53½c. OATS.—No. 3, at 32c; do. White, 36½@38¾c; No. 2, 38@38¼c; do. White 37@37½c; Mixed Western, 33@34c; White, do. 36@38c; White State, 41c. No. 2 for August, 33@33¼c; do for September, 33¼@33½c; do. for October, 31¼c; do. for November, 33c.

PROVISIONS.—PORK.—Mess, quoted at $10 50 for Old and $11 00@11 50 for New; $12 00@$13 00 for Family Mess; $13 25@14 75 for Clear Back, and $9 50@10 for Extra Prime. BEEF.—Extra India Mess, $11 50@13; Extra Mess, in barrels, $8 00; Packet, $8 50; Plate, $8 50. BEEF HAMS.—Quoted at $24@24 50 for new. CUT MEATS.—Pickled Bellies, 12 lb average 6½c; Pickled Bellies, 12 lb average, 6½c; City Pickled Shoulders, 6¼@6½c; Smoked Shoulders, 7½c, Pickled Hams, 11½@11¾c; Smoked Hams, 12½@12¾c. MIDDLES.—Long Clear in New York, 6¾c; at the West, Long Clear, 6.40c; Short Clear, 6.60c. DRESSED HOGS.—City Heavy to Light at 6¾@6¾c, Pigs, 6¾c. LARD.—Western steam spot, at 7.12½@7.15c; September, 7.45@7.50c; October, 7.15@7.19c; November, 6.85@6.88c, December, 6.85@6.90c; City steam stronger; refined, 7.00; continent, 7.75c.

BUTTER.—Creamery—State, pails, fine, 23; do. and Pennsylvania, tubs, 22½@23c; Western, best, 22@22½c; do. prime, 18@19½c; do good, 15@16. State Dairy, half-firkin tubs, best, 21@21½c; do. do. about prime, 19@20c; do. do. good, 17@18c; do. common, 13@14c; Welsh tubs, best, 20c; do. prime, 18@19c, Western Imitation Creamery, best, 15c; do, fair and good, 13@14c; Dairy, fine, 13½@14c; do, common, 11@12c; do, Factory, fresh, 12½@13½c; do. good, 11@12c.

CHEESE.—The quotations are for: New State Factory, best white, 8¾c; do. best colored, 8¾c; do. fine, 8½@8¾c, do, fair, 7¾@8c; do. common, 7@7½c, Ohio Factory, fine, final, 7¼@7½; State Factory, light skims, 6@7c.

EGGS.—State, 15c; Western, 14@14½c; Canadian, 14¼.

POULTRY.—LIVE.—Chickens, spring, per lb, at 10@12c; fowls, near-by lots, per lb, at 10@10½c.; fowls, Western lots, per lb, at 9@10c., fowls Southern lots, per lb, at 9c; turkeys, per lb at 10c; ducks, western per pair, at 50c. @75c.; geese, western, per pair, at $1.00@1.37.

POULTRY.—DRESSED.—Turkeys, per pound, at 10@12c.; Spring chickens, Philadelphia, per pound at 16@18c.; do. western, per lb, at 12@13c; fowls, Pennsylvania, prime, per lb, 11½@12c.; do State and western, per lb, at 11@12c.

FRUITS.—FRESH.—Quotations: Apples.—Nyack, Pippin d h bbl., at $1 25@1 75; do. open heads at $1 00@1 25, Orange Pippin, per d-h bbl, at $1 25@1 50; do. open-heads, at $1 00; Gravenstein, per d-h bbl., at $1 50@1 75. Red Astrachan, Jersey, per bbl, $1 50@2 00. Peaches.—Mt. Rose, Md. per basket 75c.@$1 00; Crawford, Md. per crate, at $1 00@1 50; Maryland and Delaware, inferior, per basket, 30@40c; Jersey, choice, per basket, at 50@75c; do. poor to fair, per basket, at 30@40c. Pears.—Bartlett, Va., good to choice, bushel crate $2 00@2 50; do. fair, per bushel crate, at $1 00@1 50; do. Md., per crate, $1 00@1 25; do. Jersey, per bbl. at $3 00@4 50; Clapp's favorite, per bbl, $3 00@3 50; Bell, per bbl, $1 75@2 00; Scooler, per bbl, at $1 50@2 00; Buff, per bbl, at $1 25@1 50. Grapes.—Niagara, South Carolina, per lb, 8@12c; Perkins, North Carolina, per lb, 4@5c; Martha, N. C., per lb, at 8@10c. Concord, N. C., per lb, at 8@9c; other black varieties, N. C., per lb at 2@4c; Moore's Early, Va., fancy, per lb, at 12@14c; Hartford and Ives, Va., fancy, per lb, 5@7c. Plums.—Egg, up-river, per bbl, at $2 00@2 50; Damson, Md., per crate, 40@50c. Blackberries.—Best, at 6@8c. per quart; small, at 3@5c. per quart. Huckleberries.—Shawangunk Mountains, per half-bushel box, at 50@75c; Shawangunk Mountains, per quart, at 5@6c; Jersey, per quart, at 4@5c; Jersey, per 8 to 12 quart box, 30@50c. Watermelons.—Georgia, prime, per 100, at $23@25; Georgia, poor to good, per 100, $ 2@16; South Carolina, good to prime, per 100, at $20@25, South Carolina, poor to fair, per 100 at $12@16; North Carolina, poor to prime, per 100, $10@16. Muskmelon, Norfolk prime, per bbl, at $1 00@1 50; Norfolk, inferior, per bbl, at 50@75c; Baltimore, poor to good, per bbl. crate, $1 00@1 25.

FRUITS.—DRIED.—The quotations are as follows: Apples—Fancy evaporated, at 9c; do. choice, at 8½c; do. prime at 8c; fancy North Carolina sliced, at —; choice do. at 2½@3c.; choice Tennessee quarters at 1½@2c.; State quarters at 2½@3c.; southern sliced prime at 1½@2c. Peaches—Peeled North Carolina, choice, 11c; fancy, —@—c; do. Georgia, choice, at —@11c; do. prime, —@—c; unpeeled halves 3@3¾c, unpeeled quarters at 2½@3c. Cherries, pitted, at 10@10½c. Evaporated raspberries, at —c; sun-dried do. 13@14c. Blackberries—Prime at 6¾c.

PEANUTS.—Quotations are: 5½c. for best hand-picked; 4@4½c. for farmers' grades.

COTTON.—The quotations, according to the American classification, are as follows:

	Uplands.	New Orleans and Gulf.	Texas.
Ordinary	6 11-16	6⅞	6⅞
Strict Ordinary	7⅛	7 5-16	7 5-16
Good Ordinary	8 1-16	8¼	8¼
Strict Good Ordinary	8⅛	8 11-16	8 11-16
Low Middling	8⅞	9 1-16	9 1-16
Strict Low Middling	9⅛	9 5-16	9 5-16
Middling	9 5-16	9½	9½
Good Middling	9¾	9 15-16	10 15-16
Strict Good Middling	10	10 3-16	10 3-16
Middling Fair	10⅜	10 9-16	10 9-16
Fair	11	11 3-16	11 3-16

STAINED.

Good Ordinary	6⅛	Low Middling	8
Strict Good Ord.	7 3-16	Middling	8¼

HAY AND STRAW.—The following quotations are Choice Timothy, old, 90@95c; Good do, at 70@75c; medium, 55@60c; shipping at 50c; clover mixed, 50@65c. Straw.—No. 1 rye, 70@75c; short rye at 40@50c, oat, at 30@40c.

HOPS.—State, best, 28c; State, good and prime, 24@26c, State, common, 20@22c; State, old crop, 17@23c; California, best 24@25c.

VEGETABLES.—Quotations are for: Potatoes.—Long Island, rose, in bulk, per bbl., $1 75@2 00; Jersey, rose, per bbl, $1 75@2 00; sweet potatoes, Va., yellow, per bbl., $3 25@3 75; sweet potatoes, Va., red, per bbl, $2 25@2 75. Beans.—Long Island, green, per bag, 75c. @$1 25. Corn, Southern Jersey, prime per 100, $1 25@1 50. Cabbages.—Flat Dutch, per 100, $2 00@2 75. Cucumbers.—Long Island, per 100, 50@60c. Egg plant, Philadelphia, per bbl., $1 25@1 75; do. Southern, per bbl, $1 00@2 25. Onions.—Potato, Jersey, per bbl., $1 75@2 00; do. Maryland, per bbl, $1 75@2 00; do. Long Island, red, per bbl, $1 75@2 00; do. State, per bbl, $1 75@2 00; do. Western, per bbl, $1 75@2 00. Peas.—Long Island, per bag, $1 50@2 25. Squash.—Long Island yellow, per bbl, $1 00@1 25; do. Long Island, white, per bbl, $1 00@1 25; do. Norfolk, marrow, per bbl $1 50. Tomatoes.—Monmouth County, per box, 15@50c; do. Southern Jersey, per basket, 75c@$1 00. Turnips, Jersey, Russia, per bbl, 75c@$1 00.

LIVE STOCK MARKET.

NEW YORK, SATURDAY, August 21, 1886.

BEEVES.—Texans, 926 lb average, at $3 50 per 100 lb; do, 940 lb, at $3 70; Illinois Steers, 1254 lb, at $5; do, 1259 lb, at $4 90; Stags and Steers, 1087 lb, at $3 75; Bulls, 1308 lb, at $2 50; Indiana Steers, 1533 lb, at $5 20; Ohio Steers, 1287 lb, at $5 15; Kentucky do, 1166 lb, at $5 20; do. 1127 lb, at $4 80; Ohio Dry Cows, 944 lb, at $2 80; State Steers, 1300 lb, at $5 15; Indiana do, 1400 lb, at $5 15; do, 112 lb, at $4 40.

CALVES.—Red Calves, 213 lb, at 4½c; Veals, 180 lb, at 7c; do. 167 lb, at 7c; do. 158 lb, 7½c; Fed Calves, 211 lb, at 3½c; Veals, 170 lb, at 5½c.

SHEEP AND LAMBS.—Receipts for six days, 34,523 head against 42,456 head for the same time last week. Pennsylvania Lambs, 60 lb average, at 6½c per lb; Kentucky do, 67 lb, at 6½c; do, 64 lb, at 6¾c; Indiana Sheep, 103 lb, at 4¼c; Pennsylvania Sheep, 76 lb, at 4¼c; Kentucky Ewes, 101 lb, at 4½c; Kentucky Lambs, 60 lb, at 5¾c; Ohio sheep, 74 lb, at $4 10; Canada Lambs, 70 lb, at 6¾c per lb; Virginia do, 80 lb, at 6c; Virginia Sheep, 85 lb, at 4c; Pennsylvania Lambs, 66 lb, at 6½c; Jersey do, 72 lb, at 7c; Jersey Ewes, 115 lb at 4c; Pennsylvania do, 110 lb, at 4c; Western Bucks and Ewes, 82 lb, at 2¾c; Jersey do, 99 lb, at 4c.

HOGS.—Receipts for six days, 28,241 head against 30,458 head for the same time last week. State Hogs 235 lb, at 5 1-10c; do, 260 lb, at 5c.

Purify the Blood.

We do not claim that Hood's Sarsaparilla is the only medicine deserving public confidence, but we believe that to purify the blood, to restore and renovate the whole system, it is absolutely unequalled. The influence of the blood upon the health cannot be over-estimated. If it becomes contaminated, the train of consequences by which the health is undermined is immeasurable. Loss of Appetite, Low Spirits, Headache, Dyspepsia, Debility, Nervousness and other "little (?) ailments" are the premonitions of more serious and often fatal results. Try

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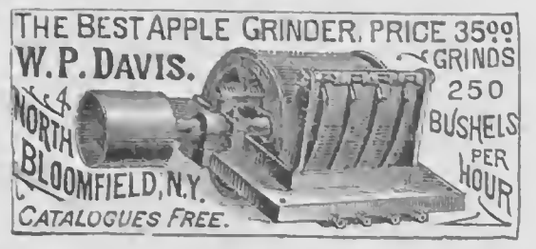
Pulverize Wheat Ground. WALDO F. BROWN, of Butler County, Ohio., in describing several experiments with reference to thorough pulverization of the soil for wheat says: "The result of the experiment (thorough pulverization) and observation was that $1.00 of extra work per acre with good Pulverizers adds from 5 to 10 bushels per acre."

See advertisement of the "ACME" Pulverizing Harrow, Clod Crusher and Leveler on page 572.



For the Young.

IT is the "trusty" boy who gets along in the world. A great many men tell me they never get any vacation, and never like to go away from their business because they have no one to leave behind that they can fully trust. If they had some one to leave behind who could do things just as they should be done, there would be a different feeling about going away. These "trusty" boys make "trusty" men, and such men always are wanted. The fact is that people who hire men want no other kind, and take men whom they cannot fully trust just as they would buy cheap goods.

The days are beginning to grow a little shorter. Before we know it Winter will be upon us. Time goes pretty fast to those who are busy, and there is nothing harder to bear than the thought that time hangs heavy on our hands. It pays to keep busy, to have some good work to do. I don't believe in people who do nothing but work. They don't accomplish nearly as much as they would if they would take a little time for play. I don't think much of people who want to play all the time. They hurt themselves, and really don't have the good time that they would if they would only learn how to work. It is pretty hard for some people to believe this. I can remember the time when I didn't, but it is true as anything can be.

I always like to see cattle that are trained to lead. They are more gentle and are easier to handle. It is a very good plan to put a halter on the calves and teach them to lead and stand. It can't be done too early. They will never forget the lesson. I once saw a wild cow just taken off the range fastened in a row of stanchions. She was terribly frightened. She jumped and pushed and broke down the stanchions and ran off with a wooden frame about her neck. A negro at the South had been made a present of a little dog. It was a little yellow dog of no good whatever, and yet the negro thought it was a wonderful animal. He bought a piece of rope about 25 feet long and an inch through and tied one end about the little dog's neck and the other to the saddle of his mule. Then he got on the mule's back and started for home. The poor little dog tried to keep up, but that great rope tripped him, and before he knew it he was on his back with the rope dragging him along. He learned how to lead, but he was a dead dog before the negro could untie the rope. Don't try to lead calves that way. Be gentle with them and treat them kindly.

THE STORY OF A DISTRICT SCHOOL

A COLLEGE BOY'S DIARY.

(Continued.)

Mr. Forest gave his opinion at length. I listened attentively—the long sentences gave me fresh courage.

"I have repeatedly informed this gentleman that what we most need is direct and thorough instruction in the primary principles of elocution, penmanship and correct deportment. The study of mathematics and of correct orthography is, I admit, of vast importance, yet you will readily concur with me gentlemen in saying that our young men and women are, as a rule, most horrible readers, and that the short sentences which we occasionally find written upon the board at our reform club meetings are of such construction and mechanical execution that no living person can ever read them."

This speech had the effect which was doubtless intended. The other members of the board edged their chairs away from the speaker and looked wonderingly at each other. Mr. Monser started to reply and put in another good word for spelling, but after careful deliberation he appeared to think that silence was safest. He appeared resigned to his fate. He waved his hand sadly and muttered with a sigh—"there goes another term o' school for nothin'."

Mr. Forest, encouraged by his success, now started at another point in the enemies' line.

"I would gladly call your attention to another point, well worthy of your attention, gentlemen. It has been the custom in this district for the teacher to board around. Now, I am prepared to prove by the most careful calculation"—

"I'll vote agin that every time," Mr. Hardhack fairly shouted, even before the question had been stated, "Teacher'll hev ter board 'round an' they ain't no use fitin' it. We all wanter see what teacher's made of. Like enough we kin give him pints agin them what wants fer ter sorter dog him on."

"I'll vote agin it too," broke in Mr. Mouser, "teacher's got ter board 'round; thar' ain't no dodgin' it."

Thus this point was settled. All Mr. Forest's eloquence only made the majority of the board more of a unit. It was decided that I should board around. The school board shortly adjourned, and the director and I were left alone to talk matters over.

"You'll find your hands full now. They've gone home angry at me, and they will be sure to take it out of you. They will tell all the big boys to be sure and come to school and make trouble. I'll stand right back of you. They have been needing this for a good many years. Now I want you to give them a good strapping."

"But I am no prize-fighter; I want to teach school."

"I know you do. You never taught a district school before, and you have an idea that things are going off just as they do at college, where the boys are all anxious to learn. If you go in with that idea I tell you plainly that you'll be the most surprised man in the world at the end of the first fortnight. You can make up your mind at the start that you will have a fight before the term is over. Start now with that idea and you'll be better prepared for it when it does come. I don't care how often you thrash those hounds. Just keep order over there and I'll pay all the bills."

"Well, what shall I do in case we have trouble?"

"Mop up the floor with them. Pull them straight. That's all I can say. Nobody can fight your battles for you, though I'll do all I can to help you. Let's start out with these facts. The boys here will expect a fight with the teacher. It is a regular part of the programme. You will have to make the fight yourself. If you give up you might just as well let the school go. I will back you up in whatever you do, and will give you $10 extra if you will thrash the bully of the district so he can't see."

"Who is the bully?"

"A fellow named Jack Brawn. A great strapping fellow who just makes it a business to whip every teacher. He's smart enough too, if he'd only start right. His father eggs him on. You'll have to fight him anyway. But come now, let's drop the school and have some music."

Mrs. Forest came in and took her place at the piano. This was the only musical instrument, as I afterwards found, in the district. With the help of the hired man and the director's little daughter we were able to make music that made up in volume what it lacked in quality.

I lay awake for a long time that night. I must admit that I seriously considered the question of giving up the school and backing out of the impending conflict. The various reports to which I had listened were doubtless exaggerated, yet it was evidently a most unpleasant neighborhood. There were two things that made it almost impossible for me to give the school up. I felt that I must earn the money. Without it my college course must be interrupted. But most of all I hated to give up anything that I had once attempted. So I fell asleep at last with my mind fully made up to stay in Bear Creek and fight it out. I can remember that I dreamed all night of fighting Jack Brawn for the possession of the school building. I do not remember which won in this battle, but I had such a fine opportunity of fighting the bully that I should have been well acquainted with his methods of attack and defense.

LETTERS FROM THE COUSINS.

UNCLE MARK: I am very much interested in your department and about a year ago you asked for a vote on a number of questions, and I do not remember of seeing the result of the vote. When are we to have the result? I am anxious to know how we stood on the questions. Yours, G. A. BLISS.

Groton City, N. Y.

[That makes me think that I have never told you how the vote did come out. I am very sorry about it for I had it all arranged at the time, but the advertisements crowded us into such a little hole that I had to give up many things. You will all remember what we voted for—1. The most serviceable animal to the farmer. 2. The most valuable grain. 3. The best pet. 4. The most valuable fruit. 5. The most beautiful flower. 6. The most valuable vegetable. The voting went on for a long time, and many votes were cast. It was decided at last in this way: 1. Cow first, horse second. 2. Corn first, wheat second. 3. Dog first, baby second. 4. Apple first, strawberry second. 5. Rose first, violet second. 6. Potato first, carrot second. The contest between the cow and the horse were pretty close—there were but three votes between. All the others had good majorities. I thought at first that wheat would beat corn, but a good many corn votes came in with a rush and carried the day. —U. M.]

DEAR UNCLE MARK: I am a little girl, 13 years old, and I have two sisters and four brothers. My father has a farm of 140 acres. We have six cows, four horses, seven pigs, 25 chickens and three cats. I planted the Rural seeds, but few came up. But one flower came up of the Garden Treasures and I do not know the name of it. My father takes the RURAL and I love reading the letters from the Cousins very much. I never wrote a letter to the RURAL before and don't know if this will be a good one or not. I wonder if you could tell me what will kill the insects on the cabbages and keep the woodchuck away from them. Your niece,

GERTRUDE GARTHE.

Leelanaw Co., Michigan.

[For the cabbage worm Buhach is sure death. For the fly use dust or plaster or ashes sprinkled over the leaves. Kill the woodchuck. —U. M.]

DEAR UNCLE MARK: I have written once before but it is quite a while ago. I planted the Garden Treasures, they are very nice. I wish the Cousins could see my pansies. I have some beautiful ones. I water my flowers every night. We had a wind storm last Thursday and it blew a board through our window. We have 100 head of cattle and 19 head of horses and five little colts. I have three pet lambs. I have raked about 140 acres of hay this year; I had a riding rake.

Your niece, ETHEL MOON.

[Well done. You are quite a haymaker. That board was a visitor that did not receive any welcome.—U. M.]

DEAR UNCLE MARK: I am a little girl, nine years old, and I would like to be one of your Cousins. Papa takes the RURAL NEW-YORKER. We live on a farm of 128 acres. We raise a great many chickens. We have four head of horses. We have seven milch cows and seven young cattle. My sister has a canary bird and one dove. We live near the Delaware River. We have a large peach orchard of about 1,000 trees, and two apple orchards. We have 24 little ducks and 33 turkeys. We have two gardens—one early and the other late. We have all kinds of vegetables in them. We live on a hill and have a very nice view. Your niece,

Northampton Co., Pa. MINNIE JACOBY.

DEAR UNCLE MARK: I am a girl, 14 years old. My father has been taking the RURAL for over 10 years, and thinks it is the best farmers' paper he has ever read. I enjoy reading the letters from the Cousins. I have just been reading the piece about the habit of drinking tea and coffee to my mother, from the RURAL. She thinks it is a bad habit, and drinks neither of them. I have a sister older than myself, a father and mother. I have five fan-tailed pigeons, which are very tame. We have a pet dog and a year old heifer.

Your niece, ELMIRA R. BRAGAW.

Newton, L. I.

[Glad people think as I do about tea and coffee. It is only a habit any way.—U. M.]

DEAR UNCLE MARK: I want to tell you of my Garden Treasures, which I think are just splendid. Mamma and I care for them together. We can have as large a flower bed as we want. I will tell you of the plants that came up. Bachelor's button, balsam, calliopsis, candy tuft, carnation pink, catch fly, coxcomb, convolvulus, cypress vine, California poppy, dahlia, dianthus, two varieties of foliage, hyacinth bean, lopezia, love-lies bleeding, love-grove, marigold, mignonette, nigella, six varieties, petunia, 18 varieties phlox, monthly pinks, 12 kinds of poppies, portulaca, snapdragon, eight varieties sweet peas, spider plant, sunflowers, spiral mignonette and three varieties zinnias. There are eight plants that look like abutilon; we are very sure they are, but they have not blossomed yet. There are 12 varieties of plants unknown to us, and we lost about as many more trying to transplant. The pansy seed and verbena and asters and some others did not come up. Mamma says that the ground was not warm enough. I shall be more careful if I ever get any more. I sent you some wild goose beans by mail last May. If they did not reach you I will mail you some more.

From your loving niece,

ELLA K. BARRETT.

New Haven Co., Conn.

[The beans came and are growing nicely.—U. M.]

DEAR UNCLE MARK: This is my first letter to the RURAL, I would like to be a member of the Y. H. C. I am a girl 10 years old. I have two sisters and three brothers, besides Papa and Mamma. We have four horses, two calves, and 10 pigs. Papa and the two boys commenced stacking to-day. All our cutting is done except the flax. The only pets we have now are three cats and a dog. We had a Jack rabbit, but he was so wild he ran away. I read the Cousins' letters, and like them very much. Your niece, BELLE

Aberdeen, Dakota.

DEAR UNCLE MARK: The Garden Treasures are very pretty, especially the sweet peas. We have one white sweet pea, something we never saw before. A great many neighbors want seed. I have two pet doves, they are as black as a crow. Papa has three working horses and three colts. Papa will begin thrashing next week, and then he will be busy till Winter sets in. Well, I must close, for it is supper time.

Your niece, LOIS H. SCHADT.

Greenville, Penn.

[Supper time is a good time to stop. I can forgive almost anyone who leaves me for a good supper. Those doves are funny.—U. M.]

Miscellaneous Advertising.

I WILL INSURE YOUR HOGS!
DR. JOS. HAAS'
HOG AND POULTRY REMEDY

[None Genuine without this Trade Mark.]
Is the only Practical Preventive of the so-called Swine Plague.

If used in proper quantities, it will
1. *Prevent Disease;*
2. *Arrest Disease;*
3. *Pay for itself with the increased pork it will put upon the hogs.*

AS AN EVIDENCE OF FAITH
In my Remedy, I make the following offer:
I will insure herds of swine of not less than one hundred in number against disease, at a small fee per head, provided they are fed my Remedy under my direction, and prove upon examination prior to contract that they are in a healthy condition, and neither inbred, close-bred, or the progeny of such.

WHAT IS SAID OF THE REMEDY.

"It has stopped the hogs dying and improved their appetite."—F. C. GOLDSBOROUGH, Easton, Md.
"Have used the remedy with success."—D. G. BARNES, Easton, Md.
"This medicine has been thoroughly tested and its merits established on the eastern shore."—Record and Gazette, Pocomoke, Md.
"I will not be without Haas's Hog Remedy if it costs three times the present price."—JOHN CASTIN, Grant City, Mo.
"We would not risk feeding a pen of hogs without the remedy."—WHITE & CO., Gibsonton, Pa.
"I would not think of raising hogs without it."—J. M. ELLSWORTH, Martinsville, Wis.
"It gives satisfaction every time."—J. G. BARTLETT & SON, Suncook, N. H.
"It has never failed to arrest the disease yet."—JONES & MESSELMAN, St. Paris, O.
"I have sold over $200 worth, and am pleased to say that it has given good satisfaction."—MELLE WILLIAMS, Druggist, Taylorville, Ill.

The Remedy can be procured of all druggists, or from my Laboratory, upon receipt of price.
Prices, $2.50, $1.25, and 50 cents per package. 25 pound cans, $12.50.

JOS. HAAS, V.S.,
Member of Indiana State Veterinary Med. Association,
INDIANAPOLIS, INDIANA.

HUMPHREYS'

DR. HUMPHREYS' Book of all Diseases, Cloth & Gold Binding
144 Pages, with Steel Engraving, MAILED FREE.

LIST OF PRINCIPAL NOS.	CURES	PRICE.
1	Fevers, Congestion, Inflammations...	.25
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BLAIR'S FODDER SQUEEZER
A GRAND SUCCESS. 10,000 FOR 1888.

With this instrument one man can do the work of two with greater ease and much more expeditiously. Not only for tying Corn Fodder but for most all like bulky material in shock or bundle. For sale by hardware dealers. Send stamps—50c.—by mail for one, without rope. E. BLAIR, Bucyrus, Ohio.

PERSONALS.

EIGHT of the original thirteen of the Emerton family at Bucksport, Me., are living, and their combined ages are 807 years.

MARTIN IRONS, who was so prominent as a leader of the Knights of Labor during the strike on the Gould system of railroads last Summer, is now boss of a second-class hash house in Kansas City.

"LORD BRASSEY of Bulkeley" is the title which the husband of Lady Brassey will wear in the House of Lords. Bulkeley is said to be the name of a small patrimonial estate which has been possessed by his family for over 400 years.

H. C. FARNUM, of Savage & Farnum, proprietors of the Home Stock Farm, Grosse Isle, Wayne Co., Mich., has just arrived here with a large importation of splendid Percheron stallions and brood mares, selected by himself from the best stock in France.

THE President has appointed Mr. John Goode, of Virginia, lately rejected by the Senate as Solicitor-General, to be special counsel on the part of the United States in the suit instituted at Columbus, Ohio, to test the validity of the patent granted the Bell Telephone Company.

HENRY WORTHINGTON of, Geneseo, Ill., is a nice young man—a very nice yonng man. During the long evenings of last Winter, instead of fooling away his time in reading or studying, or sleigh-riding with the girls, he made a patchwork quilt. It contains 6,022 separate pieces. Henry is just 21 years old.

THREE American horses are to be shipped to Rosa Bonheur. One was bred on the Sun River, in the Rocky Mountains; another is a wild horse caught on the head-waters of the Niobrara, and the third is a mustang from the Brazos River, Texas. They are designed as specimens of horses used on our frontier.

THE late Samuel J. Tilden always stuck up for the dairy interests of the country, so, very appropriately, his head will now be the vignette on the oleomargarine stamps. His likeness is already in the hands of the Government engraver. Only the heads of dead statesmen are engraved for Government vignettes.

CANON BAGOT, spiritual adviser to the Queen in Ireland, and probably the most prominent advocate of dairy improvement there, is now in Colorado. His visit to America is for the purpose of securing to the beneficiaries of his will the estate of Robert Nument Moore, who died in New-Mexico last March, possessed of property valued at $350,000.

COUNT VON MOLTKE plays amateur farmer at his country place at Creisau. He likes to go over his fields and to prune the young trees planted in the park. He insists upon having home-grown fruit upon his table, and he enjoys talking to his guests about it. He has built a school-house on his estate, and he often visits it, listens to the teaching and questions the pupils.

THE other day the widow of Santa Anna, the famous Mexican General and several times President, who was whipped by Gen. Houston in 1836, in the "War of Independence" of Texas, and again, 10 years later, by Gen's. Taylor, Scott and Lane, in the "War of Annexation," died in Mexico, and last Tuesday his son, Don José Lopez Santa Anna, aged 65, and very wealthy, shot himself through the brain at Havana, Cuba.

THE Crown Prince of Germany accidentally burned his right hand the other day, and instead of waiting for a doctor, he promptly drove to an hospital and had the hand dressed at once. As he disappeared with the injured member done up in black silk, the medical students shouted with admiration. In a very short time now he must become the most powerful Emperor on the globe, as his father cannot last much longer.

BOB INGERSOLL is growing fat. He isn't any balder than formerly, for that is impossible. His eye-glasses have changed to spectacles and his chubbiness is turning to fleshiness—even to flabbiness. His years are beginning to tell, but his smile and twinkling eyes are the same. Ingersoll has a habit, when interviewed, of writing out both questions and answers, and reading them over before the reporter goes.

MR. WYNANS, the Baltimore millionaire, pays, it is reported, $85,000 rent for his Scotch shootings. Not a shot has been fired on some of the "reserves" for five years. They are patrolled by the keepers on a regular system, which reminds one of the methods of the Irish police. The men, kept under severe surveillance, meet at certain hours at certain appointed stations, while there are solitudes in the middle of the wilder ranges on which even keepers and gillies are forbidden to intrude. All the trout streams are strictly preserved; so that the fish, the deer, the grouse, and ground game for once ought to be having a happy time of it.

It IS money in the Pockets of FARMERS.

TO MAKE FERTILIZERS AT HOME with POWELL'S PREPARED CHEMICALS

FOR $12.00 You can obtain A TON of SUPERIOR PHOSPHATE

NO TROUBLE. Any boy, in ONE HOUR, can mix a TON ready for use. Intelligent, prosperous and leading farmers in every State as references. CHEAP, GOOD and PURE. Fully two-thirds of the usual Fertilizer bill can be saved by using POWELL'S PREPARED CHEMICALS. ☞ A book giving full information, mailed Free.

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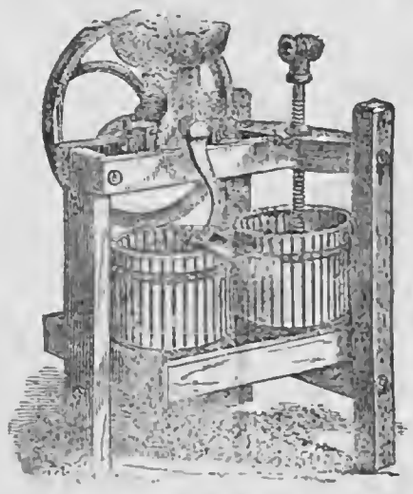
DOUBLE YOUR CROP. SEED WHEAT ☞ HINTS FOR GROWING. ☜ everything for the Fall. Send now. Address

It will PAY you to write for our *New Fall Catalogue* (mailed free). It gives illustrations, history and descriptions of all the *Choice New and Standard varieties* of Wheat, including the **Ontario Wonder**—a handsome *New Variety*, never before offered. Also the New Rye—*Thousand Fold*, which has won golden opinions. BULBS, FLOWERS, SMALL FRUITS and JOHNSON & STOKES, Philadelphia, Pa.

VALUABLE COUNTRY RESIDENCE FOR SALE. The property known as "Farley's Point," on Cayuga Lake, residence of the late Dr. H. H. Farley, containing about 35 ACRES, half in bearing Vineyard, Pear Orchard, and Small Fruits. One of the finest locations in the State. A lovely place for a Country Home. Sold only on account of death of former owner. Terms easy. Address H. S. ANDERSON, Union Springs, N. Y.

NEW CIDER MACHINERY.



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SPAIN'S GRUBBS Star Churns, Rapid Ice Cream Freezers, Improved Tree Tubs, all made of CEDAR. Send for illustrated circular and prices Clement & Dunbar, Philadelphia, Pa

FOR SALE.

1040 acre Ranch and 960 acre Ranch in S. E. Kansas; both in same County. These places have good improvements and never failing water to any one wanting first class ranches, now is your time to buy, as these are very desirable places. Also 480 acre Farm in N. W. Iowa, with good Improvements, Stock and Farm Implements. 160 acres unimproved in Palo Alto Co., Iowa; 160 acres unimproved in Dixon Co., Neb. All within reasonable distance of R. R. Depots. Also choice Chicago property with and without improvements. For terms etc., address the owners at either place.

POWELL BROTHERS, Waukgan, Ill.
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CAN'T BE BEAT!

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Price of 2-in. Mesh, No. 19 Wire, in Bales of 150 lineal feet only.

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Grind your own Bone, Meal, Oyster Shells, GRAHAM Flour and Corn in the $5 HAND MILL (F. Wilson's Patent). 100 per cent. more made in keeping poultry. Also POWER MILLS and FARM FEED MILLS. Circulars and Testimonials sent on application. WILSON BROS., Easton, Pa.

UNION WIND MILL CO.

Manufacturers of Sectional Geared and Sectional Pumping Mills, etc. All work guaranteed. Send for Catalogue and prices, mentioning this paper. Address UNION WIND MILL M'F'G CO. ALBION, MICH.; or F. H. LOOMIS, GENERAL EASTERN AGENT, 11 CALEDONIA AVE., ROCHESTER, N. Y., Drawer 267.

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THE WILLIAMS

Grain Threshers, Horse Powers, and Engines,

Highest prize awarded these machines at the New York State Ag. Soc.'s latest trial, over a large number competing. Ample warranty and opportunity for trial given. For full particulars address ST. JOHNSVILLE AGR'L WORKS, St. Johnsville, Montgomery Co., New York.

FRUIT and ORNAMENTAL TREES, SMALL FRUITS, GRAPEVINES, &c.,

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Our stock embraces all that is to be found in a first-class Nursery, which we carefully pack for safe delivery in all parts of the country, by mail, express, or freight. "Illustrated Descriptive Catalogue and Guide to Successful Fruit-Growing," sent for ten cents in stamps. Price Lists free to all who mention this paper. Address

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MOUNT HOPE NURSERIES ROCHESTER, N.Y.

These nurseries, established nearly half a century ago and still under the same management, offer for Fall planting, the largest, most complete, and carefully cultivated collections in the United States of
Fruit Trees, Standard and Dwarf.
Grapes, All the best new and old sorts.
Small Fruits, All the best, including the famous new Gooseberry "Industry."
Ornamental Trees and Shrubs.
Roses, of every class, the finest in cultivation.
Hardy Bulbs, Hyacinths, Tulips, &c.

Catalogues sent to all regular customers free. To others: No. 1 Fruits, 10c.; No. 2 Ornamental Trees, &c., Illustrated, 15c.; No. 3 Strawberries, No. 4 Wholesale, No. 5 Roses, free.

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600 ACRES. 13 GREENHOUSES.

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PEARSON'S FERTILIZERS.

High Grade. Reliable. Lasting.

Manufactured in dry condition, thereby assuring full weight of fertilizing material. Most flattering results where used side by side with other preparations. Where there are no agents for these Fertilizers, orders direct to the manufacturers will receive prompt attention. JOHN M. PEARSON, Hudson, N. Y. Send for catalogue.

"MARCHMOOR FARM."

HIPPARCHUS No. 11672; Sire Orange Peel, P. 288; Dam King's Fertile, No. 22765. Service Fees, $100.

BRIGHTSON No. 11671, Sire Farmer's Pride P. 322; Dam Nellie Flanders, No 22764. Service Fees, $100.

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HOLSTEIN FREISIAN CATTLE

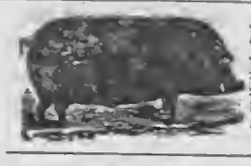
IMPORTED AND HOME BRED.

WHAT OTHERS SAY.

"The finest herd this season."—Dr. Farrington, U. S. Quarantine Station, N. J.

"As a herd, away up! up!! up!!!"—Dudley Miller Esq., Oswego, N. Y.

Young Cows; Yearlings with Calf, Yearling Bulls, and Spring Calves: Prime Stock. No fancy prices. We mean business. G. W. THOMPSON & SON, Stilton, N. J., P. R. R.



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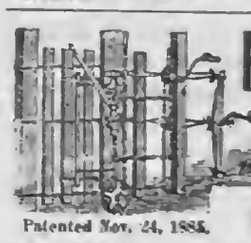

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Patented Nov. 24, 1885.

Surpasses all other wire and picket fence machines, for making strong and durable fences in the field, that no stock will break down. On rough, hilly ground, it keeps pickets perpendicular which no other machine will do without constant adjustment. It is easy to handle, uses any kind of pickets, and any size of wire. Write for circular and price. WAYNE AGRICULTURAL CO., Richmond, Ind.

THE BEST CATTLE FASTENING!

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The only Practical Swing Stanchion Invented. Thousands in use. Illustrated Circular free. Manufactured by BROOKS & PARSONS, Addison, Steuben Co. N. Y.

ENGINES AND BOILERS OF ALL SIZES.

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Our Patented Vertical Boiler will not prime. No danger of burning flues.

Harrow your Wheat Ground. CHAS. A. GREEN, editor of the *Fruit Grower*, in writing to the *N. Y. Tribune* of a crop of wheat, says: "The stubble lot was sown just before a rain. I harrowed it thoroughly with the "ACME" Harrow, a man riding and sending the blades deeply down. To test the effect, strips were left without this harrowing. At this date (Nov. 22) it is surprising how much more forward the wheat is on the part harrowed."

See advertisement on page 572.

A NEW BUTTER PRESERVATIVE.

KELLOGG'S ROYAL SALT.

Positively Prevents Butter from ever becoming rancid.

Endorsed by George B. Douglas, Esq., Ex-President Mercantile Exchange; Putnam Conklin, Esq., Manager Thurber, Wyland & Co.'s Butter Department, New York City; Col. Wm. Crozier, Northport, L. I., N. Y.; St. Louis Dairy Co., Charles Cabanne, Gen'l Manager, St. Louis, Mo., and such Agricultural Journals as the Rural New-Yorker, American Agriculturist, Indiana Farmer, Country Gentleman, Farm Journal and others. Send for Circular.

BUTTER PRESERVATIVE SALT CO., OFFICE AND FACTORY, FOOT OF *West Eleventh St., New York City, N. Y.*

OXFORD DOWNS.

Another importation will arrive Sept. 1st from the celebrated flock of John Treadwell, whose sheep have again this year won 1st, 2d and Champion prizes at the "Oxfordshire," "Bath and West of England," and the great "Royal" shows. His best Rams are by my grand imported, 420 lb., "Bicester," winner at these Shows '83, '84 and was 1st at sweepstakes, *over the other Downs*, at Chicago, Madison, Wis., and St. Louis. Mr. Treadwell wanted him back last year. For sale, Imported Rams, Ewes and Lambs by imported "Bicester," "Sir John," "Baron Campsfield" and "Donatus."

F. C. GOLDSBOROUGH, EASTON, TALBOT CO., MD.

WHITMAN'S NEW PATENT REBOUND PLUNGER PERPETUAL

GUARANTEED SUPERIOR to any LEVER PRESS NOW MADE.

Received First Premium at N. Y. State Fair, in 1880, 1881, 1882, 1883 and 1885, including the Grand Gold Medal and two Silver Medals, over Dederick and others; also World's Fair at New Orleans, and California State Fair. The most rapid, powerful and durable press made: puts over ten tons in car; bale every three minutes; fully warranted and protected; three bales to any other press's two. Send for illustrated circulars. Also Horse Powers, Cider Mills, Corn Sheilers, Feed Cutters, &c. WHITMAN AGRIC'L CO., St. Louis, Mo.

DYSPEPSIA.

Its Nature, Causes, Prevention, and Cure. Being the result of actual experience with Dyspepsia By JOHN H. McALVIN, LOWELL, MASS. Fourteen years Tax Collector. Sent free to any address.

IT PAYS to sell our Rubber Printing Stamps. Samples free. J. M. Milton & Co., Cleveland, O.

General Advertising Rates of THE RURAL NEW-YORKER.

The following rates are invariable. All are therefore respectfully informed that any correspondence with a view to obtaining different terms will prove futile.

ORDINARY Advertisements, per agate line....30 cents.
One thousand lines or more, within one year from date of first insertion, per agate line, 25 "
Yearly orders occupying 4 or more lines agate space..... 25 "
Preferred positions ..... 25 per cent. extra.
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Terms of Subscription.

The subscription price of the RURAL NEW YORKER is:

Single copy, per year	$2.00
" " Six months	1.10
Great Britain, Ireland, Australia and Germany, per year, post-paid	$3.04 (12s. 6d.)
France	3.04 (16⅔ fr.)
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Any one sending a club of seven is entitled to one copy, one year free.

Agents will be supplied with canvassing outfit on application.

Entered at the Post-office at New York City, N. Y, as second-class mail matter.

Humorous.

HOOPS are in fashion—on flour barrels.—*New Age.*

AGE appears to increase the value of everything except women and butter.—*New Age.*

A PRESS despatch announces that the "Indians are being hemmed in." Wouldn't it be better to fell them?—*Day's Outing.*

A COUNTRY youth wishes to know "how long girls should be courted." Why the same as short girls, of course.—*Day's Outing.*

IT seems a hard thing that so many dudes should be walking around with nothing to do, when the hand-organ man has to pay $40 for a monkey.—*Baltimore Herald.*

"I CANNOT sing the old songs," she murmured, as she took her seat at the piano, and the tall man who was holding the music threw a cloud upon the meeting by saying: "I heartily agree with you, Madam."—*St. Louis Whip.*

"WHAT are the things that touch us most as we look back through the years?" asked a female lecturer, impressively. There was a moment's awful pause, and then a small boy in the audience answered—"Our clothes."—*Credit lost.*

HARRY (who has the idea, but forgot the precise words)—"Oh, sister, Mrs. B. told me to tell you how awfully kind it was of you to sing, as it's so hard to get any one to do it nowadays unless they sing well."—*Credit lost.*

"WHAT, 40 cents for a little can of French sardines like that!" exclaimed a lady at a fish store yesterday. "Yes, mum," replied the dealer; "you see this Canadian fishery fuss has cut off our French sardine supply, and the price has riz."—*Pittsburg Chronicle.*

BIGGS says he has been experimenting with half a dozen different type-writers, but he hasn't found one that is good for anything. They are all alike, he says; "the confounded things print well enough, but they don't spell one word in ten correctly."—*Boston Transcript.*

A POOR ILLUSTRATION.—"Don't know how many times three times ten is? Now, Harry," said the teacher, "if one loaf of bread cost 10 cents wouldn't three cost 30 cents?" "Maybe so at your bakery, but we deal with a baker that gives three for a quarter."—*Texas Siftings.*

"WOMEN are forging to the front as inventors. I notice by the Scientific American that no less than 10 patents were lately allowed—" "I'll tell you one thing a woman didn't invent, my dear." "What, Mr. Dusenberry?" "The dumb waiter. Nor a camp stool, for that shuts up."—*Credit lost.*

A ST. ALBANS youngster, who was being put to bed the other night, wanted his back scratched, and that soothing operation was being performed when he began his prayers. This is the way he started it: "Now I lay me down to sleep, I pray the Lord—scratch, why don't you?"—*Credit lost.*

"AND so this is a Roman candle?" she asked, upon seeing one of those pyrotechnics in full blast. "And do they always take one of those in Rome, upon retiring? True, they make quite an illumination while they last, but I shouldn't think they'd last long enough to go to bed by."—*Credit lost.*

MEMBER of the Shakespeare Class (reading) "The sixth age shifts into the lean and slippered pantaloon——" Another member (a young woman of hot air culture): "I would suggest, ladies, that for 'pantaloon' the word 'trousers' be substituted as less objectionable and more in harmony with the present age. The suggestion was unanimously adopted.—*Rambler.*

THE IDEAL "SPORTSMAN."—*German Paper.*

Miscellaneous Advertising.

FOR SALE

The following articles in perfect working order.
One De Laval Cream Separator.
One Forty-eight (48) inch Cycle Ensilage Cutter and elevator attachments.
One Fifteen (15) horse New Page Hazelton high-pressure Steam-Boiler.
35 tons of Kentledge Iron, used for weighting Ensilage, in pieces convenient to be handled. For further particulars, address

MRS. R. M. HOE,
"BRIGHTSIDE," 23d Ward, New York City.

MAST, FOOS & CO.,
SPRINGFIELD, O.,

BUCKEYE FORCE PUMP,
IRON TURBINE WINDMILL,
BUCKEYE WROUGHT IRON PUNCHED RAIL FENCE,
BUCKEYE LAWN MOWERS,
BUCKEYE HOSE REELS AND LAWN SPRINKLERS.
Send for Illustrated Catalogue and Price List.

CIDER MAKERS Should send for our New Catalogue, mailed FREE
Boomer & Boschert Press Co., Syracuse, N. Y.

ROSSIE IRON ORE PAINT
Is made from Red Iron Ore mined in Rossie, N. Y.—Is the best and most durable Paint for Tin, Iron and Shingle Roofs, Barns, Fences, Farm Utensils, Etc., Will not crack or peel.
Will protect roofs from sparks. Valuable for coloring mortar. Samples free. Ask prices of
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WILLIAMS, CLARK & CO.'S
AMERICUS BRAND
HIGH GRADE
BONE FERTILIZERS
FOR
WHEAT
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SEEDING TO GRASS.
The Phosphate being derived from Bones, the Ammonia from Blood and Meat, makes them peculiarly efficient. Send for circular on the CULTIVATION OF WHEAT.
GENERAL OFFICE: Cotton Exchange Building, New York.

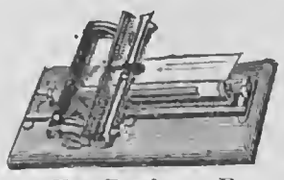
FRUIT AND ORNAMENTAL TREES
SMALL FRUITS, BULBS, SHRUBS AND ROSES.
Special attention is called to our remarkably Fine Stock of
STANDARD AND DWARF PEARS
ALSO **GRAPE VINES** Including such kinds as Niagara, Jessica, Empire State, Willis, Frances B. Hayes, etc.
Prices reduced to suit the times. Correspondence solicited. Catalogue Free. 32d Year. 600 Acres. 21 Greenhouses. Immense Stock.
THE STORRS & HARRISON CO. PAINESVILLE, Lake Co. Ohio.

NURSERY STOCK---FALL 1886.
The old and Reliable! **SYRACUSE NURSERIES** Come to the front For the Fall of 1886
with the choicest Stock of their specialties, STANDARD APPLES, STD. and DWARF PEARS, PLUMS and CHERRIES, ever offered to the public, all young, thrifty and well rooted.
Also a very superior assortment of GENERAL NURSERY STOCK both FRUIT AND ORNAMENTAL including all the popular ORNAMENTAL TREES, SHRUBS, and ROSES.
All Nurserymen and Dealers are cordially invited to inspect this superior stock or correspond with us, before placing their orders for the coming Fall.
SMITHS, POWELL & LAMB, Syracuse, N. Y.
(When writing always mention RURAL NEW-YORKER.

$25 PHOSPHATE ACTIVE AND PERMANENT **ANIMAL BONE MANURE**
BAUGH & SONS, ONLY MANUFACTURERS, PHILADELPHIA, PA.
Send for BAUGH'S PHOSPHATE GUIDE.

The Cold-Water Dip,
(THYMO-CRESOL,)
A very highly concentrated, non-poisonous fluid—mixes readily with cold or warm water—the simplest, safest, surest cure for TICKS,
LICE,
MANGE, SCAB, all Insect Pests, all Skin troubles, and many other Diseases of Live Stock. Recommended by many prominent Breeders. See circular, sent on application. T. W. LAWFORD & CO.,
Baltimore, Md.

THE SUN TYPEWRITER.
PRICE $12.
A PERFECT MACHINE



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Will be shipped anywhere, C. O. D., with privilege of examination, and if not satisfactory can be returned by merely paying express charges both ways. Address
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This knife has been tested with the most celebrated knives of other makers, and has proved an easier and faster cutter than any other. Its special excellence consists in a chisel edge tooth. It may be used for cutting hay in the mow, stack and bale; also for ditching, cutting peat, or for any other work for which a hay knife is used.
Send for circular.
North Wayne Tool Co.,
HALLOWELL, MAINE.

HORSE POWERS
LATEST IMPROVEMENT
Machines for THRESHING and CLEANING GRAIN; also Machines for SAWING WOOD with Circular and Cross-Cut Drag Saws.
Acknowledged by all to be **THE BEST** considering

EASY DRAFT, DURABILITY, QUANTITY & QUALITY of Work.
48 page pamphlet FREE. Address **A. W. GRAY'S SONS**
PATENTEES AND SOLE MANUFACTURERS,
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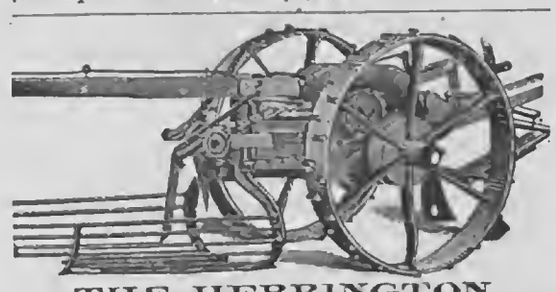
ACME PULVERIZING **HARROW,**
Clod Crusher and Leveler.
The Best Tool in the world for preparing Wheat Ground and for Summer Fallows.
NASH & BRO., Sole Manufacturers,
Harrisburg, Pa., & Millington, New Jersey
N.B.—"Tillage is Manure" and other essays sent free to parties who name this paper.



THE HERRINGTON
POTATO DIGGER
IS A SUCCESS.
Send for circular to PLANTERS' HOE CO.,
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DOCTOR BAILEY ENSILAGE & DRY FORAGE CUTTER
Greater Capacity, Less Power

AMES PLOW CO.,
QUINCY HALL, Boston, and 53 Beekman St., New York.
Manufacturers of Agricultural Implements and Machines.
AGENTS WANTED. Send for Circulars and our Illustrated Pamphlet.

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NO TAR
ESTABLISHED 1866
Takes the lead, does not corrode like tin or iron, nor decay like shingles or tar compositions, easy to apply, strong and durable at half the cost of tin. Is also a SUBSTITUTE for PLASTER at Half the Cost. CARPETS and RUGS of same, double the wear of oil cloths. Catalogues and samples *free*.
W. H. FAY & CO., CAMDEN, N. J.

7,000 CHALLENGE WIND MILLS.

IN USE IN EVERY State and Territory of the U. S. It is a sectional wheel, has been made by us 15 years, and has never blown down without tower breaking, a record no other mill can show. MILLS SENT ON 30 DAYS TEST TRIAL. BEST FEED MILLS, CORN SHELLERS, ETC. GOOD AGENTS WANTED in all unassigned territory. Catalogues free. CHALLENGE WIND MILL AND FEED MILL CO., Batavia, Kane Co. Ill.

Improved HYDRAULIC RAMS
Send for Circular and Price List. Address
ALLEN GAWTHORP, Jr.,
WILMINGTON, DEL.
Awarded Medal and Diploma at the Centennial Exhibition, Philadelphia.

THE RURAL NEW-YORKER

A JOURNAL FOR THE SUBURBAN AND COUNTRY HOME

VOL. XLV. No. 1910. NEW YORK, SEPTEMBER 4, 1886. PRICE FIVE CENTS. $2.00 PER YEAR.

Entered according to Act of Congress, in the year 1886, by the Rural New-Yorker in the office of the Librarian of Congress at Washington.

Horticultural.

THE GOLDEN QUEEN RASPBERRY.

IN the Summer of 1882 Mr. Ezra Stokes, of Berlin, Camden County, N. J., while having his crop of Cuthbert Raspberries picked for market, had his attention called to a cane found growing in this patch, producing a light-colored berry. From this beginning came what is known as the Golden Queen Raspberry. During the strawberry season of 1884, after inspecting Mr. Parry's new seedling strawberry, having heard of Mr. Stoke's intention to put this raspberry on the market, I visited the Golden Queen in its home. It was too early in the season for the fruit to be ripe. The canes, however, were well loaded with immature berries, and presented a vigorous growth, closely resembling in appearance the Cuthbert. In the Spring of 1885, Mr. Stokes sent me a dozen of the plants for trial. I selected a dozen Cuthbert plants of equal vigor from my grounds, and set them in rows side by side. I also put out, the same day, a dozen each of Raucocas and Marlboro. That year the Golden Queen bore a few berries—just sufficient to give the flavor. In vigor of growth it was like the Cuthbert, by its side. The past Spring, the canes were alive to the extreme tips in both the Queen and Cuthbert, and the former proved quite as hardy as the latter, which for years has been perfectly hardy.

I cut back both varieties the same day, and to a length as nearly alike as possible. The buds of the Golden Queen burst several days before those of the Cuthbert, Rancocas or Marlboro. The Golden Queen and Cuthbert blossomed at the same time, and ripened the first berries together.

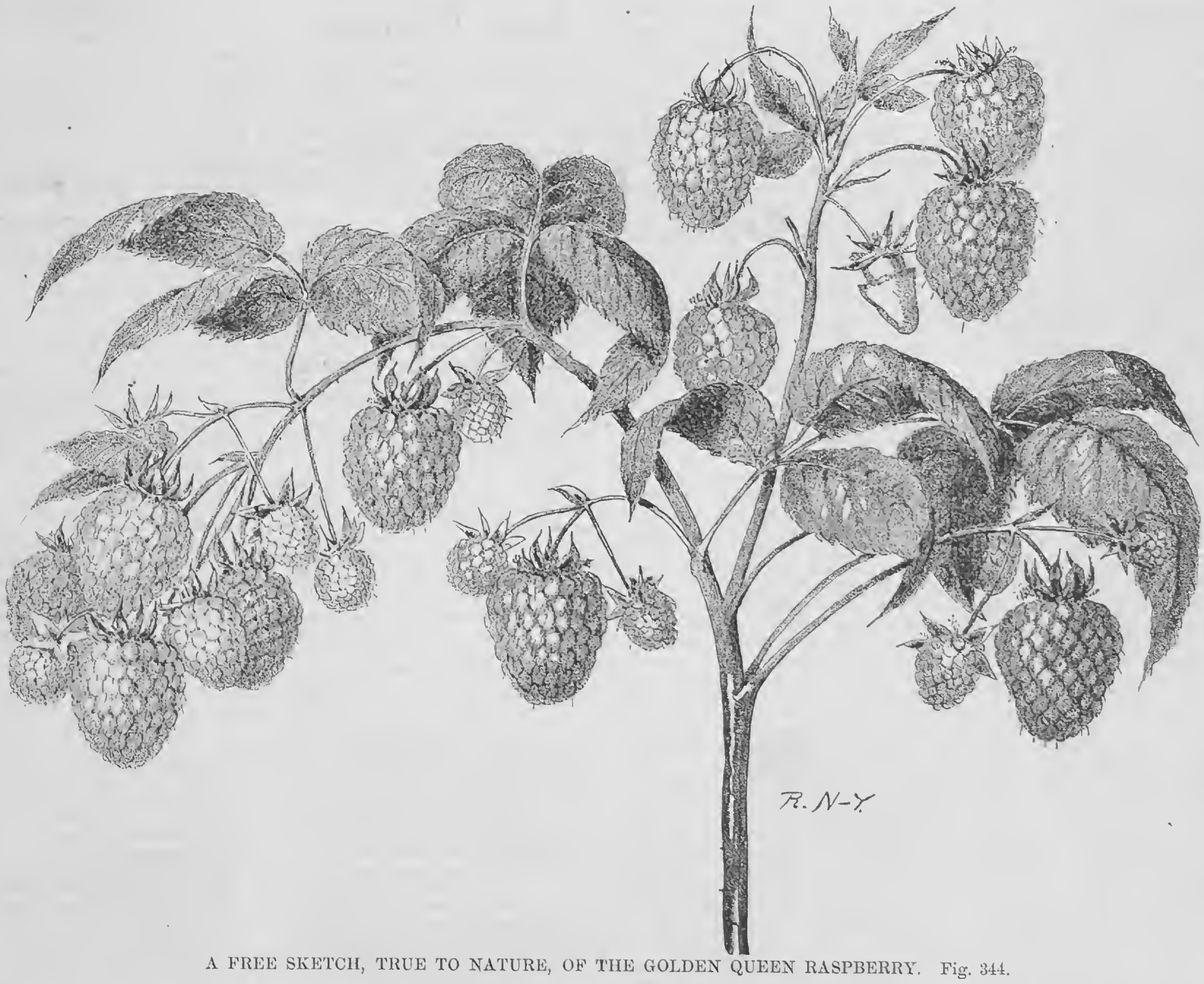
On July 12, 1885, I visited the Golden Queen on the grounds of Mr. Lovett, and there saw nearly half an acre in bearing. Except in the color and flavor of the berries, the Golden Queen resembles the Cuthbert in all respects, both in plant and fruit. In flavor it is more sprightly than the Cuthbert, and equal to it in firmness. The Rancocas with me is a poor grower, and the berry is of small size. On my grounds the growth of the Marlboro is like that of the same variety on the Rural Grounds. The plants made a good, vigorous growth last year, but the Winter killed all of the more vigorous, leaving all the small canes. They have made a sickly growth and have borne but little fruit. J. B. ROGERS.

[Our engraving, Fig. 344, is made from a specimen sent to this office by Mr. J. T. Lovett, who also sent us plants last year. Several of them died, and the others started late, and have not therefore made a vigorous growth. We have entire faith that the Golden Queen will be found well worthy of introduction.—EDS.]

NITRATE OF SODA FOR STRAWBERRIES, ETC.

IN the RURAL of August 21, Chas. A. Green gives his experience in the use of nitrate of soda on strawberry plants, but does not give the exact amount he uses, or tell on how much of a row or surface he applied it; and I suppose it was applied in the dry powdered state. Now, my experience in the use of nitrate has been very satisfactory, and was not followed by any ill results. I measure out one pint of nitrate and put it in ten gallons of rain water—well water will answer. I then stir it until it is completely dissolved. Then I take an ordinary watering-can, which holds about two gallons, and in the evening, before sundown, I apply it by sprinkling on the rows, which are about 200 feet long and a foot wide, making two gallons water the full 200 feet of the row. In ten or twelve days I repeat the application. I speak now of the Fall only. I have never yet used it in Spring. The results were so marked that every person who saw the rows that were treated to the nitrate, and those next to them which received none, would inquire as to the reason for the difference in their appearance, and, as far as I can observe, there has not been the least sign of burn or spotting of the foliage from its use. The effect was to quickly start the vines into a vigorous growth, giving them a deep green, clean and glossy appearance, and in the fruiting season the results were yet more plainly apparent. I kept account of the best picking, and on two rows alongside of each other made the comparison. The one which received the nitrate gave sixty-three quarts, and the other twenty-seven quarts—less than half. I shall treat the rows again this season, and will also apply on different rows bone-meal and a combination of bone-meal and ammoniated bone. As a mulch for Winter I find well-rotted stable manure, applied uniformly to a depth of 1½ inch as nearly as possible, the most satisfactory of all that I have used yet, and believe it contains more elements beneficial to the growth of the berry than any of the other mulches generally used, such as straw, corn fodder, tobacco stems, etc.

Montgomery Co., Ohio. W. BARRINGER.



A FREE SKETCH, TRUE TO NATURE, OF THE GOLDEN QUEEN RASPBERRY. Fig. 344.

WHO INTRODUCED THE SHARPLESS?

WHILE no one will wish to deprive Mr. J.

K. Sharpless of the honor due him as the originator of the Sharpless Strawberry, one of the most valuable ever discovered, I cannot think that Mr. Wilder was far from correct in mentioning Ellwanger & Barry as the introducers, for they prepared the first illustrations and colored plates, first exhibited it at the Nurserymen's Association, and gave it a place in public esteem by recommending it. While they were not the only ones who were introducing it, they were the principal men, and did more to make it popular than all others united. CHARLES A. GREEN.

Rochester, N. Y.

STRATAGEM AND PRIDE OF THE MARKET PEAS.

In the RURAL of July 24 we notice the following paragraph in a letter from Mr. F. S. Wilson, of Des Moines Co., Iowa: "I see very little difference between Stratagem and Pride of the Market Peas." We can only assume from Mr. Wilson's remark that he has not grown the peas himself, because if he had done so he would have discovered that there is as much difference between Carter's Pride of the Market and Carter's Stratagem as there is between Carter's Telephone and Telegraph Peas. Telephone and Stratagem are both of a decidedly wrinkled form in the dry seed, whereas Pride of the Market and Telegraph are very properly classed amongst the round-seeded varieties, and are quite distinct in appearance. JAMES CARTER & CO.

London, C. W., England.

Farm Topics.

CORRESPONDENTS' VIEWS.

When my boys got to be 14 years old I laid aside every week one dollar for each of them to be considered as wages. When they wanted some new clothes I took them into town and let them pick out samples themselves and get just what they wanted. The money for the clothes came out of their wage money, and other expenses were figured in the same way. The plan worked well in every way. My boys got an idea of business that has stuck to them. Too many boys are just taught to lie and steal by their fathers. I know men who tell their boys they must not touch an apple, or a peach, or any other fruit. Who ever yet heard of a boy who could keep away from fruit when he really wanted it and it was right before him? I wouldn't give a cent for such a boy even if he could be found. A wise man will have a barrel of fruit opened and tell the boys to go and get what they want. If they do this there won't be any sneaking about to get an apple, or any trying to hide the fact after the apple has been taken. Be fair and honest with the boys if you want them to make men.

Passaic Co., N. J. S. H. B.

I have a few grape-vines that I bought for Lady that are like "E. M. C.'s," page 547. I shall dig them up. What few ripen are of no account. They must have been disseminated because of their color, a small greenish white berry. The chickens will hardly eat them. I wish I could get wool waste as cheap as "H. H.," page 547. Hair is one of the best fertilizers for potatoes, and I think wool would be as good. J. M. M.

Green Cove Springs, Fla.

Washington is a grand city, full of libraries and schools. It is a fine place to visit, but who would want to bring up a family there? The whole spirit and sentiment of the place are averse to work. The poison of indolence is in the very air. The children early learn to shirk. Their education teaches them that hand labor is a little "off color." The higher schools try to fit children for getting a living without work. This is true, to a great extent, of all large towns and cities. When farmers rush to the cities for an education for their children they often do themselves a positive injury. Stay on the farm. There is an education there worth far more than that you can get in the city. E. D.

Fairfax Co., Va.

Farmers who try to buy wit for their boys will find that it costs more than it comes to. A neighbor of mine has found this out to his sorrow. He started some years ago on a new farm and worked like a slave to bring it up into shape. He had a large family of boys, and they were all sent to school, Summer and Winter. The man said that as he never had any chance himself he proposed to give his boys every chance they wanted. Every one of them had to have a horse and buggy to drive by the time he was eighteen, with money to spend at every dance within ten miles. The man bought a new farm, giving security on his old place. The family was strong-handed in the house and out, if the boys had only been brought up to work. They had the nicest chance in the world to get a fine place, but instead of that they lost the whole thing. Those boys would not settle down to work at all. They went driving round over the country and let their father hire help. The result was that he could not meet his payments and had to give up. That is what comes of this way of thinking that our sons must have an easier time than we had. That is all nonsense. There is no reason why a farmer should make a slave of himself in order to keep his son in luxury. It is tough knocks, the rough rubbing against the world, that make a man; and it is most mistaken kindness to try to pay a boy's way for him. OLD FOGY.

Hardin Co., Ky.

This year we have had all the fruit we could eat. We began with strawberries and are now eating apple sance. We have fruit on the table at every meal; not a little taste for each one, but a regular dish. We have had no sickness. I figure that we have saved at least $20 in the meat bill since May. We are all healthy and fat. Fruit-eating not only brings good temper and comfort, but it saves dollars.

Orange Co., N. Y. W. L.

Different people have different hobbies regarding health. I have mine. Some people want one kind of patent medicine and some another. I take my medicine in the shape of plenty of fruit, lots of cold water and a coarse towel. The fruit I eat. A part of the water I drink, but the most of it goes on the outside of the skin. I never could begin the day's work right without a bath all over with cold water. In ten minutes I can sponge myself all over and rub myself into a glow. Those 10 minutes do me more good than an hour more in bed would do. When I come in to dinner, with clothes just dripping with perspiration, I don't sit right down to the table as I am. In 10 minutes I can rub myself all over with a coarse towel and change my underclothing. The wet clothes, hung out in the sun, will be all right for the next day's change. I enjoy my dinner far more than I would if I sat down wet and hot from work, and the 10 minutes' time is never lost. This practice pays me well, and I would not discontinue it for anything. I am well satisfied that there are dozens of diseases that can be rubbed out of the system with a coarse towel if they are only taken in time. Try it, farmers, and see if it doesn't pay you. H. K. B.

Worcester Co., Mass.

Rural Topics.

FARMING IN THE MOUNTAINS OF WEST VIRGINIA.

CHARLES A. GREEN.

One of the advantages of traveling is the sense of satisfaction one feels with his own home on returning. We are apt to suspect that our farm is beset with undesirable features: it is too high or too low, too distant from the city, too sandy, too clayey, too thistly, too stony. There is always some drawback which at times we lose sight of, then again behold with all its depressing influences. If the reader is dissatisfied with his farm, let him come to these farms on the rough mountain sides of West Virginia, and he will be forever contented. The farmers of many of the fertile farms of the Eastern States, as well as the garden-like prairies, complain of small incomes and hard times. Let them come up here and learn how people, often handicapped with large families of small children, or poor health, live on a tenth of their income. A farmer who has scratched a living here for 17 years was visited yesterday. His shanty is 400 feet above the Cheat River. Going up is like climbing a ladder, the rounds of which are rocks, stones and stumps. The path was made by a water-spout that burst near the farm house with a noise like the roar of a cannon, tearing bolders and huge trees from the mountain-side. The farmer with two little boys and two girls, the elder 15 years of age, is planting beans in a field large in their eyes, but to me like the corner of a kitchen garden. He marks the ground with a plow that resembles those used in Egypt in the time of Joseph and the seven years' famine. It had been a shovel-plow, but the point had been reduced by wear until it was about the size of my hand. The soil was lumpy and soddy, and might have been as well prepared by the old long-nosed breed of swine. Hill-sides adjoining, as steep as the steepest roof, were planted to corn and potatoes. I would not risk cultivating them, fearing my horses would misstep and roll to the bottom.

Squirrels were destroying the freshly planted crops, though fought with poison as we fight rats. Grasshoppers cut down the pastures and meadows, and storms make gullies through the yielding earth. A long, lank man was splitting rails under the scorching sun for a fence to keep the cows out of the corn. No barns were visible—simply coops and cribs. If this farmer were called upon to pay a debt of $10, it would trouble him more to pay it than it would a New York farmer to pay $500. And yet this man is happy and contented. He knows of no better country, and would not exchange his farm for one in the Genesee Valley, with the New York Central Railroad given in place of a chromo. He is a dignitary in the village church, and delights in telling how he "ousted a dirty-mouthed clergyman," showing up his judicial capacity in managing the affair, shedding tobacco juice right and left meanwhile, in a way to excite astonishment as to where the saliva all came from. He is sallow, long, lank and frowzy, with scant hair, straggling chin whiskers, long, bony hands, and yet, withal, he has an intelligent twinkle of the eyes, and is a good talker in his own vernacular.

"Pertaturs es my crap. Ye can grow three hills of pertaturs wher ye can grow two of corn, and ye get three leetle ears of corn from a hill and half a peck o' pertaturs. All the folks buys pertaturs, must hev pertaturs. I live on pertaturs. Pertaturs is the best crop as I grows." How he gets his *pertaturs* down the mountain sides is more than I can explain.

"Why don't you plant the hillsides to grapevines, my friend? You have just the soil, climate and exposure desired." "Yas," he replies, "but the law won't let us make wine, and the folks hereabouts can't eat grapes by the acker. But there's Bill Bascomb over thar' as has made a heap o' money at it." The truth is the man has no money to buy vines with, and lacks the necessary enterprise. It is a wonderful country for fruit, and many are succeeding in that line. This farmer sells his apples at $2.50 to $3.50 per barrel in his village. He paid $2.50 for three apple trees. The price was $3, but $2.50 was all he had, and the agent wisely accepted it in full.

Rollsburg, W. Va.

Farm Economy.

THAT MANURE QUESTION AGAIN.

Crude manure shouldn't be covered; surface manure as a trap for catching atmospheric fertility; best effects from surface manuring; manure as a mulch; a lost opportunity; shortcomings of crude manure plowed under.

The question submitted to the readers of the RURAL of July 31 in regard to the effect of manure spread in February, as compared with that spread in April, is a very interesting and important one, though not entirely novel. Analogous—though hardly parallel—cases have been observed and noted before, very noticeable differences between the effects of surface manuring—more especially upon grass lands in Winter and in Spring—have often been observed and discussed. I am satisfied, from much experience and more observation, that it is a gross mistake to cover any manure not digested by the use of chemicals, with earth. I am not sufficiently versed in chemistry to understand why it is so, but I am certain that a larger proportion of the elements of plant growth are set free from the same amount of crude manure when exposed to the free action of air and water than when covered by the earth, though but very lightly. I have long entertained this opinion, though I do not know how well founded it may be, that, if the atmosphere does really contribute anything toward plant growth, manure upon the surface of the ground is the most effective trap for catching it, and that it acquires aid from that source in its own more complete digestion. Of course, the best effect upon the soil from surface manuring is produced when the manure is kept so moist as to be constantly giving out its soluble elements in the drip. In the case under consideration, the spread manure had been for two months dissipating its plant food, which had been taken up by the soil below it from the permeating solution.

Meantime the manure in the heap had lost more or less by evaporation and fermentation, and gained nothing from the atmosphere. In the one case the greater part of the plant food had been made readily assimilable and distributed all through the soil, where every rootlet was able to find its due proportion. The friable condition of the soil was doubtless largely due to the action of the manure as a mulch, but not wholly. No amount of mulching with a clean material will render a poor, tenacious soil friable, though, by keeping it moist, it may render it less resistant to the plow, and more workable generally. But when the mulch consists of manure the whole effect is materially different. The pores become filled to a greater or less extent with the manure deposited by the water, and the cohesive power of the particle is reduced very considerably. Once acted upon by the frost the surface never again acquires the same unyielding condition as before, but is disintegrated and crumbled. Of course these changes are very gradual; but not nearly so slow as one not accustomed to carefully observing them would naturally suppose. I have had occasion to reclaim some little pieces of almost impermeable hard-pan, from which the surface-soil had been removed in grading my grounds, and have had an admirable opportunity for noting the effects of different methods of treatment had my attention been called to the subject in season to have gone at the business systematically. As it is, I have no exact comparative data, but a much larger fund of opinion than of proven facts to support my theories.

But to return to the second case: In this case the manure was applied in a crude, practically undigested state, notwithstanding its frequent turning, and mixed mechanically with the cold soil, just when it was most needed to give the crop a good start. Plowing, harrowing and cultivating the soil till doomsday will not convert a single particle of the manure into plant food. It may distribute it all through the soil where the rootlets may find it, but it is still unassimilable until acted upon by some decomposing agent. Heat and moisture are the agents we unscientific observers recognize as most important. There is generally moisture enough in the soil but very rarely heat enough to accomplish this object. The result is that only so much of the manure as is brought to, or very nearly to, the surface actually becomes available food, and that much slower than when more exposed. We hear a great deal said about the leaching of the manure through the soil. It is a good deal more apt to leach out of the cold, damp subsoil than out of the more open, permeable surface soil. I might fill a whole page of the RURAL with accounts of observations tending to confirm these conclusions but I trust I have written enough to awaken a lively discussion, or to draw the fire of some wiser investigator.

O. S. BLISS.

The hay crop is the chief crop of New England. There is more money in it for the labor expended, than there is in any other. Selling the whole hay crop is a dear way of making money. Most of the hay should be fed out on the farm, and the manure put back again on the land. The surplus can be sold in this way without robbing the land.

Prospect, Me. F. K. L.

Field Crops.

CLOVER AS A FERTILIZER.

WALDO F. BROWN.

Objections to clover hay; ten years' experiment; a two years' rotation; worth of clover turned under per acre; how to avoid failures in clover; when to sow clover; evil of pasturing clover in the Fall and early in the Spring; Mammoth Clover most profitable.

For more than a quarter of a century I have followed the rule of sowing clover on all small grain, and yet, except when I cut it for seed, I make but little use of the crop except as a fertilizer. In the system of farming followed in our Miami Valley we need but little hay, for every farmer has each year a large straw stack and abundant supply of corn fodder, which enable him to winter his stock well without hay, if he so desires. My objections to clover hay are: first, the difficulty in curing it well, ripening as it does with us early in June before the heat of Summer has come to dry the land thoroughly and give us good hay weather; and, second, that the work of cutting and curing comes at the busiest season of the year when our corn and other cultivated crops need all our attention in order that we may have them clean and in good condition before wheat harvest.

For the first fifteen years in which I managed the farm I now own, I bought a large amount of manure at the village two miles distant, to keep my land up to a high state of fertility. As I noticed from year to year the fertilizing effect of clover, and compared it with manure, I became convinced that I could keep my land up as well with clover as by the purchase of manure and with much less cost and labor. Ten years ago I set apart twenty acres of my best land for an experimental plot, to determine whether I could grow a crop of grain every year and keep up the fertility with clover. I adopted a two years' rotation, begining with wheat with which clover was sown, the latter being allowed to make all the growth it would after harvest, being neither pastured nor cut but plowed down either in the Fall or the next Spring. I find that unless the season proves very dry, I can grow a crop of clover to its full development, after har-

vest, and I have never failed to grow enough to be of great benefit in fertiziling the soil. Our wheat was cut this year between the 21st and 27th of June; at this date (Aug. 2,) the clover has entirely overtopped the stubble and is blooming freely and on the richer parts of the field it is laborious to walk through it, the growth is so rank and tall.

Have I made my rotation clear? Half of this land is in wheat every year, and the other half in corn or potatoes. Then the part in corn or potatoes is sown in wheat, and that which was in wheat has a heavy growth of clover which is plowed down, and this part is planted in corn or potatoes. Thus you will see that I grow three crops in two years, two grain or root crops, and one fertilizing crop.

When I take a man out to show him what a growth of clover there is on my stubble fields I am usually asked, "Can you afford to use all this clover for the land? Why don't you cut it?" I smile as I reply, "Before I adopted this plan I put twelve loads of manure on an acre, which cost me $9 in money and three days of hard work with a team, while this clover has cost me only the outlay for seed and sowing, which is rarely $1 per acre. My land is cleaner and more easily worked than if I used manure, and I believe that under this plan I get $15 for one, for I value my clover crop at that for fertiliziug. By this plan I can fertilize as many acres as I choose each year, while if I depend on manure it is often impossible for me to get half what I need, or to find time to draw it if I could get it. In a wet time, when the fields are soft, I cannot wagon over them at all; but that is just the weather when my clover makes the most rapid growth. Understand, I do not depreciate the value of the manure we save, and I apply all I can get at home; but I no longer buy and draw it from the village.

"But what do you do when you fail to get a stand of clover?" I hear some old farmer ask. Well, to tell the truth, that would seriously interfere with my rotation; but I don't have failures. "How do I avoid them?" First—I make sure that I have good fresh seed, by either growing it at home or buying it of a neighbor (usually the latter); but if I buy from the stores I test it. Second—I sow early on a bright, clear morning, when the ground is frozen sharp and I am sure of a rapid thaw before noon. This covers the seed thoroughly and it is sure to grow, and not till the right time. It will not sprout as quickly when covered in this way as it would if lying on the surface, and if it does sprout, the earth protects it when another freeze comes, and if the weather is dry and the sun hot it does not perish as it would if lying on the surface. "But you lose the fall pasture?" Yes; and it is a loss greatly to my gain. A large percentage of the clover of the country is permanently injured by pasturing after harvest, when the plants are tender and much of the land sown in clover receives little or no benefit because of this, and turning on it too early in Spring. One great benefit clover imparts to the soil is by its dense shade, under which chemical action is induced and nitrates are formed, and plant food in the soil is rendered available, and fields which are closely pastured fail to get this benefit. My plan of utilizing clover also saves all injury by tramping, which, on clay lands is considerable and cannot be avoided if the clover is fed off. Incidentally also you will notice the saving of fences, for I have done away with division fences on 60 acres of my 90-acre farm.

Six years ago I sowed the Mammoth or Sapling Clover, on four acres as an experiment, and every year since I have had a field of it. I think it more profitable for most, if not for all purposes, than the common Red Clover, and think that hereafter I shall sow nothing but the Mammoth. It makes a much larger growth and shades the land more thoroughly. It is about a month later, and usually the weather is hotter and the land drier, so that it is more easily cured if cut for hay. It yields more seed, and as it seeds in the first crop and can be cut and thrashed in August, there is less risk in curing and thrashing it than with the common variety which must stand later. For hay it outyields any variety of grass or other clover I have ever seen, and stock do well on it. I can from six years' experience heartily recommend farmers to give it a trial.

Floricultural.

THE ROSE, MARSHALL P. WILDER.

Among Hybrid Perpetual or, to use a better name, Hybrid Remontants, we have always regarded Alfred Colomb as one of the very best of its class. Two or three years ago Ellwanger & Barry, at the writer's request, sent us among others, one of their own seedlings which they had named Marshall P. Wilder. It has bloomed with us for two seasons, growing within a few feet of Alfred Colomb which it in many respects closely resembles. Both are seedlings of General Jacqueminot. Both are vigorous growers and, so far as can be judged, hardy and equally so. The buds and flowers are closely alike, the buds being round and slightly conical, the flower very double, level-topped and very fragrant, though Wilder was thought to be the more fragrant. The buds are large, the outer petals of a dull, dark red, like those of Comtesse de Serenye, Caroline de Sansal, Colomb and others: but these recurve as the buds unfold and are of course concealed. The flower is of a fresh, rich crimson. Alfred Colomb is a shade lighter. Both roses often bear five to seven buds on a peduncle, the pedicels often being short—not over two inches long—smooth and slender. Wherein do the two roses differ materially? We can not say except that Wilder has given us more roses and has bloomed later. In fact since its first abundant offering of June roses, the bush has not at any time been without buds in one or another stage of development, while Alfred Colomb has not bloomed in two weeks.

Alfred Colomb is thought to be one of the best roses for general cultivation; but we must prefer its American sister, or brother rather, Marshall P. Wilder. Our reasons as intimated are (1) that it blooms more freely and during a longer period; (2) the flowers are more fragrant; (3) the plant is more vigorous.

Our illustration, Fig. 345, is from a rose carried to the office and sketched not until the petals were somewhat withered.

THE ROSE, MARSHALL P. WILDER. From Nature. Fig. 345.

FLOWERS FOR THE FAIR.

September is the month of fairs: let us prepare accordingly.

Plants in pots.—Get them ready at once. If they are planted out, lift and put them into the smallest pots you can get them into without injuring their roots. Have them established in their pots before the fair time; they will look better and keep up better.

The pots.—So far as the judges shall discriminate, an old teapot or tomato can is just as good in their eyes as the finest flower pot. only let the pots be in proportion to the sizes of the plants, neat and clean. A dirty pot is an abomination, and should weigh heavily against the exhibitor.

Collections of plants.—Let every plant be good and of its kind a creditable specimen. If you have any little, weak, sickly, trashy or scraggy things, don't take them to the fair. Aim at quality, not at numbers. Don't think that the premiums will be awarded for a large number of poor plants rather than a much smaller number of good ones. Poor stuff doesn't count at all in your favor so you may just as well leave it at home.

Arranging the plants.—Take some pains to arrange them prettily. It will count in your favor. Keep the large ones to the back of the table, and grade the others according to their size. Keep the kinds together as much as you can—the begonias together, the geraniums together, the fuchsias together, and so on. Have the best side face to the front, and do all you can to make your collection look well and to the best advantage.

Collections of cut flowers.—Make the best exhibit you can, but again let me advise you to give preference to quality rather than quantity. Have some style about your collection. Let every blossom you exhibit be a first-class flower or bunch of flowers of its kind. Don't mix them up helter-skelter as if you had dumped them into an ash barrel. Make as large a display as you please, have as big bunches as you please, but don't have dahlias scattered all over the lot, or geraniums, asters, marigolds, petunias or other flowers, but have all your dahlias near together, the same with your phloxes, zinnias, salvias and other flowers. Use rose geraniums, wood ferns, or other "greens" to tastefully set off your flowers. Have some get-up about your arrangement.

Cut blooms of one sort of plants, as for instance, asters, or roses, or dahlias, or gladioli. Take dahlias for example: keep all the whites by themselves, and so on with the reds, crimson, mottled, and the like, and grade them so that the large blossoms shall be at the back and the smaller ones to the front. Mixing them up in size or color is contemptible taste in exhibition, home or any other kind of decoration. If your notion in mixing is to make the judges think you have a greater variety than you actually have, please undeceive yourself. The judges have something else to do than unravel the intricacy of any nasty muddle.

Bouquets.—Use a few rather than many kinds of flowers, and arrange them so that every blossom shall appear unruffled and in perfection. Don't use wires, sticks, or other unnatural stems. Let the bouquets be small rather than large. Let white be the prevailing color, and avoid incongruous and violent mixtures. Don't have a conglomerate mass of little and big blossoms. Use the very best material you can command, and arrange it with all the elegance and loveliness your mind can devise. Be very particular about the stem of the bouquet; see to it that it is neatly tied and finished off. Don't think because the bouquets are stuck into little vases filled with water that the stems are hidden. Oh, no; the judges lift them out of these vases, and examine the stems as well as the tops; and don't think that the little greenery you stick into the vases around the bouquets will be overlooked, for nothing except what is tied up in the bouquet is reckoned any part or parcel of it.

Indust'l Societies.

THE FLORISTS' CONVENTION.

(RURAL SPECIAL REPORT.)

Blending of business with pleasure; the floral display; lively "experience meeting;" a trip to the ocean; election of officers; a floricultural circus; luncheon at Wootton; organization of a hail insurance company; the ladies; a good time all around.

The Society of American Florists held their second annual convention in Philadelphia August 18 to 21, both days inclusive. The affair was a tremendous success, both professionally and socially. Indeed, the social part of the affair was so liberal and extensive that there were some murmurs from the ferociously industrious members, who feared that this would interfere with business. However, the business part of the programme was fully followed out, resulting in the ventilation of many new ideas and new methods in floriculture, while the social gayety removed any danger of overtaxed brain power on the part of the members.

The meetings were held in Horticultural Hall, on Broad Street. The upper hall, devoted to business sessions, was tastefully decorated, the balcony being draped with laurel and the stage arranged with foliage plants, while over the speaker's desk hung the word "Welcome" in immortelles. The lower hall was devoted to the exhibition. This, though not very large, comprised some excellent features. Two tanks filled with aquatics were of much interest. One contained cut specimens of the Sacred Lotus (Nelumbium speciosum). The superb rosy-pink blosssoms were mingled with leaves and seed-stalks, making a most artistic group. The other tank contained nymphæas, white, blush-pink, rose, and blue, of most delicious perfume. There were also leaves of the giant lily, Victoria Regia—great saucer-like shields that are often eight feet across, borne on cable-like stems set thickly with cruel spines.

A quantity of gloxinias and tuberous-rooted begonias made a fine show, backed by fragrant white lilacs, grown in pots. Some new ferns were exceptionally fine, and a large collection of very spiky cacti grinned cheerfully at the passer-by.

Seeds, bulbs and florists' appliances made another useful and comprehensive exhibit, the display of baskets being very large. But here let me make a plaintive protest against those awful decorations (!)—dyed Pampas Plumes! Nothing can be more graceful than this grass in its soft, native hue, but when ruthless man dyes it an aniline green or magenta, or purple, it is a sight to make angels weep.

The convention was opened with an address by Mr. Mitchell, of the Pennsylvania Horticultural Society. He introduced the Mayor of Philadelphia, who welcomed the society in a very happy speech.

Next Mr. Peter Henderson told "What the Craft Has Been Doing the Past Forty Years." His essay was both instructive and amusing, and at its close some of his contemporaries were requested to give their experiences, which were another source of amusement to the audience.

At the afternoon and evening sessions essays were read on Treatment of Tea Roses During the Summer, by Antoine Wintzer, West Grove, Pa.; H. P. Roses for Out-door Summer Blossom, John Henderson, Flushing, L. I.; Pot-grown Roses for Market Purposes; Robert Craig, Philadelphia; Fungoid Diseases of the Rose; H. J. Sackersdorff, Bayside, L. I.; and Pot-grown Foliage Plants for General Purposes, by James Taplin, Maywood, N. J. These essays were followed by very lively discussions, and the evening session had the excitement of keenly-contested debates on subjects drawn hap hazard from the "Question Box." Perhaps nothing provoked such close debate as the subject of great plant auctions and their effect on small florists. It is the general opinion, even among the great florists who supply these auctions, that they cripple the local trade of smaller growers to an alarming extent, and what are we going to do about it!

On Thursday there was no business session, the entire convention going in a body to spend the day at Atlantic City. A special train was chartered by the Florists' Club of Philadelphia, and a fine dinner was given the excursionists at the United States Hotel, the number of guests being nearly 650.

On Friday morning the Convention met with great promptitude, and devoted themselves to business so as to prepare for the afternoon, when G. W. Childs, Esq, gave them a reception at Wootton, his beautiful country seat at Bryn Mawr. The first business in the morning was the election of officers for the ensuing year. These were elected unanimously: Robt. Craig, Philadelphia, President; Edwin Lonsdale, Philadelphia; Secretary; Myron A. Hunt, Chicago, Treasurer; J. C. Vaughn, Chicago, First Vice-President.

After the election Mr. Le Moult gave his exhibition of floral designs. He marshalled a number of employés, both men and girls, on to the stage, where they started on the formation of a Wheel of Fortune. While they were at work, Mr. Le Moult exhibited designs in immortelles. The first was: a life-size Shetland pony; this was followed by the steamer Amerique, the yacht Galatea, a Venetian gondola, a life-size lion, and several others. Mr. Le Moult's remarks were often amusing, and so were the comments of the audience, who for the most part seemed to regard this part of the exhibition as a floricultural circus. The fabrication on the stage, though plain enough to professionals, would give very little infor-

mation to those unacquainted with the process. The Wheel of Fortune winged, and surmounted by a cornucopia, was finished in an hour and twenty minutes; it was about five feet high, and a very effective design. In the afternoon it was presented to Mr. Childs.

In the afternoon the convention adjourned most unanimously to go to Bryn Mawr. They numbered about 750, and were taken out on a special train in two sections. They were welcomed with the graceful hospitality for which Mr. Childs is famous, were given the freedom of the place, and were entertained with charming music and an elaborate luncheon. Mr. Childs was enthusiastically cheered, and after shaking hands with the entire convention, he sent his happy guests back to town on their special train.

Friday evening was devoted to essays and discussions on steam *versus* hot water, resulting in a majority for steam. Specialists were appointed to study the subject, and report upon it at the next meeting of the society to be held in Chicago.

On Saturday morning the final session was held to appoint a committee for the organization of the Hail Insurance Company. Chairman, J. M. Jordan, St. Louis; H. A. Silbrecht, New York; J. G. Esler, New Jersey; J. C. Vaughn, Chicago. This hail question is a very awkward one, as a national insurance while benefiting Western florists within the hail section, would merely impoverish Eastern men, who do not suffer from destructive storms of this character. On Saturday the Ladies' Reception Committee, composed of Mrs. G. C. Evans, Mrs. Mary Bissett Rumel, Mrs. Robt. Craig and Miss Ferguson, gave a drive to the visiting ladies, taking them through Fairmount Park, calling at many points of interest and including a charming luncheon at the Belmont Mansion.

The business part of this convention contained much of interest and value, while the social part was of unusual liberality. The only drawback, as some of the business-like members fear, is that it will provoke too much emulation among cities visited, and this cannot fail to be prejudicial to the society's usefulness.

However, all the visitors cannot fail to long remember Philadelphia's generous hospitality; and whatever may be the society's ultimate fate, the convention of 1886 will remain the most thoroughly enjoyable in the history of horticulture. E. L. TAPLIN.

A FARMERS' PICNIC.

We have recently enjoyed a farmers' picnic, under the management of the Western New York Agricultural Society. Professor I. P. Roberts's lecture on this occasion was one of the best I have ever had the pleasure of listening to. The Professor was taken to task in a good-natured way, by one of our leading farmers, for stating that farmers could wear gloves at many kinds of work—such as reaping, thrashing, etc. Nothing daunted, the Professor replied—"I tell the girls that if the farmer boys do not know how to protect their hands so that the girls will not be ashamed of them when the boys appear in society, they had better not marry them."

Certainly there is much to be learned about the care of hands on a farm. I have seen farmers' hands so knotty, bruised and distorted as to cause us to pity the possessors. It is our duty to God and man to preserve our comeliness of person, and a well-formed hand is to be desired.

Professor Roberts said that the land-holders would be the aristocracy of this country fifty years hence; that some Englishman had said that this country produces enough milk each day to fill the canal from London to Birmingham.

Farmers, remember that you are Americans, and that Americans are destined to lead the world in agriculture and commerce. Do not be satisfied to cultivate well the land; cultivate your minds. Work less with your hand—more with your heads. Look sharp to your votes. If you confine yourselves too closely to the plow, wily politicians may defraud you of your birthright.

President Hamilton said: "Speed the plow! If the plow no longer turns the furrow, the factories of this broad land will close, the miners will hang up their idle tools, the railroad whistle will no longer be heard, and our steamships will rot at the wharves."

Altogether this was a pleasant and profitable gathering, and one to be long remembered

Monroe Co., N. Y. CHARLES A. GREEN.

Pomological.

THE CALIFORNIA WAY OF CANNING FRUIT.

Owing to the fact that all of the canned fruit of last season's pack has left the State, it is probable that the greatest portion of the fruit grown this year—excepting the prunes, of course,—will be canned. For my part I am sorry it is so, and for this reason, viz: it appears that the fruit canners, with all their perfected (?) appliances, are not able to make use of the fruit unless it is hard, green, and unripe. They want it hard, so they can handle it with greater ease, greater economy, less waste, and to some uninitiated unfortunates those solid halves all standing out by themselves look nicer in a jar than softer ones that necessarily press sluggishly upon each other and almost fall to pieces. But this same green, harsh-tasting fruit goes abroad among people who know how delicious good, ripe fruit, well preserved, is and the buyers consider themselves cheated out of their money when, upon opening a can of "choice (?) California fruit," they find this vile, unpalatable and very unwholesome stuff! No wonder then, that the people East, though admiring California's fruit-growing advantages, all say that California fruit is insipid, lacks sweetness, and is inferior to that which they grow at

Santa Clara Co., Cal. P. LE HARDY.

KEEPING PEARS.

I save my Bartlett pears so that they make fine eating two months after those of my neighbors have gone. I take a stout box and line it with paper, almost any kind will answer. The bottom is covered an inch deep with wheat bran. The pears are carefully picked, wrapped separately in thin paper and packed deeply in the bran until the bottom is covered. Then this layer is covered with bran to the depth of an inch, and another layer of pears is placed in the same way. This is continued until the box is full, when the cover is tacked on, and the box set away in a cool, dry place. The fruit will retain its fine flavor and color. J. S. B.

Hightstown, N. J.

Architecture.

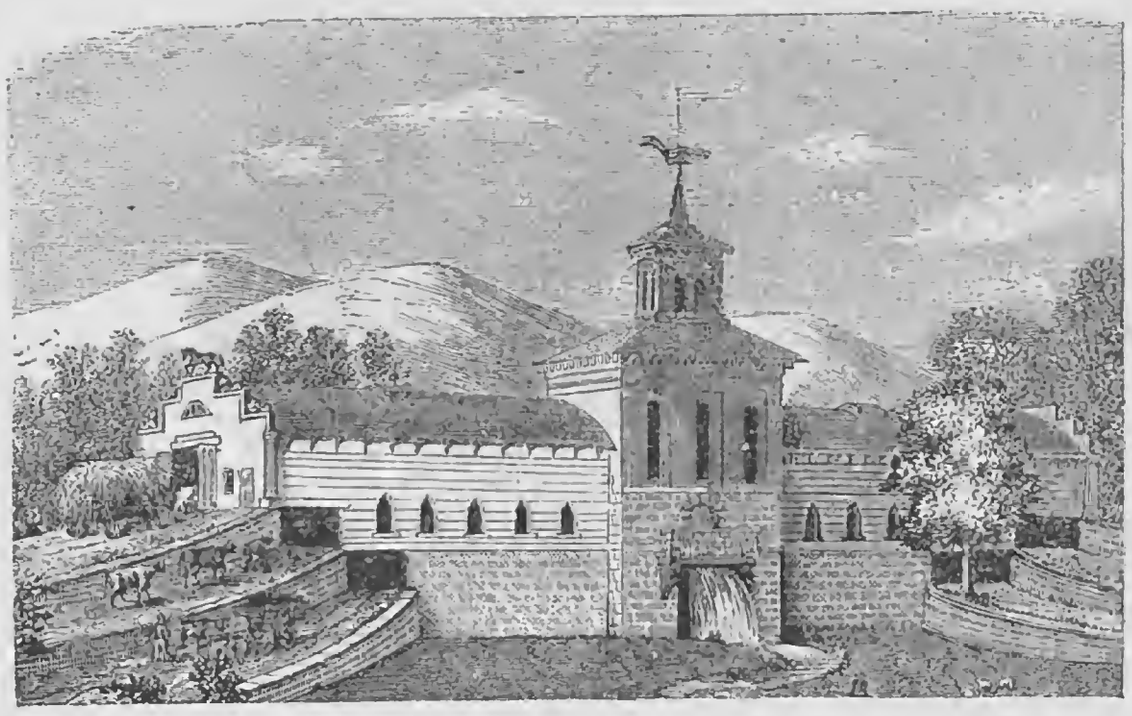
A BIG BARN.

T. H. HOSKINS, M. D.

The disposition of many country-born men who have become wealthy in our cities to repossess, enlarge and beautify the farm upon which they were born and reared, or at any rate to retire to rural life as age approaches, is very noticeable among Americans. The "fancy farms" of such individuals have been the subject of much writing in the agricultural journals, in which very different views of their influence upon the progress of agriculture have been expressed. The fact probably is, that this point has received very little consideration from the parties most directly interested in the matter. In most cases the ground of action has been mainly, if not entirely, personal in its purposes. Either the rest and healthful repose of the quiet country have been sought, or some cherished idea of how a farm ought to be carried on has lingered in the mind from the days of youthful impatience and disgust with the ancient conservatism that is still found on so many farms, and is yet exciting like feelings in the breasts of so many youthful sons of the soil.

New England is dotted over with these fancy farms, the elaborate and ornate character of whose buildings and surroundings marks them at once to the eyes of the passer-by. They abound especially in the Connecticut Valley, and the minor valleys of Western Massachusetts, a great number of whose sons have made themselves noted and wealthy in almost every branch of business enterprise. Magnificent mansions, amounting up even to seven figures in cost, have been erected; but more often, perhaps, the "fancy farmers" have prided themselves on the elaborate perfection of their barns and outbuildings, rather than on their dwelling houses. One of the most noteworthy, though not the most recent case of this kind, is that of an enormous barn erected in the town of Great Barrington, near the village of that name in Berkshire County, Mass. This barn, though really one of the most costly and complete that has ever been built in America, has received very little notice in the agricultural press, and would perhaps have always remained obscure had not its recent destruction by fire, and the trial of the supposed incendiary attracted public attention.

This curious building (shown in the illustration, Fig. 347,) was erected thirty-four years ago, on his Brookside farm, by the late David Leavitt, the grandfather of its recent owner, Henry A. Leavitt, a broker at 1 Exchange Court, New York. The site chosen was both novel and convenient. The building, 200 by 40 feet, spanned a ravine 200 feet in width and 30 feet in depth, one wall forming a dam controlling the fine stream which runs through the ravine, and was employed to furnish motive power to the numerous machines in various parts of the building. The banks of the ravine on both sides, below the barn, were used for roadways, entering each of its three stories. The lower story was used chiefly as a manure vault, the second was for stabling, and the third for storage. But, besides these, there was both a complete grist-mill, and a wood-working shop, embracing saw-mill, planing-mill, lathes, etc. There was a full equipment of farm machinery, including a corn-sheller, which could shell, clean and bag 500 bushels a day, with an elevator of the same capacity. The thrasher had a straw-cutting attachment, which chaffed the straw as fast as delivered. In the arched dairy cellar, 20 by 78, was a line of shafting with power-churning and butter-working apparatus. The hay was also pitched from the wagons to the mow by the same power, and in fact the whole work was so planned and arranged by Mr. Wilkinson, who was at once the architect and farm superintendent, as to be done in the most speedy and economical way. The total cost was stated at upwards of $100,000. Michael O'Connell, a farm hand, was suspected and arrested for the burning of this elaborate and costly structure, but has been acquitted of the crime.



A BIG BARN. Fig. 347.

The Herdsman.

IN FAVOR OF THE "GENERAL-PURPOSE" COW.

PROFESSOR G. E. MORROW.

I am not able to agree with much that is being written and published in favor of the position that it is absurd and ridiculous to attempt to breed any class of animals for more than one purpose. Especial argument, ridicule and sarcasm have been directed against efforts to secure a good degree of merit as beef-makers and milk-givers in any breed of cows. None the less do I believe that it is desirable and practicable to secure this result: that for a large percentage of the farms of the United States cows of this class—"general-purpose" cows, if you please—would be better adapted than those with marked excellence for the one purpose, coupled with inferiority for the other; and that there are vast numbers of cows which do combine in a satisfactory degree good size, form and aptitude to lay on flesh, with ability to give a good quantity of good milk. I have seen many such cows.

Beef-making and milk-giving are natural functions of the cow. It is not contrary to the principles of breeding and is in accord with experience that these functions should be well developed in the same animal. It is unusual to find them both developed to a remarkable degree. In regard to these qualities, as well as to many others, the breeder may make his choice between efforts to reach remarkable excellence in one point or a fair degree of merit in two or more. It is clearly true that in many cases the latter effort is the wiser.

Urging all breeders to select some one point, and seek to develop that to the greatest degree, is not wise. There is a demand for animals so developed—for horses with special fitness for heavy draught, or for fast trotting; for cattle especially fitted for beef or for milk; for sheep remarkably developed in the way of either mutton or wool production; but the largest number of users of either class desire animals reasonably well adapted for more than one purpose. The horse best suited to the needs of farmers generally, or for most business purposes, is neither a heavy draught nor a typical roadster, and so of the other classes of animals, even to the hog, in breeding which too exclusive attention may be given to early maturity or to ability to lay on flesh.

Aside from the farmers who keep cattle with almost sole reference to beef making, and the special dairymen, there is a vast number who know what they are about when they insist on having cattle satisfactory, both as meat makers and milk givers. Unquestionably its merit in this double capacity has been a great cause of the widespread popularity of the Short-horn both in Great Britain and in this country. It is amazing that men will continue to deny or ignore the fact that there are many thousands of pure-bred or high-grade Short-horn cows which are in a satisfactory degree, what it is denied there can possibly be, good general-purpose cows. There are many Short-horn cows that are not good milkers, many that are not good beef animals, and many that are both. The same is true in some herds of cattle of a number of other breeds. On the University Farm there is to-day abundant proof of this fact as to Short-horns. Of two Hereford cows one is a good milker, the other not; a half-blood is well above the average. There is a half-blood Holstein steer, weighing over 1,650 pounds at 28 months, and a beef animal of superior quality; a pure Ayrshire steer quite satisfactory in beef merit.

I recognize fully the marked differences in the adaptations of different breeds and of different animals belonging to the same breed, but dissent from the position that it is impracticable or always unwise to secure development in more than one direction in one breed or one animal.

University of Illinois, Champaign, Ill.

HOW TO GROW THE BEST BEEF.

Farmers in general hardly realize the extent to which their future success with cattle depends upon grading up to a high point. I refer now to feeding cattle, that is, such as are bred mainly for meat production. Stock growing and general farming are by many said not to be as remunerative as formerly. Over-production is said to be the cause of this. If this applied to cattle, it is certainly not to the higher grades, but to the lower, for, no matter how hard the times, or how depressed the industries in general are, the higher classes of steers always sell quickly at good figures. Since the discovery—for it should take rank as one of the discoveries of the age—that it is more profitable to feed cattle for meat production from early calfhood up to the period when they rate as long yearlings or at most as two-year-olds or a little past, it is indispensable that high grading up be practiced, as we cannot have marketable steers at the ages named unless they are bred from thoroughbred, or at least high-grade stock.

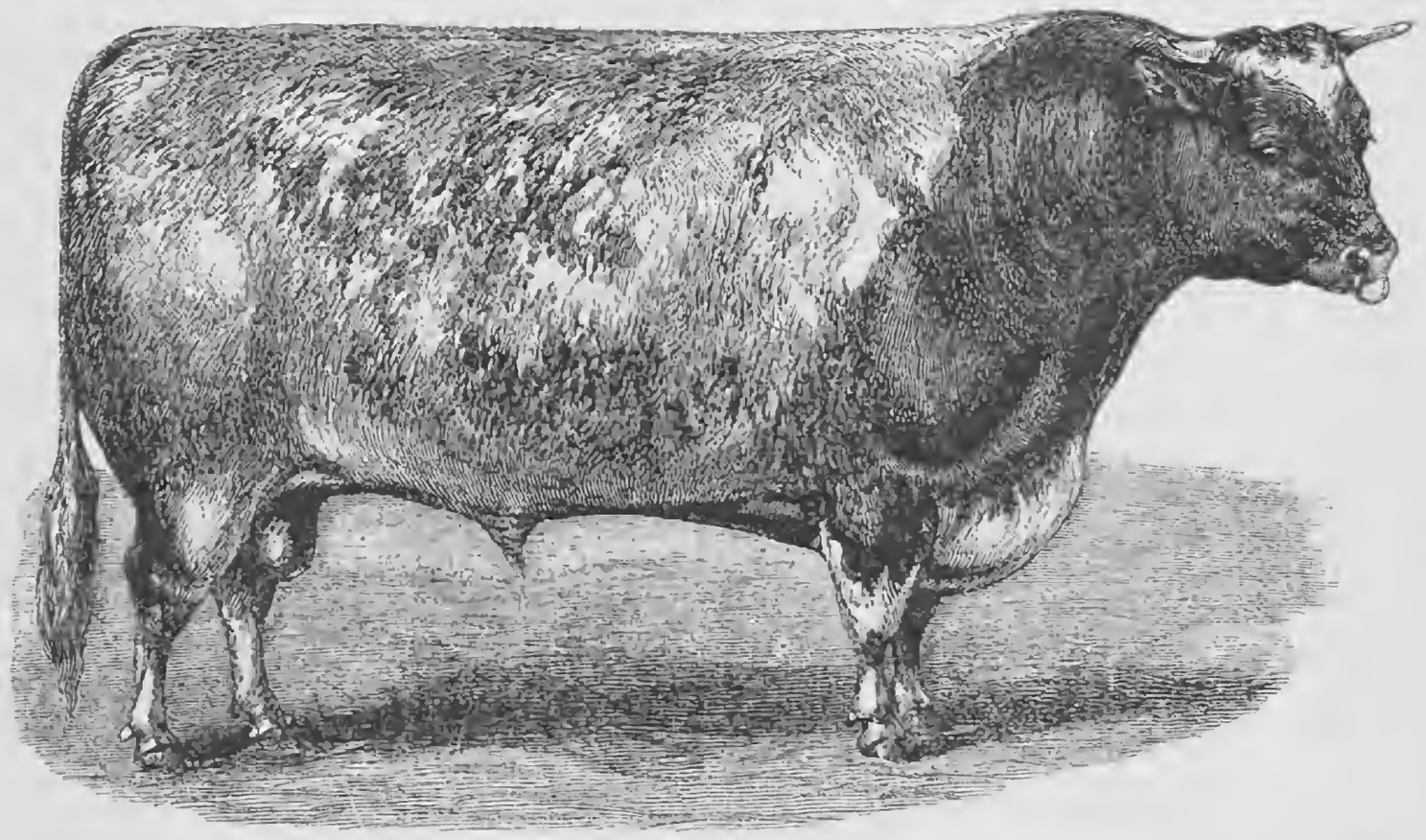
The notion entertained by many that young beef (that is, of the age named) is to such a degree immature—called, derisively, "baby beef"—as to be innutritious, is a very palpable error. After the calf ceases to suckle its dam, depending thereafter upon food like that given to grown-up cattle, the meat ceases to be veal, and, in every sense of the word, is beef, as nutritious from a long yearling as from a four-year-old. It contains the same fibrine and the meat juices are the same, though, of course, the fiber is more tender than that of the ox, without being less nutritious. In fact, it is a question not yet settled at just what age meat of any kind begins to lose ground, in point of nutritiousness, by reason of having too much age, becoming, as it is quite liable to, too hard in its fiber to be easily acted upon by the human stomach.

Digestion and assimilation in the young are more active than in older animals. Hence it is fair to suppose that the young steer will get more good from a given amount of food than those that are somewhat aged, unless they happen to have escaped all disturbances of digestion, and not every animal escapes these. We cannot get the size necessary for turning off at a young age except we breed for it, and nothing less than breeding from animals possessing a good deal of merit—pronounced merit on one side at least—will give us the required material for feeding up as long yearlings. It is not only that we require good breeding to give size, but in no less degree to spread the hips and rump, spring the long ribs well out at the upper setting on, sending them well down, forming the basis for a straight lower line; then upon this frame formation placing a thick packing of that peculiarly well-marbled flesh that never fails to bring the top price of the market. "WESTERN."

OUR ANIMAL PORTRAITS.

SHORT-HORN BULL, PRINCE OF HALNABY.

NEXT to Charles and Robert Colling, Mr. Bates, and the Booths, father and sons, have been the greatest and most widely-known improvers of Short-horn cattle, each of these having established several tribes of preëminent merit, which have won numerous prizes. At Figure 348 we present to our readers a fine likeness of the Short-horn bull, Prince of Halnaby, winner of the first prize in the "Aged Class" at the last show of the Royal Agricultural Society at Norwich. He is described as a splendid beast—"admirably formed in front, and very good over the crops," says the (London) Live Stock Journal, from which our cut has been re-engraved, "but he lacks substance slightly." He has, however, choice quality and character, and is very strong in Booth blood.



SHORTHORN BULL PRINCE OF HALNABY. Fig. 348. Re-engraved from the London Live Stock Journal.

SOUTH DOWN SHEEP AHEAD.

SOUTH DOWN sheep suit me better than any others. Merinos are good for the big ranchmen who have room for 500 or more, but most of us want smaller flocks, of say, 30 to 40. For such purposes the South Down suits me. A farmer can build up a good stock of sheep by getting 30 or 40 ewes—what we call Missouri natives. They are a mixture of all kinds generally after the old Saxon pattern: no wool on the legs or belly, average clip 3½ pounds per head. Take such ewes and run them two years with a good South Down ram. Then sell or butcher all the old stock and such of the young as do not suit the fancy. Then get a new buck, and the lambs from such a flock will be as good for wool or mutton as full-bloods J. E. B.

Johnson Co., Kans.

HEREFORDS suit me well. For general purposes in this country they are hard to beat. They are hardy, easily fattened, fair milkers and they make the best of oxen, being smart and always well mated. The raising of good oxen is a profitable business in these parts.

Hancock Co., Me. F. K. L.

My sheep are doing well, and I have already some young lambs. This is a little premature, but I shall try and make even them pay well. I am much pleased with the Hampshire-Down ram, though a late lamb last year and not by any means fat, he weighs over 170 pounds, and is very nicely proportioned and very active. J. S. W.

Lockport, N. Y.

Entomological.

THE ELM-LEAF BEETLE.

PROF. A. J. COOK.

THE Elm-leaf Beetle—Galeruca xanthomelæna (Schrank), like most of our dreaded insect pests, is an imported nuisance. It, like the potato beetle, and grape flea beetle, belongs to the Chrysomelidæ, or leaf-eating family of beetles. These are all well named, as they are voracious feeders on foliage both in the grub or larval, as well as in the imago stages. This Elm Beetle has done great damage of late in the East from New England to Virginia. As yet we are not troubled with it in the West, but we are in imminent danger of an attack at any time. The insect has been described by many of our entomologists. In the report of the Commissioner of Agriculture for 1883, the government entomologist gives a very full, illustrated article, which all practically interested would do well to procure and read. See page 578.

The small yellow beetle striped with black lays its yellow eggs in groups of from five to twenty on the underside of the leaves. In a week these hatch, when the grubs which are yellow and black, the yellow increasing with age, commence to feed upon the leaves, which they soon skeletonize, as they do not eat the veins. They feed for two weeks during which time they molt, or shed their skins, four times. After the lapse of the two weeks, the full-grown grub passes to the ground, and pupates under some kindly sheltering board or clod. It comes forth from the bright-colored pupa state in about one week. Like the Colorado Beetle the imago, or mature beetle, also feeds upon the leaves, but eats much less than does the grub from which it came. We see from the above that it requires but four weeks for these insects to mature. This gives chance for three broods a season. Thus where these insects are very common they keep the trees stripped of their leaves, and unless checked in their work will soon destroy the trees.

In the illustration, Fig 347, p. 578, the leaves are shown as eaten by the beetle. The eggs are deposited in an upright position upon the under side of the leaves as at *a*. A group of these eggs is shown at *c*, magnified. The perfect beetle is shown at *e*, magnified at *k*.

The best remedy for these devastators is to use the arsenites in water—about one pound to 100 gallons. Others would add about six quarts of flour, which causes the poison to adhere to the leaves better in case of a hard rain. For small trees a Whitman Fountain Pump would be all that is needed. If one has many or large trees to treat, it would be better to procure a large, powerful force pump. Another remedy has been suggested, which from the habits of the insect must succeed, but is faulty as it only locks the door after a part of the goods are stolen. That is to encircle the base of the tree with a close-fitting trough so guarded by a smooth shelving piece of tin on the outside, that as the larvæ descend they would be unable to pass down, and so none would succeed in developing to full maturity. As suggested, this does not kill till the insects have done their mischief and so only does good in preventing future damage.

Law.

THIS YEAR'S STATE LEGISLATION.

OWING to the evils of over-legislation, in two-thirds of the States now the Legislatures meet only once in two years, so that sessions were held in only one-third of the States this year. The only way of lessening the evils of ill-regulated and pernicious legislation appears to be to restrict the opportunities for legislation of any kind. The following are, in brief, the most important State laws passed during the year: Labor arbitration tribunals have been established in Connecticut, Iowa, Kansas, New York and Massachusetts. Massachusetts has ordered weekly payments of wages by corporations. Rhode Island requires that employer and employé must give like notice of stopping work or each must otherwise forfeit wages. New Hampshire prohibits intermeddling of strikers with other laborers. New York forbids the sale of bogus butter under a false name. Ohio ordains that genuine butter only shall be used in charitable and penal institutions in the State, and dealers in bogus butter must designate it as imitation butter and are forbidden to sell it to persons asking for genuine butter. Anti-oleo laws have also been passed by Maryland, New Hampshire, New Jersey and Iowa. New Hampshire has regulated the sale of veal. Iowa has prohibited traffic in diseased hogs. Ohio prohibits deception in dealings in grain. Michigan prohibits the adulteration of honey, and, like Maryland and Kentucky, regulates the sale of fertilizers. Kentucky imposes a heavy tax on venders of lightning-rods. Kansas punishes by fine and treble damages deception in the sale of shrubs, plants and trees. Ohio punishes hotels and boarding house "beats" with fine or imprisonment. Michigan authorizes the incorporation of mutual insurance companies to insure against losses by cyclones and wind storms. Connecticut permits corporations to distribute a part of their profits among their employés. Mississippi makes telegraph companies liable to fine as well as damages for unreasonable failure to deliver messages. Connecticut makes it a crime for officers of any public or private corporation to accept commissions or gratuities upon business of such corporation. New Hampshire forbids savings banks to act as agents for other corporations or to receive any inducement to make loans.

Georgia, Kentucky, Ohio, New Jersey, and Virginia regulate the sale of drugs. Michigan and Virginia regulate the practice of medicine, and Georgia the practice of dentistry. Iowa has made her prohibitory law stronger and more stringent. Rhode Island forbids the sale of intoxicating liquors except for artistic, mechanical, or medicinal purposes. Ohio levies a direct tax on the proceeds of the sale of liquors. Georgia, Mississippi and Maryland have passed local option laws. Congress, Connecticut and Iowa have provided for instruction in the public schools under their jurisdiction as to the effects of alcoholic drinks on the human system. Massachusetts declares women eligible as overseers of the poor; and New York permits them to vote at school meetings. Connecticut, Michigan and New York regulate the employment of children, forbidding excessive work, or work in unwholesome places. Georgia provides for industrial education for school children. Maryland, Massachusetts and New Hampshire forbid the sale of tobacco to minors. The sale of adulterated sweets is forbidden in many other States. In every State Legislature as well as in Congress there is a vast disproportion between the number of bills introduced and of those passed, and between those of a private and public nature.

LATE DECISIONS.

MEANING OF HOUSEHOLD GOODS.—The Supreme Court of Kansas held in a recent case of Smith *vs.* Findley, that the phrase "household goods" used in a contract of carriage did not include potatoes, bacon, vinegar and salt, a portion of which was sold or offered for sale after the arrival of the goods at their destination.

PATENT—RECOVERY OF LICENSE FEE—INVALIDITY.—A licensee who has paid a license fee for the use of a patent privilege of which he has had the benefit cannot maintain an action to recover back the amount so paid upon the ground of the invalidity of the patent, according to the decision of the Maryland Court of Appeals in the case of Schwarzenbach vs. Odorless Excavating Company.

PURCHASE OF MACHINE—BREACH OF WARRANTY.—Where a purchaser of a machine used it for eight months and then gave his notes for the full price, the Maryland Court of Appeals held (Adler vs. The Robert Portner Brewing Company) that he could not afterward in good faith set up the defense of a breach of warranty to an action for the price. The court took the view that the purchaser had ample opportunity to ascertain whether or not there had been a breach of warranty.

SALE OF OLEOMARGARINE. — INDICTMENT. —EVIDENCE.— Upon an indictment for the selling or offering for sale of oleomargarine unmarked, the Supreme Court of Oregon lately held (State *vs.* Dunbar) that it was not necessary to prove any overt act of offering it for sale in an unidentified condition, but that the mere possession of it and placing it in a store with other articles held for sale were sufficient to warrant a jury in finding that the same was offered for sale.

PROHIBITORY LIQUOR LAWS—STATUS OF BUYER.—In the case of Wakeman vs. Chambers the Supreme Court of Iowa held that the statute of the State against the sale of intoxicating liquors does not make the buyer an abettor or *particeps criminis*. The court said: "Under the statute the sale or keeping with intent to sell is a public offence, because the statute so declares. The statuary crime is bounded by the statute creating it, and the statute operates on and has force and effect against the persons therein named and no others. As the prohibitory statute does not provide that the purchaser is guilty of any crime, it seems to us this fact practically ends the inquiry."

AGREEMENT TO USE LANDS FOR ADVERTISING PURPOSES. —The nature of an agreement selling the right to use fences and buildings on certain lands for advertising purposes was considered by the Supreme Court of Illinois, in the case of Willoughby et al. vs Lawrence et al., where it was held that the right conveyed by such an agreement was more than a mere revocable license and was a right of way in gross which a court of equity would protect as an equitable charge on the lands. The court further held that the record of such an instrument would affect subsequent purchaser. and creditors with notice thereof.

CONVEYANCE.—AGREEMENT TO BUILD.—FORFEITURE.—WAIVER.—The owner of certain land, wishing to develop it by building, executes a conveyance of it to a builder, taking from the latter a covenant to build upon the land, the owner making advances for that purpose upon the condition that in case the buildings were not completed by a specified time the property would be forfeited, and the owner might re-enter and take possession. The builder did not complete the buildings by the date fixed, but the owner nevertheless went on making advances, and afterward entered upon and took possession of the land. The right of the owner to do this was disputed by the other creditors of the builder, and their contention has been sustained by the English Court of Appeals, which holds (Platt *vs.* Parker) that by continuing to make advances after the builder's default the owner had waived the forfeiture.

What Others Say.

TO MAKE THE BEST BUTTER.—To produce the best butter every condition must be the best, but Mr. Gould, writing for the Press, is convinced that the average quality of the butter product could be greatly improved if heed were given to four definite rules.

First. Arrange to have some fresh milkers at every season. If the cows all come in about the same time, after a few months the entire yield loses its new milk virtue at once, and the butter is not possessed of that delicate aroma and "grain" that made it a luxury earlier in the season.

Second. Churn often, especially in the Summer. In open-pan setting the cream is usually acid enough when removed from the milk to put into the churn at once. Special

ly is this the case when the cream is allowed to remain upon the milk until the latter is thick; the heat and air having promoted ripening, the cream is at its best estate. By no means let cream remain u churned until bitter water or lactic acid whey forms in the bottom of the cream jars.

Third. Churn as cool as possible (the cream does not need to be over 58° in the Summer), and churn in revolving churns. The action of churning is not to "smash and gather," but by a more gentle agitation to collect the serum of the cream together, and leave the butter fats free to unite. The bad behavior of cream in the Summer may, as a rule, be traced to over-sour cream or too violent beating in the churn, or both.

Fourth. Save the grain. The best butter is that which has had the least done for it all the way through. The aim now of the butter maker should be to avoid the salvey, greasy condition of store butter, which has had all grain and life and flavor washed out of it in the churn or mashed out of it in subsequent working over. Many fail just here. The object is to get solid grains of butter, and this is secured with cold water and salt. When the buttermilk shows, the churn should be stopped and a gallon of cold water and an ounce of salt be added for each supposed six or seven pounds of butter. This hardens the globules, and the salt, in the form of weak brine, takes the place of the buttermilk as a coating or film to the globules. If we agitate the mass slightly, and then let it stand a few moments, the butter grains will all rise above the surface of the fluid. If the buttermilk and brine are drawn out from beneath, without disturbing the butter above, then more weak brine added, we free the butter from buttermilk, and have not disturbed or injured the grain. Now add the salt to this very wet butter. Let it stand for the salt to dissolve and work over at once. Then *pack away from the air*, and we get very nearly perfect butter in August.

CHANGES IN PREPARING FLAX.—The simultaneous introduction of a new process for steeping and a new machine for preparing flax will probably cause a great increase in the cultivation of the crop in England as well as in Ireland. Mr. Henly, a gentleman who was formerly an owner of large flax works in the south of England, has patented a new process of steeping, very much simpler and cheaper than the old process, superseding altogether the use of steam for heating the water in the pits He intends shortly to introduce his system in the United States, in which he has resided during a considerable portion of his life. At present he is starting a company n London to work his patent, chiefly by charging a yearly sum for its use. The new machine for preparing flax is a French one, just brought to Ireland. It allows of almost completely dispensing with skilled labor, and is said to do its work splendidly. The makers will not supply one for under $1,000 and they say they cannot make the machines fast enough.

AGRICULTURE IN IRELAND.—The full text of the Irish Agricultural Statistics for 1885 came out at the end of July. They give a very encouraging presentment of Irish agriculture. There is an increase in the area of land under cultivated crops, as compared with that of 1884, to the extent of 84,383 acres, pasture being decreased by 95,756 acres. There are increased areas of 18,922 acres under flax and 72,281 acres under "meadow" (grass for hay) and clover and decreases of 4,716 acres under cereals and pulse crops and 2,104 acres under green crops (chiefly roots). There are also increases in all classes of live stock except pigs. Poultry, asses and goats are included in the statistics, as well as horses, mules, cattle and sheep. The yield of crops in Ireland in 1885 was highly satisfactory, but prices were low. The fact is that the soil and climate of Ireland, on the whole are not surpassed for general farming, arable and pastural together by those of any country in the world.

SPICE.

WESTERN farmers may learn at least one thing from Eastern farmers. It's to cut and stack the corn as soon as it is ripe—"ripe," that is the word. Prof. Sanborn of Missouri has done good work in forcibly pointing out to the farmers of his State that the corn fodder wasted by allowing the corn to stand in the hill until it is as dry as parchment, is enough to winter the stock.....

"WHY," remarked a Western man to the Editor of the Live-Stock Journal, "many Western farmers raise enough to make an Eastern farmer rich." .....

THE facts regarding the wastes of our Western farmers are indeed startling. The products of the soil, in many parts, are so abundant and low that they seem hardly worth saving. But, as the Journal says, the time is near, very near at hand when all these wastes *will have to be stopped*. Hard times like the present are efficient teachers of economy. ....

THE R. N.-Y., which was the first journal seriously and persistently to press upon the farming public the necessity of frowning upon the sale of intoxicating liquors at agricultural fairs, has now many supporters among the better class of journals throughout the country. The National Live Stock Journal says that experience has proven that there is no benefit in the sale of spirituous liquors on the grounds of our agricultural fairs, while the evils resulting therefrom are legion.....

IN the category of spirituous liquors must be included not only whisky and brandy, but even wine and beer. Any beverage that contains alcohol; any drink that, while it quenches thirst, overheats bad blood and furnishes the rowdy, either individually or collectively, with the fire that rouses into activity the uglier elements of human nature, should be absolutely prohibited, even though such prohibition is attended by a loss of revenue to the several associations ....

BETTER late than never. Now let all good journals join us in our opposition to horse-racing at agricultural fairs, and we may hope that these exhibitions may accomplish unmixed good..... .....

MR. STEWART thinks that three pecks of seed-wheat drilled in are equal to six pecks sown broadcast, and it is equally true that the excess of the yield of a 10-acre drilled crop over a broadcast one may very easily pay the whole cost of a drill each year.....

NEITHER delude yourself nor allow your wife to delude herself that an outing at this season will not do you both good, says the Orange Co. Farmer.....

PATRONS of agriculture will note the disrepancy between the prizes offered for a horse that will trot in less than 2.20, and a cow that is a credit to her breeder, remarks the same journal. The races get more money prizes than all the rest of the show, and they ruin the usefulness of the society which gives them..... ... .

AN examination of high-class butter offered for sale, says the Cultivator, shows that those specimens made by the centrifugal process are soft during the heated term, even when kept in refrigerators that harden the lumps of butter made in the ordinary way. We are convinced that the choicest butter cannot be produced where the milk or cream is subject to such violent motion as it receives in the centrifugal machine..... ..... .

CHICKENS never worry about their crops, says Puck. A good enough joke were it not that the chickens' crops are often bound.....

THE following table from the Milling World shows the prices of certain farm products in 1816 and 1886:

	1816	1886.
Wheat, per bushel	$0 .44	$0 .99
Oats, " "	.15	.41
Corn, " "	.20	.46
Barley, " "	.25	.80
Butter, " pound	.12	.32
Cheese, " "	.6	.10
Eggs, " dozen	.5	.12
Cows, " head	15 00	50.00
Hay, " ton	5.00	17.00
Straw, " "	4.00	14.00
Sheep, " head	.75	2.00
Farm labor, per month	8.00	15.00

THE Times says that oleomargarine is now a legalized product, and butter makers have a fair race and a clear course before them to keep ahead of it. If they are beaten it is their own fault ....

VICK'S Magazine says that sulphide of potash has proved all that has been claimed for it by the English press as a destroyer of mildew on roses, chrysanthemums, and some other greenhouse plants. A quarter of an ounce dissolved in a gallon of water and thrown on the affected foliage with a fine-rosed syringe will wholly destroy the fungus, and the leaves will not be injured..... .....

SELECT your seed corn by marking the plants which please you best.....

SOME of the most successful dairymen in the great prairie States are strong advocates of feeding cows more or less in the Summer on crops cut and carried to them in their stalls, says Ed. Cheever in the New England Farmer. They find that they can keep double the stock that farmers usually keep who pasture exclusively... .....

THEY also learn that there is a great saving of manure, and of fencing too, if the system is extensively adopted. They learn, too, that their cows give a more uniform flow through the season and retain their flesh better. Their cows are never starved in a dry period, nor bloated when the feed is over-luxuriant, nor are they pestered by flies as when running in the pastures in hot weather..... .....

THIS of course presumes that ample preparation is made for a succession of field crops through the entire Summer, and good comfortable stables, sheds or yards for the cows to eat and lie in.....

MR. CHEEVER has never been an advocate of indiscriminate full soiling, but would recommend such a system for each farmer as will best fit his own particular case. If one has a good pasture it would certainly be the hight of folly not to use it, and if one has pasture land that is too rocky to cultivate it should be kept in pasture or wood permanently.....

THE ELM LEAF BEETLE. Fig. 347. (See page 577.)

Everywhere.

TRANSCONTINENTAL LETTERS.-LXIII

MARY-WAGER FISHER.

The Petaluma and Santa Rosa Valleys; Petaluma; Sonoma County; a servant's gossip; a new mode of grafting.

ON March 16 we set out for our trip into the Petaluma and Santa Rosa Valleys, on the line of the San Francisco and Northern Pacific R. R., which extends as far north as Cloverdale—84½ miles from San Francisco. One leaves San Francisco by ferry to Tiburon, then by rail to San Rafael, where the road diverges from the Coast road, but keeps much the general trend of that route. The country through which it passes, however, is of quite a different character—one of the most beautiful valleys I have seen in the State, and lying in Sonoma County, which is very well known as being one of the best counties, and its taxes are lower than those of any county in the State—about $1.30 on the $100. The county has a population of 30,000, and about 400,000 acres of bottom and valley lands. In none of these valleys is there public land of any value to be taken up; but there is much unimproved land which can be bought at from $10 to $50 the acre. Improved farms are held at figures varying from $80 to $400, possibly even higher. The car we rode in was the first one I have noticed as having been made in the State—at Donahue, a manufacturing place on the Petaluma Creek, which is rather an estuary at that point, and navigable from Petaluma to the San Francisco Bay, a distance of 30 miles. At Santa Rosa, 35 miles north of Petaluma, there is a divide, the streams running into the sea, and this divide defines the boundary of the two valleys, the part from Santa Rosa to Cloverdale, the terminus of the road, being the finest. The entire valley is very new, the White and Black Oak groves in it being about 150 years old, and a man in the car said that Sir Francis Drake sailed up it as far as Cloverdale.

From Tiburon to San Rafael, nine miles, the country is deeply rolling, a billowy country, and we passed through four tunnels of considerable length. Great bunches of mistletoe—a dark green parasitic growth, flourishing as if grafted on the trees, sometimes three to four feet in diameter—green moss and the dull green moss or lichen depending from the branches, gave the oaks a very picturesque appearance. The valley is from eight to fifteen miles in width. Petaluma has a population of 4,000, and is quite a shipping point. It is a noted market also for Norman horses, and for its live-stock fairs. It is a pretty town—less so than Santa Rosa—but I doubt if there is an ugly town in California. The instinct for beautiful surroundings is universal—well kept grass, trees, flowers, and buildings in excellent repair. Sonoma County ranks next to Marin (pronounced *Marree*) for its dairy product, and next to that are its vineyards. The people seem to have gone daft in regard to grape-culture. One wonders what they are to do with so many grapes. One of the tributary valleys, 25 miles long and called Sonoma, has 7,000 acres in vines. The soil is volcanic and especially fitted for the growth of light-red wine grapes. In Petaluma there is much dairying and grazing. The fences are of boards or rails; the farm buildings of a most attractive character, many of them charming villas; and the whole country, improved and unimproved land, lay like a garden on that leafing, blossoming spring day.

On the first day we went as far as Santa Rosa, where we stopped for the night, finding an excellent hotel: but it was too cool for us to sit in our parlor without a fire, and I asked the chambermaid to build one. She was past middle-age, a good looking, large-eared, Scotch-Irish woman, and as she sat on the floor, piling the wood on and waiting to see if it would burn all right, she began to talk about "back East," saying she was from Philadelphia. When I told her that was my home, she became especially voluble, and declared that it was "the nicest and cleanest place in the world." "I always told the people here," she went on, "that the houses there were kept as clane on the outside as they are inside here, and, Oh! it's very different living at service here where there's no rale ladies and gentlemen as there is there. Everybody here came here poor and to make money, and it is just like workin' for another servant who has more money than has you. They may be good and kind, but they ain't your born ladies and gentlemen. Why, I lived sixteen years in a banker's family in Philadelphia, and it was like home to me. Such a lovely home, it was always a pleasure to go through it and dust and clane it. I came out here because my brothers and my sister came, and now I would go back, but my sister is buried here, and I can't lave her grave behind me. But, they do say that all the nice, clane Quakers have left Philadelphia," and she seemed glad to have me assure her such was not the case.

On the following morning a heavy rain was falling, which, however, had the grace to stop in time to give me an hour for walking about town, pretty all over with some very beautiful cottages, a $100,000 court-house, a fine public hall and in the hotel there were gas and water pipes. The hotel, like many another on this coast, was so constructed that the main stairway to the second floor opened directly from the office and smoking room, so that the halls and corridors were filled with the smell of the abominable cigar. Oleander and palm trees flourish in the open air, but the acacias that were past bloom in Oakland, were here just beginning to show their yellow beauty.

Anaximander paddled out in the rain to accept the invitation of a nurseryman to visit his nursery, which he found of unusual interest. The nurseryman, a New Englander, with clear-cut, attractive features, had nearly a million seedling roses. He also exhibited a method of grafting in vogue here, which is different from any we have seen in the East, and worth knowing about. An apple-seed is planted, and when the young sapling is one year old it is dug up, and the tap-root is cut off to within about two inches from where the top begins; the top is then cut off and budded, and the doubly shorn little tree is planted; this makes one tree. The remainder of the tap-root is then cut into two or three lengths, according to its size and length, and on to these pieces of root is grafted a cutting, both root and twig being cut off aslant, with a slanting gash in each, then pressed together, waxed and planted in the ground with one bud above the surface. In this way one apple seed produces from three to four trees. The population of Santa Rosa is placed at 6,000.

RURAL SPECIAL REPORTS.

Illinois.

ROCKFORD, Winnebago Co., Aug. 16.—We have had no rain to lay the dust since May 20.

Rye was a heavy crop. Winter wheat good, but little sown. Oats are being thrashed, and are much better hereabouts than was expected. Mine weighed out about 60 bushels per acre. Corn is suffering badly. Many pieces will not be worth husking. Potatoes a very short crop; rain would injure them by causing them to sprout, being so nearly matured. Apples a light crop of inferior quality. Oats are selling at 29 cents; rye, 50 cents; potatoes, 75 cents to $1. Garden truck of all kinds high. Everybody feeding cattle either hay or green corn. S. H.

Indiana.

INDIANAPOLIS, Marion Co., Aug 18.—Reports relating to the corn crop received here continue to support the view that Indiana will gather more than 100,000,000 bushels this Fall. Last year the crop amounted to 132,000,000 bushels; in 1884 it was 105,000,000, and in 1883 96,000,000. "It is too early to guess what it will be this year," said Secretary Heron, of the Agricultural Board, this morning; "but all reports are favorable to a great crop, except from a few northern counties, where the rain did not fall early enough to benefit the growing fields." Manager Henderson, of the Indianapolis, Bloomington and Western Road, has just returned from a trip over his lines, and he gives it as his view that the corn yield will be as great in Indiana and Ohio, or nearly so, this year as last. In Illinois there are some fields which the drought has badly damaged. M. L.

Maryland.

WESTOVER, Somerset Co., Aug. 14.—Wheat and oats are about all thrashed, and much of both is marketed; prices low; wheat from 60 cents to 90 cents in the Baltimore market. Tomatoes are about done. The price has dropped too low for shipment. Muskmelons are being shipped at fair prices. Some of our farmers are plowing wheat land. D. C. S.

Montana.

FORT BENTON, Choteau Co., Aug. 17.—Great prairie fires have lately been raging in this section. The whole country north of the Missouri is said to be burned, with only now and then a small oasis in the blackened waste. On the south side of the river, and in the Little Rockies and Bear's Paw, great damage has been done. The ranges below the Musselshell and in the Red Water country will be almost wholly destroyed. On Wednesday three or four fires were raging in the vicinity of Fort Assiniboine, and every available man of the post was out fighting them. A fire in Bear's Paw threatened the destruction of the timber cut for the post, but after a hard fight it was saved. The driver of the Helena coach reports that a fire between the Lakes and Twenty-eight Mile Spring has destroyed much of the valuable portion of that range. As far as the eye could see was a black expanse of burned and devastated country. Much more damage is feared unless rain comes soon. M. R.

New York.

UTICA, Oneida Co., Aug 23.—BUTTER—Sales yesterday were 150 packages with really fine quality in good demand and bringing from 18 to 20 cents readily, mostly the latter price. The lesser grades are not so salable and bring anywhere from 16 cents up. On the Board there were 80 packages bought at 20 cents of prime butter. At Little Falls 20 packages sold at 19 to 20 cents. The market is firm and promises a trifle easier movement. CHEESE—The New York market decline has had its effect. Other sales on the Board this week were smaller by 3,000 boxes nearly, and half-a-cent lower. Notwithstanding, the sales were quick, and there was but little holding back, although salesmen are inclined to believe in a higher turn. Sales were: 130 boxes at 8 cents; 5,005 boxes at 8¼ cents; 808 boxes at 8⅜ cents; 1,206 boxes at 8½ cents; 1,982 boxes at 8⅝ cents; 733 boxes at 8¾ cents; 150 boxes at 8⅞ cents; 90 boxes at private terms, and 486 boxes on commision; total, 10,590 boxes, ruling price 8¼ cents. The sales at Little Falls were 6,560 boxes at 8¼ cents. HOPS—There is still no market and the situation has not materially changed. The poles are black, with here and there a few green tops showing, and they are covered with lice. The few yards that have survived in any kind of condition will prove a bonanza. There is a conviction that the situation has not been overdrawn and that brewers will have to pay large prices. The State Board of Health will need to make another beer adulteration examination if the the foreign crops are short or prices stringent in the West. There is no activity here, only waiting. No sales have been reported in this market. R. H.

Ohio.

PORTAGE Co., Aug. 14.—The drought here is terrible. Wheat and oats not over one-third of a crop. Corn and hay the same. Potatoes very small in general. C. S.

THE FARMER'S CLUB

ANSWERS TO CORRESPONDENTS.

[Every query must be accompanied by the name and address of the writer to insure attention. Before asking a question, please see if it is not answered in our advertising columns. Ask only a few questions at one time. Put questions on a separate piece of paper.]

AN AILING MARE.

C. C. Warrenton, N. C.—A mare, though a hearty eater, is all out of sorts. She gets ten large ears of corn and all the fodder she will eat three times a day, yet she is poor all the time and has "growling" of the bowels. About a year ago a piece of wood cut a gash about three inches long around the upper part of the left hind pastern joint. This injury caused not only a swelling all round the joint, but the whole leg to the hock joint became swollen. When not worked hard she seems all right; but hard work, like fast driving, makes her weak in the leg. At times it swells up and breaks out at the sore, emitting a great deal of pus, which is often quite lumpy, and after a while the swelling goes down and the wound heals over. What is the matter?

ANSWERED BY F. L. KILBORN.

Judging from the very brief and incomplete description, the present condition of the mare may be due to any one of several causes. To enable us to give a very satisfactory answer it will be necessary for us to know the following points: The age of the mare. The condition of her teeth. Are they all sound and perfect, with none overgrown or displaced so as to cut and injure the gums? Is the food well chewed and swallowed without difficulty? Is there any unnatural odor to the breath or from the opened mouth? How long after feeding do the "growlings" occur, or do they occur at all times of the day or only before feeding? Are there any symptoms of intestinal worms, as their passage with the dung; the passage of mucus with the feces, or a rugged ring of dried mucus around the anus; rubbing of the tail near the root; occasionally elevating the upper lip and rubbing against any cool object within reach? Are the bowels and kidneys regular and apparently normal? Any nasal discharge or cough?

HOW TO PROPAGATE THE SHAFFER.

A Reader, Charlevoix, Mich.—How should the Shaffer Raspberry be propagated?

ANS.—When we first began to propagate the Shaffer we often failed. We have found that with us it must be layered *very early*. We layer ours before the berries are all picked—say July 15th; then we are sure of the tips taking root. We plow, re-plow, and cultivate between the rows until the ground is in fine condition; then open a furrow close to the row on each side. Two boys, one on each side, bend down the tall branches and hold the tips in place, pointing down, well spread out until covered by a stronger person with a shovel. All other raspberry tips are put in with a garden trowel. With us the Shaffer grows so high and so upright it is difficult to reach up and put it in in that way, and then the spring of the canes is apt to draw out the tips. If covered when piled in bunches by careless boys the tips will rot, but never when properly spread.

WEAKNESS IN THE HIND-QUARTERS OF PIGS.

J. T., Numa, Kan.—A five-months'-old pig has nearly lost the use of its hind legs. It began to grow weak there a month ago, and has kept on getting worse all the time, until now it can't walk or stand alone. When held up on its feet it trembles, and falls over when unsupported. It eats and drinks in a hearty way. What is the matter?

ANS.—Weakness in the hind legs of pigs is due to several causes. It is often caused by worms in the kidneys. Then the pigs drag their hind-quarters. As a remedy give a tablespoonful of turpentine diluted with milk. One or two doses a day for two days will be enough. Sometimes the weakness is caused by founder, generally due to eating too much corn. In such cases change the food to wheat middlings or oatmeal. Immersion in water, as hot as the animal can bear, will help. Keep it in for 20 to 30 minutes, and then rub it well, especially on the legs. Keep the head out of the water. A tablespoonful of sulphur should be mixed with its food daily for a week, and it should have all the charcoal it will eat. Weakness in the back and hind legs is also sometimes caused by inflammation of the spinal membrane, which produces a nervous weakness or partial paralysis. In such a case apply turpentine or mustard paste to the loins, and give a tablespoonful of linseed oil.

FERTILIZER QUERIES.

G. M. W., Port Stanley, Can.—1. Will ground bone, dried blood and muriate of potash make a complete fertilizer for wheat? 2. What is the probable cost per pound of each? 3. In what proportion should they be mixed? 4. How much should be sown to the acre, on land that was manured for corn, followed by barley this season? Soil a sandy loam well under drained.

ANS.—1. Yes. 2. The prices vary according to the grade. It is best to estimate the cost by the per cent. of plant food. For instance, if bone contains 20 per cent. of phosphoric acid, we should have 20 pounds to the hundred or 400 to the ton, which at seven cents the pound would make it worth $28. Then raw bone would contain several per cent. of nitrogen. If it contained two per cent. this would give 40 pounds to the ton, which at 17 cents the pound would make $6.80. Add this to $28 and we have the value per ton, viz: $34.80. In the same way we may estimate the value of blood and potash. Potash as muriate is worth about 4¼ cents at wholesale; the nitrogen of blood 17 cents. 3. For wheat three per cent nitrogen, 12 per cent. phosphoic acid and three per cent. of potash. 4. It is impossible for us to say how much should be used per acre, since our friend does not state whether the land is rich or poor or how much manure was used for corn. According to the fertility of the soil we should use from 400 to 1000 pounds per acre.

ROT IN TOMATOES.

O. H. B., Hutchison, Ky.—What causes tomatoes to rot upon the vines before maturing, and is there any way to prevent it?

ANS.—The rot is caused by a fungus, more prevalent in some than in other seasons, and more partial to some than to other varieties—the Acme for instance. The tomato worm also causes rot. These worms are easily found by their copious droppings, and destroyed. We have never heard of any remedy for the rot caused by fungi.

Miscellaneous.

F. M. V., Stockton, N. Y.—1. What is a description of the old Meshannock Potato? 2. How far apart should different varieties of corn be planted to avoid danger of mixing?

ANS.—1. The Mercer, Chenango and Meshannock are the same. The tubers average of fair size, are longer than broad, somewhat flattened. Eyes sunken. Color purple and white. Flesh often purple in parts. The quality is dry and good. It was once thought to be the best potato in cultivation. It is now "run out," liable to decay, etc. It is an early variety, as we remember. 2. Half a mile at least.

A. K. S., Richmond, Va.—Who makes caponizing instruments? When the work is skilfully done and proper attention given, does it pay?

ANS.—W. H. Wigmore, 107 So. 8th Street, Philadelphia, Pa. It not only lessens the time of maturity and increases the weight of the fowl, but it also improves the quality of the flesh. Capons sell for about one-third more than ordinary fowls. The practice of caponizing is cruel, however, and we do not recommend it on that account.

F. C., Leominster, Mass.—1. What are the best varieties of small fruits for home market in this section? 2. Should the shad-bush and evergreens be transplanted this Fall or next Spring?

ANS.—1. The first question has already been answered. 2. The shad-bush may be transplanted this Fall or next Spring, as preferred. The evergreens should be transplanted next Spring.

H. G., Hamburg, Conn.—If I can't get wood ashes for an asparagus bed, what form of potash would be the best to apply and how much per acre should be used?

ANS.—Kainit would be our choice. Use two bags to the acre—four if you can afford it. We should also use raw bone flour, two bags (400 pounds) to the acre.

F. C. W., Columbus, Ohio.—On page 500 in "Brevities," you say you like other wheat, better than the Diehl-Mediterranean for the Rural Farm. What varieties and why?

ANS.—For our light soil we prefer either Surprise, Fultzo-Clawson or Armstrong (Landreth).

W. C. J., Newark, Md.—A party has been taking orders hereabouts for a new strawberry—the Western Union—at $8 per 100. He says it is two weeks earlier than the Wilson and an enormous cropper. Is this story true?

ANS.—This is the first time we have heard of it.

F. B. G., Ypsilanti, Mich.—From Michigan we have heard several favorable reports as to the Diehl-Mediterranean. The Landreth and Martin's Amber are hardy and productive. Prof. Lazenby's late wheat report may help you. (Ohio Ex. Station, Columbus.) Probably D. M. Ferry & Co., of Detroit can supply them. We learn through Dr. Greenleaf who sold the firm seed raised from the Rural seed, that Samuel Wilson, Mechanicsville, Bucks Co., Pa. has the Surprise Wheat for sale. We should like to have our friend sow it in a small way.

E. C., No address.—1. No experiments or even trustworthy estimates have been made of the "average milk yield" of Jerseys, Devons and Ayrshires. The comparative yields would be, however, in the order Ayrshire, Jersey and Devon; but there is so much variation in the cows themselves and their conditions that it would be little more than guesswork to figure up an average yield for either breed. 2. Nothing is sold at this office except the RURAL NEW-YORKER.

J. M. B., Quebec, Can.—The potato you inquire about is the Harlequin, which was sent out years ago. Its foliage is variegated with yellow the same as the leaf you send. There are several other variegated varieties which have been tested at the Rural Grounds and reported upon in these columns. The variegated foliage is pretty and odd—that is all that can be said in their favor.

E. M. C., Embar, Wyo. T.—The flowers tied with a thread are Vaccaria vulgaris—Cornherb. It is a European annual which is becoming naturalized here. The loose heads are the Corn-cockle—Agrosteumma Githago. E. R. C. is entitled to the 50 cents.

J. H. A., New York City.—For information about the Elm Tree Beetle, see article in the Entomological department of this issue.

DISCUSSION.

SLUG-SHOT ON CABBAGE.

W. B., DAYTON, OHIO, in answer to the RURAL'S inquiry as to the safety of Slug-shot when used on cabbage: I consider it entirely safe and effective as a worm destroyer. In my neighborhood there are twenty or thirty persons who use it, and I have yet to hear of the first instance of harm caused by it. Immediately after applying the powder, we often cut the cabbage and use it for the table without the least mistrust, and have for the last three years so used it. It is also put on currants and gooseberries, and I would sooner eat a pie made from berries on which Slug-shot had been than one from those which the detestable worm had made its resting place.

Several instances can be given in this neighborhood of poisoning from the use of Paris-green on cabbage, and no one of good mental capacity ought to ever think of using such a deadly poison on anything intended for the stomach. I cannot see why the RURAL takes such exceptionally strong grounds against Slug-shot. It certainly has never given it a fair and impartial test.

R. N-Y.—We have never given it any test at all. We have never taken strong grounds against it further than to say that if any form of arsenic is the property poisonous to insect life, all who use it should know the fact.

L. E. B., LINCOLN, NEB.—In the RURAL of August 7, W. G. B., Monominee, Mich., asks why his hardy Russian apples are dying. You answer that you think it is due to late and rapid growth and consequent winter injury. This can hardly be possible for he says: "Many of the limbs of last year's growth, which are loaded with fruit"—they were alive this last Spring and set fruit—"are dead, and a good deal of this year's growth seems entirely dead." This Summer's growth could not have been injured by the last Winter.

The Central Russia apples will have no trouble in enduring an average Minnesota Winter. So far as tried, cions which have been top-worked and so forced into rapid and late growth show little or no winter injury. I think more probably the injury to the trees is due to blight, a trouble easily known from winter injury in that it affects and kills "this year's growth."

T. H. ROOD, PERRY, N. Y.—W. A. S., in the RURAL of August 14, asks where he can find Surprise Wheat. I raised 50 bushels this year; shall sow 25 or 30 bushels; the balance I will sell for $1 75 per bushel.

PETER E. HARVEY & BROS., COLUMBUS, N. J.—We have about 40 bushels of Surprise Wheat to sell at $1.50 per bushel. In 1882 we sowed 50 grains, received in the Free Seed Distribution. I suppose we have over 100 bushels.

Miscellaneous Advertising.

LIVER COMPLAINT
CURE GUARANTEED
Dyspepsia, Constipation, Indigestion, Jaundice, Sick Headache, all result from a diseased Liver, and are symptoms of Liver Complaint. To all suffering, I will send a Valuable Treatise, with full particulars for home treatment. FREE
Dr. H. C. TYLER, DEEP RIVER, CONN.

THE
RURAL NEW-YORKER.
A National Journal for Country and Suburban Homes.

Conducted by
ELBERT S. CARMAN.

Address
THE RURAL NEW-YORKER,
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32 PAGES.

NEXT week we issue a supplement of 16 pages, or 32 pages in all.

IT is impossible to open an English agricultural paper of the present time without finding an editorial on "Saved by Hope." English agriculture has about struck bottom, and all that keeps many farmers up is the hope that the times will change and that prices will improve so that farming will be once more profitable. The worst of it is that farmers have little besides hope to tempt them to look for better times. Competition is close, no new markets are apparent, and many of the old ones are changing. Truly the English farmers have reason to feel doubtful. Still hope is a better anchor than doubt. It is better to believe that good times are probable than to settle down to the conviction that nothing can improve. There have been depressions in agriculture before, yet farmers have lived happily and contentedly through them. The point to be held in mind is that the habits of economy that poor crops or low prices have forced upon us must not be entirely dropped when the times once begin to improve.

THERE is some talk of urging Congress to appoint a committee to investigate the condition of the Agricultural Colleges of the country. These colleges were established through an act of the General Government appropriating certain lands, the proceeds from the sale of which were to go to the support of the institutions. It is claimed that a thorough investigation would reveal the fact that the conditions accompanying this gift have never, except in the case of some half dozen colleges, been complied with, and the money has been clearly misappropriated. Such an investigation might work good results. There is certainly no reason in the world why thousands of dollars should be given to an institution for the express purpose of aiding agriculture and the mechanic arts, and then have the money spent for a totally different object. Why not stir up these colleges and find out just what they are doing. If they cannot increase in usefulness, cannot attract students and gain in dignity, why should they exist at all? There is no economy in paying out this sum every year in order that a few professors may draw comfortable salaries. It will be of more profit to the State to pay the entire expenses of the dozen or more students at an agricultural college like those of Massachusetts, Michigan, Kansas or Mississippi, and close up the home concern, if things are going to drag along in the future as they have in the past. On the whole, we hope Congress will take the matter up.

SOME THINGS THE FARMERS WANT.

THERE has just been a representative gathering of the farmers of the Northwest at St. Paul. In a set of lucid, definite resolutions they left no doubt of the things they need in the way of legislation. Of these, four at least are of national importance. They want the national oleomargarine law strictly enforced. A number of States have passed stringent laws in regard to this matter; but in not one of them have they been efficiently carried out. Now that the national authorities have the supervision of the manufacture and sale of the product, it should be much easier for the State authorities to enforce every provision of the State laws; and in those States which now have oleomargarine laws, not a pound of the concoction should be sold in contravention of the State or national laws. It is not now a question of whether the law is good or bad; it is on the statute book, and should be enforced.

They want Congress to appropriate $3,000,000 "to stamp out contagious diseases among domestic animals." When Congress appropriated $150,000 the other day for this purpose, what a cry of extravagance rose from some agricultural "authorities," and how bitterly they must denounce the assembled farmers of the Northwest for their outrageously unreasonable demands! The amount asked, however, is not a tithe of the losses inflicted on the nation every year by contagious diseases among our live stock.

They want speculation in food stuffs stopped as far as possible by the passage of State laws prohibiting gambling in the form of dealing in "futures." The injury done to American agriculture by this sort of speculation is a serious matter, not only to the farmers of the country, but to every class in it. The unscrupulous men who engage in this form of gambling have not only disorganized our home markets, but lost us a good deal of our foreign trade in agricultural products, by unduly raising prices here beyond what foreigners would pay; by creating abroad distrust of American fair-dealing; and by inducing purchasing foreign countries to seek elsewhere for their supplies, and thus stimulating production among our rivals. They are the leeches who add nothing to the wealth of the nation, but prey alike on producers and consumers. If legislation could suppress them, they should be suppressed at once.

They want a Secretary of Agriculture, with a seat in the Cabinet. We do not remember any large assemblage of farmers in any part of the country at which a resolution of this kind has failed to receive hearty indorsement. A considerable number of prominent agricultural writers, however, can see no advantage in such an elevation of the chief representative of the agriculture of the nation. It will not make spring wheat yield fifty bushels to the acre in Minnesota, or be as effective a remedy against the curculio as a flock of hens in a New England plum-patch. The farmers of the country, however, would undoubtedly be pleased with the measure; and the farmers of the country can, if they please, undoubtedly enforce their wishes in the matter.

MORE IMMIGRANTS.

IT looks as though England is approaching the limit of her population that can live happily upon her soil. There are, to be sure, countries more densely populated. In portions of China and Japan people are crowded so closely that an English garden would seem like a stock farm to them. No Englishman would care to live as the Japanese live. John Bull needs more room, and if he cannot get it at home he must seek it elsewhere. England, without Wales, contains 50,922 square miles. In 1881 she had a population of 24,608,391, or 480 to the square mile. Massachusetts seems crowded to us, yet she has but 228 persons per square mile. New York has 108, and New England 60. The surplus population of England must go somewhere, and it will come here if allowed to do so. It may go to Canada, and thus help to realize Beaconsfield's dream of an English wheat supply; but with the present state of Canada such an emigration is not to be expected. The Government of Mexico has made strong efforts to induce colonies to go to that country. These efforts will not be much of a success. Emigration is almost sure to follow distinct lines of latitude. The history of the attempted French colony in Paraguay shows how difficult it is to acclimate colonists in a warm country. In 1880 we had in this country 2,772,169 persons who were natives of Great Britain and Ireland. More than half of these were located in New York, New England and Pennsylvania. It is time to seriously consider this question of emigration. We have welcomed the world to our doors. Is it not about time to modify that welcome? Uncle Sam is no longer "rich enough to give us all a farm." The old gentleman should not injure himself by his gifts outside the family.

HELP NEEDED FOR THE SUPREME COURT.

THERE are now before the United States Supreme Court, on appeal from the United States Circuit and District Courts, several important patent cases in which the farmers of the country are interested. There are before the same august, but slow-moving body, a large number of other cases in which important private and public interests are involved. Prompt decision in such matters is of great public and private importance; but prompt decisions are impossible as the court is at present constituted, owing to its dilatory mode of work and the over-loaded condition of its docket. When it convened last October there were 851 cases on the docket. During the term 489 cases were added, while the court disposed of only 440. Thus after eight months' steady work the court adjourned with 49 cases more on its docket than it began with. Next Fall it will meet with a good three years' work before it, and the arrearage is increasing all the time. Isn't it a shame that suitors appealing to the highest tribunal in the land must wait three years for a hearing, however great an injustice may be caused by the delay? The people of the country are now paying unduly high prices for a large number of articles on account of the royalty exacted from the manufacturers by the owners of patents which the court will certainly declare invalid when it gets to them. Neither the royalties nor the excess of prices paid on account of them are recoverable, even though the court should declare the patents to have been worthless from the outset. The late Judge David Davis matured an admirable scheme for the relief of the court, and the Senate passed it twice; but the House on both occasions treated it with the neglect which it has of late accorded to many important measures originated in the other branch. This flagrant dereliction of duty should not be repeated. The interests of the country as well as common justice and decency demand a speedy decision in cases involving great public and private interests, and it is chiefly such cases that are appealed to the Supreme Court. Early in the next session, Congress should relieve this body from some of the burden of business which each succeeding term shows it cannot carry, and this is a good time for electors to remind their Representatives of the necessity for prompt action.

GRAIN BUYERS' ASSOCIATIONS.

WHILE fairly conducted associations of grain buyers may be of considerable advantage to the farmers of the section in which they operate, by securing lower storage and transportation rates and sharing the consequent advantages with their customers, such organizations guided by selfish and unscrupulous principles are a curse to the country they oppress. Such for years was the Millers' Association to the Northwest. For ten years this organization practically controlled the prices of wheat in the greater part of Minnesota and Dakota and greatly influenced them in adjoining sections. The agents at Minneapolis fixed the prices for buyers along every line of railroad tributary to that place, and telegraphed them every day to its agents operating among the farmers. Most of the large elevator companies were controlled by the Association and were compelled to stick to the prices made. The railroad companies which were interested in the scheme, gave the Association a rebate which gave it a great advantage over any outside buyer who might be rash enough to compete with it. Thus the farmers were compelled to sell their grain at the figures fixed by this "giant monopoly." Last year a new grain law promised relief to the farmers by allowing anybody and everybody to build warehouses and elevators where they pleased, and a multitude of small, independent elevators came into sharp competition with the large elevator companies. The Millers' Association in struggling against this competition incurred considerable loss, while the farmers, for the first time in a decade, enjoyed the benefits of fair competition among the buyers.

This year the Millers' Association will not keep its buyers in the field as formerly, but it expects to exercise influence on prices through a new association of buyers organized early this month, and including all the leading grain buyers in Minnesota and Dakota. Over 200 of these from all sections met at Minneapolis the other day, and bound themselves by ironclad rules to adhere to certain prices for grain, and pay no more. The plan adopted was that of the Iowa Grain Dealers' Association, which for four years has fixed the prices for grain in that State on the basis of the Chicago market, less the freight from the point of shipment to that market, and a liberal allowance of three cents per bushel for margins. The railroads allow a rebate of two cents per 100 pounds to the members of the association. This compels all buyers to join the organization, for outsiders not getting this rebate, could not compete with members. Recent legislation in Minnesota is very stringent in prohibiting such oppressive organizations, and the State Railroad and Warehouse Commissioners, whose duty it is to see to the enforcement of the law, are closely watching the new association; but the members declare they have no intention of breaking the laws. If the law passed for that very object does not protect the farmer, however, it is likely he will find in the Grain Buyers' Association as oppressive a monopoly as he ever found in the Millers' Association.

BREVITIES.

ARE our criminal laws designed to protect honest men or malefactors?

Now cut out the old canes of the blackberry and raspberry bushes; cultivate the soil.

WE have fifty or more chrysanthemums grown from seed started not till March. The plants are as thrifty as possible, and will, no doubt, give a great variety of flowers later.

WE asked a good old doctor last week to name the best treatise on health. He took a piece of paper and wrote, "Keep your head cool, your feet warm and your bowels open." What do you think of it, friends? Doesn't that state about all there is to it?

IN agricultural practice, as in other things, authorities sometimes differ. In this issue friend Waldo F. Brown advocates the plowing under of the entire clover crop; in last issue friend Henry Stewart insisted that it is more economical to cut the crop for hay and plow under only the roots and stubble.

MARKET gardeners tell us that sweet corn sells to better advantage this year than any other vegetable. Much of the corn about here has been badly injured by worms, and the price for good ears has held up well. Eating corn is about like eating cash for the market gardener. Tomatoes, beans, potatoes and apples are slow

THAT was a lively meeting of florists in Philadelphia the other day; and owing to the rapid advance in their business the florists of this country ought to be a merry set when, once a year, they come together to talk over experiences and profits. Forty years ago, Brother Henderson tells us, the sales of cut flowers in New York City at New Year's amounted to less than $250. Last New Year's the sales reached $100,000, while over $3,000,000 were paid for cut flowers here during the past year. Doubtless the increase in other places was just as great, so the 8,000 florists in the country have good cause to be merry. An increased love of flowers is a sure sign of an increase in refinement in any community. What better proof of this truth can we have than that women, who excel men in refinement the world over, have a far stronger love than men for floral beauties.

WEDNESDAY last the Secretary of the Illinois State Board of Agriculture sent warrants for $100 apiece to the treasurers of 37 agricultural societies in the State on account of the fairs held in 1885. Thirty-one other societies received similar warrants last month, making 68 societies in all entitled to this bounty. The last General Assembly made these appropriations for county and other agricultural fairs; but provided that no warrant should be drawn until the President and Secretary of each society had filed affidavits with the State Board of Agriculture that no wheel of fortune or any other gambling device was licensed or allowed on the fair grounds. This proviso is good as far as it goes: but betting on horse races or trots, as well as licensing or tolerating the sale of intoxicants should have also been prohibited.

THE farmers of Michigan may well congratulate themselves. They are making solid progress towards political recognition. If they do not secure the rights that any political party can bestow upon them, it will be their own fault. Hon. C. G. Luce has just been nominated for Governor by the Republicans. The nomination was unanimous and hearty. Mr. Luce is a farmer. As Master of the Michigan State Grange he has labored for years for the best interests of the farm. He is a sound, honest, out-spoken man—as near to the ideal farmers' candidate as we can well imagine. Farmers to the front every time say we. Whenever the opportunity offers it is the duty of farmers to show their power. What better chance will the farmers of Michigan ever have than the present? Here is a chance to place a man from their own ranks in the highest office in the State. Do it, say we, and prove that it can be done.

THE National Butterine and Oleomargarine Association, representing 25 manufacturers, 16 of whom were present, met at Chicago Wednesday, and after a good deal of grumbling and carping at the new law, decided not to test its validity in the courts. If the grocers and jobbers refuse to pay the tax imposed for selling the stuff, the manufacturers threaten to sell direct to the consumers. If they do pay the tax, $48 and $480 respectively, then the manufacturers will do their utmost to have the tax lightened. Here is a threat and a promise to the underlings; what will the effect be? Some people grumble that the price of butter hasn't gone up with a jump since the passage of the law. Pshaw! It won't go into effect before November 1, and as the results of it are a trifle doubtful, there's little disposition to discount them in advance; but there is certainly an upward movement.

THE latest advices with regard to European crops show that the harvest is short everywhere except in Russia and Roumania and the stock of cereals on hand in the former country is very low. In France the wheat crop will be 40,000,000 bushels less than last year. The shortage is about proportionally as great in other continental countries, and in nearly all other crops also there is a considerable shortage. The Indian wheat crop is also shorter than hitherto reported. There is therefore a fair prospect of remunerative prices for American wheat for those farmers who can hold on to it. In venturing such predictions there is always much reluctance, because no one knows all the circumstances which would decide even legitimate trade, and speculators can always upset the most reasonable inferences. If one could foretell with certainty the course of the market even for the next two months, there would be "millions in it."

Horseman.

THE PERCHERON HORSE SHOW.

WE give, at Fig. 350, a correct illustration of the building erected for the exhibitiou of the American Percheron Horse-Breeders' Association to be held at Chicago in connection with the Illinois State Fair, September 6—11. The building is 700 feet in length, and is one of the grandest exhibition buildings ever erected.

We are informed that nearly three hundred pure-bred Percherons will be exhibited by about fifty breeders of the United States and Canada; and that a display of several hundred grade Percherous in harness will be made, showing the different purposes for which their breeders claim superiority over all other breeds of horses, thus giving the farmers and stock-breeders of the country an opportunity to see in large numbers the kind of horses that meet ready sale at the most remunerative prices. The State Agricultural Society and the Percheron Association are together offering about $7,000 in prizes, and a large number of gold, silver and bronze medals for Percheron horses.

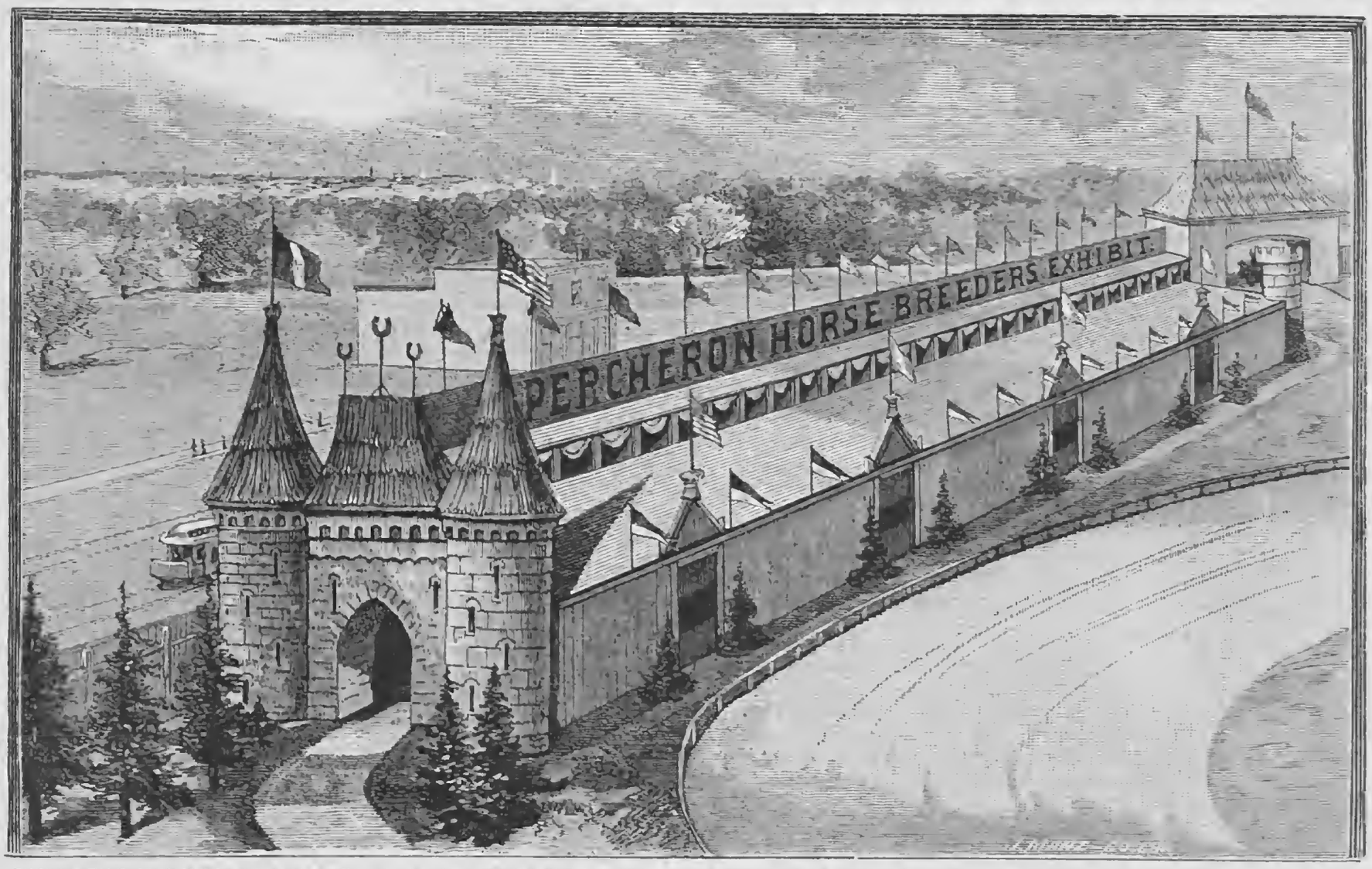
The jury of awards has beeu appointed by the highest official representatives of agriculture in three great nations, the Minister of Agriculture of France having appointed Marquis de la Motte Rogne, Inspector General of the National Studs; Commissiouer Colmau having appointed the Hon. George B. Loring, ex-Commissioner of Agriculture, and the Minister of Agriculture of Canada having appointed Prof. Andrew Smith, President of the College of Veterinary Surgery at Toronto.

In view of the great iuterest now taken in the Percheron breed in all parts of the world it seems probable that the coming exhibition will be the most successful meeting of draft horses ever held.

Other breeds of horses will also be there in great force. The managers offer premiums as follows:

For roadsters, $500, divided into four premiums, $50, $25, $15 and $10, for best stallion four years old or over, best stallion three years old and under four, best mare four years old and over, best mare three years old and under four, best pair of mares any age, best mare any age, best pair geldings any age, and best gelding any age. For Thoroughbreds, $400 is offered, divided as above. In the class for saddle horses, $300 is offered, divided into four premiums each, for best stallion any age, best gelding any age, and best mare any age. A class is made for carriage or coach horses, other than Cleveland Bay, for which $400 is offered, divided into four premiums each for best stallion any age, best pair geldings, best mare auy age, and best pair mares. For the best park horse, stallion, mare or gelding, any age, $100 is offered, divided into four premiums. There are$ 250 offered, divided into first, second and third premiums, $25, $15 and $10 for best boy rider, under 14 years, best gentleman rider, best girl rider under 14 years, best lady rider, and best lady rider with escort. For best boy driver not over 14 years, and best girl driver not over 14 years, $50 each is offered in three premiums, divided as above, the horse to be driven to cart, and to be under 14 hands high. For best pony stallion any age, best pony mare any age, and best pony gelding any age, $50 each is offered, divided into three premiums, the ponies to be not over 12 hands high.

The Cleveland Bay, Percheron, French Draft, Clydesdale and English Shire Associations each contribute $500, to be awarded in classes, divided into first, second, third and fourth premiums—$50, $25, $15 and $10—for best stallion four years old or over, best stallion three and under four, best mare four years old or over, best mare three and under four, and best pair of mares any age. There will also be $400 offered in the grade draft class (get of pure-bred sires), divided as above, for best gelding any age, best pair geldings any age, best mare any age, and best pair mares any age.



BUILDING ESPECIALLY ERECTED FOR PERCHERON HORSE EXHIBIT AT ILLINOIS STATE FAIR, CHICAGO, SEPT. 6-11.
Fig. 350.

IN FAVOR OF MEDIUM-SIZED HORSES.

I CONSIDER 3,000 pounds of horseflesh enough for most of our farms. It is better to have this divided into three horses than into two. It will cost but little more to feed three 1,100-pound horses than it will to feed two weighing 1,500-pounds each. It will not cost much more to shoe three smaller horses than it will to shoe two larger ones. Smaller horses will work barefooted better and will hold their shoes longer. In planting time it is handy to divide the team and keep both harrow and marker going. The cultivator can run many a forenoon while the team is mowing. The third horse can pull the hay-fork and rake the hay. I want a farm horse weighing 1,100 pounds. He should be short-legged and of a quiet dispositiou. A rather low-spirited horse, as a rule, is better for the farm. He is more easily kept, is safer for hired men and boys, will bear a change of drivers every day if need be; he is safer for women to drive and less liable to injure himself. Where three are kept they should be alike in disposition and movement so that any two can be worked together. L. G.

Crawford Co., Pa.

Miscellaneous.

CATALOGUES, ETC., RECEIVED.

BUCHER, GIBBS & CO., Canton, O.—An illustrated circular of the Imperial Sulky Plow. These plows are made of wrought and malleable iron. The sulky is adjustable to any hand plow (right or left) or it is furnished complete with a chilled or steel plow with or without handles. The steel or wood beam sulky (complete) has a three-horse evener, rolling cutter, neck-yoke and plow. There is no need of a power lift. One great advantage of the Imperial over any other sulky, it is claimed, is that the boys, girls, or aged men can do the plowing. The plow is counterbalanced by the weight of the operater, the seat being adjustable so as to equalize any difference in the weight of the driver and plow. The plow is clamped to the bail, so that it swings horizontally or vertically on the bar, thus avoiding obstacles. It is guaranteed that this sulky is easier on the team, while carrying the driver, than the same plow detached and in use. The advantages are well set forth in the circular which, with the illustrations and instructions will make everything very clear. Our friends should send for it.

WINE FROM DRIED FRUITS.

WHEN the phylloxera first devastated the French vineyards, the imports of raisins and currants into France amounted to only 6,000 to 7,000 tons a year; for the last three years the imports of both these dried fruits have averaged 65,000 tons—an increase of nearly 60,000 tons in seven years. And, remember, these imports of dried fruit represent no less than 270,000 tons of fresh fruit. The vine-growers, learning that wine was made from these imports, complained to the Government, and the Minister of Agriculture has just reported the results of the investigation ordered.

The preparation of the wine according to this report, is simple. The dried fruit is put into a vat with water at a temperature of 68 degrees Fahrenheit, there being 55 gallons of water to every 100 pounds of fruit. At times a small quantity of sugar is added, in order to assist fermentation, which as a rule soon occurs and generally continues for a week or two. At the end of this period the water is drawn off and the wine is made. As a rule it is of a very pale color. When highly-colored wine is required it is mixed usually with the very darkest Spanish wine. These wines, when made, contain from 7 to 10 per cent. of alcohol, but they have very little tannin and do not keep long.

The greater part of the supply of fruit is obtained from Greece and Turkey. Of currants alone France imported the last two years 80,000 tons. The demand from this quarter has greatly enhanced the price. The production has not increased, remaining almost stationary. While the imports into the United States decreased from 12,500 tons in 1883 to 7,400 tons last year, those of France increased from 20,200 tons to 48,000 tons for the same period. The fruit from the Ionian Islands is most desirable, because in curing it is allowed to remain upon the tree until dried, the stem being twisted in order to prevent the sap from ascending.

GAPES IN CHICKS.

GAPES in young chicks seems to remain the great obstacle to success in the poultry-yard. I have not had a single case of gapes during the last five years, and I attribute it to the fact that after the first two days the chicks get no soft feed, at least no wet corn-meal at any time. At first a soft custard of milk and egg is fed, and after that dry, cracked corn. I know very little as to the cause of gapes, and have never raised chickens extensively, but I do know that previous to the exclusion of soft, wet meal in the feed to young chicks every one hatched got the gapes, and many died with it. Now I lose none by the disease. The philosophy of this I cheerfully leave to others. H. H.

"GOING BACK" ON WHITE LEGHORNS.

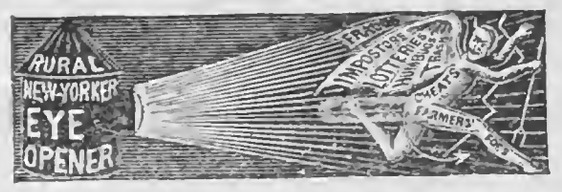
I HAVE pinned my faith to White Leghorns heretofore. Their eggs sell well, and the hens seem to be all eggs. I figure that some of my hens have laid five times their weight of eggs during the past year. This year I have had bad luck with my chickens. Just about 85 per cent. of them are roosters. A White Leghorn rooster is about the most unprofitable bird I ever tried to raise. I wish now I had a larger breed. B. C. C.

Ionia Co., Mich.

FLAVOR OF CARP.

THE flavor of carp depends entirely upon the food given them. That is an old saying, but it is as true now as ever. I can take a chicken and feed it on food that will make the flesh too rank to eat. I have taken carp and fed them upon corn meal six weeks before eating them, and cooked them so that good judges who were prejudiced against them declared them equal to any fish they ever tasted.

Philadelphia, Pa. M. P. P.



Here is a verbatim copy of a confidential letter which was sent to a friend of ours in Michigan, from whom we received it this morning:

NEW YORK CITY.

"DEAR SIR: My confidential traveling man, who was recently in your section of the country, writes me that he thinks you would be a good man to do business with in your State. He says that from the good reputation you have among those who know you, that you would not willingly betray a confidence that had been placed in you, whether my propositious were satisfactory to you or not. Now, to be plain, I have goods that were printed from plates that were secured from the Treasury Department of the United States. They cannot be told from genuine until they have worked their way back to the Treasury for redemption. By that time, as you well know, they have worked their way through hundreds of hands. They are ones, twos, fives, tens and twenties. When you reply to this I will give you full instructions how to get into the business, showing you how to make money safely, quickly and easily. I will explain to you as a sensible, intelligent man that you do not run the slightest danger. Write your name and address on a separate piece of paper."

Inclosed, on a separate piece of paper, was the address of the swindler, or rather the place to which letters are to be directed to him.

This is a specimen of the invitatious sent out to would-be dupes by the saw-dust swindlers, who, in spite of repeated exposures, are still finding a multitude of dupes all over the country who deserve to be cheated for attempting to get counterfeit greenbacks with which to swindle their neighbors. The fraud has been fully exposed a dozen times in this Department by the E.-O.

The repeated publication of officia statements from our diplomatic representatives in England concerning the enormous "unclaimed estates," by means of which many a swindler makes a living in this country, seems to have convinced these speculators that estates must be manufactured in some other European country for credulous American "heirs." Their attention has been turned to Holland. Numerous "heirs" have been writing to our Minister at The Hague, Mr. Bell, for information about the great fortunes to which they think they are entitled, and he tells one applicant that these inquiries convince him "that a systematic fraud has been, and still is being, practiced by scheming sharpers who make a living by keeping alive and warm the excitement about the existence of unclaimed estates in Holland for Americans." Those who have been led to believe that money awaits them there should know that all unclaimed estates in Holland that came into existence before 1857 are now the property of the State and are beyond the reach of claimants.

TO SEVERAL INQUIRERS.—We have never tried the Common Sense Evaporator, made at Newark, Ohio; but from what we hear of it, it seems to be a humbug. So we judge, is the "Fruit and Vegetable Growers' Association" which commends it through its "Secretary," W. Orlando Smith. Indeed the only reason for the existence of the humbug association seems to be to indorse the humbug evaporator.....We do not recommend the National Alliance, a newly started mutual life insurance concern of this city. It may turn out all right; but better wait and see.....We do not place much faith in the merits of galvanic batteries of any sort; but those made by the World Manufacturing Company are as good as any.....Whatever the price may be, a cheap gun is generally a poor investment.

Woman's Work.

CONDUCTED BY EMILY L. TAPLIN.

DAISIES ON THE FARM.

She painted them on canvas
With a rapt, artistic air,
She wore them in her bodice,
And in her raven hair.
She thought farm life idyllic,
And said its greatest charm
Was lent it by the daisies,
The daisies on the farm.

"Do you not love the daisies?"
To the farmer's son she saith,
But all the praise he uttered
Was underneath his breath.
It sounded energetic,
But she felt a vague alarm
That he did not love the daisies,
The daisies on the farm.

She read to him a poem,
A pastoral complete;
He seemed unsympathetic,
Though her voice was very sweet.
With some repressed emotion
His face grew dark and warm,
For its burden was the daisies,
The daisies on the farm.

Soon the charming summer boarder
To her city home returned.
For a soul of higher longing
Her æsthetic nature yearned.
And the farmer's son, undaunted,
With his scythe upon his arm
Went to battle with the daisies,
The daisies on the farm.

—*From Texas Siftings.*

OF INTEREST TO WOMEN.

The London Queen describing novelties in fancy-work, says that fancy canvas scarfs are used now for decorating chair backs, by being cut and joined to the required length, with the ends resting on the back, and with a large bow of Surah silk tied round the middle, placed on the top of the chair. Sometimes one end is of Surah, and the other of canvas, with the two materials twisted up together to form the bow. These scarfs are also cut out and arranged as lamp shades, over a wire framework, with a ribbon tied round, near the top, and finished off in a bow; a frill of lace stands up above. Muslin window curtains are tied back with the scarfs, with one end turned over the other, and hanging below it. Birdcages are also surrounded by them, so that there are several ways of utilizing what is a bygone fashion for dress, and will not be worn next Summer.

The same authority states that pretty square toilet pincushions, brush covers, glove and handkerchief sachets can be made with small squares of plush, satin or silk, an inch and a quarter, joined together by the points. The square is cut out in card-board and then neatly covered in the ordinary patchwork way; the card-board is not withdrawn, and should be quite hidden. For an ordinary-sized pincushion sixteen squares will be required in four rows of four, all joined together, with a pearl at each join. The cushion would measure seven inches square, and be of satin edged with lace, with a small bow of ribbon matching the squares, or little tassels of pearls at each corner. A grey satin cushion with cream-colored lace and squares of ruby plush looks handsome, or a white satin with yellow, pale blue, or pink, according to the color of the toilet table drapery. The sachets are made in exactly the same way, only have silk cord instead of lace. Cushions for chairs, and sofas have squares measuring about three inches, of one or more colors. This is novel, effective, and a capital way of using up even the smallest scraps. In making articles for bazaars or presents, one always has small cuttings, which appear too insignificant to do anything with, but these will all come in for this work.

Chair backs worked in the four corners and gathered up with a bow of silk cord and tassels in the middle, are of recent introduction. The cord matches the color of the embroidery and one end hangs down lower than the other, from the top of the back of the chair. Two corners fall over the back and two over the front. Russian cross-stitch is more usual for the working of the corners, or a small appliqué design. Perforated colored cloth, for cross-stitch, is excellent, and can be had adapted for slippers, cushions and valances. For a knitter, the new Penelope knitting cases are charming little gifts; they fold up like a letter-case, and have straps containing nine sets of knitting-needles, all numbered. Sets of plush table napkin rings, each of a different color, or two of each, have been recently sold at bazaars, or given as presents. They are either made over a piece of stiff buckram, one and one-half to two inches wide, lined with sarsenet or satin, and neatly joined together, and made to look as if they buttoned over, by two good-sized beads as buttons, and two rings of little beads as loops; or else they are drawn over a piece of rope, carefully joined, and finished off with a tie and bow of satin ribbon over the join. Plush d'oyleys are not unheard of, but they are only used for "very best," and have been known to have a real flower and spray of maiden-hair pinned to one side by a pearl-headed pin. Violin bow covers in plush or satin are sometimes made by skillful fingers, as a present to some great friend of musical ability. They require a length of 30 inches and width of five inches. The piece is first lined with tolerably stiff brown paper, and then with satin or some other material. If anyone is wishing to make one, the best pattern is a brown paper cover from a musical instrument shop, such as is usually sold with the bow.

OLD-FASHIONED GIRLS.

We don't mean dowdies, careless in dress and ungraceful in manner. Nor the hard-featured, raw-boned young woman, who, to the public eye, bears the mark of spinster foreordained on her uncompromising brow. We mean girls after the type of Miss Alcott's Polly, brightest and best of old-fashioned girls. Our old-fashioned girl is often pretty—very pretty, in a demure, somewhat Quakerish style. Even if her features are not beautiful she has a look of placid intelligence and gentle sweetness that brings her more than half-way towards actual beauty. Her features are merely the screen through which her clear and radiant soul transmits its light. Herein lies the secret of her attractiveness; it is all the difference between mere dollish prettiness and spiritual beauty.

The old-fashioned girl affects a trim simplicity of dress. She wears softly falling brown frocks, with a knot of scarlet at the throat, making her look like a benevolent Robin redbreast; or soft dark silk—we may notice particularly that her silk gowns never have the aggressive rustle we notice in others. Or she robes herself in bright muslins fresh as her own true heart, that set off her modest face as costly silk and satin never could.

The old-fashioned girl is not an exclusive product of country districts, as is often supposed. There are some quiet, half-forgotten nooks even in busy New York where, like the heroine of our nursery rhyme, "she makes music wherever she goes." She may be a school teacher or daily governess, or earn her daily bread and butter in any of the thousand and one employments open to women, or she may be the busy vestal of some domestic shrine, the mainspring of the household machinery. In either case she is the same bright helpful spirit—

> "A creature not too bright and good
> For daily use and daily food."

What, then, is her peculiar charm—the trait distinguishing her above all the fair "rose-garden of girls?" Rather a difficult matter this to reduce an impalpable charm to cruel prose.

Miss Alcott's Polly, we may remember, is noticeable for her cheery helpfulness and patient unselfishness. Perhaps this is the secret, after all. The determinations to help others will always help us ourselves, and the unselfishness that enters into all the hopes of others smoothes many rough places for our own feet. "In love preferring one another." The gentle, gracious mind, self-abnegating spirit and cheery heart, these are the crowning gifts of the old-fashioned girl we try to paint—none the less a heroine in that her victories are of the mind and heart only.

What if her gentle graces fail to win the love that all women hope some day to possess? Her life is not a failure because she must write herself *femme-sole* to the end of the chapter. She has worked, and planned, and prayed for others—she has crucified self, and such are indeed the very salt of the earth.

So, if these are our old-fashioned girls, like Abou Ben Adhem, may their tribe increase, leavening this careless world with their brave spirits, until claimed by that old, old fashion, Death!

WOMAN'S WORK.

THIRD PAPER.

Again we take up this subject for discourse, because there are hardly two other words that imply so much in our existence as woman's work. In these words there is so much combined for pleasure and profit that much might be said to guide the footsteps of mankind high up beyond the foot-hills of this mountainous journey. For many obstacles might be overcome, that are lying in our pathway, if we but build the ladder on which we rise, and that means to inform ourselves in the best modes and methods to pass through the things that may encumber our pathway each day. And in order to inform ourselves, we should see that we have placed within our reach an abundant supply of good literature. It should be grasped at with more zeal than rubies and precious metal; for if we ponder well on the depths of good and solid reading, we shall have a ship of thoughts deeply freighted with truth and beauty, and its effect has upon us a lasting influence, which cannot easily be effaced by the stroke of time. An intelligent old lady once said: "I can always tell upon entering a household what kind of people they are by seeing the literature they have within their reach." So it is when we come in contact with persons; we can easily tell by their speech as well as their looks the benefit they have derived from good literature. Have you not in reading the interesting articles from Mary Wager-Fisher noticed that she still continues her study and that she associates with those who are of her stamp; those who give her in exchange, words that should never die? When we have fully attended to our mental capacities, we should see about our companions and associates. What are your associates? What company do you keep? What class of people do you love to mingle with? Is it those of a higher nature—those who would have a tendency to elevate you; or is it those that are not your equal, and who seek to destroy that very part of your better nature? As it has been said, "Let your companions be select; let them be such that you can love them for their good qualities, and whose virtues you are desirous to emulate." How much then ought we to impress upon youth the value of good literature and good companions; for out of these springs the source of the finest fountain in youth. Good literature and good companions go hand in hand; wherever you see one you must invariably see the other. The great responsibility concerning the youth's associations, depends largely upon the parents and home surroundings. The parents should lay the foundation of their children's character and when this is carefully done, and the right kind of example set before them from day to day, they will have a love for the things that will elevate them; and have no desire to go backward, to be hurled in some fast-destroying element, to perish by their own misguided footsteps. As you have noticed—a vine will run its course as it is trained; so will a child. Then parents should be very careful in the culture and growth of their children, that they may, when mature, be persons whom you may feel justly proud of, both mentally and morally and who will always be as a shining light at home and abroad. In building or making anew, it pays to furnish the best quality for such uses; and so it is in building up children's characters, it more than repays to furnish them with such material as will help to lay a solid foundation for their future career.

Shakespeare says: "'Tis the mind that makes the body rich," so we should not first be desirous of riches, but seek to develop the mind. Remember a good name is rather to be chosen than great riches. No one can rob you of your good name, but can take from you your wealth. Mothers, be not in a hurry to clothe your daughters in fine silks and costly raiment, better by far clothe their minds with that which is more lasting, and which will ever befit them to live in deeds, not years, in thought, not dress. For by thought miracles have been wrought, and by dress extravagantly displayed riches have soon vanished to poverty and utter destitution.

Cummings said: "Dignity and rank and riches are all corruptible and worthless, but moral character has an immortality that no sword-point can destroy, that ever walks the world and leaves a lasting influence behind." Every one leaves behind him influences for good or evil that will never die, and it should be our highest aim and endeavor to sow good seed along our pathway in life, that we may in due time reap our just reward.

MARY D. THOMAS.

GOLDEN GRAINS.

The Christian minister who is satisfied, in any sort, with serving as an echo for the religious ideas of his time, will be a reed shaken by the wind.. ....

The best thing to take people out of their own worries, is to go to work and find out how other folks' worries are getting on.....

Fenelon says: "We dote upon this world as if it were never to have an end, and we neglect the next as if it were never to have a beginning" ....

From Geo. Eliot's Adam Bede: "If a man does bits 'o jobs out o' working hours—builds a oven for's wife to save her from going to the bakehouse, or scrats at his bit o' garden and makes two potatoes grow instead o' one, he's doing more good, an' he's just as near to God, as'f he was running after some preacher an' a-praying an' a-groaning." ....

Dr. Coles says there are but three kinds of animals which generally use tobacco. The rock goat of Africa, whose stench is so insufferable that no other animal can approach it; the tobacco worm, whose intolerable visage gives to every beholder an involuntary shudder; and one other nondescript animal, whose tobacco frothings and spittings defile his own visage, bespatter and bedaub everything within his reach; who besmudges and pollutes the atmosphere with his nauseous fumigations, and whose stygian breath seems to denote approximation to some bottomless pit...

The same objects, seen from three different points of view, the past, the present, the future, often exhibit three different faces to us; like those sign-boards over shop doors which represent the face of a lion as we approach, of a man when we are in front, and of an ass when we have passed.....

Emmons says: "I could never think well of a man's intellectual or moral character if he was habitually unfaithful to his appointments."

In all charity believe that your brother desires to hold only Christ's truth; but do make sure that you hold it yourself, whether he holds it or not. This is the best undenominationalism in the world..... ....

Mrs. Whitney says: "There is never a 'Might-have-been' that touches with a sting, but reveals also to us an inner glimpse of the wide and beautiful 'May-be.' It is all there; somebody else has it now, while we wait."....

In the memoir of Dr. E. N. Kirk, it is recorded that some one asked him how a Christian could best show himself a Christian in society. His reply was: "I always try to put myself in this attitude before leaving home: 'Lord, give me an opportunity to honor thee, and a heart to embrace the opportunity.' This is all our Lord requires.".....

The wise man seeks the cause of his defects in himself, but the fool, avoiding himself, seeks it in all others beside himself..... .....

Domestic Economy

CONDUCTED BY MRS. AGNES E. M. CARMAN.

HOUSEKEEPING IN CALIFORNIA.—XIV.

MARY WAGER-FISHER.

When in San Francisco, which was not often, we sometimes went on a tour through "Chinatown," which if not sweetly odoriferous, is very picturesque and interesting. The Chinese provision shops are of the most curious character, for what they do not turn to account would be hard to mention. Like the Indians, they dry a great deal of fish and meat. One sees dried fowl's gizzards strung like pepper pods, dried ducks, and the entrails—I take it—of animals no worse than sausage stuffed in the same way. Among the shell fish they dry, is the abelone—each vowel should be pronounced—and as they were the first, I think, to eat it, it is not generally considered a fit food for fastidious palates. But one day a friend said to me that she had eaten it dried and that it tasted very like dried beef, so a few days afterwards, when we were at Monterey driving along the beach, we came upon a Chinese camp where these abelones were drying in the sun, and we bought two. They asked for them five cents a piece. After Anaximander had pared off the outer surface thoroughly, we proceeded to eat, and the general verdict was that if the meat had been salted and then smoked and dried, and had tasted a little less abelonish, we should have liked it. But it was not bad by any means, and a whole abelone will make dried, or fried, a full meal. The shells the fish live in are magnificent, and the Chinese sell them for five cents each. We found some beautiful ones on the beach, where they abound, growing on the rocks, but often washed in while alive.

Another food of the Chinese consists of sprouted seeds. They take evidently any kind of seed that is cheap—beans for example—and sprout them in water. How they cook them I do not know, but they are always to be seen in buckets in their markets. Possibly they are cooked and served something after the manner of spinach and make a dainty dish.

While we were at Monterey, we found ourselves overtaken by hunger in one of our tramps, and so we dropped in at the first restaurant we came to. It was clean and had a sanded floor, the white, fine sand of the beach being well fitted for the purpose. It was the laddie's first sight of such a floor, and I had only seen one once before in an out-of-the-way place in southern Ohio. The waiting maid brought us beefsteak, black beans, bread and butter, coffee and most delicious water. We were hungry enough to relish almost anything and thought the black beans delicious. I concluded that they had been cooked in that excellent way—boiled until tender and then baked 24 hours in a closely covered earthen pipkin buried deep in hot ashes. But I was silly enough to ask how they had been prepared, and the maid said, "boiled until done, then fried in lard, and water added for gravy," a regular mess; but they tasted good, nevertheless. At Monterey there is a place called Pacific Grove, planted with cottages, where families come at all times of the year to rent cottages for a month or more, or put up tents

in summer time. It is one of the most delightful places I ever was in, with no end of natural interest on sea and land. Every year the Methodist conference and the Chatauqua Assembly meet here. I asked the wife of a Methodist preacher how it happened that this was a stated place of meeting for the conference. "It is because of the difficulty of finding in a suitable place elsewhere, sufficient accommodation for so large a body of men. Californians are very inhospitable, and indeed, they do not know in what true hospitality consists. They think that when a preacher enters the house they should put everything in the larder on the table—instead of simply adding another plate, and serving whatever they themselves happen to be eating," and her criticism applies beyond the limits of California. She had been born and reared in Philadelphia, and had lived for a quarter of a century in Oregon and California, but to her mind there was no place like the East.

I asked in regard to the salaries of Methodist preachers here, but her information was rather indefinite. The pastor of the First Methodist Church in Oakland had $2,000 a year. Her own son-in-law, who was a preacher, and had a wife and four children and kept a hired girl, had received during the past half year $187, and she thought to manage with that required very close housekeeping.

There is a great deal of extravagance in California, as elsewhere; poor women ape the dress of the rich and there is constant strain for show, particularly in dress. The women, too, use a great deal of powder and paint on their faces, which give them a disreputable appearance, when they are, it must be supposed, of average respectability—the wives of clerks, tradesmen, artisans and shopkeepers. The leading amusement in society seems to be "progressive euchre," whatever that may mean, although there is a great deal of intellectual pursuit. I commented one day upon the unusual numbers of women with beautiful white hair, and a long-time resident said she thought that hair turned white very early in California.

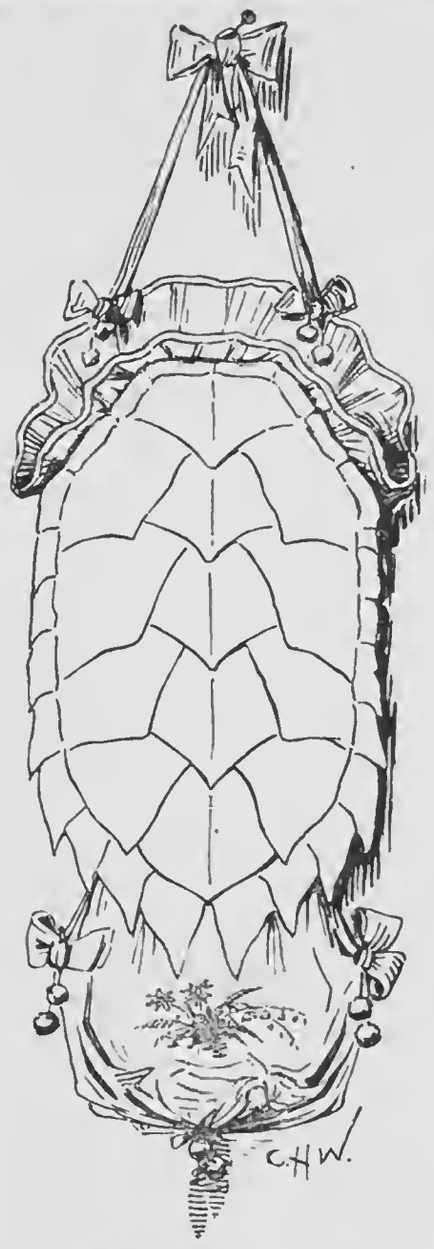
The greatest personal pest in California is the flea. It is no respecter of persons and one never becomes accustomed to it. Fleas infest cushions, carpets and all stuffy places. I never went to church without getting at least two on me. They are not so annoying as I found them in Italy, but they render some women's lives almost wretched here, their dress, being more voluminous than that of men, attract more fleas. Pyrethrum (insect powder) and the leaves of the laurel and of the eucalyptus were claimed as being obnoxious to the fleas, but I never found anything effective but to spy them out with a pair of sharp eyes, reinforced with nimble, murderous fingers. I became so expert as a flea-killer that I rather enjoyed seeing a flea. In the half year we were in California we never encountered bedbugs, and an old resident told me that there was not one in the State. She had lived 12 years in Kansas, where, she said, her house, in spite of all she could do, was constantly infested with them, and after she had moved to California she was so careful to beat and brush and clean every article in her boxes before putting them in her new California house that a physician asked her the cause of her great cleanliness. When she told him that she might have transported a Kansas bedbug he was greatly amused and begged her if she found one to let him have it as a natural curiosity in California. On the last day of March our housekeeping in California came to an end, and we turned our faces, to the wild delight of the laddie, homeward. After the expressman had carried our trunks away I tarried in the flower garden and picked a nosegay of spicy carnations and Banksia roses.

AN ODD WALL-POCKET.

A MANUFACTURER of fancy goods and embroideries has just filled an order for a wall-pocket, which is the most original of all I have yet seen. A captain in the East India trade brought home with him six huge tortoise shells. The backs received a beautiful polish and the under sides of the shells were bronzed. Then they were lined with satin, and the lining was brought out at the top and faced with silk, to form a pretty border at the mouth of the pocket.

The little bag affixed to the bottom is only for ornament. The shell may be trimmed in any color desired; a shade of blue or old gold gives a pleasing effect. It is very difficult to obtain the shells of the tortoise, but an excellent substitute can be found in the smaller shells of the common land or fresh water turtle. After cleaning and drying them carefully they may be polished or not, as desired.

At a recent wedding in this city the bride



AN ODD WALL POCKET.

was presented with one of these unique pockets, containing a huge bouquet of rosebuds just bursting into bloom. C. H. WARREN.

New York.

KITCHEN TALKS.

ANNIE L. JACK.

THE alternate waves of heat and cold that we experience this season are very trying to health and strength. The nights become suddenly cool after sunset, and mildew and blight are found everywhere. Grapes that have never before suffered, are covered with the white mold and many varieties of apples are spotted so as to be hardly worth the gathering. Chief among them is the Fameuse, our great staple fall fruit. The orchardist puzzles his brain to discover if there is any way in which we could counteract this dire influence, any condition of soil or treatment that will prevent it. Theories have been advanced, but nothing practical has resulted. What seems strange is that the Dutchess of Oldenburg is free of spot growing side by side with other varieties. It seems to make no difference whether the trees are in the open, or two thickly interlocked. So we say cheerfully—our ship will not come in this year, and "learn to labor and to wait."

Meanwhile in the kitchen are many discussions on Domestic Economy, and the business of the daily cooking; but the putting up the winter supply of fruit goes bravely on. There are so many steps to be taken and the kitchen architect so seldom takes into consideration the weariness such needless walking brings, that I would warn all house builders to see to it that the kitchen possesses all the requisite conveniences for labor-saving, whatever the parlor may have. See to it that there is free ventilation to carry off all the mixed odors of the cooking, and that there is sufficient light to disinfect with that best of all God's blessed sunlight. Let the floor be, if possible, of hard wood that needs a yearly oiling, and regular wiping over, but no scrubbing. Well do I remember all the stiff and sore fingers that came from that cruel abomination home-made lye, used to clean the floor to a pine-board whiteness. It is a woman's martydom to have to depend on such resources for keeping her floors clean. The walls of a kitchen should be painted and varnished, then they would simply need to be wiped down at intervals. The ceiling should be light-colored to give a cheerful appearance to the room. And then, no matter who works therein, there will not be any unpleasant connection with dirt and grease as is too often the case. I like to hear the children of a household after they have left home talk about their mother's kitchen as the pleasantest room in the house. It speaks for itself without any comment. Here the Gourmand breaks in and says he thinks the pantry will remain longest in his memory. Well that is doubtless partly the result of the kitchen work and is always associated with it. Boys especially like to remember the good things they could eat, and it is a pleasure to see a crowd of healthy children actually enjoying their food. Besides, we all know by experience how near the heart is to the stomach, and how a day's work and happiness are influenced by a bad breakfast.

"CANNING FRUIT."

To can fruit nicely is really very little trouble if one only knows exactly how to do it. Weighing both fruit and sugar is, I think, easier than measuring out quart by quart, and greater accuracy is obtained. Half a pound of sugar to a pound of fruit is a good general rule to go by, but raspberries contain so very little acid that for them I do not think quite so much sugar is necessary, so I only put five pounds of sugar to twelve quarts of berries, and in putting up smaller quantities just "spare" the sugar somewhat, using a little judgment in preference to twisting small fractions (which are an abomination any way) upside down in one's head.

I use a large-sized tin pan to cook the fruit in: it will hold about twelve pounds of fruit with five or six pounds of sugar. Instead of using a damp cloth to set the cans on while filling, as so many advise, I set a shallow pan of water on the stove by the side of the pan in which the fruit is cooking, and set two empty cans in it, with the rubbers already on them and the lids within reach.

When putting the fruit on the stove always add a little water, to prevent it from sticking to the bottom. When the berries have come to a boil, skim off the froth and let them cook only five minutes (cook cherries, pears and peaches twenty minutes); then take a quart cup to dip them up with, and pour into the cans through a wide-mouthed funnel. When one can is nearly full set the funnel into the other, and fill the first one right up to the brim with a spoonful or two of fruit. Screw on the lid *immediately*, and with a good-sized, damp cloth lift the can off on to a table; give the lid an extra twist, rub off the sides of the can and set it on its head until cold, as this presses the rubbers tighter than when the cans are set right side up. Be sure to have the fruit boiling when putting it into the cans. When the latter are cold, rub them off again; give the lids another turn and set away in the cellar. I put mine on a hanging shelf, with curtains of coffee-sacking around it, to keep the fruit dark.

In packing fruit to send a distance it is better to use a barrel than a box, for a barrel is generally rolled around while a box is set down k-slap! No matter if it is marked "glass, with care." An apple barrel holds 17 quart cans wrapped in newspaper and swathed in a good handful of hay—each can separately, of course. Put a good thick layer of hay in bottom of barrel, then lay in four cans and pack hay closely between them, then another layer of hay and four more cans, then more hay and now you can put in five cans as the middle of the barrel is larger, then more hay, and four more cans which make the 17. Cram in as much hay as possible and head up the barrel. This last is easier said than done, unless you are an old hand at the business. In the first place, loosen the hoops around the top of the barrel, and next be sure and find out which way the head fits in best, for although the barrel is round you will find it is round with a difference, and that there is just one way and one place to get the head in tight.

CARRIE D. HIGH.

TO WASH CLOTHES WITH A SCRUBBING BRUSH.

Soak the clothes over-night, then, in the morning, soap, put on the washboard and scrub with an ordinary scrubbing brush. You will find that the dirt is removed much easier and quicker than by rubbing with the hands.

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PATENTED.

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The Pail is made from heavy XX tin, and is in all respects the **best in the world.**

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FOR MILKING COWS WITH SORE TEATS.

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Languor, and Loss of Appetite, are cured by the use of Ayer's Sarsaparilla. It removes that terrible sense of *Constant Weariness*, from which so many suffer, gives tone and vigor to the stomach, and restores health and strength more surely and speedily than any other medicine.

Three years ago I suffered from Debility and Loss of Appetite, the result of Liver Disease. After having tried various remedies, and consulted several physicians, without benefit, I was induced to take Ayer's Sarsaparilla. The first bottle produced a marked change, and the second and third accomplished so much that I felt like a new man. I have, since that time, taken about one bottle every year, and had no recurrence of the trouble.—William E. Way, East Lempster, N. H.

Ayer's Sarsaparilla,

Prepared by Dr. J. C. Ayer & Co., Lowell, Mass. Sold by all Druggists. Price $1; six bottles, $5.

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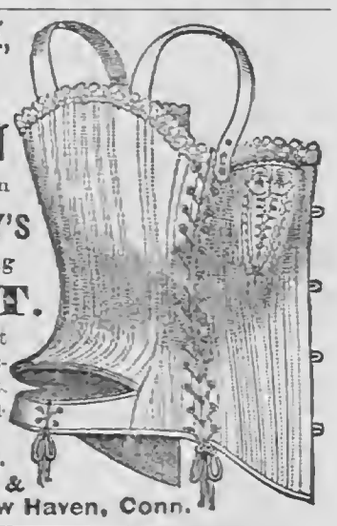

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UNION COLLEGE OF LAW

The Fall Term will begin Sept. 23d. For circular address H. BOOTH, CHICAGO, ILL.

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10 Scrap Pictures and Agent's Sample Case for a 2-cent stamp. HILL CARD CO., Cadiz, Ohio.

News of the Week.

HOME NEWS.

SATURDAY, August 28, 1886.

THE great Minneapolis Exposition was formally opened Monday. Mrs. Cleveland, by touching an electric button connected with the telegraph at Saranac Lake in the Adirondacks, N. Y., set the machinery in the Exposition building in motion. The exposition is a big thing. The building covers seven acres, and cost $300,000, and the show will last six weeks.....The trial of the Chicago anarchists cost over $25,000. The board bill of the jury and two bailiffs for 60 days amounted to $2,541; two extra bailiffs were needed for greater precaution during the last 23½ days, costing $141 for board; total board, $2,682. Their case will be appealed to the Supreme State Court, and to the United States Supreme Court if the decision in the State court is adverse. Owing to the law's glorious delays and uncertainties few, if any, of the miscreants will ever stretch hemp.....Geronimo and his murderous band have again slipped away from their pop-sure American and Mexican would-be captors. Just as the troops of both nations were closing in upon the hostiles, the latter took to the mountain fastnesses. They still "look worn and hungry," however, and "dispirited." Gen. Miles, after six months of failure, is still certain his men will soon capture or kill them. So was Gen. Crook several times before he was superseded.....There's to be a lively triangular fight in Michigan. The Democrats and Greenbackers have clasped hands, the former nominating the candidate for Governor, Treasurer, Land Commissioner and Member of the Board of Education; while the latter fill in all the blanks for Lieutenant-Governor, Auditor-General, Secretary of the State, Superintendent of Instructions and Attorney-General. The fusionists hardly expect to elect their State ticket, but they think they'll gain in the Legislature and be able to elect a U. S. Senator to succeed the present Republican, Conger. The Republicans have nominated an excellent ticket, and the Prohibitionists are ready to "play a lone hand," against all the others.....The anti-rum fight is raging fiercely in Iowa. The rum-inspired murderers of the Rev. Mr Haddock of Sioux City have not yet been arrested. Many druggists have been acting as if they supposed that the Pharmacy Act of last Winter turned over the saloon loafers to them, and have been allowing customers to register applications for liquor under the names of prominent temperance men, and even of Pres. Cleveland, H. W. Beecher, etc. The Pharmacy Commission, however, which has control of the matter, has just secured the conviction of some of the most flagrant offenders and is to make a general onslaught on rum-selling druggists.....During the absence of the Commissioner of Indian Affairs and the Assistant Secretary of the same office, Miss Minnie S. Cook is acting as the head of the Indian Office.....The deficit of Col. Bolton, the late superintendent of second-class matter in the Chicago post-office, now amounts to near $16,000, instead of the $100,000 first claimed. He is still in the County jail. His property so far as discovered amounts to $30,000.....A statement just issued by the Bureau of Statistics gives the total number of immigrants who arrived at the six principal ports during July, 1886, as 31,348, an increase of 3,866 over the number arriving in the same month last year. During the seven months ended July 31, 1886, there arrived 221,313, or 6,610 more than in the corresponding period of 1885..... .....W. J. Kendall, ex-policeman and afterwards private detective at Boston, swam the Whirlpool Rapids of the Niagara River the other day, for a part of a bet made between others. His share is variously said to have been from $1,000 to $3,000. It was in doing this foolhardy feat Webb lost his life.....

..The Prohibitionists have put up a full State ticket in Nebraska, with a woman suffrage plank in their platform....The lists of Congressional nominations from the Western States contain a fair proportion of Prohibitionists..... .....,

..The Washington Territory Democrats assembled at Tacoma re-nominated Charles S. Voorhees as delegate to Congress without opposition. The platform indorses President Cleveland's Administration, demands the repeal of the Burlingame treaty, and a strict enforcement of the Chinese restriction bill, and censures Governor Squire for declaring martial law during the anti-Chinese riots last Winter..... .....

...Hundreds of half-breed Indians who were not captured and punished after the Riel rebellion have been caught between two millstones. They lost no time in retreating to Dakota and attempting to take up government lands. Our Department of the Interior has refused to treat them as anything but Indians, and the consequence is that many of them, unable to procure lands, are once more in the Saskatchewan Valley, where the Dominion authorities say they are not wanted.....Thomas Moonlight, who some years ago called the Democrats of Kansas "rapscallions, the scum and dirt of the Missouri river-bottom," is now Democratic candidate for Governor out there, and the Republicans and Democrats are both mad.....

....John Dougall, founder and editor of the Montreal Witness in 1846 (daily in 1861) and of the New York Witness (daily in 1870, discontinued in 1878, the Weekly being still continued) died at Flushing, L. I., Thursday morning at the age of 78.....

.....Prof. R. S. Woodward, of Washington, says the average yearly rate of the wearing away of Niagara Falls, along the whole contour, has been from 1842 to 1875, 2.44 feet; from 1842 to 1886, 2.42 feet; from 1875 to 1886, 2.38 feet. The time required to recede a mile, at the rate of 2.40 feet a year, is 2,200 years. Buffalo, 20 miles away, feels relieved..... ...The Canal Convention which met at Syracuse, N. Y., this week was the most important meeting held in support of the canals in some time. The general sense of the meeting, as shown in the voting, was overwhelmingly against all plans for enlisting Federal aid for the canals, and the action taken may be regarded as having pledged New York State to care for its great waterways without the intervention of the National Government. Among the resolutions adopted was one recommending the State Legislature at its next session to appropriate $500,000 for the improvements recommended by Horatio Seymour, Jr., chief engineer of the canals. A noteworthy incident of the convention was the electing as president of the Canal Union, of Mr. George C. Clinton, of Buffalo, the grandson of Governor DeWitt Clinton, who contributed most to the building of the Erie .....

Editor Cutting has been released from his Mexican prison, and now from this side of the river is vaporing against the Mexicans and appealing to his "fellow countrymen." He was justly in "quod" for two months during which time he was very well treated, and now he claims $500,000 damages. An editor's time on the Rio Grande must be even more valuable than in New York! He'd probably make more money by exhibiting himself in a dime museum or a circus. To avoid all future embroilment of the kind, an effort is to be made to secure a change of the Mexican laws in so far as they are held to give a right to try Americans in Chihuahua for acts committed in America. The laws of Italy, France and Belgium are the same. Are we to seek an amendment in these also?.....The injury by that hurricane at Galveston last week was greater than expected. The storm extended along the coast and 250 miles inland. All the towns, farm houses, cottages, plantations, crops, etc., in its area were more or less severely injured. Loss estimated at over $5,000,000. Much destitution.....

FOREIGN NEWS.

SATURDAY, August 28, 1886.

THE most startling news of the week, a chapter of romance, an oriental sensation, is the deposition and kidnapping of Prince Alexander of Bulgaria, last Saturday morning in Sofia, the capital of his principality. When the "revolution" was first announced on Sunday morning, it appeared to be a national affair, indorsed by all the leading Bulgarians and hailed with rejoicing by the people at the capital and throughout the country. The abdication appeared certain and voluntary, and all considered the movement a great stroke of Russian diplomacy, much the same in nature as the Russian action at Merv, and in some of her other oriental enterprises. Soon it was known that all the telegraphs were controlled by the revolutionists; that nobody was allowed to leave or enter Bulgaria; that all travel therein was prohibited; and that nothing was known except what the revolutionists wished. Then came contradictory reports; but no doubt soon existed that the army all over Bulgaria and Eastern Roumelia, remained faithful to the Prince who had lately bravely led it to glorious and unexpected victory against the invading Servians. Everywhere the troops declared their loyalty, and the people buzzed with the troops. The "counter-revolution," was successful. The revolutionists were prisoners. All parties shouted for the Prince's return; but where was he? "Shut up in a monastery near Sofia," some reports said. "No, in a Russian monastery," said others. "A prisoner in a Russian fortress." "A prisoner on his way to St. Petersburg, "At liberty and on his road home by way of Odessa," "No, by way of Roumania," "No, by way of Austria," and numerous other rumors came thick and fast during the week. It is only this morning that something like a definite idea can be formed of the "revolution" and "counter-revolution," both triumphant within three days. A handful of Bulgarian conspirators, violent friends and paid agents of Russia, aided by a single regiment, lavishly bribed with Russian gold, and a few hot-headed military and naval cadets, effected the "revolution." The sentinels having been bribed, the leaders entered the palace at two o'clock last Saturday morning, roused the Prince, told him the people, while thankful for his military services, were dissatisfied with his government as not friendly enough with Russia, and demanded his resignation. He absolutely refused—yielded to threats and through disgust say others. Before the city was aroused he was hurried off, surrounded by a band of cavalry, to the nearest point on the Danube; and with one of his brothers put on board a fast little steamer, already prepared, and at once started down the river to the newly acquired Russian province of Bessarabia. Meanwhile the Bulgarian troops and populace rose against the conspirators, imprisoned the leaders, and demanded the return of the Prince, who was still steaming down the river. As the vessel passed Rustchuck and Silistria the people shouted for it to land the Prince, but on it sped. Inquiries, expostulations, threats, and all sorts of negotiations were meanwhile flashing along the wires between all the courts and diplomatists of Europe. Was the deposition of the Prince due to Russian intrigue alone? Did Germany and Austria connive, or would they consent? Was Russia to seize Bulgaria and Roumelia, and Austria appropriate Bosnia and Herzegovina? Were the Turkish troops to enter Roumelia from the south, and the Russian Bulgaria from the north? Was the triple alliance between Germany, Austria, and Russia still intact, or did Russia rely on French aid? Was there to be a grand European war, to close with the expulsion of the Turk from Europe? Was the Russian or Austrian flag to float over Constantinople, or were the confines of Greece to be extended—the Greek Empire revived? The excitement all over Europe far exceeded that produced by the Cutting affair along the Rio Grande. The course of events in Bulgaria surprised all, while delighting some and disappointing others. Where the Pruth joins the Danube stands Reni, the first town the Prince's steamer could reach in Bessarabia. On arriving there orders from the Czar, who had learnt all about the successful counter-revolution, directed that the Prince should be set at liberty, and, entirely ignorant of the course of events in his principality and in the rest of the world, he started for his old home at Darmstadt..... After traveling by rail through Russia, where he received scant courtesy, he arrived at Lemburg, Galicia, Austrian Poland, at two o'clock Thursday afternoon, where he was received enthusiastically by Poles and Germans, and where hundreds of telegrams from royalties, princes, nobles and notabilities awaited him. The Bulgarians want him back; but whether he will return or not will depend on the joint action of the Powers. The Czar indignantly denies he knew anything about the conspiracy. He urges Alexander not to return to Bulgaria, and the Courts of Vienna and Berlin are reported to join in this request or demand. The Turks are massing troops on the south of Roumelia; the Russians are doing the same in Bessarabia, north of Bulgaria. The first shot in a general European war may be fired at any moment; but if Germany, Austria and Russia agree, peace is hardly likely to be disturbed in the near future.....

Foreign news next week ought to be interesting; and shall be full.....

AGRICULTURAL NEWS.

SATURDAY, Aug. 28, 1886.

FARMERS at the East are beginning to complain of the dry weather and to long for rain. The Northwest is also not only suffering from drought, but from an unusually intense hot wave, the thermometer in some places actually reaching 100°. As one of the results of this state of affairs, prairie fires have broken out in Minnesota and threaten serious damage. Rains there would evidently be as welcome as they would be east of the Alleghanies..... Acting Attorney-General Jenks has given an opinion sustaining the right of Land Commissioner Sparks to prosecute timber thieves after they have carried their spoils off the lands .....Prof. Law, of the N. Y. State Board of Health, has inspected over 50 ailing horses near Middletown, N. Y., and found six cases of glanders. The affected animals were all killed and the premises disinfected. About 30 others were quarantined until the symptoms shall take a decided form.....The great English lamb fairs now in progress show a substantial advance in prices. .....Clover in Iowa is suffering from black mold..... The regulations necessary to carry into effect the provisions of the Oleomargarine Bill are completed, and will be ready for publication in a few days.....Frederick A. Berry, grocer, and Joseph Senckermen, dealer in produce, in Chicago, were held Tuesday in $1,000 bail each for trial on a charge of selling oleomargarine under the name of fresh dairy butter.....The design for the oleo stamps is to be simply a bull trampling a serpent under foot in the center, while around the margin are the words: "Oleomargarine" and "Internal Revenue," the denomination of the stamp being indicated in the corners. Three varieties of stamps will be needed, one for retailers, another for wholesalers, and a third for manufacturers.....Much of the cranberry crop of Wisconsin was destroyed by the late forest fires. .....The manufacture of wine from oranges is developing into a very extensive industry in Florida. Wine made from this fruit is said to have formed a large proportion of the "sherry" of commerce since the trouble caused by the phylloxera in France and other wine-producing countries. ....In consequence of the outbreak of pleuro-pneumonia among cattle in quarantine at Quebec, an Order in Council has been passed prohibiting the importation of live cattle from infected counties in England..... ...The Association of Official Agricultural Chemists of the United States has been holding its annual meeting in Washington, at the United States Department of Agriculture, for the past two days. It had under consideration the methods used in the analyses of commercial fertilizers, and has agreed upon those to be employed during the coming year. The scope of the association's labors has been much increased, so as to include the consideration of the analyses of soils, dairy products, cattle foods and other agricultural products.....

Catarrh in Children.

"THE children have used the Compound Oxygen and are very much better; the cough has left them entirely. The little girl is better from the catarrh, but is bad enough yet. At one time it was terrible to be near her, there was such an offensive odor; but she is so much better that she will be able to attend school to-morrow morning. She has been troubled for about three years with nasal catarrh."

This extract from a letter from Joliet, Ill., is an example of many from mothers who find this remedy the most effective aid in restoring and preserving the health of their children. To learn more about this write for a treatise of nearly two hundred pages, sent free to all applicants by Drs. STARKEY & PALEN, 1520 Arch St., Philadelphia, Pa.—*Adv.*

Crops & Markets.

SATURDAY, Aug. 28, 1886.

On Monday last the Mark Lane Express said that "the harvests thus far have been greatly disappointing," although a "spell of dry weather, with hot sunshine," might yet redeem what appears to be a bad harvest." Trade was sluggish in English wheat markets, but home grain was 3c. a bushel dearer and foreign 1½c. to 3c. higher, and the tendency was upward.

A leading English daily thus sums up the European harvests:—"It is now pretty certain that the wheat crops in Western and Central Europe, the great wheat-importing areas of the world, will be less than the average amount. In England the out-turn will probably be 15 per cent less per acre than that of last year, and 25 per cent less than that of 1884. In Italy and Austria the wheat crops are about 10 per cent below the average, and in Germany, though fairly good, they will hardly reach an average."

THE crops in Scotland promise to exceed the average.

Advices from Adelaide state that the wheat crop in South Australia will yield, according to the latest estimate, an average of seven bushels to the acre. There have been copious rains throughout the wheat-growing region and the rain continues.

A letter just to hand from Cooperstown, N. Y., says: "From a careful estimate made by towns, the County of Otsego may be relied upon for about 5,000 bales of hops, against say 45,000 bales last year—one-ninth. This proportion will hold about the same through the hop district of the State. There are not less than 130,000 bales of brewing hops of 1885 and previous growths now in the country, and I should be inclined to call it 140,000, including the foreign hops. The market is likely at any time to be flooded by German hops."

In Lancaster County, Pa., the center of the Pennsylvania tobacco-growing industry, the continued rains have been exceptionally favorable to the crop, and the average yield to the acre will be 1,300 pounds of Havana and 1,500 pounds of seed-leaf. This is an increase

of between 200 and 300 pounds per acre over last year. Hail did some damage, but only the late storms leave their marks. The early crops outgrew the damage, and in some cases tobacco experts cut down the original crop and cultivated the second growth to full maturity. The damage from this source will be about one-half per cent of the whole crop. Rust is confined to the Havana, but there is little complaint. The crop will be clean and of good quality, unless improper care is taken with the crop in the sheds. In the majority of districts Havana gains in favor, as farmers better understand how to grow and handle it.

A letter from Wilmington, Del., dated Tuesday last, says: "The peach season reaches its hight during this week, and the shipments from now until the 1st of September will be the heaviest of the year. The Stumps, Moores, Oldmixons, and Reeves's Favorite are coming now, and with the end of these varieties the flush of the season passes away. The prices have been higher this season than last, but the quality of the fruit has been inferior. The yield has been about a fourth less, and it is not probable that the coming shipments will make any break in the prices."

The treatening aspect of Eastern Europe on Monday advanced grain prices in this country; but soon a reaction set in. Free selling by "bulls," and the impending deliveries of Spring wheat, which are expected to prove heavy, prevented an advance, especially after an increase of 1,800,000 bushels in the visible supply was announced on Tuesday. On Friday wheat declined here 1c. to 1⅛c. for spot and options on free options. Reports of damage to corn by drought are pretty serious in nearly all cases; but as to the real amount of injury reports are very conflicting.

Butter has been steady during the week with an improved demand for factory grades, but otherwise the market has not been interesting. Advices from the producing centers are an important element of strength. Exporters are not operating freely.

The cheese market has been fairly active during the week, but no improvement has been made in prices, excepting in colored fancy, which is scarce. Exporters are limited to price in their operations, and the failure of Liverpool to respond to the last upward move here has a depressing effect.

On account of factorymen refusing to offer any August cheese, and July being nearly closed out, at Ingersoll, the great cheese market of Ontario, Can., five factories offered 1,230 boxes, 1,030 July 200 August. No sales reported. Twenty factories represented and ten buyers present.

No change in wool during the week. Holders, looking at supply and demand the world over, say present prices will be maintained or advanced.

The September series of sales of colonial wool in London will open ten days hence. All the indications point to firm if not higher prices. The current quotations for leading sorts at Boston are the same as last week, as follows:

Ohio & Penn. X	32@33c.	Fine Ohio delaines	36c.
Ohio & Penn. XX	33@34	No. 1 combing	38
Ohio & Penn. XX and above	35	Texas sp'ng, 12 mos	23@26
Michigan X	31@32	Super A	31@37

According to the latest reports, an unusually large amount of the Western ranges is in poor condition to support grazing stock next Winter. There are every Summer considerable areas in this state, but this year the injury is reported to be much more extended than usual, and even with a favorable season henceforth there is little prospect of recovery. The poor condition of pastures in many sections of the country at present, and the unfavorable outlook on the ranges, have caused a heavy run on the market, and tended to depress prices. The weakness of fat cattle has had a depressing effect on the prices of store cattle, and, moreover, the prevalent conditions afford a rather discouraging outlook for feeding stock. At present nearly 80,000 head of cattle have been thrown upon the Chicago market from Dakota alone inside of two months, and the four or five buyers in Chicago, who control the market there, take advantage of this fact to put the price of beef down to a point where there is no profit for the producers. The Montana ranges are overstocked, and there's no room for pilgrim cattle. The Fall round-up has begun, and the cowboys are ordered to cut out every animal that will make beef or that is old enough for market. Even with this diminution it is a puzzling problem how to winter what is left, and growers are seeking locations elsewhere for a part of the stock for Winter. From the great number of poor sheep lately sent to market, it appears likely that sheep owners are rigorously culling their flocks. This is a good plan for profit in the future, but it depresses the price of ordinary sheep everywhere. Good mutton sheep fetch high prices, but the complaint is pretty general that most of the offerings are miserable stuff.

The Marquis de Mores and "de" Dakota, the chief party interested in the new dressed-meat enterprise here, is jubilant at its success. Said he, yesterday: "We now have three stores in New York, and notwithstanding the boycotting are disposing of 100 cattle a day. By October we shall have six more shops opened, and hope to bring our sales up to 250 cattle a day before January. The cattlemen in the West look upon the venture with considerable favor, and are taking steps to follow my example and supply Boston, Philadelphia, Baltimore, Washington and other large cities with meat direct from the ranch. I am now making arrangements to slaughter and ship cattle for my neighbors on commission; and, furthermore, am putting up a slaughter-house in Kansas City, where corn-fed beeves, hogs and sheep will be dressed during the winter months, thus securing a continuous supply for this market."

The receipts of hogs at Western packing centers have tended to depress prices of products. This effect was produced from this, aided by other causes, and about the middle of the week, owing to free selling, even speculative lard went off and looked despondent. The decline in grain assisted the weakness.

TELEGRAPHIC BRIEFS THIS A. M.

DULUTH, MINN.: Reports from the wheat fields say that the yield is far beyond anticipations, and it now looks as if there will be about as much wheat for the Duluth market as last year.

OMAHA, NEB. During the last three weeks the weather has been very favorable, and crop prospects continue encouraging. The weather is hot and dry at present, but the corn is not suffering from want of rain, and the wheat has nearly all been harvested.

ST. JOSEPH, MO.: The corn crop in North western Missouri has been damaged by drought fully 50 per cent. In Northwestern Kansas they had earlier and more rain, and the crop is estimated at 60 to 75 per cent.

LOUISVILLE, KY.: The corn crop promises a full yield hereabouts. Wheat is coming in liberally and quality improving. Oats, free receipts, holders meeting the market readily.

MARKETS BY TELEGRAPH.

SATURDAY, August 28, 1886.

CHICAGO.—Compared with cash prices a week ago, regular wheat is 1c. lower. No. 2 Spring, ⅞c. lower. Corn, 1¾c. lower. Oats, 1⅛c. lower. Rye, ½c. lower. Barley, 2c. lower. Flaxseed, 1½c. lower. Pork, 10c. higher. Cattle, from 10c. to 25c. lower. Hogs, from 10c. to 35c. lower. Sheep, steady. Few good mutton sheep in the market.

WHEAT.—August, 77@77⅝c; Sept., 77⅝@78½c; October, 79⅝@80¼c; No. 2 Spring, 77⅜c. CORN.—Cash, 41¼c; August, 41⅜@41½c; September, 41¾@42¼c; October, 43⅝@44. OATS.—Quiet; Sales ranged: Cash, 26½c; August, 25⅞c; September 26⅛@26⅜c; October, 27¾@28c. RYE.—Quiet; No. 2, 50c. BARLEY.—September, 59½@60c. FLAXSEED.—No. 1, $1 10. MESS PORK.—Cash, $9 52½@9 55; August, $9 52½@9 55; September, $9 50@9 55; October, $9 60@9 65. LARD.—Sales ranged: Cash, $7 22½; August $7 22½@7 25; September, $7 23@7 35,, closing at $7 25@7 27½. Short Ribs.—Cash, $6 20. Boxed Meats.—Dry salted shoulders, $5 75@5 87½. Short clear sides, $6 60@6 65. CATTLE.—Shipping steers, $3 60@5 02; stockers and feeders, $2 20@3 30; cows, bulls and mixed $1 50@3 10; bulk, $2 25@2 80; through Texas steers, $3 50@3 60. HOGS.—Rough and mixed, $3 90@4 00; packing and shipping, $4 50@5 95; light weights, $3 70@4 05; skips, $2 50@3 50. SHEEP.—Market weak; Natives, $2 00@4 00, Texans, $1 75@3 00; Lambs, $4 10@4 70.

ST. LOUIS.—Compared with cash prices a week ago, No. 2 red wheat is ¼c. lower. Corn, 1⅜c. higher. Oats, ¾c. higher. Rye, ¾c. higher. Butter, about 1c. higher. Pork, 15c. lower. Cattle, about the same. Hogs, from 5 to 20c. lower. Sheep, poor grades unchanged, no prime mutton sheep offered.

WHEAT.—No. 2 Red, Cash, 79@79½c; August, 79c; September, 79¾c. CORN.—No. 2 mixed Cash, 38@38⅜c; August, 38½c; September, 38¾c. OATS.—No. 2 mixed, Cash, 26¼@27c.; August, 26½c; Sept, 26½c. RYE, Sept, 32c. BARLEY.—No market. BUTTER.—Creamery, 18@22c; dairy, 10@18c. EGGS, 12c. FLAXSEED.—$1 06. HAY.—Timothy, $10 00; Prairie, $8 00. PORK.—$10 15. BULKMEATS.—Long clear, $6 25; short ribs, $6 25; short clear, $6 40. Lard, $6 62½. CATTLE.—Market active; Good to Choice Native Shipping Steers, $4 35@4 75; Common to Fair, $3 65@4 20; Butchers' Steers, $3 50@4 50; Cows and Heifers, $2 25@3 50; Stockers, and Feeders, $3 25@4 00; grass Texans, $2 50@3 75. HOGS.—Market firm; heavy, $4 85@5 10, Packing, $4 35@4 55; Lights, $4 10@4 95. SHEEP.—Market firm at $2 25@2 75.

BOSTON.—GRAIN.—Corn.—Steamer mixed at 55½c. per bushel; high mixed, 57½c; steamer yellow 56½c; OATS.—No. 2 white at 38½@38½c. as to location; No. 3 white, 37@37½c. and fancy clipped at 41½@42c. per bushel. RYE, 70c. per bushel. Bran, $14@15 00 for Spring, and $13 75 for Winter; Fine Feed and Middlings at $15@18, and Cotton Seed Meal at $28 50 on the spot, and $21 75 per ton to arrive. HAY AND STRAW.—Choice Northern and Eastern at $18@19 50 per ton, $16@17 for fair to good, $13@16 for fine, and $8@13 for poor and damaged; Western choice, $16@17, do fair to good $14@15. Straw.—Rye straw is held at $16@16 50 for choice, and $13@14 for common to good. Swale hay at $10@11 per ton. Oat straw at $8@9 per ton. PRODUCE.—BUTTER.—Northern and Eastern creamery, extra, 21@22c; extra firsts, 19@20c; firsts, 17@18c; Western creamery, 18@20c. for extra firsts to extra; firsts, 17@18c; Northern dairy, 14@17½c. for Vermont extra firsts to extra; firsts, 14@14½c; seconds, 12@13c; Western dairy, 12@13c. for firsts; seconds, 9@11c; imitation creamery, 11@15c for extra firsts to extra; ladle packed, 9@12c, for extra firsts to extra; firsts, 8@9c; seconds 7@8c; grease, 5@6c. NEW CHEESE. New York and Vermont extra, 8½@9c; do. do. firsts, 8@8½c; do do. seconds, 5@7c; Western extra, 8½c; do. firsts, 7@8c. EGGS.—Capo and near-by, per doz. 18½@19c; Eastern extras 17@17½c; do. firsts, 15@15½c; Northern firsts, 15@17c; Western firsts, 13½c; Provincial, 15@15½c. BEANS.—Choice Northern hand-picked pea, $1 75@1 85 per bushel; do. do. New York, small, $1 60@1 70; do. do. screened, $1 55@1 60; medium choice, hand-picked, $1 50@1 55; do. do. screened, $1 45@1 25; Yellow Eyes, improved $1 50; do. choice flats, $1 25@1 40; Red Kidneys, $1 75@2 00; Canada pea, 65@95c. per bushel for common to choice; green peas, Northern, 90c@$1; do. Western, $1 15@1 20. POTATOES range at $2 00@2 25 per barrel.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, August 28, 1886.

STATE OF THE MARKET.—As compared with cash prices last week, flour is unchanged; No. 3 Red Wheat, steady; No. 2 Red, 1c. higher. Corn, steady. Oats, 1c. to 1½c. lower. Butter, slight increase; cheese, a shade lower. Eggs, 1c. higher. Poultry, steady. Fruits and vegetables steady.

FLOUR, FEED AND MEAL.—FLOUR—Quotations: Fine $2 00@2 65; Superfine, $2 15@2 90; Extra No. 2, $2 70@3 25; Good to Fancy Extra State, $3 30@3 70; Common to Good Extra Western, $2 70@3 70; Good to Choice Extra Western, $3 90@4 70; Common to Fair Extra Ohio, $2 70@3 75; Good, $3 80@4 20; Good to Choice, $4 25@4 75; Common Extra Minnesota, $2 70@3 00; Clear, $3 25@3 75; Rye Mixture, $3 30@3 75; Straight, $1 00@4 60; Patent $4 10@5 10; Bakers' Extra, $3 75@4 50; St. Louis Common to Fair Extra, $2 70@3 65 Fair to Good, $3 70@4 50; Good to Very Choice, $4 55@4 90, Patent Winter Wheat Extra, $4 25@5 10, City Mill Extra for West Indies, $4 15@4 60; South America, $4 00@4 75. SOUTHERN FLOUR.—Common to Fair Extra at $2 85@3 60, and Fair to Choice, $3 65@5 00; Patent, $5 25. RYE FLOUR.—Superfine, $3 20@3 40. CORN MEAL.—Yellow Western, at $2 50@2 75; and Brandywine at $2 80@2 90. FEED.—#) to 50 ℔, quoted 72½@75c; 60 ℔ at at 65@70c; 50 ℔ at 70@75c; 100 ℔ at 85@90c; Sharps at 95c@$1 05. Rye, at 75@80c.

GRAIN.—WHEAT.—Ungraded Red, 87c; do, Red, 83@93c; No. 3 Red 87½c.; Steamer No. 2 Red, 87½c; No. 2 Red, 88¾@88½c; Mixed Winter, 87½c; No. 2 Red, for September, 88¾@89¼c; do. for October, 90¼@90¾c; do. for November, 91¾@92c; do. for December, 93¼@93⅝c; do. for January, 91½c; do. for May, 99¼@$1 00¼. RYE.—Western, 55@56c. State, 57@58c; Canada 56@57c. CORN.—Ungraded Mixed, at 51@53c; No. 2, 52c; No. 2 for August, 51¼c; do. for September, 51¼c; do. for October, 51¾@51⅞; do. for November, 52⅝@52¾c. OATS.—No. 3, at 31c; do. White, 31½@34½c; No. 2, 32@32½c; do. White 33c; Mixed Western, 32@34c; White, do. 36@42c; White State, 33c; No. 2 for August 32¼@32½c; do for September, 32¼@32½c; do. for October, 33⅛@33½c; do. for November, 34c.

PROVISIONS.—PORK.—Mess, quoted at $10 25 for Old and $11 00@11 25 for New; $13 00@$14 00 for Family Mess; $14 25@14 75 for Clear Back; and $9 50@10 for Extra Prime. BEEF.—Extra India Mess, $11 50@13; Extra Mess, in barrels, $8 00; Packet, $8 50; Plate, $8 50. BEEF HAMS.—Quoted at $23 50 for new. CUT MEATS.—Hams, 11¼c; Pickled Shoulders, 6¼c. for home use; Pickled Bellies, 12 ℔ average 6⅝c; City Pickled Shoulders, 6¼c; Smoked Shoulders, 7¼c; Pickled Hams, 11½c; Smoked Hams, 12@12½c. MIDDLES.—Short Clear, November and December deliveries, 6.25c; Long Clear in New York, 6¾c; at the West, Long Clear, 6.40c.; Short Clear, 6.60. DRESSED HOGS.—City Heavy to Light at 6 5-16@6½c; Pigs, 6¾c. LARD.—Western steam spot, at 7.45c; September, 7.47c; October, 6.96@7.05c; November, 6.81@6.84c, December, 6.77c; City steam, 7.20c; refined quoted nominally at 7.00; continent, 7.35c.

BUTTER.—Creamery—State, 21½@23; do. Pennsylvania, 21@21½c; Western, 18@22c. State Dairy, half-firkin tubs, 18@21c; Welsh tubs, 16@20c; Western Imitation Creamery, 11@15c; Dairy, 11@12c.; do. Factory, 10½@12¼c.

CHEESE.—State, 7@9c; night skims, 6@7c; Western flat, 7½@8

EGGS.—State, 17c; Western, 16@16¼c; Canadian, 16@16¼c..

POULTRY.—LIVE.—Chickens, spring, per ℔, at 10@12c; fowls, near-by lots, per ℔, at 9½@10c.; fowls, Western lots, per ℔, at 9@9½c; fowls Southern lots, per ℔, at 8½@8¾c; turkeys, per ℔ at 9@10c; ducks, western per pair at 45@70c.; geese, western, per pair, at $1.00@1.37.

POULTRY.—DRESSED.—Turkeys, per pound, at 10@12c.; Spring chickens, Philadelphia, per pound at 16@17c; do. western, per ℔, at 12@13c; fowls, Pennsylvania, prime, per ℔, 12@13c.; do State and western, per ℔, at 11@12c.

FRUITS.—FRESH.—Quotations: Apples.—Nyack, Pippin d-h bbl., at $1 50@1 75; do. open heads at $1 00@1 25, Orange Pippin, per d-h bbl, at $1 50; do, open-heads, at $1 00; Gravenstein, per d-h bbl., at $1 50@1 75. Red Astrachan, Jersey, per bbl. $1 50@1 75. Peaches.—At 50c.@$1 00 per basket for best; 50@60c. for plain per basket; do. extra per crate, $1 00@1 25; do. plain per crate, at 65@70c; Jersey, at 60@80c; per crate, and 30@50c. per basket. Pears.—Bartlett, Va., good to choice, bushel crate $2 50@3 00; do. fair, per bushel crate, at $1 50@2 00; do. Md., per crate, 75c.@$1 00; do. Jersey, per bbl. at $3 00@3 50; Clapp's favorite, per bbl, $3 00@3 50; Bell, per bbl, $1 75@2 00; Scooter, per bbl, at $1 50@2 00; Buff, per bbl, at $1 25@1 50. Grapes.—Niagara, South Carolina, per ℔, 10@12c; Concord, Va., per ℔, at 5@6c, other black varieties, N. C., per ℔ at 2@3c; Hartford and Ives, Va., fancy, per ℔, 4½@5c. Plums.—Egg, up-river, per bbl, at $2 00; Damson, Md., per crate, 40@50c. Huckleberries.—Shawangunk Mountains, per half bushel box, at 75c@$1; Shawangunk Mountains, per quart, at 5@7c; Jersey, per quart at 5@6c; Jersey, per 8 to 12 quart box, 50@75c. Watermelons.—Georgia, prime, per 100, at $20@25; Georgia, poor to good, per 100, $12@16; South Carolina, good to prime, per 100, at $20@25; South Carolina, poor to fair, per 100 at $12@16; North Carolina, poor to prime, per 100, $10@16. Muskmelon.—Norfolk, prime, per bbl, at $1 00@1 50; Norfolk, inferior, per bbl, at 50@75c; Baltimore, poor to good, per bbl. crate, $1 00@1 25.

FRUITS.—DRIED.—The quotations are as follows: Apples—Fancy evaporated, at 9c; do. choice, at 8½c; do. prime at 8c; fancy North Carolina sliced, at —; choice do. at 2½@3c.; choice Tennessee quarters at 1½@2c.; State quarters at 2½@3c.; southern sliced prime at 1½@1¾c. Peaches—Peeled North Carolina, choice, —c; fancy, —@—c; do. Georgia, choice, at —@11c; do. prime, —@—c; unpeeled halves, 3@3½c; unpeeled quarters at 2½@2¾c. Cherries, pitted, at 10@10½c. Evaporated raspberries, at 15@15½c, sun-dried do. 13@14c. Blackberries—Prime at 7c.

PEANUTS.—There is a light sale; prices are held steadily. Quotations are: 5½c. for best hand-picked; 4@4½c. for farmers' grades.

COTTON.—The quotations, according to the American classification, are as follows:

	Uplands.	New Orleans and Gulf.	Texas.
Ordinary	6⅝	6 13-16	6 13-16
Strict Ordinary	7 1-16	7¼	7¼
Good Ordinary	8	8 3-16	8 3-16
Strict Good Ordinary	8 7-16	8⅝	8⅝
Low Middling	8 13-16	9	9
Strict Low Middling	9 1-16	9¼	9¼
Middling	9¼	9 7-16	9 7-16
Good Middling	9⅝	9 13-16	9 13-16
Strict Good Middling	10 15-16	10⅛	10⅛
Middling Fair	10 5-16	10⅜	10⅜
Fair	11 15-16	11⅛	11⅛

STAINED.

Good Ordinary	6 7-16	Low Middling	8
Strict Good Ord.	7¼	Middling	8 11-16

HAY AND STRAW.—The following quotations are Choice Timothy, old, 90@95c; Good do, at 70@75c; medium, 55@60c; shipping at 50c; clover mixed, 50@55c. Straw.—No. 1 rye, 65@70c; short rye at 40@55c; oat, at 30@45c.

HOPS.—State, best, 28c; State, good and prime, 24@26c, State, common, 20@22c, State, old crop, 17@25c; California, best 23@25c.

VEGETABLES.—Quotations are for: Potatoes.—Long Island, rose, in bulk, per bbl., $1 62@2 00; Jersey, rose, per bbl, $1 65@2 00; sweet potatoes, Va., yellow, per bbl., $3 25@3 75; sweet potatoes, Va., red, per bbl, $2 25@2 50 Beans.—Long Island, green, per bag, 75c.@$1 00. Corn.—Southern Jersey, prime per 100, $1 00@1 50. Cabbages.—Flat Dutch, per 100, $2 00@3 00. Cucumbers.—Long Island, per 100, 50@60c. Egg plant, Philadelphia, per bbl., $1 00@1 50. Onions.—Potato, Jersey, per bbl., $1 50@1 75; do. Long Island, red, per bbl, $1 50@1 75; do. State, per bbl, $1 50@1 75; do. Western, per bbl, $1 50@1 75. Peas.—Long Island, per bag, $1 75@2 00. Squash.—Long Island yellow, per bbl, $1 00@1 25; do. Long Island, white, per bbl, 75c@$1; do. Norfolk, marrow, per bbl $1 25@1 50. Tomatoes.—Monmouth County, per box, 30@35c;

LIVE STOCK MARKET.

NEW YORK, SATURDAY, August 28, 1886.

BEEVES.—Chicago Steers, 1625 ℔, $5 75; d, 1415 ℔, at $5 75; do, 1576 ℔, at $5 10; Texans, 1058 ℔, at $4 90; Virginia Steers, 1092 ℔, at $4 70; Kentucky do, 1158 ℔, at $4 65; do. 1155 ℔, $4 55; St. Louis Colorado Steers, 1078 ℔, at $4 50; do, 1099 ℔, at 4 40; St. Louis Texans, 921 ℔, at $4 00; Chicago Texans, 1075 ℔, at $4 80; do, 1047 ℔, at $4 25; Colorado Steers, 1047 ℔, $4 60; St. Louis Native Steers, 2171 ℔, at $5 00; do, 1105 ℔, at $4 65; Chicago Steers, 1470 ℔, at $5 88; Bulls, 1280 ℔, at $3 50; Colorado Steers, 1197 ℔, at $4 40; Illinois do, 1292 ℔, at $5 20; do, 1250 ℔, $5 10; Western Cows and Stags, 1053 ℔, at $3 85; Indiana Cows, 1055 ℔, at $3 60; Bulls, 750 ℔, at $2 60; Indiana Steers, 7067 ℔, $4 20. Illinois do, 1240 ℔, at $4 70; Dry Cows, 1256 ℔, at $4 25; Long Island "Stillers," 967 ℔, at $4 15; Ohio Steers, 1175 ℔, $5 05; do, 1280 ℔, at $5 04; Oxen, 1,660 ℔, at $4 54¼; State Bulls, 930 ℔, at $2 90.

CALVES.—Grassers, 190 ℔, at 2½c; Fed Calves, 253 ℔, at 3½c; do. 310 ℔, $4 40; Veals, at 272 ℔, 5¾c; do. 190 ℔, 7½c; Calves, 223 ℔, 3½c; Veals, 158 ℔, at 6¾c; do, 181 ℔, 7c

SHEEP AND LAMBS.—Receipts for six days, 42,566 head against 34,523 head for the same time last week. Canada Lambs, 73 ℔, at 6c per ℔; do, 71 ℔, at 5¾c; Virginia do, 56 ℔, at 5½c; Kentucky do, 62 ℔, at 5c; Ewes, 97 ℔, at 4c; do, 100 ℔ 4½c; Ohio sheep, 81 ℔, at $4 20; KentuckySheep, 69 ℔, at 4½c; Indiana do, 86 ℔, at 4½c; Pennsylvania do, (common) 72 ℔, at 5½c; 223 do. 61 ℔, $5 10; Kentucky Lambs, 59 ℔, at 4¾c; West Virginia do, (bucks), 140 ℔, at 3½c; Jersey Lambs, 64 ℔ 6½c; Jersey Ewes, 111 ℔ at 4c; Pennsylvania Lambs, 65 ℔, at 6c; Bucks, 185 ℔, at 3c; Pennsylvania Bucks, 83 ℔ at 3c; Northern Canada Lambs, 61 ℔, at 5½c; State, Sheep, 83 ℔, at 4c; Western do. 78 ℔, at 4½c; State Lambs, 61 ℔ at 5½c; State Bucks, 91 ℔, at 3c State Sheep, 87 ℔, at 4½c.

HOGS.—Receipts for six days, 27,997 head against 28,244 head for the same time last week. Western Hogs, 122 ℔, at $4 50; do, Rough, 140 ℔, at $3 50

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING August 28, 1886.

W. G. L. D.—H. D. C.—A. H. B.—E. Z. D.—A. J. C.—A. N. B.—W. H. W.—O. H. B.—Mrs. J. M. W.—G. E. M.—J. A. S.—A. H. B.—C. E. D.—G. A. T.—W. H. A.—I. N. S.—J. B.—J. G. B.—Mrs. E. A. W.—W. H. R.—B. C. C.—G. L.—T. T. L.—A. B. C.—E. R. B.—J. M. W.—W. K. R., thanks—H. Y., plants rec'd—S. W. G.—W. H.—F. L. K.—P. N. W.—C. A. G.—J. N. V.—W. H. C.—B. F. J.—J. L. B.—F. C. W.—T. H. S. & S.—P. J. B.—M. S. W.—J. M. S.—J. W. D.—F. R. H.—W. C. T.—N. F. N.—L. E. B.—S. A. R. Mrs. M. S. W., thanks—J. B. C., we do not recognize the wheat—B. F. J.—J. M. S.—P. N. W.—D. W.—L. D. A.—P. E. H. & Bro.—J. M. W.—W. B.—E. L. C.—J. N. R.—S. H.—J. T. E.—T. F.—M. & B.—T. T. L.—W. M. N.—H. H. W.—B. G. N., thanks.—A. W. C.—J. S.—A. H. A.—A. G. S.—

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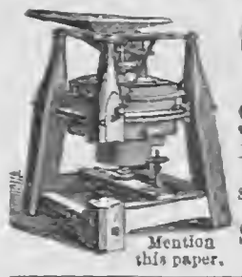
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For the Young.

I ALWAYS like to see a boy who wants to learn a trade. A trade is a fine thing. If I could be a boy over again, and know what I do now about things, you may be sure that I would be a blacksmith or a carpenter. A man with a good trade at his fingers' ends is in a pretty independent position. Even if he comes to farming at last, and there are few better things that he can do, his trade will be a wonderful help to him. What is a trade? Like every other thing that makes one man smarter than another, it is knowledge. In learning a trade you learn how to use certain tools to the best advantage, and how to keep those tools in good condition. You learn how to handle work, how to put the parts of a machine or any other article together. You learn to think and plan, and the practice trains the hand, mind and eye, so that work is done quicker and better than it was before. You never can do a thing well till you know how to do it. You never can know how until you think out a piece of work, do it in different ways, and study it. Some boys cannot get a chance to learn a trade as they would like. Let them make a trade of their own. Let them stick to their work, no matter how simple and monotonous it may be, until they master it and can do it a little better than any other boy can. This will pay them well. If they do not have a regular trade, they will have the next thing to it, and they will be always sure of a place. There are two things about work that you must always remember. One is that only a good workman can get good wages; and the other is, that the only way to become a good workman is to study your work and be careful over it.

I FAIL to see why a girl should not learn a trade just as well as a boy. Some girls don't want to work. They prefer to have somebody support them. Such girls had better keep away from trades. There are lots of independent girls however who want to support themselves. Many of them want to help their parents. What can such girls do? There used to be a time when it was considered something dreadful for a girl or a woman to try and do anything outside of what men were pleased to call "woman's work." That time has gone by now, and I am glad of it. I never thought much of the colleges for women. I never saw a graduate of one these literary colleges that could support herself at any other business than teaching school, and that is not a very good business to follow for good. There may be plenty of these graduates who can do wonderful things but I have never seen them. There are women doctors who are doing a great deal of good and I wish there could be more of them, but it isn't every person who can make a good doctor; one has to be fitted for it naturally. I like to see a girl learn the dress-maker's trade. With that trade well learned, she is always sure of work. Let her take a regular course at some first-class dress-maker's place and she will be able to earn more money than three-fourths of the men in this country. There are plenty of trades that girls can learn if they only have ambition. I think every girl ought to know how to keep house and to cook. Plenty of girls make money at raising chickens and eggs or at making fancy butter. A woman can make better butter than a man can, any day. It is nearer a woman's work. The same is true of bee-keeping. Any one of these works can be made into a trade if the girls will be patient and ambitious. It will take time and work to make much out of them but there ought to be a great satisfaction to a girl in knowing she can be independent and helpful. I don't think much of these toy girls who can do a little of a great many things and yet can do nothing well.

I saw a cat the other day that was made very useful. He stood out in front of a book store, where old books and pamphlets were sold. He had a wide piece of cardboard fastened around his neck, on which was printed in large letters:

"TAKE A CATALOGUE."

It was a new idea, and everybody stopped to look at it. Many people went in and looked at the books, who would not otherwise have done so. So that cat was a very profitable partner in the business. There was no danger of his running away. When he came to stir I saw that one of his feet had been cut off by some accident. So he was a cripple, and could not run. And yet, with only three feet, he did far more business than a great many cats do with four feet. The boy in the store told me that he bought milk and meat for the cat every day. When a cat is doing such good work in the book business he deserves to have his nights to himself, and should not be obliged to hunt rats in his spare time.

THE STORY OF A DISTRICT SCHOOL.

A COLLEGE BOY'S DIARY.

(Continued.)

Monday morning found me at the schoolhouse, as soon after breakfast as I could get there. I was bound to have an early survey of the field. I built a fire in the great stove, and then sat in the teacher's chair to look about me. The floor was battered and cracked, particularly about the stove. The walls were discolored, and in the corners and along the walls a troop of spiders had contributed an example of diligence for the pupils. The seats were battered and old, many of them were broken, and most of them had been carved and cut by restless jack-knives. I afterwards found that this knife study was the favorite one in Bear Creek. My own chair was placed on a little platform near the door. Several of the boards of this platform creaked most suspiciously as I walked over them. A low desk stood unsteadily on three legs, with the other broken so that it pushed under without touching the floor.

A blackboard at one end of the room bore the last faint trace of a mathematical effort in the shape of a collection of straggling figures. Under this was written in great, uneven letters, now nearly obliterated, this legend

"Teacher is a fool."

I found a little consolation in the fact that this statement doubtless referred to the previous teacher rather than to the present one. It was a farewell rather than a welcoming statement. The more I investigated Bear Creek, however, the more I began to think the title might be appropriate in my own case.

Long before the time for opening school the scholars began to arrive. The first to put in an appearance was a little freckle-faced girl. She carried two small books in one hand while the other grasped a large tin pail almost as large as herself. I soon found that this latter receptacle contained her dinner, for after much fumbling she pulled open the cover and proceeded to eat a lunch. She nearly destroyed her pocket in bringing to the light a large, red apple which she brought at last and bashfully handed me.

"You better come to our house jes' soon's you can, teacher."

The corner of her apron which she persisted in pushing into her mouth rendered this invitation a little muffled.

"Why so?"

"Cause we've jest killed our hogs an' they's lots o' fresh meat, an' the minister's goin' to stop to our house next Sunday."

The little girl evidently had not given me the apple purely out of charity. There was method in the gift. She carried her books to a seat conveniently near the stove, and carefully deposited them on the top.

"Say, teacher, I can have my old seat can't I? The ones that gets here first always has first choice."

This seemed reasonable enough, so I told her she might occupy the seat.

"What studies do you like best?" I asked, when she had celebrated her victory by a short dance in front of the stove.

"'Rithmetic, spellin' an' joggerfy, best."

"Don't you like grammar, too?"

"We don't have no grammar here. Pa says they ain't no call fer ter study it, an' I'm glad on it."

Her further explanation was interrupted by the arrival of a large company of scholars. The boys came tramping in at one door while the girls entered at the other. There were very few books visible, but the display of dinner pails was something striking. Bear Creek appeared to believe in specialties. There was to be no attempt to supply nourishment to both mind and body at one time. The body was to be well sustained and the mind left to secure such material as it could conveniently pick up.

The scholars all made a grand rush for the most desirable seats and placed their books on the places they picked out. This seemed to be a regular law of the school. Then they came back and gathered about the stove to examine me. I examined them in return.

The boys were dressed in rough jackets and blue or brown overalls tucked in the tops of their boots. They all kept their hats on and most of them stood with their hands in their pockets, grinding their heels into the floor. They were stout well-built fellows with heavy expressionless faces and little eyes.

The girls were very brave in ribbons and bright calico dresses. They simpered and whispered among themselves, whenever I looked in their direction. The Bear Creek idea of a flirtation seemed somewhat crude but was none the less hearty.

I went about to shake hands with all the scholars. Most of them regarded this movement in wonder. They simply held out a hand and allowed me to shake it. There was no effort on their part to return the hand clasp. After a moment of giggling the girls ran out at the door. I heard them shouting with laughter on the outside.

LETTERS FROM THE COUSINS.

DEAR UNCLE MARK: I am a little girl seven years old, and would like to join the Cousins. My papa has taken the RURAL ever since I can remember and I like to hear the letters from the Cousins. Mamma gave me some of the Garden Treasures and I planted them in a little garden of my own and now I have some lovely blossoms; Mignonett, Candytuft, Pansies and Phlox and many others and one great tall sunflower a great deal taller than I am. I have two little Kittens one white that I call snowball and one maltese I call Molly. I went to school last Spring and read in the second reader, but can't write quite well enough to write to you so Mamma is writing for me. We live on a farm two miles from the city. Your little friend,

Joliet, Ill. MABLE K. DAVISON.

[I can read all kinds of writing so you must write the next letter yourself. Our cat is named Molly too. I wonder if that sunflower is as tall as I am?—U. M.]

DEAR UNCLE MARK:—Perhaps you remember my letter, written to you last August, in which I told you of my "garden in the sky," which was a candle-box filled with earth, in which the peas and beans were growing, which you kindly sent Mamma. It stood on our balcony, up on the sixth story of the apartment house in which we lived, and the beans grew splendidly, too. I did not think then that this year I should be in a real garden and see beans growing in true ground, up still nearer the sky, 2,000 feet above the sea. It was just the nicest place you could wish to see, way up in the Catskill Mountains, sometimes above the clouds. We were on Mr. Bailey's farm, and there were lots of horses, cows, pigs, chickens, etc.; and you could do just what you liked. No signs there, saying "Keep off the grass!" Only a city boy knows how to enjoy such freedom. I could drive one of the horses all alone by myself, and he got so tame he knew me. His name is Prince, and he is 20 years old. He cannot go very fast, is what they call short-winded; but I didn't mind that. I liked to ride rather slowly on those rough, hilly roads.

It was so hard to come back to this dirty city and leave all the lovely fun. In the country, you know, there is always something for a boy to *do*. Harold and two other boys had a tent, and they camped out *regular* for three days, cooked their dinners and slept there. One night it rained hard, and I thought, it was so dark, that the bears would come sure. They did not, and the boys slept soundly all night, not a bit scared or hurt. I slept with "Mino" that night and was not homesick.

We want to go to Jewett again in March, for Mr. Bailey has invited us. Then they are going to make maple sugar from the maple trees, and it seems so funny how they can do it. When I am a man I am going to be a *farmer*. There is nothing like it.

Mr. Bailey takes the RURAL; it seemed like an old friend to find it there. Everybody reads and enjoys it. I am, your little friend,

New York. WALTER F. POOLE.

[I am glad you had a chance to see what farm life is like. I hope you will make a farmer. When you have your own farm I will come and see you. Old Prince must be a good horse.—U. M.]

DEAR UNCLE MARK: I wrote to you once before and my letter went in the waste basket but I was not discouraged. It is a very warm day. It is so warm I would just like to sit still and have some one fan me all day. We had two little pet chickens die; one was my sister's and the other was mine. I had the sick headache but I am better to day. Ma is ironing my white dress. I had an aunt come from York State, and she gave me a nice dress because I had two eye teeth pulled. My Cousin Etta and I went horse-back riding, we both were on the same horse and we made her canter and we both fell off and I skinned my knee badly and my Cousin sprained her ankle so we both go around limping. The sweet peas you sent me have blossomed. We have nine cows, seven calves, 70 young chickens, and two little kittens. One is mine, it's name is Rosabel.

From your niece. ZELLA SHIMMINS.

Delavan, Wisconsin.

[If you had people to fan you how could they stand the heat? That dress was well earned. I don't think I should care to ride in that way.—U. M.]

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Warranted *absolutely pure Cocoa*, from which the excess of Oil has been removed. It has *three times the strength* of Cocoa mixed with Starch, Arrowroot or Sugar, and is therefore far more economical, *costing less than one cent a cup*. It is delicious, nourishing, strengthening, easily digested, and admirably adapted for invalids as well as for persons in health.

Sold by Grocers everywhere.

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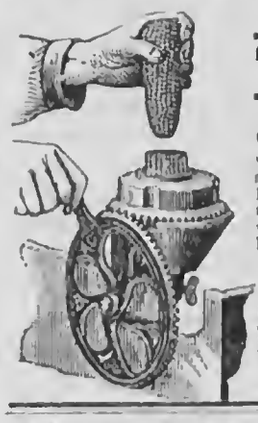
$1000 REWARD THE VICTOR

For any machine hulling and cleaning fit for market as much Clover Seed in ONE DAY as the VICTOR DOUBLE HULLER. Illustrated circular mailed free.

has made $100 often in ONE DAY.

NEWARK MACHINE CO., Columbus, O. Ex. Br. House, Hagerstown, Md.



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"RIGHT SPEEDY"

(STYLE NO. 2.)

CORN SHELLER

will shell the largest and smallest corn perfectly; shells 12 to 14 bushels per hour. It is the best hand Sheller made and I warrant it for 5 years. Price $5, or handsomely nickel plated, $6.

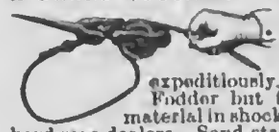
Agents Wanted.

If no agent in your vicinity, I will send Sheller, express paid, on receipt of price. Send for circular.

CURTIS CODDARD, Alliance, Ohio.

BLAIR'S FODDER SQUEEZER

A GRAND SUCCESS. 10,000 FOR 1886.



With this instrument one man can do the work of two with greater ease and much more expeditiously. Not only for tying Corn Fodder but for most all like bulky material in shock or bundle. For sale by hardware dealers. Send stamps—50c.—by mail, for one, without rope. E. BLAIR, Bucyrus, Ohio.

PERSONALS.

SIR ARTHUR BASS, of "Pale Ale" fame, enters the British peerage as "Baron Burton of Rangemore and Burton-upon-Trent."

SIR JOHN BENNET LAWES told Professor Morrow that he didn't like to report on a certain line of agricultural experiments he was conducting, because he had carried them on for only 27 years.

JAMES ARMSTRONG, of Loure, Canada, a well-to-do farmer, aged 83 years, fell in love with a maiden of 76 summers, who rejected his suit. Thereupon he made his will, bequeathing her all his property, and then hanged himself.

WHEN the present Under Secretary of the Treasury, Thompson, of South Carolina, was nominated for Governor, a message from one of the State institutions was sent him saying: "Every one in the lunatic asylum is delighted with your nomination."

WHENEVER the Emperor William undertakes to eat his dearly-loved lobster, his doctor invariably shudders and protests, but the aged Emperor merely smiles and continues his meal. He eats a good deal, and is particularly fond of shell-fish.

THE Honorable Frank Lawler, of the Second Illinois District, lately one of the chief spouters in Congress against oleo legislation, may now be found any day behind his bar at Chicago. Nowadays his eloquence is chiefly exhibited in the terse speech: "Wull, gints, wot'll it be?"

AT Windsor, Vt., Wednesday, Senator Evarts of New York, C. C. Perkins of Boston, whose son had married the Senator's daughter, and Miss Matthews, daughter of Judge Stanley Matthews, were thrown from a carriage. Perkins was instantly killed, and the two others severely, though not dangerously, injured.

CONFEDERATE General H. P. Ransom "suicided" by morphine at Lexington, Ky., Wednesday. Married a wealthy widow ten years ago, and at her earnest solicitation resigned his post as General Manager of the Kentucky Central Railroad, and became dependent on her for a livelihood. From the start she made him feel his dependence keenly, and he could endure his position no longer.

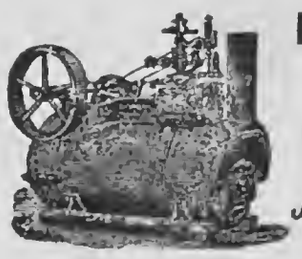
DURING all the excitement caused in England last Wednesday by the state of affairs in Bulgaria, the Marquis of Salisbury, the British Prime Minister, and the man who among the Conservatives is trusted most in foreign affairs, was in his laboratory at Hatfield House engrossed in experimenting with an electric invention of his own for driving agricultural machinery—"a favorite hobby with with the Premier," says the cablegram. Lord Iddesleigh (the late Gathorne Hardy), Foreign Secretary, kept telegraphing to him all day, however, and he returned to London at 7 P. M., to work most of the night on diplomatic matters.

ALEXANDER I., Prince of Bulgaria, is 29, having been born in April, 1857. He is the son of the German Prince Alexander of Battenberg, and a cousin of the Emperor of Russia, his father's sister having been the wife of Alexander II. His older brother married a grand-daughter of Queen Victoria, and his younger brother Henry is the son-in-law of the Queen, having a short time ago married her youngest and favorite daughter, Beatrice. He entered the German army in 1870 and the Russian army in 1879, and was elected hereditary Prince of Bulgaria by a unanimous vote of the Constituent Assembly in 1879. He received an income of $120,000 a year with the maintenance of a palace at Sofia. In September, last year, Eastern Roumelia rebelled against the Porte and declared itself a part of Bulgaria, and Alexander took the title of Prince of North and South Bulgaria. To prevent the union Servia declared war and invaded Bulgaria; but Alexander, who had served with distinction in the Russian army in the war against Turkey, completely routed the Servians, gaining great glory by his energy, skill and good sense. Russia still opposed the union, however, and Turkey insisted on maintaining her control, and Alexander had to be contented with the Governorship of Roumelia for a term of years. He had incurred the bitter enmity of his cousin, the Czar, and his downfall is due chiefly to Russian plottings against him, as the Bulgarians are partly Slavs like the Russians, and look on the latter as their deliverers from the grievous Turkish yoke by the war of 1877.

Miscellaneous Advertising.

DIXON'S "Carburet of Iron" Stove Polish was established in 1827, and is to-day, as it was then, the neatest and brightest in the market; a pure plumbago, giving off no poisonous vapors. The size is now doubled and cake weighs nearly half a pound, but the quality and price remain the same. Ask your goocer for Dixon's big cake,

VALUABLE COUNTRY RESIDENCE FOR SALE. The property known as "Farley's Point," on Cayuga Lake, residence of the late Dr. H. H. Farley, containing about 35 ACRES, half in bearing Vineyard, Pear Orchard, and Small Fruits. One of the finest locations in the State. A lovely place for a Country Home. Sold only on account of death of former owner. Terms easy. Address H. S. ANDERSON, Union Springs, N. Y.



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UPRIGHT AND HORIZONTAL,
3 TO 10 HORSE POWER.
OVER 3,000 IN SUCCESSFUL OPERATION.
Illustrated Pamphlet sent free. Address,
JAMES LEFFEL & CO., Springfield, Ohio.
Eastern Office: 110 Liberty St., New York.

BLYTHECOTE FARM POULTRY YARDS.
INTELLIGENT BREEDING PAYS! BLYTHECOTE STRAIN OF WYANDOTTES.
Annual improvement sought by careful matings selected from the best. One setting of choice Eggs will produce more first-class birds than ten settings from inferior stock. A limited number for sale from the above yards this Season. Price, $3 per Setting of 13; Two Settings, $5; Five Settings, $10.
Address J. D. TOMPKINS, Brainard, N. Y.

MAPLE LAWN POULTRY YARDS & KENNELS
Wyandottes, Plymouth Rocks, Pekin Ducks—500 finely bred Chicks for sale. SCOTCH COLLIE (Shepherd) Pups, bred from imported stock. Write for what you want. Address
WESLEY B. BARTON, Pittsfield, Mass.
Reference: Editor RURAL NEW-YORKER.

OXFORD DOWNS.
Another importation will arrive Sept. 1st from the celebrated flock of John Treadwell, whose sheep have again this year won 1st, 2d and Champion prizes at the "Oxfordshire," "Bath and West of England," and the great "Royal" shows. His best Rams are by my grand imported, 420 lb., "Bicester," winner at these Shows '83, '84 and was 1st at sweepstakes, *over the other Downs*, at Chicago, Madison, Wis., and St. Louis. Mr. Treadwell wanted him back last year. For sale, Imported Rams, Ewes and Lambs by imported "Bicester," "Sir John," "Baron Campsfield" and "Donatus,"
F. C. GOLDSBOROUGH, EASTON, TALBOT CO., MD.

FOR SALE.
1040 acre Ranch and 960 acre Ranch in S. E. Kansas; both in same County. These places have good improvements and never failing water to any one wanting first class ranches, now is your time to buy, as these are very desirable places. Also 480 acre Farm in N. W. Iowa, with good Improvements, Stock and Farm Implements, 160 acres unimproved in Palo Alto Co., Iowa; 160 acres unimproved in Dixon Co., Neb. All within reasonable distance of R. R. Depots. Also choice Chicago property with and without improvements. For terms etc., address the owners at either place.
POWELL BROTHERS, Waukgan, Ill.
POWELL BROTHERS, Winfield, Kan.
POWELL BROTHERS, 1603 Milwaukee Ave., Chicago, Ill.

600 ACRES. 13 GREENHOUSES.
TREES AND PLANTS
We offer for the Fall trade a large and fine stock of every description of FRUIT and Ornamental TREES, Shrubs, Roses, Vines, SMALL FRUITS, Hedge Plants, Fruit Tree Seedlings, and Forest Tree Seedlings. Priced Catalogue, Fall 1886, mailed free on application. Address
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Established 1852. BLOOMINGTON, ILL.

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NIAGARA and *Empire State*, 50c. *each*, and all other new and old varieties, *Guaranteed* true to name. *Quality* positively *unsurpassed*. At the *lowest prices* in America, we believe. Mailing a specialty. Send for Price List.
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ORIENTAL FRUITS
LeConte and Kieffer Pears on their own roots; Bartlett and other Pears on LeConte roots; Prunus Simoni and Japanese Plums; Peen To & Honey Peaches; Russian Apricots. A large and general assortment of Fruit Trees. Catalogue with facts, Free. Address W. F. HEIKES, Manager, Huntsville Nurseries, Huntsville, Ala.

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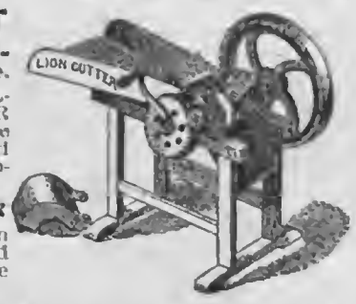
THE BEST
Ensilage & Fodder Cutter made.
Also GALE'S CYLINDER and LEVER CUTTER. We make besides, the old and popular self sharpening
FEED CUTTER
For full description send for Illustrated Circulars and Price List. Address



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CENTRIFUGAL-GOVERNOR
WINDMILL
Is the best working and most powerful Wind-Engine in the world, because it is the only one which unites the most perfect form of wind-wheel with the most perfect method of regulation. Geared Mills a specialty.
For Descriptive Circulars apply to
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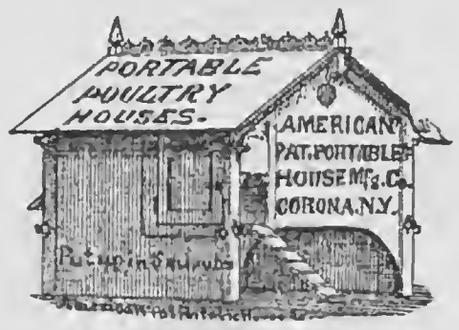
FAY'S MANILLA ROOFING
NOT TAR
ESTABLISHED 1866
Takes the lead, does not corrode like tin or iron, nor decay like shingles or tar compositions, easy to apply, strong and durable at half the cost of tin. Is also a SUBSTITUTE for PLASTER at Half the Cost. CARPETS and RUGS of same, double the wear of oil cloths. Catalogues and samples *free*.
W. H. FAY & CO., CAMDEN, N. J.

ZIMMERMAN FRUIT EVAPORATORS
The best in America. Great Bargains for 30 days.
☞ *From the wife of* Hon. John Sherman of Ohio:
"I have thoroughly tested your machine as a Baker as well as a Dryer, and it works beautifully. CECELIA S. SHERMAN."
Address Zimmerman Machine Co., Cincinnati, Ohio, U.S.A.

THE HAHNEMANN MEDICAL COLLEGE AND HOSPITAL OF CHICAGO.—The 27th Annual Course of Lectures begins September 21, 1886. The teaching is **Clinical, Dynamic, Thorough, Practical, and up with the Times.** Information on application. E. S. BAILEY, M.D., Registrar, 3030 Michigan Avenue, Chicago, Ill.

PORTABLE POULTRY HOUSES.



Furnished all complete ready for occupancy. These houses are just what poultry breeders want, as they are
Neat, Practical and Cheap.
All kinds of portable houses suitable for all climates; *rain, wind* and *water proof*. Sent to any part of the world, and no carpenter required to put them together.
Send for our Circular before you order a poultry house.
AMERICAN PATENT PORTABLE HOUSE MANUFACTURING CO.
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EMPIRE POWER and SEPARATOR
BEST, CHEAPEST and MOST IMPROVED in the market.

We also manufacture Mowers, Reapers, Twine Binders, Rakes, Field Rollers, Plows, Feed Cutter and Crusher, Hand and Power Corn Shellers, etc. Send for Illustrated Catalogue and Price List. S. S. MESSINGER & SON, Stockertown, Pa.

We have been able to convince the public that
SMITH'S VICTOR MILLS
Take the Lead!
Send for Catalogue, Address,
VICTOR GRINDING MILL CO.,
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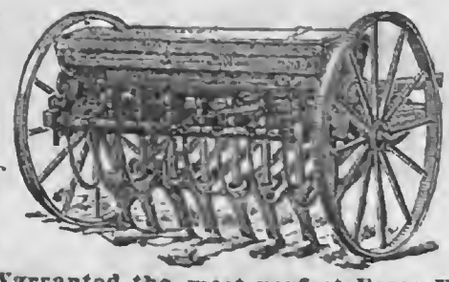
IRON **ROOFING**
Send for prices and Illustrated Catalogue of
CINCINNATI (O.) CORRUGATING CO.

The Pennsylvania Force-Feed



Fertilizer Grain Drill.
Warranted the most perfect Force-Feed Fertilizer Drill in existence. Send for circular, A. B. FARQUHAR, York, Pa.

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Full treatise on improved methods, yields, profits and prices FREE. AMERICAN M'F'G CO.
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THE GRANGER FAMILY FRUIT & VEGETABLE

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Has the Largest Track Wheels, DOUBLE GEARED, NO RODS, CHILLED BEARINGS, and LEVEL TREAD.
ILLUSTRATED CATALOGUE FREE

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Send for catalogue.
THE WELLS RUSTLESS IRON CO.,
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We desire to employ a limited number of active, intelligent lady agents (none other need apply) for the sale of the most meritorious and fastest selling article ever placed in the hands of lady agents. Entirely new. Business light and pleasant. Terms liberal. Address without delay ELECTRIC RUBBER CO., Marshall, Mich.

PEARSON'S FERTILIZERS.
High Grade. Reliable. Lasting.
Manufactured in dry condition, thereby assuring full weight of fertilizing material. Most flattering results where used side by side with other preparations. Where there are no agents for these Fertilizers, orders direct to the manufacturers will receive prompt attention. JOHN M. PEARSON, Hudson, N. Y.
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TRADE MARK
Ohio Improved Chester
The best Hog in the world. Not subject to Cholera. Sold 788 in 1885. Two weighed 2806 lbs.
Send for discription of this famous breed, also fowls.
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HIPPARCHUS No. 11672; Sire Orange Peel, P. 288; Dam King's Fertile, No. 22765. Service Fees, $100.
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Young Cows; Yearlings with Calf, Yearling Bulls, and Spring Calves' Prime Stock. No fancy prices. We mean business. G. W. THOMPSON & SON,
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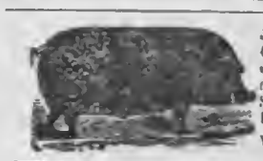

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LINSEED OIL-CAKE MEAL.
ABSOLUTELY THE BEST FEED FOR
CATTLE, HORSES, CALVES, SHEEP AND HOGS.
The Oil Meal from the mills of the undersigned is found by many Feeders of
LIVE STOCK
to be of great service during the
SUMMER MONTHS
when grass is good. No room here to give particulars; but try it, and you will see the good results. It is sold by all leading feed dealers.
Mr. JOHN KING, NORRISTOWN, PENN., is General Eastern Agent.
Cleveland Linseed Oil Co., Cleveland, Ohio.
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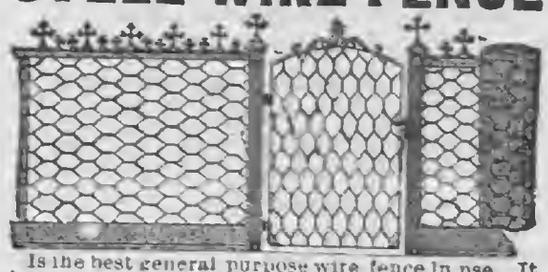
SEDGWICK STEEL WIRE FENCE



Is the best general purpose wire fence in use. It **is a strong net-work without barbs.** Don't injure stock. It will turn dogs, pigs, sheep and poultry, as well as horses and cattle. The best fence for Farms, Gardens, Stock Ranges and Railroads. Very neat, pretty styles for Lawns, Parks, School-lots and Cemeteries. Covered with rust-proof paint, or made of galvanized wire, as preferred. It will last a life-time. It is **better than boards or barbed wire** in every respect. The **Sedgwick Gates** made of wrought-iron pipe and steel wire, defy all competition in lightness, neatness, strength and durability. We make the best, cheapest and easiest working **all-iron automatic or self-opening gate**, and the **neatest cheap iron fences now made.** The best Wire Stretchers, Cutting Pliers and Post Augers. For prices and particulars ask Hardware Dealers, or address, mentioning paper,
SEDGWICK BROS., Richmond, Ind.
EDWARD SUTTON, Eastern Agent,
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Humorous.

LAW'N ORDER: "Keep off the grass."—*Detroit Free Press.*

IF it was not for the weather there never would be any variety in some people's conversation.—*Texas Siftings.*

THE House to the Senate: "Please pass the oleomargarine," and the Senate passed it.—*Rochester Post-Express.*

THE fat woman at a dime museum may not be "all wool," but she is generally "a yard wide or more."—*Norristown Herald.*

"I THINK I wear twos," she simpered to the shoemaker, "do I not?" "Yes, ma'am," said the honest dealer, "you wear twos." Then under his breath; "One on each foot."—*New York Sun.*

AGED NEGRO, speaking into street letter-box: "Hullow in dar! Is dar any letters for Efraim Sines? Umph! don't pay no 'tention to cullud gentleman's question, eh? Knowed it ud be dat way as soon as de Democrats got in offis."—*Judge.*

FOND FATHER: "How is this, Charles? Your standing at the last examination was very low." Charles: "Yes, sir." F. F.: "What is the reason?" C.: "Well, those old professors went and asked a lot of questions that I could not answer."—*Detroit Free Press.*

BAGLEY: "I notice that you frequently speak of things that happen at 2 A. M., and so on. Are you a newspaper man?" DeBaggs: "No, but I frequently walk the streets all night." "Insomnia?" "No. My wife locks the door at 10 p. m."—*Philadelphia Call.*

MAUD: "Yes, I have sent him back his letters; given him back his ring." Edith: "And are you happy?" "No, I am miserable." "Then why did you do it?" "Well, pa and ma were so pleased with him I was afraid we weren't suited to each other."—*Omaha World.*

"HAVE you traveled much?" asked a picnicker of a Butler County youth at a picnic last week. "Traveled much!" replied the young fellow; "I should say I had. Why I go to Sharpsburg every week with a load o' hay or suthin'."—*Pittsburg Chronicle-Telegraph.*

"MATTIE, Mattie," called out an Omaha dame to her daughter, "I wish you would play something else besides Wagner. I am so sick of it." "I am not at the piano, ma," responded the daughter from an adjoining room. "Then who is?" "Nurse and the Baby."—*Omaha World.*

A LITTLE boy was watching his mother make sandwiches to carry to the picnic last Thursday and asked what she was putting between the biscuits. She replied: "Deviled ham." He thought for a moment and then said: "Well, you needn't give me any of that bad man's ham, for I belong to the Star of Promise."—*Fairhaven (Mass.) Star.*

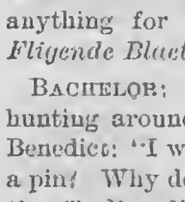
A COUPLE from the humbler walks of life came before a Justice of the Peace to be married, when, the ceremony being over, the bride began to weep copiously. "What's the matter?" asked the new husband. "I never told you that I don't know how to cook," sobbed the bride. "Don't fret. I'll not have anything for you to cook. I'm a poet."—*Fliegende Blaetter.*

BACHELOR: "What in the world are you hunting around on the carpet like that for?" Benedict: "I want a pin." Bachelor: "Want a pin? Why don't you look on the pincushion then?" Benedict (looking up in surprise from his search): "See here, old man when you've been married as long as I have you'll know where to look for a pin when you want one."—*Exeter Gazette.*

NOT THE BUSTLE HE MEANT.—"There has been an awful bustle here this afternoon," said Spicer to Mrs. S., who had just returned to the hotel from an afternoon ride. "I know it," remarked the lady viciously, "it made me look like a camel and I have sent it back to the clumsy woman who made it. Now what are you grinning at, Seth?" But Spicer had bustled out of the room without vouchsafing an explanation.—*Boston Bulletin.*

The machine that gave Grandmother a tired back makes a pretty plaything for the girls.

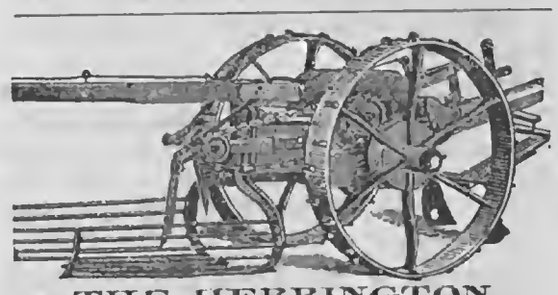
Miscellaneous Advertising.



Best and most profitable LATE WHITE PEACH: Chairs Choice best late yellow peach. Large stock of Peach trees suitable for all sections. William's Early Red, best early apple. Good stock Apple Trees, most popular and late keeping kinds. Pears, Cherry, Quince (and all fruit trees and fruit bearing plants. 200,000 2-year-old Asparagus roots. Large stock of Shade and Ornamentals. Send for Catalogue. S. E. ROGERS & SON, Mt. Holly, N. J.

CIDER MAKERS Should send for our New Catalogue, mailed FREE Boomer & Boschert Press Co., Syracuse, N. Y.

ACME PULVERIZING HARROW, Clod Crusher and Leveler. The Best Tool in the world for preparing Wheat Ground and for Summer Fallows. NASH & BRO., Sole Manufacturers, Harrisburg, Pa., & Millington, New Jersey. *N.B.—"Tillage is Manure" and other essays sent free to parties who name this paper.*



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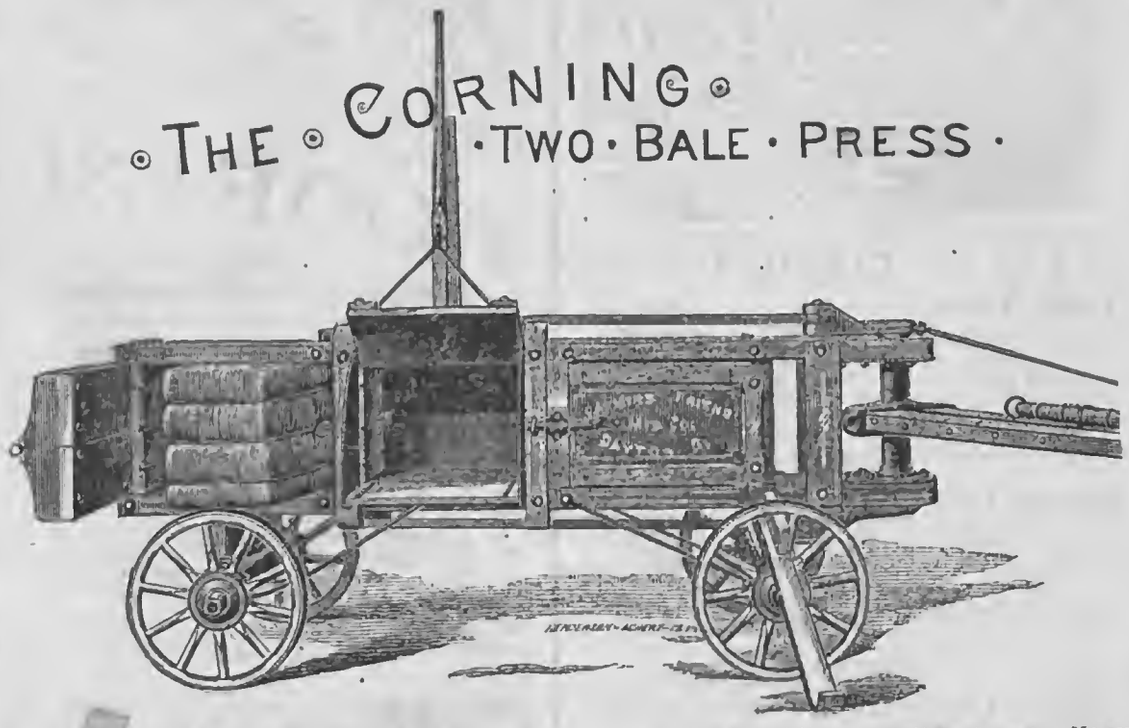

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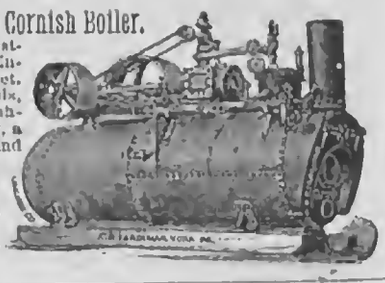

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THE RURAL NEW-YORKER

A JOURNAL FOR THE SUBURBAN AND COUNTRY HOME

VOL. XLV. No. 1911. NEW YORK, SEPTEMBER 11, 1886. PRICE FIVE CENTS. $2.00 PER YEAR.

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The Herdsman.

SHORT-HORNS.

"Saxon and Norman and Dane are we," the English say of themselves and, according to tradition, the same may be said to a limited extent of Short-horn cattle, the most highly prized and widely-diffused breed among the English-speaking race. In England, Ireland, Scotland and Wales their presence and influence are everywhere. In Canada and the United States they have found so congenial a home that the choicest and highest-priced specimens of the breed have been developed on this side of the water. In Australia and New Zealand they are prized as highly as on the banks of the Tees. Nor are their praises unsounded in foreign tongues. They are improving the standard of the coarse, shaggy herds of Russia. The best German breeders profit by their merits. In spite of the high opinion which France entertains of her own choice breeds, many Short-horns are imported for the improvement of her herds. Even Japan has been Europeanized in her appreciation of Short-horns, as well as in other respects.

Wide as is the fame of the breed to-day, however, until about a century ago their reputation was confined to the counties of Durham, York, Westmoreland and Northumberland. The cattle of the two first-named counties, on either side of the river Tees, had for several centuries been celebrated for yielding, under generous treatment, larger quantities of milk than any other breed on the island. They were generally wide-backed, well-formed animals, deep in the fore-quarters, soft and mellow in the hair and "handling," late to mature, though afterwards they fattened rapidly and gave heavy weights of coarse-grained, dark-colored flesh whose flavor was inferior to that of the smaller breeds. Their horns were somewhat larger than those of their descendants, and widened upwards. Their shoulders and hips were unduly prominent; they lacked length in the hind-quarters, width in the chest and fullness before and behind the shoulder itself. They were unduly large-bellied and uneven in appearance owing to their failure to take on flesh evenly and firmly. Such were the beasts out of which the present breed of Improved Short-horn cattle was developed.

The year 1780 marks the beginning of a new era in the history of Short-horns. A new impetus was given to breeding stock at that period by the wonderful effects produced by the genius of Robert Bakewell, of Dishley, with Leicester sheep, Long-horn cattle and cart horses. His method in breeding was to select animals of the best blood, possessing as nearly as possible the form he needed for the objects he had in view. He then bred them strictly in their own families, breeding in-and-in as closely as possible—often daughter to father and mother to son—so long as constitution, vigor, quality, health and fecundity remained unimpaired. He never went outside of the family except when he found specimens elsewhere which he considered would still further improve his stock. By this means he concentrated in the members of one family all the virtues he sought to perpetuate so firmly as to endue them with the faculty of transmitting their special qualities to a greater extent than had ever before been possible by any system of breeding. This system was inferred from Bakewell's practice, for he never disclosed his methods; and, with few slight modifications, it is the same as that by following which the most celebrated subsequent breeders of all kinds of live stock have accomplished their highest successes.

Among the interested visitors to Dishley were two young men, Robert and Charles Colling, sons of a substantial Teeswater farmer and breeder, who were about to start in business on their own account. During several visits they carefully examined Bakewell's stock, learned all they could of his system, and on their return north, applied what they had learned to the breeding of the Short-horn cattle of their district, being more fortunate in their material to start with than was Bakewell with the Long-horn cattle of his section. Beginning business jointly in 1780, they amicably separated three years later—Robert, about 30, and a confirmed bachelor, settling on a farm at Barmpton, and Charles, married, though a couple of years younger, taking another farm at Ketton. The farms were near enough to each other to allow the brothers to use the same bull in the same or alternate seasons, while each profited by the other's experience. Each, however, had his own cows carefully selected from the surrounding Short-horn herds, the choice of every purchased animal being determined by its possession of some particular excellence which the purchaser wished to introduce into his own stock. Thus they labored, Charles for thirty years and Robert for forty, making such marked improvements in the herds they bred that, under their management, the Short-horn race attained an unprecedented popularity which has continued to increase and spread until to-day.

GOLDEN THISTLE. Fig. 351. (See page 590.)

On the sale of the Ketton herd, of 18 bulls and 29 cows and heifers, in 1810, and of the Barmpton herd of 18 bulls and 89 cows and heifers, in two lots, in 1818 and 1820, the choice results of the labors, skill and experience of the Collings were scattered among the best breeders of the day, who eagerly competed for them at unprecedentedly high figures. Among these breeders the most celebrated were Thomas Booth, founder of the Booth Short-horn herd, and Thomas Bates, founder of the Bates herd. The former was a neighbor and rival of the Collings, having begun breeding in 1777 on a farm near Studley Park, although the legitimate foundation of his herd was not laid till 1790 at his Killerby and Warlaby estates near Darlington, Yorkshire, not far from Barmpton and Ketton. His two sons, Richard and John, joined him in breeding, and after his death, in 1837, succeeded him, the former at Warlaby and the latter at Killerby. On the death of Richard, in 1864, his nephew, T. C. Booth, inherited the Warlaby estate and soon made the Warlaby herd the finest representative of Booth blood. To this blood belong some of the most famous Short-horn tribes, such as the Fairholme or Blossom, the Bright Eyes, the Halnaby or Strawberry, the Bracelet, Isabella, Farewell, Boughton, Dairymaid or Moss Rose tribes, all of which, whether belonging to the Studley, Killerby,

or Warlaby contingent, have spread the fame of the Booth blood far and wide.

A worthy rival of the Booths was Thomas Bates, crotchety, kind-hearted, acrimonious, and an extremely skillful breeder. Having started Short-horn breeding in 1800, at the age of 25, he devoted an ample fortune, fine abilities and the rest of a long life to the production of a herd of such transcendent merit as to insure his lasting fame. At his death, in 1849, no Short-horn herd on the globe excelled his, judging from the prizes, prices and renown since won by the tribes he established. Of these the first in order of time, in his affectionate care and in world-wide celebrity, comes the Duchess, closely followed by its near relative the Oxford, while the Waterloo, Red Rose, Wild Eyes and Foggathorpe tribes have all deservedly won high reputation.

What these famous breeders, and a multitude of others hardly less renowned, have effected by way of improvement in the course of a century can be readily seen by comparing the splendid Short-horns of to-day with the coarse Short-horns before the Collings' time, as above described.

What a magnificent head is that of the heifer, Golden Thistle, on our first page, the property of W. A. Harris, Linwood, Kansas, which was bred by A. Cruikshank, Aberdeenshire, Scotland.

STOCK JOTTINGS.

POINTS OF DEVONS.—There has been considerable discontent in England the past season at the conflicting and bewilderiug decisions of judges in making awards of prizes among Devon cattle, aud it is proposed to define more clearly the points of Devons. In this couutry there is no breed whose characteristic points are so clearly marked as those of the Devons; but in England there are the Devon-Devons and the Somerset Devons. The former are the more symmetrical; the latter the larger; the former the more suitable for hilly districts and medium soils; and the latter for more level and rich districts. Hence differences of opinion: one mau wants size; another, symmetry. The favorite Devons, however, are a medium-sized breed, and many object to any attempt to enlarge the size by breeding or in any other way, as certain to entail loss of caste, and spoil the lot. The list of prizes for Devons is being somewhat coutracted by English agricultural societies.

DEVONS SLIGHTED.—There is some iudignation among breeders of Devon cattle at the slight notice taken of their favorites in reports of exhibits at fairs, and it is especially charged that Short-horn and Aberdeen-Angus, men are trying to belittle the solid reds. Doesn't the fault, if there is one, lie chiefly with the Devon men? They have probably the best established of all breeds; when have they ever tried to "boom" them, or even to call a just amount of attention to their merits? They should hardly expect others to take up the part of their business they themselves neglect.

ERGOT AND ABORTION.—Ergot on rye, grain or grass, is a fruitful cause of abortion in cows. This is now generally regarded as a malformation of the grain or grass, due to a parasitic fungus attached to it from its earliest development. It is a protuberance which grows out in a curved form, resembliug a cock's spur, from among the grains of the grass tribe, as wheat, barley, and especially rye. In the latter it is known as spurred rye. The spur-like protuberance should be readily recognizable. The ashen hue of the earlier stages gives place, later on, to a dark-purplish color. It attacks only the flowering branches or panicles of the grasses, and it is useless to look for it on the stems or leaves. The sides of streams and ditches, hedgerows, and other places where uncut grasses are allowed to flourish, should be regarded with suspicion, and, on the discovery of ergot, in-calf cows should be kept away from the spot till the ergoted grasses have been gathered and burnt. Abortion once commenced in a herd of cows may extend merely by sympathy; and the loss and inconvenience are so great as to render trivial any trouble involved in keeping a sharp lookout for ergot, provided those in charge of cows know where to look for the pest, and how to recognize it.

ABERDEEN-ANGUS CATTLE.—At the annual meeting of the Polled Cattle Society held the other day at Aberdeen, Scotland, it was announced that Vol. X. of the Herd Book had been issued February 15, and that Vol. XI. would close January 1. For this 1870 entries had been already received, 126 of them being from America—about two-thirds fewer than usual. Of the 126 animals from this country seeking entry 117 were bred on this side of the water. Vol. I of the American Aberdeen-Angus Herd Book was published in July, and hence there is some doubt about the advisability of permitting American entries in the Scotch Herd Book henceforth. The matter is under advisement. Hitherto these cattle have been known in Scotland as polled Aberdeen or Angus; it was decided henceforth to call them Aberdeen-Angus, a name adopted here nearly two years ago.

REMOVING OBSTRUCTION IN COW'S THROAT.

I notice a device in a late RURAL for removing an obstruction from a cow's throat. I find that "gagging" the animal is almost, if not quite, a sure cure. In fact, I have never known it to fail. My method is to take a piece of a round stick, the size of a fork-handle about a foot long, and place it through the animal's mouth so that the ends stick out at either side. Press it firmly back in the mouth as far as possible. Tie a string to each end of the stick, and up over the head, or around the horns, to keep it in position, and leave the animal for a short time. The obstruction will pass away without further trouble.

New Berlin, N. Y. J. S. B.

Horseman.

GENERAL CARE OF THE FEET OF THE HORSE.

DR. F. L. KILBORN.

Importance of sound feet; great care essential; evils of bad shoeing; brittle and contracted hoofs; hoof ointments; bruises, pricks, strains, etc.; importance of rest.

THE foot is one of the most important and complicated members of the horse economy; moreover, it is a member more liable to injury and disease than any other part of the animal. And yet, how many of the readers of the RURAL are there that ever give any special attention to the condition and care of their horses' feet? Many appear to believe that the only attention the feet of a horse require is to be re-shod whenever a shoe becomes loosened or lost, whether it is in one or six months.

While bad shoeing is undoubtedly the most prolific cause of diseases of the feet, due largely to the deplorable condition of our present farrier system, still there are many other matters in the care of the feet that every farmer can and ought to look after. Through this carelessness and inattention, and I may say ignorance, especially on the part of the average farrier, more horses are either blemished, permanently injured, or ruined than by any other method. An occasional systematic inspection of the feet and limbs should be made, to see that they are being kept in the proper healthy condition. This will enable the owner to discover any slight injury or disease in the earlier stages when treatment is comparatively simple, and recovery much more certain. It will also cultivate a habit of observation that will be invaluable to every horse-owner.

Whether at work or standing idle, all dirt and manure collecting in the shoe should be daily removed, preferably at evening, with a blunt-pointed iron instrument. If allowed to remain it dries, retains or increases the heat of the foot, and tends to drying and brittleness of the sole. During the Winter there is very little danger from drying and contraction, but during the heat and droughts of Summer the danger is greatly increased. Horses that are constantly kept on dry roads or paved streets or dry stables are quite liable to suffer from over-drying. Simple contraction, however, must not be confounded with the contraction which so frequently results from various diseases of the feet. The former occurs only occasionally; but the latter very frequently. One of the most common causes of contraction from drying is the prevailing custom of farriers to mutilate the hoof by excessive rasping and paring. In their opinion, an animal is not properly shod unless a large part of the surface horn—the great safeguard against excessive drying—is removed. The progress of contraction can very readily be seen by observing the heels and frog. As contraction goes on, the heels approach each other—"turn in"—and the frog becomes dry, hard and diminished in size. An excellent method is to keep accurate measurements of the feet, taken when they are in good condition. These can be used as a ready means of comparison, and will indicate the degree of contraction at any time.

Wetting the feet frequently, especially when heated, while answering a very good purpose in many cases, is a questionable practice. Better to allow the horse to stand for several hours daily for a few days in a puddle of clay or a water-bath just deep enough to cover the hoofs. Turning the horse on a wet pasture for several days, pasturing at night, or even for a few hours in the morning where there are heavy dews, are all beneficial; It must not be forgotten that after such soaking or moistening, the hoofs are, for a time, even more susceptible to drying influences than before; so that to counteract this tendency, a suitable hoof-ointment should be repeatedly applied after the soaking. These hoof-ointments can very frequently be employed to advantage to prevent excessive drying, not only after soaking, but whenever the hoof is drying from other causes, and especially after the hoof has been unduly rasped by the farrier. An excellent simple ointment for this purpose is a mixture of equal parts of the best pine tar and vaseline, to be applied daily as long as required. A horse should not be allowed to stand on or near heating manure, in urine, or on any decomposing substances. It injures the quality of the hoof, rendering it dry and brittle.

In recent bruises, pricks, strains, or other injuries to the feet where inflammation is liable to result, cold water is one of the best of applications to keep down the inflammation. Loosely fasten a piece of old blanket or sacking about the injured foot, and keep it saturated with cold water until the inflammation is reduced. In very severe cases, or in those not promptly attended to, a warm poultice may be more soothing.

Rest is an all-important part of the treatment. If this is neglected, and the animals kept at work, or if it is not promptly and properly treated, structural changes may soon occur, which will render the case very difficult to cure, or perhaps altogether incurable. Too much importance cannot be given to the *early*, proper care of all injuries and diseases of the feet. Rest, without treatment, is usually better than treatment without rest, but to secure the best results the two must be combined.

In the case of strains or sprains, the animal should be allowed to rest for several days, or in severe cases for several weeks, after an apparent complete recovery, otherwise a return of the lameness in an aggravated form frequently results. In all cases of wounds that are discharging, a free opening should be made for the discharge of the pus; the cavity should be thoroughly swabbed out with some astringent anti-septic wash, (as sulphate of copper or zinc, carbolic acid, etc., one dram in a pint of water), and dressed with tar. Perfect cleanliness should be observed; all wounds should be carefully cleaned and the foot bandaged, when necessary, to retain the dressing and keep out the dirt. During the enforced rest the animal should be kept on a restricted laxative diet; when again put to work, it should be gradual, until there is no danger of a recurrence of the injury.

WILD MUSTANGS IN NEW ENGLAND.—A number of wild Western cowboys are traveling through New England just now, selling mustangs to the farmers and all others who will buy them. They are reported to have operated to a considerable extent in other parts of the country also. They advertise ahead of their arrival; and on entering a town, with long strings of prancing, cavorting, mane and tail-tossing mustangs, turn them loose on the fair ground or some other large inclosure, and hunt them down on trained horses, lassoing and capturing them, to the huge delight and admiration of the assembled neighborhood. The fire, vigor and speed of the ponies; the wild gestures, long, free-flowing locks and bedizened garb of the riders, and the excitement of the entire scene, predispose the farmers to bid good prices for the mustangs when they are put up at auction at the close of the performance. The "steeds of the prairie" are thought to be tougher, hardier and gamer than the native horses, and many a quiet farmer, doctor and deacon is induced to invest in one. In nine cases out of ten, after a short time he wishes he hadn't. Most of the animals have never been broken. None of them has learned to prefer oats to grass, or even Canada thistles. All of them have strong objections to barns, which many of them soon emphasize with their heels. Although not very high, a fall from one of them either bucking or swerving or stopping suddenly when dashing along at full speed, hurts quite severely, as is evidenced by numerous bruises and contusions and some broken limbs. The enthusiasm for them soon dies out wherever they are well known, and the opinion is becoming general that, however well adapted they may be to the "Wild West," they are much less valuable for Eastern use than the native stock.

Sheep Husbandry.

Notes from the Western New York Farm.

WINTERING LAMBS.

THE OLD WAY. DOES IT PAY?

At least 900 out of every 1,000 lambs wintered, are either raised on the farm or bought in the Fall and either turned into the barnyard or an open field in which is a stack of hay and there compelled to run through the Winter, with little or no water except what they may get from some hole cut through the ice or by eating snow, and with no protection except the fence or the lee side of the hay or straw stack; or perhaps in the most favorable instances they may have an open shed to run under, and this is always the coldest and most windy place on the farm. They are usually given two feeds of hay daily and allowed to pull what straw they can from the stack, and a portion is usually scattered about the yard each day. The hay given them is seldom pure clover cut in proper time; but is usually a mixture of Timothy, June Grass, Red Top, and clover often much over-ripe when cut.

So treated we find them in Spring gaunt and feeble. What little growth they may have gained in frame has been at the cost of the flesh. The majority are badly infested with ticks and in many flocks a large percentage have yielded their pelts to ornament the fences and their emaciated carcasses to feed the hungry swine. Is it any wonder that the owners in disgust assert that there is no money in lamb raising, and that lambs are the very worst stock a man ever did try to winter?

THE BALANCE: WHERE IS IT?

Even under the most favorable conditions, the balance must be small, and without estimating the value of the manure for use on the farm, it must appear on the wrong side of the account. Suppose a lot of lambs are taken, weighing 60 pounds in the Fall; such lambs are richly worth four cents per pound. To carry them through the Winter without loss in number or weight would require at least three per cent. of their live weight in good clover hay daily, besides what straw they might get. This would amount to 325 pounds each. At this rate the account against the lambs will be, for cost price, $2.40; for 325 pounds of hay at $8.00 per ton, $1.40; for interest for six months on cost price, .07, making an aggregate of $3.87 each. For this we have, after shearing, a yearling sheep worth three cents per pound, and if it has gained in weight as much as the weight of fleece taken off, it would be worth $1.80. The seven pounds of wool would have sold for 25 cents per pound, or $1.75 for the fleece. The manure well cared for and used, is worth half as much as the hay, or .70. This makes a total of $4.25, and shows a balance in favor of the sheep of 38 cents; but when exposed as it would be where lambs were so wintered, the manure would lose by washing and evaporation at least half its value. Deduct this and the profit vanishes.

On looking this estimate over carefully it will be seen that if any error has been made or any over-valuation allowed, it has been rather for than against the lambs, so that this method has nothing to recommend it, even where the conditions are all most favorable; and where ordinary mixed meadow hay is substituted for the clover, or where a less quantity is given, the case will show much worse. They will absolutely fall away in flesh, and more or less will starve to death.

Every observant man must bear testimony to the truthfulness of this presentation of the case, and must admit that there is not only no profit, but that there is an absolute loss in the wintering of lambs as it is ordinarily done. It would be far better for the farmer to sell his lambs in the Fall, as there is always a good demand for them then. What deceives people is the fact that they look at the result of keeping them during the whole year, and think that the value of the yearling and its fleece is so much to be credited to the flock, when they should consider the value of the lamb in the Fall, and compare that and the cost of food with its Spring value after shearing. In the next "Notes" I will endeavor to show that there is a better way, and what that better way is.

It is now high time that lambs were taken from the ewes. What they get in the way of milk does not compensate for the annoyance they are to the ewes, and it only spoils their appetite for grass. They should be put into good, fresh feed and where they cannot hear the bleatings of the mothers. They should have plenty of fresh water and must be fed daily an allowance of a mixture of bran and corn, equal parts. This will keep them growing nicely and bring them into winter-quarters strong and fat.

AT last, on the 16th of August, over 65 days' continuous drought was broken by a fine rain, and again on the 24th. We have had enough to wet down as deep as the plow runs. These will greatly benefit late corn and potatoes, and enable the farmers to properly fit the barley and oat grounds for seeding, which could not have been done had the dry weather continued.

IT is wonderful how quickly the grass starts

after a good rain succeeding a severe drought. Those fields which two weeks ago were as brown and sere as in Winter, are now fresh and green, affording a good bite to the stock.

Much new seeding has been injured, some ruined beyond recovery, and still many fields on which every particle of clover looked as though dead, are starting out with a new growth and now look as though with a few more showers they would make good meadows. J. S. WOODWARD.

HAMPSHIRE DOWN LAMBS.—Lately Professor Wrightson, of England, speaking of Hampshire Down sheep, challenged the breeders of any other kind of sheep to produce a flock which will give an equal weight of mutton at the same early age. He insists that no sheep will give so good a return for the food consumed. He gives the live weight of seven of his lambs, averaging 142½ pounds each. Mr. A. W. Wells, of Berks, "goes some better," as seven of his Hampshire Down ram lambs, born on Xmas Day, and sold July 27, weighed respectively 188, 184, 178, 178, 177, 174 and 166 pounds. These, it is true, were the pick of the progeny of 326 ewes; yet the weights are wonderful. He claims high quality as well as quantity of mutton. A number of other accounts of wonderful weights of Hampshire Down lambs are given in late European papers. This breed is gaining ground steadily on both sides of the water.

AN OLD-TIME SHEEP "BOOM."—Many people talk as if "booming" live stock in the way of securing big prices for them originated yesterday or the day before and in this country; but as long ago as 1786—just a century ago—the famous Bakewall, of Dishley, obtained from each of two breeders $2,000 for the use of a famous Leicester ram a single season, after reserving one-third the usual number of ewes for himself, thus valuing the use of the ram for the season at $6,000. Three years later he obtained $16,000 for the use of ten of his best rams, and $15,000 for the use of the rest of his flock—or $31,000 in all in a single season. Has an American sheep "boom" ever equaled that?

Rural Topics.

Experiment Grounds of the Rural New-Yorker.

A NEW LABEL FOR PLANTS, SHRUBS, TREES, ETC.

When the Rural Grounds were laid out upon the site of an old apple orchard, 13 years ago, one of the first problems to solve was the best kind of label to adopt. Many were tried and given up. For shrubs and smaller plants an inch square pine stake, a foot long, pointed at one end, was used. This was painted white, except the lower part, which was dipped in warm tar. Such stakes, if again painted and dipped every three or four years, will last for 15 years at least. The work of re-painting, re-marking and tarring is the chief objection. An improvement upon this stake is shown at Fig. 353, No. 3, a device of J. T. Macomber, of Grand Isle, Vermont. The little wood label is screwed in on the top, and is intended to cover and protect the name, which is written on the stake underneath. It is easily pushed aside, and replaced when the name is to be looked at. Mr. Macomber says:

"I have used it two seasons, and the names are as fresh now as when written. The stakes should be made long enough to allow of their being driven ten or twelve inches in the ground."

For trees the zinc label was tried, the name written with an acid ink and secured by a copper wire. Prof. Gale was the first to suggest to us that a common lead pencil answered every purpose of the ink. The writing is not plain at first, but it becomes distinct in a short time and so remains. The objection to the zinc label was found to be that its movement upon the wire with every breath of wind, gradually wore the hole larger, and unless looked to from time to time, the labels were liable to drop off. To remedy this we suggested the double loop through the hole, so that the label should be firmly bound by the wire. But this was found not to overcome the objection entirely. There seems to be an electrical action between the copper and zinc which slowly wears upon the zinc and allows the play which the double loop was intended to prevent.

Let us now endeavor to explain our latest label, which, thus far, promises to be the simplest and freest from objection of any label and attachment known to the writer. Strips of zinc are procured from the tin store at a nominal price, and cut in various lengths, which, with a little coil of copper wire, are always carried in a certain pocket of the coat usually worn during working hours. These strips are bent over at the top, so as to bind the wire, as shown in Fig. 353 (4, 5) and Fig. 352 (2 and 1). The name may be written either on the under or upper side, and the wire twisted about the stake, as shown at Fig. 353 (4 and 5). If written on the under side the label may be raised up (see No. 4) to show the name, and replaced (see No. 5). A poor quality of zinc, after a few days' exposure to the weather, often forms a white corrosive

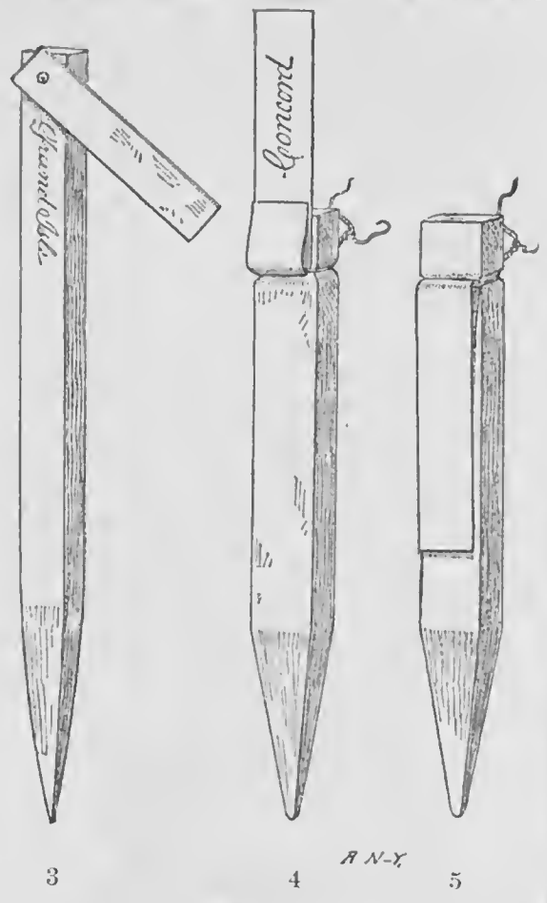


Fig 353.

powder on its surface, which soon obscures the pencil marks. When protected by the stake, as in No. 5, this powder does not form, and the writing will remain distinct for years and years, as we believe. A good quality of zinc, however, does not need this protection. Here there is no play whatever of the zinc upon the copper wire, and there would seem to be scarcely any limit to its durability.

When the stake rots the label may be removed and affixed to a fresh stake. For trees this arrangement thus far seems to be equally effective.

The engraving, Fig. 352, is imperfect. The

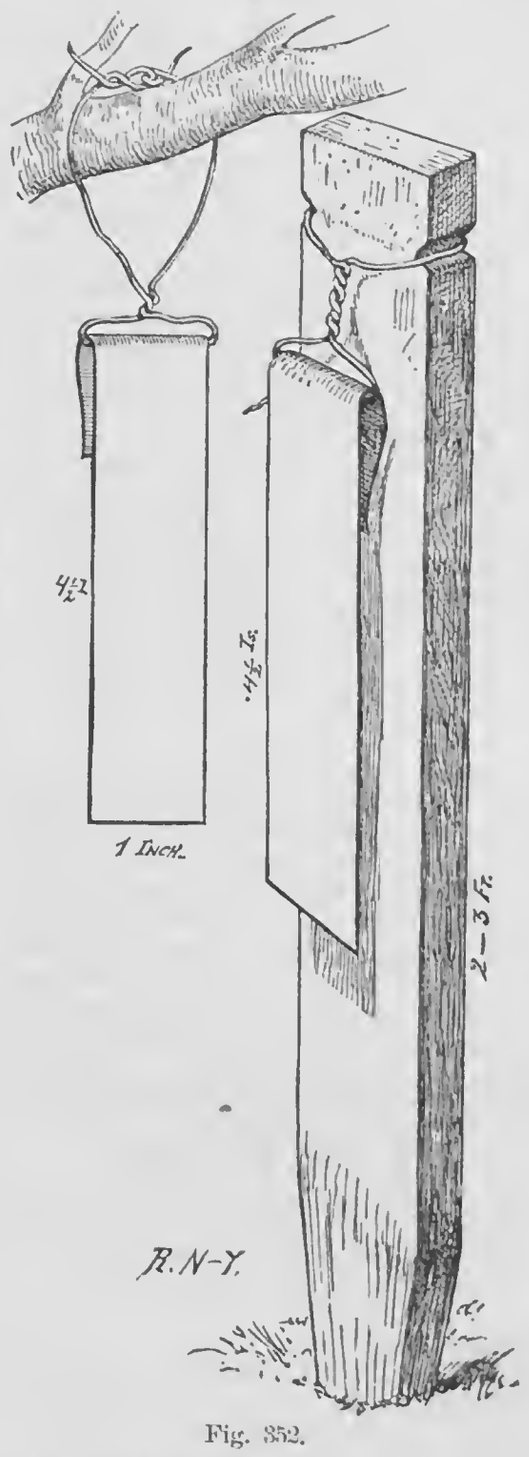


Fig. 352.

copper wire should be twisted firmly around the zinc as shown, and the short fold of the zinc pressed upon the other or main part so that the wire is held by the two parts of the label. This, however, is not essential as the weight of the zinc prevents it from blowing off. To provide for the growth of the branch to which the wire is attached, one end of the wire should be a loop through which the other end passes extending five or six inches or more as desired beyond the loop and merely curved over so as to hold the label. As the branch grows, the loop will enlarge or may be adjusted.

THE YELLOW-WOOD.

THE following letter explains itself, and we are glad to present it in support of our own appreciation of this beautiful tree:

IN the RURAL of June 26th, page 414, you make allusion to the Yellow Wood (Cladrastis tinctoria) being in bloom June 7th. Here it was in bloom about the same time. Our tree is a foot in diameter one foot from the ground, and is about 20 years old. It is, indeed, as you say, the most beautiful of trees, especially when covered with its graceful white flowers. These with the pale green leaves make a delightful contrast. The bark is smooth and somewhat variegated as in the sycamore. It is vigorous and hardy—not subject to attacks of any insects. It is comparatively rare in this section; in fact, I have not seen it planted extensively anywhere as it deserves to be. In the report for 1885 of the Pennsylvania Fruit Growers' Association, I made special mention of it.

You certainly have not over-praised it, and those who will try it will thank you for the advice in regard to planting this tree.

Cumberland Co., Pa E. H. COCKLIN.

BLACKBERRIES.

IF you plant the Snyder or Taylor Blackberry, you will get about everything there is in this fruit except size. The Taylor is a little later than the Snyder, and the berry averages a little larger. If you plant the Kittatinny you will get about everything except the extreme hardiness of the Snyder and Taylor. If you plant the Wilson Junior, you will get more berries perhaps than from any other kind, if the plant will endure your climate, which, if severer than that at the Rural Grounds, it will not do more than two years in five. It is, however, hardier than its parent, the Wilson. If you want a curiosity in the blackberry way that needs protection, try the Crystal White. The berry is white and sweet like a mulberry—the plants not productive. Among the new blackberries, Bonanza is worthy of mention. It is hardier than the justly famed Kittatinny, the berries are about as large, though scarcely as sweet, and it is about as productive. It appears somewhat before the Kittatinny and is desirable also for that reason. If you plant the Early Harvest you will get the earliest and prettiest blackberry in cultivation It is hardy here two years in five, we should say. The crop is used up by the time the Kittatinny begins to ripen. If you want a good and prolific dewberry, try the Lucretia. Its berries are large and of fair quality, ripening with the wild dewberries. Why anybody wants a blackberry that it is so hard to pick and that takes the space of several standards, is difficult to say. Stone's Hardy is worthless here. The berries are small and imperfect.

EARLY OHIO POTATO.—It has often been stated in these columns that the Early Ohio is the earliest potato ever grown at the Rural Grounds. The present season's trial further confirms these statements. In the same row were planted the Beauty of Hebron (?) and the Rural Seedling, No. 1. The vines of the Ohio died July 9th. There were seven hills, which yielded 9¾ pounds, which is at the rate of 337 bushels per acre. There were 57 potatoes, of which 45 were marketable. This is considered a rather small yield for the rich plot in which they were grown. As the tops of this variety are always small, the hills might have been closer.

The vines of the Rural No. 1 died July 15. There were six hills which yielded 15½ pounds, or at the rate of 625 bushels per acre. The whole number was 99, of which only 58 were marketable.

Five of the seven vines of the Beauty of Hebron were still quite green when the potatoes were dug. The seven hills yielded 26 pounds, or over 898 bushels to the acre. There were 78 tubers, 63 of which were of marketable size. The best five weighed 4⅛ pounds. The hills first to mature were perhaps the Beauty—the others were not. As between the Ohio and Beauty, therefore, no comparison could be made as to earliness, but the Ohio was a week earlier than any other in the entire plot.

Farm Economy.

A HARVEST HINT.

ALL the boys, both old and young, will appreciate the little drama shown at Figures 355 and 356. Our friend, J. M. Drew, sends us the idea from which our artist made the sketches. A well-filled oil-can is a necessity on all farms where machinery of any kind is to be handled. Oil is a necessary agent in its place, but it is a dirty and slippery article when it is allowed to spread out of its proper boundary. In Figure 355 the boy has been sent to the shop to fill the oil-can. He is in a great hurry, for his father wants to oil up the reaper before

Fig. 355.

Fig. 356.

starting for the field. The boy tries to fill the can from the jug, and the result of this effort is plainly visible. The oil is wasted, and goes dripping all over everything to the immense disgust of all hands. The boy thought the matter over pretty thoroughly, and the result of his thinking is shown at Figure 356. He has taken an old baking-powder can, and with a pair of pinchers made a spout at one side of it. With this arrangement he can fill the oil-can without any danger of wasting the oil or dirtying the floor. No wonder he smiles over his work, and stands up straight in the proud consciousness that he has invented a useful implement. Of the two ways of filling an oil-can, the latter is by far the best. Every farmer in the land will value this "Harvest Hint." Such a use of the baking-powder or tomato-can will save time, patience and oil.

Farm Topics.

CORRESPONDENTS' VIEWS.

MY muskmelons are splendid, and surprise every one who has seen them. I started the seeds in the house in April; then I put the plants in the hot-bed, about the middle of the month, where they remained till the beginning of June. I then transplanted them carefully, and covered them with cotton-covered frames till they were well established, and I did not lose a single one. I am in for all the prizes.

Headingly, Manitoba. E. F.

I LIKE what Mr. Woodward says about feeding cows. I have fed mine regularly, Summer and Winter, and it pays the best kind. It is poor economy to let any animal go without enough to eat. I give a feed consisting of half corn-meal and one-fourth each bran and oil-meal. The cows keep in good flesh, give more butter, and the manure is worth more. The best price I can get on oil-meal in New York is $29 per ton. We are working into Holsteins here. I am having made a husking-jack like the one recently pictured in the RURAL. No more kneeling on the ground for me. W. R. H.

Somerset, Co., N. J.

WE NEED MORE KNOWLEDGE.

We are wont to forget that beneath the growing crop that is waving before our eyes in the summer breezes, lies another crop, its counterpart, without which the first could not exist a single hour. We forget that within the darkness and dampness of the soil a system is in operation, beside which the most wonderful human achievements of hydraulic engineering shrink into nothingness. For

every leaf that plays with the zephyrs, a thousand miniature pumps of marvelous fineness and delicacy are at work to maintain its elasticity and grace. Beneath every full-grown plant that yields its quota to the farmer's crop lies a system of nature's plumbing scarcely less intricate than the human system which underlies New York or London.

When we contemplate these truths, naturally enough we begin to feel a sort of reverence for the soil, and the processes that are going on within it. The advice so often given, to put the cultivator down deep between the rows of corn is not quite so easily followed. We wonder how many tiny service pipes we are severing, and how the loss of sap entailed is going to affect the foliage. We query whether our method of preparation of the soil is the best that it might have been. We would gladly know how we may best resist this wonderful subterranean development.

Farmer A prefers deep plowing. His neighbor B prefers the reverse. C insists on shallow culture for corn, while D. cannot cultivate too deeply. E puts his fertilizer beneath the hill, and F gets better results by putting it above the seed. Are not our rules in agriculture largely empirical or experimental? May it not be truly said that the science of culture is yet in its infancy? Surely we do not know enough yet to attempt to lay down rules that shall apply to all conditions.

Geneva, N. Y. E. S. GOFF.

Dairy Husbandry.

SOUTHERN DAIRYING.

HENRY STEWART.

DAIRYING in the South is at present in a chaotic state; it is without form and void, and darkness is over it. Here and there some bright spots are breaking through the chaos, and nuclei of order and improvement are visible. One of the brightest of these is a Jersey Cattle club of which one of the RURAL subscribers, (Mr. Shuford, of Hickory, N. C.,) is President and for which I recently drew up a constitution and by-laws. Other bright spots are occasional herds of Jersey cattle; improved native stock; the better class of utensils and sweet-flavored butter. These, however, are few and far between and are not sufficient to lighten the general darkness, but serve more to make this more dense by contrast. And yet no other part of the Union has better opportunities for engaging in the dairy business or has a better market. Grass of various kinds, clover, and all sorts of fodder crops, in far greater variety than is known to Nothern dairymen, grow and flourish. The mild Winters in which pasturing is possible with only a few short intervals, make dairying at this season very easy, and then the largest demand of the year exists, for the whole South is then crowded with refugees, as they might be termed, from the Northern cities anxious to escape the rigors of the Northern Winters, and the hotels and boarding houses furnish a most excellent and liberal market; 50 cents a pound can be procured with ease for a fine quality of butter and every condition for the finest quality is afforded.

I am now writing from the center of the great Southern mountain region, where the elevation above sea level is about 4,000 feet. Here there is a magnificent dairy country. A cool summer climate averaging a night temperature of but little over 60° and a day temperature of about 75°; and a winter temperature of over 50;°; with rare and short snowfalls and a warm Southern sun which raises the noon temperature mostly to 65 or even 70 degrees; the fresh and most abundant water from ever-flowing springs and brooks which never freeze or vary from a standard temperature averaging 50 degrees: a soil and climate which produce all the clover and grasses to perfection and to which Red Top and Kentucky Blue Grass seem to be indigenous coming in spontaneouly when the land is cleared, and growing on the mountain tops, on the bald, treeless summits in large meadows, some covering more than 100 or 200 acres; and a rainfall of 60 inches in the year: all these combine to make a paradise for the dairyman who has been wont to struggle with summer heat and drought, and winter frosts, and snows in the North and West. Here mosquitos are unknown, and malaria, the curse of so many otherwise pleasant places, has no abode. What more can a dairyman ask for?

But where nature does the most, men do the least, and it is the rule among Southern farmers—to the manner born—with a very few exceptions, to do as little as they can, and do that little only when they are forced by necessity to do it. Hence the Southern dairy is in a state of chaos from which only Northern dairymen can lift it; and thousands of them, now shrinking with fear from the bugbear of oleomargarine and its numerous kin, might find room in the South, where this enemy could not make them afraid. Winter dairying is the best for the South. The Summer should be devoted to those special crops which are exceedingly profitable when rightly managed, as cotton and tobacco; and to making sufficient hay and corn and curing enough fodder to carry the cows through the short Winters. Pasturing might begin in September when the cows would be coming into milk after running in the woods from May or June; where they find abundant and excellent feeding on the luxuriant undergrowth. By reserving some aftermath of clover, or Orchard Grass, or a Blue Grass pasture for Fall and Winter use, the yard feeding would be very short; indeed it would be lengthened purposely for the object of making as much manure as possible. In places where the Summer lingers in the lap of Winter, silage of the abundant fodder crops, corn, millet, peas, Pearl Millet, Teosinte, Johnson Grass, and many others, with clover, which grows as it is rarely seen in the North, would supply the most liberal feeding where the pastures are barren and parched waiting for the late fall rains to restore their verdure. There is no difficulty of climate to stand in the way that cannot be overcome; no want of fertility in the soil; no want of a market; no trouble to sell the product at good prices; only men are wanted. The harvest is great but the laborers are few, and the dairy in the South is just waiting to be developed.

Macon Co., N. C.

The Poultry Yard.

THE FALL CARE OF POULTRY.

P. H. JACOBS.

AT this season of the year, when prices are usually low, many are prone to look upon the dark side of poultry-keeping, but as such depresssion is caused by a desire to reduce stock, a point is reached late in the year at which shipments become less frequent, and prices for poultry and eggs rise until the hens begin to lay abundantly in the Spring.

Before reducing stock, select all the hens that have moulted or show signs of moulting, as they will complete the process and begin to lay before cold weather comes on. Though the rule may not be infallible, yet the hen or pullet that begins to lay on the approach of Winter will generally make a good winter layer, while the one that does not commence before cold weather usually postpones operations until Spring. The hens intended for market, therefore, should be those that have not moulted, as moulting requires about three months.

Another point is that a moulting hen is usually fat. This is because she stores in her system the fat of the food, while the mineral and nitrogenous elements go to the formation of feathers. Hence, a hen may be very much debilitated by the shedding of new feathers, and yet be very fat. The best food for a moulting hen is oatmeal, with meat and milk, whenever such can be procured. Feed very little corn, as she should not be made very fat.

As the Fall begins to pass over and Winter approaches, by careful management the hens may be made to lay all Winter, and the beginning of the Winter preparation should be made in the Fall. In some sections the season is not very severe until January, and advantage should be taken of the warmer weather. Lice must still be kept down, and the poultry house must be made as comfortable as possible. To get the hens in good laying condition those that are very fat should be separated from the others, and be fed upon oats, as the only food, compelling them to hunt and scratch for the grain in cut straw, leaves, or some kind of litter, as the consequent exertion will reduce them in flesh and keep them in health. As soon as the hens begin to lay, they may be fed well on plenty of food, provided there is a variety, as the production of eggs will enable them to appropriate it to that purpose. Whenever a hen ceases to lay, if even for a few days, she begins to fatten, and this must be guarded against, as a fat female, whether quadruped or birds, is not very prolific.

If soft food is given, it should consist of ground oats three parts, shorts one part, and bran two parts, and if the hens are laying well there should be added one part of corn meal and one of ground meat. Bone-meal, ground shells, and pure water should always be where the fowls can have access to them, and the soft food should be seasoned with salt, scalded, and fed warm. No food will be necessary then until night, when oats and wheat should be given, unless in cold weather, when corn may also be allowed.

Chicks hatched late in the Summer or during the Fall, must be sold whenever cold weather sets in, as they seldom grow after frost. They will remain nearly of the same size all through the Winter, but will grow rapidly on the approach of Spring. Such chicks usually make short-legged, compact-looking fowls, while those hatched in the Spring are taller. It pays to give the late chicks the whole of the warm weather in which to grow and attain all the size possible, but if kept till the end of the year they should be sold about the middle of January, as prices then begin to rise. Good warm quarters have some influence on the growth of chicks and the productiveness of the hens, and as but little can be done in Winter, this is the proper time to build and make preparations.

AUTOMATIC REVERSIBLE FOUNTAIN.

FOWLS are as fond of pure, cool water as human beings, and when it may be provided at so little trouble and expense it is downright cruelty to neglect it. An automatic fountain is not difficult to make, and would prove a boon in every poultry yard. One head is taken out of a keg, a demijohn is placed inside, so that its neck will protrude through a hole bored in the center of the head, and solidly packed in with sawdust. The head is then replaced and the keg hung upon a frame, as shown in the sketch (Fig. 357). A pan is

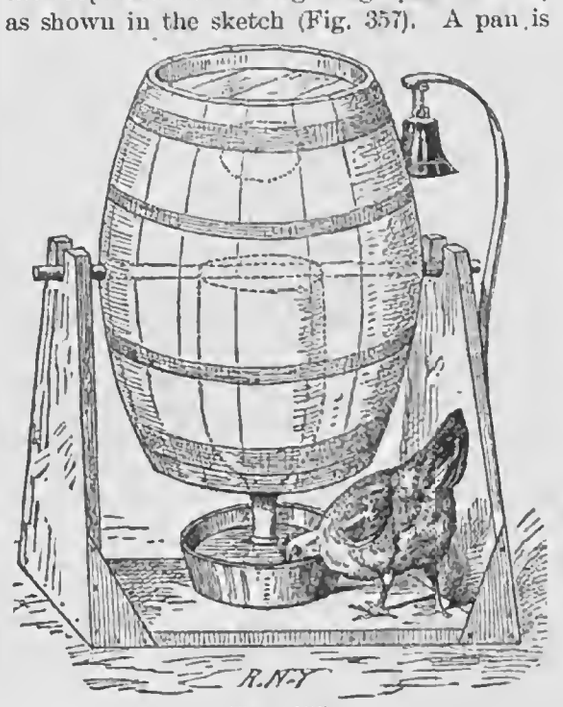


Fig. 357.

placed under the demijohn, so that the former's bottom will be about two inches below the latter's mouth. As the water is taken from the pan by the fowls it will flow in from the demijohn, so that there will always be two inches of water in the pan. The sawdust packing will keep it cool until the last drops flow out. As the keg is being packed with sawdust, a stone a little heavier than the empty demijohn may be placed in the bottom; then, when all the water has run out, the keg will turn over automatically, and may be arranged to ring a bell as it does so. In Winter the demijohn may be filled with *warm* water, and the sawdust packing will keep it warm a long time. A tin can, holding a couple of gallons and shaped something like a demijohn, may be used, and in very cold weather it may be filled with *hot* water without danger of breaking. With such a fountain as this in a poultry-house the fowls will not be apt to suffer for pure drinking water.

Christian Co, Ill. F. GRUNDY.

GAPES IN CHICKENS.—I have had an experience of several years raising chickens—from a score to 300—and sometimes, in a confined space; gapes have appeared, but not with any disastorous results when the following remedy was used:—Feed the flock sparingly, short rations. Keep a shallow dish with cracked corn, and over this corn pour a little turpentine; the chickens will go for this dish and take the corn, not with particular relish, but they will soon lose the gapes. B. H.

Field Crops.

PROFITABLE WHEAT ECONOMY.

WALDO F. BROWN.

WITH wheat selling at present prices no farmer can afford to grow a poor crop, and every wheat grower should determine to select such soil, and so thoroughly prepare it, that he may reasonably expect from 20 to 30 bushels per acre. This ought not to be difficult on good wheat land provided the proper conditions of soil are obtained. By far the most important point under the control of the farmer is the preparation of the seed-bed, and often ten bushels to the acre can be added to the crop by attention to this alone. The best seed-bed is one mellow at the surface, but compact below. This seed-bed is most easily secured by early plowing and frequent workings of the soil. These workings should follow every rain, as soon as the land is dry enough, and should be shallow. There is no better implement for this than an Acme harrow, but judgment must be used, and the implement selected must be the best suited to the condition of soil. Sometimes a roller or a heavy plank drag will do the best work; but the object should be to keep the surface fine and mellow so as to retain the moisture, and induce chemical action which will render the plant food in the soil quickly available. If for any reason plowing must be deferred until near seeding time, it should always be shallow—from four to five inches—and the roller should immediately follow the plow, so as to compact and pulverize the soil before it dries. Why do I lay so much stress on a compact, mellow seed-bed, do you ask? Because, first, I have seen many failures of the crop from sowing at once on a deeply plowed mellow field. The loose, porous soil holds too much water, and does not anchor the roots firmly, and the soil is not aerated and disintegrated so as to give up readily the plant food so necessary to give the plant vitality to endure the Winter and enable it to develop enough of blade to protect the roots, and enough of root to maintain its hold on the soil and resist the lifting process caused by the alternations of freezing and thawing, which kill the feeble plant. I have said nothing about fertilizers; but would advise that all the animal or barn-yard manure at command, be thoroughly fined and mixed, and used as a top-dressing after the land is plowed, and that it be thoroughly mixed with the surface soil by subsequent harrowing. Many years of experience have led me to believe that wheat sown early, on a well prepared soil, requires but one bushel of seed to the acre to produce all that the land is capable of; but I have hesitated to recommend this amount, because at some of the experiment stations the experimental plots seemed to show that six or seven pecks gave a greater profit; but in the report for 1885, Professor Lazenby, the Director of the Ohio Experiment Station, says: "From previous tests we should unhesitatingly say that four pecks of seed is a sufficient quantity per acre, *if the soil is in proper condition* and there are no exceptional climatic conditions." (The italics are mine.)

In regard to varieties, I recommend always that each should sow such as are tested in his locality. With me the Fultz and Diehl- Mediterranean have given the best satisfaction. As a rule, early sowing is best, but I would rather defer sowing two weeks than to put the seed in a badly prepared seed bed, and I would not sow while the mercury is much above 80 degrees, or in a very dry soil, as these conditions are favorable to insect enemies. I prefer to seed after rather than before a rain, which will pack the soil and form a hard crust. Following as nearly as possible these rules, I have been fairly successful as a wheat grower.

Pomological.

STAMINATES AND PISTILLATES.

PERHAPS no subject will, in the near future, assume more importance to nurserymen and fruit-growers than that which heads this article. The question of the perfect and imperfect blossoms is, as yet, but little understood. There are comparatively few engaged in horticultural pursuits familiar with the office performed by pollen in the production of fruit. Here is a field for practical investigation. We have barren plants, barren vines and barren trees. Is it because the blossom is imperfect or not? The strawberry is catalogued as staminate or pistillate, having a perfect or imperfect bloom. There are some raspberries which are said to be better than others when planted near others better supplied with pollen. [There is no doubt about it, and the same may be said of certain blackberries.—EDS.]

But how is it with orchard fruit trees, grape-vines and other kinds of fruit? [The same unquestionably as to certain varieties.—EDS.]

Mr. D. B. Wier, a prominent horticulturist, of Lacon, Ill., contributed some well-written papers to a Western agricultural paper, last Winter, on our "Native Plums." He states that the Wild Goose Plum has an imperfect blossom, and that unless it is planted near some other kind having a perfect blossom, is unproductive. He is evidently correct. I have an orchard of 800 large Wild Goose Plum trees, capable of yielding at least 4,000 bushels of fruit. I got only about 200 bushels this year. On the southwest side of this orchard there are a few rows of Amsden peach trees, and just beyond the peach trees is an apple and pear orchard belonging to a neighbor.

Five or six years ago when this peach

orchard was young and thrifty, and bore full crops of peaches, there was a full crop of plums. Whenever the peaches were killed in the bud and failed to bloom, the crop of plums was small. This year there were no peach blooms, all being killed in bud last Winter, and the crop of plums was very small. A few rows of plum trees next to the peach orchard and nearest to the apple and pear orchard, had more fruit on them than any other part of the orchard. They were doubtless [? Eds.] fertilized by the pollen from the apple and pear trees. I have another plum orchard of 100 trees completely surrounded by peach trees. Last year the peach orchard bore a nice crop of fruit, and the plum trees were loaded with plums. This year there were no peach blooms, and not a peck of plums on the 100 trees. The Wild Goose plum has never failed to bloom in the spring with me, though the thermometer registered 24 degrees below zero the preceding Winter.

The above observations lead me to believe that the Wild Goose Plum has an imperfect blossom, and needs a supply of pollen from some other source to produce a crop of fruit. The peach tree would be an excellent help for this purpose were it not for the fact that the peach-bud is killed when the mercury drops to 16 degrees below zero, while the plum-bud is not.

Mr. Wier recommends planting several varieties of plums together, and claims that the Miner Plum fertilizes the Wild Goose perfectly. It would be truly gratifying to many of the RURAL readers if the intelligent, practical horticulturists of the country would take up this subject and analyze it in all its bearings. Thousands of dollars have been paid out for barren nursery stock by parties ignorant of this subject, and ninety-nine one-hundredths of all such purchasers are ignorant of it. The nurseryman of the future must label his fruit trees, vines and plants as perfect or pistillate. If the latter, he must state the variety to plant with it to supply pollen.

Near the southeast corner of my large plum orchard are two or three large red elm trees, which were in full bloom at the time the plums blossomed. A few trees in this corner of the orchard were full of plums. Did the elm trees furnish the pollen? There was nothing else in bloom near the orchard that could have done so. A. R. C.

Princeton, Ky.

No, it would be impossible so far as is at present known. Neither could an apple fertilize a plum or peach. That a peach may fertilize a plum or *vice versa* is very probable. Prunus Simonii seems to be as much peach as plum. We urge our friend to unite with us in condemning the word "staminate" as it is sometimes used to express a *perfect* flowering variety; that is, one bearing *both* pistils and and stamens. The word should never be used in that sense. We have staminate species and varieties as, *e. g.*, asparagus, ailanthus and a multitude of others. These are properly "staminates." We have others, like the corn plant, chestnut, maple, pines, spruces, etc., that bear their male and female flowers separately, though on the same plant. Then we have another class of plants bearing perfect flowers, that is, flowers having both sets of organs in the *same* flower. This is just the case with what some call "staminate" strawberry flowers. It must appear therefore to all who desire that words should have definite meanings that to use the word "staminate" for "perfect" is misleading and altogether objectionable.—EDS.]

THE SCARLET CRANBERRY APPLE.

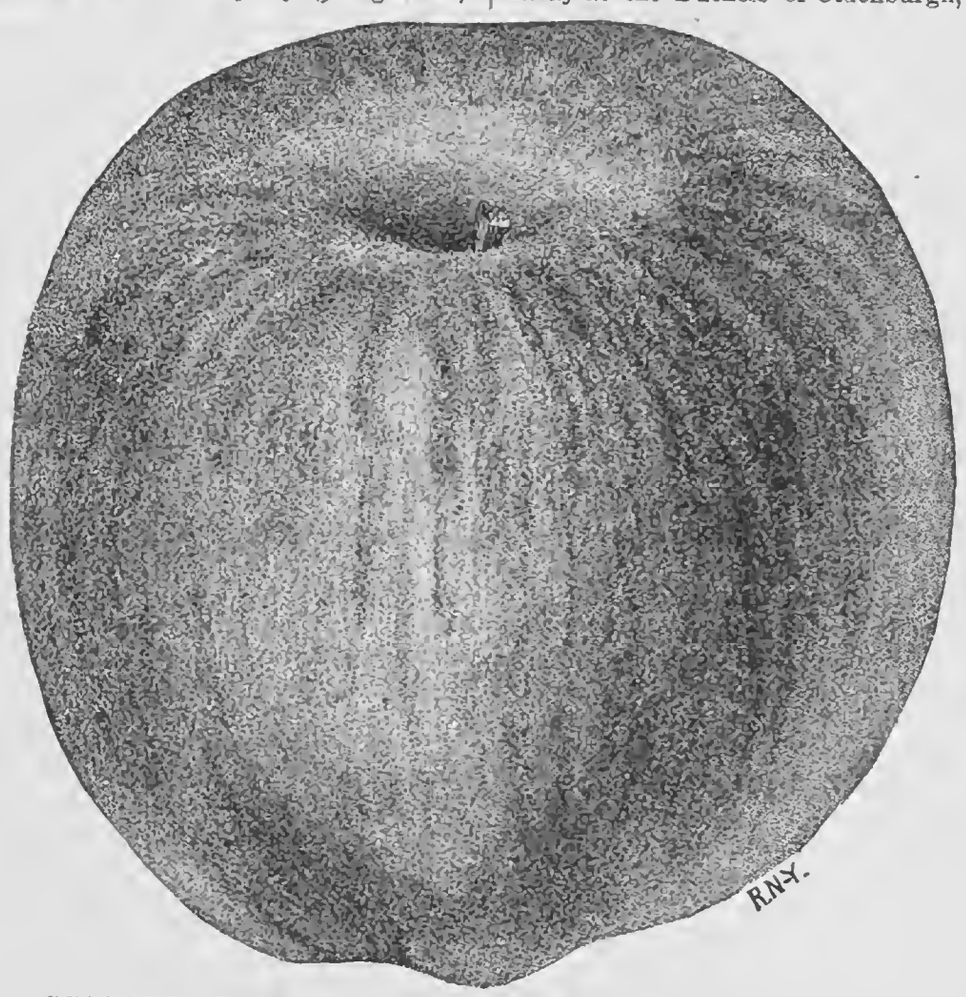
THE Scarlet Cranberry Apple, a specimen of which is shown at Fig. 358, with cross-section at Fig. 359, originated in Scott Co., Virginia, some score or more years ago, from seeds of an unknown variety. It is a very vigorous grower. The branches are very stout, often being at the ends of the twigs as large as a man's finger. It is an upright grower and is wonderfully productive, bearing full from top to bottom. Notwithstanding the great size of the fruit, they hang tenaciously to the large limbs and resist strong winds. The apples were sent to us and the above facts furnished by Mr. Geo. W. Robinett, of Pattonsville, Scott Co., Va. Our own notes taken at the time the apple was received, read as follows:

Very large, ovoid, conical, flat across the stem end; considerably ribbed, excessively so on the eye end; stem very long, 1¼ inch, slender planted in a narrow, very deep cavity; a little irregular and entirely covered with russet, which extends in irregular rays considerably out over the rim. Calyx rather small, closed in a narrow, moderately deep and much corrugated basin. Color: groundwork of pale yellow, completely overspread with a spatter of red, and much splashed with irregular stripes of deep carmine red, running much deeper toward the stem end. Cross-section: core small and well filled with seeds, many of which are imperfect; the seeds are small, short and thick. Flesh firm, fine-grained, dry, sub-acid, and though not high-flavor, quite meaty and of great consistency. Color white. Liable to be too dry and mealy when a little over-kept. A large, handsome and showy apple.

THE TETOFSKY AS A STOCK.

T. H. HOSKINS, M. D.

THE Tetofsky Apple was one of the first Russians introduced into the United States, it coming about the same time as the Alexander, Duchess of Oldenburgh and Red Astrachan. It is peculiar for its very upright growth,



SCARLET CRANBERRY APPLE. (From Nature.) Fig. 358.

stiff branches, and the habit of bearing its fruit on spurs, much like a pear. The fruit is of medium size, oblate-conic, ribbed, whitish-yellow in color, with carmine stripes; flesh firm, and of mild subacid flavor. On some soils and in some localities it is a shy, uncertain bearer, but in others it fruits profusely; yet, owing to its clustering habit and very short stems, most of the fruit is forced off by its growth, so that very little hangs until maturity. Its season in Northern Vermont is August, a little later than that of the Yellow Transparent, which has entirely superseded it as a market apple.

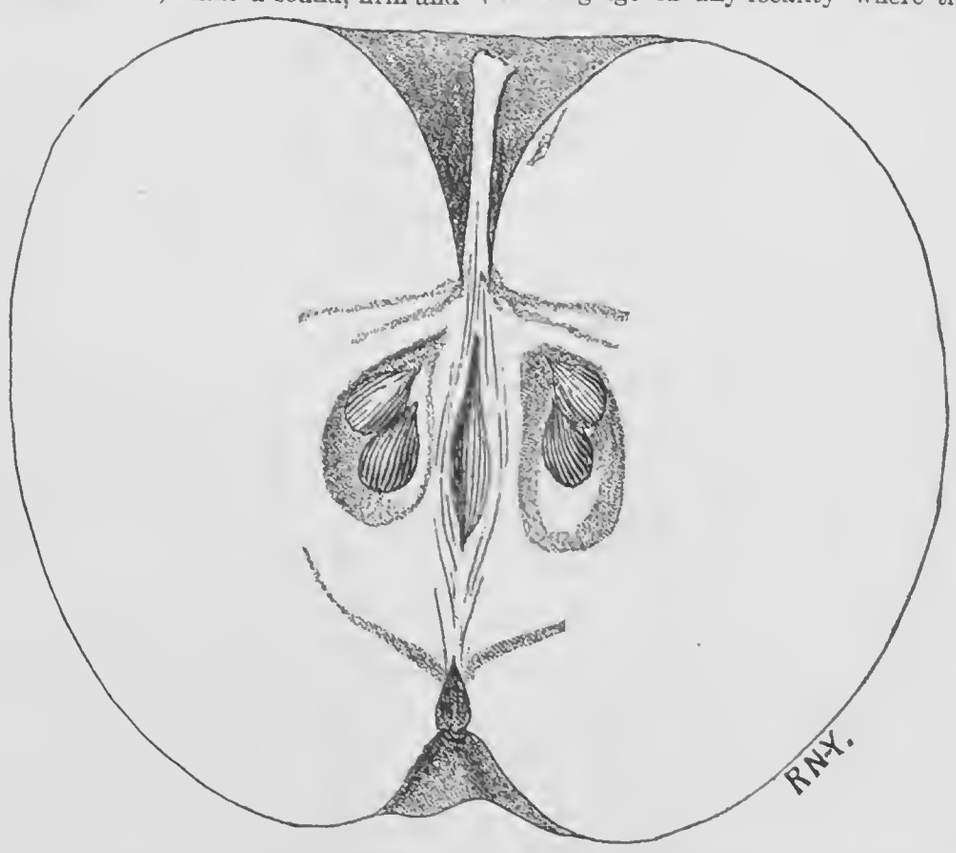
This last-named fact has been the means of teaching me the very great merit of the Tetofsky as a stock. A great many varieties (all that I have tried) make a sound, firm and lasting union with it, without any marked enlargement at the point of junction. The growth of cions upon it is healthy and vigorous, without being excessive. I find it just the thing to top-graft the semi-ironclad varieties upon. Without Tetofsky stocks I could not make the Fameuse a profitable apple. It is also an admirable stock for varieties that may be hardy against cold, but are subject to bark-bursting, either near the ground or higher on the trunk, and it has the great merit of bringing tardy bearers to time, and of making shy bearers productive.

The Prolific Sweeting is the best fall iron-clad of that class I know, but it comes very late to bearing, and I could not see where the prolificacy came in, until I top-grafted it on Tetofsky, where it bears heavily. Alexander is rather tender here, but perfectly satisfactory on Tetofsky, and a long list of this sort might be given, while the Foundling, one of our best late fall apples, but very subject to bark-rupture is safe from this on a Tetofsky stock. Nurserymen who have an over-stock of Tetofsky should avail themselves of this knowledge.

THE MANN APPLE.

I THINK it due to the public that the claim advanced for the Mann Apple, that it is as hardy as the Duchess of Oldenburgh, should be emphatically and widely contradicted. I do not say that its introducers are willful deceivers in making this claim for it, yet they should by this time know from the proceedings of the various horticultural organizations and the reports of individual fruit-growers and nurserymen in the "cold North," that the Mann apple is in no sense an "iron-clad" tree. It is considerably less hardy than Fameuse, which is far from being iron-clad. It is not so hardy as Westfield Seek-no-Further, Blue Pearmain or Tolman Sweet, all three of which are so lacking in hardiness as to be unprofitable in my grounds. In fact, there has not been one Winter of the last six when the Mann has not been badly injured in this section, and there is no likelihood that it can be brought to bearing age in any locality where trees approaching the character of an "iron-clad" are required. If my testimony on this point is not sufficient, it will, I feel sure, be sustained all through the cold North by men like Prof. Budd, of Iowa, A. W. Sias, of Southern Minnesota, A. G. Tuttle or H. H. Howlett, of Baraboo, Wis., Charles Gibb, of the Province on Quebec, and by many in Northern Maine.

Orleans Co., Vt.



SCARLET CRANBERRY APPLE. (Half Section.) Fig. 359.

We have received from a friend in Washington Territory, three Prunes d'Agen weighing 12½ ounces of delicious quality.

Arboricultural.

SIBERIAN STONE PINE.

PROF. J. L. BUDD.

THIS differs from our Swiss Stone Pine about as widely as does the White from the Norway Spruce. It is nearly as light-colored in foliage as our White Pine, and quite as graceful in expression, though denser and more compact in habit. It makes a free, rapid growth on the rich steppes of Russia, east of the Volga, and as far north as Moscow, and attains large size where the slower-growing Swiss Stone Pine utterly fails. Its timber is fine-grained, soft and peculiarly fragrant. It is almost exclusively used for the delicate, carved work sold at Moscow, Kiev, and other sacred places of the Greek Church, and for the rich carving of the interior of cathedrals. The nuts are edible and in quality compare favorably with our beech-nuts.

On our rich, dark-colored prairie soils, and in our changeable Summer air, our common conifers are difficult to start from seed with the best known care and arrangements for shading, while the nuts of this Stone Pine germinate as readily as corn, and the plants do not seem liable to damping off or burning, even when exposed to the sun.

Their ability to stand intense drought and heat has been well tested this Summer. Three-year-old plants, in bed, have been exposed to the heat and desert air of the past eleven rainless weeks which, for the first time in the history of prairie development, have shriveled and dried up our early planted corn, yet no leaf of the Siberian Pine has flagged, and the trees have made a growth of several inches, and seem to be still growing, when such trees as the White Willow and Box Elder are dropping their golden foliage as in Autumn.

The object of this note is to direct the attention of propagators to what seems to be a peculiarly valuable tree for Western planting. Its seeds can be obtained in any desired quantity of Carl Wagner, Riga, Russia, or can be ordered through Vilmorin, Andrieux & Co., of Paris.

Ag'l Coll., Ames, Iowa.

THE JAPAN CHESTNUT IN FLORIDA.

EVERYTHING in the shape of trees and shrubs coming from Japan seems to do remarkably well here. My Japan chestnuts are growing finely; but those I grafted on native stock are out-growing the trees bought and set at the same time. They all seem to grow more like a bush than a tree. Last February I put in four grafts of the Kelsey Japan Plum, in a common wild plum (set three years) near the ground. To-day (August 20th) I carefully measured the main shoots and laterals. The combined length is 382 feet four inches—longest shoot eight feet four inches. The largest measures 6¾ inches in circumference. The combined length of the best graft is 160 feet. It still seems cheerful and looks as though its task for the season was not nearly completed. J. M. M.

Green Cove Spring, Fla.

Horticultural.

TOO MANY NEW STRAWBERRIES.

THERE are too many new and often poor strawberries thrown upon the public. Too many want to get rich selling plants to the credulous public. I am heartily glad to hear of a "commission appointed to examine and report on all *new* fruits." If this is done it will save the country thousands, besides preventing the land from being over-run with trash. How many new and worthless fruits flood the realms of Pomona? All for money! Now, no one berry or fruit can be expected to suit the whole of our vast domain. Hence, some will say, "the only way for us to do is to try all newcomers." But suppose a commission tries them and proves they are worthy. We then are less liable to be imposed on than if there had been no trial or proof of their worth or worthlessness. If a disinterested commission at some of our agricultural colleges would prove the value of all fruits, before they are sent out, it would be of immense benefit to the fruit growers. Some proof, however, is better than none. One will say, "the originators prove their fruits." Yes; but they are directly interested; hence a trifle liable to err. The RURAL has been of much benefit by its impartial criticism on fruits. Yet it has been blamed for that very impartiality. A commission would doubtless meet with the same treatment. Still, I am in favor of one as I think good would result. "Go slow" in buying new things. A. F. D.

Croston, Oregon.

What Others Say

A VISIT OF THE FARM EDITOR OF THE N. Y. WORLD TO THE RURAL GROUNDS.

THOSE WHEAT AND RYE HYBRIDS.—L. C. Benedict, the painstaking agricultural editor of the New York World, visited the Rural Grounds a few weeks ago. The following report of the visit is taken, word for word, from a late issue of that journal:

"The wheat and rye hybrids produced on the experimental grounds of the RURAL NEW-YORKER, and about which World readers have already had two illustrated descriptions, continue to attract widespread attention and no little controversy among the scientists of the country.

July 13 a visit was made to the Rural Grounds to see the twentieth-of-an-acre plot, which has been characterized as bearing plants that most resembled rye. All the plants thereon have sprung from one seed, as stated in the weekly World, Feb. 24. This one seed gave a plant bearing twenty-two heads in which only a few shriveled kernels were found and the plot above alluded to is the second year's increase from those shriveled kernels. Of all the rye-wheat hybrids this twentieth acre has proven the most interesting. At the time of our visit of inspection we might have selected no fewer than fifty different heads as distinct from each other as are any of the wheats in cultivation.

Some of the plants were dwarfs, not over two and one-half feet high, with culms thrice as heavy as any ever seen in the pure wheats. Heads seven inches long were not uncommon. Some were bearded as heavily as buckwheat; others were beardless and still others showed every intermediate stage. Some were club-headed, with breasts or spikelets densely crowded towards the top. Some bore compound spikelets; that is, two breasts growing instead of one, and the head partially double-breasted on each side of the rachis. Some heads were shapely, others twisted with long, curly awns and culms as crooked as the heads. Some heads were larger and contained more kernels than any wheats we have ever seen growing in this climate. Others were feeble, narrow heads, scarcely two inches long. The straws were of all colors, from yellow to dark purple. They were of all thicknesses, from the size of rye to that of a small slate pencil. Some were densely downy, others smooth. Some were wiry and strong, others weak.

These plants were maturing variously, some with rye, some with wheat, while many were still perfectly green, with a good promise of not ripening at all. These strange plants, all from one seed, vary so remarkably, are so entirely different from either wheat or rye, that nothing short of seeing them can give the reader a good idea of them or enable authorities on grasses to intelligently consider the matter.

We pass now to the three-fourths rye plants, seeds of which were planted last Fall, having been produced by again crossing the half-rye plants by the application of rye pollen. About a dozen plants grew, every one of which is different from the others, and three of which, bearing from fifteen to twenty heads each, are evidently sterile. It is to be hoped that a few seeds may be found in these heads, as thus far it is only from them that any progress towards rye has been made. One of these sterile plants was the tallest of any plants in the several plots by six inches. The culms are as slender as rye culms, but in color a very dark purple, nearly black. Seven heads of the three-quarter rye plants were again this Summer emasculated and treated to rye pollen. If any kernels result their parentage will be seven-eighths rye. All will be again carefully planted, one kernel a foot apart each way, and will, it is hoped, result in further remarkable departures next Summer.

If by this continued use of rye pollen upon successive progenies, the first mother of which was Armstrong Wheat, real rye plants are again produced, it will prove a most interesting and instructive fact, especially to botanical science. One cannot, however, examine this varied collection of hybrids without being impressed that the immense culms and heavy heads of many plants will find a welcome place in the future cereal husbandry of the country.

"FERTILIZERS FOR WORN-OUT SOILS.—The hybrids above considered are the results of only one of many experiments conducted by the Editor of the RURAL NEW-YORKER in the interests of progressive agriculture and science. The Rural Grounds is one of the foremost practical agricultural stations of the land, and abounds in valuable lessons to farmers. Following are a few items of interest gleaned during our recent hurried visit:

Potato fertilizer experiments made on poor, impoverished soil produced results that prove the folly of bestowing on land which requires all three of the essential plant foods, any one or even two of them. A profitable yield is gained only where a *complete* fertilizer was given. Animal manures are complete fertilizers in the sense of containing all the elements of plant foods. A "complete" fertilizer among commercial or artificial fertilizers is one that possesses more or less of nitrogen, phosphoric acid and potash. It may be worth $50 or $5 a ton, according to the quantity of these three foods it contains in available form. In Mr. Carman's experiments chemical fertilizers were used. Lime, ashes, sulphate and muriate of potash, kainit, nitrogen, etc., plaster, bone, etc., were applied separately without material increase of yield over unmanured plots. The effect of any two was much the same. It was only on those plots where bone, potash and nitrogen were all used that the yields were increased.

"IMPROVING CORN BY SELECTION.—An interesting plot that demonstrated what each farmer may do for himself in the way of improvement in corn gave the results of ten years' selection. The variety originally was Tennessee Prolific, which during the second year of trial was crossed with heavy white dent. Ten years ago it grew ten and eleven feet high, suckered badly and bore small ears. Every year small plots have been planted and seed selected from only the most perfect plants. The tassels of all faulty plants were cut off. The results, as seen recently, of this ten years' improvement by selection are: It is two weeks earlier, there are few suckers; the ears are often four and five to a stalk, are borne lower, and the plants average not over eight to nine feet high in good soil.

"EARLINESS OF THE EARLY OHIO POTATO.—The earliness of the Early Ohio potato is a subject of some discussion, as is also the fickleness of its yield. In some localities it is the earliest sort known, and yields well; in others the yield is poor. A peculiarity of this variety everywhere is smallness of the tops, and they hardly ever bloom. On the Rural Grounds Early Ohio and Beauty of Hebron were planted side by side. July 13 the vines of Early Ohio were nearly all dead, while those of Beauty of Hebron showed no signs of changing. Judging from the raised, cracked soil and one hill opened for inspection, the yield will be heavy; but then this was in extremely rich soil that had not been subjected to drought. Early Ohio was the earliest of sixty-one varieties under trial.

"RASPBERRY AND BLACKBERRY CROSS.—Prof. Saunders, of Canada, and perhaps others, have effected a cross between raspberries and blackberries, but the results are not known. It appears from Mr. Carman's experiments in this direction that the cross is a simple one to make. Both the raspberry and blackberry buds were opened and the anthers removed while green. Pollen from each was applied to the other, and carefully wrapped up in tissue paper to prevent contact of pollen from bees or wind. About fifteen berries formed from this hybridization, three-fourths on the raspberry and the remainder on the blackberry. The seeds of the raspberry have already been sown, and those of the blackberries are to be planted when ripe.

"THE JAPAN CHESTNUT.—The Japan chestnut which owes its introduction in this country to an accident, has proven in New Jersey to be as hardy as the American chestnut. Some trees will bear when three years from seed, and there appears to be no difficulty in transplanting the seedlings. Owing to its short joints and shrub-like tendency of growth the Japan chestnut is peculiarly adapted as an ornamental tree for lawns; it is also of value for its fruit, which, while not of as good quality as the American chestnut, is better than that of the Spanish nut. On the Rural Grounds were seen seedlings one foot high from seeds that had been planted this spring.

"PEAS WILL NOT MIX.—Farmers, many of them, believe that different varieties of peas will cross if planted in close proximity. This is not the case, for the ovules of each flower are fertilized by the pollen of the same flower long before the buds unfold. Therefore, in crossing peas, the anthers must be removed just as soon as the petals show themselves in the bud. If one waits beyond this period, it will be found, on opening the bud, that the anthers are ripe and have shed their pollen upon the stigma. It is impracticable to unfold a bud so small and immature, and therefore many have concluded that peas could not be crossed even artificially. This difficulty is obviated, however, by cutting off the tip of the bud as soon as it appears, and slitting down the flower a short distance; the ten anthers are then easily removed, leaving only the stigma, which may now receive pollen of any other variety with which it is to be crossed.

"WELCOME OAT UNDER MANY NAMES.—Trial plots devoted to oats make it appear that "Welcome" is really the "White Australian" introduced by ex-Commissioner Le Duc while in office; but then again it is not Australian, because Australia is not an oat country. "Dakota Chieftain," "Clydesdale," "White Belgian," "Race Horse," are all really "Welcome" or "White Australian." So, likewise, are the new "Yankee Prolific," the "Russian White," or "White Russian."

"THE BLUSH POTATO.—The Blush Potato, introduced by the RURAL NEW-YORKER four years ago, has proven all that was claimed for it. It is of the Peachblow kind, but one of the heaviest of yielders, and in quality as good as any Peachblow. It is a late sort, and one of the best of keepers. Its one failing is that it straggles in the hill, thereby rendering it more difficult to harvest than some other kinds."

FEEDING APPLES TO COWS.—Owing to the tendency of cows to over-eat when they can get food which they like and to which they are unaccustomed, the Natural Live Stock Journal thinks that probably there is nothing more dangerous for them to help themselves to than apples, yet they readily become accustomed to them, so that they can be as safely trusted in an orchard as a sheep or horse. They should be fed moderately at first, and the quantity be gradually increased till, at length, they learn to measure the quantity their stomachs can manage.

Apples are a dainty bit for cows, and when fed judiciously, are a healthful and excellent milk-producing food, and as safe as any other. The great danger in the case of bovines over that of other animals, comes in part from an extraordinary development of the rumen by habitually overcrowding it with coarse herbaceous food in the effort to furnish the means for supplying the demands of abnormally active udders. The rumen becomes stretched to such a capacity that it will hold more concentrated food than can be digested before fermentation becomes active enough to prove detrimental, if not fatal; and the animals are not able, until educated by experience, to discriminate in the use of coarse and concentrated foods. Non-ruminants have no such organ for hastily taking in a store of food to be afterwards worked over, and hence are not so likely to be led into overloading; nor do ewes, which have a drain through their udders very much inferior in proportion to cows, feel such a strain upon their appetites as to induce an over-distension of the rumen, but would in all probability do so with a corresponding development of milking capacity, since they are also ruminants and have analogous stomachs.

HEREFORDS AS BUTCHERS' STOCK.—An important characteristic in Hereford cattle is that they carry flesh most heavily on the parts of the frame from which the best meat is cut. Their broad backs are usually loaded with meat of the very finest quality, and the average Hereford carcass is found to have its fat and lean mixed in the most admirable manner. Butchers and consumers alike hold Hereford beef in high esteem in England. Indeed, the grass-fed Hereford beef enjoys quite an enviable reputation, and brings top figures in the best markets of that country, as we are told by Farm and Home. The perfect mixing of Hereford beef has been notorious for generations, and has frequently been illustrated both by brush and pen. The proportion of lean to fat is exceptionally large, and the whole is juicy, tender, and choicely flavored.

THE LATEST AND BRIEFEST.

THE New York Times says that "the purpose of most of the agricultural schools is not so much to make farmers as to make teachers of the art, but it seems to a practical man that the best kind of a teacher is one that can first show a young man how to use the plow and harrow by explaining to him the principles upon which they are constructed and work, and teaching him how to handle them. This should come before the study of chemistry, or at least be held equally important with it." By all means. But it strikes us that a young man should know how to plow, harrow, hoe, etc., before entering an agricultural college, as an elementary education necessary to pass an examination.....

THE hams which won the first of four premiums, offered for the best cured hams by the Maryland Agricultural Society, were cured as follows: For every 100 pounds of meat take 8 pounds of the best pork salt, 2 ounces of saltpeter, 2 pounds brown sugar, 1¼ ounce of potash and 4 gallons of water. Mix them and pour over the hams after they have lain in the tub 2 days, having been rubbed with fine salt when put in. Let them remain in this pickle for 6 weeks; then let them dry several days before smoking.....

PUCK (the illustrated comic journal) says that the man who labors with his hands has a way of arrogating to himself all the dignity of labor. He calls himself a workingman, and denies that title to the men who labor with their brains. He will not recognize as a fellow-laborer the accountant, the editor, the artist, the inventor. He never thinks that such men may work as hard as he does, *must* work as hard as he does to get on in the world, and to make their living.....

Everywhere.

RURAL SPECIAL REPORTS.

Delaware.

CAMDEN, Kent Co., Aug. 31.—Lately I have done a good deal of traveling through the New Jersey, Delaware and Maryland peach region. Only a few of the evaporators in the Delaware and Maryland peach region were run before the first part of this week, as the excess of rain during the first part of the fruit season made the peaches of poor quality for canning. Lately there has been a good spell of dry weather, however. A basket of peaches should yield, if Oldmixons in prime condition, upwards of seven pounds of evaporated fruit, but this season only from two to three pounds have been secured from a basket. Consequently the cost has been too great for the business to be profitable. The opportunity on the peninsula for evaporating white or red fruit has passed, but the dry weather if it continues will cause the Smocks, the yellow peaches generally used for that purpose, to be in prime condition, and the evaporators may secure the usual supply. White or red evaporating fruit will probably be scarce excepting for unpeeled fruit, and that will probably be abundant. There may be a few Smocks ready for market this week from Lower Maryland, but there will be an abundance of them next week. This is the most desirable yellow peach for canning and preserving, and housekeepers will do well to bear this in mind and be prepared by next week. The season will be a short one, and there will be but very few peaches from Delaware after Sept. 10. H. R. S.

Illinois.

CHICAGO, Cook Co., August 24.—During the last seven days we have been drifting again into very hot weather, and advices from the West indicate that the recurrence is not local. The late rains, however, have been very beneficial. In many localities where corn two weeks ago did not promise anything, a half crop at least now seems very probable. Another favorable change is the revival of vast areas of pasturage, so important for stock feeding. Fall pasturage in the West is greatly relied upon for the fitting and preparation of stock for winter feeding. The long, dry weather had completely exhausted the fields, and they were totally destitute of the slightest sign of life or vegetation, but a favorable change is plainly visible to-day everywhere from the lakes to the Mississippi River. The reports on spring wheat have been very conflicting, but the burden of the evidence increases to the effect that in many areas of Minnesota, where forty days ago the crop was reported to be a failure, a very fair yield of spring wheat is now being thrashed out. Good progress has been made with plowing for wheat in Ohio and Indiana, and we expect to see seeding of winter wheat in these States soon commenced. The movement of winter wheat still continues very fair. Farmers lost very heavily last season on their wheat, where they had any, by holding for higher prices. But this season there does not seem to be any disposition either in the spring or winter wheat belts to hold for an advance, but to sell as the necessities of the case require. One good general rain (which we have not yet had) would put everything in the farming world in excellent shape for fall work. The rains have come during the last two or three weeks only in areas, and were confined more or less to States. I do not think that during the last forty or fifty days Illinois received any rain which would cover the State as a whole during a consecutive period of twenty-four hours, and this is one reason why the reports on the corn situation have been of such an irregular character. W. H. L.

Massachusetts.

WOLLASTON, Norfolk Co., August 24.—Grapes almost a failure on account of mildew; none escaped. Pears very light owing to frost about the time of blossoming. As a general thing, in most other sections of Eastern Massachusetts, the crop will be good. Apples plenty, the ravages of the canker-worm not so apparent as in previous years. Plums a fair crop. Peaches—none—trees dead or dying. Tomatoes very late and inclined to rot before ripening. J. N. R.

New York.

MIDDLETOWN, Orange Co., August 31.—The

onion growers of this section are harvesting the scanty crop which has escaped the ravages of their old enemy the cut-worm and of the new pest which first appeared last year, the onion weevil. The two largest onion fields of the district are the Graycourt Meadows, near the Erie railway station of that name, and the Black Dirt Meadows on the right bank of the Walkill. In ordinary seasons the 1,000 acres planted with the root at Graycourt and the 1,500 acres planted on the Walkill yield a crop of about 500,000 bushels. Owing to the destructive work of the insects the crop this season will fall short of 200,000 bushels. The onions sent to market this season are unusually fine, of large size and fully ripened. Formerly the growers vied with each other in supplying the early market at high prices, and frequently shipped the tubers in an unripe state. Of late Bermuda and Southern onions monopolize the early markets, and our growers have abandoned the early for the late fall and winter trade. They find that their product, fully matured, has superior keeping qualities and brings a better late season price than the Southern article. Prices opened this season for the crop raised in this quarter at $1.75 to $2 per barrel. Later quotations are $1.50, with a declining market. Those who stored their crops last year for the winter trade made a good thing by it on an advance in prices, and many of the larger growers will adopt a like policy this season. G. G. S.

PORT JERVIS, Orange Co., Aug. 26.—It is estimated that the yield of huckleberries of all varieties for the season about closing, in the famous berry regions of Northern Pennsylvania and Southern New York, within a distance of 150 miles of New York City, is not less than 150,000 bushels, nearly half of which were shipped to the New York market. Philadelphia took over 25,000 bushels, and the rest went to supply the local demand and the markets. Out of the grand total of huckleberries, 20 bushels of white huckleberries were picked. This is a rare berry, only two localities being known where it may be found. One of these is a small spot in Sussex County, N. J., where a few quarts are picked. The only other locality where white huckleberries grow, and the one spot where they are found in any quantity, is on the East Knob, Blooming Grove Township, Pike County, Pa. The 20 bushels mentioned were picked there, and were sold for $4.80 a bushel. These berries are a creamy white, and very sweet. The average price obtained by huckleberry pickers this season was six cents a quart, making a sum of nearly $300,000, which was distributed among them in the region which includes Ulster, Orange, and Sullivan Counties, in this State, and Pike, Monroe, Lackawanna, Luzerne, and Wayne, in Pennsylvania. The profits of the dealers amounted to as much more. N. S. T.

THE FARMER'S CLUB

ANSWERS TO CORRESPONDENTS.

[Every query must be accompanied by the name and address of the writer to insure attention. Before asking a question, please see if it is not answered in our advertising columns. Ask only a few questions at one time. Put questions on a separate piece of paper.]

WHAT WAS THE MATTER WITH THE BUTTER.

J. G. B., Ashtabula, Ohio.—Last week, the cellar was undergoing repairs, I set 45 or 50 pounds of fine roll (fresh-made) butter in our house refrigerator. When taken out, ten days later, it was really frowy. There was nothing in the box but butter and ice, and I am certain the butter was as good as is made, when put in. Could the ice have caused the mischief? I contemplate building a cooler this Fall, 12x12x16 feet high, with ice overhead. Will the space of 12x12x9 feet hold sufficient ice to last the season? What will ice weigh per cubic foot? Can one construct a building so as to be sufficiently cool to keep butter well during hot weather without the use of ice, and how should it be made?

ANS.—There is nothing about ice made from pure, cold water that will injure butter cooled by it, or even in contact with it, so long as it is so kept; but when butter is so kept and then allowed to rise in temperature it soon goes off flavor. It is impossible to tell definitely what caused our correspondent's butter to become frowy. It might have been the result of germs that got into the milk and cream from a foul atmosphere before churning, or even into the butter while being handled and exposed to the atmosphere. The hot weather was favorable to the development of bacteria and all sorts of microbes which, if once in the butter, would soon cause decomposition to set in. But without investigation and a thorough knowledge of all the conditions and surroundings we cannot say positively what caused the trouble. In addition to the possible causes already indicated, poor salt or imperfect salting may have had something to do with the frowing of the butter as there might have been too much water in the butter when the salt was applied, and in consequence only a weak brine was produced, leaving the butter salted too little, and that little with a brine too weak to check decomposition in the nitrogenous elements in the butter, even at a low temperature; or there might be ingredients in a poor salt that would hasten decomposition. This is often the case with the cheap salts, which may run tolerably pure for a while, and then a batch be struck that will spoil everything that it is used in. Such salt is unreliable, and it is risky to use it. An ice-house, of the dimensions named, will hold a good deal of ice, but we cannot say whether it will hold enough without knowing how much our correspondent needs. A building with double walls can be so constructed as to keep butter very well without ice. It is better, however, to so build it that cool air from the ice-house can be let into it. A cubic foot of ice will average about 57¾ pounds, according to solidity. If porous and snowy, it will weigh less. As a further basis for calculation, we will add that a gallon of water will average about 8⅓ pounds, and there are 231 cubic inches in a gallon.

GROUND BONE; SUPERPHOSPHATE; BURNT OYSTER SHELLS.

Subscriber (address withheld.)—I am grinding bones and selling the dust to my neighbors. I steam the bones, and as soon as they are dry they are run through a power crusher, and are then considered ready for application as a fertilizer. Does the steaming deprive them of much of their fertilizing value? Would it be better to grind them without steaming? What is dissolved bone? How much bone heated with vitriol should be used per acre in seeding down? How are bones dissolved? How much superphosphate will a ton of ground bone make? Should anything be put with clear bone dust before it is used as a fertilizer? Would oyster shells burnt and then ground, be of much account for application to land.

ANS.—Bones are ground more readily after having been steamed, as steaming renders them brittle. The steaming takes out the fat, and, if long continued, some of the gelatine. The gelatine contains the nitrogen of the bones, which is the most valuable portion of the fertilizing matter. Bone contains, when dry, about 45 per cent. of organic matter, which has very nearly the composition of wool, hair and horn, and is rich in nitrogen; the 55 per cent. remaining consists of phosphate of lime with a little carbonate of lime, magnesia, soda and potash. All this earthy matter is not affected by boiling, it is the organic part which is partly dissolved, and, of course, lost in the cleaning. The liquid from the steamed bones makes a valuable fertilizer. Steamed bones, however, decay sooner in the soil and consequently have a more active effect than fresh bones. On the whole, the small loss resulting from moderate steaming is balanced by the cheaper grinding. Dissolved bone is bone which is treated with sulphuric acid, and is thus made into superphosphate of lime. In this condition the phosphoric acid of the bone is soluble, and the effect is immediate; while that of ground bone is more lasting. Superphosphate is made as follows: the ground bone is put into a wooden or leaden vat and is thoroughly wetted. Sulphuric acid (oil of vitriol) is then poured on at the rate of 120 pounds to 480 pounds of bone. The mixture foams up and the bone is changed in character: the phosphoric acid is released and the lime of the bones unites with the sulphuric acid and makes sulphate of lime or plaster. The bone is then in a pasty condition and is dried by mixing dry wood ashes or plaster with it. It is then what is called dissolved bone. A ton of dry bone will make about 2,500 pounds of superphosphate; 300 or 400 pounds of this are generally used per acre in seeding down. Clear bone dust is an excellent manure and nothing is needed with it to make a perfect fertilizer but some potash; either wood ashes or the German potash salts. Oyster shells when burned make the best of lime; they do not need grinding.

DRAINAGE FURROWS, ETC.

Apprentice (no address).—In getting rid of surface water on our winter wheat, our land being stiff clay, the practice here is to plow into narrow beds, leaving the "dead-furrows" very deep, and then to cross-furrow every two rods, at right angles, to go as deep as the dead furrows. This is ruination to self-binders. Is there a better way, and, if so, what is it? 2. Is there a winter wheat as hardy as Lancaster, and with a stiffer straw so as not to be so liable to lodge and, withal, as good to yield?

ANS.—1. This class of land must be bedded up; but it need not have the dead furrows opened so very deep. We open out with a furrow cleaver so made as to carry the dirt well back. This leaves a clean, shallow furrow which carries the water nicely; but still is only two inches or so below the surface on each side. This carries off the water just as well as though a foot deep. Make no cross-furrows except in the bottom of the natural depressions where the water must necessarily go, and make these by plowing, so as to have the furrows like a dead-furrow, and clean out so as to be more of a valley than a deep furrow. These cross, or rather drainage, furrows need be only few in number and then, by cutting the wheat lengthwise of the land, the shaking and injury to the machinery will be reduced to the minimum. 2. Yes; the Diehl-Mediterranean. It yields better than the Lancaster, and you can hardly make the lands so rich as to cause it to lodge.

SMALL FRUIT QUERIES.

H. T. Dorr, Dansville, N. Y.—What kinds of blackberries and black and red raspberries would be best for market here? What would be the best time to plant them? How should protection be given to those needing winter protection? Would sod-ground plowed now be suitable for planting blackberries and raspberries this Fall?

ANS.—We think that every farmer should try a number of kinds of berries in order to find out which are best suited in his soil and location. Something may be learned by going among the small-fruit culturists near. For black raspberries try Nemaha, Souhegan, Mammoth Cluster, Hilborn. For reds, try Turner (home use), Cuthbert, Shaffer's Colossal. For yellow, try Caroline and Golden Queen. Blackberries: try Snyder, Taylor, Kittatinny and Early Harvest; Kittatinny and Early Harvest need protection. Strawberries: Jewell, Sharpless, Parry, Crescent, Downing. You may plant the strawberries now: the blackberries and raspberries in October or next Spring. To protect blackberries, bend over the canes and cover lightly with evergreens, straw or litter. Bending them over will often prove a sufficient protection. If the canes are too strong to bend, it will be necessary to dig away the soil on one side. We know of no objection to sod-ground for blackberries or raspberries, except it will be needful to compact the soil about the roots.

PROPAGATING THE JAPAN CHESTNUT.

M. J. Barrie, Ontario, Canada.—Which is the better way of raising the Japan Chestnut—from the nut, or by getting young trees? Where can either be obtained? 2. Can the black walnut be grafted on the butternut?

ANS.—1. It is very easy to raise the Japan Chestnut from nuts. We have little trees, a foot or more high, from nuts planted late in the Spring. But these seedlings will vary the same as American chestnut seedlings vary—in the size and quality of their nuts. There are several nurserymen who have raised many seedlings, and are now propagating the best of them. These will be offered for sale in due time. We are not positive that the nuts are at present offered for sale. Ellwanger & Barry, Rochester, N. Y.; Storrs, Harrison & Co., Painesville, Ohio, and doubtless others have the trees for sale. 2. Yes.

BITTER ROT IN APPLES.

G. E. C., Lovely Mount, Va.—On many of my summer and fall apples are small rotten spots which gradually spread over the whole of the apples. Here the disease is called bitter rot; what can be done to prevent it?

ANS.—This is a common disease, wherever apples are grown; and the name "bitter rot" is the only one we have heard applied to it. It attacks the apple only at maturity; although certain varieties are especially subject to it, while others are nearly or quite exempt. It is also true that large or overgrown specimens of the same variety are more liable to be affected than those of medium or small size. The disease attacks equally summer, fall, and winter varieties. So far as we know, this disease has never been subjected to a scientific examination, and the cause is not known; although there are reasons for the suspicion that it may be attributed to some of the very minute forms of fungus or bacteria. We know of no remedy, or preventive, save the avoidance of excessively stimulated growth; or the rejection of such varieties as are especially subject to the disease.

Miscellaneous.

S. E. S., Medina, N. Y.—How can I clean cockle out of Fultz Wheat? The kernels are so nearly alike in size that it is impossible to screen it out. This is the worst fault I have to find with Fultz Wheat.

ANS.—We hook the "shake" to the mill so that the "shoe" will lie still; fit a board of the right length, so that it will go into the "shoe," its lower edge resting on the screen; take out all the sieves, and put in the board in such a place, moving its top edge back or forth, so that when the mixture of wheat and cockle is allowed to run through slowly, while the mill is turned steadily and quite fast, all the cockle and much of the lighter wheat will be driven back of the board, and run out at the back end of the mill. Nothing but clean wheat will then fall in front of the board, and run out at the front of the mill. This cleans wholly by the blast, and is a sure way to separate all foul stuff.

E. R. M., Lincoln, Ind.—1. What are the four best plums likely to prove hardy in Northern Indiana? 2. Where can I get seed of the Japan chestnut? 3. How can I propagate the Golden Retinispora? 4. In what is the Thousand-fold Rye superior to the common kind? 5. Is the Shumaker a red or white wheat?

ANS.—1. Green Gage, Imperial Gage, Jefferson, Lawrence's Favorite. 2. Try Storrs, Harrison & Co., Painesville, O. 3. By grafting and layering. 4. It is superior at the Rural Farm in having a larger kernel and longer heads. It ripens later than common rye. 5. It is an early, dark-chaff, red-kerneled wheat.

DISCUSSION.

LIGHTNING RODS.

I. P. R., CORNELL UNIVERSITY, ITHACA, N. Y.—On page 545 I notice a short clipping on lightning rods from the Vermont Watchman, which, it appears to me, is likely to lead people astray. Galvanized iron is a very good conductor of electricity, but four-ply of it will not furnish enough metal to conduct even a small charge, much less a large one. Where only a small amount of iron is used, the resistance is so great that the rod becomes either intensely hot or entirely melts, which often endangers the building more than if no rod had been upon it. A wire cable of not less than ⅝ of an inch in diameter is as small as can be used with safety. If copper is used instead of iron, the cost will be somewhat increased, though the cable need not be over half the size of an iron one. Our lightning rod runs directly through the hay mow and we consider it safe because the rod is large enough to carry off the electricity without even warming the rod. It is stapled to the roof and has a ground connection of old copper boilers deeply buried in the earth.

D. E. P., OTOE CO., NEB.—In a late RURAL some one tells about hoeing sweet potatoes. I have raised them for 60 years and never heard of such a thing before. I always make ridges for sweet potatoes and hoe between the ridges, and pull the weeds out of the ridges. That writer wants us to hold the vines with one hand, and hoe with the other. That looks to me about the greatest nonsense I have read lately.

Miscellaneous Advertising.

That Tired Feeling

The warm weather has a debilitating effect, especially upon those who are within doors most of the time. The peculiar, yet common, complaint known as "that tired feeling," is the result. This feeling can be entirely overcome by taking Hood's Sarsaparilla, which gives new life and strength to all the functions of the body.

"I could not sleep; had no appetite. I took Hood's Sarsaparilla and soon began to sleep soundly; could get up without that tired and languid feeling; and my appetite improved." R. A. SANFORD, Kent, Ohio.

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100 Doses One Dollar

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PATENTED.

This is the only *perfect* Pail made.—There are no seams in the front to catch the dirt. It has a perfectly fitting strainer, which can be instantly removed, so that every part of the pail may be *quickly* and *thoroughly* cleaned. Extra strainers can be obtained at any time.

The Pail is made from heavy XX tin, and is in all respects the **best in the world.**

Send for special circular. Agents wanted.

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FOR MILKING COWS WITH SORE TEATS.

This is the best Tube in the market. Sent, post paid to any address, on receipt of price. One Tube, 25 cents; Five Tubes, $1.00. Send for special circulars to

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Conducted by
ELBERT S. CARMAN.

Address
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No. 34 PARK ROW, New York.

SATURDAY, SEPTEMBER 11, 1886.

We hope to retain for years to come as in years past, the bulk of our old subscribers without any further inducement than that which the RURAL NEW-YORKER *itself offers. If they continue to need and to prize it, they will continue to subscribe for it. In order to induce those who would gladly see its circulation largely increased to aid us in this work, we have placed before them two propositions. The first is that in clubs of five or over, the price will be (until further notice)* $1.50 *per year. The second is embodied in the premium-list, a careful examination of which will certainly show that adequate compensation is offered for any effort our friends may kindly make in the* RURAL'S *behalf.*

WE would call attention to the zinc label, and the way of attaching it to stakes as well as to the branches of shrubs and trees, which we have finally adopted at the Rural Grounds, as at once the simplest, cheapest and most durable of all labels and attachments known to us.

PARTICULAR attention is called to our clubbing combination list on pages 610 and 614. Any of our readers desiring to subscribe for any of those papers in connection withthe R. N. Y., may subscribe through us, with the assurance that the *promptest attention will be given their favors.*

AMONG the newer kinds of grapes, we think it may be said that Moore's Early is among early grapes what its parent, the Concord, is among later. We know of no other grape of its season about which so much good can be said, while nothing can be said against it except that it is no better in quality than the Concord.

IT is desirable that the RURAL NEW-YORKER should be represented at all the agricultural fairs of the country. Those who are willing to act as agents will be furnished upon application with posters and all the specimen copies they may need.

THE difficulty of forecasting prices of agricultural products is well exemplified by the contradiction now noticeable in the cotton market. The price of the staple is more than a cent a pound less than a year ago; yet the visible supply is 25,000 bales less, and the current estimates of the new crop are half a million bales less than the current estimates a year ago. True, the stocks of raw material in the hands of manufacturers are thought to be heavier now than then; but it is known that the stocks of manufactured goods are lighter.

A UNITED STATES cutter has seized three vessels belonging to the Canadian province of British Columbia, for fishing for seals in Behring Sea within the marine jurisdiction expressly ceded by Russia to the United States on the purchase of Alaska. It seems, therefore, that there are two sides to the fishery question, and that Americans can retaliate for Canadian seizures of offending fishermen. Apart from this, there is considerable complaint regarding increased stringency in the enforcement of customs regulations on both sides of the line. It seems to us that the present trouble is somewhat of a childish nature, and that an amicable adjustment of the existing difficulties would be hailed with satisfaction by all sensible men in the Dominion and the Union.

THE offense must not be repeated. The reputation of American young men; the delicacy of English young women, and dread for our foreign commerce forbid it. An English shopkeeper writes to the London Daily News that lately one of his assistants, on cutting open an American cheese, discovered a tin box in the center of it. Inclosed in it was—not dynamite, but something more dangerous to the well-being of English households—a letter which said that the writers, two young men, would be pleased to receive correspondence from two young ladies, the names and addresses of the writers being given. If nice, modest English young girls are to be exposed to the temptation of clandestine correspondence in this way, how long will it be before careful English matrons will forbid the entry of American cheese into their houses? Again we say, therefore, that this offense, fraught with such dire consequences to one of our most important dairy interests, must not be repeated, and we very earnestly entreat all cheesemakers to keep a watchful eye on their young men.

THE SAME OATS UNDER DIFFERENT NAMES.

DURING the past season we raised side by side 19 varieties of oats; that is, oats with different names. A report of all will be made later. It may be well that we should hasten to state that the seven kinds sold respectively as White Australian, Welcome, Badger Queen, Clydesdale, Racehorse, White Belgian and Dakota Chieftain are, so far as the writer could judge, *all the same.* We further find that the Yankee Prolific is the Russian White or White Russian. Now, the Welcome was sold several years ago at a very high price as a novelty. The first season they were offered, we found them to be the Australian, and so stated in these columns. They are now offered at $1.25 a bushel. The Racehorse are now offered at $1.25; the Clydesdale at $3.50; the White Australian at $1; the White Russian at $1; the Yankee Prolific were offered last year at $10 (!) per bushel. We have no catalogue of this year to refer to. This is bad business. We do not suppose that reputable seedsmen will wittingly buy old varieties and sell them as new; neither is it reasonable to assume that seedsmen can give that careful study to flowers, vegetables and grains, which would enable them to recognize old varieties, grown perhaps under the most favorable conditions, and offered to them under new names. But when, by careful tests, they are found to be the same, the new name should be discarded—abhorred! Can any conscientious seeds firm sell "Yankee Prolific" Oats at $10 a bushel, knowing they are White Russian, which are worth but $1?

THE RURAL NEW-YORKER NO. 2.

THIRTY-THREE hills of this R. N.-Y. seedling potato were dug Aug. 31. We may be pardoned for thinking that it is of its class the nearest to a perfect potato which the writer has ever seen, since in the plot where it was grown probably over 600 varieties have been tried during the past ten years. The yield of the 33 hills was 120.25 pounds, which as the hills were one foot apart and the trenches three feet apart, would be at the rate of 881.83 bushels (60 pounds) to the acre. There were but 187 potatoes, and of these all were of marketable size but 22. Even the largest (five of which weighed 4¾ pounds) were smooth and shapely. Its form is oblong, inclining to round, and much flattened, while, except at the "seed end," there are but three or four eyes, and those are nearly level with the surface. The skin is white; the quality is the best as far as can be judged at present.

This potato has been placed in the hands of one of our first seedsmen for propagation, and it will be sent to our subscribers as soon as the supply will admit. We had intended to place the R. N.-Y. No. 1 (Rural Calico) in our next seed distribution, but it has this season developed failings, and we shall try it yet another year. We do not care to introduce any of the Rural seedlings until we are satisfied that they are better than any of the kinds already in the market.

ONE TEACHER OR THREE.

IN many country school districts there is a new teacher for every term in the year. It will pay to appropriate a little more money and secure one good teacher for all three terms. As a rule, young women who will teach for low wages are placed in charge of the school during the Summer. In the Winter, when the larger boys and girls go to school, and when it is considered that the best teaching is required, a man is engaged. By adding $50 to the amount now paid to all three teachers, one good one could be secured who would teach for the same length of time and do far better work. Our experience with district schools shows us that it takes at least three weeks to find out what the previous teacher had taught the scholars, and then the methods employed by one teacher are so different from those of another that often the best half of the term is wasted in getting ready to begin. Where the teacher is selected for the whole year and the whole school money is to be contracted for at once, far more care will be exercised in securing a suitable person. Where the teacher is engaged for only three months there is always a feeling that it is a small matter; if he does not suit he can go at the end of the term anyway. Those who think the older boys and girls need all the careful instruction, and that anybody who can "hold down a chair" will do to teach the little people, are sadly mistaken. These points should be considered this Fall. Get one good teacher and pay him well.

FIX THE ROADS.

WHAT is to be done about the roads in your township this year? Are they good or bad, and what do the people propose to do about them? Too many of our country roads are in a very bad condition. Most of the work on them is done in the Fall, and in a very half-hearted manner. "Working on the road" is generally a disagreeable task, and the workers are ever ready to "kill time." The usual system of road-mending is to scrape the earth at the side on to the crown of the road, or to dump a great mass of gravel into every bad place. The work is all done at one season, and for a few weeks the roads are about impassable; until they can be "worn down" there is little comfort for man or beast. Then the work is dropped for the year, the same practice to be gone through with the following Fall. If each little leak or washout could be taken in time, the roads could be kept in fair condition all through the year at a moderate expense, but the money gives out after the fall work, and there is nothing left for repairs. Many townspeople spend too little money upon their roads, and what they do spend is poorly applied. In some localities the system of hiring a man to make a business of keeping the roads in order has been very successful. If a man takes a contract to keep the roads of a township in order, he is bound to do it, and he will have to watch them carefully. In the cities and larger towns repairing is constantly going on. Every little defect and failure in the road is corrected at once. The streets never become impassable, because bad places are not allowed to grow. Something of this system should be employed in the country. Farmers are busy men, and cannot always leave their work to give half a day to road-making. If some man could be made responsible for the performance of the work, and paid for doing it, there would be a difference. No arguments are needed to prove that good roads are a blessing. They add to the value of property, increase the social features of any neighborhood, and promote the welfare of the people in every way.

THE FARMERS' CONGRESS OF THE UNITED STATES.

THE Farmers' Congress which met last week at St. Paul decided to make the institution permanent, and measures were taken to incorporate it under the laws of the United States as "The Farmers' Congress of the United States." Every year delegates are to be sent to it by assemblies of farmers in the various States in the proportion of one for each Senator and Representative in Congress. It is proposed to hold regular sessions each year, and in this way to give expression to the opinions and wishes of the farmers of the nation, who, with their sons and helpers, form more than half the voters of the country.

In addition to the resolutions mentioned last week, the assembled farmers also passed others favoring the development of the system of water transportation as a check to railroad extortion, and asking the intervention of the Government to prevent unjust restrictions by foreign powers against the importation of American farm products. This was especially directed against the action of France, Germany and other Continental countries in excluding American hog products on false pretences. It was also resolved that the tariff of 1867 on wool should be restored, and that protection should be given to home-grown rice and sugar by the imposition of heavier duties on importations of their foreign rivals. A resolution also favored the extension of the Signal Service so as to give timely warning of approaching changes in the weather to the farmers of all parts of the country; while another urged the general Government to regulate inter-state commerce. This resolution was one of the most important of the series, as a change in freight rates is virtually a change in the value not only of the marketable products of the farms, but even of the farms themselves, and it is intolerable that frequent changes in matters of such great importance should depend on the selfish decision of a handful of unscrupulous railroad speculators and monopolists. It is very easy to point out evils of this kind, however, but very difficult to devise a remedy, and hence the convention could not agree upon indorsing either of the bills on the subject pending before Congress. Some supported the Cullom bill passed by the Senate; others the Reagan bill, passed by the House. The meeting throughout was orderly; its deliberations were calm and dispassionate, and its recommendations are worthy of attion by the people at large and their Representatives in the National and State Legislatures.

32 PAGES.

BREVITIES.

POTATOES at the Rural Grounds are rotthig more than ever at this season of the year.

Farmers pass excellent resolutions at their conventions; why don't they vote in accordance with them at the elections?

THE new white Jessica grape was fully ripe at the Rural Grounds Aug. 20; Moore's Early Sept 1; Florence (black) was ripe Aug: 20, but the quality is very poor.

MANY farmers do not care to sow nitrate of soda or sulphate of ammonia upon the soil and leave it exposed to the action of the air lest the ammonia may be lost. Though soluble in water, and very readily so, not a particle is lost by exposure to the atmosphere.

WE have some proof that tubers from young seedling potatoes may be improved in shape and productiveness by selecting the best tubers from the best hills for seed, and we are impressed that it pays to select all our potato seed, whether from old or new kinds, in the same way, with the same object in view.

WE say mulch heavily between the rows of strawberries as soon as the ground freezes, and cover the plants lightly. In the Spring the plants will easily grow through the mulch and the berries will rest upon it. Leave the mulch *between* the rows until *after* fruitage—*then* cultivate.

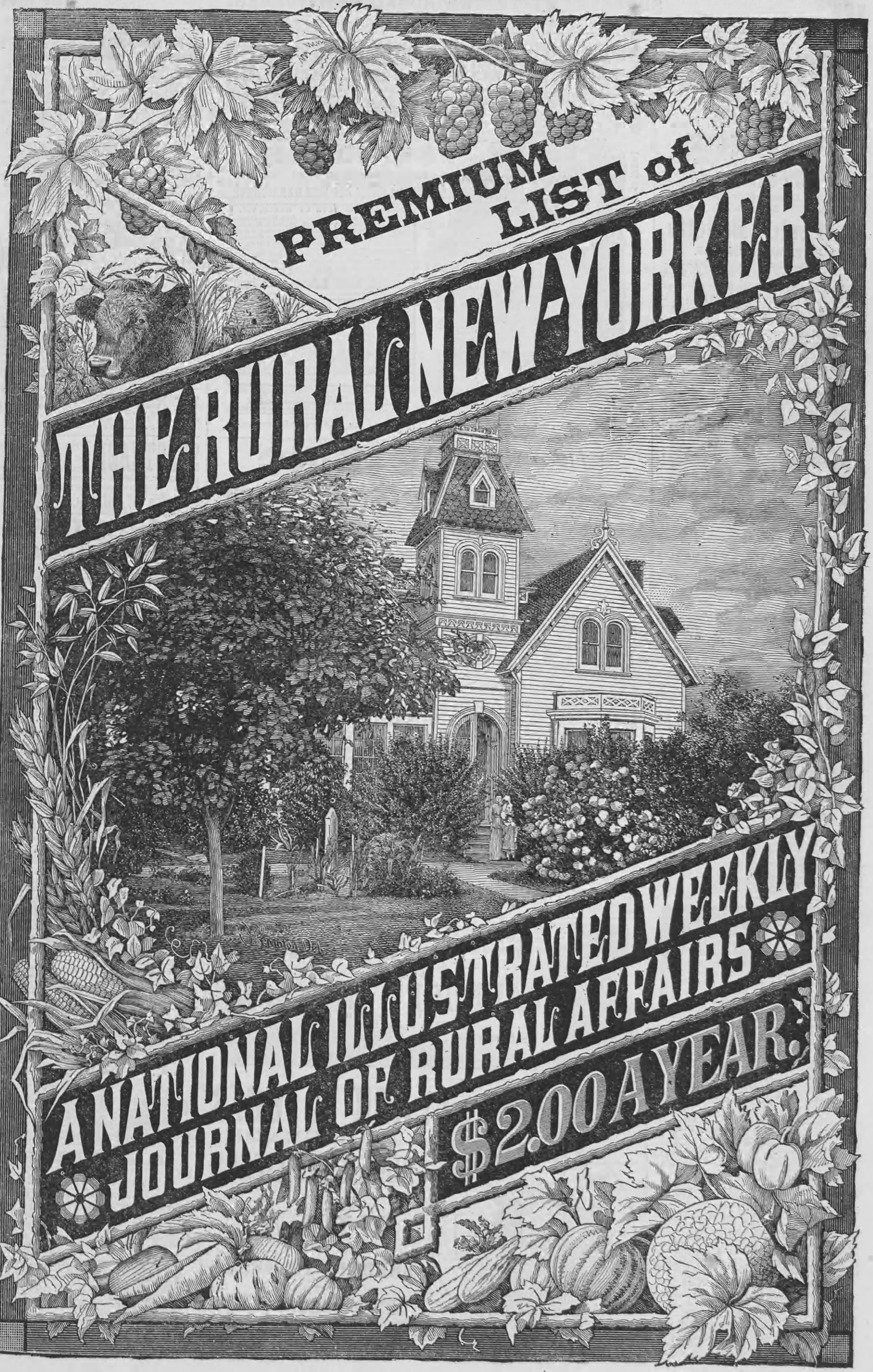
WE are told that Ayrshire cattle are attracting increased attention in England, both at the shows and in the dairies. In our own country the Ayrshires have gained many friends of late. Can it be that we are to have a "boom" for the Ayrshires? There are many worse things that might happen to the dairymen of the country than this same "boom."

MR. H. H. HAAFF, of Atkinson, Ills., whose excellent book on "Dehorning Cattle" was reviewed in a late RURAL, writes us that in one hour, in the barnyard among cattle, he could convince us that dehorning, as he performs it, is not necessarily painful. He is positive that his system of dehorning has never been practiced before, and that it is bound to come into general practice. Mr. Haaff has the good of stockmen at heart. He is working earnestly to increase the usefulness of his discovery.

YOU can hardly do better than to sow the Armstrong (sold as Landreth) Wheat. It is as hardy as any of the hundred varieties tested at the Rural Grounds, very productive, and makes a good flour. Some day we hope that one or the other of the Rural crossbreeds may supersede it. Martin's Amber is also a first-rate wheat in every way, though it is so like the Landreth that the one answers for the other, except it may be in milling qualities, which we don't happen to know any thing about.

TEN dead calves and twenty-two dead sheep were taken out of two "double-deck" cattle cars that arrived at Newark, N. J., from Owego, N. Y., Thursday morning. The wretched animals on the cars were wedged closely together, and the odor was sickening. They had been on the road 36 hours, and no attention whatever had been paid to them on the journey. The Society for the Prevention of Cruelty to Animals is to bring suit against the railroad company; but are the brutes who shipped them, and the other brutes who were supposed to have charge of them to go scot-free?

A LITTLE band of agitators claiming to represent the Knights of Labor, a number of agricultural associations, anti-monopolists, trades unions, the Peoples' Party, and temperance reformers, met at Indianapolis a week ago and resolved to form a new party; but they exhibited a wide and apparently irreconcilable difference of opinion as to the basis on which it should rest. A great deal of long-winded resolutions and fine-spun theories occupied much of the time. Although a majority of those present belonged to the Grange, Wheel, or Farmers' Alliance, the Knights of Labor and Greenbackers had things all their own way. A committee of eight was appointed to arrange for a national convention at Cincinnati next February; but no place on the committee was given to any representative of the agricultural interests. The whole thing, though loudly puffed in advance, was a sheer fiasco. It indicated, however, a certain amount of discontent with existing parties, but wide as this may be, they certainly will not be superseded by this "party of the future."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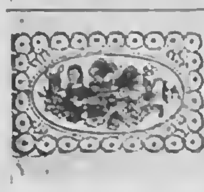

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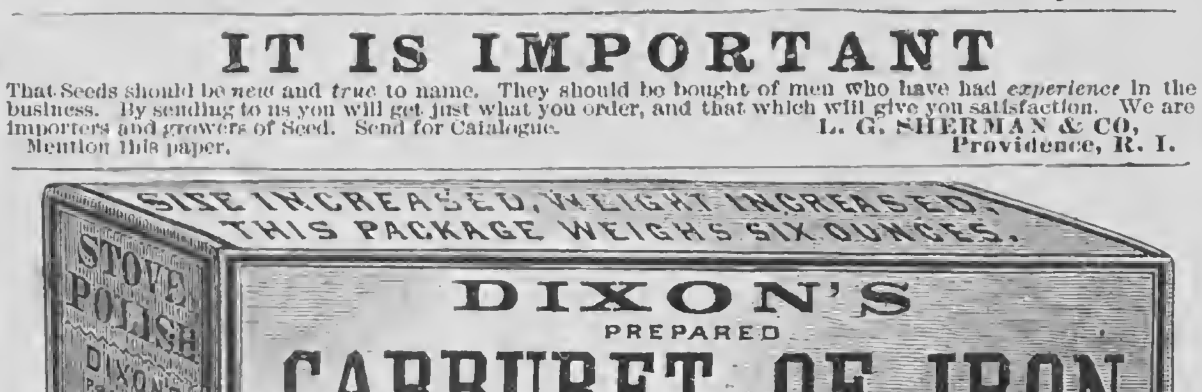

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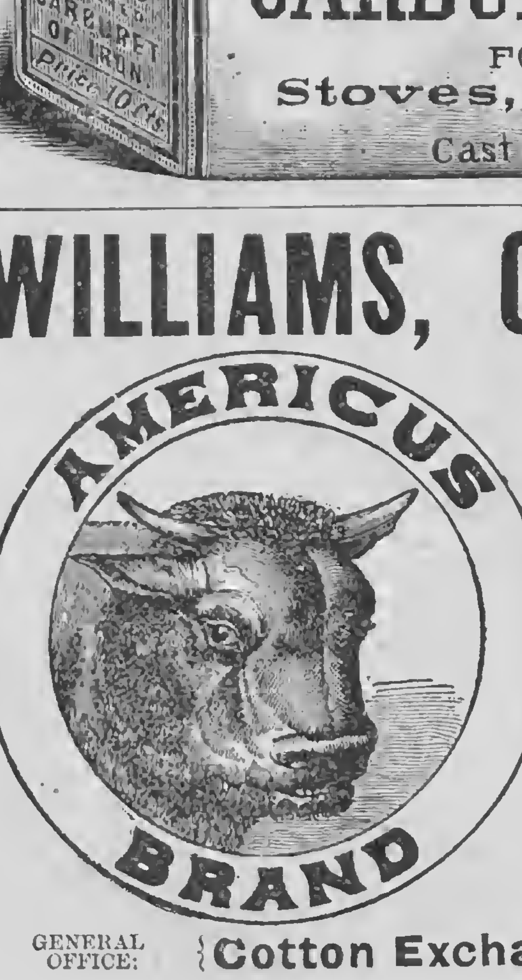

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IMPORTANT

TO ALL READERS AND AGENTS.

It has been decided that in Clubs of FIVE or OVER we will mail The Rural New-Yorker from now until January 1st, 1888, for

$1.50.

That is, Fifty Cents Commission will be allowed for every yearly subscriber. After January 1st, 1887, the Rural New-Yorker will be mailed One Year in Clubs of five or over for $1.50 until further notice. For single subscriptions the price will be as hitherto, invariably $2.00 per year. In Clubs of less than five, as well as for larger Clubs, the Premium List should be consulted.

We beg to say that the following Premium List has been made up, with the kindly aid of our advertising patrons, so as to allow, in the articles offered from ONE TO TWO DOLLARS FOR EACH SUBSCRIPTION SENT. We have spared neither pains nor expense to induce our friends to work for the Rural New-Yorker during the present subscription season.

BEGIN NOW!

We will send Specimen Copies to any names or list of names forwarded to this office as often as desired, in order to aid our friends in obtaining subscribers.

Meanwhile we shall exert our best endeavors to make the Rural better than ever.

RURAL NEW-YORKER, 34 PARK ROW NEW YORK.

TO OUR SUBSCRIBERS
AND AGENTS.

The attention of all our readers and agents is called to the above announcement. With the view of inducing our friends to exert themselves in the "RURAL'S" behalf, we have done all in our power (limited only by prudence) to present a list of articles which will pay them *adequately* for their work. In so far as we may judge, a more liberally scaled premium list has never been presented by any trustworthy journal.

To those who prefer a cash compensation, we have to announce that, as above stated, in clubs of five, or over, the price of the "RURAL NEW-YORKER" will be, until further notice, $1.50.

Respectfully and earnestly soliciting the support which our friends may deem the "RURAL" worthy of, they may rest assured that nothing can moderate our desire to increase its influence, and to make it in every way more worthy of their confidence and regard.

INSTRUCTIONS.

Send for all the specimen copies and posters desired. A good way is to hand several specimens to those who may wish to subscribe (or have us, at our expense, mail them) and then, allowing a few days for examination, call upon them and solicit their subscriptions. Commence the work at once. Commencing early insures success.

The RURAL values the entire confidence of its readers, and therefore has no interest whatever in the sale of anything except the R. N.-Y. If you wish to PURCHASE any premium found in the List, apply to the manufacturers, kindly mentioning the RURAL.

The smaller premiums are given for PROCURING new subscribers—in other words for increasing our circulation. It will be apparent to all fair-minded readers that we can not afford to pay for individual renewals of subscriptions. We assume that, knowing the paper, no such inducement should be required. When, however, they are willing to exert themselves in our behalf by sending us new subscribers, or by making up clubs, whether new or old, THEN OUR CLUB-RATES OR PREMIUM LIST IS AVAILABLE.

You can send for a Premium for each subscriber as the names are sent to this office, or complete the list and then select as may be preferred.

Old and new subscribers, we repeat, count in clubs of five or over, and they may be sent from different post-offices.

Money, sent by letter, almost always reaches us safely. Still unless registered, we can not assume any risk.

Premiums are sent at the expense of the agent, unless otherwise noted, either by mail or express as desired. This Premium List will be operative until June 1st, 1887.

THE following premium list is the most liberal we have ever offered, in fact, we consider it the most liberal list ever offered by any paper in this country. We do not like to ask our friends to work for us for less money than they could make working for themselves. We are a little proud of the fact that every one of our subscribers is like a personal friend, and we know that the majority of them will gladly say a "good word" in the "RURAL'S" behalf. We do not like to see people work for nothing; we object to doing it ourselves, and we will not ask others to do it. We wish to make a business arrangement with every one of our friends. We want to extend our circulation, and we want the help of every person who sees the *Rural New-Yorker*. We propose to pay for this help, and a study of this List will show the amount of pay we offer. If any person can obtain surer returns by canvassing for any other paper, we desire to be told of it. Start now, and you can offer the paper for the rest of this year, and the whole of next, for one price. We will gladly answer all questions, and keep all supplied with posters and specimens.

OUR readers should understand that these premiums are given **for** new subscriptions, and not **to** new subscribers. The "RURAL" is well worth the subscription price. In times past new subscribers have demanded premiums for their own single subscriptions. That there may be no misunderstanding during this campaign, we will state that the premiums will be given only to those who are already subscribers, or to regular agents. Any **new** subscriber will be entitled to commissions for any subscriptions he may send after his subscription has been received. The premiums are not given because we think something additional is needed to make the "RURAL" worth its price. We give the various articles named in our list, simply as payment **for services rendered.** Those who work for us, and spend their time and energies in helping to extend the circulation of the "RURAL," deserve to be rewarded, the same as if they engaged in any other work.

We have just had printed a new and beautiful poster. It is handsome enough to hang anywhere. We want to have one hanging in every house, every store, every post-office, every grange every shop, every stable, and every barn. You cannot possibly put up too many of them. Place them in every spot where farmers congregate. Keep them before the public. We will gladly ***send copies to all*** who apply. Send for the full account of our Free Seed Distribution. Join in the RURAL campaign for 1886-7. Begin now!

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No. 1. Dutton Mower Knife Grinder. Given for Six Subscribers.

THIS little machine weighing only 20 pounds will sharpen the knives of a mowing machine quicker and better than the largest grindstone. It will save its cost in one day. It can be attached to the wheel of the mower and the

mower knife quickly and easily ground by one person. Sharp knives save grass and wear and tear of the machine and of horse flesh. It is made by the R. H. Allen Co., 189-191 Water St, N. Y. City. Although it sells for $7.50, and is worth it, yet we will send it to any person sending us six subscribers.

No. 2. The Hitchcock Potato Digger and Shovel Plow combined. Given for Ten Subscribers.

THIS is a simple, but valuable implement. Although it does its work perfectly, yet it is of remarkably light draught and can be used with one horse. A cheap and good potato digger is a much desired implement. Potato digging ranks with manure spreading as hard and uncomfortable work. The common plow does fair work but too much hand digging is required in combination with it to secure all the tubers. We believe the Hitchcock Digger will give good satisfaction. Most diggers are high-priced, and beyond the reach of the smaller farmer. They can be used only through the short digging season and are

practically worthless for the rest of the year. We should advise the purchase of the combined implement which by the changing of one bolt can be converted either into a shovel plow or a potato digger. The price of the Combined Tool is $10.50 and we will send it for 10 subscribers. The Potato Digger alone, price $8.00, for eight subscribers; or the Shovel Plow, price $7.00, for seven subscribers. Manufactured by the Belcher and Taylor Agricultural Tool Company, Chicopee Falls, Mass.

No. 3. Cole's Improved Garden Plow. Given for Three Subscribers.

THIS handy little implement materially lessens the labor of cultivating the garden. We have it in use and would not be without it for many times its cost. Its excellence is largely due to the size of the wheel and adjustments so that the force applied to the handles acts parallel to the resistance of the plow

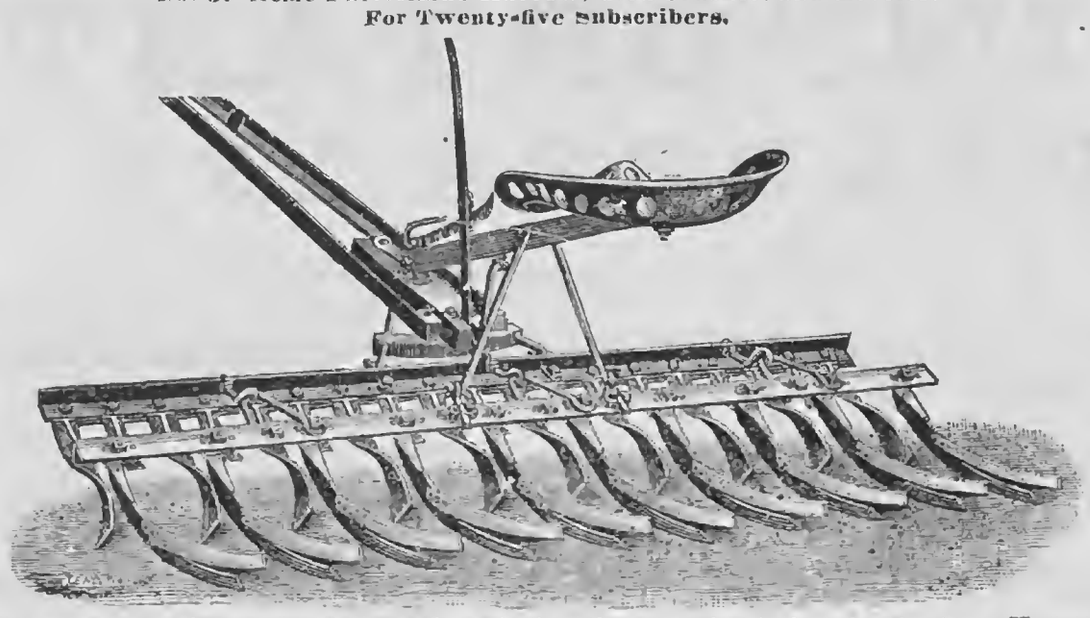
or scuffles instead of wasting the force by pushing directly into the ground as is done in the straight handled small wheeled hand implements. The plows, large and small, and the scuffles are of steel. It is made by G. W. Cole, Canton, Ills. Price complete with attachments $5.80.

No. 4. Lewis's Combination Force Pump. Given for Five Subscribers.

The cut shows the pump in the three forms into which it can be readily changed. It is made of drawn brass tubing, is 1⅞ inch in diameter, and weighs 4½ pounds. It is an excellent fire extinguisher, throwing a stream of water 50 to 60 feet. It can be changed from a

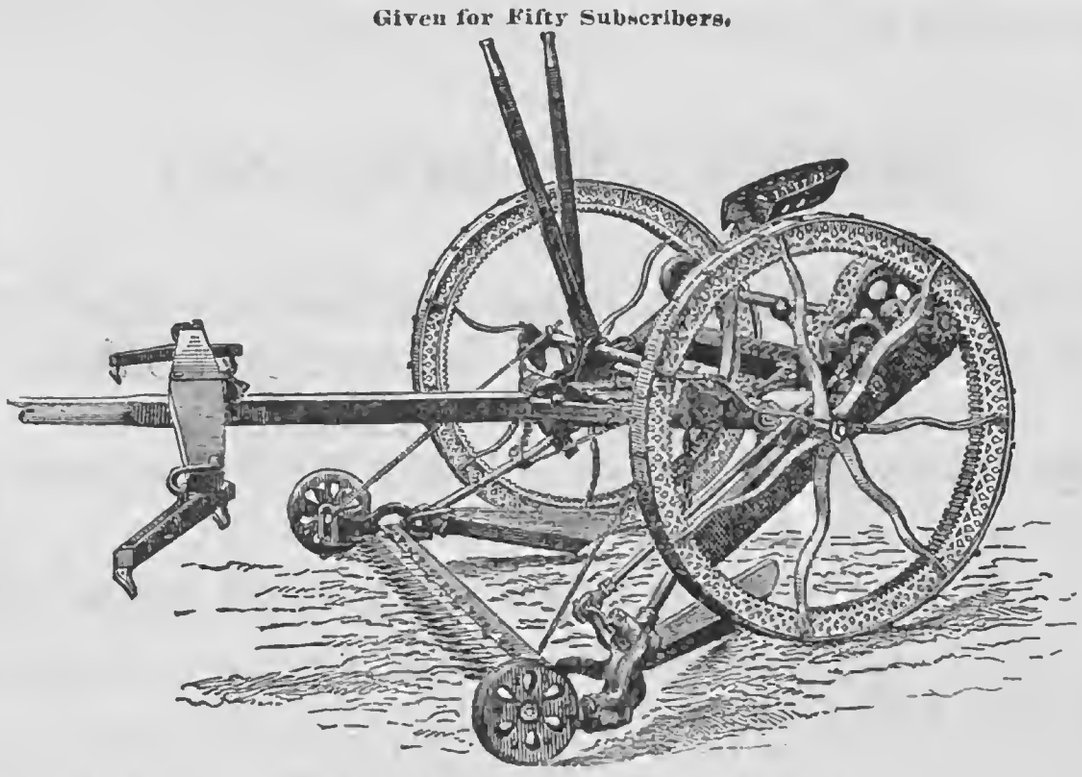
force pump into an insect sprayer, having a nozzle for this purpose, which gives a fine spray, and proves very satisfactory. It can also be changed into a veterinary syringe, and as such is a very useful instrument. Agents are meeting with fine success in selling these pumps, and they are a very desirable premium. Price $6. Made by P. C. Lewis, Catskill, N. Y.

No. 5. Acme Pulverizing Harrow, Clod Crusher, and Leveler. For Twenty-five Subscribers.



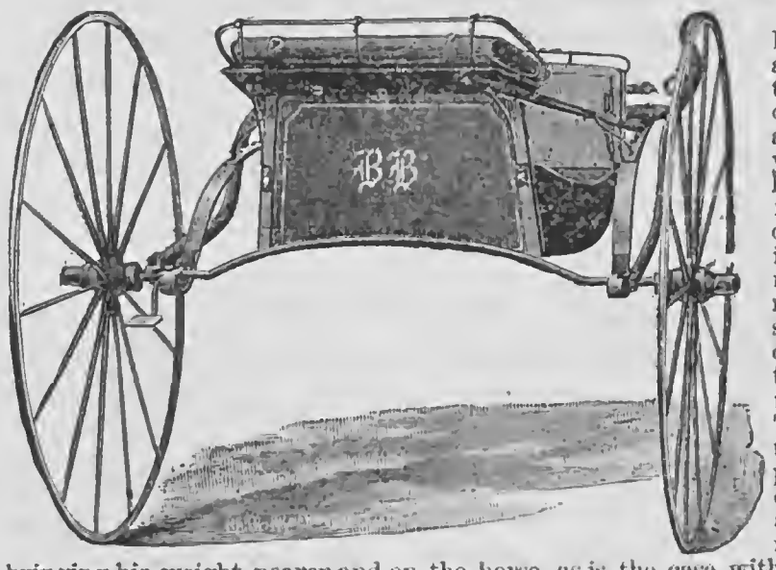
There is no tool that could be made to do just the work that is done by the Acme Harrow We have never used any other implement that has given us such complete satisfaction. Its work is unique. Its peculiar combination of cast steel coulters or slicers, by their continual cutting, lifting and turning, seems to completely pulverize and mellow the top two or three inches of soil and put it into the best possible condition to receive the seed. In hard clay lumps, on inverted sod and on the lightest land, it seems equally at home, and it cuts and slices until the surface is all gone and any ordinary growth of weeds annihilated. The implement is so well known that words spoken in its praise seem almost useless. We could not farm without one, and we believe those who once use one will say the same thing. Made by Nash & Brother, Millington, N. J.

No. 6. The Eureka Mower. Given for Fifty Subscribers.



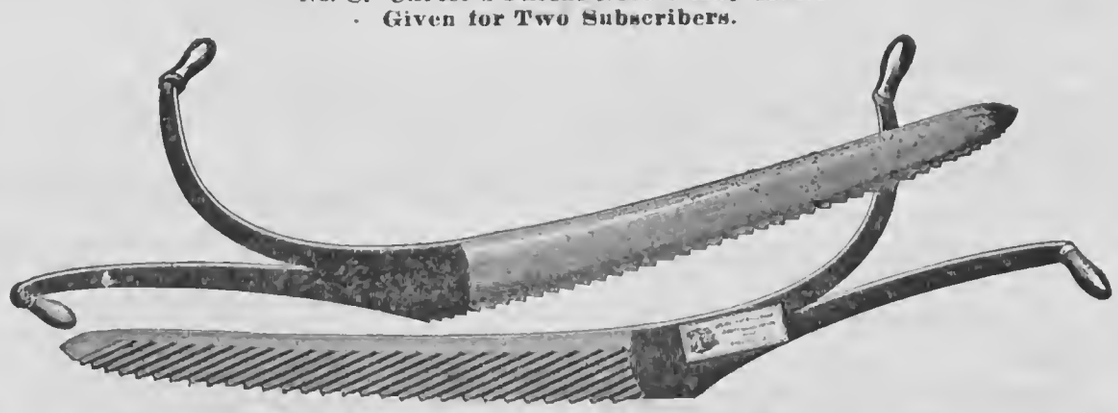
Last year we said, in speaking of the Eureka, that having used it for five years in all kinds of grass, we would no sooner think of going back to a narrow, side-cutting mower than we would to the old hand-rake reaper. We can only reaffirm this opinion. In this machine the cutter bar is directly behind the horses and in front of the driver. Every part is made of the strongest material, and the whole machine is put together to stay. The size we offer cuts six feet wide, and a pair of ordinary farm horses will handle it with ease. The idea that this machine runs so heavily that extra horseflesh is required to move it is absurd. We can highly recommend the Eureka. It will make friends wherever it goes. The machine is made by the Eureka Mower Company, Utica, N. Y. Price, $90; and the man who secures it will be sure to say that it is worth the money.

No. 7. The Beebe Cart. Given for Thirty-five Subscribers.



In offering the celebrated Beebe Cart as a premium we are giving our readers a chance to obtain something more than ordinarily useful, ornamental and durable. In educating young horses, in riding over hilly country, or rough or muddy roads, this cart is without a superior. It's a cart that is easy to mount and is pronounced perfection by horsemen. It is wide between the shafts. The cross bar is circular, allowing ample room for the horse and lending elasticity to the girting of the shafts. The seat is just right, low, and the position of the feet for pullers, is such that the driver cannot be brought off the seat, and be made to stand or nearly so on his feet, thus bringing his weight nearer and on the horse, as is the case with other carts of this class with high seats and with less room to brace the feet. The springs are back and rest on the axle, making little weight on the thill straps. This cart is light and graceful, is nicely balanced and an easy rider. The seat is of perforated veneer, and handsome. The foot rest is made with slats. The fact is that every horse owner ought to have something of this kind, and he cannot do better than to write to the Beebe Cart Co., Racine, Wis., for a circular and prices. The price of the one we offer is $46, delivered on board the cars at Racine.

No. 8. Carter's Patent Needle Hay Knife. Given for Two Subscribers.



This knife has been tested fully by the side of the best knives made, and will cut more hay and do it easier than any of them. Its velocity and special excellence consist in the chisel edge teeth, as shown by the lower knife in the above cut. It cuts rapidly and easily, hay or straw, in stack, mow or bale, and can also be used for cutting moss or peat, or for cutting muck in ditching, or wherever a hay knife is to be used. As the grinding is done only on the smooth side, any novice can grind it and do it well; if a tooth breaks out, a slight grinding replaces it as good as new. It is made by the North Wayne Tool Co., Hallowell, Me. Price $1.75 each.

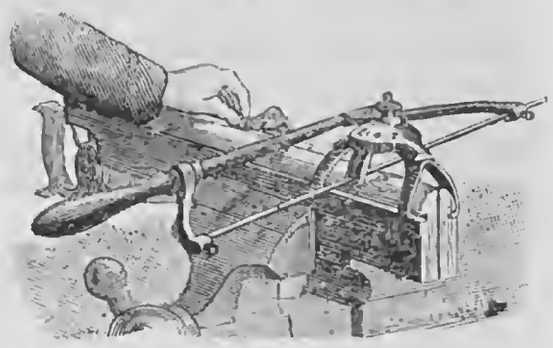
No. 9. Londerback's Combination Tool. A No. 2. Given for One Subscriber.

This combination tool was found last year to be one of our most popular premiums. When

one considers the *multum in parvo* represented in this combination it is not surprising that every household wants one. There are 10 different but useful tools in one, as will be seen by reference to the cut: A, adjustable screwdriver; B, hand vise; C, wrench; D, nail puller; E, large gas pliers; F, hammer; G, leather punch; H, wire cutter; I, small gas pliers; J, pincers. These are made by Edwin Londerback & Co., 413 South Fifth street, Philadelphia, Pa. Prices, No. 2—9 inches—$1.25; No. 3—12 inches—$1.50.

No. 10. Roth's Saw File Guide. Given for Two Subscribers.

We will venture to say that not one-half of our readers keep their saws in a condition to work properly, and we are glad to offer on liberal terms, a tool which will enable anyone to put a saw in the best possible condition. It is a pleasure to do work with a saw when in good order; but it is hard work and kill-time to do work with a saw in bad order, and

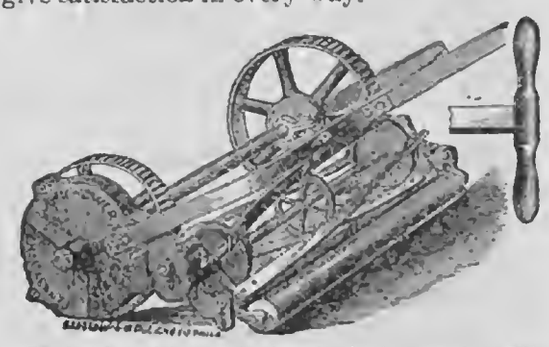


always taxes patience and body to an alarming degree, besides a loss of much time. A saw in good and proper order will do more and better work in one hour than a bad one will in three hours.

Very few carpenters even know how to file and set a saw properly. This instrument will enable any person to do it with greatest accuracy. No person who uses a saw should be without one. The hand saw guide will be delivered anywhere on receipt of price $2,50. E. Roth & Bro., New Oxford, Pa.

No. 11. Pennsylvania Lawn Mower. Given for Twelve Subscribers.

A good lawn mower is a necessity to one who desires to have a good lawn. A poor mower is a most unprofitable investment. We have used the Pennsylvania Mower for a number of years, and can assure our friends that it is one of the best made. The size we offer has a 14-inch cutter and an 8-inch wheel. It can be operated by a lady, as the weight is only 36 pounds. It will cut long grass, and give satisfaction in every way.



It is durable and simple in its work. We can assure our friends that, if they secure one of these implements, they will be well satisfied with the result of their labors in our behalf. The price of the mower is $12.50. For 12 subscribers it is one of the best of premiums. Made by the Lloyd & Supplee Hardware Co. of Philadelphia, Pa.

No. 12. The "C. C. Brooks" Swivel Plow. Given for Fifteen Subscribers.

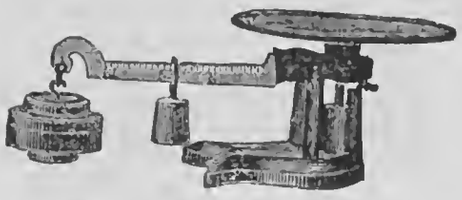
This plow has given excellent satisfaction wherever used. It works well on level ground and on side hills. It is equally good on low land or turf. It is guaranteed to turn a hand

some furrow 16 inches wide and 8 inches deep. A good tool; one that will give satisfaction every time. Price of No. 1, $15; Steel Mould Board, $1 extra. Manufactured by B. & J. W. Belcher, Chicopee Falls, Mass.

No. 13. The Aquapult. Given for Five Subscribers.

A more useful machine than this it would be difficult to find. It can be used as a fire engine, portable force pump, sprinkler, window washer, bug destroyer, etc. The method of using it is shown by the illustration. It will throw water forcibly against a 2nd-story window. It will pay for itself in one season. Price $9. Made by W. & B. Douglas, Middletown, Conn.

No. 14. "Stop Thief" Scale.
Given for One Subscriber.

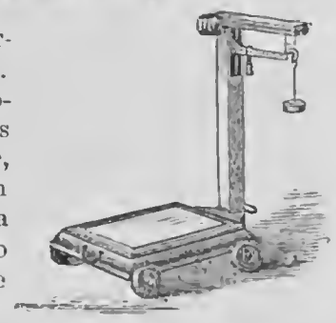


This scale will weigh from ½ oz. to 10 lbs., and is one of the most popular premiums we have ever offered. It retails for $1.15, and is worth it.

No. 15.

UNIVERSAL OR FAMILY SCALE. Given for six subscribers. Weighs from ½ oz. to 240 lbs., and is fully warranted. Price $10.

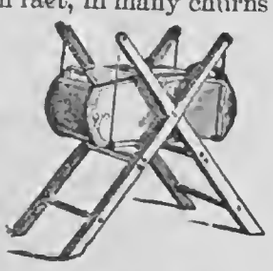
No. 16.
PORTABLE PLATFORM SCALE. Given for 20 subscribers. This has a sliding poise, is mounted on wheels, and has a capacity of ¼ to 800 lbs. Price $22.50.



These three styles of scales, as shown above, are selected with special reference to the tastes and wants of our friends. We get them of the manufacturer, Jones of Binghamton, Binghamton, N. Y., whose reputation as a maker of true and reliable scales is well established.

No. 17. The Davis Swing Churn
Given for Ten Subscribers.

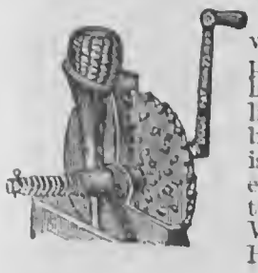
It is now a conceded fact that floats and paddles are not essential to the successful working of a churn. In fact, in many churns they have a tendency to break grain, and no matter how good the flavor, butter can not be gilt-edged, and bring a gilt-edged price without a perfect grain. We have used the Davis Swing Churn for several years, and have been well pleased with its working. It churns quickly, works easily, and the butter comes in a granular form and in fine condition for washing and salting; and then the women like it because it is so easily washed and kept clean. We will give a No. 3 churn, capacity eight gallons of cream, price $10, for 10 subscribers.



No. 18. Challenge Cross-Cut Saw-set and Jointer.
Given for One New Subscriber.

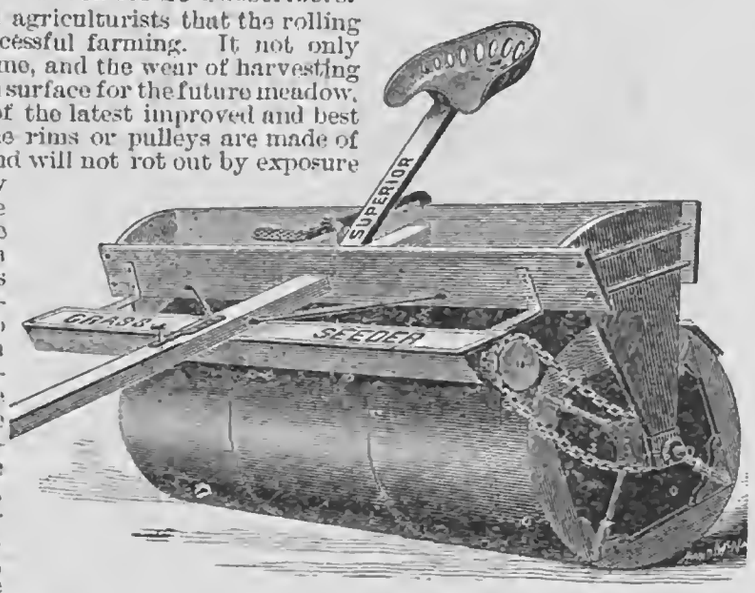
Every man who uses a cross-cut saw is liable to have more or less mishaps in the way of getting it caught and the set taken out, and he should be prepared to set, joint and file his saw even in the woods. The most difficulty in keeping a saw in order, is in jointing it accurately. In the Challenge, we have a combined tool, one of which is a reliable jointer. It does work with ease and accuracy. It is made of the finest of annealed steels, is of convenient size to carry, is strong, simple and durable. Its principle of setting gives any desired amount of set, and sets every tooth exactly alike, thus keeping the teeth in a straight line. Another nice feature is a rubber cushion against which the points of the teeth come and which effectually prevents their being dulled in the setting. It is but little larger than an ordinary pocket knife, and yet it is strong and will do the work. No person who owns a cross-cut saw could afford to be without it if it cost three times its price. It is made by the Challenge Saw-set Co., Meadville, Pa. Price $1. This tool was used as a premium last year and gave such universal satisfaction that we gladly place it upon our list this year. It will please you. Valuable printed instructions for jointing, setting and filing saws sent with each set.

No. 19. Wood's Patent Corn Sheller.
Given for Three Subscribers.



There are many reasons why every farmer and poultry raiser should have one of these handy little shellers. It takes but little power to run it; is simple, durable and effective. It is made by the Lehigh Valley Emery Wheel Co., Lehightou, Pa. Price $3.

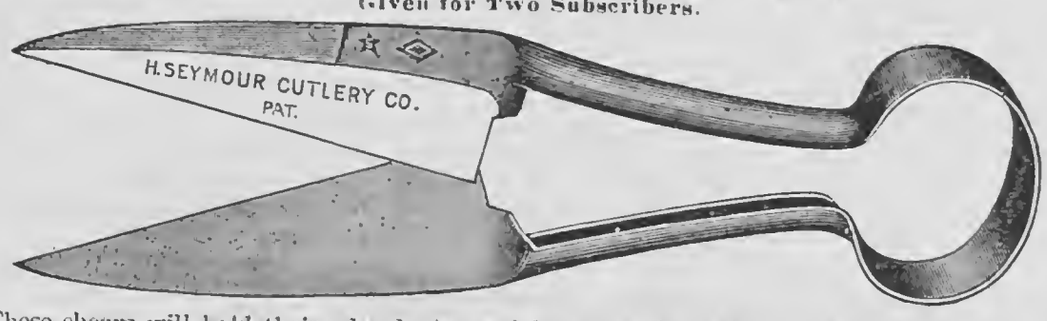
No. 20. The Superior Land Roller.
Given for 25 Subscribers.



It is admitted by most good agriculturists that the rolling of land is indispensable to successful farming. It not only increases the crops but saves time, and the wear of harvesting machinery, by leaving a smooth surface for the future meadow. The above cut represents one of the latest improved and best land rollers in the market. The rims or pulleys are made of the Best Boiler Iron or Steel, and will not rot out by exposure like those made partly or entirely of wood, or break by rough usage as is apt to be the case with those of cast iron. Oak felloes kept in position by iron corner blocks into which the spokes are inserted at their outer end keep the pulley rims tight and in shape. For the purpose of tightening the felloes if at any time found necessary the spokes are threaded and supplied with locking nuts. The arbors are made from the best rolled shafting, carefully straightened and machine turned at the bearings. The journal boxes are self-oiling, a new and very valuable feature in implements of this kind; one oiling being sufficient for weeks of constant use.

They are made in two sizes, viz.: The Three-Section (the popular size) which is 24 inches in diameter by 6 feet in length, weighing about 600 pounds, price $35; and the Four-Section, 24 inches in diameter by 8 feet in length, weighing about 750 pounds, price $40. They are built with stone or weight boxes, by means of which extra weight may be added if desired. An easy spring seat adds to the many attractions possessed by the Superior. When not in use the Roller can be easily and quickly taken apart and stored in a loft or other convenient place. We have made such arrangements as enable us to offer one of the Three-Section Rollers for 25 subscribers which is a splendid opportunity for any one who needs a first-class land roller. They are made by the Gouveneur Machine Co., Gouveneur, N. Y., who will gladly mail circulars to all who apply.

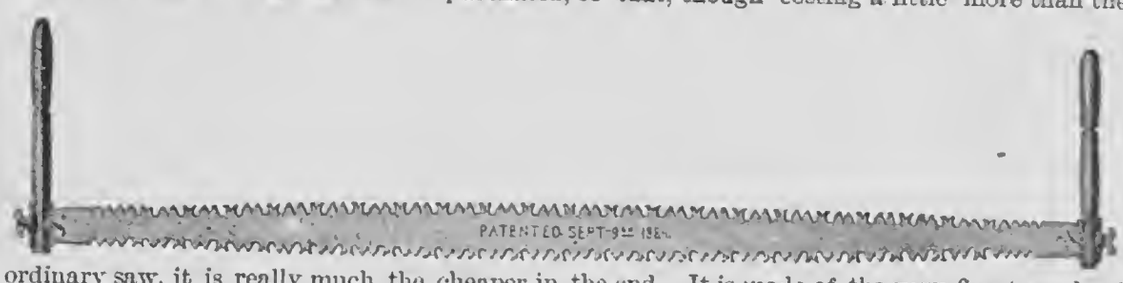
No. 21. Seymour's Diamond Edge Sheep Shears.
Given for Two Subscribers.



These shears will hold their edge better and longer without sharpening than any we have ever tried. The spring and handles are made of the best spring steel and the blades from the best cast steel, and we think no sheep shears yet made will compare with them for cutting qualities. Aside from their use for sheep shearing we have found nothing equal to them for trimming the edges of flower beds and lawns, where a scythe or lawn mower cannot be used. The price varies, according to length of blade, from $1.25 to $2 per pair. Send to the H. Seymour Cutlery Company, Holyoke, Mass., for a pair, or get us two subscribers, and we will send you a pair, either five, five and a half or six-inch blade, as you may prefer.

No. 22. Emerson's Patent Double Cross-cut Saw, Narrow Blade.
Given for Two New Subscribers.

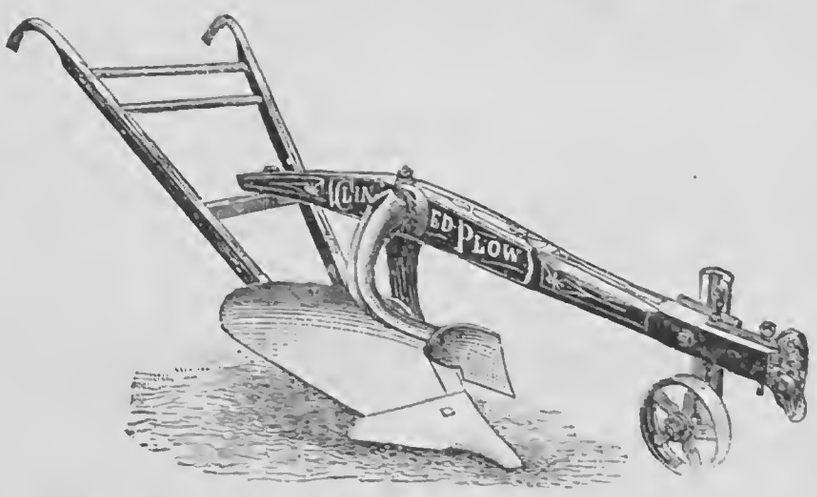
This is something new in cross cut saws, two saws in one; two sets of teeth worn out before the saw is gone. No more gumming of saws and breaking of teeth. This saw, as seen, has teeth on both edges, both sets are filed ready for use, but only one is set ready for use. When the side in use is worn out, the set is to be hammered out of that side; the others set, and you have a new saw. All who have used a cross cut saw know that when it once needs gumming, its best days are over, as one is very seldom made to work well afterwards. In the Emerson, both sets of teeth are made when the saw is purchased, so that, though costing a little more than the



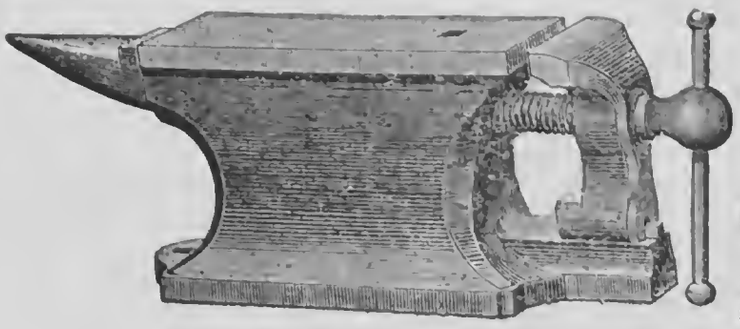
ordinary saw, it is really much the cheaper in the end. It is made of the very finest grade of silver steel, and is heated, in working and in tempering by natural gas, which contains no sulphur or other base properties so injurious to steel; therefore all tools made with this fuel are much tougher and of more even quality than by any other method. Each one of these saws is furnished with adjustable handles, with which it can be used in any position; as well for cutting down trees as for sawing those that are down. Made by Emerson, Smith & Co., Limited, Beaver Falls, Pa., who publish annually a Hand Book for Sawyers containing a large amount of valuable information; the book will be sent free to any part of the world by them on receipt of full name and address.

No. 23. The Clinton-Chilled Plow with Patent Jointer.
Given for Ten Subscribers.

The great novelty and superiority of this plow consist in the crooked jointer arm which passes out over the furrow in such a way that grass, weeds or manure passing over the jointer and up the arm are caught and buried by the turning furrow. We have them in use and can recommend them to do what is claimed. Made by D. Woodward, Clinton, Mich. Price, com-



plete, $14, or jointer alone, $3. We will give the jointer alone fitted for use on any plow, for three subscribers. If you have never used one of these jointers, you should by all means secure one, and you will take solid comfort in using it.



No. 24.
Farmers' Anvil and Vise.
Given for Four Subscribers.

Here is a chance to get one cheap; do not miss it. Manufactured by the Richardson Manufacturing Co., Worcester, Mass. Don't spend an hour or two running to a blacksmith shop to have a small job done when you can do it just as well yourself if you have the proper tools. Every farmer should have an anvil and vise.

No. 25. Farm Bell.
Given for Two Subscribers.

Every farmer should have a good farm bell, if for nothing else but the luxury of hearing its welcome tones at meal time. It is a great safeguard against thieves or tramps, a few taps being usually sufficient to drive the boldest tramp away and to call the men folks. In case of fire it may be used to alarm the neighborhood, and many dollars worth of valuable property may be saved thereby. These bells are made of the best material and are covered with a rich and durable gold bronze. The hangings are coated with an indestructible varnish, preventing rust. The No. 2 weighs 50 pounds, is 17 inches in diameter, and the regular price is $5. Send to Bell & Co., Hillsboro, Ohio, for a descriptive circular.

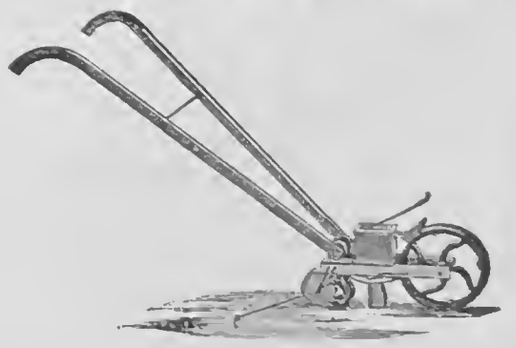
No. 26. The Wilson One and Two Horse Spring Whiffletrees.
Given for two and three Subscribers.

These whiffletrees do away with the severe shock that the shoulders of the horse would otherwise receive in pulling and starting heavy loads, so that he labors with ease and comfort. The importance of this can hardly be overestimated. When the plow strikes a stone, or if the wagon comes against any obstruction or drops into a deep rut, the blow that comes against the horses shoulder is enough to crush it. The wonder is, not that so many horses are lame with shoulder troubles, but that all are not. These severe shocks may all be obviated and nine-tenths of the suffering and lameness prevented, by the use of the Wilson

Spring whiffletrees. We have had them in use and unqualifiedly recommend them to the notice of every horse user. While lighter than the old rigid tree, they are so strong that the most powerful team cannot break them. The above cut shows their construction. The coiled steel spring sustains the draft and equalizes every strain, and the brace rods running to the end make them very strong. They are sold by Jerome Potter, Tiverton Four Corners, R. I. They are made in three sizes, and we will give a pair of the No. 3 size, worth $3,25 or the No. 2, worth $5.10, for three subscribers. No. 1, worth $3, for two subscribers. The smallest size is large enough for ordinary horses.

No. 27. A. H. Matthew's Little Gem Seed Drill.
Given for Six Subscribers

There are thousands of people who still plant their seeds by hand, in the clumsy, old-fashioned way, because they haven't use enough for a drill to afford to pay $10 or $12



for one. This drill is designed for just such people. It is a low-priced, reliable Seed drill that will make the drill, drop and cover the seeds, and mark the next row. Price only $6. Manufactured by Small & Matthews, Boston, Mass.

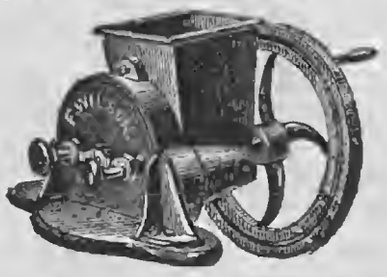
No. 28. Small's Calf Feeder.
Given for Two Subscribers.

This invention feeds the milk to the calf in nature's own way. Its merits and usefulness

will be apparent to every farmer who feeds or handles young calves. Price $2 50. Made by Small & Matthews, Boston, Mass.

No. 29. Frank Wilson's Hand Bone Mill.
Given for Four Subscribers.

We used to pound our bones or shells with a home-made pounder, a piece of log on a broom handle. It was hard work and a large proportion of the shells and bones were only partially broken up, or pounded into the ground. These little mills have saved us money and made the work easier. These mills are a complete success for crushing oyster shells, grinding bones and all kinds of grain including



corn and cob. It will grind a peck of shells, or bones, in from 12 to 15 minutes. Whole oyster shells can be put in the mill as well as bones of the same size. It is adjustable grinding either course or fine. The smaller mill without legs weighs 35 pounds and is sold at the astonishingly low price of $5. It will pay you to get one of these mills and hire a boy to gather up the old bones about your place and grind them up for poultry. For further particulars address, Wilson Bros., Easton, Penn.

Owing to a special arrangement with the manufacturers, we will send one of these mills, to any person sending us four subscribers. This is one of the best.

No. 30. Hill's Combined Truck and Step Ladder.
Given for Three Subscribers.

The above cuts represent a combined Step Ladder and Truck for stores, mills, hotels and farms. It is strong, light, well-made, easily handled, and very simple in construction. The ladder is locked when open by the V-shaped locking device or foot, which makes it

very strong, safe and secure. It has more valuable features than can be shown on paper, and cannot fail to give entire satisfaction. Weighs 18 to 20 pounds each; carries 600 to 800 pounds; made of best second-growth ash, malleable and wrought iron. The wood wheels are made of guarly walnut. Price for Truck, walnut wheels, $4; do. iron wheels, $5. Made by James Hill, 47 Hanover Street, Wilkesbarre, Pa.

No. 31. Macomber's Corn Planter.
For One New Subscriber.

Last year this best of corn planters was offered for *three* subscribers. This season, by a special arrangement, it is offered for *one*. So popular has this useful implement become

that the sale of them is limited only by the capacity of the manufactory. Their simplicity recommends them, their durability makes them economical, and their labor-saving makes them indispensible. Made by S. M. Macomber & Co., Grand Isle, Vt., Price $3.50.

No. 32. The Schiedler Post Hole Digger.
Given for Two Subscribers.

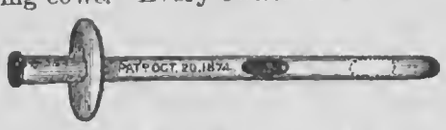
This implement makes a hole of any desired size or depth, and works successfully in all kinds of soil—clay, stony, slate, quicksand or hardpan.

The cut to the left shows the digger in position for work. One shovel only is used in digging, which gives it a decided advantage for fast digging in hard soil over any of the class of diggers that have two shovels, and both are used.

In sandy or gravelly soil, where others usually fail, this digger works with perfect success, owing chiefly to the effective position in which the two shovels can be placed for lifting the soil from the hole. Myers, Housel & Co., manufacturers, Canton, Ohio, U. S. A.

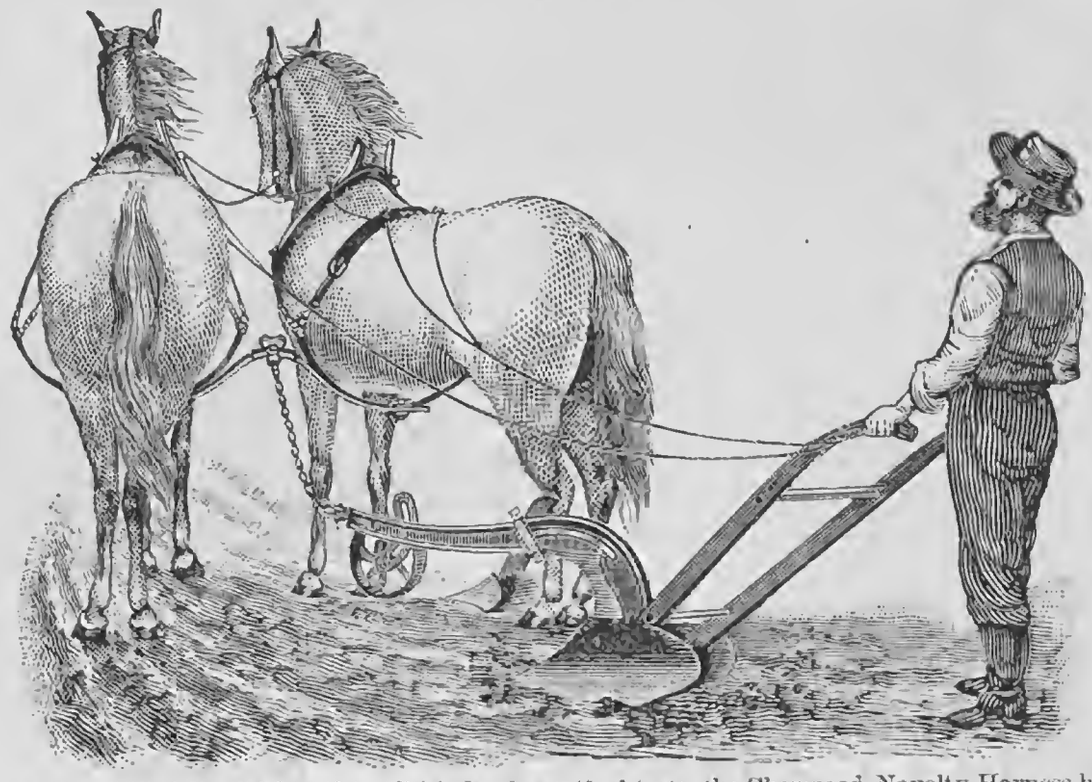
No. 33. Pilling's Patent Coin Silver Milking Tube.
Given for Two Subscribers.

For sore and obstructed teats and hard-milking cows. Every owner of a cow should



have a set of these tubes. Price $2 per set, or 50c. each. Furnished by George P. Pilling, 101 S. Tenth street, Philadelphia, Pa.

No. 34. Sherwood Novelty Harness.
Given for Ten Subscribers.



After having been subjected to all kinds of practical tests, the Sherwood Novelty Harness has proven to be just what it is represented, and it stands before the people to-day as the best harness for practical farm work in the market.

The following endorsement, coming from the editor of the Farm Implement News, is very decided, and is only one of many such which have been given. In speaking of the harness the editor says:

"Having witnessed the use of the Sherwood Novelty Harness in drawing binder, teaming on the road and other farm work—in fact, having used it myself—I am prepared to endorse the claims made in its favor as an easy, practical and really convenient Farm Harness, besides being very durable. Its advantages should commend it to the trade, and we would advise an agent who wants a novelty of merit to order one of these harness, and before plowing begins. If properly handled and pushed it will have large sales."

We have arranged to offer the harness as a premium for ten subscribers. The price of the harness is $15, and it is made by the Sherwood Harness Company, Syracuse, N. Y.

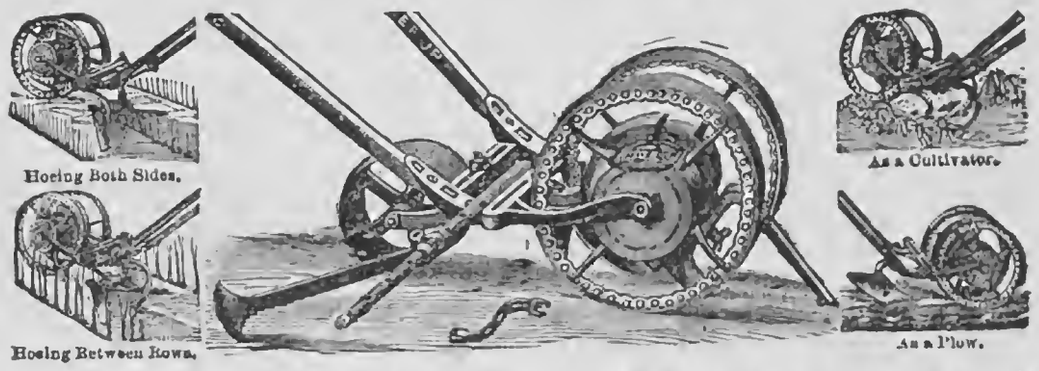
No. 35. The "Fire Fly" Single Wheel Hoe, Cultivator and Plow.
Given for Five Subscribers.

Implements of this kind have done much toward relieving the drudgery of garden cultivation. Running the "Fire Fly" is only a mild form of recreation in comparison with the back-aching and discouraging fight with weeds with the old-fashioned weapons—the fingers and the hoe. The "Fire Fly" Single Wheel Cultivator and Plow is a tool intended for those who have but small gardens and a moderate amount of time to spend in them, and for those who cannot avail themselves of horse-power tools advantageously. It is exceedingly valuable to such persons, since it enables them to economically raise the vegetables necessary for their family, or for market, with a minimum expenditure of labor and time. The work of this little plow is almost equal in thoroughness to that of an ordinary horse cultivator. Price $4.50. Made by S. L. Allen & Co., Philadelphia, Pa.

No. 36. The Planet Jr. Combined Horse Hoe, Cultivator, &c.
Given for Thirteen Subscribers.

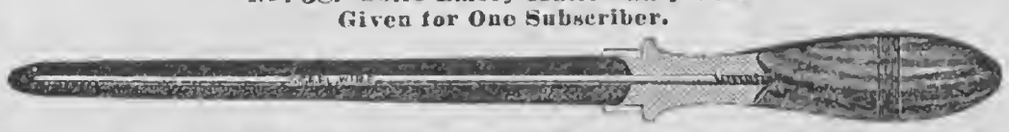
Like the other "Planet Jr." tools this implement is too well known to require any description. We know it will please those who have occasion to use it. Those who try to do garden work without an implement of this kind are sure to regret it. It is well shown in the cut. We are able to offer these implements on very liberal terms this year, and our agents should be able to secure them without much effort. The price of the Hoe is $13.25. Made by S. L. Allen & Co., Philadelphia, Pa.

No. 37. The Planet Jr. Combined Drill and Cultivator.
Given for Twelve Subscribers.



The "Planet Jr." tools used last year as premiums gave such satisfaction that we are glad to offer them again. The Seed Drill, which we offer on most liberal terms, is one of the most popular tools ever used by gardeners. It can be used as a drill, as a plow and as a cultivator, and in each capacity it does the best of work. Each machine is sent out with the tools, ready for adjustment, as shown in the cut. It is simple, accurate and effective. It will be sure to give satisfaction. Price, $12. Made by S. L. Allen & Co., Philadelphia, Pa.

No. 38. Solid Emery Knife Sharpeners.
Given for One Subscriber.



There is no question but that Emery is the material to sharpen knives with, but the difficulty has been to get it into a convenient and durable shape. This has been accomplished in the sharpener represented in the above cut. It is handy and neat, and at the same time by reason of the wire running through its entire length and the manner of fastening into the handle, it is as strong and durable almost as an old fashioned steel. It is just what you need to keep your knives in order. They are made by Wm. H. Parkin, 13 South Water street, Cleveland, Ohio. You can have your choice between a maplewood and cocobola handle for one new subscriber.

No. 39. The Lamont Combination Razor Strop.
Given for One Subscriber.

The razor strop represented by the above cut is said to be one of the best strops in the market. It is made throughout with only the very best selected material, such as the practical experience of years has satisfied the inventors alone can be used in its construction with a certainty of its standing the test of time. The leather is tanned and prepared especially for this purpose, and nothing but the most perfect sides are used. The strops are made by Tower & Lamont, Rochester, N. Y., who claim the best leather, the best and thickest hone, the best arrangement for stretching and the best support for the rod and handle to be found in any combination strop.

No. 40. Blanchard Churn.
Given for from Six to 12 Subscribers.

This is one of the best churns made. Only the very best material is used in their construction and they are made by skilled workmen in the most perfect manner. By experiments with one of these churns made entirely of glass, it has been demonstrated that the form and motion of the dasher perfectly aerate and agitate the cream, bringing the butter at the

proper time and in the best possible condition. The body of the churn being cylindrical, all the cream is churned alike and at the same time, making streaked butter impossible. Those who desire to make butter on what is called the "granular system" can do it perfectly with the Blanchard churn. Made by Porter Blanchard's Sons, Concord, N. H. Prices from $6 to $12. We will send a No. 7, which will churn 16 gallons; price $12, for 12 subscribers or smaller sizes for from six to ten subscribers.

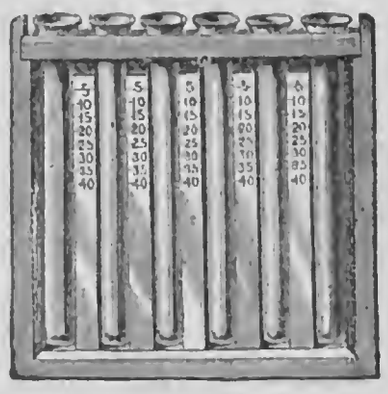
No. 41. Clark's Root Cutter.
Given for Twelve Subscribers.

Dozens of farmers last year wished to secure the Root Cutter, which was offered in our list of presents. They will have an excellent opportunity this year of securing one for compartively little effort.

This machine is one of the very best. It is well made, strong and cuts the roots into pieces half round, the best possible shape for feeding, as they cannot pack down in the feeding dish. It will easily cut one bushel per minute, and every one who feeds roots or apples to stock should have one. Made by the Higganum Manufacturing Corporation, Higganum, Conn. Price, $14.

No. 42. Cream Tester.
For One New Subscriber.

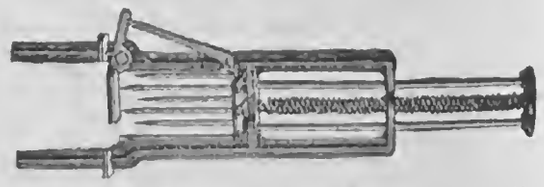
The plan adopted by the most successful dairymen of testing the milk of each cow in their herd has led to the introduction of the



cream tester. The one here offered is practical, economical and accurate. It is made and sold by Wymon L. Edson, Union Centre, Broome Co., N. Y. Price of 6-glass cream tester, $1, postpaid. Send for a circular.

No. 43. Olmstead Reliable Mole Trap.
Given for Two Subscribers.

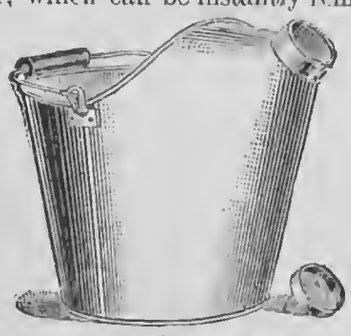
We have noticed that but a small proportion of the damage done by moles is attributed to them. They destroy seed and growing potatoes eat seed corn, and undermine and destroy young vegetables of all kinds. They are an



intolerable nuisance to be destroyed in the quickest and most effectual way. This trap will catch and kill them and every one of our readers should have one. Price $1.65. Sold by L. H. Olmstead, Corona, N. J. Given for two subscribers.

No. 44. The "Common Sense" Milk Pail.
Given for Two Subscribers.

This is the nearest approach to a perfect milk pail we have ever seen. It protects the milk. There are no seams in the front to catch the dirt. It has a perfectly fitting strainer, which can be instantly removed, so



that every part of the pail may be quickly and thoroughly cleaned. It is well made of heavy XX tin, and we know our dairy readers would not be without it if they thoroughly understood its merits.

No. 45. Milking Tubes, for Milking Cows with Sore Teats.
A Full Set sent for only One Subscriber.

If a cow's teat becomes injured or sore, or in any way obstructed, to draw the milk by hand from such a teat is very painful to the

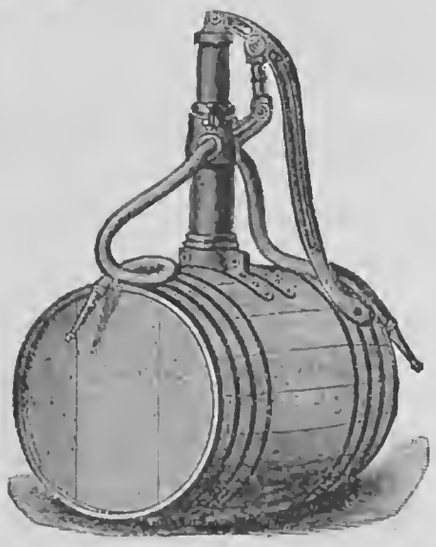
cow and vexatious to the milker. In such a case, with one of these milking tubes, the milk can be taken so easily that both the cow and the owner will enjoy the operation. Every farmer should have one of these sets. The Pail and Milking Tubes are supplied by Messrs. Bartlett & Dow, Lowell, Mass.

No. 46. Pearce's Improved Cahoon's Patent Broad-cast Seed Sower.
Given for Four Subscribers.

This machine sows wheat and heavy grain two rods wide, so a man can sow four acres by walking a mile. It sows all kinds of grain and cleaned grass seed, and does better work than can be done in any other way. Four to eight acres can be sown in an hour at a common walking gait. It saves both in labor and seed. Simple in construction and easily regulated. Price $5. Made by the Godell Company, Antrim, N. H., who also make a horse-power seed sower.

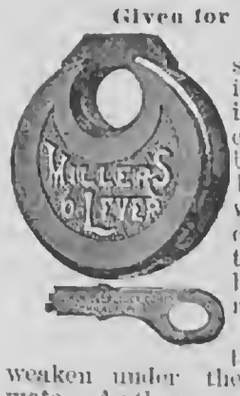
No. 47. Double Acting Force Pump.
Given for Eleven Subscribers.

It is needless to speak of the value of a good force pump to the orchardist or planter. The Goulds' Force Pumps, shown in the cut, have given the most complete satisfaction. For throwing poisons or liquids of any kind over trees and shrubs they have been used with excellent effect.



The pumps are made with brackets or feet, that will fit an ordinary barrel capable of holding 40 to 50 gallons of water. This barrel can be placed on a wagon and drawn through the orchard or garden. With one of the pumps attached, a stream of water may be directed from one or both sides, as may be desired. The dimensions of the pumps offered are: Outer cylinder, 1¼ inch; hose discharge, ¾ inch; pipe discharge, ½ inch. The piston and smaller cylinder are made of brass and the outer cylinder is iron. Price, $10 50. Made by the Goulds Manufacturing Co., Seneca Falls, N. Y.

No. 48. "Champion" Six-Lever, Self-Locking Padlocks.
Given for One Subscriber.



In order that a padlock shall be good for anything it must be strong and lasting, and have a lock which cannot be picked by everybody with a tenpenny nail. The "Champion," which we offer for a premium, combines to a large degree the essentials of a good padlock, and we confidently recommend it.

The springs are of phosphor-bronze, not liable to weaken under the influence of any climate. As the name implies, this lock has six levers or tumblers, and is so constructed by elaborate machinery that no two of them can be opened by the same key unless they have been made alike to order. The Miller Lock Company, 821 Cherry Street, Philadelphia, are sole manufacturers. They will furnish price lists, etc., on application.

No. 49. The McCreary Patent Dog and Sheep Power.
Given for Ten Subscribers.

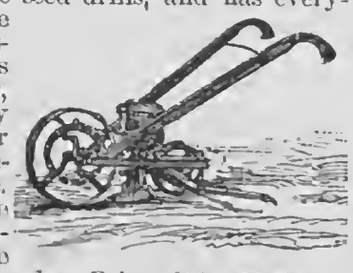
How common it is to see a great big dog lazily following the horses or dozing under the trees, doing little else but eating food which could be fed with advantage to the hogs or the chickens, while the farmer's wife and children are worrying away with the churn, sweating and fretting because the butter will not come. It is a farmer's duty to utilize all available forces, and he should stop a very common waste by getting a good dog power and making the dog earn his living, to the relief of the already overworked wife or child. These powers can be worked by a sheep as well as by a dog. There is no reason why the old ram should not expend his surplus energy in a useful manner in one of these powers.

The McCreary Dog and Sheep Power is adapted for farm and dairy use, and is the lightest running power made. A 25 pound dog or sheep will churn five gallons of cream, and a larger animal will churn proportionately more.

This power is a horizontal rotary platform, 54 inches in diameter, and working on a friction wheel, which gives an easy, steady motion, without any jar or jerking. The platform is adjustable to any angle to suit the weight of the dog, and also regulate the speed, a very desirable feature when wishing to run the churn slow to "gather" the butter. The change can be made while the machine is running. The machine occupies 4x4½ feet floor space; is made strong and durable. With ordinary care it will last a life-time, as there is nothing to wear out, and it is so simple it cannot get out of order. Price, $15. Manufactured by Logan & Strobridge, New Brighton, Pa. *The R. N.-Y. never sells any premiums.*

No. 50. New York Seed Drill.
Given for Ten Subscribers.

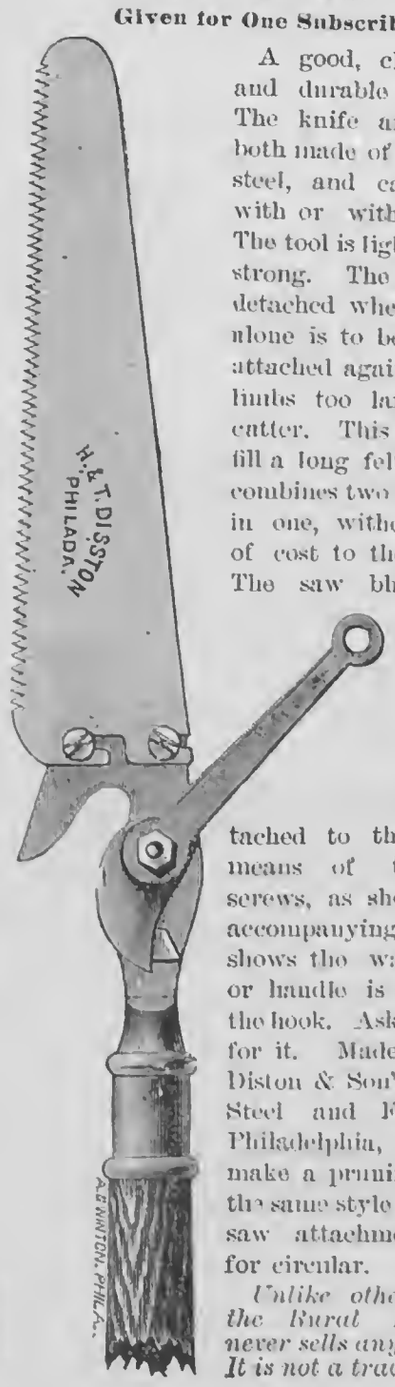
This is one of the oldest and most thoroughly tested of all the seed drills, and has everywhere given the most perfect satisfaction. It is simple, strong, durable; a very accurate dropper and easy to operate and manage. The name of the makers is a sufficient guarantee that it is well made. Price, $12. Made by the Higganum Manufacturing Corporation. Higganum, Conn.



No. 51. The Granger Fruit and Vegetable Evaporator.
Given for Three Subscribers.

This evaporator is especially adapted for family use. It can be used on the kitchen stove, with no extra expense for fuel. Its action is uniform and steady, it never scorches or burns, requires no watching, and produces beautiful, clean, tender and palatable evaporated fruit in from two to three hours. No farmer should be without one. It will pay for itself in a few days. The price varies according to size from $3,50 to $10. We will give a No. 1 18x26 inches price $3,50 for only three subscribers. For circulars address Eastern Manf'g Co., 268 South Fifth Street Philadelphia Pa.

No. 52. Disston's Little Giant Pruning Hook and Saw.
Given for One Subscriber.

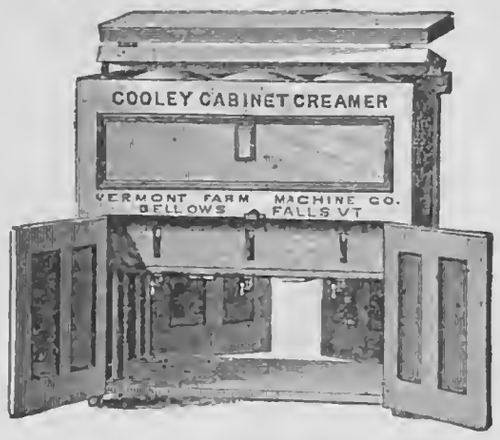


A good, cheap, simple and durable implement. The knife and saw are both made of the best cast steel, and can be used with or without a pole. The tool is light and very strong. The saw can be detached when the hook alone is to be used, and attached again for use on limbs too large for the cutter. This pruner will fill a long felt need, as it combines two useful tools in one, without increase of cost to the consumer. The saw blade is attached to the hook by means of two clamp screws, as shown in the accompanying cut; it also shows the way the pole or handle is attached to the hook. Ask your dealer for it. Made by Henry Diston & Son's Saw, Tool, Steel and File Works, Philadelphia, who also make a pruning hook of the same style without the saw attachment. Send for circular.

Unlike other journals, the Rural New-Yorker never sells any premiums. It is not a trade journal.

No. 53. Cooley Cabinet Creamer.
Given for Thirty-three Subscribers.

Experiments demonstrate the fact that the use of a creamer and cold water or ice raises the cream more perfectly than any other method. In a recent test made by Dr. Babcock, of the New York Experiment Station, with a Cooley Creamer, less than one-tenth of one per cent was left in the skim milk. In the



Cooley the cans containing the milk are entirely submerged and water-sealed, which is claimed to greatly increase the cooling surface, and the water is said to absorb all gases or bad odors, and the cream is not affected by thunder or sudden changes of temperature. We will present a No. 1 Cooley Cabinet Creamer, having three cans and large enough to accommodate the milk of from six to nine cows. Price, $33, for thirty-three subscribers.

No. 54. Eureka Butter Worker.
Given for 10 Subscribers.

When butter has to be worked with the ladle and bowl it is very hard work, and the temptation is great to no more than half do it, and the danger of spoiling the grain is also great. The Eureka worker obviates both these objections. It frees the butter from the buttermilk by pressure and in the easiest manner and quickest time and with no danger to the grain. It is strong, durable, and simple and easily kept clean. We will give a No. 3 Eureka, capacity sufficient for any farmer, price $10,00 for 10 subscribers.

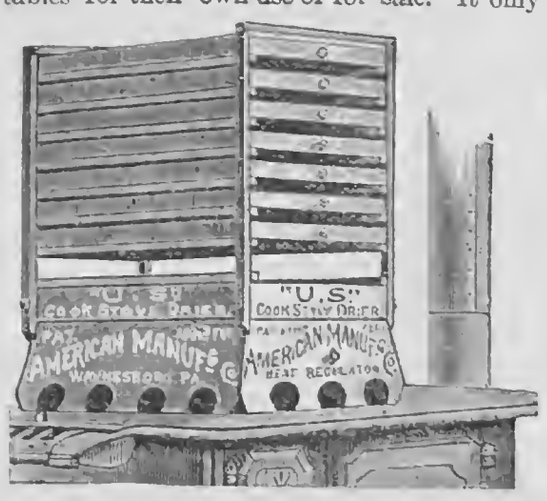
No. 55. Nesbit Butter Printer.
Given for Six Subscribers.

However good the butter may be, appearance has much to do with its price and ready sale. This very convenient little machine puts the butter in a neat, rectangular or brick form, does it easily and quickly, and if the block is carved with two designs the brick can be cut into two equal-sized pieces. This is a very convenient machine, and we shall give a one pound self-gauging press, worth $5.50 for six subscribers.

The Vermont Farm Machine Company, who make the above-mentioned articles, are, perhaps, the most extensive manufacturers of dairy apparatus in the world, and their name is a guaranty of careful manufacture out of the best material.

No. 56. U. S. Cook Stove Drier.
Given For Five Subscribers.

There are thousands of careful prudent household managers who have no time nor necessity to engage in evaporating fruit for market as a business, but who have frequent use for just such an article as this for making smaller quantities of dried fruits, berries and vegetables for their own use or for sale. It only



weighs 20 pounds; has eight reversible interchangeable galvanized wire-cloth trays, which will not rust or discolor the fruit &c., and will last for years. It is made of galvanized iron, except tray frames and supports. Can be used for broiling beef steak, fish, &c. Its capacity is ample for domestic purposes and it is always ready for immediate use. Price, seven dollars, made by the American M'f'g Co., Waynesboro, Pa., manufacturers of the American Evaporator.

No. 57. Matthewson's Steel Name Stamps.
Given for Two New Subscribers.

The custom of borrowing is the cause of much ill-feeling between neighbors. A large part of this trouble would be obviated if every farmer stamped his implements so they could be identified beyond all question. We will send a Steel Name Stamp, letters not to exceed 10 in number, one eighth of an inch in length, for two new subscribers. Send to J. E. Matthewson, Springfield, Mass., for a catalogue. In ordering, please state whether the stamps are to be used on wood or metal.

No. 58. Manner's Improved Bench Drill.
Given for Five Subscribers.

This tool is just the thing for a farmer with sufficient skill to keep his own implements in repair. The total hight is about 24 inches, weight 31 pounds and it will drill a hole from the smallest to ¾ of an inch true and square, with bed plate. The rim of the screw is 3½ inches. A Chuck is fitted to each machine to fit Morse Square Shank Twist Drills, which can be bought in any hardware store. The list price of this drill is $12, but it is sold at the very low price of $4,50, by the Manner Drill Co., Rochester, N. Y.

The same firm makes a Machinists' Vise. width of jaw 3½ inches; opens 4 inches; steel jaws; wrought forged screw; square cut thread. List price, $4.50.

This vise will be sent for two subscribers.

No. 59. Goodell's "White Mountain" Potato Parer.
Given for One Subscriber.

This machine does good work—much better than can be done by hand—going into and cleaning out the eyes, and saving at least twenty-five per cent.

It is free from the objections made to all styles of geared parers, is good in every respect, and so cheap as to be within the means of everybody. It will pare quinces or pears equally as well as potatoes. The Alford & Berkele Company, New York.

No. 60. Trio of Excelsior Plymouth Rock Fowls.
Given for Ten Subscribers.

While the newer varieties come and go the "Rocks maintain their position as one of the leading all-purpose fowls for the farmer and poultry raiser. Scudder & Townsend of Glen Heads N. Y., make a speciality of breeding fowls for farmers. At the New York Poultry Show Messrs. Scudder & Townsend won first prize on P. Rock Breeding Pen and we have accordingly selected their fowls as being the best obtainable. These birds will not be culls or second-class specimens. They will be first-class in every respect. Scudder and Townsend cannot afford to send out poor birds. The pullets will weigh from six to seven pounds and the male from eight to nine pounds. We will give a trio of first-class thoroughbred Excelsior Plymouth Rocks for ten subscribers.

PLANTS, SEEDS AND VINES.

No. 61. Golden Queen Raspberry.
Nine Plants for One Subscriber.

This is a seedling or sport of the celebrated Cuthbert, and is of a rich, bright, creamy yellow, and this color it holds well when in the crate. In size, vigor, productiveness, beauty and hardiness it is superior to the Cuthbert. In season of ripening it is the same. It also endures heat and drought as well as or better than the Cuthbert. Every fruit grower should have this berry for its beauty as well as good qualities. It will be sent by J. T. Lovett, Little Silver, N. J. Price $3 per dozen. We will send nine plants, postpaid, for a single subscriber. This is a better offer than we made last year, and the berry has greatly improved its standing since then.

No. 62. Rancocas Raspberry Plants.
Given for One Subscriber.

With another year's trial, the Rancocas Raspberry stands better than ever. It last Winter endured the extreme trial of the cold better then than anything else at the Rural Grounds. It is more than a week earlier than Cuthbert, and ripens its crop in a short time after the first picking. Color a bright red; bush very stout and branching. R. G. Chase & Co., nurserymen of Philadelphia, Geneva and Boston, again kindly enable us to give one dozen plants of the Rancocas, worth $2, for one subscriber.

No. 63. Moore's Early Grape.
Three Vines for One Subscriber.

This is one of the healthiest and most vigorous growers of the grape tribe, and, withal, the earliest of the eatable black grapes. Joel Horner & Son, of Merchantville, N. J., the reliable nursery firm, who pride themselves on sending out good goods, and warrant them strictly true to name, have placed a few at our disposal and we will give three one year old vines for one subscriber.

No. 64. Jewell Strawberry Plants.
One Dozen for One Subscriber.

We sent out a large number of plants of the Jewell Strawberry and so far as we have heard they have given excellent satisfaction. In 1885 we reported on this berry as follows and see no reason for changing our decision. We have found this to possess more points of merit than any other we have ever tested, if we may judge by the experience of two seasons. The plants are very vigorous and free from disease. The berries begin to ripen June 12. The average size is large from the beginning until the end of the season—the form broadly conical, often flattened or widened at the top. The largest berries with us measured four inches in circumference. The color is a bright red, and the quality is very good, though not best. They are firm enough to ship to a distance. Its great claim to superiority rests in the vigor of the plants, the uniformly large size of the berries, and its productiveness, in which latter respect it is thought to stand first among all known varieties of strawberries. Our first portrait of the Jewell was presented in the R. N.-Y. of July 12, 1884. We will have sent, direct from the originators, P. M. Augur & Son, Middlefield, Conn., post paid, one dozen of these plants for only one subscriber.

No. 65. Garden and Flower Seeds.
$1 Worth Given for One Subscriber.

To raise seeds successfully requires years of experience and the most perfect conditions of soil, climate, etc. Ordinarily it will not pay our readers to raise the few garden and flower seeds they require. We have accordingly arranged with our leading seedsman to compensate our friends by sending them seeds, should they be preferred to the other premiums. For one subscriber and 10c. to pay the postage we will send $1 worth of garden or flower seeds in packets. The seeds may be selected from the catalogues of any of our leading seedsmen who advertise in the RURAL NEW-YORKER.

HOUSEHOLD ARTICLES.

No. 66. Magee Mystic Range.
Given for 57 Subscribers.

This range gave unbounded satisfaction to our agent who had the good fortune to get it last year, and we are glad to be able to offer it again. The Magee Furnace Co. is one of the oldest and most reliable firms in the country; they are noted for their superior stoves and honest dealing. Their main office and salesrooms are in Boston, where daily immense numbers of stoves and ranges are sold. They have also branch wholesale houses at 92 Beekman Street, N. Y.; 86 Lake Street, Chicago; 8 and 10 Pine Street, San Francisco; and with Bood Bro., Kansas City; and their stoves are retailed in nearly every town of this country, and are everywhere the standard of excellence,

none claiming to make better. The Mystic is one of their latest and best ranges. It is made in various styles and at various prices, but all work splendidly. The prices vary according to size and fixtures. We will send any size or priced range for the number of subscribers corresponding to the value of the range in dollars. For example we will send a Mystic Range like the cut, having six eight inch holes, a reservoir holding 10 gallons, a cabinet base with polished edges, a high shelf, a very large ash-pan, and an oven 20x20 inches, fitted for coal or wood as desired, price $57, for 57 subscribers, or a lower priced one for a less number of subscribers, Send for a catalogue and make your selection.

No. 67. Magee's Ideal Parlor Heater.
Given for 36 Subscribers.

This base-burning, self-feeding, hard-coal stove is beautiful in design and perfect in workmanship. It is of the latest style, and would be an ornament to any parlor. It is also made by the Magee Furnace Co., of Boston. Its price is $36. We will send it for 36

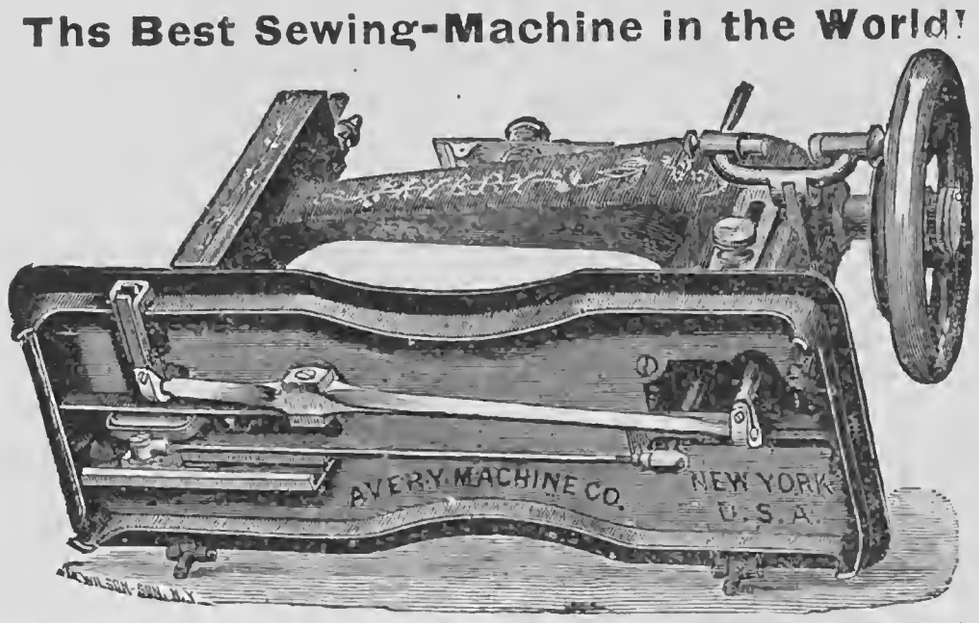
subscribers, or a larger or smaller size on the same conditions as the range. We will send almost any style or priced stove, ranges or heater, from the same firm on the same conditions, viz., a number of subscribers corresponding to the value of the stove in dollars. Send to the Magee Furnace Co., of Boston, for a catalogue and you will appreciate this offer.

No. 68. Carpenter's Dust Pan.
A Pair for One Subscriber.

This is perfection in the way of a dust pan. It is self-supporting. The person who uses it stands erect and does not inhale the dust, and can use both hands in handling the broom. It is made by F. W. Carpenter, Harrison, Westchester County, N. Y. Costs 50 cents, is worth ten times the money, and will captivate any lady who gets it. We will give a pair of them for one new subscriber.

No. 69. The Avery High-Arm Sewing Machine.
Given for Twenty Subscribers.

Ths Best Sewing-Machine in the World!



We stated last year that in our opinion the Avery is the lightest-running, stillest, most reliable machine ever invented. One year's further acquaintance with the machine justifies us in making this assertion even stronger than before. We firmly believe it to be superior to all other machines upon the market, and we are satisfied that a personal examination will convince any one of its superiority.

The Avery machine, which we show in the cut, and which we offer as a gift to those of our friends who send us clubs, is the latest triumph of inventive genius. It is a high-arm machine, almost absolutely noiseless, and by far the easiest-running machine made. It has a shuttle, makes a lock-stitch, and the shuttle and feed motion are in one piece, and there is no possibility of its getting out of "trim." The Avery is made on a new principle, having an entirely new mechanical combination, which does away with a large proportion of the pieces, and has no need of cogs, cams, links or levers, thus making it simple, easy to keep in order, and running with half the power of the older styles of machines. These machines are made by the Avery Sewing Machine Company, N. Y., in different styles, the prices varying from $45 to $65. The style which we offer retails at $60.

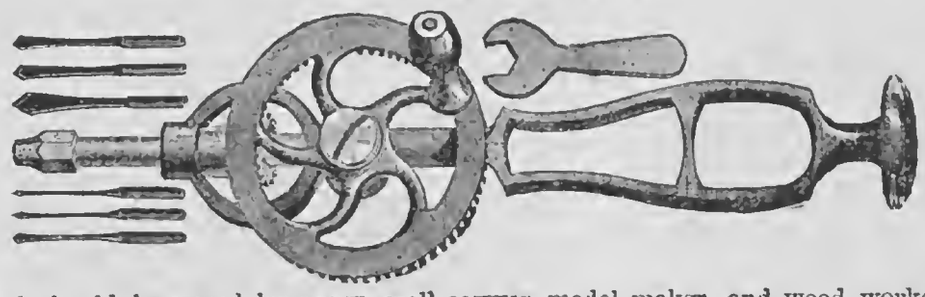
Remember, this is no old style machine, nor any imitation of any machine, such as are offered by so many papers at from $15 to $22, and dear at any price, but a brand-new machine on a a brand-new principle, and the best, easist-running, highest-priced, though cheapest, machine in the market.

We consider this, in many respects, the most remarkable premium we have ever offered. The same machine was given for forty subscribers last year, and many were disposed of. This year the machine is to be given for twenty subscribers. Think of it, friends, a $60 machine for only twenty subscribers.

No. 70. J. R. Torrey Toilet Set.
Given for Two Subscribers.

This is a complete toilet set for a gentleman. It is made in the best manner throughout and our gentlemen friends will be delighted with it. Our young readers who are just begiuning to shave should send for one of these sets made by J. R. Torrey & Co., Worcester, Mass.

No. 71. The Premium Drill.
Given for One Subscriber.



This tool should be owned by every scroll sawyer, model maker, and wood worker in the country. Many delicate pieces of scroll work, requiring hours to saw out, are ruined in putting together for lack of proper tools. One of these drills and a screw driver will be found invaluable to the scroll sawyer or wood worker after once using. Price 85 cents. Manufactured by A. H. Pomeroy, 216 and 220 Asylum street, Hartford, Conn.

No. 72. The Keystone Washer.
Given for Three Subscribers.

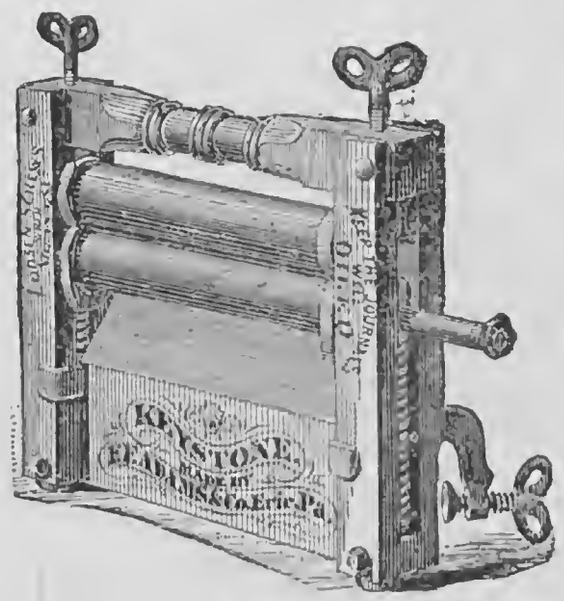
This washer is warranted by the manufacturers to wash clean, if properly used, without rubbing, anything that can be washed by hand. It is easy in operation, does not wear the clothes, and will last for years. Price $7. Made by F. F. Adams & Co., Erie, Pa.

No. 73. Special Introduction Box of Seeds. For One New Subscriber. Postage 10 Cents.

In offering this box of seeds as a premium an opportunity is presented to secure a collection of the finest variety, consisting of thirty packets of garden and three of flower seeds. Each packet is illustrated with the vegetable in colors, with full directions for culture, etc. The seeds are selected and put up by Johnson & Stokes, Philadelphia, Pa., whose reputation as seed growers is abundant guarantee of the quality. Actual value, $2.50. Sold by the dealers for $1, postpaid.

No. 74. Keystone Clothes Wringer.
Given for Four Subscribers.

This wringer has a wood frame, all the latest improvements, and greater capacity



than any other wringer. It is simple, durable and adapted to the frailest as well as the strongest fabrics. It saves time, strength, clothes and is an article indispensable to the household. Price $7.50. Made by F. F. Adams & Co., Erie; Pa.

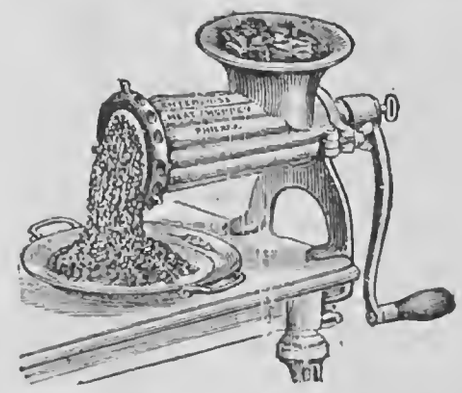
No. 75. Torreys Folding Pocket Scissors.
Given for One New Subscriber.

THESE handy little scissors are sharp pointed and are readily opened for use, but when closed the points are firmly held and protected by steel sheaths. They are perfectly safe and they will please you. Made by J. R. Torrey & Co., Worcester Mass. Price 75 cents.

No. 76. The Enterprise Meat Chopper.
No. 12, for Three Subscribers. No. 22 for Four Subscribers.

We sent out a large number of these choppers last year, and they gave the most unqualified satisfaction.

Among the necessities of every farm house is a good meat chopper. In our younger days we worked many a weary hour with the ax and chopping block, cutting meat for the annual sausage making, or with the chopping knife and bowl, cutting meat for hash or mince pies. While it was tiresome to use those tools, they did their work well. The meat was *chopped*, not *mangled*, and there was some comfort in eating what was made of it. With the invention of meat machines



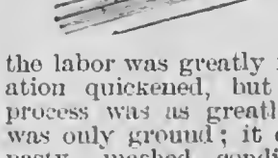
the labor was greatly reduced, and the operation quickened, but the efficiency of the process was as greatly lessened; the meat was only ground; it came from them in a pasty, mashed condition, full of strings, tendons and gristle, in such a condition as no one who had ever eaten *chopped* meat could endure. We had tried the various makes, and rejected them in disgust, as unfit to prepare meat for human food. We had got thoroughly tired of pulling strings out of our teeth, and had decided either to eat no more cut meats or go back to the old, slow hand-mode of chopping, when we chanced upon the Enterprise Meat Chopper. We have now used this for more than two years for cutting all kinds of meat and vegetables, for all kinds of purposes, and in every case we have found it simply perfect. This is a MEAT CHOPPER. It cuts the meat like a pair of shears, and does not grind, mash or tear it. It beats the old hand process with ax and block, or chopping knife and bowl, all out of sight, in cutting it better, and in doing it so much faster; and then it runs so easy, it is real fun to use it. In short, we unqualifiedly recommend this as *the* meat chopper all our friends need.

The No. 10, shown in the cut, weighs 8 pounds, chops 1 pound per minute, and sells for $3. The No. 12 is the same as the No. 10, except that it has legs instead of clamps; price $2.50. The No. 22 chops two pounds per minute; price, $4. The No. 32 will chop 3 pounds per minute; price, $6.

We will give the No. 10 for three and the No. 22 for four subscribers.

These choppers are made by the Enterprise M'fg Co., corner 3d and Dauphin Streets, Philadelphia, Pa.

No. 77. Deed Boxes.
Given for Three Subscribers.



One of these boxes is what every one needs who is not conveniently located near a bank or safe-deposit vault. They are exceedingly convenient for locking up valuable papers, such as deeds, insurance policies, agreements, etc. They are secured with a keyless "Champion" lock, and are made by the Miller Lock Company, Philadelphia, Pa., to whom requests for catalogues, giving full description, should be addressed.

No. 78. Sands' Patent Triple Motion White Mountain Freezers.
Given for Three Subscribers.

A good freezer can be used to advantage at any season of the year. Ice cream and a variety of other dishes that may be prepared with a

freezer are just as palatable in winter as in summer. In fact every family should have a freezer. The White Mountain is one of the best freezers made; it has three motions, thus mixing the cream evenly and thoroughly. They are light, easy to clean and have no large surface of zinc to come in contact with the cream. Families especially should look to this, as freezers put away damp will, when dry, show oxide of zinc, which is a well known poison. The list price of the four quart freezer which we offer is $5.50. Send for circular and receipt book to White Mountain Freezer Co., Nashua, N. H.

No. 79. Portable Furnace and Washer.
Given for 15 Subscribers.

This is a portable furnace for heating water, canning fruit, boiling cider, making apple-butter, boiling corn, and other purposes. Aside from these uses, it is a first-class wash-

ing machine, washing all kinds of clothing—bed and table linen—clean and without any hand-rubbing or the rubbing off of buttons. It is made by B. L. Ryder & Co., Chambersburg, Pa., weighs 200 pounds, price $35.

No. 80. Hunter's Pet Rifle.
Given for Fifteen Subscriber .

Here is something in the way of a sporting rifle which will interest all who are familiar with weapons for hunting. It was made to order in the first place for a special party which wanted rifles which would shoot accurately and also be light and easily carried. After a thorough trial it was found so convenient and trusty that they are now made and sold in large quantities. The weight is about 5¼ lbs. and it will kill at 40 or 50 rods. They are made by the J. Stevens Arms and Tool Co., Chicopee Falls, Mass., and we have no hesitation in recommending them to any of our readers who wish a hunting rifle. The price for this particular rifle is from $18 to $21, according to the size. It will pay to send for a catalogue which, with all necessary information, will be furnished to any one writing to the company as above. Mention the RURAL.

No 81 Lyman's Gun Sights.
Given for Six Subscribers.

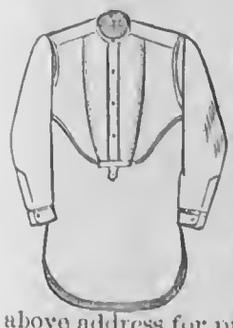
In these days when experts have got rifle shooting down to such a fine point it is essential that every one who uses a rifle should have all the latest and most approved appliances for increasing the accuracy of the weapon.

The patent Ivory Bead Front sight shown in the small cut, is said to be a great improvement as it gives the sportsman a clear white bead, which can be seen distinctly against any object, in the woods or in bright sunlight. The contrasting black neck of the Sight makes the bead all the more prominent. We will send this front sight alone for one subscriber.

The Lyman patent combination rear sight for sporting and target rifles is used and recommended by many of the most expert rifle shots in this country. It is adapted to any rifle and can be readily adjusted. One of its advantages is that when aiming this sight has the appearance of a ring or hoop, which shows the front sight and the object aimed at, without intercepting any part of the view, while with the ordinary open rear sight the most important part of the view is shut out besides the great difficulty of quickly getting the front sight in the notch of the rear sight. Almost instantaneous aim can be taken; it can be used when the light becomes too dim to use any other rear sight; it is a hundred-fold easier to shoot moving objects, running or flying, and both the eyes can be used as well as one eye; it is also far more accurate than any other open sight, and in most respects is better for target shooting than the peep sight.

These sights are made by the patentee William Lyman, Middlefield, Conn., who will send his catalogue containing a great deal of interesting matter to any one who will write for it. We will give the front sight for one subscriber the rear sight for five subscribers and both sights for six subscribers.

No. 82. The Den Shirt.
Given for One New Subscribor.



We have made a contract with the Den Shirt Factory, No. 149 North 8th Street, Philadelphia, Pa., which enables us to send by mail for only one subscriber, a good substantial dress shirt. It will be full reinforced, 3-ply bosom and bands, hand finished. Send size of collar worn (13 to 17 inches). Send to the above address for prices and further particulars. The day has gone by when shirts can be made most economically by the housewife. There is work at which she can more profitably employ herself. You cannot secure a good shirt more easily than by inducing your neighbor to subscribe for the RURAL.

THE IMPROVED LITTLE BELLE TELEPHONE.

No. 83. Sent Postpaid for Two Subscribers.

Works without the use of a battery, gives splendid satisfaction and works nicely at a distance of one mile. The Farmer can connect his house with his barn or with some central point on his farm and speak to his family from his field, the merchant his house with his store or connect his store with the homes of his customers or a central point from which his customers can order goods, boys can connect their homes with those of their friends, neighbors can connect their houses and live in direct communication with each other. No experience required.

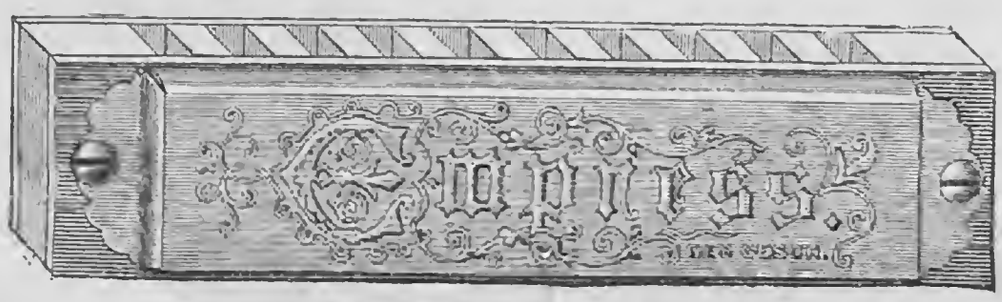
No. 84. Magic Lantern.
Sent Postpaid for Three Subscribers.

This Magic Lantern will commend itself to all who want a really first-class Lantern for a small amount of money, and should not be classed with the worthless German Lanterns with which the market has been flooded. The Lenses are imported and balance of Lantern of American manufacture. They work perfectly and will give entire satisfaction. They are neatly put up in wooden case with Lectures, Show Bills, Tickets and 30 Pictures; each picture will make a four foot circle on the screen.

No. 85. Salzard Violin Outfit.
Given for Seven Subscribers

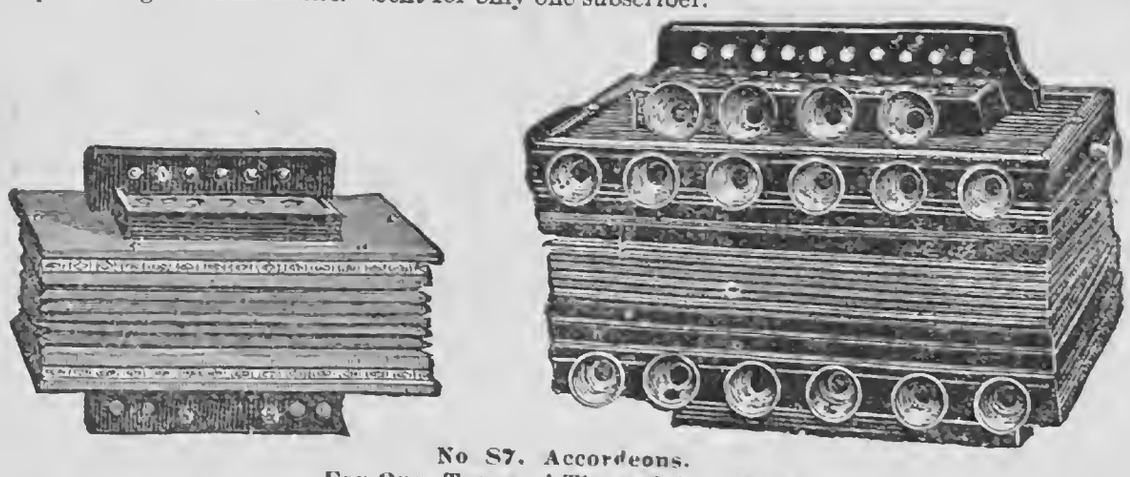
A most beautiful Violin, artistic model, graceful outline, finished and polished so as to bring out all the rich elegance of the wood, are double-lined, and of brilliant tone. Each outfit sent complete with Italian strings, fine pegs, pearl—inlaid tail-piece, fine snake-wood bow, ebony and German silver trimmings, carefully packed in plush-lined black-wood case, new model, brass handle, fastenings and trimmings. Book of Instruction, and 600 pieces of Choice Music. Price $5, or sent for seven subscribers.

Supplied by G. H. W. Bates & Co., Importers and Manufacturers, 106 Sudbury street, Boston, Mass. The RURAL NEW-YORKER SELLS nothing.



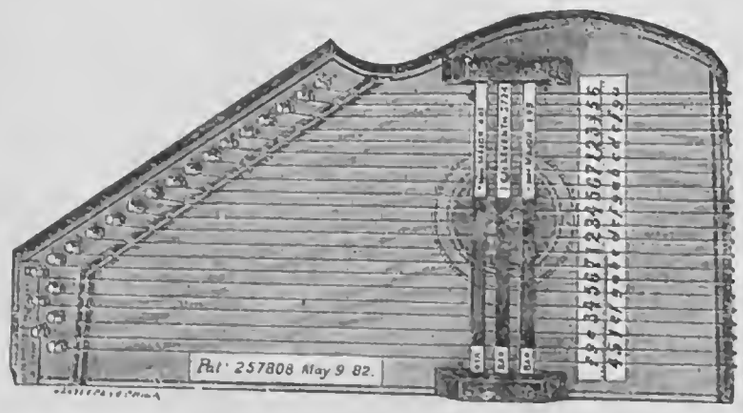
No. 86. Empress Harmonica.
For One Subscriber.

These handsome little instruments, finished in imitation of either gold or silver, are capable of producing excellent music. Sent for only one subscriber.



No 87. Accordeons.
For One, Two and Three Subscribers.

We have selected several styles and priced accordeons and think they will please our friends. An accordeon is one of the easiest musical instruments to learn to play and when well played produces very pleasing music. No. 1601, retailing for $1.50, will be sent for only one subscriber. No. 1615, price $4, sent for three subscribers. No. 1646, price $7.50, sent for four subscribers. Our musical instruments as described above are supplied by the well known manufacturer and importer, John F. Stratton, 49 Maiden Lane, New York City, whose name is a guaranty of quality and value.

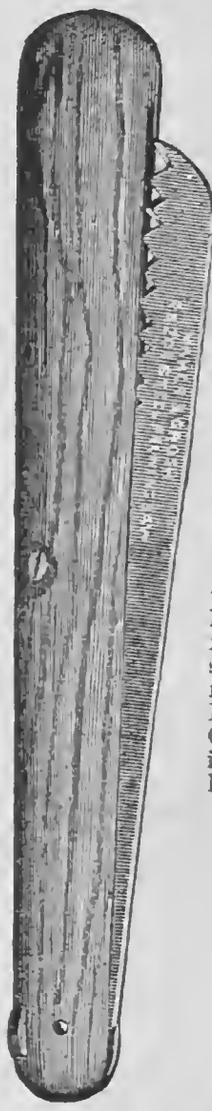


No. 88. Zimmerman's Miniature Auto Harp.
Given for Three Subscribers.

This little instrument will please those having a taste for music, but debarred from practicing it by the cost of an instrument, or the difficulty of learning. And when they see how easily they can play it, every such person will want one. It is sold by C. F. Zimmerman, importer and dealer in musical instruments, 240 North Second street, Philadelphia, Pa. Price $3.50.

No. 89. Marlin Revolver.
Given for Three Subscribers.

This revolver is made of the best material. It is fully nickel-plated; hard rubber handle, and is in all respects one of the best revolvers made. Furnished by the Marlin Fire Arms Company, of New Haven, Conn. Price $5.50. We will send one for three subscribers. This is an extraordinary offer. The RURAL NEW-YORKER SELLS nothing.



No. 90. Mead's Pocket Pruning Saw.
Given for Two Subscribers.

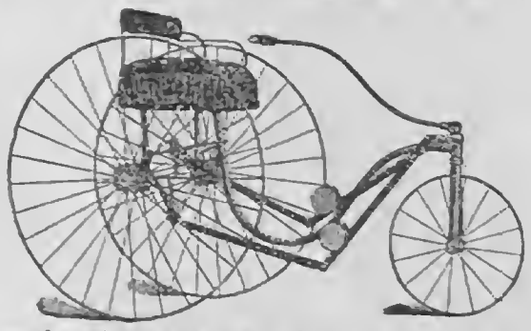
This is a new and very useful tool. The blades are hand-forged from the best razor steel; it needs no setting as blade tapers to the back. Can be carried in coat pocket; is ready for use, and, when not in use, the blade can be shut up like a knife, and is out of harm's way. Price $1. Made by Maher & Grosh, Toledo, O.

No. 91. Pruning, Whittling, and Budding Knife.
Given for Two Subscribers.

Our friends who received this knife last year speak highly of it, and we therefore offer it again this season. It is fully warranted by the makers, Maher & Grosh, Toledo, Ohio, who never send an inferior article. Price of knife, $1.

No. 92. The Fairy Tricycle.
Given for 10 Subscribers.

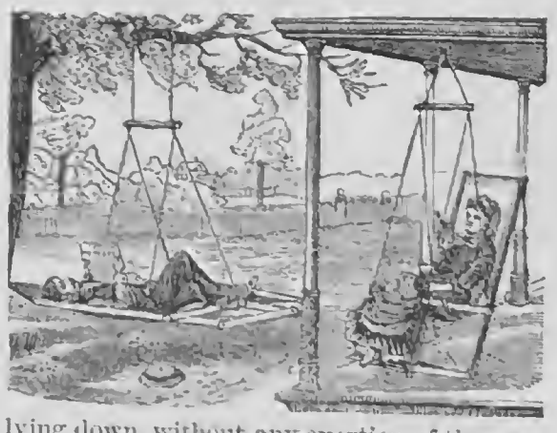
This tricycle is the best in the market in point of health, ease and grace of motion. The tendency is to keep the body erect and the shoulders back instead of bending over as children are apt to do when riding any other tricycle. No weakness or any other bad effects follow excessive riding. These are points which should be considered first of all by parents when purchasing tricycles for their children. It can be used anytime when snow is not on the walks, and especially in stormy



weather they protect the clothes and feet from the wet in taking outdoor exercise or going on errands and become most useful as well as pleasant. Is is a good hill climber and perfectly safe to descend any hill. It is just the thing for school girls who have long or short distances to go. No child can afford to be without one and the price is within the reach of all. The No. 1, price $10, given for 10 subscribers; or the No. 2, price $12, given for 12 subscribers. Manufactured by the Fay Manufacturing Company, Elyria, Ohio.

No. 93. The White Mountain Hammock Chair.
Given for Three and Four Subscribers.

This combined hammock chair is adapted to the house, lawn, porch or camp, and is chock full of comfort and blessed rest. It assumes and can be used in any position from sitting to



lying down, without any exertion of the occupant. The cheapest and best article in the world for the enjoyment of fresh air. Price, $3, with stand $4. The Alford & Berkele Co., 77 Chambers Street, New York.

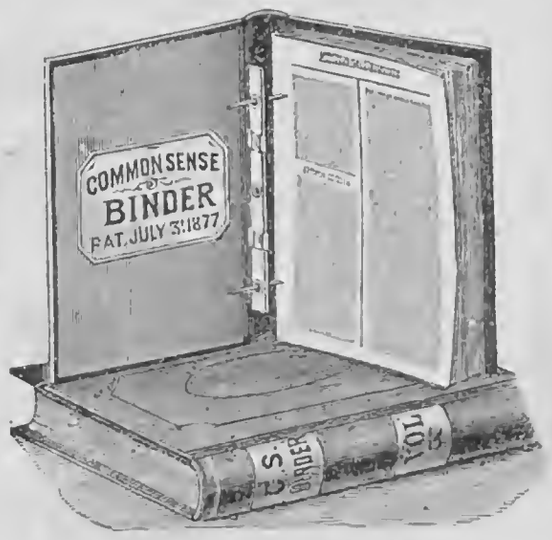
No. 94. The Ideal Fountain Pen.
Given for Two Subscribers.

A farmer or any one else who fails to use every labor saving devise of merit makes a mistake. If you spend five minutes every day for a year getting out your inkstand and looking up your pen, you lose in a year, nearly three working days to say nothing of loss in worry and ill nature over dry ink-stands and broken or rusted pen-points. The Ideal Fountain Pen is a labor-saving implement just as much as is a harvesting machine or a sulky plow, and everyone who has writing to do should have one. It is a pen for every-day use at the desk, or can be carried in the pocket and used when occasion requires. It is a first-class gold pen attached to a hard rubber pen-holder, carrying ink sufficient for from 12 to 16 hours' continuous writing. The construction is plainly shown in the cut. The handle or inkholder is made in two pieces, the point section and the barrel, which are secured together by a screw joint, at which place it is opened for filling with ink. The pen (a first-class gold pen) is held in the point section by the feed bar, which also carries the ink from the reservoir to the pen only so fast as used up in the writing. The fourth piece is merely a cap which covers the pen when not in use, to protect it from injury in the pocket, and also to prevent the ink from drying up, and when removed from over the pen, it is put on as shown in cut, to lengthen the holder for use in writing. We have used this pen for 15 months, and can fully recommend it to every one as the best pen we have ever seen Last year we handled hundreds, giving it as a premium for four subscribers. It is now offered for only two subscriptions, and every one of our friends should secure one. We do not wish our readers to confound this with the cheap fountain pen, or with the old stylographic pen, as it is fully equal to any gold pen made, and is worth a basketful of the cheap, poor trash, and we guarantee it to fit to your hand, or you can change till you get one that does fit. This is a pen that every clerk, school teacher, canvasser or farmer needs. It is made by L. E. Waterman, No. 155 Broadway, N. Y. The prices range from $2.75 to $7. Send for circular as above, see what the pen is, and then go to work and secure one. We know you will never regret it.

The Nos. 1, 2, and 3, are most suitable for ladies use; we will send either number for two subscribers. The No. 4 is the medium size and is well adapted for ordinary use. We will send one for two subscribers. The larger sizes, No. 5, 6 and 7 will be sent for three, four and five subscribers respectively. If you desire the pen sent by registered mail send 10c. for fee, Farmers, Clergymen, Boys, Girls, School-teachers, Everybody, here is a chance you cannot afford to neglect. No more useful or appropriate present can be found for Christmas, New Year's or birth day, and you can earn one with a little effort. Send to L. E. Waterman, 155 Broadway, N. Y., for circulars.

No. 95. Common-Sense Binder.
Given for One Subscriber.

In offering this Binder as a premium we believe we are conferring an opportunity to preserve the weekly numbers of the RURAL NEW-YORKER as they appear, which will be appreciated by our readers. As its name implies it is a simple, practical device, which will file the papers, and also bind them firmly together in such a manner as will effectively and conveniently secure them as in any regularly-bound book. It is entirely free from complicated fixtures (such as needles, rubber straps, hooks or strings), and is, either as a temporary or permanent binder, simple, practical and durable. The binding device is composed of steel strips or stubs, between which the papers are firmly held—as in a vise—by means of two or more steel fasteners, which cannot stretch and allow the papers to work loose, or the book to sag from the cover; the back being flexible, adjusts itself to any thickness, hence the volume always corresponds to the actual thickness of the papers bound.

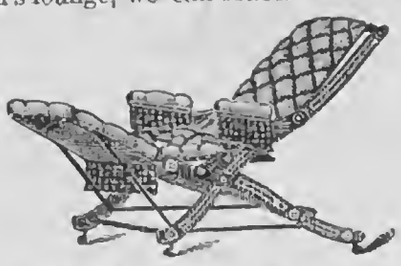


These binders have black cloth sides, upon one of which is stamped the name of the RURAL NEW-YORKER, thus making a neat volume, which would not be out of place upon the library table. We presume most of our readers preserve their RURALS, and we trust they will secure one of these handsome and convenient articles for that purpose.

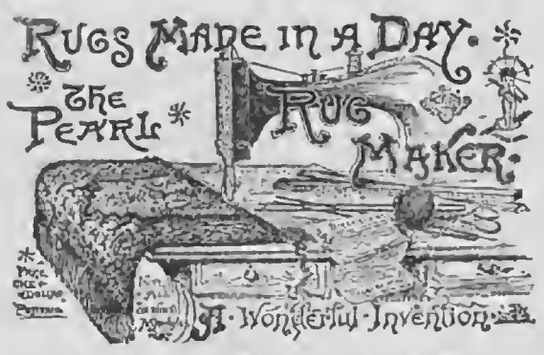
The binders are made and furnished by the well-known house of Asa L. Shipman's Sons, No. 10 Murray Street, New York, who make twenty-six different sizes for music, magazines, pamphlets, and periodicals of all kinds.

No. 96, The Luburg Adjustable Chair.
Given for 13 Subscribers.

The ordinary chair affords very little rest to a weary person or an invalid, and an easy-chair is a comfort that should be in every household. Of all the easy chairs made none quite so fully "fills the bill" as Luburg's adjustable chair. It is made of solid walnut, neatly and durably upholstered in various materials according to the taste of the purchaser and the price he cares to pay. Having over 50 changes of position into which it can be put, from the upright reception chair to the invalid's lounge, we can conceive of no shape



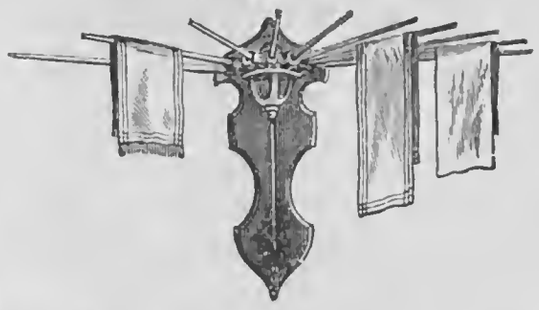
into which a tired person wishes to get or an invalid's caprice might suggest, that this chair will not assume. And, then, for the student or reader or the editor even, it has an adjustable reading or writing desk which can be attached and placed in any position. We can think of no more appropriate or acceptable wedding, birth-day or Christmas present than one of these chairs. They are simply solid comfort. Made by the Luburg Manufacturing Company, No 145 North 8th Street Philadelphia, Pa. The price varies from $7.00 to $35.00. We shall give the No. 23 chair, with new patent combination spring, price $13.00, for 13 subscribers.



No. 97, Given for One Subscriber.

Ladies don't buy a new carpet. If you wish to be economical, you can cover those worn places with home made rugs. If you do not have enough bright-colored pieces in your rag bag, you can color them at a trivial expense. With the Pearl Rug Maker many ladies make an entire carpet. When making large rugs or carpets, it is advisable to make them in sections, or pieces about 1½x2 feet, and then join them by sewing the edges securely together on the back. (This is fully explained in the illustrated directions.) It can be used on any sewing machine or by hand. Price, postpaid $1. Supplied by the Pearl Art Co., 23 Union Square, New York City.

No. 98. Empire Drying Bars.
Given for One Subscriber.



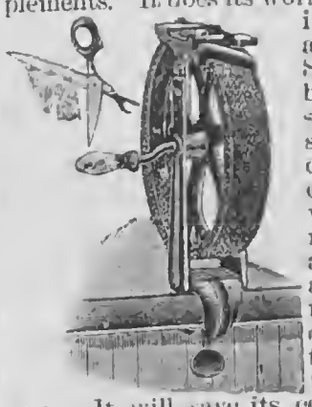
OPENED FOR USE.

CLOSED.

This is one of the neatest, most compact and best made towel or clothes racks for drying purposes in the market. It requires small space when in use and can be folded up out of the way when not wanted. It is nicely finished, and the castings are galvanized. Its capacity when opened is ten arms each two feet in length. The price is $1. It is made by the Empire Wringer Co., Auburn, N. Y., who also make the celebrated Empire Wringer.

No. 99. The "Household" Patent Emery Wheel Knife Sharpener.
Given for One Subscriber.

This valuable machine meets the demand for a practical and inexpensive article for sharpening Knives, Scissors, and other cutting implements. It does its work quickly and effectively. The Adjustable Table with Scissor Guide, enables anyone to sharpen knives or scissors properly. It can be raised or lowered as desired. The wheel is 6 x 1, with rim of solid emery, and warranted durable. The Machine is fastened to a table or shelf by turning a thumbscrew. Every family should have one. It will save its cost many times in the course of a year. It will be sent to any address by the Crystal Emery Wheel Co., of Northampton, Mass, for $1.50 or we will send it for one subscriber.



No. 100. Artist's Outfit.
Given for One Subscriber, with 10c. for postage.

How to Learn to Draw and Paint in Water Colors Without a Teacher, and ten moist water colors and three brushes in a japanned tin box.

The above is a complete outfit for learning to paint in water colors without a teacher.

The book is a series of introductory lessons in Drawing and Painting in Water Colors, by Marion Kemble. It is more than a text book. It is a series of lessons, and should be appreciated as such.

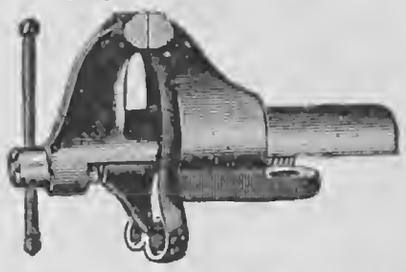
Either of the above sent by mail on receipt of 50c., or both for $1. S. W. Tilton & Co., 333 Washington street, Boston.

No. 101. "Grand Rapids" Carpet Sweeper.
Given for Two Subscribers.

An implement which saves labor in the house is just as important as a labor saving device for outdoor use. The Grand Rapids sweeper possesses all the qualities of a broom and dust-pan combined, its brush being so constructed as to be perfectly self-adjusting under the slightest pressure. Lightly running, it will take up anything that a broom will, from any kind of carpet, while if pressure is given to it as with a broom, to remove dirt

imbedded in the carpet—still running easily—it will work wonders, being more effective than any broom. It is adapted for the lightest as well as the heaviest sweepings. Its case is unique in shape, made of rich woods, and handsomely hand decorated, which, with the contrast afforded by the color of the rubber band encircling it, makes it the handsomest as well as the best of carpet sweepers. It sells for $3, and is manufactured by the Bissell Carpet Sweeper Company, Grand Rapids, Mich. Eastern branch, 105 Chambers street, New York.

No. 102. Hayden & Barnes' Amateur Vise.
Given, with Detective Burglar Alarm, for only One Subscriber.



The finest finished and best made small vises at the price in the market. Supplied by Hayden & Barnes, Syracuse, N. Y.

No. 102. The Detective Burglar Alarm.
Given with Hayden & Barnes' Vise for One Subscriber.

Can be applied to any door or window in a few seconds. When the door is opened or window raised, the Alarm falls to the floor exploding a No. 32 blank cartridge. Packed complete with four cartridges in each box. Those of our readers who live in a tramp-infested section will be greatly pleased with this alarm. Endorsed by Hon. William B. Smith, Mayor of Philadelphia, and General James Stewart, Chief of Police. Manufactured by Spencer E. Carr & Company, Ninth and Jefferson streets, Philadelphia, Pa.

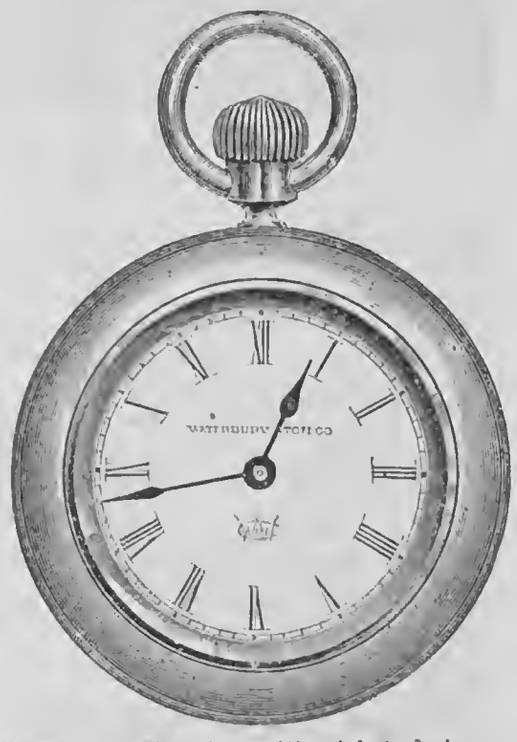
No. 103. The Improved Waterbury Watch.
Given for Four Subscribers.

The introduction of the now celebrated Waterbury Watch caused a revolution in the prices of these necessary articles, and since that time a good timepiece has been within the means of most any one.

The success attained by the Waterbury Watch Company has brought many imitators and would-be competitors into the market, but none of them have succeeded in making a watch to sell at the same price which will compare with the Waterbury. Some idea of the enormous demand for and sale of the Waterbury may be gathered from the fact that last year, at their large factory at Waterbury, Conn., there were manufactured 308,000 watches, or about one watch every two working minutes during the year.

We offer one of the latest and best of the

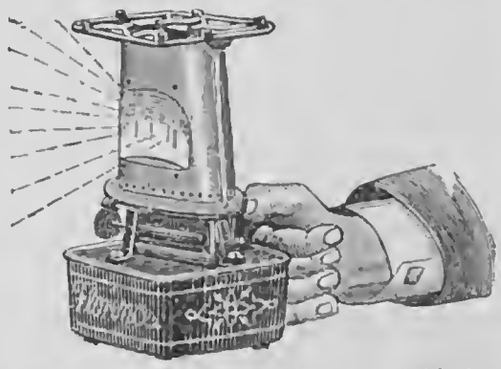
"The Waterbury."



Waterbury Watches with nickel chain as a premium for Four Subscribers this year, and we trust there will be a large demand for them.

No 104. The "Florence" Lamp Stove.
Given for Two Subscribers.

The cut below represents a lamp stove of such dimensions as to be easily carried about and yet so thoroughly made as to meet the requirements of both a stove and lamp. It illu-



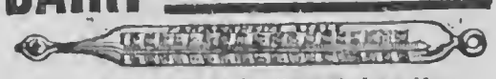
minates the room as well as a large table lamp and affords sufficient heat to boil a quart of water in eight minutes. It is absolutely safe and free from odor. The price is $2, and it is manufactured by the Florence Machine Company, Florence, Mass.

No. 105. J. R. Torrey Razor
For One Subscriber, or with Strop for Two Subscribers.

The importance of having a good razor is appreciated by every man who shaves. How often we go to the barbers to escape torture and find out too late, that we have only jumped from the frying pan into the fire. Send along a subscriber and get one of these

razors, or better yet send two and get a razor and strop and shave yourself in comfort. The blade of each razor is tested, and set ready for use, and will shave with ease the hardest beards, even those upon which other razors have failed. They are put up in elegant Gold Embossed cases and are made in three widths. The razor and strop sell for $2.50 but we will send them for only two subscribers.

DAIRY THERMOMETERS!



No. 106. For only One Subscriber.

A very neat, convenient and useful article, which every farmer should have, consisting of a glass cylindrical tube, which is easily kept clean, and there being no metal about it, there is nothing to collect or retain a trace of sour cream. To those who have often spent two hours of a cold winter day in trying to make the butter come, it will prove a priceless boon; for, by its use, taking care to get the milk or cream to the exact temperature of 62 degrees, the time spent in churning will be reduced and the butter will be better when it does come. Good butter is never made by guess-work. There is a proper temperature, and the only way to know when you have secured it is to use a thermometer. Price 50c. Furnished by W. Mitchell McAllister, Optician, No. 720 Chestnut Street, Philadelphia.

Book Premiums.

WE have in course of preparation a list of the latest and best books from the leading publishers. The list will include works of celebrated authors on a great variety of subjects adapted to the wants, and suited to the tastes of our readers.

We shall offer these books, as premiums on the most liberal terms.

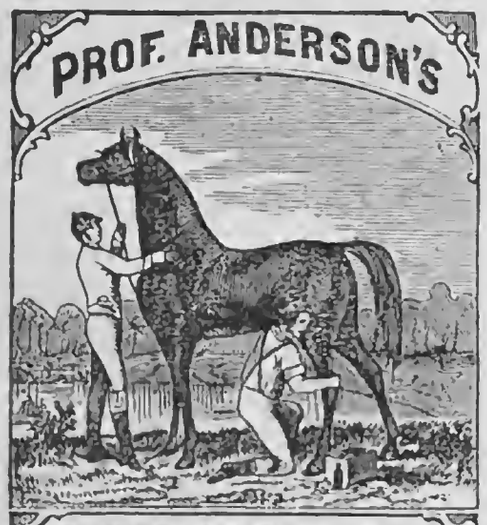
The list will be sent free to all applicants.

Send for it at once.

THE INVALUABLE DOMESTIC REMEDY.

PROPRIETORS:
HANCE BROTHERS & WHITE, Phila.
For Sale by Druggists and General Merchandise Dealers.

GOOD FOR MAN AND BEAST.



DERMADOR.

GOOD FOR MAN.

Inflammation of all kinds. Diptheria, Wounds, Bruises, Burns, Sprains, Rheumatism, Sore Throat, Swelling of the Glands, Inflammation of the Eyes Broken Breasts, Frost Bites, Chilblains, Piles. Bee Stings and all sores.

GOOD FOR BEAST.

Fresh Wounds, Galls, Sprains, Bruises, Cracked, Heel, Ringbone, Poll Evil, Wind Galls, Spavins, Sweeney, Founder, Lameness, Sand Cracks, Scratches, or Grease, Mange, Horse Distemper, etc., etc.

Cures Garget, Sore Teats and Bags.

AND ALL SORES AND SWELLINGS IN COWS AND OXEN.

For more extended remarks and for a large number of testimonials voluntarily sent to us by the persons whose signatures are attached, we refer you to our Circular Pamphlet around each bottle.

We would say to Livery Stable Keepers make it a point never to be without this great remedy. It is a cheap, efficient and SURE medicine. With this "Dermador," there is no such word as "FAIL." It never blisters, but cools. Price 25 and 50 cents. Sold by all druggists. **D. RANSOM, SON & CO.,**
BUFFALO, N. Y.

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THE GREAT CALIFORNIA

INSECT POWDER.

A pure California production, an infallible exterminator of Roaches, Bed-bugs, Waterbugs, Flies, Fleas, Mosquitoes, Ants, Moths, and in fact all insect pests of the household, field, orchard, garden, and conservatory.

BUHACH is guaranteed to be as harmless to animal and plant life as it is destructive to that of the insects.

BUHACH is the powdered blossoms of a California grown flower and absolutely contains no acids or poisonous drugs of any description.

BUHACH is not to be classed with the thousands of worthless and dangerous preparations so called "Insect Exterminators."

BUHACH is the insecticide of progress.

Pure! Powerful! Potent!

BUHACH is not sold in bulk, but in sealed tins with yellow labels, upon which appears our Trade Mark BUHACH as above. Beware of base imitations. Ask your druggist or grocer for it and see that you get it. Descriptive circulars mailed free upon application to us. BUHACH PRODUCING & M'F'G CO.
of STOCKTON, CALIFORNIA,
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BONE MEAL FOR POULTRY.

30 lb. boxes	$1.40	100 lb. bags	$3.00
60 lb. "	2.25	200 lb. bbls	5.50

GRANULATED BONE.

30 lb. boxes	$1.25	100 lb. bags	$2.75
60 lb. "	2.00	200 lb. bbls	5.00

CRUSHED OYSTER SHELLS.

50 lb. boxes	$ .75	200 lb. bags	$2.00
100 lb. "	1.40	320 lb. bbls	3.25

Expressly manufactured for fowls from superior stock. Pure and sweet. Sent by freight on receipt of price. Samples, 5 cents. Fine ground Oyster Shells same price as crushed. **C. H. Dempwolf & Co.,**
York Chemical Works, YORK, PA.

FEED CUTTER for $5. Send stamp for circular. Agents wanted.
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YOUNG MEN and Boys starting in life for themselves or assuming the business of a father or relative, and wanting the best preparation to assure success;

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EASTMAN COLLEGE,
Clement C. Gaines, Pres't. POUGHKEEPSIE, N. Y.

GREAT MUSICAL WONDER! THE PARLOR ORGANETTE.

Plays **Hymn, Popular Airs, Quadrilles, Polkas, Waltzes, Etc.** The instrument speaks for itself,—it sings its own praises. **A mere Child can play it.** Simply turning the crank feeds the music strips, blows the bellows, and produces the music. Adapted for Singing or Dancing Parties, and Winter Evenings Entertainment. The most exquisite trills are as easily produced as a single note. Such pieces as "the Mocking Bird," are played in a manner that few organists can approach. The most difficult and complicated operatic air is played as perfectly as a simple hymn; the music is as melodious and sweet as a cabinet organ. Hundreds of the most popular tunes are ready for the instrument; the music costs but a few cents per tune.

Price $8, To introduce it **at once,** so as to sell thousands at the regular price for CHRISTMAS PRESENTS, I am willing to offer **First One** at **$4.75,** as every one sold sells others. We ask in return that you show it to your friends who are sure to order at regular price. Christmas and New Year's are fast approaching. **Now** is the time to order before the Holidays.

BUY IT FOR CHRISTMAS.

A selection of music goes free with each one. The PARLOR ORGANETTE is the handsomest, sweetest, most interesting musical instrument yet produced, and repays its cost in genuine enjoyment a hundred fold.

The PARLOR ORGANETTE has 14 large powerful organ reeds and will last a life time.

SPECIAL OFFER. On receipt of this notice and $4.75, before **Jan. 1st, 1887,** we will ship the **Organette** exactly the same as we sell for $8.00. You should avail yourself of this great offer **AT ONCE.** No such offer was ever made before or will be again. Take advantage of it while the opportunity is yours. We believe when one is sold in a town or village it will sell a dozen or more at regular price. We wish to make each purchaser our agent. Enclose $4.75 with this notice, and we will ship the **Organette,** in handsome Solid Black Walnut Piano Polished Case, with elegant carved sides, at once. Address, **G. H. W. BATES & CO.,** 106 Sudbury Street, Boston, Mass

GOLD-FILLED ELGIN OR WALTHAM WATCH ONLY $10.00!

Warranted to Wear for Five Years.

The cheapest watch in the world. Jewelers puzzled and astonished. A limited number of the celebrated Waltham or Elgin watches. Heretofore a low-priced watch has been the poorest of investments, being of no value as a time-keeper and a constant source of annoyance and expense to its owner. This watch is a marvel of accuracy and cheapness, and I am now for the first time in the world's history able to offer a low-priced, perfectly reliable time-keeper suitable for use on railroads, steamers and all other places where accurate time is required. The movements are Waltham or Elgin make, known the world over for their excellence and fine finish, having seven jewels, expansion balance, quick train, straight line escapement, gilt index to overspring regulator, sunk second, new pat. pinion, dust-proof. The handsome cases are genuine gold-filled, and with which I send a written guarantee to wear for five years. I know this watch will meet with and grow in favor as its merits and good qualities become known. There is a growing demand for such a watch, for more than ever before are the acts of everybody governed by and performed on time, and I believe that the vast army of professional men, clerks, mechanics, farmers, laborers and railroad employees, will appreciate a good watch at a cheap price, such as they can rely upon for accurate time. I wish to put you on your guard, as there are numerous irresponsible firms advertising cheap watches that are worthless as time-keepers. A printed form of fac-simile of certificate of guarantee accompanying every watch purchased from me:

"The watch purchased from me by G. S. Smith is a genuine gold-filled case, which I warrant to wear 5 years, No. 16263, genuine Elgin works, No. 3265491, and a valuable time-keeper, which I hereby guarantee and agree to keep in good order for one year under fair usages.
WILLIAM WILLIAMS, 122 S. Halsted Street, Chicago."

[The name of purchaser; the quality of the case, either gold or silver; the number of same; the number of movement, with its designated make, are inserted in italics as an illustration of the manner of filling out this certificate.]

"This certificate is binding upon me, being an absolute guarantee, and for which I at all times hold myself responsible.
WILLIAM WILLIAMS."

MY GRAND OFFER.—On receipt of $10.00 and this advertisement, I hereby agree to forward by registered mail to any address, all charges prepaid, one of the above described Watches and a beautiful silk guard, all securely packed in a strong casket, providing your order is received on or before May 1. I can only send a limited number of these watches at price named, and in order to protect myself from jewelers and speculators ordering in large numbers, hence I require you to cut this advertisement out and send it to me with your order, that I may know you are entitled to the benefit of this offer. Under no circumstances will I send more than one watch at above price to any one person, and if others are desired I will furnish them at regular prices. If you do not want a watch yourself, you can sell it to some neighbor, and make a handsome profit. Many of my agents sell these watches for $25 to $50. Send money by Registered Letter, P. O. Money Order or Draft, or I will send watch C. O. D., with privilege of examination, on receipt of $1.00 as a guarantee for express charges. If you have any friends carrying an Elgin or Waltham watch, I refer to them for their excellence and good time. As to my reliability I refer you to any business house in Chicago, or if you have any friends in the city, I refer you to them. In ordering, please state which you prefer—Elgin or Waltham movement. Nickel clock, $1.25, with alarm, $1.50; postage prepaid and warranted. Nickel watch, $3.00; and a full line of diamonds, gold, silver and nickel watches, which I am selling at a small advance over the cost of production, giving you the benefit of low prices obtained by making large purchases. My assortment is varied and desirable. Elegant Illustrated catalogue mailed 2c.
Address, **WILLIAM WILLIAMS,** Manufacturing Jeweler, 122 S. Halsted Street, Chicago.
Can give Rockford Quick Train Movement, instead of Elgin, if preferred. I would recommend Rockford

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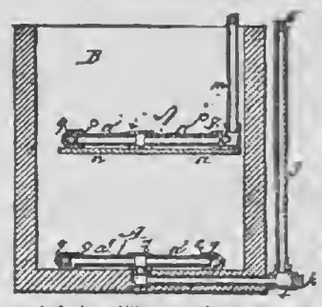
$1 WORTH ELEGANT LACE REMNANTS (Free.)

Here is a chance to get valuable, rich and elegant Lace Remnants and Soiled Lace for almost nothing. Having bought a big lot of Laces at auction, representing every imaginable pattern and quality, at one-tenth their real value, we are enabled to offer most astonishing bargains. We put up large assorted packages of these Laces which, though costing but 50 cents, represent real values of $1 and upwards. These Remnants include the finest White Laces, Linen Torchon in exquisite patterns, Spanish and Languedoc Cream Laces, Black Laces, and in fact samples of almost every kind known to the trade. The uses to which these Laces can be applied will appear to every lady reader, or to her male friends who wish to make an acceptable present, as no such bargain has heretofore been offered. Ladies will find them very useful for trimming all kinds of underwear, or ornamenting children's and infants' clothing, as each package contains such a variety. The supply is limited. Order at once and secure this bargain. Send 50 cents in Stamps or Postal Note. Address SOCIAL VISITOR, Box 3139, Boston, Mass.

Perfectly Preserved Green Forage.



The undersigned, having made and fed ensilage for several years, believing that we have arrived at certain and uniform success, offer to those who are in doubt this

CERTIFICATE.

This certifies that we are preserving green forage, without heat or fermentation, in silos with air-tight walls, cutting the corn in one-half to three-quarter inch lengths, weighting 100 pounds to the square foot, and with this pressure getting one foot or more of juice in the bottom of the silo. We remove the air from the silo by using Colcord's Silo Governor, which causes a heavy vertical, with very little lateral pressure. We obtain as uniform result, cold, moist, soft, pulpy forage, the natural color of the corn, without offensive odor, imparting no odor to the silo, barn, hands or clothing. We feed an average of 60 pounds daily to each cow, and our cattle eat it *all* without any waste.

We regard Mr. Colcord's system as the true, if not the only true method of ensiloing green forage crops, and recommend is as *sure, uniform, economical,* and less troublesome than any other. By using this system, with the Governor, according to directions, anyone may be sure of success.

EDMUND M. WOOD, Boston, Mass.
T. E. RUGGLES, Milton, Mass.
CHAS. L. COPELAND, Milton, Mass.
C. A. DAVIS, Natick, Mass.
BERNARD MONAGHAN, Dedham, Mass.

The above-named are reliable gentlemen. I have thoroughly examined their silos, and the green forage preserved in them; it cannot be made as economically or as good in quality in any other way. (Send to me for circulars).

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TWO GOLD MEDALS
LONDON 1883 — CONTAINS NO ACID — NEW ORLEANS 1885.

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AT THE EXH'N. ORLEANS MADE WITH A TESTING WORLD'S AT NEW JOINTS IT ENDURED STRAIN OF OVER SIXTEEN HUNDRED POUNDS TO A SQ. INCH.

IT MENDS EVERYTHING.
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STRONG AS IRON, SOLID AS A ROCK.
Sold in tin cans for Mechanics and Amateurs, and in bottles for Family use. Send card of dealer who does not keep it, and 10c. postage for sample can FREE by mail.
RUSSIA CEMENT CO., Gloucester, Mass.

IT IS A SIN TO BE SICK.

We tell you *why* in our **NEW BOOK** and Eight-Page Paper, which we send *free* to any address.

This **Book and Paper** should be in *every home.* All who read them and follow their suggestions will save large *doctor bills,* many long hours of suffering and have many years added to thier lives. Send your name at once for our new book, "**A PLAIN ROAD TO HEALTH,**" *free to all.*

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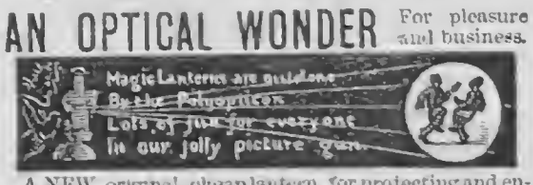
For pleasure and business.



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M. HILL PUB. CO., 129 East 28th St., New York.

FREE TO LADIES!

Send ten 2-cent stamps to pay postage, and we will send our Family Story Paper three months, also **12 Montague Curl Clasps free.** The most useful and convenient article ever used for the hair. **Warranted to curl the straightest hair,** without breaking or injuring it in any manner. No lady would be without them after once using. Address,
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Box 3139, Boston, Mass.

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CHEAPEST and BEST FENCE LOOMS

Wholesale and Retail. Agents Wanted. Catalogue free. **STANDARD MFG. CO., Cincinnati, O.**

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After 10 years of success, they remain the **First in simplicity, durability, finish, practical results,** and in **everything** that makes a first-class machine. Also **Brooders** that are **warranted.** Send Two cent stamp for Illustrated circulars to

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FOR FALL USE.

WIDE AWAKE FARMERS.

THE LARGEST AND BEST ASSORTMENT OF

AGRICULTURAL TOOLS & MACHINES.

Our very extensive warehouses are filled with every size and style of Farm Implements needed at this season in the Garden, Field, Dairy, Barn or Stock Yard. These are not only the standard Tools but also the very best newly improved styles introduced during the past two years,

The best for Tillage and for Harvesting of all crops. New Steel Plows, Grain Drills and Sowers, Horse Powers and Threshers and Fan Mills. Corn Huskers, Shellers and Grain Mills. Root Cutters Cider Mills and Presses and Every Requisite for the Dairy for making the very best gilt edged butter.

Details with prices etc., will be furnished to all applicants by illustrated circulars and correspondence.

The Dutton Mowing Machine Knife Grinder, introduced by us in the Summer of 1885, has proved the most successful Labor Saving Tool of the last 10 years.

500 made and sold in 1885. 3,800 sold and in actual use in 1886. A sale of at least 10,000 expected in 1887.

Send for this special circular.

R. H. ALLEN COMPANY,
189 & 191 WATER STREET, NEW YORK CITY.

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DAIRY GOODS.

Dairymen and Dealers in Dairy Goods, who desire the very best articles in the market at the most reasonable prices, are invited to send to

PORTER BLANCHARD'S SONS,
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Lime Spreader and Fertilizer Distributor.

AND ROOTS CORN SHELLER.

Price of Lime Spreader, $75. Broadcast Distributor $50. Spangler's Improved Corn Planter, Single Planter, $16; with Iron Frame Combined Machine with fertilizer attachment, $22. Spangler's Improved Vegetable Sower for fertilizing only $15, with Vegetable Sower attached complete, $30. Send for circulars and other information to

SPANGLER M'F'G. CO.,
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CRYSTAL CREAMERY.

Glass Milk Cans, Steel Water Tanks, coated with Rubber Paint. Never will rust or leak. Improved Cabinet, Improved Faucets; little if any ice required; no lifting; makes one third more butter in winter and in hot weather. One to first purchaser at wholesale to introduce. Agency, if desired. Address with stamps for sealed proposal and Circular.

C. L. KNEELAND,
Unadilla, Otsego Co., N. Y.

"FLOATS," or Phosphate Dust.

Also Ammoniated Super-Phosphate, Sangston's Cereal and Plant Food, Alkaline Bone Super-Phosphate, Tornado Fertilizers, Linden Super-Phosphate.

We have on hand and for Sale

FINE GROUND, RAW (ANIMAL) BONE, DISSOLVED RAW (ANIMAL) BONE, MURIATE OF POTASH AND KAINIT.

Circulars on application.

THE MARYLAND

Fertilizing and Manufacturing Co.

No. 4 South Holliday St., Baltimore, Md.

For ARTESIAN and COMMON WELLS.

Thousands in use with records of 100 ft. per day in clay, 50 ft. in slate, and 10 to 20 ft. in Hard rock. They work successfully where others fail, and we challenge any machine to test with us. Make wells at one-third less expense than any other, and drill 3 ft. to their 2 ft. Sold ON TRIAL, *without* advanced payment. Send for descriptive Catalogue.

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Remember Old Reliable

EMPIRE WELL AUGER CO.,
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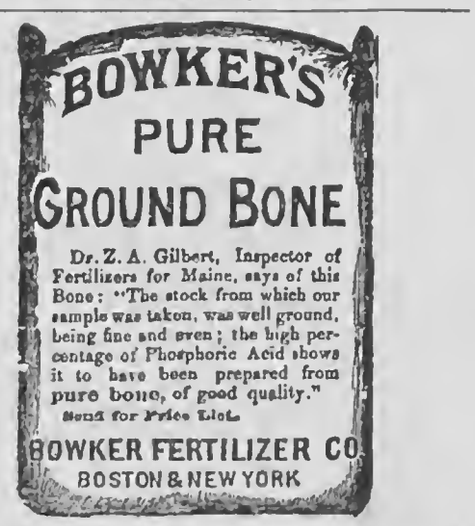

SMALL'S

CALF FEEDER.

This NEW article is appreciated and approved by all progressive Farmers and Stock Raisers. The calf sucks its food slowly, in a *perfectly natural way*, thriving as well as when fed on its own mother. Circulars Free. SMALL & MATTHEWS, 21 S. Market St., Boston, Mass.

Well! Well! Such a Fine Little Gun for so Little Money!

IT IS

STEVENS'
IMPROVED NEW MODEL.

For Touring and Vacation Trips, or for Every-Day Shooting.

Weight, from 2 to 2 3-4 pounds.

22 or 32 Calibre.

Any one can see at a glance that with the Open Rear Sight on the Barrel, combined with the BEACH and VERNIER Sights, you have a Rifle which can be changed instantly from a *Hunting* to a *Target Rifle*, and *vice versa*.

PRICE.

10 Inch Barrel,	$15.25	15 Inch Barrel,	$18 00
12 " "	16.25	18 " "	19.50

With Globe Front, and combined Rear Sight on Barrel, without Vernier Sight, Three Dollars less than above price.

DISCOUNT TO RETAIL TRADE FROM ABOVE PRICES, 10 PER CENT.

We can supply a Fine Leather Case, so Rifle can be swung across back, for $1.50.

Over 10,000 of these Little Favorites have been sold here and abroad within the past few years.

Send for Illustrated Price List of Fire Arms.

J. STEVENS ARMS AND TOOL CO.,

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WAYNESBORO, PA.

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TRACTION ENGINES,
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SEPARATORS.
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VIBRATING THRESHERS,
HORSE POWERS,
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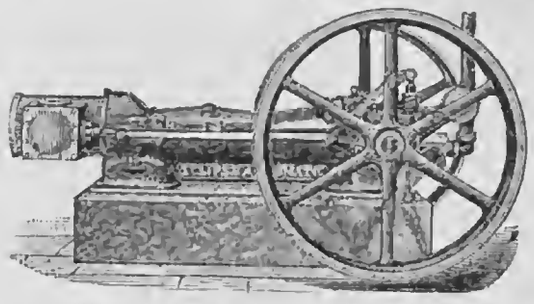
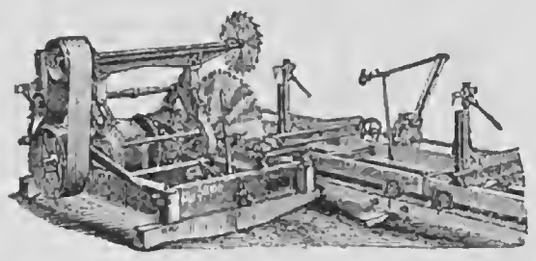
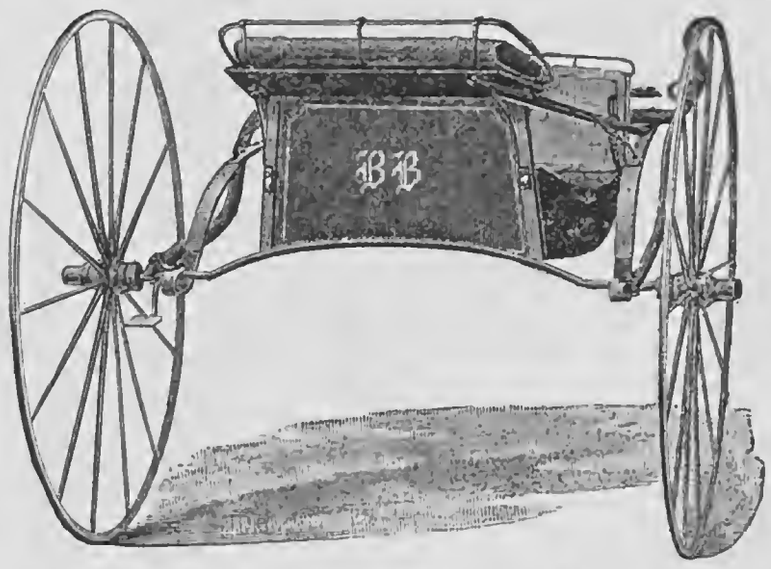
FIRST-CLASS
AUTOMATIC
CUT-OFF STEAM ENGINES

ICE MAKING AND REFRIGERATING MACHINERY, ONE TO 150 TONS CAPACITY.





HIGHEST AWARDS and PREMIUMS wherever exhibited. Write for Agencies and send for Catalogues. Mention RURAL NEW-YORKER.



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For LADIES, for HORSEMEN, for DOCTORS.

Delivery Carts,
CARTS for ANYBODY and EVERYBODY.

If we have no agent in your vicinity send for a Cart, and BECOME AN AGENT YOURSELF.

We will gladly send circulars describing the DIFFERENT STYLES, if you desire.

Just the thing for Muddy and Sandy Roads.

THE B-B CART CO.
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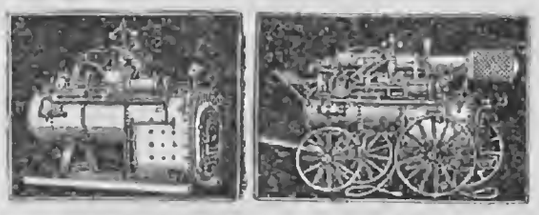

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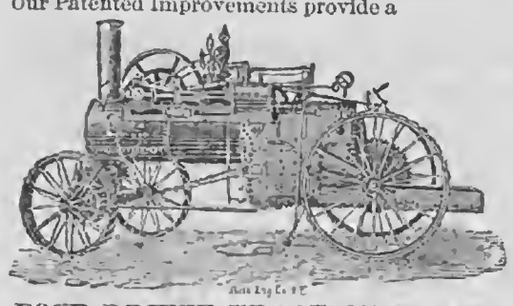

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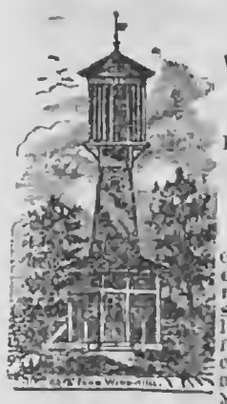

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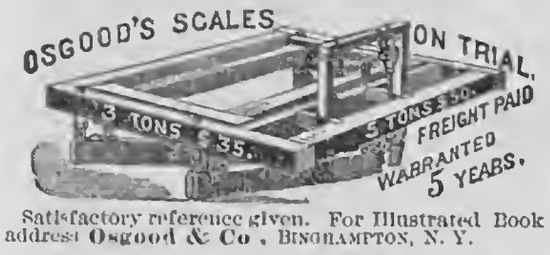

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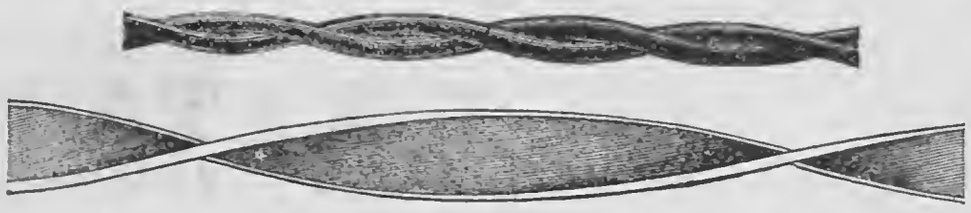

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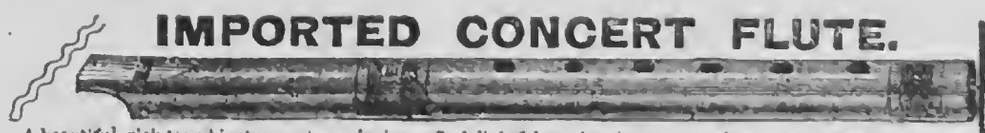

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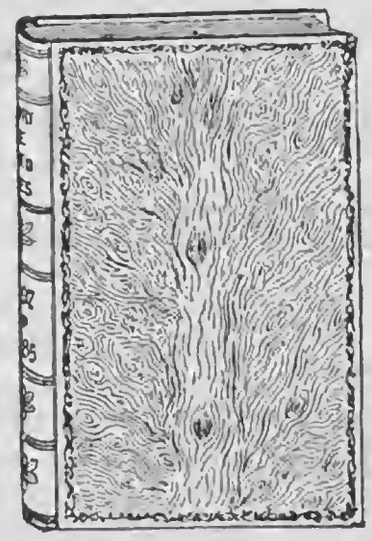

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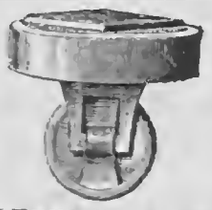

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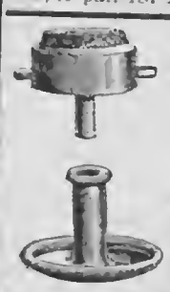

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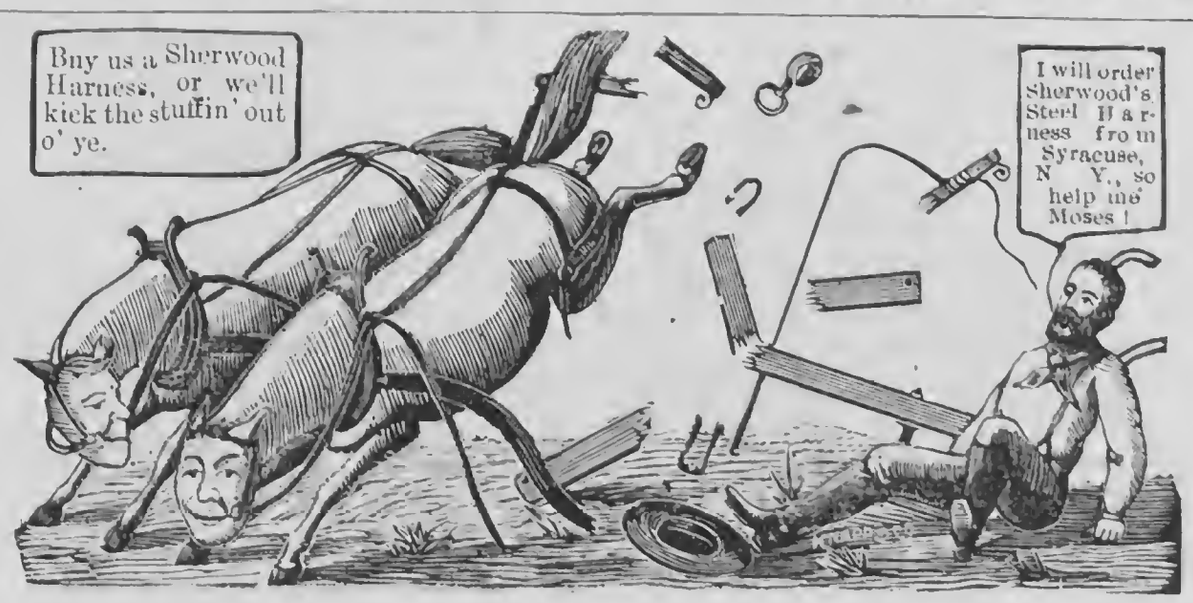

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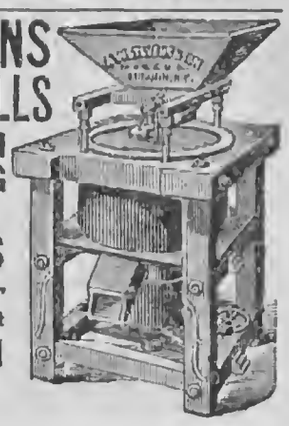

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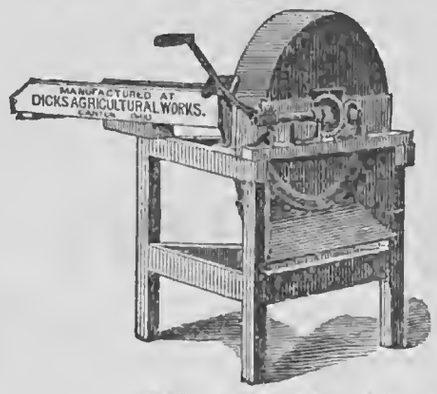

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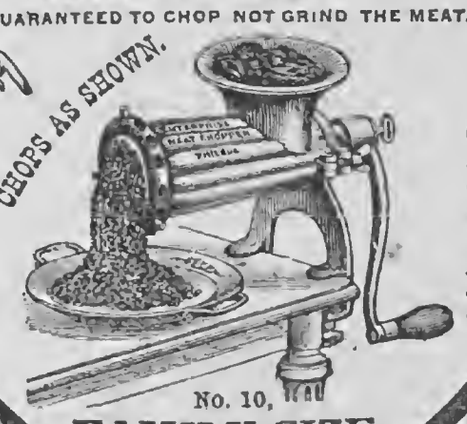

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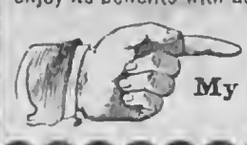

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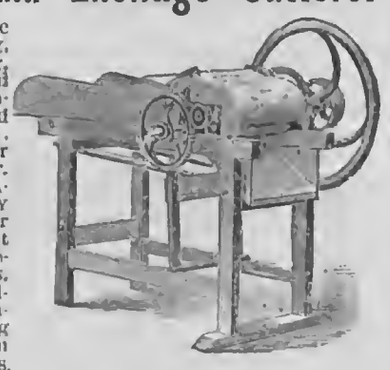

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The Swineherd.

PIG USES.

COL. F. D. CURTIS.

THAT pigs are not made more profitable on the farm is not so much the fault of the pigs as of the owner. Shut up in the barnyard, or in some close pen or yard, the pig is expensive, for it must be fed all it will eat, and it must be waited on. As time is money, the account runs up, and then the food is all more or less costly. These facts form the basis for the head of this short exhortation.

If farmers would calculate, more especially about the pigs, they would have a great deal less trouble and more money. They forget that pigs will eat grass, aye, are fond of it, and actually yearn for it. When only three weeks old, they will eat it, and it does them good. Now the thing is to have a place to turn the pigs to eat the grass. Where shall this be? Anywhere, provided there is a fence to keep them in. What shall the fence be? Anything, if it is tight. Pigs don't jump—they crawl through. Hight is not the quesion, but tightness. A stone wall is good, so is a board fence; one made of two boards and two twisted wires is capital; all wires will do but not more than four inches apart, with posts every six feet; rails are good if there are no holes; an old, broken-down wall will do leveled up and a barbed wire stretched along the top, just where the hog's head would come if he tried to climb over it. Such a fence has kept hogs in at Kirby Homestead for two years.

A ring well put in in the Spring will last all Summer, and then there will be no trouble about rooting. My text is "Pig Uses." Pigs should be used to enrich the farm, and the place to do this is in the fields. They may have a pasture by themselves, or be put into next year's prospective corn-field, or even in the meadow. I keep pigs all over, and the next year the result is seen in the early and strong-growing blades of grass, and in a good crop when corn and other grains are raised. No man can afford to keep pigs beyond the extent of slops, when shut up in a barnyard or a close pen; but any man can afford to keep pigs, if he will use the means he may, and at the same time his enterprise may cause his pigs to be factors for increased profit. Let the pigs out to grass.

NEW YORK HOG SUPPLY.

THE hogs reaching this market average between 6,000 and 7,000 daily, about 37,000 a week, or 2,000,000 a year. They come almost exclusively from the West, as the Eastern States raise only about enough to supply local demands and the neighboring towns and cities. All arrivals here are first taken to the large yard at the foot of West Fortieth Street, owned and controlled by the New York Central Railroad Co., where 50,000 can be accommodated at once. The charges are five cents per 100 pounds, and corn is supplied at $1.50 a bushel. They remain there to rest and recuperate from 24 to 36 hours. There is another reception depot on the Hackensack River west of Jersey City; and this receives at least as many as the New York inclosure. Hog slaughtering is confined to less than 20 concerns here and in Jersey City. These kill and dress, and then pass over the carcasses to the packers, smokers and large provision houses, some of whom cut, cure and distribute among retailers from 4,000 to 7,000 hogs a week, though 1,500 a week is a good trade. The dressed meat for export comes almost entirely from the West, and in passing through New York bulk is not broken. The large slaughtering houses keep buyers in the West. The hogs are shipped in double-decked cars averaging 140 medium-sized hogs per load. In dressing the shrinkage is said to average 22 per cent.—chiefly bristles, offal, blood, etc. The supply is less by about 10,000 a week in Summer than in Winter, as the demand for roasts, chops, sausages, etc., is less. The demand for bacon, hams, etc., however, is greater, but nearly all the large grocery houses obtain these almost exclusively from the West. The shipments of fresh pork from the same quarter, which are very heavy indeed in cold weather, are entirely suspended in the warm months. Of the hogs that arrive here there are three grades. The first, consisting of pigs weighing between 120 and 130 pounds, is most in demand for good family trade. The "loin grade," from 130 to 160 pounds, make hams, etc., best suited to the demands of restaurants, hotels, etc. The "bacon grade" comprises hogs heavier than the above. There is usually a difference of about 25 cents per 100 pounds between the above grades, number one bringing the highest price. Brooklyn and Jersey City are partly supplied from the above yards, and partly by stock shipped alive or dressed from the adjacent country.

Entomological.

THE CHINCH BUG IN MINNESOTA.

GEN. WILLIAM G. LE DUC.

THE special misery that has affected the agriculture of this section of country during the past season has been the chinch bug. Last year these pests were abounding and destructive in places, but this year they are infinite in number and have damaged the crops so much, and over so wide an area, that their presence and work may well be considered a great calamity. Last season (1885), they were plentiful in my wheat fields, six miles west of here, and reduced the crop one-third in quantity and one-half in quality or grade; but they were not hatched out early enough to do all the mischief they might have done; and while they partly ruined the wheat, the barley and oats escaped unharmed, and the corn was but little damaged. In some pieces of wheat seeded to clover and fertilized by sowing salt, it was thought that their ravages were prevented almost entirely. But this season the warm weather came upon us two weeks earlier than usual; the bugs hatched out in such numbers that on close observation it seemed as if the entire surface of the ground was alive and in motion. The favorable condition of the weather pushed vegetation rapidly forward, but before the wheat could form heads the work of destruction had begun, the stalks and leaves of the wheat and barley were black with minute-moving parasites sucking the juices; soon the stalks weakened, turned yellowish white, and began to sag down, and aided by the severe drought, which began just before wheat harvest, whole fields of straw broke down into a tangled, matted mass, entirely ruined and worthless for any purpose, and the bugs at this time half-grown left the blasted wheat-fields for the vigorous and promising maize.

They advanced in masses through prairie grass, clover and timothy meadows, across dusty roads or plowed ground, and assaulted the corn in columns by divisions. Each division taking a hill of corn would cover the stalks to the hight of two or three feet, and at a short distance it looked as if some careless painter had daubed the stalks over with the dregs of a paint kettle to that hight. The bugs following would pass by to the next hills or rows, and when the juices of the plants in the first row were exhausted the bugs would descend and push forward further into the field. After a few days the field of corn would begin to look as if scorched by fire, and a few days after the bugs had passed, the stalks and leaves would fall to the ground and seem to disintegrate and lose all identity. It was said that when the bugs had developed their wings they would no longer damage the corn. This I found to be a mistake. Having wings they spread over the whole country, flying in clouds and settling wherever food could be found, even in the town gardens and city grounds. A little patch of seven acres of corn (which I hoped would approach in yield the extraordinary crop I saw growing on the RURAL Long Island Farm) on my home place here, inside the corporate limits of Hastings, I thought was in no danger from chinch bugs; but they came; they saw, they settled upon and destroyed or greatly damaged the entire patch. Aided by the very severe drought, they have brought to the ground much of the Lackawaxen, an early eight-rowed yellow flint corn, and are now giving their malodorous and malignant attention to the best field of white dent I have ever seen in Minnesota.

I suppose when we recover somewhat from our amazement and semi-paralysis we will do something to avoid or prevent loss from the minute insect whose presence has brought distress and dismay to the farmers of this part of Minnesota.

Hastings, Minn.

Various.

MORE LIGHT ON FERTILIZERS.

I WAS glad to see in a recent RURAL the merits of different fertilizers as given by State agricultural stations. Give us more of the same sort. We farmers want to know where we can get the best fertilizer for the money. Experiments with fertilizers would be of the greatest help to your readers. The Eye-Opener helps us, but men who are too shrewd to drop to these confidence games are cheated by the thousand in fertilizers that are not worth half the money paid. The majority of farmers are back from the markets and cannot get the different brands to experiment with. Thus they are induced to try some brand not worth half as much as other kinds that cost but little more. I know that farmers are swindled out of vast sums of money in this way. The RURAL would be worth twice what it now is to me if on your experimental plots you would use different brands of fertilizers and report the results, hit or miss. Post us on the best brands of fertilizers. Give us the results of Mapes, Lister's, Bradley's, Peter Cooper's and all the rest. Thousands of farmers will bless you for such work, for they cannot well do it themselves.

E. P.

Greene Co., N. Y.

A VERY common dodge of swindlers, which has several times been exposed here, is to advertise for help of various kinds, who are required to deposit a certain sum "as security." After a number of victims have made the required deposit, the sharpers clear out, without having furnished the promised employment to any. Often they give some sort of work to the first dupes for a short time so as to allow them time to swindle more; but in the end they always disappear with all the deposits, unless the law impedes or hinders their flight. Not a week passes without a record of such knavery. The number of sharpers is greatest in larger cities; and countrymen seeking employment there are the principal victims; but frequently the rogues make excursions into smaller towns, where they play the same game through the local papers. Very often the employment is to be given at some distant point, but the security is always wanted off-hand, and as the salary promised is usually liberal, the swindler plausible, the deposit moderate, and the hints at great competition for the place persuasive, the knaves are, as a rule, successful. Sometimes they have desk room in a large store and tell their dupes they own the whole. We have heard of several cases where the sharper took his victim into a large store which he claimed to own; told him to wait for a few minutes until he had transacted some urgent business in his private office, went into the office of the concern, where he passed some time talking to the owner, in the character of a dealer elsewhere who intended to buy goods; then returning to his dupe, walked with him to a neighboring hotel and had no difficulty in fleecing him out of a $200 "deposit." Some of them go into small country places and advertise for workmen or clerks in another part of the country; they ask either for a deposit to insure fidelity or merely for the whole or part of the railroad fare. When they have collected a lot of money in this way, they vanish. Others put up at hotels, and pretend to be passing through or merely visiting small places, or buying goods at large ones: and advertise for help at home; but on one excuse or another, all want money in advance, and having got all they can, all disappear. Nothing so exasperates these rascals as the refusal to be caught by a person who has been nibbling at the bait. If they know such a person has money, they will run almost any risk to get it. They appear to think it belongs to them, and will generally venture more to get hold of it than an honest man would venture to recover the same amount from those who had robbed him of it. Within the last six months the Eye-Opener has noted over a dozen cases where such sharpers have been arrested in this city for using violence or intimidation to obtain the money from their victims. Similar crimes are committed all over the country. Last Tuesday a fellow called Symmons put up at a hotel in Chicago, advertised for a hotel clerk needed in the country, and asked applicants for a deposit of $75. One of these had $61, but refused to part with it, although Symmons generously declared that amount would be sufficient. Finding his promises and blandishments ineffectual, the rascal knocked down his victim, beat him so severely that there is little or no hope of his recovery, took every cent the poor fellow had, and disappeared. A brief condensation of the accounts of this form of swindling, noticed by the Eye-Opener every week in different parts of the country, would fill a column here, and would be interesting until it became monotonous, as the variations in the details of the swindle are trivial.

TO SEVERAL INQUIRERS.—J. D. Morton, M. D., Chicago, Ill., is a fraud, and his Monbutto Coca Compound, a humbug. J. W. Walker, Macon Co., N. C., who advertises Japan Clover (Lespedeza striata) and other seeds for sale, and writes about them to several papers, is "a fraud and a swindler," we are assured by one who knows him well. In Macon Co., where the fellow lives, this Japan Clover is worthless, as it is elsewhere except in the low, waste lands of the cotton country where it grows along with horse nettle, dog fennel and other pestilent weeds. Walker's puffery of it is absolutely false, and he must know it. The fellow is a microscopic counterpart of Bain, the Ohio chicken fraud..... The Reliable M'f'g Co., Philadelphia, Pa., is by no means reliable. F. Mallard & Co., of Boston, is a concern of the same kidney..... ....Thompson & Co., of "Brahma Yan, the Hindoo Deafness Cure," notoriety have been exposed here over and over again. The concern and its "cure" are sheer humbugs..... "Miss M. Casey," of Oberlin, Ohio, is an *alias* or stool pigeon of Bain, the poultry fraud.... ...We cannot recommend the Monarch Lightning Saw, or the Monarch Potato Digger. We have had a large number of complaints of each.

TRANSCONTINENTAL LETTERS.—LXIV.

MARY WAGER-FISHER.

Snow on the mountains in the middle of March; low-cut vineyards; a winery at Cloverdale; about wines; a deferred visit; Poison Oak, or Poison Ivy; local architecture; intemperance due to the wine-making industry; sage-growing

AS we continued our upward journey from Santa Rosa, amid vineyard after vineyard, it looked odd to see the mountain tops—notably St. Helena—white with snow that had fallen the previous night; the trees on the mountain tops being white as if heavily loaded with it. It was a cooler morning than usual, and when late in the evening we were on the ferry crossing San Francisco Bay a passenger said it was the coldest day that had been in San Francisco for a year, but there was no frost.

Some of the older vineyards in this valley, all the way up to Cloverdale, look in their low-cut condition like fields of planted stumps root end up. The vine stumps are from four to 12 inches in diameter, and the vineyards are cultivated like a corn field. Olives grow well in Sonoma County, and in Santa Rosa Valley prunes do especially well, and many orchards have been planted. Everything presents an appearance of wealth, but it is the general verdict that the many moderately wealthy men there, have in large part, made their money elsewhere. The land here is claimed to equal the very best in Los Angeles, San José, or Santa Cruz, and is much cheaper, although it is very far from being cheap. Various kinds of fruits do well here—apple, peach, pear and plum trees being in bloom.

When we reached Cloverdale we found that we would have between two and three hours to use as we pleased before the return of the train. As one of the large wineries of the valley was near the railway station, we first visited that—a substantial brick structure, filled with huge casks, a grape-press, and lengths of hose for transferring the wine from tanks to barrels. The wine made here is "finished" off in a winery at Santa Rosa. One of the men in charge gave us to drink—the wine was pure as water—and the red wine from the Mission grape was very pleasant. As I do not like white wine, I could not judge of that. The red wine is the entire grape crushed and fermented together; while the white is only the fermented juice. How much the manufacture of wine has added to the drunkenness of the people I have been unable to learn. Good new wine costs about 75 cents the gallon. Last year the grape crop was light. Vineyardists receive from $18 to $22 per ton for grapes, and it is conceded that if a man gets 15 cents a gallon for his grape-juice he makes about $500 per acre off his land. There are various private wineries which consume many grapes. A few years ago a great deal of wheat was raised in this valley, but now the fields of wheat are rare—mostly vines and fruit trees. For the production of tannin in wine, the hill-sides are considered the best for vines. At the convention of viticulturists in San Francisco, a good deal of attention was given to the question of unhealthful germs in wine, which the eminent French chemist, M. Pasteur, claims to be animal, and his method of destroying them by heating the wine to 150 degrees and suddenly cooling it, which also arrests fermentation, awakened great interest.

From the winery we walked through the town at the head of the valley—the mountains coming together on both sides—and stopped for a time to talk with a livery-man about horses and a carriage to drive to the Geysers, some 16 miles to the east. His charge would be $5, but he left us to infer that if we drove there and back we wouldn't care to repeat the trip, a narrow, dangerous road, but the Geysers were always spouting, we might be sure of that! However, we concluded, as we walked through the pretty town, named because there is *no* clover in it, at least I saw none in the grass out into the canyons and on to the mountains, that we would leave the Geysers and the petrified forest for our old age. In our tramp we found everywhere, as usual in our climbing expeditions, a profusion of Poison Oak, just coming into bloom. It is evidently what in the East we would call

Poison Ivy, only here it assumes a shrubby habit, and a great many people are poisoned by it. We were careful not to handle it, while feeling tolerably secure that we were not sensitive to its noxious effects. It grows in great abundance from Oregon south, in company with the beautiful manganita, laurel and madrona.

In making these northern trips, there were many kinds of people in the train—Spaniards, Italians, Swiss, Portugese, Chinese, Germans, French—a mixed population indeed. Now and then we saw an Indian, and in one place an Indian camp. A very pleasing feature of this valley was the architecture of the dwelling houses; they all looked to be new and in the pretty modern cottage style, the rooms all on one floor, and this floor elevated well above the ground, from four to six feet or more, the basement being convenient for various purposes. This construction tends to modify the labor of the household, but I have heard women say that it does not insure the privacy and quiet to be had in two-floor houses.

Since writing the foregoing, I have had a conversation with a well informed gentleman anent the effects produced upon sobriety by the wine production in these valleys. The gist of what he said was this: "In a general way, drunkenness has not increased much by the manufacture of wine. In all our larger cities, the vice of drinking is enormous, but whisky and unlimited quantities of beer are drunk. Many of our artisans and laboring men can't do a day's work without their beer. But there is a great deal of wine drinking in the families where wine is made, and nearly all the grape growers in the valleys make wine for their own use, even if selling none. A reputable physician whom I know, told me that in twenty professional visits that he made in Napa Valley—where he thought wine inebriation worst—he found ten to twelve young women suffering from delirium tremens. A good many foreigners live in these villages, who all their lives have been accustomed to drinking the light wines of Europe, but the much larger percentage of alcohol in California wines, affects them in a very harmful degree."

A young lady who knew much about the wine making districts in Sonoma, described the condition of affairs there as "perfectly terrible"—a vast amount of crime, quarrelings, etc. being the outcome of wine drinking, and it is rather astonishing that when the penalty of wine bibbling has so long been known, such vast multitudes of people continue to be deceived by it, and by the vile stuff that goes under the name of beer. One might better raise sage, as some do in California, in a small way, but reap a nice profit from it. The sage can be clipped three times a year, and sells at from six to nine cents per pound in San Francisco. An acre will yield of sage, when dry, from six to eight hundred pounds. It is a sure crop and does not require much attention. I don't think from the way in which Chinese tea is manipulated that it can be at all clean, and it is one of the things that we use without first washing it.

Woman's Work.

CONDUCTED BY EMILY L. TAPLIN.

MOTHER'S WORK.

BAKING, stewing and brewing,
Roasting, frying and boiling,
Sweeping, dusting and cleaning,
Washing, starching and ironing,
Ripping, turning and mending,
Cutting, basting and stitching,
Making the old like new:
Shoestrings to lace,
Faces to wash,
Buttons to sew,
And the like of such;
Stockings to darn
While the children play;
Stories to tell,
Tears wipe away,
Making them happy
The livelong day;
It is ever thus from morn till night;
Who says that a mother's work is light?

At evening, four
Little forms in white;
Prayers all said,
And the last good-night,
Tucking them safe
In each downy bed,
Silently asking
O'er each head,
That the dear Father
In Heaven will keep
Safe all my darlings,
Awake or asleep.
Then I think the old adage true ever will prove:
"It is easy to labor for those that we love."

Ah me! dear me! I often say,
As I hang the tumbled clothes away,
And the tear-drops start
While my burdened heart
Aches for the mother across the way.
Where, oh where are
Her nestlings flown?
All, all are gone,
Save one alone!
Folded their garments
With tenderest care,
Unpressed the pillow
And vacant the chair
No ribbons to tie,
No faces to wash,
No hair all awry;
No merry voices
To hush into rest;
God save them!
He took them,
And he knoweth best;
But, ah! the heart anguish! the tears that fall;
This mother's work is the hardest of all!

—*Philadelphia Sunday Republic.*

OF INTEREST TO WOMEN.

COLORED satintable cloths, such as have obtained in fashionable circles during the past year, are now denounced abroad as vulgar. Without doubt, nothing is so charming as fine white damask. Good Housekeeping says that six or seven years ago some of the young ladies in Washington society organized a society called "The Belles of the Kitchen," and at their weekly meetings they used to prepare and serve dainty dishes. It has, however, come to pass that every "belle" has got married—Miss Meigs was the last—and now some half a dozen girls of a younger generation have in turn started an organization, which they call "Six Little Cooks." They wear at their weekly meetings, at each other's houses, mobcaps and aprons of swiss muslin, trimmed with scarlet ribbons. The hostess, herself, prepares a salad, escalloped oysters, croquettes, or some other dish, which the others eat critically.

Sweeping day is a penitential day to many housekeepers, chiefly because too many consider this work conquerable only by main-strength and ignorance. Says a writer in Good Housekeeping: "Look at the average Bridget when she sweeps. She enters the room sleeves rolled up, an apron tied over her head. She opens the windows wide (especially if it is a windy day) and goes at it. No skirmishing for her. She storms the fort at once. Nothing is covered to keep it from dust. Nothing is moved unless it comes in her way, and very likely the broom goes bang against the article then before it is moved. She sweeps with a will, as if she meant to go to the foundation of things. The dust flies in clouds and gets out of the way as fast as possible, settling on curtains, tops of pictures, furniture—anywhere to get out of the way, for she is like a conquering army, sweeping all before her. And the dusting is a sight to see. As soon as the sweeping is done, the long handled feather duster comes to the front. A whack here, and a bang there. The dust waltzes around and flies here and there, but never gets out of the room—only changes its place—and an hour afterwards you would never guess the room had been touched. I remonstrated with one of these strong-armed sweepers about sweeping without moving or covering anything. "Sure, haven't I got to dust all the same after I get through?" She emerges from the conflict with red face and tumbled hair, and declares "she is glad it is done."

MOTHER'S BOYS.

THE average schoolboy does not always imply a compliment when he describes a chum as his mother's boy. He is very apt to consider such a title an acknowledgement of effeminacy, though it is hard to tell why.

We must confess a personal weakness, however, for the boy who elects his mother as guide, philosopher and friend. True, a weakly-indulgent woman may warp and twist a boy's character, making him what we contemptuously term a Miss Nancy; but this is not so in every case, and some of the most thoroughly spoiled boys we have met were spoiled by their fathers, rather than their mothers. It is a self-evident fact that there can be no better influence in the building of character than that exercised by a woman of education and refinement. As an axiom, it may be stated that *every* mother should be educated and refined. Pity 'tis not always so.

The mother who has always a sympathetic word or look for her boy, in happiness and sorrow alike, can always be sure of his heart and allegiance. It is not always easy for us older folks to fully enter into a boy's feelings; but any want of interest we may show is always felt and often resented. So the mother who appreciates her son's prowess on the skating-pond, or his success in snaring suckers, will be considered just right, even if she does mingle a little firmness with her gentle rule.

The true mother's boy is not by any means a molly-coddle; he is a distinctly human boy, brimming over with fun and mischief, too, and coming to grief as often as other specimens of his race. But under his mischief and boyish pranks there is enough genuine chivalry to stock a regiment of mediæval crusaders. He is gentle to his mother and considerate to his sisters, and does not consider an evening spent exclusively in their society a barren waste. He waits upon his feminine relatives, like the little gentleman he is, and has even been known to give up an important engagement to go fishing with his chum because his mother needed his help. So he grows from the well-behaved boy to the man every one likes—a living encouragement to all mother's boys.

But there is one thing we are sometimes apt to forget. If we expect courtesy from a boy, we must return him in kind. Don't we all know the household where, if there is an irksome errand, some one says, "Send Johnny." If, when there are unexpected guests, the pie won't go around, "Johnny can do without." If the tea-table is crowded, "Johnny can wait." Poor Johnny! Who can blame him if he is not always as obliging as he might be?

If we treat our boys as little gentlemen, small doubt that they will behave as such. If we respect their feelings, they will respect ours. It is a fair system of give and take. So, dear mother, win your son's heart while it is still within your hand, and small doubt that your "mother's boy" will prove a crown of blessing.

WHAT SHALL THE CHILDREN READ?

IN these days this question cannot be too frequently asked, nor the subject too thoroughly discussed. As I call to mind the countless publications which are issued I exclaim, surely "of making books there is no end." And among so many, of course, some are good, some bad. It is for you, mothers and fathers, to decide whether your children shall read the good or the bad. Not that a child would necessarily select a bad book if left to make his own selections, but those books are bright and fascinating; the evil is presented in so charming a manner as scarcely to seem wrong; it is so cunningly interwoven with the good that to the inexperienced reader it is scarcely perceptible, but it will leave its impress upon the young mind, and bear fruit in later years.

This subject is one that has claimed my attention for years, and I've wondered that parents, careful in other respects, would allow their children to read anything and everything that comes in their way. Parents who are particular that their boys and girls should have proper food for the strengthening of their bodies, seem utterly careless with regard to their mental sustenance. Many who would be horrified at the idea of their children's seeking bad companions will thoughtlessly allow them to occupy their leisure hours with books of questionable morality. Victor Hugo says: "Books are cold but sure friends." If, then, your children are furnished with good books, these "sure friends" may be of inestimable value to them, but if you allow them to choose their own "cold but sure" companions, you may suddenly be aroused as was a mother recently, who said to me: "It nearly broke my heart to find my son, a lad of thirteen, reading a translation of one of the most corrupt French novels."

See to it, mothers, that your children read no books without your permission. If you could go still further and declare that they shall not look within the covers of a book, unless you allow them, it would be better still, for I remember, with sadness, a single sentence that I read as I picked up a volume from a booksellers' stand while waiting for a train. Beautiful thoughts, exquisite sentiments, which I've carefully read, have vanished from my memory, but that loathsome expression, which I glanced at hurriedly and carelessly, will, I fear, haunt me as long as I live.

And this oversight of children's books cannot be begun at too early an age, for pictures will leave an impression long before the printed page is read. In recognition of this fact D. Lathrop & Co. have published within a few years "Babyland," a monthly publication, for the youngest in the family. Many a little one has been charmed, and many a wearied mother rested as the bright and *wholesome* pages have been eagerly scanned.

But, after all, the most watchful attention is needed when the boys and girls first feel the delight of being able to "read for themselves." Then look carefully at the character of their "silent friends." And, as some perplexed mother may feel at a loss what to choose, mayhap a list of safe, good reading in the columns of the RURAL, from one whose business demands close attention to books, would prove helpful.

To begin, then, with children who have just learned to read. Be sure to have a paper or magazine especially for them; let it come to their address; make them feel it is all their own. I know of nothing better in this line than "Our Little Men and Women"—a monthly at $1 per year, containing large and beautiful pictures, short and instructive stories and delightful poems. Many of the papers for children are adapted to various ages, but this is specially for the beginner, and finds a hearty welcome from every little "man or woman" who is so fortunate as to receive it.

Then there are Mrs. Brine's books, always pure in tone—"Four Little Friends," "Papa's Daughters," "Jingles and Joys," the "Prudy" books, the "Flaxie Frizzle" series, by Sophie May. Those charmingly illustrated books, "Told in the Twilight" and "Out of Town," by Weatherby, and others included in the "Art Gem Series." Hans Andersen's wonderful stories are of world-wide reputation.

To those who think that the babes need some "strong meal" as well as "milk," there are histories of France, England, Germany and the United States, written in words of one syllable, by Mrs. Helen Pierson, and "Little Arthur's History of England and of France," by Lady Calcott.

Is Sunday reading or religious instruction demanded? There are the old-time favorites, "Peep of Day," "Line upon Line," "Precept upon Precept," which have recently been republished. There is the "Picture Bible for Children," the "Dawning" and the "Day Spring."

The list might be extended indefinitely; but surely one can select enough from this to furnish a child with reading matter for two years. Don't have too many books for the children. Require them to read, review and re-review. Should they declare they know them "all by heart," test them. Let the mother take a volume and have the children tell what they know of the first dozen pages. She will find a new interest aroused. The boys and girls will be ambitious to remember what they read, and be able to tell others about it.

And just a word here as to the training of children to take care of books. If they are made to look upon them as "friends" they will be careful in their treatment of them. No shabby volumes with broken or soiled covers and dog-eared pages will be visible. Furnish each little one with a set of book-shelves. These may be bought at a trifling expense or be "home-made," or allow them to use the lower shelves in the library proper. Then require them to replace each book after using, in a proper position. Let some penalty be attached, some privilege forfeited should the order be disobeyed. Habits of order and neatness will then be formed.

I remember the evident pride which a little friend manifested as I visited her father's library. Pointing to the lowest shelf, "Those are Jack's books. He hasn't many because he has just begun to read. Those on the next shelf are mine—all the books I have had since I was seven years. I'm nearly ten now and I have forty books. The third shelf belongs to Agnes. She is almost thirteen and has *ninety-seven books*. Only think! Nearly a hundred. We have to dust them and keep them nice."

Have your children gone beyond the "just beginning" stage. What myriads of volumes stand ready for their eager brains.

RHODA LANDER.

GOLDEN GRAINS.

PAUL H. HAYNE in Harpers:

Is happiness a plant of mortal birth,
Which, shrewdly cultured, grows in gracious earth?
Rather a heavenly glory, or bright dew,
Slipped from the bosom of the cloudless blue,
On some fair morning, to the soul's surprise,
Fresh with the fragrance born in Paradise.....

There is no soul without its "Hush!"
Life has surcease—
Sweet restful pauses, when we hear
Some wondrous voice, low, sweet and clear
Life hath surcease—
Calm, holy hours, when we are "still,"
And hush our souls to all God's will,
In perfect peace.....

HOLMES says: The best of a book is not the thought which it contains, but the thought which it suggests, just as the charm of music dwells not in the tones, but in the echos of our hearts.....

AN exchange says; One of the chief causes of the repugnance of many worthy people to what goes under the name of "society" is the accumulation of false smiles, false speeches and deceitful usages of all kinds which flourish in fashionable circles under the mistaken notion that they are a polite necessity.....

THE man or woman who is discovered to be actually honest in deportment and expression forms a center where the standard is planted and around which everything that is worth saving makes a gallant fight for existence. It is notable how soon the vivacious, the frank man or woman inspires confidence amongst those who lack the impulse or the courage to fall into line with truth.....

To be sincere does not imply rudeness. It is compatible with the most delicate tact and address, and may coexist with all the graces. All that sincerity asks, so far as social life is involved, is that men and women do not put themselves to trouble, to be false and makes an environment of small deceits a necessary concomitant of the act of meeting together for social purposes. Be graceful and be courteous, but above all be sincere.....

Domestic Economy

CONDUCTED BY MRS. AGNES E. M. CARMAN.

Nothing should be bought which is considered too fine for the fullest domestic appropriation. Far better is the plainest furniture, on which the children can climb, than satin and damask which must be viewed with reverence.

A BREAKFAST FOR SIX.

"We'll feast each other ere we part."

Codfish Cakes.
Rissoles of Chicken. Savory Potatoes.
Fricasseed Eggs. Muffins.

Codfish cakes are very much like the little girl in St. Nicholas:

"When they're good, they're very, very good,"
And when they're bad they're horrid."

They not only seldom are so good as they might be, but they generally are much more "horrid" than is necessary. Now for the good kind.

Buy a pound of the so-called "boneless codfish," choosing a thick cut from the center. It must be white and free from suspicion of taint; after having soaked it for an hour in lukewarm water, pull it in pieces and put it over the fire in cold water, letting it stand where it will come to a boil slowly. As soon as it reaches the boiling point, take it off, taste it, and if not sufficiently freshened, pour off the water, cover again with cold water and let it heat slowly. If allowed to boil it will be tough. Drain, press dry, and pull in shreds, picking it until it is light and fluffy. There must be no lumps or coarse pieces in these model codfish balls. Add an equal bulk of hot mashed potatoes, that have been carefully prepared after a recent RURAL recipe, butter the size of an egg, one beaten egg and pepper to taste. Beat these ingredients until they are all thoroughly mixed, and mold into flat cakes or little round balls. If these are for breakfast, it is a good plan to make them at night while the dinner dishes are being washed. Fry quickly in a little hot butter or sweet dripping; I do not like lard for this purpose. They are often fried by immersion in boiling fat, but this is not always convenient in a small family, where quantities of fat for frying purposes are seldom on hand. Half of the above quantity will be sufficient at a breakfast where other courses are to be served, but the remainder makes a nice and cheap little fish course for a family dinner.

A few tablespoonfuls of cold roast or boiled chicken may be served up as follows: Mix it with a third of the amount of tongue or ham; all should be minced finely; put a tablespoonful of butter in a saucepan, stir in as much flour, and when it thickens add the minced meat; moisten with a very little stock or cream, season with pepper and salt (if the latter is necessary), a little lemon juice, and a trifle of nutmeg. Remove from the fire, and stir in the beaten yelk of an egg. Now make a paste with two beaten eggs, a gill of water, a pinch of salt, another of sugar, and flour enough to enable you to roll it out. Stamp in round pieces with a cutter three inches in diameter. When the mince has cooled, put as much on each piece of paste as can be folded up neatly: fasten the edges by brushing them them over with cold water. Brush each rissole over with beaten egg, and fry by immersion in hot fat.

Put six hard-boiled eggs in cold water as soon as they are done, and when cold cut them cross-wise; take out the yelks, slice a bit from the bottom of each of the white halves, standing them close together in a flat dish. Rub the yelks to a paste with a tablespoonful of melted butter, one of cream and two of bread crumbs. Fill the whites of the eggs with this mixture, pour over them a little chicken stock or gravy, and set in the oven for five minutes.

Slice a pint of cold boiled potatoes and simmer them for ten minutes in a little gravy or stock; add a bit of butter, a little minced parsley, such seasoning as may be necessary, and serve very hot.

The nicest of muffins are made from one small yeast cake dissolved in a cup of warm water; add two cups of milk, and flour enough to make a stiff batter. The next morning add one beaten egg, a tablespoonful of melted butter, a teaspoonful each of salt and sugar, and bake in buttered gem pans.

A nice breakfast is never complete without stewed or fresh fruit of some kind; the latter is generally served before the meal.

PALMETTO.

THE author of "John Halifax, Gentleman," who has pictured so beautifully in her novel the wise, economical wife and mother, gives, in Harper's Bazar, the very practical advice that every girl who is not entirely dependent on her male relations ought, by the time she is old enough, to know exactly how much she has, where it is invested, and what it ought yearly to bring in. A person who is careless about money is careless about everything and untrustworthy in everything. Yet there is such a thing as ignoble economy, as well as noble extravagance. She who stints her servants in food and wages, who goes shabbily clad when her station and her means require her to be dressed at all points like a lady, is deserving of the severest blame. Money is meant not for hoarding, but for using.

"THE PRETTIEST LITTLE PARLOR."

I AM very fond of young people, and never so happy as when I am listening to their joys, or comforting them in their sorrows. My friends say I am an inveterate match-maker: perhaps because my own life has been a hard and lonely one, I am the more anxious that the lot of others in whom I am interested should be brighter. For some reason or other, young people all confide in me. I am "Auntie" to many, and "Mamma" to not a few. If Lois is fickle, or Jack is proud, somehow the trouble is always brought to me, and bearing in mind the sad mistake of my own life, I am often able to calm the troubled waters and make peace between them. So the other day when pretty Lois came to me, all smiles and tears and blushes, to tell me that she and Jack were going to prevent any future misunderstandings by joining their lot for all time, I had not the heart to point out to her that married people quarreled quite as often as lovers, trusting to her own loving heart and Jack's sturdy good sense to prevent this in her own case. We talked instead of the little parlor that must be cheaply furnished, and of how we could make it attractive at the least possible cost.

Since it was to be in the country, we agreed that rural simplicity should be the order of the day, and a matting was the first thing decided upon. It is always best to get the best quality of India matting, which sells for 75 cents a yard and is seamless. By a little time spent in judicious shopping, however, one can always buy remnants at half price, and as there is no time like the present we put on our bonnets and sallied forth in search of it. We found a piece, or rather two remnants, at 40 cents a yard, of excellent quality, with the cream-colored monotony relieved by a narrow stripe of dark red at wide intervals. There were nearly twenty-two yards which the obliging shop-keeper called twenty, and sold for $8. A durable and really artistic library table was chosen at $15. For the rest of the furniture we went direct to the manufacturers, and chose a couch, wide and low, and two big, stuffed easy chairs of different designs; as we took these without any covering except the muslin one, and as they were intended to be entirely upholstered there was no costly carving about them, and the cost was only $15. These we upholstered ourselves with loose covers of pretty cream-colored cretonne closely covered with deep cardinal flowers and trailing vines in browns and old gold, making three large, soft pillows for the couch, one for the head and two for the back. Two light chairs and a wicker rocker were also added.

One corner of this parlor Jack, who is skillful with tools, is going to fit up in the following manner: A triangular seat, the hight of an ordinary chair, is to be fitted in, stuffed with excelsior, covered with a layer of wool, and the whole tacked down and covered with coarse unbleached muslin. This is to be covered with cretonne, letting a ruffle of the same descend to the floor. Two pillows are to be covered with the same and placed against the wall. A piece of gilt molding is to be placed against the wall, to match the shape of the seat below, and from this is to be draped a pair of Madras curtains like those at the windows, looped back with ribbons in cardinal and plain gold.

A SPINSTER.

"BENEDICK, THE MARRIED MAN."

SOME time since the RURAL published an article entitled "Woman's Unnecessary Work," in which I criticised (not unjustly, I think) over-industrious women; but a letter that I have just received, forwarded to me through the RURAL, shows me that all persons do not think alike. Although the letter is signed "Vindicator," I judge that my correspondent is a woman, in spite of the masculine affix, both from the fact that she has taken up the cudgel in defense of the weaker sex, and because the letter savors considerably of injustice. A lady writer of much note, speaking of her own sex, says: "We are often tenderer than our brothers, but not usually so just."

I must admit that "Vindicator" shows much penetration when she expresses her opinion that I never had a husband of my own. I am bound to confess that, under the decrees of an all-wise Providence, whose wisdom in the matter I have never for a moment doubted, I never had. Perhaps, for this very reason, however, I have had better opportunities to study "other women's husbands," and I have not found them all bad specimens.

A few months ago I received a letter from a dear school friend whom I had not seen since her marriage ten or more years ago, telling me that she needed rest and change, and was coming to San Francisco for a couple of weeks in search of both, at the end of which time I was to accompany her home. I found my poor friend sadly changed, with the sad drawn lines in her face, that tell of insomnia, that terrible disease that fastens itself upon so many great thinkers and writers. Although a graceful writer, whose name is well-known in the literary circles of California, she had never devoted herself to her work with such assiduity as to endanger her health, and consequently the cause of her illness remained a mystery to her physician and friends. In this case its worst feature seemed to be a maddening sense of the eternal sameness and routine of things. With an artist's love of the beautiful, and an extremely sensitive nature, it was a peculiar phase of her disease that the very pattern of the wall paper had become a source of torture from the fact that her eyes had rested on it for so many years. We tried the usual routine of trips to Monterey, San Rafael, Angel Island; sought every spot where health-giving mountain or sea breezes were supposed to loiter, not forgetting that resort of every loyal Californian, the Cliff House; but without producing much effect in the way of healthful sleep. For some reason that was to remain a secret she had been forbidden to return home before the two weeks were over, but at last the letter came recalling her. As we neared the house I noticed a bewildered look on the face of our dear invalid, which was explained by her exclamation of "What can Tom have been doing? Our house used to be white!"

Whatever "Tom" had been doing, he certainly had shown much taste in painting his house the darkest of olive green with just a line of Indian red here and there, the whole effect restful to the eye. As we entered the tiny hall and passed into the parlor, bewilderment deepened to amazement. Not one familiar object was to be seen. The room had been re-carpeted and re-furnished; the very engravings on the walls were different. This transformation extended through the entire house, and in the dining-room, the daintiest of feasts and a few chosen friends awaited this idolized wife.

But it was in my friend's own room that the acme of thoughtfulness had been reached. A large bay-window had been added to give increased light and cheerfulness, the carpet was of mossy greens interspersed with Lilies of the Valley. Great crimson poppies on a gilt background covered the walls; the ceiling was papered to represent night, and twinkled with innumerable moons and stars. I saw at once that the poetical nature of my friend appreciated this pretty idea of a poppy-covered wall in her sleeping room, and did not doubt that all this change, together with the pillow of poppy leaves that had been provided, would bring "Nature's sweet restorer," to her weary eyes once more.

This of course is only *one* "Other Woman's Husband," and I fear that he is somewhat of a *rara avis*, but, although such devotion in a husband after fifteen years of married life, is not frequently found in all conjugal differences, there are two sides to the question. The ease with which divorces are obtained in this country, where, as Charles Reade says, "they allow you five minutes at a railway station to get a divorce," has probably much to do with the unhappiness of married people. Young people, while they may not contemplate the possibility of a divorce on their wedding day, still have a feeling that the marriage is not necessarily for life.

Swift said: "The reason why so few marriages are happy is because young ladies spend their time in making nets, not cages."

NO MAN'S WIFE.

Miscellaneous Advertising.

When Baby was sick, we gave her Castoria,
When she was a Child, she cried for Castoria,
When she became Miss, she clung to Castoria,
When she had Children, she gave them Castoria

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News of the Week.

HOME NEWS.

SATURDAY, September 4, 1886.

LAST Tuesday night between 9.15 and 9.45, an earthquake was felt more or less severely in most parts of the country from Canada to the Gulf, and from the Atlantic to the Pacific. The shocks were much less violent in the North than in the South, and culminated at Charleston, S. C. There were several shocks there; but the first did the greatest harm. The first accounts reported over 100 deaths, but the latest accounts lower the number to between 40 and 50; but nothing definite is yet known. Two-thirds of the city have been destroyed, and most of the buildings left standing are considered insecure. The damages are estimated all the way from $8,000.000 to $10,000,000. Families sleeping in the streets. Much destitution. Intense suffering. Several neighboring villages destroyed or damaged..... ...

..The Indiana Republicans, at their State Convention at Indianapolis Thursday, went in for local option and high license. Yesterday's telegraph says a notable feature of the convention was that so many of the delegates were big men physically—tall, broad-shouldered, solid fellows from the farm..... The anti-saloon movement is gaining great strength among Republicans, who feel that unless they take a very decided stand against rum-sellers, the party will lose so many of its best adherents as to be pretty certain to meet defeat at the polls. It is in a delicate position; if it strongly opposes the rum-sellers it will lose heavily on one side; if it doesn't do so, it will lose heavily on the other. In some few States, especially in the South, the Democrats are in the same dilemma, but the Republican party being the "party of high moral ideas," is likely to suffer most by the defection of Prohibitionists.....Canadian vessels are not allowed to go from one United States port to another to get cargo. Canada has just enforced a similar rule against American vessels, and lake ship-masters are howling.....Two other American fishing vessels have been seized by the Canadians within a week, making 13 in all. All, except the last, have been released on the deposit of $400 each by the owners or the U. S. Consuls at the ports of capture. The right to the fine will be decided by the Canadian Courts, but it is generally thought the decision will be against the owners, but the Imperial or Dominion Government may afterwards remit the fines, should a satisfactory treaty be made. Our Prof. Baird is experimenting on a newly invented process for preserving fish; with a view of preserving bait so that our fishermen may be independent of the Canadians in this particular. If it proves successful, it will be of vast importance in other ways also.....As Congress is not sitting, news is scarce, and the papers are filling up their yawning columns with long yarns about the sea serpent, which has been lately seen by large numbers of "credible witnesses" from Savannah to Cape Cod. One is supposed to be up the Hudson River now. He's enormous—from 25 to 250 feet as far as seen, "round like a barrel," with head uplifted from 5 to 25 feet out of the water..... Prof. Calvin Stowe, the long-time ailing husband of Harriet Beecher Stowe, died at Hartford, Conn., last week.....There's likely to be a long and bitter freight and passenger rate fight between the great Western pool railroad lines, as the Baltimore and Ohio has been cutting rates in revenge for an attempt made by the Pa. Road to shut it out from New York.....The American Purchasing and Leasing Company includes all the distilleries north of the Ohio, and began operations Sept. 1. It is increasing the capacity of the distilleries about 30 per cent., in spite of the Prohibition agitation..... ....At Englewood, near Chicago, three Know Nothing lodges, with 300 members, have just been discovered, and local politicians are angry and perturbed..... The Mississippi River has not been lower in years than it has been this Summer. A few days ago a man on horseback forded it near Galena, Ill., where usually the river is three-quarters of a mile wide. The deepest water he found was in the channel, and there it was but a trifle over two feet deep.....Mormon apostles very troublesome about Spartansburg, S. C. Probably there will soon be lynching or tar-and-feathering "outrages" in that section, just as in Tennessee and Georgia a short time ago....Monday the Knights of Labor, of Hamilton County, Tenn., in convention at Chattanooga, nominated candidates for the State Senate and House—the first action of the kind taken by the order in the South. The K. of L. are going heavily "into politics" elsewhere, however.....No, the Government telephone case is not dead. The arguments against the Bell Telephone Co., will begin at Columbus, Ohio, on Sep. 20, and the Government's case will be presented by Messrs. Thurman, Lowery and Chandler. .....Not including the Post Office or the War and Navy Departments, $12,893,476 are due the Government on account of defalcations and improper disbursements since 1861.

PARTICULAR attention is called to the list of journals with which the RURAL NEW-YORKER clubs. Any of our readers who desire to subscribe for any of these papers in connection with the R. N.-Y. are promised that their commands shall receive careful and prompt attention.

AGRICULTURAL NEWS.

SATURDAY, Sept. 4, 1886.

THE Fourth Annual Exhibition of the National Horse Show Association of America will be held in Madison Square Garden, New York, during the first week in November, beginning on Monday, Nov. 1. Prizes to the amount of $16,135 have been offered. Of this amount $11,765 are for first prizes, and $4,370 for second. The total amount includes special prizes valued at $1,800. The highest regular prize is one of $500, which is offered for the best trotting stallion shown, with four of his get. There are 99 regular and 9 special classes. Prizes are given for Thoroughbreds, Arabs, trotters, heavy draught horses, Clydesdales, Normans, coaching stallions, carriage horses, tandems in harness, four-in-hand teams in harness, cobs in harness, ponies in harness, horse and cab, saddle horses, cobs, ponies, hunters, fire-engine horses, police horses, cavalry horses, and donkeys and mules. The association has expended in prizes in the past three exhibitions $30,635. In 1883 there were 391 animals shown, in 1884 382, and in 1885 444. Entries for this year's exhibition will be closed on October 12. Forms of entry can be obtained from Secretary, W. F. Wharton, at No. 48 Broad Street.....During the last few months a new industry has sprung up in the Canadian Northwest—that of shipping hogs to Eastern points. In one day recently nine cars, seven for Toronto, and two for Ingersoll, left Winnipeg. The hogs are gathered up from farmers all over the province, and command good prices.....The total exports of wheat from the Atlantic ports this year, between January 1 and August 7, were 31,246,000 bushels, against 21,822,000 bushels for the corresponding period last year. The exports of flour for the same period are 4,461,000 barrels this year, against 4,443,000 barrels last year. Our foreign wheat trade is by no means dead yet, in spite of the antics of speculative gamblers..... .....

..The celebrated orchid "Vanda Lowi," which was purchased by William S. Kimball, at the great Morgan sale in New York, is now in bloom at his gardens in Rochester, N. Y. The orchid is the only one of the variety ever brought to this country, and cost Mr. Kimbals $12,500. It has been in bloom only once before, at the botanical gardens in London, where Mrs. Morgan purchased it.....

....At a conference of the cattle dealers of Ireland, in Dublin, a week ago, it was stated that the depression has lessened the value of stock £20,000,000, or $100.000,000.....

..Last week Milwaukee warehouse men made the charge for storing wheat a year 11½c. per bushel instead of 15 cents—the rate till then. The reduction amounts to one-third during the seven summer months, and other concessions are also made..A herd of imported Aberdeen-Angus cattle belonging to Andrew Allan, of Montreal, Canada, valued at $1,200 each, has been destroyed at Montreal as affected with pleuro-pneumonia. The government pays two-thirds of the value of cattle thus slaughtered to prevent the spread of the disease; but the amount per head must not exceed $50, however great the value upon stock. Some of those slaughtered in quarantine the other day were worth $2,000 and over.....The orchard fruit crop of Scotland is this year a complete failure. The almost continuous frost and snow of May and June ruined the crops of apples and pears, Small fruits, an average yield; but there, too, prices have been very low.

....An official call has been issued for a general gathering of the millers of the country at Minneapolis, September 13 and 14.....Two bales of new English hops, the first received here this year, were sold Thursday at 40 cents per pound.....The Government silk station in Piedmont, S. C., was lately sold by order of Commissioner Colman. Meanwhile Congress has voted $15,000 more for another year's fooling with silk-worms.....Reports of frosts from several parts of Iowa and Dakota have tended to raise the price of corn, through fear of early damage to the crop. No injury yet reported..... ...

AMERICAN HAY PRESSES ABROAD.

RECENT advices from South America state that the "Inter-National Rural Exposition" of Buenos Ayres, has awarded the Whitman Hay Press the First Prize over a large number of competitors. This is but an additional honor to the Whitman Agricultural Company, of St. Louis, who, we are informed, have received the First Prize at every Fair, Exposition and Trial where they have exhibited their "World Renowned Rebound Plunger Hay and Straw Press." Farmers or others who are in need of Hay Presses will do well to communicate with the above Company.—*Adv.*

Crops & Markets.

SATURDAY, Sept. 4, 1886.

The Mark Lane Express, in its weekly review of the British grain trade, last Monday, said: The week's splendid harvest weather has materially altered the position. Much grain has been secured. The crop in early sown districts is in fine condition, while late sown crops are rapidly maturing. Another week's sunshine will probably cause a big drop in prices.

A cablegram from Vienna, Austria, on the same day says: The harvest reports for Austria-Hungary, show that the yield of wheat is from 5,500,000 to 6,000,000 hectolitres below the average; the yield of grinding barley 5,000,000 hectolitres below the average, and of rye 3,500,000 hectolitres below the average. There is a medium yield of malting barleys and oats. The only grain available for export is malting barley, to the amount of 2,500,000 or 3,000,000 hectolitres. A hectolitre is 2.82 or 2 4-5 bushels.

A cablegram from Sidney, New South Wales, on the same date, says: The harvests of New South Wales are very promising. The best yield since 1870 is expected.

It is estimated that the wheat crop of California will be worth $54,000,000 this year, as against $28,000,000 last year, and that the barley crop will fetch $16,000,000, a gain of $7,000,000 over last year. The area sown is said to be but a fraction larger than in 1885. Recent estimates place the wine crop at $18,000,000, instead of the $25,000,000 estimated earlier in the season. Last year's crop was $15,000,000.

The Charleston Courier says that the reports from the crops continue to be good for both upland cotton and rice, but in the Sea Island section caterpillars are reported on nearly every plantation.

CIGAR leaf tobacco promises to be a more remunerative crop this season than for several years, judging from the reports made to the New England Homestead by 500 special correspondents, covering the seed leaf districts of the entire United States. The Connecticut and Housatonic Valleys take the palm for quality and yield, producing 1,500 to 2,000 pounds per acre of Havana seed leaf and 1,600 to 2,000 pounds of domestic seed leaf. The acreage has been reduced fully 15 per cent., but the yield, being 200 pounds per acre more, will make a total product fully as large as in 1885. On the whole, the season has been singularly favorable, hail and wind having done damage only in small streaks, injuring less than five per cent. of the crop in the two valleys, while insect pests have been few, and "calico" or mottled plants, which in some years give the crop an uneven value are this year notable by their absence. As a result, an unusually large percentage is wrapper leaf, and higher prices are expected—from 10 to 20 cents per pound, against 7 to 15 cents last year.

Less than 15 per cent. of the 1885 crop is in growers' hands, being held at 10 to 25 cents, a larger proportion being held in Franklin and Hampshire Counties in Massachusetts than elsewhere. There is an increased proportion of Havana, except in the famous Connecticut seedleaf district of East Hartford, South Windsor and vicinity, where the crop is a marvelously fine one in all respects. The tobacco which was harvested is curing down fine in texture. Onandaga County section of New York has a lighter yield (1,000 to 1,400 pounds) and less acres than last year, but the quality is very fine. Ten cents are offered for the new crop, but 15 are asked. What little old is held is worth 12½ cents. The Big Flats or Chemung Valley has about 1,600 acres, the same as last year, of 10 per cent. poorer quality and 8 per cent. lighter yield per acre. Growers have upward views as to prices. Pennsylvania reduced its acreage about 10 per cent., but the yield is nearly 200 pounds per acre more than in 1885, being 1,300 pounds of Havana and 1,500 pounds of seed leaf. The total product is 80,000 cases, against 75,000 cases last season. The seed-leaf counties of Southwestern Ohio have increased 10 per cent, mostly Little Dutch. The quality is somewhat better than that of the '85 crop. The crop in Wisconsin and adjoining counties in Illinois is light and uneven beyond all precedent. The low prices of last year led to a reduced acreage, but owing to the June and July droughts, thousands of acres prepared for the crop were not planted to tobacco, and large areas that were set almost totally dried up. What has survived is very uneven and will require good weather until October to mature it. Some of the early set, however, is very nice, where it has escaped the hail, which on August 21 largely damaged what tobacco had survived in the famous Janesville region. Elaborate returns from every tobacco town in the State show that the average of merchantable tobacco on August 25 was only one-third as large as last year, probably yielding an average of 856 pounds to the acre, against 1,112 in 1885. The crop of this whole section is, therefore, placed at 26,000 cases, against 80,000 cases last year, and 54,000 cases in 1884. Growers and local buyers talk strong prices for good crops, 10 cents through having been refused, and 20 cents mentioned, while but little old is held at higher prices. It is quite likely that good 1886 leaf will bring somewhat better prices than last year, when the crop sold at such low prices, and that dealers should be able to realize on it readily with a good cure. The 1886 wrappers will do much toward supplanting the Sumatra leaf.

BEAR in mind that the RURAL never *sells* its premiums. We give them as payment for work. We will not, under any circumstances sell them for cash. The RURAL sells nothing and hence is not bound to praise any implement or plant except as it deserves praise.

MARKETS BY TELEGRAPH.

SATURDAY, Sept. 4, 1886.

CHICAGO.—Compared with cash prices a week ago, regular wheat is 1½c. higher. No. 2 Spring, 1c¼. higher. Corn, ½c. lower. Oats, 1c. lower. Rye, 1c. lower. Barley, 1¾c. lower. Flaxseed, ¼c. higher. Pork, 70c. higher, and there is proportionate rise in "futures. Cattle, from 5c. to 35c. lower. Hogs, from 5c. to 40c. higher. Sheep, steady.

WHEAT active.—Sept., 76@76¼c; October, 77¾@78¾c; November, 79¾@80½c; No. 2 Spring, 76½c. CORN quiet! Cash, 41¼c; September, 41@41¾c, closing at 41¼c; October, 42¾@43¼c; November, 43¾@44¼c. OATS.—Steady! Sales ranged: Cash, 25¾c; September, 23¾@23¾c; October, 27¼@27½c. RYE.—Quiet; No. 2, 49c. BARLEY.—Firm, No. 2, 58½c. FLAXSEED.—No. 1, $1 10@1 10¼. MESS PORK.—Firmer; Sales ranged: Cash, $10 20@$10 25; September, $10 20@$10 25, October, $10 12½@$10 40; November, $10 00@$10 20. LARD.—Firm; Sales ranged: Cash, $7 47½; September, $7 52½@7 50; October, 6 87½@$6 90; November, $6 60. Short Ribs.—Steady; Cash, $6 60. Boxed Meats.—Dry salted shoulders, $5 75 @5 87½. Short clear sides, $6 60@6 65. CATTLE.—Market strong; Shipping steers, $3 50@5 00; stockers and feeders, $2@3 50; cows, bulls and mixed $1 50@3 40; bulk, $2 25@2 50; through Texas steers, $2 70@3 60. HOGS.—Market strong; Rough and mixed, $4@4 58; packing and shipping, $4 30@$5 10; light weights, $3 75@4 85; skips, $2 40@3 60. SHEEP.—Natives, $2 00@4 00, Texans, $1 75@$2 75; Lambs, $4@5.

ST. LOUIS.—Compared with cash prices a week ago, No. 2 red wheat is 1⅞c. lower. Corn, 1½c. lower. Oats, 1c. lower. Rye, 1½c. lower. Butter—Creamery steady; dairy from 2c. to 5c. higher. Eggs steady. Flaxseed unchanged. Pork, 50c. higher. Lard, 50c. higher. Cattle from 5c. to 15c. higher. Hogs from 10c. to 20c. higher. Sheep—Lower grades steady; best kind good figures.

WHEAT.—Active; No. 2 Red, Cash, 77¾@77¾c; September, 77¾c; October, 79¾@79⅞c. CORN.—Dull; No. 2 mixed, Cash, 31¼@31½c; September, 31½c; October, 33c. OATS.—Firm; No. 2 mixed, Cash, 25¾@26c Sept, 25c.; October, 26¾c. RYE.—Sept, 50½c. BARLEY—No market. BUTTER.—Creamery, 18@22c; dairy, 15@20c. EGGS, 12c. FLAXSEED.—$1 06. HAY.—Timothy, $10 00; Prairie, $8 00. PORK, $10 75. BULKMEATS.—Long clear, $6 60; short ribs, $6 60; short clear, $6 80. Lard, $6 75. Receipts: Flour, 2,000 bbls. CATTLE.—Market active; Good to Choice Native Shipping Steers, $ 4 30@4 75; Common to Fair, $3 50@4 25; Butchers' Steers, $3 50@4 00; Cows and Heifers, $2 25@3 35; Stockers, and Feeders, $3 25@4 00; grass Texans, $2 25@3 60. HOGS.—Market firm and active; heavy, $4 90@5 10; Packing, $4 35@4 85; Lights, $4 40@4 60. SHEEP.—Market firm at $2 25@4 25.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, September 4, 1886.

STATE OF THE MARKET.—As compared with cash prices last week, flour is 5c, lower; ungraded Red Wheat, 1c, higher; No. 2 Red, ¼c, lower. Corn, ungraded mixed, ½c, lower; No. 2, ¼c. higher. Oats, ¼c. lower. Pork, 25c. higher. Butter, 1c. to 1½c. higher. Cheese, 2c. to 2½c. higher. Eggs, ½c. lower. Fruits and vegetables steady.

FLOUR, FEED AND MEAL.—FLOUR—Quotations: Fine $2 00@2 60; Superfine, $2 25@3 00; Extra No. 2, $2 65@3 25; Good to Fancy Extra State, $3 30@3 70; Common to Good Extra Western, $2 70@3 70; Good to Choice Extra Western, $3 90@4 70; Common to Fair Extra Ohio, $2 70@3 75; Good, $3 80@4 30; Good to Choice, $4 25@4 75; Common Extra Minnesota, $2 65@3 00; Clear, $3 25@3 75; Rye Mixture, $3 30@3 75; Straight, $4 00@4 60; Patent $4 40@5 10; Bakers' Extra, $3 75@4 50; St. Louis Common to Fair Extra, $2 65@3 65 Fair to Good, $3 70@4 50; Good to Very Choice, $4 55@4 90; Patent Winter Wheat Extra, $4 25@5 00; City Mill Extra for West Indies, $4 40@4 55; South America, $4 60@4 70. SOUTHERN FLOUR.—Common to Fair Extra at $2 85@3 60, and Fair to Choice, $3 65@5 00; Patent, $5 25. RYE FLOUR.—Superfine, $3 20@3 40. CORN MEAL.—Yellow Western, at $2 50@2 75; and Brandywine at $2 80@2 95.

GRAIN.—WHEAT.—No. 2 Chicago at 87c; No. 2 Milwaukee, 87¾c; No. 1 Hard, 92c; No. Northern, 90c; Ungraded Spring, 75c; Ungraded Red, 84@90c; No. 3 Red, 86@86¼c; Steamer No. 2 Red, 86c; No. 2 Red, 87¼@87¾c; No. 1 White, 89c; 2 Red, for September, 87¼@87¾c; do. for October, 88¼@89¼c; do. for November, 90¾@90¾c; do. for December, 91¾@92c¼; do. for January, 93¾@93¾c; do. for February, 94¾@95¼c; do. for May, 98¾@99 1-16c. CORN.—Ungraded Mixed, at 50¾@52c; No. 2, 51@51¼c; No. 2 for September, 51¾@51¼c; do. for October, 51¾@51¾; do. for November, 52¾@52¾c, do. for December, 53¼c. OATS.—No. 3, at 31¼c; do. White, 34¼c; No. 2, 32½c; do. White 35¾@35c; Mixed Western, 32½@33c; White, do. 36@41c; White State, 38c; No. 2 for September, 32¼@32½c; do. for October, 33@33¾c; do. for November, 34@34¼c.

PROVISIONS.—PORK.—Mess, quoted at $10 50@10 75 for Old and $11 00@11 25@11 50 for New; $13@$14 for Family Mess; $18 75@15 00 for Clear Back; and $9 25@10 25 for Extra Prime. BEEF.—Extra India Mess, $11 50@13; Extra Mess, in barrels, $8 00; Packet, $8 50; Plate, $8 50. BEEF HAMS.—Quoted at $23@23 50 for new. CUT MEATS.—Pickled Hams, 12 lb average, 10¾c; Loose Green Hams, 9½c; Pickled Shoulders, 6@6½c; Pickled Bellies, 12 lb average 6½c; City Pickled Shoulders, 6@6¼c; Smoked Shoulders, 7¼c; Pickled Hams, 10¾@11¼c; Smoked Hams, 12@12½c. MIDDLES.—Long Clear in New York quoted at 6.75. DRESSED HOGS.—City Heavy to Light at 6¼@6¾c; Pigs, 6¾c. LARD.—Western steam spot, at 7.37½@7.45c; September, 7.47½c; October, 7.12@7.22c; November, 6.92@6.05c; December, 6.90c.

BUTTER.—Creamery—State, pail, fine, 23@23½; do Pennsylvania, tubs, 22@22½c; Western, best, 22c; do prime, 20@21c; do. good, 16@17c. State Dairy, pails

choice, 21@22c; half-firkin tubs, about prime, 18½@19½c; half-firkins, tubs, good, 16@17c; half-ferkins, common, 13@14c; Welsh tubs, best, 18@19c; do. do. prime, 17c. Western Imitation Creamery, best, 14c; imitation creamery, fair and good, 12@13; Dairy, fine, 13@14c; do, common, 10@11c; Factory, fresh, 12@13c; do. good, 11@12c.

CHEESE.—New State factory, best, 9¼@9½c; do, do, fine, 8¾@8¾c; do, do, fair, 7¾@8c; do, do, common, 7@7½c; Ohio factory, fine, flat, 7¾@8c; State factory, night skims, 6@7c.

EGGS.—State, 16½@16¾c; Western, 15½@15¾c; Canadian, 15½@15½c.

BEANS.—Marrows, $1 65@1 70; mediums, $1 50; peas, $1 50; red kidney, choice, $2 00@2 10; white kidney, choice, $1 50@1 55; California lima, $1 70; green peas, $1 15@1 20.

POULTRY.—LIVE.—Chickens, spring, per lb, at 11@13c; fowls, near-by lots, per lb, at 11@12c.; fowls, Western lots, per lb, at 11@12c; fowls Southern lots, per lb, at 11c; turkeys, per lb at 9@11c; ducks, western per pair at 45@70c.; geese, western, per pair, at $1.00@1.37.

POULTRY.—DRESSED.—Turkeys, per pound, at 11@12c.; Spring chickens, Philadelphia, per pound at 17@18c.; do. western, per lb, at 13@14c; fowls, Pennsylvania, prime, per lb, at 13@13½c; do State and western, per lb, at 12@13c.

FRUITS.—FRESH.—Quotations: Apples.—Orange Pippin, per d-h bbl, at $1 50; do, open-heads, at $1@1 25; Gravenstein, per d-h bbl., at $2 00@2 50. Peaches.—At 30c.@$1 00 per basket for best; 50@60c. for plain per basket; do. extra per crate, $1 00@1 25; do. plain per crate, at 65@70c; Jerseys, best, at $1 00@1 25 per basket; do. good at 60@80c. per crate, and 80@80c. per basket. Pears.—Bartlett, Va., good to choice, bushel crate $2 50@3 00; do. fair, per bushel crate, at $1 50@2 00; do. Md., per crate, 75c.@$1 00; do. Clapp's Favorite, per bbl, $2 50@2 75. Grapes.—Niagara, South Carolina, per lb, 10@12c; Concord, Va., per lb, at 5@6c; other black varieties, N. C., per lb at 2@4c; Hartford and Ives, Va., fancy, per lb, 4½@5c. Plums.—Egg, upriver, per bbl, at $2 00; Damson, Md., per crate, 40@50c. Huckleberries.—Jersey, per quart at 2@4c; Jersey, per 8 to 12 quart box, 30@45c. Watermelons.—Georgia, prime, per 100, at $21@24; Georgia, poor to good, per 100, $15@19; South Carolina, good to prime, per 100, at $20@23; South Carolina, poor to fair, per 100 at $12@16; North Carolina, poor to prime, per 100, $10@16. Muskmelons at $2 00@3 00 for best per bbl.

FRUITS.—DRIED.—The quotations are as follows: Apples—Fancy evaporated, at 9c; do, choice, at 8½c; do. prime at 8c; fancy North Carolina sliced, at —; choice do, at 3½@3c.; choice Tennessee quarters at 1½@2c.; State quarters at 2½@3c.; southern sliced prime at 1½@1¾c. Peaches—Peeled North Carolina, choice, —c; fancy, —@—c; do. Georgia, choice, at —@11c; do. prime, —@—c; unpeeled halves 3@3¼c; unpeeled quarters at 2½@2¾c. Cherries, pitted, at 10@10½c. Evaporated raspberries, at 15@—c; sun-dried do. 13@14c. Blackberries—Prime at 8c.

PEANUTS.—Quotations are: 5½c. for best hand-picked; 4@4½c, for farmers' grades.

COTTON.—The quotations, according to the American classification, are as follows:

	Uplands.	New Orleans and Gulf.	Texas.
Ordinary	6 9-16	6¾	6¾
Strict Ordinary	7	7 3-16	7 3-16
Good Ordinary	8 15-16	8⅛	8⅛
Strict Good Ordinary	8⅜	8 9-16	8 9-16
Low Middling	8¾	9 15-16	9 15-16
Strict Low Middling	9	9 3-16	9 3-16
Middling	9 3-16	9⅜	9⅜
Good Middling	9 9-16	9¾	9¾
Strict Good Middling	9⅞	10 1-16	10 1-16
Middling Fair	10⅛	10 7-16	10 7-16
Fair	11⅜	11 1-16	11 1-16

STAINED.

Good Ordinary	6⅜	Low Middling	7⅛
Strict Good Ord.	7 1-16	Middling	8⅜

HAY AND STRAW.—The following quotations are Choice Timothy, old, 80@85c; Good do, at 70@75c; medium, 55@60c; shipping at 50c; clover mixed, 50@60c. Straw.—No. 1 rye, 60@65c; short rye at 40@50c; oat, at 30@40c.

HOPS.—State, best, 27@28c; State, good and prime, 23@25c, State, common, 19@21c; State, old crop, 16@24c; California, best 20@23c.

VEGETABLES.—Quotations are for: Potatoes.—Long Island, rose, in bulk, per bbl., $1 50@1 75; Jersey, rose, per bbl, $1 25@1 50; do, peerless, per bbl, $1 00@1 25; sweet potatoes, Va., yellow, per bbl., $2 00@2 25; sweet potatoes, Va., yellow, inferior, per bbl, $1 50@1 75; sweet potatoes, Va., red, per bbl, $1 25@2 00. Celery, per dozen, $1 00. Corn.—Jersey, per 100, 75c.@$1 00. Cabbages.—Flat Dutch, per 100, $2 00@3 00. Cucumbers.—Long Island, per 100, 40@50c, do. pickled, per 1,000, $1 00@1 20. Egg plant, Long Island, per bbl, $2 00. Lima beans, per bag, $1 25@1 50. Onions.—Potato, Jersey, per bbl., $1 50@1 75; do. Conn., red, per bbl, $1 25@1 50; do. Orange County, red, per bbl, $1 25@1 50; do. State and Western, per bbl, $1 75. Peas.—Long Island, per bag, $2 00@2 25. Squash.—Long Island yellow, per bbl, $1 00; do. Jersey, marrow, $1 00@1 25. Tomatoes—Monmouth County, per box, 25@40c; do. Long Island, acme, per box, 35@40c; do. Long Island, Grant, per box, 25@30c.

LIVE STOCK MARKET.

NEW YORK, SATURDAY, Sept. 4, 1886.

BEEVES.—Total for 6 days, 9,779 head. West Virginia Steers, 1321 lb, at $5 10; do, 1281 lb, at 4 90; do, 1140 lb, at $4 55; Texans, 958 lb, at $3 45; Cows, 1016 lb, at $3 45; Kentucky Steers, 1206 lb, at $4 40; do, 1306 lb, at $4 25; Pennsylvania do, 1081 lb, at $3 85; Ohio Steers, 1383 lb, at $5 30; do, 1227 lb, at $5; Indiana do, 1140 lb, at $3 90; do, 1246 lb, at $4 70; Ohio do, 1361 lb, at $5; do, 1320 lb, at $4 80; Dry Cows, 1110 lb, at $3 35; Heifers, 1310 lb, at $4 25; Bulls, 1250 lb, at $3; Kentucky Steers, 1473 lb, at $5 10; Chicago do, 1317 lb, at $5 25; do, 1317 lb, at $5 15; Oxen, 1340 lb, at $4 05; Colorado Steers, 1176 lb, at $4 80; do, 1173 lb, at $4 22½; Colorado Texans, 1061 lb, at $3 80; do, 1052 lb, at $3 61; St. Louis Steers, 1305 lb, at $4 95. Chicago Steers, 1297 lb, at $5 20.

CALVES.—Grassers, 203 lb, at 2½c; do, 169 lb, at 2½c; do, 208 lb, at 2½c; Fed Calves, 191 lb, at 4c; Veals, 190 lb, at 3c; Fed Calves, 260 lb, at 3¾c; Veals, 186 lb, at 7½c; do, 161 lbs, at 6½c; do, 161 lb, at 6½c.

SHEEP AND LAMBS.—Receipts for six days, 41,870 head against 42,567 head for the same time last week. Canada Lambs, 74 lb, at 6c per lb; do, 79 lb, at 5½c; Kentucky do, 65 lb, at 5½c; West Virginia do, 69 lb, at 4¾c.; Virginia do, 56 lb, at 5c; Ohio Sheep, 93 lb, at 4¼; Kentucky do, 99 lb, at 4c; West Virginia do, 90 lb, at 2¾c; Kentucky Lambs, 61 lb, at 5c; do. 63 lb, at 4½c; do Sheep, 91 lb, at 4¼c; Indiana Sheep, 91 lb, at 4¼c; Canada Lambs, 74 lb, at 5¾c; Pennsylvania do, 62 lb, at 5c; do Ewes, 101 lb, at 4c; Jersey Ewes, 126 lb, at 4c; State Sheep, 115 lb, at 4½c; do Lambs, 71 lb, at 5¾c; Western Sheep, 77 lb, at 4½c; Northern Canada Lambs, 59 lb, at 5¾c; State Bucks, 116 lb, at 3c; State Lambs, 66 lb, at 5¼c.

HOGS.—Receipts for six days, 28,238 head against 27,997 head for the same time last week. State Hogs, 213 lb, at 5¼c; Ohio do, 155 lb, at $5 20; Ohio Roughs, 223 lb, at $4 20.

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Manufacturers of Sectional Geared and Sectional Pumping Mills, etc.
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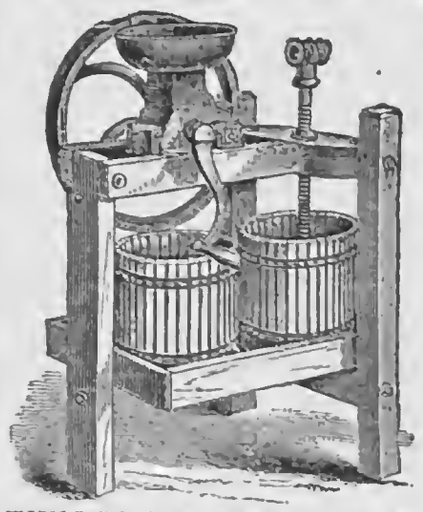
The most complete line of CIDER MACHINERY ever offered. Seven sizes, from the smallest Hand Mill to an Eight-Barrel Press.
THREE NEW PATTERNS.
Send for New Illustrated List, just issued.
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Newton's Improved **COW TIE** holds them firmly, draws them forward when lying down, pushes back when standing, gives freedom of head, keeps clean. E. C. NEWTON, *Batavia, Ill.*

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GRINDS 250 BUSHELS PER HOUR
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Grain Threshers, Horse Powers, and Engines.
Highest prize awarded these machines at the New York State Ag. Soc.'s latest trial, over a large number competing. Ample warranty and opportunity for trial given. For full particulars address
ST. JOHNSVILLE AGR'L WORKS,
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THE BEST SAW MILL
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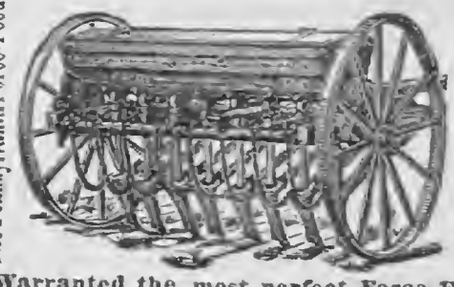
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Warranted the most perfect Force-Feed Fertilizer Drill in existence. Send for circular, A. B. FARQUHAR, York, Pa.

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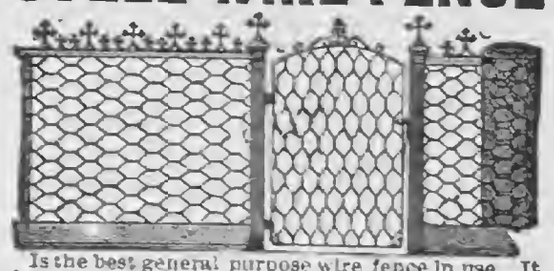
Is the best general purpose wire fence in use. It is a **strong net-work without barbs.** Don't injure stock. It will turn dogs, pigs, sheep and poultry, as well as horses and cattle. The best fence for Farms, Gardens, Stock Ranges and Railroads. Very neat, pretty styles for Lawns, Parks, School-lots and Cemeteries. Covered with rust-proof paint, or made of galvanized wire, as preferred. It will last a life-time. It is **better than boards or barbed wire** in every respect. The **Sedgwick Gates** made of wrought-iron pipe and steel wire, defy all competition in lightness, neatness, strength and durability. We make the best, cheapest and easiest working **all-iron automatic or self-opening gate,** and the **neatest cheap iron fences now made.** The **best Wire Stretchers, Cutting Pliers and Post Augers.** For prices and particulars ask Hardware Dealers, or address, mentioning paper,
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DOUBLE RUNNING Plates STATIONARY MASTER Wheel

We guarantee more work with lighter draft than any mill made.
THE BEST MILL ON EARTH. Made by THE FOOS M'F'G. CO., SPRINGFIELD, O.

AN EXTRAORDINARY OFFER TO AGENTS.

We want live, Energetic and Capable Agents in every county in the United States and Canada, to sell a patented article of great merit, *on its merits.* An article having a large sale paying over 100 per cent. profit, having no competion, and on which the agent is protected in the exclusive sale by a deed given for each and every county he may secure from us. With all these advantages to our agents, and the fact that it is an article that can be sold to every house owner, it might not be necessary to make an "*Extraordinary Offer*" to secure good agents at once, but we have concluded to make it to show, not only our confidence in the merits of our invention, but its salability by any agent that will handle it with energy. Our agents now at work are making from $150 to $300 a month clear, and this fact makes it safe for us to make our offer to all who are out of employment. Any agent that will give our business a 30 days' trial, and fail to clear at least $40 in this time, *above all expenses*, can return all goods unsold to us, and we will refund the money paid for them. Any agent or General Agent who would like ten or more counties, and work them through sub agents for 9 days, and fail to clear at least $750 *above all expenses*, can return all unsold and get their money back. No other employer of agents ever dared to make such offers, nor would we if we did not know that we have agents now making more than double the amounts we guaranteed, and that by two sales a day would give a profit of over $125 a month, and that one of our agents took 21 orders in one day. Our large descriptive circulars explain our offer fully, and these we wish to send to everyone out of employment who will send us 3 one cent stamps for postage Send at once and secure the agency in time for the boom, and go to work on terms named in our extraordinary offer. We would like to have the address of all the agents, sewing machine solicitors and carpenters in the country and ask any reader of this paper who reads this offer, to send us at once the name and address of all such they know. Address at once

RENNER MANUFACTURING CO.,
216 Smithfield St., Pittsburgh, Pa.

For the Young.

THE CRIPPLED CALF.

THE Jersey calf was crippled; far behind
The herd she limped as to and from the field,
They passed, at morning through the dewy grass
At night o'er-burdened with their fragrant yield.
She limped along and tried to hold her place
Though thin and poor, and often in disdain,
The lordly Hereford turned her great white face,
And ridiculed the crippled Jersey's pain.

The Short-horn and the Devon laughed in scorn
To see the cripple hobble far behind,
They only sought to strike her as she passed,
They might have used her tenderly and kind.
"Aha!" they sneered "you 'famous butter cow',
You can't pay wages with that limping walk,
You are not worth your salt, we reckon now,
Its beef and weight and muscle make the talk."

But one old scrub, the butt of all the herd,
A poor old battered cow that knew no style,
Nor pedigree nor polish left the herd
And walked beside the Jersey all the while,
And day by day the patient creature walked
Beside the calf, and cheered her on her way,
She cared not how the petted "pure bloods" talked
She knew she was not half so smart as they.

And when at night within the dry warm sheds
They pushed the cripple from their bed so warm,
The old scrub bowed her meek and patient head
And stood between the cripple and the storm.
And so until the little Jersey died
The selfish cows looked for themselves alone
And still the good old scrub bore out her part
And did her work without complaint or moan.

But one dark night a fearful storm arose
The sheds were tossed like playthings on the air.
And wildly beat the storm upon the cows
That huddled wild and unprotected there.
Then bitterly the petted "pure bloods" moaned;
They knew not how to stand the cold and rain,
Their selfish life had sheltered them from harm,
They felt with double power the touch of pain.

But turned against the blast, the good old scrub,
Cared nothing for the storm, her thankless life
Had made her stronger than she ever knew,
She stood unharmed through storm and cold and strife.
Strength only comes from sorrow; he who turns
Aside to ease the burden of a friend
Will feel his load grow lighter; we shall need
The strength thus gained before we see the end.

WE have been having a taste of the drought which the Cousins have been reporting. It didn't last long enough to cause any serious damage, but it gave us a good idea of what dry weather might be. I don't think I ever lived in a country yet where the weather was just exactly what I wanted it to be. I do not propose to hunt for such a country for I am convinced it would take so long to find it that all my friends would die before it was found, so that I would have to live there alone. The best way is to make the best of what we have, and be just as contented as possible.

We think our cat is pretty smart. She had five kittens a short time ago and three of them disappeared. I think the old cat had an idea the others would go in the same way. She hid them at any rate, and we could not find them for awhile. At last we found them up in a tree. Some 15 feet above the ground there is a hollow limb and in this safe place Mrs. Molly had placed her children. How do you suppose she got them up there? She must have held them in her mouth and climbed up the trunk of the tree with them. That must have been hard work, but a cat will do almost anything to save her kittens.

An ant can carry off a piece of food several times as large as itself. If an elephant's muscles could be as strong in proportion, he could move a good-sized piece of the world. Suppose a man could have muscles as much stronger than those of an ant as they are larger, suppose his eyes were as much sharper than those of a bee as they are larger, that he had the speed of a deer, the hearing of a rat, the courage of a lion and the patience of an ant. He would be a wonderful creature, wouldn't he? He wouldn't be any happier, that I can see, however. He would be so different from other people that he would have no friends or associates. He would kill everything he touched; he would see and hear too many things. On the whole I think such wonderful qualities would make a very poor gift if they could be given away. That health, strength and property are best which we make ourselves. When we see people who are stronger, better and smarter than we are, we must not envy them. The point is to see *why* they are smarter or better than we are, and go to work to see if we cannot find out their secret.

Japan is a queer country about many things, but there are some customs that might well be introduced here. The people are very fond of birds, and are glad to have the little creatures about them. When the birds come to build their nests, the Japanese place boxes and baskets, with good nests in them, about their houses, so that the birds will come into the family. If a bird builds a nest in an exposed situation, a cover is placed over it, and great pains taken to care for the young birds. There are many people in this country who might well follow the example of the Japanese in this matter.

Picking up potatoes is about the hardest work on the farm to my mind. It is work that comes in very handy for the farm-boy. He is sure to be put at it. There will be plenty of chances for him during this month. It is back-aching work. I have done lots of it. I never saw a man or boy who liked to do it, but it has to be done by somebody, and it is better to do it without grumbling.

THE STORY OF A DISTRICT SCHOOL.

A COLLEGE BOY'S DIARY.

(Continued.)

The only pupil who carried more books than dinner was a thin, delicate little girl, who came timidly in and stood on the outside of the company about the stove. As soon as she appeared the freckled-faced girl, who had given me the apple, left the stove and danced before the newcomer. Not satisfied with dancing, she made up a series of horrible faces, by placing her thumbs in her mouth and her little fingers at the corners of her eyes, and pulling the face into a sadly-mixed expression.

"Teacher says I can have your seat! Teacher says I can have your seat. Iv'e got it too. You've got ter set way back yunder. Ain't I glad! Ain't I glad!"

All through this speech she continued her dancing. She took one hand away from her face to point at the object of her remarks, who received this intelligence with evident sorrow. Her eyes filled with tears, and her lip quivered, as she slowly walked to the uninviting seat at the rear of the room. The scholars all laughed at her, and several shouted, "Cry-baby," as she passed them. One boy reached out his hand to pull her hair as she went by him, but, catching my eye, he let his arm fall.

Just as she reached her seat a loud shouting on the outside attracted the attention of the scholars. They ran to the window, and, at the sight of two young men standing in the road, rushed out in a body to hold some sort of consultation by the broken gate. I watched them for a time. There seemed to be some exciting discussion going on, and by the way they glanced and pointed at the school-house, I judged that I came in for my full share in the talk.

While they were thus engaged, I walked down the aisle to speak to the little girl who had lost her seat. She was just drying her eyes, and her lip was still quivering.

"You musn't feel badly about the seat, it's first come, first served, you know," I said, thinking some consolation was needed.

"But Miss Benson told Manma that I could have it if I could go the whole term without being tardy. I don't care about myself, but Mamma is sick and she will feel dreadfully about it." Her mouth began to quiver again and her eyes were filled.

"Was Miss Benson the last teacher?"

"Yes, and she told Mamma over and over again that I could have that seat."

Perhaps I should have used more policy in the matter, but the little girl's grief touched me. She was different from the others, and the other girl had acted a lie too.

"Take your books and put them in the other seat"—I said at once.

"But what will Mollie Brawn say?"

"Brawn?" That was the name of the district bully. If it was his sister, the change would mean trouble at once, but I was determined to make it.

"I will talk to Mollie. Put her books in this desk, and take yours over there."

The change was made as I directed, and the little girl sat in her new seat as happy as she had before been miserable.

At nine o'clock I rang the bell at the school-house door. The scholars reluctantly gave up their conference at the gate and came slowly toward the house. The two young men walked down the road. After a few steps they turned and shook their fists in the direction of the school-house. I was not entirely surprised when one of the little boys volunteered this information:

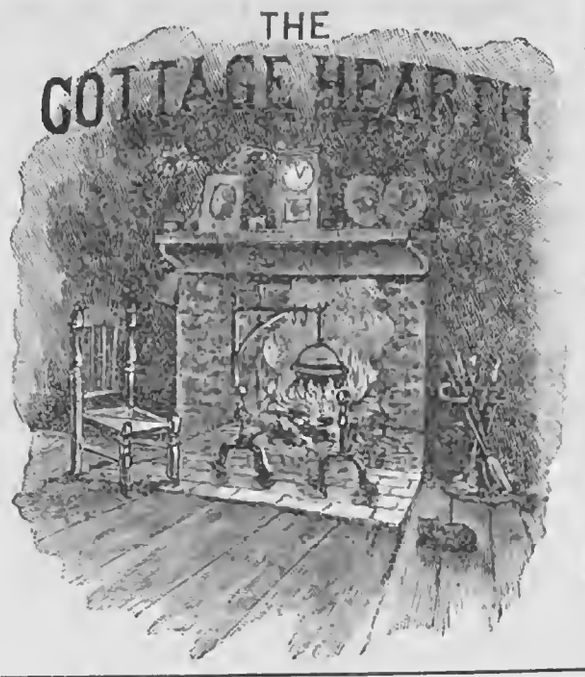
"Yunder's Jack Brawn. He's a whale now, you bet. He says he'll bet his boots he can whip you with one hand."

Several of the larger boys here tried to push this informer out of the way. In fact, he himself seemed to regret his indiscretion in detailing the plans of the enemy.

The boys all stopped at the door to see how I would take this bit of information. I knew that it was necessary for me to say something. Experience had taught me that such people as Bear Creek seemed to possess in quantity always accept silence as an evidence of cowardice. In fact, two-thirds of the fighting is always done with the tongue. So I preserved a solemn countenance and merely remarked:

"Well, boys, I don't know what Jack Brawn wants to do; but I always fight to kill. You never can find two of us alive after I fight."

This piece of bravado had a most decided effect. The boys grew respectful at once. I knew every word of the speech would be reported to the bully—in fact, I proposed to fight him over the heads of the others if I could do it.



THE COTTAGE HEARTH is the best Magazine for its price that we know of. It is filled with pure, wholesome literature. It is a large, 32-page magazine, beautifully illustrated and elegantly printed. The best writers in the world are among its contributors. We can assure our readers that they will be pleased with the Cottage Hearth. Those who secured it last year are enthusiastic in its praise. We have made special arrangements whereby we are enabled to offer both papers (regular price $3.50) for $2.25. This is a remarkable combination.

Send to COTTAGE HEARTH CO., BOSTON, MASS., for a free sample copy.

CLUBBING COMBINATIONS.

Besides the special combinations which are noticed on page 610, arrangements have been made with the following excellent papers whereby such of our readers as desire to do so, can secure the RURAL with their favorite local paper at a reduced rate. These papers are all of good standing. They circulate among the best people of their respective sections and are well worthy of patronage. In all these combinations it is understood that the Free Seed Distribution is included and will be sent with the papers for the regular combination price.

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A strong outspoken Republican paper. Its home department is one of the best of its kind to be found in the country. Price of both papers, $2.25.

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Well-known throughout northern Ohio. Price of both papers, $2.50.

Post, Washington, D. C.

A Democratic paper published at headquarters. Price of both papers, $2.25.

American, Baltimore, Md.

Taken by hundreds of our readers who will gladly avail themselves of this opportunity. Price of both papers, $2.50.

Advertiser, Elmira, N. Y.

One of the best papers in New York State. Circulates in a section fairly dotted with RURAL subscribers. Price of both papers, $2.50

Globe, Boston, Mass.

The liveliest paper in New England. Price of both papers, $2.25.

Democrat & Chronicle, Rochester, N. Y.

We have hundreds of subscribers who want this paper. Price of both papers, $2.50.

Mail, Toronto, Canada.

The leading paper in the Dominion. Price of both papers, $2.50.

Sentinel, Milwaukee, Wis.

Covers a fine field and covers it well. Price of both papers, $2.50.

Republican, Springfield, Mass.

The best weekly in New England. This is a splendid combination for our New England subscribers. Price for both papers $2.50.

Ohio State Journal, Columbus, Ohio.

A splendid paper as its thousands of readers will testify. This is a fine combination. Price of both papers, $2.50.

Times, Cincinnati, Ohio.

Just the paper our readers in the Ohio Valley want. Price of both papers, $2.25.

Farm Implement News, Chicago.

Manufacturers, agents and handlers of agricultural implements should subscribe for this excellent publication. Price of both papers, $2.50.

Kansas State Journal, Topeka, Kan.

An excellent chance to secure an admirable paper with the RURAL. Price of both papers, $2.50.

Herald, Omaha, Neb.

Our Western friends who desire a home paper cannot do better than accept this combination. Price of both papers, $2.25.

Journal, Kansas City, Mo.

The Journal is known throughout the West. Kansas and Missouri farmers will do well to think this combination over. Price for both papers, $2.35.

Times, Philadelphia, Pa.

One of the ablest edited papers in the State. Price of both papers, $3.00.

In addition to the above, we have made arrangement with many local papers whereby our readers can secure their home papers in combination with the RURAL.

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Price with the RURAL NEW-YORKER, including Seed Distribution:

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Miscellaneous Advertising.

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I WILL INSURE YOUR HOGS!
DR. JOS. HAAS'
HOG AND POULTRY REMEDY

[None Genuine without this Trade Mark.]

Is the only Practical Preventive of the so-called Swine Plague.

If used in proper quantities, it will

1. *Prevent Disease;*
2. *Arrest Disease;*
3. *Pay for itself with the increased pork it will put upon the hogs.*

AS AN EVIDENCE OF FAITH

In my Remedy, I make the following offer:

I will insure herds of swine of not less than one hundred in number against disease, at a small fee per head, provided they are fed my Remedy under my direction, and prove upon examination prior to contract that they are in a healthy condition, and neither inbred, close-bred, or the progeny of such.

WHAT IS SAID OF THE REMEDY.

"It has stopped the hogs dying and improved their appetite."—F. C. GOLDSBOROUGH, Easton, Md.

"Have used the remedy with success."—D. G. BARBER, Easton, Md.

"This medicine has been thoroughly tested and its merits established on the eastern shore."—Record and Gazette, Pocomoke, Md.

"I will not be without Haas's Hog Remedy if it costs three times the present price."—JOHN CASTIN, Grant City, Mo.

"We would not risk feeding a pen of hogs without the remedy."—WAITE & CO., Gibsonton, Pa.

"I would not think of raising hogs without it."—J. M. ELLSWORTH, Marthasville, Wis.

"It gives satisfaction every time."—J. G. BARTLETT & SON, Suncook, N. H.

"It has never failed to arrest the disease yet."—JONES & MUSSELMAN, St Paris, O.

"I have sold over $2,000 worth, and am pleased to say that it has given good satisfaction."—MELLE WILLIAMS, Druggist, Taylorville, Ill.

The Remedy can be procured of all druggists, or from my Laboratory, upon receipt of price.

Prices, **$2.50, $1.25,** and **50 cents** per package. 25 pound cans, **$12.50.**

JOS. HAAS, V.S.,
Member of Indiana State Veterinary Med. Association,
INDIANAPOLIS, INDIANA.

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The following rates are invariable. All are therefore respectfully informed that any correspondence with a view to obtaining different terms will prove futile.

ORDINARY Advertisements, per agate line....30 cents.
One thousand lines or more, within one year from date of first insertion, per agate line, 25 "
Yearly orders occupying 14 or more lines agate space..... ..... 25 "
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Great Britain, Ireland, Australia and Germany, per year, post-paid.....	$3.04 (12s. 6d.)
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Any one sending a club of seven is entitled to one copy, one year free.

Agents will be supplied with canvassing outfit on application.

Entered at the Post office at New York City, N. Y. as second-class mail matter.

PERSONALS.

BRET HARTE is now described as a handsome white-haired man, with a red English complexion.

LIEUTENANT GREELY is now in better health than at any other time since his return from Lady Franklin Bay.

THEY are discussing President Grévy's state of health again in France. He suffers from no especial malady, but is steadily growing weaker. He is now 84, and suffers perhaps just a trifle from old age.

MR. ARTHUR BALFOUR, the new Secretary for Scotland, owns and has rented for $13,500 for the season, the great Strathconon deer-forest of 60,000 acres.

MR. J. W. CLAYTON, a well-known business man of Atlanta, Ga., estimates that at least 10,000 people have emigrated from that city in consequence of inability to procure employment since the Prohibition fever struck the town.

JAMES GATNER, an English railway porter, whose wages were but 19 shillings per week, has just died, leaving $20,000 as the result of accumulated tips from passengers. Tipping is the biggest nuisance in the United Kingdom.

A. K. CUTTING, the creature who made the trouble on the Mexican border, deserted his family several years ago, and his wife is now supporting herself and half a dozen children in Kansas City. He has always been in trouble with neighbors and employés.

JOHN G. SAXE, the poet, is slowly dying at Albany, N. Y. His nervous system has never recovered from the shock received in a Western railroad disaster in 1875, when he was rescued from a wrecked sleeper just in time to escape being burned to death.

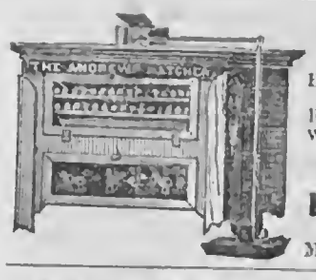
THE father of Thomas A. Edison, the electrician and inventor, is living at Hessonia Beach, Mich., at the age of eighty-two years. He has six children—three by his first wife and three by his present one. The inventor's youngest brother is only four years old.

THE Autocrat of the Breakfast Table returned from England Monday, on the seventy-seventh anniversary of his birth. However cordial the reception accorded to Dr. Holmes abroad may have been, it cannot exceed the love and esteem in which he is held by his countrymen who now welcome him upon his safe return home.

SENATOR MAHONE, playing billiards the other evening before a number of his admirers, tried a difficult shot, and just missed making it. He looked disgusted. "That was magnificent, even if it didn't count, General," said a friend. "No, sir," said the little man, sagely, "nothing is magnificent that misses."

Miscellaneous Advertising.

NOTRE DAME OF MARYLAND,
Collegiate Institute for Young Ladies and Preparatory School for Little Girls, EMBLA P. O., Three Miles from Baltimore, Md. Conducted by the Sisters of Notre Dame. Send for Catalogue.



Best Hatcher
ON EARTH.
Hatches Ducks, Turkeys, Geese and Chickens. Received First Premium where exhibited. Send for Circular.
ANDREWS'
Hatcher Co.
Elmira, N. Y.
Mention RURAL N.-Y.

BLAIR'S FODDER SQUEEZER
A GRAND SUCCESS. 10,000 FOR 1886.

With this Instrument one man can do the work of two with greater ease and much more expeditiously. Not only for tying Corn Fodder but for most all like bulky material in shock or bundle. For sale by hardware dealers. Send stamps—50c.—by mail, for one, without rope. E. BLAIR, Bucyrus, Ohio.

DYSPEPSIA.
Its Nature, Causes, Prevention, and Cure. Being the result of actual experience with Dyspepsia By JOHN H. McALVIN, LOWELL, MASS. Fourteen years Tax Collector. Sent free to any address.

IT PAYS to sell our Rubber Printing Stamps. Samples free. J. M Millen & Co., Cleveland, O.

A NEW BUTTER PRESERVATIVE.
KELLOGG'S ROYAL SALT.
Positively Prevents Butter from ever becoming rancid.
Endorsed by George B. Doughs, Esq., Ex-President Mercantile Exchange; Putnam Conklin, Esq., Manager Thurber, Wyland & Co.'s Butter Department, New York City; Col. Wm. Crozier, Northport, L. I., N. Y.; St. Louis Dairy Co., Charles Cabanne, Gen'l Manager, St. Louis, Mo., and such Agricultural Journals as the Rural New-Yorker, American Agriculturist, Indiana Farmer, Country Gentleman, Farm Journal and others. Send for Circular.
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NEW AND RARE WINTER FLOWERING PLANTS.
East Indian and South American Orchards—Dutch Bulbs, etc.
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New Pears, new Peaches, new Cherries, new Grapes, new Strawberries, etc., with a large stock of all kinds of Fruit Trees, Shrubs, etc.
DUTCH BULBS.—Large importations, direct from the leading growers in Holland. First quality Bulbs, Beautiful Hot-house Plants, Roses, Clematis, etc.—well grown, cheap.
Catalogues mailed to applicants.
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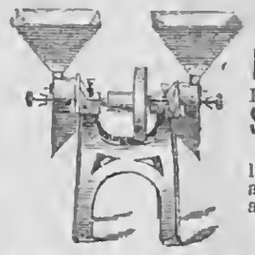
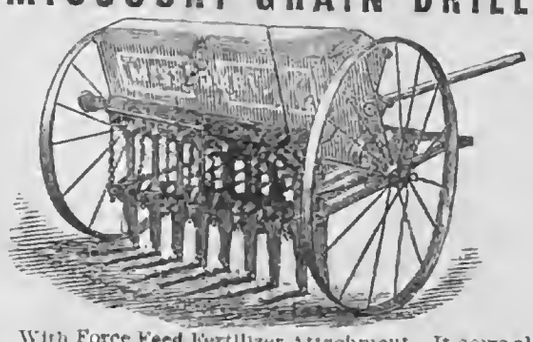


PORTABLE FEED MILLS.
Patentee and Manufacturer of
Single and Double Mills.
Capacity, 5 to 30 bushels per hour. Adapted to any suitable power. Send for Circular and Testimonials.
LEWIS STRAYER,
York, Pa.

MISSOURI GRAIN DRILL.



With Force Feed Fertilizer Attachment. It sows all kinds of Grain and seed; also plants corn and beans. Warranted in every respect.
THREE SECTION FIELD ROLLER.
Which is so adjusted by hinges as to adapt itself to the most uneven ground, whether ridge or dead furrow. Turns as easily as a wagon.
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GUARANTEED SUPERIOR to any LEVER PRESS NOW MADE.

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IN USE IN EVERY State and Territory of the U. S. It is a sectional wheel, has been made by us 15 years, and has never blown down without tower breaking, a record no other mill can show. MILLS SENT ON 30 DAYS TEST TRIAL. BEST FEED MILLS, CORN SHELLERS, ETC. GOOD AGENTS WANTED in all unassigned territory. Catalogues free. CHALLENGE WIND MILL AND FEED MILL CO., Batavia, Kane Co. Ill.

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Patented Nov. 24, 1885.
Surpasses all other wire and picket fence machines, for making strong and durable fences in the field, that no stock will break down. On rough, hilly ground, it keeps pickets perpendicular which no other machine will do without constant adjustment. It is easy to handle, uses any kind of pickets, and any size of wire. Write for circular and price
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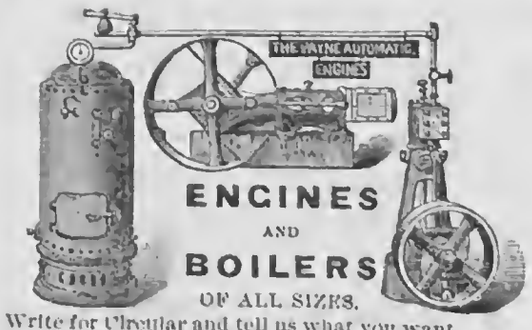
The only Practical Swing Stanchion Invented. Thousands in use. Illustrated Circular free. Manufactured by BROOKS & PARSONS, Addison, Steuben Co. N. Y.



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Takes the lead, does not corrode like tin or iron, nor decay like shingles or tar compositions, easy to apply, strong and durable at half the cost of tin. Is also a SUBSTITUTE for PLASTER at Half the Cost. CARPETS and RUGS of same, double the wear of oil cloths. Catalogues and samples free.
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The best in America. Great Bargains for 30 days.
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The old and Reliable! **SYRACUSE NURSERIES** Come to the front For the Fall of 1886
with the choicest Stock of their specialties, STANDARD APPLES, STD. and DWARF PEARS PLUMS and CHERRIES, ever offered to the public, all young, thrifty and well rooted.
Also a very superior assortment of GENERAL NURSERY STOCK both FRUIT AND ORNAMENTAL including all the popular ORNAMENTAL TREES, SHRUBS, and ROSES.
All Nurserymen and Dealers are cordially invited to inspect this superior stock or correspond with us, before placing their orders for the coming Fall.
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FRUIT AND ORNAMENTAL TREES
SMALL FRUITS, BULBS, SHRUBS AND ROSES.
Special attention is called to our remarkably Fine Stock of
STANDARD AND DWARF PEARS
☞ ALSO **GRAPE VINES** Including such kinds as Niagara, Jessica, Empire State, Willis, Frances B. Hayes, etc.
Prices reduced to suit the times. Correspondence solicited. Catalogue Free. 32d Year, 600 Acres. 21 Greenhouses. Immense Stock. **THE STORRS & HARRISON CO.** PAINESVILLE, Lake Co. Ohio.

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METAL, PERFECT
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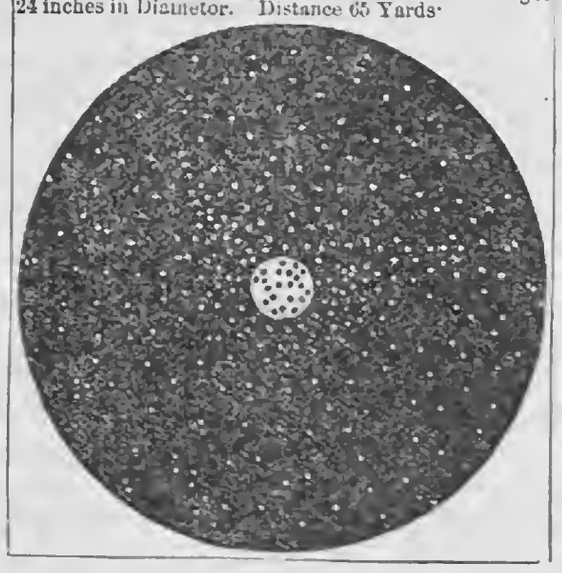
$12.50 FOR A $30 SHOT GUN.
Every Part Hand made and warranted
Lightest, most reliable shot gun ever made
NOW OR NEVER IS YOUR CHANCE!
to get the best handmade, reliable shooting gun ever manufactured.
In the great gun factories of the world continual experiments are made to obtain the greatest strength with other needed qualities in gun metal. After innumerable trials they at length hit upon the kind of metal used in this gun, hence it is named the "WOOLWICH," in honor of the Woolwich Infant, the most powerful Rifled cannon in existance. But not only is the metal the best in the world, but it is made by the most skilful artizans to be found in any gunsmith's shops anywhere. It is
The Grandest Triumph of Intelligence and Practice.
It is made for service, not show, although very handsome. No other breech-loader begins to have anything like the same powerful action. It is a centre fire, 10 or 12 bore, Steel Barrels finely bored. Has very easy working Steel Lock, blued; an automatic shell ejector suits either paper or brass shells handsome case hardened mountings. Barrels 28, 30 and 32 inches.
It Shoots Perfectly at 80 Yards and Will Kill at 150 Yards.



This Illustrates a Target with both Barrels. Target 24 inches in Diameter. Distance 65 Yards.

It is one of the strongest arms ever made weighs from 7½ to 9½ pounds. It has all the best qualities found in a $50 Shot Gun. The instant your eye spots this gun you will admire it and the first trial will convince you that you never took sight over a better or truer piece. We intend to be permanently engaged in the sale of the WOOLWICH Gun and for this reason we put it, for the present, at so low a figure, as we are satisfied that every Hunter and Sportsman will concede it to be the best shooting gun furnished at any price. So satisfied are we of the great merits of this gun that we will send C. O. D. on receipt of $3.00, subject to examination. Balance of bill to be paid at express office. As soon as enough of these guns are sold at $12.50 to make them well known to the shooting classes we shall put the price up to $25.00 knowing they will readily sell at that wherever known. Now is the time to be sure of getting this excellent Gun at $12.50. A good gun like a good watch is always valuable and will often sell for more than twice its cost. To any one sending $12.50 at once, full amount of cash with order
WE WILL GIVE FREE A SPORTSMAN'S BELT of fine water-proof canvas and 25 Shells extra.
Our patented solid brass shells, which prevent charges and wads from falling out, furnished at 60 cents a Dozen, $4 a Hundred. Paper Shells 75 cents per Hundred. $2.00 will buy full set reloading tools,
IF YOU WANT A GOOD SHOT GUN AT A MODERATE PRICE BUY THIS.
Send money by Post Office Order or registered letter.
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Write for new descriptive circulars of our
New Reversible Double Share PLOW.
The marvel of modern Plow Making.
SOUTH BEND CHILLED PLOW CO.,
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Humorous.

"AND how old are you, my little man?" "I'm not old at all. I'm nearly new!" —*Otago Witness.*

"MRS. LIBRIPER, you could never get the coroner's jury to sit on this soup." "Why so, Mr. Jones?" "Because there is no body to it." —*N. Y. Ledger.*

A GREENHORN girl, who mistook some directions given her was found the other day using a lawn-mower for a sweeper on a parlor carpet.—*Scranton Republican.*

TOO SHARP.—"Do you keep any Hamburg edging?" asked a timid Miss. "Not if we can sell it," was the pert reply of the clerk. He kept some that day.—*N. Y. Ledger.*

A LITTLE girl was seated at the table opposite a gentleman with a waxed mustache. After gazing at him for several minutes, she exclaimed: "My kitty has got smellers, too!" —*Salem Standard.*

FARMERS in Illinois have resolved to boycott the chinch bug by not sowing wheat for three seasons. The bugs are expected to carry the matter to court, as boycotting has been declared a crime.—*Pittsburg Chronicle Telegraph.*

"DID not the sight of the boundless blue sea, bearing on its bosom the white-winged fleets of commerce, fill you with emotion?" "Yes," replied the traveler, "for a while it did, but after a while it didn't fill me with anything. It sorter emptied me."—*Otago Witness.*

Miscellaneous Advertising.

The Lion Fodder Cutter AND Crusher.

HAUCK & COMSTOCK, Mechanicsb'g, Pa.

The Cold-Water Dip,
(THYMO-CRESOL.)

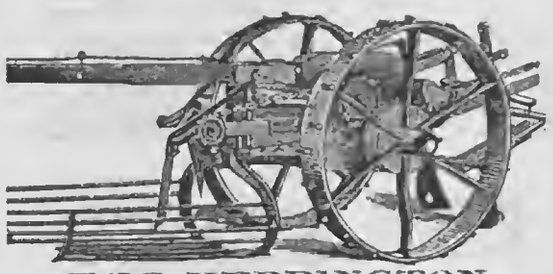
A very highly concentrated, non-poisonous fluid—mixes readily with cold or warm water—the simplest, safest, surest cure for TICKS,

LICE,

MANGE, SCAB, all Insect Pests, all Skin troubles, and many other Diseases of Live Stock. Recommended by many prominent Breeders. See circular, sent on application. T. W. LAWFORD & CO., Baltimore, Md.

CARTER'S
IMPROVED NEEDLE HAY KNIFE.

This knife has been tested with the most celebrated knives of other makers, and has proved an easier and faster cutter than any other. Its special excellence consists in a chisel edge tooth. It may be used for cutting hay in the mow, stack and bale; also for ditching, cutting peat, or for any other work for which a hay knife is used.
Send for circular.
North Wayne Tool Co.,
HALLOWELL, MAINE.



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POTATO DIGGER
IS A SUCCESS.
Send for circular to PLANTERS' HOE CO., Troy, N. Y.

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Gutta Percha Roofing.
Especially adapted to Hot or Cold Climates
Cheap and Durable for Flat or Steep Roofs. Send for Catalogue.
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One man can do the work that heretofore required two. Utilizes the *weight* of operator. *Lightest running, cheapest and only practical* log sawing machine made. *Saws cord an hour.* Weighs but 35 lbs. Price complete only $12.00. To introduce, will deliver one machine free to any address on receipt of price. *Address* Champion Mfg. Co., Quincy, Ill.

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Ajax Engine on Cornish Boiler.
The cheapest, first-class, horizontal Engine in the market. Engines of all kinds, for Sawing, Threshing, and Cloning, a specialty. Saw and Grist Mills, Threshing Machines, etc., a specialty.
Send for Illustrated Catalogue.
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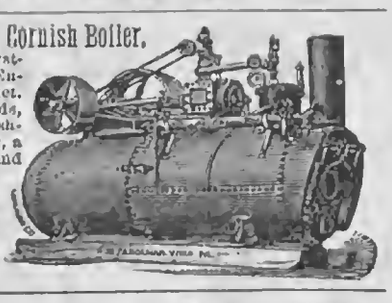

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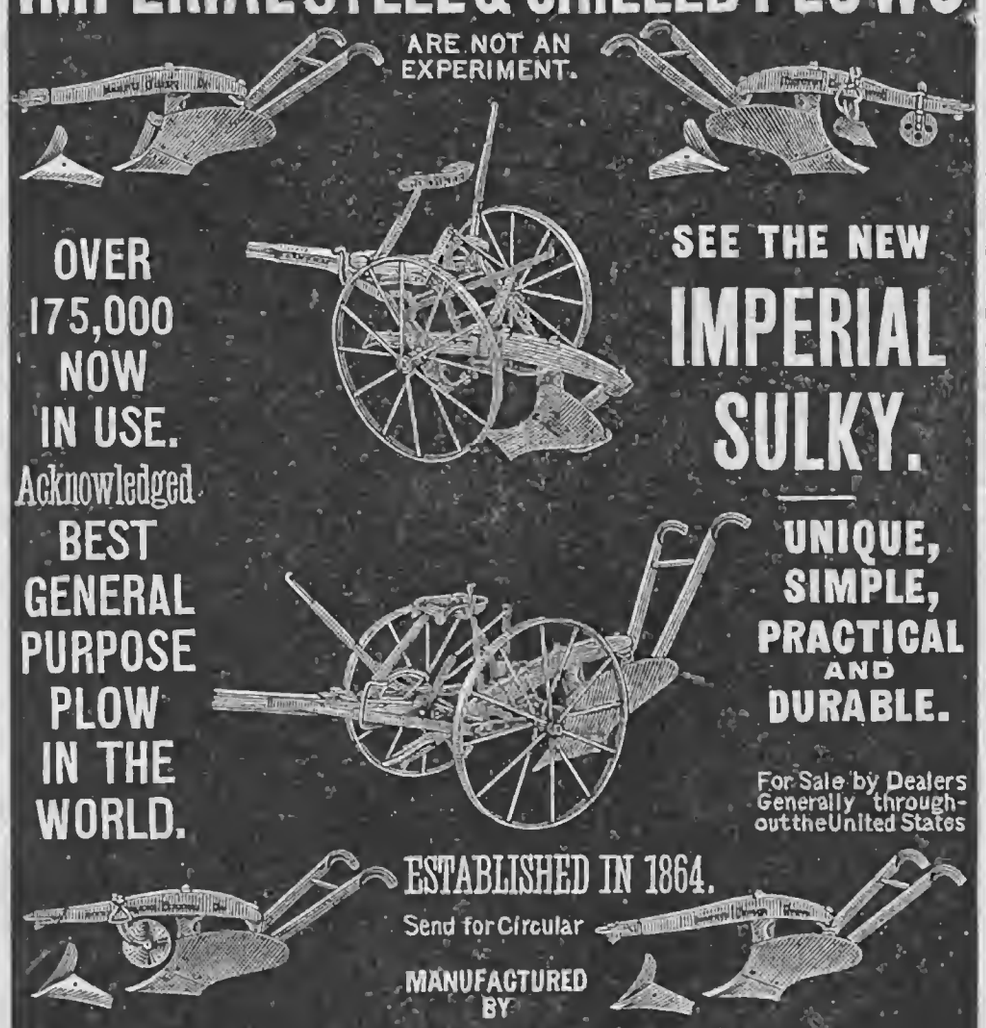
IMPERIAL STEEL & CHILLED PLOWS
ARE NOT AN EXPERIMENT.



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UNIQUE, SIMPLE, PRACTICAL AND DURABLE.
For Sale by Dealers Generally throughout the United States
ESTABLISHED IN 1864.
Send for Circular
MANUFACTURED BY
BUCHER, GIBBS & CO., CANTON, OHIO.

INCORPORATED MAY 27, 1886.
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STANTON THOMSON & CO., Sacramento, California.
BROWN & FOSTER HARDWARE CO., Los Angeles, Cal.
J. WILDER & CO., 159 & 161 West 6th St., Cincinnati, O.
DE LONG & CO., Lexington, Ky.
BIRDSALL & SONS, 134 Market Street, Phila., Pa.
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AGENTS WANTED
BEST SELLING TOOL ON EARTH

Subjects the soil to the action of a Steel Crusher and Leveler, and to the Cutting, Lifting, Turning Process of Double Gangs of Cast Steel Coulters. Immense cutting power. Crushing, Leveling and Pulverizing performed at the same time. Entire absence of Spikes or Spring Teeth avoids pulling up rubbish. Only Harrow that cuts over the entire surface of the ground. Sizes, 3 to 15 ft. wide. With and without Sulky attachment. We deliver free at Distributing Depots.

FAIR PLAY. **DO NOT BE DECEIVED.** Don't let dealers palm off a base imitation or some inferior tool under the assurance that it is better. SATISFY YOURSELF BY ORDERING AN "ACME" ON TRIAL. We will send a **double gang** Acme to any responsible farmer in the United States; if it does not suit, he may send it back, paying return freight. We don't ask pay until tried on his own farm.

Send for pamphlet containing thousands of testimonials from 18 States and Territories.

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N. B.—"TILLAGE IS MANURE" and other essays sent free to parties who NAME THIS PAPER.

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With Rubber Hands and Feet.
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Most Natural, Comfortable and Durable. New Patents and Important Improvements. Fourteen First Premiums in Succession.

The accompanying cut represents a young man who lost both legs by a railroad accident. **He is able to Skate** (ice or roller), **Dance or Play Ball,** without the use of a cane or any assistance except his artificial limbs with rubber feet. He can perform a day's work without unusual fatigue, can go up and down stairs; in fact, can do any of the ordinaries of life without exhibiting his loss.

ARMS restore the appearance and assist greatly in the performance of labor. Large Illustrated Pamphlet of 160 pages *SENT FREE.*

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Of Philadelphia.
Assets, 1st mo., 1st, 1886, $10,472,202.94.

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THE WONDER OF THE AGE! A SCIENTIFIC TRIUMPH!!

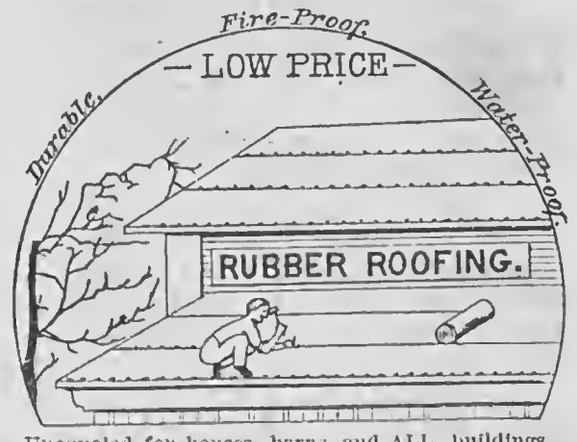
MASON'S INDICATOR CHART, Attachable to any Piano. **A child 10 years old can understand it perfectly.**

This wonderful invention has been before the public (in its perfected form) less than two years, and we have sold over 40,000, which is the surest test of its merit, and orders have been received from every country on the globe. **Mason's Indicator Chart is a mach**... which fits over the keys of a P... Organ, *indicating where and* ... *hands are to be placed, and the* ... *to strike,* changing its positi... rangement to suit the di... *They are infallible in resu*... read you can play the Pi... Organ in **one day** *better than a Teacher could teach you in many lesson*... you have no Piano you can learn at some friend's house, and astonish w... your acquirement. DEXTER SMITH, the editor of the leading Musical ... in the world, says, "*They should find a place in every house. They are to Music what the Multiplication Table is to Arithme*... t gives satisfaction in every case. MUSIC TEACHERS UNHESITATINGLY ENDORSE IT. The price is **$1.00** for a comp... et (4 forms). Favorable terms to Agents and the Trade.

$1.75 WORTH of Choice Music Given FREE.

SPECIAL OFFER.—In order to introduce this wonderful invention at once in every town where this paper reaches, **we will give free** to every reader of this paper, who buys a Mason's Indicator Chart, our **Musical Album,** containing music which if bought separately would cost **$1.75.** If you desire the Album, STATE THAT YOU SAW THE ADVERTISEMENT IN THIS PAPER, otherwise we will **not** give the Album free, as it is intended as a present **solely to the readers of this paper.** We send the Indicator and Album by mail, **prepaid,** for **$1.00.** THIS IS POSITIVELY NO HUMBUG. We have thousands of testimonials from old and young, and from almost every country on the globe. **C. H. W. BATES & CO.,**
106 Sudbury St., Boston, Mass., *Sole Agents. These Charts are copyrighted and patented. All infringements will be prosecuted.*

VALUABLE COUNTRY RESIDENCE FOR SALE. The property known as "Farley's Point," on Cayuga Lake, residence of the late Dr. H. H. Farley, containing about **35 ACRES,** half in bearing Vineyard, Pear Orchard, and Small Fruits. One of the finest locations in the State. A lovely place for a Country Home. Sold only on account of death of former owner. Terms easy. Address H. S. ANDERSON, Union Springs, N. Y.



Unequaled for houses, barns and ALL buildings. Anybody can apply on steep or flat surface.
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Samples free if you mention Rural New-Yorker.

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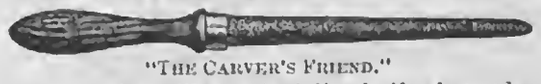

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A few strokes will give the dullest knife a keen edge, which every housekeeper will appreciate. Handy for table or kitchen use. Made of best Turkish Emery, with steel wire in center, and will last for years. Price, with fine Rosewood or Cocoboln handle, 85 cents; Applewood handle, 60 cents. Sent, post-paid, on receipt of price, in postage stamps or any convenient way.
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Corn Cultivator, Potato Digger, (doing two rows at once) and Spring Tooth Riding Harrow, combined in one, sold at the price of one. Sold on its merits and the cheapest yet made. New Victor Lever Cutter, largest and best. Also Vegetable Cutters, etc. Agents wanted. Send for Circular. JOHN R. WHITTEMORE, CHICOPEE FALLS, MASS

THE HUDSON STEEL POTATO DIGGER.
SOLID STEEL CURVED LIFT FRONT SHANK.
ROLLED STEEL "MOULD BOARD" RODS.
2 INNER BARS, STEEL SHARE, EXTRA HIGH BEAM AND ROCKER BOTTOM.

HAS THE BEST RECORD YET.
TESTIMONIALS.
GREAT IMPROV'T.
ORDER SAMPLE.
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Is unlike any other sulky in the world, and owing to its peculiar construction it will work equally as well on rough, stony land as on the Western prairie. We want every one of our readers to write to E. Daniels & Co., Havana, N. Y. for circulars and prices. They say it is the cheapest, simplest, and most durable sulky in the market. It can be attached to any common walking plow in five minutes' time, and is warranted to do better work with less draft than any plow made, either walking or riding. They want a good live man to act as agent in every town in the U. S.

BOWKER'S FARM CHEMICALS — FOR — HOME MIXING
Dissolved Bone.
Ground Bone,
Muriate Potash,
Sulphate Ammonia,
Dried Blood, etc., etc.
Send for Price List.
BOWKER FERTILIZER CO
BOSTON & NEW YORK

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$50 REWARD
will be paid for any **Grain Fan** of same size that can clean and bag as much Grain or Seed in one day as our **Patent MONARCH Grain and Seed Separator** and **Bagger** or our **Improved Warehouse Mill** which we offer cheap. Price List mailed **free.**
NEWARK MACHINE CO.
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HORSE POWERS
LATEST IMPROVEMENT
Machines for THRESHING and CLEANING GRAIN; also Machines for SAWING WOOD with Circular and Cross-Cut Drag Saws.
Acknowledged by all to be **THE BEST** considering

EASY DRAFT, DURABILITY, QUANTITY & QUALITY of Work.
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THE RURAL NEW-YORKER

A JOURNAL FOR THE SUBURBAN AND COUNTRY HOME

VOL. XLV. No. 1912. NEW YORK. SEPTEMBER 18, 1886. PRICE FIVE CENTS. $2.00 PER YEAR.

Entered according to Act of Congress, in the year 1886, by the Rural New-Yorker in the office of the Librarian of Congress at Washington.

Horticultural.

THE CARMAN RASPBERRY.

IN April of last year, G. H. & J. H. Hale, of South Glastonbury, Conn., sent us four plants of a new blackcap raspberry, two of which were large plants with ample roots, that bore an abundance of fruit in late June and early July. Our illustration (Fig. 361, p. 629) is an accurate portrait drawn from a branch at that time. The berries were somewhat smaller than those borne this year, an average cluster of which is shown at Fig. 360. Had we desired to show the fruit at its best, it would have been easy to have selected larger berries.

The berries began to ripen June 29. They are jet black (without bloom), with small drupes, and as good in quality as any cap berry we know. The two larger bushes bore as many berries as any variety ever tested at the Rural Grounds. They grow, however, in a part of the garden where all raspberries do well, and the season was in every way most favorable to an abundant fruitage. The canes are stout, and have grown to the hight of six feet. They were not in the least injured by the past Winter. Earliness, productiveness, hardiness, quality and firmness might be claimed for this variety if judged by a single year's test, which is a very hazardous thing to do.

ITS HISTORY, ETC.

ED. RURAL NEW-YORKER: Your card requesting the history of the Carman is at hand. Possibly I can do no better than to send a copy of what Mr. Sherwood wrote to State Secretary Gold two years ago. The following Spring the entire control of the stock of plants was given to our firm, and we named the new seedling Carman, in honor of the Editor of the RURAL NEW-YORKER. It has fruited here this season side by side with all the leading black-caps, and I find it as early as the earliest: jet black, as large as the Gregg, and the best in quality of them all. Indeed it is by all odds the best black-cap I have ever seen. J. H. HALE.

So. Glastonburg, Conn.

MR. T. S. GOLD, Secretary of the Connecticut State Board of Agriculture:

In reply to your question, "Are there any new choice fruits in this locality not generally known?" I will state that I have a new blackcap raspberry which, some 10 years ago, came up by a stone fence in a corner of a meadow, in a bunch of elders, and for two or three years I noticed it was double the size of others, so I found three roots and set them in the garden in vacancies among old plants. These were neglected for other outside work—onions, etc. Then I pulled up all and set out a new spot on the opposite side of the garden—a row of reds and a row of black-caps, with sweet corn between, 12 plants of each kind. When two years old, I picked 40 quarts from 11 plants, which had also been neglected, not having been tied up or manured. They did so well that in the Fall I threw a little dirt on some of the shoots, and in the Spring of 1881 they had rooted at tips and joints. I set out a quarter of an acre with them, using anything that had a root, the smallest portion being tips; but the joints did not make good plants, so I have increased until this year (1884) from an acre (and two-thirds of those one-year-old plants) I have picked 2,851 quarts, and sold 2,798 quarts at wholesale (mostly to one man) or $316.75. I shall have 1½ acre in bearing next season. The plants are stocky growers, with large clusters of fruit and some along the stalk. Berries large—about two inches in circumference, a great many 2½ inches, and some three inches. They are not so flat as Souhegan or Gregg, a shiny black, free from bloom. The vines continue long in fruitage. I picked berries for market last year from July the 4th until the 25th, and this year from July 7th until the 28th, and longer for the table. It is, therefore, a good family berry, and being several days earlier than Souhegan, and so firm, with a good flavor, it is a good market berry. I should have had 3,000 quarts but for heavy showers which beat the berries in the dirt, as most of them were on young plants; so I lost some, and many being dirty sold for less. ARTHUR H. SHERWOOD.

Southport, Conn.

FROM MARSHALL P. WILDER:

In regard to raspberries, the Carman is the earliest cap variety I possess. It is sweet and *very* good, a valuable acquisition.

Dorchester, Mass.

FROM PROF. S. M. TRACY:

The two plants of Carman Raspberry received from Hale Brothers a year ago, made a fine growth during the Summer, but one of them was nearly killed during the Winter. The remaining plant fruited well this season. Berries not quite so large as the Gregg, but more abundant—very firm and of the best flavor. From the little I have seen my impressions are very favorable.

State University, Columbia, Mo.

FROM A. W. CHEEVER:

I saved two plants of the Carman, one of which has failed to thrive this year. The other bore a good crop for the size of the bush, and the berries were the largest and richest black-caps I have ever tested. The Mammoth Cluster is nowhere beside it with me for productiveness or quality. My bush is small and did not bear a quart all told, and consequently we had but very few "meals" from it; but enough to be able to say it pleases us better than any variety of the cap raspberry (white or black) that we have ever tested.

Ag. Editor N. E. Farmer, Dedham, Mass.

From J. B. ROGERS:

In the Spring of 1885, Messrs G. H. & J. H. Hale, of Connecticut, sent me for trial plants of the Carman black-cap. My soil does not seem congenial to the growth of this variety of black-cap. I cannot get any growth to speak of, and hence can say nothing as to its merits.

Milburne, N. J.

FROM THE N. E. FARMER OF AUG. 7:

A new black-cap, the "Carman," not yet sent out except for trial, was received a year ago from the Hale Brothers, South Glastonbury, Connecticut. A single bush fruited this year, bearing heavily for one of its age and size. We had rather lost affection for black-caps since becoming acquainted with the better red raspberries, but the Carman is large, even in shape, very handsome and more palatable than any black-cap we have before tested. We can see no reason why it should not become one of the standard popular small fruits. The black-caps are usually hardier than the reds, and the fruit, being firmer, bears transportation better. The great fault has been, they bear carriage too well, but the Carman has comparatively soft pulp with less prominent seeds.

THE CARMAN BLACKCAP RASPBERRY. From Nature. Fig. 360.

THE MINNEWASKA BLACKBERRY.

THE originators of the above blackberry request us to publish the following letter to them. The R. N.-Y. has expressed itself rather freely perhaps respecting the Minnewaska, and we are glad to present any evidence on the other side:

A. J. CAYWOOD & SON,
Marlboro, N. Y.

DEAR SIRS: "My experience with the Minnewaska for one year has been very satisfactory. From its start in the Spring to this time (August 19) it has shown wonderful vigor. It fruited heavily, and the berries were of the largest type and uniform, every one being perfect in form. I find it earlier than I supposed, as it commenced ripening some three days earlier than the Early Wilson, or Wilson Jr., and finished its crop some 10 days earlier than either, making it decidedly an early variety, and some of our best fruit growers who have watched it carefully think it will supersede both these varieties, as they are both affected with the double-blossom nuisance. I tested the shipping quality, of the Minnewaska by handling a few quite roughly and laying them away and in six days some of them began to decay, but held their black color without any change to red to the last. On the whole, they have succeeded beyond my expectations as one-year-olds, and if they hold their good qualities with age they are certainly a great acquisition. Mr. W. A. Brown, the Inspector of the Mich. Fruit Exchange, and one of the best authorities in the State, has watched this variety carefully and says he believes it to be the coming blackberry.

Benton Harbor, Mich. R. MORRILL.

INTRODUCTION AND IMPROVEMENT OF NEW VARIETIES OF STRAWBERRIES.

I PROPOSE to make a new departure in the

introduction and dissemination of [new varieties of strawberries, with a view of preserving all the best qualities of the fruit and plants by making what may be called pedigree plants by selecting the best when they are in fruit. I believe that many new varieties have been ruined and have fallen into disfavor and consequently been discarded by a promiscuous introduction of runners, without knowing the size and quality of fruit any particular runner will bear. We can determine whether a particular runner is a strong, healthy grower; but we can not tell what kind of fruit it will bear. Probably some of the characteristics of the original will remain; but not all the best ones. My investigations and experience have taught me that there is as great a variation in different runners of the same plant as there can possibly be in the progeny of the same parents of fowls or other animals, which all experienced breeders know is not a little. In some of the runners there is a decided improvement, and these are the ones we want to "breed" from; but as a general thing, there is a tendency to degeneration, as many of the fine fruits and vegetables which have gone out of cultivation afford clear and striking evidence. I have noticed that plants which have degenerated in quality of fruit are prone to propagate themselves faster and stronger than those which maintain their higher qualities, and consequently one can see how it is that a new variety may be ruined by sending out the runners promiscuously without knowing what quality of fruit they will bear. The first consideration in the introduction of a new variety, should be strength of plant; second, productiveness; third, quality, size and color of fruit.

For the last four years, in the new variety (the "Banquet") which I am propagating, I have been selecting, marking and throwing out all plants which did not come up to the standard of the original in quality of fruit. In the introduction of this new variety I purpose sending out only one plant to each propagator and that plant will be in fruit at the time it is sent out, and have a pedigree number. One advantage of this plan (and a very great one) is that it will enable the receiver to observe and determine the principal characteristics of the new variety he is about to propagate, and all his stock will be grown from a plant combining the highest characteristics of the new variety and the propagator who makes the closest investigations and selections will have the best pedigree plants.

This will require a good deal of care and labor, and consequently carry single plants up to a high price, owing to the necessity of selecting the strongest runners and transplanting them and growing them another year, and selecting those which have maintained or improved upon the best characteristics of the original plant. Now the variety which propagates itself the most uniformly as to its original characteristics, and which improves in its better qualities will, by these selections, become the most valuable. I would request consideration, investigation and comments upon these views by those who feel interested.

Orange Co., N. Y. J. R. HAWKINS.

KIND OF NEW FRUITS WANTED.

THE multiplication of new fruits is so fast that great caution or a deep purse is needed to keep up with them, and the work of the RURAL is a good one in giving reports of tests on its trial grounds; still it can only speak of the conduct of the plants on its own grounds, and we must all judge of each case for ourselves. In the case of the Marlboro Raspberry the results of the tests by the RURAL do not hold good in my soil (a light sandy loam), in which it is a rampant grower and free bearer; but the quality of the fruit is not up to my standard, though where it originated the quality is good.

We need no more kinds except those that are an improvement in some direction on the old. A raspberry that is early, hardy, and solid for market is the only kind that should be welcomed. A blackberry to be of use should be hardy, early, of good flavor and size as well as prolific—hard things to get all in one plant, 'tis true, yet I believe it can be done. A new strawberry should be of good size and flavor and of an attractive color and ripen uniformly. It should be a good bearer and capable of resisting the rust by the vigor of its foliage.

The Sharpless is an example of a large, vigorous berry whose merit to me is lost owing to its uneven ripening, particularly in the early part of its ripening season. One end is then ripe while the other is green, and the first is rotten when the other is ripe. The Bidwell is somewhat of the same kind; so are several others. All new candidates for favor should be free from these defects. A berry that will yield 20,000 quarts to the acre ought to be of value; but to me it would be interesting to learn precisely the treatment given to produce such results, for at 25 cents per quart, the income would be $5,000 per acre.

Creedmoor, N. Y. H.

The Vineyard.

GRAPES IN 1886.

GEO. W. CAMPBELL.

NEARLY all grapes have done better this year, and ripened earlier than usual in this region, and I find this to be generally true in all sections throughout the State, and the grape crop will probably be, both in quality and quantity, above the average. There seems to be less difference also in the time of ripening between the varieties than usual, the earlier and later varieties coming to maturity nearer together, and all from one to two weeks in advance of their usual period. I will remark upon them about as they ripen in succession.

JANESVILLE was the first to color, beginning the latter part of July, and being quite black by August 5. The vine is very hardy, and generally healthy; moderately productive of rather small clusters, and medium-sized berries; pulp hard, with little reddish juice next the skin; quality and flavor poor; more sprightly, but hardly better than Talman; cannot be recommended except for extreme northern locations, where very early ripening is indispensable.

MOORE'S EARLY.—Vine very healthy and vigorous; fruit began to color about August 10 and was quite mature August 20. Berries larger than Concord; bunches smaller. Skin tender and easily broken, like Concord, which it closely resembles in quality and flavor. With me, it has not been as vigorous in growth or as productive as Concord, but it is valuable for early ripening, especially in northern latitudes.

LADY ripened this year only three or four days later than Moore's Early and still continues to be the best white grape of its season. The vine has the health and hardiness of the Concord; but is less vigorous in growth. In quality, better than usual this season, and fully matured August 25th. Some clusters were eatable on the 15th. Its greatest fault is a very thin skin, easily broken, and which sometimes cracks in rainy weather about the time of ripening. It is thought much better flavored than the Concord by most people.

GOLDEN GEM.—A small, white grape of excellent flavor, but too slender in growth, and too small to be profitable or popular except for amateurs. The vine seems reasonably healthy and hardy, but weak and slender. Claimed to be a cross between Iona and Delaware. Ripens very early—about Aug. 25, this year.

EARLY VICTOR has fully sustained its character as a hardy, healthy and prolific variety. The clusters are sometimes too compact and crowded upon the stems. The foliage has been perfectly healthy and the fruit entirely exempt from rot. It is a few days later than Moore's Early; clusters nearly as large; berries much smaller, but of better flavor. Very promising for a profitable early market grape.

FRANCIS B. HAYES has rather too much name, which will probably be cut down to Hayes, which will be better. I have fruit this year for the first time, on a young vine—some six or eight clusters—and am agreeably disappointed in finding it much better than I expected, as well as earlier. It has become so common to represent all new grapes as "earlier than Hartford," that I always receive the statements with many grains of allowance as to earliness. Judging from the performance of the Hayes this season, I should say Mr. Moore has not overrated or over-praised it. It is now (Aug. 28), well ripened, and is to my taste the best and purest flavored of all the Concord seedlings, black or white, that I have grown or tested. In growth, the vine is much like the Martha, and I should judge would be of about equal productiveness; but about ten days earlier in ripening, and of far better quality, having scarcely a suspicion of foxiness. The skin, though thin, is more tenacious than that of Concord, and it will probably both keep and carry well. Its color—a light yellowish green thinly covered with white bloom—makes it attractive in appearance, and though bunch and berry are not above medium in size, it has the promise of being a first-class variety for general culture.

EMPIRE STATE is making a strong, healthy growth, and all vines large enough are bearing well. Clusters, long and handsome; berries of medium size, very light green, but so covered with a thick white bloom it is nearer to a really white grape than any other variety I have grown. Some clusters are very nearly mature and quite eatable; but it will be from September 5 to 10 before they are perfectly ripe. It is a very fine-flavored grape, with a distinct Muscat flavor, suggestive of the finer foreign varieties. Although claimed to be a cross between Hartford and Clinton, I believe there is a dash of the foreign element in its character, though only developed in the fine quality of its fruit. So far, however, the vine seems both hardier and healthier than many fine natives, and the fruit has shown no disposition to rot. Unless some difficulty not yet apparent should arise hereafter, the Empire State will have a brilliant and successful future, as a hardy, healthy and productive grape of best quality.

EL DORADO is a strong-growing vine, with large and generally healthy foliage; but has never been very satisfactory, as its blossoms are imperfect and it often fails to set its fruit well. The clusters are generally small and straggling, and sometimes rot pretty badly. Can hardly be recommended except for amateur culture, though its quality is fine and it ripens early.

BRIGHTON has steadily grown in favor, and seems to improve as the vines get older, bearing larger and finer clusters, and more of them. Though not quite hardy without winter protection when the temperature is much below zero, it is a strong-grower and the grape is of fine quality, agreeable apparently to all tastes, being pleasant and sprightly, sufficiently sweet and without foxiness. The blossoms are apparently not quite perfect, having reflexed stamens, but it appears to fertilize well, and form handsome, not too compact clusters.

FAITH is one of Rommel's Missouri seedlings of the Riparia class, probably from the Elvira. An enormous, strong-growing, long-jointed vine, with large foliage. It is moderately productive, bearing long, slender clusters of rather small white or light-green berries, ripening quite early, of fairly good, but not remarkable quality.

NIAGARA is fruiting with me for the first time this season. The vine has made a good growth, the foliage is unusually healthy, and the berries and clusters are both good, for the size and age of the vine. Not yet ripe enough to judge of its quality fairly, but it has a good deal of the foxy odor already. Will apparently be fully ripe about Sept. 10, to 15th. Quite satisfactory this season as to growth and bearing. Vines show very little mildew, and no rot.

POCKLINGTON.—Judging from the past two years' experience, I think this grape has been under-estimated, and I venture to predict that as a popular and profitable market grape, except in a few Northern localities, it will grow in favor, as it becomes better known. Though often rather slow of growth while young, the vines are hardy and healthy, and the bunches and berries increase in size with the age of the vine, and it becomes one of the most productive, and the clusters the largest and handsomest of its class. No vines of any variety are bearing more handsomely this year, than the Pocklington. A very important matter is, that the skin of the Pocklington is more tenacious than that of Concord, Lady, Worden, or any other of the Concord seedlings, thus enabling it to be handled and shipped without injury, and also to be kept without injury for a long time after gathering. When fully ripe, it is of a delicate yellow color, and though it has a considerably foxy odor, it is rich and pleasant-flavored, and to most tastes a very acceptable grape. To my taste it is certainly better than Concord. It is nearly ripe, some clusters being now eatable. Will apparently be fully matured by Sept. 10 to 15.

VERGENNES is also doing well, and bearing heavily this season, berries and clusters improving each year. Now nearly colored, though the vine is really over-bearing. Foliage healthy no rot. A promising variety.

JEFFERSON. But little later than Vergennes. A good grower with large and healthy foliage. Bearing well; clusters large and very handsome. One of the best of all the red grapes; only requires fall pruning and laying down, with slight winter protections to succeed in all reasonably good grape-growing localities. It is a variety well worth a little extra trouble, as its only fault here is want of hardiness in very severe Winters. It endured, last Winter, 13° below zero, uninjured, growing near a stone wall with an eastern exposure. It ripens here about one week to 10 days later than the Concord.

LADY WASHINGTON has proven rather variable. In favorable seasons, like the present, it bears well, and when ripe is both handsome and good, though not high-flavored. It is a very strong grower: bears large clusters of light, pink-colored berries. Has shown some rot early this season; but is bearing fairly well. Will not be ripe apparently until the middle to last of September.

DUCHESS has made a good growth and set an abundance of fruit. The foliage has shown some mildew, and a good many clusters rotted pretty badly early in the season. A portion which escaped are promising to ripen well. A pure flavored and fine grape, worthy of a place where it can be grown.

Delaware, Ohio.

Farm Topics.

CORRESPONDENTS' VIEWS.

I HAVE made a trip through the East, and it paid me well to look over the style of farming they have there. It is a good thing for men to stir away from home now and then and see what other folks have to do in order to make a living. The Eastern farmers can teach us a good many things, but we can show them a thing or two also. They say they make their money by taking care of all the little things. It looks to me as though they are inclined to put too much time into these little things. A little more attention to what they call big things would help many of them. I found lots of men within thirty miles of New York making good livings on little farms of twenty acres. They buy manure by the carload and chemical fertilizers by the ton, and scratch up every inch of soil they have. It beats everything what crops of vegetables and fruits they can get. There seems to be a good market for every potato they can raise. I don't see what they get to do in the Winter. Most of them seem to keep a cow or two, but not enough for a dairy. The soil needs manure badly. I can't get over the idea that so much chemical fertilizer used year after year will ruin the soil. They need more substance; they can get that in barnyard manure. It strikes me that if I were in that business I would feed cattle through the Winter. I could get good steers at the market nearby. I could make it pay to ship baled hay from the West by the carload and feed it out with grain and oil-meal. I believe I could put flesh enough on the steers to pay for the feed, and have all the manure to pay for my labor. Some of them seem to do this on a small scale, but I think it would pay to work it heavily. Then, in hogs and spring lambs there is a good chance to get pay for the Winter's work and keep the farms up. It takes lots of room to pasture cattle, but a good many of them can be fed on a small farm.

Lenawee Co., Mich. A. C.

"H. B. G.," page 559, thinks few real farmers are making money. He must live in a poor country, or among a poor class of farmers—the two are closely allied. If there is any money to be made in any branch of work it surely ought to be made in farming, for upon that all other industries depend. The farmer is a general consumer as well as producer, and when he fails to produce his regular crops, all other business must stagnate. Friend G. is mistaken in saying that most moneyed farmers got a start in some other line of work. True, some men made a start off the farm, but do such men really make money from the farm? I doubt it. Most of them do not. They generally know nothing about farming, and after a few years' trial they are glad to go back to their former occupations. Some moneyed men take a farm more for the pleasure it gives them than for any money-making object. In my opinion the farmer who makes money, or has made it, is the one who commenced as a farmer, who has stuck to the farm through thick and thin, and through high prices and low prices has made it a business, and conducted it on business principles, who has given attention to details, has kept out of debt, paid cash for what he has bought, and taken and read a paper like the RURAL. C. L. N.

Tullahoma, Tenn.

I LIKE the RURAL because it shows us how to beat the imps of nature when they try to cheat us out of our profits. It is manure and more thoughtful work that we want. My land is rich, but I shall keep manuring it. Farmers here say that manure will heat the soil, and burn and kill a plant. During the Summer the ground is so hot that one cannot walk barefooted on it. I shall haul my manure out in the Fall and turn it under during the Winter. The RURAL is away ahead of our style of farming, but now and then we find a connecting link that pulls us a little out.

Medina, Texas. F. G. W.

WE are advised to do our work thoroughly. That is most excellent advice, but I think it can be carried too far. Some men are so thorough about their work that they get to puttering over it, and spend too much time over little simple things that don't pay. Such men never get ahead. You can't run a dollar business on a cent basis. S. H. J.

Broome Co., N. Y.

THE idea of saying that a strong and healthy young man can make what he likes out of himself is a good one. I believe it fully. That is the way to talk to farm boys. If a man is

tied down by sickness or deformity he can't be blamed for failing; but if he has his health and a fair amount of brains, he has no business to complain of failures. C. B. C.

Ira Co., Mich.

SHAKESPEARE said:

"It is not in our stars, but in ourselves
That we are underlings."

It is well for farmers to think this over. There are more farmers in this country than can be found in any other class of workers. In some of the Western States the right to vote and to be taxed are almost all that is conceded to farmers. The right of railroads, warehousemen and others to fleece them is guaranteed. Why do our lawyers and saloon-keepers have ten-fold more influence than farmers? Because they exert it that they may promote their individual or united interests and aims. English farmers are filling many important Government positions. In America the farmers are expected to occupy the humble but important position of mud-sills, by their own consent. Nine out of ten of our counties and legislation districts are represented by lawyers. They have had so much method in making our laws that an estate cannot be settled, or a note of hand collected, unless an attorney gets 10 per cent or more. However intelligent a farmer, merchant or mechanic may be, he cannot appear as a party in court, except through a lawyer. We have employed lawyers to do our business, until they have bound us "hand and foot." Some forty years ago a law was made in this State, permitting any man to appear in Court, and attend to his own case. Lawyers immediately nullified the law, by a decision that no one can appear in court to attend to business without a license to practice law. Had the law been permitted to stand it would have proved a grand educator of the people, and saved to their pockets many thousands of dollars. Farmers will never be emancipated until they act independently of political parties. Success to the 'Wheel' that is rolling in Arkansas and to the alliances throughout the northwest. They are omens of good. S. W. H.

Madison Co., Ind.

FAILURE—WHERE LIES THE BLAME?

E. DAVENPORT.

Too much whimpering; laying the results of one's own faults at fortune's door; "About Face!"; subscribe for the RURAL*; be honest with yourself—and with others; lots of frozen sense.*

Too much is written and said about the dark side of farming, condoling with the poor wretch who is doomed to toil from sunrise till dark for the bare necessaries of life; with no advantages, social or otherwise, and no money to spend for pleasure or improvement. In a recent article I find such a one described as obliged to endure his hard fate as there is no escape. The author advised him to bear up under the great load for the sake of his dear family dependent upon him for support.

I say to expressions of such sentiments "Bosh!" The chances are that the wife or the neighborhood supports such families. If it be true that hard labor does not bring a measure of success, there is a great leak somewhere, either in expenditures or in energy misdirected. But the probability is that the man in question is a chronic grumbler, loitering perhaps while others are at work. He trades upon credit, and shelters his machinery under the broad, blue canopy, wherever night or the close of the season overtakes it. I will venture that he pastures his cows, his sheep and his hogs in the same field with his horses and along with his geese if he owns any; that the nuts are loose on his mower, and the sickle is dull, that his fanning-mill is old and his wheat turns to chess; that his farm grows rougher, and that he is too shiftless to dig a ditch; that the wet spot in his field grows larger and deeper till the willows spring up and flourish "like the green bay tree." To sum up the whole matter, I will venture the opinion that he has the blues, and is disgusted with his business; that he is working without plans and does not profit by his failures.

Let me say to such a man "Halt! About Face!" Take for your motto "This one thing I Do," and think of it at every job you undertake. Do everything just as well as you know how, and it will be done poorly enough. If you do not know how to do a thing as it should be done, ask some one who does know. Be on the lookout for the best way. Waste nothing. Subscribe for two or three agricultural papers, and read them. If your seed is not pure, get some that is, and keep it so. Get new screenes for your fanning-mill, and your wheat will not turn to chess. Before you take that mower into the field, see that it is in perfect repair. If any part is defective, renew it at once. Keep everything tight. Repair, but never patch. Do not wait till noon to repair a break: do it on the spot, lest the weak place bring extra strain upon the strong. When you put away that mower, make a note of all repairs it will need before another year; then provide them in season. Put it into a house the same hour you finish using it. If your reaper is too old to use and you must have one, buy a new one. Do not give your note for it but buy for cash. Pay money for every purchase, even if you have to hire it. You can buy cheaper, you will buy less, and will take better care of what you do buy.

Do not do two days' work in one, and go fishing the next. Set up your grain so it will endure bad weather. Hire only the best of help, and if you do get a poor man, settle with him on the spot. Never invest in schemes promising sudden riches. Do not speculate. It might be well to buy a dog and feed him on traveling schemers.

Be strictly honest. If you have a cow that is not just what a cow should be, say so when you sell her. Don't let the best of the wheat get on top in the bag. Find no fault with the weather—it is both wicked and foolish. It is as good as if you had made it yourself. Don't grumble about hard times, or get the blues. Other men have their difficulties—be a man yourself. Other men succeed at farming; you can.

Study your business. Quit using tobacco. You have no money to waste; besides, you are going to be too much of a gentleman. Look on the bright side of things. Maybe you have the dyspepsia. You eat too much or too fast. If things go wrong there is a cause. Find it; fix it. Pay every debt the day it is due. Excel in something. Be authority in some line. Do not embark in a new scheme without careful investigation. If you have made a mistake, retreat; but in good order. If you are engaged in a branch that does not pay or is not pleasing, do not surrender without terms. Hold the fort for the honors of war. Cover your retreat, and go out with colors flying. In other words, do not quit a branch of farming in disgust and at a great sacrifice. Wait till the tide sets in a favorable direction for a change.

If you have decided you cannot be a farmer, adopt the same principle. Do not quit in the midst of failure, or the chances are you will fail in the next business you undertake. Go at it with a will. Study it. Wring success out of it. Then change your business if you will. The renewed confidence in yourself will bring success in your new calling, and the chances are it will awaken an interest in the old one. If a man fails utterly in one business, he is all the more liable to fail in the next, for "from him that hath not shall be taken even that he hath."

If not successful look to yourself for the cause and you will usually find it. Compare yourself with some one who does succeed. Don't say "He had a better chance than I." That is a coward's argument. A good chance must be improved to amount to anything. It takes the same energy and attention to save and use that it does to acquire. Some can do more than others; but every man can do well if he will. If you succeed you will be on hand to claim the credit, so if you fail be consistent and shoulder the blame. There is more difference in men than in their occupations. All callings afford more or less opportunities for success and the best of them chronicle many a failure. Look up. Thank God and take courage. Take a lofty view of life even on a farm, and you will respect yourself, be respected, and be happy.

Barry Co., Mich.

Field Crops.

THE WHITE RUSSIAN AND OTHER OATS.

IN the RURAL of August 21st, I notice comments on C. S. Plumb's experiments with oats. I notice also a paragraph in another article in the same issue, which says "Our minds were given us to reason and think; we must not settle that a thing is so just because somebody else says it is. Things that we prove for ourselves are worth twice as much as things somebody else proves for us."

I do not agree with Mr. Plumb's conclusions respecting oats, and do not know that the fact of his being connected with an experimental Station makes his experiments any more valuable than those of practical farmers made on a larger scale. I have read articles written by him before in the Country Gentleman, in which he praises horse-mane or side oats as better than all other kinds; but I consider his theories on the subject unsupported by facts. I have raised oats for 40 years or more, and have tried a great variety of kinds on a large scale and in different soils, and my conclusions with respect to side oats are the reverse of his. I consider the Russian the best of that kind so far as I have tried; but they are so late in ripening as to be generally discarded by farmers in this section. They usually ripen here about the middle or later part of August, and become more or less damaged by rains which are almost sure to come about that time; moreover, they ripen too late to sow wheat after them. They do not stand up any better than the panicle-growing oats, especially the White Australian, which I consider superior in that respect and in every other to any kind I have ever raised. They are the heaviest oats I know of, and retain that quality. I commenced raising them four years ago and now raise no other. They weighed 42 pounds to the measured bushel at first, and this year's crop averages 44 pounds. I never knew White Russian to weigh over 36. The Australian ripen very early. I sowed this year the last of April and commenced cutting the 20th of July, and they were all in the barn the first week in August. I cannot say that they yield better than the White Russian, but they yield equally well, the largest crop I have had of either being 70 bushels per acre by weight. I may change my opinion after further trial: for it requires some time to determine what is the best kind of oats. This is a crop that seems to be affected more than most other grains by soils, seasons, etc.

For instance, the first year I raised the White Australian I had nine acres on a clay loam rather compact soil, and adjoining this piece, on the other side of a fence, four acres of the same kind of oats on a loose, mucky, gravelly soil. The first named piece stood up well, and every rod was cut by the reaper clean, although some of it was over five feet high, and it would average at least four feet. The other piece, on the loose soil, lay almost flat on the ground, and there was much waste in cutting. If I had sowed none but this last I should very likely have thought they were not good to stand. There are conditions in which no oats will stand up well. A loose soil or a heavy shower at the right time will prostrate side and panicle oats alike. It may be well to try experiments on a small scale; but conditions will vary. The chemist in his laboratory may analyze the soil, but the farmer will never know what he can raise on it until he tries The great superiority of the Australian oats is in its weight. As ground feed for horses it is worth 25 per cent more than most other kinds, while in every other respect it is equal, if not superior, to them.

With respect to what Mr. Plumb says about "this oat being boomed extensively" and his remark that "all through Western New York, from Geneva to Niagara Falls, extensive fields of them may be seen lying flat on the ground," I will say it is news to me. I have never known of the variety being "boomed" as much as I have known of his efforts to write it down, and if he knows of "extensive fields lying flat" etc., I do not, and should like more explicit information.

[The White Australian oats were never "boomed" under that name, but as "Welcome" first, and now under several different names as we have stated repeatedly. Our friend is referred to page 626, third column, under What Others Say.—EDS.]

I do not raise Australian oats to sell for seed, and know of no one who does, nor of any "boom" attempted in their favor. I live in Western New York, between "Geneva and Niagara Falls." This year some of my Australian Oats stood five feet eight inches high and none of them were "down." The same is true of my neighbors' who raise them and praise them for precisely the quality which Mr. Plumb says is lacking. They are considered the best to "stand" of all kinds about here, and so long as they continue to do well, we shall continue to raise them, opinions at the Experiment Station to the contrary notwithstanding. WILLARD HODGES.

Monroe Co., N. Y.

CEREAL NOTES.

ARE Martin's Amber and Landreth Wheats the same? As seen in the field, grown side by side, they certainly do appear identical. But in studying varieties I have found it necessary to take into consideration the color of the grain as a diagnostic point. The grain of Martin's Amber is of a decidedly light *amber* color, while Landreth is usually a white or mottled amber and white. The original Landreth, I understand, had a white grain. My seed came from the party originally selling the seed to Landreth. I found that these two varieties were apparently identical in other respects, the spikelets averaging the same in number—18—the grains being about medium size, 1,000 of Landreth weighing 564 grains, and 1,000 of Martin's Amber 529 grains. The panicles of both are smooth, slightly loose, flattened and abruptly pointed.

Considering that the two above are considered distinct varieties, owing to difference in color of seed, the question comes to me—How fixed is the color of seed in a wheat variety? In 1884 I had the seed of a certain wheat sent me from an experiment station. It was of a most pronounced white color. The progeny of the seed planted had just as white a grain as the parent. In describing this same variety, the experiment station that sent it to me classes it as red wheat. I have no reason for doubting the accuracy of the work of the other experimenter, yet this evidence seems only to confirm other marked evidence that some varieties of wheat are very subject to changes produced through being grown under very different conditions—extremes we may say.

[We have received several alleged Blount's Cross-breeds from the Colorado College, the heads being larger and finer than any we had ever seen as raised in the East. These grains, sown at the Rural Farm, were easily recognized as old kinds; Clawson was one.—EDS.]

This variability in color or form may perhaps be illustrated in the case of Washington Glass or Surprise. That sent to me as Washington Glass came from the Ohio Experiment Station, and was certainly larger, squarer, and more compact at the tip than at the base of the panicle, yet seed of this same variety from the Agricultural Department (Rural, Vol. XLV., p. 545,) produced heads of the form of Laudreth. Now, did all this seed originally come from the same source, and by being grown under diverse conditions produce a variable progeny, or have we two varieties sold under the same name.

[We have reason to think that two kinds were sent out as the Surprise in the Rural's Seed Distribution.—EDS.]

I agree that Diehl-Mediterranean is preferable to Mediterranean Hybrid, it being the *original* name, and explanatory at that Yet I thus described it as having been sent me under that designation and as the popular name. If Armstrong is identical with Landreth, the former name should take precedence; likewise the name White Australian Oats should be used rather than Welcome

[We object to Mediterranean *Hybrid*, for the reason that the wheat is merely a cross, not a hybrid. In fact, we doubt whether it is even a cross.—EDS.]

This matter of names is really one of great moment, for the more names a variety has the more deception can be practised by seed-dealers in selling it. Hence the necessity of accurately describing all varieties introduced, and making synonyms where there are no doubts.

[That is very true.—EDS.]

I have grown this year over a half dozen varieties of side-head oats. These are not all later than open-panicle varieties, though, as a rule, they are later. One, called Egyptian, was of medium earliness, the first side-head to ripen, and preceded quite a number of open panicles. I know nothing of this variety, a most excellent one. I found a spoonful of seed in an old envelop, marked "Egyptian Double-headed Oats," evidently left here by some farmer. Grain white, of medium size, plump, short, abruptly pointed, quite different from White Russian, whose seed is long and tapering, and not strictly plump.

During the past two months I have been making very critical examinations of many oat varieties, and taking thousands of measurements of the various parts of the plant. I do not feel justified in saying that the proportion between chaff (glumes) and grain is strikingly variable. Certain so-called rust-proof oats from the South have large glumes, but so have they large, broad-backed grains. The clustered condition of side-head panicles gives the impression of chaff, that the same panicle would not give if opened. I do not think side-heads are chaffier than open panicles, neither do I believe that even the hulless oat has a greater percentage of chaff than the common oat, if we divest the latter of its flowering glume, or tegument.

Is there a rust-proof oat? I have not seen it yet, though I have grown oats under that name from several localities in the South. They all rusted with me. I should like to receive some genuine rust-proof oat seed.

Reports are coming to me that Manshury Barley is becoming more in demand among malsters. If farmers can command a good price for it, it will pay them to grow so productive a variety. Clawson wheat has had to fight the millers in its day. The farmers liked it for its productiveness and stiffness of straw. The millers disliked it because it did not mill to suit them. The millers had to give way to the farmers, and to-day Clawson is the leading wheat in New York State, as well as in other parts of the country. Perhaps the Manshury can be made to command a price if *pushed* to the point by the farmers.

C. S. PLUMB

The Herdsman.

A FINE HERD OF JERSEYS.

WHILE in Rochester, N. Y., recently, our correspondent visited the Grove Place herd of Jersey cattle, owned by S. D. McBride and P. J. Cogswell. The herd numbers about fifty head, and is led by the magnificent Stoke Pogis and Victor Hugo bull, Exile of St. Lambert, 13657. This animal has many excellent points. He is very large, weighing over 1,500 pounds as a three-year-old, still there is not a coarse feature about him. His dam, Allie of St. Lambert, has yielded under test in midwinter, 26 pounds 7 ounces of butter in seven days, and has given 63 pounds of milk per day. Her udder measures 63 inches in circumference. She is a large, beautiful cow, and one of the finest daughters of Stoke Pogis 3rd. St. Lambert is in great demand. Every one sending a cow is required to pay $100 on the birth of a living calf. Mr. E. J. Larrabee, of Albany, N. Y., has sent four of his finest animals there this year, and ex-Congressman Greenleaf, of Rochester, had two fine cows there when our reporter visited the herd. All of the young things that have descended from the herd of McBride and Cogswell this year and last are sired by Exile of St. Lambert, and show a remarkable resemblance to each other. The calves were all large and healthy, and without exception showed a good udder development. Over 95 per cent. of his get are of solid color, and nearly the same percentage have been heifer calves.

At the head of the RURAL'S premiums offered to subscribers last year was a Jersey bull from this herd, which Mr. E. Williams, of Montclair, N. J., won. The calf is a strong, healthy, vigorous animal of solid color with full black points, sired by Exile of St. Lambert, and is to be called Rural Prince.

Our reporter's attention was attracted to a large cow of the Victor family, which had a fine escutcheon, and also to the dam Eva Locust, 21050. Many of the young animals in this herd can be traced to Coomassie, Alphea, St. Helier 45, Welcome, Jersey Belle of Scituate, Albert 44, Pansy 8, Favorite of the Elms and other famous strains. All of the young heifers have been bred to Exile. Attention was also called to Waiter Girl, a large, beautiful, silver-gray cow, which lately tested at the rate of 20 pounds 2 ounces of butter in seven days. Her bull calf seemed a very desirable animal to head a herd, as the average record of his own dam and sire's dam foots up 23 pounds 7 ounces of butter in seven days.

HEREFORD CATTLE.

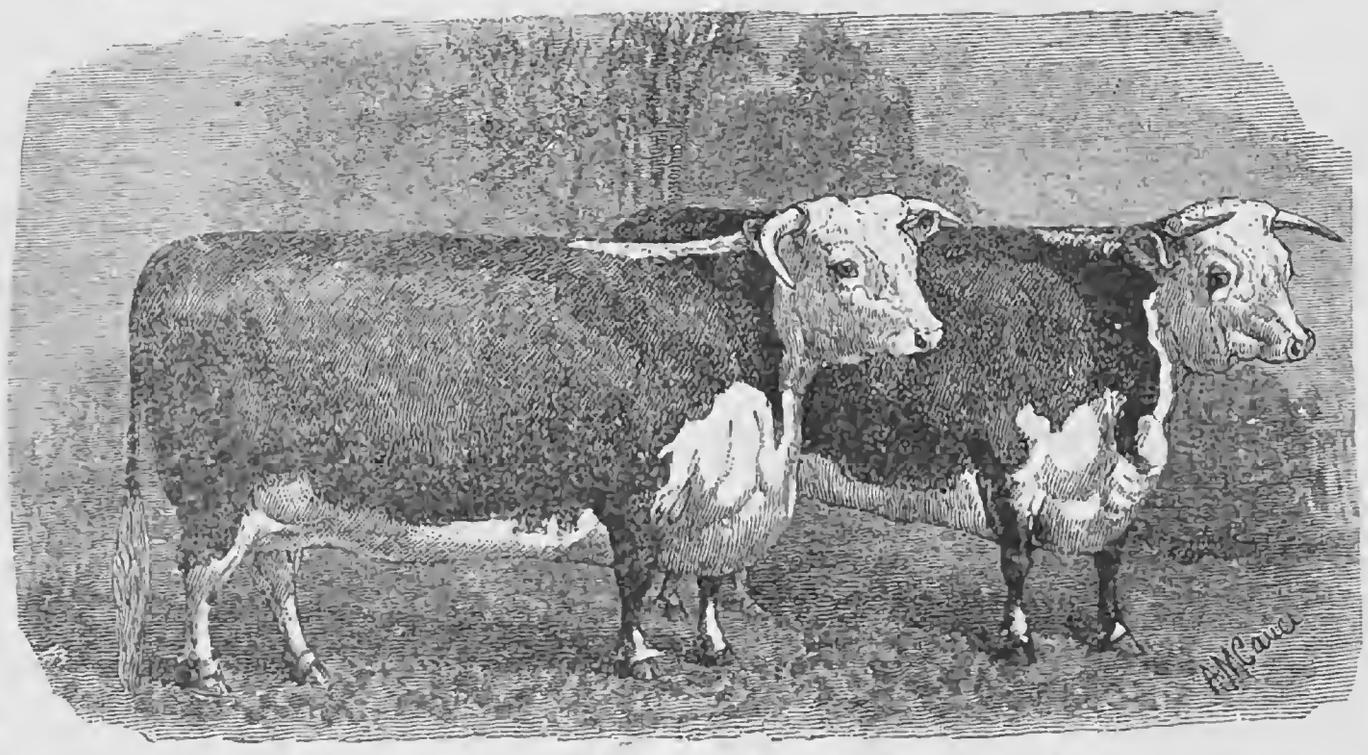
THE Hereford is treading close on the heels of the Short-horn. As a beef breed many consider the former on a line with the latter, or even a little ahead. The earliest notices of the White-faces praise them for their large size, hardiness and excellence as draft animals, as well as for their aptitude to fatten readily, and for the superior quality of their meat, beautifully marbled by a desirable admixture of fat and lean, and for their profitableness as feeders, as it has long been claimed that in proportion to the feed, they lay on more flesh than any other breed. Beyond rare notices of this sort, little is known as to the early history of the race before the opening of the present century.

They are, no doubt, to a great extent, an aboriginal race bred for ages in the county from which they get their name. It is generally thought that they belong to the same stock as the somewhat smaller cattle of Devon and Suffolk, and like these they were originally a solid red. As these counties are a considerable distance away, however, and other breeds were common in the intervening country, there are some doubts on this point. The present characteristic markings of the breed are of comparatively recent date; for late in the last century and early in the present, there were Hereford cattle of dark red or brown color with scarcely any white, as well as others with mottled faces.

In the History of Hereford Cattle just published, the authors, after a full rehearsal and comparison of all attainable information, say that a review of all the circumstances connected with the origin and development of the breed seems to establish the fact that it was founded on a variety of aboriginal cattle of the type from which the Devon and Sussex breeds have been derived. At an early period White Welsh cattle, larger in size, and probably of foreign extraction, were introduced and mixed with the stock of Herefordshire, imparting a tendency to white markings, and enlarging the frames of the native breed. In 1671 Lord Scudamore introduced from Flanders a number of red cattle with white faces, which "strongly accentuated the white face," without rendering it universal. This cross probably also increased the size of the breed. During the 18th century other districts of England were resorted to for stock, as we read of the introduction of Gloucestershire, Devon and Montgomery blood into the race.

Like nearly all our most valuable modern breeds, the Hereford would therefore appear to have been the result of judicious amalgamation of various good sorts, both home-bred and foreign. Various elements were grafted on the native stock, stimulating the development of better properties.

It was in 1760 that Robert Bakewell, of Dishley, Leicestershire, at the age of 35, succeeded his father as proprietor of the Dishley farm; but he had already obtained some reputation as a breeder, which was soon greatly increased. His example and the results of his labors stimulated not only the Collings and other early Short-horn breeders, but also the breeders of Herefords. Down to the close of last century cattle in England were bred more for excellence before the plow or the wagon than in the dairy or the shambles; and Bakewell was the first to devote his attention to the production of animals that would mature early, lay on fat readily at the lowest cost for feed, and give generous results at the pail; and to accomplish this object he was the first to employ a scientific method of breeding.



HEREFORD CATTLE. From an old picture. Fig. 365.
Re-engraved from the "History of Hereford Cattle," page 194.

What the Collings brothers were in the improvement of the Short-horns, the Tomkins, father and son, were in the improvement of the Herefords. The elder Tomkins (Benjamin) is supposed to have begun breeding about 1742, and had a large measure of success, but his son, Benjamin Tomkins, the Younger, was by far the more noted breeder. His herd is supposed to have originated in 1766 from stock purchased in the neighborhood of his farm at King's Pyon, Herefordshire, and though he paid little attention to color, and early in his career was not particular about introducing the blood of other Hereford strains, or even of other breeds, he left at his death, in 1815, what was considered the finest herd of Hereford cattle in existence. After this had been greatly reduced by private sales, 28 head were sold by auction in 1819, and averaged £149 each. At Charles Colling's sale at Ketton, in 1810, the average of 47 Short-horns was £151,8*s.*, and at Robert Colling's sale at Barmpton, in 1818, 61 head averaged £128, 17*s.*, 10*d.*, and at his sale in 1820, 46 head averaged £49, 8*s.*, 7*d.* So that the prices at the first great Hereford and Short-horn sales were hardly in favor of the Short-horns.

Other eminent Hereford breeders, contemporaries or survivors of Tomkins, and whose names and strains are still honored in Hereford circles, are Galliers, Tully, Skyrme, Price, Hewer, Jeffries, etc.

The cows Dorothea and Theodora, Fig. 365, winners of the first and second prizes at the Royal show of 1884, are specimens of the breed. As will be seen, the face, throat, chest, belly and part of the legs with the crest of the mane and tip of the tail, are white. Countenance pleasant, and open, denoting good temper and that quiet disposition essential to economical fattening. Head small in comparison with the rest of the body. Chest deep and full. Shoulder-blades thin, flat and sloping towards the chine, and well covered with mellow flesh. Chine and loin broad. Hips long and moderately broad. Legs strait and small. Rump forming a straight line with the back. Thighs full of flesh to the hock. Flanks deep. Ribs well sprung. The whole carcass covered with rich, mellow flesh. Hide thick, yet mellow, well covered with soft, glossy hair with a tendency to curl. Horns such as are borne by the "middle-horned" class.

STOCK JOTTINGS.

IMPORT DUTY ON CATTLE. — Considerable indignation prevails among the stockmen of the Northwest at the recent imposition of a 20-per-cent. tax by the Canadian Government on importations of American cattle, and threats of retaliation are made. A number of stockmen finding the American ranges over-stocked or the grass in poor condition, have crossed the line into the Northwestern Territory, where better pasturage can be had for little or nothing, and they are greatly displeased at finding that if they drive their herds across, they will have to pay this duty. But this tax has really been legal since 1878, though it is only of late that it has been "oppressively" enforced. We levy a duty of 20 per cent on all live stock imported from Canada or any other country, and the Dominion is merely retaliating. Canadians themselves have to pay the same tax on imports from this country, and Americans importing stock into the Dominion are merely placed on the same footing as Canadians. Some time back, owing to fear of pleuro-pneumonia, the importation of American cattle into the Dominion was absolutely forbidden under any conditions without undergoing a quarantine; but this regulation has been relaxed in reference to Northwestern cattle. Our Treasury Department has lately issued orders for the stricter enforcement of the duties on cattle from "contiguous foreign countries," and Canada has simply followed our example.

SEA TRANSPORTATION OF LIVE STOCK.—A considerable number of the transatlantic steamers are now fitted up with special reference to the transportation of live stock with much less risk of injury and far more regard to comfort than even a year ago. Speed is recognized as an important consideration at sea, as greatly lessening the risk of loss, which other things being equal, is always heaviest when the animals have been weakened and demoralized towards the close of the voyage. Lately the new steamer Alcides, built and fitted up as a first-class live stock boat, made the round trip between Glasgow and Montreal and discharged both cargoes within a month—an unprecedented feat. She had 141 horses on board—mostly Clydesdales—besides a lot of cattle—chiefly polls. Montreal is becoming a favorite port of debarkation with American as well as Canadian shippers of live stock. The distance to the mouth of the St. Lawrence is less than that to Boston or New York; the water thence is smooth; the animals are carried far inland; the railroad routes to the homes of the importers are usually shorter and more convenient, and as the animals are "for breeding purposes," there is no trouble about bringing them into the United States duty free.

RESCUE OF STOCK FROM FIRE.—Scarcely a week passes without accounts of heavy losses of cattle and horses confined in burning stables. In a few cases the animals become so dazed and frightened that they would not escape through an open door if loose, but as a general thing they might be saved if they were not tied; and often it is too risky a business to enter the burning building to untie them. Lately an ingenious contrivance for releasing horses, cows and other stall animals, in case of fire, has been invented by Mr. Frederick Chawner, of England. Inside a tube, which is fixed underneath the feeding trough, runs an iron bar, and to this, in the center of each compartment, a hook is welded. By means of an aperture in the tube the halter-chain may be threaded on to the hook. In case of fire the animals may be instantaneously released by any one outside the building by drawing out the rod three or four inches, for the hooks being drawn past the aperture, the halter-chain or rope falls to the ground. To farmers and the proprietors of large stables, the invention is an important one.

THERE must be a good deal of dissatisfaction with recent methods and objects in Short-horn breeding in England, when a Short-horn enthusiast suggests (in the L. S. J.) that the Short-horn Herd Book Society should burn its 31 volumes and begin afresh. This would be a truly heroic way of getting rid of the "pedigree" incubus. But what, he asks in desperation are Short-horn men to do to keep in the race, while they are being beaten "all round"—by Herefords in the Southwest and Aberdeen-Angus in the Northeast. Can American Short-horn men answer the conundrum?

AYRSHIRE cattle won the champion milking prize at the Bath and West of England Show the other day. Why don't the English Agricultural societies have separate classes for this valuable dairy breed? Why don't Ayrshire breeders call more attention to their merits on this side of the water?

A South American buyer purchased three yearling Booth Short-horns and a bull at Warlaby the other day.....A draft of 45 of the Aberdeen-Angus herd of Sir George McPherson Grant of Ballindallock, Banffshire, Scotland, were sold by auction on September 7. Among them were specimens of the Erica, Pride, and the other famous families of the herd. In spite of depressed times the prices were satisfactory. .....Who knows anything about a race of "white-polled cattle," said to be now bred in Erie County, New York? They are reported to be good milkers and beef producers, and it is said to be the intention to improve, refine and pedigree them.

DEVICE FOR HOLDING A BULL.

A FRIEND, whose address we have unfortunately mislaid, sends us the device shown at Fig. 363, p. 625. It was suggested by the picture on page 526, illustrating the riot which takes place in a barnyard when an ugly bull once gets his head down. The device is fully shown in the picture. A small ring is fastened into the nose ring and connected with a strap which passes up over the head to be fastened to a surcingle just back of the shoulders. It is impossible for the bull to lower his head, and he can be led with safety. It is not intended that the head should be held up all the time, but only when the animal is being led from place to place. It will be handy to use in leading ugly bulls to the fair.

Dairy Husbandry.

COMBINED ICE-HOUSE AND MILK-ROOM.

OUR ice-house and milk-room combined cost us about $25, not including labor. The outside dimensions are 10x18 feet. The uprights—all 2x10 inches—are set two feet apart edgewise. Siding is nailed to the outside and lining to the inside, thus making a dead air-space of 10 inches. The roof is made of half-inch stuff laid like clapboards with about eight inches to the weather. A partition of inch stuff runs through the center to the hight of the eaves, thus making the ice-house eight feet square and the milk-room the same size. The floor of the ice-house is made of clay, rammed hard, covered with six inches of gravel and four inches of sawdust on this. The ice is surrounded on all sides with six inches of sawdust packing. A small window at each gable end and a small box running up through the center furnish ventilation. Shelves along the partition allow for shallow milk setting. In one corner of the milk-room, towards which the floor of the ice-house slopes, is placed a tank for deep setting. This is 20 inches wide, two feet six inches long and two feet deep. This will hold five or six five-gallon cans. It is an ordinary dry goods box caulked, and given a coat of asbestos, and sunk into the ground to receive the drip from the ice-house with an outlet at the bottom emptying into a drain. When the drip from the ice-house is not sufficient, water is put in from the well. The cans are made by a tinsmith. They are 8½ inches in diameter and 19 inches deep. They are fitted with tight covers and have little balls

of solder at the bottom so that the water can flow under as well as around them. The handles are made of copper wire. The cans cost 75 cents each. M. E. L.

Putman Co., W. Va.

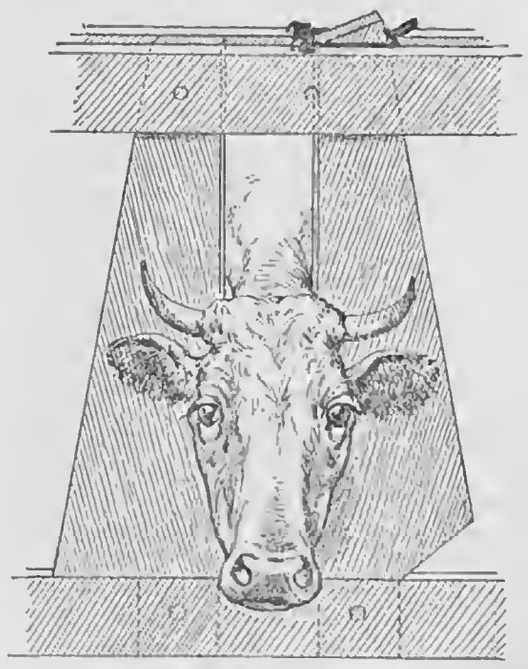
ANOTHER IN FAVOR OF THE GENERAL-PURPOSE COW.

I want to vote in favor of the "general-purpose" cow. Such an animal is not only possible, but profitable. I have never seen anything that came nearer such an animal than good Short-horn or Holstein grades. A cross of a thoroughbred bull on our common cows gives an animal that is hard to beat when you take cheapness, hardiness and general worth into consideration. People who advise farmers to keep nothing but thoroughbred stock do not tell the whole story. We have to get down to the intrinsic value of cattle. We have no time to raise pedigreed stock and but little money for advertising. It will be hard to find thoroughbred cows that can turn more food into milk and butter than my grades can. C. P. S.

Essex Co., Mass.

FASTENING FOR STANCHION.

Mr. William Petrie sends us a sketch of a stanchion-fastener which is in use among his neighbors. We show it at Fig. 364. It is



R. N-Y.

Fig. 364.

made of ⅜-inch iron and attached to the stanchion by means of two staples. These staples are just large enough for the fastener to play in. It will be seen that the end of the iron is turned up, so that when the upper part of the stanchion strikes against it, it rises and falls again of its own weight. It can be easily raised to liberate the cows and will hold them securely. Any blacksmith should be able to make them.

Veterinary.

MUD POISONING.

In Montgomery County, New York, there has been some alarm among farmers for fear "black-leg" had broken out among the cattle. The cattle got lame; then the legs swelled and at last became covered with sores. This is a good description of the effects of mud poisoning which is sure to follow if cattle are obliged to wade into mud holes or ponds to get water. The beds of creeks and drinking places, where the mud has accumulated, and all pond holes from which the water has dried out will poison the feet of cattle and also the skin on the legs. The soreness will begin between the toes, and this will cause lameness without any discernible cause, and then the more tender skin on the hind part of the legs will crack, and with the irritation of the flies and the mud a rapid inflammation follows, and the leg swells and now becomes hot and feverish and swells badly.

Cattle will seek these moist and cool places to stand in when not thirsty. In the early stages of the trouble, washing the feet clean and greasing between the hoofs will cure, and the same treatment will also heal the legs; but when the inflammation becomes severe the animal should have regular doses of Epsom salts daily, and be kept in a dark stable, or the legs should be bound up to keep the flies away, and washed daily with a weak solution of carbolic acid, and be well smeared with salted grease. In droughts when water is scarce is the favorable time for mud poisoning.

F. D. C.

Horseman.

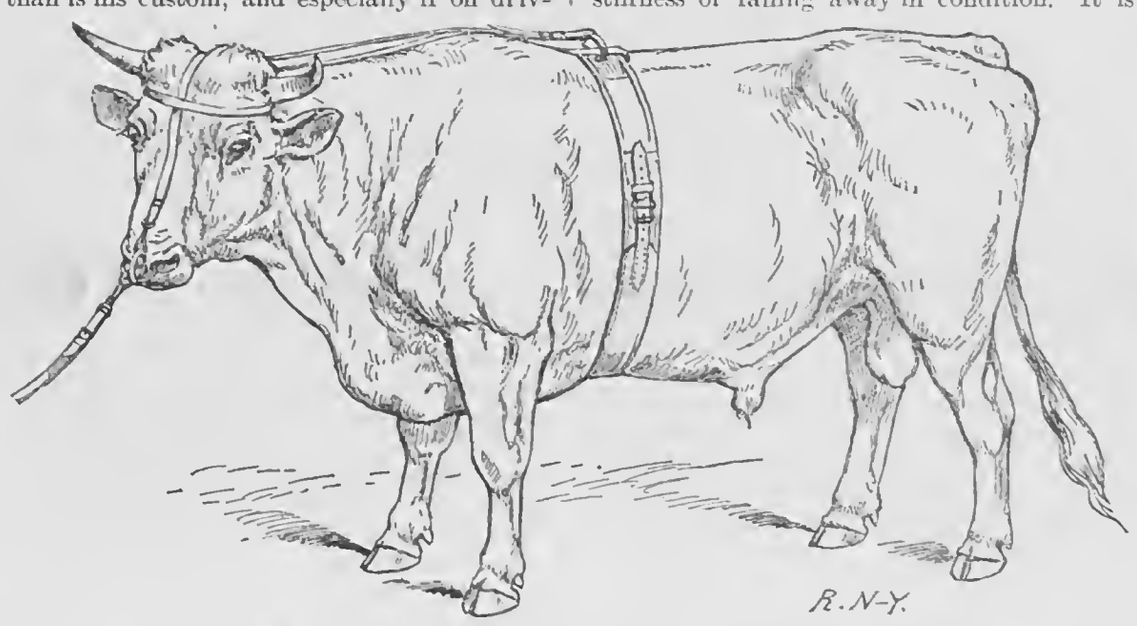
THE HORSE UNDER A CATARRH.

Horses that have been in moderate service during the hot weather, especially if they have been well fed, are generally in that condition termed "soft," and as the fall weather comes on with its customary cold winds, horses are very liable to contract catarrh, from being driven till a little fatigued or till the skin is giving off moisture freely. When evil effects follow, these come in one of two ways, or may come from the two combined; namely, from a chill upon the relaxed surface, sending the blood inward upon the delicate lining of the air passage, resulting in congestion and followed by inflammation, and constituting catarrh of the air passage; or it may, and sometimes is caused by the cold current of air entering the lungs, acting directly as an irritant upon the delicate mucous lining.

When the horse has contracted catarrh, what is it, and what may it lead to? It is simply an inflammation of the mucous lining of the nasal cavities; or at least this may constitute a catarrh in itself sufficient to cause a degree of fever, perhaps raising the pulse from its natural beat of about 40 per minute, to 50 or 55. In such a case, a careful observation of the respiration will show this is quickened; the nostrils will be seen to be red and expanded on expiration, and the flanks will be drawn in, and will be pushed out a little more than ordinarily. Now this breathing keeps tally with the pulse and the temperature, the latter being quickly seen if the thermometer be brought into requisition.

Catarrh means more than this. It may fix itself upon the deeper-seated air passages, and then we have bronchitis—pneumonia may not be far off. The owner, after having driven sharply against a cold wind; or, having warmed his horse to the free-sweating stage, then permitted him to stand in a cold current long enough to give time for the animal to cool off, will act wisely in watching the horse's movements carefully. If, on continuing his drive, he observes now and then that the animal slackens his pace, moving with less spirit than is his custom, and especially if on driving to the stopping place and unchecking him he at once drops his head low down, alternately partially elevating and putting it down again, he had better put him in a warm place at once, try his temperature and pulse, and if these are going up, he can readily detect this, and the quickened respiration will be additional proof if any is needed. In such a state the horse will leave his feed, stand as though under some distress, and many a valuable horse is lost for the want of a little skillful attention at this particular juncture.

What to do? Buckle a woolen blanket around him, and in place of drenching him with physic—salts or any other thing—as many would advise, simply give him the tincture of aconite root, ten to fifteen drops each half hour in a little water, the dose to be large or small, as the heat and pulse are high, or the opposite. Watch the pulse, and as you observe that it is diminishing in frequency, graduate the dose accordingly. Keep the heat down for a few hours, or a day and night, and a threatened serious trouble may be averted—namely, pneumonia or bronchitis. WESTERN.



R. N-Y.

DEVICE FOR HOLDING A BULL. Fig. 363. (See Page 624.)

The Swineherd.

PIG ATTENTIONS.

COL. F. D. CURTIS.

The most trying time for pigs is when their mother's milk is not sufficient to satisfy their growing wants and when they are old enough to eat grain and assimilate it well. A very young pig needs milk, and nothing agrees with it so well as that of its own kind. After it has sucked its mother a few days, or even a few times, it can be made to live on cow's milk; but it must not be fed over a few teaspoonfuls at a time or it will have colic and die; and if it does not die, it will be a poddy and forlorn-looking thing.

The same is true when fed grain while it is young. It will get a big stomach, and be hollow in the back and grow out of shape. Pigs will begin to eat grain when three weeks old, and at first a few kernels are all they should have at a time. Corn is good, but oats are better. The very best meal is fine wheat middlings, and they should be well mixed and not diluted, so that it will take a considerable bulk of swill to satisfy their hunger. Bulk or stuffiness will make big, bulging stomachs and give pigs a miserable appearance. Where there is plenty of cow's milk for pigs all this particularity is not necessary, as they will do well on the milk with a little middlings mixed in, or on the milk alone. It is well to feed a little corn or oats together with the middlings, but it should be given between times. Pigs will always do better when allowed to run in the grass, as they will eat more or less, and it has a laxative and cooling effect.

It is always an injury to pigs to compel them to squeeze through holes under the fence or in any place. It tends to make them hollow in the back, and it hurts their stomachs and will often make them sore in the sheath on account of it being bruised on the ground. The trough should always be set in a clean place, and be kept clean. It should be just high enough so that the pigs can reach into it without humping up their backs, or being obliged to put their feet in. Pig feeding of this sort isn't profitable. When confined in a pen the pigs should have some fresh grass or weeds every day, and a liberal bedding. Weeds are made for pigs to eat and convert into manure, and a farmer who wants to turn things to the best account will keep his hogs supplied and so utilize them in the best manner.

The bedding is important to enable the pigs to lie more comfortably and to afford rest to their feet and legs after standing on the hard floor. This is one item in pig attentions which must not be omitted, or there will be stiffness or falling away in condition. It is not essential to sour the food of young pigs as of old ones. As the bulk is so much less in the stomach, there is less fermentation and flatulency. When large quantities of meal or middlings are continued, the work of fermentation should not all be left to be done in the stomach. The softening also helps digestion. It is better to have the pigs in small bunches, not more than 10 in a pen, or 20 in a field.

ALTERATION OF NAME.

There are in England no longer Large, Middle and Small Yorkshire White breeds of swine. The word Yorkshire has been dropped, and it is not unlikely the Large and Small White breeds will soon be dropped also. These, though the original breeds, are fast losing ground in public favor. The former is considered too large and coarse, the latter too small and stunted to please the general buyer. The number of Large and Small Whites at the public shows has lately fallen off, and less care is noticeable in their breeding. The Middle White is fast eclipsing the two other breeds by the crossing of which it was produced. By this crossing greater size has been obtained on the one hand, and a better quality of flesh on the other. The reason assigned for dropping the name Yorkshire is that these breeds have been continually crossed with Suffolks and other white breeds, which, whatever their merits and pedigrees, were not in any way allied to the Yorkshire.

The Poultry Yard.

CHICKS DYING IN SUMMER AND FALL.

It has been noticed by some that while early-hatched chicks have made good growth, with but little care, the late chicks begin to die when about two weeks old. The natural supposition is that the trouble is caused by lice, which is true in many cases; but there have been instances in which even the best of care, with freedom from lice, did not save the chicks. Those hatched under hens are not safe, but as the broods in the brooders are larger in number, and receive the direct attention of the poultryman, the trouble there is more particularly noticed.

To get at the root of the difficulty it may be stated that chicks hatched at either too low or too high a temperature will come weak, and though this fluctuation is often a fault of some incubators, the same may be said for the hen. Some hens do not generate sufficient heat, while others, when very fat, keep the eggs too warm in Summer. When the chick is hatched under these disadvantages, the yelk is not sufficiently absorbed, and though the chick may pass over the difficulty yet it is liable to succumb whenever the conditions in the brooder are unfavorable. One of the principal causes of failure is that because the weather is warm the chicks are not given sufficient warmth, while those with hens are dragged about and fatigued by the dam's following the strong and lively chicks from place to place. Even in the warmest days of August young chicks require warmth in the brooders, which may be observed by their crowding together. If heat be lacking (and they only want a little) the result will be cold on the bowels, and death is attributed to constipation. No mode of feeding will save chicks affected in this way. They become droopy, refuse to eat, and die. It is safe, however, always to look carefully for lice, as the vermin work when unseen.

Another point frequently overlooked, is that when the cocks and hens are moulting they are debilitated, which accounts for the failure of eggs to hatch, and even when there is a limited number of chicks from eggs in the Fall, the debility is passed to the young, and they come into the world enfeebled and lacking in vigor. As insect food is usually plentiful, but little meat is fed to the chicks, which is a mistake. At least three times a week chopped meat should be given the adults and chicks. All birds, even those that feed exclusively on grain, provide animal food for their young until fully feathered, and if this rule was observed in the case of chicks they would make better progress and the loss would be smaller.

Keep the chicks warm and dry, even in the Summer and Fall; give animal food; provide water in a manner to prevent them from getting wet, and avoid dampness. In using eggs for hatching, put a cockerel of last Spring's (early) hatch with two-year-old hens, removing the old cocks, and there will be a larger percentage of chicks. The early spring broilers should be hatched from November to March. P. H. JACOBS.

BREEDING WYANDOTTES.

I beg to differ from J. H. G., in a late Rural, as to the above breed losing its popularity. I find Wyandottes are growing in favor continually. I know not what luck people in general have had in hatching chickens from eggs purchased at a round price. I buy none but high-priced eggs to renew the blood for breeding purposes; but I do not always get the best-marked birds. In April I bought one setting for $5; result, three chicks. I notified the breeder of the hatch and sent $5 more and received 16 eggs, from which I hatched eight chicks. I have raised seven of them. They cost on leaving the shell $1 each. They are nearly all good breeding birds. I would not sell them now for $3 each, or take $30 for the lot.

I next sent to a dealer $8 for eggs from his best stock. I received 16 eggs and hatched eight chicks. One died, leaving seven for eight dollars. There does not appear to be a prime bird among the lot. I have much better from my own stock. So much for costly eggs.

The eggs I have sold this season from the best pens cost $3 for 13; from the other pens, $2 for 13. I have had no complaint of lack of fertility; nor have I heard of a setting bringing less than eight chicks except where a customer notified me that a hen had left her nest and spoiled all of them.

J. H. G. cannot be a novice from his style of writing, but from some statements contained in the article I must conclude he did did not pay $5 for his setting of eggs; they must have been eggs sold at a very low figure. No careful breeder will sell eggs from thoroughbred stock which will produce such bad results. I have heard of only two white (Albino) Wyandottes hatched from all the eggs sold by me this season. True, they have not yet been bred according to the standard for a sufficient time to perfect the breed; but nineteen-twentieths should breed true to color. I have, on an average, met with as good success in hatching and markings from eggs sold at $2 to $3 per setting as from those bought from so-called first-class breeders. On one occasion I bought from a noted strain three settings that cost me $10, each setting being marked as from separate pens. Two settings bought 18 chicks, one setting nothing. All were hatched in the same incubator at the same time. Not one of the chicks would score above 85 points, while many chicks from my $2 eggs scored from 90 to 93 points. It no doubt often happens that high-priced eggs are sent from second and third quality mating birds.

Eggs from good birds are sold by many breeders at $3, and even $2 per setting; but all the eggs at these figures are not from good birds, and eggs at $5 per setting do not in many cases give satisfaction, but in all cases Wyandottes should show their origin, except an occasional Albino. They have come to remain, and even if irresponsible parties occasionally sell a mixture of eggs for pure-bred, they are nevertheless bound to grow in public favor. WYANDOTTE.

What Others Say

DAIRYING IN ENGLAND.—Prof. L. B. Arnold, our well-known dairy authority, has just returned from a tour among the dairy counties of England. In a very interesting article which he contributes to the New England Homestead he says that the factory system has been growing in England since 1869, but the number of factories has only got up to 80 in the 17 years it has been progressing, and yet they seem to be doing fairly good work; judging from the few factories visited and the cheese seen, they are turning out quite as good work as the factories in the States, but not as good as the Canadian factories, especially those in Western Ontario in the neighborhood of Ingersoll. The best cheese Prof. Arnold met with was from Western Ontario, and it everywhere took the lead in reputation and price. Not all the cheese, however, from Western Ontario was fine. All he saw that was made on the old acid process, still too much in vogue in Canada as well as the States, was no better than State or English cheese, if as good. It was the cheese made by drawing the whey sweet and giving the curd a long ripening after it is out of the whey, by keeping it warm, that has given Canadian cheese the good name it has acquired, and it seems a pity that other factorymen, and especially our own, are so slow in adopting it. This process is as much superior to the acid process as the factory system is to private dairying, which the English dairymen are adhering to with a tenacity that looks to us like a blind and stubborn conservatism, but many of our own factorymen show a conservatism equally blind and stubborn in their stupid continuance in the old acid rut. Whether the product is butter or cheese, so long as the bulk of it is made in families, there will be about as many varieties as there are families making it, and while some of it may be fine and as fancy as it is possible to make, yet the bulk will always be inferior because the great majority of makers are not experts. A few can always be found in any community more skillful than the rest, and it is the submitting the milk of the many to the skill of these few that gives the associated system an advantage in quality and uniformity over private dairying, that it will always retain. So long as the English stick to their present preference of making cheese in families, the great bulk of it will continue to be inferior to that made by their kin in America who associate and employ their best experts.

In the midland counties where most of Prof. Arnold's time was spent, English butter was not quite as high-flavored or as high-colored as American butter, either States or Canadian, when all were uncolored and otherwise made alike. A rich soil, all other conditions being equal, contributes to richness of milk and to high flavor in butter, and seeing that the soil averaged richer in England, he anticipated finding higher-flavored butter, and was surprised and at first a little puzzled to account for its being lower-flavored instead, but after studying the situation awhile, he thought he saw two causes operating to produce the unlooked-for qualities. One of these was the want of sunshine and hot weather.

In England there is more cloudy and foggy weather than here, and the grass there gets much less sunshine. England has a more equitable climate than we have. It is warmer there in Winter and cooler in Summer than with us. Flavor in grass, as in fruit, is the combined product of sunshine and warm weather. Other circumstances may modify the flavor of grass, but where all other conditions are equal, the lower the temperature at which it grows the less flavor will develop in it.

The other cause modifying the butter of England is the breed of cows employed in its production. In the midland counties they are nearly all Short-horns, and many of them pedigreed animals. That breeds, as well as species, mold the flavor of their milk differently is a fact well understood. The difference between the milk of different species is wider than between different breeds of the same species. The milk of a mare and a cow differ more than the milk from different breeds of either species, but that the Jersey, Devon and Kerry cows give milk which makes higher-flavored and higher-colored butter than Dutch cows and Short-horns is plain, and the difference between Short-horns and the common American cows, though less distinct, is wide enough to be distinctly appreciated, and to be recognized as a sufficient cause for a difference in the butters made from the milk of two kinds of cows.

Prof. Arnold does not make this comparison to speak disparagingly of English butter as compared with American, or as being in any sense poor when taken as a whole.

English butter is no more uniform than our own, but though originally not possessing quite as much flavor as ours, as an average it goes upon the table to suit his taste and the taste of the average human, better than average American butter does. He considers it a vitiated taste that calls for crowding an ounce of salt into a pound of butter. Even a mild taste of butter is more palatable to him than the taste of salt, and he believes this is true of all the world outside of America. The English, so far as he saw, use butter with very little or no salt. Whatever good there is in it is in a condition to be appreciated and enjoyed by the consumer. It is neither covered up nor warped by an overdose of salt, and that meets his choice exactly.

BALDERDASH.—"When the dairymen undertook to say that the laboring poor, who, from necessity rather than choice, must use the substitutes for butter or eat their bread and potatoes dry, shall contribute of their poverty two cents on every pound of it to the support of government to protect their interests, it is going a good deal farther than they have any right to. It is an encroachment upon the rights of others" to which a writer in the New England Farmer, objects to being a party. "The wrongs of the dairymen can never be righted by wronging the poor," says he.

"From necessity rather than choice," the "laboring poor" have to use tools, household utensils, clothing, etc., the price of every item of which is increased by the heavy duties levied on lower-priced foreign rivals for "the support of government to protect" the interests of American manufacturers. The tax levied on oleomargarine for the protection of the dairy interests of the country—to enable struggling dairymen to make a living by forcing the manufacturers of "oleo" to deal honestly—will not amount to much over $600,000 a year; the tax levied on the other home-made goods of the country to protect manufacturers so as to enable them to pile up more millions, runs up high among the millions every year. How is it that we hear so little about the heavy tax which the poor are forced to "contribute of their poverty" towards the vast fortunes of our manufacturers, while we hear so much about the slender contribution they make to enable equally hard-working dairymen to live, as well as to protect themselves from fraudulent imposition? But will the "laboring poor" really have to pay more for this "substitute for butter on their bread and potatoes," because of the two cent tax? We think decidedly not. As a rule they have hitherto had to pay butter prices for the concoction; after the new law has gone into force, they will have to pay only oleomargarine prices for it. There is little doubt that prices of oleo will be lower after November 1 than at any former time in spite of this two-cent tax, and if the "laboring poor" really hanker after the stuff itself, its sale is likely to increase rather than diminish. All this gabble about "protecting the poor man's food," legislating against one American interest in favor of another, etc., is mere balderdash so long as it is confined to one out of many cases.

EPILEPSY.—From National and State statistics, and from the number of inquiries sent to us with regard to the merits of nostrums for the "cure" of epilepsy, it is very evident that this disease is one of the greatest curses of the human race. At a meeting of the British Medical Association at Brighton, England, on August 17, reported by the London Times, Mr. Victor Horseley, F. R. S., Surgeon of the National Hospital for the Paralyzed and Epileptic, exhibited three patients who had long been suffering from severe epileptic fits and who had been cured by Mr. Horsely by opening the skull and removing the diseased structure or new growth from the brain itself. The operation is regarded as opening a new era in surgery, promising to rid the human race of this terrible disease. In all cases the operation was not difficult, and the recovery was speedy without any retarding symptoms. As the operations are of recent date, there has not been time to prove that the cures are permanent. What is actually proved at present is that it has become possible, by the observation of symptoms, not only to determine the fact of the existence of some morbid growth within the skull, but also to determine its precise position with such accuracy that it can be cut down upon and removed. It is also proved that considerable portions of the brain may be removed without injury, the functions to which these portions are subservient being performed, after a while, very possibly, by corresponding parts of the opposite hemisphere. Two of the patients had been injured, so that there were external indications; but in the third there was nothing of this kind, and the point at which the skull should be opened was determined solely by the fact that the fits commenced in a particular group of muscles—those, namely, which act upon the left thumb. The physician in charge of the case was able to say that this manner of commencement pointed certainly to the presence of a continuing source of irritation near the surface of the brain at a definite spot; and, the surgeon having opened the skull at the point indicated, a tumor was found imbedded in the brain substance, and, together with a portion of the brain surrounding it, was removed, so far with absolute cessation of the fits, which were previously not only very frequent, but, as might have been expected, were also increasing alike in frequency and severity, and were such as to disable the patient from following any occupation, not to say that they placed his life in constant jeopardy from accident. By experimenting with electricity on living animals rendered unconcious, it has been found that the brain surface is largely made up of "motor areas"—regions which excite movements, each in its special part of the body, so that a skillful experimenter by stimulating in succession different parts of the brain can cause a narcotized and therefore unconscious animal to perform a considerable variety of actions with perfect precision. Horseley, knowing what part of the brain caused the movement of the patient's left thumb, cut down on that spot and removed the tumor that caused the epileptic movement.

RATHER MIXED AS TO OATS.—We have just received a bulletin from the Ohio Ex. Station, which presents the yield of 29 kinds of oats, or rather of oats with different names. Badger Queen, at the rate of 75 bushels to the acre; Clydesdale, 66; Racehorse, 53; Welcome, 41. THE RURAL has found these all the same, viz., the White Australian. Are we mistaken? The report makes no mention of their being the same or even of resembling each other, further than is shown by the fact that they all ripened at the same date. The difference in yield, supposing them to be the same, and that they were treated the same, is surprising. Neither is there any mention of the fact that Yankee Prolific and White Russian are the same. Is it not as important that farmers should know that a certain kind of oats is sold under half-a-dozen different names and at as many different prices, as that they should know the difference in yield, weight of grain and straw, and time of ripening, all of which is owing either to a difference in the quality of the seed or the soil? If Welcome had been sown upon the Badger Queen plot, no doubt it would have yielded 75 bushels instead of 41!

According to the bulletin, Black Russian oats yielded 85, Black Tartarian 63, Early Dakota 62, Early Prize Cluster 61, Probsteier 70, White Schœnen 52, White Victoria 57 bushels to the acre. The bulletin says that the average yield and weight per measured bushel of the early ripening varieties are greater than of those that ripen late.

DOGS TOO MANY; DOLLARS TOO FEW.—In 1880 there were 625 Indians in Maine, of whom 312 were males and 313 females. Every able-bodied Indian in the State has a dog and every Indian who is not able-bodied has two, says the Lewiston Journal. They play the old Nick with the sheep of the neighboring farmers and run down a few deer. They are the homeliest, gauntest family of dogs in the State. A man in Perry recently lost 26 sheep by the teeth of these curs and made a row about it. He went to the Indians and threatened to sue them. They laughed at him. One old Indian addressed him as follows: "White man everything; Indian nothing. What going to do?" The argument was unanswerable. Change the names and, with some modifications, isn't the story true of your section also, reader?

THE FLY TORMENT.—Of all sorts of cattle subject to suffering from flies, fattening stock and those at fairs are most to be pitied. In spite of the best care, fine-skinned animals will lay on little flesh unless they are in some way protected from these pests. If "fly nets" or sheets cannot be used, it is found that the animals will not be worried much in the stable or at pasture, if they are sponged every morning with the following wash: Kerosene, half a pint; water, three gallons; carbolic acid, half a pint. The London Live Stock Journal thinks it will pay to sponge every beast in the house night and morning.

SHORT AND FRESH.

A WRITER in our esteemed contemporary, the Farmers' Review, says that listing corn is the lazy man's way of doing away with extra work in the Spring. But he thinks that the lazy man as in other cases "takes the most pains." The listed corn has not stood the drought half as well as planted corn.....

DR. BABCOCK of the N. Y. Ex. Station, we learn, has solved the question of detecting adulterations in milk and butter and imitation butters—a matter of the first importance certainly.....

ONLY a knowledge of bees, faithful attention to the apiary and a thorough and timely preparation for the honey flow, swarming and wintering, will make any man or woman a successful bee-keeper, says the Vermont Watchman.....

WERE we dreaming, asks the Western Plowman, or did a little bird whisper to us that a great organization was about to be formed called the Daughters of Purity, in which men are to be measured by the same standard that they apply to the character of women?.....

MAKE cuttings of currants and gooseberries *now*. Six inches long will answer. Mellow the soil, insert them vertically (straight up and down) or nearly so and press the soil about them *firmly*.....

SAVE the *best* specimens of tomatoes for seed, no matter whether they are the earliest or latest, so that they grow upon varieties suitably early for your soil and climate. We can not compete with the South as to earliness, and we should think more of solidity, smoothness, quality and productiveness .....

IF the farmer's help does not feel inclined to pay for and read a good paper with some trustworthy agricultural information in it, it will pay the employer to spend the money for it and present it to his workman, says the N. Y. Times.....

THE Merino, says J. S. Woodward in the N. Y. Tribune, is a noble sheep, the pride of the American breeder, but there is no reason why he cannot be greatly improved. Why not breed for fewer wrinkles, less grease and more wool?.....

DR. KEDZIE says that all cisterns should have an outlet pipe as well as an inlet, and of the two the outlet is the more important. And the escape pipe should extend to within half an inch of the lowest part of the cistern, and should not be more than two inches in diameter when the entrance pipe is four inches. So when the cistern becomes full during a heavy rain the water is pressed out with force enough to carry with it all the dirt and sediment that will settle in the lowest place, along with all the old impure water. Put the outlet and inlet well down below the frost. Make the neck long enough so the frost cannot enter. Above all, make the cistern as deep as possible. Avoid filters; and you will have a cistern of satisfaction to you and to coming generations. The cistern preferably should be made egg-shaped.....

THE Indiana Ag. Coll. (Lafayette, Ind.) raised 49 different kinds of wheat the past season. Velvet Chaff ranks first both as to hardiness and yield. It is described as a bearded wheat. The Velvet Chaff raised at the Rural Grounds is beardless. Oh, for a correct nomenclature! The Michigan Amber also ranks high. W. C. Latta says that the only wheat which the College has for sale that he can confidently recommend is the Velvet Chaff.....

C. D. WARNER says that a dead bird does not help the appearance of an ugly woman, and a pretty woman needs no such adornment.....

THE N. E. Homestead advises farmers and fruit growers to secure barrels early, while the demand is less than the supply.....

A PROMINENT Short-horn breeder in one of our Northern States recently said to a correspondent of the Breeder's Gazette that he would "give $5,000 if his Short-horns were without horns." The New England Farmer says that a Hereford breeder, whose name stands high in the Hereford fraternity, told the same writer that he would remove the horns from every one of his heifers if he did not know it would hurt their sale. The steer of the future and the domestic cow of the future will be without horns.....

WE are firm believers in cutting corn as soon as most of the grain is glazed, though the rule does not so well apply to the dent corn.....

SAVE the corn fodder before it is harmed by frost. Mr. Stewart well says if it is cut before frost, it is green and full of nutritious starch and sugar. Frost tends to change these to woody fiber. This part of the corn crop is often equal in value to the grain.. ..

SOUTHERN farmers believe the cow pea to be the best milk-and-cream-making fodder grown, and from the known nutritious character of this plant the claim is no doubt just. We have raised immense crops of this pea at the Rural Farm. Care, however, must be taken as to varieties selected.....

POMEROY'S DEMOCRAT says that every time a person tells the truth he adds to his strength of character; every time he oppresses a servant he is guilty of a sin; every time he pays rent he is taking that much away from a home

of his own; every time he refrains from speaking in defense of a friend he proves that he is *not* a friend.....

EASY MATHEMATICS.—The Vindicator proposes this problem: If a farmer pays $250 for a twine-binder in the Spring, and cuts $160 worth of wheat in the Summer with it, how long will the binder have to stand out in the weather to get a mortgage on the farm!.....

A SHORT-HORN cow belonging to David Niles, of Pickaway County, O., gave birth to a well-developed calf, a few days since, which weighed just eight pounds. So says the Live Stock Indicator.....

ACCORDING to the past year's experiments with wheats at the Ohio Agricultural Experiment Station, two pecks of seed to the acre gave a yield of 42 bushels; three pecks, 43; four pecks, 42; five pecks, 42; six pecks, 38; seven pecks, 37; eight pecks, 28. A second sowing of four pecks gave 36.....

As to dates of sowing, four pecks being the quantity sown, August 29 gave 41 bushels per acre; September 10, 32; September 17, 35; September 24, 39; October 1, 42; October 8, 36; October 15, 38; October 22, 30. Plots two and and three were not so well prepared as the other plots, owing to wet weather.....

IT is now nearly two years since we called notice to the growing attention paid to matters agricultural by the American magazines, as manifested by the number of articles most of them contain during the year relating to farmers' affairs, especially live stock. The London Live Stock Journal notices a similar tendency in English journalism; but it is in the great dailies rather than in the magazines. While most of the prominent daily papers in this country publish weekly editions with one or more columns devoted to agricultural topics, the English dailies have not yet followed the example. Their only notice of farming matters has until lately been in the shape of news; but recently the Times has been discussing Hampshire sheep; the St. James Gazette has devoted nearly a page to Hereford cattle, while the Pall Mall Gazette, not to be outdone by its younger rival, has had a long article on Mountain Sheep!

PRINCIPAL WALLEY, of Edinburg, considers salt and sugar good helps in feeding young stock if supplied in proper measure; but an over-dose of the former acts as an irritant, and of the latter as a purge.....

THE Professor is sure there is no hereditary tendency in contagious pleuro-pneumonia....

Ergot on grass is unusually plentiful this year in England, and farmers are warned against it as a prolific cause of abortion in stock.....

WAS Abraham Lincoln a crank when he made this declaration; "I affirm it as my settled conviction that class laws placing capital above labor in the structure of the Government endanger the Republic more fatally this hour than did chattel slavery in the days of its haughtiest supremacy,".....

THE FARMER'S CLUB

ANSWERS TO CORRESPONDENTS.

[Every query must be accompanied by the name and address of the writer to insure attention. Before asking a question, please see if it is not answered in our advertising columns. Ask only a few questions at one time. Put questions on a separate piece of paper.]

BLOODY MILK; HORSE RUBBING TAIL AND MANE.

J. W., Franklin, N. J.—1. What is the cause of bloody-milk? 2. Why does a horse scratch his tail and mane, and what can be done for him?

ANSWERED BY F. W. KILBORN.

1. The causes of bloody-milk are very variable. The most common cause is some local injury, as from kicks, bruises from stones thrown by careless attendants, walking through underbrush or over a low fence, or lying on a hard or pointed body. The injury may be so slight as to be unobserved except for the milk. Running or chasing by dogs; a too sudden change of diet, as from scant to rich, flush feed; also feeding upon certain acrid or resinous plants, as some of the ranunculi, polygonums, coniferæ and others which are said to cause bloody milk; occasionally during heat, especially if ridden by their fellows. Any condition that causes congestion and inflammation of the udder, even if but slight, is liable to cause bloody milk. The course of treatment will depend somewhat on the cause of the difficulty. If possible, first ascertain and remove the cause where it still exists. In most cases a pound of Epsom salts, with two ounces of ginger, will be found beneficial to open the bowels and relieve blood pressure; to be repeated after 24 hours if no movement of the bowels is produced by the first dose. This may be followed by one-ounce doses of nitre, night and morning. During treatment the diet should be restricted and consist largely of green food, roots and mashes. If there is any slight local injury, swelling or inflammation of the udder, bathe for twenty minutes after each milking with cold water and rub vigorously. If feeding heavily or on very flush pasture, feed more sparingly until the difficulty has passed, then increase the feed gradually. In the absence of any apparent cause look over the pastures for plants that would be liable to produce the trouble. If pasturing on wood lots or swampy ground, remove to a pasture that is occasionally under cultivation. 2. If the rubbing is confined to the mane and tail it is probably due to some animal parasite, either lice or a form of mange. Closely examine the skin about the roots of the hair, on at least three or four occasions both by daylight and lamplight, for lice. If no lice are found, look for scabs, crusts or roughness of the skin. Remove any crusts found, break them up finely over a large sheet of writing paper, and watch carefully, preferably with a low magnifying glass, for slight movement of minute particles or specks. Any such found will be mange, scab or itch parasites. If crusts or scabs are found, soak and remove by washing thoroughly with strong soft soap suds, then apply an ointment of one part of oil of tar, and 20 parts of sweet oil, or a sulphur ointment, rubbing the ointment well into the roots of the hair. If no crusts are found, apply a solution of water saturated with kerosene or a strong solution of tobacco—one pound of tobacco boiled in 10 quarts of water. Whitewash the stall or stable, adding a half pint of kerosene to each bucket of whitewash.

FAILURE OF AN APPLE ORCHARD.

E. T. J., Newport News, Va.—My apple orchard is 14 years old, and has been cultivated ever since set out. It is on the south side of a 26-year-old pine wood, from which it is separated by a road. Soon after the leaves appear in several rows near the wood they turn yellow and several spots are seen on the upper, and a fine yellow dust on the under side. In a few weeks they drop off and are replaced by new leaves which seem healthy for the rest of the year. In other parts of the orchard a tree is now and then similarly affected. Such trees never bear any fruit, and the others yield only a few, and those knotty and wormy. In 1878 I gathered 45 barrels of the nicest and smoothest apples I ever saw, and in August, the same year, every tree in the orchard was blown down by a heavy gale. They were set up again, but since then I have never had a smooth, nice apple. Can anything be done to make the orchard fruitful, and the fruit handsome?

ANSWERED BY W. L. DEVEREAUX.

The spots on the leaf and yellow dust underneath at the first leafing out in Spring, together with the abundance of knotty, gnarly apples, point to that common pest of the apple, the fungus growth named Fusicladium dendriticum, an account of which appeared in the RURAL August 1, 1885. Our friend's orchard is attacked very severely, but orchards in every direction are injured very extensively in foliage by it this year, and it seems to be annually increasing. Trees put on a healthy growth of leaves after the attack, but on many all the foliage isn't clean and the new tip shoots decked in light-green leaves present the appearance of colored flags fixed to a tree with dusty, worn foliage. The failure of the apple crop this season in the North, is largely due, I assert, to this parasite. Orchards near Lake Ontario and other bodies of water, have a favorable influence protecting them from this pest. Trees leafing and blooming late escaped, just as the late-leafing peaches escape the "curl-leaf" fungus. Old trees or those which have received even less injury than the above orchard, are much subject to this "mildew." Incomplete plant food in the soil, and in the present case, the unfavorable influence of a pine forest adjoining, certainly assist the development of the parasite. It is very possible that a thorough treatment with wood ashes, muriate of potash, a heavy mulch of sea weed, or even straw, might reclaim the orchard. Mr. Malcom Little, of Malcom, New York, has succeeded in curing the "yellows" of the peach with alkaline mulches, and he thinks these applications are needed in the apple orchard.

A CONGRESSIONAL BLACK-LIST.

Several Inquirers have asked for the names of the members of the House of Representatives who voted against the Oleomargarine Bill, and who should therefore be blacklisted by the dairymen of the country. Here they are; 16 Republicans and 85 Democrats; 30 from the Northern and 71 from the Southern States. Republicans in *italics*:

Adams, John J., New York City.
Barbour, John S., Alexandria, Va.
Barnes, George T., Augusta, Ga.
Bennett, Risdon T., Wadesborough, N. C.
Banchard, Newton C., Shreveport, La.
Blount, James H., Macon, Ga.
Breckenridge, Clifton, Pine Bluff, Ark.
Breckenridge, Will C. P., Lexington, Ky.
Browne, Thomas M., Winchester, Ind.
Burnes, James N., St. Joseph Mo.
Cabell, George C., Danville, Va.
Campbell, Felix, Brooklyn, N. Y.
Campbell, Timothy J., New York City.
Candler, Allen D., Gainesville, Ga.
Catchings, Thomas C., Vicksburg, Miss.
Cobb, Thomas R., Vincennes, Ind.
Collins, Patrick A., Boston Mass.
Cowles, Wm. H. H., Wilkesboro, N. C.
Cox, Wm. R., Raleigh, N. C.
Crain, W. H., Cuero, Tex.
Crisp, Charles F., Americus, Ga.
Culberson, David C., Jefferson, Tex.
Curtin, Andrew G., Bellefonte, Penn.
Daniel, J. W., Lynchburg, Va.
Dargan, Geo. W., Darlington, N. C.
Davidson, Alex. C., Uniontown, Ala.
Dibble, Samuel, Orangeburg, S. C.
Dougherty, Charles, Port Orange, Fla.
Dowdney, Abraham, New York City.
Dunham, Ransom, W. Chicago.
Dunn, Poindexter, Forest City Ark.
Fisher, Spencer O., West Bay City, Mich.
Ford, George, South Bud, Ind.
Forney, William H., Jacksonville, Ala.
Gay, Edward J., Plaquemine, La.
Gibson, Eustace, Huntingdon, W. Va.
Glass, Peter T., Ripley, Tenn.
Hammond, Nathaniel J., Atlanta, Ga.
Harris, Henry R., Greenville, Ga.
Hemphill, John J., Chester, S. C.
Henderson, John S., Salisbury, N. C.
Herbert, Hillary A., Montgomery, Ala.
Hewitt, Abram S., New York City.
Houk, Leonidas C., Knoxville, Tenn.
Hutton, John E., Mexico, Mo.
Irion, Alfred B., Marksville, La.
Johnston, Thomas D., Asheville, N. C.
Jones, James H., Henderson, Tex.
Jones, James T., Demopolis, Ala.
Kelley, William D., Philadelphia, Penn.
Lanham, Sam'l W. T., Weatherford, Tex.
Lawler, Frank, Chicago, Ill.
Lehlbach, Herman, Newark, N. J.
Libbey, Harry, Norfolk, Va.
Lovering, Henry B., Lynn, Mass.
Mahoney, Peter B., Brooklyn, N. Y.
Martin, John M., Tuscaloosa, Ala.
Maybury, William C., Detroit, Mich.
McAdoo, William, Jersey City, N. J.
McMillin, Benton, Carthage, Tenn.
McRae, Thomas C., Prescott, Ark.
Merriman, Truman A., New York City.
Miller, James F., Gonzales, Tex.
Mills, Roger Q., Corsicana, Tex.
Mitchell, Charles L., New Haven, Conn.
Morrison, William R., Waterloo, Ill.
Neal, John R., Rhea Springs, Tenn.
Negley, James S., Pittsburg, Penn.
Norwood, Thomas M., Savannah, Ga.
Oates, William C., Abbeville, Ala.
O'Hara, James E., Enfield, N. C.
O'Neill, Charles, Philadelphia, Penn.
O'Neill, Charles J., St. Louis, Mo.
Peel, Samuel W., Bentonville, Ark.
Perry, Wm. H., Greenville, S. C.
Reagan, John H., Palestine, Tex.
Sayers, Joseph D., Bastrop, Tex.
Skinner, Thomas C., Hertford, N. C.
Snyder, Charles P., Charlestown, W. Va.
Spooner, Henry J., Providence, R. I.
St. Martin, Louis, New Orleans, La.
Tarsney, Timothy E., East Saginaw, Mich.
Taulbee, W. B., Sailersville, Ky.
Taylor, John M., Lexington, Tenn.
Taylor, Zachary, Covington, Ky.
Throckmorton, J. W., McKinney, Tex.
Tillman, George D., Edgefield, S. C.
Tucker, John Randolph, Lexington, Va.
Turner, Henry G., Quitman, Ga.
Van Eaton, Henry S., Woodville, Miss.
Van Schaick, Isaac W., Milwaukee, Wis.
Wadsworth, Wm. H., Maysville, Ky.
Wallace, Pennsylvania.
Ward, James H., Chicago, Ill.
Warner, William, Kansas City, Mo.
Wellborn, Olin, Dallas, Tex.
Wheeler, Joseph, Wheeler, Ala.
Willis, Albert S., Louisville, Ky.
Wilson, William, Charlestown, W. Va.
Wise, George D., Richmond, Va.
Woodburn, William, Virginia City, Nev.

ABOUT STRAWBERRIES.

A. B. (no address).—What varieties of strawberries are best for a light loamy soil? 2. What is the character of the Ontario strawberry? 3. In the absence of stable manure, what is the best fertilizer for strawberries on an exhausted loamy soil? 4. How would the Jewell do under matted-row culture on such land?

ANS. 1. Charles Downing, Sharpless, Cumberland, Crescent, Iron-clad and Parry. 2. Favorable from one season's fruiting. Another season will be required to express any positive opinion. 3. We should sow broadcast late in the Fall, 800 pounds of raw bone flour and 200 pounds of sulphate of potash. In the Spring as soon as the frost leaves the ground, 100 pounds of nitrate of soda and 100 pounds of blood. Harrow and plant. 4. It would do well no doubt, but all strawberries must have food and plenty of it to give profitable crops.

GRAINS ON TASSEL AND COB OF CORN.

C. B. P., Albany, Ill.—A contemporary of the RURAL says: "The grains of corn that grow on the end of the stalk with the tassel, will produce new varieties if planted by themselves. It is in this way that many curious and sometimes valuable novelties are secured." What does the RURAL say of that?

ANS.—There is nothing whatever in it. The seeds or grains produced on the tassels are essentially the same as the kernels produced on the cob. It occasionally happens that the tassels bear female flowers or those which produce silk (or pistils). The sexual influence is precisely the same so far as is known.

Miscellaneous.

J. S. B. (no address).—When my two-year-old colt was foaled, he had soft bunches as large as the "bottom of a teacup," on the inside of his legs just below the knees; they are somewhat larger now. What should be done for him?

ANS.—The bunches are evidently congenital. Why they should have occurred we cannot say: and without knowing the exact location and nature of the swellings we cannot prescribe definitely. If, as we suspect, they are near the knee, so that they may be connected with the joint, it would be unwise for any one not well acquainted with the parts to disturb them. Consult a veterinary surgeon if possible.

F. P., Eganville, Ont., Canada.—The inclosed heads of wheat are the result of the reseeding last Fall making it a fall wheat. Is it a common occurence? Is it a new specimen of fall wheat? Will it grow if sowed again this Fall?

ANS.—This wheat resembles Lost Nation, a spring variety. About eight years ago we began the experiment of changing this (with other spring wheats) into winter wheats. For two years the Lost Nation passed the Winters safely, the third every plant was killed.

L. D. A., Cortland Co., N. Y.—Of the plants sent for name: 1. The gooseberry is one of the foreign varieties which are numbered by hundreds. We cannot name it. 2. Seems to be a poor specimen of Holcus lanatus—Soft or Velvet Grass. Of no value. 3. Trifolium agrarium—Yellow Hop Clover. Of very little value. 4. Pyrethrum Partheninm—Feverfew.

L. L., Gallatin, Dak.—The vine is a parasite, Cuscuta inflexa—Dodder. It germinates in the soil, but soon withering at the root, derives its entire nourishment from the plants it twines around.

J. M. S., Penn Yan, N. Y.—The plant sent for name is Medicago sativa—Alfalfa. A very valuable forage plant, particularly for the Southern States.

S. C. S., Westova, Md.—Are not the Netted Gem Cantaloupe and the Golden Jenny identical?

ANS.—We do not know.

J. M., Sarnea, Can.—All nurserymen have the Japan Snowball, or Plicate-leaved Viburnum for sale.

DISCUSSION.

J. D. O. B.—In a late RURAL, a correspondent asks whether linseed oil will be of service to old wheels that are getting loose. In the Spring of 1885 I had two wheels on a Spring wagon repaired, new spokes were put in and half a rim in each, and the tires were cut. The first time the wagon was used in warm weather the spokes became loose in the hub, and the tires were loose also. The man who had done the repairs was consulted, and claimed that the hubs were rotton and that the fault was not in his work. The wheels had to be soaked in water to make a short trip. I concluded then that I would try the effect of linseed oil. I painted the wheels well with the oil, rubbing it well into the hubs. I found that the oil swelled out the hubs just as the water did, and that it filled the pores well and made the wheel tight. The wagon was run regularly through 1885, and has been used as a market wagon during 1886, and the tires have never been loose since, and the wheels remain stroug. Before the application of the oil, the wheels were almost ready to fall to pieces, and cutting the tires had failed to remedy the trouble. I think the oil swelled the hubs and then filled the pores. This experiment shows the efficacy of oil in old wheels. Boiled oil is said to be better, but in this case unboiled oil was used. It is believed that many old wheels would be made stronger by the application of several good coats of oil than by having the tires cut. If the tires are cut and not well painted, water swells the wheels, crushes the porous cell-work and the wheels are again loosened. If the pores are filled by the oil, the wheel is tightened and the water is excluded.

A. RICE, Mitchellville, N. Y.—This year I raised from the seed sent out by the RURAL 110 bushels of beautiful white Surprise Wheat, which I now offer for sale at $2 per bushel. It has proved with me to be a very hardy, productive variety, and I have found as it stools so greatly that one bushel of seed is sufficient for the acre.

THE
RURAL NEW-YORKER.
A National Journal for Country and Suburban Homes.

Conducted by
ELBERT S. CARMAN.

Address
THE RURAL NEW-YORKER,
No. 34 PARK ROW, New York.

SATURDAY, SEPTEMBER 18, 1886.

IT is desirable that the RURAL NEW-YORKER should be represented at all the agricultural fairs of the country. Those who are willing to act as agents will be furnished upon application with posters and all the specimen copies they may need.

SEVERAL flowers in a spike of the Gladiolus multiflorus at the Rural Grounds bore 30 petals and 15 stamens each. It is noteworthy because when flowers become double it is at the expense of the stamens or pistils or both.

A NEIGHBOR remarked to the writer one day last week that he had rather sell his potatoes now at $1.75 per barrel than to keep them until February and sell at $2.25. Many potatoes, which are now of marketable size, will have to be thrown out then. Besides, we have to consider rot and the shrinkage of the rest.

THE RURAL NEW-YORKER, as announced last week, will be mailed from now until January 1st, 1888—nearly 16 months—for $2, or, in clubs of five or over, for $1.50. Specimen copies and posters will be sent promptly to all who apply. Our new Premium-list of 16 pages will again and at any time be sent to all who desire it.

THE writer was asking himself a few days ago, as he sat under the Yellow-wood of the Rural Grounds, and admired first one, then another of the many different kinds of evergreens in view, which he would choose in case he was confined to one or two. We thought it over very carefully, and chose, first, the common Hemlock Spruce, and, second, the White Pine, and this, too, after cultivating for 13 years the rarest conifers known. Few know of the surpassing beauty of the White Pine when, during youth, it has been disbudded, or cut back in a way to induce an ample furniture of foliage from the ground to the top.

We hope to retain for years to come as in years past, the bulk of our old subscribers without any further inducement than that which the RURAL NEW-YORKER *itself offers. If they continue to need and to prize it, they will continue to subscribe for it. In order to induce those who would gladly see its circulation largely increased to aid us in this work, we have placed before them two propositions. The first is that in clubs of five or over, the price will be (until further notice)* $1.50 *per year. The second is embodied in the premium-list, a careful examination of which will certainly show that adequate compensation is offered for any effort our friends may kindly make in the* RURAL'S *behalf. Send for it if you have not received it.*

MIKADO AND TURNER'S HYBRID.

TURNER'S Hybrid and the Mikado Tomatoes are receiving as much praise in some of our farm journals as if they were distinct varieties. But they are distinctly the same, as the RURAL has before stated, and as we suspected as soon as the first true leaves appeared upon the little plants last Spring. The foliage is quite different from that of any other kind of tomato known to us, quite resembling that of young Lima beans in a general way. This peculiarity of foliage is all that we can find about this tomato to interest us. The variety is a strong grower and very productive. So also are Optimus, Beauty, Perfection, Acme, Cardinal, Paragon, Mayflower and a score of others. The fruit of the Mikado, or Turner's Hybrid is as firm and well-flavored as that of any of the above. But the variety is inferior to them in one essential respect—*shape*. There are scarcely two shaped alike. Most of them are as deeply lobed and irregular, as the Trophy; many of them more so. Occasionally one is found that is smooth and handsome, and from such, by continued selection for several years, a tomato may be evolved that, besides a peculiar foliage, may prove as good in every other way as the popular kinds now before the public. The origin of this new tomato seems to be obscure.

A SOURCE OF DISEASE.

THE statement is made that a barrel of kerosene buried in the ground will give a distinct taste to all water taken from a well within 20 rods of it. The foul vaults to be found on the majority of farms are far more deadly than kerosene, and the injurious emanations from the contents are certain to pass into wells whenever allowed to do so. The cold well-water, which we are apt to look upon as the purest of all drink, is often fairly reeking with disease germs washed into it from the filthy, uncleaned vault. The worst of it is that these germs are often imperceptible to the taste or smell. Their presence is never known until some member of the family is stricken with disease. At this hot, dry season there is particular danger. The ordinary farm vault is a veritable plague spot, responsible for the loss of numberless dear lives that might have been spared by a decent regard for sanitary laws. The man who allows an open, uncemented vault to remain upon his premises is guilty of a criminal offence. The vault should always be watertight, and dry earth, road dust or other absorbents should be used freely. The best closet that can be used consists of small iron or wooden boxes, in which absorbents are very freely employed. They can be taken out and emptied at frequent intervals. This method will make extra work, but the increased cleanliness and health resulting from it will pay.

KILL THE WEEDS.

IN too many neighborhoods farmers have prepared a bountiful crop of weeds for next year's seeding. Along the roads, in old strawberry patches and potato fields, in the waste places, back of the houses, there are millions of weed seeds ripening at leisure. Weeds are a curse. We are tired of the charity which spoke of them as "plants whose virtues have not been discovered." They are the worst of all enemies of legitimate plant life, for they add robbery to murder. If farmers would only combine against these tramp weeds, which crowd into roadsides and other waste places, thus escaping the cultivation which is bestowed upon the profitable parts of the farm, with the determination with which they combined against oleomargarine, they could make solid progress. The fact that the weeds grow and flourish upon land that could not be profitably employed in agriculture, leads many farmers to consider them comparatively harmless. This is a fatal mistake. So long as a single weed ripens its seed within 20 rods of a cultivated field that field is in danger. And even after every growing weed has been exterminated there is danger. It has been shown that weed seeds can lie dormant in the soil for years, to germinate at last when least expected. The interest awakened in tree planting by the general observance of Arbor Day has done much to counteract the careless spirit which prompts the destruction of forests. Shall we not be forced in the near future to appoint "Weed Days." The idea is a sensible one. By devoting one day to the business of cutting and burning the weeds that grow in roads and waste places, farmers could save themselves an immense amount of work and trouble. Let Granges and Farmers' Clubs take hold of the matter and make "Weed Day" an established fact.

A LESSON IN ROAD-MAKING.

WE know of one Southern town that has taken a practical lesson in road-making. It is situated on a "prairie," where during the rainy season the mud stands a foot deep. During the Winter the streets are simply impassable by reason of the mud, and when this mud dries it dries in great mounds and ruts that will shake a wagon into pieces. There was no gravel within thirty miles. It was at first proposed to build a plank foundation through the main street, but this was considered too expensive. There was but little intercourse with the surrounding country, except on horseback, from November to April, One dealer sold a wagon and could not deliver it for four months simply because he could not haul it out of the town. The town is quite a shipping point for cotton. Two railroads run through the place, and there is close competition for the cotton shipments. One railroad offered to deliver free of cost a number of carloads of gravel on condition that it be applied by the town authorities to the street leading to the depot. The other railroad, not to be considered behind the times, duplicated this offer, and the town accepted. As a result, nearly one mile of street was fairly well-coated with gravel. The effect was so plainly noticeable that the town has decided to improve all the roads within the corporation limits. It is so unmistakably evident that good roads will increase the business of the place and add to the comfort of the people that those who before opposed the expenditure of money for road repairing are now in favor of it. There are thousands of neighborhoods that go on thinking that money spent on good road-making is money thrown away. If they could have practical demonstration of what good roads are, they would never regret the money spent in securing them.

LAND HUNGER IN IRELAND.

PROBABLY in no other country in the world is land hunger or love of the soil so great as in Ireland. For ages the land has afforded only the meagerest support to those who have tilled it, yet the peasant is always ready to suffer all sorts of privations, to the verge of starvation, sooner than abandon the little holding that has kept his forefathers, himself and his children pinched and tattered, and his highest ambition is to be the absolute owner of a few acres. To secure this object he will improvidently undertake obligations which it is almost impossible for him to discharge. Irish tenant farmers now insist that it is impossible for them to pay the rents which a few years ago the courts decided to be fair. They say the value of agricultural products has been constantly going down, and that present judicial rents are from 30 to 50 per cent too high. In spite of this, however, the cables a few days ago announced that the owners of several estates had sold the fee simple of their property to the occupying tenants for sums amounting to from 16 to 20 years' rental at the present exorbitant rate; and this, too, though the price of Irish land is going steadily down, owing to decreasing population and increasing foreign competition! The American tenant farmer who hires land at a fair rent, seldom estimates the price which he should pay for it at over nine to ten years' rental, although the land is certain to increase in value owing to the rapid increase of population. The Irish farmer pays the purchase money in yearly installments, and can borrow a part of it from the government; but it is preposterous to suppose that, under the circumstances, he will be able to pay it. Michael Davitt has repeatedly warned the tenantry that Irish land is worth only from five to ten years' rental, allowing the tenant full credit for all improvements made by him, and there is no doubt that in a few years the peasant proprietors will be importunate for a scaling down of the annual payments just as the purchasers of Irish glebe lands, who bought on the disestablishment of the Episcopal Church a few years ago, are clamoring for relief at the present time. In spite of the recent enormous depreciation of farming land in the United Kingdom, there is no doubt but the value put upon it at present is absolutely fictitious, and the landowners in all parts of the islands would do well to heed Gladstone's late warning to Irish landlords—"the sand in the glass is rapidly running out."

POOLS.

COMBINATIONS of the unscrupulous are always inimical to the welfare of the community. The manipulators of gigantic rings which aim at a monopoly of any trade are utterly unscrupulous in their means for accomplishing the objects they have in view. When they join hands it is always for the purpose of obtaining an undue and therefore an unfair advantage over legitimate trade and honest industry. However plausible the reasons assigned for such associations, their object is always to extort from an unwilling public a patronage and profit they can secure in no other way. Who knows of a single instance in which the welfare of the community has been promoted by any such combination?

No class suffer so much from organizations of this kind as farmers. There are manufacturers' and jobbers' pools, whose sole object is to put up the prices of most things farmers have to buy; there are buyers' and speculators' pools, whose sole object is to put down the prices of most things farmers have to sell; and there are railroad and steamship pools, whose sole object is to secure unduly high rates of freight on both manufactured and raw products on their way from the workshop to the farm, and from the farm to the market.

In other industrial callings combinations are constantly made to keep or raise up the price of labor or its products. Hitherto such combinations have been impracticable in agriculture. When employers of labor combine to lower wages, trades-unions combinations are ready to resist, and often even exact higher figures. When grain buyers combine to put or keep down the price of wheat or corn, the farmer, as a rule, has to abide by their decision, for generally he must sell to obtain money for pressing needs, and he cannot advantageously ship to distant markets, as the railroads will charge a higher rate of freight and the consignee a higher rate of commission on his single shipment than on the aggregate shipments of an individual buyer or combination of buyers, to say nothing of the greater risks of overcharges or total loss through an unscrupulous or dishonest consignee.

What is the remedy? Evidently either protective combinations against inimical organizations, or legislation to prevent them. Why shouldn't the farmers of each district keep posted on the markets and combine to sell or ship their products, and also to purchase their supplies? By this means they might sell the former at the highest figures, buy the latter at the lowest, and obtain fair rates of transportation on both. Generally this would be very difficult, if not impracticable, at present; but it is done to some extent in some places, mostly through the Grange, and there is a strong tendency to form combinations for the purpose everywhere. Preventive legislation is being tried to some extent in Minnesota, but such legislation can have no influence on injurious combinations outside the State, and can only check flagrant abuses within its limits. The great necessity now is that farmers should fully realize the removable evils which curtail their legitimate profits; for a clear recognition of these is a prerequisite to their suppression.

BREVITIES.

WHO can supply nuts of the Japan Chestnut to our subscribers?

THE Empire State Grape has made a fine growth at the R. G. this season.

ONE of the most grotesquely beautiful trees is the Weeping Beech, but it requires at least twelve years to show its grotesque beauty.

ANY of our readers who care to post up their visitors will kindly send for the new RURAL poster and post it up in a conspicuous place.

OUR advice is not to sow wheat early if the soil is dry. Better wait even a month for rain. The trouble is that the wheat will usually germinate and be injured irremediably if the drought continues.

THE Spanish have a good old proverb that will bear thinking over.

> "They who wait the coming rider
> Travel twice as far as he,
> Tired wench and coming butter,
> Never could in time agree."

The tendency of young men is to try and hurry results. They cannot wait for the slow, legitimate process through which all that is good must pass. A careful, patient development is the safest in the end. Young America needs to study patience rather than push.

THE Early Victor (black) ripens at the Rural Grounds almost exactly with Moore's Early. If there is any difference the Victor is a day or so earlier. The skin is firmer than Moore's Early, the quality fully as good, the berry and bunch smaller—the vine a less thrifty grower.

THE meeting of the American Horticultural Society, just closed at Cleveland, Ohio, has been a successful one. The attendance was good, the papers read were interesting and practical, and the discussions spirited. The display of fruits was excellent and the prizes were well scattered about the country. The society is doing an excellent work and its proceedings are well worthy the thoughtful consideration of all Americans. We hope to begin a report of the proceedings next week.

OLEOMARGARINE and its kin are the bitter foes of all dairymen; so are flies. Many a pound of butter and many a gallon of milk are sucked from the blood by wretched flies and gnats. Good farmers who will fight oleomargarine with every weapon they can handle, are often disgracefully beaten by these winged enemies. No merciful man wishes to torture his animals, and yet one can hardly subject them to worse torture than by compelling them to fight flies all through the hot sun. It is more humane and more economical to keep the cows tied up in a darkened stable, during the heat of the day at least. Good farmers would point in scorn at a man who would keep his cattle out in cold, freezing weather, yet how much more cruel is it than the usual summer treatment?

Indust'l Societies.

SOCIETY NOTES.

THE managers of the Dubois Agricultural Fair [Pa.] recognize the fact that there is not much money to be made at such an exhibition. The profit is to come in the awakening of a "spirit of progress," which will change the whole country for the better. This idea is correct. It is poor policy to run a fair simply for the purpose of making a few dollers. At the Dubois fair everybody is invited to come forward and help to make the meeting a success. Anarchists and dynamiters are excluded from this invitation. We should be better satisfied if rumsellers had been placed in the excluded class.

THERE is a growing tendency to offer better premiums for graded cattle at the agricultural fairs. This plan is a good one. Graded cattle must, for many years yet, make up the bulk of farm animals. Breeders of thoroughbreds will help themselves greatly by encouraging prizes to be given for the best specimens of grades of their own stock.

A CONVENTION of the Northern-born residents of North Carolina will be held at Raleigh during October. It is designed to show what part Northern persons are taking in the development of the South. No doubt advantage will be taken of this meeting to push the advantages which the State offers to immigrants to the front.

THE managers of the Indiana State fair have set apart Sept. 28 for Children's Day. All children under 12 years old will be admitted free, and special arrangements will be made for their entertainment. The dog and pony shows will be of special interest to the little people. This idea is a good one and might well be followed by other societies.

SOME of the county agricultural associations have continued the old plan of adding reading matter to the usual list of awards in the premium list. We find some of them partly filled with essays and communications from farmers. The practice is not a bad one if the matter can be well selected. These premium lists are well read and studied. Where there is a live farmers' club in connection with the fair association, it might be wise to have a portion of the pamphlet given up to selections from the best essays read during the season. It is a fact that some of the most practical and reliable agricultural information comes from these farmers' clubs. The premium list made into the form of a report could be made very interesting.

AT the recent meeting of the American Seed Trade Association held at Niagara Falls, delegates were present from Massachusetts, Connecticut, New York, Pennsylvania, Ohio, Illinois, and the Province of Ontario. Resolutions of sympathy with the family of the late secretary, J. Y. Murkland, were adopted and spread upon the minutes. The postage and tariff questions were discussed at length. The committee appointed last year to wait upon the Secretary of the Treasury, and present the views of the Association in regard to the want of uniformity in the collection of duties, made its report. The question of valuation was also discussed. It was shown that too much latitude was allowed the collector. The law seems clear enough, but some of the collectors base their assessments upon what they deem the correct value, in some cases going back to a time six months before the crop was grown. Some seed growers had been compelled to go to other ports at great inconvenience and additional expense in order to get fair play. The only equitable mode of adjustment was that present market price only should be considered at the ports of entry. A motion prevailed authorizing the president of the Association to appoint committees, as special cases arise, to whom tariff matters might be referred with power to act. A very clear and elaborate paper was presented from the seed trade of Boston, showing what this Association is doing in the interests of its members, and on motion it was ordered that the substance of the matter presented be embodied in the annual report of the Association. Agricultural newspapers which accept the money of seedsmen for advertising, and also devote their space and use their influence to divert business from the seedsmen, through the tempting offers made by the papers themselves, came in for a share of the discussion. The convention will meet in Philadelphia in June, 1887.

AT the Wisconsin State Fair held at Milwaukee, Sept. 20–24, premiums of $50 each are offered for the best milk, butter and cheese cow respectively. Any breeds may be entered, but no cow can compete for more than one of the premiums. All food given during the test and for 12 hours before will be carefully weighed. The cows will be milked twice daily for two consecutive days, and the milk weighed. The chemical composition of the milk will be determined by chemical analysis. The scale of points to decide the contest will be as follows:

FOR MILK:—1 point for every 10 days since calving; 1 point for every ounce of total solid matter produced in 24 hours.

FOR BUTTER:—1 point for every 10 days since calving; 3 points for every ounce of fat produced in 24 hours.

FOR CHEESE:—1 point for every 10 days since calving; 3 points for every ounce of protein produced in 24 hours; if the amount of fat produced is less than one-and-one-seventh times the protein, deduct 3 points for every ounce deficiency.

Such a contest ought to call out good specimens of all the noted dairy breeds.

THE CARMAN BLACK-CAP RASPBERRY. First Season's Fruit. From Spring-set Plants. From Nature. Fig. 361.
(See Page 621.)

Miscellaneous.

CATALOGUES, ETC., RECEIVED.

CINCINNATI CORRUGATING CO.—Catalogue of this reliable concern.—A well printed and finely illustrated pamphlet. One is surprised to note the immense number of uses in which corrugated iron can be profitably employed. Its use is rapidly increasing, and we are confident that it will become exceedingly popular when farmers take time to carefully examine the superiority over other building materials claimed for it. The pamphlet is well worth reading. The Cincinnati Co. have ample facilities and experience. They can supply anything in their line promptly no matter what the size of the order may be. Our readers may rest assured that they will receive the best of attention at the hands of this company.

ECONOMIC RELATIONS OF BIRDS AND MAMMALS.—The Department of Agriculture has recently established a Division of Economic Ornithology. Dr. C. Hart Merriam, Government Ornithologist, has sent out a series of circulars which promise to lead to valuable results in determining the legitimate place on the farm of many of our common birds and small animals. The circulars are entitled, "The English Sparrow," "Instructions for the Collections of Stomachs," "The Economic Relations of Mammals," "The Food-habits of Birds," and a circular to rice growers. Each circular contains a number of well selected questions relating to the habits and destructiveness of birds and animals. The design is to collect thousands of answers to these questions, from all parts of the country, and embody these answers in a general report. This work is one in which all farmers can be of great service. It is well known that certain birds destroy thousands of dollars' worth of farm crops every year, while it is equally well understood that other birds by preying upon mice and other injurious insects, preserve as much as the others destroy. Again, there are other birds which are looked upon as thieves and rogues, while in reality they do far more good than harm. Crows, owls and hawks have both friends and enemies among men. They steal corn and kill chickens, but they also destroy countless insects and mice. The evil results that always follow the wholesale slaughter of small birds, teach us that we must discriminate sharply between our friends and enemies. These questions, proposed by Dr. Merriam, intelligently answered, will go far towards balancing the good and evil qualities of our many feathered visitors. We need more light, and the farmers of the country should combine upon this question as upon any other. There are many small animals like rats, mice and foxes, that need no investigation. They are enemies beyond all doubt. There are others, like moles and skunks, that render valuable service to the farmer. How far does this good service go toward counteracting the damage done to lawns by moles, or to lessen the dreadful odor of the skunk? Questions like these are well worthy of atten-

tion. Our readers can do themselves and the public a real good by sending for the questions and answering them honestly. We hope they will take an interest in the matter, and help to make the report comprehensive and valuable. Send to Dr. C. Hart Merriam, U. S. Department of Agriculture, Washington, D. C.

CORNISH ORGANS.—Circular from Cornish & Co., Washington, N. J. The instruments described in this circular are low in price, and yet appear to be well made and durable. The prices for musical instruments have been greatly reduced of late and such establishments as this of Cornish & Co., have done much to bring about the reduction. The influence of music is ennobling and refining, and he who labors to place the means of producing it more extensively among the masses, is in a sense a public benefactor. Washington N. J., is noted all over the world as a manufacturing place for organs. The old idea that a large manufacturing establishment to be a success, must be located in a great city, has been disproved. Many highly successful concerns have pushed out of the city into some smaller towns of easy access where the cost of rents, taxes and labor can be reduced to a minimum. The establishment of Cornish & Co., is an immense affair. The firm proposes to reduce the price of good organs to the lowest possible point, by dealing directly with purchasers, and thus avoiding all commissions to agents and middlemen. Those wanting organs should send for the catalogue.

ENTOMOLOGY.—Report of the Government Entomologist for 1885.—A pamphlet of 150 pages, with numerous plates, giving an account of the work done by the entomological section of the Department of Agriculture. A considerable portion of the report is devoted to silk culture. We learn that 300 ounces of eggs were imported from France in 1884, and distributed in 1885 among some 850 applicants. Most of the applications came from Illinois. Most of the eggs were distributed in lots of one-twentieth and one-tenth of an ounce. Some 600 ounces were distributed this year. Some 8000 mulberry trees were distributed to serve as food for the worms. Nurserymen urge the Department to encourage the setting out of large mulberry plantations, as necessary in fostering silk culture; but for good reasons the distribution of mulberry trees has not been pushed. Attention is called to the Osage Orange as a food plant. In Central Illinois, where this shrub is used as a hedge plant, it is now the common material used as food for silk-worms. We do not see that the advocates of silk culture can glean much encouragement from this report. The business has been extensively advertised as suitable to old persons, invalids and children. The Entomologist distinctly states that such advertisement is calculated to do harm. There may be no heavy physical labor needed, but a most careful watchfulness is necessary, and a constant care involved which the farmer's wife with her multitude of household duties or the person with enfeebled constitution, cannot bestow. At the Experimental Stations silk has been produced at a cost, per pound, including raw material and labor, of $7.58, at Philadelphia, and $5.90 at New Orleans. This silk sold at $4.40 per pound. The remainder of the report is devoted to an account of experiments with various injurious insects. The habits, history and description of such insects are given, with best methods of fighting them.

Woman's Work.

CONDUCTED BY EMILY L. TAPLIN.

OMENS.

THE cornsilk tassels on the ridge
  Are bronzing in the sun;
The elderberries by the bridge,
  And all along the run,

Grow purple through the golden days;
  Barberries by the wall
Glow crimson in the silver haze
  That ushers in the Fall.

Old Ocean dreams in slumbers deep
  Of wintry storms to come;
In far-off mountain caverns sleep
  The winds; the brooks are dumb.

The partridge, in lone country lanes,
  Whirs low a speckled wing;
Silence through all the woodland reigns,
  The birds forget to sing.

From yellow cornfields slowly pass
  The crows, with clanging cry;
All day upon the orchard grass
  Ripe apples fall. A sigh

Escapes the earth at thought of death,
  For summer's life so brief,
And, fluttering on that sigh's faint breath,
  Falls down the first red leaf!

—Annie M. Libby in Good Housekeeping.

OF INTEREST TO WOMEN.

AMONG modern occupations for women, the Pall Mall Gazette reckons the profession of druggist. There is quite a community of feminine druggists in England, and it offers a better field for educated women than dentistry.

The English papers are still denouncing the slaughter of birds for adornment. Says the Echo: "In reckoning the factors of modern evolution, the future Darwin will have to take account of Fashion, which in some countries must be more potent than natural selection or the survival of the fittest. It is the women of Europe and America who are, doubtless unwittingly, working a change in the bird life of the tropical countries, by the demand they create for bird skins; and possibly, when the facts are brought to their notice, they will at once stop the present rate of slaughter by returning again to artificial flowers and feathers as suitable trimmings for their head-gear. The large number of bird skins sold in the merchants' auction rooms of London give no indication of the actual number of birds destroyed, for at a moderate computation every skin that is salable represents at least six birds, so many of the skins being irretrievably ruined by the methods employed to capture the birds. Of humming birds, Impeyan pheasants, birds of paradise, and other tropical beauties, some million skins are annually sold in London alone, to which must be added a large number of skins of tern and gull. Some spots on the Atlantic Coast of North America have been almost denuded of birds with snowy plumage, and if the present rate of slaughter continues, even the Brazilian forests will be depopulated, for any bird with handsome plumage is the prey of the hunter. No one has ever yet discovered the leaders of fashion, so an appeal is made generally to the women of Europe and America to discourage this wholesale slaughter of birds by refusing to wear any ornament which involves the death of the creature producing it, and it is to be hoped that the appeal will not be made in vain."

A contemporary says "the newest and latest jewelry craze is a curious little *porte bonheur*, said to be more efficacious in commanding fortune than even the horseshoe of the fathers. It is said to have originated in Egypt in the years when the pyramids were young, and bears the original name of Oudja, which signifies happiness tempered with good luck. It is in the form of a thin, flat, oblong of metal intaglio, and bearing the eye of the Sun-god Horus, from which a tear-drop falls, intended to represent the mysterious origin of the river Nile. The Pharaohs regarded it as a talisman, capable of warding off adversity as well as of promoting prosperity, and it is found sculptured on the rocks, cut on pillars, and engraved on mummy cases. In London this new charm is becoming quite the rage, ordinary furor being stimulated by the curious history said to have attended its introduction into England and modern civilization. The fair young wife of a gallant officer in the Guards received one from her husband fighting in the Soudan with the legend: 'This is the charm which protected the cultivators of ancient Egypt against misfortune: may it act likewise in your favor and insure brilliant days for your future.' A report came soon after that the guardsman had fallen a victim to duty and honor. But the young wife had conceived a superior faith in her Oudja and refused to believe, despite published official news of his death. An extraordinary escape and unexpected return of the officer has been accredited to the protecting influence of the Egyptian talisman, and in fashionable circles the Oudja is speadily becoming all the wear."

OUR SINGLE BLESSINGS.

A CLEVER botanist once proved, with remarkable distinctness, that the clover crop of this great country depends entirely on the number and distribution of our crop of spinsters. Clover, be it known, must be fertilized by bees. Now the great enemy of the bee is the common field mouse, and as the mischievous rodent is only suppressed by the domestic cat, the existence of the bee, and consequent fertility of the clover, depends on this useful animal. Old maids are proverbially given to the culture of cats; the clover crop is dependent therefore on these self sacrificing members of society.—Q. E. D.

But the spinster's usefulness does not stop at the production of clover. Don't we all know some helpful, benevolent spinster, some radiant Aunt Jane or Hester, who eschews "cuts, scandal and Bohea?" Thrice blessed is the family to which she belongs. To her the children take their wounded fingers and wounded feelings alike; she is always mistress of the revels, and at Christmastide is in great request as confidential adviser among young and old. She is equally an authority on catnip tea and cats-cradles, and will give judicial advice on the set of a kite's tail or a doll's frock with equal readiness. To the elder members of the family she is an ever sympathetic friend, nor does she confine her efforts to her own people. She is a good Samaritan to the dweller of highways and hedges, according to the advice of the scholarly Apostle. Such a woman—and she is by no means rare—gives lustre to her much-maligned class. But why should we hear so much of the crabbedness and general ugliness of old maids? It is our deeply-rooted conviction that they are much more useful, amiable, and self-sacrificing than old bachelors. So there!

The average man holds, as soundest doctrine the opinion that every woman would marry if she had the ghost of a chance. This is doubtless true in many cases, but it is not by any means an invariable rule. Many a faded spinster bears deep in her faithful breast the memory of some early love, lost, but unforgotten; many a one has toiled and crucified self for home and kindred, to meet with little reward save the sense of duty done, and the title of "old maid."

We must admit that we occasionally meet with very unfavorable representatives of the class. Prying, inquisitive, gossippy, unattractive in dress and manner. They offer a convenient text to support the popular impression of spinsters. But don't we all know married women who display all these objectionable traits? It is the native disposition, not the result of her condition. When a woman appears soured by single life, it displays a radical defect in her education. Every woman should be trained to be a good wife, but she should be trained to make a successful spinster also. Then she is prepared for either fate. Marriage is an holy and honorable estate, but we can't all marry—the census says there are not enough men to go round—and believing that old maids are a blessing to every community, let us bear in mind the advice of a sage equally remarkable for wisdom and bad spelling: "It is better to be laffed at becoz yew are not married than to be unable to laff yourself becoz yew are."

TAKE CARE.

MRS. S. H. ROWELL.

"I have been all night over with Ella Norton, helping her take care of her children! I wish to goodness there was a law to prevent people who do not know enough to take care of their children ever getting married!" exclaimed Jenny Saunders, as she rushed unceremoniously into her sister's house, one hot morning in August, threw off her hat and drew a chair up to the breakfast table.

"Give me a cup of coffee, please Hattie, I am tired out, sleepy and cross," she said laughing, and kissing a little bright-eyed youngster who sat in his high chair eating a bowl of bread and milk. "Auntie is glad that Robbie's mamma knows how to take care of him."

"What is the matter with the Norton's, Jennie? You have not even given the top of the morning to us," said George Elliott, as he passed the plate of hot rolls to her.

"I am too much out of humor to be polite. I do not often forget my manners you know, but, good morning, Mr. Elliott. Well, last night, (you know mother had the headache yesterday) there came a tremendous ring of the door bell after eleven o'clock. I slipped on my dressing-gown and ran to the door and asked who was there. 'Mrs. Norton's little girl is dreadful sick, wants your mother to come over as quick as she can; I called at the doctor's and he is not at home,' said the boy, who lives at Mr. Norton's.

"'Mother is sick herself, she cannot go,' I answered."

"'Oh, dear! cannot you come, Miss Jennie?'

"Well, I thought I would go, so I dressed as quick as possible and went with him. The child was in terrible distress and seemed quite unconscious; his eyes were rolled up in his head, and he would cramp up his legs and scream. I was just frightened myself and his mother was as white as a sheet. Mr. Norton was lighting the fire.

"'What has he been eating,' I asked.

"'I guess he ate too much ice cream and cake,' she replied.

"'We must give him an emetic then,' so I flew around but not a thing had they in the house that would answer the purpose till I thought of mustard, I stirred up a teaspoonful as quick as I could in some warm water which we had to force down; his mother telling him it was good. Then I heated some flannels to put on his stomach. Just as we were giving him the last spoonful little Ella began to scream. Well, we did have a lively time. She was in as great agony as her brother, and cramped dreadfully. I dosed her with mustard and wrapped her in flannels, and told her she must keep as quiet as she could, for Johnny was dreadfully sick, then I asked her if she had been eating ice cream. She said they had it for supper, and afterwards she and Johnny asked mamma if they might have some more, and they took some spoons and went to the freezer and ate all they wanted. By and by Johnny commenced to throw up, and I fancy he will not want any more ice cream for a while. In half an hour more Ella had got rid of her supper, I kept changing the flannels, so as to have them hot all the time. The little boy went to sleep first, about three this morning; then their mother gave up and I reckon she had hysterics. Her husband got her on the bed and sent again for the doctor. When he came he said the mustard had saved the children's lives. That ice cream was seasoned with vanilla so strong that it was fairly sickening. Oh, dear! what fools there are in the world."

"What a blessing it is, Jennie, that there are a few old maids left to look after fools and their children. I, for one, am thankful that there is one left in our family," said Mr. Elliott, as he took his hat and turned toward the door.

"You insinuate that I am an old maid, George Elliott! Thank you. I know enough not to feed babies on ice cream, and I always keep medicines on hand for an emergency."

"Of course, you do. So does every one of your mother's girls—thanks to her for her wise teachings! If she had not been a wiser woman than Mrs. Norton's mother her girls would not have been more intelligent or thoughtful than Norton's wife. I think I shall tell Norton of the bill you are going to present to the Legislature. I will vote for it, any way," said he. "Hattie, why don't mothers take care of their children?"

"Just because they do not know how. Mrs. Norton has lost two little ones, and it does seem as if she would try and be more careful of their diet. One you know died in a fit, caused by eating currants and drinking milk afterwards, and the other one had the croup, and they did not call in help till it was too late" said Mrs. Elliott.

"She says that there has not been a week since her first baby was born, but what they have had a physician called. I should think she would learn, 'that an ounce of prevention is worth a pound of cure.' But I must go home, or Mother will think I am lost. Take care of Robbie; this hot weather, one cannot be too careful of the little ones, and try to keep them well."

WOMAN IN POLITICS.

M. W. WILKES.

"WOMEN know
The way to rear up children (to be just);
They know a simple, merry, tender knack
Of tying sashes, fitting baby shoes,
And stringing pretty words that make no sense,
And kissing full sense into empty words;
Which things are corals to cut life upon."

This tribute to women by Mrs. Browning would never be accorded to men. Yet here is Burns' tribute to the sterner sex:

"Princes and lords are but the breath of kings
An honest man's the noblest work of God."

Men and women have their respective fields of work. The creator knew what was best when, in the garden of Eden, he said to the man, "In the sweat of thy face shalt thou eat bread."

The heavier, coarser, manual work should be done by men. Women do it in some countries, but American women do not aspire to a coarse face and figure and brawny red arms. Coarse brain work is in the field of politics. There are flinty rocks and accumulated debris which men can hardly work through, and should women eventually enter the lists, they would become coarse, unlike the modest, refined, thoughtful, and more than all, deeply spiritual women every one loves to remember. Women would become practical, scheming, and ambitious. How many who have read the late Disraeli's Endymion wish to emulate the women found there, who are continually plotting for the lordship, even premiership of their favorites?

If woman votes, she will be unwilling to remain where her uplifted hand may be counted but beyond the reach of her voice. To become an important factor in politics she must engage actively in law-making, for we have already seen that the ballot of women will not tip the balance of votes. No woman can eagerly wish for fat office; surely not the mother of clinging children. A truth well endorsed by this verse:

"I have been flattered by admiring eyes,
Some words have writ which critic's said were wise,
Have spoken to the plaudits of the crowd,
Had thanks for kindness till my heart was proud,
But ne'er had praise which thrilled me through and through,
Like baby's lisp—'you old dood muzzor, you!'"

Better taxation with never a representation if it will taint the whole, even part of the home. Woman knows, for God has written it in her heart, that she should be virtuous let what will befall. Formed with quick intuitions, given the open Bible, the Creator designed woman for a bulwark of virtuous strength to this nation. Men see the need for reform and are working for temperance and purity, but *real* reform is slower through legislation than through earnest individual effort. The universal ballot will avail

nothing, but the out-stretched hand with heart in it will avail much.

GOLDEN GRAINS.

ARTHUR HELPS says: "Be cheerful, do not brood over fond hopes unrealized until a chain, link after link, is fastened on each thought and wound around the heart. Nature intended you to be the fountain-spring of cheerfulness and social life, and not the traveling movements of despair and melancholy"..... .....

VALUE the friendship of him who stands by you in the storm; swarms of insects will surround you in the sunshine. .....

THE Journal of Education says: "Neither matter nor mind, nor both combined, could keep this world from becoming a howling wilderness without moral forces." It should have added that moral forces are but the manifestation of the spirit of God—and He who created order out of chaos, will perpetuate it, though the agency of both matter and mind are moral force... ....

THE Tribune and Farmer, says: "God sends his rain upon the just and the unjust alike, and He makes His seasons the same for all men; but tempered drought and lessened flood, earlier Spring and later Fall has the man with a well-drained farm" ....

IF time is money, not only must the time be improved and valued, as if it were money, but its products are to be saved. Thrift means not only saving time, but saving money. Young people need to learn the virtue of economy even in their pleasures. A Western millionaire, when a lisping child, took his penny to the store and bought a stick of candy, and said: "Three thuckth a day, and thith will laththth five dayth." ....

AN Exchange says, and it cannot be repeated too often: "Nothing is more thoroughly mistaken than the idea that a women fulfils her duty by doing an amount of work that is far beyond her strength. She not only does not fulfil her duty, but she most singularly fails in it; and the failure is truly deplorable. There can be no sadder sight than that of a broken-down, over-worked wife and mother—a woman who is tired all through her life." Unfortunately this idea of duty, *i. e.*, the doing of work beyond her strength, too often comes to woman only after the heat and burden of life should be over. When the mantle of labor—not of duty—should be placed upon those younger and better able to bear it.....

Domestic Economy

CONDUCTED BY MRS. AGNES E. M. CARMAN.

PITHS.

AVOID fall colds.

We would rather have a clean cellar than a clean parlor.

Mend kid gloves with fine thread, not silk, of the same color.

Don't allow yourself to make unexpected visits.

It will pay to have suitable clothing in readiness for the first cold days.

We think most women can spend their time more profitably than in piecing bed-quilts.

Have at least one stove up besides that in the kitchen, in which you can build a fire during the cool autumn days and evenings.

A cheap disinfectant is made by dissolving a half pound of copperas in a gallon of water. Bottle and use for destroying the noisome odors in sinks, pails, etc.

We would that the "company parlor" might become extinct.

GRAND ARMY GOSSIP FROM THE GOLDEN GATE.

THE G. A. R. has come and gone. San Francisco has "welcomed the coming, and sped the parting guest," and the streets that one short week ago were almost impassable on account of the throngs of people that filled them, now look almost desolate, and the native San Franciscan wears a sort of "I-feel-like-one-who-treads-alone-some-banquet-hall-deserted" air, as he passes down Kearney Street. The buildings that a few days since were gay with bunting in patriotic colors and flags and pennants and banners of every device, have once more resumed their somber, work-a-day dress. Still California has done her duty in the matter of hospitality and patriotism, and praises of the success that attended her efforts are heard on every side. The grand parade was one of unparalleled magnificence, and occupied four hours in passing a given point.

Every day had its excursion and pleasure trip. Among the most enjoyable of these was that to San José and Santa Cruz. At the entrance to the latter city was an immense arch of greens bearing this floral inscription: "Santa Cruz Surrenders to the G. A. R." A feast was spread in the plaza, the guests being protected from the sun by arbors covered with green boughs. This banquet took the form of a huge barbecue, at which 14 beeves and 27 sheep were roasted. The tables, besides, were spread with cakes and fruits of every description. A bouquet of choice roses was placed at each place, and also a button-hole bouquet. Over 3,000 people were fed, and in the matter of consumption of food reminded one of the difference between it and that other multitude that were once fed on three small loaves and a few fishes.

Although the strangers who have visited us during the encampment have seen only the most disagreeable weather of which California is guilty, the general idea is that it will be followed by a considerable immigration to this coast. First impressions, however, are not always true ones, and the air of festivity that California has worn is calculated to throw a glamor over everything connected with it. It is always well in choosing a partner for life or a place of residence, not to do hastily that of which you may have to repent at leisure.

BEATRICE.

LITTLE HELPS FROM CORRESPONDENTS.

MRS. B. writes that she always freshens her salt pork in skim-milk. When frying she sprinkles a little sugar over the slices before turning.

"B" THINKS that as a rule salads are poorly appreciated by country people.

ADA WILLIAMS says that trying to get warm and to keep so on a cold day by an open fire, is the most discouraging thing that she has ever undertaken. Toes and face are burning while the rest of the body feels chilly. She prefers an "ungainly black monster" to a "wide generous hearth."

ACCORDING to a friend, machine oil can always be taken out of muslin if the spots are first washed with cold water and soap.

MRS. O. D. says that the reason why canned peaches are so often beautiful to the eye and insipid to the taste, is that they are used in an unripe state, sacrificing their delicious flavor for appearance sake.

J. H. puts her sugar in a tin pan to keep it away from the little red ants.

A WORD TO CHARITY.

PATIENCE, dear Charity Sweetheart! Our minister said in a sermon lately that the work that men and women are put into this world to do, is generally done between the ages of 30 and 50. All the years before are but preparation for that work. It may be crowded into and finished in 12 months' time, but we need years of discipline to fit us for it whatever it may be. I see sometimes old people who, I am told, were stern and hard, almost cruel, in their younger days; now they are gentle, kind, unselfish, but it required many years, even with the help of grace, to build up such characters.

"Those boys" ought to be cleanly for the sake of health and common decency, and a little interference in the shape of parental authority or sisterly suggestion might do them some good, but we must not shrink too much from the world's dirty work. Somebody has to do it. Think of the work of physicians and nurses. Not for money alone, not because they are lacking in refinement or feeling, but for the cause of science and for the sake of suffering humanity they bear disagreeable and disgusting things, and make no sign. Life with plenty of books and the companionship of refined, intellectual people for its principal feature, would be an existence so purely ideal that I fear comparatively few realize it, and such a life might become selfish indulgence. Many fail from sad necessity in this world, but I trust Charity Sweetheart will not be one. I prophesy that with "lofty endeavors" she will reach the hills of high achievement whence perhaps she will look back upon the hard road she has trodden with tenderness, and sometimes long for its scenes again. Those of us whose lives are failures can live again in watching the progress of others and cheering them on. C. W. M.

PRESERVING WILD FRUITS.

IN parts of the West fruit is scarce this year, and enterprising house-keepers make use of the wild fruits of the country, which still grow abundantly in many places. It was discovered years ago before the present mode of canning fruit had come into such universal use, that wild plums could be kept nicely for several months, and would be found to have lost that disagreeable acrid flavor, which is common to them. The plums when gathered were put into a stone crock, large or small as desired, and boiling water was poured over them in sufficient quantities to cover them: then a cloth was spread over the top and a plate was put over that to keep them under the water. No other care was required. They were kept in the cellar and used as wanted.

Wild crab apples which also have a disagreeable flavor, may be made very presentable for the table by first boiling them up in saleratus water—a teaspoonful for a quart of water. When the apples become tender, pour this off and with a clean cloth squeeze out the cores, which are small and will come out entire. Then stew the apples in molasses, with a little water added. When well done this makes very nice sance. Perhaps the absence of the best apples may give them a relish they might not have otherwise. They were always considered an addition to the table of an "Old Settler."

Wild grapes were also pressed into service and made a good and lovely colored-jelly. They were handled very much as currants would have been if jelly was to be made from them.

Tomatoes will figure largely this year as preserves, which is the surest way to keep them. Lemons should be generously used to flavor them. AUNT RACHEL.

WATER FOR THE SUPPER DISHES.

IF Mrs. Jack would turn a dipper of cold water over her supper dishes, and let them stand till morning, it would save heating the house at night. Or, have a kettle of water hot before the fire goes out. It will keep warm enough to wash supper dishes. MRS. H.

AUTOGRAPH APRON.

I NOTICED a very pretty apron that an ingenious young friend of mine wore recently, and it occurred to me that as it was original with the young lady, it would probably be new to the readers of the RURAL. The material was white linen, the threads were drawn, and a hem an inch wide was hem-stitched in. One corner was occupied by an immense spider-web, worked with etching stitch in light blue working cotton. Among the meshes of this web were the names of various friends, written in their own hand-writing, and embroidered with different hued cottons. Some were merely initials, others the first name, and still others had written the whole name, in different degrees of elaborateness. The opposite corner contained a beautifully drawn bird, with a scroll in its mouth bearing the name of the artist.

Some curious hieroglyphics, that might have been copied from an Aztec monument, I found upon translation were these words written in short-hand,

"Genevieve of old,
Against the bitter cold.
"Wore apron more bold."

The young lady's name was Genevieve, and doubtless in after life this apron will serve to recall to her many sweet and happy memories. The embroidery should all be done by one hand, to preserve a neat effect, as no two people, unless skilled in the art, embroider alike. AUNT EUNICE.

DOMESTIC RECIPES.

COOKIES.

THESE are good and can't hurt children. One cup of cream, one cup of sugar. If sour cream is taken, use one teaspoonful of saleratus dissolved in a very little water; if sweet, use the same quantity of baking powder. Season with cinnamon, make stiff enough to work easily. MRS. J. H.

AUNT ANN'S WHITE MOUNTAIN CAKE.

One-half cup butter, one of white sugar, two eggs, one-and-one-fourth cup of flour, one-half cup of sweet milk, one teaspoonful of cream-of-tartar, one-half teaspoonful of soda Bake in four tins. Make white of one egg into frosting and spread between the layers. MRS. B. C. D.

WHAT OTHERS SAY.

LUCY M. HALL, M. D., in the Christian Union, says there are two things she most devoutly wishes. The first is that every girl would grow up a tomboy. The second is that that most unjust and mischievous word had never been compounded.

THE same sensible writer thinks that the notion that a sickly, peevish girl is more of a lady than one who is bright, rosy and joyous, bubbling over with the high spirits of health, is a fatal mistake.

HARPERS' BAZAR says that the purest butter that was ever made may become tainted and poisoned in one short hour by objectionable surroundings.

WILLIAM STREET, in Philadelphia Press, says that it is all over with a mistress when she says to the children or the servants, "I will tell your father, or my husband, if you will not obey me."

Miscellaneous Advertising.

Catarrh

Is frequently an indication of a Scrofulous taint in the system. Ayer's Sarsaparilla purifies the blood, and thus restores health to the affected membranes. It also stops the nauseous catarrhal discharges, and prevents the infection from reaching the lungs and stomach. Catarrh should be treated as a blood disease.

I suffered for years from chronic Catarrh. My appetite was very poor, and I felt miserably. None of the remedies I took afforded me any relief until I commenced using Ayer's Sarsaparilla, of which I have now taken five bottles. The catarrh has disappeared, and I am growing strong and stout; my appetite has returned, and my health is fully restored.—Susan L. W. Cook, 909 Albany st., Boston Highlands, Mass.

Ayer's Sarsaparilla,

Prepared by Dr. J. C. Ayer & Co., Lowell, Mass. Sold by all Druggists. Price $1; six bottles, $5.

MAKE HENS LAY

SHERIDAN'S CONDITION POWDER is absolutely pure and highly concentrated It is strictly a medicine to be given with food. Nothing on earth will make hens lay like it. It cures chicken cholera and all diseases of hens. Illustrated book by mail free. Sold everywhere, or sent by mail for 25 cts. in stamps. 2½-lb. tin cans, $1; by mail, $1.20. Six cans by express, prepaid, for $5. I. S. Johnson & Co., P. O. Box 2118, Boston, Mass.

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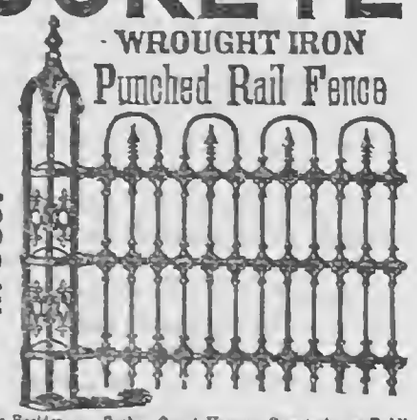

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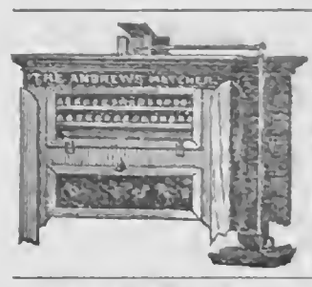

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A GRAND SUCCESS. 10,000 FOR 1886.

With this instrument one man can do the work of two with greater ease and much more expeditiously. Not only for Corn Fodder but for most all like bulky material in shock or bundle. For sale by hardware dealers. Send stamps—50c.—by mail for one, without rope. P. BLAIR, Bucyrus, Ohio.

REMOVE STUMPS and BOULDERS WITH **FORCITE POWDER!** THE CHEAPEST AND BEST METHOD. *Send for Circular mailed free.*

American Mfg. and Supply Co. [LIMITED], 123 Malden Lane, N. Y.

When Baby was sick, we gave her Castoria
When she was a Child, she cried for Castoria,
When she became Miss, she clung to Castoria,
When she had Children, she gave them Castoria

News of the Week.

HOME NEWS.

SATURDAY, September 11, 1886.

SEVERAL minor earthquake shocks have been felt in Charleston since last Saturday, greatly frightening the people whose nerves were already overtasked, and prostrating or damaging still more a number of buildings already demoralized by previous shocks. For days and nights the alarmed inhabitants camped in the widest streets, squares and other open places, nearly starving at first because afraid to venture into the narrower streets to get food from home or the stores, as chimneys, etc., were toppling down frequently and whole buildings might crash down on them in case of another shock. A very large proportion of the town will have to be rebuilt, and nearly all of the houses need strengthing and repairing. A number of fissures appeared here and there in the city, and still more in the adjacent country, where many houses were damaged or thrown down, and many people injured, and a few killed. Relief societies were at once organized in all the chief towns of the country; and especially in this and other Eastern and Southern cities which have much commercial relations with Charleston and the tributary country. Large contributions were at once telegraphed by private individuals, companies and organizations like the Stock and Produce Exchanges, and within the first week over $100,000 was forwarded, besides a vast amount of provisions and clothing. More contributions are still pouring in, and there's no doubt but all the help needed will be given. What is now wanted are loans to enable the people to rebuild and resume business.....

Sea serpent seen in Connecticut River Tuesday. Head five feet out of water; large as the smoke-stack of a steamer. Two "credible witnesses"—nobody else ever sees it..... Federal officials are again warned against interference in politics—this time by the Acting Secretary of the Treasury.....Judge Thomas C. Manning, of Louisiana, is to succeed United States Minister Jackson in Mexico.....People getting tired of the Cutting affair—excitement dead on that score; but other complaints of illegal imprisonment of other Americans excite some interest. The Republicans, as a party, are opposed to trouble with Mexico, but favor a "vigorous policy" with regard to Canada...Another American fisherman has been seized. The Canadian authorities declare that our seizures of Canadian vessels in the Behring Sea were illegal, as seals are not fish, and anyhow the captures were made over 120 miles from land. It is said that English war-vessels on the "Atlantic station" are to assemble at Halifax and aid the Canadian cruisers to prevent Americans from fishing within the tabooed limit..... .....At Northmond, Sullivan County, Pa., Thursday night a shanty, in which 56 Hungarian workmen were sleeping, took fire, and seven were cremated.....The Louisiana State Board of Health is strongly of opinion that there are several cases of yellow fever at Biloxi, Mississippi, a Southern watering-place on the Gulf—exodus of visitors.... .. Nearly $4,000,000 in gold has been shipped into this country since August 14. Crops going out, gold coming in. .....Horace Chase, one of the founders of Milwaukee, died September 1.....The aggregate Internal Revenue receipts for July, 1886, just published, show an increase of more than 10 per cent. over those of July, 1885, about two-thirds of which are from spirits. The figures are for July, 1885, $8,832,198, and for July, 1886, $9,735,488. Anti-Prohibitionists attribute the increase to the Prohibition agitation!..... .....According to the new Pennsylvania marriage law, a license must be obtained in the county in which the ceremony takes place. A parson was fined $100 at Philadelphia Thursday, for marrying a couple on a license issued in another county.....Monday was "Labor Day"—a holiday with many workingmen. About 20,000 paraded here, 15,000 in Brooklyn, 18,000 in Boston, 14,000 in Pittsburg, 22,000 in Chicago, and proportionate numbers in other centers of labor. Lots of speeches, music and bunting .....The inland revenue receipts of the Dominion of Canada for the year ended June 30, 1886, amounted to $5,883,580, making with additional miscellaneous collections, a grand total for the year of $6,396,330..... ... It is stated that the Knights of Labor organization will be remodeled after the system of the Federal Union. The leaders of the miniature National Party in Mass. have invited the Knights of Labor to take part in politics with them. In Connecticut a convention of delegates from labor organizations has nominated a State ticket. The impression is growing in the New England States that the Knights mean to become a power in politics. .....The Court of Appeals of New York State is said to stand four to three against boodle Alderman Jachne's appeal, so it is likely he will serve his full time in Sing Sing. His lawyer, however, who also acts for the other boodle aldermen, says he has discovered a technical flaw in the manner of making up the grand jury which brought indictments against the "boodlers," and that this will be enough to vitiate every case on which it acted. ....."Does Prohibition prohibit," is the latest conundrum of the high-license, local-option and anti-saloon people. Each says his own check on liquor selling is a much stronger stimulant to temperance than Prohibition, which they say cannot be enforced at all in large towns, and only partially in small ones. Prohibition is certainly the great side issue now everywhere, and it looks as if it would become a main issue soon in National and State politics....."Ex-President Arthur continues to improve," say the New York papers. "Ex-President Arthur is again in a serious condition," say the Chicago and St Louis papers.....Recent discoveries here, in Newark, N. J., and in several other parts of the country leave no doubt of the truth of the impression that roller-skating rinks are nurseries of vice. The "fever" is fast subsiding; and late revelations should close every such den in the country.....Forest fires are "raging terribly" in the country about Calais, Me. Waters in rivers and lakes not so low for years.....Drought still very severe about Tolono, Ill. Streams dry; fish dead; stock driven long distances to water. Corn parched. Earth full of cracks. Soil baked.....The revolution against the General Government is assuming "alarming proportions" in Tamaulipas, Mexico. Insurgents number 1,000 well mounted. Revolutionary strength reported as great in Nuevo Lion and Coahuila.....The America Cup was won from the best English yachts about a quarter of a century ago by the yacht America, and several attempts have since been made by crack English yachts to recapture the trophy. Last year the Yankee sloop Puritan defeated, in two straight races, the English cutter Genesta. This year the English cutter Galatea, said to be faster than the Genesta, has come across to try for the Cup; and Yankeeland built the Mayflower, which has proved faster than the Puritan, to defend it. In a 40-mile race on Monday the Boston flyer outsailed the English clipper by nearly 12 minutes. They started again for an ocean race Thursday, but a dense fog and light breeze stopped the race. Mayflower ahead, however. To day they are racing again and (now, 3:30 P. M.) Mayflower is 2¼ miles ahead. .....At last Geronimo, Natchez, and their band of 40 adults and three children, surrendered to Captain Lawton, on September 4, "unconditionally," it is said; but many believe so wary a chief would never have given in without assurances that his life would be safe. On September 9 a special train of three cars left Bowie Station, Arizona, with the whole band in charge of Lawton, bound for Fort Marion, Florida, General Miles going with them as far as El Paso. Other turbulent Indians, taken from the Apache Reservation, met them at Albuquerque, and are to be also transported to Florida. Geronimo escaped from Fort Apache May 17, 1885, and took with him 34 bucks, eight boys, and 91 women, traveling 120 miles before camping, with pursuers hot on his heels nearly all the time. Since then he has been hunted by nearly all the cavalry of the United States and Northern Mexico, and though wounded much of the time, he could not be captured. His cruelty deserves death, but his unparalleled hardihood, skill, pluck, endurance and courage deserve admiration. He may be imprisoned for life, or tried by court-martial and shot, or surrendered to the authorities of Arizona for trial, which would mean certain death for his multitudinous murders and other atrocities.

FOREIGN NEWS.

SATURDAY, Sept. 11, 1886

IN Europe the Bulgarian embroglio still "holds the field." Owing to the lond entreaties of the army and people of Bulgaria and Eastern Roumelia, Prince Alexander stopped on his way to Darmstadt, and at the instigation chiefly of England, returned last week to Bulgaria, where he was enthusiastically received. The chief conspirators against him were tried and condemned to death, but all were soon released owing to the pressure of Russia in their favor, and it soon became evident that the Russian influence in the Balkan States was so powerful as to cause a civil war should Alexander remain, and that would give Russia a pretext for occupying the country, and virtually taking possession of it. Alexander by the advice of Emperor William, wrote an abject letter to the Czar, protesting his devotion to Russian interests; but the answer was curt and brutal, telling the Prince he had better quit the country or trouble to himself and it would follow. Russia used every means to get rid of him. Austria was lukewarm. The German people were inclined to be enthusiastic in his favor, but Bismarck grimly declared that if he were an angel, it wouldn't be worth while for Germany to offend Russia on his account, so the unfortunate young man resigned the title he had just resumed, and once more started for Darmstadt where he arrived yesterday. On the road he was heartily greeted by enthusiastic crowds. A regency was appointed to look after Bulgarian affairs until a successor shall be elected. He may possibly be re-elected, and then there will be trouble for certain, and most likely there will be trouble soon anyhow. The Balkan States are now virtually provinces of Russia, which guarantees a loan of 10,000,000 roubles, sends a general to command the army, and an envoy to manage civil affairs. Whether England, Turkey and Austria will view this state of affairs quietly is doubtful ....Turkey evidently fears a war with Russia, and is conscripting all Turks of military age in Europe and Asia Minor. The harshness of the conscription is causing much discontent in Asia, as the families of the conscripts are starving. Artillery and small arms are being bought on all sides, and earnest preparations for war in Europe and Asia are being pushed forward. There is talk of a confederation of Bulgaria, Roumania and Servia, which could put 500,000 men into the field; and England is trying to bring it about as a barrier between Russia and Turkey. Austria is dissatisfied with Russian predominance on the Peninsula, but is held in check by Bismarck. Some say she will push to the sea at Solonica, appropriating Bosnia and Herzegovina, and allow Russia to push to the sea at Constantinople, after appropriating all the States north of it abutting on the Black Sea. Italy is strongly opposed to Russian designs as likely to bring the mighty Muscovite Power close to her on the Mediterranean. Germany's attitude is a puzzle to diplomatists, as they think she ought to desire to humble Russia, as there must probably be a war between the two before long. At present Bismarck appears to be playing second fiddle to De Giers, and favoring Russian pretensions in every way. France thinks her position is bettered by the embroglio. Her army was never so large or well equipped. Her navy is hardly second to that of England. Whatever side Germany may take in any war, France is sure to take the opposite, and most think the present attitude of Germany is due to Bismarck's determination to prevent a Franco-Russian alliance at all cost. Hence the concessions to Russia are the price of a continuance of the "Triple Alliance" ....England's army is insignificant in numbers in comparison with those of the great Continental Powers, and she cannot fill it up by means of conscription, the only means by which other European Powers keep up their vast armies. Moreover, it is scattered all over the world, and the present disturbed condition of Ireland keeps upwards of 40,000 troops there; and probably twice that number will be needed the coming Winter, if the threatened evictions take place. Moreover, trouble is feared in her East Indian possessions, as it is known that Russian agents have lately been inflaming the natives against the British, and in favor of the Russians. The latter have been pushing their railroads east with all speed, and can now transport troops by rail nearly to the borders of Afghanistan, and in case of war with England no doubt the latter country and probably India, also, would be involved in the contest. Hence England is cautious; though strongly opposed to all the Russian projects in the southeast of Europe. There's very little "jingoism" just now, but it would not take much provocation to rouse it against Russia.

Honors at Home and Abroad.

THE Whitman Continuous Hay and Straw Press was awarded the First Prize Silver Medal at the New England Fair (Bangor, Me.) this week; also First Prize at the late International Rural Fair, Buenos Ayres, South America. This, in addition to the Great World's Fair and many others, should be very gratifying to the Whitman Agricultural Co. of St. Louis, Mo., who will furnish any information desired.—*Adv.*

AGRICULTURAL NEWS.

SATURDAY, Sept. 11, 1886.

AT West Chester, Pa., Wednesday, about 700 bushels of wheat stored in an upper floor of the barn of Darlington Strode, in East Bedford, proved too heavy for the joists, and the floor giving way, crashed into the cow stables. Twenty-two cows were in the stable, seven of which were smothered to death by the grain or killed by the falling timbers. Most of the cows taken out alive were more or less injured .....Thursday, at Jacksonville, Ill., Charles Spain and Everett Ellis, aged 11 and 13 years respectively, were smothered to death while playing in a wheat bin from which the grain was being drawn,.. ....The above two items are simply specimens of many accidents reported, due to similar causes.....Counsel, "the best trotting horse on the track" at the annual meeting of the Council Bluff's Driving Park Association, belongs to G. W. Barley, of Fairbury, Neb., was sold for $10,000 the other day..... ....Texas fever prevalent among cattle at Decatur and Jerseyville, Ill., contracted from Texas and Cherokee cattle bought at St. Louis.....Hog cholera very fatal south of Muncie, and about Peru, Ind..... ....It is reported that nearly half the oleomargarine exports from this country return in the shape of foreign cheese..... ..... The fourth annual meeting of the Veterinary Medical Association was held at Columbus, Ohio, the other day. Laws for shutting out quacks and giving protection to professionals are to be sought. Incompetents having been driven out of New York and W. Va., are said to have found a welcome in the Buckeye State. The following officers were elected: President, T. D. Cotton, of Ohio; vice-presidents, R. J. Withers, of Chicago, A. J. Chandler, of Michigan, and T. L. Armstrong, of Indiana; recording secretary, C. B. Robinson, of Wheeling; corresponding secretary, James Hamill, of New York City; treasurer, L. V. Plagemann, of Brooklyn..... The Democratic convention of California demands the restoration of the tariff of 1876 on wool.....The principal authorities in the grain trade in Great Britain agree in predicting a higher range in wheat prices during the coming cereal year than has prevailed during the past one.....English agricultural returns for 1886 show that the acreage of land under wheat this year is 2,286,066 acres. This shows a falling off of 7.8 per cent. compared with last year, and of 14.6 per cent. compared with 1884.....The exports of live stock and dressed meats from the port of Boston last week were 1,173 cattle and 3,179 quarters of beef.....In the last ten years Canada cattle increased about 30½ per cent. against an increase of 63 per cent. in the United States.....

It costs about $25 per head to carry cattle from Canada to the English markets... .....A second New Jersey Horticultural Society was organized Thursday. President, James R. Pitcher, of Short Hills; chairman of the executive committee, J. P. Knorr, of Orange; treasurer, Thomas H. Spaulding, Llewellyn Park; secretary, John Farr, Short Hills..... .....The exports of genuine butter from the United States have fallen from 40,000,000 pounds in 1880 to 21,638,138 pounds in 1885, or nearly one-half, while the exports of butter substitutes have increased from 20,000,000 pounds in 1880 to 39,000,000 in 1885. .....The Hessian fly has just been added to the many other plagues of the English farmer. Miss Ormerod, Consulting Entomologist of the Royal Agricultural Society, has "positively identified it" near Hertford, and farmers are cautioned against it—but what good will that do? It has long been a pest in Germany, the wonder is that England has hitherto escaped.

A Friend of the Family.

THE desirability of a permanent and effective remedy in the household in cases of croup, scarlet fever, asthma, hay-fever, insomnia and sore throat will be admitted by everybody. Such a remedy exists in Drs. Starkey & Palen's Compound Oxygen, which is made by them and dispensed from 1,520 Arch street, Philadelphia, Pa., to almost every part of the world. Of this fact *Elmer E. Burlingame*, of Elmira, N. Y., wrote September 14, 1885: "I know Compound Oxygen to be worthy of the highest praise, having used two Treatments of it in my family during the past year with wonderful results." Complete information as to the methods of Treatment and the highest testimonials may be obtained free by any applicant.—*Adv.*

Crops & Markets.

SATURDAY, Sept. 11, 1886.

The Mark Lane Express, in its review of the British grain trade during the past week, says: "The rainfall of the week has done no harm to crops. In the earlier districts the bulk of the harvest has been secured, and where the crop has not been reaped strong winds counteracted the wet. The change in the weather will retard the appearance in the market of new wheats, and will also be an important factor in determining values. The sales of English wheat during the week were 29,892 quarters at 33s. 1d., against 39,709 quarters at 32s. 4d. during the corresponding period last year. Foreign wheats are steady, but with little doing.

The fourth series of London wool sales of the year, at which 266,000 bales are to be disposed of, commenced Saturday last. There was an unusually large attendance of home and Continental buyers, and competition was very animated. Since the close of the last series there has been an active demand, which has resulted in the private sale of 20,000 bales at two to four cents above the average rates of the series. The values realized the first day of this sale show the following advances compared with the closing rates of July: Australian—Greasy and merino seven cents; washed and scoured four to six cents: do. cross-breds two cents. Cape of Good Hope and Natal—Greasy four cents, do. fleece and scoured six to seven cents.

Early-planted potatoes are reported to be generally good in the West; but late-planted are poor, and in many districts a flat failure.

Hogs are generally reported well, with only scattering cases of cholera as yet.

Here are some dairy items from strong dairy centers:

ELGIN, Ill., September 6.—Under strong demand butter advanced 1 cent to-day, the sales on the call board being made 24 to 25 cents for all offerings, closing firm, with many orders unfilled. Cheese firm. Full creams at 7¼ to 8⅛ cents for cheddars and flats; young Americas at 9 to 10 cents; skims at 3 to 7½ cents, according to quality.

LITTLE FALLS, N. Y., September 6.—Cheese—Prices 1¼ cents above those of last week. Sales, 4,200 boxes at 9½ cents; 3,260 at 9¾ cents; 1,100 at 10 cents; 1,200 on commission, and 960 of farm dairy 8½ to 10 cents, the bulk at 9½ cents. Butter—Sales, 40 packages at 18 to 20 cents, the bulk at 20 cents.

UTICA, N. Y., September 6.—Cheese—Market 1 cent higher and active. Sales to-day 100 boxes at 8¼ cents; 40 at 9 cents; 5,000 at 9¼ cents; 2,700 at 9½ cents; 1,940 at 9⅝ cents; 1,250 at 9⅜ cents; 575 boxes on private terms, and 1,000 on commission.

Frost one night last week in much of the West, according to Western reports, did very little damage to the growing corn, while it hastened maturity. A week ago in sections of Missouri, Kansas, Iowa and Minnesota a portion of the crop has sufficiently matured to be beyond danger from frost. The reports indicate that, as a whole, the corn crop will be out of the way of frost within ten days. The general prospects for the output of corn show no marked improvement. The reports from all the States, except Ohio, Indiana, Michigan and Minnesota, continue to predict a short crop.

According to the Maine Farmer the hay crop of the Pine-Tree State is about one-fourth larger than last year. It has been gathered in splendid condition, and has never been excelled in quality. Two weeks more of warm weather will produce a large output of corn. Apples, also, promise well, but the yield of potatoes will be below the average.

The Chicago report of the visible supply of grain in store in the United States and Canada on Saturday, September 4, and the increase or decrease from the preceding week is as follows: Wheat, 42,965,625 bushels, increase, 1,667,749 bushels; corn, 13,192,387 bushels, increase, 1,422,706 bushels; oats, 4,949,360 bushels, increase, 704,007 bushels; rye, 515,485 bushels, decrease, 55,200 bushels; barley, 808,090 bushels, increase, 22,850 bushels. The proportion in Chicago elevators was: Wheat, 7,911,000 bushels; corn, 5,796,900 bushels; oats, 2,013,000 bushels; rye, 231,000 bushels; barley, 488,000 bushels.

A telegram from Minneapolis, Wednesday, says the mills last week turned out 141,200 barrels of flour, averaging 23,230 daily, against 152,110 the preceding week, and 65,470 the corresponding time in 1885. The trouble from low water is probably at an end. The heaviest rains ever experienced in that section fell on Monday over the country south of the Northern Pacific Road. The river had previously risen, and on Wednesday had enough water. This week's output will likely reach 150,000 barrels. The mills had not yet begun to use much new wheat, on account of the large supply of old. Exports last week were 58,135 barrels. The production of all city mills for the year ending Sept. 1 was 5,936,530 barrels. Receipts past week—Wheat, 718,850 bushels. Shipments—Flour, 137,170 barrels; wheat, 61,050 bushels; millstuff, 3,887 tons. Wheat in store—Minneapolis, 2,923,404 bushels; Duluth, 3,547,783; St. Paul, 410,000.

Owing to the abundance of feed in many parts of the Ohio Valley and Atlantic States the demand for stock cattle has been noticeably increasing of late; but buyers are unwilling to invest, except at bottom prices. An unusually active demand for breeding stock is also reported; but here also, great caution is exercised by buyers. The taste for good stock is steadily growing among farmers; but they do not care to pay "boom" prices for anything. The business between breeders and breeders is said to be quite limited of late, while that between breeders and farmers is growing in a steady, healthy fashion.....

More attention than ever before has lately been given to overstocking the cattle ranges of the West, and the general impression is that the evil has proved such source of loss as to necessitate speedy correction. The injury to the owners' pockets is likely to lessen the suffering and mortality among range stock before another year.

Although there is a deficiency of 470,000 tons in the sugar-beet crop of Europe, for the season of 1885–6, the visible stocks of sugar are about the same as at this time last year, and prices are even lower. Prophets of higher prices disappointed and puzzled; general belief that last year, in Germany and Austria, there were large invisible supplies, kept quietly back to prevent a still greater fall in prices; these are now being pushed forward, and more than supply the shortage. Better prospects, therefore, for next year, as the invisible supply has for the most part become "visible," and is disappearing by consumption.

MARKETS BY TELEGRAPH.

SATURDAY, Sept. 11, 1886.

CHICAGO.—Compared with cash prices a week ago, regular wheat is unchanged. No. 2 Spring, ⅝c. lower. Corn, ⅛c. lower. Oats, ⅜c. lower. Rye, steady; ⅜c. lower. Flaxseed, 2c. lower. Pork, 15c. higher. Cattle, some grades a trifle higher; others somewhat lower; but prices are a little lower on the whole. Hogs, from 5c. to 15c. lower. Sheep, steady, except Texans, which are from $1.40 to $2 higher, chiefly owing to better character of receipts.

WHEAT active.—Sales ranged; Sept., 76@76½c; October, 77¾@78⅝c; November, 79⅝@80c; No 2 Spring, 76½c. CORN—Cash, 39⅝c, September, 39⅝@40⅛c; October, 41⅛@41⅝c; November, 42⅜@43⅛c. OATS.—Quiet; Sales ranged: Cash, 25¾c; September, 24¾@25⅛c; October, 26⅝@26⅝c. RYE.—Quiet; No. 2, 62c. BARLEY.—Dull. No. 2, 57½c. FLAXSEED.—No. 1, $1 83@1 84. MESS PORK.—Firm; Sales ranged: Cash, $10 36@$10 37½; September, $10 35@$10 37½; October, $10 27½@$10 47½; November, $10 17½@$10 30. LARD.—Steady, Sales ranged: Cash, $7 32½; September, $7 30@7 35; closing at $7 30@7 32½; October, 6 60@6 70, closing at $6 67½. Short Ribs.—Strong; Cash, $6 95. Boxed Meats.—Dry salted shoulders, $6 12½@6 25; Short clear sides, $6 10@7 15. CATTLE.—Shipping steers, $3 40@5 35; stockers and feeders, $2 90@3 25; cows, bulls and mixed $1 25@3 00; bulk, $2 00@2 25; through Texas steers, $2 50@3 10. HOGS.—Market steady; Rough and mixed, $3 90@4 80; packing and shipping, $4 75@5 50; light weights, $3 75@4 80; skips, $2 50@3 75. SHEEP.—Market lower; Natives, $2 00@4 00; Texans, $3 40@3 55; Lambs, $4 25@4 85.

ST. LOUIS.—Compared with cash prices a week ago, No. 2 red wheat is 1c. lower. Corn, ½c. lower. Oats, ⅝c. lower. Butter—Creamery, from 1c. to 2c. higher; dairy, 2c. to 5c. lower. Eggs, unchanged. Flaxseed 2c. lower. Pork, 25c. higher. Cattle, only slight fluctuations. Hogs, unchanged. Sheep, about the same.

WHEAT.—No. 2 Red, Cash, 76⅝@76¾c; September, 76⅝c; October, 78⅝@79c. CORN.—Dull; No. 2 mixed, Cash, 36⅝@37c; September, 36⅛c; October, 37⅜c. OATS.—Dull; No. 2 mixed, Cash, 25⅜@25⅝c; Sept, 25c.; October, 25@c. RYE. Sept, 48½c. BUTTER.—Creamery, 20@23c; dairy, 10@18c. EGGS, 12c. FLAXSEED.—$1 04½. HAY.—Timothy, $10 00; Prairie, $8 00. PORK, $11 00. BULKMEATS.—Long clear, $6 00; short ribs, $7 00; short clear, $7 10. Lard, $6 75. CATTLE.—Good to Choice Native Shipping Steers, $4 30@4 80; Common to Fair, $3 40@4 25; Butchers' Steers, $3 25@4 10; Cows and Heifers, $2 25@3 50; Stockers and Feeders, $3 25@4 00; grass Texans, $2 25@3 50. HOGS.—Market active and steady; heavy, $4 90@5 10. Packing, $4 35@4 85; Lights, $3 85@4 65. SHEEP.—Market firm at $2 25@4 00.

BOSTON.—GRAIN.—Corn.—Steamer mixed at 53½c. per bushel; high mixed, 55c; steamer yellow 56c. OATS.—Sales of No. 2 white at 36@37½c. as to quality, and fancy clipped at 40⅝40c. per bushel. RYE, 62@64c. per bushel. Bran, $14 50 for Spring, and $15 00@16 00 for Winter; Fine Feed and Middlings at $15 50@18, and Cotton Seed Meal at $24 00 on the spot, and $22 50 per ton to arrive. HAY AND STRAW.—Choice Northern and Eastern hay at $18@18 50 per ton, $15@17 for fair to good, $13@16 for fine, and $9@13 for poor and damaged; Western choice, $16@17, do fair to good $11@15. Straw. Rye straw is held at $14 50@15 00 for choice, and $12@14 for common to good. Swale hay at $10@11. Oat straw at $8@9 per ton. PRODUCE.—BUTTER.—Northern and Eastern creamery, extra, 22½@23c; extra firsts, 20@21c; firsts, 17@18c; Western creamery, 19@22c. for extra firsts to extra; firsts, 16@18c; Northern dairy, 16@19c. for Vermont extra firsts to extra; firsts, 14@15c; seconds, 12@13c; Western dairy, 12@13c. for firsts; seconds, 9@11c; imitation creamery, 16@16c for extra firsts to extra; inde-packed, 9@12c, for extra firsts to extra; firsts, 8@9c; seconds 5@7c; grease, 3@4c. NEW CHEESE.—New York and Vermont extra, 8½@9c; do. do. firsts, 8@8½c; do do. seconds, 7@7c; Western extra, 8½@8½c; do. firsts, 7@8c. EGGS.—Cape and near-by, per doz. 19c; Eastern extras 13c; do. firsts, 16@17c; Northern firsts, 15@12c; Western firsts, 13½@14c; Provincial, 15½@16c. BEANS.—Choice Northern hand-picked pea, $1 75@1 85 per bushel; do. do. New York, small, $1 60@1 70; do. do. screened, $1 15@1 80; medium choice, hand picked, $1 50@1 55; do. do. screened, $1 15@1 25; Yellow Eyes, improved $1 50; do. choice flats, $1 25@1 40; Red Kidneys, $1 50@1 75. POTATOES range at $1 75@2 00 per bbl.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, September 11, 1886.

STATE OF THE MARKET.—As compared with cash prices last week, flour 15c, higher; No. 2 Red Wheat, 1c, higher, Steamer No. Red, 1c, higher, Pork, unchanged. Butter and Cheese, steady. Eggs, 1c higher. Poultry, 1c, higher Fruits and vegetables steady.

FLOUR, FEED AND MEAL—FLOUR—Quotations: Fine $2 10@2 65; Superfine, $2 35@3 00; Extra No. 2, $2 70@3 25; Good to Fancy Extra State, $3 30@3 70; Common to Good Extra Western, $2 70@3 70; Good to Choice Extra Western, $3 80@5 00; Common to Fair Extra Ohio, $2 70@3 75, Good, $3 85@4 30; Good to Choice, $4 25@4 75; Common Extra Minnesota, $2 70@3 10; Clear, $3 50@4 00; Rye Mixture, $3 75@4 00; Straight, $4 25@4 65. Patent $4 65@5 00; Bakers' Extra, $3 90@4 25; St. Louis Common to Fair Extra, $2 70@3 65 Fair to Good, $3 70@4 50; Good to Very Choice, $4 55@5 00; Patent Winter Wheat Extra, $4 10@5 10, City Mill Extra for West Indies, $4 45@4 50; South America, $4 10@4 70. SOUTHERN FLOUR.—Common to Fair Extra at $2 25@3 85, and Fair to Choice, $3 90@5 00. RYE FLOUR.—Superfine, $3 20@3 35. CORN MEAL.—Yellow Western, at $2 65, quoted at $2 50@2 75; and Brandywine at $2 50@2 95. FEED.—40 lb, quoted at 65@70c; 60 lb, at 85@87½c; 80 lb, at 70@75c; 100 lb at 81@85c; sharps, at 90c.@$1 00. Rye Feed at 90c.

GRAIN.—WHEAT.—No. 2 New York Spring, at 86½c; Ungraded Winter Red, 86@90c; Steamer No. 3 Red, 85c; No. 2 Red, 87½@87¾c; Extra Red, 90½c; Ungraded White, 88@88c; No. 2 Red, for September, 87¾@87¾c; do. for October, 88 1-16@88 1-16c; do. for November, 90¾@90¾c; do. for December, 91¾@92¾c; do. for January, 93¾@93½c; do. for May, 98¾@98¾c. RYE.—Western, 54@56c; Canada, 56@58c; State, 58@60c. CORN.—Ungraded Mixed, at 51¾@52c; No. 2 Mixed, 50½@51c; No. 2 White, 53c; No. 3 Mixed, 49¾c; No. 2 Mixed for September, 50½@50¾c; do. for October, 51@51 1-16; do for November, 52¾@52¾c. do. for December, 52¾@53c; do. for January, 52¾@53¼c. OATS.—No. 3 Mixed at 31½c; No. 2, 31½@32c; No. 3 White, 31½@31¾c; No. 2, 35@35¼c; No. 1, 36½c; Mixed Western, 33@34c. White, do. 35@41c; White State, 37c. No. 2 Mixed for September, 31¾@32c; do. for October, 32½@32¾c; do. for November, 33½@33¾c; do, for December, 34½.

PROVISIONS.—PORK.—Mess, quoted at $10 50@10 75 for Old and $11 00@11 25@11 50 for New; $13@14 for Family Mess; $13 75@15 00 for Clear Back; and $9 25@10 25 for Extra Prime. BEEF.—Extra India Mess, $11 50@13; Extra Mess, in barrels, $7 25@8; Packet, $8; Plate, $7 25@8 00. BEEF HAMS.—Quoted at $21 00@23 00. CUT MEATS.—Pickled Shoulders, 6@6¼c; Pickled Hams, 9¾@10c; City Pickled Shoulders, 6@6½c, Smoked Shoulders, 7½c; Pickled Hams, 10½@11½c; Smoked Hams, 12@12½c. MIDDLES.—Long Clear in New York quoted at 7½ at West, Long Clear, 7c; Short Clear, 7.3c. DRESSED HOGS, City Heavy to Light at 6¼@6¾c; Pigs, 6@7c. LARD.—September, 7.15c; October, 6.91@6.97c; November, 6.79@6.83c, December, 6.75@6.78c; January, at 6.85@6.89c; City Steam, 7.10, Refined, 7.60; Continent, 7.90.

BUTTER.—Creamery—State, pail, fine, 23@23½; do Pennsylvania, tubs, 22@22½c; Western, best, 22@22½c; do prime, 20@21c, do, good, 16@17c. State Dairy, pails choice, 21@22c; half-firkin tubs, about prime, 18½@19c; half-firkins, tubs, good, 16@17c; half-ferkins, common, 13@14c. Welsh tubs, best, 18@19c; do, do, prime, 15@17c. Western Imitation Creamery, best, 14c; Imitation creamery, fair and good, 12@13; Dairy, fine, 13@14c; do, common, 10@11c, Factory, fresh, 12@13c; do. good, 11@12c.

CHEESE.—New State factory, best, 10c; do, do, good and fine, 9@9½c; do, do, fair, 8½@8¾c; do, do, common, 7½@8c; Ohio factory, fine, flat, 8½@8¾c; State factory, night skims, 6¾@7½c.

EGGS.—State, 17½c; Western, 17@17½c; Canadian, 17@17½c.

POULTRY.—LIVE.—Chickens, spring, per lb, at 12@14c; fowls, near-by lots, per lb, at —@12c.; fowls, Western lots, per lb, at 11@12c, fowls Southern lots, per lb, at 11@12c; turkeys, per lb at 9@11c; ducks, western per pair at 45@60c.; geese, western, per pair, at $1.00@1.37.

POULTRY.—DRESSED.—Turkeys, per pound, at 11@12c.; Spring chickens, Philadelphia, per pound at 17@18c.; do. western, per lb, at 12@13c; fowls, Pennsylvania, prime, per lb, 12@13c; do State and western, per lb, at 11@12c.

FRUITS.—FRESH.—Quotations: Apples.—Gravenstein per bbl, at $2 00@2 50. Maiden Blush, per bbl., at $2@2 50. Peaches.—At 40@50c. per basket for best; 25@35c. for plain per basket; Jerseys, best, at $1 00@1 25 per basket; do. good at 50@60c. per basket. Pears.—Bartlett, Western, per half bbl, $1 75@2 00; Jersey, per bbl, at $2 75@3 25. Grapes 12@15c. for up-river Delaware, per lb; do. Hartford and Champion at 2@4c. per lb. Plums.—Egg, up-river, per bbl, at $3 00@3 50. Watermelons at $15@20 per 100. Muskmelons at $2 00@3 00 for best per bbl.

FRUITS.—DRIED.—The quotations are as follows; Apples—Fancy evaporated, at 9c; do. choice, at 8½c do. prime at 8c; fancy North Carolina sliced, at —; choice do. at 3½@3c.; choice Tennessee quarters at 1½@2c.; State quarters at 2½@3c.; southern sliced prime at 1½@2c. Peaches—Peeled North Carolina, choice, — c fancy, —@—c; do. Georgia, choice, at —@11c; do. prime, —@—c; unpeeled halves 3@3½c, unpeeled quarters at —@—c. Cherries, pitted, at 10c. Evaporated raspberries, at 15@—c; sun-dried do, 15@14c. Blackberries—Prime at 8c.

PEANUTS.—Quotations are: 5½c. for best hand picked; 4@4½c. for farmers' grades.

HAY AND STRAW.—The following quotations are Choice Timothy, old, 80@85c; Good do, at 70@75c; medium, 55@60c; shipping at 50c; clover mixed, 50@60c. Straw.—No. 1 rye, 60@65c; short rye at 40@50c. oat, at 30@40c.

HOPS.—State, best, 27@28c; State, good and prime, 23@25c; State, common, 18@20c; State, old crop, 15@23c; California, best 20@23c.

COTTON.—The quotations, according to the American classification, are as follows:

	Uplands.	New Orleans and Gulf.	Texas.
Ordinary	6⅝	6 13-16	6 13-16
Strict Ordinary	7 1-16	7¼	7¼
Good Ordinary	8	8 3-16	8 3-16
Strict Good Ordinary	8 7-16	8⅜	8⅝
Low Middling	8 13-16	9	9
Strict Low Middling	9 1-16	9¼	9¼
Middling	9⅝	9 7-16	9 7-16
Good Middling	9⅝	9 13-16	9 13-16
Strict Good Middling	9 15-16	10⅛	10⅛
Middling Fair	10 5-16	10⅝	10⅝
Fair	11 15-16	11⅜	11⅜

STAINED.

Good Ordinary	6 7-16	Low Middling	7 15-16
Strict Good Ord.	7⅛	Middling	8 11-16

VEGETABLES.—Quotations are for: Potatoes.—Long Island, rose, in bulk, per bbl., $1 75@2 00; Jersey, rose, per bbl, $1 50; do peerless, per bbl, $1 25@1 87; sweet potatoes, Va., yellow, per bbl., $2 00@2 25; sweet potatoes, Va., yellow, inferior, per bbl, $1 37@1 75; sweet potatoes, Va., red, per bbl, $1 37@1 75. Beans.—Long Island, wax, per bag, $1; do. do. green per bag, 75@87c. Corn.—Jersey, per 100, 75c.@$1 25. Cabbages.—Flat Dutch, per 100, $3 00@4 00. Cucumbers.—Long Island, per 100, 40@50c, do. pickled, per 1,000, $1 00@1 25. Egg plant, Long Island, per bbl, $1 50@1 75. Lima beans, per bag, $1 00@1 25. Onions.—Potato, Jersey, per bbl., $1 75, do. Conn., red, per bbl, $1 25@1 50; do. Orange County, red, per bbl, $1 25@1 50; do. State and Western, per bbl, $1 75. Peas.—Long Island, per bag, $1 75@2 25. Squash.—Long Island yellow, per bbl. $1 00; do. Jersey, marrow, $1 00@1 25. Tomatoes—Monmouth County, per box, 15@25c; do. Long Island, Acme, per box, 10@30c; do. Long Island, Grant, per box, 15@20c.

WOOL.—There is a somewhat better tone to the market, owing to the higher ruling of the London auction sale. Recent sales include: 140 bales Montevideo in bond, said to be at 10c; 30,000 lb X and XX Ohio, 34@37c; 100,000 lb Territory, 20@26c; 25,000 lb Medium Unwashed, 30@32; 10,000 lb Montana, 30c; about 465,000 lb Spring Texas, 25c. 7,500 lb, Washed Combing Fleece, 9,700 lb Unwashed do, 25,000 Medium washed do, and 9,400 lb Spring Texas, on private terms.

LIVE STOCK MARKETS.

NEW YORK, SATURDAY, Sept. 11, 1886.

BEEVES.—Chicago Steers, 1478 lb, at $5 65; Texans and Colorados, 1041 lb, at $4 20; do, 1084 lb, at $4 15; do, 1109 lb, at $4 10; Ohio Steers, 1423 lb, at $5 40; Virginia do, 1128 lb, at $4 30; do, 1014 lb; at $4; West Virginia do, 1094 lb, at $4 25; Chicago Steers, 1246 lb, at $5 30; do, 1193 lb, at $5 15; Ohio "Stockers," 1067 lb, at $3 90; do, 880 lb, at $3 25; Bulls, 1025 lb, at $3; Virginia Steers, 1214 lb, at $5 10; do, 1206 lb, at $5 05; Colorado Half-Breeds, 1312 lb, at $4 20; do, 1439 lb, at $5 05; Native Chicago Steers, 1392 lb, at $5 15; do, 1341 lb, at $5 25; Texas Steers, 1060 lb, at $3 85; Colorado do, 1125 lb, at $4; do, 1179 lb, at $3 80; Kentucky Steers, 1218 lb, at $5 22½; do, 1235 lb, at $5 10; Texans, 909 lb, at $3 50; do, 1027 lb, at $3 80; Chicago Natives, 1255 lb, at $5 25; State Bulls, 825 lb, at 2¾c.

CALVES.—Grassers, 198 lb, at 2c; do, 214 lb, at 2¼c; do, 250 lb, at 2½c; Fed Calves, 260 lb, at 3½c; do, 196 lb, at 4c; Veals, 120 lb, at 6½c; Grassers, 180 lb, at 3¾c; Fed Calves, 205 lb, at 4c; do, 358 lb, at 3c; Veals, 175 lb, at 7¼c.

SHEEP AND LAMBS.—Receipts for six days, 40,627 head against 41,570 head for the same time last week. Kentucky Lambs, 70 lb, at 5c; Ohio Sheep, 85 lb, at 4¼c; Kansas do, 113 lb, at $1 40; Kentucky do 88 lb, at 3¾c; Indiana Sheep, 99 lb, at 4¼c; Ohio do, 76 lb, at $3 65; Canada Lambs, 72 lb, at 5½c; State Lambs, 57 lb, at 5¼c; Indiana do, 63 lb, at $5 06¼; Pennsylvania do (part Sheep), 65 lb, at 4¾c; State Sheep, 93 lb, at 3⅞c; Canada Lambs, 75 lb, at $5 30.

HOGS.—Receipts for six days, 28,947 head against 28,258 head for the same time last week. Very few on sale and none sold before 'Change. Market quoted steady at 5¼@5⅜c for Fair to Good Hogs.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING September 11, 1886.

J. H. H., apples rec'd—W. H. L.—N. B.—C. S. J., plants rec'd—E. T. J.—W. L. D., thanks—G. K., plants rec'd—P. & O.—H. T. D.—A. J. C. & S.—A. & H.—E. L. C.—J. M. R., thanks—B. G. N.—T. T. L.—G. E. C.—M. D. S., thanks—F. L. P., apples rec'd—S. C. S.—C. H. Blomsberry, answer by mail—W. H., thanks—O. F.—O. S. G.—L. L.—T. S. W.—M. H. G.—Ben H., thanks—J. D. A.—W. J. B.—J. M.—F. S. W.—A. B. T.—A. L.—A. C. C.—M. J.—C. W. M.—P. J. B.—S. C. B—L. H. R.—M. D. S.—S. C. S.—C. W. M.—C. S. P.—B. H.—Rd. R. M.—M. J.—L. W. B.—N. J. P.—J. M.—F. S. W.—E. L. C.—S. C. S.—L. D. A.—L. L.—F. P.—S. S.—U. S. G. Mc.—C. S. C.—J. M. H.—C. B. P.—J. E. S.—S. R.—H. H.—A. R.—R. S. C.—J. D. O. B., thanks—P. H. J.—E. B.—A. G. C.—G. W. C., many thanks—D. L.—S. A. R.—E. T.—H. S.—J. T. M.—T. H. H.—A. D.—W. H. S.—H. S.—E. S. G.—C. S. P.—Adah—F. D. C.—A. G. M., thanks—G. H.—D. M. A.—S. McF.—T. H. W.—D. S. G.—T. D. B.—J. C. H.—S. W. H.—G. J. B.—S. W. H.—W. H. M.—E. H. U.—T. D. B.—D. S. G.—L. H. W.—S. W. O.—R. R. V. H.—A. G. M.—F. L. G.—A. W. D.—T. C.—G. D.—J. M. S.—C. A. G.—W. B. R.—J. F. S.—C. B. B.—J. R. H.—C. A. B.—C. H.—E. L. H.—G. E. M.

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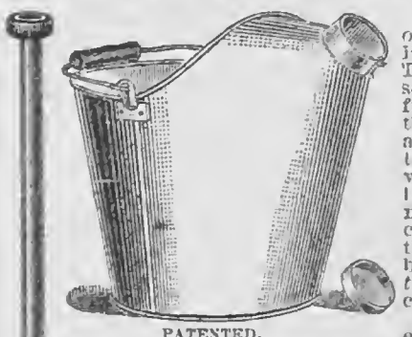

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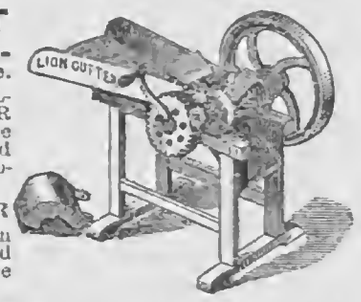

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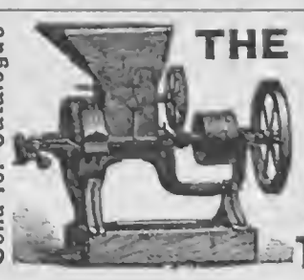

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For Grinding **Ear Corn, Shelled Corn, Oats and all Small Grain.** Each set Plates guaranteed to grind **5000 to 8000 Bushels** before wearing out.
THE FOOS MANUFACTURING CO., Springfield, O.

For the Young.

WHY should boys be so anxious to throw stones? I never saw a boy yet who did not think it was a great thing to be able to hit a mark with a stone or apple. When I was a boy I used to be a pretty good shot with a stone. Now what good does all this stone throwing do? I never heard of but one case where it did much good. A man out West told me that once, years ago, the Indians chased him over the mountains. He used up all his powder and at last hid behind a rock. There was nothing he could use in the way of a weapon but a pile of stones. He threw these with such strength and aim that the Indians kept back until help came. That may be true, but very few of us are ever going to live among Indians. Instead of learning how to fight, we want to learn how to avoid fighting, and it won't make any difference with most of us if we never can hit a barn door with a stone. When we find we can throw a stone straight, we are always wanting to see how near we can come to some animal without hitting it. I have known boys to throw stones at cows, dogs and sheep, and I know cases where such stones have done great harm. I know a boy who had his eye put out by a stone. Who ever knew of any good being done by a stone? I wish our boys would stop the practice.

ANOTHER very foolish thing that some boys practice is carrying a pistol. There is nothing more foolish than this. Boys or men who carry pistols are the worst kind of cowards, and I want them to know what I think about them. You needn't be afraid that robbers and murderers are going to attack you. The man or boy who minds his own business will seldom have any trouble, and the one who fights with right on his side will always win in the end. Some boys read about "Buffalo Bill" and "Texas Jack" and think it would be a fine thing to ride around all day with a rifle to fire off every half hour. I want my boys to look for something higher than that. We don't want any more such men as "Buffalo Bill" than we can help.

UP WITH THE BREEZE.

"Up with the breeze, the birds and the bees,"
I heard a boy sing in the morn;
And his hoe kept time with the merry rhyme,
As he cheerfully hoed the corn.

Down went the weeds and the noxious seeds,
And up went the emerald corn;
And I looked with delight at the gladsome sight,
The work of the early morn.

The broad green leaves turned to golden sheaves,
And the field of beautiful corn
Was gathered and sold, thus turned into gold—
The work of the early morn.

Then up with the breeze, the birds and the bees,
If you wish to grow wealthy and wise,
And merrily sing like birds in Spring,
While your work as merrily flies.

The poor sleepy head, who lingers in bed,
Will have more sorrows than joys;
And when he grows old will be hungry and cold,
So keep "wide-awake," my boys.

—*Unknown Exchange.*

THE STORY OF A DISTRICT SCHOOL.

A COLLEGE BOY'S DIARY.

(*Continued.*)

After much stamping and pushing about the scholars settled into their seats. This confusion did not appear to be the result of any disrespect to me, but it seemed to be considered as a regular performance. School could not well be opened without it.

Two contests were at once begun. Mollie Brawn, finding her seat occupied, proceeded to pull the little girl out into the aisle and brace herself firmly in the seat. The ejected claimant began to cry and to rub her eyes with her apron. It took me several minutes to explain matters and compel Mollie to take the other seat. She got up at last muttering and shaking her head. Her first move was to run to my desk and secure the large red apple she had given me. She seemed to fear that I would try to capture it from her. That I might get as little enjoyment out of it as possible, she proceeded to take several large bites from different parts of it. These filled her mouth so full that her eyes were almost forced out of her face. Then she walked sulkily to the other seat where she sat sullenly scraping her feet on the floor. The other girls sympathized with her as far as they were able by making faces in my direction.

This trouble was hardly begun when I was called to settle a dispute that had arisen on the boys' side. Two of the largest boys were contending for a back seat. They had exhausted verbal argument and were now engaged in a wrestling match which was rapidly degenerating into a fight. A small boy, evidently the brother of one of the contestants, was jumping about in the rear of the battle seeking to get his brother's antagonist by the foot and thus help in throwing him.

I had to pull hard to get the two apart. Then I tried to investigate the trouble. It was hard to decide which one was entitled to the seat so I proposed that they draw lots for it. After some discussion, in which the whole school endeavored to take part, this plan was adopted and I prepared two sticks, which I held in my hand with the understanding that the boy drawing the shorter should find another seat. When the sticks were selected, and it was found that the largest boy would have to get another seat, there was a fresh discussion. The loser at once declared that I had said long instead of short in speaking of the sticks and some of the other boys said the same thing. At last the discussion became so noisy that I became tired of it and caught the defeated candidate by the collar and marched him to the new seat, where I placed him with very little ceremony. The effect of this abrupt argument was that when I rapped on my desk the entire school came to order and sat watching me. Mollie Brawn had by this time disposed of her mouthful of apple and sat scowling fiercely at me.

Of all the queer audiences that one is called upon to face, a strange school is the hardest. I must confess that I felt something akin to fear as I looked down upon the heavy, expressionless faces that met mine. It seemed somehow necessary for me to make some sort of a speech, yet what could I say to interest my audience? Before I could consider a proper line of argument, I found myself speaking.

LETTERS FROM THE COUSINS.

DEAR UNCLE MARK: I am a little girl eight years old. I have one sister and one brother, one Grandma, and she is living with us. We have one Grandpa. Pa. takes the RURAL. We have five sows and 30 little pigs, five horses, three cows and three calves, one cat, one dog, 15 turkeys, eight geese and a good many chickens. They are Buff Cochins, Brahmas and a few Plymouth Rocks. Ma. is canning pickles and tomatoes to-day. I like to read the letters from the Cousins very much. I never wrote a letter to the RURAL before and don't know if this will be a good one or not. Your niece,

ALPHA A. DENPREE.

Johnson Co., Indiana.

UNCLE MARK: I am a boy 16 years old but I am a subscriber of the RURAL NEW-YORKER and would like to be a Cousin. We live on a farm of 30 acres, two and one-half miles from Bay City. My brother Marty and I own the chickens and we have made $10 so far this year. We have 25 old hens, a peacock (that had a tail five feet long but it is all gone now) and a peahen with four little young ones about a week old. I think we will take them to the fair. I planted all the seed that you sent me and the corn all came up and I think I will have a good chance for the prize if nothing happens. Your Nephew,

ACKERSON N. BROCK.

[I would take them to the fair by all means. —U. M.]

DEAR UNCLE MARK: We live on the bank of the Mississippi River, and I have learned to pull a boat. If you ever come and see us I will take you out boat-riding. I have to walk two miles to school. I am keeping a lot of bird eggs. I have over thirty kinds. I wonder if any of the Cousins can beat that. I am learning to do all kinds of housework. I have seven brothers and three sisters, one brother living in Wisconsin, and one brother living in Minnesota, and five at home; two sisters in Wisconsin and one in Nebraska.

Your affectionate niece,

BERTHA L. BANTA.

Oquawka, Henderson Co., Ill.

DEAR UNCLE MARK: I would like to join the Y. H. C. I am ten years old. Papa has taken the RURAL for five years. He likes it very much. I have a little flower garden. I planted the Garden Treasures, but they did not come up because it was so dry. Perhaps the Cousins would like to hear about the hail storm—the hail-stones were as large as turkey eggs. The second time it was a mile from our place. It entirely destroyed the grain, and in some places it destroyed the grass. Papa has just harvested. He thinks the wheat will go 20 bushels to the acre.

From your niece, VIDA THOMSON.

Grant Co., Dak.

Miscellaneous Advertising.

Scrofula

Probably no form of disease is so generally distributed among our whole population as scrofula. Almost every individual has this latent poison coursing his veins. The terrible sufferings endured by those afflicted with scrofulous sores cannot be understood by others, and their gratitude on finding a remedy that cures them, astonishes a well person. The wonderful power of

Hood's Sarsaparilla

in eradicating every form of Scrofula has been so clearly and fully demonstrated that it leaves no doubt that it is the greatest medical discovery of this generation. It is made by C. I. HOOD & CO., Lowell, Mass., and is sold by all druggists.

100 Doses One Dollar

GENUINE YANKEE SOAP

After half a century is still without an equal, AS A SHAVING SOAP. Its rich, mild and lasting lather leaves nothing to be desired. *All Druggists keep it. Avoid Imitations. Trial Samples by Mail, for* 12 cts.

The J. B. Williams Co., Glastonbury, Conn.,

Formerly Williams & Bros., Manchester, 1840.

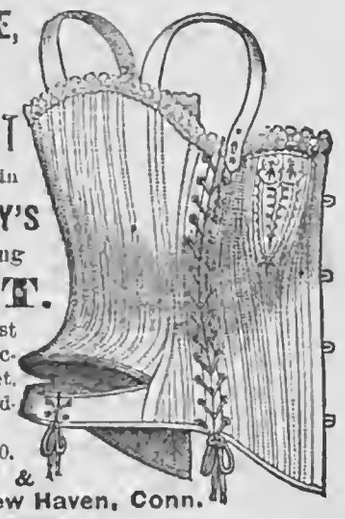
ELEGANT SHAPE, HEALTH and COMFORT

Perfectly Combined in

MADAME FOY'S

Skirt Supporting

CORSET.



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Price by mail $1.30.

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Beautiful Maryland Homestead Farm.—230 Acres, $8,000. For full particulars, address H. P. Chambers, FEDERALSBURG, MD.

INVENTORS and MAN'F'RS. Send for large pamphlet containing U.S. **PATENT** Office Rules for obtaining Patents. F. B. BROCK, Atty., Washington, D.C.

GOLD MEDAL, PARIS, 1878.

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Warranted *absolutely pure Cocoa*, from which the excess of Oil has been removed. It has *three times the strength* of Cocoa mixed with Starch, Arrowroot or Sugar, and is therefore far more economical, *costing less than one cent a cup.* It is delicious, nourishing, strengthening, easily digested, and admirably adapted for invalids as well as for persons in health.

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Cheap and Durable for Flat or Steep Roofs. Send for Catalogue.

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"I NEVER!" Ladies, we make a specialty of giving Premiums for the forming of Tea Clubs. Now is the time to get up orders for our celebrated TEAS and COFFEES. Teas of all kinds, from 30 to 75 cts. per pound. We defy the world on price and quality. No house can give the same quality of goods and premiums as we do. We have a host of useful and ornamental articles to select from. Send us your address (mention this publication) and we will mail you our Illustrated Price and Premium List, and full particulars. Address NATIONAL TEA & COFFEE CO., Washington St., Boston, Mass.

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DOG BUYERS' GUIDE.

Colored plates, 100 engravings of different breeds, prices they are worth, and where to buy them. Mailed for 15 Cents.

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Whitman's Patent Americus.

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BEST, CHEAPEST and MOST IMPROVED in the market.

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$1000 REWARD For any machine hulling and cleaning fit for market as much Clover Seed in ONE DAY as the VICTOR DOUBLE HULLER.

THE VICTOR has made $100 often in ONE DAY.

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One man can do the work that heretofore required two. Utilizes the *weight* of operator. *Lightest running, cheapest and only practical* log sawing machine made. *Saves cord an hour.* Weighs but 35 lbs. Price complete only $12.00. To introduce, will deliver one machine free to any address on receipt of price. *Address* Champion Mfg. Co., Quincy, Ill. Agents wanted.

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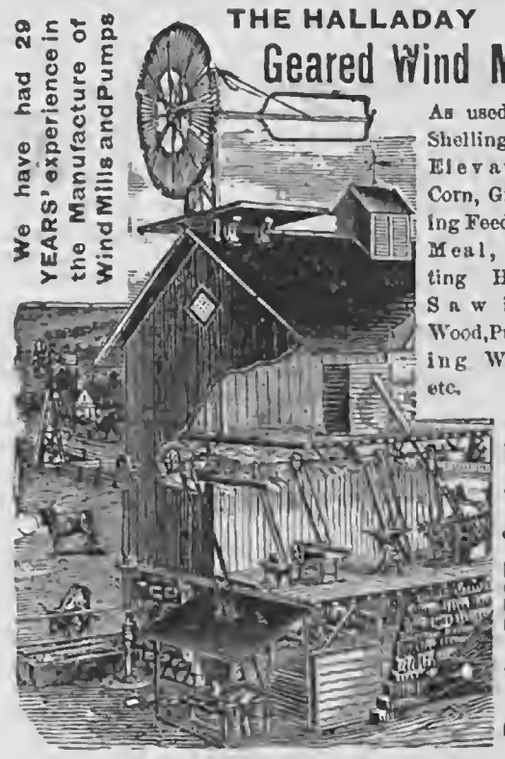
THE HALLADAY

Geared Wind Mill

We have had 29 YEARS' experience in the Manufacture of Wind Mills and Pumps



As used for Shelling and Elevating Corn, Grinding Feed and Meal, Cutting Hay, Sawing Wood, Pumping Water, etc.

Buy the BEST, for in the end it is the CHEAPEST.

Send for Catalogue illustrating the above machinery; also Pumping Wind Mills, Pumps, Tanks, Noyes' Buying Tools, Horse Powers, Jacks, &c.

Give depth and location of your well; quantity of water wanted. State also what machinery you wish to operate, and we will quote you a special price for the entire outfit, or any part thereof. Reliable Agents wanted in all unassigned counties.

U. S. Wind Engine & Pump Co., Batavia, Kane Co., Ill.

Improved HYDRAULIC RAMS

Send for Circular and Price List. Address

ALLEN GAWTHORP, Jr., WILMINGTON, DEL.

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Fertilizer Grain Drill.

Warranted the most perfect Force-Feed Fertilizer Drill in existence. Send for circular, A. B. FARQUHAR, York, Pa.

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THE RURAL NEW-YORKER.

The following rates are invariable. All are therefore respectfully informed that any correspondence with a view to obtaining different terms will prove futile.

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One thousand lines or more, within one year from date of first insertion, per agate line, 25 "
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Terms of Subscription.

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Single copy, per year	$2.00
" " Six months	1.10
Great Britain, Ireland, Australia and Germany, per year, post-paid	$3.04 (12s. 6d.)
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Any one sending a club of seven is entitled to one copy, one year free.

Agents will be supplied with canvassing outfit on application.

Entered at the Post-office at New York City, N. Y., as second-class mail matter.

PERSONALS.

THE wife of President Diaz, of Mexico, is not yet 26 years old, and is a devont Roman Catholic.

ROSCOE CONKLING has had the beard along the side of his face closely trimmed. It now looks like hoar frost, and is whiter on his ruddy cheeks,

F. L. HARVEY, of the Arkansas Agricultural College, has been elected to fill the vacancy in the Maine Agricultural College occasioned by the resignation of Dr. Fernald.

THE Queen of Spain is suffering from pulmonary disease, which is making alarming progress. The affection is similar to that which caused the death of King Alfonso.

THE Michigan State Board of Agriculture has conferred the degree of Master of Science upon Prof. Samuel Johnson, for the past six years Professor of Agriculture at Lansing.

ONE of his friends estimates that with his city house in Philadelphia, his country house at Bryn Mawr, and his seaside house at Long Branch, Mr. George W. Childs spends $250,000 a year.

SENATOR SHERMAN'S house at Mansfield, O., is the highest point in the State. It is 1,300 feet above the sea level and exactly on the divide between Lake Erie and the Ohio River.

DURING a recent eight minutes' speech in the House of Commons, Lord Randolph Churchill was observed to make 130 gestures with his hands, besides numerous changes of general attitude.

CHARLES J. JAMES, a son of G. P. R. James, the English novelist of "two-solitary-horsemen" fame, peddles papers and makes ordinances in Euclair, Wis., where he is an Alderman, and preaches dynamite and anarchy between times.

ONE of the results of the earthquake was to cure the rheumatism of a citizen of Columbia, S. C. He had used crutches for years, but when the quake quaked he ran out of the house like a four-year-old steer, and he hasn't used his crutches since.

MRS. ANNETTE WYNNE, who lives in Washington Territoy, is the proprietress of a fine farm, which contains 420 acres, much of it in a state of high cultivation, and she conducts a stock and dairy business, all the work being done under her supervision.

THE other day at Kansas City, where he is keeping a small eating-house, Martin Irons, the leader of the great Southwestern railway strike, was locked up at the police station overnight on the charge of drunkenness, being unable to give bonds for his release. Fined $5.50 next morning.

MR. GLADSTONE takes every day two glasses of claret at lunch and two at dinner, with a glass of port wine. His alcholic consumption has been estimated by his son at seven gallons a year, which would be three and a half times the average consumption per head in England and four and a half times the average in Europe.

THE mother of General Philip H. Sheridan is 87 years old, and lives in a modest little house near the Hocking Valley, Pa. Her health is excellent, and she enjoys nothing better than a chat about her son. To a visitor she said recently: "You can excuse an old mother for being so proud of her son. He has always been good to me."

GENERAL LOGAN and Governor Alger, of Michigan, while in California, took off their coats and felled a tree that would cut into 108 cords of wood or furnish 36,000 feet of lumber. They could earn $50 a month any time they choose to leave their Eastern homes and occupations and accept a steady position in a red wood lumber camp.

MR. BENJAMIN BOWER, a resident of Pleasantville, N. J., sprinkled Paris-green on his grape-vines. The wind blew some of it in the face of Miss Allie Bower, his twenty-year-old daughter. She inhaled it unconsciously, and soon after became violently ill. A physician, who was summoned immediately, could do nothing for her, and she died in a few days.

IN 1875, Mr. James Lick, of California, left $700,000 for the erection and equipment of an observatory. The structure, on Mount Hamilton, in that State, will be ready for use in the Autumn of next year; and the University of California hopes to make it a gift to science, and not merely a gift to that State. Its immense telescope is the most important astronomical instrument in the world.

Miscellaneous Advertising.

DIXON'S "Carburet of Iron" Stove Polish was established in 1827, and is to-day, as it was then, the neatest and brightest in the market; a pure plumbago, giving off no poisonous vapors. The size is now doubled and cake weighs nearly half a pound, but the quality and price remain the same. Ask your goocer for Dixon's big cake.

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FROM NOW UNTIL JANUARY 1, 1888,
For the REGULAR PRICE, $2.
In Clubs of Five or more, $1.50.
Examine the New Premium-List, which will continue operative until June.
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BEGIN THE CAMPAIGN NOW!
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RURAL NEW-YORKER,
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Takes the lead, does not corrode like tin or iron, nor decay like shingles or tar compositions, easy to apply, strong and durable at half the cost of tin. Is also a SUBSTITUTE for PLASTER at Half the Cost. CARPETS and RUGS of same, double the wear of oil cloths. Catalogues and samples *free*.
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NEW Sample Book of beautiful cards, 14 Games, 12 tricks in magic, 336 Album verses. All for a 2c. stamp. STAR CARD CO., Station 15, Ohio.

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1040 acre Ranch and 960 acre Ranch in S. E. Kansas; both in same County. These places have good improvements and never failing water to any one wanting first class ranches, now is your time to buy, as these are very desirable places. Also 480 acre Farm in N. W. Iowa, with good improvements, Stock and Farm Implements. 160 acres unimproved in Palo Alto Co., Iowa; 160 acres unimproved in Dixon Co., Neb. All within reasonable distance of R. R. Depots. Also choice Chicago property with and without improvements. For terms etc., address the owners at either place.
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CHEAP FARMS in Piedmont, Va., and N. C. Real Estate Journal Free. Address ELAM'S REAL ESTATE AGENCY, P. O. Box 195, DANVILLE, VA.

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"SINGER" MODEL SEWING MACHINES for $12.00 up. Warranted 5 years. New and perfect. Sent on trial if desired. Organs given as premiums. Send for circular with 7,000 testimonials from every state. We can save you $15 to $50. GEO. PAYNE & CO., 42 W. Monroe St., Chicago.

U. S. COOK STOVE DRIER $7 Handiest, Cheapest, Best. Agents Wanted. 12 sq. ft. of Trays. Weight, 25 lbs. Circulars *free*. AM. MF'G CO., Waynesboro, Pa. Box P.

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RENNER MANUF'ING CO., Pittsburg, Pa.

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LeConte and Kieffer Pears on their own roots; Bartlett and other Pears on LeConte roots; Prunus Simoni and Japanese Plums; Peen To & Honey Peaches; Russian Apricots. A large and general assortment of Fruit Trees. Catalogue with facts. Free. Address W. F. HEIKES, Manager, Huntsville Nurseries, Huntsville, Ala.

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The old and Reliable! SYRACUSE NURSERIES Come to the front For the Fall of 1886
with the choicest Stock of their specialties, STANDARD APPLES, STD. and DWARF PEARS PLUMS and CHERRIES, ever offered to the public, all young, thrifty and well rooted.
Also a very superior assortment of GENERAL NURSERY STOCK both FRUIT AND ORNAMENTAL including all the popular ORNAMENTAL TREES, SHRUBS, and ROSES.
All Nurserymen and Dealers are cordially invited to inspect this superior stock or correspond with us, before placing their orders for the coming Fall.
SMITHS, POWELL & LAMB, Syracuse, N. Y.
(When writing always mention RURAL NEW-YORKER.

FRUIT AND ORNAMENTAL TREES
SMALL FRUITS, BULBS, SHRUBS AND ROSES.
Special attention is called to our remarkably Fine Stock of
STANDARD AND DWARF PEARS
☞ ALSO GRAPE VINES Including such kinds as Niagara, Jessica, Empire State, Willis, Frances B. Hayes, etc.
Prices reduced to suit the times. Correspondence solicited. Catalogue Free. 32d Year. 600 Acres. 21 Greenhouses. Immense Stock. THE STORRS & HARRISON CO. PAINESVILLE. Lake Co. Ohio.

CARMAN RASPBERRY This NEW Extra Early Black Cap is now offered for Sale, and is likely to work a REVOLUTION in its market growing. VERY PRODUCTIVE. Fruit of largest size, Jet Black, and the earliest *of all to ripen*. Sells at highest price. Best quality for family use. Also EARHART Rasp., a valuable novelty—fruits from June to Nov. Pot STRAWBERRIES and all best varieties Small Fruits for Fall planting. Cheap for choice stock. Circulars free. Hale Bros., South Glastonbury, Conn.

HAND PICKED SEED. DIEHL-MEDITERRANEAN.
The hardiest, best yielding and milling Wheat grown. Seed hand-picked and strictly pure. For sample heads and prices, address, with stamp,
H. M. JAQUES, Wright's Corners, N. Y.

NEW GRAPES
NIAGARA and *Empire State*, 50c. *each*, and all other new and old varieties, *Guaranteed* true to name. *Quality* positively *unsurpassed*. At the *lowest prices* in America, we believe. Mailing a specialty. Send for Price List.
J. ELLETSON,
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Best and most profitable LATE WHITE PEACH; Choice Choice best late yellow peach. Large stock of Peach trees suitable for all sections. William's Early Red, best early apple. Good stock Apple Trees, most popular and late keeping kinds. Pears, Cherry, Quince (and all fruit trees and fruit bearing plants. 200,000 2-year-old Asparagus roots. Large stock of Shade and Ornamentals. Send for Catalogue. S. E. ROGERS & SON, Mt. Holly, N. J.

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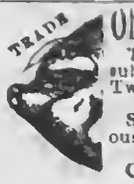
TRADE  MARK
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WHAT OTHERS SAY.
"The finest herd this season."—Dr. Farrington, U. S. Quarantine Station, N. J.
"As a herd, away up! up!! up!!!"—Dudley Miller Esq., Oswego, N. Y.
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Another importation will arrive Sept. 1st from the celebrated flock of John Treadwell, whose sheep have again this year won 1st, 2d and Champion prizes at the "Oxfordshire," "Bath and West of England," and the great "Royal" shows. His best Rams are by my grand imported, 420 lb., "Bicester," winner at these Shows '83, '84 and was 1st at sweepstakes, *over the other Dozens*, at Chicago, Madison, Wis., and St. Louis. Mr. Treadwell wanted him back last year. For sale, Imported Rams, Ewes and Lambs by Imported "Bicester," "Sir John," "Baron Campsfield" and "Donatus."
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JERSEYS FOR SALE.
Imported by the late Col. Degraw, of Jamaica, Queens Co., L. I., where they can be seen. One Bull, "Pride of the Island" No. 5416. Seven Cows, No.s 11904, 11906, 11811, 11907, 11814, 11905, 11910. Also twenty American-Bred—all Registered. These cattle are known as among the most celebrated in this country. They will be sold single, to the party making best offer. Bids close Sept. 10th.
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OIL-CAKE MEAL.
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CALVES,
SHEEP AND HOGS.
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to be of great service during the
SUMMER MONTHS
when grass is good. No room here to give particulars; but try it, and you will see the good results. It is sold by all leading feed dealers.
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Humorous.

IT was Summer. And Long Branch. He came there.
We met.
He was handsome and hasty, and I a coquette.
He proposed. I refused him. I loved him. But then I thought—don't you see?—he would ask me again.
But he didn't.—*Life.*

OXBERIENCE was a bully teacher. Der only trouble mit him vas dot he gifs his knowledge out vhen it vas pooty late.—*New Age.*

A MAN must look up and be hopeful, says an exchange. How can he, with three plumbers working in the cellar, and his wife housecleaning.—*Days' Outing.*

"I DO love dress!" exclaimed a young society belle. "Then I should think you would wear more of it," replied a cynical bachelor.—*Buffalo Commercial Advertiser.*

A LADY entered a drug store a: asked for a bottle of "Jane's Experience." The clerk informed her that Jane hadn't t tled her experience yet, but they could furnish her with "Jane's Expectorant."—*New Age.*

A PRETTY maiden fell overboard and her lover leaned over the side of the boat as she rose to the surface and said: "Give me your hand." "Please ask papa," she said, as she sank for the second time.—*Boston Courier.*

"Is your rector going away this Summer, Mrs. Pew?" "Yes, indeed. The vestry has voted him three months' leave." "They realize, then, that he needs a rest?" "No. On the other hand, they realize that the congregation needs a rest."—*Yonkers Gazette.*

GERMAN MERCHANT (on his return to his office, to clerk, who informs him that a lady has called during his absence): "Laty? Laty? Vat kinds of a laty she vas?" Clerk: "An elderly lady, sir, with rather a commanding presence." German Merchant: "Laty! Dot vas no laty; dot vas mine wife!"—*Australasian.*

Two tramps, a man and his wife, have recently been making a good living in Scotland by means of their baby. "We just gets 'im christened," says the father, "at all the towns we pass, and then you see, parson, he makes us all comfortable wi' summat to eat and money for beds. On days orful bad we have to do 'im twice."—*Credit lost.*

Fig. 1.

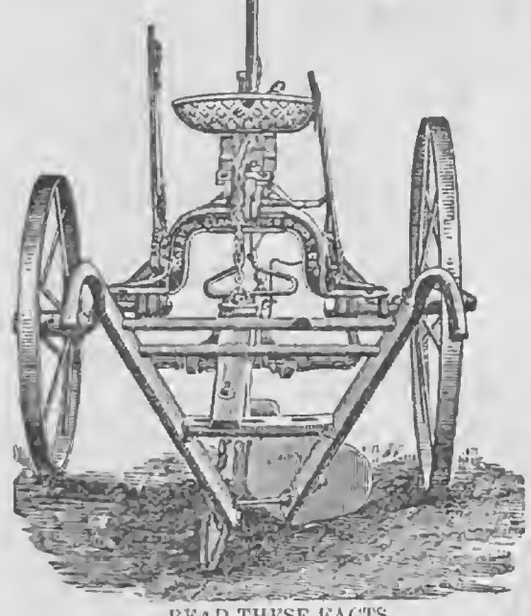
Fig. 2.

Fig. 3.

1. *Vat a pooty leetle kitten dot vas.* 2. *I dinks I vile dake dot leetle kitten home to mine frau.* 3. *Mine gracious, vats de matter mit dat kitten?*

Miscellaneous Advertising.

THE ELKHART
PLOW SULKY



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We claim and GUARANTEE that a Plow attached to the Sulky and carrying the driver, is from five to 100 pounds lighter draft than the same Plow doing same work without the Sulky. Write for prices.

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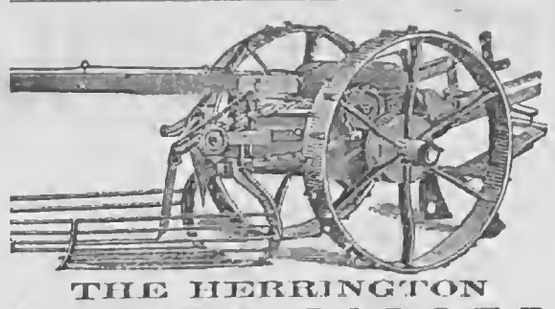

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NEW
MEAT-CHOPPER
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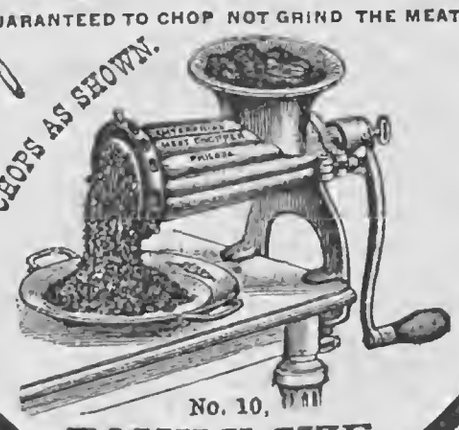
CHOPS AS SHOWN.
RAPID CLEAN
NO STRINGS OR SINEWS CAN PASS THROUGH UNCUT.

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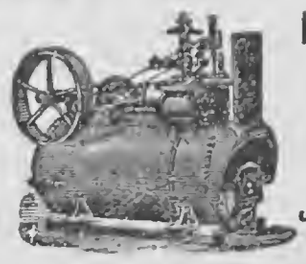
Mrs. S. T. RORER, Principal Phila. Cooking School.



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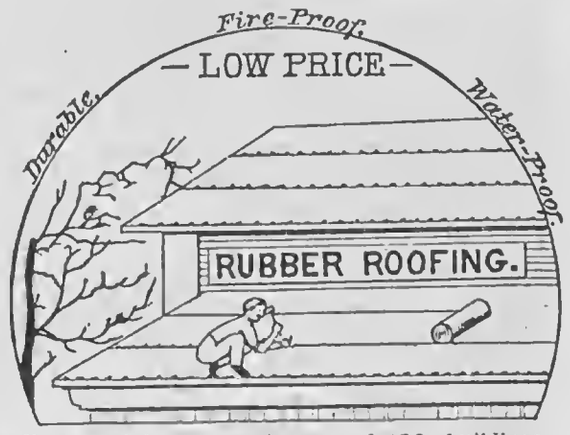

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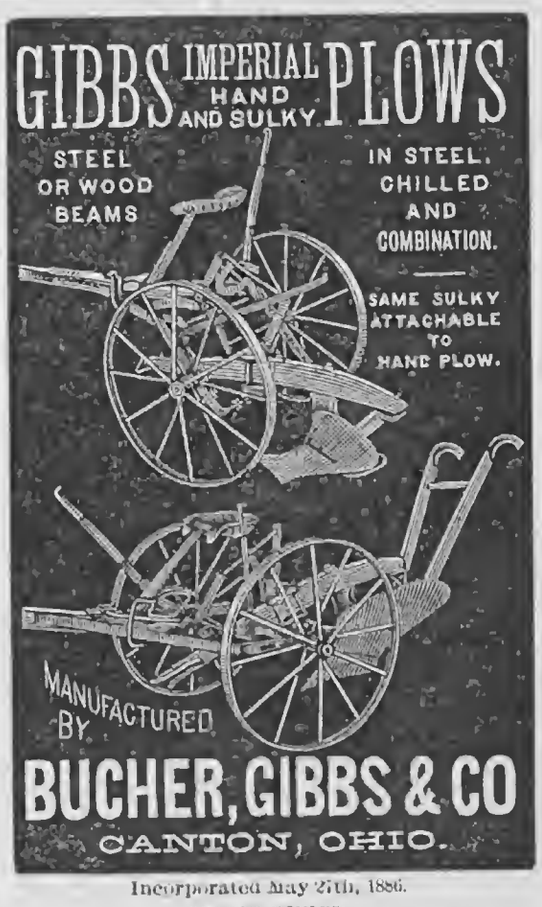

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500 PURE-BRED MARES & STALLIONS
Of the most popular families, all recorded with Extended Pedigrees in the Percheron Stud-Books of France and America, now on hand at Oaklawn Farm.

The Percheron is the only French breed possessing a Stud-Book in both France and America where eligibility to entry is based on authentic pedigree. I have a few imported Stallions of individual excellence (but not eligible to entry in the Percheron Stud-Book) which I will sell at half the price of pedigreed animals of equal appearance. 100-page Catalogue, illustrated with engravings sketched by Rosa Bonheur, sent free. Address, M. W. DUNHAM,
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SOLID STEEL CURVED LIFT FRONT SHANK.
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THE RURAL NEW-YORKER

A JOURNAL FOR THE SUBURBAN AND COUNTRY HOME

VOL. XLV. No. 1913. NEW YORK, SEPTEMBER 25, 1886. PRICE FIVE CENTS. $2.00 PER YEAR.

Entered according to Act of Congress, in the year 1886, by the Rural New-Yorker in the office of the Librarian of Congress at Washington.

The Herdsman.

THE SCRUB.

HE poor creature shown at Fig. 366 represents a class of cattle that is by far too numerous. Two weeks ago we gave a picture of what we consider one of the most beauful cows in this country. We may safely put this scrub down as one of the ugliest specimens of her race. Place the two side by side and observe the contrast. It is well to keep the appearance of our friends in mind, yet it is also useful to know how the enemy looks, that we may know him on all occasions. Such cattle as this old scrub are the enemies of all successful stock growing. It is the duty of all good farmers to unite in breeding and butchering them out of existence. This old cow can be seen any day on the Hoboken flats. There is something pitiful in the scarred face. It tells a sad story of abuse on the part of some cruel owner. With decent care and feeding, warm shelter and attention, this poor old wreck might have made a respectable cow, but hardly ever a profitable one. It is not the cow so much as the years of abuse on the part of her master, and the generations of wretched ancestors, that look out so mournfully at us. Could there be a more striking illustration of what man's cruelty and hereditary ungainliness may lead to? The lesson is repeated over and over again. There is much in breed, but there is still more in care and feeding. Turn the beautiful "Golden Thistle" out on the bleak flats and subject her to the treatment this old scrub has endured, and how much better than this pitiful old creature would her grandchildren be? Give this old cow proper feed and care, let her run with pure-bred cattle, and her grandchildren, if their parents were equally well treated, could easily lay claim to respectability.

THE SCRUB. Drawn from Life, Hoboken Flats, New Jersey. Fig. 366.

STOCK JOTTINGS.

A STATISTICAL HUMBUG.

MR. P. S. LAMAS is "an economist of great repute" in some parts of the world, especially in South America, from which he hails. He is certainly a tremendous compiler of figures; but we more than doubt their correctness. According to his computation there are on the surface of the globe 47,500,000 head of cattle and 105,000,000 of sheep. Europe and Algeria provide 25,000,000 cattle and 50,000,000 sheep, Australia, New Zealand and the Cape 2,500,000 cattle and 20,000,000 sheep, the United States and Canada 9,375,000 cattle and 9,750,000 sheep, the Argentine Republic and Uruguay 6,000,000 cattle and 24,000,000 sheep, and Central America 4,250,000 cattle and 1,250,000 sheep. Hasn't this scientist shown himself a pretentious humbug in these figures? According to the census of 1880, there were in this country, six years ago, 993,841 working oxen, 12,443,120 milch cows, and 22,488,550 other cattle, or a total of 35,924,511 cattle, and the number has largely increased since then, yet this "eminent statistician" allows to the Union and the Dominion only about one-third the number of cattle in the former. This country had in 1880, 35,192,074 sheep, nearly three times as many as he assigns to the United States and Canada. The figures for other countries are just about as "correct."

After an elaborate array of figures of live stock, the genius computes that the world's annual consumption of beef is 7,930,000,000 kilogrammes—2 1-5 pounds—or 17,446,000,000 pounds, and of mutton, 10,550,000,000 kilogrammes, and then apportions to the inhabitants of each county a consumption of a certain number of kilogrammes annually per head; but as his foundation is grossly false, his superstructure is, of course, a farrago of error. But we notice the figures are "going the rounds" of the papers, even the grave, statistical Bradstreet having given them last week without a word of comment.

LIVE STOCK IN BUENOS AYRES.

SCARCELY a week passes without sales of choice pure-bred English cattle for the improvement of the herds of Buenos Ayres. A large number of English and Irish men have settled there, and most of them are engaged in stock-raising—the chief industry of the Province. Lately some experimental shipments of dressed meats have been made to England, and the prospect of a profitable trade in this line is stimulating cattle owners to improve their herds; for it is only high-grades or prime stock that can pay when exported as fresh meat in view of the competition from this and other countries in the British markets. In 1876 the population of Buenos Ayres—the most important Province in the Argentine Republic—was about 600,000, and according to the latest returns, the immigration is between 60,000 and 70,000 a year. Area 440,000 square miles. There are about 45,000,000 sheep, which yield 136,000,000 pounds of unwashed wool; 5,500,000 cattle and 1,500,000 horses, or 200 sheep, 20 cattle and 6 horses for every man, woman and child in the Province. The sheep farms cover 40,000,000 acres, and there are about 30,000 shepherds—mostly Irish and Scotch. Grass is very rich and luxuriant, affording pasturage for sheep at the rate of 30,000 per square mile. Formerly the cattle were hunted down merely for their hides and tongues, the carcasses being abandoned to the wolves and vultures. Now they are slaughtered in abattoirs where every part of the animal is made available, almost as carefully as in Chicago. Except the comparatively small amount exported fresh, the meat is salted or jerked for exportation; the tallow is boiled down, and the trade in hides is great and growing. In 1872 the Province exported 203,610,000 pounds of wool; 72,970,000 pounds of sheep skin and 1,121,756 pounds of ox and cow hides.

CAUTION TO STOCK BUYERS IN LARGE MARKETS.

WITHIN the last week we have noticed announcements of outbreaks of various contagious diseases among live stock in different parts of the country—chiefly hog cholera, Texas fever and glanders—owing to the careless introduction of stock brought in large markets, like Chicago and St. Louis in the West, and Boston and Pittsburg in the East. Here is a specimen: A fortnight ago S. S. Snodgrass, a farmer of Lancaster County, Pa., "bought 96 Durham steers" (mostly grades probably) at Chicago, brought them home and sold some to his neighbors. Within the first week four of them died, a number of others were sick last Monday (when the case was reported) and several deaths had occurred among stock sold in the neighborhood. The disease is said to be splenic apoplexy. If so, it is a form of anthrax in which death is usually very sudden. The purchased cattle, we are told, are quarantined, as "the disease is very contagious." After death the flesh rapidly putrifies and becomes black, as in black-quarter or black-leg (an analogous form of blood poisoning), and is totally unfit for human food. Even dogs and hogs that have fed upon it have died within a few hours, and butchers who, in handling the animals, have been tainted in cuts or scratches on their persons, have died in great agony. The carcasses should be buried deep at once or, better, burned. Too much care cannot be taken in buying stock "promiscuously" in large markets. It frequently happens that unscrupulous owners rush their stock to such markets on the first appearance of disease among them, and it takes more or less time to become developed. Then, again, disease is sometimes contracted on the road by contagion, either from infected cars, fodder or yards in which the stock are temporarily confined. Is it ever generated by hardship and cruelty?

At the recent auction sales of Herefords in England, prices were unsatisfactorily low. On August 19, at the sale of the Bage and Shenmore herd of 70 head, founded in 1842, the highest price was 40 guineas—$204. At the Slowes Court sale of 125 head on August 22, the highest figure for a cow was 41 guineas—$209—though several others brought 30 guineas—$145. The top price for a bull was 66 guineas—$324. At the great sale of Crome Court on August 26, 100 head were offered, 1,000 guineas being the reserve price placed on Good Boy, and 150 guineas the reserve on Gold Treasure, both famous prize-winners; but no one cared to pay either figure. The best prices for cows were 50, 40, 38, 37 and 31 guineas; and for bulls, 60, 40 and 36 guineas. A number of cows and bulls were withdrawn from sale or remained unsold because of the poor prices.

AT the sale of the Burnside herd of 74 Shorthorns, on August 17, the highest-priced bull brought 168 guineas—$856.24. The highest-priced cow, Princess 10th, two-year-old, was bought, for Buenos Ayres, for 100 guineas—$511., the 74 cows and bulls averaging £33 5s. 4d.—$160.50.

SOME people think that nothing but still, cold weather will hurt stock. They make a great mistake. The cold, drizzling rains that come every Fall do more damage than the frosty weather of Winter. If cattle ever need shelter it is when these cold rains come. Remember it, farmers, if you want the cows to have any shape to them next Spring. C. E. E.

Hillsborough Co., N. H.

Dairy Husbandry.

DAIRY NOTES.

T. D. CURTIS.

INDIVIDUALITY OF ANIMALS.

THE individuality of animals is not sufficiently considered. Hence too much stress is laid upon the performance of individual cows as a test of the characteristics and value of the breed to which they belong. The fact is that there is about as much difference between the individuals of a breed as there is between the several breeds, and the individual is constantly changing with the different periods of lactation, and from year to year. This change can be seen in both the quality and quantity of product. Hence, aside from the general appearance, the characteristics and value of any breed of cows can be properly judged only by the performances of a large number of such cows under well-known natural conditions.

DIGESTIBILITY OF MILK.

It appears that the digestibility of food depends largely on the availability of the fats which it contains, and these fats must be present in due proportion. Milk is now understood to be an emulsion of fats, sugar and water with caseous and other nitrogenous materials, including some mineral ingredients. The caseous matter is held in imperfect or partial solution, and hence the white or opaque appearance of the milk. The fat exists in the milk in minute microscopic globules, not covered with a caseous or other membrane, as supposed until recently, but with the albuminous or more viscous materials naturally adhering to them. Now, digestion depends on the reduction of all the ingredients to minute particles so that they can be dissolved by the digestive fluids, and put in a condition for their absorption by the millions of little capillary ducts that line the intestinal canal, that they may thus enter into the general circulation to nourish the needy organs. Hence, the conclusions gradually being reached by some who are acknowledged as authorities, that milk which contains the smallest butter globules is the most easily digested. It appears reasonable, and it will not be surprising if full investigation shall demonstrate this to be a fact. If so, it will give additional value to the milk of some breeds that have heretofore stood in popular disfavor because of the smallness of the fat globules which it contains. It is even asserted that the butter made from cream composed of small globules of fat is more easily digested than that made from cream composed of large globules of fat—and this with all due respect for the little Jersey.

CUM GRANO SALIS.

Some very queer things are claimed for dairy salt, and that which should be generally considered a defect is sometimes commended as a desirable quality. For instance, we are told that a certain salt added a specified amount more of weight to butter, when used in equal quantity, than another kind, and this is considered favorable to the former! If the treatment is precisely the same, all that is shown is that one salt is less soluble than another, and the best butter makers have always considered that salt the best, all other things being equal, which dissolves the most readily. In cases of difference of weight caused by the use of different makes of salt, one of two things must happen—either the most soluble salt is foolishly wasted by too much working of the butter, or too much of the other salt is retained in the butter in an undissolved condition. The most soluble salt requires the least working, and is, therefore, the most desirable. With intelligent and proper management there would be no more waste of it than of the harder salt, but labor would be saved and the grain and flavor of the butter better preserved. Weight is not the most desirable quality in butter.

FALL CARE AND FEED OF COWS.

The dairyman who is most careful to furnish shelter for his cows when the cold rains and frosty nights come on, and who feeds most judiciously, never letting his cows shrink in their flow of milk unnaturally for want of food or of the proper kind and proportion, is the one who will get the most product. Such a dairyman is likely to manage well in other respects, to work his large flow of milk up to the best advantage, and to get the best prices for his goods. To say nothing of the cruelty of the act, it is bad policy to permit cows or other animals to suffer for want of food and shelter. Any loss in this way, in the Fall of the year, puts the animals in so much worse condition for wintering. The loss is not only immediate, but is felt all through the future, and imposes extra cost to restore the animals to the condition which they could have been kept in with very little more outlay than was incurred.

COMMON SENSE IN THE DAIRY.

Some dairymen are so short-sighted as to make very wasteful mistakes in feeding their herds. A common one—not so common now as it was once—is to feed all the coarse fodder the first thing in the late Fall and early Winter for the purpose of having the finest and best left for subsequent feeding. By this practice, the cows not only fail to get a proper variety of food all through the season of foddering, but are compelled to gorge themselves with the coarse fodder in order to secure nutriment enough, if they do not reach a state of satiety and refuse to eat. The subsequent feeding on the better fodder may not be so objectionable, but fails in point of variety. Common sense dictates that the coarse and fine fodder be fed together, the one complementing the other and providing a much better balanced ration. The fodderings may be alternated. By this method the coarse fodder will be eaten up more closely, and both will go further than they would if fed separately. Thus combined, the cows will relish their food much better, will keep in a more thriving condition, and if in milk, yield a larger and better product.

SUCCULENT FOOD FOR COWS.

Provide somewhat of succulent food for your cows when the pastures fail and they must depend on fodder. Some dry feed during the Summer when the grasses are so very juicy, is equally desirable. It is easy enough to furnish the latter in the form of hay. Succulent food may be silage or roots. The food may be drier during the cold weather than would be beneficial in Summer. But in Winter, we ought to aim to furnish food not much less succulent than fall grasses. It is better for the cow and for the product.

"RICH IN CASEINE."

WHAT does a certain kind of dairy writers and breeders of dairy cattle mean by the term "caseine richness" in the milk of certain breeds, by some called the "cheese cows?" That there is a certain per cent. more of butter-fat incorporated or held in natural emulsion in the caseine part of the milk of such breeds, that the best cream extracting processes will not take out, than there is in the milk of the common, or the specific butter-breeds, or what do they mean? That there is a greater per cent. of pure caseine, as compared with the fat, than in milk that will yield more pounds of butter per 100 pounds of milk? If the first, can it be shown that caseine, as chemically analyzed from two breeds differs in quality or "richness?" If the second, then is there any escape from the conclusion that the greater per cent. of caseine there is in a cheese, as compared with the butter-fat coagulated and incorporated with it, so much the more does the curd take on the character of skim cheese? "Richness" in cheese comes only from butter fat. Where does richness in caseine come from, we meekly inquire? It is as absurd, in my opinion, to talk about richness in caseine, as it would be to talk about the saccharine properties of lemon juice. The breeder who commends a cow for "caseine richness" in her milk, is either stupendously ignorant, or trying to prey on the ignorance of his victim. The term is as absurd as oleaginous potash. Let farmers know this—that a cow especially commended as a cheese cow because she can't show up in butter, is a skim-cheese cow, and really can't show up in either cheese or butter. BADGER.

Sheep Husbandry.

Notes from the Western New York Farm.

WINTERING LAMBS.

THE REQUISITES OF SUCCESS.

IT must not be forgotten that, no matter what the temperature to which an animal is exposed, its bodily heat must be maintained at 98°, or else it suffers in health; and digestion, in common with the other functions, becomes impaired and only loss can ensue; and that this temperature, when no artificial heat is used, is kept up solely by the combustion of a portion of the food. It follows, then, that in the too common way of wintering lambs in the open field or yards, a very large proportion of the food is thus consumed, and so far as any returns to the owner, it might just as well have been burned in a heap. Now, if the lambs were so housed in warm quarters that the consumption of food necessary to keep them warm was reduced one-half, the other half would go to add to the growth, and as the quarters once built will last many years, the amount chargeable to the lambs would be only the sum of interest and repairs. It will pay to build stables just for the saving in this direction.

In the wintering of lambs, as in the keeping of other stock, a certain amount of food is required beyond that necessary to maintain heat in supplying the waste of tissue in sustaining life (in running the machine), and if no more be fed than what is necessary to supply this waste, the only possible profit could be in an increased value in Spring over Fall; but, as has been shown, a shorn yearling, if in only store condition, is worth less than the lamb in the previous Fall, so that he who winters in the old way has to work against this decline. But when so fed as to become fat and in demand for slaughter, the spring price, even without the fleece, will be about the full value of the added weight. If the quarters in which the lamb is are of the best construction, the gain in weight will be in proportion to the food consumed, providing such food is selected and proportioned so as to be most conducive to growth; but it must not be forgotten that lambs require very different food from full-grown sheep. In the lambs there will be a large proportionate increase of bone and muscle, as well as of fat and wool, and our ration must be suited to the growth of each and all. After much experience, I have found a mixture containing 100 pounds of corn, 50 pounds of bran and 50 pounds of new-process oil meal as near the thing as any I have tried. Of this, beginning with a small quantity and gradually increasing until they receive all they will eat, the average amount eaten by each per day will not be far from one pound, or 180 pounds for the Winter. In this ration the bran furnishes a surplus of the phosphates for the bones, the oil meal, of the nitrogenous matter for the muscles and wool, and the corn, of the fats and carbohydrates for sustaining heat and furnishing fat, while the combination of hay and mangels, and the straw, which should be given daily, furnishes a very well-balanced food. If the old-process meal is used, the proportion must be greatly reduced, or the proportion of free oil will be in excess of the ability of the stomach to digest, and its effect will be medicinal and harmful, and for the reason that I can buy the carbohydrates much cheaper in the corn than in the oil meal, I greatly prefer the new-process meal with its less free oil and much larger proportion of albuminous matter.

The cost of material for the above mixture will, at last year's prices, be as follows: 100 pounds of corn, 80 cents; 50 pounds of oil meal, 56 cents, and 50 pounds of bran, 30 cents, or $1.66 for 200 pounds, or 83 cents per hundred, or for the 180 pounds eaten for the Winter, about $1.50. But in addition to the grain, hay and straw ration, to do its best the lamb must have a daily feed of some green food. I use mangels, and feed one-half bushel to 20 lambs, which would require 4½ bushels for each lamb during the Winter, costing not over 32 cents.

When sold, our account against the lamb will stand about as follows:

60 pounds lamb at 4 cents	$2.40
Six months' interest	.07
Rent of barn room	.08
325 pounds hay at $8 per ton	1.40
180 pounds of feed	1.50
4½ bushels mangels	.32
Aggregate	$5.77

To its credit there will be seven pounds of washed lamb's wool, worth, even at last Winter's very low prices, $1.40; 95 pounds of fat lamb, 5½ cents, $5.25; making an aggregate of $6.625, and leaving a net profit of 85⅛ cents per head, and adding the value of the manure (which is richly worth one-half the cost of the dry food, and one-eighth of that of the mangels, or $1.49), the profit will be $2.34⅓ per head. It will be noticed that in neither case have I made any account of the straw fed the lambs. I have taken this course because the straw on most farms is a waste product, and must in some way be used up and returned to the fields, or else be burned up, as is the idiotic way of thousands of Western farmers; or, worse yet, allowed to rot down in a pile to become a breeding place of weeds and a scourge to the farm. Neither have I made any account of the labor in caring for the lambs, for the reason that almost every farmer has the help to care for his stock, and unless a business is made of winter feeding, very little extra help will be needed and this will be very little more in the one case than in the other, and if charged in both would make the showing very much more unfavorable to the old way. Another thing which I have done is very unfair to the new way—I have conceded that, when highly grained, each lamb would eat as much hay as when fed hay and straw alone, and this is not true, as they will eat fully twice as much straw and one-third less hay. But with all the unfairness, and construing everything as unfavorable for the highly fed and as favorable for the others as any one dare claim, still every reasoning man must see that the sooner the old way is abandoned and the new adopted, the better for the sheep keeper and the more money he will have.

I am asked by several if the indications are favorable for a profitable feeding season. The indications are always favorable to the feeder who takes good care both of his stock and the manure he makes. There is not an acre of land in any of the older States, and I doubt if there is in any of the States east of the Mississippi River, that would not be better if manured, and when we count the value of the manure properly used, there is always a profit in feeding. But for this particular year, let us see: Sheep and lambs are higher by about one-half cent per pound than one year ago; grain and hay are not very much different. On the other hand, wool has advanced at least 25 per cent., is strong at the advance, and promises to advance still more. There is a large decrease in the number of sheep and a scarcity of feed on the Western ranges, so that while many sheep will be rushed East during the Fall and early Winter, I am of the opinion that good prices will be realized for good sheep in the Spring.

This has been the driest Summer I have ever seen. Since June 14, we have had only two rains—August 17 and 24th—that wet down to moisten earth even in plowed and cultivated land. Yesterday morning—September 12th—we had the first shower that laid the dust since August 24th. Wheat sowing is greatly delayed, and late potatoes and corn are suffering. Yet on land that was well manured last Winter and that has been thoroughly cultivated, corn and potatoes will be fair crops.

There is great danger that in such a dry Fall and with poor pastures, the sheep will be allowed to fall off in flesh. This is a grave mistake, and a fatal one with last Spring's lambs. A few hundred pounds of bran a few bushels of corn fed now, a little daily, will save many dollars' worth of feed in Winter, and, likely, quite a number of lambs also. Try it!

Orchards are bare of apples. This County will produce fewer barrels than in any other year since 1859—the year of the June frost. Besides this, the trees are looking badly in all orchards not well manured. There is no mistake but that fruit trees need manuring as much as any other crop, and the quicker fruit growers realize it the more money they will make. J. S. WOODWARD.

TAKE GOOD CARE OF THE RAM.

MANY farmers who keep a few sheep treat the rams in an absolutely barbarous manner. He must be treated better if any vitality is expected from him. Too many farmers look upon the ram as a sort of necessary evil. They have to keep him in order to get the ewes with lamb, but that is about all he is good for, many of them think. The fact is that the ram is half the flock. The value of the lambs depends greatly upon him, and he should be well treated. Two weeks before the time for service he should have extra feed and at all times he should be kept out of storms and bad weather. Before turning him with the ewes smear his breast with paint. When he serves a ewe catch her and put her in a separate yard. After he has served three or

four, put him back into his own place. Keep this up till he has served all the ewes, and then let him run with the flock for two weeks to serve any that may have failed. This makes extra trouble, but it pays well. Some of the neighbors will laugh in the Fall, but they will keep remarkably quiet in the Spring. Your lambs will be jumping up to take their rations without assistance. When you see your neighbor hastening to the house with a lamb under each arm and upsetting the pantry for a nursing bottle with which to brace up weak lambs, you will have your turn at laughing. A poor half-cared for and overworked ram will cause weak and spindling lambs. Don't forget it.

Washtenaw Co., Mich. W. F. B.

ANGORA GOATS.

THE American Mohair Growers' Association, organized at Fort Worth, Texas, last February, will hold its first annual meeting at San Antonio, Texas, Monday, October 4, next. The establishment of an Angora Goat Breeders' Register is to be considered.

Angora goats were introduced into California in 1848, and goat raising has attained the greatest development there. For the production of flocks, they have usually been bred on the common goat, as the Merinos have been crossed on the coarse-wooled Mexican sheep. There is a considerable demand for mohair; but the industry here is in an experimental stage, and has varying fortunes. An establishment in California for making robes, mats, gloves and whip lashes often uses 30,000 goat skins in a year—half-bred or high-bred Angoras. Considerable interest is taken in Nevada in raising Angoras for meat, skin and wool, and there are several large flocks in the Territory. They are, as a rule, the offsprings of common goats with bucks from California. We have an account of a flock of 2,912 head, consisting of 1,800 ewes, valued at $2.25 per head; 600 wethers, $2.75 per head; 500 kids, $2.25 per head; and 12 bucks, $16.50 per head. Though Texas has started the Association, the Angora goat business there is of later introduction; but it is developing rapidly. There are a number of flocks now of 1,000 head each, but there as elsewhere, the business is very fluctuating. There are also some considerable flocks in the Carolinas, Georgia, Kentucky, Tennessee, and Arizona, and smaller "bunches" in other States.

The present prices of mohair in this market range as follows: choice, 55 cents; superior, 45 cents; fair, 42 cents; ordinary, 40 cents; inferior, from 30 to 35 cents. At the Cape of Good Hope, where Angora keeping is an extensive industry, the animals are clipped twice a year; but in in this country, they are shorn only once—early in the Spring. A flock of Angora wethers from two to six years old, if kept fat the year round, would yield fleeces of five to six pounds; but breeding ewes would not give over four pounds.

Horseman.

CLEAN THE HORSE'S SKIN.

IT is not enough that the groom should merely clean off the dry deposits that remain from the sweating process through which the horse may have gone. This, it is true, removes the apparent foulness, but it is far from meeting the work that comes under the head of "grooming." There is no way in which one can do the horse more real service in the way of keeping him healthy, than by washing his skin with water as hot as the hand will bear. Whether this is done immediately after a drive when the horse is perspiring freely, or when at rest and the skin is perfectly dry, a large blanket should be provided to cover the animal and keep it covered during the process of washing, keeping it on the shoulders while washing the hind-quarters, and *vice versa*.

Provide yourself with a large sponge and a piece of good soap, or, instead of this, an ounce of aqua ammonia. Put this into a quart of water if it be of the highest strength, and into a pint if it be of low grade, and after moistening the hair and skin with the hot water, with a small sponge rub the surface over with the ammonia water, seeing to it that it reaches the skin. Then wash the hide and hair thoroughly, scraping the water out of the hair with a wooden or other scraper having a thin, smooth edge. Rub dry with a woolen cloth and cover with a dry blanket, keeping the horse out of a current of air, if this be cold. Be especially careful if the horse is exhausted by having had a hard drive.

Merely cleaning the dried sweat from the hair of a horse is a small item in the process of thorough grooming and cleaning. It should be remembered that it is the skin, and not the hair that carries on the process of eliminating such secretions as the body requires relief from: that is, such as escape through the pores of the skin. The intestinal tract and the kidneys and bladder present but a limited surface for the elimination of refuse from the body, as compared with the skin, yet, when a horse gets sick how ready men are to say, "give him a physic"—salts or aloes or "give him a diuretic"—niter or pumpkin seed tea. An ounce of prevention is, as often stated, worth a pound of cure, and if, in conjunction with care in feeding—feeding enough and not too much, and of the right kind—that portion of the duties of the stable that comes under the head of grooming be carried out as here indicated, we would not so frequently as now need the internal agents referred to.

WESTERN.

HORSE JOTTINGS.

WHILE we are importing every year great numbers of draft horses and an occasional Thoroughbred from Great Britain, couldn't we secure the balance of the trade in our favor by exporting more horses than we do? England imports annually 20,000 horses; at present most of these come from Ireland. In spite of the excellent native breeds—Clydesdale, Shire and Suffolk—many draft horses—Normans or Percherons—are imported from France, besides some lighter horses for other purposes—some of them for the army. There's an English Commission now in Canada inquiring into the adaptability of colonial-bred horses for cavalry remounts; it wouldn't be a bad idea for the members, even for curiosity's sake, to visit Illinois and Kentucky, where they would see thousands of animals excellently adapted for cavalry or artillery purposes.

August is a favorite month for shipping live stock, as the weather is likely to be unusually favorable. The last week in the month there was a brisk trade in Clydesdale horses north of the Tweed. Half a dozen pedigree Clydes were shipped from Liverpool for Peter Blundell, Washington, Ill. Two were shipped to George Murray, Polo, Ill. Four went to Mr. Snaggs, Brantford, Ontario, Can. One of the largest shipments of the season, 44 head, left Glasgow for Norris & Clark, Lamoille, Ill. Of the lot 31 were pedigreed stallions, between four and five years old, reported to be an excellent lot. Over 760 pedigreed Clydes have been exported since the opening of the year,—the largest figure yet reached. Powell Brothers, Springboro, Pa., have made two large shipments, one in August. Clydes seem to stand ocean travel exceptionally well, nearly 300 having been landed in Montreal in August with the loss of only one animal, which was sickly when embarked.

The Swineherd.

PIG CONSIDERATION.

COL. F. D. CURTIS.

Sows eating their pigs; habit due to an unhealthy condition; predisposing causes; prevention; treatment of a sow in slow or unnatural parturition.

THERE is always trouble with sows eating their pigs in the Winter and early Spring, and very little trouble when the sows are out on the ground, or have plenty of succulent food. I have never had any trouble in Summer. The past Spring there was more complaint than usual on account, I suppose, of the cheapness of corn. It was fed bountifully because cheap and handy, and it made more fever amongst sows, and so more of them were inclined to eat their pigs. The best remedy for this kind of trouble is care and consideration beforehand. Light and laxative foods should be given up to the time of pigging and afterwards, because the best to cool the blood and keep the whole system in good order. A sow never kills and eats her pigs when in her right mind. The evil is always due to an unnatural condition of body and mind. In other words, a sow to do such things is crazy or frenzied and ferocious with pain or fright. There are various reasons for this excited condition. Fever, constipation, fright, hunger and thirst will produce it. The most natural cause is the pain of parturition. A weak, squealing pig often excites the sow and makes her wild. When such is the case the pig should be taken out of the pen and kept out. If a sow shows excitement when disturbed, she should have food put within her reach and be left alone. When a sow strikes her jaws together in an angry manner, she must not be disturbed. Some sows are much more sensitive than others. A good dose of raw linseed oil would be good to give a sow whose feces show dryness or constipation. A bountiful feeding of thin slop would fill the stomach and allay hunger and thirst.

Unnatural parturition is one cause of frenzy. I lately had a case of this kind. In the morning a favorite sow was found to have had pigs all of which were dry, showing that they had been born some little time. As soon as I approached the pen, the sow got up and was uneasy and went tramping around the inclosure. Fearing she would step on the pigs, I got into the pen and picked them all up and put them into a basket and took them out. She did not appear in the least disturbed. She was given a little drink, after which she lay down and was soon up again. She thrashed around, all day growing more and more uneasy without passing anything. After dinner an effort was made, in the most quiet way, to give the pigs to her. The instant she heard them she sprang up and would have killed them had she been given a chance. The pigs were taken to another sow, and her own were kept away, while the little strangers got some suck. Just before night, the sow, having been in great pain all day, a rope was put over her snout at the end of a fork and she was secured and thrown upon her back. She fought and struggled, and in the struggle a fine pig was born. Her hind and fore legs were each bound together with a strap, and then made fast to staples in the floor. The rope on her snout was tied so that she could not throw her head around. A board was nailed down across the pen and fitted down closely to her shoulder and another to the ham. These boards did not touch her belly but they prevented the least struggling and made it impossible for her to get up. The pigs were now put to her breasts which were leaking the milk, and she was left until the next forenoon undisturbed. At this time no more pigs had been born and the placenta was discharged, and the sow was taking to her pigs. She was now released and and everthing was all right. She had gotten over the pain caused by her not being able to give birth to the pig. I shall always confine a frenzied sow the same way, and when one is not able to have her pig it would be a good plan to turn her for a few minutes on her back to cause the unborn pig to change its position and so relieve the mother, or to raise her up behind and let her walk on her fore feet. This will change the position of the young and work a natural presentation.

HOG CHOLERA QUESTIONS.

DR. F. S. BILLINGS, of the University of Nebraska, to which the State Agricultural College is an adjunct, has been appointed to investigate hog cholera in that State, and asks the farmers to send to him, at the University at Lincoln, information as to the number of hogs they raised last year; was any hog cholera among them; their market value at death; the breed of the diseased animals; whether any breeds are more liable to the disease than others; are "scrubs" more susceptible than pure-breds; when is the loss the greatest; what effect has the weather on outbreaks, especially as to severity; are outbreaks earlier on high dry land than in low wet places; how did it get into the herd; does the term indicate one or more diseases; if more, why; was the herd affected in 1884; were the hogs kept in the same place both years; has sex or age any influence for or against the disease; will hogs that have had the disease have it again next year, if allowed to live. These are suggestive queries to hog owners in all parts of the country where hog cholera is ever prevalent; and where is it not? What do our readers think of them?

The Poultry Yard.

KILL THE LICE.

THE hen houses must be cleaned out during September if the hens are to be kept through the Winter. They are fairly alive with lice now. No wonder the hens want to roost in the trees. It is unfortunate in some respects that more human beings cannot be made to endure the torture from these creeping horrors. They would be far more merciful to their stock if their flesh could honestly creep at the memory of these filthy vermin. Lumbermen, war prisoners, and others who are forced to live in lice-infected places, all say that nothing so tends to destroy health and comfort as lice. No more horrible punishment would be possible than to force a man to live in a lousy room. Constant torture, sleeplessness, insanity, death would be the result. What right has man to inflict this dreadful punishment upon the dumb animals that are placed in his charge? He has no right; he transgresses both a human and a moral law when he neglects to destroy the vermin on his cattle or turns the hens into a lousy house for the Winter. We say stop *now* and clean out the hen-house, or else kill every hen on the place before cold weather sets in. Take a hoe and a shovel and clean out every ounce of manure. Take water as hot as you can get it, and with an old broom or mop swab out every crack and corner of the place. Burn up the old nests. Spray kerosene into the cracks and edges. Put two good coats of whitewash all over the inside. Take out the perches, scrape them off and pour kerosene along them. It will pay to dig out the earth at the bottom of the house and put fresh dirt back. Put in pure sand, if you can get it. Don't neglect this now. It is a combination of business and morality. You will get more eggs to pay for it, and your conscience will be lighter.

POULTRYMAN.

A GOOD CHICKEN COOP.

I HAVE found the coop shown at Fig. 373 indispensable in raising chickens where rats and minks abound. It is 14 feet long, 4 feet wide, 5 feet high at the back and 3½ feet high in front, and is divided into four parts. The roof is shingled and a space two inches wide is left at the highest point of the roof over which are placed two fence boards,

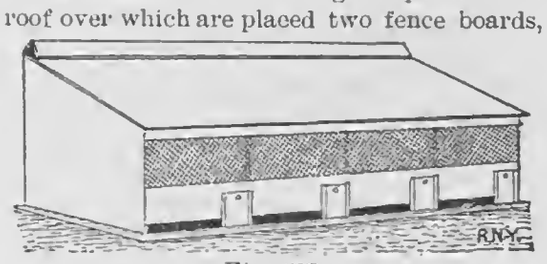


Fig. 373.

nailed together at right angles, to shed the rain. This forms a ventilator. A door opens into each part to facilitate cleaning. The front, which should face south, has a board nailed under the eaves and one two inches above the bottom and between these is 1½-inch mesh wire screen. Exits are sawed out for the hens. At the left of each exit are long, narrow places for chicks to run out, which are closed at night with heavy scantling, or boards kept in place by stakes at each end. The exits are closed with boards to fit. Boards about three inches wide are placed on a level with the earth entirely around the coop to prevent the hens from scratching under. The coop makes an excellent roosting place for "weaned" chicks; 50 nearly grown may be accommodated till placed in winter-quarters. My single coops are all constructed on this plan. Without some such convenience I presume I could not raise 20 per cent. of my chicks on account of common rats and minks.

Wilmington Co., Ill. GRACE STEVES.

Farm Topics.

CORRESPONDENTS' VIEWS.

PEOPLE in this country need to take an education on the subject of stoves. During the rainy season we sit shivering around open fire-places. There is only one side of us—the one nearest the fire—that can be kept comfortable. These big fire-places should all be closed up and stoves put in their place. Nobody knows how the health and comfort of our people would be improved if such a change could be made. Most of the folks here have their wood-piles right out in the weather. They cut up a few sticks at a time as needed. We are using more coal now, but most of that stands right out in the rain. We need wood-sheds and stoves here the worst kind.

Lowndes Co., Miss. A. K. W.

THE best way to reach the hearts of children—and some men—is through their stomachs. Some people save all the eggs, butter and chickens to sell, and live on pork and beans from January 1 to December 31. They think the little bank account that comes from this saving is a big thing. They would make more in the end to sell the pork and beans and have chicken three days out of seven. The children will be healthier and better satisfied to stay on the farm. It is a good thing to remember every birthday by roasting the fattest goose or turkey on the place. Let all the birthdays from father's down to the baby's be remembered in this way. Associate happiness with a good dinner if you want your children to be home folks.

K. C.

Peoria, Ill.

How do you eat grapes? It seems to me that most people only half eat them. They just pull off the skin and swallow the pulp and seeds whole. I claim that in this way they don't half eat grapes. There is no more reason why we should swallow the seeds of grapes than the pits of cherries. These seeds are said to act upon the kidneys and that a few of them will do no harm. I am satisfied that where grapes are eaten in large quantities the seeds may prove very harmful. It is with eating grapes as it is with eating bread and butter; most people eat it so that the butter comes against the roof of the mouth, when to get the best taste it should be put against the tongue.

H. C.

Bergen Co., N.J.

FOR a long time I have advocated a plan

for helping the temperance cause which seems to me to be practical. I would make every saloon keeper responsible for whatever damage was caused by the liquor he sold. Suppose a man got drunk and destroyed property. The man who sold him the liquor would have to pay for it. Suppose he committed some crime for which he was sent to prison. The liquor dealer has to support the prisoner's family. In every case, as I think rightly, the damage is attributed directly to the liquor, rather than to the man. The man who supplies liquor to the customer is as much responsible as the man who applies fire to a building. Such a law could be passed where a prohibitory law never could be. It would destroy the argument of thousands of men who say that the Government has no right to say what they shall drink so long as they do not disturb the peace. Rum-sellers would be very careful to whom they sold liquor if they knew that they would be held responsible for the effect of their cursed stuff. The business would soon lose its profit, and we might hear of a rum-seller failing—something I have never heard of yet. Such a law could be enforced more completely than any strictly prohibitory law could. J. B. R.

Essex Co., N. J.

We have a bad piece of road in our town. It was originally a "cross way" road built of logs and plank through a swamp. The logs rotted and bad holes formed. The swamp has been drained and many loads of gravel have been placed on the road. Still it was a regular slough in Winter. Two years ago we made a hard pull to get it into shape. The owner of a brick yard near by gave us a big pile of broken brick. We all turned out with teams and dumped that brick along the worst places and put gravel on top of it. After it worked down it made a fine road for a time, but now the old logs are beginning to work up. We can cover them with gravel I suppose, but I do not think the road will be what we want it to be until we dig the old logs up and start on a new foundation.

Hillsdale Co., Mich. B. H. S.

My idea is that fruit growers who want better prices should pay more attention to the temperance reform. The people in our towns and cities who have little money are the ones who ought to buy more fruit, and they would do it if their money didn't go for drink. Plug up the saloons, and we shall open a new market for our fruits. It is a matter of business, fruitmen. The less liquor sold, the more fruit bought. H. C. B.

Summit Co., Ohio.

NIGHT SOIL AS MANURE.

Some 20 years ago we hauled night-soil from a town over three very hilly miles. We put it in water-tight barrels sunk in the ground and added water from time to time. In a week or 10 days in warm weather it would foam and rise. In this state, with the addition of a little water, it could be carried in pails and put around the hills. The good effect was evident in a few days. When the solids were mixed with ashes and spread on the surface, or spread unmixed, the effect was more lasting We were paid for carting the night soil away. It paid us well, for our place was poor enough, and by means of this manure we brought it into a high state of fertility. We were glad to give the business up though after we were fairly started on the farm. It is the dirtiest of all work, and it gives one a reputation that will hang to him for years. Still, I must say that a man with a poor farm and no money with which to buy manures, cannot do better than to collect all the night soil he can find. E. F. E.

Brandon, Vt.

CHEMICAL FERTILIZERS ENOUGH.

I have a little place of 10 acres, all tillage, on a hillside. I am eight miles from any good place to buy stable manure. I keep no stock, and in fact, have no barn. For manures, I depend upon chemical fertilizers and green crops plowed under. I raise vegetables, fruit and hay. With these crops I can support my family and pay for the place. Some people think farming or gardening cannot be run successfully without stock. They keep dairy stock on a small place, often at a loss, rather than say they keep none. My experience satisfies me that I can raise an abundance of fruits and vegetables on chemical fertilizers, and supply the needful vegetable matter by plowing under an occasional crop of rye, buckwheat or sowed corn. A. W. B.

Middlesex Co., Mass.

HANDLING POTATOES.

Every person who raises many potatoes should have a number of square boxes holding about a bushel each. These can be placed along the rows and filled from the ground. They should be placed in the wagon and not emptied until the barn or cellar is reached. Most farmers handle their potatoes over three or four times in passing from the ground to the bin. Why handle them unnecessarily? What must we think of a farmer who has to mow down the weeds on his patch in order to find his potatoes. T. N.

Belmont Co., Ohio.

COOKING FOOD FOR STOCK.

I notice that most of the Experiment Stations report that it does not pay to cook food for stock. It may not for cows, but I am certain it does for hogs. I have an idea most of these tests we hear about were made in Winter, and that the cooked feed froze. It pays to cook the small potatoes anyway, and to my mind all meal fed to the hens is far better cooked.

Bucks Co., Pa. W. H. L.

[All agree that it pays to cook potatoes for stock feed, owing to the indigestibility of the starch granules in an uncooked and unbroken state. When potatoes are boiled these starch granules swell and burst, as seen in heated pop-corn. The starch is then digestible. The season at which the tests have been made is always mentioned and all other conditions which affect the cases.—Eds.]

Rural Topics.

Experiment Grounds of the Rural New-Yorker.

LATTER-DAY RASPBERRIES.

Have we made much real progress in improving the raspberry of late years? Let us see.

The Cuthbert is a hardy plant. Its fruit is of an acceptable color, firm enough for market—good enough for home use. As a late variety, it has no equal in many parts of the country. It is one of the few raspberries that, prospering over a wide extent of country and under varied conditions of soil and climate, has not disappointed those who were induced to cultivate it by the high claims made when it was introduced.

The Superb is not a success. The plant is vigorous, hardy and productive enough—the berries are large. But they crumble too much for market purposes, while the quality will never commend them to those who appreciate a good raspberry.

The Marlboro was paraded before the public in a grand way, and the Rural tooted at the head of the the brass band as loudly as anyone. Judging it by the branches loaded with large berries taken to the office as well as by the fruitage and growth of two fine plants carefully set at the Rural Grounds by the originator himself, we though we were safe in concluding it would succeed generally as well as in the grounds of its birth, where it seemed almost faultless. But several years of trial since show that while the berry is larger and firmer than the average, the plant is not vigorous enough ever to become a general favorite except under congenial conditions to be found only here and there.

Shaffer's (Colossal), which was introduced less ostentatiously, is everywhere gaining friends. It can never become valuable as an "all-purpose" berry on account of its dark color. Neither is the quality of the best; it is too acid. Yet the acidity is of the rich not of the sour order, which with the great size of the berry places it among the best kinds for canning purposes.

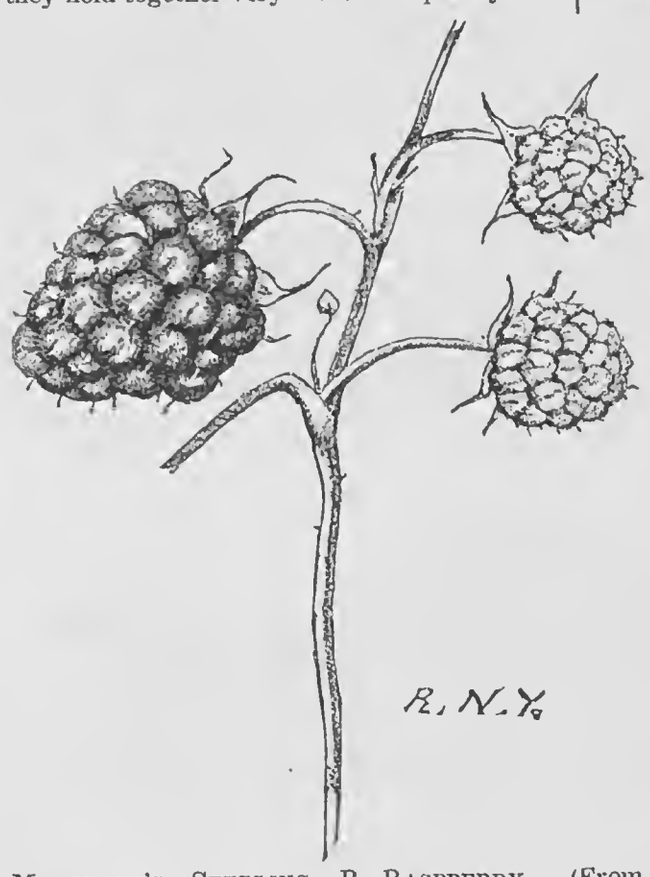
The Hansell is the earliest raspberry we have, and in this and in the firmness and lively color of the berry rests its chief value. The berry is inferior in quality, and the plant in vigor. The Ranecas differs from the Hansell in being not quite so early and a trifle more vigorous or, shall we say, less feeble.

Crimson Beauty was introduced by A. M. Purdy of Palmyra N. Y. Several different varieties have been tested here under this name, none of which seem to be any decided improvement over old kinds. It ripens with Marlboro and is better in quality, though not so large and firm. There are many imperfect berries.

Reliance was sent to us by C. A. Green, of Clifton N. Y. The plants are hardy, productive; the berry is much like the Philadelphia.

Christine is a late berry, large conical, firm and of good quality. It was sent to us by Rev. E. P. Roe. It will thrive probably where the Antwerp thrives. It is not hardy here oftener than one year in three.

Seedling B, shown at Fig. 367, was received from L. M. Macomber, of North Ferrisburg, Vermont, in May, 1885. It is thought to be a seedling of Belle de Fontenay which it resembles in cane and leaf. The berry is bright red when ripe, darkening in color afterwards. Some of the berries were as large as any we have ever raised. The drupelets are very large, as shown in the illustration, though they hold together very well. In quality we



Macomber's Seedling B Raspberry. (From Nature.) Fig. 367.

know of no better berry. It has all of the sweetness, richness, sprightliness and raspberry aroma that can be desired. The plant is strong-growing and bears continuously for a long time, though whether it produces a fall crop we cannot as yet say. The canes are nearly thornless. It is too soon to judge of this fine berry as to productiveness and hardiness. We merely record the impressions of a single season.

Meredith Queen, from E. J. Brownell, does not thrive very well here. The berries are of medium size, late, extremely juicy and too soft for carriage.

YELLOW RASPBERRIES.

The Golden Queen has recently been illustrated and described in these columns. Our plants have not yet borne. It promises to be the best all-purpose yellow berry yet introduced.

Caroline is hardy and vigorous and productive. The berries are of medium size, not very firm, juicy, but rather sour.

Ripening with Caroline is Macomber's Seedling of the Antwerp, planted in May of 1885. It is hardier than its parent, more productive and of better quality. The berries are nearly white in color, very large, juicy and rich, with very small seeds. It is too soft for shipment, but a gem for home use. The plants are vigorous and bear a long time. We cannot as yet fairly judge of its hardiness.

THE NEW GRAPE JESSICA.

One vine was received of this in the Fall of '83 from J. T. Lovett, of Little Silver, New Jersey. It fruits with us this season for the first. The vine is hardy though not vigorous, the canes short-jointed, the leaves small and somewhat liable to mildew. The bunch is much the size of the Delaware, the berries rather larger, light green, half-transparent. The skin firm. In quality it is juicy, pure-flavored, sweet with about as much pulp as the Delaware, and three-seeded. It is the earliest white grape ever raised here, and as early as any variety, whatever the color. Mr. Lovett says that it succeeds only in districts favorable to grape culture. Good accounts of the Jessica have reached us from Canada, where, we believe, it originated.

Elvira was received from Jacob Rommel, of Morrison, Mo., in May of 1883. It bore a fair crop last year and is now loaded with bunches, which, though rather small in size, bear a goodly number of berries, as they are closely crowded together. Ordinarily each bearing shoot though averaging but a foot or less in length, carries four bunches. This little vine which is but three feet high, with four main canes from eight to 10 feet long, bears 125 bunches, not a berry of which has either cracked or rotted. The Elvira is a white seedling of the Taylor. It ripens this year Sept. 8, or about with Concord, though it is said to ripen later. The berry is of medium size with thin skin which, though quite firm, cracked considerably last season. The berry is pure in flavor, sprightly and juicy—pulp rather tender. The vine is perfectly healthy.

Transparent (Rommel) was planted at the same time. The berry is small, white, transparent, sweet, with very little pulp. The bunches are small and there are many imperfect berries. The vines are healthy, though slender in growth.

Pearl (Rommel) is late rhere than Concord, though claimed to be nearly as early as Hartford. The berries are light green, not shouldered, crowded in the bunch, three-seeded round. The skin is thin with some bloom; pulp tender, juicy and well flavored. The vine is productive and healthy.

Faith (Rommel) ripened September 5. Skin thin but firm; two-seeded, yellowish green, sweet, pure. Berry small, round; the bunch imperfect and of medium size. Vine very productive, healthy.

Pomological.

NOTES IN THE ORCHARD.

T. H. HOSKINS, M.D.

RUSSIAN APPLES IN GENERAL.

I have fully 100 varieties of Russian apples growing in my grounds, many of the trees being 16 and 18 years planted, while some, of the later importations, are small. One thing is fully demonstrated, viz., that these apples are, as a class, very much hardier against adverse climatic influences, and especially against Winter's cold, than those previously grown on this continent. This alone gives them enormous value for the "Cold North," where, without them, tree-fruit culture would be impossible. In productiveness, and size and beauty of fruit, the Russian apples are, on the average, more than a match for those of Western Europe, and for our native seedlings thence derived. The disputed question in regard to them is as to their quality as dessert fruit. I say "disputed," but it is now disputed only by those who have only a very limited acquaintance with this class of fruit. People who judge them in this respect by the Dutchess of Oldenburg, Alexander and Red Astrachan, while admitting their beauty and prolificacy, undertake to denounce the whole race of Russian apples as "useful only for cooking." So earnest and continuous has been this outcry, on such manifestly insufficient grounds, that it would seem as if something more than a general interest in fruit culture were back of it. However that may be, those who have an extensive acquaintance with Russian apples know that there is among them quite as large a proportion which deserve to rank as of dessert quality as there is among the common sorts. True it is that but few of these finer sorts have yet been much distributed, but they are known, and as soon as the public becomes acquainted with them this unjust stigma attached to Russian apples will be effaced. Among these fine dessert apples the Yellow Transparent, Grand Sultan, Switzer, Charlottenthaler, Berkoff, St. Peter, Longfield, Golden White, Heidorn's(?) Streaked Red, Summer Calville, Noble Redstreak, Russian Gravenstein, Red Anis, Titovka, White Russet, and several others have now been sufficiently tested to establish the fact of their excellent eating quality, joined, in most of them, with great beauty of form and color.

RUSSIAN PEARS.

From my experience, so far, with some dozen varieties of Russian pears, while most of them seem to be hardier than our hardiest American and West European kinds, I fear few or none of them are really iron-clad. Most of them are vigorous, upright growers, with firm, glossy foliage, almost or quite free from attacks of fungus and of insects. They make an early, determinate growth, yet hold their foliage late, and though the new wood of nearly or quite all of them is discolored by a temperature of 25 or 30 degrees below zero, growth starts stongly from the terminal buds, and so far as outward appearances are concerned, they are uninjured. A number of my trees are now seven or eight feet high, and as they are well above the snow line they must soon show whether our northern Winters are too much for them. I think their healthy foliage is much in their favor, as it ensures well ripened wood. I would suggest to fruit-growers south of the iron-clad region the wisdom of planting a few of the best Russian pears among their other pear trees, and the growing of seedlings from the former. If in this way the thick, vigorous foliage (somewhat similar to that of Le Conte and Kieffer, yet different) can be secured, with good quality and other meritorious points of fruit, a valuable improvement would be secured.

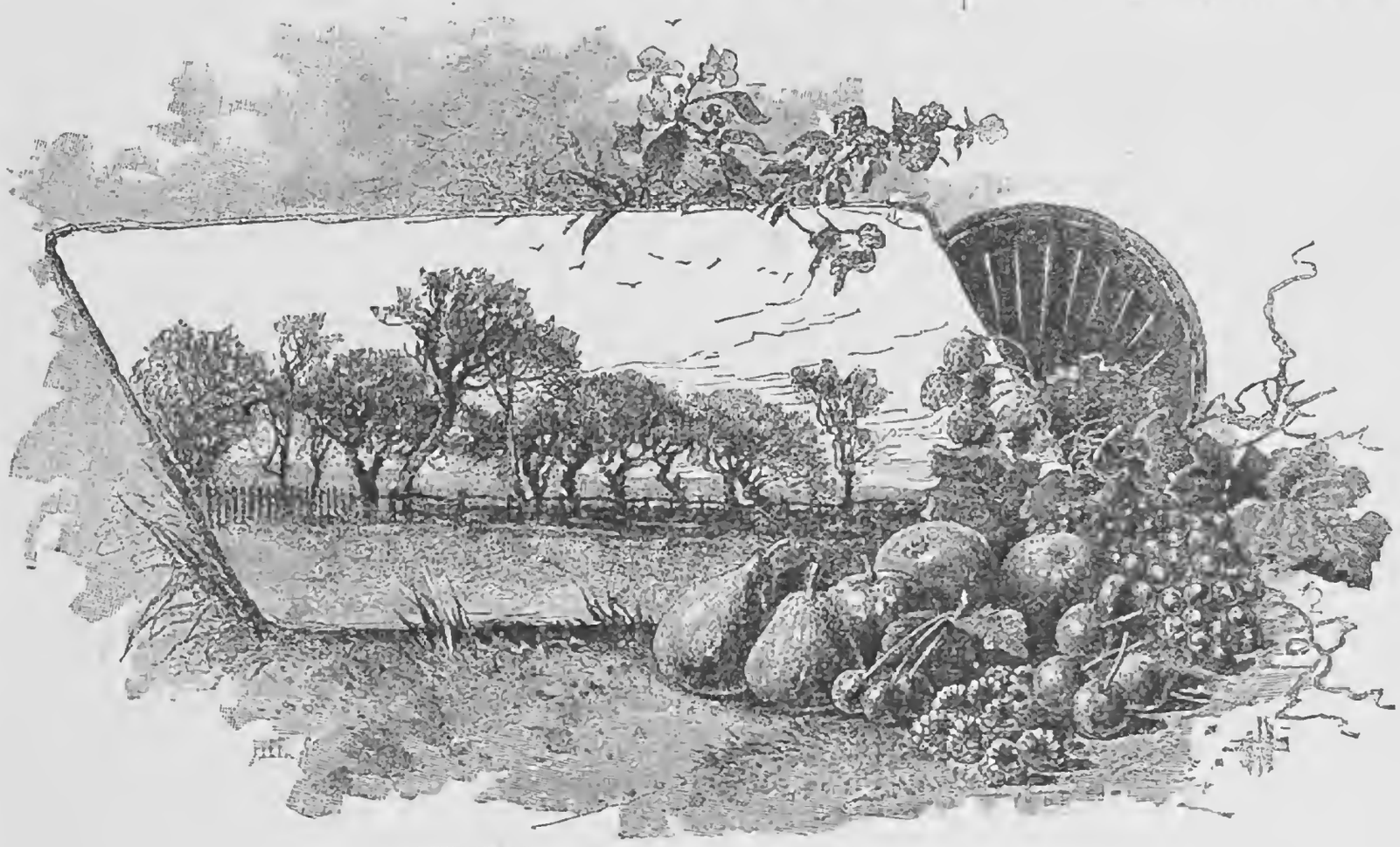
THE ZOLOTOREFF APPLE.

Grafts of this variety, (which much pleased Mr. Downing) grown upon (Duchess of) Oldenburg, have fruited with me this season. It is distinctly larger than Duchess, less oblate, a little irregular, and inclined to be angular. It is somewhat later than Duchess in season. I have not yet tested its quality, but Mr.

Downing says (3rd Appendix) "Flesh whitish, half-fine, tender, juicy, sprightly sub-acid, and of good quality." It is valuable as extending the season of the Duchess with a fruit certainly not inferior.

THE BERKOFF APPLE.

THIS is also an apple of the Duchess type,



AUTUMN. Re-engraved from The Queen. Fig. 372.

almost identical in form and color, but very much better in quality, being a mild sub-acid, spicy and soft-fleshed apple—a true dessert Duchess. The tree is a handsome, spreading grower that will require little pruning and promises to be a good bearer.

Orleans Co., Vt.

RURALISMS

ANOTHER season further attests the folly of using single eyes of potatoes for seed in heavy soil. The shoots made a slow, feeble start; the beetles ate them back; they started again; the drought came; result, a very small yield. Whole potatoes on scarcely better soil have given a good crop.

THE Industry Gooseberry is very promising. The fruit is very large and the past season was free from mildew. The plant promises to be productive.

AMONG strawberries, nothing tested has surpassed the Sharpless for size and productiveness. The Crescent yielded more berries in number, but less in measure. James Vick, with very high culture, gave an immense crop, but with ordinary culture the yield was quite inferior. Legal Tender did well and promises to be a valuable variety for our soil. The Prince (of Berries) surpassed all in richness of flavor, but was only moderately productive.

WITH me Henderson's New York Lettuce was the old Neapolitan, or Naples Cabbage known 20 years ago, and I know not how much longer. It is a good summer lettuce, but its color is too deep a green to suit many persons. The Tomhannock Lettuce sent out by Mr. Burpee, was the same as that which Mr. Gregory has been selling for several years under the name of Sugar Loaf. It is the largest-growing lettuce I know of, with perhaps the exception of the Bossin, and is excellent for Summer.

ONE advantage to be gained by bagging grapes, that I have not seen mentioned, is that the bags offer a considerable protection during hail storms. When such storms are very severe, much damage will, of course, result in spite of the bags; but in moderate hail storms, the kind we most often have, the bags will save a large proportion of the bunches from injury. I have tried using simple pieces of newspaper for bagging, or rather wrapping the bunches, with apparently good success. The pieces were cut about six by eight inches and were readily wrapped about the bunches and fastened by folding one corner over at the top and pinning. The sides were folded together, the bottom being left open. The wind and rain have disturbed these papers but little, and after a very severe hail storm, I find comparatively few berries injured on bunches thus protected.

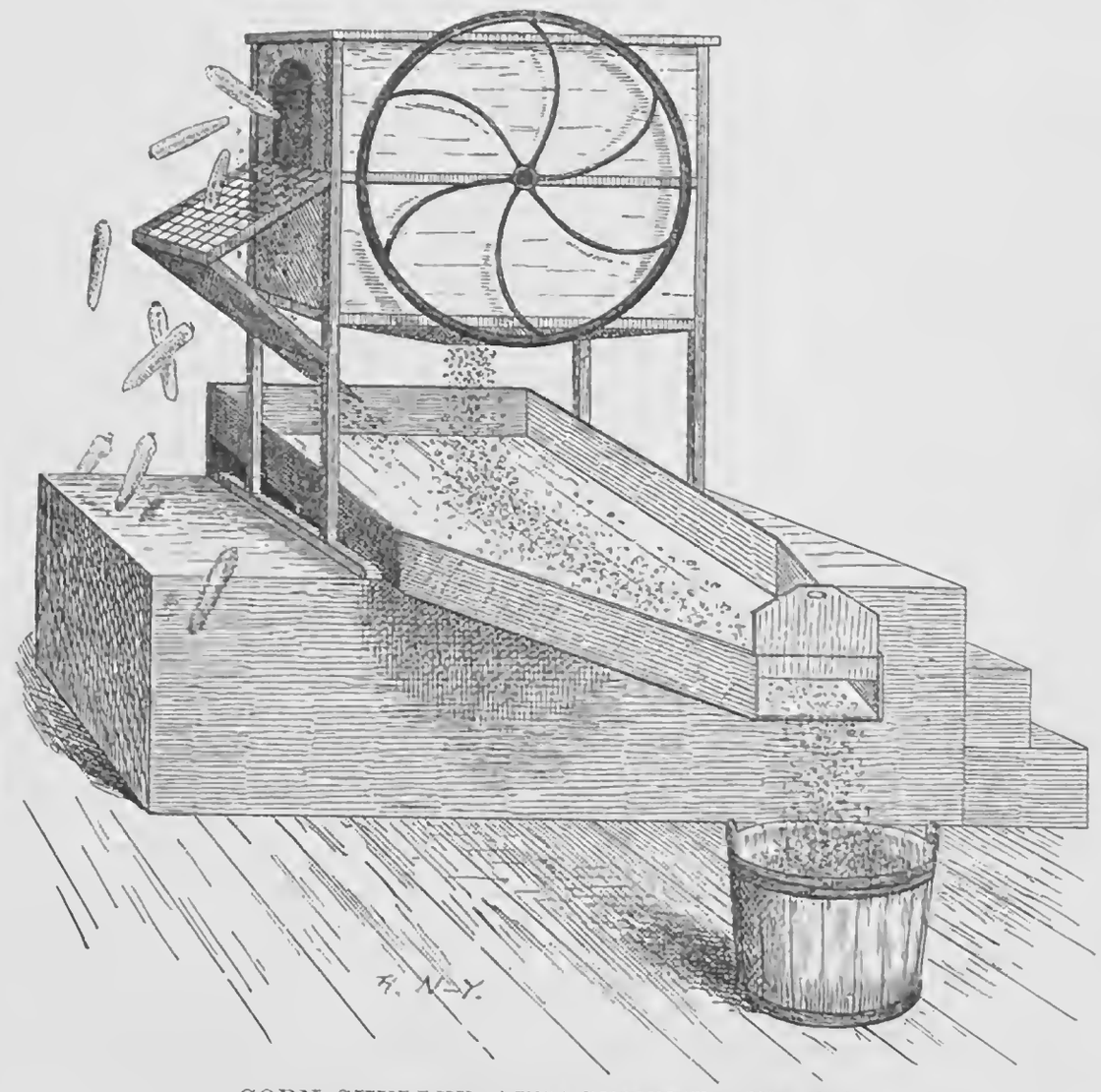
I HAVE twice attempted to grow the French or Globe Artichoke, with partial success. The plants make an excellent growth during the Summer but are quite apt to winter-kill. About half of the plants perished in this way the past Winter, though they were protected with a light covering of straw. The yield of flower heads, which is the part used, on the surviving plants has been abundant. I fail to see, however, what there is in this plant that makes it so popular in France. Surely we have many vegetables that are more delicious.

N. Y. Ex. Station E. S. GOFF.

Farm Economy.

CORN SHELLER ATTACHMENT.

I HAVE been bothered by corn coming out of my sheller with the cobs and being trampled on and wasted, so I hit upon the device shown at Fig. 370. It is made of any kind of light wood. The top is covered with a piece of wire cloth, with ¾-inch mesh; this the corn goes through, while the cobs roll over. The



CORN SHELLER ATTACHMENT. Fig. 370.

corn is received through the sieve into a small trough below, and runs back into the large trough, and thence to the measure or bag. The trough to receive the corn from the sheller is made of ordinary boards, (mine are 10 inches wide and ¾-inch thick) and has a sliding gate at the end. My sheller is set upon a platform, 4½ feet long, 2½ feet wide and 20 inches high, so as to get a slope for the corn to run out, but it may be flat on the floor, and then the corn can be taken out with a scoop shovel. E. A. B.

Gurney's, Va.

RYE STRAW FOR STOCK FEED.

THERE will be a big rye crop in this part of the country. The price for straw will be way down. If I can't get five cents a bundle, I shall feed my straw out. I can get five cents out of every bundle of it for feed and manure. It will be worth almost that much to chop up and put back of the stock to hold the urine. Rye makes a better feed than most people think. I have fed hogs on cooked rye meal with fine results, but I don't think rye is best

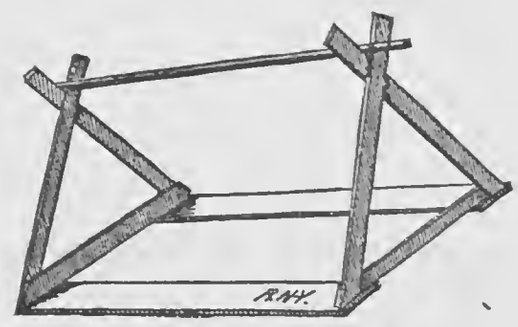


Fig. 371.

to feed alone to horses or cows. I would take one-third each of rye, oats and corn and have them ground together. That makes about as fine a feed as I want. Rye is a better crop for us to raise than wheat. V. H. W.

Passaic Co., N. J.

FRAME FOR FENCE WIRE SPOOL.

THE rack shown at Fig. 371 is to go in the hind end of a wagon when making wire fence. It should be as long as the wagon-box is wide, and high enough so that the arms of the wire spool will clear the cross-pieces of the bottom, while the wire must run clear of the wagon-box. The rack may be made of boards 1x4 inches for the ends, and 1x8 across the bottom, fastening the end frames together. The rod or roller, on which the wire spool hangs is made of wood, or an iron bar may be used, or even a piece of a fork handle. The rack may be fastened to the bottom of the wagon by screws, or by a single bolt through the forward piece.

WAGON JACK.

THE wagon jack shown at Fig. 368, may not be new to our readers, but it is simple and easily made. A A is a plank two feet long, two inches thick by eight inches wide. B is an upright piece 2x4 and two feet six inches long, and is nailed and braced to A A. C is an inch piece four inches wide and three feet long, and works on a bolt in the upright B. D is a chain fastened to A and hooking on to a nail in lever C. The dots indicate holes in the upright, B, which allows the lever, C, to be raised or lowered to suit the hight of wagon or buggy.

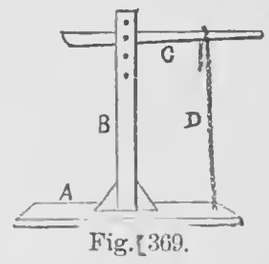
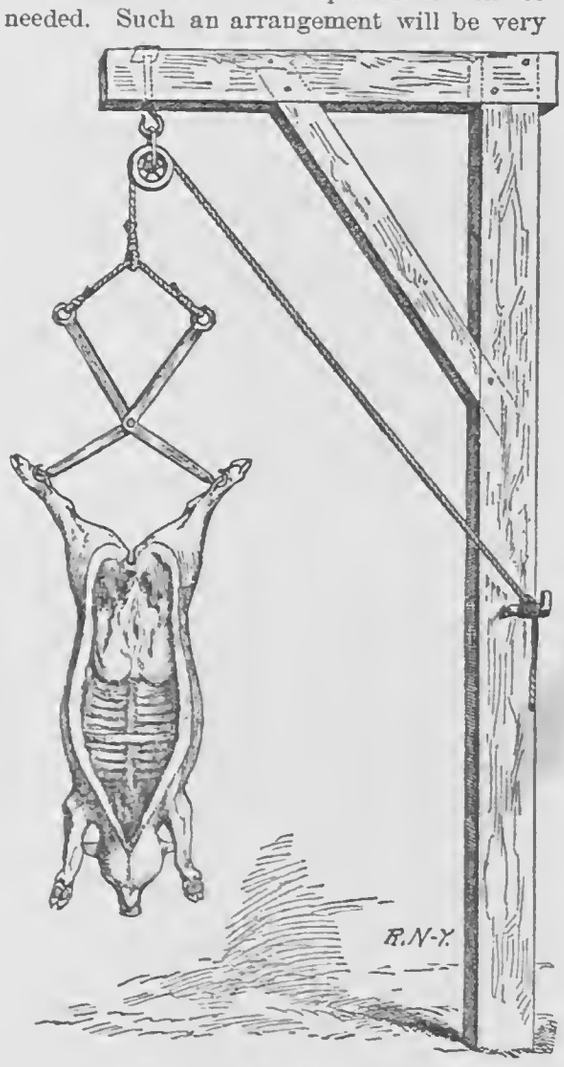


Fig. 369.

AUTOMATIC GAMBREL.

THE device shown at Fig. 369 is so plainly drawn that but little explanation will be needed. Such an arrangement will be very



AUTOMATIC GAMBREL. Fig. 369.

handy at hog-killing time. The iron bars which hold the hog are one inch wide and half-an-inch thick. They are held by a stout bolt at the angles. The harder the rope is pulled the further apart the legs are drawn.

What Others Say.

THE JAPANESE SNOWBALL.—We copy the following from the Philadelphia Weekly Press: "The RURAL NEW-YORKER wants to know who would have the old-fashioned Guelder Rose when he can get the Viburnum plicatum A good many people, we think. An old Guelder Rose is one of the noblest of shrubs. We know a specimen by a cottage door, which tosses its snowballs fifteen feet in the air and covers a circle of nearly as great a diameter with branches arching to the ground on every side. The foliage is coarse, but of good color, and fades into attractive tints in Autumn. We know no specimen of the so-called Japanese species that has attained sufficient age to prove how it will then appear. It is a good shrub, although we do not consider the bronze color of its leaves at the ends of the shoots a beautiful feature and we have noticed a disagreeable habit in some of the flowers in the ball browning or burning and thus spotting the snowy whiteness of the cluster. It winter-kills at the ends of the twigs in latitudes where the old species never fails. By the way, is not our native Viburnum opulus, known as the High Bush Cranberry, as good as either in some situations? It has the advantage of showy fruit, which is not inedible."

SOME English hop growers, after gathering the hops, are using the vines for silage. One party tells the Mark Lane Express that he ex-

pects to save 60 tons of hay in this way this year. He is putting them up in stack which is pressed down by means of chains. . ....The British brewers contemplate doing without the hop merchant, so that the factors will be the only middlemen. The curtailment of middlemen would be a blessing everywhere. .....Agents of English grain merchants, reporting on the quality of spring wheat in widely separated parts of Dakota and Minnesota, say it is of superior quality — berry plump, very bright, free from foul seeds, and very hard. Even sections that usually produce soft wheat, produce hard this year. Owing to its excellence for milling it is thought that an unusually small proportion will be permitted to leave the country as grain; as the millers will prefer to yield a point to retain it for flour.....Cork, Ireland, has always been famous for butter; but so bitter is partizan feeling just now, that Orange Major Sanderson said in the House of Commons the other night, that the butter is only fit for adulterating butterine....Last month 500 Guernseys were imported into Ireland According to the Mark Lane Express, these are supposed to be the first pedigree Guernseys ever introduced into the country.

SAMPLES AND COMMENTS.

MR. BROWNING says that the lawyer and the doctor have most to do with the pound of cure; the farmer is most interested in the ounce of prevention..... ....

"THE hope of America is the homes of America," says Dr. Northrup. When every citizen is stimulated to make his own grounds and wayside neat and attractive, the whole town becomes inviting. The homes of any people plainly tell their state and traits, their thrift and ambition, or sloth and improvidence.....

DR. NORTHRUP has worked as earnestly as any man we know of to improve the homes and home life of the American people, and to help in the practical realization of the cardinal truth that the chief privilege and duty of life is the creation of happy homes. The multiplied ministries of Nature, Providence and religion, center in the maintenance of happy homes. The higher aim of the industries of life, and the end for which government itself should be sustained, is that men may live in happy homes. When such is one's ideal, and his home is his pet and pride, life has new significance and value. Such an ideal brings new cheer and inspiration for one's daily duties....

DON'T give the horse-race character by attaching it to the agricultural fair, says the Orange County Farmer. It is a parasite and like all parasites injures or kills the object to which it clings.....

IT is a peculiar fact, says Mrs. Annie L. Jack, before the Montreal Hor. Soc., that even farmers' daughters who feed calves and make butter—doing the churning and milking, besides the arduous kitchen work of a farmhouse—are proud to say they "do not work out of doors," and affect to despise this health-giving labor. But Mrs. Jack has never yet found a girl who, if once interested in the pleasant occupation of fruit and flowers, was willing to give it up and return to the labors of the kitchen stove, the wash-tub and the ironing table.....

WHERE the trunk of a fruit-tree grows near the boundary of a field and the branches hang over another man's land, Mr. Browning of the Connecticut Board of Agriculture, decides that the fruit all belongs to the owner of the land where the trunk grows or enters the soil. He says that no one has a right to appropriate the fruit because it falls on his land. The owner of the tree may pick up the fruit on the neighbor's land if he cause no damage in so doing. The neighbor has a right to cut off the overhanging branches even with the line. But if he allow them to remain and the fruit to ripen and drop, they are not his.....

AS the land will not give us full crops unless supplied with every kind of plant food needed by those crops—so hens in order to lay well, should be fed all the material for forming eggs.....

THERE is a growing partiality for white fowls, says the Vermont State Journal. The reason is plain. A white fowl is easier plucked, the pin-feathers not being so easily discernible, while the skin and legs are usually of a golden yellow.....

EVERYBODY likes to be posted. To this end it is desirable that every reader should send for the new RURAL POSTER and post it up in his barn or carriage-house. .....

THE Weekly Press says that in spite of the accepted opinion that grass is the foundation of successful agriculture, farmers generally know less of the various species of available hay and pasture grasses than they do of any other plants on the farm..... .....

IT is true, remarks Mr. Gould in the above paper, that good butter makers are somewhat rare, but it is equally true that there are different ways to make equally good butter. One maker will succeed by one plan and absolutely fail by attempting to copy the successful mode of another.....

PROF. A. J. COOK, of the Michigan Agricultural College is in favor of sowing wheat when it seems best to sow, the land having been properly cultivated and manured. This, he thinks, is the best way to meet the Hessian fly. A healthy plant, he says, will stand some injury and send up fresh shoots in the place of those injured.....

THE most unsatisfactory crop of wheat the the RURAL has ever raised was sown September 25, in a dry time. The wheat sprouted but was too much injured by the continued dry weather.....

THE Dairy says that milk varies very much in its quality for butter-making. The creameries make a pound of butter from thirty pounds or fourteen quarts of milk, but they do not skim it closely. A fair, ordinary quality of milk will make a pound of butter for each twelve quarts. The best it has heard of is a pound of butter to four quarts; but that was an extraordinary cow. A good cow should make a pound of butter from seven quarts.....

THE Dairyman says that the use of brine among butters is much more popular than it used to be. It is now used by many in washing butter, and some salt their butter only by brining it. If brine is used in washing, and fresh water is not subsequently used, brine salting will make the butter as salt as it ought to be, or as most people like it.. .....

FROM the fact that sweet and sour cream require different temperatures for churning, the above journal states that the two should never be mixed. They cannot be churned together without loss. At least twelve hours should intervene between the churning and the last addition of cream, that the whole mass may become in the same condition.....

DR. FERDINAND COHN, of Breslau, has discovered a new disease in potatoes. The stalks begin to turn down from the roots upwards, and the leaves fall away and wither. On examination it will be found that the stalks have been hollowed out, and the hollow filled with a rotten substance. Cohn found in this hollow the larvæ of a fly which had eaten the stalk. These larvæ are footless, ringed, round, yellow, with the posterior end rounded, and the anterior end pointed and black. The disease appears in only some sorts of potatoes. ....

A. J. CAYWOOD, the veteran fruit-grower of Marlboro, N. Y., says, in the Orange Co. Farmer, that he was astonished to see a certain horticultural editor (doubtless referring to the R. N.-Y.) assert that one hill of the Lucretia Dewberry will occupy as much ground as three or four hills of standing blackberries, while the facts are that two hills of Lucretia will occupy about the same ground as one hill of a large-growing standing blackberry.....

MR. CAYWOOD has quite a large patch of this running berry planted for market four feet apart each way, and keeps them under better control than standing berries can be kept at the same distance. A person of his acquaintance scouted the idea of planting a dewberry, but after seeing how Mr. Caywood had them arranged, concluded to plant an acre. Mr. C. says he was never more enamored of a fruit than with the Lucretia on its first bearing .....

WELL, the R. N.-Y. has this one word to say in reply: We hope we were wrong.. .....

PUCK asks if the old saying "what will cure one will kill another" applies to the curing of hams?..... .....

SEEDSMEN are now ready to deliver all sorts of hyacinths, tulips, narcissus, etc., for fall planting. Even a little bed, say five feet in diameter, is a delightful sight in early Spring.

ONE of the finest plants we know of is the old Trumpet Creeper trained in tree form, as alluded to by the Gardener's Monthly. Plant a stake near the young Trumpet Creeper and when it reaches the top cut it off. Remove also all side branches as they appear from the stem as high up as desired. In a few years it assumes a beautiful weeping-tree form, while the stem or trunk will have grown large enough to support it by the time the stake rots ....

MARK all lawn trees now that are interfering with each other, that the least valuable may be transplanted or removed during the Winter. One fine specimen is worth more than two poor ones..... ... .

MR. S. B. PARSONS says, in the Gardeners' Monthly, that his Weeping Beech is 50 feet high and 50 feet broad, with a living house for its interior. He praises the Weeping Sophora as a graceful, feathery mass of the softest foliage; the Weeping Hemlock as resembling an evergreen fountain. The Weeping Silver Fir and the Weeping Norway Spruce have each their own merits and give that variety of form which, with variety of color, makes the picturesque lawn which all admire.....

THE best time to transplant in the Fall is just as soon as the leaves begin to change color or to wither. If we wait longer, the transplanted tree has the less time to recover before freezing weather sets in. If the soil is very dry, fill the hole with water and throw in soil until it is filled with mud. As this sinks, throw in more soil and water until the hole is nearly filled. Then finish with dry soil and cover the ground about the tree or shrub with leaves, straw or something of the kind...

MR. MEEHAN says that many now-a-days who want to plant trees in the Spring, buy in the Fall, and plant all temporarily thickly together, no matter if the stems are a foot or more deep in the ground, in some nook sheltered from drying winds. Here they remain till Spring, sheltering one another, as well as being sheltered. The advantage is that the wounded roots heal over, and when replanted in Spring, push into growth a couple of weeks before those then freshly taken up. Besides this, there is the great advantage of having them on hand to plant just when you are ready, instead of having them rushed in just as something else is sure to demand immediate attention.....

THE U. S. Dairyman says that the cry is that honest dairymen cannot compete with men who use cheap fat in making bogus butter. In the same way how can honest milkmen who feed pure, sweet grain, hope to compete with those who use rotten refuse or swill? This is a fair question and fairly put; the miserable goods of dishonest and incompetent dairymen have furnished the defenders of counterfeit butter with many of their best arguments..... .....

THE above journal quotes a contemporary, without giving its name as it should do, as saying that it is strange that people still think that they can strain filth out of milk. It can't be done. Filthy milk will be filthy to the end of the chapter, and all the straining in the world will not make it pure. When a cow steps into the pail she steps into the butter plate . ...

AN interesting experiment, showing the influence of electricity on the growth of roots, has been made in Germany by Professor Holdefleiss. Plates of copper were thrust upright into the earth and connected by wires with similarly placed zinc plates about 100 feet distant—an electric battery being thus formed, with the earth between the copper and zinc in the circuit. Both potatoes and beets planted between such plates gave an increased yield—beets 15 per cent., potatoes 25 per cent.—as compared with other parts of the same field ..

CONTAGIOUS pleuro-pneumonia having lately broken out in Forfarshire, Scotland, the inoculation of the affected animals was advocated by the local authorities charged with the treatment of the disease. Several instances were mentioned where, after such treatment, the disease was stopped without any loss from milk or otherwise, except that the cows operated on lost their tails more or less, as the operation had to be performed in the lower joint of the tail..... ....

WE want apples and peas and peaches to grow bigger downwards in the box, basket or barrel. We want to find the bottom berries of rasp, black and straw the best in the box. Then we want to know who puts up fruit in that way and to encourage him by asking for his fruits and showing a readiness to pay for them..... .....

DO you need a complete or partial fertilizer for your land? If one element exists in the soil in excess, that element may be omitted. How can you find out what elements are in excess? Only by trial..... .....

Everywhere.

RURAL SPECIAL REPORTS.

Illinois.

CHAMPAIGN, Champaign Co., Sept. 8.—Weather dry and warm, if not hot; regular fly-biting, corn-ripening, south-windy weather. East of the 90th meridian and to farther Eastern Indiana the corn crop is an immense one; west of it and to the mountains of Middle Colorado there is scarcely corn enough for seed and bread. B. F. J.

Indiana.

PENDLETON, Madison Co., September 4.—We have uniformly good crops in this part of the State. Wheat is an average of fully 20 bushels per acre, and the quality is good. Our lands are generally tile-drained, which has proved an antidote to blight and rust, and a good insurance against freezing in Winter and drowning out at any season. It has also added 25 per cent. to the comfort and health of our rural population. Much more time is devoted to preparing the ground for wheat than formerly, and the increase in quantity has more than compensated for the increased labor. It is well plowed, and then harrowed and rolled until there are few clods. The drill is then used, which completes the operation. Our best farmers have an average of 25 bushels per acre; our worst 10 bushels, with a slow but steady increase from year to year. Corn, oats, rye, barley, buckwheat and potatoes will average 100 as compared with last year or a series of years. S. W. H.

Kentucky.

NICHOLASVILLE, Jessamine Co., September 4.—We have had the best season and consequently the best crops we have had for 36 years. D. W. A.

Michigan.

CAMBRIA, Hillsdale Co., September 6.—Crops are good. Some yields of wheat as high as 35 bushels per acre. Corn a little shortened by drought, but not as much as hay and potatoes. Recent rains have made the pastures green. Apple trees are breaking under their load and other fruits, except peaches, have been abundant. Wheat, 75 cents; corn, 45 cents; oats, 30 cents; potatoes, 35 cents; butter, 13 cents and eggs, 12 cents. A. J. MCD.

New York.

UTICA, Oneida Co., Sept. 13.—The market for butter is firm. Prices are a little advanced. While some good dairy butter is bought for 18 and 19 cents, the bulk brings 20 cents., and good creamery 21 and 22 cents. Thirty packages were bought to-day at 21 cents. The number of packages bought during the week was 105 at prices as stated. A prime article is said to be scarce. Little Falls sold dairy at 18 to 20 cents, and creamery at 21 cents. The Cheese market opened a little dull, but toward the end displayed considerable activity and closed firm and strong. Prices will hold this week, and the indications are for a still better market. The Board sales were as follows: 900 boxes at 9⅜ cents; 4,438 boxes at 9½ cents; 700 at 9⅝ cents; 1,400 boxes at 9¾ cents; 878 boxes at 9⅞ cents; 1,890 boxes at 10 cents; 84 boxes at 10¼ cents; 358 boxes on private terms and 210 boxes on commission—total, 10,852 boxes, ruling at 9½ cents, which is one-quarter cent higher than last week. Little Falls sold 7,746 boxes to-day at 9¾ cents. The cheese men held back for the higher terms and the market was slow. The hop market has seen a slight change in the last week and the hops being about picked, where there are any, there have been a few sales. Those heard from in this county have been worthless as a base for prices. They have merely been sales of hop refuse. About 10 bales were sold the other day in Clinton for 15 cents a pound. They were in bad shape and certainly not worth any more than was paid for them. Some good hops have been sold at 35 and 40 cents in small quantities. In Chenango County the crop is reported better than expected, but the acreage in this county is small. There have been one or two good yards in Otsego County, In some districts the presence of a small worm at the roots of the vine is reported, and it is feared that the plant will be destroyed. Lewis County has 400 bales against 5,000 last year. R. L.

Tennessee.

TULLAHOMA, Coffee Co., Sept. 4.—Crop outlook very promising: wheat was more than an average crop, and has been put upon the market at 65 to 75 cents. Corn is selling at 50 cents; oats, 30 cents; rye, 75 cents; potatoes (new) 60 cents per bushel. Stock of all kinds low. Apples plentiful at 30; peaches an entire failure in this section. C. L. N.

Texas.

MEDINA, Bandera Co., Aug. 30.—On the 20th we had a most terrible storm. It began in the morning and lasted for about seven hours. It started from the north, from which direction it blew for three hours, increasing in force all the time until it carried everything before it. Thousands of bales of cotton are beaten into the ground and farmers in Western Texas are greatly discouraged. Corn was a failure on account of drought; the cotton crop, too, was cut short. It would have averaged ⅛ of a bale per acre, or five dollars, which would not have paid for the work expended. Now even that is lost, for the rain beat the cotton into the ground, and it is now sprouting. Such is the dark side of farming. But the rain has started the grass, and if we have some more rain we will probably have a fair Winter range for our cattle. Most of them would have died from starvation before Winter, were it not for the rain. I have been feeding my cows for about six weeks, but to-day they refused to eat corn fodder, because they got a taste of green grass. Times are hard. Prices are very low; cattle no sale. Hogs, fat, $2.35 per hundred. Corn, which we have to buy, is 60 cents per bushel, while some farmers sold theirs two months ago at 30 cents. I fed mine into hogs which I cannot sell without losing money. W. S. H.

Vermont.

NEWPORT, Orleans Co., September 6.—We have a large crop of apples this year. T. H. H.

THE FARMER'S CLUB

ANSWERS TO CORRESPONDENTS.

[Every query must be accompanied by the name and address of the writer to insure attention. Before asking a question, please see if it is not answered in our advertising columns. Ask only a few questions at one time. Put questions on a separate piece of paper.]

INFLUENZA IN MULES.

H. H. S., Leipsic, Del.—I have lately lost five mules from some disease with the following symptoms: Rejection of "cud;" dry cough; loss of muscular power; high fever; very offensive breath; yellowish, thick discharge from the nose; tongue and mouth dry and hot; rattling in the throat; morbid lesions; pus in left frontal sinus; lividity and ecchymosis of right lung, and slight adherence to pleura. Considerable effusion of a reddish, foamy, bloody water in the trachea. The animals were in good order, and did not run on grass. Now, what is the cause, and what should have been the treatment?

ANSWERED BY F. L. KILBORN.

Evidently a catarrhal form of influenza, in which the lungs were quite seriously implicated. Uncomplicated cases rarely prove fatal when promptly attended, with proper care. In these cases the local inflammation must have been very severe, or perhaps the animals were improperly treated, with lack of suitable care and diet. Being a disease that runs a definite course, more usually depends upon the care and diet of the animal than upon the medicinal treatment. A clean, dry, well-ventilated, comfortable stable, preferably a box-stall, is very essential. Blankets, and bandages to the limbs, must be freely used when necessary, to make the animals comfortable. Draughts of air are to be avoided. The diet should consist mainly of mashes, boiled oats barley or linseed, with roots, or other green food in moderate quantity. Allow free access to good *water*. Frequent steaming of the nostrils is very soothing to the inflamed air-passages, favors free secretion, and relieves the cough. This is very easily accomplished by feeding hot mashes from a pail or nose-bag. Externally, the throat may be bathed with water as hot as the hand can bear, rubbed with ammonia and oil, or a mustard blister applied. Internally, the following prescription may usually be given with advantage: mindererus spirit and sweet spirits of niter, each one ounce; extract belladonna one dram, to be given two, three or four times daily. Constipation is best relieved by copious injections of warm water. While, as a rule, purgatives are to be avoided, small doses of oil may be given, if thought desirable. In mild cases little or no medicinal treatment is necessary; but special attention should always be given to the care and diet. During the course of the disease the animals should be kept quiet, exercised gradually while recovering; but under no circumstances allowed to return to work until fully recovered. When convalescence is tardy, a course of tonics is desirable—an ounce each of Epsom salts and powdered gentian, and two drams of niter, night and morning. On alternate weeks the gentian may be replaced by two drams sulphate of iron.

RED WATER IN A SOW, ETC.

J. C. H., Summerville, Ga.—My two-year-old sow farrowed in July and was in good health until two weeks ago, when she began to grow poor, and reel about in her hind quarters. She ate heartily till two days before her death. The morning she died blood passed with her urine and she had also a slight cough. One of her pigs drooped, had a cough and bad breath, and white matter ran from its nose. I pulled some black teeth out of its mouth, but that didn't do any good. What was the trouble?

ANSWERED BY F. L. KILBORN.

With the sow the symptoms indicate a dietetic disease commonly called "red water," usually due to feeding on wet, new or inferior pastures which furnish unsuitable or innutritious food. In addition to unhealthy soils, general defective feeding is a predisposing cause. In this case the sow was greatly weakened from the birth and nursing of the young pigs. As treatment the sow should have been confined in a clean pen, given an ounce of olive or castor oil, and sustained on a laxative, nutritious diet, as mashes, gruels, boiled linseed, etc. The following prescription might have been given with benefit: potassium chlorate and powdered gentian each one-half dram, ether and mindererus spirit, each one dram, to be given cold in ale or linseed tea three or four times daily.

The symptoms of the young pig indicate simply disease of the respiratory organs, probably broncho-pneumonia. The treatment of so severe an attack on an animal so young is usually not very satisfactory, and in all severe cases of disease of the air-passages the treatment is constantly being varied to suit the varying symptoms, so that it would be very difficult to briefly indicate a proper course of treatment.

WATERY EYES IN A HORSE.

S. McF., Tower City, Dak.—Very clear water has been running from my horse's eyes all the time for a month, sometimes in a stream. There is also some discharge from the nostrils when he is drinking. He has been affected in the same way before. He seems in good health and works every day. What ails him?

ANSWER BY F. L. KILBORN.

The difficulty may be due to stricture or closure of the lachrymal duct or to any inflammation of the eye producing an increased secretion of tears to such an extent that the duct is unable to carry them away. The very copious secretion in this instance would indicate such inflammation, which may be due to some foreign body in the eye, to any local injury, or to any abnormal position of a portion of the lids. From the absence of other symptoms and the fact that the cause of the irritation appears to be more or less permanent, we are unable to diagnose very closely. As general treatment, keep the animal in a darkened stable and protect the eyes from light by a calico bandage. Bathe the eyes frequently and keep the bandage wet with a weak, tepid solution of borax, to which add a few drops of tincture of belladonna. The animal must be protected from a draught or cold. Keep the stable clean, so that there will be no irritating gases from dung, urine or other decaying substances. Unless the bowels are already loose, give five or six drams of aloes, and follow by a restricted, laxative diet. If after a week there is little or no improvement, use the following lotion for a few days, after which return to the borax and belladonna, or other simple tepid lotions: Lead acetate one-half dram, morphia 10 grains, water one pint. If this treatment is unsuccessful consult a veterinary surgeon, or if there is none available, call the family physician and ask him to examine and treat the same as he would the human eye under similar conditions.

DIVIDING RHUBARB ROOTS; RADISH AND SPINACH WORMS.

W. J. P., Leadville, Col.—1. Can I divide the roots on a plot of rhubarb which has stood for four years, without injury to the next year's crop; if so, how? 2. For two years my radish and spinach crops have been greatly injured by a worm like the cabbage worm; what is it and is there a remedy?

1. Yes. Remove the earth from one side of the plant sufficiently to expose the crown of the root. Select a part of the crown that is furthest from the center, and with a butcher's knife sever one of the branches of the root-stock that contains an eye. It may be done late in the Fall or early in Spring. 2. The insect that infests the roots of the radishes is, doubtless, an anthomyia, and is very closely allied to the cabbage maggot and onion maggot. We believe some entomologists consider them all varieties of one species. Plant radishes on soil containing a very large proportion of sand, to avoid injury from this pest. The insect that infests the leaves of spinach is probably also an anthomyia. We know of no remedy, as the maggots are protected from applications by living between the two surfaces of the leaf. We would suggest planting on ground that has not recently been devoted to spinach or beets, and as entomologists are not sure whether this anthomyia is distinct from the ones that infest cabbages and radishes, it would be well to avoid, also, ground that has been devoted to these crops, provided they have been injured by the maggots.

A BARREN COW.

H. H. W., Pomona, Col.—Two years ago I bought a four-year-old cow, said to be with calf; but this turned out not to be the case. She was put to the bull half a dozen times the first year I owned her, but in vain. Last year she took the bull four or five times, and then was quiet for some time. A month or two afterwards, I think, she miscarried, and in a few days she was in heat again, and since then she had the bull two or three times without getting in-calf. Her milk yield has dropped from seven to about two quarts a day. What should be done with her?

ANS.—Dry her off and feed sparingly for a month or two. Watch closely to make sure there is no discharge from the vagina. As she comes in heat, have her served by one bull, and the next time by another. If after three or four trials you are still unsuccessful, and no disease of the generative organs can be discovered and removed, we can only recommend that you sell her for beef. Similar cases are not very uncommon. See Sterility in Mares in the Farmers' Club for July 3. With cows a much smaller per cent. are unfruitful, usually not over one to two per cent. The fact that a cow takes the bull is sufficient evidence that she is not with calf.

TREATMENT OF INSECTS FOR A COLLECTION.

G. A. T., Bella Silva, Pa.—I wish to begin a collection of insects. What is the best substance with which to kill them, and how should they be treated to prevent drying and crumbling?

ANS.—The most satisfactory substance with which to kill insects of all kinds is cyanide of potassium. A lump the size of a small hickory-nut should be broken into three or four pieces and placed in a large-necked bottle, with a tightly-fitting stopper. Glass-stoppered bottles are the best, and then plaster-of-Paris should be poured in until the lumps are well covered. In a few moments after being placed in the bottle, the plaster will set, and leave a little water standing above it. This should be poured off, and the uncorked bottle be set in the sun for a few hours to dry. A bottle filled in this manner often does good service for a year. Chloroform or ether may also be used by putting a few drops in a bottle or box, with tightly-fitting cover, in which the captured insects are placed. There is no substance in general use, if in use at all, to prevent drying and breaking. The drier a collection is kept, the better; and to prevent breaking, handle with care.

SOD LAND FOR POTATOES.

J. S. B., New Berlin, N. Y.—I have a piece of sward plowed last August, and I wish to plant it to potatoes next Spring; how shall I treat it so as to put it in the best condition?

ANS.—Cultivate and harrow it often enough this Fall, so as to keep it clean and subdue the sod. In Spring plow it well, cutting the furrows narrow so as to pulverize and mix it thoroughly. If any stable manure is to be used, it should be well rotted and spread before plowing in Spring. It would be better if put on early in Winter, so as to be dissolving by frost and rain and mixing with the soil. If commercial fertilizers are to be used, they should be put on after plowing and thoroughly worked into the surface. There is no danger of getting land *too* mellow and fine for potatoes.

GRASSES.

S. W. O., Ridgewood, N. J.—1. What grass and fertilizer would be best for a horse paddock on sandy loam land? 2. What is the best grass mixture for a lawn?

ANS.—1. We can think of nothing better than a mixture of Creeping Bent, Red-top, and Blue Grass. We should recommend stable or farm-yard manure. In the absence of this, use at the rate of three bags of raw bone flour, one bag of sulphate or half a bag of muriate of potash, and 100 pounds of blood. 2. For a lawn use either Red-top or Blue Grass or both. This is just as good in every way as the higher-priced lawn mixtures.

Miscellaneous.

Amateur, Delaware, Ohio.—1. What winter protection is needed for Clematis crispa-Jackmannii and coccinea? 2. How are the Walbridge, Wagener, Haas, Saxton, Lawyer, Shiawassee Beauty, Munn, Jefferis, Red Bietigheimer, Blue Pearmain, Black Detroit and Blenheim Pippin Apples as to hardiness and quality?

ANS.—1. The Clematis mentioned should be hardy in your climate. 2. We do not know as to Walbridge. Wagener is very hardy, best quality. Haas (Fall Queen) is hardy enough for Ohio, but succeeds better in the South. Fair in quality. Saxton is fair in quality and hardy, but does not thrive in Ohio. Lawyer is very good. It does not thrive in Ohio. Shiawassee Beauty is very good and hardy, succeeding only in Michigan, so far as we know. Munn is hardy, fair quality. It will not succeed with you. Jefferis is of fair quality, hardy and succeeds pretty well in Ohio. The Red Bietigheimer is a large, showy German apple of fair quality. Blue Pearmain is a hardy apple of fair quality, but we have no evidence it will be profitable in Ohio. Black Detroit is of poor quality, (Grand Sachem). Blenheim Pippin is of fair quality, hardy. Does not succeed in Ohio.

Herder, Llano, Texas.—When some of my lambs are ruminating, there is a constant flow of saliva from the mouth. In about two weeks they begin to scour badly; but this eventually disappears and they are left with a large lump under the throat; what ails them and what can I do for them?

ANS.—It is impossible to tell from so imperfect a diagnosis; but the symptoms are probably not all due to the same cause. The flow of saliva and the scours are very likely due largely to some poisonous weed eaten. A close examination may reveal the cause. If not write us more fully.

B. P. Van H., Fridley, Mont.—The oats sent for name seem to be the White Russian, the other is called variously Montana Rye, Diamond Wheat, Polish Wheat, Polish Rye and Big-seed Wheat. It is really Polish Wheat, a distinct species.

O. J. J., Allen, Md.—Jerseys and Alderneys are not the same; but the Jerseys in this country are often miscalled Alderneys. Alderneys are very like Guernseys, and are included in an Appendix of the Guernsey Herd Book.

S. O. R., Vencentown, N. J.—The pears you sent for name are undoubtedly Bartletts. We sent one of the specimens to Ellwanger & Barry who think the early ripening is due to the influence of the stock.

C. B. B., Norfolk, Va.—Who makes brick machines?

ANS.—Penfield & Son, Willoughby, Ohio, and Frey, Sheckler & Hoover, Bucyrus, Ohio.

DISCUSSION.

THORNLESS BLACKBERRIES AND BLACK-CAP RASPBERRIES.

J. H. H., SOUTH GLASTONBURY, CONN.—In the RURAL of August 21, page 247, "F. C., Leominster, Mass.," asks whether there is any thornless raspberry or blackberry profitable for market. The answer is "No. We do not know what the berry which you speak of is from your description." In a general way the answer is correct. The thornless varieties are not profitable for market. Hoosick and Wachusett Blackberries have been well tested in private gardens all over the country, the former proving of little value anywhere; while the latter is favorably mentioned by about one-half of those that have cultivated it. I have known it for the past 10 or 12 years, and learned some time ago that under ordinary conditions it is not very productive, but planted on strong, rich soil, and well cultivated, it is very productive of berries about the size of the Kittatinny, and even better in quality. The plant is as hardy as the Snyder, and, being free from thorns, is much easier to work among in trimming, cultivating, and gathering the fruit; hence it has been largely planted for market in Worcester Co., Mass., and Hillsborough Co., N. H.; in fact, I think there are to-day more acres of Wachusett Thornless in New England than of all other sorts combined; but it should always be borne in mind that it will not yield paying crops on thin, light soil where Wilson, Kittatinny, Snyder, etc., can be grown at a profit. As to thornless black-cap raspberries, Davidson's Thornless, an old, well-known sort, was for a time quite profitable on account of its earliness; but the fruit being small, it soon had to give place to larger and better varieties.

The Springfield, a thornless variety of Massachusetts origin, has within the last few years attracted considerable attention in this section, the plant being as healthy as Souhegan and entirely free from thorns; canes as smooth as a willow, moderately productive, of medium to large berries, jet black, sweet and juicy, and ripening extremely early. It is sure to find a place in every family fruit garden, and to any market fruit grower that objects to the thorns on the older varieties, I would say, plant the Springfield; it's fun to pick the fruit and you will have no torn clothes or flesh during the cultivating or pruning season, as is often the case while working among all other black-caps. Our women pickers bless the day when we first planted the Springfield, and we shall increase our plantation of it next Spring.

R. N.-Y.—The R. N.-Y has reported upon the Springfield as it has behaved at the Rural Grounds—see page 461.

N. F. NICKERSON, ADRIAN, Mich.—I have about 10 acres of "Surprise" Wheat raised from the seed sent out by the RURAL. I will furnish it in four-bushel lots, in new bags, for $5 per lot; or at $1.25 per bushel in smaller quantity, with 25 cents for bag delivered on the cars; the price to accompany the order in all cases.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING September 11, 1886.

S. C. C. F.—W. F., Y.—T. H. H.—A. J.—S. O. R.—C. W. P.—W. P.—E. L. B.—R. S. C.—A. L. J.—E. L. T.—R. S. C., plants rec'd—H. H. A., plants rec'd. N. B. Send all perishable articles direct to the Editor, River Edge, Bergen Co., N. J.—M. S. C.—R. S. T.—The seed distribution will be announced in a few weeks.—A. J. McD.—W. L. M.—W. P., O. K.—O. H. A.—E. M. B.—W. L. M.—G. S. C.—W. Z. M.—S. C. H.—J. I. C.—F. N.—C. C. -E. T.—E. M. C.—H. S.—P. U.—T. H. H.—W. F.—A. P. R., thanks—C. H.—A. B.—W. A. S.—W. B. R.—J. G.—W. F.—L. K.—F. G.—J. W. L.—E. E. F.—A. J. C.—G. E. H. thanks—M. H. S.—W. G. B.—J. G. R.—C. V. R.—C. C. W., thanks.—B. B.—J. A. M.—E. D.—J. H.—Mrs. C. C., thanks.—E. F. R.—W. F. B.—A. B.—J. T. B.—J. D. D.—W. H. S.—L. R.—E. C., thanks.—D. R.—W. D. T. J. W. Y.—K. T.—A. C. M.—J. C.—E. C.—A. E. M. C.—E. T.—H. S.—C. S. A.—R. M. C.—C.—"Subscriber."

THE
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Conducted by
ELBERT S. CARMAN.

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SATURDAY, SEPTEMBER 25, 1886.

IT is desirable that the RURAL NEW-YORKER should be represented at all the agricultural fairs of the country. Those who are willing to act as agents will be furnished upon application with posters and all the specimen copies they may need.

WHY not gather the seeds of the best grapes and plant them at once in beds of well-prepared soil? They will sprout next Spring.

THE Earhart Everbearing black-cap is bearing finely (Sept. 15) its third crop. The berries are large, and borne in clusters of from 16 to 40. It is a remarkable variety.

THE Alaska Peas planted August 16, are now a foot high and in bloom. It is our first trial with peas planted so late. The vines of the Spring were over two feet high when they began to bloom.

A FINE rain last week enables us to prepare our wheat plot just exactly to suit us. We are afraid that our attempted cross of rye upon the three-quarter hybrids will prove a failure. Two or three kernels may, however, grow.

OUR new mode of securing for potatoes moisture as well as air and sun-light, which we have called "Valley Mulching," will be described in a few weeks. The experiment was made in a small way, and the yield was so much increased that we shall try it more thoroughly another year.

ONE of the best Bird Cantaloupes raised from the seed of our last seed distribution weighed nine pounds three ounces. It was thickly netted and of fine quality. The size was 13 inches around the middle and 25 inches around lengthwise. Some of these melons are not netted at all; others are of the regular melon shape.

THE new Premium-List of the R. N.-Y. is available to all who send yearly subscriptions at the regular price, viz., $2.00. It is a matter of choice whether they retain the cash commission of 50 cents for each subscription in clubs of five or over, or select any of the articles from the Premium-List, which are scaled so as to allow an equivalent of from one to two dollars for each subscription, according to the arrangement which we have been enabled to make with the manufacturers.

THE American Forestry Congress at Denver, Colo., before adjourning Thursday night, adopted resolutions asking Congress to establish an agricultural and forestal experiment station in connection with the Department of Agriculture at Washington; also to pass a bill for the protection and preservation of the timber land now in possession of the Government and for the establishment of a Commission on Forestry to provide the means to prevent the destruction of forests by fire and the prosecution of persons setting fire to timber. The Forestry Congress has done much good in arousing attention to the necessity of forest preservation. Substantial progress has already been made. Public opinion is becoming instructed. A good deal has been done by some of the States in the way of forest cultivation; but there is need of vastly more. The rapidity with which timber is consumed is well illustrated by the fact that the railroads of the country require this year 80,000,000 ties for repairs alone. These are all from comparatively young trees. Railroad ties last only from one-fourth to one-fifth the time needed to grow them. When metal or paper shall have replaced wood for ties, a vast saving will be made in timber destruction.

FARMERS' CLUBS.

THE time is now coming when the live Farmers' Club will do its greatest good. There are many excellent clubs in the country, and their influence for good is beyond measure. Some of the very best work is done by the county or town clubs. These smaller associations are more like great families where the members are free to praise and criticize with no other motive than a desire to bring out the truth. The Westtown Farmers' Club, of Orange County, N. Y., is an admirable society. Its meetings are always well attended and lively. One admirable feature of each meeting is the "creaming" of some good agricultural paper. A member is appointed to study the paper and take off the cream—that is to take the heart out of the articles—and present them in the form of an essay or speech. Then the members can discuss the various points, add testimony if they approve and show wherein the wrong lies, if they object. This plan is a fine one, and many a good club can be built up by following it. Many clubs decay and die because the members simply talk themselves out, and tell all they know. By discussing the ideas advanced in a paper like the RURAL, they can discuss the ideas of over 1,000 persons through the year, and there will be no lack of new subjects to handle. We advise all Farmers' Clubs and Granges to adopt this line of work. Where there is a desire to organize a club, let three or four good farmers make it a point to meet now and then to discuss their favorite agricultural paper. They will be surprised to see how quickly others will desire to join them.

CANDIDATES AT FAIRS.

THE politicians are having rare times at the fairs this year. All the candidates, big and little, are glad to put themselves on exhibition by the side of prize horses and cattle. The people have a chance to look them over and judge them by the "scale of points" which every thinking man makes for himself. We see no reason for the outcry which is raised against candidates for attending public meetings. The people want to look at them. Suppose they do make speeches and shake hands. Are American farmers so simple that they believe everything that is told them? We hold that they have minds of their own and that no man's tongue can wag them away from what they think is right. We object to having the recognized speech of the fair delivered by some lawyer who tries to tell what he knows about farming and only succeeds in showing that he knows nothing; but if a candidate wants to come out and show himself as a side-show, why object? It is far better to have candidates so taught that they are willing to take off their hats to the farmer and beg for his vote, than to have them feel that the farmer's vote will come to them anyway. The keener the competition for the farmer's vote, the greater the benefit we shall derive from it.

POLITICAL TEMPERANCE.

THE temperance cause is gaining ground. The growth of a strong and permanent reform like this must of necessity be slow. It is an education and we must reach to the very bottom if we would form a rock-like basis. It is better to go slowly and steadily on than to rush into legislation that must be undone, or to spend time in correcting mistakes. The agitation against the saloon has been compared with that raised against slavery. In one sense the two are unlike. Slavery was a sectional evil. Those who fought against it knew little about its practical workings. It was possible to arouse an intense enthusiasm among those who had never seen a slave other than the few superhuman specimens who had the manhood and courage to escape. The cause of the saloon is not sectional. Its power is felt all over the country and faces us everywhere. It can be fought and overcome, but this cannot be done in a day. We look upon the recent meeting of Anti-saloon Republicans at Chicago as one of the most hopeful signs of the times. When Senators and ex-members of the Cabinet openly declare war upon the saloon we may well hope for definite results. There have been many denunciations of the liquor business, but few have been pronounced in sturdier or more pointed language than is contained in the following extract from the resolutions adopted at the Chicago convention:

"The liquor traffic as it exists to-day in the United States is the enemy of society, a fruitful source of corruption in politics, the ally of anarchy, a school of crime, and with its avowed purpose of seeking corruptly to control elections and legislation, is a menace to the public welfare and deserves the condemnation of all good men."

The action of these prominent Republicans cannot well be disregarded. They mean business of the most determined character. Let the party plant itself squarely upon a temperance platform and the politicians will surely come to time. This will give political temperance a dignity it has never before enjoyed. The question should be raised above a mere matter of party politics, however. We want the matter so managed and brought before the people that all temperance men can unite against the saloon and still feel free to vote upon other subjects as they desire. We welcome all honest efforts that tend to place the question squarely and fairly before the people, but we want no such humiliating spectacle as that of a man sliding into office under cover of a temperance cloak. May the day soon come when all good men can unite against the evil.

THE GAMBLING MANIA.

THE desire to get something for nothing and the belief that it can be done honorably seem almost universal. Speculators in produce and stocks are not confined to New York and Chicago; they abound in all parts of the country; but especially in the West. There every city, town and village has one or more grain offices, which during business hours, are constantly receiving quotations from the next large market while the Board of Trade is in session. For these dispatches they pay from $10 to $20 a month, and sometimes a number "chip in" to pay for them. Few legitimate business places in the towns are as well patronized as these. The farmers from the surrounding country are constantly dropping in to see how "she is going," and are just as constantly investing all they can spare and often more "on their judgment." The grain dealers of the section come or send in a clerk to get the figures, and they too frequently "back their judgment." The men "about town" who have any money to invest are frequent visitors. As the yellow messages pass from hand to hand, it is wonderful what unanimity of opinion there is that wheat, corn and pork are "bound to go up," for in nine cases out of ten, the country speculator is a "bull."

There are no goods on show, no samples even. It is simply a gambling den. There is no pretense of buying and selling. The patrons simply bet on the future price of wheat or pork, or whatever else they nominally buy or sell. The owner of the gambling "hell"—usually a several-times "busted" speculator—explains to his victims how, by a system of margins, he can control thousands of bushels of grain or barrels of pork with a few hundred dollars, and offers to take them into a "deal," which is a "sure thing," and the victims put their money into the "blind pool" and usually lose it. Even if the deal is successful, the "outsider" must trust to the honor of his "partner," and usually honor where "big money" is concerned, is a scarce commodity in that quarter.

Of course every patron soon knows all about "puts," "calls," "straddles," and the whole business, and has an abiding faith in his own "judgment." He may lose over and over again, but he is certain all the time that he can win it all back, and more too, if he can only raise money enough to invest. An occasional "hit" causes him to think himself the smartest man in town, and makes him as confirmed a gambler as the oldest patron of the faro table.

Very few ever come out of such dealings ahead. Most of them "spread themselves" too much, buying heavily on a margin of only a few cents, and a slight fluctuation "wipes them out;" or the chief manipulator, often in concert with another speculator at the central market, makes "snap" quotations two or three cents lower than the regular market prices, and "freezes them out."

The evils caused by this form of gambling are widespread. It has done nearly as much as poor crops and low prices to put a mortgage on many a farm in the West, and plantation in the South. How many speculative grain merchants who "backed their judgment" beyond their means, are now heavily in debt and carrying on business under their wives' names, or those of somebody else, if they have still money or credit enough to carry on business at all? When the farmer rides to town to learn "how the market is going," leaving a green hand to manage the farm, something is sure to go wrong. Careful bankers will not lend money to those known to speculate in produce, except on the best security, because the innumerable examples of those who have lost their all at the game render them distrustful of repayment.

What can be done to meet the evil which affects alike the blackleg gambler, the church-going storekeeper and the staid farmer? Special legislation seems powerless. The only hope appears to lie in a knowledge of truer business methods, a healthier public opinion, and a hearty condemnation of the sentiment that gambling in produce is a whit more honorable or honest than gambling at cards.

BREVITIES.

WHAT blackberry gives so much fall fruit as the Kittatinny?

THE Worden Grape ripens this year exactly with Concord at the R. G.

SIMON'S PLUM, which seems to be half peach or apricot, is worthy of trial.

How many pounds of milk from *your* cow does it require to make one pound of butter?

THE beautiful little Polyantha Roses may justly be called everblooming. They are hardy also.

OPTIMUS is the best tomato, all things considered, we have ever raised at the Rural Grounds.

THE Victoria Grape, which has borne immense crops for five years previously, fails this season.

We find the "Self-husking" Corn very much what is claimed for it—a somewhat rare occurrence as to novelties.

WE conclude that we had rather engage a stupid man who likes his work than a smart man who shuns it. Are we right?

THE Brazilian Flour Corn is decidedly different from any corn we have raised—quite a curiosity, in fact. We shall report later.

SUPPOSE we should stuff our stomachs with food, the same as some dairymen do those of their cows in order to secure large milk flows, what would be the result?

EGGS are now going up in price. They will increase in price till Christmas. What treatment are the hens receiving now? The increased price will make no difference with your profits unless you take care of the hens.

SUPPOSE you spend half a day in putting an acre of wheat land is first-rate order, and that acre yields two bushels of grain more than the rest of the field, do you lose or gain by the extra work? If you gain, why not treat every acre in the same way?

THE Angel of Midnight Corn, sent out in the RURAL'S last Seed Distribution, has done well with us, though requiring a longer season to mature than last year. It is certainly one of the most productive strains of yellow flint known to us.

DON'T say because wood ashes produce fine results on your land that they are the best of all manures. Don't say because they show no effects they are worthless. In the one case, your land may be rich in phosphoric acid and nitrogen, needing chiefly potash—in the other rich in potash.

DR. R. P. GREENLEAF, of Delaware, sends us the first bunch of grapes we have seen from the Niagara seed sent out several years ago in the RURAL'S Seed Distribution. The berry is much the color and shape and size of its parent. In quality it is more meaty (less pulp), the skin is firm and we can not detect any foxiness. Dr. G. says the vine is vigorous.

THE Rural Blush is yielding heavily at the R. G. The season has been favorable, it is true, for late potatoes. The Blush is not the best shaped potato in the world and, as we have often said, the tubers do not grow closely together. Still its quality equals that of the best of the Peachblows. Wait until we distribute the RURAL NEW-YORKER No. 2 among our subscribers!

Do you attend the fair to learn all you can, or do you go merely for amusement? How easy it is to distinguish the one from the other. The farmer who aims to improve his methods and to raise better crops will find something in everything to examine and inquire about. The farmer who views farm life as merely a routine of drudgery will be found gaping in front of a fortune-wheel or idly gazing at the horse trot.

MR. H. M. C. GARDNER has the thanks of the ladies of this office for a huge bunch of Golden Rod blossoms. These bright masses of gold are very popular with city people. Whenever they make a visit to the country at this season, they are sure to return laden with bunches of Golden Rod. Even the farmer, who is bound to look upon it as an agricultural enemy, is often forced into an expression of admiration as he sees it nodding merrily over his fields.

WOULD you have a bed of pansies bloom during the entire Summer? And would you have the flowers nearly as large in midsummer as in early Spring or Fall? We have succeeded in this way: The soil of the bed was enriched with old manure and chemical fertilizer (bone, blood and potash), and kept moist all the while. If the plants suffer for water for even a day or so, the blooms grow small and do not recover their size in several weeks. The newer strains of pansies—lilac, red, red and yellow, bronze and black—are very beautiful.

THE busiest men in the world just now are the market gardeners. They are having a close race with the frost. Tons of vegetables and melons are ready to be brought into the market. These would be utterly destroyed by heavy frost. There is little sleep for the market gardener these nights. The roads are crowded with teams. The wagons are loaded so heavily that the horses can just about pull them on level ground. Teams are stationed at the foot of each bad hill, which, for a small sum, will help haul the load to the top.

We are sending specimens of the R. N.-Y. to some of our old subscribers who are not subscribers now. We respectfully call their attention to our proposition to send the Rural from now until the end of next year for $2.00, or in Clubs of Five or over for $1.50. We invite them to send for our new 16-page Premium List, which, it will be conceded, offers very liberal compensation to all who are willing to aid in extending the Rural's circulation.

Indust'l Societies.

AMERICAN HORTICULTURAL SOCIETY AT CLEVELAND.

(RURAL SPECIAL REPORT.)

The old and new name; slim attendance; the "Horticultural State"; grapes therein; a mischievous practice; discussion on varieties of grapes; grapes in the South, and elsewhere; fruit growing in Florida; "the whole field of horticulture"; forestry.

SEVEN years ago the Mississippi Valley Horticultural Society was organized by leading fruit growers, horticultural writers and scientists from 20 States. At its New Orleans meeting during the Exposition, the members became imbued with the ambitious, broad and national spirit then prevailing, and changed the society name to "The American Horticultural Society." The first meeting under the new name opened at Cleveland, Ohio, September 7, and the sessions extended through four days. The attendance was not large owing to the detention of members at fairs and openings of agricultural colleges, and the refusal of railway managers to make any reduction in rates. About half the States were represented, however, and valuable papers were read from leading members in numerous other States. Ontario, Canada, had a representative and Kizo Tamari of Japan, was present.

President Parker Earle presided at all the meetings with his usual ability and grace. Secretary Ragan presented the financial status of the society, which showed a balance of $173.12 on the right side. He then read a paper on "The past, present and future of grape culture in California," by Geo. Husmann, of that State. He thinks California is pre-eminently the horticultural State of the Union, as fruits of the temperate zone flourish side by side with those of the tropics. From an experience of five years there he gives a brief outline of grape culture in that State since 1847, when the Mission Grape was the only variety known there. Now he says they have nearly 400 sorts, and expect to produce 20,000,000 gallons of wine this year, equal in quality to any on the globe. "Our raisins are competing with the finest London 'layers;' our table grapes go to every city in the Union, and our grape brandy competes with the choicest French cognacs. We have the best climate under the sun to produce a perfect product; have learned all about location, soil, varieties; can handle the product better, have fewer diseases, and we can furnish the world with better and cheaper wines, raisins, table grapes and brandies than any other country, while our area for successful production is larger than that of France. Good grape land is worth $50 to $100 per acre, and can be brought to bear for $100 per acre more. Then five tons of grapes per acre, at $20 per ton, $20 per acre for cultivation annually. I believe in 10 years our production will be doubled." He refers deprecatingly to the practice of selling the best sorts under foreign labels and the poorest as California fruit, which has resulted advantageously to France and Germany to the injustice and expense of California. The growers hail from all countries, even to the Chinese, who, the writer says, have had a larger share in this grape progress than they are usually credited with.

A discussion of the paper and varieties in general followed. Mr. Green, New York, saw how cheap Chinese labor enabled California growers to compete with producers of the East, notwithstanding high freights. Mr. Miller, Penn., thought Worden superior to Concord, from one year's trial. He asked Mr. Hubbard concerning a tendency to drop from the stem. Mr. Hubbard said all reports were to the contrary. He had visited the original vine on Mr. Worden's place, which had produced 110 pounds of grapes annually for three years past. The present crop was the finest he ever saw. Worden is larger, handsomer than Concord, a week to ten days earlier: quality of a first-class Concord; no rot. Mr. Hollister, Mo., reported a very short grape crop in that State, fruit rotting badly. He condemned practice of selling unripe grapes to get high prices early. Mr. Albaugh, O., cited a case in Montgomery Co., where oats were sown between vineyard rows, and prevented rot. Dr. McKay, Miss., said it was a poor grape year there. Concord did best, and was generally regarded as the safest to plant between the 30th and 35th degrees of latitude. Scuppernong never failed, but was not good for market. Excessive rains for thirty days had caused much rot. Mr. Miller had found sulphate of iron a preventive of rot. Mr. Lindsay, N. C., spoke of the increase of grape culture in his State. The eastern section is the home of the Scuppernong, one vine often covering three acres. Seventy-five varieties bunch grapes grown in the middle section, where the finest grapes in the country are raised. Ives and Champion pay best. We call Worden the best black grape. Mr. Vandeyman, Kan., reports a good grape crop. He had visited many vineyards in Texas and Arkansas, and found fair crops in spite of the drought. He alluded to the noble work of Mr. Munson, of Texas, who is sowing seeds of wildings, and crossing seedlings with the best cultivated sorts. Some wild bunches there are one foot long, and the grapes are fine. President Earle said: "We have no more useful man in the interest of horticulture than Mr. T. V. Munson." Most of the members seemed to agree with him.

Mr. Geo. W. Campbell, Ohio, said: "In Central Ohio this is the best grape season since 1849. Early and late sorts are ripening near together. The Talman colors early, but it is an abomination. I was one of the first to raise Worden in Ohio. It is larger than Concord, juicier, ripens earlier, but it has all the faults of that kind, tender skin, a poor shipper." Mr. Carpenter, Ohio, thought high culture gave better grapes and prevented rot. Mr. Tarmari, of Japan, who since the World's Exposition has been studying American horticulture at Lansing, Mich., and other points, then made a few remarks. His people are beginning to grow American grapes. "We had no wine until our country was opened; the Chinese had raised wine grapes for many years. Now we shall have wine, too. There are only two varieties of native grapes in my country. We live so much on vegetable food, eating grapes at table was never thought of." Mr. Tarmari is an intelligent gentleman, but he still finds it difficult to express himself fluently in English, and his pronunciation is very odd.

President Earle then read a paper on Florida Horticulture, by E. H. Hart of Federal Point. He spoke in glowing terms of the climate, and said scientists had immigrated there in large numbers, but as yet science had done little for them. "All we can boast of is profuse vegetation. The fascinations of orange culture have caused the neglect of other fruits. There are wonderful possibilities in the way of landscape gardening in our State. There is no reason why cut flowers cannot be grown in Florida for Northern markets at a good profit. The effects of last Winter's frost have been obliterated by the copious rains of the Summer."

At the first evening session, President Earle read his annual address, an excellent, comprehensive, and practical paper, covering the whole field of horticulture. He said the home, the farm, the garden, and the park were now embraced under this head. "There is an æsthetic and an economic side to it," and he could not tell which had developed most in late years. Horticulture co-operates with education, religion, and moral culture. All honor to those who have made our country the most fruitful and flowerful under the sun. Thirty years ago the strawberries of the Chicago market could have been carried in a wagon; now they require immense railway trains; 300 to 600 tons of the fruit come in daily, and over a quarter of a million persons are engaged in the harvest. He contrasted the poor, little flower-bed half hidden in the farmer's yard, and the spikes of hollyhock at the front door in years gone by, with the embowered mansions and cottages of the present day. Alluding to complaints of over-production of fruit, he regarded the evil as resulting rather from imperfect distribution. "We are marketing too poorly, and there is no obstacle in the way which may not be overcome. We should know more of fruit culture in Russia and Asia." He spoke with great earnestness on the forestry question. "Without forests no successful agriculture is possible, and no high civilization can be maintained. Every year of timber waste makes the matter worse. Seasons change; destructive floods are followed by consuming droughts. The forces of Nature are unbalanced. In 1853 the State of Ohio had 54 per cent. of its surface covered with forest; in 1884 only 17 per cent. remained. Do you wonder at the inundations, the harder Winters, hotter and drier summers; or at the absence of the sparkling brooks that ran and sang all Summer? I quail before the inexorable penalties Nature has in store for all States and peoples who will ruthlessly destroy so glorious a heritage of forest as the American people once possessed. Our woodlands should be preserved by absolute force where the government has the right, and by all encouraging legislation where it has no control." The paper was long and the above sentences are selected at random. It was loudly applauded, and 2,000 copies were ordered printed in pamphlet form. H. H.

THE ILLINOIS STATE FAIR.

(RURAL SPECIAL REPORT.)

Entries and attendance good; Children's Day; live stock; other exhibits; new officers; evidences of progress in manufacture and adaptation of machinery.

THE 34th annual State Fair of Illinois was held at Chicago, September 6 to 10, 1886. The entries exceeded those of former years in number and in quantity of live stock. The attendance was very large, especially from the territory tributary to Chicago. Expenses were met. The premiums offered amounted to more than $34,000; nearly half of which was for horses, but more for speed than anything else. Why is it that fairs must encourage gambling while important objects of agriculture are in proportion discouraged? The weather was propitious most of the time. There were the usual number of swindling peddlers and abominable restaurants. There were on exhibition 879 horses, 258 cattle, 510 swine, and 489 sheep.

Tuesday was Children's Day, when the children of Cook County schools were admitted free. About 20,000 attended. Had not the children of the entire State equal rights of free admission with those of Cook County? Wednesday there was an industrial parade, led by prominent dignitaries in carriages. The effect was very imposing. Thursday was Citizens' Day, and horse-racing was the chief feature. Over 40,000 persons were present.

The principal exhibit of horses was of Percherons. They were housed in a structure made of baled hay, representing a French castle of the fourteenth century. France gave 5,000 francs to the Percherons, and had with Canada and the United States special judges. England gave £200 to the Shire horses. The British Clydesdale Association gave medals for Clydes. The cattle display included all the principal breeds. The horses and cattle exhibited at the Columbus, O., and Minneapolis, Minn., fairs were brought here. The excellent display of animals brought together buyers from many parts of the United States, Canada and Europe. Sheep and swine were present in large numbers and revealed a high state of breeding. The poultry exhibits were meritorious.

Agricultural produce gave an idea of the fertility of Western soil. Agricultural implements were fully represented. There were numerous instructive and interesting contests presented between the latest improved machines and their predecessors. Flowers and the fine arts were fairly represented. There were numerous meritorious exhibits in the "educational" department, in which the country schools were not far behind the city in certain lines of study and work.

Samuel Dysart, of Franklin Grove, Lee County, was elected President of the Illinois State Board of Agriculture. Vice-Presidents were elected from each of the 20 congressional districts in Illinois. Charles F. Mills, of Springfield, was elected Secretary *pro tem.* He and Mr. Bunn, Treasurer, will probably be re-elected by the Board. There is a movement on foot to secure permanent grounds for the State Fair to be held at Chicago. There should be better facilities for reaching and leaving the grounds. The next great event concerning the cattle interest will be the American Fat Stock Show, at Chicago, Nov. 8-19, 1886.

The exhibits at the Illinois State Fair show the progress made in various lines of agriculture. For example, implements:—There is a tendency to abandon the arbitrary sizes, and to make large or small machines for intensive or "ten-acre" farmers. Steel is being much used for the passive parts of machines, superseding wood and iron. The weight is less and the articles are not so bulky and cumbersome. Side-drafts are being avoided. Prominent features are fewer parts, simpler connecting mechanism, direct transmission of power, and more positive action. Dodging patents and seeking novelty have resulted in many variations, some of which are not especially noteworthy or valuable. There have been some improvements in harvesting machines. Needless parts have been done away with, defective actions remedied, and arrangements made for folding the parts together on the road. The reel is under better control. The driver has better direction of his machine, some wheels having been adopted in the place of levers. The sickle is now more easily actuated. Feed grinders are very popular subjects of invention. In them there are improvements in applying power and greater compactness. Riding-plows are more easily turned, and improved mold-boards are presented for sticky soils. For planters greater ease of manipulation and more reliable action are claimed. Hay machines are being made to increase the speed and ease of handling larger quantities of hay. Ensilage and chopped feed seem to be popular, as many machines are made for them. Windmills are being adapted for the lighter purposes of the dairy, household and work-shop. It is to be hoped they will be made so that they will be good for something in a breeze something less than a gale. T. G. LAMOILLE.

SOCIETY NOTES.

HON. GEO. B. LORING at the New England Fair criticized the use of the word thoroughbred in fair catalogues and herd books. Thoroughbred applies to a race of horses bred in England for speed. A thoroughbred pig would be an impossibility. Animals are pure bred, but not necessarily thoroughbred.

AT the New England Fair classes were made for grade Jerseys and grade Ayrshires. The design was to encourage dairy cattle. After some discussion all other grades were admitted into the class for grade Ayrshires. The idea expressed was that every cow that gives milk is to a certain extent a dairy animal.

THE old fashioned "town team" is still exhibited at many fairs. As many of the oxen of the town as can be had are hitched together and walked around the track where all can see and compare them. In many parts of the West a yoke of cattle is a great curiosity. On many New England farms an ox earns his living and pays a profit by his work while he is growing into beef. The fact that so much of the work on New England farms is still done by oxen explains why it is that the Hereford cattle are so well represented at the fairs. These cattle are large and strong and always well mated.

THE Elmira Farmer's Club discussed the use of rock salt for salting cattle. It was thought that a piece weighing 80 pounds placed on boards, stones or any other dry support would be a sufficient supply for 10 or 12 cattle through the entire season at pasture. It should not be placed on the ground.

BULB prizes are offered by the General Union of Holland through the Massachusetts Horticultural Society. The prizes are for spring flowering bulbs, and the exhibition will take place about March 23, 1887. The prizes consist of nine medals and $221.

PROF. W. A. HENRY of Wisconsin told the members of the California State Horticultural Society that there would be a large consumption of California fruit in Wisconsin if good fruit could be sent at a reasonable price. The poor stuff which is now often sent, does not commend itself. So long as farmers have to pay all they can get for a bushel of potatoes or a pound of fruit, they will not be apt to buy much. California fruit growers have had this story told them pretty often of late.

THE Atlanta Pomological Society is doing an excellent work for Georgia and the South. Meetings are held weekly. Discussions and exhibitions of fruits are held.

DUST was the one great objection at the Ohio State Fair. The exhibition was the most successful ever held in Ohio, It was worthy of the most remarkable state in the West. Thousands attended. The live stock exhibition was fine. The Ohio Farmer gives the number of animals exhibited as 73 draft horses, 336 cattle, 597 sheep and 361 swine. There were 75 Short-horns, 38 Herefords, 19 Red Polls, 25 Aberdeen-Angus, 24 Holsteins, 61 Devons, 42 Ayrshires, and 52 Jerseys, 184 fine-wool sheep, 71 Black Top and delaine Merinos, 114 Shropshires, 45 Oxford Downs, 43 South Downs and 50 Long Wools and 138 Poland-China hogs, 88 Chester Whites, 90 Berkshires and 51 Duroc-Jerseys. About every implement known to agriculture was on exhibition and some new implements made a sensation.

THE show of horses at the New England fair was the finest ever seen in Maine. Draft horses, trotters and roadsters were all represented. It is expected that this fine display will tend to stimulate horse raising in New England as never before.

FROM the cattle exhibits at the New England fair it was evident that Hereford, Short-

horn and Holstein cattle are rapidly growing in favor in New England, that some of the finest Jerseys are to be found in Maine, that Ayrshires make friends wherever they go, that Swiss cattle are becoming popular and that breeders of Devons do not seem to care much about pushing their stock to the front.

THE Livingston Co., N. Y., fair will be held at Geneseo, Oct. 6 and 7. The Premium List contains extracts from the State laws, relating to the protection of property at fairs. The powers of the managers as to the appointment of policemen and the preservation of property are clearly defined. It is well to have such matters understood.

Miscellaneous.

CATALOGUES, ETC., RECEIVED.

J. T. LOVETT, LITTLE SILVER, MONMOUTH Co., N. J.—A circular of the new blackberry "Erie," and of the new strawberry "Monmouth." We are trying the Erie, but can't report as yet. It is highly praised by a number of trustworthy fruit growers who have fruited it.

ELLWANGER & BARRY, ROCHESTER, N. Y.—A descriptive catalogue of select roses. Ellwanger & Barry have had under trial many new varieties since the last edition of this catalogue was issued one year ago, but their experience, thus far, does not justify them in placing them in the catalogue. Only one vaety has been added, viz.: Her Majesty, and she has not behaved very well. This variety, with W. F. Bennet, American Beauty and The Bride was ordered from several different firms in the Spring, but except The Bride, they are either dead or have made very little growth. The Bride has done fairly well and its beautiful flowers except color are much the same as Mermet, of which it is a sport. The flowers are white, sometimes rose-tinted on the outer petals.

NINETEENTH Annual Report of the Ohio State Horticultural Society, G. W. Campbell, Secretary, Delaware, O. The report contains 240 pages and we hope to refer to it again.

Woman's Work.

CONDUCTED BY EMILY L. TAPLIN.

A RETROSPECT.

"It is fair as the flush of dawn," he said,
"And sweet as the breath of May:
But so slight a part of the day has fled,
And roses will bloom along the way—
Will not gather this dew-kissed flower
To fade in the noontide's heat,
I will wait awhile—another hour—
Time flieth all too fleet.
I will wait till the burden of day has passed,
And evening's cool shadows come at last;
Then will I gather a fairer rose,
Than any that in this garden grows."

So he journeyed lilly all the day,
His path was hedged with the ripening grain:
Soft and low, from the distant way,
Came the reaper's faint refrain.
But the sun went down in a blackening cloud,
And the wind blew shrill and cold.
The frail earth shook with the thunder loud,
And the lightning's flash grew bold.
He hurried on to the dim dark wood,
Where the swaying, storm tossed monarchs stood;
But he feared in their gloomy depths to stay
So turned him backward on his way.

He wandered backward—but glanced behind
In doubt to go—yet loth to stay,
It seemed to him that the shrilling wind
Mockingly whispered "Which way?"
He thought of the rose, so fair and sweet;
"I will gather its fragrance yet," he said;
And hastened backward with fool-steps fleet
O'er the path where so late they had fled.
But the rose was gone!—its petals lay
Tossed and torn by the wind-sprite's play,
And never more, through the sun or rain,
Will its frail sweet beauty bloom again.

—*France E. Daly, in San Francisco New Age.*

OF INTEREST TO WOMEN.

THE opal is again to be a fashionable stone, according to the jewelers.

Fashion says that the coming ear-ring is an immense ball of rough gold, either plain or with jewels sunk deep in the metal. They are said to be almost as large as tennis balls, rather a Fiji Island idea.

Apparently the plain coat sleeve will not continue to enjoy its monopoly, since dressmakers abroad are trimming elaborately from the shoulder to the elbow. Still, the woman who knows that she has a pretty arm will be reluctant to disguise it.

Since the servants of a Pennsylvania town have formed into a protective union, they decline to enter a family where they are expected to wash or iron, and in few cases will one girl undertake the work of a family. The next thing will be a mistresses protective association, and if they always decline to hire a girl who cannot show a good character from a former employer, make arrangement about breakages, and rigidly insist on the month's notice before leaving, they may do some good to the down-trodden mistresses.

The Czarina of all the Russians is a model to many housewives. The Chicago Times says: "She rises early, and, though most dainty and fastidious in all her toilet arrangements, is always ready at 10 o clock. Mass is said at 11 and breakfast is served at 12. Her Majesty does not affect *robes de chambre* nor *deshabilles*, but has adopted for morning wear the simple costumes of fine cloth or wool *a la Anglaise*, with narrow collar and cuffs. Her beautiful hair, silky and shining, always exquisitely arranged, completes her daily toilet, so thoroughly 'neat,' with that freshness which is so much admired in the English household of the Princess of Wales. The Emperor declares that there is not another woman in the world who so thoroughly understands the art of dress."

LETTING THINGS SLIDE.

FROM ANOTHER STANDPOINT.

"THE philosophy of letting things slide! That sounds well enough, but when one woman has to cook, sweep and dust, help the children with their lessons, and start them off to school, make new gowns and make over old ones, mend, and wash dishes, and tie up cut fingers, while she entertains guests, assists her husband in his business, and tries to do her duty to the needy in between times—what in the world is she to let slide? She bids fair to realize Mrs. Gargery's description, 'a slave as never has her apron off.'"

This half-querulous plaint would express the inmost feelings of many a tired housewife, if she could ever find time to put her ideas down in black and white. What should we let slide? That is the question agitating many an overworked woman.

We are so often told of the wonders in the way of house-work accomplished by our grandmothers—how they baked and spun and wove; carded wool, and made their husbands' clothes, and brought up great families of sturdy sons and daughters. But there were but 24 hours in a day, then as now, and it is our deeply rooted conviction that our grandmothers did not really work harder than we do; they must have let something slide, and we should do the same. What to leave undone each woman must decide for herself. To a woman carefully trained, with the good-housekeeper-instinct ingrained in every fibre of her being, it is often absolute misery to leave undone the things she ought to have done. The very idea of letting things slide brings to her indignant lips the one word, "shiftless," and there is no severer terms in her lexicon: To be shiftless, to have no "faculty," as they say in New England, is to be a very pariah, and it is exasperating in in some cases—"there is a point beyond which forbearance ceases to be a virtue." But ordinarily there is little doubt that the right way to take life is to take it easy. We must do our duty, to the full extent of our power, but we need not create imaginary duties that are in reality superfluities. It was a great, though obscure philosopher who said, "give me the luxuries of life and I care nothing for the necessities" We fear too many of us hold similar opinions, though we may not so frankly avow them.

So, too busy housewife, let the luxuries slide, and only work for the necessities. Of course you will regard mental and moral culture as a necessity. Iron and stitch fewer frills, make less pastry and preserves, if you will, but cultivate the finer graces of mind and heart with and for your children. And, let me whisper, if you are bent on frills and furbelows, indulge in them for yourself as well as your little girls. Let them always remember mother's pretty gowns and pretty ways, and wisely neglecting the needless worries of a household. Keep a bright faith and a bright heart for the trials you cannot let slide.

SEPTEMBER.

OH these glorious golden days! They make one's heart throb with gladness and carry one's memory back to the days of youth, when hope and joyful anticipations of a glad coming time in the near future would gild the lifelong day with happiness.

How many of these golden dreams have been realized? We look back through the vista of long years and think of the days when we gathered the lovely golden rod, the blooming asters and the purple live-forever, and thought how life would be one glad era of brightness and joy; We wove webs of fairy texture in which to clothe ourselves, and built castles in the air, that long since have been demolished by stern reality. Youth is always hopeful and joyous. It is pleasant to look back to the glad days when we stood on the verge of womanhood, never doubting the bright prospects that our fancy had pictured as the one we should tread through life. We never thought then of thorns piercing our feet or briers wounding our hands, or worse troubles piercing our hearts. The lovely September days were emblematic of our bright hereafter. So we left girlhood behind us and assumed the new duties and responsibilities of wifehood. Never regret the past that cannot be recalled; but how many of the wives and mothers of the last decade would have ventured into the wedded state could they have looked forward and seen with a truthful eye the cares, sorrows and vicissitudes of the life to come, that was mapped out before them? They would have shrunk back in consternation, and if they had advanced it would have been with fear and trembling.

But the hearts of the young are ever hopeful. They know their mothers and their aunts have seen hardships; their life has been a struggle between grief and sickness; they have seen their friends fade and fall like the September leaves, but surely their road will be smoother: a kind, loving hand will make their path easy. They will not have such a tedious journey. The sunlight will always shine on them: the dark shadows will fall on some other less favored ones. And so they press on. The bright September sun of life very soon gives way to the rough equinoctial storms; the frosts of October are quickly followed by the winds of bleak November and the blasts of a cold dreary Winter. Such is life! Brightness and sunshine cannot linger forever; but it is pleasant to enjoy them as they pass along, and their memory is very pleasant as we look back through the corridors of Time. As our heads become sprinkled with the frosts of years the reminiscences of bygone days are pleasant, but very sad. We recall faces and forms of loved ones that have passed away; been gathered into the great storehouse of the dread Harvester. S. H. R.

KITCHEN WORK.

THERE is no work in life where the old adage, "Whatever is worth doing at all is worth doing well," is more applicable than it is in the kitchen. Did you ever turn your kitchen over to the undisputed reign of a servant for a few weeks? If so, did you recognize it after that reign was over? I remember once moving into a house whose last occupant was a lady who kept two servants, and who had the name of never going into her kitchen. One glance at the floor convinced me that her name was not undeserved, and I could not help thinking that if it had been mine I should have either wanted to keep out of it altogether, or else—I should have wanted to clean it. As it was, I did not trust its renovation to other hands, and, although I am not fond of scrubbing, I experienced unalloyed satisfaction in my work after it was done.

Of course, when one takes a servant from among the lowest Irish peasantry, one does not expect to find a neat and trained housekeeper, but I have had girls from American families, whose mothers were noted housewives, who were lamentably ignorant of all housewifely ways. My last experience was with a bright, pretty girl of eighteen, from a home where thrift and good housekeeping are not strangers. Her first task was to wash the dinner dishes. She clattered the greasy plates with fragments of food into the dish-pan, together with the spoons and silver forks, and poured boiling water over the whole. The result was a thick, greasy scum with rinds and crusts bobbing in it—a mess that looked fit only for the swill-pail. The girl was intelligent and willing to learn and I did not have to tell her twice about the proper way of doing a thing; she had simply been neglected by her mother. There are so many mothers who, from a mistaken idea of what is for their daughters' best interests, give them a few lessons on the piano or in painting, or some other accomplishment of which they can only get a smattering, and which will only serve to call attention to their ignorance. If mothers would believe it, their daughters will be happier women, and better wives and mothers for being first, good housekeepers; after that if there is time and money to spare, let them learn music or painting, or anything they or you may desire, but see to it first of all, and above all, that they are good housekeepers. If it is any comfort to you, you may remember that all of Queen Victoria's daughters are famous for their skill in housewifery, and in everything that pertains to the duties of a wife and mother. A MOTHER.

GOLDEN GRAINS.

COLERIDGE says: "Common sense in an uncommon degree is what the world calls wisdom".....

How often we are reminded when looking over current literature of Clark's words. Multitudes of words, he says "are neither an argument of clear ideas in the writer, nor a proper means of conveying clear notions to the reader".....

SOUTH says: "Frequent consideration of a thing wears off the strangeness of it, and shows it in its several lights and various ways of appearance to the view of the mind".....

NEWTON always looks on the bright side, he says: "Trials are medicines which the Great Physician prescribes because we need them. Then, let us trust in His skill, and thank Him for His prescription".....

LET the day have a blessed baptism by giving your waking thoughts into the bosom of God. The first hour of the morning is the rudder of the day.....

WALK as if you were conscious that your body has a soul in it.....

HUME, the historian, has left on record his opinion that the disposition to look on the bright side of things, and to make the best of everything that is good is equivalent to a large fortune to its happy possessor.....

KNOWLEDGE must be earned; it cannot be passively taken. Unless the mind works for its living it will always remain poor; neither gifts nor legacies, neither houses nor lands can enrich it .....

A MAN started out for church one icy Sunday morning, and presently came to a place where a little boy was standing, who, with choking voice, said: "Please don't step there." "Why not?" "Because I stepped there and fell down," sobbed the little fellow, who had thus taken upon himself to warn the unwary passer by of the danger into which he had fallen.. .....

IT is well for us to be warned by the sad experience of others, and it is sometimes a duty for those who have fallen by these temptations to lift a warning voice. There are slippery places all around us, and thousands are passing heedlessly along. Let us entreat them to beware, and, as we remember the bitter experiences of our own sinful lives, let us say to those who are just yielding to such temptations, "Don't step there, for I stepped there and fell down."

Domestic Economy

CONDUCTED BY MRS. AGNES E. M. CARMAN.

SUGGESTIONS.

LAY in a store of quince jelly.

Take care of your teeth—it pays.

Avoid whispering in a sick room.

This is to be another velvet season.

Discourage your children in candy and nut eating. Let them buy fruit instead.

A hop pillow will often induce sleep.

In spite of all that is said about thoughtless daughters and over-worked mothers, it is, nine cases out of ten, the mother's fault that the daughters do not relieve her of her cares.

A feverish person can often be quieted by first rubbing the body with a coarse towel, and afterward with alcohol.

Fancy-work is fascinating, but my dear girl, don't allow yourself to study out that pattern for shell lace, until you have darned the drawerful of stockings that have been gathering from week to week, in spite of the oft-repeated conscience quieter: "I'll mend them to-morrow."

A neighbor tells us that black currants lose their disagreeable aroma in cooking, and that as a canned fruit they are simply delicious.

A SEPTEMBER MENU.

Scotch Broth.
Roasted Chicken with a border of Rice.
Sweet Potatoes. Lima Beans.
Cucumber and Onion Salad.
Peach Meringue.

A good, wholesome soup, not too heavy for a September dinner, is made from two pounds of knuckle of veal, two onions, four ounces of lean ham (not smoked), one turnip and a bunch of parsley, with half a cup of barley. Soak the latter for several hours in enough milk to cover it, and put it over the fire together with the meat and bones and two quarts of water. Simmer slowly for three hours, add the vegetables that have been cut into dice and parboiled. Cook for another hour; pick out the meat and bones, skim off the fat, if any, pour into the tureen and serve.

When you buy the knuckle of veal for the above soup, bargain also with your butcher for a sweetbread or a pair of them. Trim off the skin and fat and boil it in water containing a small onion, a few sprigs of parsley and salt; boil for 20 minutes, and then blanch it by dropping in cold water. The livers of the chickens should have been boiled at the same time; chop all together until very fine, and mix with half the quantity of bread crumbs. Clean a pair of chickens and fill them with this force-meat seasoned to taste. Lay them in a baking-pan, and cover the breasts with thin slices of salt pork secured to the skin of the

fowls with small skewers; dust with pepper and pour a cupful of hot water over them; roast about an hour, basting frequently; take off the pork and lay it in the pan; dust the chickens with flour, and as this browns baste with melted butter, and twice again with the gravy. Lay the birds on a hot dish, skim and thicken the gravy (if any thickening is necessary); make a mound of boiled rice; lay the chickens on it, pour over them some of the gravy and send the rest to table in a boat.

Lima beans are never so good as in September, and there is not so much secret in cooking them as in buying or picking them—they should be young, and if possible of the variety called "Dreer's Improved." Parboil them and do not add any salt until they are done; have them nearly dry; add a little hot cream or good milk, a generous lump of butter and some pepper; serve very hot, as they cool quickly.

Browned sweet potatoes cooked after a recipe given some time since in the RURAL, should accompany this dinner.

Slice cucumbers and onions in the proportion of about one of the latter to three of the former; let them lie in salted cold water for an hour, and season with vinegar, pepper and salt; oil may be used if liked.

Pare, stone and halve enough ripe peaches to make a close, thick layer in a deep pie-dish; scald a pint of milk, and stir in two even tablespoonfuls of corn-starch wet with cold milk; as soon as it thickens take it from the fire; add a tablespoonful of butter. When this is luke-warm add the beaten yelks of five eggs, well whipped with half a cup of powdered sugar. Sprinkle the peaches thickly with sugar and pour this custard over them. Bake for ten minutes in a hot oven; spread with a meringue of the whites, whipped stiff with powdered sugar; let it color for one minute and take out. Eat cold with cream, and give thanks for the goods the gods have provided. PALMETTO.

KITCHEN TALK.

ANNIE L. JACK.

"WHAT was the matter with her?" asked the Epicure.

"She was a sacrifice to her slavery to the teapot," answered the Student, and when the Housewife tossed her head in scorn, he added, "Such an inveterate tea drinker must suffer, for those who taste and pack tea are subject to paralysis, and to headache and giddiness. The theine or caffeine varies in different qualities of tea, but is brought out more when it is directly boiled, instead of being simply steeped. Medicinally, tea has been overpraised, and under-rated. It is said to have restorative effects on the nervous system, promoting all vital action. In cases of opium or tartar-emetic poisoning, strong tea is an antidote, and then again, in certain forms of heart disease, it acts injuriously on the pulse, and is unsuitable for those of an irritable constitution. The theine causes intoxication and the subsequent sleep of exhaustion."

"Thank you," said the Housewife; "we shall all feel good when we drink our second cup and know that it has been deluging us with the mysterious 'theine,' but it refreshes and comforts one. Why did Cowper write of 'the cup that cheers yet *not* inebriates,' if there *is* intoxication in it?"

"Oh! he had not been at the trouble to analyze it," said the Student, and the Guest of the House added, "I do think it is harmful, for in Winter, at the afternoon receptions, when people go from house to house and drink strong tea they must suffer for it, even if the baneful effects are not seen all at once. It is a hospitable custom, but carried to excess nowadays."

Then the talk drifted to different methods of tea-making and of cooking and the varied tastes of people in general. During the visit of some guests from different parts of the country, one preferred baker's white bread, another Graham and a third really enjoyed only warm rolls. The same people were as divided in regard to drink, one desiring a beverage of strong tea, which another could not touch, while the third always used cocoa. One cannot eat, any more than breathe, by rule, and it is well to study the taste of a guest; but I often wonder what effect such diverse foods have on the constitution, and what the result would be if one were obliged to eat the food he or she disliked. If an unpalatable breakfast is answerable for the day's sins, how necessary it is that each person should have the food he or she can enjoy and assimilate. Children should be so studied that if their appetites are healthy, they will eat what is set before them. I do not believe in the forcing system of making them eat what is repulsive to them, but in so understanding what they can eat of wholesome food that there will not need to be antagonism in this important matter. Mothers should always remember that tea is injurious to children, and bring them up without expecting that they are to use it.

TABLE MATS.

THIS Summer I crocheted a set of table mats for a friend, I also have a set for myself, which have been in use some time. I make them of No. 12 cotton macremé cord, either white or cream. They are much preferable to any you can buy of straw or slats of wood, and are easily washed when soiled. My own are oblong, but I made two round and three oblong ones for my friend. For the oblong ones I set up a chain of 15, 20, or 30, according to the size—30 for the largest—then work around this in single crochet, widening at each end four stitches in each round, and placing them so the mat will lie flat and smooth. When large enough, I finish off with a fancy edge, then dampen and press very hard and smooth. For round ones, I set up a chain of seven, join, work two stitches in each chain, making 14 inches in the first round, then crochet one in first stitch of second round, two in second, one in third, two in fourth, and so on, making 21 stitches in all. Continue to increase seven stitches in each round, always making two in the last one of the two in one of previous round, until the mat is sufficiently large. Finish off with an edge and press.

A medium-sized bone needle or hook must be used. Work close and firm, taking up both parts of the stitch. AUNT EM.

"A PRETTY PICKLE."

NEVER choose your pickles for their prettiness. A beautiful green pickle may be very pleasing to the eye, but if you are poisoned by it (as you are very apt to be), blame your own false taste that has created a demand for pickles of extreme verdancy, thus forcing the manufacturer to make that which he can sell, in order that he may live, even though he knows that the sale of it, although it may support his own life, will knock the props from under that of his customer. This desired greenness is due to the presence of acetate of copper. The housewife who wishes to put up her own pickles may rely on the following directions and recipes:

Use only a porcelain or granite kettle, and the best cider vinegar. Pickles keep best in glass or hard stoneware. Examine them after a few weeks, and if you find any soft ones, remove them, heat the vinegar scalding hot, with a half pound of sugar for each gallon, and pour it hot over the pickles. If they are keeping well, merely throw in a quarter of a pound of sugar for each gallon, and tie them up again. All well-made pickles are better when they are six months old than at first.

This recipe for East India Pickle was obtained from an old resident of India, and has been used for many years with great satisfaction in my own family. Put in a tall, narrow stone jar two ounces each of curry powder, and mustard, one ounce each of tumeric and garlic; one-and-a-half ounce of ginger, one dram of Cayenne pepper, two ounces of salt, and a quarter of a pound of small onions. The latter should, of course, be skinned. Add to this, a little at a time, two quarts of vinegar; cover the mouth of the jar with a bladder wet with the pickle, and keep it in a warm place by the fire for three days, shaking it several times each day. It is then ready for use, that is for putting in anything that you may wish to pickle; tiny cucumbers, green tomatoes, sprigs of cauliflower, nasturtiums, green beans or grapes; anything, in short, except red cabbage or walnuts. It should stand for two weeks before using, and improves with every year.

An excellent chow-chow is made with very little trouble. Chop four quarts of green tomatoes, two of ripe ones, and one large head of cabbage with three large onions, six large, green peppers, and two ripe peppers, (from which you must take the seeds) as finely as you choose. Sprinkle over them a cupful of salt, and tie up in a coarse cotton bag. Hang where the mass will drain for 24 hours. Put into a kettle with a gill of grated horse-radish, a teaspoonful each of black pepper, ground mustard, white mustard, mace and celery seed, and a pound and half of brown sugar, cover with vinegar and boil until tender and clear.

ONE might write a small book on the subject of making pickles, they are of such infinite variety. The small, silver-skinned onions are especially nice. Remove two layers of skin, when the onions should be perfectly clear; put them into strong brine for three days; bring enough vinegar to cover them to a boil with a few blades of mace and half a dozen small, red Chili peppers. Pour it over the onions while boiling hot.

Pickled Bell Peppers deserve to be more generally known. Cut a slit in the side and take out all the seeds. This should always be done in whatever way they are to be used. Make a brine that will float an egg, and let them soak in it for two days; drain and wash well in cold water. Bring to a boil vinegar with a few sticks of cinnamon, some blades of mace and a teaspoonful of nutmeg and pour it over the peppers. When these are wanted for use stuff them with boiled tongue cut into dice and mixed with a Mayonnaise dressing. They will be a delight to any lunch or dinner table. AUNT ADALIE.

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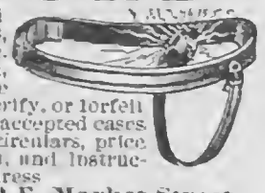

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News of the Week.

HOME NEWS.

SATURDAY, September 18, 1886.

THE Recorder of Montreal decides that the Salvation Army have a right to parade the streets and sing.....The Piute Indians, of Nevada, having lately obtained liquor, are conducting themselves in such manner as to cause great alarm among the whites..... Canadian Wiggins claims to have foretold the earthquakes, and thinks the greatest strain will occur before October 15 .....The skins of seals, etc., caught in Alaskan and other Pacific waters almost all go to London to be handled and dyed. Shipments through this port last week were very heavy, something over 900 casks, making about 20 carloads, having arrived on Thursday and Friday by way of the Pennsylvania Railroad.... ....The Boston Mayflower crossed the winning line 29 minutes nine seconds before the British Galatea, last Saturday, so the America Cup is to remain here. This is the sixth failure of the British to capture the trophy..... .....The first argument in the Government's Bell Telephone suit will be heard at Cincinnati, Monday.....Geronimo with his band, and 400 turbulent Apaches from the San Carlos Reservati n are on their way to Florida, where they will be confined for the present. Fate of Geronimo in doubt. Will probably be tried by military commission, like the Modoc Indians. Many insist that Geronimo, Natchez, and a few other leading men should be hung or shot; but it is hardly likely. Surrender unconditional, except that they were assured that the soldiers never kill "prisoners of war".....The Louisiana Cotton-seed Oil Company, of New Orleans, has joined that monopoly the American Oil Company. Its valuable machinery is to be sent "into the interior" where new factories will be established.....There have been several slight earthquake shocks at Charleston since Saturday; but no additional damage. Experts say much of this is due to the poor materials and faulty construction of the houses. Cash relief amounts to over $320,000, and more coming in. Considerable complaint of idle negroes and "poor whites" who rely on charity rations, and refuse to work. Bricklayers insist on $5 a day, and others in the building trade are equally exacting. Full work for all in patching up houses and rebuilding. What's wanted are loans at low interest to restore fallen and ruptured buildings and start trade. Nothern people are generous with cash and credit. This city alone has contributed over $100,000. Thousands have left the city—most never to return. Free transportation furnised to emigrants. Will take years before the place will recover from the disaster..... ....Canada is determined to levy prohibitory export duties on saw logs. The duty is now $1 to $2 per 1,000 feet, board measure; but it is to be raised to $3 if exportation continues and higher, if necessary, to stop it, as the government has discretionary power in the matter. Canada wants us to take all the lumber we want, but wants to keep for herself all the profits of manufacture.....Some of the officials at Ottawa have blustered a good deal about the seizure of those sealers in Behring Sea; but our Government has heard nothing, officially, about the matter. Canada must act through the English Government in the matter. Seizures made 60 to 120 miles from land. Russia ceded to us the exclusive right to catch fur-bearing animals in the whole region; but had Russia the right to seize vessels more than three miles from land? Canada says we have no right to seize vessels in the Pacific beyond three miles from land, following the indentations of the coast; but in the Atlantic she claims the right to seize vessels within three miles of a line running from headland to headland! .....Another Yankee fisher has been seized. The hearing in the case of the seizure of the David J. Adams, the first of the fishing vessels whose fate is to be decided, was begun in the Vice-Admiralty Court at Halifax, N. S., Thursday ..... Owing to the failure of the Newfoundland fishery this year, great distress is probable during the Winter. It is thought that from 100,000 to 150,000 will need public help to escape starvation—probably an exaggeration... ....There's a great strike of sailors on the Pacific Coast, where labor organizations have lately become very powerful. Between 1,100 and 1,200 men are reported to be idle along the coast, 750 of them in San Francisco. They all belong to coasting vessels, 25 of which are idle in San Francisco, owing to lack of hands; while others have put to sea short-handed. Both sailors and ship owners are resolute..... ....Colored Washingtonians are getting up an exposition of the achievements of the race since the war.....Many prominent Democrats are supporting Republican Governor Rusk for re-election in Wisconsin, because he put down the Anarchist outbreak in Milwaukee with such a prompt and vigorous hand... The New York Stock Exchange, by an overwhelming majority, has refused to allow Georgia State bonds to be sold or quoted in that body, because Georgia, by a constitutional amendment, repudiated $8,000,000 worth of debts contracted in "carpet-bag" days; though some of the bonds sold for as high as 94 cents on the dollar, and the State has ever since enjoyed the benefit of the money. Attorney-General O'Brien has also decided that in this State savings banks cannot invest in such securities .....The liquor interests are fighting "tooth and nail" everywhere in the elections....From latest trustworthy reports it seems all the "terrible excitement" about the "Cutting affair" in Mexico and "down South" was almost exclusively confined to the newspaper offices.....Philadelphia has impeached Mayor Smith for having used public money for his private purposes, and for having allowed dummy policemen to draw pay month after month, the money going "where it would do the most good."....It looks as if the Farmers' Alliances of Minnesota were to join the Democrats to elect Mayor Ames of Minneapolis for Governor, against "railroad monopolies." If Ignatius Donnelly can get enough votes from such an "alliance," he'll be candidate for United States Senate; but the chances are small.....The Democrats swept Arkansas. The Wheelers made a poor show; but most of the members didn't favor separate action.....The Republicans carried Maine by about 14,000 majority over the Democrats and Prohibitionists. The latter made a poor show in the oldest Prohibition State. Blaine spoke and led splendidly.....The canvass for Governor of Tennessee, between Bob. Taylor, Democrat, and his brother Alf., Republican, is very lively, indeed, but quite fraternal—an excellent example for other States and much smaller sections. The real merits of both parties are freely and fully discussed; but there are no "campaign lies" or mud-slinging..... ... .Judging by the legislative nominations, Bayard is still supreme in Delaware. Gray's election to the U. S. Senate is assured..... Frank Lawler, the Chicago rum-selling Congressman, is going back to "Congress's hall." He made himself solid with the big meat-packing firms by opposing the Oleo Bill, and all their men were ordered to vote for him at the primaries.....Fifty people were poisoned at a wedding near Decatur, Ill., the other night by eating chicken cooked in a copper kettle.....The naval inspectors find over 100 American steamships hailing from New York alone, capable of running 14 knots an hour, which would be of service as naval vessels of an inferior order upon an emergency..... .... The first National Convention of Anti-Saloon Republicans at Chicago was largely attended. Its object was to retain in the Republican party as many as possible of those who favor Prohibition and stringent laws regulating the sale of liquor. The results of its efforts must greatly help the cause of temperance. Extreme Prohibitionists, however, are irreconcilable. The Labor party threatens to be to the Democratic party what the Prohibition party is to the Republican.....

FOREIGN NEWS.

SATURDAY, Sept. 18, 1886

IN the English Parliament measures of great national importance are almost invariably introduced by the Government.; when this isn't done, the Government consents to their introduction, and if it refuses consent, and a majority of the House of Commons favor it, the Government is defeated and generally resigns. The other day the Government consented to the introduction of a land bill by Mr. Parnell. The Land Act of 1881 appointed a Court to determine what were fair rents for land, and the landlords had to accept its decision. Leaseholders, however, were excluded from the benefits of the Act. In view of the decline in the prices of agricultural produce since then, Parnell's Bill provides that where the rent was fixed before 1884, if half the rent for 1886 and any antecedent arrears have been paid, and the tenant says he is unable to pay any more, the Land Court must decide what abatement should be made. By section two leaseholders are put on the same footing, as regards rent, as tenants from year to year. Section three provides that wherever proceedings have been begun, the Court shall suspend such proceedings until the tenant shall have the benefit of this act. The rents of hundreds of tenants are due in November, and they say they can't pay them. Most of the landlords are prepared to evict them, and the Government has promised to give military aid in doing so. Eviction is to be resisted by violence. Policemen, troops and all others aiding in the work are to be rigidly boycotted. Men who take the farms of evicted tenants are to receive the harshest treatment. Some of them are killed or maltreated every week. The evicted tenants are advised by their leaders to flock to the work-houses so as to force the landlords to support them, and no disgrace is to attend the act. Imprisonment for resisting eviction is to be considered honorable. On the whole, a turbulent time seems probable in Ireland during the Winter, for there's little or no prospect of the passage of the Parnell Bill which would keep peace in the island.....Tenants in Scotland and Wales are loudly demanding the same terms as those granted to the Irish. How long will English tenants who suffer just as much, keep from joining in the clamor?..... Russia, Germany and Austria seem to have agreed with regard to Bulgaria, and when those three big bullies agree, it's not much use for others to protest. Prince Alexander is hardly likely to return, though the vast majority of Bulgars want him. The Sobranje (Legislature) has just voted a grant of $500,000 to purchase all his property in Bulgaria, retaining $185,000 of it to pay his debts. Very little would be needed to cause a conflagration in Eastern Europe. England and Turkey are more cordial than ever, and both are vigorously preparing for contingencies... ..... Italy is disposed to side strongly with them, and if Germany and Austria go with Russia, it seems that France must join the other coalition. There are reports that Bismarck is to peremptorily demand of France why the Government allows persistent virulence against Germany in the newspapers; and why the French army is constantly increasing its numbers and efficiency. Germany is doing pre-precisely the same with regard to France; but what of that? If the French answer be not satisfactory, the Germans, befriended by Austria, and smiled upon by Russia, are once more to push on to Paris. All the armies of Europe are being equipped as rapidly as possible with the very latest improvements in fire-arms, and it seems impossible that peace can last much longer in the presence of so many causes of bickering and complaint and such multitudes of men trained and kept at enormous expense for the sole purpose of killing each other.....

AGRICULTURAL NEWS.

SATURDAY, Sept. 18, 1886.

ALL the pressmen, stevedores and other workmen handling cotton at New Orleans, some time ago formed a powerful association to regulate hours and wages. The Cotton-Press Association, composed of the owners of most of the cotton presses, managed to join the workingmen's organization, although many of the men objected on the ground that the interests of the employers and the employed must often clash, and could not therefore be represented by one body. There were several presses not in the Cotton-Press Association, which paid the same wages and employed men belonging to the longshoremen's union. The Cotton-Press Association has lately insisted that the men should not work for them. If they had carried their point, the entire business of pressing and shipping cotton in the largest cotton market in the world would be in the hands of a small, selfish monopoly, and the producers and consumers must suffer, while much of the trade would certainly go elsewhere to avoid extortion. It has just been decided by all parties, however, to make no distinction in labor matters between the independent presses and those of the Cotton-Press Association. A lively competition in the cotton pressing business is expected..... ....The Executive Committees of the National Cattlemen's Association of America and the National Horse and Cattle Grower's Association of the United States met at Springfield, Ill., Wednesday, to complete the steps taken last Winter to organize the two bodies into one. Their consolidation was practically effected by arranging the program to be carried out at the Cattle Show at Chicago next month..... ..Californians have lately purchased in Utah and Nevada large quantities of wool, which they shipped by the Central Pacific Road to San Francisco at local rates and re-shipped over the same tracks for Boston at 75 cents per hundred pounds. Owing to railroad discrimination, it would have cost much more to have shipped direct to Boston. .....Here's a sample outrage of Indians in the Northwest—chiefly Canadians raiding across the line: The other day a large flock of sheep which were being driven from Montana into Canada were surrounded by a band of raiders on the Belly River, and urged over its banks until they piled up, one on another, 25 feet deep. In this way 172 sheep were killed, and afterward skinned, cut up, and carried off by the redskins.....Most of the tenants of the O'Flaherty estates near Longford, Ireland, have accepted the offer of their landlord to sell them their holdings at a price equal to the sum of 16 years' rent. As none of the tenants on the O'Flaherty estates have had their rents fixed under the Land Act of 1881, the purchases will be based on the old rents... .....The New Hampshire Agricultural College has seven students.....Wet weather cost the New Jersey State Fair at Waverly, over $6,000, Thursday .....At the Massachusetts Agricultural College 57 applied for admission; 47 were examined, and 37 admitted. The largest class for years.....In New England the established Granges are generally adding to their membership, and new Granges are being established.. .....At the Western National Fair at Bismarck Grove, near Lawrence, Kan., 3,600 bottles of beer were emptied into the Kansas River last Saturday by the Sheriff in the "presence of 500 thirsty people." Those selling beer in violation of the Prohibitory Law were arrested ....Hog cholera reported in several districts of the "Cherokee Nation;" in many localities all the swine have died... .....In Central Indiana the ravages of the disease are very disastrous. Farmer Sheppard of Henry County claims that he has found "parasites or trichinæ," visible to the naked eye, "in the second lining of the stomach" of hogs that had died of the plague, and he thinks these are the cause of it. He expects soon to publish a remedy.....Geo. Wilson, "a well-to-do farmer," living eight miles south of Muncie, Ind., died last Saturday of "a disease contracted while administering medicine to cholera hogs." Doctors say the disease was like hog cholera and that it may become epidemic. The entire southern portion of the county is horror-stricken and many farmers are anxious to sell their farms and go West. Many have left their homes and will not return until the question of epidemic is decided.....A virulent epidemic of hog cholera is now raging along the Kaskaskia or Okaw River, in Champaign County, Illinois, and is chiefly confined to Sadorous township. The loss so far entailed upon the farmers is not less than $12,000.....In the Court of Queen's Bench at Montreal, Thursday, C. H. Cordingley, proprietor of the Commereial Grain and Stock Exchange, a sort of "bucket shop" was found guilty of keeping a common gaming house.....

Crops & Markets.

SATURDAY, Sept. 18, 1886.

The Mark Lane Express, in its weekly review of the British grain trade, says: "Owing to the continued wet weather it will be impossible to make an early delivery of sound native wheats. For this reason the market points to no such big drop in values as was expected during dry weather. The sales of English wheat during the past week were 31,538 quarters at 32s. 5d., against 57,192 quarters at 31s. 1d. during the corresponding week of last year. Foreign wheats were steadied by the bad weather."

The August cotton report of Egypt shows that the condition of the crop is favorable and that the yield promises to exceed that of 1885.

The Agricultural Department's September crop report says the yield of spring wheat is better than was expected a month ago owing to an improvement in Dakota and Wiscousin chiefly. The average yield an acre is 11 bushels, and it may reach 11½. In the South the harvest was disappointing and rains injured the product in the shock. The returns indicate an average yield of about 12⅙ bushels an acre. The entire wheat product will apparently exceed that of last year by 90,000,000 bushels. The Rural's crop Special on July 10, put the excess at 78,000,000, and was blamed by some for putting it so high. The Agricultural Department says there may be a variation of from 5,000,000 to 10,000,000 bushels from its estimate. Corn has declined from 81 in August to 77. The present crop prospect, with no further decline, is 10 per cent. worse than last year, and indicates over 21 bushels an acre, or nearly 1,600,000,000 bushels. The cottou returns show a vigorous condition of the plant, with lateness and deficiency in fruiting. There has been improvement in most of the States, with a decided decline in Texas and a little in Arkansas. With a long and favorable Autumn it indicates an average crop. Yet a decline in condition after this date is usual. The results of thrashing make condition of oats at harvest 91, a small reduction from earlier expectation; barley is 93, an average crop; buckwheat 90. Potatoes have declined from 88.3 to 81.4, from the effects of local drought. In New York the decline is from 97 to 89, and it is heavy in the dry area of the West. Tobacco averages 81. The numbers of fattening hogs are apparently less by about 6 per cent. with some reduction in average weight.

The National Cotton Exchange from New Orleans, says cotton is generally late, and therefore exposed to unfavorable influeuces. General coudition of the crop favorable. No danger yet from worms. Labor plentiful.

From a careful estimate of the broom-corn crop of Douglas County, Ill., which produces a great quantity, the total area planted was about 12,000 acres. The crop this year is heavier and the brush of a finer quality than usual, and about 5,000 tons will be produced, it taking a little over two acres to a ton. The price paid so far is $100 per ton, but as the old crop is entirely disposed of, $150 is likely to be the ruling price. The crop may be safely relied on to bring $600,000 in cash into the county, which is almost the value of the crop of Indian corn.

The Michigan monthly crop report shows the average yield of wheat now thrashed to be 16.18 bushels, indicating a total yield in the State of 26,500,000 bushels. Oats will average 31 bushels; barley 29; winter apples promise 89 per cent. and late peaches 57 per cent. of an average crop.

Telegram from Canajoharie, N. Y., Thursday:—The hop crop of the important counties of New York State, has been harvested, showing the estimate of one-eighth of a yield to fall short. Growers who expected 100 bales get 40, and the quality is exceedingly poor at that.

Up to September 10, receipts of rough rice at New Orleans were 205,850 barrels, against 169,300 barrels at equal date in 1885. Plauters are insisting on higher prices, as domestic rice is better than foreign, while the figures are not proportionately higher. Buyers are unwilling to yield, as the crop is unusually heavy —600,000 barrels. The value of the crop is hardly likely to be established before November or December, by which time the bulk will be in the market, and planters will have decided what to do. They consigned much of the crop last year "all over creation," with very bad results; and this year there is a strong disposition on the part of planters aud factors to sell at home.

An extraordinary rush of wheat to market during the week has depressed the prices of that and other cereals. It has been heaviest from the spring wheat sectiou. Large elevator companies and railroads are said to have done their best to cause it. The outcome has been a further large addition (for the week, 1,906,000 bushels) to what is called the visible supply, bringing the grand aggregate up to 44,872,000 bushels, against 42,248,200 bushels a year ago.

Wool prices are going up; some lines have advanced half a cent from last week. It looks as if fabrics requiring the finer wools would come into fashion. Prices at the Loudon wool sales are very firm—at a higher level than at the last sales. In Bostou fine wool is much stiffer than even a week ago. Quotations there for leading sorts are as follows:

Ohio & Penn. X.....32@33c.	Fine Ohio delaines36@37c.
Ohio & Penn. XX...33@35	No. 1 combing..... 38
Ohio & Penn. XX and above.....35@36	Texas sp'ng,12 mos 23@26
Michigan X.....31@32	Super A.....31@37

The sales of the week have amounted to 5,000,000 pounds, as against 4,900,000 last week, and 7,000,000 for the correspouding week in 1885.

Heavy shipments of corn and an eageruess to realize at once contributed to depress prices.

Oats held their own remarkably well iu the face of the notable weakness and distrust in wheat and corn.

MARKETS BY TELEGRAPH.

SATURDAY, Sept. 18, 1886.

CHICAGO.—Compared with cash prices a week ago, "regular" wheat is 1¾c. lower; No. 2 Spring, 1⅞c. lower. Corn, ⅞c. lower. Oats, ⅝c. lower. Rye, ½c. lower. Barley, ½c. higher. Flaxseed, 1c. higher. Pork, 10c. higher. Mouday pork started at $12 for October option; then fell to $11.25. Armour bid $11 for 10,000 barrels November pork, and only got 5,000. Siuce then prices have been going down. Cattle, from 15c. to 40c. lower, according to grade; some grades steady, others lower; average somewhat lewer. Sheep, natives steadily; Texans, from 40c. to $1.40 lower—poor quality.

WHEAT active.—Wheat easy; Sales ranged; Sept., 74¼@74⅝c; October, 75⅝@76c; November, 77¾@77¾c; May, 81¾c; No 2 Spring, 74½c. CORN—Weak: Cash, 38½c; September, 38⅛@38¾c; October, 39⅝@40c; November, 40¼@41¼c. OATS.—Steady; Sales ranged: Cash, 25¼c; September, 25⅛@25⅜c; October, 26@26⅝c. RYE.—Quiet: No. 2, 48½c. BARLEY. Dull, No. 2, 58c. FLAXSEED.—No. 1, $1 00@1 00¼. MESS PORK.—Sales ranged: Cash, $10 45@10 47½; September, $10 45@10 50; October, $10 35@10 77½; November, $10 20@10 50. LARD.—Steady, Sales ranged: Cash, $7 20 September, $7 20@7 22½; October, 6 25@6 35. Short Ribs.—Steady Cash, $7 85. Boxed Meats.—Dry salted shoulders, $6 12½@6 25; Short clear sides, $7 25@7 30. CATTLE.—Market weak; Shipping steers, $4 25@5 30; stockers and feeders, $2 20@3 70; cows, bulls and mixed $1 50@3 00; bulk, $2 00@2 25; through Texas steers, $2 50@3 45. HOGS.—Rough and mixed, $4 05@4 70; packing and shipping, $4 70@5 05; light weights, $4 00@4 80; skips $2 50@3 75. SHEEP.—Market steady; Natives, $2 00@4 00. Texans, $2 00@3 15; Lambs, $4 00@5 00.

ST. LOUIS.—Compared with cash prices last week, No. 2 Red 1⅝c. lower. Corn, ½c. lower. Oats, steady. Rye, ⅞c. higher. Butter—Creamery, 1c. higher; dairy, 20c. higher for best quality. Eggs, steady. Pork, 25c. higher. Cattle, steady in most grades, higher in some. No grade lower; some higher. Sheep, 15c. lower for best.

WHEAT.—No. 2 Red, Cash, 75@75½c; September, 75c; October, 75⅜@75¾c. CORN.—Strong; No. 2 mixed, Cash, 36@36½c; September, 36¼c; October, 36½c. OATS.—Dull; No. 2 mixed, Cash, 25½@25⅝c; Sept, 25¼c.; October, 25¼c. RYE.—Sept, 49½c. BUTTER.—Creamery, 21@24c; dairy, 10@20c. EGGS, 12c. FLAXSEED.—$1 05. HAY.—Timothy, $10 00; Prairie, $8 00. PORK, $11 25. BULKMEATS.—Long clear, $7 85; short ribs, $7 90; short clear, $7 75. Lard, $6 65. CATTLE.—Good to Choice Native Shipping Steers, $4 35@4 90; Common to Fair, $3 60@4 25; Butchers' Steers, $3 50@4 10; Cows and Heifers, $2 25@3 50; Stockers and Feeders, $3 25@4 00; grass Texans, $2 25@3 60. HOGS.—Market active and firm; heavy, $4 90@5 10, Packing, $4 40@4 85; Lights, $4@4 70. SHEEP.—Market weak at $2 25@3 85.

BOSTON.—APPLES.—The market is over-supplied; Gravensteln, $1 50@2 per bbl; Williams, $1 75@2 25, Porters, $1; Sweets, $1; receipts for the past six days 5,832 bbls; previous six days, 5,467 bbls. BUTTER.—Receipts for the week, 14,304 tubs, 708 boxes, last week, 15,321 tubs, 1,148 boxes. Exports this week, 32,573 lb, last week, 15,961 lb. The receipts of fresh made continue light, and prices for such stock are tending upward. Western imitation creamery and ladle packed are steady. Northerncreamery, extra, 24@24c; extra firsts, 20@ 2c; Western creamery, 22@23c.; do. firsts, 20@21c; do. choice 19@20, dairy, Franklin County finest, 22@23c; good to choice, 19@20c.; Vermont extra 17½@18c; Northern, choice, 16@17c; do. fair to good, 14@15c., Western dairy, good to choice, 12@13c; imitation creamery, extra, 14@15c; ladle-packed, choice 11@12c; do. fair to good, 9@11c. BEANS.—Receipts for the week, 57 bbls; last week, 1,054 bbls. The market well supplied with pea beans, and there continues to be a moderate demand for choice lots. Choice pea, Northern hand picked $1 75@1 85 per bushel; do. do. New York choice, hand-picked, $1 60@1 70, do. do. screened, $1 50@1 55; medium choice, hand-picked, $1 50@1 55; do, choice screened, $1 15@1 20; Yellow Eyes, choice, $1 50@1 50; do. flat, $1 45@1 50; Red Kidneys, $1 75. CHEESE.—Receipts for the week, 6,540 boxes; last week, 5,132 boxes. Exports, 30,035 lbs; last week, 124,622 lbs. The market for cheese made a further advance in rates the past week, but the demand is quiet, and 11c. per lb is an extreme quotation. Liverpool quotations, 48s. New York extra, 10c; do. good to choice, 8½@9½c; do common, 6@8c; Vermont extra, 9½@10c; good to choice, 8@9c; common, 6@8c; Western extra, 10c; do. fine, 7@8c; common, 4@6c. Sage, extra, 10½@11c. HAY AND STRAW.—Receipts this week, 114 cars hay, 48 cars straw; last week, 169 cars hay, 41 cars straw. Market for hay quiet, and prices are fairly steady. Choice, $18@19 per ton; fair, $15@16; ordinary, $14@15; fine, $13@16; Swale hay, $10@11; poor, $10@13 50; Western choice, $13@17; do. fair to good, $13@14 50. Rye straw, $16@17; do. do. machine, $12@14. Oat straw, $8@10. POTATOES.—Demand poor; supply liberal; market easy. Early Rose, 50@63c; Beauty of Hebron, 50@63c; Natives, per bbl., $1 75@2 10. Sweet Potatoes—Virginia Yellow, $1 75@2 50 per bbl; Jersey, $2 75@3.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, September 18, 1886.

STATE OF THE MARKET.—As compared with cash prices last week, flour is steady; No. 2 Red Wheat, ¼c, lower; No. 2 Red, 1c. lower. Corn, 1½c, lower. Pork, steady. Butter, 1½c, higher. Cheese, ¼c. higher. Eggs, 1c. to 2c. higher. Poultry, a shade higher. Fruits about steady. Vegetables unchanged for most. Tomatoes higher.

FLOUR, FEED AND MEAL—FLOUR—Quotations: Fine $2 10@2 70; Superfine, $2 85@2 90; Extra No. 2, $2 70@3 25; Good to Fancy Extra State, $3 30@3 70; Common to Good Extra Western, $2 70@3 70; Good to Choice Extra Western, $3 90@5 00; Common to Fair Extra Ohio, $2 70@3 75; Good, $3 80@4 40; Good to Choice, $4 25@4 75; Common Extra Minnesota, $2 70@3 10; Clear, $3 50@4 00; Rye Mixture, $3 75@4 00; Straight, $4 25@4 65; Patent $4 65@5 00; Bakers' Extra, $3 90@4 25; St. Louis Common to Fair Extra, $2 70@3 65 Fair to Good, $3 70@4 50; Good to Very Choice, $4 55@5 00; Patent Winter Wheat Extra, $4 60@5 00, City Mill Extra for West Indies, $4 45@4 50; South America, $4 60@4 70. SOUTHERN FLOUR.—Common to Fair Extra at $2 25@3 85, and Fair to Choice, $3 90@5 00. RYE FLOUR.—Superfine, $3 20@3 85, with small lots Fancy at $3 40. CORN MEAL.—Yellow Western, quoted at $2 50@2 75 and Brandywine at $2 80@2 85. FEED.—40 lb, quoted at 65@70c; 60 lb, at 62½@63c; 80 lb, at 70@75c; 100 lb at 8.@85c; sharps, at 95c.@$1 00, Rye Feed at 75c, screenings at 45@75c, fancy at $1 25.

GRAIN.—WHEAT.—Old No. 2 Milwaukee at 83c; No. 2 Chicago, at 86c; Ungraded Red, 81@87c; No. 3 Red, 84¼c, Steamer No. 2 Red, 81¾c, No. 2 Red, 85¾c; No. 2 Red, for September, 86c; do. for October, 86 5-16@86¾c; do. for November, 87¾@88¼c; do. for December, 89¼@90 1-16c; do. for January, 91c@91½c; do. for February, 93¾@93c; do. for March, 94@94½c do. for May, 91c@94¾c. CORN.—Ungraded Mixed, at 49@50¼c; No. 2 Mixed, 49@49½c; No. 2 for September, 49¾@49¾c; do. for October, 49¾@50c; do. for November, 50⅝@51c, do. for December, 51¾c; do. for January, 52c. OATS.—No. 3 31c; do. White, 33@33½c; No. 2, 31½@32⅝c; do. White, 35¾@36¾c; No. 1 White, 37c Mixed Western, 32½@34c, White do, 36@40c; White State, 36c; No. 2 for September, 31½c; do. for October, 32@32½c; do. for November, 33@33½c; do, for December, 34c.

PROVISIONS.—PORK.—Mess, quoted at $11 for Old and $11 50 for New; $14 for Family Mess; $14 50@15 50 for Clear Back; and $15 50 for Extra Prime. BEEF.—Extra India Mess, $11 50@13; Extra Mess, in barrels, $7 25@8; Packet, $8; Plate, $7 25@8 00. BEEF HAMS.—Quoted at $21 00@22 50. CUT MEATS.—Rib Bellies, 12 lb average, 7½c; City Pickled Shoulders, 6@6½c; Smoked Shoulders, 7¼c; Pickled Hams, 10½@11¼c; Smoked Hams, 12@12½c. MIDDLES.—Long Clear in New York quoted at 7¾; at West, Long Clear, 7c; Short Clear, 7¼c. DRESSED HOGS.—City Heavy to Light at 6¾@6¾c; Pigs, 6¾c. LARD.—Western steam spot, 7.25@7.30; October, 6.73@6.76c; November, 6.59c, December, 6.56c; January, at 6.63@6.65c; City Steam, 6.90, Refined, 7.50; Continent, 7.85. BUTTER.—The market has not varied since our last, ruling firm on fine grades. Creamery, 24@25c, Pennsylvania Creamery, 24@24½c, Western, 18@22c; State Dairy, half-firkin tubs, 17@23c; Welsh tubs 17@20c; Western imitation creamery, 11@16c; Western dairy, 10@11c; Western factory, 11@13c. CHEESE.—The market is in much better shape. Demands are more general, and prices show a further slight rise. State, 8¾@10½c.

BUTTER.—Creamery—State, pail, fine, 24½@25; do. Pennsylvania, tubs, 23@24½c; Western, best, 23½@24½c; do prime, 21@22c; do. good, 18@19c. State Dairy, palls choice, 22@23c; half-firkin tubs, about prime, 19½@21c; half-firkins, tubs, good, 17@18c; half-firkins common, 14@15c; Welsh tubs, best, 19@20c; do. do. prime, 17@18c. Western imitation Creamery, best, 14@15c; imitation creamery, fair and good, 12@13; Dairy, fine, 13@14c; do, common, 10@11c; Factory, fresh, 12@13c; do. good, 11@12c.

CHEESE.—New State factory, best, 10¾@10½c; do, do, good and fine, 9¾@10c; do, do, fair, 8¾@9¼c; do, do, common, 8¼@8½c; Ohio factory, fine, flat, 7½@10c; State factory, night skims, 7½@8½c.

EGGS.—State, 19@19½c; Western, 18@18½c; Canadian, 18c.

POULTRY.—LIVE.—Chickens, spring, per lb, at 11@13c; fowls, near-by lots, per lb, at —@12c.; fowls, Western lots, per lb, at 11@12c, fowls Southern lots, per lb, at 11@—c; turkeys, per lb at 9@11c; ducks, western per pair at 50@75c.; geese, western, per pair, at $1.25 @1.50.

POULTRY.—DRESSED.—Turkeys, per pound, at 13@15c.; Spring chickens, Philadelphia, per pound at 17@—c.; do. western, per lb, at 12@—c; fowls, Pennsylvania, prime, per lb, 12@—c; do State and western, per lb, at 11@12c.

FRUITS.—FRESH.—Quotations: Apples.—Gravenstein per bbl, at $2 00@2 50; Malden Blush, per bbl., at $2 25@2 50; common varieties at $1@1 75 per bbl. Peaches.—At 40@75c. per basket for best Delaware and Maryland; Jerseys, best, at $1 00@1 25 per basket; do. good at 65@75c, do. plain at 30@50c. per basket. Pears.—Bartlett, Western, per half bbl, $2 00@2 25; Jersey per bbl, at $2 50@4 50; up-river, per bbl, $4@5. Grapes, 5@7c for up river Delaware, per lb; do, Hartford and Champion at 1a2c. per lb. Plums.—6@8c. per quart for Quackenboss; $2 25@2 75 for Lombard; $3@3 50 per bbl, for Damson. Watermelons at $15@25 per 100. Muskmelons at $2 00@2 50 for best per bbl.

FRUITS.—DRIED.—The quotations are as follows; Apples—Fancy evaporated, at 9c; do. choice, at 8½c; do. prime at 8c; fancy North Carolina sliced, at —@— choice do. at 2½@3c.; choice Tennessee quarters at 1⅝@2c; State quarters at 2½@2¾c. southern sliced prime at 1¾@2½c. Peaches—Peeled North Carolina, choice, 11½c fancy, 12½@13c; do. Georgia, choice, at —@11c; do. prime, fancy, new, 10@11c; unpeeled, new, 12½@13½c, Georgia new, 10½@11c. Cherries, pitted, at 10c. Evaporated raspberries, at 14½@15c; sun-dried do, 13c. Blackberries—Prime at 8@8½c.

PEANUTS.—Quotations are: 5½c. for best hand-picked; 4@4½c. for farmers' grades.

HAY AND STRAW.—The following quotations are Choice Timothy, old, 80@85c; Good do, at 70@75c; medium, 60@65c; shipping at 50c; clover mixed, 55@60c Straw.—No. 1 rye, 60@65c; short rye at 40@50c. oat, at 35@40c.

HOPS.—State, best, 26@27c; State, good and prime, 22@24c, State, common, 18@20c; State, old crop, 14@22c; California, best 19@22c.

COTTON.—The quotations, according to the American classification, are as follows:

	Uplands.	New Orleans and Gulf.	Texas.
Ordinary	6 11-16	6⅝	6⅞
Strict Ordinary	7⅛	7 5-16	7 5-16
Good Ordinary	8 1-16	8¼	8¼
Strict Good Ordinary	8⅛	8 11-16	8 11-16
Low Middling	8⅞	9 1-16	9 1-16
Strict Low Middling	9⅛	9 5-16	9 5-16
Middling	9 5-16	9½	9½
Good Middling	9 11-16	9⅞	9⅞
Strict Good Middling	10	10 3-16	10 3-16
Middling Fair	10½	10 9-16	10 9-16
Fair	11	11 3-16	11 3-16

STAINED.

Good Ordinary	6½	Low Middling	8
Strict Good Ord	7 3-16	Middling	8¾

VEGETABLES.—Quotations are for: Potatoes.—Long Island, rose, in bulk, per bbl., $1 75@2 00; Jersey, rose, per bbl. $1 50@1 75; do peerless, per bbl, $1 25@1 50; sweet potatoes, Va., yellow, per bbl., $2 00@2 25; sweet potatoes, Va., yellow, inferior, per bbl, $1 37@1 75; Beans.—Long Island, wax, per bag, $1; do, do, green, per bag, 75@87c. Corn, Jersey, per 100, $1 00@1 25. Cabbages, Flat Dutch, per 100, $3 00@3 50. Cucumbers.—Long Island, per 100, 40@50c, do, pickled, per 1,000, $1 00@1 25. Egg plant, Long Island, per bbl, $1 25@1 50. Lima beans, per bag, $1 00. Onions.—Potato, Jersey, per bbl., $1 75, do. Conn., red, per bbl, $1 50@1 75; do. Orange County, red, per bbl, $1 50@1 75; Squash.—Jersey, marrow, per bbl, $1 00@1 25. Tomatoes—Long Island, Acme, per box, 20@25c; do. Long Island, Grant, per box, 15@20c.

LIVE STOCK MARKETS.

NEW YORK, SATURDAY, Sept. 18, 1886.

BEEVES.—Colorado Steers, 1,165 lb, average at $4 10, do, 1150 lb, at $4 10; do, 1153 lb, at $4 05; Texans 1024 lb; at $3 90; do, 1082 lb, at $3 90; Heifers from Chicago 1244 lb; at $4 50; Illinois Steers, 1436 lb, at $5 17½; Indiana do, 1272 lb, at $4 85; West Virginia Steers, 1350 lb, at $4 75; do, 1230 lb, at $4 35; Virginia do. 1187 lb, at $4 55; Ohio do, 1391 lb, at $4 75; Oxen, 1595 lb, at $4 40; Kentucky Steers, 1493 lb, at $5 35; Kentucky Steers, 1351 lb, at $5 10; Indiana do, 1121 lb, at $4 40; Chicago do, 1553 lb, at $5 60; Colorado Half-Breeds, 1392 lb, at $4 90; do, 1390 lb, at $4 75; Native Steers from Chicago, 1322 lb, at $4 80; Bulls, 940 lb, at $3; Ohio Steers, 1252 lb, at $4 60; 14 do, 1293 lb, at $4 55; 3 do, 1160 lb, at $4 25

CALVES.—Grassers, 312 lb, at 2½c; do, 232 lb, at 2½c; do, 300 lb, at 2¾c; Fed Calves, 230 lb, at 5½c; Veals, 194 lb, at 7c; Grassers, 263 lb, at 2½c; Fed Calves, 230 lb, at 3½c; Veals, 166 lb, at 5c; 7 do, 169 lb, at 7½c; Grassers, 206 lb, at 2¾c; do, 266 lb, at $2 60; Fed Calves, 902 lb, at 4c.

SHEEP AND LAMBS.—Receipts for six days, 42,492 head against 40,627 head for the same time last week. Canada Lambs, 81 lb, at 6¼c; do. 73 lb, at 6c; do, 84 lb, at 5¾c; Michigan do, 66 lb, at 5¾c; Kentucky do, 63 lb, at 5¼c; "Culls," 57 lb, at 4¾c; Nebraska Sheep, 112 lb, at 4½c; Ohio do, 91 lb, at $4 05; Kentucky do. 108 lb, 4¼c; Kentucky Lambs, 68 lb, at 6c; do, 58 lb, at 4¾c; Ohio do, 66 lb, at 5¼c; State Sheep, 99 lb, at 4c; Kentucky do, 97 lb, at $4 10; do, 85 lb, at $4 35, Pennsylvania Sheep and Lambs, 66 lb, at 4¼c; Ohio Sheep, 91 lb, at $4 35; Kentucky do, 94 lb, at 4¼c; Pennsylvania Lambs, 68 lb, at 5¾c. Ohio Sheep, 93 lb, at 4¼c, do, 94 lb, at 4½c; State Sheep, 100 lb, at 3c; State Lambs, 60 lb, at 5c.

HOGS.—Receipts for six days, 31,537 head against 28,947 head for the same time last week. State Hogs, 341 lb, at $5 15; Ohio do, 166 lb, at $5 25; Pennsylvania Hogs, 147 lb, at 5c.

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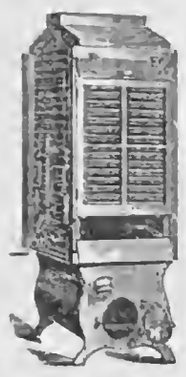

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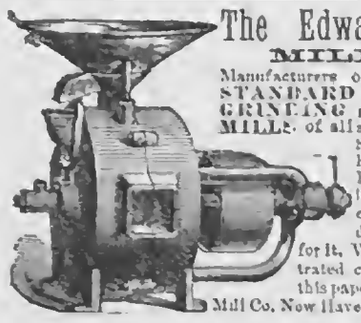

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1. *Prevent Disease;*
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I will insure herds of swine of not less than one hundred in number against disease, at a small fee per head, provided they are fed my Remedy under my direction, and prove upon examination prior to contract that they are in a healthy condition, and neither inbred, close-bred, or the progeny of such.

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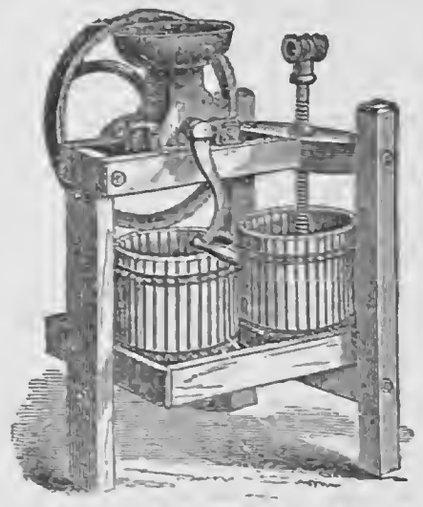

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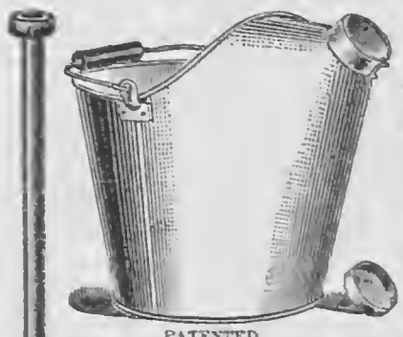
THE "COMMON SENSE" MILK PAIL.



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Extra strainers can be obtained at any time.
The Pail is made from heavy XX tin, and is in all respects the best in the world.
Send for special circular. Agents wanted.

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This is the best Tube in the market. Sent, post paid to any address, on receipt of price One Tube, 25 cents; Five Tubes, $1.00. Send for special circulars to
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MAKE THE GRANDEST FLORAL DISPLAY IN EARLY SPRING.
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18 Hyacinths,	various colors.	15 Assorted Dafodills.	50 Variegated Crocus.
25 Single Early Tulips,	"	12 Pheasant-eye Narcissus	24 Snowdrops.
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450 EXTRA FINE BULBS FOR $3.75.
A desirable present for your friends, direct from Holland. Address the sole agent for the United States and Canada,
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Headquarters and lowest rates for EMPIRE STATE & NIAGARA
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For the Young.

THET TERMATER RAISIN.

BY AUNT SUSAN.

Pap gut his prime termater seed
An' planted 'em right early,
An' tickled half to death he wuz,
Ter see 'em green ez grass.
Fer most of our termaters,
They wuz sorter stunt an' nerly,
An' Pap, he likes termaters
Better'n any kind o' sass.
An' when the nights growed warmer,
An' the frost hed quit a hazin',
Then Pap he set them plants out
Jest ez natrel ez ye please.
An' the children they all wanted
Fer ter try termater raisin';
So Pap, he give 'em all a plant,
Jest so'st they wouldn't tease.

We hed a little pauper
From the County house thet Summer,
Jest a ragged little feller
Doin' chores and runnin' round,
Not much bigger than a corn cob,
But ez spry ez ary hummer;
Pap hed tuck him home to raise him
So'st they couldn't hev him bound.

An' that little pauper feller
Stood around there sorter waitin',
An' his eyes growed mighty wistful
Ez he looked the plantin' o'er.
Pap wuz allus sorter foolish,
Tender-hearted, allus hatin'
Fer ter see folks havin' trouble,
But there wasn't but one plant more,

Thet wuz dredful poor and spindlin',
But the little feller tuck it,
An' he dug a hole an fixed it
Jest ez slick an' clean ez wax.
An' he jest took hold and hoed it,
Carried water in a bucket,
An' he rigged him up a cover
From some pieces of old sacks.

Now the children soon gut tired
An' they quit termater raisin',
An' the weeds growed up an' smothered
All them plants away frum view.
But thet little pauper feller
Stuck to his'n most amazin',
An' it jest beats all my tellin'
How thet plant gut up an' grew.

Pap walked out last Sunday evenin'
Fer ter see how things was growin',
An' thet big termater razin'
Sorter made him stop and think.
An' he shet his eye a minnit,
An' he did look mighty knowin',
An' I couldn't help a seein'
Thet his mind let out a link.

An' he sez "we all git started
Sorter fair in life's big battle,
But it ain't so much the startin',
Ez it is the haugin' to.
Them thet starts out sorter blusterin'
With a mighty noise an' rattle,
Find thet noise won't make no showin'
When they run their journey through.

Take the poorest chance an' work it,
Sorter foster and stay by it,
An' it's sure ter come ter somethin'
Ef ye keep it clean an' bright.
Take the biggest chance agoin'
An' neglect it, and half try it,
It'll spindle down to nothin'."
An' I guess that Pap was right!

ONE of the greatest men we ever had in this country said that no man was ever so ignorant that we could not learn something from him if we tried. He was right. If you watch sharply you will find that every person has some one thing that he can do a little better than anybody else can. Sometimes we can't find it out at once, but when we do find what it is we can learn from him. Be careful about calling people ignorant. The first you know some one who knows a great deal more than you do will come along and show people how little you know. Where will you be then? Never parade your knowledge. It takes many years of study to get enough to parade. Keep quiet and learn all you can.

Almost before we know it we shall have to get ready for Thanksgiving. I hope we shall all have much to be thankful for this year. When we come to figure things up we shall find that we have a great many things that we wouldn't have taken away from us.

We want to make the hens comfortable this Winter. Look out for the houses now, and don't forget to give plenty of food. How would you like to be shut up in a cold room without enough to eat? You are not a hen, to be sure, but you are not as good as a hen if you are cruel to stock of any kind.

SCHOOLS have begun in the city. There are nearly 200,000 children in the New York City schools this term. I went by a school the other day and saw some of the scholars playing about. They had to play in the street or in a little room in the basement. I wonder how our boys and girls would like being cooped up in a little place like that. Not very well, I think. I know that I shouldn't.

IT is a fine thing to be able to write a good report of a meeting of any kind. Such reports are always in demand, and very few people can write them up just as they should be. Our boys and girls can learn to do this work. Begin now. Whenever you go to a meeting of any kind pay close attention to what is said. If you have a piece of paper or a book, write down the things that seem to you good. If you have no book remember all you can of what has been said, and when you get home think it over. This practice will help you. You will be able to pick out the best parts of a sermon or a speech, and people will soon ask you to help them when they want to hold a meeting. Begin with the sermon. Think over what the minister says, remember the text, and when you get home see how much of the sermon you can write down. It will be hard at first, but if you will keep at it, the work will come easier.

THE STORY OF A DISTRICT SCHOOL.

A COLLEGE BOY'S DIARY.

(Continued.)

"I am glad to see you" I began. "I hope we shall get along nicely together. You know, and I know just what we have come here for. We are not here simply to have a good time but to try and learn something. I have no doubt there are many things you can teach me. I shall be glad to learn with the rest. There is one thing about studying which I hope you will all remember. Knowledge represents just so much work. We can never learn a thing unless we are willing to work for it. Now a man might stop in here and ask us the right way to town, but I never could put him there. I could show him the way, but unless he made some exertion he never could reach the place."

I noticed a boy sitting on a front seat who seemed greatly interested in my remarks. His mouth was wide open in his excitement, and he tapped his boot on the floor to gain my attention. It seemed to me a good opportunity to stop and point my speech, so I turned to him and said:

"Don't you think that is so?"

"Sposin' ye had a load o'grain or sum hogs ter take ter town. Why couldn't ye hitch up an' carry him?"

He fairly shot these words out of his mouth in his eagerness to explain the ideal educational system of Bear Creek. The rest of the school appeared to agree with him. It was certainly far easier to be carried to town than to walk there, and the same rule would unquestionably apply to studying.

Before I could explain as I wished to do, the door opened with a great flourish and the director strode in. If he had kept away I believe I should have made a much better start. In his great desire to help me out, he precipitated a conflict which lasted during the whole term. He carried a large bundle of sticks under his arm; several of them genuine clubs in size and shape. He handed me this collection with a most dramatic flourish. Then he rapped smartly on the desk and made a long speech in a tremendous voice, in which he informed the scholars that he had carefully studied the law and had found that his position gave him the right to maintain order in all parts of the district. He told them that he could send any of them to the Reform School in case they disobeyed me. At the last he turned to me and fairly shouted in a terrible voice:

"This gentleman has been selected as your teacher. His first duty will be that of enforcing the law. I stand back of him, and back of me stands the Government of this great State, and back of that the Government of these United States, and back of that all moral law. We are too strong to be beaten. We will not be imposed upon!"

The effect of this outburst was not immediate. The scholars looked at each other in wonder. The larger boys shook their heads sullenly and muttered to each other. It was the custom of Bear Creek to move slowly in such matters, but the movement was always sure. All such statements were to be reported at home and carefully discussed around the fireside. When some decision could be reached, the children could be sent to school armed with the parental authority to make things interesting for the teacher and fight the battles of the district through him.

LETTERS FROM THE COUSINS.

DEAR UNCLE MARK: If I may be allowed to call you by that name as I have never written before: I live on a farm in the southern part of Alabama, 25 miles south of Mobile, and five miles from the Gulf coast. The bay from which the place gets its name furnishes good fishing and duck hunting. The creeks furnish good sport with hook and line in fishing for black bass and pickerel. The other day I went down to the creek which flows in sight of our place, and was back home in less than an hour with a bass which measured two feet in length and weighed seven pounds. Can any of the Cousins beat that? My father has a dairy of 13 cows. He ships the butter to Mobile where it brings 25 cents a pound. He also owns about 100 sheep.

Yours truly, FRANK WARREN.

[I think we would have to get up early and make a long day to beat that fish. I would like to catch one like it.—U. M.]

DEAR UNCLE MARK: I want to know if you want another niece. Pa takes the RURAL and I like to read the Cousins' letters. I am a little girl, and I have two brothers. We live on a new farm in Northern Michigan. We have a nice garden. Pa cleared the land last Spring. I have a nice flower garden from the seed that Pa. got with the RURAL. Pa. has a pint of Alaska peas. We have a lot of Prince Albert and Stratagem peas, Pa. raised from the seed you sent out last year. I have a hen and she raised 12 chickens. They are great big ones. Don't you think that is pretty good? She is raising 12 more. Your niece,

GEORGIE STEWART.

Kalkaska, Michigan.

[That is a fine record for a hen. You are a Cousin surely.—U. M.]

Miscellaneous Advertising

Purify the Blood.

We do not claim that Hood's Sarsaparilla is the only medicine deserving public confidence, but we believe that to purify the blood, to restore and renovate the whole system, it is absolutely unequalled. The influence of the blood upon the health cannot be over-estimated. If it becomes contaminated, the train of consequences by which the health is undermined is immeasurable. Loss of Appetite, Low Spirits, Headache, Dyspepsia, Debility, Nervousness and other "little (?) ailments" are the premonitions of more serious and often fatal results. Try

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Sold by all druggists. $1; six for $5. Made only by C. I. HOOD & CO., Lowell, Mass.

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A pure California production, an infallible exterminator of Roaches, Bed-bugs, Water-bugs, Flies, Fleas, Mosquitoes, Ants, Moths, and in fact all insect pests of the household, field, orchard, garden, and conservatory.

BUHACH is guaranteed to be as harmless to animal and plant life as it is destructive to that of the insects.

BUHACH is the powdered blossoms of a California grown flower and absolutely contains no acids or poisonous drugs of any description.

BUHACH is not to be classed with the thousands of worthless and dangerous preparations so called "Insect Exterminators."

BUHACH is the insecticide of progress.

Pure! Powerful! Potent!

BUHACH is not sold in bulk, but in sealed tins with yellow labels, upon which appears our Trade Mark BUHACH as above. Beware of base imitations. Ask your druggist or grocer for it and see that you get it. Descriptive circulars mailed free upon application to us. BUHACH PRODUCING & M'F'G CO. of STOCKTON, CALIFORNIA, 49 Cedar St., New York.

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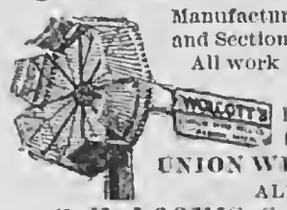

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and other well-known writers, giving us the best and most practical matter ever written on household topics—**The Tea Table** and how to make it attractive. **Washing and Ironing; Nursing the Sick,** etc.

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A page devoted exclusively to the care of infants and young children. Filled with interesting letters from subscribers exchanging views and methods of management; and original articles from the best writers. Helpful, suggestive, and worth double the subscription price of the paper to every young mother.

HINTS ON ETIQUETTE; How to entertain, &c. by SOPHIE ORNE JOHNSON (Daisy Eyesbright).

"Brush Studies," and Household Decoration, by LIDA and M. J. CLARKSON; is a special strong feature, finely illustrated.

LECTURES TO YOUNG WOMEN, by REV. F. E. CLARK, of Boston, Mass. **"A Young Woman's Rights," "Frivolity and Flirtation," "Getting Married," &c.**

Instructive articles on "How to Appear Well in Society," "How to Talk Well, and Improve your Grammar," by MRS. EMMA C. HEWITT.

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With special illustrations. Knitting, Crocheting, and all kinds of embroidery. Edited by an expert. **Prizes given** for contributions.

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SPAIN'S CHURNS. Star Churns, Rapid Ice Cream Freezers, Improved Tree Tubs, all made of CEDAR. Send for illustrated circular and prices. Clement & Dunbar, Philadelphia, Pa.

PERSONALS

EX-GOVERNOR ST. JOHN, according to Neal Dow, received $50 per night for his campaign work in Maine.

EXCEPTING only the sprained leg, which he is still unable to use, Senator Evarts has almost entirely recovered from his recent accident while driving.

LEWIS APPLE, editor of a weekly paper at Panora, Iowa, bought flowers at the State Fair to decorate his grave, and on reaching home killed himself with a revolver.

"EXTRA BILLY" SMITH, twice Governor of Virginia, reached his 90th birthday last week. He is still quite active, physically and mentally, and daily walks to Warrenton, Va., a distance of nearly a mile.

WHITELAW REID and his father-in-law, D. O. Mills, have been surveying the Owens River Valley, in California, near Reno, with a view to taking up 20,000 acres of land for a wine and grape-growing colony.

Charles Monckey, inventor of the Monckey wrench (ignorantly called the monkey-wrench), is living in poverty in Brooklyn. He sold the patent for $2,000, and now millions are made annually out of the invention.

SENATOR EDMUNDS' check for $50, accompanied by a very sympathetic letter, has been received by the Charleston relief committee. He will have a "walk over" in Vermont in his canvass for the United States Senatorship.

GUERDON S. HUBBARD, the oldest resident of Chicago, and one of the first of the white pioneers to visit the present site of the city, died there last Tuesday. He landed there in 1818, and resided there almost continuously ever since.

PATSEY COLLINS, while shovelling grain in the top of a big Niagara Falls flour mill, fell into the hopper, slid for 80 feet through a spout eight by ten inches in size, and shot out unhurt, with six tons of grain, into a car standing on the track below.

EX-POSTMASTER THOMAS L. JAMES applied for membership in a young men's Prohibition Club, of New York, Tuesday evening, and was rejected. He had signed the call for the Republican Anti-saloon Convention at Binghamton, and that was fatal to his reputation as a Prohibitionist.

GEN. W. T. Sherman, wife, daughter and a young son have come to New York to live permanently. The General's health is good, but he dosen't seem as lively as formerly, and some attribute his failing to disappointment because his eldest son, Thomas Ewing Sherman, has become a priest. A high political career was expected for the brilliant young man, who has just been appointed Professor of Rhetoric in the Jesuit College at Detroit.

JAMES G. BLAINE, Jr., aged 20, youngest son of the Ex-Senator, married without paternal consent, the other day; but was readily forgiven and assigned, *on dit*, $1,800 a year to live upon. He will probably go into business and thus add to his income. His wife was a Miss Nevins, and is a grandchild of Samuel Medary, who was Territorial Governor of Minnesota and of Kansas. She was educated at a convent in Cincinnati, has rare musical and dramatic talents, and is represented as exceptionally beautiful.

THE other day Geo. Gould, 24, eldest son and business representative of Jay, married Miss Edith Kingdon, an actress just returned from Europe, at his father's fine place at Irvington-on-the-Hudson. She has been on the stage about four years, and her real name is Adams. Has always borne an excellent reputation, and is a very handsome woman of about 22. George has continued steadily at work in his father's office here, right along. He is quite wealthy himself, and the "old man" is said to have settled upon him "enough to live quite comfortably."

M. CHEVRAUL, President of the National Agricultural Society of France for many years, celebrated his hundredth birthday the other day, and is still hale and hearty. Few have done so much for French agriculture and for various branches of science. He says longevity is hereditary in his family for generations past. His father lived to the age of 81 and his mother to that of 93. He has long adjured alcohol and tobacco, preferred chicken to any other meat, bathed much in cold water, used tea and coffee with moderation, gone to bed early, and walked out-doors daily in all weathers. He attended the theatrical performance given in Paris in honor of his 100th birthday—the first play he had seen for 20 years.

Miscellaneous Advertising.

DIXON'S "Carburet of Iron" Stove Polish was established in 1827, and is to-day, as it was then, the neatest and brightest in the market; a pure plumbago, giving off no poisonous vapors. The size is now doubled and cake weighs nearly half a pound, but the quality and price remain the same. Ask your goocer for Dixon's big cake.

Miscellaneous Advertising.

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Special attention is called to our remarkably Fine Stock of
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Prices reduced to suit the times. Correspondence solicited. Catalogue Free. 32d Year. 600 Acres. 21 Greenhouses. Immense Stock.
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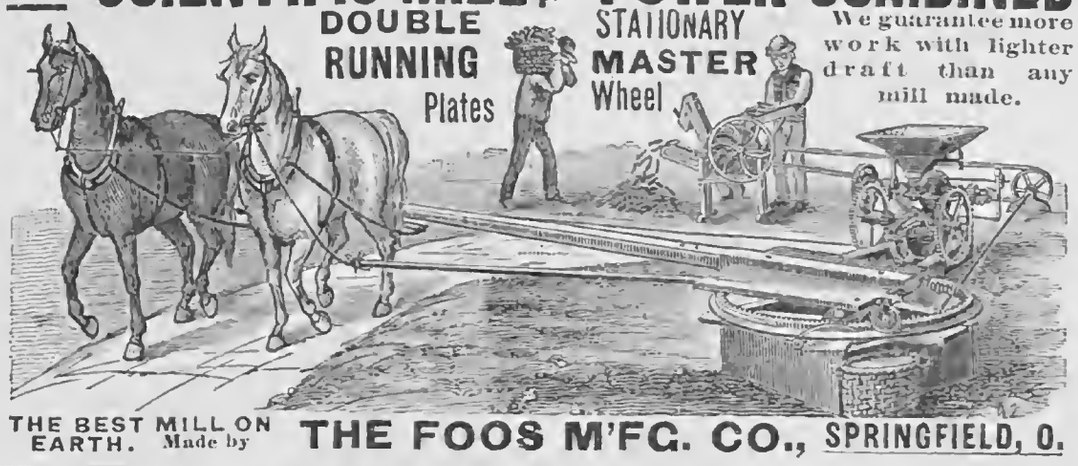

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HORSE POWERS.
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Manufactured in dry condition, thereby assuring full weight of fertilizing material. Most flattering results where used side by side with other preparations. Where there are no agents for these Fertilizers, orders direct to the manufacturers will receive prompt attention. **JOHN M. PEARSON, Hudson, N. Y.**
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Meal, Oyster Shells, GRAHAM Flour and Corn in the **$5 HAND MILL** (F. Wilson's Patent). 100 per cent. more made in keeping poultry. Also **POWER MILLS** and **FARM FEED MILLS.** Circulars and Testimonials sent on application. **WILSON BROS., Easton, Pa.**

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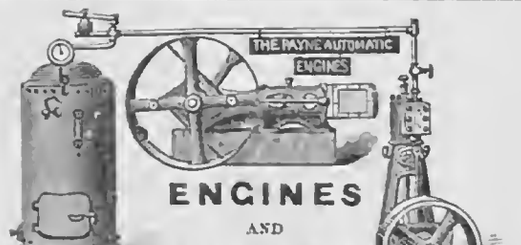

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Another importation will arrive Sept. 1st from the celebrated flock of John Treadwell, whose sheep have again this year won 1st, 2d and Champion prizes at the "Oxfordshire," "Bath and West of England," and the great "Royal" shows. His best Rams are by my grand imported, 420 lb., "Bicester," winner at these Shows '83, '84 and was 1st at sweepstakes, *over the other Downs*, at Chicago, Madison, Wis., and St. Louis. Mr. Treadwell wanted him back last year. For sale, Imported Rams, Ewes and Lambs by Imported "Bicester," "Sir John," "Baron Campsfield" and "Donatus."
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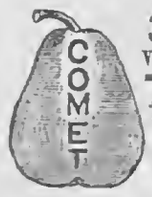

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As any one can see,
He came back home all by himself
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Washington Critic.

BRITISH yachts may do their best,
Dip their hulls in brandy,
Boston beans and Yankee grit
Can beat 'em neat and handy.

Our Yankee sloops can lick erea
Tion, sweet is she as candy,
Mark how she kicks up her heels,
Yankee doodle dandy.
Evening Post.

BUSINESS TRAITS.—A selfish fellow—The fish vender.

A man of mettle—The stove dealer.

Is clever at taking people in—The stage driver.

Worse than a gross man—A grocer.

A hard laboring man with a brief career—The lawyer.

Always in a hole—The grave digger.

His life a perpetual grind—The miller.

A well-bred man—The baker.

WE are thinking seriously of establishing a poet's corner. It will be connected by a trap door with the basement.—*Burlington Free Press.*

DOCTOR—I will leave you this medicine to take after each meal. Mike—And will yez be koind enough to leave the meal, too, doctor?—*New Age.*

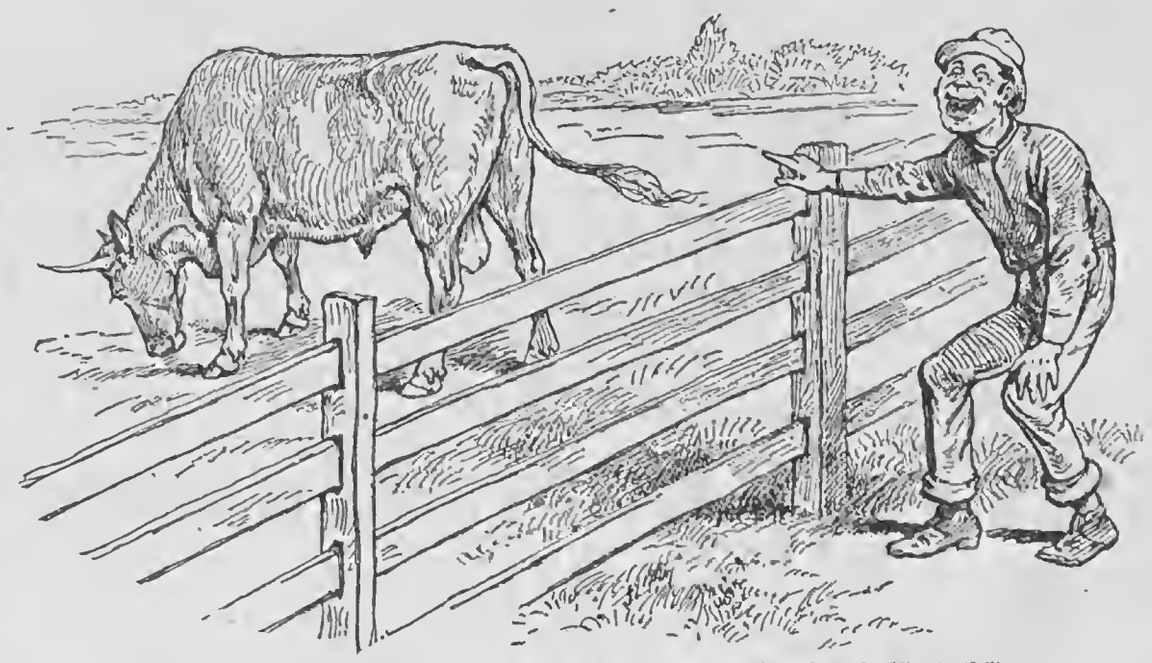
A VERMONT man has invented a sleigh made of paper. Nothing new about that. We have used a paper cutter for years.—*Texas Siftings.*

ARTHUR—Yes, we should like to have you write for our paper. Address your lettter to the business office and it will be sent to you.—*New Haven News.*

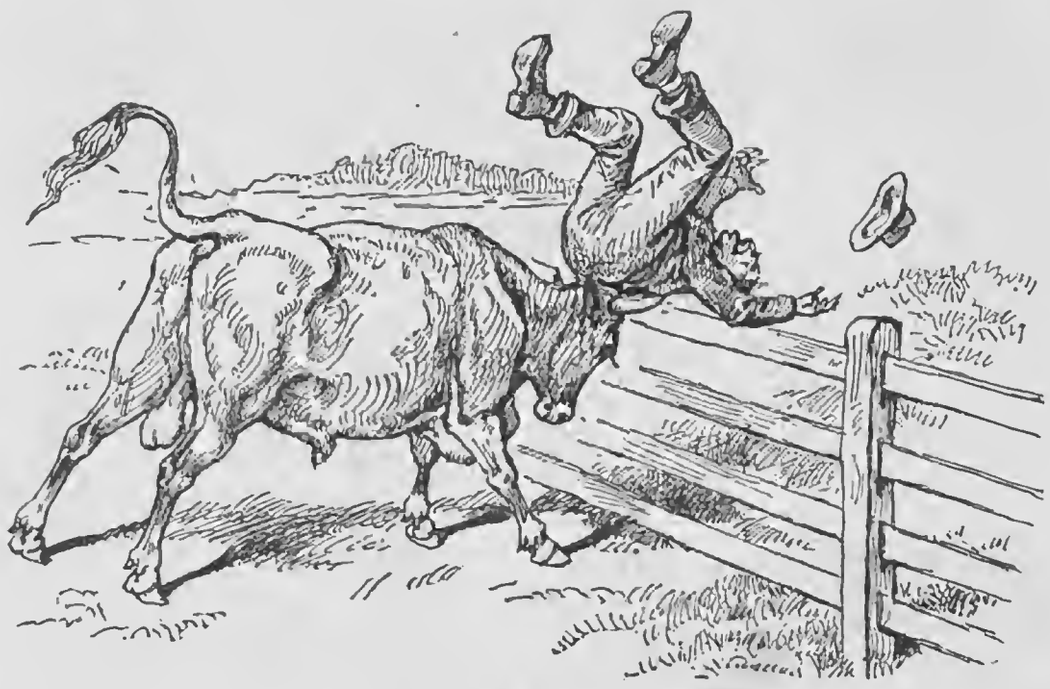
THE CHESTNUT GONG.—"For you," he said, "I'd gladly die, I've loved you well and long." The cruel girl made no reply, she rang a chestnut gong.—*Detroit Free Press.*

AT A FRENCH RESTAURANT: "Here, waiter, it seems to me this turbot is not quite as fresh as the one you had last Sunday." "Pardon! Monsieur, it's the very same!"

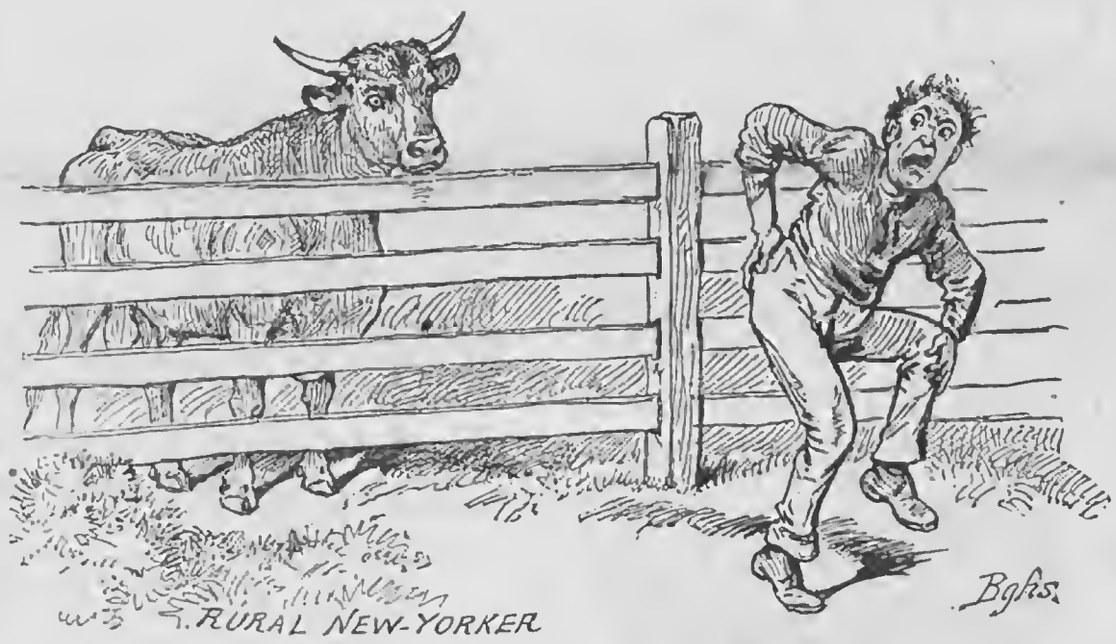
THERE are little, sweet, pretty and green oases, all the way through the desert of life, but the fat man who breaks a suspender on a hot day when running to catch a train doesn't think of this.—*Boston Courier.*



"Begorra, what a foine schame it will be to twist that bull's tail!"

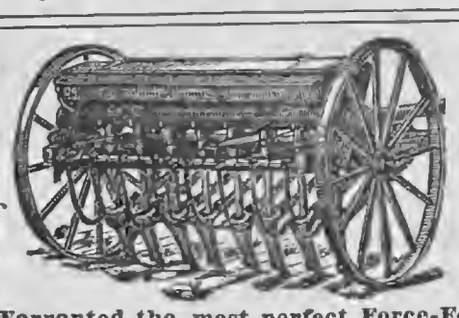


The twisting is performed.



"It's a moighty good thing I had me laugh before!"

Miscellaneous Advertising.



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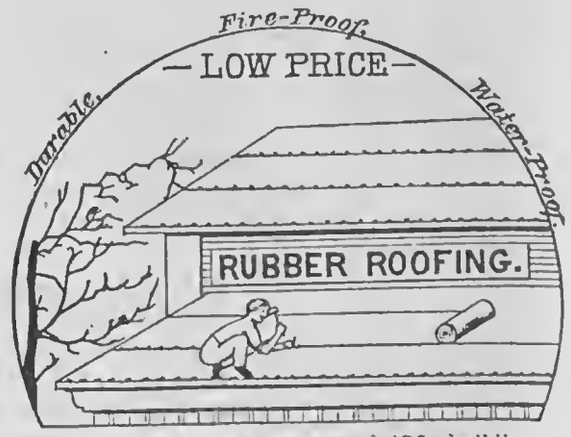

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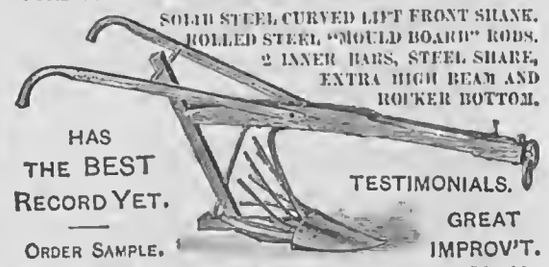

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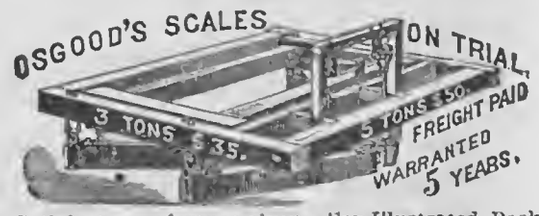

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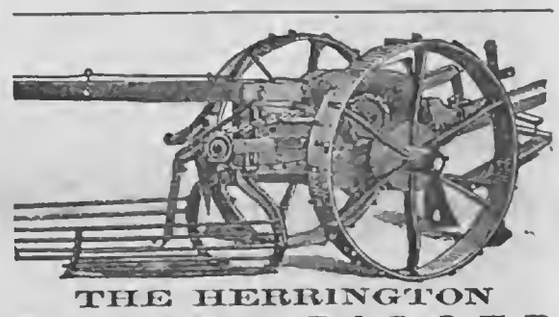

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THE RURAL NEW-YORKER

A JOURNAL FOR THE SUBURBAN AND COUNTRY HOME

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The Vineyard.

THE BERTRAND GRAPE.

ABOUT the middle of last July we received from our friend P. J. Berckmans, Augusta, Ga., a specimen bunch of a seedling grape originated in Middle Georgia. Said he: "The vines are now eight years old, and have yielded five crops, and this year there are upwards of 100 bunches. No trace of rot. Vigor all that could be desired. It belongs to the Æstivalis group. In addition to its excellent quality, it has the advantage of ripening when nearly all other bunch varieties are about gone. The originator calls it Bertraud."

The bunches are sometimes shouldered, as shown at Fig. 374, sometimes not. Black with blue bloom. Peduncles long. Skin firm and thin. Very juicy, hig-hflavored and sprightly. Flesh melting; pulp not perceptible—one and two seeds. A refreshing, delightful grape. (See editorial page.)

PRAISE OF THE NIAGARA GRAPE.

FOR two or three years, Geo. W. Campbell, of Delaware, Ohio, has spoken many times unfavorably of the Niagara Grape, and even at this late day he remarks, in his fall circular, that it has succeeded well in some places and signally failed in others; and also that in suitable locations and favorable seasons it has been successful and profitable; which would plainly give the average fruit grower to understand that, in order to succeed with the Niagara, he must have a location especially adapted to the growing of grapes and also a very favorable season.

I am engaged somewhat extensively in raising grapes for market purposes, and have no axe to grind. I commenced setting the Niagara Grape in the Spring of 1882 for market purposes, and have set more or less of the variety every year since. I have a fine show of them in bearing this year. I train to four arms, according to the Kniffin system. I now have single arms, with 36 nice solid bunches of fruit upon them. Out of 41 varieties of grapes which I have in cultivation, the Niagara has proved itself to be the strongest grown and the most productive of the whole lot. It is also as hardy as the Concord, better in quality, and from six to eight days earlier. It is also a long keeper and a splendid shipping grape, and, taken altogether, I consider it for market purposes the best grape for growers to set that has been practically tried and is now before the public.

Grand Haven, Mich. WALTER PHILLIPS.

GRAPE NOTES.

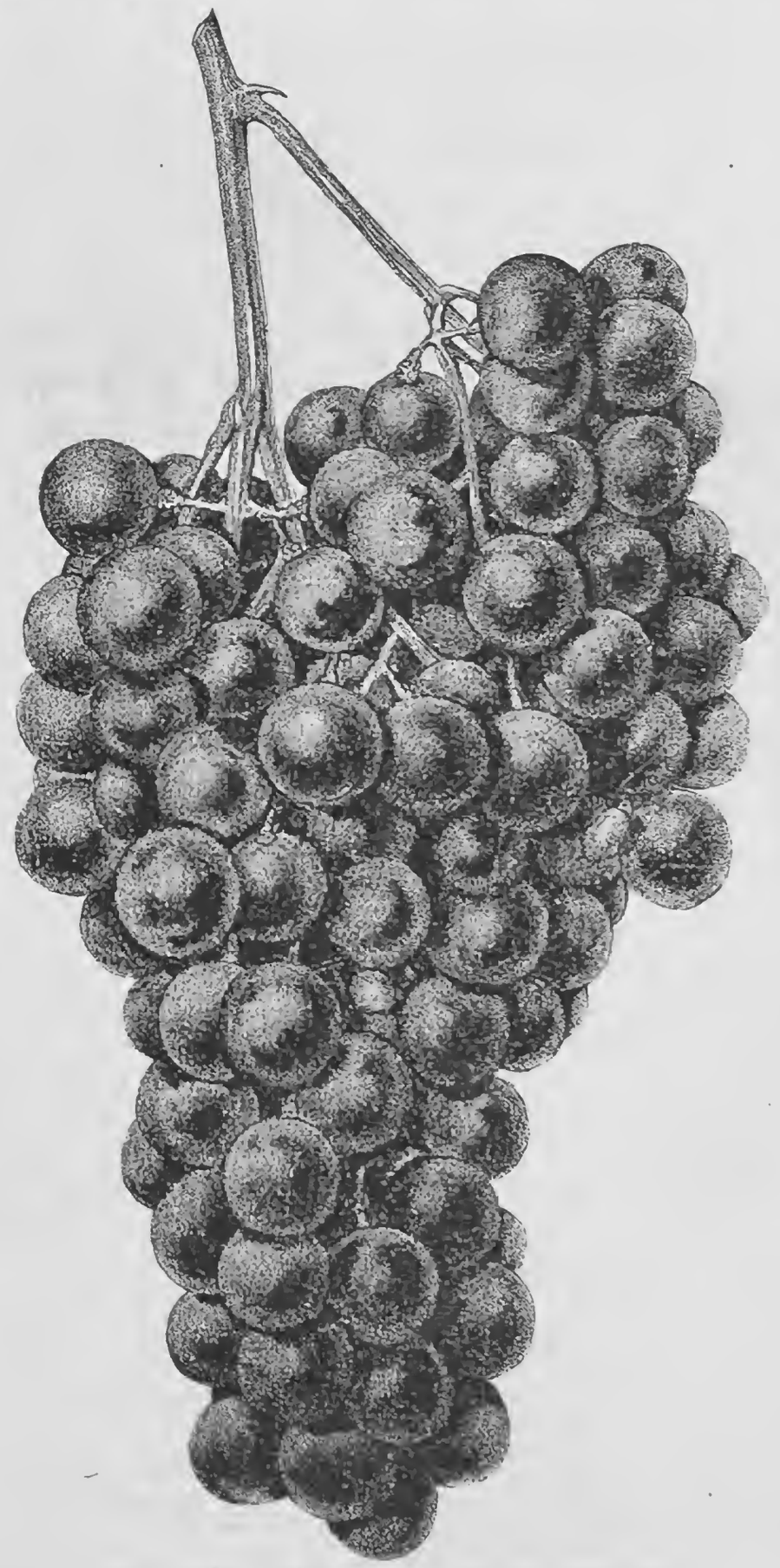
MOORE'S EARLY is the best early grape I know of for market or home use; larger than the Concord, somewhat sweeter, but a little more insipid in taste; not much inclined to rot; large seeds.

NIAGARA.—Some rot first crop; only a few bunches on a grafted vine. Bunches medium in size; berry medium and of good quality, but with a trace of muskiness. Not pulpy; seeds small.

ROMMEL'S AMBER.—Little rot. Much the same as Niagara in size and color; of purer flavor. Seeds separating too easily from the pulp. Rather tender for keeping. Bore well this year, ripening a little later than Concord. I think this is a good home grape.

POCKLINGTON.—A little rot. A thrifty grower. A large showy grape of poor quality, almost as foxy as Martha, which I consider too poor to eat. Will do to sell to the legion that eat the Ben Davis Apple.

EARLY VICTOR.—Some rot. Ripens nearly with Moore's Early, Champion, Janesville, and several others. A medium-sized black grape, of flavor distinct from the Concord type; no foxiness. I was expecting no rot, but was disappointed. Vine a good grower, and it may bear better next year. The berries hold well to the stem.



BERTRAND GRAPE. From Nature. Fig. 374.

DUCHESS.—Much rot; no perfect bunches left, owing to rot. Young wood scabbed with disease. Berry small—very good.

PERKINS.—Some rot. Does not succeed with me. More rot than in the Concord. Not very hardy or early. Rather shy in bearing. Foxy, but better than Martha or Pocklington. It is medium in size, and very showy when well ripened, being somewhat mottled in color like a Blood Peach.

TRIUMPH.—A fine grape, but vine too tender.

The Concord is the most reliable grape we have, and it will be a long while before it will be superseded here. People ordinarily prefer it to the best of Rogers's hybrids for steady use, just as they prefer a Janet to a Grimes's Golden Apple, or bread and butter to cake and pastry. BENJAMIN BUCKMAN.

Saug. Co., Ills.

[MOORE'S EARLY is not anywhere, so far as we know, as productive as the Concord. It ripens at least 10 days earlier, and the berries are larger. In these two respects it excels its parent, while the vine is fully as hardy and vigorous.—EDS.]

Pomological.

A GARDEN FRUIT EXHIBITION.

WHILE much may be learned of fruits by viewing them when on exhibition at the fairs and horticultural meetings, much more can be learned by visiting growers and seeing the fruits on the trees and vines, thus learning the growers' methods. Hence my recent visit to the fruit gardens of Ellwanger & Barry was enjoyable and profitable. Mr. W. C. Barry, recently returned from a long season of retirement among the Adirondacks, was my guide. First we visited the plum orchard. Here were ripening the productive and popular Reine Claude and Lombard, the small and prolific Damson, the showy Pond's Seedling, the large and showy Quackenboss, the Yellow Egg, the beautiful and fine-flavored Washington and many others.

"Which two prove the most popular for market, Mr. Barry?"

"The Lombard and Reine Claude. The latter pays best, ripening after the others are mostly gone. Washington is one of the largest and most beautiful, and of superior quality."

"How about the Wild Goose, Weaver and others of the native type?"

"They are of no value for this locality, where we can grow those so much superior in size and quality. They make straggling, uncouth trees and, with a few exceptions, do not show as much vigor."

"How do you manage the black-knot?"

"We simply cut off the diseased limbs and burn them. You can see that none of these trees show any signs of the disease." The soil was kept in fine tilth, the branches well thinned. The trees did not appear to have been planted over five years.

We then passed across the ornamental grounds. Here are long stretches of closely cut turf, extending farther than the eye can reach, bordered with a thousand varieties of shrubs and trees. Then I passed on to the private garden of my guide, to see his dwarf pears. His favorite appears to be the Anjou. The trees were well laden with as fine specimens as the most critical could desire to see, each perfect in form and color and of large size, though they had not attained full growth.

"The culture of these fine fruits is one of the greatest pleasures I enjoy," remarked Mr. Barry.

"What is your opinion of seeding dwarf pear orchards to grass?" I asked.

"I should seed it only when is was making excessive growth, and then cultivate it again after the excessive growth has been checked. On this soil it is not possible to get an excessive growth. We fertilize the soil as highly as possible, yet the annual growth does not exceed 18 inches. If the wood begins to ripen well by September 1, we do not consider the growth excessive."

"But will such high culture be profitable for those who grow for market?"

"Yes," replied Mr. Barry. From the appearance of these trees I concluded that few need fear that their soil is too rich, or that their trees are growing too vigorously. I should rather infer that most dwarf pear orchards are suffering from starvation. The trees were trained low. There were many varieties all bearing heavily, and yet this is not the bearing year for pears in this vicinity. I cannot see how men of wealth and taste can more successfully beautify a part of their home grounds than by planting choice fruits.

On our way to see the grapes, we stopped to test the Surprise Melons, which Mr. Barry says he has found to be the best of all in quality. The flesh is as yellow as gold, and equal to a peach in flavor. Mr. Barry says it is as refreshing as the finest wine.

The grapes, grown under glass, without artificial heat, except such as the glass afforded, the roots extending into the garden beyond the house, were an attractive exhibition. The leaves were broad and luxuriant, the canes of the present season's growth being the size of my largest finger, but nowhere crowded, trained with the greatest care and watched tenderly. Should the gardener forget to give them air in the heat of the day, they would

perish. There were numerous varieties, differing in color, quality and size of bunch. Many of the bunches I judged to be a foot long, and with numerous shoulders, each of which was as large as ordinary bunches of out-door grapes. Two of these bunches Mr. Barry placed in my hands and my arm was weary with the burden when I reached my wagon.

I noticed by Mr. Barry's remarks that he reads the RURAL NEW-YORKER. He spoke of the work of the various horticultural societies. He considers the discussions and the papers read at these meetings of the greatest importance, and that they should never be made of secondary importance. He says he can listen with pleasure and profit to such discussions and essays, and if he can, it is my opinion that we all can derive pleasure and profit therefrom. While the press is doing a great work, and none greater than the RURAL NEW-YORKER, it must be conceded that our horticultural meetings furnish the greatest opportunities for gathering and disseminating information on this important subject. CHARLES A. GREEN.

CANADA FRUIT NOTES.

Failure of Fameuse; a good word for the Marlboro and Golden Queen; Niagara the least injured among grapes.

THE season of 1886 will be long remembered by the fruit-growers of this Province as the darkest for apple growing they have ever known. Early in July spots were seen on the principal varieties, and the Fameuse, our orchard's glory for autumn fruit, was the heaviest sufferer. The crop stands to-day not worth the gathering for the first time in the 32 years of fruit growing in which this family has been engaged. Duchess, Tetofski, Alexander, Charlottenthaler, Yellow Transparent; in fact, all the Russian apples escaped, but all others, except the russets, have suffered. Our theory with regard to the spots is that they occur when a cold night with fog is followed by a hot morning sun, fixing the fungus on the apple before the water from the heavy mist has had a chance to evaporate.

Of pears we have tried several varieties. Clapp's and Kieffer's have succumbed; Flemish Beauty and Mount Vernon are bearing this year some handsome fruit.

Raspberries have been a good crop; Clarke about as usual. Many of the older sorts were winter-killed, and Cuthbert suffered for the first time. Marlboro stood the Winter bravely, and bore for the first time. The fruit was fine and well colored, quite marketable for firmness, and in quality equal to any other, while the size is superior, and that tells greatly in its favor as a market berry. Golden Queen also stood through its first Winter, and bore a little first-class fruit. It is destined to become popular if it continues hardy. The color is like that of the Brinckle, but the texture is firmer.

Blackberries always do well here, and we have Taylor's still holding out. But, sad to relate, our Minnewaska died, though we blame the location more than the variety, and we mean to try again. Early Harvest is early, but it suffered a little during the last trying Winter.

Grapes are a fair crop, but sustained some injury from a late frost. Niagara was least injured, and the fruit is good. It is the most prolific grape we have ever grown, and as hardy as the Concord. Agawam, Brandt, Othello, Worden, Croton and several other varieties mildewed so as to cause a total loss of the fruit. Duchess is as good as ever, and ripened early. Jessica had a few good bunches, and all others had the usual quantity. The season has been so far favorable for ripening the fruit, and the grape vines are healthy. Brighton suffered from the June frost in flowering, yet they must be plentiful somewhere as they were selling last Saturday in Montreal market for five cents per pound. The Herbert and Wilder, famous as large black berries, are the latest to ripen, and we generally get our first fruit from the Early Dawn, which, though small, ranks with Eumelan, Duchess, Brighton, Lady and Moore's as first in quality.

Near Quebec. ANNIE L. JACK.

PLATFORM LADDER.

AT Fig. 375 we illustrate a ladder which is very useful and convenient in picking fruit from trees. The platform, of strong, light wood, is 1¼ or 1½ inch thick, 10 or 12 inches wide where attached to the legs, tapering to a width of four inches. It may be six to nine feet long. The legs are 6 or 7 feet long, 1x4 or 5 inches at the top, tapering to 2½ or 3 inches at the ground. Let the legs extend one inch above the platform, and nail a good cleat across the top of the plank, between the ends of the legs; also one on the outside of the legs, close under the platform. The legs should spread out somewhat, so as to be 3½ feet apart on the ground. Nail light pieces across from one to the other for steps. Light braces should extend from the middle of the legs to the middle of the platform. The engraving fully explains all, and shows how the ladder is used. It needs no skill and very few tools to make it, as everything is nailed. It may be moved around sideways five or six feet without changing the end in the tree. It enables a person to pick clean from the outside to the center of the tree without changing the ladder, and one can stand on it as comfortably as on the ground. I have used this style of ladder 15 years, and have found very few places where it was not handier than a long, straight ladder, and it is hard work to stand on a ladder round. The inside end of the platform may be raised or lowered a foot or more and still stand firmly, and there is always a limb or crotch on which to put the end. D. S. H.

Wakeman, Ohio.

PEARS.

MT. VERNON—With the exception of Seckel, this is the healthiest and hardiest of any dwarfs and the thriftiest grower of all and a fine bearer of large russet pears of very good quality more acid than the Anjou, but to my taste just as good and preferable to that noble variety for planting here.

CHAMBERS—A few specimens were obtained this year from a graft and I am fully satisfied not to plant any more. Fruit small and well colored; but as poor as the Buffum. Ripening first of September. B. B.

Sangamon Co., Ill.

FIGHTING BITTER ROT.—We have been troubled somewhat with bitter rot in apples, but succeeded in two instances in reducing the trouble. The first was by accident, the latter intentional. We trimmed sharply just as the trees were coming into bloom. The large limbs must not be cut at that time, however, if the trees are an object. L. GOEPPER.

Warren Co., Ohio.

PLATFORM LADDER. Fig. 375.

Floricultural.

TEN HOUSE PLANTS FOR THE WINTER.

E. L. TAPLIN.

THE chief requisites of success in the winter care of house plants are sunshine, moisture, uniform temperature, and cleanliness. It is not wise for the cultivator to be too ambitious; one cannot produce all the effect of a varied conservatory in one window, and any attempt to do so will result in disastrous failure. When I say moisture is an indispensable requisite to success, I do not mean that the soil should be waterlogged, nor should the pot stand in a saucer of water, unless it is an aquatic plant. I mean that the atmosphere should be moist, and here we encounter the greatest of all difficulties in the culture of house plants. Both stove and furnace produce a dry heat, and this is more or less trying to all plants. Where possible, it is well to stand a pan of water over the stove or furnace; the evaporation is very serviceable. If this cannot be done, the only plan is to water frequently, but discreetly. Gas is also very trying to plants; even where there are no perceptible fumes, the light frequently causes the flowers and buds to drop off. When we are arranging for the comfort of our floral pets it is well to recollect that we ourselves require sunlight as much as they, and it is hardly wise to entirely block up the only sunny window in a room during the dark winter days. A stand or window box is always preferable to the numerous shelves we so often see shutting out every ray of sunlight. For these reasons, plants noticeable for fine foliage rather than for flowers may be specially recommended since they require less sunshine.

We must give first place for beauty and ease of culture to Ardisia crenulata, a plant little known among amateur growers, though becoming popular as its virtues are becoming known. It is a sturdy-growing, shrub-like plant, with shining, ovate, dark-green leaves. In August or September it bears small, inconspicuous, greenish-white flowers. These are followed by bunches of berries, which, as they mature, turn bright red, resembling, in size and appearance, the Mountain Ash. These berries last the entire season, keeping their beauty, in fact, until a succeeding crop is ripe, so the plant is never without them. The effect is really beautiful, so bright and Christmasy. The plant does well in an ordinary living-room, with regular watering, but it must not be waterlogged, or stand in water. The leaves may be sponged once a week, and it will keep its brightness in a northern window where there is little or no sun. This plant is a charming decoration for the dinner table; in fact, it is infinitely desirable in every way.

Another universal favorite is one of the fan palms, Latania Borbonica, like the Ardisia, noticeable for its easy culture and readiness to respond to very little attention. In its tropical home it attains a large size, but in house culture it grows slowly, so it is many years before a plant is too large. Its foliage has such a clear, healthy, look, apart from its handsome form, that it makes a striking ornament with an air of tropic suggestiveness. Its culture is similar to that of the Ardisia, and, if in a light room, it will do without being directly in the window. During the Summer it will do nicely outside.

The Climbing Asparagus (Asparagus tenuissimus) is not yet very familiar, but it is a charming thing and may be highly commended as a window climber. Nothing short of a hard frost or the absence of water for two or three weeks will discourage it. It climbs and twines like smilax; but the foliage is fine and feathery, like common asparagus, only more so. It does well in a room heated by a stove, does not harbor insects, and, in short, is a botanical paragon.

Another more familiar climber is the old-fashioned German Ivy, so-called by the rule of contrary, I suppose, for it is not an ivy, and does not hail from Germany. However, it is a rapid grower of very pretty habit, and is usually of more easy culture than Ivy proper.

All lovers of house plants are familiar with the large-leaved Begonia Rex. Its robust habit and handsome, vari-colored, metallic leaves justly make it a favorite. Like the palm, it is an excellent thing for city houses where there is little sunshine. Of course, if grown in a gloomy locality it will only flower weakly, and will not be as richly colored as when in good sunlight, but it will do better than most plants and is attractive under any circumstances.

Another member of its family, Begonia rubra, is equally desirable, being the most attractive of the plain-leaved varieties. The long leaves are a bright, shining green: the large flowers, profusely produced, are a brilliant red. It is a very free grower, easily propagated, and if sponged or syringed in addition to the ordinary watering, is very cleanly in its habits.

Most growers of house plants are familiar with the ordinary abutilons, sometimes called bell-flower, but very few grow the trailing variety, A. Mesopotamicum. It is a charming little thing, throwing out long, trailing branches. The leaves are smaller and more pointed than those of the ordinary variety, beautifully variegated with gold; the little, bell-shaped, dark-red flower has a besom-like clapper of black stamens. It is as easy to grow as others of its class, but it requires a good sun to bring out the variegation of the leaves.

For those desirous of profusely flowering house plants nothing is better than the Chinese primrose. It can be kept continually in bloom from November till May, and the blossoms form a whole gamut of color, from pure white to deepest crimson. They are of easy culture, requiring little attention save in watering. They must not grow actually dry, though here, as everywhere else, the cultivator must be warned against over-saturating the pots. A great advantage of the primrose is that it is very rarely infested by green-fly, or similar pests. Under the same circumstances as the Chinese primrose, we may grow its modest little yellow-flowered English cousin, though a living room is rather too warm for it. The frail English flower, however, is always rather spindling under our alien skies.

Cyclamens are good house plants, and may be readily grown, flowering profusely. It is well to notice in purchasing, however, that one should get plants of good constitution; many growers seem to have a very sickly strain, with worn-out vitality. In the very beginning of September plants should be repotted, shaking all the old earth off, and giving new soil; the crown of the bulb should be left uncovered.

For those having rooms rather cool than otherwise, violets are charming, but it is useless to attempt them in a very warm place. They will flower profusely during the Winter in a temperature of from 45° to 50°, and their beauty and fragrance make them most desirable. Of single varieties the Czar is very fine; it is large, dark purple, and very fragrant. The Neapolitan is the best double variety. With all house plants frequent sponging or syringing of the leaves may be advised as a preventive of red spider and similar pests. But it is well to reiterate that in every case one must water with brains; no amount of printed instructions is equal to a little personal discretion in this case. Discretion, enthusiasm and energy are the three graces of horticulture and they cannot fail to bring success either to professional or amateur.

THE FLOWER GARDEN.

WILLIAM FALCONER.

DON'T neglect the keeping of the garden, because the season is advanced. A clean and tidy garden with little in it is prettier and more cheerful than a well stocked garden full of dead flower stems, scattered leaves and sticks and overgrown with weeds.

HARDY PERENNIALS.—Fountain-leaved, Maximilian's, multiflorus and several other decorative sunflowers; Curtis's, lævis, and other showy asters, some boltonias, purple rudbeckias, mist-flower, red and white Japanese anemones, lance-leaved coreopsis, Seibold's sedum and some others are still in good bloom. Cut over phloxes, loosestrife, bee balm and other plants that have done blooming and whose leaves and stems are fading. Save the stakes you had supporting larkspur and other rank growers for another year's work. If you wish to make any alterations in your borders next Spring, mark now the places of fraxinella, butterfly weed, platycodon, gypsophila and Japanese anemones, as they die down to under ground and start late in Spring, and nothing is left above ground to indicate their places in Winter.

SELF-SOWN SEEDLINGS.—Any amount of self-sown seedlings are scattered among the borders. Lift and plant close together to stay over Winter what kinds you wish to keep. They will mostly consist of hollyhocks, Canterbury bells, fox-gloves, Sweet Williams, coreopsis, larkspur, speedwell and Deptford pinks. Hollyhocks and Canterbury bells will be grateful for the protection of a cold-frame or at any rate a mulching of leaves, sea thatch or evergreen branches.

ANNUALS.—Spring sown annuals barring zinnias, globe amaranths and marigolds are almost all past, but a goodly show still remains of gaillardias, asters, marigolds, stocks,

Drummond phloxes, zinnias, mignonette, candytuft, pinks, coreopsis, balsams, scarlet sage, larkspurs and petunias of June and July sowings. Poppies or eschscholtzia sown in September or October bloom in Spring earlier than those that are sown in Spring, still sowing annuals in Fall for spring flowers is hardly worth bothering with.

TENDER PLANTS.—After the first nip of frost we may have a week or two of fine weather and dahlias and other flowers forget their wounds enough to bloom again quite cheerily. But the woeful look presented by half killed plants cannot be compensated for by the few flowers they may, for a little while longer, continue to bear. Cut them over, save their "roots" and tidy up the place. Cut back abutilons, lemon-scented verbena, lantanas, fish and rose geraniums; shake away the earth from the roots, and put them into the smallest pots into which you can conveniently crowd them. Have a young stock of coleuses alternantheras, iresines, double petunias, geraniums and the like. Don't save scarlet sage, centaurea, golden feverfew, vinca rosea or nierembergia as you can get up a better stock from seed next Spring than you could from cuttings.

THE LAWN.—Now is the time to make repairs. Where bumps occur reduce them, where there are hollows skin them and fill them up. You can lay sod anytime before the middle of October; later the sod may not get fastened enough to escape displacement by frost. You can also sow seed before October; later the seedlings might hardly be strong enough to escape being winter-killed. You can make the smoothest kind of lawn by preparing your ground now—subsoiling, enriching and leveling it. Then let it lie in that condition over Winter; in Spring unfasten the top a little, then firm and level the surface equally, sow the seed, rake it in lightly, and roll heavily but smoothly.

TREES AND SHRUBS.—Remove suckers and stem sprouts and destroy all tents of caterpillars. You can now see the dead wood, but you cannot very well see it in Winter, therefore this is the time to cut it out. Cut the roots at three to six feet off from the stem of all the large trees you intend transplanting next Spring, the trees will recover the loss considerably before transplanting time and can be moved with much greater certainty of success. Transplant evergreens. Deciduous trees and shrubs may also be transplanted as soon as they lose most of their leaves. Fall planting is safe enough in well sheltered places, but in bleak and exposed places spring planting is to be preferred.

THE CENTURY PLANT.

THERE are very few plants more effective in certain positions than the Century Plant or Agave, whether we employ the plain or variegated-leaved. Its stately beauty, massive growth and readiness to be satisfied with almost any soil or situation, and the little care needed to Winter it, render this plant a general favorite for out-door cultivation. It will stand several degrees of frost without injury, and may be taken up in the Fall and placed in the cellar, where it will require no further attention if only its roots be covered. Though called "Century" Plant, its period of blooming depends entirely upon the culture given it. In greenhouses it will sometimes bloom when 10 or 12 years old, while if used as a garden plant in a climate where it needs Winter protection, we doubt if it would ever bloom. In green-house culture or in its tropical home the flower stem sometimes grows from 20 to 40 feet high, bearing a great number of yellowish flowers, then the plant dies. But many little plants form about the base of the main plant, which are easily propagated. The Agave is really an Amaryllis, and the name aloe by which it is often called is confusing. The true aloe is a lily, blooming yearly. It is from this that the well-known purge is obtained. But we desire chiefly to call attention to the beauty of the American Agave as an ornamental plant, and to the position in which it is seen to the best advantage. Our picture, Fig. 377 (p. 661), which we have re-engraved from our able contemporary the London Garden, shows, better than we could explain, just such a position. Low-growing, herbaceous plants are seen beside it, and in the back-ground a vine-clad birch. On the left of the walk are palms intermingled with evergreen shrubs and low-growing trees.

Horticultural.

NOTES IN THE GARDEN.

THE FLAGEOLET BEANS.

LAST Spring a writer in the RURAL spoke of the Flageolet Bean as being an excellent shell bean, but worthless for snaps. This is quite true of the Green-seeded Flageolet, but not of the red and the purple-seeded sorts of that name. Why they should be called by the same name is a mystery. There are no two beans in the whole list more unlike in every particular, aside from both being bush beans, and both very good shell beans. The red and purple sorts are very nearly alike. The former has sometimes green and sometimes yellow pods the green-podded being nearly if not quite identical with the Canadian Wonder.

OTHER GOOD BEANS.

Low's Champion, a red, round-seeded dwarf bean of the "Cranberry" type, is one of the earliest, most vigorous, healthy and prolific beans I have ever grown, and is an invaluable variety for the market garden, both as a snap and shell variety. Fully its equal as a snap bean, a little earlier, and with a golden pod is the Golden Prize, an enormously prolific sport from the common yellow-eye bean. In every way, as an early market snap, it equals the favorite Ferry's Golden Wax, but, unlike it, is entirely free from spotting. Among pole snaps the Mont d'Or is the best, being very early and prolific, excellent in quality, and quite free from disease. For a late snap the Long-podded Kentucky Wonder is most excellent. The Dwarf Mont D'Or spots so badly as to be worthless. As a succotash bean none is superior to the speckled Cranberry or "horticultural" pole bean. There are many varieties of this type. The one I have selected as best is very early, and very productive; the pods as handsome as a flower with their rich carmine stripes. All the dwarf varieties of this bean spot badly with me.

SQUAW CORN.

Connecticut's model agricultural secretary, T. S. Gold, hearing that I was in search of the "Indian Blue Corn," most kindly sent me, in in the Spring of 1885, an ear of corn, about half of the kernels of which were a bright china-blue and the other half milk-white. I planted each color separately, and noted during their growth that the foliage of the blue corn was of a much darker green than that of the white. This encouraged me to think they might be distinct varieties, which could be easily separated, and although the mixture showed in both lots, there were in one several entirely blue and in the other many entirely white ears. This year I have planted a patch of each, and feel assured that in a few years each will come entirely true. Mr. Gold wrote me that he obtained this corn from the West, but it is a true flint corn, very early and very dwarf, but with large ears, having much the appearance in the field of the Marblehead Sweet Corn. I am hoping that the white variety will give us a good Northern hominy corn. Nothing could be whiter, nor anything bluer than its mate. I have been kindly favored with "blue" ears from various localities, but nearly all of them were of a dusky "blue-mixed" shade. Mr. Gold's is "true blue," and would be a decided acquisition where corn ears are in request for decorative use.

Newport, Vt. T. H. H

THE VEGETABLE GARDEN.

COLD-FRAMES.

I am now preparing the cold-frames for winter vegetables. They are of the common size, taking 3x6 feet sashes, and of length to suit the number of sashes. Some are permanent fixtures, and made of 1¼ inch pine plank; others are temporary arrangements put up for winter work and removed in Spring.

THE SITUATION in which they are placed is warm and sheltered, sloping to the south and southeast, and protected on the north and west sides by buildings and close wooden frames. But November is early enough to put up these fences. A warm and sheltered situation is of very great importance, because frame crops should have a good deal of sunshine and ventilation in Winter, otherwise they will spindle or rot. Besides, in warm, sheltered places frames do not need nearly so much covering in severe weather as they do in open, exposed situations.

SOIL.—For ordinary crops I fill up to within some six inches of the top in front and eight or nine inches at back, using rich loamy soil with lots of finely-rotted manure in it.

KIND OF CROPS.—Cabbage, parsley, spinach, lettuces, radishes.

CABBAGE.—I shall sow Early Jersey Wakefield out-of-doors about the 20th or 24th of this month; then when they are three or four weeks old, transplant them into the frames about two inches apart each way. During Winter I shall put on the sashes in the case of hard frosty weather, and when the thermometer indicates 20 degrees or more of frost I shall add a little additional covering in the way of wooden shutters, straw mats, or some "thatch"; also cover up and tilt up the sashes at the same time in the case of wet or snowstorms. Don't coddle up the plants, but always ventilate them freely in favorable weather.

THE NEMAHA BLACKCAP. From Nature. Fig. 376.

CAULIFLOWERS may be treated in the same way as cabbages, except much more tenderly in Winter, for they are not so hardy. But I have never had very good luck with fall-sown cauliflowers; they mostly "button" in Spring. But with those sown in hot-beds in early Spring I have had good success.

PARSLEY.—I sowed parsley in frames, in rows nine inches apart, about the first of August. It is now up nicely, thinned a little and shall yield me my best crop in Spring. It does not run to seed so soon as the older roots, which I transplant into the frames in September and October. I am transplanting these now. I lift part of the last spring sown crop, shorten the tops and roots and plant with a dibble, as I would cabbage. From this I cut from December till April. Our present out-door crop will give us lots of parsley till December. In order to be able to cut parsley every day in Winter we have to completely exclude frost, but this is easily done by a thick covering of straw mats kept dry by light wooden shutters over them. For general family use a box filled with plants and kept in the cellar usually gives parsley enough.

SPINACH.—From the middle to the end of September I sow round and prickly spinach in warm places out-of-doors, in beds, each containing six rows a foot apart. In November over these I fix board frames. Even with no other protection than the sashes I get a vast deal more spinach from under these frames than from the same amount of unprotected plants. On account of field mice it is unsafe to mulch the plants with anything.

LETTUCES.—For winter work I prefer and use Tennis Ball—a small, pretty hardy, solid-hearting kind. About the middle and again the end of September I sow broadcast out-of-doors, then when the seedlings are two or three weeks old transplant them two inches apart into cold-frames. These lots give me stock enough for my succession plantings in hot-beds in Winter and cold-frames in early Spring. Treat them just as you would cabbage plants in frames. Earlier sowings, also those sown in the middle of the month, give me hearting plants in cold-frames up till New Years, or later. These are set out nine inches apart each way. Hearting plants should be kept warmer than stock plants.

RADISHES.—Sow in cold-frames in September and the first part of October, after that a slight hot-bed is needed to grow and root them quickly. W. FALCONER.

Long Island, N. Y.

THE NEMAHA BLACKCAP.

IN May of last year, Mr. C. A. Green of Clifton, N. Y., sent us several plants of the Nemaha blackcap. The best canes are now, one inch in diameter at the base and about nine feet long. It is as late as the Gregg, though commencing to ripen before. The berries are firm, borne in close clusters and are of good flavor—far better than the fruit of Gregg. The seeds are rather large and the berries have some bloom. On June 19 we picked some of the largest blackcaps from this variety, that we have ever seen. How much of the size was due to a favorable season can not be estimated, since this is the first year of fruiting. As to hardiness, we can only say that it has not thus far been injured in the least. We deem it for the Rural Grounds superior to the Gregg in every way. Our illustration, Fig. 376, shows an average cluster of fruit.

REMARKS OF MR. GREEN.

The Nemaha originated with Hon. Robert Furnas of Brownsville, Neb. As I remember, he found it growing in some fence corner. His claim for it was remarkable hardiness. We have fruited it here four or five seasons. It has passed through some severe Winters, and our location is about the worst in this State for winter-killing. It has proved much hardier than Gregg with us. One Winter the Tyler, growing by the side of Nemaha, was injured much more. We have all thought the quality of Nemaha superior to that of Gregg, but this season it was no better. Nemaha resembles the Gregg, and many of our friends write us that they can see no difference. If they get a hard Winter they will discover, by the dead canes of Gregg, the dividing line.

Clifton, N. Y.

MY GOLDEN QUEEN RASPBERRY

Has shown itself to be of good quality—I think fully equal to Brinckle—and in firmness is much more desirable than some of the red varieties; but it is not as firm as Cuthbert. It has grown remarkably strong canes, and if it proves to be hardy, will be a great acquisition. Brinckle's Orange is by far too soft for market purposes. For my family use I keep a small patch of both it and Pride of the Hudson growing by the side of a wall. They need no other protection in this latitude. D. E. H.

Hampshire Co., Mass.

SALT AND PEPPER FOR THE CABBAGE WORM.

THE cabbage worms in my garden were very destructive this Summer, but going over them twice, at an interval of a few days, with a mixture of salt and pepper, put on them pretty thick, killed the worms and did not injure the cabbage. WM. G.

Menominee, Mich.

Farm Topics.

CORRESPONDENTS' VIEWS.

SUCH a list as the RURAL has just published of the Congressmen who worked and voted against the Oleo Bill is useful for reference, and should appear in every agricultural paper in the country. If the farmer wants his interests looked after, he must elect men to Congress who are in sympathy with him. If he allows other trades, crafts and professions to put a party ring in his nose and lead him whithersoever they will, he can rest assured that they will lead him out of his own good pasture and turn him into the briar path of rumination, to browse on the thistles of humiliation and chew the bitter cud of remorse.

Morrisonville, Ill. F. G.

HOUSEWIVES have an intense disgust for all house insects like roaches and ants. They can see these creatures and witness their work. The little "mites" are equally injurious, yet they are so small as frequently to be invisible to the naked eye. Not long since a lady

sent us a sample of her Graham flour. We found it contained a large number of two species of mites, one of which must have been invisible to those who have not the keenest eyesight. Hardly one housewife out of a thousand would have detected the strangers. Most would have gone on making bread from this infested flour, without thinking that every loaf entombed hundreds of these little creatures. "Where ignorance is bliss, etc." I do not know that cooked mites would prove unwholesome food, but neat housewives would rather be at the trouble of frequently scrubbing and refilling the flour boxes than to know they were setting before their family this "mity" bread. C. P. GILLETTE.

Lansing, Mich.

I PLANTED the cantaloupe with stable manure, the muskmelons with a compost of night soil, and the watermelons with stable manure and cotton-seed meal. The muskmelons were best. I have never found any northern corn to do well the first season; it takes two or three seasons to get acclimated. C. C. W.

Mobile Co., Ala.

THE feed mill which I secured as a premium gives universal satisfaction. I had it at our fair, and drew first premium.

Fluvanna, N. Y. H. A. WHITTEMORE.

I HAD a piece of land very full of weeds. I plowed a part of it in the Fall for a fire-break. The rest I burned over the following Spring, then plowed it, and planted the whole field to corn, and seeded it to grass the next Spring. To-day you can see to the very edge of the fall plowing. It is well set in grass and no weeds. The spring plowing is full of weeds and little grass. W. I. R.

Burlington, Ky.

IN every neighborhood that I have ever lived in there has been a farmer who always bought second-hand tools just because they were cheap. At every auction he would invest in a lot of old truck just because it sold for a small sum. It is needless to say that such a man always makes a cheap, second-hand farmer. All his store room is filled with a lot of old trash that nobody can use. G. M.

Randolph, Vt.

THERE are in this country thousands of what I may call accidental farmers. They are men who from sickness or accident have not been able to succeed in other vocations. They read about the comfort and independence of farm life and sell what they have and go to the West to get a piece of land. They know no more about the land than the land knows about them. The living for the first year or so comes so hard that many of them become disgusted and drift away into something else. Those who persevere, keep out of debt and study the methods of their successful neighbors come out all right. It takes grit to make a living under such circumstances. The worst of it is that people think farming is so easy that when they come to find out just what it is they feel sick. J. I.

South Creek, Neb.

I KNOW farmers who fully expected to get rich at selling soap. They answered some of those advertisements where people are promised $75 a week at home. They got an answer stating that for $5.00 a recipe for making a valuable soap would be sent. Some farmers are foolish enough to think they can compete with a soap factory. They send the money and make some soap, but they can't begin to make it for the price at which ordinary soap is sold. I know of several instances where this thing has been tried. The soap is good but it is absurd to suppose that a farmer can make it as cheaply or as well as a manufacturer who has everything to work with. Better let the soap business alone. Indeed a farmer seldom makes any money by meddling in outside matters. A successful man devotes all his attention to his legitimate business.

Hamilton Co., Texas. L. MCCARTY.

WHAT is a man with a large, worn-out farm to do with his manure? My farm is very poor and my quantity of manure is limited. I make all I can, but there is not half enough to go around. The usual custom here is to put all the manure on to a few acres and let the rest of the farm go. That's the only way we can get any decent crops, but I would like to improve more of my farm. It is a question of putting all the manure I can get on to a few acres, or of scattering it over a large area and raising less per acre. K. H. C.

Bristol Co., Mass.

I AM picking superb strawberries, second crop, nearly as large as first crop—Cumberland Manchester and Sharpless. Hansell and Crimson Beauty did nothing early in the season, but are now loaded with fair berries. For the first time in my observation a cane of blackcap that bore a full crop is now bearing a second crop at the points. It is not a new cane.

Clinton, N. Y. E. P. P.

Farm Economy.

THAT MANURE QUESTION.

HENRY STEWART.

Lessons from 30 years' experience; how plants feed; manure piled up and spread out; saving volatile fertility; application of manure to grass land; and to plowed land; plowing in manure; heat in the soils; leaching of manure in the soil.

MR. O. S. BLISS has, in a late RURAL, very ably argued that manure question from the side of surface application; but as I look at it from 30 years' use of manure—in some of which manure cost me $27 per car-load of 10 small tons—I think his premises are very much at fault, and so misled him. It is a most important question, because thousands of farmers are buying manure as I have done, and every farmer is interested in getting all he can out of it, so as to increase the yield of his crops as much as possible. Therefore I submit the results of my practice and the conclusions reached by a careful study of the science of manuring. I speak only of those crops which afford a choice of methods, such as grains, roots, potatoes, etc., and not of grass, which must be top-dressed, except at the first seeding.

Manure must be either fresh from the yard or stable or be well decomposed. Now, which of these conditions is the best in any particular case? Fresh manure is coarse and contains much undecomposed litter and the manure itself is raw and not fit for plant food excepting so far as it is soluble. Plants feed only by their roots, and absorb nothing but what is dissolved in water. But manure decomposes, and in the course of its decomposition gives up to water whatever becomes soluble in the process of decay. This process of decay goes on only when the manure is moist, for no chemical action takes place in the absence of moisture. When fresh manure, then, is spread upon grass land it begins to decay under "the free action of air and water" as Mr. Bliss truly observes. If this manure were constantly moist and rain was falling frequently, the manure would slowly become soluble and the soluble portions of it would be washed into the ground and down to the roots. But this is not the case, and when the manure is dried by the too free action of the air, then as it decays it gives off carbonic acid and ammonia, both free and in the evaporated moisture; these are lost in the air. When, however, the manure has been in the heap in the yard during the two months from February to April, it will have decomposed there under the action of moisture and heat much more than it could have done upon the surface of the field, and when spread in April the first rain would not only dissolve out of it the soluble portions, but would beat down the half decayed remainder into the grass, where it would be sheltered from the too free action of the air and would be saved from waste.

The heap of manure will *not* lose anything by evaporation and fermentation; and it *will* gain something from the atmosphere. A heap of fermenting manure is undergoing rapid decay and is being prepared for use as plant food. If it is neglected—I admit—it will lose considerably; but this neglect is not an element in the question. We are supposing every care that the good farmer can exercise is taken to avoid loss. Then, if he mixes plaster with the manure, as he should do, this will catch and hold everything—ammonia chiefly—that might escape in the watery vapor which is driven off in the form of the steam which we see escaping from manure heaps in cold weather. Moreover, manure cannot catch anything from the air, as Mr. Bliss suggests, excepting the oxygen which causes decay; on the contrary, it is giving out all the time it is decaying on the surface; and if there is any "trap" at all about it, to catch anything, it is the soil, as I shall presently show. For these reasons I would not spread manure upon even grass land until it was as much decomposed as possible, and most fit for food for the plants.

Now, as regards the application of manure to plowed land, the question becomes broader and deeper. Mr. Bliss says, "plowing, harrowing and cultivating the soil till doomsday will not convert a single particle of manure into plant food." This is an error. Porous earth is a disinfectant, and is used in earth closets and as an absorbent in stables solely because it will and does convert decomposing animal and vegetable matter into plant food, and this truth, and this property of pulverized soil, are the key to a sound solution of this question of plowing in manure. All porous substances are most effective oxidyzing agents. Everybody knows how rags or sawdust saturated in oil will heat and burst into flame in warm weather, and this is only an example of the same property which renders fine earth or sifted ashes so useful in the earth closets.

Now, when manure is left on the surface of the ground, as I have shown, there is a waste of most valuable plant food; but there is and can be none when it is plowed in the soil, and the more the soil is pulverized and made loose and porous the more plant food is developed from any organic substance in it, and even inorganic substances are also affected by this oxidation and by the carbonic acid which is liberated in the decomposition. When a farmer plows in the manure as it should be done, it lies in alternate layers with the soil, and these are set on edge, sloping with the surface 45 degrees or more, as the plowing may have been done. It does not then dry out but is kept moist; the sun's heat warms the soil and the dark manure absorbs the heat, and under the influence of the warmth and the moisture and the oxidizing effects of the pulverized soil, a vigorous chemical action begins, and never ceases. The "free action of air and water" circulating in the soil quickly decomposes the manure, and this in its decomposition dissolves the silicates of potash and soda and lime and the phosphates of these minerals in the soil, and thus not only is it converted into plant food but it actually converts mineral matter into plant food. Therefore it is not a "gross mistake"—friend Bliss—to cover manure with earth, as I hope I have been able to satisfy you.

There are some other points in the remarks of Mr. Bliss which I can scarcely refrain from noticing, although I am trespassing upon space and the patience of the readers. The heat of the soil is one point. Now, the total amount of heat in the soil during the year is far greater than that of the air and the surface of the soil. Porous soil absorbs a large quantity of heat from the sun during the day and holds it during the night. The soil may freeze on the surface for an inch or several inches, and yet maintain a temperature of 55 or 60 degrees below the frozen surface. This relative difference is constant. On one occasion of an early frost, which damaged my corn crop, the soil six inches below the surface marked 80 degrees on the thermometer, and this heat had been retained from the previous warm, bright day through the cold night.

The leaching of manure through the soil is another point that should be noticed. This is a common error. Porous substances, especially soil, have a remarkable affinity for solid substances in solution, and filter them out of the descending water most effectively. I had once a manure cellar in the sandiest of sandy soil, and all the liquids from a cow stable over it, which ran into this cellar for several years, failed to discolor the yellow sand more than three inches down. I have filtered the dark liquid from this cellar through a tube with eight inches of clear sand in it, and the water came out clear, free from odor and without any apparent taint. The same may be said of the soil. Moreover, there is a physical law of matter known as the law of diffusion, by which heavy carbonic acid is diffused through the greatly lighter air up to the highest elevations, and the heavy salt is diffused through the lighter ocean to the surface. This law prevails in the soil, and if one will scatter 600 pounds per acre of salt in a field of mangels, as I have done, and see it disappear in the soil, and fear it is gone—leached—out of reach, he will by and by be pleased to see it come up, when the soil dries, as a white crust on the surface where it is brought up by the moisture diffused in the soil. No, soils do not leach, unless the water is in great excess, and then the water escapes almost pure into the drains, carrying off only nitric acid so far as is known—and not all of it—from the soil. No farmer need ever borrow trouble about the manure leaching out of the bottom of his soil.

A MANURE PROBLEM.

THE manure problems in late RURALS call to my mind a case I noted a short time since. I visited a friend in Somerset Co., N. J. He is a good farmer of 40 years' experience. Last May he planted quite a large field to corn. The soil is a strong loam and the situation so high that water could not stand upon the surface. The field is of uniform fertility and a good clover sod. Before plowing, he hauled from the yard and spread on a part of the field coarse manure, at the rate of 10 loads per acre. He then plowed the entire field and upon another part of the same spread well rotted manure at about the same rate as before, and then harrowed until the surface was in good planting condition. Since planting, the corn has been so well worked that a man can convey the weeds of the entire plot under one arm, and yet, strange as it may appear, the corn is best by all odds where there was no manure. Who can explain?

Kingston N. J. J. P.

Field Crops.

JAPAN CLOVER AGAIN.

IN the RURAL of September 11, it is stated that "J. W. W., of Macon Co., N. C., who advertises Japan Clover (Lespedeza striata) and other seeds for sale, and writes about them to several papers, is a fraud, etc.," and it is further stated that "this Japan Clover is worthless," and that "Walker's puffery of it is absolutely false." Now, though the party alluded to, in writing "to several papers," may have managed to get considerable free advertising, you may rely upon it that the Japan Clover itself is no fraud, neither is it "worthless," and all that was said of it by J. W. W. in the RURAL of August 28, has proved to be literally true in this section. Some ten years ago I procured from North Carolina a bushel of the "dirt" that was scraped up where the Japan Clover grew, and which was said to contain the seed. This was seeded according to directions on an acre in the middle of a 60-acre field, and it was stated that it would spread all over the field, and afford excellent grazing, all of which has turned out to be true, for that and Bermuda Grass were the only green grasses during the severe drought of 1885 in a standing pasture in grass for 15 years, and they both afforded excellent grazing when the other grasses were all dried up. I consider Bermuda Grass, as well as the Japan Clover, both to be valuable in all standing pastures; but the Japan Clover now seems to be pushing itself all through the Bermuda sod, and to be smothering that out. The Japan Clover starts early, and by July and August (when other grasses are failing) it forms a heavy, dense sod when grazed, and blossoms about September 1, having a small blue blossom at the foot of each leaf, and it affords fine grazing until it is killed by heavy frosts; but then it starts again the next Spring, spreading out more and more every year. It will grow and form a sod on the thinnest land, and even in the roads, and on galls and naked places where nothing else will grow, and on good lands, when not grazed, it is said to grow tall enough to cut for hay, and to make excellent hay in Lonisiana, where it is used for this purpose. The seeds are saved, and were advertised for sale last year, and a party here purchased a bushel (12 pounds) at $8, and express charges, and sowed them this Spring with the view of making hay and saving the seed.

The plant is said to have started in Charleston, S. C., (just before the war) from seeds found in a cargo of Japan tea, and has now spread itself, where it was never seeded, as far south as New Orleans and as far north as Virginia. It grows along the roads and highways and in all uncultivated fields, and no one seems to know whence it came, or how far it will spread. Mr. Edwin Montgomery, the editor of the Southern Live Stock Journal, considers Japan Clover "one of the most valuable grasses in the South," and Professor Massey, of the Miller School of Virginia, when on a visit to the Mississippi Agricultural College (where he first saw the grass) endorsed all the editor had said of it. No grass can be "worthless" that will cover the road sides and barren fields with a carpet of green and afford good grazing where nothing grew before.

I have no axe to grind and no seed for sale.

Spottsylvania Co., Va. A. P. ROWE.

REMARKS.—This plant comes from the eastern part of the Eastern Continent, and was first found near Charleston, S. C., about 40 years ago. Mr. H. W. Ravenel tells us that it was about 1867 that it first attracted the attention of farmers as a new forage plant. The farm papers were filled with accounts of it, and it was represented as a godsend to the impoverished fields of the South. It was surely to take the place of clover and grasses. The most extravagant accounts were printed. But it was killed by too much praise. It was finally found to possess *some* value, it is true, and we were scarcely justified in saying it is "worthless." On poor, sandy soil, it has a branching, procumbent habit and affords but little pasturage. On rich, damp soil it will grow as high as 18 inches. But the leaves are very small and the stems too hard and woody to make a desirable hay. Mr. Ravenel writes us that he thinks it will never be of any value as a crop to be cultivated like clover and the grasses, and we know of no better authority. It was Mr. Ravenel that named it "Japan Clover," though, of course, it is not a true clover. Neither is it a perennial. It is an annual. Now, the above is the most that can be said of this plant, and we hope it is not again to be puffed up only to disappoint all who purchase and sow the seeds.—EDS.]

The Herdsman.

STOCK NOTES FOR OCTOBER.

HORSES.

"No foot no horse;" therefore a most important point in caring for horses is to keep a

close watch upon their feet After the Summer's work is over, the shoes should be taken off and replaced, and the sole leveled and smoothed; but the frog should be left untouched. Unless the horses have work on stony roads or soil, it will be advisable to leave them unshod for a month or two, which will be a great help to the new growth of the hoof. Turn horses whose feet are at all tender into a damp pasture, or on to a smooth grass field. Keep a close watch on the smith when he is shoeing your horses. The horses are the owner's and not the smith's, and the smith for the time being is the owner's servant, and subject to his orders. Farmers should study the horse's foot and know all about it, and then compel the smith to shoe their animals according to directions.

Because the hard work of the Summer is over, it is not therefore right to cut off the horse's feed. This is poor economy. There will be hard work yet to be done, and the Winter with its rigors will soon be at hand. Full feeding should, therefore, be continued.

Galls of harness or collar that are found slow to heal, may be washed with warm water and soap, and then touched with a solution of sulphate of copper in water. A most excellent ointment for galls and wounds in horses is made as follows: Four ounces of clean lard, one ounce of Venice turpentine, one ounce of spirits of turpentine, one-half ounce of acetate of copper; melt and mix and stir until cold. Apply after washing and drying the part.

Give the horses half a peck of ripe apples every day; they will do them more good than a bucketful of medicine.

Brood mares that are in foal should get a feed of bran mash at least twice a week; it will be helpful to the foal, and the foal is to be considered as well as the mare. Gentleness with the mares while carrying the foal makes good-tempered colts.

Young colts should now get regular rations of oats. The first year of the colt's life makes or mars it. A quart at a meal twice a day is enough for the present, but as the colt grows, the ration should be increased to double this quantity by the end of the year. The colts should now be put in training for future usefulness. The first lesson is to use him—not break—never break a colt but train him—to a halter, and have a strong one so that he cannot break it and learn a bad habit. The next lesson is to accustom him to be curried and brushed, as the first coat is being shed; this should be done now when it will be agreeable to the young animal.

CATTLE.

Fattening beeves should now be pushed ahead. Pasture is deficient in nutriment, and should be made up by giving meal. The more finely the meal is ground, the better it is digested. A mixture of two bushels of corn, one bushel of rye and one bushel of new process linseed meal makes the best of fattening food for cattle.

Keep feeding cattle well carded and brushed, and see that the feet do not stand in filth. Sawdust or leaves make the best litter for keeping these cattle clean, and where straw is used it will pay to cut it fine in a fodder cutter to absorb the manure as well as for the sake of cleanliness. Salt is a true digestive agent and should be given regularly to fattening cattle.

Where a bull is kept for breeding purposes, he should be made to earn his keep by work. It is all the better for his usefulness, make him docile, takes the mischief out of him and keeps him healthy. Get a one-horse tread power and a fodder-cutter and a mill and make the bull do all the work of this kind.

Cows should be kept up to their milk by generous feeding. There is no profit in keeping any animal idle. An excellent ration for cows at this time of the year is two quarts, morning and night, of a mixture of the finest corn meal and bran in equal parts. This should be given to all cows that are necessarily kept on poor pasture, and a handful of salt should be given with it.

The present keenly felt necessity for an extra supply of fodder or a late pasture, should lead to efforts to supply the need another year. Cows should be on full feeding all the time, or they are losing money for their owners, and between grass and hay is usually a hard time for them.

The tall, coarse weeds which grow in the pastures at this season should be cut out; they are perennials and the easiest way is to sever the roots by a push with a heavy chisel fitted to the end of a light pole like a fork-handle.

To prevent the prevalent diseases of calves and young cattle give them some concentrated nutritious food. Linseed or cotton-seed meal furnishes an effective antidote to that common disorder black-leg (or anthrax fever), which carries off the best calves and yearlings in the Fall.

Pure water is indispensable for the health of all the farm animals, and at this season it is often scarce or wanting. Ponds and slow swamp streams are now full of decaying organic matter and are not fit for animals to drink from. Foul water of this kind may be purified by throwing into it a few shovelfuls of clay or clayey soil. Muddy water is far preferable to stagnant, putried water full of rotten vegetable matter.

Prepare the sheds and stables for winter occupation, and make everything close and tight. Put the windows in good order, but do not neglect sufficient means for ample ventilation. Pure air, if cold, warms the animal by furnishing oxygen, while warm, impure air chills it by affording too little of this warmth-giving animal fuel.

Nothing else will so help the flowing milk of the cows just now as a pailful of ripe apples chopped into slices and sprinkled with the meal. It pays as well to grow apples for the stock—if not better—as to grow roots in the field.

SHEEP.

Sort out the poor sheep. An old ewe will not pay to winter over and have her die in the Spring. The most profitable flock is that in which there are no wethers over two years old, and no ewes more than six. A good ewe that rears a good lamb every year will pay to keep as long as she will live, but this is an exception to the rule which should guide the shepherd.

If you have a few dollars to spare, buy a small flock of sheep with them, and make them a pen and a yard and procure a good thoroughbred ram two years' old to run with the ewes. Keep an account of the cost, and if everything goes right the money will be doubled by next Summer.

Cull sheep should be put up and fattened at once for slaughter or market. If the teeth are bad, feed fine meal with the best clover hay, and give the sheep a run in the day on a good meadow. Sheep do not hurt a meadow as cattle do. On the contrary, they leave behind them as much as they take and more if they get some meal and bran every day. Count the flock every time you see them; you may save a sheep by it. Give salt regularly once a week at least. The best plan is to keep a lump of rock salt in a field or yard and put a small roof over it to save it from washing. When sheep have a discharge from their noses, rub some pine tar on their lips that they may lick it off. It is the best antiseptic and tonic for them. Never give sulphur to sheep, although they need a supply for the nourishment of their wool and the yolk, which is necessary to keep the wool in good condition, yet it is better given in the form of food or some sulphate. Cabbage, turnips, rape and mustard supply sulphur, and a little sulphate of soda mixed with the salt will furnish the needed supply in the safest manner. Regularity in the management of sheep is most necessary to success. Reserve a few fat wethers and lambs for the domestic supply.

SWINE.

A dry bed is one of the secrets of success in the management of pigs; cleanliness is another. Avoid overfeeding store pigs. Crowd the fattening hogs; full feeding now fills them up and the final finish will take less food. After much labor and worry of mind, it has been concluded that pigs do best on dry, whole corn; and that it does not pay to grind their food, and much less to cook it. Some roots or vegetables are an excellent help in the feeding of pigs. One cabbage given twice a day will be found very acceptable and useful.

If young pigs are desired in March, the sows should be served in this month. This is an excellent time as a second litter may then be had in August. As a sow will rear two broods in a year as well as one, and her greatest value is for breeding, this period should not be permitted to pass by. All pigs should have exercise, even those that are fattening should not be kept shut up in a close pen. A roomy clean yard in which they can root as much as they feel inclined to should be provided. Manure yards and cellars are not healthful places for them. Young store pigs need clover hay when the pasture is used up, and if it is cut for them and mixed with the meal it will be eaten without waste.

POULTRY.

Provide a warm place for the young pullets, and the late brooding hens which will soon be in laying condition. Feed them well; wheat and bran mash with some rape seed are excellent food for them. Keep down vermin by the liberal use of crude petroleum; a barrel of it in the poultry house, used to paint the walls, nests and roosts, will keep all sorts of vermin at a distance. To encourage egg production, the following food will be found effective; potatoes baked and given hot from the oven—keep the smallest ones for this use—corn lightly parched and given warm; mush of ground oats and bran; put a little salt and some ground black pepper in this—chopped cabbage; and fresh bones broken small; no broken crockery or oyster shells will be needed, but a supply of fine gravel should be laid in for later use. Find a warm place somewhere for the late broods. They will make good spring chickens.

SORGHUM CANE FOR COWS.

For the past three or four years I have fed sorghum cane to milch cows. The cane was run through a cutter, and sprinkled with bran and cotton seed meal. I am satisfied that I got more and richer milk by its use; in fact, the more sorghum I feed the less mill feed I use, and I still keep up the yield of milk. I keep grade Jerseys, and sell butter in the Mobile market. C. C. WARREN.

Mobile Co., Ala.

The Poultry Yard.

GAME FOWLS.

I think the real merits of Game fowls are generally over-looked. Most people seem to think that Games are fighters and nothing more. Many farmers place the Game rooster among poultry about as they place prize-fighters among human beings. If they could study the breed a little closer their opinion as to its merits would improve. My best hen for an egg market is a cross between a Game rooster and a white Leghorn hen. The laying qualities of the fowl thus produced are not impaired, and the eggs are richer and more salable in a fancy market. It has been generally acknowledged that eggs from the Games are the finest known. For eating qualities nothing beats a cross of the Game rooster or a Brahma hen. There are plenty of poultry yards where a Game rooster could be used to great advantage. S. H. R.

Orange Co., N. Y.

HIGH-PRICED EGGS.

Speaking of dissatisfaction with high-priced eggs, I want to know what luck others have had. I bought some Wyandotte eggs and hatched five. Three of them are no more Wyandotte than I am. I have had bad luck before. My opinion is that it does not pay to buy eggs. I think it far cheaper in the end to buy good birds. You know then just what you are getting. I have heard one good breeder say that he had a great mind to stop selling eggs and confine his sales entirely to chickens. He has to make so many clutches good, and there is so much dissatisfaction that egg selling doesn't pay. I would like to encourage the buying of chickens. I think such a practice would give far greater satisfaction. A. L. W.

Queens Co., N. Y.

HENS IN THE STUBBLE.

My hens make money for me out of the wheat stubble. No machine can be made to cut so carefully that all grain will be saved. The hens find this waste grain far easier than a man can. It will pay to get enough wire fencing to make a portable coop and move it about from one place to another. In this way the whole field can be fed over. The hens will pick up their own living, and the manure will far more than pay for the trouble.

Ionia Co., Mich. H. C. J.

Miscellaneous.

LAW.

Secretary Gold's remarks under "What Others Say" in the last issue of the Rural New-Yorker with regard to the ownership of fruit on trees some of the branches of which overhang a neighbor's land, are good not only in morals but also in law. Even when the roots extend into the neighbor's land and draw nourishment therefrom, the tree is the property of the person on whose land the trunk stands, and he is entitled to the whole of the fruit, and if he is forcibly prevented from reaching over and picking the fruit by his neighbor, he has valid grounds for an action for assault and battery. Cases of this kind have been won in New York as well as in Connecticut. In the New York case (Hoffman vs. Armstrong) a lady stood on the division fence and tried to pick the fruit from the branches overhanging a neighbor's land; the latter forbade her, and when she persisted tried to prevent her, and in doing so did her personal injury for which she recovered $1,000. If the fruit falls into the neighbor's land, it does not become the property of the latter, but there is doubt as to whether the owner has a right to go on the land to recover it, as decisions on this point vary in different States. If done quietly without causing any damage, the courts would most likely sanction it. The adjacent owner, however, has a right to cut off the branches or roots of trees up to the line of of his land, but even then if he uses them, he must pay the owner whatever they may be worth. Where the tree stands on the boundary line, both parties own the tree and fruit in common, and neither can cut it without the consent of the other or remove the part on his land if thereby the tree is injured. In this connection, it may be remarked that every land owner has a right to plant as many trees as he may desire on his own land although they may make the house of a neighbor, near the boundary line, dark, damp or unhealthful. A landowner is responsible for damage caused by a poisonous tree extending over a neighbor's land, should cattle be poisoned by eating it, but if cattle trespass on his land by breaking through a feuce, and get at such a tree, he is not answerable.

Here are two recent decisions of the Courts which are of interest to farmers:

Exemption from Taxation.—A society which educates men in the diseases of the domestic animals, and the proper mode of dealing with them, and which inculcates the duty of humanity to them, is a benevolent and charitable institution within the meaning of a statute exempting such institutions from taxation, according to the decision of the Supreme Judicial Court of Massachusetts in the case of The Massachusetts Society for the Prevention of Cruelty to Animals *vs.* the City of Boston.

Discrimination in Rates.—A common carrier, such as a railroad, may make discriminations in rates based upon the quantities of goods sent by different shippers, but he cannot charge a higher rate to shippers who refuse to patronize him exclusively, according to the decision of the United States Circuit Court for the Southern District of New York, in the case of Menacho *vs.* Ward. The State laws differ on some points in various States; but a decision of the United States Courts is of wider authority, and, if confirmed by the U. S. Supreme Court, is applicable everywhere.

CATALOGUES, ETC., RECEIVED.

How to Fatten Fowls Artificially. Pamphlet from Brockner & Evans, 28 Vesey St., New York.—This firm manufactures the celebrated Gavuse-Martin Stuffing Machine, and this pamphlet is devoted to a description of the machine and the rations employed in producing the remarkable feeding results which French poultrymen have obtained. French poultry is famous. The birds that so delight the epicures of Paris are fattened by this system. The birds are stuffed; that is, semi-liquid food is forced down their throats and they are left to digest it as best they can. The birds are confined in revolving coops; a tube is placed in a bird's mouth, when by touching a spring a quantity of food is pushed down the throat. The food consists of barley and buckwheat mixed with water and milk. The process is interesting and in France, at least, very profitable. Those who desire to know more about it should send for the pamphlet, which will be mailed for 10 cents.

Missouri Grain Drill. Pamphlet from the Genesee Valley M'f'g Co., Mt. Morris, N. Y.—This drill is praised as the lightest, cheapest and best in America. It has been well tested in sowing all kinds of grains and fertilizers. The feeders are inclosed in iron cups beneath the box. The quantity sown is regulated by the speed of the feeders. It can be varied from three pecks of wheat to three bushels of oats. The fertilizer attachment works admirably. Many excellent testimonials are given. Besides this grain drill, the company makes an excellent land roller, the "Little Tiger" fanning mill, Fargo's patent harrow tooth, and a water wheel.

Osgood's Scales.—Catalogue from Osgood & Co., Binghamton, N. Y.—Those of our readers who want to read an essay on scales, that will fully explain their making and working, should send for this catalogue. It is well written, and makes the whole thing clear. It pays to have reliable scales on the farm. Many farmers have saved the cost of a pair in two seasons by weighing their stock and wool at home before it was taken to market. When merchants and agents know that there are scales at the farm they are pretty apt to give square weight. There are hundreds of ways in which the scales can be made useful. Those who think of supplying themselves will do well to examine Osgood's catalogue. There are thousands of these scales in use, and from the numberless testimonals received it is evident that they have given great satisfaction. If, after studying this pamphlet, the reader does not understand the mechanism of scales, it is his own fault.

Racine Windmill. Pamphlet from the Winship M'f'g Co., Racine, Wis.—A concise and readable pamphlet, in which the merits of

this mill are well set forth. The Racine Mill is self-governing, and can be safely run during a gale if necessary. It is made of two sizes, 10 and 12 feet diameter respectively. It has a sectional wheel composed of six and eight fan sections. The motion is communicated by means of wrist-pin and pitman. The work throughout is strong and simple. The mill will be sure to please. A full description of the mill, as well as directions for erecting a tower, will be found in the pamphlet. Besides the windmill, the company have for sale pumps, tanks, and Eureka sand-papering machines.

FEED CUTTERS.—Circular from Dick's Agricultural Works, Canton, Ohio.—These cutters can be used in cutting hay, straw, cornstalks and silage. The corn-stalk splitter attachment is an excellent feature. A series of steel bars are arranged so as to cut at right angles to the cutters. These split and crush stalks or cobs as they are cut off by the knives, so that the feed is turned out much finer than when they are not used. These bars can be easily removed when it is desired to cut hay or straw. The cutters are made of various sizes with knives from 7½ to 16½ inches in length. The larger sizes when run by a suitable power are capable of making 1,800 cuts per minute and cutting 4,000 pounds of feed in an hour. We believe these cutters to be simple, durable and effective. Farmers will be greatly pleased with them.

DANIELS' PLOW SULKY.—Circular from E. B. Daniels & Co., Havana, N. Y.—The time has gone by when a plow sulky is to be considered one of the luxuries of farm life. It is fast becoming a necessity wherever any great amount of plowing is to be done. The Daniels' sulky is claimed to be the lightest and simplest made. Any plow can be attached in five minutes' time so that the farmer who desires different plows for different kinds of work can easily adjust them to suit. The foot lever is an improvement to be found only in the Daniels. By means of this lever the plow can be firmly held in the ground, slightly raised so as to skim the earth, or pulled entirely out of the ground. The superior qualities of the Daniels Sulky are well set forth in the circular. Those of our friends who think of procuring a sulky are advised to send to the manufacturers for catalogues, etc.

What Others Say

WHEAT EXPERIMENTS.—Bulletin No. 8, of the Purdue University (Lafayette, Ind.), gives an account of wheat experiments. Forty-nine differently named wheats were sown side by side under conditions as nearly identical as could be secured, September 24–6 with a two-horse drill at the rate of one bushel per acre. Again the Velvet Chaff takes the lead, yielding nearly 30 bushels to the acre, weighing nearly 63 pounds to the bushel. This is described as a bearded variety with medium-strong straw and large, red grains ripening June 27. All of the Velvet Chaff wheats which we have tried are late, and the heads mildew and the kernels shrivel. Diehl-Mediterranean yielded 17 bushels, weighing 60 pounds. The straw was "very strong," the grain large and red. It ripened July 2. Two different kinds called Michigan Amber were raised. The first yielded 23 bushels, (60 pounds), ripening June 28, strong straw, smooth head, medium red grain. The other yielded 26 bushels (60 pounds), ripening July 1, stroug straw, smooth head, large, red grain. Of the latter only five per cent. was winter-killed; of the former 40 per cent. Martin's Amber yielded 21 bushels (59 pounds) strong straw, smooth head, medium amber grain, ripening July 2. Landreth (Armstrong) yielded 21 bushels (58 pounds), ripened July 1, smooth, medium, amber grain. Lancaster yielded 26 bushels (60 pounds), ripened July 1 weak straw, bearded, large red berry. Red Russian yielded 28 bushels (62 pounds), ripened June 30, medium stroug stem, smooth head, medium-sized, red grain. Clawson yielded 25 bushels. Smooth Velvet Chaff yielded 24 bushels (62 pounds), ripened June 27, medium strong stem, large, red berry. This name has been changed to Dietz Long Berry. The other varieties were remiss in yield or strength of straw, so that we need not speak of them. Professor Latta's comments are:

"The Velvet Chaff continues to hold first rank, everything considered. It was this year the most prolific wheat grown at the College, and is as hardy as any. The straw is not strong enough to stand well on very rich soils. The heads, which are strongly bearded, curve downward when ripe, making the sheaves quite bushy and difficult to shock compactly. The Finley, Fultz, Haines, Hedges' Prolific, Hickman and Hicks Wheats resemble each other in general characteristics of both straw and grain. They are not hardy here, but when the Winter is not too severe they produce a good yield. The grain is too small, however, to be generally popular with millers. Tasmanian, Tuscan Island, Mediterranean and Lancaster are apparently identical. They closely resemble the old Mediterranean.

Diehl-Mediterranean and Lovett are two very different wheats that might be mistaken for each other when standing in the field. Both have very stiff straw and erect bearded heads with bronze chaff. The former has the larger head and produces a large red kernel, while the grain of the latter is a medium-sized amber. The Diehl-Mediterranean produces fine wheat in favorable years, but is seriously damaged by hard Winters. The Lovett is unworthy of further cultivation here. The German Amber and Red Russian are good, smooth wheats, resembling Fultz when standing in the field, but they are later, more hardy, and produce larger and heavier grain. Smooth Scott, Emporium Scott, Badger, Rogers and Zimmerman are all smooth wheats of the Fultz type, both in appearance and hardiness. Martin Amber and Landreth are almost identical in characteristics. They have not sustained, here, the high reputation they have borne elsewhere. They are not hardy enough to endure severe Winters. Being rank in growth and late to mature, they are not well suited to the dark, rich soils of this section of the State. Arnold's Gold Medal, Arnold's Hybrid, Champion Amber, Dott and Michigan Wick are not considered worthy of further trial on the College farm.

Eight pecks of seed per acre gave the highest yield, viz: 35 bushels. Seven pecks gave 33—six pecks 33—five pecks 32—four pecks 30—two pecks 28. Rolling after seeding did no good, though the soil was not dry. Mulching increased the yield over three bushels to the acre. Our own mulching experiments have increased the yield far more than that, but we have no exact figures to present. But the mulch must be applied evenly and to do this by hand is a tedious, costly work. Prof. Latta says that "Kemp's manure spreader will scatter the straw quickly and evenly, and those who own, or can get the use of this implement can mulch a few acres of wheat with slight expense."

HOME INDUSTRY—HAPPY THOUGHT.—Liquor dealers pay on an average $2 per gallon for whisky, says the Farm and Fireside. One gallon contains an average of 65 drinks, and at 10 cents a drink the poor man pays $6.50 per gallon for his whisky. In other words he pays $2 for the whisky and $4.50 to the man for handing it over the bar, to say nothing about the water added. Now, if you must drink, make your wife your barkeeper. Lend her $2 to buy a gallon of whisky for a beginning, and every time you want a drink go to her and pay her 10 cents for it. If she waters it 25 per cent., which will be none the worse for you, by the time you have drunk a gallon she will have $7.12, or enough to refund the $2 borrowed and have a balance of $5.12. She will be able to conduct further operations on her own capital, and when you become an inebriate, unable to support yourself, and shunned by respectable persons, your wife will have money enough to keep you until you get ready to fill a drunkard's grave.

SEASONING BUTTER WITH BRINE.—Prof L. B. Arnold, in the Farmer's Advocate, says that those who are far enough along to appreciate the difference between gathering butter in a lump and handling it in granules, are in a position to adopt brine seasoning with ease and a decided benefit. All that is necessary for such a butter maker to do is, when his butter has come, to wash in the usual way with water till it will run off clear, and then immerse the granules of butter in brine as strong as it can be made, and let the butter lie in it the same length of time he would to have the salt dissolve if he had used dry salt, and then press the butter into a solid form, avoiding any friction or grinding motion while reducing it to a solid. In this way all working will be avoided, and the butter be left in the best possible condition for keeping, and have an even color and the highest flavor it is possible for it to have. By lying in strong brine a few hours, the brine will draw the water out of the butter the same as dry salt would.

Brine makes a more even distribution of the saline flavor than dry salt can do, and it will relieve the butter of any excess of water it may contain just as readily as salt in crystal can, and put it in readiness for packing in as little, if not in less, time. It is by some supposed that salt strikes into butter better if dry salt is worked into it than it would if covered with brine, but this is a misapprehension of the action of salt—neither salt nor brine strikes into butter at all. There is no affinity between salt and butter or brine and butter. In seasoning butter with either, the salt remains in butter only as a foreign body mechanically mixed. When butter is gathered in the churn in granular form it is never overchurned. Pounding it after it is in a lump or large masses is what overchurns it. In seasoning with brine it is never overworked, as it is not worked at all. Working out buttermilk and working in salt is where the overworking comes in. In fact, working at all is overworking, because, by the improved method, none is needed, and breaking the grain of butter by grinding in crystal of salt is also obviated by seasoning with brine.

Notwithstanding the many advantages of this mode of treating butter, it will, no doubt, be a very long time before every butter-maker will adopt it. But the new way is so much easier and better that time will fetch them in, and the butter-worker and seasoning with dry salt will become a thing of the past.

WHENCE DO PLANTS GET CARBON?—The agricultural editor of the N. Y. Times says that the value of carbonaceous matter for manure is generally supposed to be very little or nothing. The prevalent opinion is that plants get all the carbon they require from the atmosphere. The same opinion was once held with regard to nitrogen, but it is now stoutly denied. It may soon be the case with regard to carbon. Many intelligent and experienced students doubt the truth of the prevailing opinion now, and many farmers are using carbonaceous substances, such as the waste from sugar factories, with positive and marked benefit to their soil. Practical farmers have long believed that bulk in manure had a considerable value, and certainly the bulk of a manure pile consists of carbonaceous matters. This subject is of present interest, because at this season the farmer who is intent upon enlarging his stock of manure is laying plans for gathering the leaves, swamp muck, and other carbonaceous materials, and he may take encouragement from the fact that he is probably supplying to his land in these bulky matters precisely what it requires, and those materials which will supply to the soil a large quantity of carbonic acid as the product of their decomposition.

WHAT SOME CONSULS SAY.—Consul Dufais, of Havre, in a report to the Secretary of State, describes an abortive attempt on the part of commercial and labor organizations to secure a repeal of the decree against American pork. He concludes: "All hopes of a favorable change have been abandoned by those opposed to the prohibition. The millions of ill-paid and scantily-fed laboring men of France will continue to pay tribute to the French hog-raising farmer."

Consul-General Bonham, at Calcutta, reports that it is reported in Calcutta that the cattle plague, known as the "rinderpest," prevails in parts of the Madras Presidency. Large quantities of baled hides (dried and salted) are shipped from India to the United States. He calls attention to the question of cattle in America contracting the disease from the importation of these hides.

Commercial Agent Smith, of Mayence, says that the new American method of drying fruit, which gives such satisfactory results, especially with apples, is susceptible of being developed into an important industry.

MULTUM IN PARVO.

ONE kind of apple tree will yield you bushels of apples, while others will yield you pecks. Which are you going to choose if setting a new orchard? Or don't you care? In the latter case, order of one of the tree agents that visit your locality. In the former case, study the question. Consult the catalogue of the Am. Pom. Society; consult the nearest successful apple grower .....

MR. J. B. OLCOTT has once seen purslane in Hartford (Ct.) markets, but never on a farmer's table since he was a boy. Yet if the tender shoots are cooked like spinach, he says purslane is really one of the most wholesome things the round globe furnishes .....

THE Superintendent of the N. H. Ag. College gives the N. E. Farmer an account of an experiment in rapid butter-making by the centrifugal process. At 4.30 A. M. the help commenced milking. At 7 the butter was on the table at the college farm house.....

"THERE was an unusual amount of gambling in connection with the New England Fair," says the above journal.....

MR. T. B. TERRY'S (Ohio) experience with Farly Ohio Potato is much like our own. He thinks it is the earliest good potato in cultivation, for which reason as well as because its vines are very dwarf, it should be grown in rich soil with the hills nearer together than with other kinds..... .....

JUST to show what can be done with early-cut clover and timothy hay, Mr. Terry says in the N. Y. Tribune that he has a team of rather heavy work-horses that for almost five years have lived on this diet. They have not had during all this time one single feed of grain of any kind. They are fat as seals, and at no time during the five years could one see a rib on either of them. To take a big load of potatoes or wheat to market, twelve miles, is but play for them. Mr. Terry would like to see a farmer keep horses in any such order on late-cut hay and do the same work that his do. His practice certainly shows that there is great virtue in properly dried grass and clover. Many a time has a visitor said to him, "I cannot keep my horses so fat as yours on hay *and* grain." He is confident that he has made hundreds of dollars by cutting his hay at just the right time.....

DON'T flatter yourself, says Mr. Holmes, that friendship authorizes you to say disagreeable things to your intimates. On the contrary, the nearer you come into relation with a person the more necessary do tact and courtesy become. Except in cases of necessity, which are rare, leave your friends to learn unpleasant truths from their enemies; they are ready enough to tell them.....

MR. HOLMES also says that insanity is often the logic of an accurate mind overtasked. Good mental machinery ought to break its own wheels and levers, if anything is thrust among them suddenly which tends to stop them or reverse their motion. A weak mind does not accumulate force enough to hurt itself; stupidity often saves a man from going mad.....

PROF. BUDD (Ames, Iowa) thinks the Champion the best very early grape for his climate. Next in order, he says, is Moore's Early. "It is a treasure rapidly coming to the front in the Northern States".....

MR. CHARLES GIBB of Canada (Abbotsford P.Q.,) says in the Montreal Horicultural Society's Report, that Weir's Cut-leaved Maple is a curiosity; an eccentric, wayward grower. The foliage of the young growth is so slender and so deeply slashed as to be scarcely recognizable as a maple. He recommends it as a tree thoroughly suited to his climate.....

THE Cut-leaved Maple (dissectum) is a variety of the Norway. The leaves are so deeply cut as nearly to divide them in three parts. At the Rural Grounds this tree is highly prized for its compact growth, ample foliage and comparatively slow growth. It is a grand tree for small places.....

MR. GIBB praises very justly the tree we have often talked of in our columns, viz; Schwerdler's Maple, also a variety of the Norway. The leaves as they unfold in the Spring are a brilliant crimson, and this bright color continues until they are fully grown. They then grow darker, finally changing to a dark green. The leaves of this tree before becoming a dark green are sometimes nearly black for a few days with us..... ....

ANOTHER curious variety is the Curled-leaved or Cucullatum. Mr. Gibb mentions that the leaves curl into strange forms while the structure of the leaf and the way in which the veins radiate are remarkable .....

MR. GIBB justly praises the Imperial Cut-leaved Alder. It is an aerial tree. Its light, feathery foliage and dark, dull color give it an expression peculiar to itself. It is quite hardy in Lower Canada.....

YOUNG'S Weeping Birch is a tree that might well take the place of the Kilmarnock Willow. Top-grafted it is just as pendulous and more graceful and, what is important, longer lived.....

G. W. WILLIAMSON, of Mattituck, L. I., says that he has used sulphate of ammonia, bone-black, and muriate of potash, to the value of $20 per acre, for a number of years, and finds that his crops grow better and better every year..... ....

FOR the last two years he has put it on broadcast for potatoes, and says it saves labor and produces a more uniform crop, although somewhat slower in maturing. .....

HE goes over his potato ground with a horse rake before beginning to dig, and says it cleans the ground and materially lessens the labor of picking up the potatoes.....

IN the potato-growing sections of Long Island the Burbank seems to be the favorite. So far it has been freer from rot, and has commanded better prices than other varieties....

Everywhere.

TRANSCONTINENTAL LETTERS.—LXV.

MARY WAGER-FISHER.

A Spring visit to Monterey; the "old town;" the environs; the "Drive;" wheat and fruits; malaria; the question of irrigation.

SUCH readers of the RURAL as have read my letters from the outset, may recall those descriptive of the Santa Clara and adjacent valleys and the charming towns that lie in them between San Francisco, Monterey and Santa Cruz. We made the trip in August, 1884, when the hills and fields were brown from the rainless Summer; but when the time came for leaving Central California it was the last of March and we could not well resist

the temptation of seeing this beautiful valley in the green of the year, and so paid a second visit to Monterey and its environs. Of course, everythiug looked at its best. The road lay through unbroken stretches of wild flowers. The Coast Range on one side and the Santa Cruz Mountains on the other rose like undulating ramparts of amethyst on either hand, while the beautiful Bay of Monterey, flecked with pleasure and fishing boats, never looked lovelier. We went first to the Hotel del Monte with its 126 acres of lawn—a stretch of unparalleled beauty, where it is more Summer in December than in July, and where the world seems to bloom unceasingly—pelargoniums trained up like trees, a single stalk six to ten feet high; great Live Oaks bent in most picturesque forms, often the top of the tree as near to the ground as the first branch—a place where there is more beauty, comfort, elegance and cleanliness than can be had elsewhere in the world in the same length of time and for the same money. I think no one can recall this incomparable place without a feeling of enthusiasm that borders on daftness!

We spent four days there and saw many things that escaped us on our previous visit. The old town of Monterey abounds in curious interest, and is still intensely Spanish—an indolent race and largely intermarried with Indians. We drove one day through the town with great difficulty, because of the ditches and gulches in the streets, which kept our horse in constant fear. There are rows of old adobe houses, long and low, with curious tile roofs, most picturesque with vines and flowers, but probably dark and unwholesome to live in. I went into the old graveyard, where the wooden inclosures were painted black and white and the stones bore Spanish inscriptions, past the old Mission church, with its pretty pale-yellow front and bell tower at one side, the priest's house with an arch of whalebones over the gate and the walk up to the door paved with whales' vertebræ! Near a bridge on one side of the town is a high wooden cross, marking the spot where the old priest Juniper Serra, who founded so many missions in California, landed June 3d, 1770. Very near are the remains of Fremont's Fort and the whale fishery—two whales having very recently been caught—and numbers of great casks about to hold the oil.

One day, immediately after breakfast, we started out for a tramp of seven or eight miles, coming back loaded with wild flowers—new to us—and sea mosses and shells. Two miles or more of the way lay through a wood, with blue Iris blooming in the greatest profusion. On the beach and banks the eschscholtzia shone, and in the sand sprawled pink and yellow abronia; but the flowers were legion and in great variety. We were beyond the bay, and the sea rolled in on the large water-worn rocks superbly, a sight one never tires of. Sea lions sported in the waves. On stretches of sandy beaches between were washed up mosses, sponges and brilliant shells in furrows. The laddie took off his shoes and stockings, waded in the water, and poked his toes in the sand as fine and white as driven snow, to his heart's content. All in all, it was the finest, delightfullest day I ever had on the seashore anywhere. But I got so tired upon our return in crossing a space of sand dunes, where we sank into the sand to the tops of our shoes, that I gave out completely and lay down on a bed of sand for a half hour's nap in which I recruited—and a most comfortable bed it was, with the warm sunshine for a covering.

On another day we went on what is called "The Drive," a beautifully made road along the beach, and through woods and meadows; the greatest interest in this drive is centered in the cypress trees—the only surviving remnants of an almost lost race—unhappy with many youthful descendants planted all over California now. But these old trees, blown and beaten, may be for centuries, by the sea storms, are the most frantic, wierd and ghostly tree forms possible to imagine, and have made the Monterey cypress famous in the annals of tourists.

Of the many beautiful flowers which we collected in this drive, none delighted me more than a species of gooseberry growing in the woods—one solitary shrub—Ribus speciosus I think. The leaves were cunningly arranged along the top of the twigs and branches, while from the lower side depended long, brilliant red flowers, like a fringe of glowing fuchsias.

While all the country about Monterey is very beautiful, it is not especially valuable for its productiveness. In the valleys, however, the soil is excellent, and in a state of high cultivation—a great wheat and fruit region. But unless the San José scale can be speedily disposed of, the fruit grower in California will not line his pockets with gold. I have heard of a "lady bug" which is being introduced with some hope of exterminating the pest, as it feeds upon it.

Anent malaria, I must modify a statement made in the RURAL, that no chills and fever exist in California within a hundred miles from the sea coast. There is malaria everywhere in the State where there is irrigation; in the towns where the sewerage is defective, and in many places within but a few miles of the sea coast. There is malaria—chills and fever—in certain quarters of San Francisco and Oakland, both of which are immediately on the salt water. None of the valleys are good for consumptives or "rheumatics"—the former should take to the mountains, but I haven't the smallest idea where the latter should go. I found the winter climate charming—none better could be desired; but the long, rainless Summers which seem to suit the exigencies of farming where water for irrigation can be had, seem to me intolerable.

The most important question before California farmers is that of irrigation—of riparian rights, which breed endless trouble and which can only be settled by State interference and control. Upon the water supply depends the future development of the State—the possibilities of small farms and small farmers.

RURAL SPECIAL REPORTS.

Alabama.

MOBILE CO., September 16.—Our early Spring was unfavorable to all early crops, very cold and backward. On April 6 and 7 we had frost, something I have never seen before in a residence of 16 years. Since then the season has been fine for all crops. Corn crop heavy; sweet potatoes began to come in about a month ago, supply now abundant and cheap. The past two weeks have been fine hay weather, and farmers generally have saved most of the early crop, but late cornfield clover remains yet to be cut. Sugar cane promises to be an abundant crop, being now eight to ten feet high and heavy on our piney woods land, where well manured. Sorghum cane is now ripe and ready for grinding. I find this cane has some advantages over the tropical cane, as the cane worm does not trouble it, the fodder is good feed, and more seed can be made to the acre than of corn, and I find it good food for all stock and chickens, and it can be got out of the way before potato digging time. Turnip fields and cabbage beds are growing finely.

C. C. W.

Illinois.

CHICAGO, Cook Co., September 20.—I have passed over in daylight the country from Buffalo to Cleveland and from Cleveland to Chicago, and all along the line of that route I could see the marks which the dry weather had left. First, the pastures were very short; and, secondly, the usual amount of fall plowing had not been done. But as I drew near Chicago the conditions were more favorable. The ground had been plowed, and the newly-sown winter wheat was just beginning to come up. Extending my travels 150 miles south of Chicago, the same state of things existed, but only in a more exaggerated form. The pastures were shorter, the effects of the drought more visible, and scarcely any plowing was done at all. In fact, hardly a furrow has been turned in the last 14 days in Illinois, Missouri or Kansas, but very fortunately, however, after a drought extending over 57 days, this state of things has come to an end, and we have now had during the last 60 hours, with the exception of Missouri and Kansas, all the rain we need to start up full pastures, and give us feed until frost and put the ground into condition for plowing. We are doing so much better farming now, not only in the spring wheat, but also in the corn belt, that fall plowing has become absolutely necessary to successful farming, and when farmers in the Fall of the year in this part of the world are not able to prepare the ground, the outlook for spring crops, both as to acreage, quality and yield, is by no means reassuring. The seeding of winter wheat is somewhat backward. The only State which has had enough rain for fall seeding so far has been Michigan, and there seeding has for the last 10 days been more or less delayed on account of the ground being too wet. We had a slight frost in Illinois last night, but there have been no killing frosts. At least three-fourths of the corn crop of the entire country is now out of the way of a killing frost. From what I have seen and heard during the last few days, I think now that when farmers get into their crop of corn and begin to gather it the reports as they come to me will be that the crop is fully as poor in quantity and poorer in quality than has been reported. R. M.

Iowa.

MENTOR, Bremer Co., Sept. 14.—A good corn crop. Oats fair. Wheat heavy. Potatoes a failure. Flax and hay fair crops. A very dry Summer. Cattle have to be fed. Recent rains make the pastures look a little green. Corn is nearly all ripe. E. E. F.

Michigan.

SEARS, Osceola Co., Sept. 14.—This has been a very dry season—from May 16 till August 21 we have had very little rain. Since that time we have had plenty. All spring crops were injured more or less. Hay half a crop. Potatoes about the same. Oats and barley light. G. W. D.

Montana.

FRIDLEY, Gallatin Co., Sept. 14.—We have had only one frost yet, and that did not hurt tomatoes on the vines—merely nipped the top of the vines, and saved cutting back to ripen the fruit. I presume I have now 20 bushels of tomatoes in the garden, and quite a number of them ripe. I have picked ripe ones for nearly two weeks for table use. I am satisfied our Yellowstone Valley will eventually be producing plenty of corn. All it requires is to plant and attend to it. B. P. VANH.

Texas.

SHERMAN, Grayson Co., Sept. 13.—All through Western Texas the long spell of dry weather—over a year in some places—has done a world of mischief. Thousands of head of stock have perished, and others have been nearly famished and had to be sold at a ruinous price. Cattle are now selling at $5 to $5.50 per head, and the best beef stock at two cents per pound. Other stock bring only proportionate figures. Those who depended on crops couldn't raise enough to support life. Whenever I go to town on business I see plenty of covered wagons winding their way to some place where work can be found to support life. At the time when I made my crop report, corn looked fine, but the drought has made it fearfully short. The best pieces will make scarcely 15 bushels to the acre; while thousands of fields will not make as much good corn per acre as was planted last Spring, and propably the crop is better in this county than in any other in the State.

J. H. MC. G.

THE FARMERS' CLUB

ANSWERS TO CORRESPONDENTS.

[Every query must be accompanied by the name and address of the writer to insure attention. Before asking a question, please see if it is not answered in our advertising columns. Ask only a few questions at one time. Put questions on a separate piece of paper.]

QUARTERS FOR CHICKS.

G. T., W. Alexandria, O.—What is a good brooder, and how large should a building be to accommodate 700 chicks?

ANSWERED BY H. HALES.

In raising chicks in brooders it is very essential not to crowd too many in one compartment, however large. They do not thrive as well as when smaller numbers are kept in small compartments; 75 chicks in a space 6x14 feet will do well till four weeks old, when they require double the space; or, better, separate them into two compartments of the same size, 35 or 50 to each 6x14 feet, with a run outside. The runs should be partitioned off to prevent crowding the same as the inside compartments. In these last accommodations they may be reared till two or three months old, when they are large enough for broilers. The size of the building will depend upon whether it will be one or two stories, or double tiers of coops, as many breeders keep the little chicks on a second story or upper tier till four weeks old, and then bring them to the ground floor to the pens with outside runs attached. The ratio of 84 feet for 75 chicks, or for 40 when over four weeks old, should be maintained, whatever the size of the building. With proper brooders the interior fixtures are few—a drinking fountain, a food trough with wire guards to prevent the chicks from getting in to foul themselves and the food, and plenty of dust on the floor, are all that is required for each pen. If the floors are not covered heavily with dust or dry earth, a low dusting tray placed where it can receive the sunshine may be substituted. It is difficult to name the best brooder, as there are many on the market of nearly equal merits, especially of the latest designs. The best is cheapest.

TANNERY ASHES.

G. B., Coatesville, Pa.—Dr. Kedzie gives the value of an average specimen of tannery ashes as $4.50 per ton. This is a fair estimate, yet no man can give the value of any sample until he can see and examine it. It makes a great difference whether the ashes have been left exposed to the rain, or whether they have been sheltered. Such ashes would be valuable as a dressing for land occupied by peach trees or small fruits, but we could not say without seeing them whether it would pay to haul them three miles or not. It certainly would not pay to give much for them if the roads are bad or if other work can be had for the teams.

CYCLAMEN CULTURE.

W. F. Y., Shelborn, Ont., Can.—Cyclamens should be re-potted at this season. Shake all the old soil off entirely; pot in a light, rich soil, such as you would give geraniums. Do not entirely cover the bulb with soil, but leave the crown bare. Water whenever dry, but do not let the soil become sour and waterlogged, and do not let the pot stand in water. They should flower readily and profusely under this treatment.

Miscellaneous.

B. B., Farmingdale, Ill.—1. The American Chestnut fails to fill well in the West; does the Japan chestnut fill properly here? 2. Is the Prunus Simonii (Simon's Plum) free from attacks of curculio, as some claim? 3. Are cions from a dwarf pear as good as those from a standard for propagating purposes? 4. Is the original Mount Vernon Pear tree still living, and who owns it?

ANS.—1. We cannot answer this question. 2. We cannot raise plums at the Rural Grounds except by jarring the trees. Our only specimen of Simon's bore one plum which was not injured. Further we can not say. 3. There is no difference; one is as good as the other; 4. It was a chance seedling on the grounds of Samuel Walker, at Roxbury, Mass. We don't know whether the tree still survives.

H. H. L., Bainbridge, N. Y.—I got a number of settings of White Wyandotte eggs from a poultryman whom I have hitherto always regarded as honest. At least two-thirds of the chickens are colored. Some seem certainly mongrels, while others look like Laced Wyandottes. Have the chicks "harked back," or was I swindled?

ANS.—Our impression is that there is not yet any strain of White Wyandottes that will breed true. We should be glad to hear from others.

W. L. M., Clinton, B. C.—The grass sent for name is Setaria glauca—Bottle Grass. It is nutritious, but not very productive. The wheat is a very poor specimen of the Seven-headed or Egyptian. It yields well in many places as a Spring Wheat and we once carried a few plants through the Winter.

F. A. H., Beattie, Kans.—Gardening For Profit by Peter Henderson will give you the desired information. Sold by Peter Henderson & Co., New York. Price, $1.25.

"A Sub.," Shelby, O.—We do not know the character of the land about which you inquire.

A. Hatherly, Lapeer, Mich., wishes the address of breeders of pure-bred Suffolk swine.

DISCUSSION.

W. B. B., MENOMINEE, MICH.—In the RURAL of September 4th, O. H. B., of Hutchinson, Ky., asks what causes his tomatoes to rot upon the vines before maturing. My experience goes to prove that the soil is too rich. For the last few years I have put my tomatoes on the poorest soil I have had where there was no manure, and have had no trouble with rot. A tomato worm is something I have never seen here. Some of my neighbors whose tomatoes are on heavily manured ground have hardly a sound tomato.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING September 25, 1886.

W. B. Whitney, many varieties of potatoes so resemble each other that it is not safe to name them.—E. P., thanks.—F. A. B.—H. R. A.—C. H. S.—H. J. C.—H. H.—P. E.—J. W. C.—O. M. C.—P. J. B., fruit received, thanks.—T. W. D.—W. H. R.—R. P. V. H.—G. W. P. J.—J. H.—E. A. P.—J. M. O.—J. H. & S.—A. L. J.—C. A. G.—W. F.—J. A. T.—J. G.—A. L. J.—J. G. G.—E. L. T.—D. S. M.—C. A. G.—B. B.—A. J. C.—C. H. B., pear and plums received.—H. J. C.—C. A. G.—J. S. T.—W. H. P. E. A. N.—H. B.—G. W. D.—R. D. B.—A. J. M.—H. P. L.—S. C. W.—H. H. L.—G. P. & S.

Miscellaneous Advertising.

J. M. THORBURN & CO.,
15 JOHN STREET,
NEW YORK,
Beg to announce that their descriptive priced
CATALOGUE
OF
BULBS
For AUTUMN PLANTING is ready for mailing to applicants.
LILY OF THE VALLEY PIPS
FOR FLORISTS, A SPECIALTY.

CARMAN RASPBERRY This NEW Extra Early Black Cap is now offered for Sale, and is likely to work a REVOLUTION in the market growing. VERY PRODUCTIVE. Fruit of **largest size, Jet Black,** and the **earliest** *of all to ripen.* Sells at highest price. **Best** quality for family use. Also **EARHART** Rasp., a valuable novelty—fruits from June to Nov. Pot STRAWBERRIES and all best varieties Small Fruits for Fall planting. Cheap for choice stock. Circulars free. **Hale Bros.,** South Glastonbury, Conn

THE
RURAL NEW-YORKER.
A National Journal for Country and Suburban Homes.

Conducted by
ELBERT S. CARMAN.

Address
THE RURAL NEW-YORKER,
No. 34 PARK ROW, New York.

SATURDAY, OCTOBER 2, 1886.

WE can confidently recommend our readers to try a plant or so of the Earhart Blackcap Raspberry. In the way of so-called ever-bearing raspberries we certainly have never seen anything to compare with it. Even though it bore but a first crop, we should value it for its productiveness.

WE do not hesitate to state that we have had 20 different samples of Treadwell Wheat sent to us as so many new varieties. In some cases it is found in a field of Clawson, Fultz or Mediterranean; in other cases it is said to be the result of a cross! Much of this is owing to the fact that samples of Swamp, Silver Chaff, etc., sent out by the Washington Seed Dep't, were mixed with Treadwell.

THOSE in the Middle and Northern States who have not tried the Longfellow Flint Corn, should do so. The ears with us average 12 inches long, eight rows, and 60 kernels to the row. Ears 14 inches long are not uncommon. The plants in a rather poor soil grow from six to seven feet high, suckering somewhat, bearing from one to three ears. Among flints it may be called a second early, requiring about 105 days in which to mature. The rows of kernels are always straight and close together—the cob small. For a main crop flint corn we know of no better variety.

SEPT. 21. The first frost at the R. G. —a light one. Now we are ready to sow wheat—or plant it rather, since every kernel is dropped by hand in drills a foot apart, and varying in the drills from one to 10 inches, according to the quantity to be planted. We have now 100 or more crossbreeds or hybrids to plant in this way—all to be kept separate with great care; each to have its stake and name and a full record to be written in our record-book. It is very tedious work: still we enjoy it. If the way of the experimenter were altogether delightful, the market would be overstocked.

SOME farmers seem to think they can estimate the value of manure by smelling of it. Perhaps they can if they learn to discriminate between smells, but not while the idea holds that the stronger the smell the richer the manure. Sulphuretted hydrogen, found in rotten eggs and other decaying substances, is one of the worst odors, yet it indicates no particular fertilizing value. Manure may be so malodorous that a man can hardly work it, and yet be of little value as plant food. The peculiar odor of ammonia is easily detected. When that is detected about a manure pile we are safe to conclude that the manure is valuable, but that it is losing its life, and that we need to apply plaster or take other measures to hold the ammonia.

THE Bertrand Grape, illustrated on the first page of this issue, is an accidental seedling found by Mr. J. B. Jones, of Herndon, Burke Co., Ga. A report of it will be found in the Trans. of the Am. Pom. Soc., session of '85, page 17. "Bunches medium; berries medium, round, blue-black; pulp dissolving, exceedingly juicy, vinous and of delicate aroma. Skin thin, quality best. Maturity middle of August. It belongs to the Cordifolia type, of which it is perhaps the best offering brought to notice. Vine exceedingly vigorous and healthy. Fruit has never decayed or dried up on the vine—a valuable variety."

Mr. P. J. Berckmans writes us that he saw the vine this Summer and was struck with its remarkably healthy appearance. He says the foliage denotes more of the Æstivalis than Cordifolia type, and that the bunches this year are much above medium.

THE farmers of Michigan will have small business to complain about politicians if they neglect to elect Cyrus G. Luce this Fall. If they had scoured the country they could hardly have selected one who more completely represents the farm and farmer. What do you propose to do about it, Michigan farmers? Now that you have forced one of the great parties to select as its standard bearer, a man from your own ranks, do you propose to elect him or not? For years there has been a cry that the farmer has been neglected in politics, that he has been a voter and nothing but a voter. We have listened long enough to the sneering answer that the farmer doesn't know enough to fill an office, that lawyers and professional men must take care of him. Michigan farmers have a chance to prove the falsity of this answer or to add to its strength, just as they wish. Let us see what they will do.

THERE is a lull in the conflict against oleomargarine. We have won the first round and now there seems to be a general desire to wait and see how badly the enemy has been hurt. It is idle to suppose that he has been exterminated. He has plenty of life yet, but if we have forced him out of the dark, and obliged him to fight in daylight under his own flag, we have made solid progress. One thing is certain. What the farmers of this country have done once they can do again with interest. If this law does not give farmers their rights, we will have one that will, if it is necessary to defeat every Congressman who depends upon an agricultural community for his election. The sooner Congressmen appreciate the fact the more worry they will be saved. But while we are waiting, friends, let us keep busy. Let us improve the herds, improve the methods, improve the feed and improve the butter. Good butter will always be sold, and the better the butter the better the price. Taxing oleomargarine will never make a market for poor butter.

THE BEST WHEAT.

MANY kinds of wheat have been and are still offered for sale this season with the promise that by sowing them farmers may "double their crops." Our advice is to try them in a small way. In this matter the RURAL begs to say that its advice *ought* to be entitled to some consideration, for we have tried during the past ten years nearly every kind that could be procured, and have, from time to time, placed before our readers the results of our trials; and now we see some of the poorest varieties so tried lauded in the highest terms by people that offer them for sale.

When with a great flourish a "new" wheat is offered that "was found" growing somewhere or other in a field or along a hedge, the chances are 19 against 20, if not 99 against 100, that it is an old kind —that is, one that is *some*where well-known. We have raised not less than 50 different lots of wheat sent to us as crosses between this, that and the other, that we have found identical with old varieties. In several cases a correspondence with the originator (?) has revealed the fact that he didn't know "beans" about crossing wheats.

We have told our readers a dozen times within a year what kinds of wheats do best at the Rural Farm. But the fact that they are the best kinds there is no *proof* that they will succeed in Maine, Indiana or Oregon. The *only* way for a farmer to find out what varieties of wheat will "double his crops," is to obtain trial quantities of the kinds that thrive best in other places and select the best.

SWEET DISEASE.

THE health officers of this city in their search for adulterations find a fruitful field for investigation in the common candies which are in universal use. Manufacturers have been detected in using several absolutely poisonous substances, while others in common use, if not directly injurious, are decidedly unwholesome. There ought to be a war waged against impure candy until the stuff is driven out of the market. We believe it to be a fruitful source of disease. There is something absolutely filthy in the way in which much of our ordinary candy is handled and sold. Every day in the cities hundreds of pounds of it are eaten after being handled over by dirty hands and subjected for hours to the dust and fumes of the street. We have seen, in country stores, candy lying for weeks in dirty jars or in a heap in some filthy counter close to ill-smelling products of all kinds. Such candy, made of damaged sugar and starch, and colored with some cheap poison, was bad enough when fresh, but after a few months of the ordinary treatment becomes too filthy to throw away. It is strange that intelligent men will take such stuff home to their children. If they wanted to ruin the teeth and the stomachs of their little ones, they could hardly make quicker work of it than by giving this cheap candy. Children demand sweets, but it is poor kindness to gratify them by feeding disease. Honey is the purest and most healthful sweet food, and where children can have it to spread upon their bread, like butter, there will be far less demand for cheap candy. We would gladly see the candy trade spoiled by an increased consumption of honey. The health of the children of the country would be greatly benefited could such a result be brought about.

THE new Premium-List of the R. N.-Y. is available to all who send yearly subscriptions at the regular price, viz., $2.00. It is a matter of choice whether they retain the cash commission of 50 cents for each subscription in clubs of five or over, or select any of the articles from the Premium-List, which are scaled so as to allow an equivalent of from one to two dollars for each subscription, according to the arrangement which we have been enabled to make with the manufacturers of those articles.

CONTAGIOUS PLEURO-PNEUMONIA IN CHICAGO.

SEVERAL months ago a commission agent at the Chicago stock yards bought a Jersey cow, now supposed to have come from one of the places where pleuro-pneumonia was prevalent among cattle last year, and turned her in with a herd of over 100 other cows on the outskirts of Chicago. After some months of illness she went dry and was butchered and a post-mortem examination showed that she was affected with contagious pleuro-pneumonia. This is supposed to be the origin of the disastrous outbreak that at present affects between 2,000 and 3,000 cows fed at three or four distilleries at Chicago. The matter first attracted the attention of Dr. Casewell, the State Veterinarian about a fortnight ago. During the past week all the distillery-fed cattle have been carefully examined and several of them have been slaughtered for post-mortem examination by Casewell and his assistants and Drs. Atkinson and Murray, State Veterinarians of Wisconsin and Michigan, Dr. Salmon, Chief of the National Bureau of Animal Industry, and a large number of other veterinarians having no official status, as well as by several physicians connected with the Board of Health, and all unanimously agree that there is no doubt whatever that the disease is contagious pleuro-pneumonia. It is of the utmost importance that not a shadow of doubt should rest on this point, and so far as veterinary skill in this country can be relied on, no shadow of doubt can rest on the matter. A number of animals that have died of the disease and a number of others that were picked out as affected and slaughtered, exhibited, in pleura and lungs, all the indications of the disease. Among all the veterinarians who examined them there is no doubt or hesitation on this point.

Governor Oglesby and Attorney-General Hunt and the members of the State Board of Live Stock Commissioners, after a thorough investigation on the ground, have decided to slaughter all the infected cattle, as well as all those that have been exposed to contagion, numbering "nearly 3,000 head," this morning's telegram says. The loss will be over $100,000. The State has $49,000 with which it can pay for healthy cattle killed as a precaution to prevent the spread of the disease after they have been exposed to it; but it has no funds to pay for affected animals that may be slaughtered for the same purpose. It pays for sound beasts at their market price for beef or the dairy. The National Bureau of Animal Industry has $100,000 to pay for infected cattle slaughtered by its direction, with the concurrence of the State authorities; but before the present outbreak it was proposed to expend most of this appropriation in an attempt to eradicate the plague from the States East of the Alleghanies. It is probable that only a small proportion of the animals to be killed are really diseased, and the question is still undecided how to dispose of the flesh of the slaughtered beasts. The Governor and other officials wish that, after a post-mortem examination, all diseased cattle should be cremated, and all healthy beasts sold to the highest bidder. By this means a part of the great expense to the State would be defrayed, while if the carcasses were taken to the rendering tanks, the returns to the State would be insignificant. On the other hand, the stock-yard people insist that millions of dollars would be lost to the packing interests of Chicago, if the report went out to the world that beef from the infected distilleries, whether healthy or not, was shipped from that city.

In a scare like that now prevailing in Chicago, there is always a strong inclination on the part of some to exaggerate the evil, and on the part of others to belittle it. There are rumors that some infected cattle and still more of those that have been exposed to contagion, have been sold to persons in various parts of Illinois and the adjoining States, where they are likely to spread the plague. It is known that the disease must have existed at the distilleries for six months or more. Early in its course an affected cow dries up, and it has always been the custom to send such beasts at once to the shambles, hence the existence of the plague remained so long undiscovered. The stock-yardmen are still loud in the assertion that not a case of genuine contagious pleuro-pneumonia exists in any part of the country. Their business is likely to be seriously injured owing to the present outbreak, and very naturally they minimize the danger. There are reports that other States will soon schedule Illinois, and in that case the Chicago stock-yard business would be very disastrously affected, for some time at any rate.

BREVITIES.

LOVE your home; love your family.

IF you don't, run away and stay away. "You never will be missed."

HOME is the dearest spot on earth to any man that isn't crazy, or wicked, or a fool, or a victim of an abominable condition of things for which he is in no way responsible. In any case, we repeat our advice—"Run away."

OF all the varieties of Spanish chestnut probably that known as *Marron de Lyon* is the best. Its nuts are very large—as large as a horsechestnut—and it bears in two or three years.

DR. R. P. GREENLEAF, of Delaware, sends us a black seedling grape that ripens with him two weeks before Concord. The quality is good, and if the vine should prove strong and healthy it will prove a fine acquisition.

MR. O. H. ALEXANDER, of Vermont, says that he, too, finds Yankee Prolific Oats the same as White Russian. He thinks that the Welcome or White Australian Oat is somewhat different from the Badger Queen.

THE reason why the lower or white portions of the stems of asparagus are less tender than the upper or green parts is that they are older. The stems grow from the *top*, not the bottom. As the shoots increase in age, the woody fiber increases.

TRY the Frederick Clapp Pear. The fruit is fine-grained, very juicy, rich and excellent. It ripens in October. Those who want a *showy* pear in place of the great Kieffer, as well as one that may be enjoyed, will be pleased with the F. C. It has not as yet been tried sufficiently to enable us to say where it will succeed.

WE can sell our small potatoes at $1.00 per barrel at the yeast factories. Many good Western farmers never pick up the small potatoes. There is no sale for them and farmers think their feeding value will hardly equal the trouble of picking and handling. At one dollar per barrel there is no profit in small potatoes, but we can turn our work into cash, which is a great item.

WE are sorry to learn (through a private letter) that a certain railroad is about to be run through the seedling vineyard of T. V. Munson, of Dennison, Texas, our first grape authority. This may occur, it seems, before he can transplant or propagate the vines. In any case it will require three years or more before they would again bear. Mr. Munson's grape experience has already cost him dearly.

THOUSANDS of dollars are thrown away every year by farmers and their families who haven't sufficient strength of mind to resist the solicitations of the fakirs at the fairs. It is hard to understand why an association of farmers will for a paltry sum sell privileges that will permit the swindling of their families or employés out of considerable sums of hard-earned money.

IN the way of improving tomatoes, what we want is a variety that will resist rot; that will keep longer than any kind now offered for sale. It must, however, be smooth and of goodly size. We have selected tomatoes for the past 10 years with the above object always in the foreground. Before the writer, on a table in his office, is a tomato that has been there three weeks without the appearance of rot. It is shriveling the same as a native persimmon.

THE raising of turnip and cabbage seed has proven very profitable, and added materially to the income of the farmers on the East end of Long Island. One farmer near Mattituck is said to have cleared $1,200 from cabbage seed alone. Another made $120 from turnip seed raised on a small plot. The main crops in that section are cauliflowers, cabbages, and potatoes, and the raising of seed has heretofore been subsidiary to these crops, but it has proven so profitable that many farmers have gone into it largely.

LAST year with a tremendous crop of melons we did not average much over one dollar per barrel. This year with about 60 per cent. of last year's crop the price averaged nearly $2.00. Tomatoes ran about the same. Beans were lower, but sweet corn was decidedly higher. Potatoes ran small and will be a little lower in consequence, while cabbage bids fair to be higher. So it goes, a big crop cuts down prices while a poor crop sends prices up. One thing seems plain that when one depends upon a city market it pays to grow a variety, and to shift the different crops about to different parts of the farm.

Indust'l Societies.

AMERICAN HORTICULTURAL SOCIETY AT CLEVELAND.

(RURAL SPECIAL REPORT CONTINUED.)

Sensibility of plants; fruit and flower display; officers elected; a "millionaire" horticulturist; high praise for wood ashes; drainage; why potash is good in a drought.

A PAPER on the sensibility of plants, by Charles A. Green, New York, was read by the author. He thought people often forget that vines or plants are real live beings, and said their sexual characteristics prove them distinct from the rocks in being endowed with sensibility. He alluded to the recent crosses between wheat and rye, the raspberry and blackberry by the RURAL NEW-YORKER, etc., the latter producing a pomological mule, as he said, and many similar illustrations were cited in support of this theory.

Though not large, there being less than 200 entries, the fruit and flower show was attractive. It included some fine apples, grapes and peaches, and a choice collection of rare plants and flowers, the latter being mostly from the greenhouses of Mrs. Ella Grant Campbell, the lady who started on a capital of 15 cents a few years ago, and has now attained a national reputation as a floral artist. Her parasol of carnations, tuberoses and sweet peas, shown in the hall, was a unique design, winning the first prize. The collection of Mississippi apples, shown by Dr. McKay, about 25 sorts, was remarkable for the size, color and beauty of the specimens. Several of his Roxbury Russets measured 12 inches around each. He got second premium for collection.

In pears, the display of Ford & Sons, Ohio, took most of the honors. For grapes, the special prize for collection went to L. Harris, of Euclid, with single plate prizes pretty widely distributed. Caywood & Son, New York, took first and second for best named seedling, respectively with Ulster and Poughkeepsie, a small display of which attracted much attention among the Western grape-growers. R. A. Hurd, of Euclid, took first prize for plums. W. N. Cook, Michigan, for peaches. Geo. W. Campbell had 10 of his recent grape seedlings on exhibition. Some 50 varieties of grapes were shown by the Eastern Cuyahoga Horticultural Society; and a three-year-old Worden vine, bearing 48 bunches, 16 pounds of fruit upon it, was shown by Cushman & Son, Euclid, Ohio.

Though not in the regular order of the proceedings here, it may be stated that Parker Earle was unanimously re-elected president of the Society, and W. H. Ragan Secretary. T. V. Munson, Texas, was chosen First Vice-President, J. C. Evans, Missouri, Treasurer, and a Vice-President from each State. S. D. Willard, of Geneva, for New York, and J. S. Collins for New Jersey. Mr. Earle, on resuming the chair, said: "I don't know whether to thank you or not, or whether you have acted with propriety or not. In one respect at least I am not the proper person for your presiding officer. A society without financial resources, and without national or State aid, should have a wealthy president, like President Wilder, of the American Pomological Society." President Smith, of the Wisconsin Horticultural Society, was surprised. He thought Mr. Earle was a millionaire, and a little later, when money was being raised by ten-dollar subscriptions for compensation to Secretary Ragan, and Mr. Earle took five shares, Mr. Smith was surprised anew, saying: "Our president is richer than he said he was."

The second morning session opened with the reading of an important paper on "How shall we Protect our Crops in Time of Drought?" by J. M. Smith, Green Bay, Wis. He said, "We were too apt to leave our own crops entirely in the hands of Providence without using the hands and brains He has given us to help ourselves. Thorough draining is necessary. My garden contains 40 acres, having a slight slope. It is laid off in beds, with alleys between for carrying off surplus water. Beneath the alley is a tile water course for taking off the water that soaks through the soil. We have now passed through one of the most terrible droughts ever known in Southern Wisconsin, with only two light showers in June. But my cabbage roots extend from 18 inches to two feet below the surface, and they are doing splendidly. Deep plowing, and thorough and frequent cultivation of the soil, are most important. In dry weather especially I keep stirring the soil very often. Loose, mellow soil at the surface acts as a mulch, and in case of light showers the effect is almost marvelous: every drop seems to go where it is most needed. I find wood ashes of great value, not only as a fertilizer, but as a protection from drought, and I apply it freely, using 30 to 40 loads per acre. It is a great thing to hold the moisture. In May, 1885, I planted two acres of strawberries on land which had been manured for years. This Spring I applied wood ashes and cultivated the ground several times, watering a portion at times, but plants thrived best when not watered. Never saw such hot weather as during picking season, mercury went to 95 degrees, and even to 102 degrees in the shade. But in spite of that, and the unusually low price of strawberries, I realized handsomely from my strawberry patch." Continuing, he said: "Potatoes treated with ashes held out better than when compost was used. I have now 80,000 cabbages growing to the surprise and delight of everybody: nearly half have had no rain; land has been heavily manured for years, and thoroughly cultivated. But in addition I applied 100 bushels of ashes per acre."

Mr. Ohmer wished to emphasize the importance of this subject, Said he "I saved four acres of blackberries by watering and cultivation, while my neighbors lost their entire crops. I got 562 bushels of berries which brought me nearly $3,000.

A lively discussion then ensued on the subject of drainage, Mr. Smith being plied with questions from all sides. He began to underdrain nearly 25 years ago, and thought his

THE CENTURY PLANT. Re-engraved from the London Garden. Fig. 377.
(See page 655.)

father laid the first tile drain ever made in the United States. His were three feet deep, costing about $15 per acre. Members were surprised at the low cost and wanted to contract with him at once. Mr. Harrison, Ohio, had drained about 70 acres last Spring at a cost of $45 per acre. Mr. Smith's soil was loose, and tile is very cheap there. Chas. A. Green thought J. J. Thomas was the originator of frequent cultivation for drought. Mr. Caywood said it was nobody's invention, but as old as the hills Mr. Ohmer quickly replied "that is probably so, but there are more who don't know about it than who do." Caywood: "I admit the fact." Mr. Green thought ashes of no use where the soil was supplied with potash. Mr. Smith said ashes should not be plowed under deeply. Prof. Claypole, of Akron, gave a definite reason for the good effects of ashes in a drought, which seemed to surprise and please nearly every member. He said, speaking as a chemist. "The carbonate of potash is a very powerful and attractive agent for moisture: as every chemist knows, it is almost impossible to keep it dry in bottles. Hence the effect alluded to." Mr. Smith used double the quantity of leached ashes with similar results. The drainage question was again discussed at length, being shut off with difficulty by the president. The only point of value elicited was that the smaller the tile, so that it carried off the water, the better it would keep clear, by reason of more perfect flowing. In closing their discussion President Earle said Mr. Smith was one of the most successful gardeners in the Northwest. He was a theorist but never promulgated his theories until found successful in practice.

H. H.

PERSONAL NOTES FROM THE AMERICAN HORTICULTURAL MEETING.

PARKER EARLE must have a constitution of iron to endure the strain put upon him at this meeting. He presides with dignity and grace. His address was considered worthy of the man and place. It will be published in full by the American Horticulturist, Detroit, Michigan, and widely distributed on the recommendation of a committee voted to do that work.

L. B. Pierce was the leading spirit at the exhibition hall. The Ohio State Society gave $100 for premiums, and $300 were raised by local subscription. The exhibition was an attractive one, especially in grapes, apples and flowers. A floral parasol and a floral fish placed upon the reporters' table, attracted much attention. The parasol was lined with red flowers and covered with white flowers outside, nicely fringed, resting upon a base of ferns. A large stage was covered with greenhouse plants in blossom. All this from the local florists.

Matthew Crawford, of Cuyahoga Falls, Ohio, is about 43, tall and serious, excessively modest and retiring. His opinions are sought, and he is an able writer and careful cultivator. Charles Carpenter, of Kelley's Island, planted the first vines in his vicinity. He is well advanced in years and his tall form is bent, but his eyes are as bright and his face as well lit up as ever. George W. Campbell, who originated the Delaware Grape—honor enough for one man—appears as sprightly as he did twenty years ago. He has seen many changes in grape growing in his day, and is always prominent when grapes are discussed. Frank H. Leavenworth, of Detroit, Michigan, represented the American Horticulturist, Editor Myrick the Farm and Home, Mr. Hendricks the Daily Tribune and RURAL NEW-YORKER. Dr. H. E. McKay, and Professor A. B. McKay, of Mississippi, Ivan Lindley and George E. Boggs, of North Carolina, gave us some new ideas of horticulture in the South. Mississippi grows strawberries by the 100 acre patch, by methods not practised North. Her Agricultural College is a progressive institution. The high lands of North Carolina are destined to become famous for fruit growing W. H. Ragan, the indefatigable secretary, is a persistent and successful worker. President Earle could not secure a more efficient lieutenant. He is well informed and his heart is enlisted in the work. Mr. Vaudeman, of Kansas, is the newly appointed manager of the Pomological Bureau recently established by act of Congress. He is about 40, and served an apprenticeship under Dr. Warder.

President Earle stated that in 1853 Ohio had half of its surface covered with forest. In 1884 but 17 per cent. of the area remained in timber. Now only one-sixth of the surface is covered. Thus climate changes. Cold Winters are followed by hot Summers, and drought by disastrous floods. President Earle traced the growth of horticulture in Ohio from the early days when Johny Apple Seed, an interesting figure in history, preached the gospel of Christ and scattered apple seeds, which germinated and produced trees which bear fruit to this day.

John M. Smith, of Wisconsin, thinks the first thing necessary is thorough tile draining for gardening. No artificial watering is so good as rain from the clouds. If you water at all do it thoroughly, for half-way work does more harm than good. Mr. Harrison had put in 70 acres of tile this season, at an expense of $45 per acre, 3½ feet deep, two rods apart, using 80 rods of tile per acre. Professor McKey said that drains in Mississippi did as much service by promoting moisture in dry spells, as by carrying off surplus water in wet seasons. Mr. Cushman's management of the excursion to Euclid was a success. After visiting 3,000 acres of vineyard, we returned to Euclid, where we were welcomed by music from the Euclid band. Long tables were spread upon the lawn. After dinner, speeches were made by a number in response to sentiments proposed by the President.

Does this society conflict with other societies? No. There is work and room for all. There should be no attempt to subordinate one society, and no feeling of rivalry, except that each should endeavor to do all the good work possible. The more societies the better, so long as they can be equipped and sustained.

Rochester, N. Y. CHARLES A. GREEN.

We are sending specimens of the R. N.-Y. to some of our old subscribers who are not subscribers now. We respectfully call their attention to our proposition to send the Rural from now until the end of next year for $2 00, or in Clubs of Five or over for $1.50. We invite them to send for our new 16-page Premium List, which, it will be conceded, offers very liberal compensation to all who are willing to aid in extending the Rural's circulation.

SOCIETY NOTES.

THE Bay State Fair, which is to be held in Boston October 5–8, promises to be a great success. Maj. H. E. Alvord has been placed at the head of the dairy department. It is intended to make this department one of the strongest features of the exhibition. The society offers prizes amounting to $275 for butter and $100 for cheese. The New England Farmer offers $100 more for butter made on private farm dairies, and free subscriptions to all exhibitors whose butter scales over 80 points. The Boston Herald offers $100 to be given in prizes for the best displays of utensils and appliances connected with the milk supply of cities and towns. This latter exhibit will be something unique All articles are to be admitted which are useful in connection with the milk service anywhere between the cow and the consumer. Maj. Alvord has prepared a circular stating the facts connected with the exhibition, which all who are interested should secure. His address is Amherst, Mass

The second annual exhibition of the Essex Co. Agricultural Fair will be held at the Skating Rink, Montclair, N. J., Sept. 29 to Oct. 1. Those who desire to witness a farm exhibition pure and simple are notified that they will find it at Montclair. One excellent plan adopted by this society is that of offering for prizes a year's subscription to various farm papers. Nursery stock, bags of fertilizer, shoes, robes and other useful articles take the place of money prizes in many classes. We are sorry to see a box of cigars offered as a premium for the best collection of apples. Suppose a lady should show the best collection? Some man will at once feel himself bound to smoke himself into the condition of a ham in order to do justice to the victory. A goodly part of the display will be given up to

the Home Department. Prizes are offered for best bread, cake, preserves and pies. A choice Hybrid Perpetual rose bush is offered as a prize for the best cherry pie. Success to such a fair, say we.

THE conduct of the Tri-State Fair, at Toledo, Ohio, was an insult to honest farmers. Liquor was sold openly and the most abandoned characters flaunted themselves before the public. While the display of implements and stock was fine, the moral tone of the exhibition was too low for a beer garden. Boycott this fair, farmers, until the managers come to their senses.

MORE papers than ever are condemning the horse racing features at the fairs this year. Too much of this talk never rises above a grumble. The reasoning of the managers is that for some unknown reason a fast horse and the opportunity to bet upon its speed will draw the crowd as nothing else will. As the racing brings in the most money and helps most to pay the bills, it is no more than right that most of the premium money should be paid them. This sort of reasoning does well enough for those who think the sole object of a fair association is to make money. Some people have a little higher ideal than that however. We say that if a fair cannot be run without horse racing, fat women and immoral shows it had better not be run at all.

IT was noted at the Elmira Farmers' Club that almost every farmer had cattle to sell. The short fodder crops make cattle food scarce. Even the farmers who depend mostly on grain are not particularly anxious to buy cattle.

HERE are some specimen swindles: William Waite Warner was arrested by United States officers at Jackson Mich., the other day, on complaint of Post Office Inspector Purcell on a charge of using the mails for fraudulent purposes. Warner claimed to publish a daily and weekly paper and to circulate from 35,000 to 60,000 copies. He would write to business men requesting goods in exchange for advertising, receive the goods, print advertisements in a few papers, and send a copy to the advertiser. He had a little printing office, and is said to have been carrying on the business for 10 or 15 years, and to have secured a large amount of goods of all kinds, including quite an extensive library. The existence of such a paper with such a circulation was unknown to the people of Jackson. Every subscription season, however, he managed to secure a number of subscribers, who were, of course, always swindled out of their money.

Here is a variation on a trick several other forms of which have been more than once exposed here. We find it in the Farmers' Review:

"I want to sell you a county right for a self-acting wagon brake." The farmer said, "No, I am not in the canvassing business and don't want to be." "Well, replied the agent, "I have sold every county in the State but this, none for less than $500, but as I am ready to begin operations in Michigan, I will take $100 for this county." The farmer still declined, and the agent did not urge him, but remarked, "I am sure if you knew the value of what I offer you that you would take it, and I believe now that when you think the matter over you will change your mind. At any rate, here is my address, and if at any time within a few weeks you want the county right send me your note for $100, due in ninety days, and I will forward it."

Off he drove, and of course, a few days later a stranger called and said, "I understand you own the right for this county for the patent wagon brake, and I would like to buy it." "What will you give?" said the farmer, as the thought came into his mind that there was a chance for a speculation. "Three hundred dollars," said the stranger. "I can't sell it for that, the price is $500," answered the farmer. "I will split the difference," said the man. "No, I don't care about selling it unless I get the $500." "Well, I will take it, and here is $5 to bind the bargain," and he called the attention of the farmer's hired man to the transaction as a witness to the bargain, and asked for the papers and the model. The farmer said he never kept valuable papers about the house; but he would have them in a day or so, and the stranger agreed to call for them on the second day thereafter, saying, "You must not disappoint me though, for I have three good canvassers engaged and we can work the county in a short time and I expect to make $1,000 clear money out of it." The stranger left. The farmer posted a letter with his note for $100 by the first mail. He never saw either man again, but he got his note back by paying 100 cents on the dollar for it and he feels that he paid a high tuition fee for a little knowledge.

Woman's Work.

CONDUCTED BY EMILY L. TAPLIN.

A SPLENDID WOMAN.

No Greek, no French, and but one verb of Latin;
Of higher mathematics none to boast:
With far more love for simple lawn than satin,
For unadorned she seems to shine the most.
A novice in high art, its lore disdaining,
And never guilty of a Sapphic verse;
Of Terpsichore slight knowledge still retaining,
Sad losses these, and yet it might be worse.

Modest, and brave where moral strength is needed;
Easy and graceful, gentle and refined;
In culinary art high rank conceded,
In hospitality to trouble blind.
Unostentatious in her mild demeanor,
Courteous and animated, full of life;
Perchance you may or may not yet have seen her;
Perhaps you envy him who calls her wife.

The goddess Fashion she may reverence slightly,
Yet, like her sex, have due regard for dress—
A thing no woman can pass over lightly
Without vexation and some mild distress,
And yet no slave to habits so alarming,
Content with what Dame Fortune may bestow;
Her smile is bright, her conversation charming,
Sprightly, but artless, are the words that flow.

Her "set" is not so utterly exclusive
That worth, though humble, may not mingle there,
Nor lowly sorrow deemed by her intrusive,
Nor suffering want denied its pleading prayer.
If Fate is kind, with grateful smile she greets him,
And shares her pleasure and her fortune, too:
If Fate is cruel, still half way she meets him
Nor points with envy at the favored few.

Her path, when smooth and strewn with fragrant beauty,
Draws out her love for it and Nature's God;
When furrowed with the rugged lines of duty
She bends, but never faints beneath the rod.
To ceramics no idle hours are given,
Nor days allotted to *ennui* and sloth;
Flirtation and frivolity have striven
With her in vain, for she has conquered both.

The fair and idle dreamers daily pass us
With languid air, *recherche* as to dress,
They drink in tales, or linger near Parnassus
With finest frenzy and a keen distress;
Our heroine finds ample scope for science
In bridging o'er life's griefs as they occur,
Domestic arts, with each approved appliance,
Are more than dreams, and never Greek to her.

One verb of Latin, and the tense is present—
A tyro's knowledge, but a woman's bliss—
Amo and *amor*, sweet, euphonious, pleasant,
Attain their acme with the added kiss.
In every tongue this mood is only human,
Which indicates the highest joy we reach;
Who can conceive, then, of a splendid woman
Who has not learned what Heaven and Nature teach?

—*E. A. Boyden, in New York Star.*

OF INTEREST TO WOMEN.

THE Indian girls being educated at the Lincoln Institute, at Wayne, Pa., recently entertained guests at a "wolivicayapi," which, literally translated from the original Sioux, means a feast. Refreshments were served in gaily painted wigwams, and the red-skinned maidens made their guests happy in a way that would have been creditable in any experienced hostess.

THE annual report of the Christian Women's Exchange in New Orleans gives as the total amount of money paid to women during the year the sum of $11,974.25.

APPLIQUE GALLOON is a new and handsome trimming. It comes in all colors, combinations and designs, and looks more like hand embroidery than machine work.

AMONG new autumn fabrics is Khayyam broadcloth, a sort of camel's hair. It is expected that smooth-surfaced goods will lead next Winter.

THE Philadelphia Home Journal asks if it would not be well to change the moral of many of the tales of the present day. Inferentially the moral drawn is: "young woman practice the cardinal virtues or perhaps you will not catch a young man" In these days of "two-for-a-quarter-and-a-prize-thrown-in," and "a-chromo-with-every-pound-of-tea," we suppose it is necessary to offer *some* inducement for the practice of those virtues which are supposed to make a woman lovable and sought after as a companion either in the home or for life, but could not some other premium be offered? A pleasanter home, for instance, an easy conscience, a parent's approval, or some little thing like that?

HEADS AND HEARTS.

"Now, when I was a boy,
Woman, without alloy,
Was modest, mild and shrinking,
And never thought of thinking,
But had it all done for her,
By her supreme adorer,"

sings the bard of a popular comic opera. His somewhat halting verse contains amid its chaff a few grains of substantial truth. Aforetime it was the prevailing impression—it is still with some—that any effort of independent intellect on the part of a woman interfered with her purely feminine characteristics. We were told that a woman might be a good housekeeper, but she had no business faculty; a fallacy on the face of it, for to be really a good housekeeper entails the possession of great executive and administrative ability. It is both sense and sensibility, warm sympathies with a solid bed-rock of common sense, that make the house mother a perfect success. We have heard more than one man say he would never deliberately choose a woman of brains for his wife, because her very intellect would make her undesirable. But these conservatives were confounding, mere negative intellectuality with positive intellect. It is but natural that a woman with ability, well trained, should excel an undisciplined housekeeper. Only unfortunately every one does not take this view. Housekeeping with brains means much; it means order, "Heaven's first law;" it means cleanliness, refinement in everyday matters, cheerfulness, and serenity. But we often speak of a woman as possessing culture and a thorough education, when she is merely trained in one direction, and that not the right one. Since the homes of a nation are to be our own undivided charge they must hold first place in our minds, whatever intellectual hights we may scale. Nor is it a light charge. Let the men pride themselves if they will, on their triumphs over nature—on the wildernesses they subdue, or the oceans they fathom. But the woman's task is a greater one if she but devote to the highest good every talent she possesses. It is her work to mould the intellect of coming ages; she must cultivate the germ of the future men, subduing and suppressing the evil—drawing out the good.

Does it not seem laughable, were it not sad, denying that any man should for a moment imagine intellect unnecessary in a wife or mother? The old-fashioned woman was supposed to be all heart, the modern bids fair to be all head. The first was rather apt to produce sensibility *sans* sense—the second would be an intellectual Medusa if her woman's nature did not crop out at unexpected angles. The ideal woman, the heir of the ages, must be a combination of both, with a warm heart and large sympathies, controlled by a clear head and trained intellect—and to her we must look for our social millenium.

ORGANIZED EFFORT.

PERHAPS it may interest the readers of these columns to learn about a society now existing in a country neighborhood. It is called "Five Corners Band of Cheerful Workers." Our motto is "Work is Worship." This society was formed a few years ago, and is composed mostly of young people, the membership now exceeds 100. It meets semi-monthly, with different members of the Band. During each session a literary programme is given, also music. Until of late debates were a part of the evening's programme, which proved to be both instructive and beneficial. At first the proceeds were devoted to charitable purposes, amounting to a considerable sum. But lately we resolved to use some of the money for our own special benefit.

A library was soon started, and now we have quite an assortment from among different writers; occasionally a book or two is added, giving the reader a larger collection to select from. But yet, when there is need of our "mite" we give it gladly. For instance, recently we learned that a poor man in our neighborhood had become blind, and we sought to help him. It was decided to give a basket sociable, charging for each basket, and having also for sale peanuts and water-melons. The woods was the place selected for this sociable, which passed off very pleasantly to all, resulting in a nice little sum for the desired purpose. Among our group lunching together was a minister, and during our conversation our library was alluded to, also the *kind* of book to read. I asked about the reading of novels. He remarked that morally he would not advise them to be read. Although most novels speak out of human nature, yet if we had a bird's-eye view of the whole world, so we could see it at once, we would see greater things than we learn in reading novels. "And yet," he continued, "I think that one-tenth (or perhaps a less per centage than that) of the novels written would be of benefit to us." A love of reading often commences at home. One might say as quickly as a child learns to read, it begins to be interested in books. Usually the school book is its first companion in the line of reading matter; and then comes an occasional "present" of some book.

I have noticed that parents' tastes vary greatly in the selection of books, and if they would have their children profit by the reading of good books, they should exercise the best judgment in securing for them literature of the most merit, and that when read will leave their minds full of the true and noble. I would say, in conclusion, that if more such societies as the above should be formed in the different localities it would be a great benefit to the community at large.

MARY D. THOMAS.

PITHY PARAGRAPHS.

CHANGE is rest. Come from your homes, your shops and your stores where you are breaking down with care and toil. Get out of the ruts you are wearing so deep, and in new work for the Master, gain strength for your daily labor.

THERE will be some blessed surprises in the great day. This is hinted in Matthew, 25. The sweet thoughts of pure souls that just budded in time will exhale aroma like roses. High aims will shine out like good deeds. Little words of love dropped here and there and long forgotten will be repeated in music sweet as the song of angels. Kind deeds for Jesus' sake will be found embalmed in the dear Lord's heart.

A TEAR of sympathy may be more precious than words. It cannot deceive. There is no shame in the tear that shows a man has a heart.

ZEA MAYS.

LOST TIME.

THE early fading of married women is always a subject for comment among their dearest friends. And each particular friend has some very good cause to assign for it. But it is a question whether, in many cases, it is not greatly the woman's own fault.

Think, mothers, do you not do much unnecessary work? I am not going into an elaborate discussion of the sewing question. Everybody knows that you all, or at least nine-tenths of you, sew much more than there is any necessity for. I am going to speak only of the *sitting* question. Now think carefully. Do you not *stand* to do many things about which you could as well *sit* if you were only accustomed to it. "O, but it looks so lazy!" A fig for the way "it looks!" Why should a woman stand up to pare potatoes? I've seen women stand half the morning preparing vegetables. Ask them about it and what is their answer. "O I don't know. I always stand. I'm used to it. I can work better so." They have no business to *be* used to it. With all that a mother or housekeeper *must* do, she has no moral right to strain her physical or nervous system by doing one thing that she is not obliged to do. Accustom yourself to sitting as much as possible while at work. Have a high chair with a rest for the feet made to fit your table and sink. It will not cost much, but it will save you many a back-ache, many a doctor's bill, many a sensen of regret over a cross word you have spoken under the strain of having "been on your feet all day." Plenty of women work in such a back-handed way that one wonders they can live.

"I *never* lie down in the daytime," says some one decidedly and so self-righteously that the poor little meek woman who has ventured the remark feels quite criminal in ever having indulged in such a disposition.

It is not only right, says the Ladies' Home Journal, but a woman's bounden duty to take all the rest she can get. If a mother can possibly find time to throw herself down on the sofa for a few moments she should do so. It is a necessity and one that cannot with impunity be put aside. If baby is awake and you are afraid to leave him alone, put him and his playthings in a dry goods box, give him a quart of Indian meal and some little tin plates, or some other novel amusement, reserved for just such emergencies, then seize five minutes, or even fifteen minutes' rest, and you will go at your work again with a renewed vigor that will enable you to much more than make up for lost (?) time.

GOLDEN GRAINS.

THERE are some people who never have a cheering word for the struggler. They make life just as hard as possible for all who are striving to do right..... ....

HE who will not look before him will have to look behind him, and probably with some regret..... .....

TOO many believe that "the world owes every man a living," and that it requires no personal effort to make the collection. ....

MARION HARLAND says: "Domestic life has peculiar trials, but so has every other condition of this our mortal probation. They who wear thin shoes and step gingerly, feel the pebbles in the path. The firm tread of the stout boot presses them into the earth".....

FIELDING says: "Without adversity a man hardly knows whether he is honest or not."...

MRS. BEECHER says: "Home is the true kingdom of woman, where her rights can never be dethroned. Here all pure love, all right thoughts, all religions, all governments if we would have them live and flourish, must have their roots beneath the altar. This conviction impels me to say to every woman who has a home, 'Let home stand first before all other things'"..... .....

YET to the faithful there is no such thing
As disappointment; failures only bring

A gentle pang, as peacefully they say,
His purpose stands, though mine has passed away...

PATIENCE and strength are what we have now; and all the time an earnest discontent until we come to what we ought to be ....

THE saying is credited to Plutarch that five great enemies to peace inhabit with us, namely, avarice, ambition, envy, anger, pride. If these enemies were to be banished we should infallibly enjoy perpetual peace..... ....

THE secret of good manners is to forget one's-self altogether. The people of really fine breeding are the ones who never think of themselves, but only of the pleasure they can give to others. No adornment of beauty, of learning or accomplishment goes so far in its power to attract as the gift of sympathy.....

Domestic Economy

CONDUCTED BY MRS. AGNES E. M. CARMAN.

A HANDY WOOD-BOX.

A WINDOW recess that I wanted to use for a stand for plants seemed to be the only convenient place in the room for the wood-box.

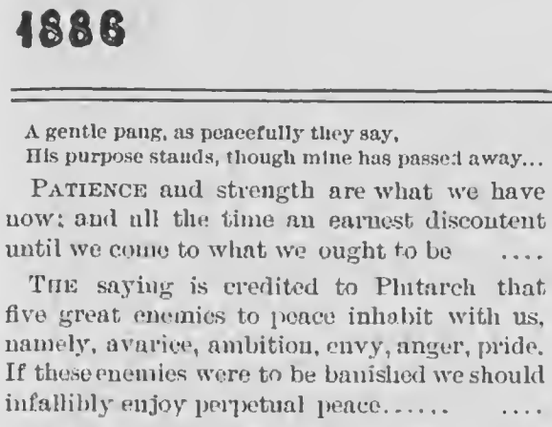


Fig. 378.

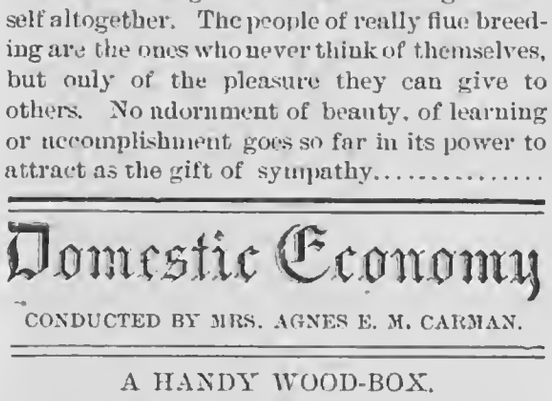


Fig. 379.

The above illustrations show how I combined the two. The box is four feet long, three high and 20 inches wide. I used turkey-red for covering, tacking a flounce around the top. ONE OF THE AUNTS.

KITCHEN TALKS.

ANNIE L. JACK.

THE corn meal kept in a wooden building adjoining the house had a habit of turning sour from heat till the Scientist of the family put a large, smooth limestone in the middle of the barrel, and it has kept it safe through the hot weather. He advised the young ladies who wear tortoise-shell combs to rub them with sweet oil, to keep the teeth from breaking.

The Amateur Cook cut a leg of mutton the other day that had been cured in the same way as a ham. Six pounds of salt, eight ounces of saltpeter and five pints of molasses will make enough pickle for one hundred weight. The legs should be kept in the pickle three or four weeks, according to size, and then hung up for a day or two to dry before they are smoked. Where people keep sheep and prefer mutton, this recipe is worth keeping to try in cool weather, for another season. If slightly boiled and fried in a flour batter, meat prepared in this way comes in useful when fresh meat cannot be had, and it is the most tantalizing thing in life to have extra people come in at dinner time when you have just enough and no more, and no butcher is within hailing distance. Then, instead of a pudding, there is nothing better than a tablespoonful of wine of rennet mixed in a quart of warm milk; flavor with vanilla, or any other favorite, set awhile on ice and eaten with sweetened cream. Our family are very fond of rice, and it is a cooling and healthy diet in Summer. When we use it simply boiled one day, I take out a dishful, mix it with a good custard and a few currants, bake, and serve cold the next day. We tire of rice baked in the oven with milk, though in cold weather it is quite a relish. It is a good thing in cooking to make two days' dinners as nearly as possible at the one time. Then the next day's time can be spent in many profitable ways away from the kitchen. In Summer especially this is necessary and labor-saving.

The autumn flowers are brilliant and beautiful—they please the eyes, but do not touch the heart, and I find myself singing the old refrain:

"Return darling lilies and white roses
And bring back the Summer days again."

FRENCH LACE.

THE directions for this pretty lace were taken originally from the Household. It is very different from any pattern that I ever made before. Cast on 13 stitches, knit across plain.

First row, k 3, o, n, k 2, o, n, k 4.

Second row, k 2 over four times, k 2, o, n, k 2, o, n, k 3.

Third row, k 5, o, n, k 2, o, n, k 1, p 1, k 1, p 1, k 2.

Fourth row, k 8, o, n, k 2, o, n, k 3.

Fifth row, k 5, o, n, k 2, o, n, k 6.

Sixth row, k 10, o, n, k 2, o, n, k 1.

Seventh row, k 3, o, n, k 2, o, n, k 8.

Eighth row, Bind off four stitches, k 12.

Explanation of terms: k signifies knit plain; o, put thread over needle; n, narrow or knit two stitches together; p, means purl or seam stitch. AUNT EM.

WASH BENCH.

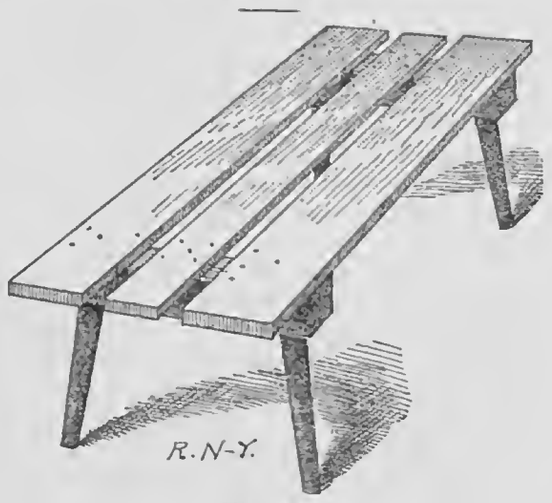


Fig. 380.

THE above is a drawing of a wash bench the writer made when a lad of fourteen. It has been in constant use eighteen years without repair.

The outside boards for top are plump one inch thick, six inches wide. Middle four and a half inches wide and a little thinner. White wood (poplar) was used. Pine is as good or better. The boards are fastened to three and and a half inch square oak sticks, 20 inches long, with No. 8 clinch (wrought) nails. Holes were first bored through the boards so as not to split them when driving the nails.

Holes one-and-one-half inch in diameter were bored in square sticks for the legs, before the boards were fastened on, to avoid boring for nails. The bench is 18 inches high and four-and-one-half feet long.

Boys don't let your mothers or sisters use chairs or that old warped plank of a bench to put the tubs on any longer. Go at it and make one that the tub will set level on and never slip. When done give it a coat of paint. D. S. H.

A PROTEST.

THE RURAL has been in our home for over 16 years, and we think it is just the best paper of its kind published. There is something in it to interest each member of the family, and many are the toothsome dishes that have come to our table from having read "Domestic Economy." But there is just one thing I feel I must say in regard to the wine and brandy, that are in some of our recipes I think the time has gone by when such things are needed to give our delicacies the desired flavor. Why not let our influence be on the side of temperance in our part of so good a paper, and reject all such recipes "lest we make our brother to offend?" MRS E. W. L.

DOMESTIC RECIPES.

COCONUT CAKE.

FIVE eggs, three cups of sugar, one cup of butter, one cup of milk, one teaspoonful of soda, two of cream-of-tartar, four cups of flour, bake like jelly cake. Icing: One-half pound of white sugar to the beaten whites of two eggs, add the cocoanut and place between the layers.

The above will answer for chocolate cake, with the following icing: one cup of sugar, one cake of chocolate and whites of two eggs whipped together.

ONE EGG LAYER CAKE.

One egg, one cup of sugar, one tablespoonful of butter, half a cup of sweet milk, half a teaspoonful of soda, one teaspoonful of cream-of-tartar. A little more than one cup flour. This makes two layers. CANADIAN.

OYSTER FRITTERS.

Drain the liquor from the oysters, to a cup of this liquor add a cup of milk, three beaten eggs, a little salt, and flour enough to make a thin batter. Chop the oysters, and add to the batter. Have ready in a frying-pan a mixture of beef-drippings and butter; heat very hot, and drop the oyster-batter in by the spoonful. Skim out as soon as they are delicately browned, and send to table at once.

OYSTER OMELET.

Beat six eggs, whites and yelks separately; to the yelks add a half cup of thin cream or rich milk, a little salt, and 24 small oysters chopped fine. Put two spoonfuls of butter into a frying pan, and heat while mixing the omelet. Add the whipped whites to the other ingredients, mix lightly, and when the butter is hot turn into the pan. Shake to prevent burning. When "set" in the middle, turn one-half over the other, and turn onto a hot platter. MRS. P. BELL.

BATTER PUDDING.

A pint of sweet milk, four eggs, whites and yelks beaten separately, two even teacups of sifted flour, a little salt, and a pinch of soda. Bake in a buttered dish three-quarters of an hour. Serve at once with a rich sauce.

KATE E.

CAKE FRITTERS.

Here is a good way to use up stale cake. Cut dry cup or sponge cake into rounds or diamonds with a cake cutter. Fry these pieces in hot fat, the same as you would fritters. Dip, very quickly, half of the pieces into a dish of boiling milk. Spread these pieces thickly with jelly, jam or preserves, cover with the dry pieces, put a little of the jam or jelly on top and serve. MRS. ECONOMY.

QUINCE CHEESE.

You can use small, imperfect fruit for this preserve. Pare, core and slice the quinces and cover with cold water. Stew the skins, cores and seeds with just enough water to cover until tender, then strain through a thick cloth, pressing out all of the juice. Drain off the water from the quinces, put into a preserving dish, add the liquor strained from the parings and cook slowly, stirring and mashing the fruit with a wooden spoon. To each quart of this mass, add a pint of sugar. Cook until very thick. Put into jelly tumblers. It should be thick enough to turn out firm so that it can be cut into slices.

SWEET-TOMATO PICKLE.

Seven pounds of ripe tomatoes peeled and sliced, three pounds and a half of white sugar, one ounce each of powdered cinnamon and cloves, and a quart of good vinegar. Mix and cook one and a half hour. Bottle and seal. MRS. I. S.

BIRD'S NEST PUDDING.

PARE and remove cores of eight quick-cooking tart-apples, put into a pudding-dish so that they will fill the bottom, make a custard of a quart of milk, yelks of six and whites of two eggs sweetened and flavored to taste. Pour over the apples and bake slowly until apples are tender and custard "set." Make a meringue of the whites and four spoonfuls of powdered sugar, spread over the top and return to the oven until delicately browned.

LEMON MERINGUE PUDDING.

Soak two cups of fine bread crumbs in a quart of milk. Beat a half cup of butter and a cup of sugar to a cream, add the yelks of four eggs, beat again then stir into the bread and milk. Add the grated rind of a lemon and bake in a buttered dish until firm and lightly browned. Whip the whites stiff, add three spoonfuls of powdered sugar. The juice of half a lemon, spread over the pudding when done and return to the over to brown. Eaten cold. MRS. C.

"POT-ROASTING" is an economical and not-to-be-despised method of cooking meat.

APPLE-SAUCE that is passed through a colander is voted "best" at our house.

As a rule lima beans are not cooked long enough. The best that we have eaten this season our hostess told us had been cooked slowly for four hours.

HERE is an excellent recipe for good rice pudding: One quart of milk, two tablespoonfuls of rice, two of granulated sugar; mix and stir often during the baking. A pudding of any size can be made by increasing the quantities, but the exact ratio should be preserved. Add a little salt if liked.

Miscellaneous Advertising.

When Baby was sick, we gave her Castoria
When she was a Child, she cried for Castoria,
When she became Miss, she clung to Castoria,
When she had Children, she gave them Castoria

DIXON'S "Carburet of Iron" Stove Polish was established in 1827, and is to-day, as it was then, the neatest and brightest in the market; a pure pin ubago, giving off no poisonous vapors. Fair size is now doubled and cake weighs nearly half a pound, but the quality and price remain the same. Ask your grocer for Dixon's big cake.

Pain in the Side

Is a symptom of disease. It may be caused by Rheumatism, or by Neuralgia, but it usually indicates a disordered condition of the Stomach, Liver, or Kidneys. Ayer's Sarsaparilla corrects the action of the vital organs, and removes every trace of disease from the system.

Last fall and winter I suffered from a dull, heavy, pain in my side. I did not notice it much, at first, but it gradually grew worse until it became almost unbearable. During the latter part of this time, disorders of the Stomach and Liver increased my troubles. I began taking Ayer's Sarsaparilla, and, after faithfully continuing the use of this medicine for some months, the pain disappeared and I was completely cured.—Mrs. Augusta A. Forbush, Haverhill, Mass.

Ayer's Sarsaparilla,

Prepared by Dr. J. C. Ayer & Co., Lowell, Mass. Sold by all Druggists. Price $1; six bottles, $5.

MAKE HENS LAY

SHERIDAN'S CONDITION POWDER is absolutely pure and highly concentrated. It is strictly a medicine to be given with food. Nothing on earth will make hens lay like it. It cures chicken cholera and all diseases of hens. Illustrated book by mail free. Sold everywhere, or sent by mail for 25 cts. in stamps. 2½-lb. tin cans, $1; by mail, $1.20. Six cans by express, prepaid, for $5. L. S. Johnson & Co., P. O. Box 2118, Boston, Mass.

FRIENDS, IF YOU ARE IN ANY WAY INTERESTED IN
BEES OR HONEY,
We will with pleasure send you a sample copy of the Semi-Monthly Gleanings in Bee-Culture, with a descriptive price-list of the latest improvements in Hives, Honey Extractors, Comb Foundation, Section Honey Boxes, all books and journals, and everything pertaining to Bee Culture. NOTHING PATENTED. Simply send your address, WRITTEN PLAINLY, to A. I. ROOT, MEDINA, OHIO.

GOLD MEDAL, PARIS, 1878.
BAKER'S
Breakfast Cocoa.
Warranted *absolutely pure Cocoa*, from which the excess of Oil has been removed. It has *three times the strength* of Cocoa mixed with Starch, Arrowroot or Sugar, and is therefore far more economical, *costing less than one cent a cup*. It is delicious, nourishing, strengthening, easily digested, and admirably adapted for invalids as well as for persons in health.
Sold by Grocers everywhere.
W. BAKER & CO., Dorchester, Mass.

ELEGANT SHAPE, HEALTH and COMFORT
Perfectly Combined in
MADAME FOY'S
Skirt Supporting
CORSET.
It is one of the most popular and satisfactory in the market. For sale by all leading dealers.
Price by mail $1.50.
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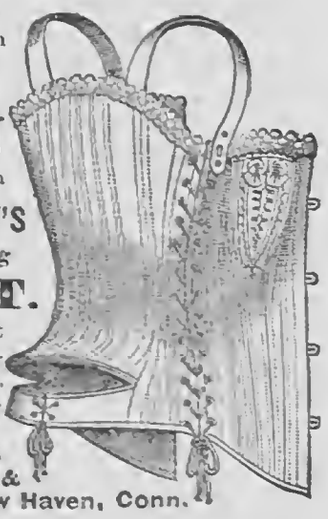

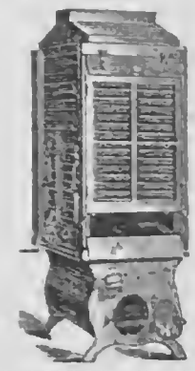

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News of the Week.

HOME NEWS.

SATURDAY, September 25, 1886.

EARTHQUAKE shocks still frequent at Charleston and in the surrounding country—three since Saturday. Relief Committee report 750 applications for repairs to houses, costing from $10 to $5,000. Reparation by committee soon to begin. Soup kitchens largely patronized. Food liberally distributed. Much uneasmess on account of Wiggins's prophecy of "the most terrible earthquake ever felt on this continent" and a tidal wave, on September 29, especially disastrous in the South. Much more help needed. Relief fund now $413,261.....President Cleveland, wife, mother-in-law, etc., returned to Washington Wednesday night, at 9 o'clock, after their very pleasant holiday fishing, deer-hunting, etc., in the Adirondacks..... According to Pension Commissioner Black, on June 20 there were 365,783 pensioners on the rolls—265,854 army invalids; 80,162 army widows, miner children and dependent relatives; 2,956 navy invalids; 1,878 navy widows, etc.; 1,539 survivors of the war of 1812, and 13,397 widows of that war. During the year 40,857 new pensioners were added; 2,229 were restored to the roll; 22,098 names were dropped on account of death, remarriage of widows, frauds, etc., leaving a net increase of 20,685 names. Annual average of each pension $122,23, a gain of $11.88 over last year—aggregate value $44,708,027.44, an increase of $6,617,041.51. Pensions paid during the year, $63,797,831.61. There are 8,095 pensions on account of amputations; 119,236 for wounds not producing amputations; 46,865 for injuries, and 163,728 for diseases. In poor-houses about 9,000 soldiers, of whom 13 per cent. are pensioners; 86 per cent. non-pensioners. The oldest soldier receiving public support is 103 years of age; the mean age is 57 years; 48 per cent. of all native born; 51 per cent. foreign born; 45 per cent. married men; 54 per cent. unmarried; 19 per cent. blind or insane. Pensioners are found in all but 118 of the 2,647 counties in the Union, and in 35 foreign countries....The Bell Telephone suit is dragging slowly along at Cincinnati. Local companies pay the Bell comany 50 cents a month royalty on 350,000 instruments; yearly income therefor $2,000,000. Patents in contest have six and seven years to run yet.....The sleeping-car porters have organized "for mutual aid and protection".....Latest reports declare that the supply of natural gas in Pennsylvania will last for at least several generations yet. In Pittsburg and Alleghany City 105,000,000 bushels of coals are saved annually by the use of this gas for light and fuel..... .....The Georgia railroad commissioners insist that local rates on railroads must be made to bear the same relations to distance and quantity as through rates.....Tilden's will is to be contested by his nephews who do not think he did justice to them in leaving the great bulk of his property for public purposes. .....About 17,000 Knights Templar—the largest of the three orders of Free-Masons—have been having "a glorious time" at St. Louis at their 23rd triennial conclave. The Templars number about 65,000 in this country. ...The Odd Fellows, 30,000 strong, have had a "glorious time" at Boston. According to reports of officers, the Order in 1864, numbered in the whole world 137,263 members. To-day there are 517,310 members in American Odd-fellowship alone, besides 605,921 in the English branch, or Manchester Unity..... ....The English Government intends to make Esquimalt, British Columbia, "an impregnable harbor and an important depot for munitions of war."....The receipts of the Patent Office during the last fiscal year from all sources were $1,206,167, as against $1,207,974 during the preceding year, while the expenditures were $992,249, leaving a surplus of $213,918. The surplus for 1885 was $140,851.. .....Most destructive hail storm ever known broke 10,000 glass lights at the Oliver Plow Works and 12,000 at the Studebaker Wagon Works, at South Bend, Ind., Wednesday. City's loss, $600,000; Oliver's, $10,000... .....Terrific wind and rain storms in several other places during the week.....The centennial anniversary of the promulgation of the Constitution of the United States will be Sept. 17, 1887, and the Governors of the 13 original States will meet in Philadelphia to celebrate the occasion.....The total vote of Arkansas was 143,000—Democratic majority, 37,000. Legislature: House—Democrats, 67; Republicans and Wheelers, 23. Senate—Democrats, 27; R. and W., 5..... ....El Coyote, a famous Mexican partizan and bandit, who has done a world of murder and mischief along the Rio Grande, was surprised by troops and shot to death the other day.....A band of 382 Chiricahua and Warm Spring Indians have arrived in Florida where they will be kept on a reservation near St. Augustina—the bucks were the most turbulent, always ready for raiding and murdering....Geronimo and his followers, still in Texas, will soon join them. It is now thought that he will not be put to death. ....Over 7,000 Socialists met in this city the other night to sympathize with the Chicago Anarchists, and protest against their punishment.. ....Martin Irons is jailed in St. Louis for being implicated in the tapping of the private wires running into Vice-President's Hoxie's office during the Missouri Pacific strike. Owing to his bad conduct of late, his bailers surrendered him. He says he did nothing wrong, but is too poor to prove it.....The Mayflower has beaten the Galatea by a length in a "drifting race" off Newport, R. I..... .. A Mr. Bell, a Glasgow yacht-owner, has cabled a challenge for next year. Scotch yachtsmen have contributed $50,000 to build a vessel that will outsail any American clipper and take back the American Cup won by us in 1851.....

FOREIGN NEWS.

SATURDAY, Sept. 25, 1886

PARNELL'S Land Bill, as expected, was defeated in the British House of Commons, by a vote of 297 to 202. This is a decisive majority in favor of the Government (95), for if every man of the 394 Conservatives and Union-Liberals and every one of the 276 Parnellites and Gladstone Liberals had been in his place and voted, the majority would have been fully 108. Gladstone came from Bavaria to support the main principles of the bill; but the Conservative-Union-Liberal agglomeration was too strong....Disturbances have already begun in Ireland, where during the last three months evictions have been more numerous than in any like period since 1851—soon after the great famine. Rents fall due in November, and as it is certain that the full amount cannot be paid in most cases, evictions will be the order of the day. The Land League begs Irishmen and sympathizers with Ireland everywhere to subscribe liberally to aid the homeless paupers who will thus be turned out in the world in Winter. It proposes to decide how much each tenant can pay, and will advise that if that amount is not taken in settlement in full, nothing at all should be paid. If it attempts to usurp the functions of the government in this way, it will be suppressed and a "social war" is likely to break out over the island. Riots still spasmodic in Belfast; garrison to be heavily increased permanently. .....Agricultural distress in England is getting up a strong sentiment in favor of import duties on live stock and perhaps on cereals. Most of the Cabinet are known to favor a duty on imported stock. Much distress among the laboring classes, owing to dull business and consequent lack of employment. Wages low and going lower. Over 50,000 weavers going out on a threatened reduction of starvation wages ....The Bulgarian embroglio is still troubling the diplomats and threatening the peace of Europe. Russia seems determined to have her own way. Gen. Klaubars, for a long time Russian agent at Vienna, who "knows more about Austrian military affairs than any man in Europe," has been sent to Sofia to regulate matters, and the Bulgars have just been warned that any hostile demonstration against him will be an excuse for Russian interference. He is reported to bear an ultimatum demanding the immediate raising of the state of siege in Bulgaria, the liberation of all political prisoners, including those arrested for deposing Prince Alexander, and the indefinite postponement of the elections for members of the National Assembly. However, there are no signs of flinching on the part of the Regency; on the contrary, the anti-Russian feeling increases daily..... .....Austria is taking a more decided stand against Russia. German and French financiers are willing to make Bulgaria a loan. England is straining every nerve to counteract Russia's designs. Her old, sleepy Ambassador at Constantinople, Sir Edward Thornton, whilom of Washington, has been superseded by wideawake Sir William White, long an Ambassador to Roumania, who will be able to block Russian intrigues with the Porte..... Her late reckless expenses for enormous public works and appropriations for immense fortifications and for the army, added to her previous stupendous load of indebtedness, threaten to bankrupt France ere long. Her Republicanism isolates her from the rest of Europe, otherwise it is likely she would soon pick a quarrel with Germany..... .....The trouble with the Pope about the Chinese Nuncio is settled at least temporarily. A Legate to inquire about matters, is to go to Pekin instead of a Nuncio, and France "will scrupulously respect the concordat and will maintain the public worship budget as at present".....There has been an attempt at a revolution in Spain. A couple of regiments in garrison at Madrid broke loose, killed a few of their officers, tried to induce the rest of the garrison to join them, and, being attacked by the latter, fled to the country, where most of them have been killed or captured. The officers who instigated the movement will be shot, and the men severely punished. It is believed to have been got up by Zorilla to "bear" the money market; but it has "bulled" it, as the government of Queen Christina is considered stronger now than before it "drew the shot of the enemy," for a weak rebellion always strengthens the government.

AGRICULTURAL NEWS.

SATURDAY, Sept. 25, 1886.

MUCH dissatisfaction in Southern Colorado at the arrival of large numbers of Texas cattle on the range, as, apart from the danger from Texas fever, the range is already overstocked, and the grass short for home herds. Stockmen warned not to bring in any more.....Canada is quarantining and killing all hogs affected by, or suspected of hog cholera..... ....Not a case of contagious pleura-pneumonia in Ohio.....Texas fever is prevalent in a herd near Columbus, O.....There will be a three days' session of the Ohio State Grange, beginning Dec. 14.....Net profits of the late Ohio State Fair, $10,000—the most profitable ever held.....The Ohio State Board of Agriculture has petitioned the Government to immediately rescind the order made two or three years ago permitting the importation of Canadian cattle without quarantine. It also wants Canadian sheep quarantined. It fears the introduction of foot-and-mouth disease and pleuro-pneumonia.... Canadians are quarantining all cattle exposed to contagion from slaughtered and cremated cattle at Quebec, and slaughtering infected animals ....On the opening of the Dutch Parliament Monday, the King said Holland's crops were good and her cattle healthy.....Robert S. Schroeder, near Malone, N. Y., has about 250 acres in hops, which yielded about 500 bales this year—thought to be the largest single crop in the Eastern States..... ...The total number of entries of public lands for the fiscal year ended June 30, 1886, were 227,744, embracing an area of 20,991,967 acres. The amount of money received for this land was $7,412,767. The cash sales aggregated 3,773,498 acres, and the amount received there for was $5,757,891. Original homestead claims were made to the number of 61,638, covering an area of 9,145,135 acres. The list of selections made by railroad companies under the different grants aggregate 2,311,537 acres. The number of timber culture entries made was 34,966, comprising 5,389,308 acres. The remaining area disposed of consisted of military bounty land warrant locations, scrip locations, State selections, wagon road selections, and agricultural selections. Final proof was made upon 19,357 homestead entries, embracing an area of 2,663,532 acres, and timber culture entries covering an area of 141,694 acres. The above totals do not include the disposals of Indian lands, comprising an area of 1,132,596 acres, on account of which $1,607,729 were received.....

A Complex Case.

ONE of the most widely known men in the United States, particularly in the extending circles of Temperance organizations, is the Prohibition candidate at the recent election for governor of the State of New York, A. A. Hopkins, Esq., of the City of Rochester. He did not receive sufficient votes to elect, but one thing is certain, from the test of his qualifications in the editorial chair of a widely circulated newspaper, he possesses the ability to have filled the position with credit had he been chosen. The physicians to whom he writes the following letter, therefore, have reason to value it very highly as a voluntary testimonial:

ROCHESTER, N. Y., Dec. 2, 1885.

DRS. STARKEY & PALEN.—*Gentlemen:*—Permit me to express my hearty recognition of the good your Compound Oxygen treatment has done in my own household. One of our family has been several years afflicted with a combination of lung, head and nerve difficulties very severe, and resisting every form of medical application. He had tried physicians literally by the score; changes of climate South and West; and had grown hopeless nearly altogether. You know how *complex* was his case, and how apparently beyond help, for he visited you in person when but just able to be off his bed. You did not think him curable. Nor can I say that he was cured; but he was amazingly helped. He tried the Compound Oxygen with little faith in it, and his cough grew less, his strength greater. His nervous condition improved steadily. Whenever the Oxygen was intermitted for a time he lost ground. Last Spring he had become so well and strong that the Treatment did not seem necessary, and he gave it up. He had regained his former weight; his cough was rarely ever heard, by night or day; he walked about with vigor, and attended actively to business. His wonderful improvement surprised himself and all who knew him. Yours, etc.,

A. A. HOPKINS.

DRS. STARKEY & PALEN, 1529 Arch Street, Philadelphia, the dispensers of this remarkable curative agent, will send, without charge, their Treatise on Compound Oxygen, giving all desired information in regard to it, to any applicant.—*Adv.*

Crops & Markets.

SATURDAY, Sept. 25, 1886.

JUST for the present enough has been said here about grain crops; now for a condensation of the latest information from all quarters about some other crops: The potato crop was injured more in August than in any year since 1882, and the average condition is the poorest for September for ten years, except 1881. Little or no chance of improvement before digging, as there is usually a decline during the present month. Loss in condition almost everywhere—a decline of 7 points in Maine; 18 in New Hampshire; 3 in Massachusetts; 12 in Connecticut; 5 in Delaware; 15 in New Jersey. Drought the chief cause of loss in Northern New England; rot and scab in the rest of the mentioned section. Crop best in the Southern States, especially Louisiana and Arkansas; plenty of moisture and little complaint of disease or insects. In Pennsylvania the Colorado beetle has injured the crop. In Ohio, Michigan, Indiana, and Illinois the crop has suffered severely from drought, and from insects in many sections, while frost has been hurtful in some northern counties of Michigan. In Wisconsin and Minnesota the crop was very poor in August; but rains towards the close of the month materially improved the outlook. In Iowa, Missouri, Kansas and Dakota, however, there has been a still further decline, as the effects of the drought have become more apparent.

The condition of apples is reported high in the principal apple-bearing States; though there has been a decline during the past month in New England, the Ohio Valley and the Trans-Mississippi States. There is a falling off of five points in New Hampshire, the average being 93; two each in Massachusetts and Ohio, leaving condition 90. West of the Mississippi condition is lower, standing at 59 in Iowa, a loss of six points; 77 in Missouri, a loss of eight; 70 in Kansas, a loss of 15; and 59 in California—a decline of eight points since last month. In the North Atlantic States condition is high, except in New York, where it is only 61; but there is much complaint that the fruit is dropping badly as it approaches ripening. An unusual tendency to rot, attributed to the excessive moisture of the early Summer, is noticed in all the Southern States from Virginia to Tennessee: this, with other maladies in a few localities, has served to reduce condition in that section. In this market apples have been abundant during the week. The best wholesaled for not over $2.50 per barrel, and very good ones sold for $2.00, and common sorts for as low as $1. In Boston apples are so abundant it is is hard to sell them at any reasonable price—best $1.25 to $1.75; common to good 50 cents to $1.25. In Chicago prices are about the same as in New York—$1.20 to $2.50 per barrel, according to variety. Shipments of apples abroad are likely to be extremely heavy this year, judging by those to Great Britain for the week ending September 18, which were as follows: From Boston, 1,831 barrels; from New York, 6,001 barrels; From Montreal 536 barrels and from Halifax, 3,023 barrels; total, 11,391 barrels. Total shipments for season, 35,674 barrels, against 15,392 barrels in the same time last year.

The peach season here is drawing to an end, though there will be plenty for the next two or three weeks. The crop was considerably less than usual. Some complaints of fruit rotting before and after picking. Maryland crop very uneven even in the same orchard; some trees nearly bare, others overloaded. Rot very prevalent in the South, both in peaches and apples. In Delaware and Maryland heavy storms last week threw thousands of bushels to the ground. Western and Eastern fruit buyers are now in New Jersey, having mostly left Delaware and Maryland. Shipping directly from the orchards. New Jersey crop very fine. Smocks most esteemed for preserving, wholesaling from $1 to $1.50 per basket. Late Crawford, The Prize and Pullen's Seedling, all yellow peaches, most sought after for table use. Ward's Late Free good for either purpose. Owing to a better system of distribution, prices have been remunerative. The crop of the Lake States and the Northwest, a

comparatively small factor, is very much below an average. Michigan and Indiana return 63, Illinois only 23, and Iowa 33. On the Pacific coast California reports a small crop of good quality, while Oregon and Washington expect an outturn but slightly below an average. Last week the receipts in Chicago aggregated about 200,000 baskets, all sold at from 35 to 75 cents per full peck basket, according to size and quality. Oldmixons brought $1. Almost all came from Mich.

The cranberry harvest has been at its hight during the week. In the great cranberry section of New Jersey the crop is good—considerably better than last year. Owing to the destruction of many of the bogs by the recent forest fires, the Wisconsin crop is greatly diminished—probable yield not over 600,000 bushels against 900,000 bushels in 1885. Much of the crop last year sold for less than cost, and 150,000 bushels could not find a market. Considerable quantities were sent to England at a loss, as people there have not yet been taught how to use the berries. A considerable area of bog was also destroyed by fire in Michigan. Berries are now selling for 25 cents a quart in Chicago.

The Louisiana orange crop is usually marketed about this time. Reports from Calcasieu, St. Bernard, St. Mary, Cameron, La Fourche and other parishes in which the oranges are principally grown, report that the crop is a complete failure this year. It usually averages from 30,000,000 to 50,000,000 a year, but will not be 1,000,000 this year in consequence of the severe freeze last Winter. The news is uniformly bad from every portion of the State. In some places where 500 barrels were obtained last year, scarcely a barrel will be secured.

The clover seed crop varies greatly from year to year. This year the total area appears a little larger than last year, with an average yield and a promise of about a full crop. In 1879 the United States produced 1,922,982 bushels, nine-tenths of which was grown in seven States in this order: O., Mich., Wis., Ind., N. Y., Pa. and Ill. Yield per acre this year 130 to 140 pounds. Some pieces yield only one bushel (60 pounds) per acre, and only a few go over three bushels. Prices range from $4.25 to $8.75 per bushel, a fair estimate being about $5.50. In parts of N. Y., Pa. and Wis., the clover seed midge and clover weevil have greatly injured or entirely ruined the crop. Grasshoppers have been troublesome in O., Ind., Ia., and Mo. Drought has caused a great reduction in area and yield in Mich. and Ia., and to a smaller extent in Wis., Minn. and Mo. Area in N. Y., 20 per cent. less than last year; yield, 120 pounds per acre; price, $6 to $6.25. Pa., area 10 per cent. greater; yield, 10 per cent. less than a full crop; price, $5.75 to $6; yield per acre, 100 to 105 pounds. Large increase of area in Md. yield, 95 pounds per acre; average price, $6 per bushel. Virginia, larger area; 1.8 bush. per acre; $5.75 per bush. Full crop on 20 per cent. larger area in O.; 2⅛ bush. per acre. In Mich., 25 per cent. smaller area; 95 pounds per acre; average price, $5.62 to $5.75 per bush. Ind., 25 per cent. more area; nearly 2⅛ bush. per acre; average price, $4.75. Best crop ever harvested in one of the largest producing States. Decreased area in Ill.; yield, 137 pounds per acre; $5.25 per bush. Wis., 80 per cent. of a full crop on a somewhat reduced area; $5.75 per bush. Ia., area reduced 30 per cent.; yield, 35 to 40 per cent. less than a full crop; average price, $5.50 per bush. Mo., 75 per cent. of a full crop; area increased; yield, 2 bush. per acre; $4.25 per bush.

According to the census of 1880 the area devoted to hops in 1879 was 46,800 acres—product 26,546,378 pounds. New York had 39,072 acres and produced 21,628,931 pounds; Wisconsin, 4,436 acres; 1,966,812 pounds; California, 4,119 acres; 1,444,077 pounds; Oregon, 304 acres; 244,371 pounds. About half the other States grew a little; but their whole product would make little difference in the aggregate crop. The yards on the Pacific Coast have rapidly increased in size and number; while there has been a slight falling off in New York, and still more in Wisconsin. On the Pacific Coast the crop this year, while much larger than that of 1879, is a trifle less than that of last year. In Wisconsin there is a fair crop; a trifle less than that of 1885. Reports from every hop-growing county in New York speak of failure, total or partial, and the injury to the yards is likely to extend into next year, as the roots of the vines are considerably injured. According to commercial authorities the crop of the State last year was from 150,000 to 175,000 bales of 180 pounds each, of superior quality, while estimates of the crop of this year range from 5,000 to 15,000 bales of very inferior quality. Some consider two-thirds of the crop unfit for market. Dealers give the following comparative list of the yield in hops by counties: Schoharie, 1885, 35,000 bales; 1886, 500 bales; Otsego, 1885, 40,000 bales; 1886, 2,000 bales. Oneida and Madison, 1885, 70,000 bales; 1886, 1,500 bales. Lewis, 1885, 2,000 bales; 1886, 500 bales. Franklin, 1885, 20,000 bales; 1886, 1,500 bales. Montgomery, 1885, 20,000 bales; 1886, nothing. Bales vary in weight from 180 to 200 pounds. Since the irreparable damage to the new crop has become apparent, prices have already risen from five to 8⅓ cents to 25 to 30 cents per pound, and even higher figures have been given at interior points. A good deal of American hops that were sent to Europe on sale have been brought home and sold at a profit. The crops have been fair in England, Germany and other foreign countries, however, and as the duty on hops is only eight cents per pound, it is likely that foreign importations will prevent a rise to the extreme figures of some years.

Raw wool is remarkably strong, and prices are again higher, with movement to manufacturers heavy. The belief appears general that the American clip is short, and Australian is certainly worth more abroad than it is here...There is less satisfaction found in the tone of the grain market than elsewhere. Receipts at the Northwest have been very heavy. Export demand has been checked, and speculation is in favor of lower figures...Louisville reports a favorable tobacco coop, with prices favoring sellers.

MARKETS BY TELEGRAPH.

SATURDAY, Sept. 25, 1886.

CHICAGO.—Compared with cash prices a week ago, "regular" wheat is 1c. lower; No. 2 Spring, ⅛c. lower. Corn, 1c. lower. Oats, ⅜c. lower. Rye and Barley, unchanged. Flaxseed, ½c. lower. Pork, 74½c. lower. Cattle, somewhat lower all round. Hogs, from 5c. to 20c. lower. Sheep, somewhat higher.

WHEAT.—Sales ranged: Sept., 73¼@74½c; October, 74@75¾c; November, 75⅞@76¾c; May, 83c; No. 2 Spring 73¾c. CORN—Cash, 37½c; September, 37¼@38c; October, 37⅜@38¾c; November, 39⅝@40¾c; May, 43⅜@43¾c. OATS.—Dull; Sales ranged: No. 2 Cash, 25¼@25½c; October, 25¾@26¼c; November, 27⅛@27¾c; May, 31⅛@31½c. RYE.—Quiet; No. 2, 48¼c. BARLEY.—Tame; No. 2, 58c. FLAXSEED.—No. 1, $1 08¼@1 08¾. MESS PORK.—Quiet; Sales ranged: Cash, $9 62½@9 75; September, $9 57½@9 80; October, $9 57½@9 90; November, $9 52½@9 70. LARD.—Quiet; Sales ranged: Cash, $7 20; September, $7 20@7 25; October, $6 62½@6 17½. Short Ribs.—Steady; Cash, $7 00. Boxed Meats.—Dry salted shoulders, $6@6 10; Short clear sides, $7 10@7 15. CATTLE.—Market Steady; Shipping steers, $3@5 30; stockers and feeders, $2 10@3 60; cows, bulls and mixed $1 30@3 20; bulk, $1 40@2 70; through Texas steers, strong; cows, $1@2 50; steers, $2 75@3 45; Western rangers, steady; natives and half breeds, $3@4; cows, $2 35@2 85; Wintered Texans, $3@3 85. HOGS.—Rough and mixed, $4 00@4 65; packing and shipping, $4 50@4 95; light weights, $3 05@4 65; skips, $2 50@3 90. SHEEP.—Market strong; Natives, $2 10@4 00, Western, $3 20@3 40, Texans, $2 40@3 10; Lambs, $3 75@5 00.

ST. LOUIS.—Compared with cash prices last week, No. 2 Red 1c. lower. Corn, ⅝c. lower. Oats, ⅛c. lower. Rye, 1½c. lower. Butter, steady. Eggs, ½c. higher. Flaxseed unchanged. Pork, $1 lower. Cattle, a trifle higher on an average. Hogs, from 5c. to 25c. lower, according to grade. Sheep, about the same.

WHEAT.—Weak; No. 2 Red, Cash, 74c; September, 71c; October, 71⅝@74½c. CORN.—Weak; No. 2 mixed, Cash, 35⅝@35½c; September, 35⅜c; October, 35¼c. OATS.—Dull; No. 2 mixed, Cash, 25¾@25½c; Sept, 25½c.; October, 25⅜c. RYE.—Steady at 48c. BUTTER.—Creamery, 21@21c; dairy, 19@20c. EGGS, 12½c. FLAXSEED.—$1 06. HAY.—Timothy, $10 00; Prairie, $8 00. PORK, $10 25. BULKMEATS.—Long clear, $7 00; short ribs, $7 00; short clear, $7 25. Lard, $6 85. Receipts, Flour, 6,000. CATTLE.—Market active; Good to Choice Native Shipping Steers, $4 40@4 85; Common to Fair, $3 75@4 30; Cows and Heifers, $2 25@3 50; Texans and Indians, $2 25@3 60. HOGS.—Market slow at 10c. lower than yesterday; heavy, $4 70@4 85; Packing, $4 35@4 65; Lights, $4 10@4 70. SHEEP.—Market strong at $2 50@4 50.

BOSTON.—APPLES.—Market glutted. Porters, $1; Sweets, $1; Gravenstein, $1 25@1 75 per bbl; Hubbardstons, $1 25, receipts for the past six days, 5,331 bbls; previous six days, 5,882 bbls. BUTTER.—The demand for fine fresh made stock is fair, and prices continue upward. Western stock is firm and higher. Imitation creamery and ladle packed are in good demand at better prices. Northern creamery, extra, 25c; do. firsts, 23@24c; Western creamery, extra, 23@24c.; do. firsts, 22@23c; do. choice 19@21, dairy, Franklin County, finest, 24@25c; good to choice, 19@20c.; Vermont extra, 17½@18c; Northern, choice, 16@17c; do. fair to good, 14@15c., Western dairy, good to choice, 12@13c; imitation creamery, extra, 14@15c; ladle-packed, choice 11@12c; do. fair to good, 9@11c. BEANS.—Choice pea, Northern hand-picked $1 75@1 85 per bushel; do. do. New York, choice, hand-picked, $1 60@1 70; do. do. screened, $1 50@1 55; medium choice, hand-picked, $1 50@1 55; do. choice screened, $1 45@1 50; Yellow Eyes, choice, $1 50@1 60; do. flat, $1 45@1 50; Red Kidneys, $1 75. CHEESE.—Receipts for the week, 7,037 boxes; last week, 6,540 boxes. Exports, 18,011 lbs; last week, 20,188 lbs. The market firm at the advance in rates. New York extra, 10½c; do. good to choice, 8½@9½c; do. common, 6@8c; Vermont extra, 9½@10c; good to choice, 8@9c; common, 6@8c; Western extra, 10@10½c; do. fine, 7@9c; common, 4@6c. Sage, extra, 11c. CORN.—High mixed, 50c steamer yellow, 50c; steamer mixed, 48½c; and no grade, 51½@51c, per bush., as to quality. EGGS.—Near by and cape, 20c. per doz, Eastern extras, 19c; Aroostook County, 17@18c; New York and Vermont, 17@19c; Western, 14@16c; Provincial, 15½@17½c. HAY AND STRAW.—Choice hay, $18@19 per ton; fair, $15@16; ordinary, $14@15; fine, $13@16; Swale hay, $10@11; poor, $10@13 50; Western choice, $16@17; do. do. fair to good, $13@14 50. Rye straw, $16@17; do. do. machine, $12@14. Oat straw, $8@10. HOPS.—New York choice, 25@26c, per lb; do, 1884, 25@30c; California, 25@28c; low grades, 15@22c. POTATOES.—Early Rose, 50@63c; Beauty of Hebron, 50@60c; Natives, per bbl., $1 75@2 00. Sweet Potatoes—Virginia Yellow, $1 75@2 50 per bbl; Jersey, $2 75. SEEDS.—Clover, West, 10½@11c. per lb; do. North, 11¾@11½c; do, white, 15@26c; do. Alsike, 13@15c; Red Top, per sack, West, $2 25; do, Jersey, $2 50@2 50; Hungarian, 90c@1; Orchard, per bush, $1 50@2; Blue Grass, $1 40@1 60; Timothy, Western, $2 15@2 25; do. Northern, $2 25@2 40; American flaxseed, $2 25.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, September 25, 1886.

STATE OF THE MARKET.—As compared with cash prices last week, flour is steady; Ungraded Red Wheat 1c. higher; No. 2 ⅜c. lower. Corn, Ungraded Mixed, 2c. lower. Oats, unchanged. Pork, 50c, lower. Butter, 2c. to 3c. higher. Cheese, ⅜c. higher. Fruit and vegetables steady.

FLOUR, FEED AND MEAL—FLOUR—Quotations: Fine $3 10@2 65; Superfine, $2 35@2 90; Extra No. 2, $2 65@3 25; Good to Fancy Extra State, $3 30@3 70; Common to Good Extra Western, $2 65@3 70; Good to Choice Extra Western, $3 80@4 20; Common to Fair Extra Ohio, $2 70@3 75; Good, $3 80@4 20; Good to Choice, $4 25@4 75; Common Extra Minnesota, $2 65@3 10; Clear, $3 50@4 00; Rye Mixture, $3 15@4 00; Straight, $4 25@4 50; Patent $4 65@4 90; Bakers' Extra, $3 90@4 90; St. Louis Common to Fair Extra, $2 65@3 65 Fair to Good, $3 70@4 50; Good to Very Choice, $4 55@5 00, latter an extreme; Patent Winter Wheat Extra, $4 00@4 90; City Mill Extra for West Indies, $4 45@4 60, latter in new pkgs.; South America, $4 60@4 70. SOUTHERN FLOUR.—Common to Fair Extra at $2 25@3 85, and Fair to Choice, $3 90@5 00. RYE FLOUR.—Superfine, $3 20@3 40. CORN MEAL.—Yellow Western, quoted at $2 50@2 75; and Brandywine at $2 80@2 95; sales, 300 bbls. Brandywine at $2 65. BUCKWHEAT FLOUR—Quoted $2 65@3 00. FEED.—40 lb, quoted at 60@65c; 60 lb, at 60@62½c; 80 lb, at 72½@80c; 100 lb at 77½@85c; sharps, at 90c.@$1 00. Rye Feed at 75c; screenings at 45@75c.

GRAIN.—WHEAT.—Ungraded Red, 81@83c; No. 3 Red, 83¼@83¾c; No. 2 Red, 84¼@85c.; No. 2 Red, for September, 84¾@85¾c; do. October, 84⅞@86¼c; do. for November, 86¼@87¾c; do. for December, 88¾@89¼c; do. for January, 89¾@90 13-16c; do. for February, 91¼@92¼c; do. for March, 92¾@93c; do. for April, 94¾c; do. for May, 95½@96 9-16. CORN.—Ungraded Mixed, at 46@48¼c; No. 2, 47¼c; Ungraded White, 48½c; No. 2 for September, 47⅝@47¾c; do. for October, 47¾@48¾c; do. for November, 49@49¼c, do. for December, 50@50½c; do. for January, 50¼@51c; do. for May, 52¾@53c. OATS.—No. 3 31c; do. White, 33½c; No. 2, 31¾@31¾c; do. White, 36@36¼c; No. 1 White, 37c; Western Mixed, 32½@33c; do. White, 33@40c; White State, 36@40c; No. 2 for September, 31¾@31¾c; do. for October, 32@32¼c; do. for November, 32½@33½c; do. for December, 33¾@34c; do. May, 37c.

PROVISIONS.—PORK.—Mess, quoted at $10 50@10 75 for Old and $11 25@11 50 for New; $14 for Family Mess; $14 50@15 50 for Clear Back; and 10 50 for Extra Prime. BEEF.—Extra India Mess $11 50@13; Extra Mess, in barrels, $7 50@8; Packet, $8; Plate, $7 25@8. BEEF HAMS.—Quoted at $21 50@22. CUT MEATS.—Rib Bellies, 12 lb average, 7¼@7½c; Clear Bellies, Heavy, 7c; City Pickled Shoulders, 6@6¼c; Smoked Shoulders, 7¼c; Pickled Hams, 10¾@11c; Smoked Hams, 12@12½c. MIDDLES.—Long Clear in New York, 7½c; at West, Long Clear, 6¾c; Short Clear, 7c. DRESSED HOGS.—City Heavy to Light at 6¾c; Pigs, 7¼c. LARD.—Western steam spot, 6.30c; September, 6.35@6.37½c; October, 6.40@6.47c; November, 6.33@6.37c, December, 6.38@6.39c; January, at 6.39@6.41c; February, 6.45@6.52c; March, 6.56c; City Steam, 6.70; Refined, 7.40; Continent, 7.80.

BUTTER.—Creamery—State, pail, fine, 23c; do. and Pennsylvania, tubs, 26¼@27½c; Western, best, 27c; do. prime, 24@25c; do. good, 19@20c. State Dairy, pails, choice, 25c; half-firkin tubs, about prime, 23@24c; half-firkins, tubs, good, 20@21c; half firkins common, 15@17c; Welsh tubs, best, 22c; do. do. prime, 19@20c. Western Imitation Creamery, best, 16@17c; imitation creamery, fair and good, 13@14; Dairy, fine, 14@15c; do. common, 11@12c; Factory, fresh, 13@14c; do. good, 12@13c.

CHEESE.—New State factory, best, colored, 11@11¼c; do, do, white, 11@11¼c; do, do, good and fine, 10@10¼c; do, do, fair, 9¼@9⅝c; do, do, common, 8¾@9c; Ohio factory, fine, flat, 9¾@10c; State factory, night skims 7@8c.

BEANS.—Marrows, choice, $1 55@1 60; Mediums, choice, $1 40@1 45; Pea, $1 40@1 45; Red Kidneys, choice, $1 65@1 75; White Kidneys, choice, $1 45@1 55; California Lima, flat, $1 70; Green Pease, $1 05@1 10.

EGGS.—State, 21@21½c; Western, 20½@21c; Canadian, 20c.

POULTRY.—LIVE.—Chickens, per lb, at 9@11c; fowls, near-by lots, per lb, at 11@12c.; fowls, Western lots, per lb, at 10¼c; fowls Southern lots, per lb, at 9½@10c; turkeys, per lb at 9@11c; ducks, western per pair at 50@75c.; geese, western, per pair, at $1.25@1.50.

POULTRY.—DRESSED.—Turkeys, per pound, at 11@14c.; Spring chickens, Philadelphia, per pound at 17@—c,; do. western, per lb, at 11@12c; fowls, Pennsylvania, prime, per lb, 12@13c; do western, per lb, at 11@12c.

FRUITS.—FRESH.—Quotations: Pears.—Bartlett, per keg, at $2@2 75; do, up-river per bbl, at $6@6 50; Seckel per bbl, at $3@4 75; Sheldon, per bbl, at $3 25@3 75. Apples.—Gravenstein per bbl, at $2 00@2 50; Maiden Blush, per bbl., at $2 25@2 50; common varieties at $1@1 75 per bbl. Peaches.—Jerseys, best, at $1 25@1 50 per basket; do. good at 75c@$1; do. plain at 40@60c. per basket. Grapes, 5@7c. for up-river Delaware, per lb. Plums.—6@8c. per quart for Quackenboss; $2 50@3 00 for Lombard; $3@3 50 per bbl. for green gage; $2 50@3 00 per bbl, for Damson. Watermelons at $15@25 per 100. Muskmelons at $2@2 50 for best per bbl.

FRUITS.—DRIED.—The quotations are as follows; Apples—Fancy evaporated, 8½@9c; do. choice, at 8@8½; do. Tennessee quarters at 1½@2c; do. State sliced at 2¼@2½c; southern sliced prime at 2@3c. Peaches—North Carolina, peeled choice new, 11½c; fancy, 12½@13c; do. Georgia, choice, at 11c; do. do, prime, fancy, new, 10@10½c; do, Delaware, evaporated, peeled, 25@26c; do, do, do, unpeeled new, 12½@13½c, do, Georgia new, 10½@11c. Cherries, pitted, at 10@10½c. Evaporated raspberries, 14½@15c; sun-dried do. 13c. Blackberries—Prime at 8@8½c.

PEANUTS.—Quotations are: 5½c. for best hand-picked; 4@4½c. for farmers' grades.

HAY AND STRAW.—The following quotations are Choice Timothy, old, 85c; Good do, at 70@80c; medium, 60@65c; shipping at 50c; clover mixed, 55@60c. Straw.—No. 1 rye, 60@65c; short rye at 40@50c; oat, at 35@40c.

COTTON.—The quotations, according to the American classification, are as follows:

	Uplands.	New Orleans and Gulf.	Texas.
Ordinary	6¾	6 15-16	6 15-16
Strict Ordinary	7 3-16	7⅛	7⅛
Good Ordinary	8¼	8 5-16	8 5-16
Strict Good Ordinary	8 9-16	8¾	8¾
Low Middling	8 15-16	9⅛	9⅛
Strict Low Middling	9 3-16	9⅜	9⅜
Middling	9⅝	9 9-16	9 9-16
Good Middling	9¾	9 15-16	9 15-16
Strict Good Middling	10 1-16	10¼	10¼
Middling Fair	10 7-16	10⅝	10⅝
Fair	10 1-16	11¼	11¼

STAINED.

Good Ordinary	6 9-16	Low Middling	8 1-16
Strict Good Ord.	7¼	Middling	8 13-16

HOPS.—State, new, fair, 27@30c; do, 1885 crop, best on offer, 20@23c; do, 1885, inferior, 14@17c; California, new, prime and best, 31@35c; do, old, best, 18@20c; do, old, low grades, 15@17c; German, new, best, 36@38c; do, low grades, 21@29c; English, new, best, 29@30c; do. new, low grades, 23@25c.

VEGETABLES.—Quotations are for: Potatoes.—Long Island, rose, in bulk, per bbl., $1 75@2 00; Jersey, rose, per bbl, $1 50@1 75; do. peerless, per bbl, $1 25@1 50; sweet potatoes, Va., yellow, per bbl., $1 50@1 75; sweet potatoes, Va., yellow, inferior, per bbl, $1 00@1 25; Corn.—Jersey, per 100, $1 00@1 25. Cabbages.—Flat Dutch, per 100, $2 75@3 25. Cucumbers.—Long Island, per 100, 40@50c, do. pickled, per 1,000, $1 00@1 50. Egg plant, Long Island, per bbl, $1 25@1 50. Lima beans, per bag, $1 00@1 50. Onions.—Conn., red, per bbl, $1 50@1 75; do. Orange County, red, per bbl, $1 50@1 75; Squash.—Jersey, marrow, per bbl, $1 00@1 25. Tomatoes—Long Island, Acme, per box, 25c; do. Long Island, Grant, per box, 30c.

WOOL.—Recent sales, showing present prices are X and XX Ohio, 31@33c; Fine Delaine, 37½c; Graded Montana, 30@31c; Oregon, 24@25c; ¾ Indiana, 32c; Western Texas, 16@18c; Scoured, 32c; do, 57c; Spring Californta 20@23c; Scoured do., defective, 50c; Medium Texas, scoured, 47½c; Fine Ohio Unwashed, 35c; and Washed Fleece, Merino Montevideo, Fine Scoured Spring Texas Scoured.

LIVE STOCK MARKETS

NEW YORK, SATURDAY, Sept. 25, 1886.

BEEVES.—Texans, 1003 lb, at $3 75; do, 1046 at lb, $4 10; Colorado Steers, 1150 lb, at $4 45; do, 1132 lb, at $4 40; Chicago Natives, 1439 lb, at $5 50; do, 1357 lb, $5 50; do 1471 lb, at $2 20; do, 1485 lb, at $5 20; Kentucky steers 1366 lb, at $3 30; do, 1379 lb, at $5 05; do, 1295 lb, at $4 75; do, 1280 lb, at $4 75; Oxen, 1660 lb, at $4 50; Texans, 983 lb, $4 05; do, 990 lb, at $4; Ohio steers, 1188 lb, at $4 35; Buffalo do, 1420 lb, at $5 15; do, 1341 lb, $5 12½; Heifers, 1345 lb, at $4 67½; State Yearlings, Cows and Two-year-olds, 779 lb, at $2 50; Native Steers, 1178 lb, at $4 30; Ohio steers, 1460 lb, at $5 42½; do, 1338 lb, at $4 85; West Virginia do, 1155 lb, at $4 20, less $5; Cows, 966 lb, at $3 25; Kentucky steers; 1076 lb, at $4 10; West Virginia steers, 1189 lb, $4 45; do, 1308 lb, $4 90; State bulls, 782 lb, $2 50; Chicago steers, 1407 lb, at $5 50; State bulls, 780 lb, at $2 47½; do, 1600 lb, at $3.

CALVES.—Grassers, 200 lb, at 2¼c; do, 275 lb, at 2½c; Veals, 258 lb, at 6½c; do, 170 lb, at 8½c; Grassers, 197 lb, at $2 55; do, 203 lb, at 2½c, Veals, 253 lb, at 5c; do, 95 lb, at 7c. do, 153 lb, at 7½c.

SHEEP AND LAMBS.—Receipts for six days, 41,813 head against 42,492 head for the same time last week. Indiana Sheep, 88 lb, at 4¼c; Northern Canada Lambs, 76 lb, at 6c; Canada do. 81 lb, at $6 35; State Bucks, 105 lb, at 3c; State Sheep, 88 lb, at 4c; State Lambs, 62 lb, at 5¾c; do, 60 lb, at 5¾c; Pennsylvania Sheep, 100 lb, at 4c; Western do, 74 lb, at 4c; do. 100 lb. at 4¼c; Pennsylvania Lambs, 66 lb, at 6c; State do, 64 lb, at 6¼c; do. 71 lb, at 6¼c; Canada do. 70 lb, at 6¼c, Western Sheep, 92 lb, at $4 65; Pennsylvania Sheep and Lambs, 57 lb, at $4 35; Canada Lambs, 78 lb, at 6¼c; Kentucky do, 74 lb, at 5¼c; Kentucky Sheep, 96 lb, at $4 50; do, 95 lb, at $4 12½; Kentucky Sheep, 98 lb, at 4¼c.

HOGS.—Receipts for six days, 32,017 head against 31,537 head for the corresponding time last week. State Hogs, 284 lb, at $5 37½; do, 191 lb, at $5 40.

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30 lb. boxes	$1.40	100 lb. bags	$3.00
60 lb. "	2.25	200 lb. bbls	5.50

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30 lb. boxes	$1.25	100 lb. bags	$2.75
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For the Young.

THE STORY OF A DISTRICT SCHOOL.

A COLLEGE BOY'S DIARY.

(Continued.)

THE director helped me take the names of the scholars, and then he proceeded to review the mental capacity of the school.

"First class in grammer rise!" he ordered, striking the desk a vigorous blow.

There was no movement on the part of the pupils. When he repeated the order in a louder tone, the little girl who had had the trouble about the seat rose timidly, and stood by her desk. She was the only one in the school who had ever studied grammar.

The director next called for pupils in elocution and mathematics, but not one could he induce to rise. When he spoke of arithmetic, however, the entire school jumped up in a body to show that there was one study that they understood. The director at last got tired of his examination, and with another warning speech took his departure.

I got along fairly well during the forenoon in arranging classes and lessons. It was impossible to arrange classes according to degrees of study. As there was only one book for every three scholars, the classes had to be made up by families, so there would be no need to buy new books. This seemed to be the principle upon which the school had been conducted before my time.

When at last I struck the bell for the noon recess, the scholars gave a loud shout, and rushed in a body for the door. I made some of them go back to their seats and march out in the usual style, but the larger boys had all run out to the road before I could stop them. The director had told me that the greatest trouble was likely to occur during the noon recess. He had insisted that I should remain in the school house during this hour to preserve order. I found that this order gave me the worst work of the term.

The scholars all seemed to have brought their dinner, even those who lived close to the school-house. The great dinner pails were emptied in a very short time and then began a season of the noisiest fun. Several boys began swinging with their hands on an iron bar that had been placed at one end of the room to strengthen the walls. Others played tag among the seats. It seemed as if they had all entered upon a shouting and laughing match. The boys all kept on their hats and there were certainly no cushions to the bottoms of their boots. By the time I had driven the boys away from the iron bar, some of them began to dance and whistle at the other end of the room. I found it necessary to shake several of the larger boys severely before the noise could be stopped. Gentle measures would not answer at all.

Then there came a dull and sullen silence. Most of the boys went outside where I could see them holding some sort of consultation. They seemed to be very deliberate in all their movements. It was necessary to hold a caucus before taking any decided action. The girls whispered together for a moment and then the largest one came up to my desk and simpered:

"Say, teacher, kin we play 'The Needle's Eye?' 'Taint no noisy game an' our other teachers always lets us play it. They joins in, too—like enough you'd like ter."

After making this request she burst into a giggle and threw her apron over her face. She ran back to the other girls and stood in the corner shaking with suppressed laughter.

I did not know the nature of the proposed game, but the name seemed quiet and harmless enough and I was anxious to please them, so I consented. I had a great mind to join in myself, but at last decided to wait and see what it was to be like. The large girl at once ran to the door and shouted: "Teacher says we kin play 'The Needle's Eye!'" There was a loud shout of approval from the company at the gate, and they all came rushing into the house without ceremony. The smaller boys and girls were at once pushed to the rear of the room, and the others proceeded to form in a circle just in front of my desk. A boy and a girl stood facing each other at each corner of a large diamond marked out on the floor. The other players joined hands in a circle and began to slowly move around between these four couples, who remained stationary at the corners. With one accord they began singing at the top of their voices:

"The needle's eye that doth supply
The thread that runs so truly,
It's oft I've passed a smiling lass
Before I did meet you.
With a bow so neat
And a kiss so sweet;
I do intend before I end
To stay here half a week."

The action was suited to the word in every instance. At the proper point of the song the entire company stopped to bow and at the next step the boy and girl next those waiting so patiently at the corners, assisted in the singing with a resounding smack, and then dropped out of the line to take the places of those whom they had so pleasantly liberated.

The smaller children, not to be outdone in entertainment, formed another circle at the rear of the room and shouted the song until the noise was deafening. In fact the only scholar who did not join in the game was the little girl who had cried about the seat at the opening of school. The rest tried to pull her into the circle, but she held stoutly to her seat. One great boy went to her seat and tried to kiss her there but on her appeal to me he ran for the door with all his speed.

LETTERS FROM THE COUSINS.

DEAR UNCLE MARK:—I wrote to you once before and my letter was put in the waste basket, but I thought I would write once more and ask you to let me join the Y. H. C. I live on a small farm of 35 acres on the Black Warrior River. We have another farm in East Tennessee of 185 acres. I have a dog, a cat, a cow, and some chickens and ducks. We have about 50 chickens. We have White Leghorns and Black Spanish Mixed, and Mamma has just bought some full blooded Plymouth Rocks to improve their size. I have a very nice boat named The Bird. I have four brothers and one sister but they are all away from home. Mamma and Papa like the RURAL ever so much. I like to read the letters from the cousins and I like the "Story of a District School" very much. I have 215 bird eggs; almost every kind that can be found in Alabama. I have a box of 25 different kind that I want to exchange with one of the cousins that live on the coast for sea shells. I hope you will print this. NELA MCCALLA.

Tuscaloosa, Ala.

[Those who want to exchange should write. —U. M.]

DEAR UNCLE MARK: I have been very much interested in reading the Cousin's letters and would like to join the Y. H. C. My Papa is a Michigan farmer. He is 40 years old and this is his first year at farming. He has 40 acres of corn planted, two acres of potatoes and two acres of broom corn. He planted the Angel of Midnight corn that the RURAL sent him, and it spreads all over the farm. He planted the watermelon and muskmelon seeds where there had been a pig pen for several years and they are not doing very well and Papa thinks the soil was too rich for the seeds and he is much disappointed for he is afraid he will not get the ten dollars that is offered for the largest melons. Money is what he is working for. My Papa has got three horses and a little colt and it's name is Tip. He is a fine colt, he is not small like his name. Papa has two fine Chester hogs and four little Chester pigs, also a great many black hogs, but I don't think these are worth mentioning for they always put me in mind of the black people. Your nieee,

East Milan, Mich. ANNIE KNOWLES.

[We musn't judge people, or even hogs by the color of the skin. We should judge them by what they can do.—U. M.]

DEAR UNCLE MARK: I am a little girl eleven years old. Papa has taken the RURAL for several years. We all like it very much, and I and my younger sister Kate like the letters from the young people and would like to join the Club. We live on a small farm one mile and a half from the village. Sister Kate and I had a garden this Summer and raised some flowers and vegetables. We help Papa too; we earned $15 picking berries. We play a good deal too, and ride on horseback and drive. We help by doing errands. We went to mill one day with the team. We like to do anything with a horse. But we must go to school next week. We have two Percheron colts and they are great pets. I could tell you a great deal more but I fear that dreadful waste basket as this is my first attempt.

From your nieces,

EDITH AND KATE VAN EPS.

Stanley, N. Y.

[You are pretty good workers I think. I have no doubt you help very much.—U. M.]

DEAR UNCLE MARK: I was 12 years old the 17th of August, and I suppose you are quite an old man—are you not? We are having quite a nice rain to-day, which is very welcome to the people. I hope you are not so needy for rain as we were here. The wells are failing. We will have about half a crop of corn. The small grain did very well. Granpa and Granma had quite a lot of small fruit this year, considering the dry weather. It has been so dry that our flower seeds did not come well; what came were very nice indeed. Uncle Mark, would you not like to live in the the country? I think I would like it better to live in the country than to live in a busy town like New York. Our school is out, and it seems as though we have nothing to do. I will stay at Grandpa's till school commences again. Grandpa milks six cows and has five little calves.

Liscomb, Ia. H. M. H.

[I am considerably older than you are, any way. I live in the country, too. I am only in New York during the day.—U. M.]

DEAR UNCLE MARK: The sweet peas came up and they are blooming nicely. There are five or six colors. They are very pretty. We have not many flowers this Summer, but we would have had a good many if it had not been so dry: everything is suffering from the drought. Mamma planted the Garden Treasures in small boxes. A few came up, but none lived except the Castor Bean. The Bird cantelopes and watermelons are growing nicely and we think we shall have a good many melons. We have had two watermelons. Papa caught a swarm of bees last Summer and they swarmed this Summer and about nine days after they swarmed the old hive was destroyed by the heat melting the comb and falling down on them. At the close of our summer school we had a picnic at one of the neighbor's groves. We had a very nice time, the scholars spoke pieces and dialogues. Two or three weeks ago Papa got up and he and the dog killed two skunks. They and the wolves have destroyed a good many chickens and nests for us. Uncle Mark you promised to tell us how you kept house on the plains. We have been watching the papers quite anxiously but have failed to see it, won't you please fulfill your promise. We are quite interested in the story of the District School. Mamma is doing without a girl this Summer, and we help her all we can; we wash dishes, sweep, make beds, iron and we can do a little of everything and I (Sarah) can bake real nice cakes. To-day we dried corn and Mamma tried to put up some your way and two bottles burst. Papa finished stacking yesterday and he has 15 stacks of oats and one of wheat.

Your Nieces,

SARAH and KATIE MCDONALD.

Greene, Iowa.

[A good letter. I shall tell you about my keeping house all in good time. I am glad you are doing so much work. I would like to try those cakes myself.—U. M.]

IT is getting pretty chilly about here. Now is the time to take care of the health. If we get cold now we won't be likely to get over it all Winter.

Miscellaneous Advertising.

Hood's Sarsaparilla

This successful medicine is a carefully-prepared extract of the best remedies of the vegetable kingdom known to medical science as Alteratives, Blood Purifiers, Diuretics, and Tonics, such as Sarsaparilla, Yellow Dock, Stillingia, Dandelion, Juniper Berries, Mandrake, Wild Cherry Bark and other selected roots, barks and herbs. A medicine, like anything else, can be fairly judged only by its results. We point with satisfaction to the glorious record Hood's Sarsaparilla has entered for itself upon the hearts of thousands of people who have personally or indirectly been relieved of terrible suffering which all other remedies failed to reach. Sold by all druggists. $1; six for $5. Made only by C. I. HOOD & CO., Apothecaries, Lowell, Mass.

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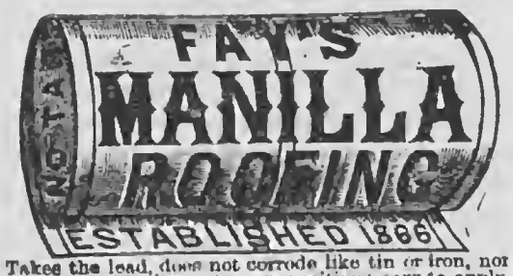

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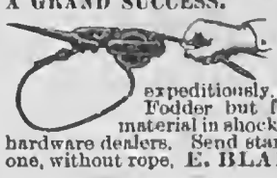

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NEW Sample Book of beautiful cards, 11 Games, 12 tricks in magic, 436 Album verses. All for a 2c. stamp. STAR CARD CO., Station 15, Ohio.

WANTED GOOD MAN
energetic worker; business in his section. Salary $70. References. Am. Manuf'c'r'g House, Barclay St., N.Y.

"SINGER" MODEL SEWING MACHINES for $12.00 up. Warranted 5 years. New and perfect. Sent on trial if desired. Organs given as premiums. Send for circular with 7,000 testimonials from every state. We can save you $15 to $50. GEO. PAYNE & CO., 42 W. Monroe St., Chicago.

Brewster's Patent Rein Holder.
Your lines are where you put them—not under horses' feet. One agent sold 12 doz. in five days; one dealer sold six doz. in 15 days. Samples worth $1.50 FREE. Write for terms.
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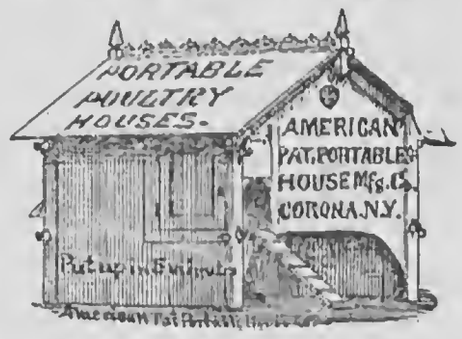
100 Choice New Recitations 13 Songs, Elegant Sample Cards, all for a 2c. stamp. CADIZ CARD CO., CADIZ, O.

Beautiful Maryland Homestead Farm.—230 Acres, $5,000. For full particulars, address H. P. Chambers, FREDERALSBURG, MD.

INVENTORS and MAN'F'RS. Send for large pamphlet containing U.S. PATENT Office Rules for obtaining Patents. F. B. BROCK, Atty., Washington, D.C.

PORTABLE POULTRY HOUSES.



Furnished all complete ready for occupancy. These houses are just what poultry breeders want, as they are

Neat, Practical and Cheap.

All kinds of portable houses suitable for all climates; *rain, wind* and *water proof.* Sent to any part of the world, and no carpenter required to put them together.

Send for our Circular before you order a poultry house.

AMERICAN PATENT PORTABLE HOUSE MANUFACTURING CO.
Corona, Queens Co., N. Y.

PERSONALS.

BLONDIN, the tight-rope walker, lives quietly in London at the age of 62.

THE Rev. E. P. Roe, the novelist and nnrseryman, will spend the next two years in Southern California.

PRINCE BISMARCK is credited with the statement that a little blood letting by Russia just now would be conducive to the general health of Europe.

IRA D. SANKEY, the revivalist, says he does not regard Chicago as the worst city in the Union, but as very inflammable. This probably accounts for its dynamite propensities.

BARON ROTHSCHILD rode by special train from Glasgow to London, at 60 miles an hour, when he heard of his mother's alarming illness in Paris. In London he learned of her death.

FRANCIS A. WALKER, Chief of the census of 1880, and boss statistician of the country, estimates that the population of the United States in 1900 will not fall far short of 80,000,000.

MISS STANLEY, a Dakota girl, spent the Summer entirely alone, without even a cat for company, on her claim four miles from Waterbury. She had 10 acres of grain, a fine garden and a watermelon patch.

THE much-talked-of General Boulanger has sagaciously directed his attention to the songs of the French people, and ordered that the national air for the French soldiers shall be "*Mourir pour la patrie.*"—To die for our country—a popular French song.

BOB and Alf. Taylor, Democratic and Republican candidates for Governor of Tennessee, who travel together and hold joint disenssions, had the first little "spat" Wednesday, but "made it up" directly afterward, and are still acting "quite fraternally."

IT is suggested that a reunion of the dethroned—or uncrowned—royal personages of Europe would be an interesting event. The group would include Isabella and Don Carlos, of Spain; Eugenie, "Plon-Plon" and the Comte de Paris, of France; the Duke of Cumberland (King of Hanover), and Alexander, of Bulgaria.

MRS. U. S. Grant invited President and Mrs. Cleveland to stay at her honse in Elberon on their way back from the Adirondacks. She received a reply from Mrs. Cleveland thanking her very kindly, but regretting that pressing bnsiness of State made it neeessary for the President to go straight through to Washington.

GERONIMO is 62 years old, stands five feet nine inches, and weighs 190 pounds. He is as straight as a ramrod and shows little signs of age. Hair long, black and glossy. Face "rather good-natured, lit up with frequent smiles." The real chief of the Chiricahuas is Natchez, "a tall, powerful-looking Indian." Geronimo, however, is leader in war.

THE four Acken brothers, of Middlesex County, N. J., are fine men. William is 83 years old, six feet three inches in hight, and weighs 250 pounds; Henry is 81, six feet four, and weighs 270; Samuel is 70, six feet five, and weighs 225; Theodore is 73, six feet six, and weighs 230 pounds. They are in excellent health and vigorous beyond their years.

SENATOR EVARTS'S country seat in the upper valley of the Connecticnt, comprises 800 acres of meadow and forest. The Senator entertains like a prince, and Mrs. Evarts is described as a queenly woman in her domestic sphere or in social duty, closely resembling the portrait of Martha Washington, which hangs in the East Room of the White House.

THE largest pension ever paid in the United States was paid at the United States Pension Office, in Louisville, Ky., Thursday, to Marcus D. Richardson, an aged soldier living at Milton, Ky. The cause for granting the pension is total blindness, brought on by an injury to the eyes received in the war in 1863. The pension dated back to that year and amounted to $11,500.

Two or three years ago Phil Armour saw a negro porter in a palace car industriously trying to spell ont words in a well-thumbed reader whenever he had a moment's leisure. He became interested in the boy and offered him $25 if he'd read six lines before the train reached its destination. The porter, by hard work, earned the money, and now he is a student in Oberlin College, sent there by the generous Chicago packer. He is very black and very ambitious.

Miscellaneous Advertising.

A Hard Fate

It is indeed to always remain in poverty and obscurity; be enterprising reader and avoid this. No matter in what part you are located, you should write to Hallett & Co., Portland, Maine, and receive free, full particulars about work that you can do and live at home, at a profit of at least $5 to $25 and upwards daily. Some have earned over $50 in a day. All is new. Capital not required. You are started free. Either sex. All ages. Better not delay.

Miscellaneous Advertising.

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SMALL FRUITS, BULBS, SHRUBS AND ROSES.
Special attention is called to our remarkably Fine Stock of
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☞ ALSO **GRAPE VINES** Including such kinds as Niagara, Jessica, Empire State, Willis, Frances B. Hayes, etc.
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I shall sell without reserve over 90 head of males and females of all ages from the **MAPLE PARK STOCK FARM,** Sale to commence Oct. 6, 1886, at the Union Fair Grounds, Geneva, N. Y. This will be a grand opportunity for those wishing to start a herd of registered cattle, as I am over-stocked and shall offer the very best animals in my herd. I selected personally from the best herds in Holland, a large share of these cattle, regardless of expense. "Gen. Grant" and "Ho-Ho" my noted bulls will well repay a journey to the sale. Catalogues ready.
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Another importation will arrive Sept. 1st from the celebrated flock of John Treadwell, whose sheep have again this year won 1st, 2d and Champion prizes at the "Oxfordshire," "Bath and West of England," and the great "Royal" shows His best Rams are by my grand imported, 420 lb., "Bicester," winner at these Shows '83, '84 and was 1st at sweepstakes, *over the other Downs*, at Chicago, Madison, Wis., and St. Louis. Mr. Treadwell wanted him back last year. For sale, Imported Rams, Ewes and Lambs by Imported "Bicester," "Sir John," "Baron Campsfield" and "Donatus."
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PRINCE NERO Sire Nero, P. S. 249; Dam Mrs. Langtry. C. 3746. Service Fees $100.
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WHAT OTHERS SAY.
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"As a herd, away up! up!! up!!!"—Dudley Miller Esq., Oswego, N. Y.
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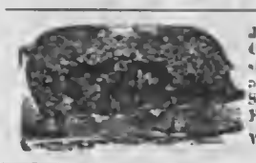

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The Oil Meal from the mills of the undersigned is found by many Feeders of
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SUMMER MONTHS
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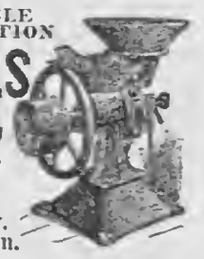

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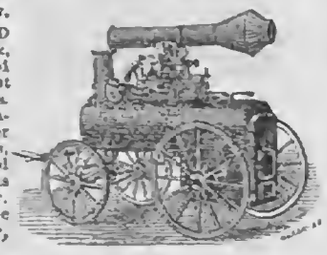

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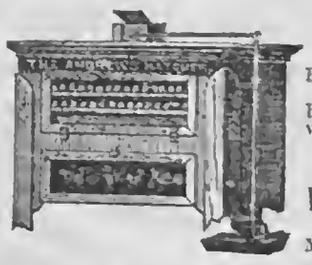

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Hatches Ducks, Turkeys, Geese and Chickens. Received First Premium where exhibited. Send for Circular.
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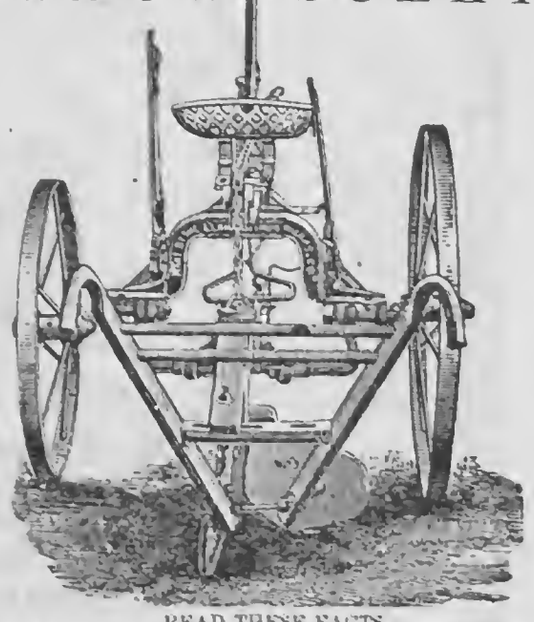

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We claim and GUARANTEE that a Plow attached to the Sulky and carrying the driver, is from five to 100 pounds lighter draft than the same Plow doing same work without the Sulky. Write for prices.
ELKHART IRON WORKS,
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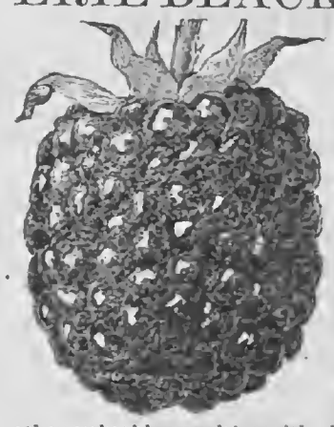
Mention Rural New-Yorker.

ERIE BLACKBERRY.



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MONMOUTH STRAWBERRY an improved Crescent, having a perfect blossom, fifty per cent. larger, *earlier*, firmer, of better quality, the same bright color, great productiveness and everlasting foliage of the Crescent. **Golden Queen Raspberry, Lawson-Comet Pear, Japan Plums** and a host of other valuable novelties with all the old varieties of both Orchard and Small Fruits worth growing. 200,000 Peach Trees, 75,000 Apple Trees, the largest stock of Blackberries in the U. S., and an enormous stock of Grape Vines. Price List—and full descriptions of novelties free; GUIDE TO FRUIT CULTURE, 10c., ORCHARD AND GARDEN, the best horticultural journal 50 cents.
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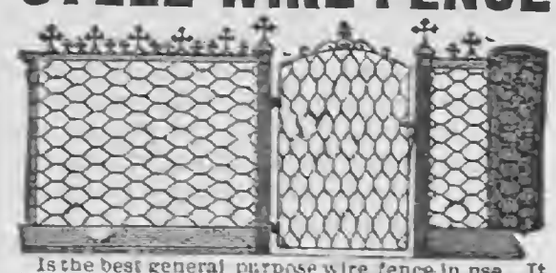

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Humorous.

THE world moves. It probably finds it cheaper to move than to pay rent.—*Boston Transcript.*

A MAN seeing on a dentist's sign; "Teeth extracted withou pain," remarked; "I never could get any teeth extracted without payin'" —*Peoria Transcript.*

IN A BATH HOUSE.—Customer (frantically)—Here! I say! There are no towels here. Proprietor—In one moment, sir. The gentleman in No. 7 is nearly through with it.—*The Rambler.*

"MAMMA, she said, "I don't like the way this bustle sets." "Neither do I," was the prompt reply. "And, besides, your father is swearing about the rat-trap being lost, so you must really take it off."—*Farm and Fireside.*

ANNIE and Emily were enjoying their first bath in the glorious surf at Old Orchard. It began to rain while they were in the water. Emily started to wade ashore. "Where are you going?" asked Annie. "After my rubbers," said Emily.—*Harper's Bazar.*

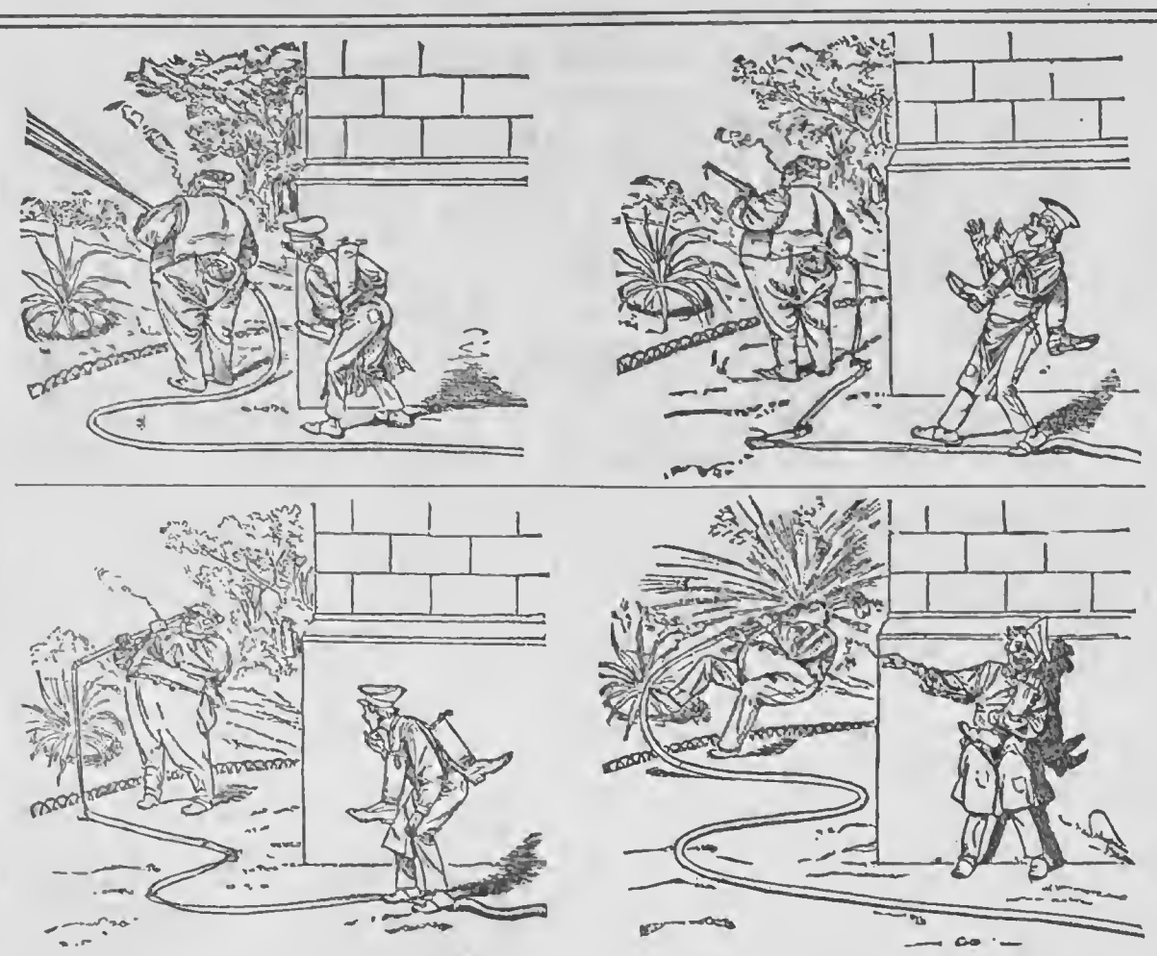
"MOTHER, what is an angel?" "My dear, it is a little girl with wings, who flies." "But I heard papa telling the governess yesterday that she was an angel: will she fly?" "Yes, my dear, she will fly away the first thing tomorrow."—*N. Y. Ledger.*

CLERK REIGLE, of the County Commissioner's office, was at the Granger's picnic this week. "Did you see the educated pig?" queried a reporter to-day. "No," said the affable clerk, "but I saw the uneducated pig. He sat in a car coming from the picnic, and occupied a whole seat while several women stood."—*Harrisburg (Penn.) Telegraph.*

BOBBIE is the son of a high official in Washington, and he is as bright as his father. He goes to Sunday-school, and last Sunday the teacher indulged in a little talk on home religion. "Does your father say grace at the table?" she asked when she came to Bobbie. "No, miss, he doesn't," replied Bobbie, "our waiter girl ain't named Grace."—*Philadelphia News.*

"WHAT college do you intend sending your son to?" asked an Allegheny gentleman of another this morning. "I thought of sending him to Harvard, but now I am thinking more favorably of Columbia." "Indeed! why have you changed your opinion?" "Well, Columbia outrowed Harvard at the recent trial. You see, I want my son to have the best education the country affords."—*Pittsburgh Chronicle-Telegraph.*

ACCORDING to the New York Times, the motto Miss Cleveland had decided upon for her Chicago paper is: "Prove all things; hold fast that which is food." The intelligent compositor, ably assisted by the omniscient proof-reader, got an "f" instead of a "g" in that last word, but he has accidentally touched a cord which will ring responsive in every editorial stomach in the Western provinces hungering for the fat of the land, for which it offers to exchange subscriptions Let the motto stand.—*Washington Critic.*



A STORY WITHOUT WORDS.—*German Paper.*

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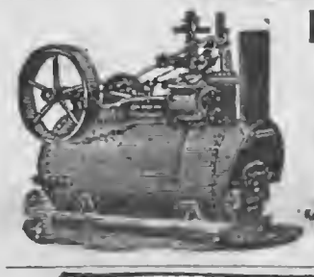

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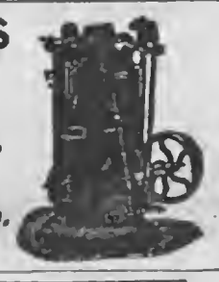

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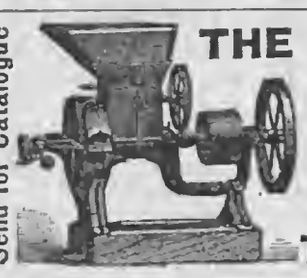

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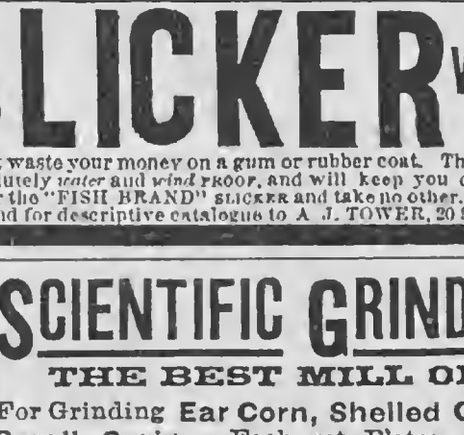

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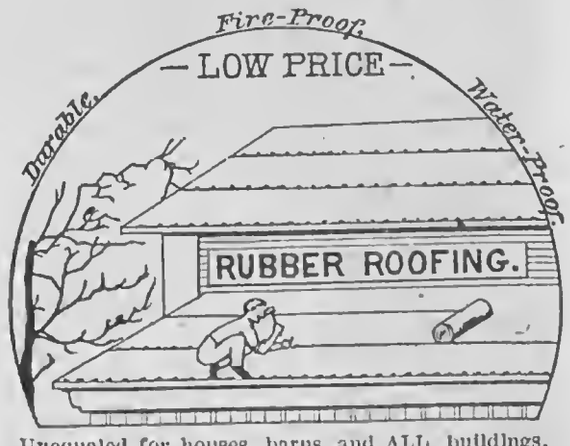

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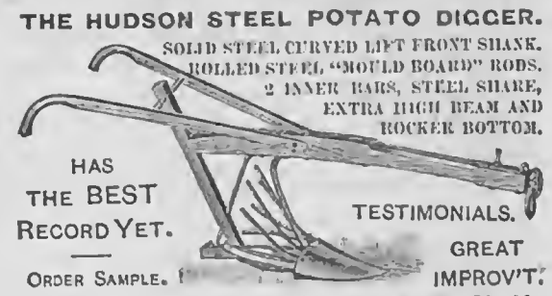

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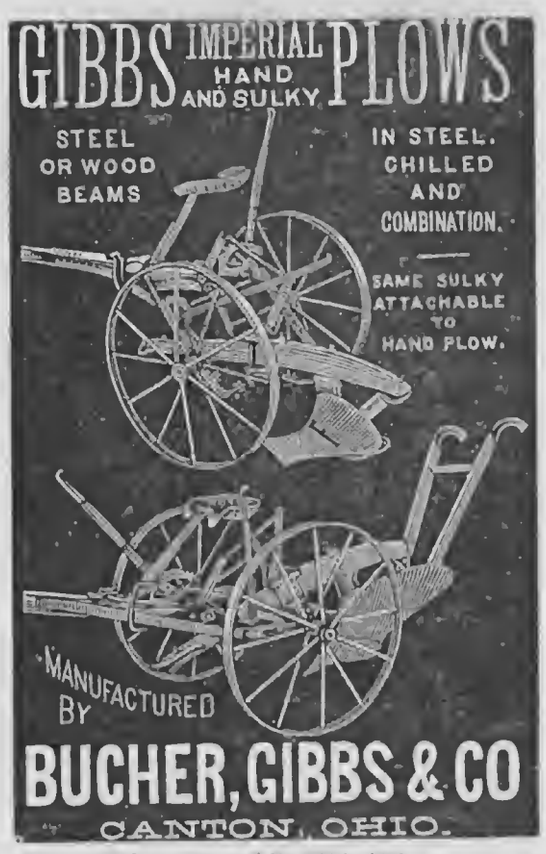

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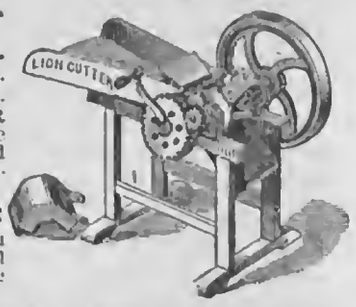

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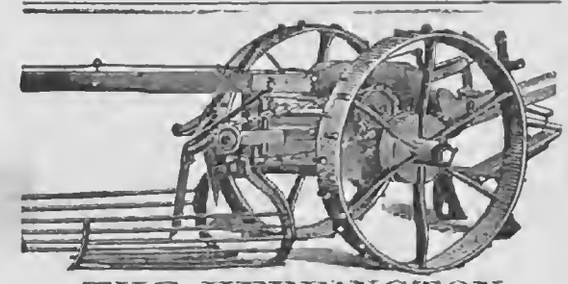

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A JOURNAL FOR THE SUBURBAN AND COUNTRY HOME

VOL. XLV. No. 1915. NEW YORK, OCTOBER 9, 1886. PRICE FIVE CENTS. $2.00 PER YEAR.

Entered according to Act of Congress, in the year 1886, by the Rural New-Yorker in the office of the Librarian of Congress at Washington.

Sheep Husbandry.

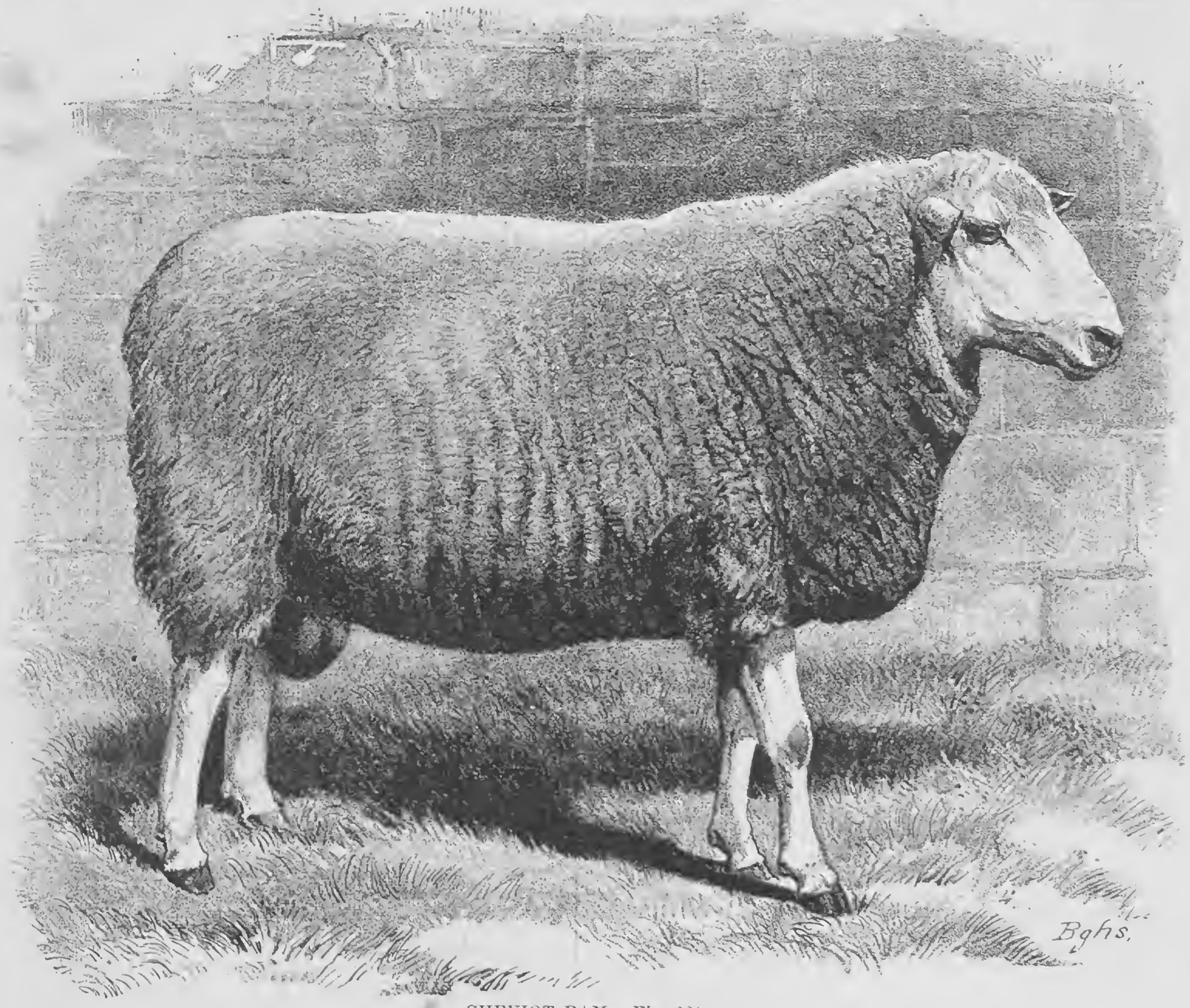
THE CHEVIOT SHEEP.

HENRY STEWART.

Home of the Cheviots; their origin; old-time Spanish sheep; Cheviots "excelled by none; equaled by few;" excellent for wool and mutton; sections best adapted to them in this country; mountainous North Carolina; weights of wool and mutton;

THE Cheviot sheep inhabit the range of hills or low mountains on the southern boundary line of Scotland, and the nothern part of England. It is a cold, bleak region, but has long been occupied by a race of hardy industrious farmers who have made the rearing of sheep and cattle their chief business. Two hundred years ago and more, when wars disturbed the peace of the two countries, this border-ground was the scene of constant raids, forays, and encounters between the partisans of the political leaders on either side, who made politics an excuse for "lifting" cattle and sheep. The excellent cattle and fat sheep of the hills even in those days, had a reputation which too often brought loss and trouble upon their owners, or defeat and disaster upon those reckless ruffians who "came down like a wolf on the fold" to rob and harry and kill. The sheep of the Cheviot hills lived then on the mountain pastures, which afforded rich, nutritious, but sparse herbage, well calculated to develop a useful animal, having a good fleece and fine-flavored mutton. It was said by the shepherds that their sheep originally came up out of the sea, and this tradition is believed to have originated from the fact that some of the ships of the Spanish Armada which was sent to conquer England in the days of Phillip II of Spain, and "Good Queen Bess" of England, were wrecked on the coast of the hill country, and the sheep carried for the supply of fresh meat escaped from the wreck and swam ashore. The sheep of Spain at that time were the best in the world. The Merinos had descended from flocks which were renowned when Spain was a part of the Roman Empire, as they furnished the fine wool of which the imperial purple robes were manufactured and which were more costly than silk then brought in caravans all the way from China. It was from Spain that the excellent Cotswold sheep were brought to England as a present from the Spanish to the English King, and the Cheviots coming from the same sources were, beyond a doubt, as excellent as the other Spanish breeds. Of late years, and since quiet came to the border by the union of Scotland and England, the hill farmers have greatly improved their sheep, and the Cheviot breed is now "excelled by none and equaled by few" of the English and Scotch breeds. The Cheviot is a large sheep, as large as the Cotswold, but a better mutton animal and has finer wool and a closer fleece. The wool furnishes the material for the soft, durable clothing goods known as "cheviots," which are so popular in England and the United States, and is not too long for carding in the common country mills for the manufacture of flannels, cassimeres, jeans, and blankets. The mutton, of course, is affected greatly in quality by the food; but where, in America, similar conditions can be secured, the sheep will yield meat as highly flavored and as tender and sweet as in their native home. It is a mountain sheep, and Northern New England, Western Pennsylvania, the Rocky Mountains and the Cascade Ranges, especially, and the Southern Mountain region from West Virginia to Alabama are all well adapted for these sheep, and will furnish them with precisely the pastures and climatic conditions most suitable for them. A moist climate produces a soft, lustrous wool, and naturally affords continuous nutritious herbage. Here, in the Southern mountain region, where the rainfall is 60 inches in the year, and descends in gentle showers at short intervals, and where consequently there are no droughts; and the soil, rich in potash, produces a varied herbage of wild pea vines, short grass, nutritious plants and undergrowth, and the very best of all the cultivated grasses and clovers, as well as roots; and where the short, mild Winters permit outdoor grazing, with the finest and well sheltered ranges in the open grassy woods, excepting for two or three weeks in January, these sheep find everything they require and enjoyed in their native home.

The engraving (Fig. 381) is a likeness of a two-year-old ram bred and owned by Mr. William Curry, Hartwick, Otsego County, N. Y. He received the first prize in his class at the State Fair at Albany in 1885. He weighs 200 pounds, and is an excellent specimen of the breed. My pure yearling ram weighs 180 pounds, and a pure-bred ewe now nursing her lamb weighs 160 pounds. A spring lamb weighs 70 pounds. One of my rams sheared 11 pounds last year and 8½ pounds this; the ewe 7½ pounds. The custom here being to shear twice a year, my flock were sheared Aug. 30, and the weights of the fleeces were: ram, 5½ pounds (five months' wool); yearling ram, 4 pounds; ewe, 4 pounds; spring lamb, 3¼ half-bred spring lambs, 2½ to 2¾ pounds; and three-months'-old lambs yielded two pounds to the fleece.



CHEVIOT RAM. Fig. 381.

The Cheviot crosses well upon the common native sheep, and the best of the half-breeds can scarcely be distinguished from the pure-

bred sheep. As this sheep is but little known as yet in America, its good qualities, its entire adaptation to so large an area, and the useful quality of the wool and the mutton render it worthy of notice by shepherds, especially by the farm shepherds who keep a few sheep for a domestic supply of meat and a little wool.

Macon Co., N. C.

A LITTLE FLOCK OF SHEEP on every farm would add millions to the public wealth. Fifty million sheep could be added to our present stock of the same number, and would be wholly absorbed in the domestic supply of the farmer's homestead. A lamb from the flock furnished an acceptable meal for the family of the ancient patriarchs and an honored guest, and many a modern patriarch surrounded by his rising generation would find a lamb agreeably useful, and far more desirable than the too common pork or bacon. A sheep too could be easily divided—turn about—by a few neighbors. The skin, tanned and dyed, would furnish the dwelling with mats and rugs, and the wool would meet with the readiest sale at the stores.

SHEEP REQUIRE TO BE WATCHED.—The rule of the good shepherd is "count the flock whenever you see it." There may be one missing, fast in a fence corner, sick, perhaps; but immediate help would save it. It is a remarkable thing about sheep that they are as valuable for their indirect worth as for their direct contributions to the farm profits. A flock necessitates such a culture of the land as is the very best for the farm, and it furnishes the richest manure to make this culture perfect. So in the act of counting the sheep, the habit of close observation and precision is formed and encouraged, and many a thing which might go amiss is discovered and set right in good time, merely because the counting of the sheep makes the farmer keep his eyes and wits about him.

The Herdsman.

COLORADO CONCEITS IN STOCK RAISING.

B. F. JOHNSON.

Sacredness of the cow and calf; Colorado beef; stock risks on the ranges; sheep and horses better than cattle; Alfalfa; its advantages in the South; its culture; enthusiastic about it; the ranchman and cowboy "must go."

LET us use the word conceit in the sense of idea, but an idea gained from experience. Thus a cow in Colorado is nearly as sacred and safe from the knife of the butcher as a cow in India, where she is worshipped as a goddess. It results from this that all beef sold by the butchers is from bullocks and generally those of three years or more. It is far from being as fat as cow beef offered in average Middle State and Eastern markets, nor has it as decided and ageeable a beefy flavor, but it is tenderer and juicier in all the eating pieces from nose to tail.

In Colorado and other cattle ranching sections, ranchmen associate, incorporate into companies to buy the steers, and do the slaughtering on a large scale, such a thing as a butcher buying steers and doing his own slaughtering being nearly unknown. This is a measure of protection on the part of the ranchmen who, by keeping a record of the brands of the stock they kill, defeat the efforts of the cattle thieves who are the scourge of the ranges.

But veal calves are in some senses held as sacred as cows, and when the best cuts of beef are sold to hotels and large boarding houses at 11 and 12 cents a pound, veal cannot be contracted for, for less than 18 cents. The cow is held in great respect for the calves she will bring and the calf is held in respect nearly as great for the steer or cow it will make.

It is a pity some of this Colorado conceit in respect to butcher's stock could not be got into the heads and hearts of butchers and meat consumers in the large and small towns of the corn, grass and cattle States, where cows, and even cows giving milk, and other cows big with calf, but in a good condition of fat and flesh, furnish nine-tenths the beef consumed. And as to veal, every calf is caught up and slaughtered that can be had, and is sold at an advance of not more than 25 per cent. over beef. To show the pecuniary risks run by ranchmen, who, buying unacclimated stock from the South, carry, or attempt to carry them through the Winter on the ranges without grain or hay, a ranchman was pointed out to me who had recently bought 2,000 head of Texas two-year-olds, on the basis that not over 200 would survive the Winter.

But sheep do better, and if a provision is made to feed a flock for 30 days, they may be wintered with as little loss as in Illinois or Kentucky. In fact, Colorado soil, climate and situation favor sheep, horse and mule raising rather than neat cattle, and to that complexion will it come at last—with the aid and assistance of Alfalfa in the irrigated sections and wherever else it can be grown.

Still using the word in its original and best sense, there is no "conceit" so prevalent among Colorado farmers, sheep and horse men, as the conceit as to the great value of Alfalfa as a forage and green crop, in one. The yield of green and dry forage, the completeness of the stand and its permanence for 30 or 40 crops, (three every year) to say nothing of the attractiveness of the deep, dark green of the growth before, and its beauty later, when it is a mass of purple bloom, must be seen to be appreciated. It is, in fact the Timothy, Blue Grass, clover and corn of the farther West, and as such it is not too highly valued.

This brings me to the point of saying to the planters and farmers of the cotton belt, if they could get into the conceit of growing Alfalfa, it would go far to shorten the time one-half, till that revolution in farming all Southern men are looking for, would be accomplished.

The great and crying want in the South all through the cotton belt, is the scarcity of green forage, from July to October. From this want on the uplands, stock are driven to the river bottom, where bad water is the rule and malaria universal, and hence the prevalence there of charbon, dry and bloody murrain, and many diseases farmers of the North have no just conception of.

Like cotton, Alfalfa is a warm and dry climate plant, and if copiously and properly irrigated will produce enormous crops under the heat and drought of terras callientes. In the cotton belt any good cotton land will produce it in a manner satisfactory to the grower; and when sown on really good land and annually fertilized, it will become a bonanza. Prepare the land as for a grain crop; but with about five times as much labor in the operation. Sow 30 pounds of seed to the acre, broadcast, or, better, in drills, as soon as all danger of frost is over in the Spring. The first year cut the herbage but once in the season, and do not allow a hoof of stock upon it until 18 months after the seeding—or, better, not at all for a generation. This interpolation is what may be thought a sort of apotheosis of Alfalfa, and may be regarded as a piece of extravagance on the part of the writer, but it is one anybody is liable to who has had the writer's experience.

Quite to my surprise I found in Colorado as strong a feeling against "hog butter" and the syndicate of money sharks who were attempting to influence Congress and the President, as in Illinois. And more to my surprise, I found a fast-growing sentiment that the ranchman and his henchman, the cowboy, "must go." The original ranchers made the mistake of fencing up the country without the shadow of a right to do so, and the worse mistake of attempting to drive the pioneers of small means out. These things have never been forgotten or forgiven, and if the sentiment grows as it seems to be growing, the popular estimates of the Western farmers for the cattle men, the cowboy and the Indian, will be nearly on a par.

BOGUS pedigrees have done much to injure legitimate stock breeding. A committee appointed by the A. J. C. C. have prepared the draft of a law which shall prevent further trouble. It provides that any person who shall obtain by false pretence from any company for the improvement of domestic animals, a certificate of registry, upon conviction shall be punished by imprisonment in a State prison for a term not exceeding three years or in a county jail for one year, or by a fine not exceeding $1,000, or by both fine and imprisonment. It is to be hoped that the legislatures of the various States will take hold of the matter and pass suitable laws for carrying out this idea. It is a good one.

Dairy Husbandry.

METHODS OF PRO-RATING BUTTER VALUE IN MILK OR CREAM.

Defects of the Fairlamb system now generally abandoned; test churns, and objections to them; oil test churn; with cream and milk; its advantages.

THE oil test churn is now a part and parcel of the cream-gathering system of butter making in several of the Western States. It is about 10 years since the system had a pronounced start, and was first known as the Fairlamb plan, and was conducted for a time with the use of a patented can of peculiar construction and uniform size and shape. The theory was that 113 cubic inches of cream, raised by the rules given for managing the can, would yield one pound of butter, and a guage to show the cubic inches above the cream line on any can filled with milk, and standing till full separation had taken place, was a part of each can. The owner of the milk and the cream gatherer looked at the "guage," and determined the amount of butter the cream would make, and the assumed facts went on the record and determined the weight of butter the patron should be paid for. A factory was projected and operated one Summer in accordance with the plan, and the belief obtained with the inventor and many of the farmers that a way to justly prorate the value of the butter in the milk of all sorts of cows had been discovered. The writer very well remembers the first public appearance of the can, and of the inventor, now deceased, at a Western dairy convention the following Winter, and the troubled anxiety there was on the brow of the latter, when upon sounding several of the dairymen and manufacturers he was most anxious to have believe, he found them not only skeptical, but some of them pointed out the radical defect that has led to a pretty general abandonment of the whole "guage" theory; for though the method had a great run, it was soon proved that from the cream taken to the same factory 113 cubic inches would make from one half pound to one and a half pound of butter, showing it was no reliable measure of value at all, of a miscellaneous lot of cream. The half pound man got another half pound that belonged to a neighbor; and the 1½ pound man lost a half pound that was passed over to the first named.

This kind of work could not last, and so test-churns came upon the stage. These were small glass jars, holding two quarts, into which one quart of each patron's cream was put at each gathering, and then churned at the factory, and the value of the cream taken at the farm was computed from the actual butter yield of the specimens separately churned. Thousands of such test jars are in use now, and quite accurately determine the butter value of any body of cream. The objection to them is the great waste of product and the cost of the skilled labor it takes to make the tests fairly certain and satisfactory.

Then came the oil-test churn, which was operated in very much smaller glass jars or tubes—10 inches long and only seven-eights of an inch inside diameter. Each of these is filled just half full with a sample of each man's cream, to a mark on the tube, and then all are churned at once, or from 50 to 200 at once, according to the number of patrons of the factory and the capacity of the test churn used. The tubes are then plunged in water at 150 degrees, when the butter fat rises to the top, and a scale and rule determine with essential exactness the weight of butter in the cream taken from the farmer on the day corresponding, by the per cent. of fat in the specimen. The test is so exact and reliable that all criticism is substantially superseded. It decrees justice between rich and poor milk, and makes skimming to make bulk simply a loss of skim-milk. It leaves each owner at full liberty to exercise his choice of breeds, and gives exact pay for the butter contributed to the pool.

Later on has come the oil test churn in which in tubes of the same size milk is used instead of cream. With these the butter value of milk can be determined as it is delivered at factories for making either butter or cheese. In the latter case the cheese-making value of milk is determined from the butter value (which is near enough), though both might be determined, for the caseine is separated as well as the fat. In using milk in the tubes, they are filled the same as when cream is tested, and then set in ice-water till a full separation of the cream is effected, which is then churned the same as when cream is used. Of course there is less butter than from the same bulk of cream, but so fine and exact are the scale and rule that essentially the same answer is obtained touching the butter value of the milk, as when cream is taken for the test. A novice could hardly believe it, still it has been proved that the samples of milk told the amount of butter from about 4000 pounds of milk so closely that one-fourth of a pound added to, or substracted from, each patron's credit for butter, would make a greater variation than the test made between the report and the actual weight of butter as packed in the tubs. There is no waste of product through the oil-test churn, because the amount taken is so small that it can be returned to the cream vat as soon as the rule has been applied, and it has no appreciable effect on the quality of the mass of butter. When the large jars were used, and the butter from each was weighed separately, it had to be packed as a lower-grade article. The milk-testing method is now so exact that it was relied on to test the cows that were exhibited at the late Minnesota and Iowa State Fairs. BADGER.

Cedarburg, Wisconsin.

The Swineherd.

PIG PARTNERS.

COL. F. D. CURTIS.

THE way for the small farmer to make money out of his hogs is to take them into partnership. This can be done in a number of ways. At first they will take the sour milk and turn it into money in the most profitable way it can be done. Experiments have shown this. The kitchen slops, which often defile the back door, can also be used by the active partner, and, if strengthened a little with middlings, they will rapidly turn into cash. Then come the weeds. I have found out what the most of them grow for—to feed pigs. Those that they won't eat will make good manure, and here the pig is a partner worth having.

There are lots of things which litter up the grounds and make them look rough and unkept, which the pigs will help to get out of the way. The only vehicle necessary to do the business of the firm is a wheelbarrow. It can be loaded both ways, taking weeds to the pig-sty and going back with manure for the crops in the garden. Nothing like hog manure out in the lot where it was plowed under for the fodder corn. The stalks are twice as large as they are where the barnyard manure was put. It is so every time. The pig will turn the plantains, the purslane, and the lawn grass to the best account. A friend had a field full of wild morning-glories, and they ran the crops out so badly that it hardly paid to cultivate the land. He got a hint from Kirby Homestead, and bought up a lot of shoats, took them as partners and turned them into this field. Every day some shelled corn was scattered about and the hogs ate it and rooted around for more and so got a taste of the roots of the morning-glories, and they kept rooting for them until the field was entirely cleared.

Another had a large lawn full of live-for-ever, and it defied all cutting, hoeing and salting. The despised pig was turned in and fed just enough to keep it keen and smart, and it went to rooting. The door yard did not look very inviting that season, and passers-by wondered at the taste, but the pigs cleared out the live-for-ever so thoroughly that not a vestige remained, and the next Spring there was the clean ground to make a smooth and handsome lawn. Pigs will worry thistles awfully in the same way, and all other foul stuff. The land always welcomes their presence, judging by the expression afterwards.

Where pigs are kept there will always be good crops. Pigs should be taken as permanent partners, but the location should be changed frequently. Two years is long enough to curry on business in the same place. For this reason portable shelters are a good thing, or it may be so arranged that the shelter shall be stationary, but the feeding place should be all around.

Horseman.

GENERAL PRACTICAL HINTS ON HORSE-SHOEING.

F. L. KILBORN.

Usual method of shoeing faulty; how often to shoe; judging by the hoof; form, size and weight of shoe; calks injurious; preparation of hoof; the sole, frog and bars; putting on the shoe; preserve the surface horn.

As generally practiced shoeing, instead of being a source of comfort and security to the horse, has been and continues to be a source of great discomfort and misery. In fact, the diseases of the limbs and feet of the horse are largely due directly or indirectly to faults in shoeing. A successful farrier should be familiar with the general anatomy of the foot, and with the rational principles and practice of shoeing both in health and disease.

As to the frequency of shoeing, no definite rule can be given. Young animals require shoeing more frequently than old. A very good general rule is to shoe every month. Rarely young animals with very rapidly growing hoofs or those that wear the shoe unevenly require shoeing oftener. Too frequent shoeing is likewise to be avoided, because it necessitates the driving of so many nails which are always, unavoidably, more or less injurious to the hoof. Horses working daily on hard pavements may require shoeing as often as every week. Old animals may frequently be allowed to go two months, but rarely can a valuable horse be safely allowed to retain a shoe longer. As a general rule, however, one month is much better than two. The too common practice with many farmers of allowing the shoes to remain until accidentally lost or en-

tirely worn out (in this way often remaining five or six months), is highly injurious to the feet.

In any case the hoof wall should not be allowed to grow out over the shoe so as to cover it and thus throw the pressure largely upon the sole, nor should the shoe be allowed to be carried forward, especially in the fore feet, so as to let the heels of the shoe press upon the back part of the sole, altogether giving the horse an unnatural, flat-footed appearance. This carrying forward of the shoe is due to the tendency of the hoof when shod to increase in length at the toe, and thus to advance the shoe.

The form and size of the shoe, although of minor importance, are still of sufficient importance to demand our attention. The shoe should be neither too thick nor too heavy. There is very little danger of its being too light. It is very tiresome for a horse to be obliged to constantly carry unnecessarily heavy shoes, and they also increase the concussion of the limbs and feet. The light, thin shoe is without these objections, and allows the frog to reach the ground. In general, the weight of the shoe should conform to the size of the animal and the work expected of him. It should be of only moderate width. The broad shoe is a very poor "catch." Both surfaces should be perfectly level, *i. e.*, the shoe should be "true" and of the same thickness throughout. The hoof surface should be flat, not beveled as is the common practice, which throws all the support upon the wall, and allows dirt and gravel to work in upon the bevel between sole and shoe. With the flat shoe the support is divided between wall and sole as it should be, and there is not the danger of graveling. In outline the shoe should be the exact counterpart of the hoof after it has been properly prepared; to apply a shoe that is too small and then rasp down the hoof to correspond, not only shows poor workmanship, but is very injurious to the foot. A clip at the toe of each shoe, or in special cases one on each side of the hind shoes, can usually be added to advantage. But they must not be set too deeply into the wall nor drawn too tightly when hammered down.

Calks, or as they are more commonly called, "corks," are always injurious to the limbs, however necessary they may be to enable the foot to hold. Upon ice or hard snow, they, or some similar device, are a necessity, and must unfortunately be used. With this exception, there are rare instances where calks are necessary. When used, however, they should be of equal hight at heel and toe. Nearly all farmers could well do without them during the summer months at least. Even on the paved and concreted streets of our cities the properly made, flat shoe is less liable to slip than the one with high calks. With a narrow shoe beveled on its wearing surface from without inward—to correspond to the natural bevel of the normal foot—and a healthy frog brought into use, there is in most cases no danger from slipping. The reason why most horses slip so easily as soon as the calks are worn down, is because the frogs have become dry and contracted and the shoes are made too wide, with a smooth, level wearing surface, both conditions being very favorable to slipping.

The preparation of the hoof should receive special attention, this being the most important part of the operation, and also the part most frequently unsatisfactorily performed. The wearing surface of the wall should be rasped or pared until perfectly level, and the two sides be of the same hight, so that a plane across them will be at right angles to the pastern. Usually the paring has to be done mainly at the toe, but the obliquity of the pastern and form of the foot must be the guide. Where the wall does not project beyond the sole no paring is required; and when paring is necessary it should be carried nearly to, but never beyond the border of the normal concave sole. This removal of the excessive growth of the wall is usually the only paring that is allowable, any additional being not only unnecessary, but almost invariably highly injurious. The wall having been worn or pared to the level of the sole, both may be rasped until the latter, especially at the toe, presents a bearing surface equal to one, or one and one-half times the width of the wall. This allows the sole to bear a portion of the weight, which in its natural condition it is abundantly able to do. Finally the sharp border of the wall ought to be slightly rounded with the rasp to avoid the danger of splitting.

The healthy sole should never be cut. The shedding of the hard, dry, horny scales from the sole is a natural process that will best take care of itself. And unless the flakes are liable to become imprisoned under the shoe, especially near the heels, it is much better for the foot that they be left to shed naturally. It is permissible, however, to remove any flakes that are loosely attached, but nothing more. The barbarous custom of paring the sole until it will give under pressure of the thumb ought not to be tolerated.

The idea that the frog must be reduced, that its coming in contact with the ground will lame the horse, is a very injurious popular fallacy. On the contrary, the frogs should not be pared any further than to remove rugged ends, and should if possible be *made* to come in contact with the ground. This is one of the most important safeguards against contracted feet. The paring of the bars, "opening of the heels," is equally injurious and should not be allowed. The sole, frog and bars are all important factors of the hoof as a whole; they are the natural protectors of the ground surface of the foot, and should be left intact.

The application of the shoe and careful driving of the nails require no little skill. To secure a perfect fit the red-hot shoe is carefully applied to the hoof for a few seconds, when any little inequalities are readily seen and removed. This secures a perfect fitting of shoe to hoof, which it would be almost impossible to obtain by a cold fitting. While the brief contact of a red-hot shoe to the hoof is in a general way beneficial, it becomes very injurious if applied too long, so as to fuse more than the surface horn. The shoe being accurately fitted, is cooled, filed and finally nailed to the hoof. In driving the nails it must be remembered that the hoof wall is thickest at the toe and gradually becomes thinner towards the heels, the inside quarter being thinner than the outside, and the nails should be driven accordingly. They should also be driven carefully to avoid the necessity of frequent withdrawals.

Preparatory to clinching, a slight notch only may be made under each nail. A deep furrow with the rasp along the row of nails, as is the common practice, is very objectionable. After the nails have been driven up and clinched, any roughness may be removed with a file, but the surface of the hoof wall, even below the clinches, should not be touched with the rasp.

Too much importance cannot be given to the preservation of the tough surface horn; and let me here repeat that, except to shorten the over-grown wall and prepare a suitable bearing surface for the shoe, no rasping or paring is usually required, and under ordinary circumstances should not be allowed.

Farm Topics.

CORRESPONDENTS' VIEWS.

MRS. FISHER's California letters are interesting, but I think she places too much confidence in the statements of strangers simply because they are very polite. My experience teaches me that many Californians are prone to put the best side ahead, to give single exceptional cases as general results, and to say many wide things in order to make newspaper people paint the best side of California. In Transcontinental Letters LXIV, I notice an error as regards wine making. Mrs. F. says; "Good, new wine costs about 75 cents a gallon. Vineyardists receive $18 to $22 a ton for grapes; and it is conceded that if a man gets 15 cents a gallon for his grape juice, he makes about $500 per acre off his land."

Figuring on this gives some surprising results. In Sonoma County Cal., the average yield is about six tons of grapes and about 140 gallons of wine per ton, or say 840 gallons of wine per acre. Now, to make $500 per acre at 15 cents per gallon, the yield would have to be 3,333 gallons of wine per acre. There may be a few exceptional acres that yield that much in extra seasons, but the average yield will not be one-fourth that amount. Again, if vineyardists receive $500 per acre when selling grape juice at 15 cents a gallon, and we calculate a fair yield at six tons of grapes per acre, and the weight of a gallon of wine is 8½ pounds, then we find that 8¾ pounds of grapes must make 8½ pounds of wine. If "good wine sells for 75 cents per gallon" and at 15 cents a gallon the product of an acre would be $500, at 75 cents it would be $2,500. It will be readily seen from this that many of these California statements will look worse for an investigation. E. REICHENBACH.

Wayne, Ohio,

I HAD 60 bushels of wheat per acre last year. One field of nine acres has not been manured for several years. It was very light sand, plowed three times, packed firm with harrow and leveler at least four weeks before sowing, and sowed about one inch deep one-and-a-half bushel per acre. This gave me a new idea, viz.: have the ground firm and sow shallow. I claim that little things like this are of more importance to us than a close study of nitrogen, ammonia, etc. [Perhaps so, and yet "nitrogen, ammonia, etc.," make the basis of all good farming. Somebody must study them.—EDS.] A. A.

Kelso, Ontario.

MY premium—the R. B. C. corn-sheller—came all right. I must say that I am more than pleased with it. I never saw one like it before. It simply works like a charm and is far ahead of anything in the corn-sheller line I ever saw. Long live the man who invented it, say I. L. L. COE.

Catharine, N. Y.

I HAVE a white dent corn that originated with me five years ago; it will mature in 80 to 85 days. This season a trial plot was planted on June 16, and matured Sept. 1st.

Eatontown, N. J. J. B. J.

Field Crops.

TOBACCO CULTURE IN CONNECTICUT.

Tobacco, the money crop; growing sets; fertilizing the bed; setting out plants; culture; harvesting; handling; a precarious crop.

THIS is the season for harvesting tobacco. The loads of plants on their way to the shed where they are to hang for curing emit an odor less fragrant than the spices of Araby; but, like many other disagreeable things, the odor is tolerated in view of the profit of the crop, for it is really the only one raised in this vicinity that directly produces money. In sight from where I write is a field of five acres the growth of which I have, during the past two months, watched with interest. It is owned and worked by Mr. F. B. Strickland, who is admitted to be one of the most successful tobacco growers in Hartford County. I have taken some pains to inquire into his methods and will give the result to the readers of the RURAL.

Seed is grown in a hot-bed in time for the plants to grow large enough to set by the first of June, or earlier if the weather is such that the ground can be properly prepared. Contrary to general practice, he prefers to raise successive crops on the same ground, that now growing being the eleventh. The ground is plowed deeply, and a goodly quantity of fertilizer is covered; then ridges running north and south are made three-and-a-half feet apart by turning deep furrows together. Before these are turned, he applies a goodly quantity of stable manure, castor pomace or tobacco stems on the surface to be directly below the plant when set and ready to furnish food for which the roots will soon make a start. It is not well to give the young plants a too vigorous growth by the application of fertilizers to the hill, but when established they will assimilate to advantage a large amount of food that should be within ready reach. He prefers to start root growth first. This done, that of the leaf will readily follow.

Plants are set 18 inches apart in the row if the variety is Havana or Spanish, or a little further if seed leaf. This crop is Spanish, which is now generally preferred here, as it gives a finer leaf and commands a larger price, although the quantity that can be raised on an acre is less than when the seed leaf is grown. Great care is taken to set the plants properly, for a plant well set is far on the way to perfect growth. Mr. Strickland never lets his work drive him. His land is made ready as early as possible, and he prevents it from becoming weedy by stirring it before the weeds appear, and takes the worms off before they have time to eat the leaves full of holes. He tops low, believing it better to have the same weight in fewer leaves, and that a few good leaves are of greater value than more poor ones. When the suckers appear they are taken off in a hurry lest they take strength from the leaves. He says it is more profitable to pay three men for one day's work each than one man for three days, because the work can in that way be done when it is needed. In harvesting he pursues the same plan.

When an acre is ripe it is cut and hung in the field on hooks put on the sides of lath alternately. On lath four feet long six plants are hung. From the field it is taken on proper racks to the drying shed, where it is hung to dry and cure under daily inspection, to see that there is nothing wanting to aid it in these changes. So it will hang until some favorable day in Winter, when the atmosphere is sufficiently charged with moisture to change it from its dry, brittle condition to one where it is pliant and can be handled without harm. Then, holding the butt of a stalk in the left hand, the leaves are rapidly stripped off with the right, and when a handful of good leaves is obtained they are bound together by winding a leaf about their larger ends, when the bundle, or "hand," as it is called, is ready to be laid aside to be packed in boxes or cases holding from 250 to 300 pounds each. In these cases it undergoes a sweating process that if successfully accomplished gives the leaves a fine silken texture of the desired color.

When stripping, the leaves are divided into two classes—firsts and seconds, or wrappers and fillers—and the sensible man does not endeavor to put with the "firsts" any that do not really belong there, knowing that a little inferior will lessen the price of the whole. For the same reason he rejects entirely some of the poorest fillers rather than have them lower the average of the rest.

But tobacco culture is hazardous business at best. There is not a day from the time the seed is sown until the crop is sold and paid for that there is not more or less risk. Sometimes the plants fail to get a good start in the seed-bed. When set in a dry time their growth is checked. Then the grub or cut-worm attacks them with vigor, and when he is subdued the tobacco worm requires combating. In later days a drought is injurious, and too much rain is not much better, especially in low land, for a tobacco plant whose roots are covered with water 24 hours is spoiled. Heavy winds blow over the stalks and whip the leaves into strings; and even a moderate hail storm is entire destruction. But a crop well raised, well cured and well sold is profitable.

Bloomfield, Ct. L. A. ROBERTS.

POTATO SPORTS.

IN digging a field of Pearl of Savoy Potatoes (Early Rose type) my workmen found several hills of Beauty of Hebron, evidently the product of a single tuber, that got into the lot of seed some way. Two of these hills contained well marked Beauty of Hebrons, while several contained rose-colored and white potatoes instead of light flesh-colored and white—*i. e.*, where the Hebron should have been light flesh-colored, it is red like the Pearl of Savoy, and one of these latter hills contained one handsome, smooth tuber, that is about equally divided from stem end to seed end, one half being a finely marked Beauty of Hebron and the other half rather dark red for Pearl of Savoy. Each kind runs the whole length of the tuber and the dividing line is very distinct. G. W. P. J.

Caribou, Maine.

[Such "sports" are not rare. Climate or soil or both often change the color of potatoes. During the past season a Rural seedling in rich garden soil was solid pink. In a sandy soil within a quarter of a mile, it is streaked buff and pink—sometimes buff. Our friend will find that by planting eyes of the pink parts, he will in a few seasons succeed in fixing a pink-skinned variety.—EDS.]

WHAT ABOUT THE POTATO CROP?

WE want to know all we can about the potato crop. Potato men in New York State should tell us about the potatoes there. Mine go about 100 bushels to the acre. They never rot in this sandy soil. They bring about 40 cents a bushel in White Pigeon. The potato dealers here have things fixed so that they can give just about what they like. For that reason we want to know whether there is much rot in the East. If there is, we can hold our crop to better advantage. T. T.

White Pigeon, Mich.

DRILLING AND HARVESTING CORN.

I PLANTED my corn this year in drills instead of hills and can now report results. Although it was sowed with an ordinary wheat drill which did the work only poorly, and in spite of the succeeding drought which caused it to come up very unevenly, it has matured a very satisfactory crop. I am well pleased with this method of planting. But two things are requisite to insure the greatest success. A good planter is needed so that the corn shall be evenly distributed, and then the smoothing harrow should be put over the ground at least once a week for the first five or six weeks. This thoroughly destroys all weeds when small, and renders the use of a hoe superfluous except to cut up thistles or other perennial weeds.

There can be but one objection raised to drill planting of corn, when treated as above described, and that is the increased labor of cutting. This can be entirely obviated by cutting it with a self-raking reaper, which will do it easily, putting it in fine shape for binding, if only a single row is taken at a time. By letting the corn lie one day in the gavel before binding, it will be so wilted that any stalk will answer as a binder.

When corn is so cut and bound in bundles and these are set into rather large shocks, it cures out nicely and is in the best possible shape for hauling into the barn or shed for husking. And by using the reaper it can be cut, bound and placed in shocks with less than half the labor of cutting by hand and standing in the ordinary stook. There are many things yet to be learned in farming.

HARVESTING ROOT CROPS.

UNLESS everything is ready for the root harvest, no time should be lost, as in this lati-

tude it is not safe to leave beets and mangels out after October 15. Any frost severe enough to freeze the skin causes them to peel easily and to rot more or less in bins or pits when stored—carrots, turnips, etc., can be safely left till later.

If the beets or mangels do happen to get frosted, unless so much frozen as to be killed, or unless severer frosts are feared, it is best to leave them standing for a few days until growth is resumed, as in that case the damage is in a great measure remedied by the healing up of the frozen surfaces, and they will keep much better when stored. J. S. WOODWARD.

Niagara Co., N. Y.

Floricultural.

BULBS IN THE HOUSE.

E. L. TAPLIN.

Treatment of hyacinths so as to secure flowers for the holidays; water culture preferred; single varieties better than double; avoid cheap, mixed sorts; moss culture; the best kinds of tulips; window boxes; snowdrops, Lily of the Valley, Easter Lilies, anemones, ixias, freesias, etc.

MANY amateur growers who admire the beauty of hyacinths and others of this class are not aware how readily they may be grown indoors, so as to secure abundant flowers about the holidays with a very small expenditure of trouble. I should always recommend growing hyacinths in water, since the system has the dual advantage of ease and cleanliness. There is no danger of mud or uncleanly drippings, and the glasses are much more sightly than ordinary flower pots. For this plan you must obtain regular hyacinth glasses, which hold the bulb nicely in place. Always use rain water, and put a few lumps of charcoal in the bottom to keep the water sweet. Start the plants about the first of October. Do not fill with water above the bottom of the bulb. Put in a dark place until the roots reach the bottom of the glass; this will probably be in about three weeks. As the water evaporates fill the vessel up, but only until it barely touches the bulb. When they begin to grow they require plenty of light, but it is not well to stand them in a window where they get the hottest noonday sun, as this often heats the water until the bulbs are almost cooked. It is also a mistake to set them directly on the window sill, as the draft at their base is soon felt.

We must warn flower lovers that the hyacinth only blooms *once* in perfection. It may bloom year after year, but the flowers grow poorer and more dege erate every season. In the Dutch bulb farms they are not allowed to flower, save in specimen beds, from the time the sets are planted until they are ready for market, in about the fourth year. The flower stem is cut off as soon as it grows, so that all the strength goes to the bulb. Outside they are not so much exhausted by blooming as inside. Forcing seems to entirely destroy the poor bulb's constitution.

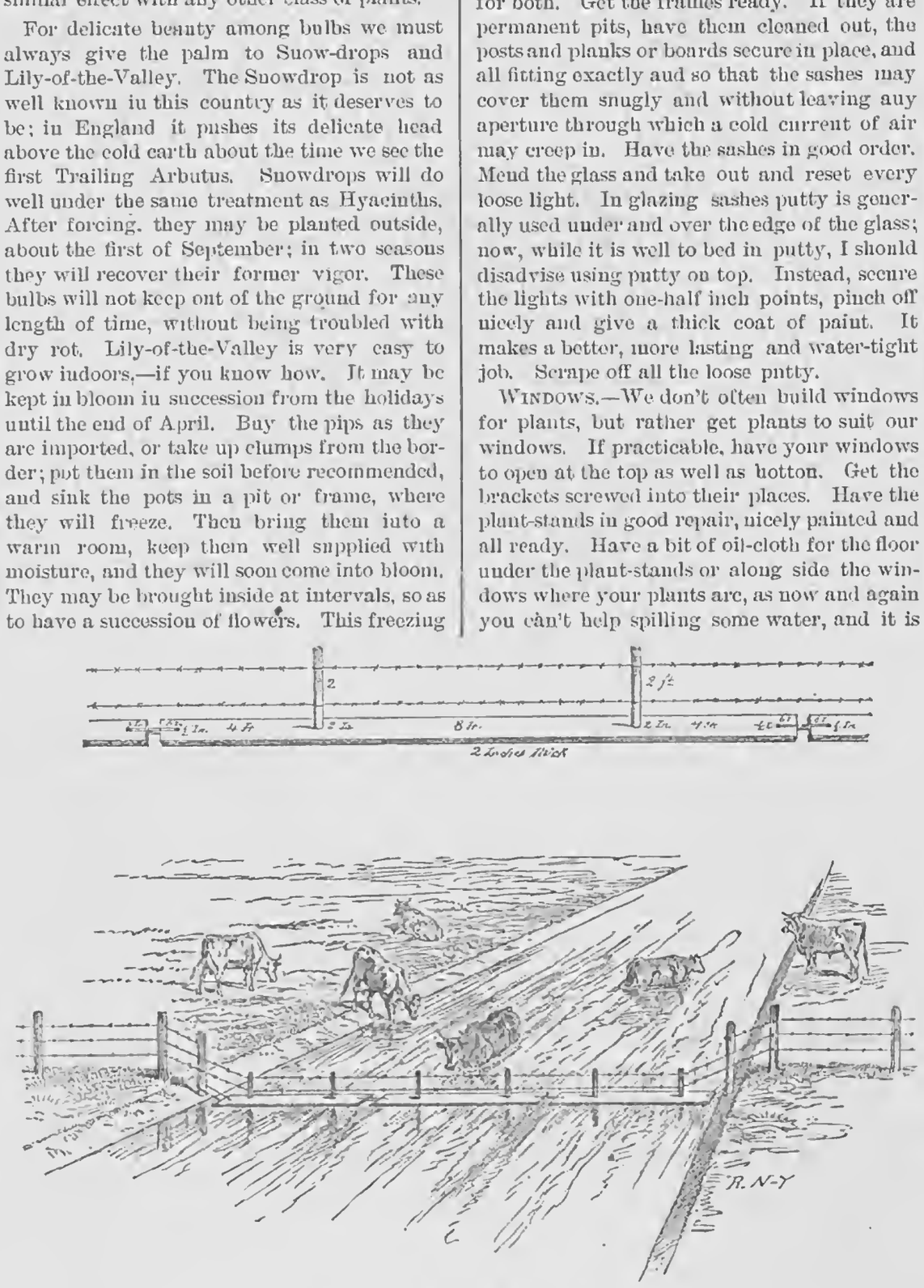
For indoor culture, single varieties are preferable; the double are apt to form flowers unevenly, and open irregularly. The best single white is that familiarly known as the Roman hyacinth, much grown for florists' use. The flowers are pearly white, and very fragrant; the spikes are small, but each bulb produces more than one. Purchasers of bulbs for window flowering must be cautioned against buying cheap, "mixed" sorts, as they are simply "culls." Chose the colors required, and buy named bulbs from a reliable seedsman. Another good plan for growing them in glasses, is to put the bulbs into clean sand until the roots are about six inches long; then take them out and put them into the water. The great attraction about growing them in water is the oddity; it is very interesting, especially to children, to watch the structure and daily growth of the roots.

Any flowering bulb will grow nicely in damp moss; if packed in the Dumesnil fertilizing moss the result is surprisingly fine. Again, a dish or vase may be half filled with clean sand, the bulbs placed on this, and the vessel filled up with fresh green moss. Nothing is handsomer or more showy than large pots or boxes containing mixed bulbs, hyacinths, tulips and crocuses. To flower successfully, they should be potted early in September, in soil containing equal parts of good loam, leaf mold, and well-rotted manure, which should afterwards be mixed with about one-fifth of pure sand. After planting, the pots should be plunged into a pit or open border, and covered with four inches of soil, there to remain until about the first of December. Then they may be brought in as wanted, and forced into flower It is always highly important that the roots should be well grown, before the leaves start to any great extent. Of tulips, the scarlet, crimson and white Duc van Thol will be found most satisfactory. They are single flowers; Tournesol is a very showy double red and yellow. Cottage Maid is a very fine pink; large and showy, yet delicate in appearance. The crocus is always charming, whether yellow, purple or white.

A window-box, filled with different varieties of bulbs, is extremely pretty, and has a spring-time suggestiveness all its own in the depths of Winter. It is impossible to obtain a similar effect with any other class of plants.

For delicate beauty among bulbs we must always give the palm to Snow-drops and Lily-of-the-Valley. The Snowdrop is not as well known in this country as it deserves to be; in England it pushes its delicate head above the cold earth about the time we see the first Trailing Arbutus. Snowdrops will do well under the same treatment as Hyacinths. After forcing, they may be planted outside, about the first of September; in two seasons they will recover their former vigor. These bulbs will not keep out of the ground for any length of time, without being troubled with dry rot. Lily-of-the-Valley is very easy to grow indoors,—if you know how. It may be kept in bloom in succession from the holidays until the end of April. Buy the pips as they are imported, or take up clumps from the border; pot them in the soil before recommended, and sink the pots in a pit or frame, where they will freeze. Then bring them into a warm room, keep them well supplied with moisture, and they will soon come into bloom. They may be brought inside at intervals, so as to have a succession of flowers. This freezing process, similar to the treatment given Jack roses, deludes the poor plant into the idea, when brought indoors, that the Winter is over, and it blossoms in consequence of this deception.

The Easter Lilies—(L. candidum and L. longiflorum) may be flowered indoors by potting early in November, and supplying them with plenty of warmth and water. Tuberose, too, will do well under similar circumstances, but it cannot be recommended, as the odor is extremely offensive to many. Ranunculi, anemones, and the various Cape bulbs, Ixia, Sparaxis, Freesia, etc., may be grown as house plants, and these bulbs offer a welcome change from the almost invariable geranium, callas, and so on, that are usually grown. They have the advantages of cleanly habits, easy culture, beauty and fragrance, and we hope to see them gaining in popularity from year to year.



FENCING STREAMS. Fig. 382.

WHAT TO DO AND HOW TO DO IT.

WILLIAM FALCONER.

THE GREENHOUSE.—Get it into thorough repair as soon as you can. Mend the glass. Use double-thick, clean glass; bed in putty, but don't use putty on top, and tack into place with one-half inch triangular points. Give the greenhouse a coat of paint. Paint is cheap enough, and you can do the painting yourself. Use the best white lead (I use Jewett's) and linseed oil. My experience with patent paints on greenhouses is that they peel off. I prefer white paint, because it is always at hand, whereas in colored paints we may not always have at hand the same shade of color. Paint preserves the wood against early decay, renders the glazing more water-tight, and gives the whole house a neat and clean appearance.

Fix and oil the ventilating gear, repair the staging and stop up every crack in the woodwork with putty. Inside the house wash the woodwork, glass, staging and walls with crude or kerosene oil, or in the case of the walls, whitewash them with hot lime-wash. This destroys insect vermin and their eggs. Clean the chimney vent, clear out the soot boxes and around the boiler, and give the inside of the furnace and corrugations of the boiler a thorough cleaning out. If the furnace grating is broken, unduly warped, or won't turn over, have it seen to at once, for after you begin firing is no time to stop and attend to these matters.

COLD-FRAMES AND HOT-BEDS.—Now is the time for cold-frames, the Spring for hot-beds, but the same frame-pits and sashes are available for both. Get the frames ready. If they are permanent pits, have them cleaned out, the posts and planks or boards secure in place, and all fitting exactly and so that the sashes may cover them snugly and without leaving any aperture through which a cold current of air may creep in. Have the sashes in good order. Mend the glass and take out and reset every loose light. In glazing sashes putty is generally used under and over the edge of the glass; now, while it is well to bed in putty, I should disadvise using putty on top. Instead, secure the lights with one-half inch points, pinch off nicely and give a thick coat of paint. It makes a better, more lasting and water-tight job. Scrape off all the loose putty.

WINDOWS.—We don't often build windows for plants, but rather get plants to suit our windows. If practicable, have your windows to open at the top as well as bottom. Get the brackets screwed into their places. Have the plant-stands in good repair, nicely painted and all ready. Have a bit of oil-cloth for the floor under the plant-stands or along side the windows where your plants are, as now and again you can't help spilling some water, and it is easier to wipe up the water off the oil-cloth than off the carpet.

Don't bring your plants inside into your windows as long as you can safely have them out-of-doors. We generally have some beautiful bright weather in October, cool at night, but warm in the day-time. Let the plants have the benefit of the warm weather, but cover them up or bring them in upon the piazza in the event of cold or wet weather. Toward the end of the month, it may be well to house most of your tender plants.

THE PIAZZA.—The piazza is a capital place for pot plants in October. All plants that are established in their pots can enjoy the south side, and those newly potted the shady side. If the plants are standing outside on the walks, in the event of frost, or a windy or wet storm, in a few minutes we can lift them on to the piazza where they will be safe, or if need be, by the aid of some old newspapers or a sheet or two we can make them doubly secure.

POTS.—I don't care what they are—glazed or unglazed earthenware, tin cans or wooden boxes—providing they have a large-sized hole in the bottom for drainage. But there is nothing better than the common flower pot. I prefer the common shapes or sizes because in repotting plants I can shift from one sized pot to another without intefering with the ball of the roots, whereas were the pots of uncommon shapes, I'd have to suit the ball of roots to the pots into which I was about to plant them. And I prefer pretty hard pots to the trashy things that crumble to pieces if they get the least rough handling when they are wet.

SOIL.—There is, I think, a good deal of twaddle written about different kinds of soils for different plants. I use sod loam and well rotted manure for almost everything. For callas I use the roughest part; for azaleas have less manure and some leaf soil: for common ferns not much manure but a good deal of leaf soil and chopped swamp moss; for roses the strongest clay loam I can get; for cactuses rather gritty loam; and so on. Gross feeders get the richest soil. In the soil for stevias, marguerites, nasturtiums and other heavy-rooting plants I add a good sprinkling of finely broken bones—such as we feed to chickens,—and for carnations, a good dusting of lime. Never use soil when it is wet, or manure that is pasty. Break up fine the clay lumps, but not so the bits of fibrous sod. Pick out and throw away all the grubs and worms you find in the soil.

POTTING PLANTS.—Don't use dirty pots; have them clean in the inside anyway, else in repotting, rather than turn out in a clean ball the outside roots will tear off and stick to the sides of the pot. And never use wet pots. Never use a big pot for a little plant, but rather use the smallest pots into which you can conveniently get the roots, no matter how big the plants may be. Always drain your pots well. Put a biggish piece of crock over the hole, then a lot of smaller ones over that, and some half-rotted leaves, dry chaffy manure, or bits of sod with the earth pretty well shaken out of them over the drainage to keep it clean and prevent its being clogged up with the soil. In draining pots I use broken pots, broken brickbats, broken mortar or cement from old buildings, coal ashes from which the finest part has been sifted; in fact, almost anything. Use moderately dry soil, introduce nicely among the roots, pack firmly, and fill up to within one-half or one inch of the brim of the pot.

LIFTING PLANTS.—I would sooner lift them in dry weather and when the ground is dry than in moist weather or when the ground is damp. When lifted with large balls we cannot put the whole ball into a pot, and if the ground is moist, in reducing the ball the rootlets are brittle and apt to drop off with the earth; when the ground is dry the rootlets are less brittle and the earth can be shaken away from the roots with less likelihood of injuring them. Get all the roots you can, no matter if you don't secure much earth with them. In the case of heavy clay ground we had better moisten it the day before we lift the plants, else it will be so lumpy that we cannot reduce the lumps without breaking off many of the roots.

WHAT PLANTS TO LIFT.—All that are planted out and which we wish for winter flowering, also all tender plants we wish to keep over Winter for next year's garden. And the sooner we lift them the better so that they may get fairly well rooted in their pots before the dull, cold weather of Winter sets in. Pot them as you lift them, water them through a water-pot rose when you pot them, and stand them in a sheltered, shady place for a few days till they recover the check. Sprinkle them overhead two or three times a day, if need be, for a few days to prevent them from wilting.

Farm Economy.

FENCING STREAMS.

MR. J. H. WOODBURN sends us the design illustrated at Fig. 382. But little explanation will be needed. The idea is to take 2x6x16 pine stuff, bore holes one-half inch in diameter, six inches from each end; also four feet from the end bore other holes two inches in diameter and drive in post two feet high, and fasten firmly. Prepare as many of these as will cross the water; wire them together end to end through the small holes, allowing some play, posts upright; then attach two strands of barbed wire to the short posts in the usual way; float this across on line of fence; attach to the fences on either side, drawing the wires tight. This will rise and fall with the water. Nothing will cross it, and when cold weather comes, loosen one end, draw out on the bank along the other fence, out of the way.

Pomological.

ABOUT DISTANT FRUIT MARKETS.

PRES. PARKER EARLE.

Increase of fruit growing for distant markets; magnitude of the trade; three great improvements; losses from bad packing and packages; instances; faulty transportation; refrigerator cars needed; losses from lack of them; better distribution needed.

ONE who travels over this country, or in any way becomes acquainted with the operations of our fruit growers in all these districts where fruit growing for market has become a principal business, will very soon see that in all the distinctively fruit-growing regions, these crops are grown for *distant* markets. This is a business that has largely grown up within the last 25 or 30 years. Before this period the means of transportation were limited. Markets were limited, and in fact the whole sys-

tem of fruit production on the immense scale which it has now reached, was in its infancy. The orchards and the vineyards had not been planted, and the varieties of small fruits now mostly grown had not been originated. But within a dozen years the business of growing fruits for market has reached a great magnitude in many sections of the country. And most of this fruit is intended for *distant* markets, a comparatively small amount being sold in towns near the place of production. For instance, California exports to the Eastern States nearly 4,000 car-loads of the various fruits in a season. The Florida orange crop is estimated at nearly a million boxes annually, which is about 4,000 car-loads again. The quantity of strawberries marketed yearly in one of our great markets—Chicago—amounts to over 1,500 car-loads. New York probably receives a larger quantity, and other cities proportionate amounts. The peach crop of the Delaware Peninsula fills five or six thousand cars. And so without attempting to compute the apple crop, which we all know reaches vast figures yearly, or the grape and other important crops grown so largely for distant markets, we see something of the magnitude of the interests involved in this question.

How many millions of dollars are invested in commercial fruit growing in this country, and how many more millions are used in handling these crops every year, no one can tell; but it has become one of the large industries of the time, and the number of people who make their living in the production and handling of the American fruit crops reaches hundreds of thousands. Hence anything that can contribute to the successful outcome of this industry is of importance to the country. Perhaps no one who is familiar with fruit markets will question that there is great room for improvement in our methods of handling fruits in three important particulars—in better packing, in better packages and in better cars for transportation. I have heard it estimated by dealers that fully one half of all the fruits sent to market were so badly packed or so badly carried as to pay little if any profit to the grower. My own observation leads me to think this a moderate opinion. If this is correct it shows that one-half of all the labor and capital invested in fruit growing in this country is wasted, and this because of defects in our system of doing business, which can be cured.

Let us look at some facts. I have seen hundreds of bushels of strawberries arrive in one of our Northern cities, where not one package could be found in good sound condition for use or reshipping, simply because of the style of package used—old-fashioned Western "stand of drawers," being wholly unsuited to the long carriage of delicate fruits. The berries referred to were large, well grown and well picked, but were practically thrown away in these wretched half-bushel drawers, nearly every berry in every drawer arriving bruised and bleeding from a journey of about 300 miles. If picked and sent in nice quart boxes or baskets, they would have borne such a journey with little damage. And yet this folly of using such ruinous packages is repeated year after year, with similar results. There is a large district in this country where berries are grown for distant markets on a large scale, where all the profit that should be possible from well grown strawberry crops appears to be thrown away in marketing in such clumsy packages. The remedy in this case is cheap, near at hand and "easy to take."

Again, a very large portion of the strawberries grown in the South for Northern shipment, although put up in suitable packages, fails to reach the markets 1,000 miles or more away, not because of the distance or the time consumed, but because of rough usage by transportation companies, or the inevitable heating which results from piling large amounts of fresh fruit in close, hot cars. In this case it is the transportation that should be improved. Different cars are needed. Strawberries can be successfully shipped long distances—a thousand miles, even two thousand miles if need be, for this is done every year. But they must be kept cool all the time. Strawberries will last several days in fine condition in a temperature of 50 degrees, and keep well enough to be marketed when exposed to a higher temperature afterwards; while the same berries will hardly survive a day's journey in cars that subject them to our summer heat. The distant marketing of berries requires the best of modern packages, and cool, or so-called refrigerator transportation. With the best appliances of this kind, the most distant markets can be safely reached, and disastrous gluts measurably avoided. This conclusion is based upon my own experience running through a number of years.

A friend of mine, an orange grower in South Florida, last Winter sent the product of his grove to market after the freeze when prices were high. He got the best cars he could, which were common freight cars, packed with great care to prevent freezing up in transit, and awaited results. His two cars were detained by high water at the Ohio River; a cold wave came, his oranges were frozen solid, and before reaching market had thawed out and heated, and with the juice running from most of the boxes they did not pay freight. There were $2,000 thrown away for lack of a good refrigerator car that would protect its load equally against cold and heat. Dealers tell me that so large a proportion of the Florida orange crop suffers from frost or from heat during the winter journey, that it renders the crop a treacherous one to handle and heavy losses are liable to occur. The orange is a good-keeping fruit, and with a system of handling and transportation adapted to its needs, it can be placed in the remotest markets of the country with safety and profit to all concerned. I am told that there were many sad homes in Florida last Winter when the returns from Northern markets were received, for crops in which all the hopes for a year's living were centered, and all or mainly because of the crude and imperfect means of transportation for this great golden harvest of our romantic, sub-tropical State; and yet Florida oranges were not low-priced to the consumer last Winter.

Space forbids any expansion of this argument. Let me say, briefly, that we are not producing too much good fruit, but we are putting half of it into market in so poor a condition as to be unprofitable; and we fail in our system of distribution. Concerning this I may write again.

Cobden, Ill.

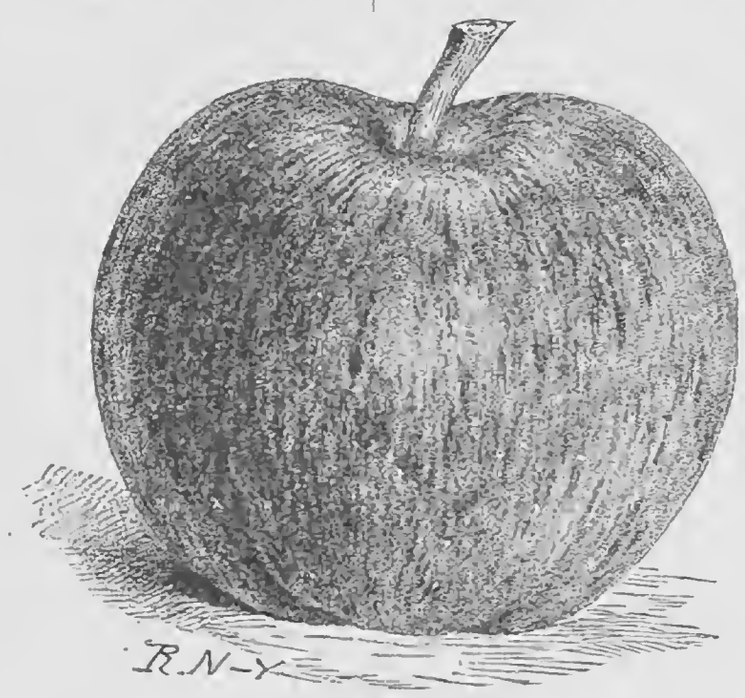
POPOFF'S STREAKED APPLE.

THIS apple (No. 247 of the Department List of 1870), cions of which I received from Mr. A. Webster, of Roxbury, Vt., a few years ago, has produced some fruit this season, and I wish to call attention to it as an apple of great beauty and high quality for dessert. It is true that there are many other good apples of the same season (Sept. here), but this is so particularly and peculiarly good and pretty that it should certainly be placed on the amateur list of iron-clads. It is of medium size, roundish-oblate, with small cavity and basin, short stem and small, closed calyx. In ground color it is ivory-white, when ripe, but nearly covered with fine, rosy-carmine stripes, spots and splashes, without dots of any kind. The flesh is as white as that of Fameuse, but partially stained with the same rosy-carmine as the surface. The texture is fine, tender and delicate in the extreme, even more so than the best Fameuse, and the flavor not high, but sprightly and delicate, with a slight acid and just a suspicion of sweet, certainly very good. This does not agree at all with the description given by Mr. Gibb, from Dr. Regel in 9th Mont. Hort. Soc.'s Rept., p. 82, but is more like "Rosy," No. 274, p. 85, yet not agreeing in season. I make this report as a contribution towards fixing the description and nomenclature of Russian apples, which is in such confusion. T. H. HOSKINS.

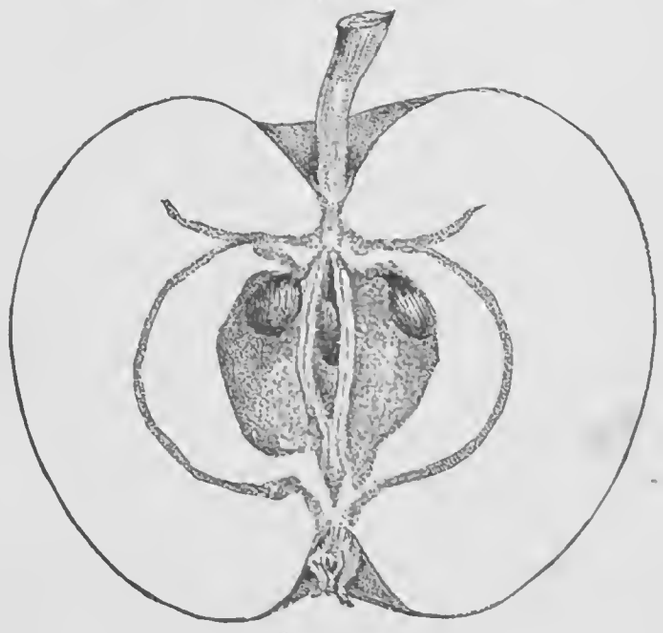
Newport, Vt.

ST. PETER'S APPLE.

ON August 25, Dr. T. H. Hoskins, of Newport, Vermont, sent to this office specimens of the above apple, and said: "The St. Peter's apple (shown at Fig. 383, with cross-section at 384) is one of the Department of Agriculture's importations from Russia in 1869–70, which is becoming very popular in the "cold North," under the name of the Russian Early Joe. It is an iron-clad, an early and profuse bearer and a very thrifty tree. Its quality, when ripened on the tree, is "very good," and it must rank among the dessert apples of this class. It is, I think, about as good as the Yellow Transparent, and almost exactly of the same season. It is, however, much smaller than that apple. It has the advantage in its red color, though the ivory white of the Transparent is quite pleasing enough to excite appetite. I am now marketing quite a large crop of the latter at $1 a bushel."



ST. PETER'S APPLE. From Nature. Fig. 383.



ST. PETER'S APPLE. Cross Section. Fig. 384.

Horticultural.

THE CRYSTAL WHITE BLACKBERRY.

THIS originated in Illinois. By whom or when we know not. We received our plants from J. T. Lovett, of New Jersey, in May of last year. They have made a strong growth and have borne a few fruit this season, of which the illustration, Fig. 385, is as true to nature as our artist could make it. The canes and leaves are of a lighter green than those of other kinds of blackberries, the leaflets much narrower, as shown. This variety is said to be somewhat tender and not very productive. The plants were not seriously injured at the Rural Grounds by the past Winter. As to productiveness, we cannot as yet speak. The berries are of a translucent, dull white, sweet and tender.

Why give space for an illustration and description of a fruit that has so little to recommend it? Oh, we like curious things. They give the charm of variety to the country home; to the children; to our friends and visitors. Those who plant, arrange, study and live only with an eye to profit are blind in the other eye and can't see or experience half of life's pleasures.

What Others Say.

KEEPING BUTTER IN BRINE.—Those who prefer freshly made butter, but cannot always obtain a supply, says the New England Farmer, have sometimes attempted to keep roll butter fresh by immersing it in a strong brine, supposing that it would thus escape the disagreeable woody taste of butter packed solid in tubs; but in most cases such experiments have been anything but satisfactory. The difficulty still remains, because the wood flavor is taken up by the brine and imparted to the butter. The Live Stock Journal gives the following directions for preparing tubs or casks for keeping butter in brine:

"Make a saturated brine of the purest salt you can get, using a pound of saltpetre to about 20 pounds of salt. Scald the brine by bringing it to a boiling heat, skim, and apply when sufficiently cool. The casks should be carefully prepared, as well as the brine. If the gum and sap in the wood are not removed before the casks are used, they will work out into the brine and affect the butter. To remove the woody flavor from the casks a thorough steaming with a high pressure is the quickest and best means. If soaked before the steam is applied, hot steam will cut the gum and woody flavor all out in a short time. If steam is not convenient, soak in brine till the wood is saturated. Then fill with boiling-hot brine, and let it stand until it gets cold, when the woody flavor will be sufficiently removed. By keeping the butter under the brine and the cask in a cool place, the butter will keep safely."

Mr. T. S. Gold, who keeps a large herd of cows for the sale of milk, and has a large family table to supply, has for many years made his surplus milk into butter and preserved it in four-pound rolls wrapped in cloth and immersed in casks of brine. He thus avoids overcrowding the milk market in flush periods, and the purchasing of butter for family use in the season of high prices. The wrappers should be well confined around the roll to prevent bits of butter from separating and floating on the surface, and the whole must be kept under brine constantly, for the smallest piece exposed would soon spoil the brine and thus all its contents.

Mr Cheever approves of this method if one can do no better. But he has never yet seen any preserved butter that is quite equal to that which is freshly made, that is, butter not over one week old.

FINALLY.

MR. THOMAS MEEHAN says that where he sees a farmer who has no love for the beautiful, for flowers, for home comforts, and pleasant surroundings, he usually finds no happiness, and an unworthy member of society. He is not prepared to say that such are always the inevitable results, but the tendencies are in that direction.....

MR. GIBB mentions in the last report of the Montreal Hort. Society that the Yellow-wood (Cladrastis tinctoria, too often printed Cladastis) has thus far proven hardy with him (Abbortsford, P. Q., Canada). He thinks it one of the finest of the American flowering trees.

HE commends the Tulip Tree (Liriodendron tulipifera) for trial in sheltered city gardens. But it is certainly the last tree we should select for such a little place. It is too large for the street or lawn, not to speak of a "city garden."

MR. GIBB pleases us when he says that the landed "Russian Mulberry" has been sold at an outrageous price. Our readers know that we planted this tree at the Rural Grounds when it was first talked of, and condemned it as not of any special value. The best kinds of the Russian Mulberry produce fruit inferior to the Downing, and are valuable only as the trees are hardier. These should be propagated from cuttings—not from seed as has been the case with the kinds offered for sale. Of course, a large proportion are absolutely worthless, so far as the fruit is concerned.....

THE Russian Mulberry is worth not over 15 cents a tree. It has been sold at prices varying from one to two dollars.....

MR. GIBB says that the new Phellodendron Amurense is not hardy in Canada. It is entirely hardy at the Rural Grounds. In general appearance it might be called an improved ailanthus.....

MR. GIBB finds the curiously beautiful Ginkgo Tree (Salisburia adiantifolia) nearly hardy with him. It is certainly worthy of a high place among all collections of any pretentious whatever.....

A LATE bulletin of the Michigan Agricultural College says that Clawson Wheat yielded 18¾ bushels per acre on eight acres. It produced "a heavy growth of straw which lodged badly and gave a shrunken, poor quality of grain.....

ROGERS'S Amber yielded 26½ bushels per

acre on six acres. The straw was stiff, of medium length, stood up well. This variety is hardy.....

FOUR acres were sown to Martin's Amber with different amounts of seed:

First acre, 45 pounds (¾ bu.) of seed. Yield, 21 bu.
Second acre, 60 pounds (1 bu.) seed. Yield, 24½ bu.
Third acre, sown with 75 lbs. (1¼ bu.) Yield, 26½ bu.
Fourth acre, sown with 90 lbs. (1½ bu.) Yield, 26 bu....

FIVE and a half acres were sown to Champion Amber with 7¾ bushels of seed. The yield was 33 bushels to the acre. This kind has proven hardy for three years. Straw strong and of medium length. Heads medium size, smooth, white chaff.....

E. W. STEWART says, in his book on Cattle Feeding, that many flocks of poultry may be found that will not eat potatoes or barley or rye or millet or buckwheat, simply because they never learned to eat these foods. Yet they are all good foods for poultry, provided they are given in due proportion, having regard to the several food elements they contain.....

IF manure at 50 cents a ton is less profitable than clover, what may those farmers think who are paying $2 to $3 per ton for manure, is a question propounded by Henry Stewart. The cheapness of clover and its far greater value as compared with manure render it especially beneficial for farmers who grow grain, and for them the practice of growing it to plow under is most useful.....

EVERY person knows, says Mr. Stewart, how moist substances, as wood, flour, flesh, grass, etc., when kept in a warm place, decay in a short time and become entirely decomposed, but how long they may be kept in perfect condition when kept dry and cold. It is the same with manure, which decays most rapidly when kept moist and warm. But when exposed to water for a short time and then dried, no matter how great the heat may be, manure will remain undecomposed. It is then, he concludes, a mistake to spread manure on the surface, but the best practice is to plow it under as soon as possible.....

A DEAD animal on the dry plains does not decompose, but dries up into a horn-like substance. Decaying organic matter evolves much carbonic acid and ammonia. When this matter is exposed to the sun's heat and to the dry winds, and the moisture in it is evaporated, these gases escape into the air and are lost. And these are really the most valuable parts of the plant food which is contained in manure. But porous earth has the property of absorbing a very large amount of gaseous matter, and the soil takes up the escaping ammonia and carbonic acid and holds or changes them into other substances which the roots of plants can feed upon.....

IN a book of stable maxims appears the following very sensible advice, says our friend the Kansas Farmer: "When a horse shows signs of being very unwell, do not try remedies which you do not half understand for an illness you cannot determine".....

MR. P. BARRY, referring to the fact that great quantities of the English walnut or Maderia nut (Juglans regia) are annually imported and sold in this country, says that the tree with him (Rochester, N. Y.,) is tender while young, but becomes hardier as it grows older.....

THE Dwarf Prolific Walnut (Juglans præparturiens) is desirable for the garden, as it bears at the age of three years from the seed, and often at the hight of two or three feet...

EVERY garden ought to have a few filbert bushes. If the fence corners and hedges must have something growing in them, the filbert is as good as anything. As to varieties, the Cosford is an improved kind of the English. It is very productive, bearing a large nut with thin shell and a kernel of excellent flavor. The Coburg bears a large nut, and it is an abundant bearer. The Dwarf Prolific is perhaps as beautiful as any, though the nut is rather small.....

MR. BARRY says that of all the varieties of the Spanish chestnut, that called by the French *Marron de Lyon* is the best. It bears and ripens well as far north as Rochester, and it bears the second year from the graft and the fourth from seed.....

A GOOD plan in packing pears is to wrap each one in soft paper, packing closely enough to prevent all motion, in bushel boxes.....

THE French, who export more pears than any other nation, cover the inside of the boxes with spongy paper or dry moss, which absorbs the moisture. Each pear is then wrapped in soft paper and placed in layers in the boxes, the largest and least mature in the bottom, filling all interstices with the dry moss. Thus they will keep a month or more. They are so closely packed that though they can not touch each other, all motion is prevented. If one decays the others are not harmed.....

MR. BARRY mentions that some of the Paris dealers preserve fruits successfully packed in layers in barrels and the interstices filled up with charcoal. The barrels are kept in a dry, cool place, about 40 degrees, and not subjected to temperature changes. Apples, pears, grapes, almonds, nuts and potatoes are all preserved in this way.....

A GOOD selection of pears is this for standards: Bartlett, Clapp's Favorite, Doyenné Boussock, Sheldon, Paradise d'Automne, Seckel, Dana's Hovey, Anjou, Bose, Doyenné d'Eté.....

IF dwarfs are desired, try Anjou, Angouleme, Howell, Tyson, Giffard, Louise Bonne de Jersey, Urbaniste.....

THE RURAL would select, among apples, the following varieties for most of the Middle and Eastern States for a small collection:

SUMMER: Williams's Favorite, Primate, Early Strawberry, Red Astrachan.

AUTUMN: Gravenstein, Jefferis, Chenango Strawberry, Oldenburgh, Hawthornden, Porter, Stump, Lowell, Fall Pippin.

WINTER: Baldwin, Wagener, Roxbury, Russet, Northern Spy, Jonathan, Hubbardston Nonesuch, Famense, Red Canada, Pomme Grise, Peck's Pleasant, Yellow Bellflower....

IF we were about selecting a dozen kinds of grapes for what is usually designated an amateur's vineyard, we should include the following: Brighton, Delaware, Moore's Early, Vergennes, Worden, Jefferson, El Dorado, Elvira, Empire State, Hayes and Ulster.....

THE new Globe Peach is announced as having produced peaches 15 inches in circumference, which is hard to credit. It ripens with Crawford's Late. It is a good shipper, a freestone, and of the best quality.....

MR. A. W. CHEEVER, the experienced editor of the N. E. Farmer, says that Red-top grows as tall as Timothy and makes more stalks which give a finer quality of hay and more of it to the acre. It endures drought after cutting better than Timothy and is less injured by cattle—The Timothy being easily pulled by fall feeding. Red-top is a little later than Timothy and some object to sowing the two together. But there is not enough difference to cause much loss by either early or late cutting of the one to save the other at its best ..

MR. CHEEVER usually sows 15 to 18 pounds of Red-top, with 10 to 12 quarts of Timothy and six or eight pounds of Red Clover. Red-top seed ranges from two to three dollars per sack of 50 pounds, 10 pounds being reckoned to the bushel. Timothy was formerly the fancy hay for stable keepers in and around Boston, but in recent years Red-top has grown much in favor .. ..

To decide the question: "Does pinching the terminal shoots of potato tops increase the production of tubers?" the New York Ex. Sta. planted eight short rows of Vick's Early Gem Potato, May 2. The tubers were cut to single eyes. On June 22 the terminal shoots were pinched off of alternate rows. The flower buds were then just forming. The pinching of the same rows was repeated on July 16. At this time it was evident that the pinching had increased the number of branches above ground. August 28 the rows were dug and it was found that the pinching was positively detrimental to the yield of tubers.....

WRITING of Canada ashes, J. J. H. Gregory says that all ashes ought to be bought and sold on analysis. It is true a man may make a pretty near guess by tasting or by leaching a sample; but the test of a chemist, though a fool, can far surpass the best guess of the most experienced man. The result in one case is a certainty, in the other, at the best, an uncertainty. In dealing with some of the smooth-tongued fellows who have all the way to Canada between you and the facts, it is much easier to analyze the ashes than the men. Ashes have been sold as Canada unleached that proved on analysis to be nothing but oyster-shell lime and a little admixture of wood ashes.

DR. R. C. KEDSIE says that if trees are cut at any time after the leaves are fully developed and in most active growth, the branches and leaves being left on till the leaves completely wither and the bark is removed from the body of the tree, the best results will be secured for lasting timber. The leaves draw out much of the sap which contains the most fermentable substance in wood, and that which furnishes food for worms which prey on wood. By cutting off the branches and leaves as soon as the tree is cut down, the pumps are stopped which would nearly pump the tree dry .. ..

PROF. BUDD says as the united result of many trials, made under the direction of the Russian Government, it has been decided that the best time to cut trees was near the end of June while the bark would peel freely.....

OLIVER WENDELL HOLMES says that when one of us who has been led by native vanity or senseless flattery to think himself or herself possessed of talent arrives at the full and final conclusion that he or she is really dull, it is one of the most tranquilizing and blessed convictions that can enter a mortal's mind.....

Everywhere.

TRANSCONTINENTAL LETTERS.—LXVI.

MARY WAGER-FISHER.

Homeward bound; California at her best in March: the San Joaquin Valley; scenes along the road; desperate-looking idlers; an alien principality; Fresno; hard lot of hired hands; a gossipy waiter; work not words the best recommendation.

WE left San Francisco the last day of March, 1886, homeward bound, with our line of travel definitely marked out over the line of the Southern Pacific Railroad, *via* Los Angeles, San Antonio on to New Orleans. Outside trips included the Grand Cañon of the Colorado—which we chose in lieu of the Yosemite Valley—the environs of Los Angeles, and a run down to San Diego.

Before starting out for "pastures new," we always made it a point to obtain all the information concerning them that was readily available, and the laddie, as well as his elders, was pretty thoroughly posted as to the things he was to see, and the chief features of interest. California was looking her very best—low hills and valleys green, and the whole country fairly aflame with the bloom of wild flowers. It was hard to realize that in a few weeks the hills would be brown, the country roads a foot deep with dust, and the only green grass to be seen, that kept so by irrigation.

The daily overland train left San Francisco at half-past three in the afternoon; but by studying the schedule we found that a local train, going as far as Tulare, left in the morning, reaching its destination at seven in the evening, and the overland could be boarded the following morning at two. This arrangement would give us daylight for almost the entire route to Los Angeles, and for this reason we chose it. It had rained the previous night, and the "splendid scenery of the sky" was unusual for California—lovely fleecy clouds floating against the blue of heaven, and California skies are as a rule, either quite cloudless or all clouds. Wheat was waving in verdant billows on all sides, and near Vallejo Junction, some 30 miles south of San Francisco, was a large, clean-looking brick flouring mill. There it was claimed the best wheaten flour in California was made. Every little town planted on San Pablo and Suisun Bays and the connecting straits, wore a pretty and thrifty air.

We soon entered the San Joaquin Valley, through which we rode for the entire day—less level and less attractive as a farming region, as seen from the railway, than the Sacramento Valley, and the wind-mills for raising water were in greater abundance. Indian pinks—a rich magenta in hue—rayless yellow compositæ and California poppy of brilliant orange—as much red as yellow—lay in solid masses of color, acres in extent—a wonderful sight and recalling Wordsworth's lines:

"Of flowers that with one scarlet gleam
Cover a hundred leagues, and seem
To set the hills on fire."

On both sides of the broad valley rose mountains—to the east the Sierras, to the west the Coast Range, the foot-hills brilliant with flowers, purple phacelia, larkspur of royal blue, and always the poppies and Indian pinks. The further south we rode the less attractive appeared the country—houses more remote, and the smaller railway stations composed of the distressing "palisade front" saloon and corresponding architecture. We crossed the Stanislaus, San Joaquin, the Tuolumne and the Merced Rivers—the latter being the stream that flows through the Yosemite Valley. At Berenda, 177 miles from San Francisco, a branch road runs off to the east toward this valley, making the tiresome stage ride some 20 miles less in extent, and year by year the fatigue of making this trip will be gradually lessened. Madera, the point further north on the road where one takes stage for the valley by a different route, is a forlorn little place, and at all the ugly little stations there were great groups of idle men, some of them desperate looking-fellows. We passed a bulbach plantation white with bloom.

For several miles we rode through one of the largest ranches in California, owned by Miller & Lux, who are said to be Germans, and who came to this country as adventurers, and have succeeded, like a good many other foreigners, in fencing in a large patch of our country's domain. A man in the car told us that the railway ran for 50 miles along one of their fences; that they raised a great deal of stock and controlled the meat market in San Francisco; also, that they own land so located that in driving their cattle from Mexico they can halt every night on their own ranches. They manage personally all their land and have no tenants.

Fresno is a "city" of some note on this route, and is reached from the north after a long ride through what is locally called hog-wallow land—the surface a continuous stretch of "hummocks" of which there is considerable in California. Fresno has trees—eucalyptus—some pretty buildings, and is rather a pretty town in spite of its crudities. We were told that for 25 miles toward the Sierra Nevada the country was a succession of vineyards and that the chief industry of Fresno was wine making. Tulare has a population of 2,000, and it was here that we were to pass the fraction of the night, in the endeavor to get some refreshing sleep. As we were eating supper in the hotel, the waiter, a gossipy fellow, informed us that they were preparing the dining room for a ball-room supper at midnight, but assured us that we would not be disturbed by the clatter. He said there were always a great many balls in California—that it was the great amusement of the country people—they came in from the ranches for miles around. He said he had worked on a ranch—that hired men were not treated as men, but as things, and that to sleep in a house on a bed, as hired men do in the East, was a thing unknown in California. They either rolled themselves up in a blanket and slept under a tree, or slept in a bunk under cover; that the owner of the ranche would practically say to his men "Here are a thousand acres"—or ten thousand as the case might be—"you can sleep anywhere it suits you best, the only thing that I require of you is that you put in an appearance on time in the morning." He said that there was a great deal of malaria at some places, and that quinine was given even to the dogs and chickens! The waiter seemed to be quite a nice fellow—had accepted that kind of work temporarily because he could find nothing better to do—and, like so many young men on the coast, had drifted around from one place to another, without taking root anywhere. He said a great many young men came from the East bringing letters of recommendation, and expecting to obtain a situation at once at $100 a month. It amused him and he always advised them to take $30, if they had the good luck to be offered that much. As for recommendatory letters, they amounted to nothing in San Francisco—a statement I often heard confirmed—that employers didn't care a straw for a young man's previous position, but valued him only in proportion as he answered to the requirements demanded of him.

RURAL SPECIAL REPORTS.

Canada.

FREDERICKTON, N. B., Sept. 18.—The rainfall in New Brunswick was exceedingly light the past Spring and Summer, and has been so thus far this Fall. In consequence, the hay crop is not more than two-thirds of an average yield. Oats and barley are well filled, but the straw is light. Potatoes are a good crop and mainly free from rust. Apples are yielding enormously; two of my trees have broken down under the great weight of fruit. G. D. S.

Michigan.

CADILLAC, Wexford Co., Sept. 25.—This has been a disastrous season for us. Absolutely no rain all Summer and frost every month in the year. No hay at all and small prices for all crops; too much "shipped in." The late heavy rains have started fruit trees in a new growth and they will get badly injured next Winter, I think. H. L. K.

Nebraska.

MADISON Co., Sept. 23.—Crops in general along the Elkhorn Valley are good. Late potatoes a little short of the average. S. S. C.

Oregon.

ANTELOPE, Wasco Co., Sept. 17.—Crops about one-fourth. Grass short. Season very dry. Gardens poor except where irrigated. M. J. W.

Virginia.

RICHMOND, Henrico Co., September 25.—This week the tobacco market has been uniformally dull, and until the new crop has been secured no change of note in transactions can well be expected. The weather has continued to be very favorable to the crop, both as to ripening and growth, particularly so on dark tobaccos. The cool nights and dews thicken it, and the warm, sunshiny days spread the leaf and ripen it; and much that has been lost in quantity planted will be again made up in increased weights, and consequent improved quality. This improvement as a rule holds good in this State to date. Brights may not come up to this estimate of improvement, but will show a more favorable condition, even though reports conflict. Leafy full wrappers must be comparatively scarce. Some cutters were sold at good prices this week. Wrappers remain quiet. T. H. M.

Washington Territory.

NORTH YAKIMA, Yakima Co.—A mistake was made here by irrigating too much in the fore part of the season. This irrigating system is but improperly understood as yet on our alkaline loams. We have more sunshine to the square acre than any other farming country in the United States. We are in the midst of hop picking now. B. F. V.

THE FARMER'S CLUB

ANSWERS TO CORRESPONDENTS.

[Every query must be accompanied by the name and address of the writer to insure attention. Before asking a question, please see if it is not answered in our advertising columns. Ask only a few questions at one time. Put questions on a separate piece of paper.]

KEROSENE EMULSION.

F. H. B., Orlando, Fla.—How should Paris-green and London-purple be used as an insecticide in orange groves?

ANS.—Paris-green and London-purple are of little use in the orange grove. The scale insects, which are the greatest enemies to the orange, will not be affected in the least by either of these arsenical mixtures, but are effectually destroyed by the kerosene emulsions. The formula for kerosene and soap emulsion found most effective by the orange growers and truck-men of Florida, and which Professor Riley strongly recommends, is as follows:

Kerosene.....2 gallons=67 per cent.
Common soap or whale-oil soap ½ pound } =33 " "
Water.....1 gallon }

Heat the solution of soap and add it boiling-hot to the kerosene. Churn the mixture by by means of a force pump and spray-nozzle for five or ten minutes. The emulsion, if perfect, forms a cream, which thickens on cooling, and should adhere without oiliness to the surface of glass. Dilute, before using, one part of the emulsion with nine parts of cold water. The above formula gives three gallons of emulsion, and makes, when diluted, 30 gallons of wash. The kerosene and soap mixture, especially when the latter is warmed, forms, upon very moderate agitation, an apparent union; but the mixture is not stable, and separates on standing or when cooled or diluted by the addition of water. A proper emulsion of kerosene is obtained only upon violent agitation. It is formed, not gradually, but suddenly: in short, to use a familiar phrase, "it comes," like butter. The time required in churning depends somewhat upon the violence of the agitation, but still more upon the temperature, which, however, need not be much above blood heat. When obtained, an emulsion of kerosene and soap is known by the perfect union of the ingredients, and the absence of oiliness, so that the liquid clings to the surface of glass or metal. It resembles a rich cream, more or less thickened according to the proportion of soap used in the mixture.

TREATMENT OF KICKING HORSE; CURE OF WARTS; FEED FOR FATTENING HORSES.

F. H. V., Bowman's Bluff, N. C.—1. What will stop a mare from kicking with both feet in a wagon? 2. What will cure warts? 3. What kind of food would be good for fattening a mare about 12 years old and very thin?

ANSWERED BY F. L. KILHORN.

1. Much depends upon the disposition of the animal, the cause of the habit, and her previous management. A few horses may be effectually broken of the habit by the judicious use of the whip; but in many cases this only makes matters worse. A simple method, usually effective, is to buckle a strap with a ring around the near fore fetlock. Into the ring fasten a half-inch rope or strong driving rein, pass back through a ring in the belly-band (or above the belly-band) to the wagon. Whenever the horse attempts to kick pull on the rope or strap, which will bring the fore foot up to the elbow. The horse is now on three legs and cannot well kick. Repeat until the horse gives up the habit. If the horse kicks while being harnessed, hitched, or immediately after being hitched, loop a short side strap around one fore fetlock, raise the foot to the elbow and buckle the strap tightly around the forearm. This will compel the horse to stand on three legs, when he can be safely handled. A course of training adapted to subdue the animal might also be desirable. 2. If the warts have a neck, cut close to the skin with a pair of sharp scissors and cauterize the cut surface with any dry caustic, (nitrate of silver, sulphate of copper, etc.) Broad, flat warts that cannot be cut off, may be eaten away by caustic. If hard and dry, use muriatic acid, applying the acid with a blunt-pointed wooden pencil bruised at the end. Care must be taken not to get the acid on the adjacent skin. Scrape the wart as fast as eaten by the acid, and continue until the wart is entirely eaten out. For warts that are cracked or sore use the copper sulphate or other dry caustic. 3. Cut hay and ground feed mixed and moistened, but not wet. For the ground feed mix equal parts by measure of ground oats, corn meal and wheat bran or middlings, and one-fourth part of oil-meal. Feed three to five quarts of this mixed feed and three to five pounds cut timothy hay thrice daily, according to the size and needs of the animal. Roots or potatoes night and morning would be excellent. The horse should receive daily exercise, or light driving or the run of a yard; occupy a clean, dry stable, and be groomed daily. Give twice daily in the feed, one ounce each powdered gentian and ginger, and two drams sulphate of iron. On alternate weeks replace the iron by two drams powdered cinchona bark. If the bowels become costive, add two drams aloes until relieved.

SMUT AS CATTLE POISON.—NASAL GLEET IN A HORSE.

D. S., Augusta, Kans.—1. Will smut on corn kill cattle? 2. What will cure chronic nasal gleet in a horse?

ANS.—1. Yes, occasionally when fed in large quantities. If fed in moderate quantity with other suitable food, there is but little danger. It is especially injurious where there is a scarcity of water. The evil effects of feeding smut, however, are usually not as marked as those from the feeding of ergotized grains or grasses. Abortion may also be produced from the excessive feeding of smut. To avoid the evil effects, feed the fodder well moistened, and allow free access to salt and good water. A liberal daily allowance of roots, potatoes, or oil meal will be beneficial in keeping the bowels open. In the absence of these, bran slops or mashes once daily will be beneficial. Whenever the bowels become costive, as they are liable to do, give two or three ounces of Epsom salts, or an ounce each of gentian and ginger twice daily until relieved. 2. Inject the following solution into the nose once or twice daily with an enema syringe, or, preferably, a nasal funnel: Sulphate of copper or zinc 30 to 40 grains, glycerine an ounce, water one quart. The method of injection is unimportant, but it is essential that the solution reach all parts of the nasal membrane. When injected, the solution should be about blood-warm. If this wash does not check the discharge in a few days, you may usually conclude that you are dealing, not with simple nasal gleet, but with a discharge from some of the mucous cavities connected with the nose—sinuses of head, gutteral pouches—or with some other disease—abcess from carious teeth, nasal polypus, or with a case of glanders—either of which should receive the attention of a veterinary surgeon.

HAIR WORMS.

G. P., Trenton, N. J.—What are the name and history of the worms specimens of which are inclosed?

ANSWERED BY PROF. A. J. COOK.

The worms are Gordii, or Hair Worms. It is said that when a horse's hair falls into the water, presto! there comes forth a living worm. Verily the day of miracles has not yet passed. To be sure this is flesh-colored, and not black: but are the tails of all horses of the same hue? Seriously, these hair worms, or Gordii, are in no wise related to the horse; but their life history adorns another tale quite as startling. They deposit strings of eggs into the water. These eggs hatch, and the young pass into the stomach of some dipterous maggot, as the larval mosquito: when partly developed they pass with their host into the alimentary canal of some hungry fish: here they develop further, and are finally ejected, to be again lapped up by some luckless cricket, beetle, etc. Here the hair worms mature, and often fairly crowd the whole interior of the insect, which may now be said to be struggling with the "worms." Now let the feverish cricket but hop into a pool, water pail, rain trough or any other water, and at once the gay worms crowd forth, ready again to scatter their eggs in preparation for the same marvelous round of vital changes. No wonder the non-scientific thought them changed horse hairs, for how strong the resemblance, unless we call the microscope to our aid. Then we find they have mouths, stomachs, indeed complete alimentary canals, and are both male and female. No wonder the scientist called them Gordii, for the old Gordian knot was not more intricate than the knots into which they tie themselves, and yet each one is the Alexander to untie itself.

WORMS IN A MARE.

H. B., Belle Plaine, Ia.—Everything my young mare eats seems to ferment and cause bloat, which is attended with hard coughing until the wind escapes from the stomach. She is also troubled with worms of the large kind. Her appetite, is good and she is otherwise healthy. What should be done for her?

ANS.—For the worms give at evening four or five drams of Barbadoes aloes to open the bowels. Then, each morning for a week, give two drams each of tartar emetic, sulphate of iron and aloes, and one dram of carbolic acid. If the bowels become too loose, omit the aloes. On the seventh morning give another dose of aloes; also slowly inject, per rectum, several quarts of a strong solution of quassia, the solution to be milk-warm when injected. Feed sparingly and allow only moderate exercise during this treatment. After the above, feed moderately on a laxative, nutritious diet, and give morning and evening in the feed one-half ounce each of sodium carbonate, gentian and ginger. At the noon feed add one ounce gentian and one dram hydrochloric acid. Thorough daily grooming will add greatly to the improvement. If the cough continues, take six drams of extract belladonna, two ounces of niter, and mix with sirup to form a thick paste. Make into six balls and rub one upon the back teeth, to be swallowed at leisure, three or four times daily.

KEEPING FLOWERS OVER WINTER.

D. N. D., Lake Grove, L. I.—Having a place to keep flowering plants through Winter, I thought of digging a pit below frost, putting in it a bottomless box, and setting the plants in it in earth or pots, covering the box with slats, on which hay or straw would be placed, and then earth. Would this method of keeping them be safe? If not, what would be a better way?

ANS.—We very much doubt whether plants would live under the treatment suggested. They might, but it is extremely uncertain. We are not informed what varieties of plants our correspondent wishes to keep. Cannas and dahlias, or any tuberous roots should be dug up and stored like potatoes. Geraniums, coleus, and such bedding plants, may be cut down to the main stems, potted, and put in a light room, kept above freezing, without reference to absence of sunshine. They would not make much growth without sun, but would keep alive. We would not advise experimenting with the pit, unless it is immaterial whether the plants survive or not.

HAIR FALLING OFF A HORSE.

B. W. M., Fredonia, N. Y.—Last Spring the hair began to fall off my mare's head in places; then it fell off the neck also; and small lumps came under the skin as far back as the shoulders; now a bare spot is beginning to grow on the hips. The bare places itch, and the animal rubs them and tears the skin off, and the places immediately scab over; when rubbed, stuff like dandruff from a person's head comes off. She eats and appears quite well. What ails her?

ANS.—The horse evidently lacks proper care. The bald places may be due to this want of care, or to parasites. See that the horse receives a *thorough daily grooming* of at least 40 minutes—an hour would be better—until the skin has been cleaned. Every two weeks wash the animal with warm water, to which add one teaspoonful of ammonia to each quart of water. Work rapidly, rub dry, and blanket for a few hours to make sure that the horse does not become chilled. The bald places will probably all disappear in a few weeks. If not, paint with tincture of iodine. Give the horse twice daily in his feed, one-half ounce each of powdered gentian, ginger and sodium bicarbonate.

SPRAINED BACK IN MULE.

G. B. K., Mobile, Ala.—A mule's spinal membrane has come apart a little just over the hips. Back of the loins he can't turn short around, and sometimes when he strikes hard ground with one of his hind legs, he draws it up and hobbles on three legs for a few minutes, and when he walks on it again he does so stiffly, with the leg turned outward.

ANS.—The mule ought to receive the personal attention of a competent veterinary surgeon, otherwise place and keep him in slings and apply a cantharides blister over the seat of the injury. Cut the hair close and rub the blister well against the direction of the hair. Tie the animal so that he can't rub the blistered surface with his mouth. When the blister is well raised (12 to 24 hours), carefully wash with Castile soapsuds, and anoint daily until healed, with vaseline. The case is apparently a severe sprain or perhaps fracture, and unless the mule is quite valuable it might be more profitable in the end to kill him at once, as a recovery is uncertain.

LAME PIG.

J. A. M., Halcottsville, N. Y.—My five-months-old pig about six weeks ago began to get stiff in the fore-legs; now he can hardly walk. When moving he does so like a badly foundered horse. He doesn't stand on his feet at all, but he sometimes gets on his knees for a few moments. He eats very little. The cords on the backs of his legs seem contracted. What should be done for him?

ANS.—The stiffness may be due to the feed (which you should have stated), injury or exposure, or to constitutional weakness. Give one ounce linseed oil, and repeat next day if the bowels are not moved. Feed on milk, with middlings, and ground barley or oats, but little or no corn. Bathe the limbs daily with one ounce each Castile soap and camphor in a pint of spirits. Give a comfortable bed on a *dry* ground or board floor.

Miscellaneous.

J. S., Kerbyville, Oregon.—1. Will it pay to plant pear trees for hog feed? 2. From whom can I obtain Coburn's Swine Husbandry? 2. Where can crude petroleum be obtained? 4. From whom can Japan Chestnuts be obtained by the 1,000?

ANS.—1. We should say not. 2. American News Co., N. Y. 3. Paint or grocery stores. 4. Storrs, Harrison & Co., of Painesville, O.

J. S., Brattleboro, Vt.—What is the tree a specimen of which is inclosed?

ANS.—It is Magnolia acuminata or Cucumber Magnolia. It is upon this that many of the more tender kinds are grafted. It forms a charming tree for the lawn if cut back somewhat from year to year for the first 10 years of its life.

E. A. P., Kirkville, Ia.—How can I preserve the seeds of the hedge thorn?

ANS.—As good a way as any is to mix them in sand in a box. Bury the box a few inches below the surface in a well-drained soil, and sow in the Spring.

B. B. L., Green Lawn, N. Y.—You can probably get Velvet Chaff Wheat from W. C. Latta, Perdue University, Lafayette, Ind.

ubscriber (no address).—The large green insect left at this office in a box is the larva of one of our largest silk moths—Platysamia Cecropia. It feeds on apple and many other trees, the leaves of which are often stripped by the large caterpillars. These larvæ develop into moths, which lay many eggs, and the wonder is that there are so few of the caterpillars. This is due to the numerous parasites which destroy the insects in prodigious numbers. The larva left here was infested with these parasites, and so would never have developed into the beautiful moth.

DISCUSSION.

C. J., OREGON, Mo.—C. L. N., on page 622, replies to one who said farming does not pay. I say it does not pay west of the Mississippi and south of the Ohio, *i. e.*, where produce must be carried long distances. Here we reside within from 100 to 700 miles of the best fruit markets in the world; but does it pay to raise fruit to ship? No! Just as many charges are put upon it as it will bear. Consumption is so restricted by the high prices due to this that the markets are quickly overstocked. It costs the price of a bushel to move it 500 miles. About one year or two in nine prices get up a little, and then freights rise, too. About half the farmers of the United States, and those dependent upon them, are thus forced to economize to such an extent that Eastern manufacturers can't sell all the wares they make. Here is the secret of the whole trouble. We are restricted consumers of manufactured goods during seven years out of nine.

J. S. T., WALCOTT, N. Y.—I set out 48 Shaffer's Raspberries one year ago last Spring, and this season picked 103 heaping quarts. Was this a large yield for the first year's picking?

R. N.-Y.—Yes. The above was a large yield for the first season for any raspberry. Shaffer is a productive variety and the quality is rich when fully ripe. Those who use it once look around for more when again in market. It shades the soil so as to prevent weeds and grass from making much headway.

G. E. B., Waynesville, N. C.—I mail the RURAL a few chestnuts from a tree or bush on a neighbor's farm. It is not quite 10 feet high and has been bearing several years. It is very productive and seems to be a genuine dwarf. There are no foreign trees in this region, so that it is a native. It is growing in an old field that has not been cultivated for several years. The nuts are smaller this year than usual. Our altitude gives us the climate of Southern Pennsylvania.

R. N. Y.—The nuts are rather small, but very sweet. It is high time that more attention were given to improving our native chestnut.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING October 2, 1886.

H. G.—J. R. K.—F. F. G.—J. S.—B. F. V.—A. G.—C. D. H.—R. R. P.—J. C. V.—F. C.—J. A. H.—T. J. R.—S. S. C. J. B. S.—B. M. B.—E. F. E. E. P.—F. Z. M.—C. A. G.—E. T. L. B.—B. P. M.—H. C.—J. B. J., thanks—O. W. S.—P. S.—W. A. D.—M. D. T., thanks—E. M. W.—J. F. E. W. W. O.—A. C. C.—"Badger."—M. A. H.—H. W.—L. S. K.—J. F. H.—Mrs G. A. B.—T. L. B.—A. G.—A. O.—J. R. K.—J. H.—B. F. V.—R. P. R.—G. W. S.—J. A. H.—B. P. M.—E. F.—B. M. B.—F. C.—J. W. K.—J. F. H.—J. R. M.—A. D. W.—G. A. B.—J. B.—G. P.—G. W. O.—W. G. M.—C. F. H.—C. E. B.—J. T.—J. H.—G. W. C.—E. P.—H. G.—T. D. B.—G. H. B. S.—A. P. R. A. L.—G. W. B.—C. R. W.—F. J. B.—S. E. B.—W. H. M., thanks—S. S. C.—Th. Huber, thanks—H. G.—R. W. Mc H.—G. H. G.—J. A. Mc E.—R. B.—J. D. L.—A. S. W.—S. T. S.—D. E. S.—C. L.—G. W. A.—J. E. C.—J. P.—E. B. C.

Miscellaneous Advertising.

DIXON'S "Carburet of Iron" Stove Polish was established in 1827, and is to-day, as it was then, the neatest and brightest in the market; a pure plumbago, giving off no poisonous vapors. The size is now doubled and cake weighs nearly half a pound, but the quality and price remain the same. Ask your grocer for Dixon's big cake.

THE
RURAL NEW-YORKER.
A National Journal for Country and Suburban Homes.

Conducted by
ELBERT S. CARMAN.

Address
THE RURAL NEW-YORKER,
No. 34 PARK ROW, New York.

SATURDAY, OCTOBER 9, 1886.

A CONTINUATION of our special reports of fairs (New York State and Nebraska) will be found on page 682.

"I HAVE heard it estimated by dealers that fully one-half of all the fruit sent to market was so badly packed or so badly carried as to pay little, if any, profit to the grower." See Parker Earle's article on page 672. Hence one-half of all the labor and capital invested in fruit-growing in this country is *wasted*.

THE Kaffir Corn (a sorghum) is very much prized where it has been tried in the South. It seems that the first growth is cut for forage when in early bloom. The second growth yields both grain and forage in late Fall. Our Northern seedsmen (or several of them) will offer it for sale. The heads are very large and must give a heavy yield of grain which, it is claimed, makes a better quality of flour than any other of the sorghums. We have seeds and shall try it another year.

IN our next seed distribution, which will be announced ere long, will be a variety of field corn which we believe to be earlier than any other tried at the Rural Grounds. The grain glazed with us in 85 days. The ears are large, the kernels are one-third larger than those of the absurdly-named Angel of Midnight; the plants do not grow so tall. A peculiarity of this variety is that the same plant often produces both pure yellow, dark-red or mottled grains upon different ears—each apparently as *fixed* as if it were a thoroughbred.

We hope to retain for years to come as in years past, the bulk of our old subscribers without any further inducement than that which the RURAL NEW-YORKER *itself offers. If they continue to need and to prize it, they will continue to subscribe for it. In order to induce those who would gladly see its circulation largely increased to aid us in this work, we have placed before them two propositions. The first is that in clubs of five or over, the price will be (until further notice) $1.50 per year. The second is embodied in the premium-list, a careful examination of which will certainly show that adequate compensation is offered for any effort our friends may kindly make in the* RURAL'S *behalf. Send for it if you have not received it.*

MR. J. H. HALE writes us, under date of September 25, as follows:

"The RURAL'S illustrations of the Carman Raspberry are very fine. Such a fine-grained, solid, compact berry shows up well in a cut; but as to size, our whole crop of 500 plants the past season averaged much larger than that shown on the first page of the RURAL: but, then, the public have been so deceived with overdrawn fruits it will be a glad surprise to them when they come to fruit the Carman to find the berries are larger than the picture. Earhart is still doing wonders here. It made a great show of fruiting canes at the State Fair last week, and again at the Rhode Island State Fair this week.

South Glastonbury, Ct."

SECRETARY GEO. W. CAMPBELL writes us as follows: "I have been really pleased at the result with Niagara seedlings that have fruited here, and that I have seen both from the northern and southern portions of the State. I believe *all* that I have seen have been quite equal to the Niagara in quality—and several were decidedly better in that they were free from foxiness. It is a little curious to me that all are white. Seedlings from others have almost always been varied. I have seedlings from Walter, black, white and red; seedlings from Worden crossed with Delaware and Purity, red, white and black. Almost all vary; but Niagara seedlings apparently do not, in color. If I live a few years I hope to send you many interesting results when a little further developed."

WE have received the following note from J. Troop, Professor of Horticulture in the Purdue University, Indiana:

"In speaking of the different varieties of wheat grown at the Indiana Agricultural College (RURAL of Sept. 18), you say the Velvet Chaff is described as bearded, while that raised at the Rural Grounds is *smooth*. I will say that we also have the smooth variety, which came to us under the name of Greenawalt, and is mentioned by that name in the bulletin. I might add, further, that we now have obtained, by selection, *four* distinct types of the Velvet Chaff, viz.: brown-bearded, brown smooth, white-bearded and white smooth *i. e.*, white and brown chaff."

SOMETHING should be done to close the mouth of Wiggins, the false prophet. He has proven himself to be a fraud. He has done damage enough. The widest publicity was given to his recent prediction of a new earthquake. Thousands of people were frightened into idleness, and a considerable loss of time and labor was experienced as a result of his dismal guessing. One can hardly blame people who passed through the horrors of the late earthquake for being nervous when the papers publish these absurd "predictions." Is not a man like this Wiggins who causes so much excitement and fright guilty of a crime? The newspapers of the country are far too eager to publish sensational reports without thinking of the mischief they may cause by so doing. They should boycott this Wiggins and keep his "predictions" out of print. This they owe as a duty to the American public.

CHESS AND WHEAT.

A FARMER, who, from a long life's experience in raising wheat, is confident that it sometimes changes to chess, brought to this office as many as six plants which apparently were both wheat and chess. The roots of each plant seemed to be those belonging to but one plant, and they were so matted together that even after all the soil had been washed out it seemed impossible to separate the wheat from the chess. "Now," said our friend, "if the plants are separate the roots can be separated or traced." We undertook the task of separating them without breaking a fiber. One by one the fibers were disentangled and over an hour was thus spent before the tedious job was completed. In one case the chess stalks seemed to start from the wheat roots and for a few minutes we were in doubt whether at last an actual instance of this change were not before us. It was found that the neck of the chess grew horizontally for two inches, resting upon and concealing the wheat neck which had also grown horizontally, while the fibrous roots of each were so intermingled that only the chess neck could be seen. When such specimens are encountered and less carefully examined, it is not to be wondered at that there are farmers who grow angry when they are told that wheat never changes to chess.

FIGHTING AN UNSCRUPULOUS MONOPOLY.

THE American Cotton Oil Trust Company is one of the largest and most unscrupulous monopolies in the country. By the most tyrannical means it has obtained control of 80 cotton seed oil mills in the South, and turns out 90 per cent. of all the cotton seed oil produced in the Union. Whenever any independent mill declined to join the combination, the policy of the syndicate has been to threaten to establish or actually start an opposition mill in the neighborhood and buy up all the seed at figures which the local mill could not afford to pay, thus ruining the latter. Having once obtained control of the business, it began straightway to plunder the planters and the public. Last season the price of cotton seed on the levee at New Orleans and Memphis was as high as $16 per ton. Then it was brought down to $11 by a combination of the crushers; then to $10, $9, and finally to $8, when the planters began to complain loudly. At last it decided to pay only $5 a ton for seed on the river bank, and in view of cost of hauling it there, little or no recompense was left to the grower. The planters of the Mississippi and Louisiana, it is estimated, could not get more than 60 cents a ton for their seed. While the price of seed has been put down in this way, that of the oil has been raised from 37½ cents in 1885 to 40 and 41 cents per gallon for prime summer yellow at present.

AT last the cotton planters of Louisiana and Mississippi have organized in opposition to this unprincipled monopoly. It is proposed that all planters shall refuse to sell seed to the mills for one year, forcing the latter to remain idle, and thus crushing the crushers. By this arrangement the planters will lose little, for if the seed is used as a fertilizer it will be worth at least the insignificant sum offered them by the mills. Of course, the growers are too numerous for all to remain in the combination against a quiet offer of better prices by the monopoly; but since the organization was formed the other day the Cotton Trust certificates have fallen from 57 to 54 1-8 in this market.

THE new Premium-List of the R. N.-Y. is available to all who send yearly subscriptions at the regular price, viz., $2.00. It is a matter of choice whether they retain the cash commission of 50 cents for each subscription in clubs of five or over, or select any of the articles from the Premium-List, which are sealed so as to allow an equivalent of from one to two dollars for each subscription, according to the arrangement which we have been enabled to make with the manufacturers of those articles.

FARMERS TO THE RESCUE!

OVER $500,000 have been already contributed for the relief of the distressed among the 50,000 inhabitants of Charleston, and money is still coming in by thousands of dollars every day. It comes from the North, South, East and West; for in this glorious country generosity and charity are confined to no section and to no class. The Charleston relief fund, however, has been contributed almost entirely by the large cities, and the mercantile, professional, manufacturing and operative classes. This is quite natural. "A fellow-feeling makes us wondrous kind," and dwellers in cities should be foremost to relieve dwellers in other cities affected by any grievous calamity for which they are in no way responsible. What an earthquake has done for the city people of Charleston in a few seconds, a drought has done for the farmers of Western Texas in 15 months—reduced them to a deplorable condition, which appeals for aid to the generosity and charity of all their countrymen and more especially to the sympathy of their fellow-farmers everywhere.

The affected district embraces 10 counties. Hundreds of the inhabitants haven't tasted meat for a year, unless perchance, they caught or shot a rabbit. Children have not for months had a drop of milk. Water and meal have been the only support of the great majority of the people for a twelve-month. In some localities water had to be hauled in tanks from 10 to 30 miles. Within the last six weeks rain has come to the dried-up region and the ground is once more in a condition for cultivation. Wheat is the principal crop of the section. That and all others put in last Fall and Spring either failed to germinate or soon perished. What the poor farmers—mostly new settlers—most need is seed wheat. Drought has left them without money to buy seed themselves, and under the laws of Texas they cannot mortgage their land to secure the means to buy. The Rev. John Brown, a Presbyterian minister at Albany, Shackleford County, Texas, has been sent North to procure aid for the distressed. "Unless I succeed," he writes us, "I do not know how many of them will live through the Winter. If seed can be supplied the stores will generally give credit until next harvest, and in this way, with what help the Relief Committee may be able to give, they will pull through." Contributions and correspondence can be sent to the Rev Dr. Kendall and the Rev. Dr. Roberts, Secretaries of the Presbyterian Board of Home Missions, 280 Broadway, New York, or to Mr. Brown at the same address. Is there any need of urging our readers to be generous to their fellow farmers starving in far-off Western Texas? Even a bushel of wheat, or, better, the price of it, from each man who reads this would be a godsend. Will not the farmers of the country do for the stricken farmers of Texas, what the city people of the country have done for the stricken city people of South Carolina?

NEW KINDS UNDER OLD NAMES.—THE DUTY OF EXPERIMENT STATIONS, ETC.

FOUR years ago, or thereabouts, when Martin's Amber Wheat was first announced as a new, wonderful variety, we grew it in our wheat plots and found it the same as Armstrong. Armstrong was sent to us about eight years ago, and we were surprised two years or more later to find it advertised as "Landreth." Still later the Martin's Amber was advertised as the most productive wheat in the world. During the past two years we have received several heads, as severally named, that seemed to be identical with Armstrong-Landreth-Martin's Amber. So it goes. The experiment stations are raising and commenting upon Martin's Amber and Armstrong and Landreth, giving different yields, strength of straw, etc., as if they were different. With the exception of C. S. Plumb, of the N. Y. Ex. Station, who writes us, under date of September 22, that they are the same, not one of the Ex. Stations has stated that they are the same. And yet the directors profess to take the most careful notes, watching the young plants, the tillering propensities, the hight, color and strength of straw, differences in the heads and kernels, differences in the time of maturity, yield, etc.

We repeat: Isn't it as important that the stations should detect synonymous varieties and make them known, as that they should grow the same kinds in different soils or under different conditions, and report different values? Farmers are thus deceived and injured. One price is paid for Landreth, another for Armstrong and another for Martin's Amber. The Landreth is praised in one State, the Armstrong condemned in another, the Martin's Amber is lauded here and rejected there. So it is that the farmer may be induced to buy first the one, then the other, to find ultimately that they are all the same. And thus it is that years of useless experimentation are wasted. After all these new (!) varieties have become old and the price is that of usual seed wheat, it is too late for the Ex. Stations to inform the farming public that they are the same. The stations should be the *first* to secure and plant all novelties, and to inform the farmers whether they are really new or old, better than old kinds or poorer, so that farmers might know whether to buy Martin's Amber at five dollars or Landreth at one dollar per bushel. And so it is with oats. Thousands of dollars have been spent by farmers for Welcome Oats at five or ten dollars a bushel when the same variety might have been purchased under several different names at one dollar a bushel. And the R. N-Y. has said this so often that it is sick of the repetition. And so it is even now respecting the so-called Yankee Prolific Oats, (White Russian) and scores of other grains, fruits and roots that have been proven to be the same at the Rural Grounds.

Our esteemed farm contemporaries are free enough to print in full the bulletins of the various agricultural stations. That is right. They are rather shy of printing the results of tests at the Rural Grounds. They don't like to give "free advertising" to contemporaries. That is wrong, provided the contemporary works as hard and as disinterestedly as does the RURAL to spread information that is of the first value to the farmers of the land.

BREVITIES.

THE Earhart blackcap ripens several fine clusters of berries October 1st.

OUR fair reports have crowded the Youth's Department out of the paper this week. As a rule, such reports are pretty dry reading, but we think we have some new ideas in those of this year's fairs.

ALASKA Peas were sown August 16. First picking September 29. The vines are 15 inches high—the pods are small with few peas. But the yield is better than was anticipated. It is a treat to have tender green peas in early October.

AGAIN we have received a bunch of Mr. Marvin's new grape, the Cayuga, from H. S. Anderson, of Union Springs, N. Y. This is a good grape, very juicy, tender, sweet, and with a firm skin. We hope the vines will prove healthy and adapted to general cultivation.

THE exhibitions of poultry at the fairs make it very evident that too much stress is laid upon the feather standard. Early maturity and laying qualities are worth far more to farmers than a beautiful plumage. There is a grand chance for improvement in the present "standard."

ONE advantage claimed for the use of potato diggers is that the act of running such a machine through the soil in digging is equal to a good fall working, freeing the land of weeds and leaving it in fine condition. This idea is a good one. Fall working of land is desirable and a machine that digs potatoes and stirs up the soil at the same time, performs a double good.

JUDGING from a specimen bunch sent to this office by Wm. F. Bassett, of Hammonton, N. J., the Dolle Grape is a very showy variety. The berries are as large as those of Moore's Early, dark blue, with some bloom. The skin is thick and firm, with considerable "meat" between it and the pulp, which is rather tough and a little sour. Seeds from two to four in each berry. Except the sourness of the pulp, the quality is sprightly, juicy and very agreeable. Mr. Basset says that the Dolle is the best keeping grape he has ever seen.

Indust'l Societies.

AMERICAN HORTICULTURAL SOCIETY AT CLEVELAND.

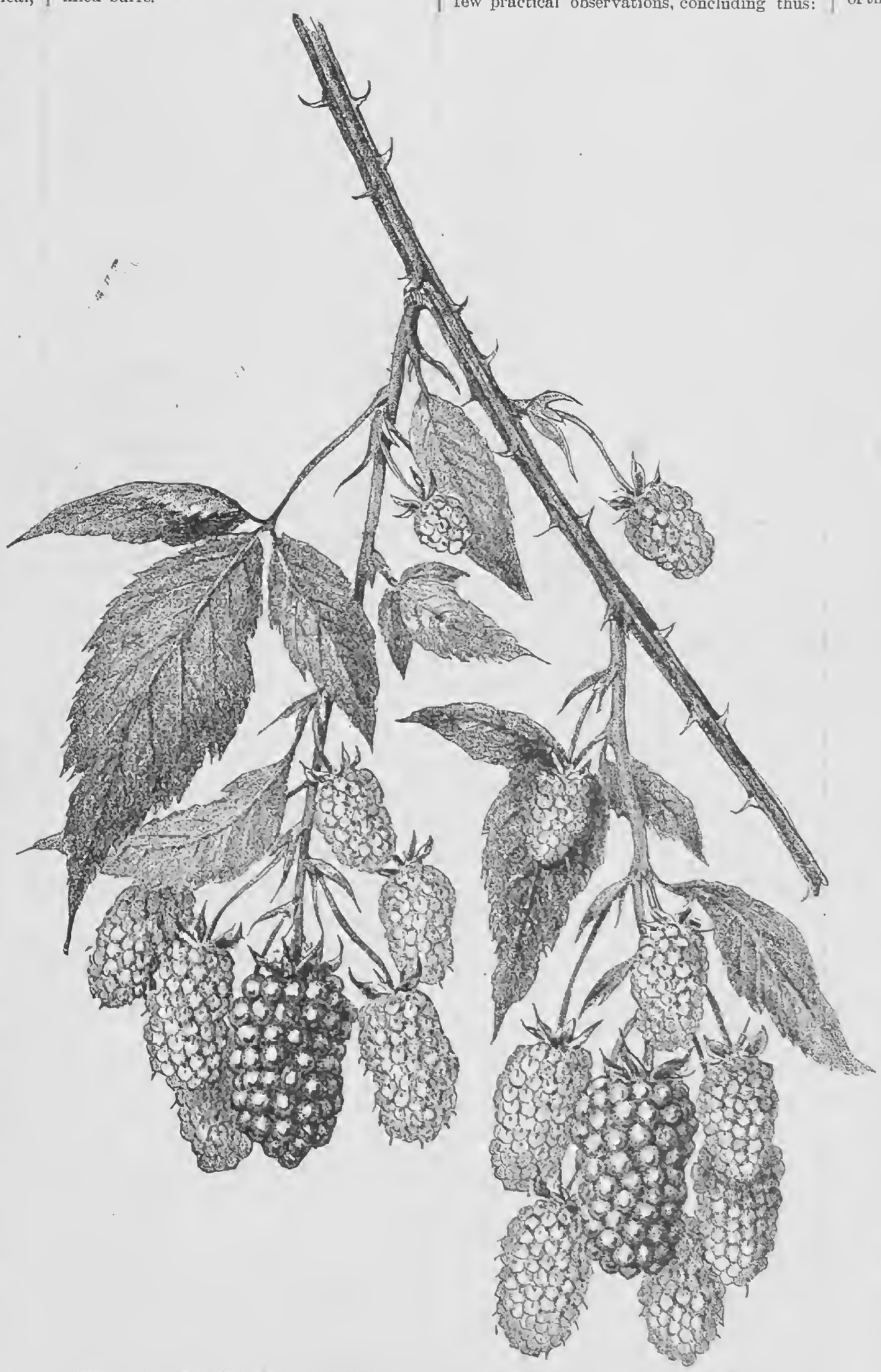
(RURAL SPECIAL REPORT CONTINUED.)

Vegetables in Japan; nut culture for pleasure and profit; most profitable kinds for various sections; Japan chestnuts; other sorts; filberts; almonds; walnuts; pecans; their culture; hickory-nuts.

THE paper on "vegetables in Japan" by Kizo Tamari, was of much interest. It was well written, but his Japanese tongue made it difficult for members to understand him. He said in substance, "We have many culinary vegetables of good quality in Japan. The choice of edible plants differs with countries and peoples, depending upon climate, social condition, tastes and methods of cooking. No other vegetable is so extensively used in Japan as the radish. They are mostly cylindrical, one-fourth of an inch to over a foot in diameter, and often over a yard in length. We have them the year around. Our carrots are longer and thinner than yours—two-and-one-half feet long, sometimes. Burdock comes third in general estimation, the root growing one foot around and three feet long in a year, soft and delicious. Turnips are used like radishes in America. Caladiums are extensively grown, and used like potatoes here. Six or seven million bushels are raised annually: taste like potatoes, but more mealy. Sweet Potatoes are largely grown in the south where farmers live upon them; other potatoes are raised in the north. Japanese yams are used in variety, but the roots of wild plants are better; these grow two inches by three or four feet in a year, very hard to dig. Lilium tigrinum is grown in fence corners, the bulbs growing two or three inches in diameter in as many years. Onions are grown like celery here, not for the bulbs, but for the long, tender stalks. We grow peas and beans in endless variety: some are used green, but most are made into different kinds of cakes, or used as parched beans. Soy bean is an important product, as great as wheat, about 11½ million bushels annually. All this is used in our culinary department, in three forms, viz: Miso, Shioyu and Tofu. The latter called Chinese cheese by the English, is very commonly used, especially away from the sea-coast where fresh fish is scarce. It contains three times as much albumen as either wheat, barley or oats. We are the largest consumers of pulse of all people in the world. We have no varieties of cabbages. Chrysanthemum coronarium is grown for its leaves and stalks; the yellow flowers are boiled, dried and used for relishes. Six or seven edible bamboos are raised. Seven species of seaweed are used, Porphura vulgaris being most highly esteemed. It is made into thin sheets, like paper. The growth and manufacture of this weed is one of our important industries." He referred to many plants used as relishes, and for flavoring, besides numerous other species not enumerated in this abstract.

Wednesday afternoon session was opened by the reading of a paper on "Transplanting in Theory and Practice," by Tuisco Greiner.

A paper on "Nut Culture at the North for Pleasure and Profit," by J. T. Lovett, was then read by President Earle, calling out an interesting discussion. The writer opens with a pleasing allusion to "the indescribable charm and fascination of nutting, which take hold of the boy as soon as his legs can carry him to the trees, which hardly weaken their grasp through life." (How strange Mr. Lovett should fail to include the girls as well.) Speaking of nut-bearing trees, he says: "That they are difficult to transplant is an error. I find them as easy as the pear, if nursery-grown. They repay abundantly in pleasure to ourselves and our children. We can hardly buy harmless enjoyment cheaper. Nut groves are not longer coming into bearing than apple or plum orchards. Japan chestnuts, almonds, filberts, dwarf English walnuts begin to bear as young as a peach tree. The commercial aspect of nut culture is, I confess, the 'hardest nut to crack.' The industry is yet too young to speak from facts. I am told almonds are largely and profitably grown in California, and that the English walnut has lately been planted on hundreds of acres there. The almond is too tender at the North, however, and we must confine ourselves to the hardy nuts. The English walnut succeeds in many of our Northern States. Patrick Barry mentions a regular and heavy yield from it in the suburbs of Rochester, N. Y. I have seen large bearing trees in New Jersey and Pennsylvania, and I see no reason why they should not prove a highly remunerative crop. Filbert culture has been tried with highly satisfactory results in some instances. Still I advise caution with this on account of its liability to fungus attacks in warm, dry climates. The black-walnut, pecan and chestnuts may be grown for fruit and timber. Pecan culture cannot help being profitable at the present price of this fruit in the markets, and the owners of regular chestnut orchards find them more profitable than apple orchards, especially the Spanish chestnut. Such is the experience of Wm. Parry and Joel Horner, of New Jersey, Samuel C. Moon, of Pennsylvania, and others. Of all native or foreign nut trees none now promises greater results than the Japanese chestnut. I have four-year-old trees covered with well-filled burrs."



CRYSTAL WHITE BLACKBERRY. From Nature. Fig. 385. (See page 673.)

Several members inquired as to how far North the pecan would succeed. Secretary Ragan said, "about 41½ degrees." Mr. Vanderman thought it would grow safely wherever the black-walnut thrived; he knew of some in Northern Kansas. Mr. Earle spoke of a tree in New Orleans 16 years old, the nuts from which last year, brought $75. Mr. Vanderman said the English walnut would not live in Kansas. Mr. Lindley, North Carolina, "The pecan does well in the central part of our State. It should be planted where the tree is wanted, as it is difficult to transplant successfully." Mr. Greiner, "It should be planted when a year old, cutting off the tap root." Mr. Albaugh thought the thinner-skinned hickory nuts deserved more attention. The pecan is not a native of any part of Ohio. Professor Claypole, "This nut question is one of interest, but perhaps also a little dangerous. I am surprised to hear of the English walnut thriving at Rochester, N. Y. All trees I know of are killed back by the Winter. The Spanish chestnut will not stand our Winters. The common chestnut seldom or never fruits except on a sandstone soil; it does not like limestone soils. Better improve our own hardy hickories: thin down the shells, enlarge the kernels. In this direction lies the greatest possibility of profits with nut growing in this country, I think." (Applause) Mr. Boggs, North Carolina, approved the suggested improvement in hickory nuts. Mr. Pierce had lately seen three-year-old Japan chestnut trees in New Jersey having eight or ten burrs each. Dr. Mackay said, "nuts grow much larger on trees never transplanted." Mr. Hollister, Missouri, "There is nothing in which the horticulturist can make better profit than in the growth of the pecan. To all having the proper soil and location, I say plant the pecan." Much more was said on this nut topic by many members, but without a kernel worth preserving, and Pres. Earle closed the subject with a few practical observations, concluding thus: "I hold that every man who plants an American forest tree that grows is a benefactor to his race." This time even the President forgot to include the women.

H. H.

We are sending specimens of the R. N.-Y. to some of our old subscribers who are not subscribers now. We respectfully call their attention to our proposition to send the Rural from now until the end of next year for $2 00, or in Clubs of Five or over for $1.50. We invite them to send for our new 16-page Premium List, which, it will be conceded, offers very liberal compensation to all who are willing to aid in extending the Rural's circulation.

MICHIGAN STATE FAIR.

(RURAL SPECIAL REPORT.)

Wet weather causes a financial failure; moderately good cattle show; Aberdeen-Angus ahead; injustice to Ayrshires; Cleveland Bay horses; coiled-spring motor; falling off in dairy interests; potatoes galore.

THE Michigan State Fair was held in the city of Jackson, and was in most respects fully an average. It was scarcely a success financially, owing principally to bad weather. The show of stock was larger, and many fine animals were exhibited. A few of the cattle were in poor condition, and a disgrace to the fair; but as a rule they showed good management, without the ever-present blanket, which was a noticeable improvement. It is poor satisfaction to look over the stock and see nothing but rows of coffee-sack blankets with horns at one end and tails at the other. One specimen of the polled Aberdeen-Angus was shown, being the first of the kind ever on our grounds. He was obliged to compete in the same class with the Galloways, but won an easy victory. The society cannot be too strongly criticised for excluding from their premium list so fine a breed as the Ayrshire. A large exhibit of this breed was made "for the fun of it."

A new feature of the fair was an importation of Cleveland Bays shown by the Cleveland Bay Horse Co., of Paw Paw, Michigan. They are of medium weight and general-purpose horses. They are always of a bay color, and are said to be practically free from blemishes on the legs. A novelty in machinery is a new spring motor, invented and made in Jackson. The power is derived from coiled springs, and is of about two-thirds of a horse power, made principally for pumping. Only eight have hitherto been made, but they will undoubtedly become popular, as they can be wound up in 15 minutes and will run for 10 hours.

In spite of the large number of creameries in the State, there was but one entry of creamery butter, while one year ago there was a large exhibit. It looks as though there is a falling off of interest in butter matters.

One of the finest features in the Agricultural Department was the exhibit of 700 varieties of potatoes shown by D. B. Harrington, of Mason. Mr. Woodman, of Paw Paw, showed a collection of 60 kinds of wheat, and between 70 and 80 of grasses, both native and foreign.

Fruit Hall contained a fine show of fruit, especially from an educational standpoint. It has been larger, but never better selected. All single plate entries of old varieties have been ruled out, and collections limited to 100 plates are required, compelling the exhibitor to use his own taste and judgment as to the varieties he will show both for family and for market purposes. This plan is a decided improvement.

The Agricultural College made a very fine exhibit in nearly every department. Among those worthy of especial mention are its collection of 70 varieties of tomatoes grown for the purpose of testing varieties. The Veterinary Department showed a collection of instruments, and mounted skeletons of the horse, the cow, the sheep and the hog, besides the horsakin—a perfect model of the body of the horse in *papier maché*, capable of dissection into nearly 100 pieces. The Mechanical Department showed numerous specimens of students' work in both wood and iron. Besides almost all varieties of turned iron, there were shown a jig-saw and two iron lathes, all well spoken of by machinists. These displays did much to popularize the College.

Good order prevailed during the fair, and the main objection that can be offered related to a failure to draw distinct lines between breeds of stock, as distinct breeds were sometimes compelled to compete in the same class.

EUGENE DAVENPORT.

THE QUEENS COUNTY, N. Y., FAIR.

(RURAL SPECIAL REPORT.)

Catering to city tastes; "hoss trots"; poor live stock exhibits; good implement displays.

THE forty-fifth annual fair of the Queens County Agricultural Society was held at Mineola, L. I., Sept. 21, 22, 23, and 24. This is one of the three or four local fairs which are attended largely by the people of New York city and Brooklyn. The excellent financial condition of the society is due largely to this urban patronage and unfortunately the exhibition is

influenced considerably thereby. The exhibition of road horses was very large and the tests of speed seemed to be the chief attraction. One good feature of the fair grounds is the location of the race track—no one need go to the track unless attracted by the races. The exhibition buildings are all between the track and the entrance to the grounds.

The cattle display was a disappointment. Only a few really good specimens of Jerseys were shown. A few good Holsteins were exhibited, but only one herd of especial merit. The cattle pens are miserably arranged; better facilities for showing fine cattle would doubtless bring out better specimens and add largely to the value of the exhibit. The show of sheep was very limited, as might be expected. Queens County is not adapted for sheep raising. It is rather remarkable that a county so near the Metropolis should make so poor an exhibit of poultry. The poultry raising industry is becoming an important one everywhere, but especially near the large cities, and the association would do well to cut down some of the premiums for trotting horses, and increase the premiums for poultry. Scudder & Townsend made a fine exhibit of Plymouth Rocks, and R. M. Seaman and other breeders were represented, but the display was not what might be expected.

The display of carriages was remarkably fine. James Downey, of Brooklyn, completely filled a large tent with his exhibit, which included every style of carriage from a road cart to the finest coach.

The implement department was well filled. Mr. H. M. Willis, of East Williston, who is local agent for nearly all the leading farm implements, led the display.

A novel grindstone treadle attracted much attention, and is a valuable implement. The R. H. Allen & Co., H. B. Griffin and others, of New York City, the Riverhead Agricultural Works, and local agents for a great variety of implements, added to the attractiveness of this department.

The fruit and vegetable show was not up to the standard. The fertilizer dealers made by far the finest exhibit of vegetables grown in the county. The fruits were excellent, so far as they went, but by far the best were grown out of the county. "G."

(*For other Fair reports see page* 682.)

Woman's Work.

CONDUCTED BY EMILY L. TAPLIN.

IN THE OLD BARN.

OLIVE E. DANA.

Its doors wide open the farmer throws,
  And in and out the sweet wind blows,
One wide old door looks east, one west;
  One long might ponder which view was best;
For fresh and strong the west winds are,
  O'er the river near, from the hills afar,
And pleasant odors the south winds bring
  From the woods and fields where the wild birds sing;
Fair in the dawning the meadows lie,
  Dark are the hills 'neath the sunset sky.

Many a scent of the woods and fields,
  And the pasture-slopes, the old barn yields;
For field, and meadow and pasture hill,
  Each gives its treasure, its space to fill.
High on the mow, and low in the bay,
  Have willing hands heaped the fragrant hay;
Green and fresh from the swathe new-mown,
  Rank and juicy and breast-high grown.

And the slow stald cows from the uplands bring
  The scent of the woods and their nourishing;
Where the best and sweetest wild herbs grow,
  And which are harmful full well they know.
Patient and placid and kind they wait
  Their turns, if the milker's task is late,
And the creeping shadows dark and still,
  With strange wierd shapes, the old barn fill.

And the gray old barn is sheltering
  Other than these 'neath its ample wing,
The calves and the yearlings frolic and play,
  From the stalls near by the horses neigh,
And among the rafters, cobweb hung
  Where spiders unnumbered have spun and swung,
Where none may venture and none molest,
  The cooing, fluttering swallows nest.

In the gray old barns are hidden away,
  Memories sweet as the fragrant hay;
Of dewy morning and starry night,
  Of summer beauty and autumn blight,
Of the tasks recurring at morn and eve,
  That the web of the farmer's life-work weave,
Of forethought wise and of anxious care,
  Of failing crops and of harvests fair.

A second hearth, to the farmer, is
  The barn with its clustering memories;
Store house and castle, its old walls hold
  Weapons of strength 'gainst the winter's cold,
Tonic and bracing its work and its cheer,
  When frosts are felt, and the days are drear,
And when Summer wanes, the pleasant farms
  Their treasures hide, in the old gray barns.

OF INTEREST TO WOMEN.

The mannish cravats now worn by women are very bright colored, while men content themselves with soberer hues. The dry goods openings display so far few novelties in color. Red is again to be popular; the newest shade being *coquelicot*. The gowns made for this season are of soft neutral tints, gray and brown being preferred. English women have adopted a very useful fashion for autumn country wear, viz.: a loose Garibaldi bodice—they call them shirts now—with simple skirts of contrasting tone. A dark moss-green skirt with a chintz bodice is a favorite and artistic combination. The waistcoat is an invariable adjunct of English cloth gowns, and is seen in every variety of form that the dressmaker can devise. The Princess of Wales wears a frill of white muslin on the front of the open jacket. The fashion of white shirts and white waistcoats under small tailor jackets is very popular among English women. It is very becoming to the figure.

French dressmakers are using watered ribbon largely in trimming. Gray camel's hair is very popular with this decoration. A single costume may be judiciously varied by movable vests, both contrasting and harmonizing. A tucked vest of white linen has a very good effect with a dark gown.

A BRIC-A-BRAC GOSSIP.

Since high art and æstheticism came into vogue a home of any pretensions without bric-a-brac is Hamlet with the royal Dane left out. But a good many people dignify with the name of bric-a-brac a collection of popular miscellanies we scarce can recognize under the title. True, we can't all possess Royal Worcester and Crown Derby, but we need not decorate (?) our parlor with cheap crockery and cheaper chromos until it looks like a tea store arranged by an earthquake. Over-decoration, and that of a tawdry character, is a glaring fault in many households. We have all been in houses where the rooms seemed afflicted with a chronic eruption of crocheted mats and tidies, breaking out on every piece of furniture, and, though a stage higher in culture, the woman who smothers everything in art needle-work is equally reprehensible, since her unlucky visitors are in constant fear of causing her displeasure by injuring her delicate fabric or work.

Still, every woman has a leaning towards fancy work, a fact borne out by the experience of some energetic young women who started an Exchange for women's work, in a small country town. They were inundated with art needle-work which they could not dispose of, because everyone gave her leisure to such work. But the culinary part of the Exchange was a success, because the women who made their own art decorations could not—or would not—make their own pies.

A bit of good china is, in our eyes, the most satisfactory of all bric-a-brac. It may not be "real," but if selected with taste it is always charming. Without taste—well, we see so many porcelain atrocities fondly regarded by their misguided owners that it seems rather a delicate subject to discuss.

Nowadays there are few wares, either in glass or china that are not perfectly imitated, the imitation while equally beautiful, naturally selling for much less than the real article. Both Staffordshire and Greenpoint offer some good examples, in imitations of Moorish porcelain and Limoges *faience*; the latter is most beautiful and very moderate in price. Japanese ware is extremely cheap, and pretty too, if purchased with taste. Then there is odd dark blue Flemish ware, with quaint pictures and Flemish mottoes—all manufactured in the United States. A little well-chosen bric-a-brac of this class, with a plaster cast or two, will give a room more character than an avalanche of art needlework. We do not mean to utterly condemn the latter, but we see too many girls neglecting the solid graces of good housewifery and the less tangible graces of mental culture for such work, until art embroidery becomes a delusion and a snare to all such foolish virgins.

CHEERFULNESS AND AMIABILITY.

"A merry heart makes a cheerful countenance," but there is little virtue in the latter, when one has so good and sufficient cause for it as a merry heart. To hide an aching heart under a cheerful face is indeed heroic. A sort of heroism, too, that of which women have almost a monopoly, as, indeed, they need have. A man can still his heartache by a closer attention to business; by contact with the busy, bustling world; a woman must suffer and be silent.

"Power," says the Concord philosopher, "dwells with cheerfulness." This, like all the gems from the pen of Emerson, is full of deepest thought and meaning. It is especially applicable to the indoor life and work of women. Ernest Renan, in his "Recollections of youth," speaks of his mother as one always very ready to laugh. What mother has not found out that seeming folly is often the truest wisdom? It is not enough to laugh with our children when they are babies. Send them to school bright and happy, with a smile and a cheerful kiss. Children of all ages have a troublesome fashion of getting out of the wrong side of the bed, as my grandmother used to say when I was particularly cross and fretful. It is at such times that a mother must cultivate the calm power of which Emerson speaks and pour oil on the troubled waters.

Cheerfulness and amiability are greater conducives to beauty than all the rouge and cosmetics that were ever invented. They can be cultivated just as well as any art or accomplishment. Even under ordinarily adverse circumstances, sunny looks and smiles and kind words cost only a slight effort, that with habit will cease to be effort. This power once acquired keeps the heart young and makes the oldest and plainest faces beautiful. Like beauty, it is very often a heaven-sent gift, but unlike beauty, even though not to the manner born, you may still become the possessor of it. Think of it, wives and mothers before habitual peevishness and fretfulness have irrevocably left their lines upon your faces. E. S.

SELF-SUPPORTING GIRLS.

An exchange asks, "Does it pay to be a woman?" and proceeds to point out that it decidedly does not pay, in view of the fact that there are so many more women than men that it is quite impossible for every woman to find a husband, and that they are paid so much less for their labor than men. Still one's sex is something outside of one's own volition, and perhaps our contemporary would agree with us that the next best thing to being a man is to be a self-supporting woman.

A boy is educated from his babyhood to be self-reliant, and with the idea always in view that he must carve his own way in the world, while our girls are thrown helpless upon the world without any preparation to enable them to fight its battles. We have frequently heard young ladies deplore the fact that if they were left dependent there was nothing they could do to enable them to earn the price of a single meal. Somewhere our schools are at fault for this state of things. There is too much learning of a little bit of everything and not much of anything. Master one thing thoroughly, and I do not care what it is, let it be only the ability to darn beautifully, and if worst comes to worst, so that you can but do one thing better than most other people can, you will find exercise for your talents that will at least keep you from misery and want.

Clerical work of all sorts, business of many kinds and nearly all the professions are now opened to women. Twenty years ago the range was much more limited; there were few women clerks comparatively speaking, and few if any women employed as book-keepers and office clerks. A girl had small choice between teaching, dressmaking or house service. To-day women are proving that they make equally as good clerks as men, are quite as accurate in figures, and in many cases are gaining the reputation of being more obliging and faithful. Their services are beginning to be recognized, and paid accordingly too. It is no uncommon thing for a feminine stenographer to receive from $100 to $150 a month. To do this, however, she needs not only to be a very rapid writer, but to have great powers of endurance. There are few women who attain a high rank in this profession for want of the latter, but a limited knowledge of it such as any ambitious girl may acquire in six months will enable her to command from $30 to $75 a month according to the demand. What girls require, whether in the household department or in any employment, is thorough practical drill. Nothing can displace a technical education and a well-served apprenticeship in any business.

It is contended by some that this unfits women for a domestic life. There are some women who never under any circumstances would be fit for it: to such it opens an avenue of escape from it, but a woman who has the true instinct of womanhood will turn to love and maternity should these come within her reach as surely as the sunflower turns to the sun, while should these delights not be given to her, she will be saved from that worst of slavery, marrying for the sake of a home.

A WORKER.

GOLDEN GRAINS.

The more believers love God, the more they love one another; as the lines of a circle, the nearer they come to the centre, the nearer they come to each other.—*Charnock*.....

There is no knowledge for which so great a price is paid as a knowledge of the world; and no one ever became an adept in it except at the expense of a hardened and a wounded heart.—*Countess of Blessington*.....

Christian faith is a grand cathedral with dimly pictured windows. Standing without, you see no glory nor can possibly imagine any; standing within every ray of light reveals a harmony of unspeakable splendors.....

It is no small or trivial matter when the day is ended to put the head upon the pillow with the consciousness that during the day no wrong deed has been done; and when life is closing in, and the last days are rapidly running out, the thought must be inexpressibly sweet that no dishonor taints the name that is held so dear.....

Never get discouraged because things get on so slowly here, and never fail to do daily that good which lies next to your hand.....

A judicious observer has said: "The longer I live the more I am certain that the great difference between men—between the feeble and the powerful, the great and the insignificant—is energy, invincible determination, a purpose once fixed, and then death or victory. The quality will do anything that can be done in this world, and no talents, no circumstances, no opportunities will make any one successful without it."....

Self-denial is the most exalted pleasure, and the conquest of evil habits the most glorious triumph.....

Domestic Economy

CONDUCTED BY MRS. AGNES E. M. CARMAN.

A HANDY BOX.

Fig. 386 shows a box that is very convenient to have in a kitchen. It is 13 inches long, nine inches broad and eight inches high.

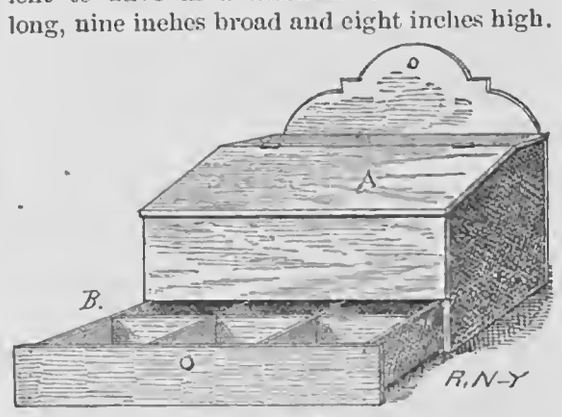


Fig 386.

The upper part forms a salt box of which A is the lid. The drawer, B, in the lower part, is divided into a number of apartments in which are kept spices and other articles of household use. S. P. SHULL.

THE POSSIBILITIES OF A MUTTON CHOP.

"MUTTON IS THE MOST NUTRITIOUS AND DIGESTIBLE OF MEATS."

While mutton is emphatically the poor man's meat, it is not scorned by royalty itself, Queen Victoria's favorite dish being boiled mutton and caper sauce, as it was that of her royal progenitor, George III. Charles II, after the fatal day of Worcester, was glad to get it, and in a manner as unscrupulous as that by which kings frequently obtain what they desire. One of his followers, as we read, enters the sheep cote of a farmer, "chooses of the best sheep, strikes him with his dagger and sends a servant for it, who brings it to the king on his back." Without waiting until the meat gains sweetness by "hanging," the king the next morning calls for a knife, and cutting some collops from the leg, fries them in a pan over the fire for his own breakfast. It is probable that in Charles a good cook was spoiled to make a poor king. Lord Bolingbroke had a fondness for mutton broth, while Ben Johnson was a noted lover of mutton as well as of tea. Dean Swift was partial to mutton pie, and eulogized roast mutton in verse. I do not know if poets are especially subject to indigestion, but one would suppose so from Goldsmith's lines:

"To poets who venison seldom can eat,
  Your very good mutton's a very good treat,"

As indeed it is when cooked by an artist.

But let us return as to the cooking of our mutton chops. They are delicious grilled and need no other accompaniment than a mealy, baked potato. They should be cut from the best end of the neck or, better still, from the loin, fully three-quarters of an inch thick, if loin chops; shorten the bones and trim off most of the fat. Make a mixture of one beaten egg, bread-crumbs sifted, parsley chopped until it is almost powder, a little powdered thyme, salt, pepper and nutmeg. Brush the chops over with melted butter and cover thickly with this mixture. Wrap them carefully in white paper, place them on a clean, hot gridiron, and broil over a clear fire, turning frequently. They will require from eight to ten minutes. Remove the paper and arrange them on a hot dish with a bit of butter under each. Have mushroom catsup on the table. Use a double broiler, or turn the chop by seizing the trimmed end of the bone deftly and giving it a quick turn, but do not stick a fork into it, or the juices will escape.

Stewed chops should first be broiled for two

minutes over a bright fire; then place them on a sheet of clean blotting paper to free them from grease. Put into a stew-pan a large tablespoonful of butter, three medium-sized onions sliced, and a half teaspoonful of salt; lay the chops on this, cover closely and stew gently, without the addition of water, until they are tender and the onions thoroughly cooked. They are capable of being served in many ways. Put a mound of nicely mashed potatoes in the center of a dish, lay the chops around the base and send the gravy, to which you have added a spoonful of good tomato or mushroom catsup, to the table in a boat. Green beans or peas may be substituted for the potatoes, or boiled rice with a spoonful of curry powder may be added to the gravy.

Few cooks do justice to a breaded chop. The general idea that it must be fried by immersion in hot fat is an erroneous one. It may be *sautéed* provided sufficient care is taken not to let the breading scorch. Dip each chop first in beaten egg and roll in fine bread crumbs, have your pan very hot, with a little very hot fat in it. Lay in the chops, place over a rather slow fire (a little practice will enable you to determine just how hot the fire should be), and turn frequently. They will require from ten to twelve minutes in the process. Season them with salt and pepper just before they are done, and serve them on a very hot dish. Mutton cooked in any way, if it is intended to be served hot, should be *very hot*, and if cold it must be very cold.

If you will try mutton cutlets a *la milinaise*, and not allow the high-sounding foreign name to frighten you, you will find them a very simple and delicious dish. Trim the cutlets or chops, and bread and fry as above. Before this is begun however put some macaroni on to boil so that it will be done about ten minutes after you begin to cook the chops. Put it on in salted boiling water, and when both are done, drain the macaroni, pile it on a hot dish, sprinkle two tablespoonfuls of grated cheese over it, lay on a piece of butter the size of an egg, season with salt and pepper and toss with two forks until the butter and cheese are melted, and the seasonings thoroughly melted. Arrange the cutlets around the base, and you will agree with Uncle Sam Ward that they "might make an ascetic play the glutton." PALMETTO.

EXTRACT from a private correspondent at Bear Lake, Manistee Co., Mich.

What bitter experiences have we passed through since I wrote you last. I think I told you something of the drought and of the destructive forest fires that were near us. First our beautiful grove surrounding the house and grounds was set on fire by a mischievous, half-witted boy, and as the drought still continued the fires continued to spread in spite of all our efforts to stop them. Meadows and pastures were blackened by the flames; miles of fence destroyed; then our commodious barn, containing a large quantity of hay and grain, machinery, sleighs, cutter, harness and tools of all sorts was burned, and two days later the house with a good part of the contents, all were sacrificed to the fiery demon. Oh! it was terrible to see the work of our hands torn from our grasp and scattered to the four winds. It seems like a terrible dream, when I think of it, and that I must awake, but it is only too true. It might have been worse, for our lives were spared, and we were insured, though nothing near to what the losses were. For the first two or three weeks I had neither strength nor ambition to do more than exist. We were all exhausted with the work of trying to stop the fires.

But we have finally taken up the thread of our lives and have gone about our work again. We were obliged to settle down in the village, five miles away, there being no vacant dwelling-house near the farm. So "the men folks" take their dinners with them, and I try to get used to village life and entertain callers, when I want to be about the 99 important things that seem necessary to be done. I expect to learn many lessons. MAY MAPLE.

CARPET BEETLE REMEDIES.

PROF. A. J. COOK, of the Michigan Agricultural College, recommends the following remedies for the destruction of the Carpet Beetle or "Buffalo Moth," as it is often called:

First, he would recommend ironing wet cloths placed over the affected part of the carpet, using flat-irons that are very hot. The cloths may be two or three thicknesses of common toweling, wrung out of water just so they will not drip, then iron till dry. To secure the best results one ought to have a dozen or more irons. He has found that this thoroughly done is most deadly to the carpet moth larva, and surely the intensely heated steam penetrating every fiber of the carpet, and to every crevice of the floor, must sound the knell of every larval carpet beetle that feels its deadly presence. He has tried this on delicately tinted carpets, and while it was delightfully efficient in destroying insects, it did no injury whatever to the carpet. The only caution here then is to make thorough work: *be sure of a full head of steam.*

Another remedy of which he says he should feel quite certain would be to brush, by use of a paint brush, the floor under the carpet with a strong solution of corrosive-sublimate, the bi-chloride of mercury. This should be made as follows: Four parts (by weight) bi-chloride of mercury, one of chloride of ammonia (sal-ammoniac), and 50 parts water. This is surely fatal to bed-bugs, Cimex lectularius, and certainly these carpet beetles can hardly be possessed of more lives than are the bed-bugs. The objection to this remedy is the virulency of the poison. Of course, with care there is no danger; but so many of us are by nature and practice so culpably careless that to have such a poison in the house is hardly safe.

He also has reason to believe that tarred paper under the carpets, napthaline, the crystals of naptha, kerosene oil or gasoline would each and all kill the insects if freely used under the carpets. There are two objections to their use. They are all more or less offensive as to odor, while the last two, from their inflammable nature, might do great harm. He has used the napthaline with marked effect. And although it does scent a room thoroughly it could be removed after effecting a cure, and the carpet and room be so aired as to greatly lessen this objection. Kerosene would surely kill all insects that it touched, but its tendency to stain the carpet, and its persistent odor might be considered serious objections to its use. Gasoline—much better than naptha, as it never stains and quickly evaporates—is also a sure cure, and great caution to thoroughly ventilate before any fire is brought near would render its use safe. If used thoroughly in a house, no fire should be allowed even in a distant room till thorough ventilation, as shown by the absence of the characteristic odor, had removed all the explosive vapor. As an accident by the use of gasoline might be most terrible it should only be used with the greatest care.

In case furniture is infested, the free use of gasoline would be the safest and surest remedy. In this case, the articles to be treated could be removed to an outbuilding, and should not be returned to the house till the liquid had thoroughly evaporated.

Woolen garments not in use may be protected by putting them in perfectly close boxes. As the insects are so small we could not be sure that they were excluded except that we paste paper over any crack, as where the cover meets a box or trunk.

In such close quarters, camphor gum, which keeps clothes moths away, is said to make no impress upon these beetles. The Professor believes napthaline, which he is told not only keeps the Dermestes lardarius (Bacon beetle) away, but actually destroys it when once at work, would also serve to protect against the carpet beetle. The trouble with this would be the persistent odor. Yet it is possible that if it should be closely wrapped in a cloth it would still keep the beetles out, and yet would not so scent the clothing that it would not soon pass off upon exposure.

If clothing should become infected it could be put into a close box and drenched with gasoline. As soon as the insects were killed the clothing could be aired, when the odorous liquid would quickly escape. Bisulphide of carbon could be used in the same way. This is deadly to all insect life; but it is fully as explosive and dangerous when fired as is gasoline. So if it is used we cannot be too cautious.

HAIRPIN RECEIVER.

THIS pretty and useful little article will require very little time to fashion. Crochet in a shell pattern, of macramé cord, a cover to fit a small tin box of any shape, stiffen it with cold starch; when dry it may be gilded. Or it may be made of the colored macramé. Make a knitted top of zephyr by knitting every other row plain, and the alternate row by winding the zephyr around the first finger four times and knitting it in. Fill the box with curled horsehair, and fit it over.

LAMP MATS.

HANDSOME lamps have become so much the fashion that it is almost a matter of necessity to have mats, for if a table has a polished surface it will be scratched and marred by the lamp, and a handsome cover will also be soiled by it. Take four shades of zephyr; olive browns or reds are pretty. Knit in plain garter stitch a strip three yards long and 18 stitches wide, using medium-sized needles. This should then be dampened and ironed; one edge cut off and ravelled out to within a quarter of an inch of the other one. Cover a piece of pasteboard nine inches square with some woolen stuff to correspond or contrast prettily with the knitted edge, and sew the ravelled strip on in rows beginning on the outer edge with the darkest color. Lap each row over sufficiently to hide the edge of the previous row. H. M.

ELSIE BEE says in the Jeweler's Circular that with the revival of other old time favorites it appears possible that cuff pins will again come into general use. That there is a necessity for these or some similar contrivance every lady who wears linen cuffs can testify, and the wonder is that so needful an article was ever dropped. There are few things more trying to the feminine temper than the shooting out of a stiff cuff over the hand, and the jagging into the flesh of a pin point with every sudden movement of the arm.

THE new advocates for favor in form of cuff pins are fashioned after the old models, which of late years have figured in stock under the name of "baby pins," because used for the purpose of keeping in place infant's bibs and little peoples' collars. The chief difference between the new and old cuff pins is that the former is bent a little so as to present a slightly convex surface that fits the curve of arm and sleeve. All gold cuff pins are in the show cases this fall: some are chased, some are finished in enamel, and others are formed of twisted wire or rope pattern. The fact that the cuff pin, like the old bar pin, is a utility affair, serves equally well for lace, bonnet and ribbon ornaments, when not required for confining the cuffs in place, is a big argument in its favor.

DOMESTIC RECIPES.

MRS. L.'S JELLY CAKE.

"I HAVE a way of my own for making jelly cake," said Mrs. L——, as she went about preparing things for supper, "and I'll make some while you are here and see if you do not pronounce it good."

While she was getting the materials together, I hunted up a bit of paper and my pencil and was ready to jot down the recipe as she directed.

"I put a cup of flour into the dish in which the cake is to be mixed, and stir in a teaspoonful of baking powder. Now I add three-fourths of a cup of sugar and two eggs; then I go to a pan of milk with my dish and dip off about five spoonfuls of sweet cream, then get a lump of butter the size of a hickory nut, and put in with the other ingredients, and then stir all together and put into the tins, and bake quickly. Flavor to taste."

When baked I found it excellent, and have since tried the rule, and found it easily made, and a success. She also gave me several other recipes, the following among them, which she prized very much:

SUPPER CAKE.

Break two eggs into a teacup and fill up with sweet cream; add one cup of sugar, one and one-half cups of flour, one heaping teaspoonful of baking powder, stirred into the flour, and one tablespoonful of butter. Mix all together and bake.

CORN STARCH CAKE.

Two cups of powdered sugar, one cup of butter, three-fourths cup of milk, the whites of six eggs, three-fourths of a cup of corn starch, two cups of flour, three tablespoonfuls of baking powder mixed into the flour; flavor with lemon. Very nice. MAY MAPLE.

PINE APPLE AU NATUREL.

Pineapples have the name of being indigestible, but if prepared as follows they will be found quite innocent in their effects. Cut the base from a sound, ripe pine. Take a long, narrow, sharp and pliable knife and run it down within a quarter of an inch of the outer side of the rind. This will loosen the fruit from the skin which should then be lifted out. Now run the knife down the core and remove the latter which will leave a hole or cavity through it an inch in diameter. Fill this with white sugar and place it on a dish, base down. Replace the shell of rind and set away for a few hours in a cool place. Bring to table the apparently untouched pine, lift off its plumed cap, and you will find it mellow, tender and delicious, and the dish brimming with a liquid like veriest nectar. A. G.

OAK floors are best for kitchens.

Have you tried salting down string beans for winter use? Treat them as you would cucumbers. When wanted take from the brine, freshen, then cut and cook as you would those just picked from the vines.

See to it that your napkins don't smell of soap.

How many of our readers have pleasant kitchens?

Miscellaneous Advertising.

When Baby was sick, we gave her Castoria
When she was a Child, she cried for Castoria,
When she became Miss, she clung to Castoria,
When she had Children, she gave them Castoria.

Miscellaneous Advertising.

Clergymen

Lawyers, Actors, and Singers, are often troubled with loss of voice, resulting from a slight cold, weakness of the vocal organs, or inflammation of the throat, and in all such cases may be promptly relieved by the use of Ayer's Cherry Pectoral.

I would not be without Ayer's Cherry Pectoral on any account. It is an invaluable remedy in Bronchitis and Lung Complaints, and speedily relieves Hoarseness or Irritation of the Throat, caused by public speaking.—Rev. E. Bethune, Jamesville, Tenn.

I have been so much afflicted with Bronchitis that I should be unable to perform my clerical duties without the use of Ayer's Cherry Pectoral.—A. G. Kirk, Pastor Baptist Ch., Hillsville, Pa.

Ayer's Cherry Pectoral,

Prepared by Dr. J. C. Ayer & Co., Lowell, Mass. Sold by Druggists. Price $1; six bottles, $5.

MAKE HENS LAY

SHERIDAN'S CONDITION POWDER is absolutely pure and highly concentrated. It is strictly a medicine to be given with food. Nothing on earth will make hens lay like it. It cures chicken cholera and all diseases of hens. Illustrated book by mail free. Sold everywhere, or sent by mail for 25 cts. in stamps. 2½-lb. tin cans, $1; by mail, $1.20. Six cans by express, prepaid, for $5. I. S. Johnson & Co., P. O. Box 2118, Boston, Mass.

FRIENDS, IF YOU ARE IN ANY WAY INTERESTED IN

BEES OR HONEY,

We will with pleasure send you a sample copy of the **Semi-Monthly Gleanings in Bee-Culture,** with a descriptive price-list of the latest improvements in **Hives, Honey Extractors, Comb Foundation, Section Honey Boxes,** all books and journals, and everything pertaining to Bee Culture. No THING PATENTED. Simply send your address, WRITTEN PLAINLY, to A. I. ROOT, MEDINA, OHIO.

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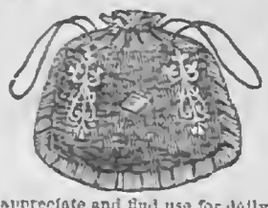

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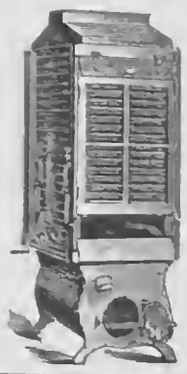

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News of the Week.

HOME NEWS.

SATURDAY, Oetober 2, 1886.

THE Industrial Exhibition of 1886, just finished at Toronto, was the most suecessful ever held there. Total gate reeeipts $43,914, as eompared with $34,126 last year.... ..... Forty miles of that railroad from Winnipeg to Hudson Bay are soon to be built, the neecssary funds having already been raised in England. Recent researehes go to prove that ice blocks navigation in Hudson Bay nearly the year round, so that the prospects of transporting freight by water direct from the railroad terminus to Europe are not encouraging; but much of the land along the line is valuable for its agrieultural and mineral resources..... ...."Every vestige of revolution has disappeared" in Mexico, with the slaughter of a number of bandits and ehronie revolutionists, who were in the habit of issuing "pronuneiamentoes" whenever there was a good chanee of robbing under the guise of making forced loans..... Gironimo and his followers are still held at San Antonio, Texas. Gen. Miles reports that they were not captured, but that they surrendered on condition that they should not be turned over to the civil authorities of Arizona, and that their lives should be spared. Hence they were at once removed from the Territory contrary to instruetions from the War Department—to confine them at the post nearest the place of capture. The Government had positively instructed Miles that nothing but capture or unconditional surrender should end the Apaehe eampaign. Cook, it is said, could have secured a conditional surrender six months ago.....Cutting estimates his "pecuniary losses, and his mental and physical suffering" as entitling him to an indemnity of $50,000 from Mexieo..... .....The Government reeeipts during the month of September were about $32,000,000, and the expenditures abont $18,000,000, making an excess of about $14,000,000. It is estimated at the Treasury Department that there has been a decrease of nearly $11,000,000 in the public debt during September.....Mrs. Cleveland and Mrs. Folsom have gone to Buffalo, N. Y., for a visit of about 10 days:.....The managing Committee of the American Purchasing and Leasiug Company (whisky pool) has advanced the price of whisky from $1.12 to $1.13—a eompromise between the views of the Cincinnati and Peoria distillers ....Ever since the Prohibitionists carried Atlanta, Ga., last November, there has been a fierce agitation, in which the Prohibitionists always came out ahead till last Tuesday, when they were "utterly swept out" in a "primary election for the State Legislature," by the Anti-Prohibitionists under the name of Conservatives–1,000 majority out of a total vote of 4,700. It was claimed that Prohibition seriously damaged the trade of the place, drove many business firms away, and greatly increased taxation..... .... . The great assembly of the Knights of Labor will be held at Richmond, Va., October 4. The colored delegates have been refused aecommodations by every hotel in the city, and the Knights—some of them—are highly indignant. Here seven Chinamen sought admission into the order; but there was no opening for Mongolians.....New Public Printer Benedict has made 725 removals in the government printing office in Washington—100 of them women from the folding room. As many more are to be made, says B .....A grand national competitive drill for military organizations at Washington next May, open to all arms—$25,000 in prizes.....Henry George, land right and labor agitator, has been nominated for Mayor by the labor organizations of this city..... ....Bonanza Mackay, chief owner of the "commercial" cables to Europe, hopes to ereate out of the Postal Telegraph Company a system as extensive as the Western Union, and predicts that in doing so he will reduce rates to such an extent as to do away with business letter writing, inside of three years. .....A Judgeship of the Court of Appeals is the highest elective office to be filled in New York State this year. Efforts were made to unite both great parties on one man; but the Republicans have nominated Charles Daniels, who has been on the bench of the Supreme Court ever since 1863—23 years; and the Democrats have nominated Rufus W. Peckham, who has been on the same bench since July, 1884—two years and two months. Both excellent nominations.....The total number of immigrants arrived at the different ports of the United States during August, 1886, were 33,366, against 26,214 during the same month of 1885, an inerease of 7,152. During the eight months ended August 31, 1886, there arrived 254,679 immigrants, against 140,917 for the same period of 1885, an increase of 13,962. The bulk of the immigrants were from Great Britain, Germany, Sweden and Norway..... ....A call for $15,000,000 of the three per cent. bonds of the series of 1882 was issued Monday. .....Arresures' family asks $100,000 indemnity of the Mexican Government.....The Dakota Republiean convention demands "the immediate reduction of the Indian reservations in the Territory," and blames Congress for not "opening to settlers a portion of the Sioux reservation".....Governor Foster, of Ohio, is out of polities, he says, and into natural gas as the agent of a eompany of whieh the Standard Oil Company owns two-thirds of the stoek put at $3,000,000. It is proposed to pipe the gas from the wells at Findlay to Toledo—25 miles .....Justin McCarthy, the famous Irish author, historian and political leader, reaehed New York Saturday afternoon, after a short passage from London on the steamer Britannia. He will lecture through the eountry on the Irish question.....John F. Swift, Republican candidate for Governor of California, refuses a place on the ticket of the "American or Know-Nothing Party." He doesn't want any connection with a ticket that brands the Romau Catholics as hostile to American institutions..... ....The proposed raee between the Mayflower and Galatea off Marblehead in a genuine "cutter breeze" has been declared off. The yachts have been loafing there a week waiting for the wind which has failed to come, and the Mayflower has now gone into winter-quarters .....Several members of the late Board of Public Works of Cincinnati have been arrested on charges of embezzlement ....Mrs. H. B. Stowe, aged 75, says her health is rather poor, but not "shattered" as reported.....There will he a National Convention of distillers, brewers and wholesale and retail rum-sellers at Chicago Oct. 18, "to eheck the growth of public sentim nt hostile" to the whisky trade.....Senator Edmunds has gone to Boston on his way to the British Maritime Provinces to investigate the fish question. A report that a treaty settling the matter and establishing favorable trade relations between the Union and the Dominion was telegraphed from Ottowa last Sunday; but proves to have been bogus news; and the senders are to be prosecuted by the Canadian Government.....John Esten Cook, the author, died at his home in Clark County, Va., last week, aged 56 years..... ..A terrible gale and rain-storm along the Texan coast in the vicinity of the mouth of the Rio Grande River last week caused great damage and distress. It lasted three days, beginning Tuesday. Two hundred houses in Brownsville, Tex., were blown down and 150 families are homeless and in want. In Matamoras over three huudred houses were leveled, many persons injured and 400 families turned out of doors .....The Inman Steamship Company's line between this port and Liverpool is reported to have been purehased by the Pennsylvania Railroad Company. It will continue to run on the usual course, but nnder the management and in the interest of the road. Three fine new steamers are to be added to it.....

FOREIGN NEWS.

SATURDAY, Oct. 2, 1886

Peaee or war? That's the absorbing question in Europe just now, and the decision depends on Berlin. Gen. Kaulbars demands in behalf of Russia, the raising of the state of siege in Bulgaria so that the Russian adherents may be at liberty to agitate in favor of Russian domination; the liberation of all political prisoners, so that all who have been confined for conspiracy against Alexander and in favor of Russia may be able boldly to repeat the offense; and the postponement of the elections for the National Assembly which is to elect a new Prince. This is required to enable the Russian adherents to agitate and intrigue before election. Kaulbars has been carrying things with a masterful hand, forbidding proclamations by the government and making others himself in favor of Russia. He has several times threatened that in certain contingeneies Russia will occupy the country. The Bulgarian Regency has been returning conciliatory but firm answers — they will comply with the Czar's demands as far as they can consistently with the honor and independence of the country. M. Tisza, the Hungarian Premier, declares that Austro-Hungary firmly adheres to the Berlin treaty, and will resist any attempt of any single power to establish a protectorate in Bulgaria. Austria, urged chiefly by Magyar hatred of the Slavs, is taking a firm stand against Russian encroachments, and it is supposed that she has an understanding with Germany in the matter. England is strongly backing her up. Turkey is massing troops on the frontier of Eastern Roumelia as if about at once to start a campaign. Russia has vast masses of men in Bessarabia ready to move south at an hour's notice. Altogether the outlook in Europe is decidedly warlike. The great age and peaceable disposition of the German Emperor, and the vast commercial interests involved are the only checks on an immediate outbreak of hostilities. Will war be deferred till Spring?....

AGRICULTURAL NEWS.

SATURDAY, Sept. 25, 1886.

The distillery cattle at Chicago are strictly quarantined under the supervision of the National Bureau of Animal Industry. Half a dozen of the best veterinarians in the country have charge of them. All agree the disease is contagious pleuro-pneumonia. The slaughter of the herd is deferred because no decision has hitherto been reached as to what shall be done with the carcases. Miller & Armour offer to take the entire lot of quarantined stock, numbering about 2,400, kill them under the charge of the official veterinarians and send the healthy carcases to market and the diseased ones to the rendering establishments. Dr. Salmon is inclined to accept the offer, but the large cattle dealers object. They can hardly afford to have the reputation of Chicago beef injured by such a sale, and it is thought that rather than have the offer accepted they will raise the money to pay the owners for all the suspected stock and have them killed and buried. There are numerous reports of outbreaks of the disease in various other parts of the country from Dakota to Virginia, nearly all attributed to importations of stock from Chicago. Indiana, Michigan, Wisconsin, Iowa, Missouri, Kansas and Colorado have already scheduled Illinois, so that no cattle from that State can be imported into any of the others without a certificate of sound health from the official veterinarians. Other States are likely to follow the example. There is a genuine scare among the whole cattle interests of the West, and protests, objurgations and "resolutions" are the order of the day.... .....In 1876 we imported 4,903,771 dozen eggs; in 1885, 16,098,450 dozen, according to the Bureau of Statistics. Eggs are on the free list; shall imports of foreign "hen fruit" be taxed; or shall the egg-laying business be increased at home?. ....

FROM 20 to 25 Canadian Pacific cars loaded with buffalo bones arrive at Fort Benton, Montana, every week, consigned to fertilizer works in the East, and the business is increasing. The bones are picked up scattered over the prairies, chiefly along the water holes and courses.....The proprietor of a grain "bucket shop" in Montreal has been convicted of keeping a common gambling house, and sentenced to a fine of $200, and to find $1,000 bail "to keep the peace" for one year. It would be a blessing if the same fate befell all the "grain offices" in the States..... .. .Last year 10,000 American cattle—chiefly from Montana—were handled by the Canadian Pacific R. R., and the number is expected to be much larger this year. First shipment —20 car loads—was made the other day from Maple Creek, Manitoba, having been driven across from Montana. They were shipped through in bond.....The exports of live stock and dressed meats from the port of Boston for the foreign markets last week were 1,467 cattle and 1,180 quarters of beef..... .....English cattle markets are very heavily supplied, and best American steers are weak at 11½ cents per pound, estimated dressed weight.....The latest figuring gives Australia 74,913,407 sheep. The average weight of fleece is stated at five pounds per sheep "in the grease," and of washed wool, two and a half pounds per fleece..... .....Concerning cattle diseases in that portion of India known as the Madras Presidency, a Calcutta paper says: Last year the total number of deaths was returned at 43,788, of which 12,057 are attributed to rinderpest, 11,226 to anthrax, 5,208 to dysentery, and the remainder to other diseases.....Colorado has 800 miles of first-class irrigating canals, 3,500 miles of secondary canals and 40,000 miles of smaller ditches, which have cost in the aggregate about $11,000,000 and will irrigate 2,200,000 acres... .....The new oleomargarine tax stamps will be ready for general distribution about the middle of this month. .....Hog cholera is spreading in Northwestern Virginia and there are fears of an accompanying epidemic of fever among the people ....The four veterinary surgeons recommended by Professor Salmon to Commissioner Colman for appointment to assist in investigating the pleuro-pneumonia among cattle in and about Chicago are, Drs. Alexander Murray, Michigan; W. H. Rose, Washington; M. R. Trumbauer, Illinois; L. J. Herr, New York.....Farmer Meir went into his pasture wearing a red shirt. A young bull, usually gentle, saw the shirt and went for it, and, although Meir defended himself vigorously with a hoe, the animal killed him..... .....The National Bureau of Animal Industry is investigating the disastrous outbreaks of hog cholera in Indiana and Illinois. Thousands of swine are dying daily, and in some counties droves have been swept away. The death of several at the Indiana State Fair at Indianapolis, early in the week, from a disease supposed to be cholera almost broke up the show in that department.....A dog, bitten by a rattlesnake in Nebraska, instead of dying, developed hydrophobia, and bit fourteen head of cattle, all of which died..... ....There is a loss of about $4,000 from the New York State Fair; but all premiums—amounting to $9,800 in money and $200 in medals—have been paid in full, and the Agricultural Society has still cash on hand from previous good years. Those who bought privileges have lost pretty heavily, owing to the slim attendance, due chiefly to bad weather.. .....The Russian Government intends to establish a tobacco monopoly in the empire. Foreign cigars will thereby be greatly cheapened, as the present enormous duty will be abolished.....Two boys, Brown and Wood, aged 13 and 14, have been arrested in Seavalla County, Texas, charged with murdering a Mexican herder and then killing 60 sheep just for fun.....A short time back St Louis tried unsuccessfully to become a great wool market. Now Chicago is trying pretty successfully to be one. Almost all the Eastern wool firms have agents or branch offices there now. Manufactories of wool have greatly increased in the West of late. There are now over 600 west of the Alleghanies. ....

Vice Consul Touhay, in concluding a report to the Department of State upon agriculture in Italy, says the grain growers in that district are reduced to a desperate condition by taxes, high rates and, above all, by competition from the United States. ....

Crops & Markets.

SATURDAY, Sept. 25, 1886.

According to the last census, the total amount of broom corn produced in this country in 1879, was 27,480,816 pounds or 13,740 tons, a fairly good crop. Of this amount Illinois produced 11,683,018 pounds; Kansas, 5,683,018 pounds; Missouri, 3,159,466 pounds; New York, 2,926,742 pounds; Nebraska, 1,751,807 pounds; Ohio, 1,504,165 pounds; Iowa, 1,169,967 pounds; Indiana, 430,159 pounds, 22 other States and Territories producing the rest, and 17 producing none at all. The area under the crop has been very considerably increased since 1879. Last year's crop is estimated to have been about 18,000 tons, and about 4,000 tons were carried over from the crop of 1884, making an available supply of about 22,000 tons.

A corner in the product last Spring greatly increased the area planted; but owing to a scarcity of good seed, farmers in their anxiety to get in a crop, used worthless seed—sweepings, screenings, etc., and hundreds of acres failed entirely, or were too poor to pay for harvesting. Here is the latest estimate of this year's crop, according to the Chicago Tribune:

State.	Acreage.	Number acres to ton.	Total product tons.
Illinois.....	32,000	4	8,000
Kansas.....	66,000	10	6,600
Nebraska.....	15,000	5	3,000
Missouri.....	15,000	10	1,500
Ohio.....	4,000	4	1,000
Texas.....	2,000	5	400
Tennessee.....	3,000	5	600
Iowa.....	3,500	7	500
Mohawk and Schoharie Valleys, N.Y.	3,500	7	500
Totals.....	144,000	..	22,100

It is thought that 1,500 tons of last year's crop was carried over into 1886, giving an available supply of 24,000 tons this season. The annual consumption is about 20,000 tons, so that there seems to be a surplus of 4,000 tons.

The Illinois crop is the best; but in all the States the length of the spikes or grass is so much greater than usual that much will cut to waste in the manufacture of brooms. Owing to this cause, it will not, probably, average over 80 dozen brooms to the ton. Two-thirds of the crop is thought to be in this condition, and every pound of waste will have to be made up from other corn; the corn, too, is considered heavier than usual, so that a good deal of the above aggregate weight will be useless for manufacturing purposes. The crop has matured unusually early this year; but hitherto receipts have been unusually small, owing to low prices. Farmers believe prices will be higher, and that manufacturers have formed combinations against them; while the latter say they will be lower still. In many places growers are holding for $150 a ton. During the corner in Spring many lots sold for 12 cents per pound; now the market is dull at five cents. Chicago is the greatest broom corn market in the world, handling five times as much as Philadelphia, which comes next. The largest broom factory in the world is that of Samuel Cupples, of St. Louis, Mo.; the next largest that of J. D. Blood & Co., Amsterdam, N. Y., and the next that of Henry Herrick, of the same place. The largest in the West, outside of St. Louis, is that of the Chicago Broom M'f'g. Co., Chicago.

From the proceedings of the 17th annual convention of the Cranberry Growers' Association, held at Tom's River, N. J., the other day, the crops of the last three seasons, as finally determined by their movement, and the crop of the present year, as estimated from the reports received, are, in bushels as follows:

	1883	1884.	1885.	1886.
New Jersey.....	118,521	121,618	198,125	277,813
New England.....	141,964	150,583	280,859	289,305
Wisconsin.....	135,507	24,783	264,432	76,686
Total.....	395,995	286,014	743,486	593,834

The crop of 1885, as compared with that estimated for 1886, shows an increase of 14 per

cent. in New Jersey and 3 per cent. in New England, but a decrease of 71 per cent. in Wisconsin.

Cranberry picking on the lower part of Cape Cod will begin in a few days. Very few new bogs have been put in the past year, owing to the discouraging effect of poor sales last season. The crop is fully up to the average, and the fruit is well colored.

Reports to the New England Homestead from the principal onion-growing sections of the country indicate a short crop and higher prices. This is true not only in New England, but in the onion fields of New York State and the West. The prices to farmers are 60 cents to $1 per bushel, but the demand is moderately active and growers are disposed to hold for higher prices. The crop in Michigan, Iowa, Wisconsin and throughout the West generally is very short, and, instead of Western competition, the probabilities are that Eastern onions will be shipped West before Spring. The onion seed crop is good.

Reports from several counties in the cotton belt of Texas tell of the disastrous result to open cotton of the late heavy continuous rains; also of considerable damage resulting from the cotton worm, which is ravaging Washington and neighboring counties. It is believed that large quantities of cotton have been whipped out and damaged by rains.

Hog packing operations in the West during the week have been large, but did not reach the proportions of the preceding week; the total number packed at all points was 140,000 against 175,000 the preceding week, and 105,000 for the corresponding week last year, making the aggregate for the season since March 1, 4,760,000 which compares with 4,035,000 during the corresponding time last year, showing an increase of 725,000, and bringing the total since November 1, up to 565,000 in excess of last year.

The French requirements of foreign wheat are now put at 70,000,000 bushels, as there is a further shrinkage of five to 10 per cent. in home-grown wheat owing to poor quality for milling. The present depression in prices is attributed there to heavy arrivals and the large delivery by needy farmers.

A cablegram to De Long Mayer & Co., of this city, Wednesday, says American apples had advanced 24 cents a barrel all around at Liverpool. At Glasgow, Greenings brought from $2.64 to $3.12, and Baldwins $2.40 to $2.88 per barrel.

The wool market continues very strong, as manufacturers are buying with more freedom. The quarterly reports of visible grain and flour stocks show heavy increases since July, and indicate that both wheat and corn have been rapidly marketed. The September cotton report announces a moderate improvement in condition, owing to favoring weather.

MARKETS BY TELEGRAPH.

SATURDAY, October. 25, 1886

CHICAGO.—Compared with cash prices a week ago, "regular" wheat is ⅝c. lower; No. 2 Spring, ½c. lower. Corn, ¼c. lower. Oats, steady. Rye, unchanged. Barley, 1½c. lower. Flaxseed, 4¼c. lower. Pork, 45c. lower. Cattle, from 5c. to 25c. lower. Hogs, about 40c. lower all round. Sheep, Natives and Western, 20c. to 25c. higher; Texans, steady; lambs, about the same.

WHEAT.—Active: Sales ranged; Sept., 72⅝@73½c; October, 72⅝@73⅝c; November, 74⅝@75⅛c; May, 83⅛c; No. 2 Spring, 73½c. CORN—Firm, Cash, 36½c. September, 36⅛@36½c; October, 36⅛@36⅞c; November, 37⅞@38½c; May, 43⅛@43⅜c. OATS.—Dull; Sales ranged: No. 2 Cash, 25@25½c; October, 24⅞@25⅛c; November, 26⅛@26½c; May, 31⅛@31⅜c. RYE.—Quiet; No. 2, 48½c. BARLEY, Quiet; No. 2, 56½c. FLAXSEED.—No. 1, $1 04@1 04½. MESS PORK.—Steady; Sales ranged: Cash, $9 25@$9 32; September, $9 25@$9 30; October, $9 25@9 30; November, $9 20@$9 37½. LARD.—Sales ranged: Cash, $5 95. September, $5 95@6 10; October, $5 87½@$6 00. Short Ribs.—Steady; Cash, $6 75. Boxed Meats.—Dry salted shoulders, $5@5; Short clear sides, $7 10@7 15. CATTLE.—Shipping steers, $3 65@5; stockers and feeders, $2 00@3 65; cows, bulls and mixed $1 25@3 25; bulk, $2 25@3 60; through Texas cattle, strong; cows, $2@2 50; steers, $2 60@3 30; Western rangers, steady; natives and half breeds, $2 75@4 05; cows, $2 40@2 90; Wintered Texans, $3@3 45. HOGS.—Rough and mixed, $3 55@4 35; packing and shipping, $4 10@4 65, light weights, $3 60@4 45; skips $2 00@3 25. SHEEP.—Market steady; Natives, $2 25@4 25 Western, $3 40@3 60, Texans, $2 10@$3 10; Lambs, $4 00@4 70.

ST. LOUIS.—Compared with cash prices last week, No. 2 Red is steady. Corn, No. 2 mixed, 1¼c. lower. Oats, 1⅛c. higher. Rye, ½c. higher. Butter, 1c. higher. Flaxseed, 5c. lower. Pork, 25c. lower. Cattle, somewhat lower. Hogs, from 5c. to 15c. lower. Sheep, steady for ordinary sorts; 65c. lower for best, as the quality of those in the market are not so good.

WHEAT.—No. 2 Red, Cash, 73¾@74⅛c; October, 73½@74⅛c; November, 75¾@76⅛c; May, 76¾@77⅛c. CORN.—Fairly active; No. 2 mixed, Cash, 33⅛@34⅛c; October, 35⅜c: November, 35⅛@35⅜c, May, 40⅛@40⅜c. OATS.—Firm; No. 2 mixed, 26½c; October, 26½c; November, 27⅛c.; May, 30⅞c. RYE.—Steady at 48c. BARLEY.—Steady; at 64@65c, according to quality. HAY.—Active and firm; prairie, $8@10 50; Timothy, $11@13 50. BUTTER. Firm; Creamery, 22@25c; dairy, 10@21c. EGGS, steady at 12½c. FLAXSEED, weak at $1 00. WOOL.—Quiet, but firm; medium clothing at 22@25½c; combing, 21@25½c low and coarse, 15@21c; fine light, 20@25c; heavy, 15@21c; black, 17@23c, PORK, $10. LARD, $5 90c. BULKMEATS.—Nearly steady; boxed lots, long clear and short ribs, $6 87½; short clear, $7 12½ Bacon firm; long clear, 7.40@7.45c. short ribs, 7.37½@7.40c; short clear. 7 60@7.75c. Hams steady at 12@13½c. CATTLE.—Market steady; Good to Choice Native Shipping Steers, $4 20@4 85; Common to Fair, $3 50@4 00; Texas grades, $1 75@3 80. HOGS.—Market weak; butchers and choice heavy, $4 30@4 85; Packing, at $4 20@4 50; Lights, $4 10@4 15. Pigs, $3 60@4 00. SHEEP.—Market steady at $2 00@3 85.

BOSTON. BUTTER.—Receipts for the week, 17,911 tubs, 708 boxes; last week, 18,106 tubs, 739 boxes. Exports this week, 7,613 ℔; last week, 2,338 ℔. Northern creamery, extra, 26@27c; do. firsts, 24@25c; Western creamery, extra, 25@26c.; do. firsts, 24@22c. do. choice, 19@21, dairy, Franklin County, finest, 22@23c; good to choice, 19@20c.; Vermont extra, 17@18c; Northern, choice, 16@17c; do. fair to good, 11@15c., Western dairy, good to choice, 12@13c; Imitation creamery, extra, 14@15c; ladle-packed, choice 11@12c do. fair to good, 9@11c. BEANS.—Receipts for the week, 1,275 bbls; last week, 1,477 bbls. Choice pea, Northern hand picked $1 75@1 85 per bushel; do. do. New York, choice, hand picked, $1 60@1 65, do. do. screened, $1 50@1 55, medium choice, hand-picked, $1 50@1 55; do choice screened, 1 15@1 30; Yellow Eyes, choice, $1 50@1 60; do. flat, $1 45@1 50; Red Kidneys, $1 75. CHEESE.—New York extra, 11@11c; do. good to choice, 8½@11c; do. common, 6@8c; Vermont extra, 9@11c; good to choice, 8@9c; common, 6@8c; Western extra, 10½@11c. do. fine, 10@10c; common, 4@6c. Sage, extra, 11½c; EGGS.—Receipts for the week, 8 boxes, 15 bbls, 6,921 cases; last week, 15 boxes, 32 bbls, 7,660 cases. There has been an upward tendency, with a good demand for all kinds of choice lots of eggs. Eastern extras are very scarce and in demand at full prices. Near-by and cape, 22c. per doz. Eastern extras, 21c; Aroostook County, 19@20c; New York and Vermont, 20@21c; Western, 15@17c; Provincial, 19@20c. HAY AND STRAW.—Choice hay, $18@19 per ton; fair, $15@16; ordinary, $14@15; fine, $13@16; Swale hay, $10@11; poor, $10@13 50; Western choice, $16@17; do. fair to good, $13@14 50. Rye straw, $16@17; do. do. machine, $12@14. Oat straw, $8@10. POTATOES.—There has been a liberal supply of potatoes and stocks continue to accumulate. Sweet in good demand and prices steady. Early Rose, 50@63c; Beauty of Hebron, 50@63c. Sweet Potatoes—Virginia Yellow, $1 75@2 50 per bbl; Jersey, $2 75@3 00 per bbl.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, October 2, 1886.

STATE OF THE MARKET.—As compared with cash prices last week, flour is 5c. lower; Ungraded Red Wheat 3c. to 4c. lower; No. 3 Red 1c. higher; No. 2 Red ½c. higher. Corn, Ungraded Mixed, ⅝c. lower; No. 3c. lower. Oats, steady. Pork, 25c. lower. Butter, 1c. to 1½c. higher. Cheese, ¼c. higher. Eggs, 1c. higher. Fruit and vegetables steady.

FLOUR, FEED AND MEAL—FLOUR—Quotations: Fine $1 90@2 65; Superfine, $2 25@2 90; Extra No. 2, $2 60@3 15; Good to Fancy Extra State, $3 20@3 70; Common to Good Extra Western, $2 60@3 70; Good to Choice Extra Western, $3 80@5 00; Common to Fair Extra Ohio, $2 70@3 75, Good, $3 80@4 20; Good to Choice, $4 25@4 75; Common Extra Minnesota, $2 60@3 10; Clear, $3 50 4 00; Rye Mixture, $3 15@4 00; Straight, $4 25@4 50; Patent $4 65@4 80; Bakers' Extra, $3 90@4 90; St. Louis Common to Fair Extra, $2 60@3 65 Fair to Good, $3 70@4 50; Good to Very Choice, $4 55@5 00, latter an extreme, Patent Winter Wheat Extra, $4 50@4 85, City Mill Extra for West Indies, $4 45@4 55, latter in new pkgs.; South America, $4 80@4 70. SOUTHERN FLOUR.—Common to Fair Extra at $3 25@3 85, and Fair to Choice. $3 90@5 00. RYE FLOUR.—Superfine, $3 20 @3 40. CORN MEAL.—Steady; Yellow Western, quoted at $2 50@2 75 and Brandywine at $2 80@2 95. BUCKWHEAT FLOUR—Quoted $2 00@2 25. FEED. 40 ℔, quoted at 65@67½c; 60 ℔, at 60@62½c; 80 ℔, at 70@72½c, 100 ℔ at 80@85c sharps, at 90c.@$1 00, Rye Feed at 75@77½c, screenings at 45@75c.

GRAIN.—WHEAT. No. Chicago at 83½c; No. 2 Spring 79c; Ungraded Milwaukee, 80½c; Ungraded Red, 76@86c. No. 3 Red, 82¼@82½c; No. 2 Red, 81@84½c; No. 1 Red, 89½c; No. 2 Red, for September, 83⅞c; do. October, 84@85½c; do. for November, 85⅞@87c; do. for December, 87⅞@88⅝c; do. for January, 89¼@90¼c; do. for May, 94⅞@95½c; do. for June, 95¼@95⅝c. CORN.—Ungraded 95c; mixed, 45½@46c; No. 3, 44½c; No. 2, 46¾c; No. 2 for October, 46⅜@46¾c; do. for November, 48@48½c.; do. for December, 48⅞@49⅜c; do for May, 51⅜c. OATS.—No. 3, 31c; do. White, 35c; No. 2, 31½@31⅜c; do. White, 35⅜c; Western Mixed, 31½@33c. do. White, 35@41½c; White State, 36½@37½c No. 2 for October, 31¼@31⅝c; do. for November, 32¼@32½c; do, for December, 33¼@33⅛c; do. May, 36⅝c.

PROVISIONS.—PORK.—Mess, quoted at $10 25@10 50 for Old and $11 00@11 25 for New; $14 for Family Mess; $14 50@15 50 for Clear Back, and 1150 for Extra Prime. BEEF.—Extra India Mess $11 50@13; Extra Mess, in barrels, $7 50@8, Packet, $8; Plate, $7 25@$8. CUT MEATS.—Pickled Bellies, 12 ℔ average, 7½c; Pickled Shoulders, 6¼c; Green Hams, 1½ ℔ average, 8c; City Pickled Shoulders, 6@6¼c; Smoked Shoulders, 7¼c, Pickled Hams, 10⅝@10⅞c. Smoked Hams, 13⅝@12c. MIDDLES.—Long Clear in New York, 7⅛c; at West, Long Clear, 6⅝c; Short Clear, 7c. DRESSED HOGS. City Heavy to Light at 6⅜@6⅝c; Pigs, 6⅞c. LARD.—October, 6.27@6.35c; November, 6.24@6.28c, December, 6.25@6.30c; January, at 6.34@6.89c; February 6.42c: March, 6.43c; City Steam, 6.40; Refined, 6.95; Continent, 7.50.

BUTTER.—Creamery—State Dairy, pail, choice, 26c; half-firkin tubs, about prime, 24@25c; half-firkins, tubs, good, 21@22c; half-firkins common, 17@18c; Welsh tubs, best, 22@23c; do. do. prime, 20@21c, Dairy firkins, best, 23c; do. do. prime, 22@23. Western Imitation Creamery, best, 17@18c; Imitation creamery, fair and good, 11@15. Dairy, fine, 15@16c; do common, 12@14c; Iowa firkins, Junes, 12@18; Iowa tubs, June, best, 12@13c; Factory, poor, 8@10c.

CHEESE.—State factory, fancy, September, 11¾@12c; do. do. best, colored August, 11⅝c; do. do, white, August, 11⅝c, do, do, good and fine, 10½@11c; do, do, fair, 9½@10c do, do, common, 9@9½c; Ohio factory, fine, flat, 10@10¼c; State factory, night skims 7@9c.

EGGS.—State, 21½@22c Ohio and other choice lots 20½@21c; Western best, 20½@21c; do. held lots, 19½@20c; Canadian, 20@20½c; do. fair held lots, 19@19½c.

POULTRY.—LIVE.—Chickens, per ℔, at 10@12c; fowls, near-by lots, per ℔, at 12c.; fowls, Western lots, per ℔, at 11@11½c fowls Southern lots, per ℔, at 10½@11c; turkeys, per ℔ at 10@12c. ducks, western per pair at 50@75c; geese, western, per pair, at $1.25@1.50.

POULTRY.—DRESSED.—Turkeys, per pound, at 11@14c.; Spring chickens, Philadelphia, per pound at 15@—c.; do. western, per ℔, at 12@13c; fowls, Pennsylvania, prime, per ℔, 13@14c; do western, per ℔, at 12@13c.

FRUITS.—FRESH.—Quotations: Pears.—Bartlett, per keg, at $2@2 75; do, up-river per bbl, at $6@6 50; Seckel per bbl, at $3@4 75; Sheldon, per bbl, at $3 25@3 75. Apples. Gravenstein per bbl, at $2 00@2 50, Maiden Blush, per bbl., at $2 25@2 50; common varieties at $1@1 75 per bbl. Peaches.—Jerseys, best, at $1 25@1 50 per basket; do. good at 75c@$1, do. plain at 40@60c. per basket. Grapes, 3@7c. for up-river Delaware, per ℔. Plums.—6@8c. per quart for Quackenboss, $2 50@3 00 for Lombard; $3@3 50 per bbl, for green gage; $2 50@3 00 per bbl, for Damson. Watermelons at $15@25 per 100. Muskmelons at $2@2 50 for best per bbl.

FRUITS.—DRIED.—The quotations are as follows; Apples—Fancy evaporated, 8½@9c; do. choice, at 8@8½; do. Tennessee quarters at 1½@2c; do. State sliced at 2¼@2½c, southern sliced prime at 2@3c. Peaches—North Carolina, peeled choice new, 11½c. fancy, 12½@13c; do, Georgia, choice, at 11c; do. do, prime, fancy, new, 10@10½c. do, Delaware, evaporated, peeled, 25@26c. do, do, do, unpeeled new, 12½@13½c, do, Georgia new, 10½@11c. Cherries, dried, at 10@10½c. Evaporated raspberries, 14½@15c; sun-dried do. 13c. Blackberries—Prime at 8@8½c.

PEANUTS.—Quotations are: 5½c. for best hand-picked; 4@4½c. for farmers' grades.

HAY AND STRAW.—The general tone is a steady one, though trading is rather light. Hay, Choice Timothy, 80@85c; No. 1 do, 70@75c; No. 2 do, 60@67; Clover Mixed, 50@55c; Clover, 40@45c; shipping at 50c; prairie, 40@45c, salt meadow, 40@45c. Straw.—Long rye, 55@60c; short rye at 35@45c; oat, at 35@40c; wheat 25@35.

COTTON.—The quotations, according to the American classification, are as follows:

	Uplands.	New Orleans. and Gulf.	Texas.
Ordinary	6⅞	6 1-16	6 1-16
Strict Ordinary	7 5-16	7½	7½
Good Ordinary	8¼	8 7-16	8 7-16
Strict Good Ordinary	8 11-16	8⅞	8⅞
Low Middling	9 1-16	9¼	9¼
Strict Low Middling	9 5-16	9½	9½
Middling	9½	9 11-16	9 11-16
Good Middling	9⅞	10 1-16	10 1-16
Strict Good Middling	10 3-16	10⅜	10⅜
Middling Fair	10 9-16	10¾	10¾
Fair	11 3-16	11⅜	11⅜

STAINED.

Good Ordinary	6 11-16	Low Middling	8 3-16
Strict Good Ord	7⅛	Middling	8 15-16

VEGETABLES.—Quotations are for: Potatoes.—Long Island, rose, in bulk, per bbl., $1 75@2 00; Jersey, Queen, per bbl, $1 50@1 75; State, $1 37@1 62c. do Burbank, $1 62@1 87; Jersey, peerless, per bbl, $1 25@1 50; sweet potatoes, Va., yellow, per bbl., $1 50@1 75; sweet potatoes, Va., yellow, inferior, per bbl, $1 00@1 25; Corn, Jersey, per 100, $1 00@1 25. Cabbages.—Flat Dutch, per 100, $2 75@3 25. Cucumbers.—Pickles, per 1,000, 75c.@$1 25. Eggplant, Long Island, per bbl, $1 75@2 00. Lima beans, per bag, $1 00@1 25. Onions.—Conn., red, per bbl, $1 50@1 75; do. Orange County, red, per bbl, $1 50@1 75. Squash.—Marrow, per bbl, $1 00@1 25; do. Hubbard, per bbl, $1 25@1 37. Tomatoes—Long Island, per box, 30@40c.

LIVE STOCK MARKETS

NEW YORK, SATURDAY, Oct. 2, 1886.

BEEVES.—Kentucky steers, 1312 ℔, average, at $4 80 per 100 ℔; Oxen and Rough Steers, 1 55 ℔, at $1 30; Chicago steers, 1430 ℔, at $5 10; do, 1270 ℔, at $5 05; Virginia steers and cows, 1069 ℔, at $3 30; Ohio steers, heifers and cows mixed, 1030 ℔, at $3 15; State bulls, 761 ℔, at $2 25; do, 886 ℔, at at $2; Stags, 1600 ℔, at $3 25; Texans, 1028 ℔, avarage, $3 75; per 100 ℔. do, 1007 ℔, at $3 70; Colorado Steers, 1189 ℔, at $3 90; do, 1125 ℔, at $4 10; Indiana, do, 1098 ℔, at $4 15; Kentucky do, 1421 ℔, at $5 05; Colorado Half breeds, 1402 ℔, avarage, at $4 96; Illinois Steers, 1291 ℔, at $4 40; do, 1261 ℔ at $4 55; Kentucky Steers, 1,250 ℔, at $4 40; Indiana do, 1218 ℔ at $4 40; West Virginia do, 1269 ℔, at $4 80; Ox 1660 ℔, at $3 75; do, 1240 ℔, at $3 40; Dry Cows, 676 ℔, at $3; Ohio steer, 1330 ℔, at $5 20; do, 1327 ℔, at $5 10; do 1399 at $5 05; State do, 1280 ℔, at $4 50; Kentucky do, 4413 ℔, at $5 22½; do, at 1302 ℔, at $4 70; Colorado Half-Breeds, 1214 ℔, at $4 35; do, 1454 ℔, at $4 65; Native steers; 1188 ℔, at $4 40; Kansas Half-Breeds, 1277 ℔, at $4 40.

CALVES.—Yearlings, 490 ℔, at 2¼c; Veals, 153 ℔, at 6¼c; Fed Calves, 253 ℔, at 5c, Veals, 155 ℔, at 5c.; do 240 ℔, at 6c; Grassers, 366 ℔, at 3c; Fed Calves, 261 ℔, at 3¼c; do, 337 ℔, at 4½c; Veals, 212 ℔, at 5c.

SHEEP AND LAMBS.—Receipts for six days, 37,943 head against 41,843 head for the same time last week. State Sheep, 103 ℔, at 4c; Western do, 94 ℔, 4¾c; do, 103, 4½c; Canada Lambs, 71 ℔, 5⅝c, do, 84 ℔, 5⅞c; do, 85 ℔, 6⅛c; State do, 66 ℔, $5 70; do, 69 ℔, 5⅝c; Northern Canada Lambs, 75 ℔, $5 70; Canada do, 77 ℔, $5 90; State Sheep, 83 ℔, 4c; State Lambs, 52 ℔, 5c; do, 76 ℔, 5⅝c; State Sheep, 81 ℔, 4c; State Sheep and Lambs, 58 ℔, 4⅛c; Ohio Sheep, 101 ℔, 5c; do, 92 ℔, 4⅜c; Kentucky do, 99 ℔, 4¼c; do, Lambs, 70 ℔, 5⅜c; Ohio do, 68 ℔, 5⅜c; Pennsylvania Lambs, 64 ℔ $5 80; Kentucky Sheep, 91 ℔, 4¼c; Ohio do, 76 ℔, $3 95.

HOGS.—Receipts for six days, 37,194 head against 32,017 head for the corresponding time last week. State Hogs, 142 ℔, $5 10; do, 127 ℔, $5; Pennsylvania do, 216 ℔, $5; Roughs, 368 ℔, $4.

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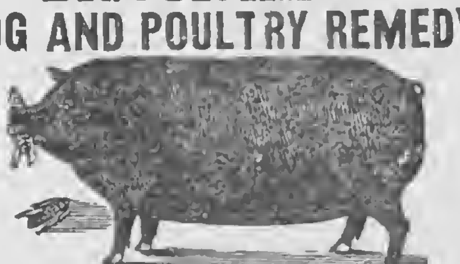

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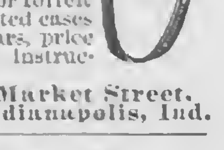

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FAIR REPORTS.

(*Continued from page 678.*)

NEW YORK STATE FAIR.

FORTY-SIXTH ANNUAL EXHIBITION.

(RURAL SPECIAL REPORT.)

Large entries; bad weather; large live stock display; splendid horse show; Short-horns and other breeds for the dairy; "honors easy" on Holstein-Friesians; good words for other breeds; grand exhibit of sheep; Merinos; South-Downs; Shropshires; Hampshires; Cheviots; a poor swine show, but a splendid poultry display.

THIS session of the State Fair opened at Utica on Thursday, September 23, with larger entries and worse weather than for many years. There were 3,025 entries catalogued, but these did not include the 1,200 entries of fruits and flowers.

Of cattle there were 695 entries, of which 84 were Short-horns, 94 Devons, 132 Ayrshires, 100 Holstein-Friesians, 143 Channel Islanders, 15 Brown Swiss and 12 Norfolk and Suffolk Red Polls. The entries of horses numbered 295, of which 17 were Clydesdales, 40 Percherons, 40 carriage and coach horses, and 100 roadsters. Sheep filled their entire section and overflowed into the hog pens, there being 512 entries, comprising 23 Leicesters, 44 Cotswolds, 24 Lincolns, 39 South-Downs, 91 Shropshires, 11 Hampshires, 8 Oxfordshires, 31 Cheviots and 240 Merinos. What the sheep over-ran the hogs fell short in numbers, as there were only 171 entries, 34 of which were Large Whites, 39 Small Whites, 28 Poland-Chinas, 19 Duroc-Jerseys, 28 Berkshires and 12 Essex. Five hundred and ninety-eight chickens cackled, 22 turkeys gobbled, 25 geese squalled, and 59 ducks quacked, making a perfect babel, while 111 pigeons, 25 rabbits and 17 dogs and puppies, by their oddity and antics kept a constant crowd of admiring youngsters about them.

So full was the horse department that every stall was occupied. Stone Hall was converted into stabling, and accommodations for many others had to be built outside. Smith, Powell & Lamb showed a full half of the Clydesdales, while M. W. Dunham was the importer or breeder of a very large proportion of the Percherons. These two classes are monsters in size, ranging from a fully half ton to eighteen or more hundreds, and while they are valuable for heavy city uses and for crossing upon the lighter and more active mares of the country, the pure-breds are too heavy to be popular with American farmers for ordinary farm uses. There were also some very fine horses in all the other classes, even down to the diminutive Shetland pony, only fit for a play-thing for the little ones.

Several ideas suggest themselves as one studies closely the cattle on exhibition. While the Jerseys led all others in numbers, yet without any booming or fuss the Ayrshires crowded them closely, being only 10 behind. While Holstein-Friesians were third in number, the Devons and Short-horns are both coming rapidly again into prominence, and the time may not be far distant when a milking strain of Short-horns may lead all others. As I have talked with prominent dairymen here from diverse parts of the State, I have been impressed with the good words unanimously spoken in praise of the Short-horn and its grades for dairy use.

Among the Holstein-Friesians the herds of Smith, Powell & Lamb of Syracuse, and of F. C. Stevens of Attica, are most prominent, and the great bulk of the premiums go to one or other of them. In the one is Netherland Prince and in the other Constantyn as leading bulls, both of which have been illustrated in the RURAL. In three-year-olds the former firm won first on their bull "Prince of Artis;" in the two-year-olds the latter got the blue ribbon on "Henry of Maplewood." Clothilde is shown in a separate tent as the largest milking cow in the world, having given 26,021 13-16 pounds of milk in a single year. By her side stands Albino, with a record of 18,484 13-16 pounds as a two-year-old.

In Jerseys there was a sharp competition and the premiums were considerably scattered, though T. R. Proctor got the lion's share. The Devons and Short-horns had many admirers in the crowd, and well they might, for no more beautiful animals exist than the red and comely Devons, and the Short-horns fill the eye of every lover of a good roast.

The Norfolk and Suffolk Red Polled bull, "Rupert," four years old, took first premium, and pleased all who saw him. In fact, he was a fine specimen of a Short-horn bull minus the horns. I can see no reason why, as these animals become better known, they should not become popular, for they have many of the best points of the Short-horn, and must prove profitable feeding animals.

Of course, the American shepherd's ideal sheep is the Merino, and though we now have no boom on this breed, yet half the sheep on exhibition are of this class. Among the exhibitors were Davis Cossit and John P. Ray, both away up as breeders, and both have some very superior sheep and heavy shearers, and claim that abundance of wrinkles and grease is inseparable from fineness of staple and heavy weight of fleece. There were on exhibition three rams from W. G. Markham's importation of French Merinos bred by Baron Foon Homeyer, of Pomerania—one, three years old; and two, two years old. They are very large, exceedingly strong in the legs and with very compact fleeces of short-staple, fine wool, very free from grease and yolk. It is worth the while of our breeders to experiment in using this as foundation stock in the breeding up of a mutton-and-wool-producing breed. The long-wools were represented by Cotswolds, Leicesters and Lincolns; but none of these breeds has ever become popular, and I doubt if they ever will, as they are not adapted to our methods of keeping in large flocks. Among the South-Downs were the imported rams No 10 and No 10 Royal Shrewsbury, by J. H. Warren. The former was imported in 1885 at a cost of $814—the largest price ever paid for any sheep brought to this country. To my mind, the latter, which was imported this year, is by far the better animal, being fuller in the shoulder and ham, and in every way the better model.

The Shropshires shown were very good and were in favor with very many. I notice, though, that they are more uneven than the South-Downs. This may be because different bloods have been mingled in their make-up, and because proper care has not in all cases been used in the selection of breeding animals. There is a future for this breed, and the wise breeder will be very careful from what animals he breeds, and how they are coupled. There were only a few Hampshires shown; but some of them would compare favorably with any to be found. These sheep with their large bodies, strong constitutions and very black legs and faces, should be very valuable for crossing upon native ewes for breeding early lambs. There were some very good representatives of the Cheviot sheep from the hills of that name in the south of Scotland. They are handsome sheep of the middle-wool class and with their beautiful white faces and long, slim ears, captured the hearts of all Scotchmen present.

The swine exhibit was much below what could be expected in the Empire State, and what few there were were about equally divided between the Large Whites, Small Whites, Berkshires and Poland-Chinas. The little roly-poly Essex, and the representatives of the opposite extreme, the Duroc-Jerseys, were in about equal numbers, and only a dozen each. The RURAL'S contributor, Col. Curtis, showed the bulk of the Durocs, and is to be congratulated on what he is doing with them in the way of shortening their noses, and reducing the size of their legs and ears. He bids fair in a few years longer to make a very presentable pig of them.

The show in the poultry department is much the largest and finest ever seen at a State Fair. The large hall is crowded from end to end and from the ground to as high as the coops could be piled. In chickens the Plymouth Rock, if numbers tell, is the favorite, with Wyandotte second, and White Leghorn third. I saw many of the RURAL'S good friends among the exhibitors, and can only wish each one might have taken as many prizes as he wished.

(*Concluded next week.*)

NEBRASKA STATE FAIR.

(RURAL SPECIAL REPORT.)

Weather favorable; a fine horse exhibit; undue prominence of speed horses; a large cattle exhibit; honors divided between Short-horns and Herefords; fine grade Aberdeen-Angus calves; Poland-Chinas ahead among swine; small display of sheep; a large poultry show; a poor fruit show; an objectionable contrast.

THE Nebraska State Fair was held at Lincoln from Sept. 10 to 17. With the exception of some light showers and a threatening morning on "the best day," the weather has been all that could be wished. Large crowds have been in attendance and the managers have been as successful as they deserved. There cannot fail to be a nice cash surplus over expenses. The entries before the opening day were such as to give the belief that the display in nearly all departments would be better than ever before, and during the exhibition this fact was quite the common remark.

Of horses the exhibit was good, while some animals were of marked excellence. Several enterprising Western breeders were represented with some of their best stock, and the contests for first places were warm. The grand sweepstakes for the best stallion among draft breeds was easily won by the three-year-old Shire stallion Gallileo, owned by the Importing Draft Horse Co., of Lincoln. This stallion also won the sweepstakes as the best stallion in his class. The Normans were out in force, but most of the specimens were too young for substantial honors in the show ring. These horses are apparently the favorites with farmers. I have but little to say of the speed horses. I do not believe in them, or sympathize with the prominence given them. The effect of racing stock is demoralizing upon real progress; but as long as they will draw great crowds they will be in favor with the average fair manager. There is need of an educated public sentiment upon this point, and it needs thoughtful men to lead as teachers. Those at the head should aim to promote the interests of the visitors and not produce excitement. I have noticed that a large part of those who attend State fairs go for the fun and excitement; while industrious farmers stay at home, because, as they say, it will do them no good, so they cannot afford it.

Over 300 head of the different breeds of cattle were in the stalls. The Short-horns and Herefords were best represented, and each was about equal in numbers. The Short-horns carried away the grand sweepstake prize for best bull of any breed, and the Herefords for best lot of five animals. Popular opinion was in favor of the Herefords in that they were much superior in average excellence. Some of the Short-horns were very fine, while others were coarse and rough. The Jerseys were well represented, but were in favor only with those wanting family cows. The Holsteins were here in numbers, but could not attract attention from the beef breeds. A few Devons were on the grounds, and the herd of seven head shown by R. H. Payne, of Ohio, took all the best first premiums, and were interesting in showing what this breed can do. A part of the cattle exhibit deserving more than mere mention was the four grade Aberdeen-Angus calves belonging to Mr. A. W. Nelson. The grades were by their mothers, which were common natives, and were a decided improvement. Mr. Nelson has 34 grade calves from his Aberdeen-Angus bull, and all are polled, although some of the mothers have the largest of horns. In form, too, the calves bred closely after the Aberdeen-Angus type. A good lesson as to what could be done with our scrub stock could be learnt from this exhibit.

About an average number of hogs were in the pens, and there were about the usual number of each breed with possibly the exception of the Berkshires. The Poland-Chinas were strongest in numbers and, also, in popular favor. The only objection I heard to them was that they were a little too sluggish in running after feeding stock.

But few sheep were on the ground, and it is surprising that, with the broad Western ranges to support them, there are not more of these useful animals.

The usual display of all kinds of farm machinery and vehicles was to be seen. The Baker Barb Wire Co., one of the firms that pay a royalty to the Washburn, Moon Co., made its style of wire on the grounds, and always drew a crowd. A new thatching device also attracted attention.

The poultry exhibit included 146 entries, and the competition has, I think, done much good. It is to be hoped the society will provide more convenient quarters another year, and recognize this industry in a way fitted to its magnitude.

The display of agricultural products was fine and well arranged. Exhibits of their special products were made by several counties, Dundy County showing "sod crops;" all kinds of vegetables and many grasses and grains were displayed and tastefully arranged. This county is in the far western part of the State and in the center of what but a little time ago was called the "desert." Now its settlers are sanguine of its becoming the richest of farm lands.

For a State which has taken national honors, the horticultural exhibit was poor. Many exhibitors were slack in arranging their work. Apples are small this year, and the display was not as fair as usual.

Art Hall presented the usual entries of musical art, fancy work and pictures. I think a sad mistake was made by the managers in admitting grocerymen and others in this building. A beautiful picture would meet the eyes on one hand, and a display of canned goods on the other. On one side of the aisle were musical instruments and music; on the other free chews of tobacco attracted a larger crowd.

But, all in all, the fair was a very good object-lesson to all who came. L. E. B.

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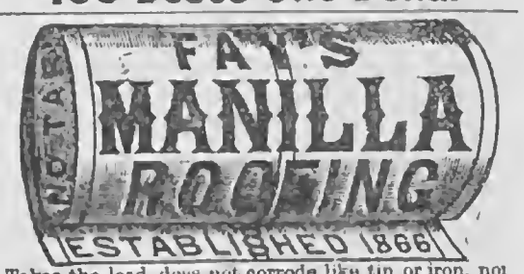

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PERSONALS

AT Queen Victoria's table there are three servants to every six guests. When the meal is finished Her Majesty is the first to leave the room.

THE widow of Dr. Octave Pavy, late acting assistant surgeon United States Army, under contract with the Greely expedition, who died of starvation at Cape Sabine about June 6, 1884, will receive a pension of $17 per month.

PASTEUR says that out of 1,200 natives treated by him for the bites of rabid animals only three died, and of 600 foreigners who came from long distances, only 15 died. How many were bitten by really mad animals, and how many of them were hydrophobia-proof anyhow?

EMPEROR WILLIAM is accompanied in all his travels by three court physicians. He may die at any moment at his great age. He is now the great peace-preserver of Europe. On his death, war is nearly certain, as the political relations of nearly all European nations will change.

THE mother of the present Czar bequeathed 2,000,000 roubles to Prince Alexander, late of Bulgaria, who was her favorite nephew. The legacy has never been paid, but the Prince has received the interest on it. His cousin, the Czar, has for years disliked him personally on account of a childhood quarrel. He was a great favorite with the late Czar.

CONGRESSMAN FELTON, of California, comes of a family of lawyers, his grandfather having been Chief Justice of New York. He went to California when only 19 years old, without a cent. He made a fortune in a few years by buying and selling mines. He now owns the entire oil belt of the Pacific coast, and his wealth is estimated at $10,000,000.

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THE Chevalier John Sartain, of Philadelphia, long distinguished as an engraver, is almost 80 and very vigorous. He introduced mezzotint into America, established a magazine, fed and clothed Edgar A. Poe, received decorations fro half a dozen European potentates, managed the art department of the Centennial Exhibition, still occupies the house to which he brought his bride from England 60 years ago, and next Spring will proceed to London to take charge of the art department of the forthcoming American Exhibition.

Miscellaneous Advertising

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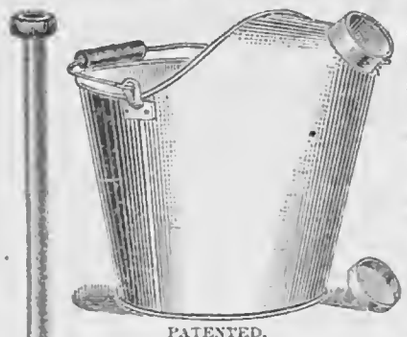

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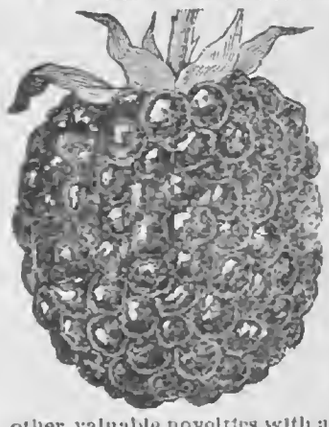

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Reading Notices, ending with "Adv," per line, minion leaded	75 cents.

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Humorous.

A SMALL country seat—The milkstool.—*New Age.*

THE sigh of a seamstress—A-hem!—*Farmer and M'f'r.*

A HOTEL should never advertise that "it stands without a-rival."—*Farmer and M'f'r.*

A PRINTED sheet, although square, is called a circular, because it is intended to go round.—*New Age.*

SOME gardeners put their phlox in beds, which is more than herdsmen do.—*Pittsburg Chronicle-Telegraph.*

TEACHER—"What are you scratching your head for?" Scholar—"'Cos I'm ther only one who knows when it itches."—*New Age.*

BUTTER, butter, nice and fair;
How I wonder what you are;
Are you really what you seem?
Were you made of grease or cream.—*Joker's Otto.*

"BESSIE, temper is an awful thing. You ought to get rid of it." "Why, mamma, only yesterday you told me to keep it."—*San Francisco Call.*

A NEW book is entitled "Hints to Poets." It will prove unprofitable. The poet is the slowest person in the world to take a hint.—*Phil. Call.*

"JOHN," said the proprietor of the beach restaurant, "you'll have to take a spade and go down to the beach and try and find a clam. The one we made the chowders with is missing. Been eaten by some of the guests, I guess. By jingo! these city folks want the earth."—*Boston Courier.*

"OH, yes," wrote a Bostonian who believes that his own home is the coolest spot on earth in midsummer, "it is all very well for you to ask me to come down to your famous hotel for rest and change. I tried it once; the porter got all the change and the landlord took the rest."—*Gazette Courier.*

Sportsman: "How's the gunning here?"
Old Timer: "Wall, we manage to kill a dude or two now and then."

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MORGAN ISLAND,
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ALSO,
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On St. Helena Island,
Containing 200 Acres. Bounded on the North by Johnson's River navigable water. A part of the land has been highly cultivated for a few years, and will produce large crops. The soil is sandy loam. A grand chance to raise early vegetables for the Northern markets. About four miles by water from Port Royal. Railroad and steamship landing. Steamers to New York every week.
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Price and terms same as for Morgan Island.
Titles guaranteed good.
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HORSE POWERS.
Latest Improvement.
Machines for **Threshing** and **Cleaning Grain**; also Machines for **Sawing Wood** with Circular and Cross Cut Drag Saws.
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We also manufacture Mowers, Reapers, Twine Binders, Rakes, Field Rollers, Plows, Feed Cutter and Crusher, Hand and Power Corn Shellers, etc. Send for Illustrated Catalogue and Price List. S. S. MESSINGER & SON, Stockertown, Pa.

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Write for Descriptive Circular. Mention this paper.
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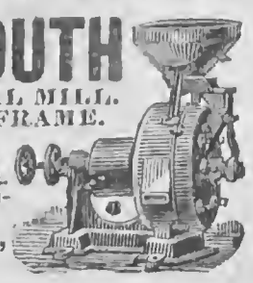

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MANGE, SCAB, all Insect Pests, all Skin troubles, and many other Diseases of Live Stock. Recommended by many prominent Breeders. See circular, sent on application. **T. W. LAWFORD & CO.,**
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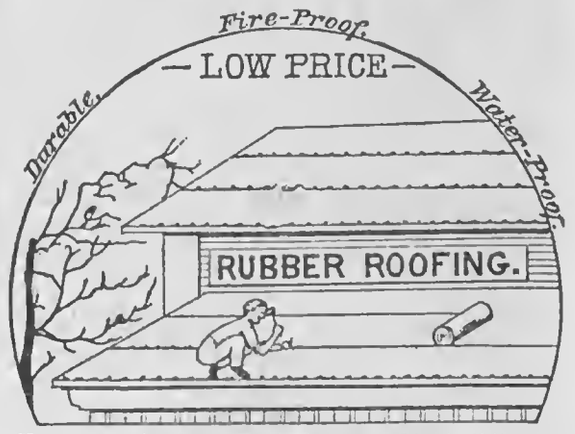

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Samples free if you mention Rural New-Yorker.

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IMPROVED NEEDLE HAY KNIFE.
This knife has been tested with the most celebrated knives of other makers, and has proved an easier and faster cutter than any other. Its special excellence consists in a chisel edge tooth. It may be used for cutting hay in the mow, stack and bale; also for ditching, cutting peat, or for any other work for which a hay knife is used.
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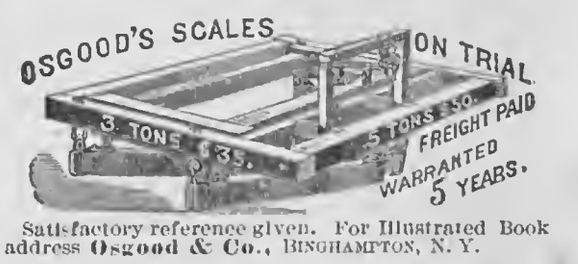

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The only four-year-old that has given over 23,000 lbs. in a year.
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The only herd in which 87 two-year-olds have averaged over 11 lbs. each in a week.
Twenty-three Cows in this herd have averaged 18 lbs. 3 oz. of butter in a week.
Also a fine stud of CLYDESDALE STALLIONS, Mares and Fillies of all ages.
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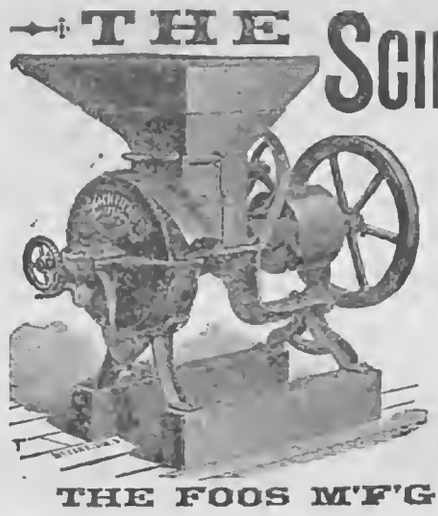
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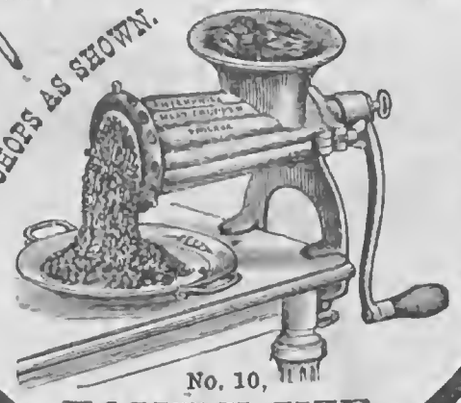
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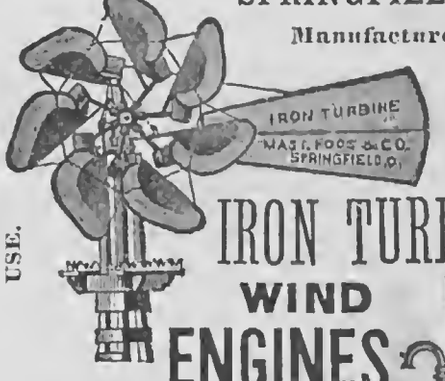

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A CHILD CAN USE THEM.
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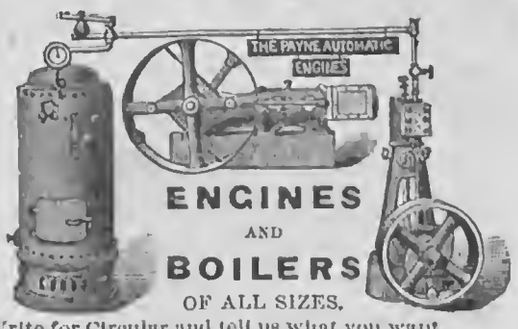
7,000 CHALLENGE WIND MILLS.

IN USE IN EVERY State and Territory of the U. S. It is a sectional wheel, has been made by us 13 years, and has never blown down without tower breaking, a record no other mill can show. **MILLS SENT ON 30 DAYS TEST TRIAL. BEST FEED MILLS, CORN SHELLERS, ETC. GOOD AGENTS WANTED** in all unassigned territory. Catalogues free. **CHALLENGE WIND MILL AND FEED MILL CO.,** Batavia, Kane Co. Ill.



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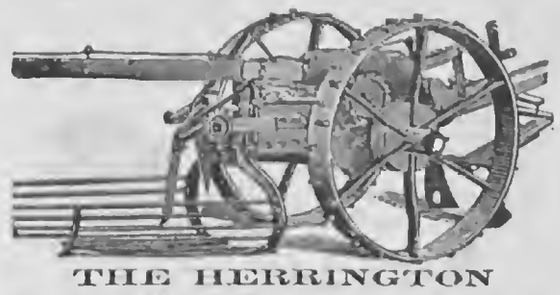
Our Patented Vertical Boiler will not prime, or danger of burning flues.


THE HERRINGTON POTATO DIGGER
IS A SUCCESS.
Send for circular to **PLANTERS' HOE CO.,**
Troy, N. Y.

THE RURAL NEW-YORKER

A JOURNAL FOR THE SUBURBAN AND COUNTRY HOME.

VOL. XLV. No. 1916. NEW YORK, OCTOBER 16, 1886. PRICE FIVE CENTS. $2.00 PER YEAR.

Entered according to Act of Congress, in the year 1886, by the Rural New-Yorker in the office of the Librarian of Congress at Washington.

Architecture.

A NEAT COTTAGE.

THE design shown at Fig. 386 '87 '88 is for a cottage now being built at Lewaren, N. J., and is one of a number that have been erected during the past year. The plan is so arranged that a view of Staten Island Sound, which is just at the rear of the grounds, can be had from all the principal rooms.

Convenience of arrangement is what has been aimed at, and a glance at the accompanying plans will show that this point has been gained. The hall is quite large, giving a good impression to a visitor when first entering the house. It is amply lighted from the rear, both by windows above and below the platform of stairs, and from its size—13 by 16 feet—a delightful sitting-room can be had. All the other rooms on the first floor are reached by doors from the hall, thus obviating the

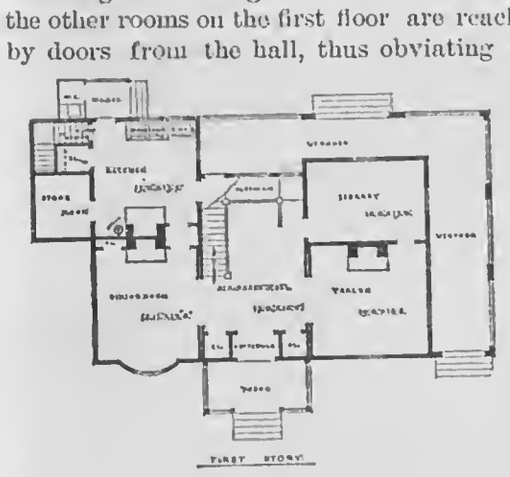


Fig. 387.

necessity of passing through one room before entering another, and yet the rooms on each side of the hall are connected. The kitchen is large; the wash trays and sink are placed in one corner so as to give a space in the middle of the floor for a table; the store-room connected with the kitchen is fitted up with shelving and a pastry table.

The parlor and dining-room each have an open fire-place, so that a "fire on the hearth" can be had in these rooms in early Fall, before it is time to start the furnace. The rooms on the second floor are all large, light and airy,

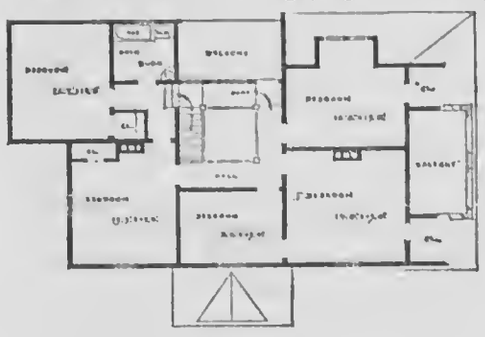


Fig. 388.

and each has a large closet. The bath-room is placed conveniently to all bed-rooms, and yet is at the extreme outside of the house, thus doing away with any fear of sewer gas in the bed-rooms. All rooms are to be heated from the furnace.

While convenience of arrangement has been sought after in the interior, the outside of the house has not been overlooked, and a view of the perspective, herewith given, will show a very pleasing exterior. The cost of the house is as follows:

Carpenter's, mason's and painter's work	$3,500,00
Plumbing	250,00
Furnace and range	240,00
Total	$4,000,00

Further information can be had by addressing the architect, Clarence W. Smith, 30 Broad St., N. Y., who favors us with the sketches.

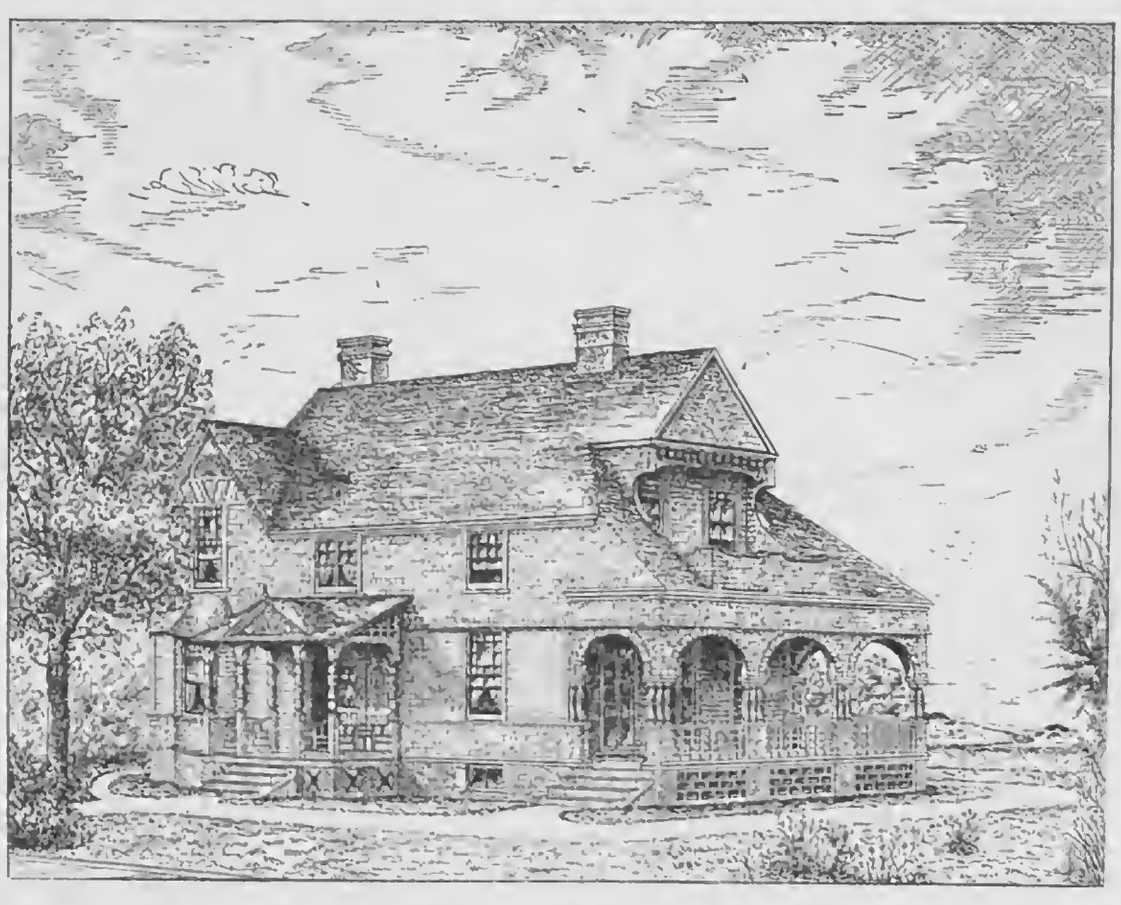
Field Crops.

SOMETHING ABOUT THE LEAVES OF GRASS.

DR. W. J. BEAL.

To a casual observer, the leaves of grass may seem to be all alike, except that some are larger or wider than others. Even Linnæus thought this was the case; but recent researches reveal a structure which is marvelously made. In details, the leaves vary much, while nothing seems to be better constructed for the purpose of sustaining the plant and at the same time yielding bountiful supplies of food to the beasts of the field.

As a boy, before I had ever studied botany, I remember more than once to have longed to know all there was to be learned about a blade of grass. It was a small affair, but there must be many mysteries locked up in those green cells. Time and study have shown that there were more things than I had



A NEAT COTTAGE. Fig. 386.

dreamed of, and yet it seems as though there was enough left unlearned to keep any one busy for a life-time. The sheaths of the leaves are described as split on the side opposite the blade. A few exceptions are given; yet a study of the young branches shows that many leaves have closed sheaths. Even five or more of the lower leaves of June Grass and Orchard Grass have the sheaths closed, while those above are split open. Many leaves are very slender, with a rib in the middle, but those of Rice Cut-Grass and Wild Rice have the main rib on one side of the middle.

In June Grass, we find a narrow blade with the two margins parallel, while in Indian corn the blade tapers very gradually to a point. In the leaf of the latter the veins on the margins disappear one after another, only a few of the middle ones extending to the apex.

The careful examination of a leaf shows it to contain *fibro-vascular bundles* or veins which run lengthwise and nearly parallel. Over the leaf on both sides is an epidermis which varies much in thickness in the same grass, depending on the amount of light and moisture. There are rows of small openings or mouths on the leaf, sometimes above, sometimes below. These admit air to the interior of the leaf where the granules of chlorophyl, through the aid of light, assimilate or digest the raw materials and fit them to nourish and enlarge the plant. The green leaves are chemical laboratories or factories busy throughout the growing season.

A leaf of grass elongates by a rapid multiplication and enlargement of the cells just at the base of the blade. Cattle may eat off the tip many times, and yet it keeps elongating. A leaf of June Grass or Orchard Grass may make a growth of two to five or more feet in a single season, yet all the time remain short, as the ends are frequently cropped by the cattle and sheep. The leaf has an upper side and a lower side, yet, strange as it may seem, about half of the leaves of grasses are regularly "wrong side up" Why this is so or of what advantage it is to the plant I am unable to tell you. Many leaves show tortion in one direction or the other, often quite uniform in the plants of one kind. The cause is obscure, if known at all.

Many leaves of grasses are more or less covered with small hairs which usually point towards the apex of the blade. In a few cases they are stiff and curve backwards or downwards, and help to hold up the stems by hanging on to other plants or on to each other. These hairs apparently help to protect the leaves in dry or very hot sunny weather. In moist, shady places grasses usually have but few hairs. A thick epidermis also protects plants in dry places. Cool, moist countries are proverbial for their succulent and nutritious grass.

Ag'l Coll., Lansing, Mich.

THE SWEET POTATO IN THE SOUTH.

THE sweet potato is to the South about what the common potato is to Ireland or Germany. It forms a very large part of the food of the negroes and poorer whites, in fact, it frequently takes the place of bread to a great extent. The favorite way of cooking it here is to bake it in the oven or in the ashes. The children are fond of burying the potatoes in the ashes at night, so that they may slowly cook all night. The southern-grown sweet potatoes are larger and sweeter than those grown at the North. Those raised in Mexico are very sweet indeed. It is not a good thing for the South, in all respects, that sweet potatoes are so easy to raise. An average analysis gives them 75.8 parts water, 1.5 part protein, fats 0.4, carbohydrates 20, woody fiber 1.1, and mineral matter 1.2. They are weaker in protein and carbohydrates than the common potato, and thus inferior as an article of diet. Such potatoes with corn bread and pork, never will make brains like oat-meal, baked beans and fish. It would be a good thing for the South if the use of the common potato could become more general. H. L. J.

Corinth, Miss.

Farm Topics.

CORRESPONDENTS' VIEWS.

PRIVY VAULTS ON FARMS.—The vaults on most farms are disgraceful affairs. They are direct sources of disease in Summer, and hardly more friendly to health in Winter. The snow drifts into them and the wind blows through them. To compel women and children to resort to such places is downright cruelty. It seems strange that farmers who desire to improve their homes reach the closet last of all. They will build wood-sheds and other conveniences and still retain that cold, windy closet with its death-dealing vault. In my new house the closet is just at the end of the wood house. There is no vault at all. Two large iron buckets are placed under the seats, on a shelf. These are partly filled with sand or road dust. A barrel of dust stands in a corner of the closet, a tin dipper is kept in the barrel, and a dipperful of the dust is thrown into the buckets whenever the closet is used. This rule is rigidly enforced. There is not the slightest odor from this closet. Once every two weeks the buckets are emptied and this operation is as clean as that of emptying ashes. There is no tramping out into the cold and storm. Come, farmers, wake up this Fall and put an end to these disease-breeding vaults. Clean them out for good and then fill them up. You will never regret it. H. C. K.

Steuben Co., N. Y.

SECOND BLOSSOMING, ETC.—The peculiar character of the past Spring and Summer, first wet, then dry and then wet again, has changed the usual course of vegetation, and I have cherries in full blossom, and nearly all my dwarf pears and quinces and some apples are opening and will be in full blossom in a few days. I fear this will cause the loss of next year's crop. The same thing occurred with me some years since in the south of England. After an unusual Spring and Summer my plum trees were in full blossom at Christmas, and they did not fully recover their usual habits for three or four years. I shall pick off all the blossom buds on some of the trees to test the matter; but fear the season is too far advanced to mature another set of buds. The Japan Clover is far from being "worthless" here. It covers the ground in a dense mat, and stock are fond of it. It will grow 15 inches high, and, as you say, is then somewhat hard and tough. THOMAS BRIGDEN.

Walker Co., Ala.

A GOOD START.—A year ago we succeeded in starting what is known as the Cayuga Co. Farmer's Club. We started with eight members, holding our meetings in the Grand Jury Room at the Court House. The club has now attained such size that the room is too small for our use, and we have been obliged to secure a larger hall. D. P. HARDY.

Auburn, N. Y.

"NOTHING IN IT."—In the RURAL for Sept. 4, J. S. B. told us how he kept Bartlett pears, by packing them in bran. We have tried it and find that there is nothing in the treatment. We lost quite a few Bartletts—all in-

side of two weeks, though they were carefully treated as per J. S. B.

Ontario, Canada. H. H. HURD & SONS.

THE only remedy for the cabbage worm that I have never known to fail is to set the plants out in Montana. We do not have the pest here. The valley of the Gallatin is ahead of the entire world as a farm and garden section. P. B. V.

Fridley, Montana.

PUSH AHEAD.

THE article by E. Davenport, in a late RURAL, suited me. I do not believe in waiting for better prices. Let farmers adapt themselves to circumstances and press forward. A successful farmer can be made with the same energy and push that it takes to make a man a success anywhere. I know grocerymen who complain of small profits and business overdone. They sit and smoke their pipes with their goods covered with dust, soap and starch and sugar all mixed together. When customers come in they spend the time talking about hard times instead of trying to sell goods. Another groceryman keeps his mouth shut about the hard times. He adapts himself to circumstances, makes small profits, to be sure, but sells lots of goods and makes money.

It is just the same way with farmers. One man thinks he can't afford to buy manure. He hires a man to cultivate 50 acres to produce a crop that would have grown on 10 acres with proper manuring. His tools make a loss of 25 per cent. in time. His horses are poor. He has to club them hard to get half a day's work in 16 hours. He expects a whip to take the place of oats. His cows are half wintered because hay is high. He can't afford to build fences, so his cattle break into the crops. He keeps scrub cattle. These make a scrub man out of him. With his scrub mind he can't see that fine cattle cost no more to raise, and sell for four times as much.

The other farmer knows the times are all right if he can only make his farm produce the largest crops with the smallest amount of labor. He buys the best tools, hires the best men, looks after them and sees that the work is well done. If he does not have manure enough, he buys the best standard fertilizer. He keeps the best cattle and horses, and starves himself rather than starve them. He spends his evenings at home reading an agricultural paper, and not in the store talking up hard times and village gossip. He studies about fruit culture and selects the best varieties, and plants plenty. He doesn't patronize some wandering tree peddler, but he buys of some reliable nurserymen. He has a good home, and he makes money.

Is the contrast overdrawn? Not a bit. Success means energy, courage, head work and perseverance; and failure means little but work in the wrong direction. It is time to stop growling about hard times. Wake up! Put energy and push into your farming and make every crop and every head of cattle pay you. If it does not, see that it is not your fault. Read agricultural papers and get the experience of others. Don't hold the cent so near your eyes that you can't see the dollar beyond it. Too many farmers make themselves near-sighted in this way. It is folly to fish with a bare hook because bait is scarce and high. Wake up, farmers, and see if you can't get better crops. EMMONS POND.

Greene Co., N. Y.

Indust'l Societies.

AMERICAN HORTICULTURAL SOCIETY AT CLEVELAND.

(RURAL SPECIAL REPORT CONTINUED.)

Small fruits in New England; cost of raising; fertilizers for; packing and marketing; little profit the rule; best varieties; currants, blackberries; Lucretia Dewberry; grapes, strawberries in Ohio; Newaan and Triumph for the South; the Bubach; shipping long distances; the Jewell; Jessie, Parry; ravages of the Tarnished Plant-bug.

THE closing paper of the second afternoon session was by J. H. Hale, on "Small Fruits in New England." Everybody expected a practical and instructive paper, and such it was. It was read distinctly by the enterprising editor, Myrick, Mr. Hale being kept at home by illness. "I think," said he, "that we in New England are producing and eating more fruit than the people of any other section of our country. A ten-acre field would be a big plantation with us. It costs us $150 an acre to raise strawberries. As a fertilizer we use ground bone and muriate of potash; $35 worth of bone and $15 of the potash per acre, using no stable manure. Raspberries, gooseberries and currants cost us about $75 an acre to grow. Currants are now sadly neglected; not over 100 acres are grown for market in New England. Our raspberries grow in hedgerows 3½ feet apart. Blackberries are not largely raised, yet the product of one acre last year paid the owner for 560 bushels of corn. We market strawberries in American square quart baskets, packed in good, returnable crates, having racks which allow for heaping up our baskets with fine, large fruit. These, with the new, white poplar baskets, sell for two or three cents more a quart than if packed in the small, rough crates used in the West. We sell from our own wagons to consumers and retailers, thus securing better prices, and yet none of us is getting rich. Some make a living, others lose money. We hear much of the one successful grower who raises 6,000 to 8,000 quarts of strawberries per acre, which he sells for 15 or 20 cents a quart; but the ninety and nine just men who get only a thousand quarts and sell at five to eight cents, we never hear from at all. And yet I advise those already in the fruit business to hold on; cultivate better, grow fewer acres, get better profits. To beginners I would say: "Don't begin." As to varieties, that's a 'local issue,' and the less said about it the better, unless we want to demoralize the business. Half of all the strawberries grown in the East are Crescent, the balance are Miner's, Downing, Sharpless, Windsor, etc. The leading raspberries for home and market are Cuthbert for red and Souhegan for black.

The Cherry Currant is largely grown, but Victoria is larger, ripens later, and sells for better prices. Snyder and Wachusett blackberries for market, for the home we add Kittatinny. The Jewell, Belmont and Bubach Strawberries, and the Enrhart and Carman Raspberries are promising new sorts. The Lucretia Dewberry is very early, doing well. Worden, Moore's Early, and Concord are our most profitable market grapes. Worden grows in favor each year. For family use all but the very late-ripening varieties can be and are grown to perfection by amateur growers in the cities and towns. We are making great progress in the cultivation of our tastes. To me there is no home without a fruit garden, and yet many a family never knows what a home with a fruit garden is, and for these people we should labor as a society." At the conclusion of the reading of Mr. Hale's paper, President Earle said: "One of the clearest, sharpest and most admirable papers ever presented; and by one of our clearest and sharpest of men." A long strawberry discussion then ensued, two or three members often talking at once.

Mr. Albaugh spoke most enthusiastically of the large and successful strawberry interest at Barnesville, Ohio. Said he, "I was there at their show in June last. Sharpless is the leading sort, 100 bushels of it are grown to ten of all others; the hill system of culture is used; rows planted parallel with the hill; runners cut persistently. An effort is made never to ship a bad berry from the place, also to get *just as big berries in the bottom as at the top of the basket.* They had shipped a tram-load of 1,200 bushels the day before my visit; one man had just picked 190 bushels."

Mr. Ohmer: "To gather these 1,200 bushels in one day everybody picks; the schools are adjourned in that season; even the first ladies of the place pick, and sometimes earn as high as $2 per day. Cumberland Triumph is raised second to Sharpless. From 100 to 140 bushels per acre is the average product." Dr. McKay, of Miss., conceded the palm to Barnesville. "Wilsons do not grow well of late in the South. We get more from Neuman than from any other kind; can ship them to New York or San Francisco. We now ship north and west and get better prices than in the New Orleans market. The finest of all berries we have grown in the South, however, is Cumberland Triumph. Nothing equal to it; ten days later than Wilson. I grow 40 varieties." Mr. Caywood: "What about the Bubach, which originated in Northern Illinois?" Mr. Miller: "I think well of it. Very promising, indeed. The fruit is uniform in size; it pleases me very much." Mr. Ford: "Fair grower; nothing more hardy; a little fruit this year."

President Earle, speaking of the transportation question, said: "The conditions in the East and in Miss. are very different; the market is near at hand in the first case and very distant in the second. We cannot return packages in the West and South, and must have cheap gift packages. I never found a berry so tender or so delicate that I could not ship it a long distance. Some sorts will color after being picked, others never do. There is no trouble to ship 600 or 1,000 miles, but of course it must be in refrigerator cars. Our crates and boxes in the West cost about two-thirds of a cent per quart, and are very satisfactory to us. As to variety with us, at Cobden we raise three quarts of Crescent to one of all others. Sharpless has serious faults as well as virtues in the West. The blossom is tender to frost, the berry will not ripen at the tip, and will not ripen after picking. Of course, we fertilize the Crescent with some perfect-flowering sort."

Prof. Green, Ohio: "We have a number of the newer sorts under trial at the Experiment Station. As to Jewell, there is nothing particular against it, except as to flavor. It is a promising market sort; don't know that the plant is very vigorous. Jessie seems one of the most promising new sorts we have. Plants very vigorous, berries large—productive. May King is promising, large as Crescent, a little larger, perhaps. Same season. Don't know what to say about Parry. I thought well of it last year, not quite so well this; plant lacks vigor. Bubach is perhaps the best of the newer kinds; berries grow as large as the picture."

Mr. Smith: "Regarding the Jessie, Mr. Louden's Seedling, the Wisconsin State Society visited it on the originator's grounds last season and were very enthusiastic in its praise. The berries lay upon the ground in heaps. They were fair in shape, of good color, averaging very large; one measured nine inches, quarts would measure from six to seven; flavor very fine. If it does as well after dissemination, it will be a great acquisition surely." Mr. Crawford, spoke very highly of it: "It is the only sort ever sent me that did well two years in succession; good quality, ripens all over at once." Mr. Miller: "Mr. Louden wrote me that his six acres of the Jessie, in spite of the great drought, had yielded over 200 bushels per acre." Mr. Smith: "I have no doubt of it from what I saw when I was there."

President Earle spoke earnestly of the serious ravages of the Tarnished Plant-Bug, asking for information and a remedy. "I don't know whether we are going to get any strawberries at all in the West if this insect keeps up its depredations. In Illinois we know nothing about exterminating it. When you see berries imperfect and seedy at the end, you may be sure this bug has been at work there, sucking the juice from the young, green berries. It has caused half-a-million dollars' worth of damage in one season in a few counties in Illinois." H. H.

NEW YORK STATE FAIR.

FORTY-SIXTH ANNUAL EXHIBITION.

(RURAL SPECIAL REPORT, CONTINUED.)

Seed and vegetable displays poor; Experiment Station's exhibit good; an average display of cheese boxes; a hodge podge; give the the home and ladies a chance; a fine exhibit of fruit, especially by Ellwanger & Barry; new Chinese pears; a "family competition"; fine display of grapes, especially of Niagaras; best five grapes; Marvin's seedlings; splendid Concords; good floral displays; a wet-blanketed fair; beer guzzling sanctioned.

IN the hall devoted to farm produce and dairy products the show was not worthy of this great State. In grain and seeds five barrels of beans, three of corn, nine of peas, 11 of white and two of red winter wheat, 16 of rye, 12 of white oats, three of black oats and eight of barley with six bushels of buckwheat, two of flaxseed and three of timothy seed covered the exhibit. Mr. M. F. Pierson, of Seneca Castle, showed 360 varieties of potatoes, 100 plates of which showed the product of single eyes. Of course he got first premium. He also displayed on plates 100 varieties of beans, showing nearly every sort grown.

The vegetables were in small collections, and aside from the show of the Experiment Station, not worthy of especial mention.

The New York Experiment Station made a large show, consisting in part of 70 or more varieties of oats in the straw, 75 varieties of cabbage, embracing all grades of wrinkled, curled and ribbed, and all shades of color from green to red: also a new variety of tomato of their own originating. This is very dwarf and very productive and is very promising, indeed, especially for forcing.

The collection of cheese and butter was as large and the quality fully as good as that at any fair for many years. I think a reform is needed in the way of showing cheese. A collection of ordinary boxes, of which only the outside can be seen, while no one can more than guess whether they are full or empty, is not a very attractive sight and cannot be expected to collect and hold a crowd or afford any instruction. Maj. H. E. Alvord showed a collection of fancy and foreign styles of cheese, which caught every one's attention (by the nose) and called forth much comment. They were put up in tinfoil and, though smelling as rank as "Othello's offence," are said to be very palatable and are finding a ready market.

In the halls usually devoted to domestic manufacturers and ladies' goods there was a perfect hodge-podge, among which I noticed six or eight boats, a man hawking some sort of washing compound, three or four salt exhibits and half a dozen men advertising some trinket. If the society ever made a bad mistake it was in sitting down so heavily on this part of the show as to obliterate it. The officers of the society should lose no time in heeding the universal protest, not only of the ladies in attendance, but of their friends (and this means everybody) in reviving this very popular department, or they may find that in sitting down on this they sat down on a pin. Clearly the best good of the society will be subserved by heeding the popular wish.

When we take into the account the almost total failure of fruit in the Western portion of the State, the fruit garden of New York if not of America, the show of fruit in Floral Hall is certainly to be commended. Some 240 feet of tables were filled with about 900 plates, of which 225 were of pears, 220 of grapes, 200 of apples, 50 of plums and a dozen of quinces. As usual Ellwanger & Barry made the bulk of of the display, showing 145 plates of pears, 46 of plums and 41 of grapes. Besides these, Mr. Barry, from his private grounds shows 13 plates of pears and 20 of hothouse grapes. No firm in this country are doing so much to create a taste for fine fruit and to educate the people as to correct names and perfection of samples, as their varieties are always correctly named and the samples perfect. In their collection of pears were the new Chinese pears Mikado and Damio. Both of these are very beautiful, especially the former. It is medium-sized, round, light-yellow, thickly studded with bright black dots, which makes it perfect, and it is a great pity that so handsome a fruit should be good for nothing else. They also showed the prettiest plate of Seckels I ever saw, so perfect in every way and so highly colored that one cannot blame the small boy who wished to appropriate them to his own use.

In their collection of plums I noticed fine specimens of the new Chickasaws, Newman and Columbia. The last could easily be mistaken for an over-grown cranberry, and one would hardly be decided did he taste it. In the contest for single plates of pears, Mr. Barry showed five in competition with his firm, and captured four of the five first prizes. An amusing incident occurred in judging the plates of Angouleme; they were so nearly alike that it was doubtful which would get the first prize, until one of the judges discovered the slightest bit of a worm-hole in the calyx of one specimen of the firm's exhibit, and gave the first premium to Mr. Barry—as they said in their report—by a single worm hole."

The show of grapes was very fine, particularly that made by the Niagara White Grape Company, of Lockport, they having pounds and pounds on the tables, of which they gave freely to every one. To show how popular this grape has already become and how fully the RURAL'S estimate of it has been realized, let me say that in every collection competing for the prizes, whether of 20, 10 or five varieties, the Niagara was placed at the front.

Ellwanger & Barry's choice of the five best grapes was, Ionia, Rochester, Niagara, Gaertner, and Barry. B. W. Clark, of Lockport, selected Agawam, Duchess, Niagara, Ionia, and Eumelan. Palmer Worden, of Central New York, chose as best five, Concord, Duchess, Niagara, Iona, and Brighton. H. M. Jacques, of Western New York, showed Concord, Delaware, Niagara, Wilder, and Agawam.

D. S. Marvin showed a large lot of new seedling grapes, many of which were not as yet named. Among others, I noticed Rutland, Centennial, Cayuga, and Rural New-Yorker. Rutland has a medium-sized cluster; compact, black berries, one-half inch; meaty, and of good flavor. I should judge it is quite early. Skin is thin, but tough. Centennial has a cluster and berry much the size of Prentiss; usually a little shouldered, of a pinkish-green color; skin tough, quality good; a little pulpy, but not tough; free from foxiness, and of a vinous flavor. Cayuga is a black grape; clusters long, not shouldered; berries as large as Concord, and a fine black, covered with a nice bloom. This grape in character and quality is so much like Adirondac as to be its brother. I hope in growth and foliage it may prove more reliable than that. The Rural New-Yorker is a black grape, with long, large clusters, always much shouldered, so much so as to be branched in many cases; berries about three-quarters of an inch in diameter, jet black, with a heavy bloom; in quality much like the Clinton, though perhaps not quite so sour. I should say it is quite early, and a good wine grape. Mr. Marvin is certainly deserving of much credit for the long and earnest labor he has devoted to the improvement of the grape. I certainly wish him success.

In the contest for single plates of Concords four of the best plates of that variety I have ever seen were shown. The judges were able to make the award only by the use of scales

and there was a difference of less than two ounces in the four plates, and either weighed over five pounds. When we realize that one came from the Hudson River, one from Western New York, one from Onondaga County and one from Schuyler County, it must be conceded that if our people do not grow all the Concords they can use, the fault is their own. I cannot omit to mention a plate each of Tompkins County King, and Twenty Ounce Apples, shown by Monroe Dunham, of Bennettsburg. They were as good as I ever saw, and none could be better.

In ornamental and hot-house plants the show was very creditable. The center of the tent was filled by two fine displays—one by the professional florist, Wm. Matthews, consisted of a great variety of plants, including some very fine orchids in bloom. The other was from the private collection of Charles H. Schiller, and in it was the variegated pine-apple in fruit; also the pitcher plant—Nepenthes—and many orchids in full bloom. The amateur show of cut flowers was very large and attracted much attention, but as is usual, was completely overshadowed by the collection of our friends, the Vicks. Theirs filled over 70 feet of table room, and comprised 75 varieties of gladioli, 150 varieties of named dahlias, 40 of phlox, and 60 of verbenas—the whole so arranged as to give every shade and mixture of color, and it was very attractive and instructive. They richly deserve what we wish them—success. I must not fail to mention a collection of seedling gladioli shown by the RURAL'S correspondent, E. P. Powell, of Clinton, N. Y. They are certainly promising.

There never has been a worse time for State fairs than this, as it has rained every night and four out of the six exhibition days. There is only one place more disagreeable in a rain storm than a fair ground, and that is in the woods fishing. It has rained so much and constantly that mud is everywhere. In some places it has got so deep that it is with difficulty that forage can be distributed to the stock. The only criticism, aside from shutting off some departments that should have been allowed, has been in selling lager beer upon the grounds. While I have seen only a single drunken man at the fair, I have seen many country boys enticed to the beer stands because of the added respectability given by the Society in allowing them upon the grounds. I devoutly hope that next year the decent element may be strong enough to obliterate even this last objectionable feature. Surely the New York State Society is too influential to lend its influence for evil.

J. S. WOODWARD.

SUFFOLK COUNTY, LONG ISLAND.

FAIR AT RIVERHEAD.

(RURAL SPECIAL REPORT.)

SUFFOLK County is the oldest, and agriculturally considered, one of the best in the State. Situated at the eastern extremity of Long Island, it has the choice of markets in two directions—Boston and other New England cities and New York. The raising of strawberries for the New England markets has heretofore been very profitable; but this year the crop was so plentiful as to reduce the price below the cost of transportation; the result was the partial loss of a fine crop. The county is noted for its cabbage and cabbage seed, cauliflowers and potatoes. It has also been the home of some of the most famous horses this country has produced, and within its boundaries are many first-class stock farms. As might be expected, the annual fair of such a section—somewhat isolated as it is, being bounded on three sides by water—is a notable event and largely patronized. The exhibits and patronage are chiefly local, and the people seem to come together as to a family reunion. The fair on the whole is an ideal county fair, largely local in its character, comparatively free from the excitement of horse racing and sideshows of questionable character, and devoted to the interests of the residents of the county.

The exhibition of cattle was not large, but for quality would compare favorably with any fair in the State. David Carll, of the Dix Hill Stock Farm, was one of the largest exhibitors. One building was devoted to a fine exhibit of poultry. Wyandottes and Plymouth Rocks were the chief attractions, but almost all the leading breeds were represented. The show of sheep was very fair, considering the fact that Long Island has not been noted of late for sheep raising. As might be expected, the fair excelled in the exhibition of vegetables. Mr. J. W. Smith, of Peconic, exhibited an unusual variety of beets, the result of his own selection. The largest pumpkin was raised by Mr. B. F. M. Treary, and weighed 158 pounds. The largest watermelon (an Iron-Clad) was shown by A. R. Norton; weight 49 pounds. A new tomato, the "Tycoon," attracted much attention both on account of its uniform size and shape and its beauty. It originated with Messrs. Reed & Funrell, of Huntington, and will be controlled by Messrs. Hallock, Son & Thorpe. Its chief merit is said to be its remarkable earliness, which, combined with its solidity and firmness, uniformity of size, and smoothness and beauty, should make it a desirable acquisition.

Peanut culture in Suffolk Co. has been encouraged by Mr. Austin Corbin of the L. I. R. R., and there was a considerable display of the goobers. They were of large size and excellent quality; but their culture so far has not been a success. "G."

WESTCHESTER COUNTY, N. Y., FAIR NOTES.

(RURAL SPECIAL REPORT.)

THE first annual fair of the Society of Agriculture and Horticulture of Westchester County was held on the Old Fair Grounds near White Plains from the 27th of Sept., to Oct. 2nd. The attendance was very large and it is probable that the managers will be so far encouraged as to make some needed improvements.

The cattle exhibit was very fine, Holsteins leading, closely followed by the Jerseys. An enormous steer variously estimated from 2,500 to 3,000 pounds, attracted much attention. The poultry show was very few in number and poor in quality. The implement department was rather slim, the chief exhibit being made by Mr. H. B. Grifling, of New York.

A novelty in shovels and spades was exhibited by the Calef M'f'g Co. These are made with pointed teeth corrugated and tempered; and it is claimed that they work very much more easily than the ordinary smooth-edged spade or shovel.

The best parts of the grounds were given over to the fakirs, and judging from the crowds which surrounded them, they were the chief attraction.

We hope the managers will re-arrange the grounds, assigning the side-shows to a less conspicuous place, and set out a few good shade trees. We should also like to see more attention paid to poultry, sheep and other forms of exhibit of interest and value to farmers, and less to horse racing.

There is no reason why Westchester, one of the richest counties in the State, should not have a first-class fair, and it would have, if the farmers would take the matter in hand and compel the managers to recognize their rights. J. H. G.

BAY STATE AGRICULTURAL FAIR BOSTON.

(RURAL SPECIAL REPORT.)

First fair of a new society: very fine cattle show; other live stock exhibits fair; moderate fruit and vegetable displays; implements in abundance; no objectionable features.

THE first cattle show and fair of the Bay State Agricultural Society was held in the building of the Charitable Mechanics' Association, Boston, on October 5, 6, 7 and 8. It was perhaps the most successful cattle and poultry show ever held in New England. The exhibition was entirely under cover, and the show ring was small so that the stock could not be exhibited to the best advantage. The cattle were in charge of Mr. E. E. Bowditch, and some idea of the magnitude of this portion of the exhibition may be formed from the fact that of the 650 stalls only a few were vacant. The beef breeds were represented by some fine specimens of Herefords and Short-horns. There were very few of the polled varieties, which are coming into favor in the North and West. The milch and butter breeds were perhaps never so largely represented at any former New England fair, the Holsteins from Houghton Farm alone filling one row of stalls. The Jerseys came next and attracted even greater attention. Unfortunately they were somewhat scattered, owing to the limited area of the basement in which the cattle were kept. Guernseys, Ayrshires, Devons, Swiss and other breeds were also exhibited.

The horse department, in charge of Wesley P. Balch of Boston, included all the leading breeds. Some fine blooded stock from Kentucky were shown, also some imported Arabian horses. The large number of sheep exhibited indicated a revival of the sheep industry in New England. The swine exhibit was good. The show of poultry was excellent. Although the fair was at a season when poultry do not show to good advantage, yet the specimens were of remarkable excellence.

The embellishment of the main hall with a grand floral display of rare and beautiful flowers and plants contributed from the private gardens about Boston, was a feature of the exhibition which managers of other fairs would do well to make a note of. The show of vegetables and fruits although fairly good, did not equal the other departments for merit or variety, with the exception of the display of pears and apples. The special prize of $50 for the best collection of apples offered by the club of which Marshall P. Wilder is President, doubtless had much to do with the fine exhibit of this fruit.

The best space in the implement department was unfortunately occupied by two or three of the leading local dealers. The exhibit, however, was the finest and most complete I have ever seen. A fine showing was made by the Belcher & Taylor Co., of Chicopee Falls, and by the Ames Plow Co., Jos. Breck & Son, and the other implement houses of Boston. The dairy apparatus department was unusually complete. The Vermont Farm Machine Co., and Porter Blanchard's Sons, and others made a large exhibit of apparatus aside from the dairy. The "Working Dairy" in charge of Maj. Henry E. Alvord, was a feature of the exhibition. The Davis swing and the Blanchard dash churns and various other dairy appliances were in operation during the fair, and this department attracted more attention than any other.

Among the novelties shown in the implement line was the Cheney Lawn Mower, modeled somewhat after the Eureka Mower, the knives being directly in front of the wheels. O. N. Robertson exhibited a chain-hanging cattle stanchion, which combined simplicity of construction, ease of operation, and efficiency. The show of mowing machines was large, including the Warrior, Buckeye, Bradley and other leading machines

One of the latest perfected road machines of the American Road Machine Co., of Kennett Square, Pa., attracted much attention.

The Domestic Manufactures Department included all kinds of domestic and fancy articles. One of the best features of the whole exhibit was the absence of games of chance and drinking, and to a certain extent, of smoking also. There were no fakirs or sideshows of any kind. The managers relied exclusively on the merit and educational value of the exhibit to draw visitors, and the fact that they were so largely successful, makes us hope for better things of agricultural fairs and cattle shows o fthe future. G. G.

FAIR NOTES.

THE KANSAS CITY FAT STOCK SHOW, Oct. 23—30, promises well. Prof. Sanborn well says that such shows are for money spending rather than for money making. The money is made too. Every one of these exhibitions encourages a love for better stock. Those who attend may see for themselves the vast difference between scrub and blooded stock, and all who read of the awards are encouraged to weed out the scrubs. Special premiums are offered for sheep. The sheep business is looking up, and steps are to be taken to encourage it by all reasonable means. Sheep produce more gain for 100 pounds of food than do cattle. Lamb growth is made almost entirely on summer feed, which costs only one-fourth of winter feed. Wool is now improving in price. There is every encouragement for shepherds. They should study the various breeds, and see which is best adapted to their own location and needs. Whenever there is a good exhibition of sheep within easy reach, it is the duty of the good shepherd to visit it.

THE meeting of Northern settlers at Raleigh N. C., Oct. 25—29, promises to be a success. Western North Carolina and Eastern Tennessee are in many respects the best sections of the South for Northern settlers. Those already there will make a splendid exhibit. The enterprise is an admirable one.

AN important Bee Keepers' Convention will be held at Indianapolis Ind., Oct. 12—16. Delegates from the North American Bee-Keepers' Association, the North Western Association, the Indiana Association and several other smaller associations will be present.

THE catalogue of the Geneva, N. Y., Fair contained 40 pages of advertisements. Too much. The matter relating to the fair was crowded into a very small space. Only a small portion of the premium money—$150—was offered for racing. One race for horses used in the grocers' and butchers' businesses was advertised. Special premiums were offered for the heaviest baby, the best-looking baby, for a married couple and for essays and fancy work by children. We were sorry to see a keg of beer offered for the best draft stallion and a gallon of whisky for the best three-year-old Holstein cow. Honest animals will be ashamed of themselves at winning such prizes.

THE Thirteenth Annual Convention of the Butter, Cheese and Egg Association will be held at Chicago, on November 10, 11 and 12. This is an association composed chiefly of dealers; but its "procedings" are generally quite spirited and the mass of statistical information it gives to the public each year is very instructive.

Implements, etc.

NEW IMPLEMENTS.

A MACHINE has been invented by which it is proposed to lift weights by means of a pendulum attachment. A large drum is fitted with a rope to which the weight to be lifted is attached. The pendulum is a heavy weight attached to a stiff bar. It is fitted with a tooth-like arrangement at the top, which fits into holes on a collar fitted to the shaft upon which the drum hangs. The motion of the pendulum slowly turns the drum and the rope is wound up. The motion must be very slow indeed. We do not see why a man with an ordinary windlass could not raise a greater weight in a shorter time than can be done with such a machine.

A NEW churn has been invented. By means of cog wheels and a pitman, the motion is communicated to the dasher so that the operator can stand erect and simply pull a lever back and forth. It does away with the lifting and pushing of the old dash churn, or the grinding of the swing churn. We should judge that more power would be necessary to work it, though the more comfortable position allowed may compensate for extra work.

MAYFIELD'S fruit picker is a patented device for packing fruit from the ground. A long pole is furnished at the end with a sharp-edged bow from which a canvas tube runs to a bag on the ground. The fruit, cut off by the sharp edge, is expected to run down the tube and drop into the bag. We see no reason for making four motions to secure an apple when, by means of a good ladder and basket, it could be secured by two.

Dairy Husbandry.

THE QUEEN OF THE DAIRY.

WHEN Echo, the wonderful Holstein cow, made a record of 23,775 pounds eight ounces of milk in one year, it was thought that the limit of milk production had about been reached. But now even this wonderful record has been beaten. The Holstein-Friesian cow Clothilde has just closed a year's test, giving 26,021 pounds two ounces of milk in a year. This easily singles her out as the most wonderful cow in the world—over 13 tons of milk in a year. Clothilde is a member of the Lakeside herd of Messrs. Smith, Powell and Lamb, Syracuse, N. Y. She was selected by a member of the firm in North Holland as an unusually fine specimen of the breed, and imported in October, 1880. She dropped her first calf January 24, 1881, when but 23 months old, and gave that year 8,964 pounds two ounces in 11¾ months. As a three-year-old she gave 15,622 pounds two ounces, and as a four-year-old 17,930 pounds three ounces, far surpassing the previous records in both instances. She is described as a cow of unusual vigor, constitution and substance, with remarkable digestive organs, a capacious chest, very large barrel, and has the broadest and straightest back and hips ever seen on a Holstein-Friesian cow. Her head is long and clean, her neck is lengthy, clean-cut and fine, her coat soft and silky, skin mellow, her veins and udder large and well developed. Her last calf was dropped August 17, 1885. The following table tells the story of her test:

	LBS.	OZ.
August 18, 1885, to September, 17, 1885, inclusive	2382	4
September 18, 1885, to October 17, 1885, inclusive	2311	6
October 18, 1885, to November 17, 1885, inclusive	2218	11
November 18, 1885, to December 17, 1885, inclusive	2091	8
December 18, 1885, to January 17, 1886, inclusive	2238	7
January 18, 1885, to February 17, 1886, inclusive	2237	7
February 18, 1886, to March 17, 1886, inclusive	1967	4
March 18, 1886, to April 17, 1886, inclusive	2110	1
April 18, 1886, to May 17, 1886, inclusive	2195	15
May 18, 1886 to June 17, 1886, inclusive	2222	3
June 18, 1886, to July 17, 1886, inclusive	2080	5
July 18, 1886, to August 17, 1886, inclusive	2045	11
Total	26,021	2

Average per day for the whole year, 71 pounds 4¾ ounces.

Highest day's yield, 88 pounds four ounces on her second month in milk.

Smallest day's yield, 57 pounds 14 ounces on the third day in milk.

The next lowest day, 58 pounds 12 ounces, on the fourth day before the close of the year.

AVERAGE YIELD PER DAY FOR EACH MONTH.

1st Month,	74	pounds	4	ounces.
2d	"	77	"	
3d	"	71	"	9 "
4th	"	69	"	11 "
5th	"	72	"	3 "
6th	"	72	"	2 "
7th	"	70	"	4 "
8th	"	68	"	1 "
9th	"	73	"	3 "
10th	"	71	"	10 "
11th	"	69	"	5 "
12th	"	65	"	15 "

There appears to be no reason to doubt the accuracy of this test. Affidavits are made by E. A. Powell, H. H. Gibbs, (who milked the cow), S. Burchard, S. Hoxie, Cecil Palmer, Prof. I. P. Roberts and Gideon C. Ferris, which fully cover every period of the test.

Maj. H. E. Alvord furnishes a statement showing that he is fully convinced as to the accuracy and honesty of the test. Maj. Alvord, it must be remembered, is the official tester of the A. J. C. C.

The grain feed given during the test was composed of wheat bran and oatmeal, half and half by weight, which weighed twenty-four pounds to the bushel. From the date of commencing her record until green feed was gone in October her average daily feed was 12 pounds (16 quarts) of this mixture, with pasture and green corn when put in stable to milk. During the Winter she was fed an average of 18 pounds (24 quarts) per day of this feed, the amount varying at times according to her appetite and condition, with what corn silage and dry hay she would eat, and four to six quarts of carrots per day. After soiling crops were ready for feeding in the Spring, her grain feed was gradually reduced to 12 pounds per day, with green rye, green oats and green clover for soiling, with pasture of clover and timothy. During the months of June and July, during the flush of green feed, she ate very little grain, not over six pounds per day. She had no other kind of grain or feed and no liquid of any kind but water, which she was given as often as she would drink.

Messrs. Smith, Powell and Lamb will publish a full account of the test in a neat pamphlet which will be well worth reading.

The Herdsman.

OUR ANIMAL PORTRAITS.

JERSEY HEIFER, GOLDEN SKIN 2d.

Long before Jersey cattle became notable for the richness of their milk and the high quality and abundance of their butter, they were favorites in the great parks attached to the lordly country houses of England's proud nobility and gentry. They were kept more for ornament than for utility. Color and form were more highly prized than udder and escutcheon: fancy points were more esteemed than genuine merit. Instead of the lean, scraggy condition characteristic of the deep-milking dairy Jersey, the ornamental Jerseys were always sleek, well-rounded and remarkable for their handsome, thoroughbred appearance. They corresponded well with the deer that clustered under the umbrageous trees or wandered through the deep grasses of the lordly demesnes. There are in England thousands of Jerseys whose easy lives are thus spent for ornamental purposes to-day. And are they not splendidly adapted for it? Just look at the heifer Golden Skin 2d, shown at Fig. 391. What a graceful, beautiful creature! What a charming adjunct must a herd of such deer-like beauties be in a vast ancestral park lavishly laid out by successive generations with all the art that improves nature!

Golden Skin 2d is Island-bred, having been bred by Mr. F. Le Brocq, St. Owens, Jersey. She is whole-colored, and was calved June 2, 1884. She won several first prizes on the Island before she was imported into England where she has been a frequent prize-winner, her latest triumphs having been the capture of the first prize at the Royal Show at Norwich, and the Bath and West of England, and Royal Counties' Shows in 1886.

CENTRAL-WEST STOCK NOTES.

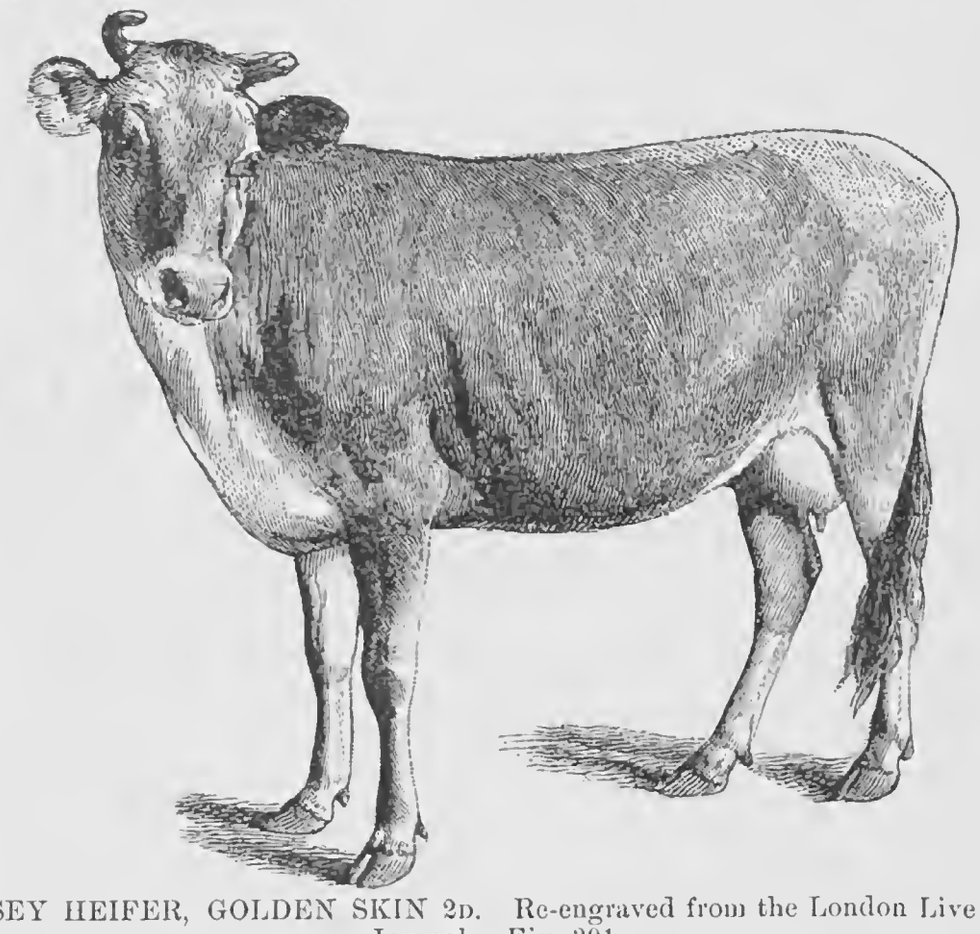
PROF. G. E. MORROW.

It now seems certain we have an outbreak of contagious pleuro-pneumonia in and near Chicago. The official and consulting veterinarians of high repute are reported unanimous in this decision, and I accept their decision as final. The fact that several thousand head of cattle have been exposed to the disease in the distillery feeding stables in which it has been found, makes the task of the State Live Stock Commission one of very serious nature. It is understood they have decided to have all the exposed cattle slaughtered. As yet the full history of the outbreak, or the full extent of possible exposure, has not been determined. It is much to be hoped the authorities, veterinary and civil, will not be embarrassed in their work by much renewal of the kind of criticism indulged in two years since.

In a number of Western States "hog-cholera" is prevailing to a serious degree. In some cases farmers in the great corn and hog raising regions have grown accustomed to outbreaks of this disease, and little may be said about it even when there is large loss. In other cases sensational reports are published, in which the loss is greatly magnified. Within a few days past Dr. Smith, of the Bureau of Animal Industry of Washington, Dr. McIntosh, our University Veterinarian, and the writer have visited the vicinity of Sadorus, in Champaign County, Ill., where much loss has occurred during the last three or four months. There is much variation in the symptoms as found in different herds. In some the pigs frequently die within a few hours after the first appearance of ill health; in others they last for several weeks before dying—in some cases recovering. In some cases the lungs are much affected; sometimes the spleen is also. In other cases the appearance of injury is mainly confined to ulcerations in the intestines. These have been counted by many as the one most characteristic symptom of the disease. While some still deny the contagious or infectious character of the disease, the evidence that it is readily communicated seems conclusive. Nor will it do to charge careless or bad management to all who suffer loss.

Recent rains over much of the Central West have done much to refresh the pastures and to encourage farmers. The low prices for "stockers" and "feeders" in the Chicago and other live stock markets, show that farmers are not usually anxious to supply themselves with cattle for future feeding. There seems little probability of any considerable advance in the price of beef cattle during the Autumn, and almost certain that very large numbers of only partially fattened cattle will be thrown on the markets; not only from the ranches in the far West, but from many farms where the drought has decreased the supply of food.

Notwithstanding the low prices, we are, on the University farm, feeding rather more than the usual number of steers for sale some time in November. We have not yet found any more economical mode of beef-making—or a more profitable mode—than to graze good two-year-old steers during the Spring and Summer without grain, if the pastures continue good, commencing feeding the new crop of corn from the middle to the last of August, and continuing this not more than 90 to 100 days. This is fed "in the ear," hogs "following" the cattle and receiving nearly all the undigested grain.



JERSEY HEIFER, GOLDEN SKIN 2d. Re-engraved from the London Live Stock Journal. Fig. 391.

It is noteworthy and encouraging that with a full recognition of lowered prices for pure-bred as well as common and grade stock, the leading fairs of the West have probably never had larger or better displays of live stock than have been found this year. I hope and believe this may be true of the Fat Stock, Horse and Dairy Show, to be held in Chicago in November next. It has seemed clear to me that this exhibition has done more for the live stock interests of the country than any other one show or fair. Certainly it has been of greater interest and profit to me than any other I have attended. There has been criticism on the management for expanding its field, but I do not see that these are well founded. I especially hope the Dairy Show may be a surprise to all in its extent and excellence. Never before would greater good have come from a show of dairy products. It has seemed to me there is a danger of over-reliance on the good effects of the oleomargarine legislation. The prizes offered are very liberal, and so distributed that it will not be possible for a very few exhibitors to secure them all.

As I have done in former years, I again promise to all Rural readers who attend this show much of pleasure and profit, and especially hope there may be many from the more Eastern States.

University, Champaign, Ill.

STOCK JOTTINGS.

COMPETITION IN WOOL BUYING.

The prices of wool have been quite satisfactory this year to the growers in Montana and the neighboring Territories. As elsewhere, the prices have gone up because the supply is unusually small in comparison with the demand; but the rise has been hastened and increased by the competition between agents and buyers for Chicago with those from Boston and Philadelphia. Until lately the latter had things all her own way; but during the past season the Lake City men have been running them closely. It is said that Montana wool consigned to Chicago last year netted the shippers from one to two cents more per pound than Boston and Philadelphia returned for precisely the same kind of wool; hence the consignments to the former this season threatened to be unusually heavy. To prevent this, the Eastern men, instead of confining their efforts mainly to obtaining consignments, according to the usual practice, bought quite heavily at prices that would make the wool cost them from 26 to 27 cents in Boston or Philadelphia, paying from 22 to 24 cents per pound or even more for large lots at the railroad stations. The Chicago people sought consignments chiefly, advancing 20 to 22 cents per pound for such wool as the Eastern men bought outright for from 22 to 27 cents. In selling, however, the Eastern people sell generally on 60 days' time; while the Chicagoans nearly always sell for cash. The great advantage Chicago has lies in the difference in freight. The rate on wool shipped from Fort Benton or Helena, Montana, to Chicago is $1.35 per 100 pounds; while the rate to either of the Eastern rivals is about $1.95. Over 600 woolen mills are nearer to Chicago than to either of the other cities, and it is cheaper for these to get their wool from Chicago (whence they draw the rest of their supplies) than from Boston and Philadelphia, as in the latter case the staple would have to pay freight to the market east of them and back, which, of course, is not the case when the purchases are made in Chicago. Honest competition between buyers is always a blessing to producers. The papers of all the three great wool markets have had pretty lively discussions on the subject of late.

Marine Live Stock Insurance.—Statistics show that about half the live stock exported from the United Kingdom go to Canada. A large proportion of these ultimately find their way into the United States. Either they are shipped through Canada to owners in this country or Canadian importers sell them to stock owners on this side of the line. The exports from Canada are also quite heavy, and many American cattle are shipped in bond from Canadian ports. Marine insurance companies in the Dominion have suffered some heavy losses in the live stock business, due to sharp rivalry, which reduced rates, raised commissions and led to poor inspection, so that often unsound stock was insured as sound, or inferior stock taken at high values. The companies have just formed a pool, the management of which issues a schedule of rates and provides for better inspection. The losses are now divided among the companies in relative proportion, and the expenses being greatly cut down, premiums are written unusually low. During the summer months on the "all-risk" plan, including mortality and jettison, rates were 1¼ to 1½ per cent. on cattle and three to four per cent. on sheep. September being the equinoctial month, rates were advanced to two to three per cent. on cattle and five to 5½ per cent. on sheep. Some companies retain only the mortality risk, and re-insure total loss and general average, while some shippers, in view of the small mortality, take their own risk as to mortality, and only insure against total loss and general average.

LARGE CATTLE IN ANCIENT BRITAIN.

It is generally supposed that in ancient Britain, even as late as the Roman times, there were only small domestic cattle of the type of the Scotch Highlanders and old Welsh sort—of the strain of Bos longifrons—and that the large cattle, to which the Chillingham herd belongs—the Bos primogenius stock—were introduced about the time of the Saxon and Danish invasions. The Urus, however, is supposed to have been the parent race. Animals of this race are described as almost equaling an elephant in size; but with the form and color of a bull. They are supposed to have been domesticated among the Swiss lake-dwellers, but then and down to historic times they abounded in the wild state through the forests of Europe. Youatt tells us that "in almost every part of the continent and in every district of England skulls, evidently belonging to cattle, have been found far exceeding in bulk any now known," and these are supposed to have belonged to that mighty race. A head found in Perthshire and now in the British Museum, measures a yard in length, while the span of the horn cores is three feet six inches. Some large bones have lately been exhumed in England which must have belonged to cattle six feet high or more at the withers, and the body must have corresponded in length, thickness and depth. Our largest Short-horns and Herefords would have seemed small beside these monsters.

Red Polls.—The more I see of Red Polled cattle the better I like them. I am a great friend of the Ayrshires, but they have horns, and as a horse does not need horns I am beginning to doubt if cattle do. E. D.

Bucy Co., Mich.

Horseman.

CARE OF THE HORSE.

I often pass men on the road who are driving horses so foul that I don't see how they can travel. It is a shame to allow horses to get into such a condition. They should have their sheaths cleaned out at least twice a year. My experience leads me to believe that many of the diseases that we doctor horses for are due to a foul sheath. I know one case where we doctored a horse for a kidney trouble, only to find that dirt had so formed at the end of the yard that he could hardly urinate. We make a regular business of cleaning our horses twice a year—once in Spring and once in the Fall. Care should be taken to see that there are no open cuts on the hand when doing so, for such will be made very sore. I find it better to put on a pair of old kid gloves. A gentle horse will not make much trouble, but it requires patience to handle a nervous animal. The hand should be thrust into the sheath until the head of the yard is felt. This can then be slowly drawn out. The scales should be picked away, and the whole well washed with warm water and Castile soap. This is the most disagreeable job connected with horses; but it is a very important one. The horse will travel better and do better in every way to pay for the operation. T. C.

Lenawee Co., Mich.

HIGH-BRED HORSES NOT SUITABLE TO WORK IN THE COLLAR.

The reason of this is that their shoulders are so slanting that their sharp points prevent the collar from setting nicely, which throws the weight of the draft of the load so much against the points as to greatly lessen the power of the horse in drawing. This is also a serious discomfort—even painful at times—and is liable to make sore shoulders. Collars, therefore, should never be put on a horse with quite slanting shoulders—but the breast band, or Dutch collar, as it is also called, should alone be used instead of the neck collar when harnessed. Horses for light vehicles and carriages should have moderately sloping shoulders; in those for heavy road wagons, city carts and trucks, a more upright shoulder is the best, as such are not wanted to trot; a square fast walk is all that is requisite.

A. B. ALLEN.

Poll Evil.—We had a horse afflicted with the poll evil. We were just at the point of taking him to the horse doctor when we read Dr. Kilborn's article on the disease in the

RURAL of March 27. We tried this treatment and cured the horse, so that we feel like recommending it to all. E. M.

Fairmount, Kans.

The Swineherd.

"ISN'T HE A BEAUTY?"

WE are somewhat inclined to the opinion that our readers will at once decide in the negative when they glance at the little porker shown at Fig. 392, page 693. There is very little "pure blood" about him. He is a decided "scrub." He is evidently pretty well able to make his wants known, for his mouth and lungs are finely developed. His head is the largest part of him. But if you all object to his personal appearance, the English laborer, who holds him up for inspection, will prove a very active minority. To him the little fellow is surely a "beauty," and no one shall ever say one word against him. The true pleasure of pig-keeping does not come to the breeder who can show his well-filled pens of shapely animals. The poor man who nails up a few boards in one corner of the garden and places his little friend therein, knows the true pleasure of pork making. "Handsome is that handsome does" applies to pigs as well as to men. The small porker in the picture will be an important member of the family. There is much depending upon him. He has taken the responsibility of providing much of the meat for the next Winter. There will be sorrow in the family when he comes to be killed. The children, especially, will feel that they have lost a good friend. The pig has been driven out of polite society. He is obliged to endure a great deal of censure—much of it unjust. He has his place in romance and poetry if people would only give him a chance. In one of Mrs. Cook's admirable stories a pig brings about a wedding. The pig jumps out of his pen and frightens the heroine of the story, a maiden lady of somewhat uncertain age. She rushes for help, and straightway the hero marches upon the scene. The pig overturns this gentleman, and stretches him upon the ground with a broken leg. The lady could not do otherwise than have her wounded knight brought into her house to be cared for. The sequel of the story is easily reached.

Pomological.

SIMON'S PLUM.—(*Prunus Simonii.*)

A LITTLE tree of this new and singular plum was received from Ellwanger & Barry, Rochester, N. Y., in October, 1884. It is now 10 feet high, with a stem 2½ inches in diameter, though it grows in the center of a bed of perennial phloxes, lilies, etc., which, during the growing season, shade the entire stem (or trunk) from the sun. The tree during the Winter may be said to occupy a northern exposure. It has never been injured in any way. It bore one plum (if plum it may be called) the past season, which was plucked August 8. The shape and appearance were more those of a good-sized crab apple than of a plum. The color was a dull, dark red, with lighter shades here and there. The suture was obscure; the skin hard. It was eaten, after sitting for its portrait, shown at Fig. 389, August 12. The

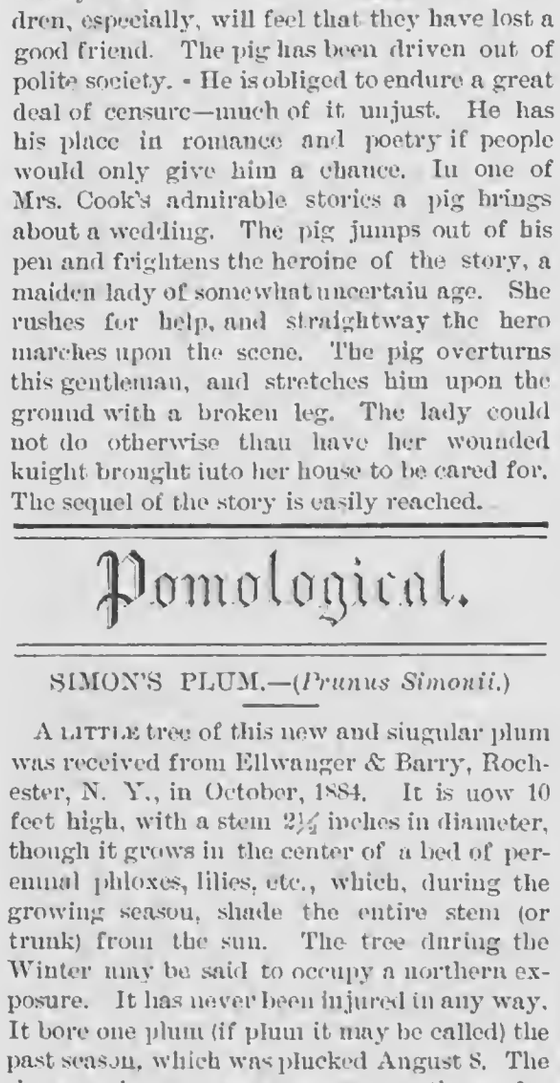


Fig. 389.

flesh, which clings to the stone somewhat, is thick and of the consistency of a firm plum, with a distinct peach-pit flavor, though by no means disagreeable. The pit is corrugated like that of the peach. The pit is shown with a half section at Fig. 390.

PRUNUS SIMONII.

PROF. J. L. BUDD.

THE RURAL says: "Tell us what you know of Prunus Simonii." I do this willingly at this time, as interested propagators are quoting, in circulars, detached sentences I have written in regard to it without putting in the qualifying words, which should go with new things yet under trial.

I first met with it in bearing in the Valley of the Moselle, in Eastern France, where it was introduced from Northwest China by Simon Louis, of Metz, through his brother-in-law, Eugene Simon, when he was French

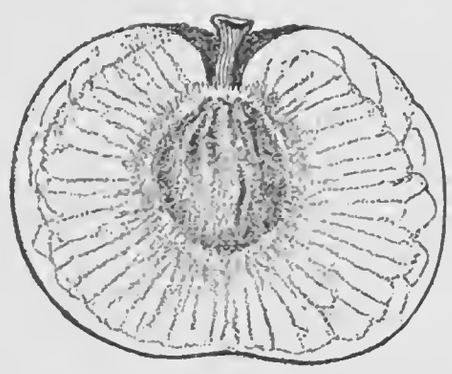


Fig. 390.

Minister at Pekin. Mr. Louis seemed to place quite a high estimate on its fruit for culinary use, especially for growing in sections where the peach failed to do well. After ascertaining that the tree endured the Summers and Winters of Iowa about as well as the Chickasaw Plums, and after tasting its peach-flavored sauce, I naturally recommended it for trial, and published Mr. Louis's estimate of its value. But this was followed by the positive assurance that it would not be apt to be worth growing in sections where the peach, nectarine, or the best apricots succeed moderately well. I said then, and believe now, that on the northern borders of the peach belt it is worthy of trial, as it comes nearer to the peach and nectarine in flavor, when cooked, than any variety of the plum I have ever met with.

Some good botanists of Europe agree with the writer in the opinion that in tree, flower, and fruit it comes nearer to the almond and peach than to the plum family, and that crosses with it of both peach and plum may bring interesting and valuable results. Aside from its possible value for fruit, I may add that it makes a neat-foliaged, pyramidal tree for the lawn or walk border.

Ames, Iowa.

FROM P. J. BERCKMANS.

I HAVE not fruited Prunus Simonii, but have a row of the trees planted in an orchard, and now two years old. The trees are of erect and compact habit, almost like Lombardy Poplars. Foliage luxuriant and bright green. The trees are of rapid growth.

Augusta, Ga.

FROM ELLWANGER & BARRY.

THE Prunus Simonii is a novelty—quite distinct in tree and fruit. It is quite as much peach as plum. Our tree is bearing, and young nursery trees have borne.

Rochester, N. Y.

Horticultural.

THE POPULAR GARDEN.

WILLIAM FALCONER.

BY this I mean a farmer's yard or small city lot, just such a garden as anybody may have, and which should be ornamental and useful. If it is very small, don't crowd it up with trees, but set out some trees along the street in front of your property, for shade. You can have vines on your fences and up the pillars of the piazza. If the garden is very small, you may need it all in culinary crops, but even then you can have lots of flowers along the edges of the pathways and around the house. If of fairly good size, have trees, shrubs, flowers and a lawn and kitchen garden. Keep your trees pretty much together in belts and clumps; or if isolated, in the vicinity of each other. Keep shrubs in the same way. Don't cut up your lawns much. Have an open, smooth piece of lawn in front of the house big enough for a croquet or play ground. Avoid many flower beds. Round, oval and oblong-square are the best forms. It is easier to cut out a flower bed in the sod than it is to fill it with handsome plants and keep it full all Summer. Never cut out flower beds in the middle of a lawn, but rather towards the outer-edge of the lawn or near the walks.

THE FENCE should be neat, strong and efficient; it may be a rail, wire or picket fence, a stone wall or anything else equally well adapted for the purpose, comely, and consistent with its surroundings and one's means. Let the gate also be neat, strong and serviceable, and always in good repair and working condition.

THE WALKS.—Don't have many. Let all you have be needed and so disposed as to be "short-cuts" to the points you wish to reach, be it the front gate, the back gate or barn. While gently curved walks are pleasant to look upon, meaningless "wiggles" are absurd. Remove an obstruction rather than "wiggle" around it.

THE SURFACE OF THE LAND should be even. Reduce the bumps, fill up the holes, and make even the puckered surface. You may retain the rolling, wavy nature of the land.

DRAINAGE. — If the land is heavy, low, springy or mucky, it will need under-draining. Also make provision for readily draining off surface moisture, which otherwise would be apt to collect into pools in Winter or after a heavy shower in Summer.

SOIL.—Make the best of whatever it may be. To begin with, subsoil it all over, but remember to keep the subsoil in the bottom and the surface soil at the top. If the soil is heavy, good drainage, a thorough breaking up and addition of sand, ashes, decayed stable manure or other light material will greatly lighten it; if light or sandy, a good addition of clay, heavy loam, muck or rotted cow manure will help it much.

SOD.—After the ground has been drained, well broken up and pulverized, firmed and smoothed, sow to grass, using clean Red Top, or Blue Grass or an equal mixture of both. Sow after the first good rain in September, or in Spring just as soon as the ground is mellow. Roll or tread the surface evenly and firmly after sowing and raking in.

ENRICHING THE LAND.—At the first preparation of the land you may incorporate into the soil all the rotted manure you want to, and mix it well with the earth; but after that, whatever is given as a dressing to lawns or nourishment to trees and shrubs let it be given as a mulching, and whatever to flowers or culinary vegetable crops let it be plowed, dug or forked into the soil, but always kept near the surface.

PLANTING TREES. — After fencing, road making and preparing the ground are completed, planting is in order. Now look to the future. Know what trees you like best, what sorts you need and why you need them, and be sure that your selection is the best that can be made for the purpose; then go ahead and plant your trees. Plant the large ones towards the outer boundary of your lot, and don't crowd them around your house or dot them all over your ground.

LANDSCAPE EFFECT.—Talking of landscape gardening in a city lot of a few rods or the farmer's ordinary garden patch seems to me to be so much twaddle. In parks and private gardens of several acres landscape effect must be considered, and in these cases landscape architects, as Olmsted, Lee or Miller, are engaged, or should be, to plan and lay out the place, and afterwards professional gardeners should be employed to take care of it. The popular garden should always be subservient to our means, convenience and taste; of course we must try to make it as pretty as we can.

KIND OF TREES.—Sugar and Norway Maples for shade; Australian Pine and White Spruce for shelter; Yellow-Wood, Red-Bud, Paul's Thorn, Silver Bell and Chinese Magnolia for beautiful blossoms; the Fern-leaved Weeping Birch and Weeping Deciduous Cypress for elegance; the Golden Oak and River's Purple Beech for color in foliage; the Fastigiate Oak and Chinese Cypress for columnar form; and the Colorado Blue Spruce, Nordman's Fir, Douglas Fir, Red Pine and dense White Pine as evergreens. But this is not a tithe of the available and desirable species.

AVOID TREES that don't thrive in your neighborhood or are much subject to insect pests. Elms are robbers of the soil; horse-chestnuts drop their leaves early; and catalpas are very messy.

SHRUBS.—Thunberg's, Van Houtte's and Fortune's Spiræas, Japan Quince, Japanese Diervilla, Persian Lilac, large-flowered and fragrant mock-oranges, deciduous azaleas, African and Chinese tamarixes, dentzias, snowballs, rose-acacias, roses of sorts, althæas chaste tree, golden hypericum and Large-flowered Panicled Hydrangea.

VINES. — Chinese Wistaria, clematises, akebia, honeysuckle, roses, Trumpet Vine Virginia Creepers, Pipe Vine, Climbing Wax-work, Silk Vine and Japanese Ivy (Ampelopsis).

HARDY PERENNIALS.—Tulips, poet's narcissus, old-fashioned daffodils, wake robin Lily-of-the-Valley, irises, lilies of all kinds, yellow and white day-lilies, Soloman's Seal, fraxinella, pæonies, Double-flowering Fern-leaved Spiræa, panicled gypsophila, Lance-leaved Coreopsis, evergreen candytuft, pentstemons, moss-pinks and late phloxes, larkspurs, double-flowering varieties of feverfew, butterfly weed, bee balm, yuccas, David's Clematis, bell-flowers, double white achillea, yellow anthemis, pink showy sedum, Japanese anemones and mist flower. Also Sweet Williams, hollyhocks, Canterbury Bells and pansies.

The Vineyard.

NIAGARA GRAPE SEEDLINGS.

Niagara Grape seedlings from the Rural Distribution; all white; absence of foxiness; valuable as a parent of new varieties.

AS the RURAL distributed among its readers a large quantity of seeds of this variety, it may be of some interest to know what may be expected to result from this distribution. I had planted some seeds of the Niagara before they were sent out by the RURAL. Some of the seedlings made rather weak and slender growth, with foliage of a wild and peculiar type somewhat resembling currant leaves and suggestive of the Rupestris species. None of them has shown indications of fruiting. The larger number of the seedlings, however, have the general character, both in growth and foliage, of the Niagara, and so far every one that has borne, has produced a white grape, showing that the variety has a very strong individuality which impresses itself upon its progeny. And although there are marked differences in the seedlings, both in shape of berries, flavor, and time of ripening, the most remarkable characteristic of all that have fruited here, has been an entire absence of either "foxy" taste or odor, which are so prominent in the Niagara. Whether this is due to some accidental cross-fertilization with another variety, or to a natural amelioration, it is impossible to say; but the result certainly promises improvement. The clusters of all—it being the third year from planting out, and the first year of bearing—were quite small. The earliest one bore a large, oval, lemon-yellow berry ripening last of August, three weeks before Niagara was equally mature. Others ripened in succession; the most of them with the Niagara about the same time. I have seen Niagara seedlings from two other sources this season; and these were also white. It now appears as though the Niagara may be valuable as the parent of new varieties of real value: as I have so far seen none that were inferior to it, while several seem to better in quality, and promising well as to growth and habit of vine. If seedlings generally prove as good as those I have seen, we have reason to expect some valuable improvement as the result of the Rural's distribution, and, I am free to confess, beyond any anticipations both when I planted seeds myself or when the seed were sent out from the RURAL Office.

Delaware, Ohio. GEO. W. CAMPBELL.

[We are glad to receive the above from Secretary Campbell. It will be remembered that the seedling of Niagara sent to us by Dr. Greenleaf was white, free from foxiness and of better quality than the Niagara.—EDS.]

BAGGING GRAPES. — In my experiments with ripening grapes, I find long-shaped bags convenient. Slit each corner of the mouth of the bag, and apply so the vine will occupy the slits: tie a string around the mouth of the bag above the vine. That will protect the stem and the cluster from frost, and the grapes will ripen to perfection. E. B. C.

Parma, Mich.

Miscellaneous.

CATALOGUES, ETC., RECEIVED.

PRUSSIAN AGRICULTURE.—Consul J. E. Potter sends to the State Department an account of the farming systems employed in the various German States. Not much can be learned by the American farmer of the German farmer except, perhaps, a lesson in the strict economy which the latter is obliged to practice. Families of seven are readily supported on farms of 10 acres in Germany. An instance is given where a 10-acre farmer made a better living than one who owned 20 acres adjoining him. The smaller farm supported one horse, two cows and seven pigs. The barn was so large that it seemed all out of

proportion to the farm. The manure pit was fitted with a water-tight foundation. The liquid manure was poured over the solids from time to time, and the hogs were allowed free access to the pile. This manure pit is fairly considered to guard the life of the farm. The owner of a first-class farm was questioned as to his business methods and profits. He had kept a complete set of books. The farm of 146 acres was divided into 104 acres of plowed ground, 18 acres of meadow, 15 acres of woodland and nine acres devoted to fruits and garden. The products were wheat, rye, oats, potatoes, sugar beets, hay and garden produce and fruit. His total crop was valued at $3,942.47. The family consisted of nine persons, five of them over 14 years of age. The cost of producing a bushel of various crops was—wheat, 84 cents; rye, 67 cents; oats, 20 cents, and potatoes 15 cents. The yearly cost of living for the family of nine persons was figured at about $714. Food cost $300; soap, fuel, beer, etc., $148; clothing, $119, and school expenses $145. Eggs, cheese, or other farm produce that could be readily sold, were rarely eaten, except on holidays. Coffee was considered to be very nutritious. The bill for sugar was but $2.85; for sirup $7.05, for tea $2.47, for coffee $14.16 and for salt $19.00. Adult farm hands were served five meals per day: two breakfasts; one at six and the other at 10; a dinner at 12, a first supper at four and another at seven. Meat and vegetables are given at dinner, and milk, potatoes, coffee and bread and butter at the other meals. Soups made of dried peas and beans, mixed with bacon, are largely eaten. Green beans preserved in salt, and cabbage are much esteemed. About 2½ pounds of bread and one-third of a pound of pork, besides vegetables, are considered a fair ration. Germany is as great a country for potatoes as is Ireland. Labor grades from $71.50 to $35 per year, with board. Large White hogs are very popular, and graded Shropshire sheep are well liked. On the farm mentioned 18 Holland cows were kept. Large cows are liked because they can be turned into beef when they fail in milk. Six oxen are fed for beef every year. About 120 head of sheep are also kept. The Holland cows are considered the best and most profitable milkers. They are kept for the entire year in the stable. They are always fat enough for market. The barns are kept at a nearly uniform temperature of 65°. The cows are never given very cold water. They are largely fed upon "returns of malt"—about like our malt sprouts—green food and grain. The ration for a cow weighing 1,100 pounds is reckoned at, Summer, 121 pounds of green clover; Fall, 110 pounds of sugar beets and 10 pounds of dry hay, and Winter, 82 pounds of sugar beets and 16 pounds clover hay. To this are added 11 pounds mixed bran and flaxseed meal. The expense of this ration is figured at 45 cents per day, which is just about covered by the milk. The other expenses of labor, rent, bedding, interest, etc., are figured at eight cents, and it is thought that the manure more than pays for this, leaving the carcass of beef for extra profit. A species of silage is prepared by leveling off strips of ground that shed water, near the barn, about four feet wide and as long as may be desired. All the green food, including stubble beets and some other roots, which at the close of the fall season have not been consumed, are deposited on this ground in thin layers, pressing each layer as compactly as possible, with the feet, or otherwise, until the long heap is from three to four feet high, tapering from the bottom to a point at the top. It is then covered with clean straw, and this with a layer of earth deep enough only to prevent freezing and to keep out the air as much as possible. Fermentation ceases very soon when the material is closely pressed and kept cool. These beds of silage are opened, when the food is wanted, at one end of the ridge, so as to expose only a small surface to the air.

PENCILS AND STOVE POLISH.—Catalogue and circular for Jos. Dixon Crucible Co., Jersey City, N. J.—The catalogue contains prices and descriptions of the celebrated "American Graphite" pencils and other articles of stationary made by this concern, which, as set forth in the catalogue, literally created a new American industry. Dixon's pencils are well known, and are said to have no superiors. They are used in the Government Departments at Washington, and by numerous schools, colleges and public institutions. The circular refers to Dixon's Stove Polish, and contains an alleged address on the subject by the renowned Brother Gardner at a meeting of the Lime Kiln Club. Dixon's stove polish has been in the market for 58 years, and having stood the test for all these years, the makers are warranted in their claim that it is the oldest, best, neatest and quickest. The only change in the polish is that instead of lowering the price or quality, they have doubled the size of the packages. Send for one of the circulars, which contains Bro. Gardner's speech and pictures of the members of the Lime Kiln Club.

P. J. BERCKMANS, Augusta, Ga.—A catalogue of fruit and ornamental trees. We find that grafted trees of the Japan Chestnut are offered at 50 cents each. Mr. B. says he has grown this tree for three years, and some of the trees "are bearing fruit." He says the burrs contain at times as many as five large nuts, and that the quality is similar to our native chestnuts. The catalogue also offers Simon's Plum; also Kelsey's, Botan and other new Japan plums.

BLOOMINGTON NURSERY, Bloomington, Ill.—A wholesale catalogue of trees, plants, shrubs, roses, bulbs, etc. Particular attention is called to their large stock and low prices of certain apples, cherries, pears, small fruits and ornamental trees.

H. S. ANDERSON, Union Springs, N. Y.—Circular of the new plum Shipper's Pride. This plum has many good qualities.

THOMAS G. ZANE.—Illustrated catalogue of strawberries and other fruits.

What Others Say

QUEER EXPERIMENTS.—Prof. A. E. Blount, of the Colorado Ag. College, has made some queer experiments according to several of the local journals. It seems that in one of his reports respecting the fattening of pigs, the aggregate weight of five pigs is given as 498 pounds. "The rumor has it," says a writer in the Live Stock Record, "that the pigs were guessed off; another that one was weighed and the others sized up with that one." The pigs were put in a pen and fed on corn alone and water for three months—84 days. During that time they gained 790 pounds, having consumed 1875 pounds of corn or 22.32 pounds a day. The gain of the pigs per day was 9.4 pounds. In answer to a criticism Prof. Blount replies that in his report "corn and water" should have read "corn and slops." But in this report he wrote "corn and water *alone*" as if to emphasize the fact that only corn had been fed. The pigs would have fattened on the slops alone and, as the Live Stock Record says, the experimenter who could innocently lose sight of such an important factor in his work is not one in whose experiments the public could place confidence; while if the omission to mention the slops was intentional, the offense becomes inexcusable. What Prof. Blount means by three months or 84 days is not explained.

Another journal—the Denver Tribune-Republican—alludes to his reports of experiments in cattle feeding as practically worthless as the age of the steers, details as to the hours of feeding, whether soiled or pastured, etc. are all omitted.

We have before now felt obliged to call attention to several matters which Prof. Blount should explain. One is that Blount's Prolific Corn, which, in reply to our inquiry, he informed us was the "result of science and cultivation," is really the Tennessee Prolific, and another is that several heads of wheats which he sent us as his "hybrids" were found to be old varieties.

SOAP FROM WOOL GREASE.—French chemists are said to have solved the problem of the utilization of the heretofore waste grease from scoured wools by using it to make soap. The fat having been heated to the melting point, absorbs certain compounds of sulphur, to the extent of retaining in a fixed state 100 times its volume of sulphureted hydrogen. When the fat is allowed to cool it is found to be soap. The combination of substances destroys the unpleasant odor of each, the mixture being fine and homogeneous. In the report of Consul Williams, at Rouen, giving these particulars, it is stated that manufactured soap of this kind has already become a commercial product in France. It is not toilet soap, but so cheap that it is likely to displace soaps based on soda for many important uses, "particularly in vine culture and horticulture as a defense against the insects that prey upon plants."

THE DIFFUSION PROCESS OF SUGAR-MAKING.—Last year the Department of Agriculture began to experiment in a small way at Ottawa, Kan., with the diffusion sugar-making process as applied to sorghum cane. Instead of crushing the cane as in the sugar-cane process, it was shaved off in minute slices and the sucrose, or sugar-yielding sap, extracted by streams of water. The results obtained were so encouraging that the field of operations was removed to Fort Scott this year, and with a largely increased plant, experiments are now in progress on a scale of some magnitude. Monday last a telegram was received from Professor Wiley, the Chemist of the Department, who is in charge of the works, announcing the complete success of the experiments. The telegram states that sirup has been obtained from the sorghum cane of light color, good flavor and crystallizing well. There was complete extraction of sucrose in six of the cells of the battery. In the process now used in the South there is a loss of nearly 50 per cent. of the saccharine matter contained in the cane, while the experiments at Fort Scott show an absolute extraction of all the sugar.

TIME TO WEAN COLTS.—As a rule colts are weaned too late in the season. They should have time to learn to eat heartily of other foods before cold weather, says the National Stockman. A colt foaled in May should be weaned in September, which will allow both it and its dam to go into winter-quarters in better shape than if weaning is postponed until October or November. If the mare is kept breeding, and has not anything else to do but to breed and nurse her colts, she will get along if the colt is not weaned until December; but the colt will not do so well if put upon fodder and hay all of a sudden at that time of year. The young thing should be taught to eat before it is weaned.

BUY BRAN EARLY.—The time bran can be bought cheapest is at the opening of the market for new crop wheat, as millers at that time are anxious to economize room. Bran is bulky in proportion to its weight, and for this reason many farmers have not the proper room to store it. But the thoughtful feeder will supply the necessary storage room and buy early, so as to save a considerable sum in buying ton, five-ton or car-load lots.

CATTLE IN BRAZIL.—Referring to the cattle of Brazil, the Live-Stock Journal, London, says that Rio Grande do Sul is one of the most southern provinces of Brazil. The country is wholly agricultural, and the principal product engrossing attention is cattle. This industry is assuming large dimensions, as about 800,000 head are slaughtered yearly for export. It is estimated that there are about 9,000,000 head of cattle in the province, and the practice is to slaughter oxen at about four years old, and cows at 14 or 15 years. The Brazilians in Rio Grande have little idea of early maturity, though they study economy of production. In fact, the owners pay little or no attention to their herds, and the cattle have to forage for their food. Cattle-breeding, as understood in England, is unknown, and vast herds wander about at their own sweet will, unattended, unprotected, and positively uncared for.

WHAT AN EGG WILL DO.—For burns and scalds nothing is more soothing than the white of an egg, which may be poured over the wound. It is softer as a varnish for a burn than collodion, and being always at hand can be applied. It is also more cooling than the sweet oil and cotton which was formerly supposed to be the surest application to allay smarting pain. It is the contact with the air which gives the extreme discomfort experienced from the ordinary accident of this kind, and anything that excludes the air and prevents inflammation is the thing to be at once applied. The egg is considered one of the best of remedies for dysentery. Beaten up slightly, with or without sugar, and swallowed at a gulp, it tends, by its emollient qualities, to lessen the inflammation of the stomach and intestines, and by forming a transient coating on these organs, to enable nature to resume her healthful sway over a diseased body. Two, or at most three eggs per day would be all that is required in ordinary cases; and since egg is not merely medicine, but food as well, the lighter the diet otherwise and the quieter the patient is kept, the more certain and rapid the recovery.

WORTH NOTING.

WILLIAM FALCONER, having tried many kinds of muskmelons on the sandy soil of his island home, thinks that the Huckensack, all things considered, is the very best.

WALDO F. BROWN says, in the Weekly Press, that the heaviest yield of wheat ever grown in Ohio—over 60 bushels to the acre on a 10-acre field—was grown where a crop of clover was burned off because it was too heavy to be turned under.

WHEN Sir J. B. Lawes, comments the above Journal, is not willing to report on an experiment because it has been running only 27 years, it is time for Americans to wait at least one season before condemning or extolling a breed, a fruit or a method in farm practice.

THE Orchard and Garden says the trailing habit of the Lucretia Dewberry is of no advantage in the climate of New Jersey, but proves to be so in all localities with a climate too severe for the upright blackberry varieties. The fruit is very large, luscious and produced in great abundance. But the grower should apply a light mulch around the plants, if he wishes to keep the berries from getting soiled and gritty.

FOR early celery it is now time to "bank up." The later celery should be "handled," that is, the stems should be supported by the soil and so strengthened. Instead of banking up, we are trying the simple experiment of placing and supporting a board on either side.

SOW spinach now.

DR. BECKWITH, of the N. Y. Ex. Station, finds the Alaska Pea no better or earlier than several other first-earlies planted near it.

SOME people feed carp as they do chickens. A writer in the Farm and Fireside says that when he wishes to see the fish or let a neighbor see them he gives them sheaf oats. When he wishes merely to feed them he gives them thrashed oats or shelled corn. Anything that a porker will eat is food for carp.

THE Mass. Ag. College is certainly worthy of the support of every farmer, as Our Country Home tells us. Pres. Godell is a good and efficient man; Major Alvord, the Professor of Agriculture, is as good a man as we know of. He is good and true. Prof. Fernald, Professor of Entomology and History, comes from the Maine Ag. College where he was much respected. Prof. Goessmann is one of our best chemists. The college is well equipped. Apply to Pres. H. H. Godell (Amherst, Mass.) for any needed information.

AN ingenious name, a druggest informs us, has been given to a proprietary anthelmintic, viz., the Early Bird.

HERE are two conundrums propounded and answered by a friend:

1st. A man met three beggars. To one he gave 10 cents, to the second five cents, to the third man 10 cents. What time was it?

Ans.—A quarter to three.

2nd. Mr. Andrew Little had a beautiful daughter. She fell in love with his coachman. When Mr. Little discovered it he was very angry and pursued the coachman. What time was it?

Ans.—A little after one.

KILL off the old hens and the young roosters.

A THOROUGH kerosening of the hen houses now will pay. It will cost less and be more effective in killing lice than a coat of whitewash.

AS soon as the leaves change color is a good time to transplant.

IT is gratifying to see how widespread the practice is becoming of sowing rye for early feeding in the Spring, says the New England Farmer. In the West the best dairy farmers sow fields of it every year.

D. H. THING says that there is a farmer's daughter in his school district who has mowed all her father's grass the past season, raked the hay, kept school to the satisfaction of the district, plays the piano skilfully and makes as nice biscuit as any of the mothers.

THE new tree Cercidiphyllum Japonicum loses its leaves early at the Rural Grounds. We doubt if it will ever prove a great success as an ornamental tree.

TRY Kelsey's Japan Plum.

MR. P. J. BERCKMANS says that the Japan plums are as distinct from our native varieties as is the LeConte Pear from the Bartlett. The trees resemble somewhat our vigorous varieties of the Chickasaw type, but the foliage is larger and quite distinct. They are hardy as far North as where the Wild Goose succeeds, and for our Southern States they open a new era in plum culture.

IN the late report of the Ohio State Horticultural Society, A. S. Cutter asks if forestry means anything to us personally? Yes, very much, is the reply. If any farmer has within his premises an acre or two, or a half dozen acres of land poorer than the rest, that land will recuperate under timber cultivation as it will with no other available treatment. Land that is growing trees loses no strength, but continually gains in all the essential elements of the soil, and these few poorest acres will become to his children double the value, acre for acre, of all his farm besides.

DR. HOLMES says that men remind him of pears in their way of coming to maturity. Some are ripe at 20, like human Jargonelles, and must be made the most of for their day is soon over. Some come into their perfect condition late, like the autumn kinds, and they last better than the summer fruit. And some that, like Winter Nelis, have been hard and uninviting until all the rest have had their season, get their glow and perfume long after the frost and snow have done their worst with the orchards. Beware of rash criticisms; the rough and astringent fruit you condemn may be an autumn or a winter pear, and that which you picked up beneath the same bough in Au-

gust may have been only its worm-eaten windfall .....

In the race of life it doesn't take very long for poverty to overtake laziness.....

Everybody says that good times are coming, and, as times are controlled for good or for bad, very largely by what everybody says, everybody is glad to hear everybody say this.

Prof. Cook, Director of the New Jersey Experiment Station, states in his report that he tries experiments over and over again before he says anything about them. He says of potash that it must be soluble before it is available. He would like to say that sulphate is better than muriate, but as yet he has not said it, but does say that he sees no difference. After experimenting twelve years, he sees no reason why any one should pay seven cents a pound for potash in the sulphate when he can get it for three cents a pound in the muriate..

Speaking of the vitality of seeds from commission men, W. S. Devol, of the Ohio Agricultural Experiment Station, says he has not observed a single instance where a variety from commissioned grocers gave so large a per cent. of germinated seeds as did the same variety put up by the same firm and procured direct from the firm..... .....

Public watering places are excellent places for spreading diseases among horses. Avoid them if there are any dangerous or contagious diseases raging in your neighborhood.....

This Winter will be doubly severe on your young horses unless you have them in first-class condition when they go into winter-quarters. Good care from now on will be well repaid before Spring.....

Dr. Gadsden, like nearly all other American veterinarians and most of those of Europe, insists that the only safe course is to slaughter every animal that has ever had pleuro-pneumonia, as he believes the disease to be incurable, and considers the so-called recovered cases the most dangerous.....

The penalty for abusing horses is generally paid by those who do it, yet frequently they are unaware of the fact.....

Everywhere.

RURAL SPECIAL REPORTS.

Canada.

Dominionville, Ontario, Sept. 28.—Crops in this section are good. Wheat, oats and peas are better than an average. Corn not much grown. Hay hardly an average. Potatoes rotting badly—not an average crop.

H. A. M.

Roxton Falls, P. Q.—Wheat, barley, oats, buckwheat and peas are good and harvested in good order. Hay better than expected. Corn shortened by drought. Potatoes yielded well, but rotted badly in some places.

J. F. L.

Delaware.

Dover, Kent Co., Sept 29.—We are now having some very warm weather—the hottest of the season; thermometer ranging from 75 to 90 in the shade. Wheat was badly damaged by the rain before it was thrashed. What has been sold brought from 60 to 80 cents. Corn is nearly all in the shock, or else topped; many fields that had a growth large enough for 50 to 60 bushels per acre will not produce more than 30 to 40 in consequence of so many barren stalks, which we attribute to the fact that when the silks and tassels were in condition to fertilize we had two or three days of hard rain which probably destroyed the pollen. The seeding of wheat is now the order of the day. We commenced last Saturday; but the greater portion will not be sown until next week. It is now too hot. We are afraid of the fly.

S. T. S.

Illinois.

Chicago, Cook Co., October 5.—For a week the whole Northwest has enjoyed extremely bright weather, and every department of farm work has moved along uninterruptedly. There are no areas at present needing rain where the pastures were not seriously damaged by the terrible drought of July and August. The favorable conditions also have enabled us to complete the Fall seeding of winter wheat in all areas north of the Ohio River. Of course the acreage question is one of great interest, and in nearly every State in the winter wheat belt the acreage promises to be fully as large as in 1885. I think that the low prices of everything which farmers have to consume and have in a great measure reconciled our farmers to the prevailing prices of wheat. The movement of winter wheat for the last 30 days, owing to the fact that farmers have been so busy seeding, is only nominal. At the same time there does not seem to be any feeling among the producers that higher prices will prevail, for the present at least. The movement in the spring wheat belt continues very free, and there are no signs at present that it will be materially reduced for the next 30 to 60 days. Reports with regard to yield in Minnesota and Dakota are still just as conflicting as ever

The first killing frosts of the season put in their appearance October 1st and 2d. The corn crop in the meantime had everywhere matured. So far we have had very little drying weather to put corn in condition for cribbing. A great deal of corn has been cut up in the different States for feed, and so far no reports have been received which would indicate that the crop was any better than has been reported during the last 60 days. Nobody pretends to say that corn is particularly scarce. At the same time if the statements are true which have been so generally made that there is a deficiency of 350,000 bushels in the yield, this shortage must be felt very perceptibly before another crop is made. The receipts of old corn out of farmers' hands, and also what is known as the cribbed corn along the railroads, have been very materially reduced during the last 30 days.

The hog situation is a question which will interest us very particularly from the present time until the winter packing season is well advanced. I notice that the Government has lately reported considerable disease called hog cholera. "Hog cholera" is a very wide form of expression; and it takes in every ill that hogs are heir to. It has baffled so far the skill of science to determine what it is, or to point out a remedy for the disease. It comes when we expect it the least, and does not leave us as long as it has any material to work upon. That we have had this disease this Fall is a fact, but so far, from my investigation I do not think it has been anything like as fatal as it was during the Fall and Winter of 1885 and 1884. I think there is a fair supply of hogs still in the country, and that the fall and early winter run may probably fall a little below that of the preceding season. Hogs are not held for particular seasons, as in former years, but are now marketed all the year round whenever they are fit to go.

C. M.

Kansas.

Frankfort, Marshall Co., Sept. 30.—We have had some showers this month, and cooler weather of late, but it is yet too dry for plowing. Crops are not an average in this vicinity. Corn something more than half a crop. Early potatoes pretty good, but late ones almost nothing. Pastures have been short. Clover and Timothy are growing nicely, but not enough for half pasturage, and hay is needed.

A. N. Y.

Kentucky.

Louisville, Jefferson Co., Oct. 3.—Dispatches to this place report frosts all over the State. About half of the tobacco crop is uncut, and so much has been injured that one-half to three-quarters of it will make only frosted lugs. Tobacco in lowlands is much damaged, while that on the uplands is little hurt. An experienced broker and handler thinks Friday night's frost will much impair the quality, but not reduce the quantity of the crop. Reports from the Flat Lick section, noted for dark, rich tobacco, are bad.

M. L. H.

Massachusetts.

Sandwich, Barnstable Co., Oct. 4.—The inland cranberry bogs suffered more on Saturday and last night by frost than at any time this season. At nine o'clock last night the thermometer registered 30 degrees, gradually falling until midnight. It was the coldest night this season. In the little village of Mashpee the frost did heavy damage. The largest grower there is the Mashpee Manufacturing Company, which loses one-half of its crop—about 600 barrels. Oliver M. Holmes, another large grower there, lost 400 barrels. There are many smaller bogs there and in the immediate neighborhood, including those which cannot be flowed. These are nearly total wrecks. Many of the berries were only nipped, which necessarily reduces the price.

R. H.

Wyoming Territory.

West Ferndale, Whatcom Co., Sept. 28.—All crops here are above the average on a largely increased acreage. Prices are: wheat, $1.50 per cental, or 100 pounds; oats, $1.25; peas, $1.50; barley, $1.50; hay, $6 per ton, eggs 25 cents per dozen, dressed meats six cents per pound, potatoes 40 cents per bushel. Mrs. Fisher's articles were very good, and we hoped she would visit the Nooksack Valley. She would have found a great deal more agricultural land than on the White River, and not half as hard to clear. The photo. of her was an agreeable surprise. She saw things about as they are, except the Chinese question. She certainly did not see the moral side of that, or she would have written differently about the Mongolians.

Z. H. R

Virginia.

Richmond, Henrico Co., Oct. 2.—Our market this week for leaf tobacco has been a quiet one, and little else but low grades of lugs and nondescript leaf seemed to find ready buyers, and these sold at very low prices, ruling at 2¾ to 3½ cents. This morning a heavy and damaging frost is reported from all parts of this and adjoining States of North Carolina and West Virginia. From one-third to one-half of the crop was uncut, and it appears that little of this escaped the frost, which blackened it in many sections. Of course, much will have been cut green to-day, with still very threatening weather. The late tobacco was chiefly depended on for the best of the crop, and the weather till yesterday was fine on the plants in the field. Potato vines were blackened in and near town. The market, no doubt, will be firmer and higher, and some have withdrawn good stocks from sale already. There must be few wrappers or good fillers made at any rate. Our tobacco year ended September 30, 1886. Total stocks on hand are as follows, with comparisons of previous years:

	Inspected.		Uninspected.		Total.	
	Hhds.	Tcs.	Hhds.	Tcs.	Hhds.	Tcs.
1886.....	18,744	1,329	6,608	307	25,372	1,736
1885.....	13,547	1,098	4,990	75	18,537	1,173
1884.....	7,873	147	1,689	22	9,567	429

The annual report of the president of the Danville Tobacco Association shows that the sales for the year were 40,353,942 pounds at an average of $9.41 per 100.

T. H. M.

THE FARMERS' CLUB

ANSWERS TO CORRESPONDENTS.

[Every query must be accompanied by the name and address of the writer to insure attention. Before asking a question, please see if it is not answered in our advertising columns. Ask only a few questions at one time. Put questions on a separate piece of paper.]

COW-POX IN COWS.

W. H. P., Grover, Pa.—The teats of some of our cows have become completely covered with scabs which come off when one tries to milk the animals. It is cow-pox I suppose. Is it contagious, and what should be the treatment?

Ans.—There are many forms of eruption on the teats and udder of a cow, which are sometimes confounded with those of variola or cow pox; but the eruptions of genuine cow-pox have certain characteristics which distinguish them from those produced by what are called spurious forms of the disease. The local symptoms of true cow-pox are heat, swelling and tenderness of the teats for three or four days, followed by irregular, pimply hardness of the skin, particularly about the base of the teats. The pimples can generally be felt in from five to ten days after communication. They become red when about the size of a pea, are very painful and hard, gradually increasing in size, and in three or four days they attain the size of a horse bean; and are circular in form on the udder and oblong on the teats. They rise in the center, becoming more or less pointed, and contain at first a clear and, later, an opaque fluid. If the vesicles are broken, troublesome sores occur, the discharge from which will communicate the disease to the milker, if not protected by previous vaccination. If not broken the vesicles become depressed in the center and around the base is a very red and tender halo or circle. The size is greatest about the tenth day, when it is a pustule—having an inflamed base and containing pus. The pustule dries up, and dark brown or black solid scabs or crusts form on the surface. Vesicles, pustules and scabs may sometimes be seen on the same teat at one time. The scabs if left undisturbed, gradually become thicker and darker until about the fourteenth day, and fall off spontaneously at about the end of three weeks, leaving shallow, smooth, oval or circular pits of a pale rose color. In tropical climates the disease is generally very severe, often causing death; but in temperate regions it is generally mild, usually causing only a slight diminution in the milk yield and a little loss of appetite. Sometimes, however, the mouth becomes sore, driveling of saliva takes place, the cheeks are pushed outward and inward by a partial breathing through the mouth, there are some abdominal pains and diarrhea; but these symptoms are almost entirely confined to the hot sections of the country. The disease is contagious and when once it appears in a herd it will usually pass through it, unless special care is taken to isolate completely all infected animals. A stable is often infected by it so that every cow brought into it will take the disease. Beyond making the udder and teats very sore, the disease is not harmful; and in ordinary cases non-interference is the best course, as it will come to an end naturally in about three weeks. Sometimes, however, treatment may be advisable. The course of the disease is hastened and ameliorated by giving daily doses of one ounce of hyposulphite of soda for a week or ten days, and continuing smaller doses of one dram daily as long as the pustules remain. Care should be taken not to break these, so as to avoid painful sores and a good deal of inflammation. The soreness is relieved by painting them over with camphorated soap liniment mixed with an equal quantity of ether. The milking should be done with milking tubes, when there is any danger of breaking the vesicles, pustules or scabs. The person who milks the diseased cows should milk no others or the infection will be conveyed in that way. Indeed, those who attend the infected cows should not go near the others. The feed should be laxative and cooling—bran mash or beets and carrots are advisable; but no corn meal or cotton-seed meal should be used.

CUTTING BACK RASPBERRY AND BLACKBERRY CANES.

J. A. Mc E., Canton, Mo.—Will the cutting back of raspberry and blackberry canes in October injure their fruiting next year? If a cane of either berry, not having been pinched back, has been allowed to grow five feet in length, and is now cut back to two or three feet, will it bear a full crop next season?

Ans.—We should prefer to leave the new canes as they are in order to secure the best yield. The cutting back of the canes of the current year's growth had better be done early, when they have reached the desired hight. Later the laterals should be pinched off or cut back. The object is to secure all the bearing wood possible to each cane. Cutting, or pinching back in early September will hasten maturity. But by cutting them back now, nothing would be gained. If the old canes have not yet been removed, it would be better to wait until the Spring and then make one job of it, viz., cut out the old canes and cut back the new ones.

Miscellaneous.

F. S. W., Des Moines, Ia.—1. What is the difference between Optimus and Livingston's Favorite Tomatoes? 2. What between Pearl of Savoy and Beauty of Hebron Potato?

Ans.—1. The Optimus is a better keeper—less liable to rot. 2. We have before stated they are very nearly alike; but we are not prepared to say that they are the same.

H. G., Hamburg, Conn.—Is kainit a good dressing for peach and plum trees; and if so, when should it be applied?

Ans.—We don't quite understand the question as to planting "potato onion sets in the Fall." Please repeat. Yes, it is a proper dressing for any kind of fruit trees if the soil needs potash. Better add raw bone.

W. W. O., Muncie, Ind.—The flower sent for name is Tagetes tenuifolia, a Mexican marigold.

DISCUSSION.

C. H., Columbus, Ohio.—In a late Rural, the Burpee's Turner, Henderson's Mikado and Livingston's Potato-leaf Tomatoes are all said to be the same. I exhibited the Potato-leaf at the Ohio State Fair, and others exhibited the Mikado and Turner; and of the Potato-leaf 95 per cent. were perfect tomatoes, while of the other two not a perfect tomato was shown. My only interest in the matter is a desire to see justice done to Mr. Livingston.

R. N.-Y.—We know nothing of Livingston's Potato-leaf Tomato, except that he sent us several plants in order to ascertain what they were. We found them to be the Mikado or Turner's Hybrid, though the Tomatoes average smoother as if a better or longer selection had been made.

Communications Received for the Week Ending October 9, 1886.

I. J. B.—J. H. E.—F. S. W.—H. H.—E. H.—E. T.—F. F.—C. C. C.—H. H.—N. T.—T. R. C.—L. S. E.—J. C. S.—A. J.—F. C. S.—W. H. H.—J. G. L.—B. B. R.—R. P. G., wheat rec'd—G. E. P., nuts rec'd—O. H. A.—apples and grapes rec'd—W. W. O.—W. T.—A. C. C., thanks—M. A. H. A.—L. A. R.—F. G. G., grapes rec'd in bad condition—J. H. & Son, grapes rec'd—O. H. A.—P. E., thanks—J. S.—C. W. H.—J. C. C.—W. H. M.—H. H.—A. L.—A. M. L.—M. J. W.—C. J.—J. S.—J. J. A.—E. L. Y.—H. H.—J. S., thanks—B. B. R.—G. E. M.—J. C.—C. I.—F. E. H.—B. F. V.—M. D. B.—D. M. R.—H. F. H.—W. J. P.—A. L. D.—A. E. W.—W. H. H.—N. T.—E. B. N.—G. W. A.—H. A. S.—W. R. W.—N. G. D.—E. J. M.—C. B.—"W."—C. Bros.—R. W. Mc H.—A. S. S.—M. M. Mc.—A. J. H.—T. D. B.—M. P. W., thanks—W. S. E.—A. N. Y.—D. D. W—O. H. A.—F. F.—T. D. B.—F. E. H.—E. S. G.—T. M.—P.—T. A. R.—F. N. B.—R. Y.—F. F.—B. B.—L. W. P.—G. W. K.—W. M. B.—H. L. C.—H. R. Jr.—M. C. G.—C. B. P.—H. B. S.—E. & B.—W. H. B., thanks.—W. W. K.—B. R. F. H.—F. H. M.—F. D.—C. O. B.—W. W. W.—R. M S. thanks.—L. M. H.—R. W. R.—W. F. D—S. S. T.—I. S H.—P. McD.—H. G.

Miscellaneous Advertising.

DIXON'S "Carburet of Iron" Stove Polish was established in 1827, and is to-day, as it was then, the neatest and brightest in the market; a pure plumbago, giving off no poisonous vapors. The size is now doubled and cake weighs nearly half a pound, but the quality and price remain the same. Ask your grocer for Dixon's big cake.

THE
RURAL NEW-YORKER.
A National Journal for Country and Suburban Homes.

Conducted by
KLBERT S. CARMAN.

Address
THE RURAL NEW-YORKER,
No. 34 PARK ROW, New York.

SATURDAY, OCTOBER 16, 1886.

WE tell the reader about all that is known of the half peach, half plum, Prunus Simonii, on page 689. It seems to us an acquisition, and it is probable that its seedlings may give us valuable fruit, intermediate between the plum and peach.

Two or three years ago, the writer grafted one of his seedling grape-vines upon a Concord. The seedling was of sturdy growth, but not remarkably so. This year upon the Concord the main cane has grown 25 feet—the longest growth we have ever observed at the Rural Grounds.

WE have a final word to say of Clapp's Favorite Pear, as it is produced at the Rural Grounds. The trees bear a greater *weight* of fruit than any we have ever raised, and they bear every year. The tree is very vigorous, fast-growing and bears young. The pears are uniformly large and showy, ripening a full week before the Bartlett. The flesh is white and quite juicy. That is all we can say for its quality. They are rather sweet, the sweetness of a little sugar and a good deal of water, without spiciness or sprightliness. The books describe this pear as "juicy, melting, buttery, rich, vinous, perfumed, sweet."

NOTICE.

THE Thanksgiving Number of the RURAL NEW-YORKER will be dated November 20th. It will present a full account of the RURAL's next Seed Distribution, and we shall issue 24 pages. Advertising rates will be the same as usual for the regular paper (30 cents per line) and 50 cents per line for the Supplement, which will be sent out from its date until next June.

WE have several times spoken of the Mikado Pear, to praise it as an ornamental tree; to praise it for the beauty of its round, golden pears which hang like so many balls suspended by slender stems two inches or more in length; to praise its wonderful productiveness, rapid growth, its early bearing; to condemn the *quality* of the fruit, no matter how carefully or in what way it is ripened. But we have now to add that when canned it is as delicious as any pear we have ever eaten. It is a question for each one to decide whether this tree is or is not worth cultivating for its beauty as an ornamental tree and for the value of its fruit, so bountifully produced, when canned. The Mikado is a Japan pear, hardier than the Kieffer and earlier by two weeks to ripen.

AT a recent school meeting in a Western State a bluff old man, who had grown tired of paying taxes to support experiments in education, said: "We don't want any more apparatus here—what we do want is more of the living stuff in our schools." Living stuff! He might have used a more elegant phrase, but hardly one that would have put the truth more to the point. We do need "living stuff" in our schools. We need originality, energy and common sense. We never will have it till we hunt it out and pay for it. If we try to economize on the teacher's wages, or hire some "poor stick" of a teacher just because he is cheap, we take the first step towards laying in a cargo of "dead stuff" that will not pay its passage. Our schools need looking after and overhauling. Put "living stuff" into them by all means.

A FRIEND had a lot of choice young heifers to carry through the Summer. The pasture fairly swarmed with bloodthirsty flies that rendered life for cattle almost intolerable. The heifers were fitted with jackets made out of light cotton cloth like the ordinary horse blanket, only arranged so as to button underneath the animal. With this covering only the head, neck and legs were exposed to the flies. This cover cost but little and made hardly any extra work. While cattle in the neighboring fields were driven almost crazy by flies, these little things enjoyed comparative comfort. The flies could only attack a part of the body where they could be reached and driven away. Nor was the increased comfort of this young stock the only point to be considered. We believe the heifers were in far better condition at the end of the season to pay for this protection. There is a good lesson here that stockmen will do well to heed.

THE POOR MAN'S FRIEND!

BEFORE Congress the oleomargarine people claimed that from 50 to 60 per cent. of their product consisted of pure butter. The other day samples of the stuff were seized by the Dairy and Food Commissioners in Cincinnati and analyzed by Henry A. Weber, Professor of Agricultural Chemistry in the Ohio State University at Columbus, and according to the sworn statement of the Professor, the highest percentage of pure butter found in any of the samples was 20 per cent., and the lowest six per cent., "the balance of the adulteration—94 per cent.—consisting of lard, tallow, salt and coloring matter." Taking the average of the 12 samples, "they contained just 10½ per cent. of pure butter and 89½ per cent. of adulterations." This stuff was purchased at the rate of 20 to 23 cents per pound from parties who claim to keep first-class groceries. The retailer pays from 11 to 12½ cents per pound for it, and it costs the manufacturer from seven to eight cents per pound. Last year 150,000,000 pounds of oleo were turned out in the United States, costing, at an average of seven cents per pound, $10,000,000, and selling for $37,000,000. Take the whole country through and the average price at which oleo is retailed is not less than 25 cents per pound. Every handler of the stuff claims, however, to be the "poor man's friend," yet what cost seven cents per pound is sold to the "poor man" for 25 cents!

MAKE WINTER WORK.

CAN'T you make work for the hired man this Winter? Try it. Can't you make arrangements for feeding stock or cutting wood that will enable you to give the hired man a home, at least? The cities are filled every Winter with farm hands who have no place to stay after November. Many of them would come here anyway, but there are some who would stay at the farm if they knew they could have a good home. These are the men you should help. Many a young man can be made into a useful citizen by a little encouragement, such as you can easily give. You have a home, with plenty to eat and drink and enough to wear. If you have a promising young man at work for you, don't let him go tramping off to the city this Winter—if a few words from you will keep him away. Exert yourself, make a little extra work for the sake of giving him a job. We make no plea for the many foul-tongued rascals who are found on too many farms. Get rid of them by all means. They are worse than poison in your family. But if you have a man who is capable of appreciating a home, and who has good in him, keep him if you can. You have a chance to carry out a little practical benevolence that you will never regret.

HEAVY CHARGES.

Last March we told how the great trunk railroad lines east from Chicago had put up the rates on shipments of dressed meat, much to the disgust of the packers, who roundly declared that the trade would be utterly ruined by the rise. It appears that between March 1 and September 1, this year, 176,677 tons of live cattle and 138,181 tons of dressed beef were shipped east from the Lake City. The increase in rates on March 1 was from 25 to 35 cents per 100 pounds on live cattle and from 43½ to 65 cents per 100 pounds on dressed beef. In spite of the payment of this great increase in transportation charges, the live cattle trade has not fallen off, while the dressed meat trade has largely increased and those engaged in it have made enormous profits. The railroad pool which controls the charges, and among whose members the profits are divided, have also made heavy gains. The pool allows from 17½ to 20 cents per 100 pounds for service in transportation of live cattle from Chicago to the seaboard. At 20 cents per 100 pounds, the cost of carrying 176,677 tons would be $706,708; while the shippers, at 35 cents per 100 pounds, paid a grand total of $1,236,739, giving a clear profit of $530,031. The pool allows 27½ cents per 100 pounds for service in carrying dressed beef, amounting, on 138,181 tons, to $759,995; at 65 cents per 100 pounds, the shippers paid $1,796,357, giving a clear profit of $1,036,358, or an aggregate profit of $1,566,389 in six months, to be divided between the members of the pool. All this, together with the great profits of the shippers, has had, of course, to come out of the pockets of producers and consumers.

PLEURO IN CHICAGO.

The cattle affected with contagious pleuro-pneumonia in Chicago and those exposed to infection are still quarantined under the direction of the National Bureau of Animal Industry. None of the animals have been yet officially killed for want of funds to pay for the slaughtered animals, and because no decision has yet been reached as to the disposal of the carcasses. Last Sunday 160 of the quarantined animals are reported to have been "spirited away;" a number of others, the telegraph says, have since disappeared; the milk of most of the cows is sold secretly and openly in the neighborhood of the distilleries, and, according to all reports, the quarantine is maintained in a very inefficient manner. It is probable that the vanished beasts have been slaughtered for sale, though there is some fear that some of them have been shipped out of the city. The Board of Health of New York is closely inspecting all dressed beef from Chicago to prevent the sale of any diseased carcasses. A telegram from Baltimore this morning tells of similar precautions there, and doubtless other places where Chicago dressed beef is largely sold will be equally prudent. Investigation has proved that the reports of pleuro-pneumonia said to have been carried from Chicago to several other parts of the country were unfounded. Texas fever or some other diseases were mistaken for the plague. The dilatory action on the part of the Illinois authorities is short-sighted and blameworthy in view of the importance of prompt and vigorous action.

FORTUNES IN THE CLOUDS.

WITHIN the past week lengthy advertisements concerning enormous fortunes lying unclaimed in England, Holland and Germany have appeared in a great number of papers—some of them among the best in the country. Indeed a good deal of judgment appears to have been exercised in selecting journals of wide circulation and high reputation for integrity as the means by which a very alluring bait has been placed before the public. The weekly editions circulated chiefly among the agricultural community, seem to be especially selected by the advertisers. A large alphabetical list of names is given of people who are alleged to have left fortunes for which no valid claims have hitherto been made, and which will be readily surrendered to the rightful heirs, who are very likely to be among the thousands who bear the same names as those in the list given or in the far larger one which is promised for 50 cents. For this sum a list of surnames only is given with the number of unclaimed fortunes left by different people of the same name—Brown, 98; Lyons, 3; Smith, 264—and a heavier fee is then demanded for the given names of the defunct. For still larger fees more information will be doled out, and the gullible and greedy will be temptingly supplied with alluring hopes so long as they are able and willing to make disbursements.

The assurance that there are large fortunes awaiting claimants in the English Court of Chancery, the Bank of England and other foreign depositories is utterly devoid of truth, and the accounts published every little while that some Brown, Jones or Smith has received a vast estate by tracing his pedigree to the defunct owner of millions thus held in trust, are entirely fictitious. The alleged extracts from foreign newspapers announcing the existence of such deposits are, in nine cases out of ten, either sheer fabrications or extracts from advertisements palmed off on the public as editorial statements.

For years a number of swindling claim agents have made a precarious living in London by extorting money from the credulous on pretense of being able to secure for them enormous sums awaiting rightful heirs yet undiscovered. A frequent advertisement of such a fraud in the London Times is always introduced by the assertion that "to-day" an English laborer receives from the Court of Chancery £250,000. Minister Phelps, however, says there isn't a particle of truth in such stories, and readers of London newspapers know that every few days these rascally schemers are dragged before the magistrates for swindling some "claimant" under pretense of proving his title to a fortune. Further information with regard to these alleged bonanzas is given in this issue, in the department devoted to the exposure of frauds.

We earnestly urge our contemporaries in all parts of the country to disabuse the minds of the ignorant and gullible of the mistaken idea that a single dollar can ever be obtained by them through the allurements of this widely circulated advertisement. Nobody will ever recover a cent except the claim agents, and every cent paid to them will be a dead loss. The advertisement was offered to the RURAL NEW-YORKER last Tuesday, but knowing that statements it contained were false, it was, of course, at once refused. Most of the papers that have admitted it, would, no doubt, have done what we did, had they, like ourselves, been for years constantly watchful to detect, reject and expose all schemes for duping the public. The least reparation they can make to their readers, however, is to warn them that the alluring fortunes spoken of in the advertisement have an existence only in the clouds, the moon, the covetous fancy of a simpleton, or the scheming brain of a swindler.

BREVITIES.

RED-TOP Grass seed for the lawn.

EMMONS POND hits the nail pretty squarely. See page 670. "Push Ahead."

PRES. WILDER writes us that he thinks the Eumelan Grape is not deservedly appreciated.

SECRETARY CAMPBELL favors us with a very interesting article on seedlings of the Niagara. See page 689.

From the continued crossing of rye upon our rye-wheat hybrids we have now several plants which are by parentage seven-eighths rye.

THE leaves of our common catalpa were wilted and discolored like those of a canna by the frost of last week, while those of the Catalpa speciosa are as green as ever.

MR. FALCONER, on page 608, pertinently remarks: "Talking of landscape gardening in a city lot of a few rods or the farmer's ordinary garden patch, seems like so much twaddle."

SEVERAL years ago in our Seed Distribution, we sent to applicants the Thousand-fold Rye. It yields splendidly at the Rural Farm, and we should like to hear how it behaves with others.

D. S. MARVIN writes us that the cause of the doubling of the flowers of gladioli must be in the air this season. The same thing which the RURAL mentioned has occurred with some of his flowers.

LOOK over the RURAL's black list of Congressmen who voted against the "oleo" bill. If you find one of them running for an office within your reach, throw your ballot under his feet and trip him up.

It has long been the opinion of the writer that certain diseases may be communicated to both children and adults, but especially the former, through milk. For this reason all the milk drank by the family is boiled.

BY selecting for seed those pods of Limas which have the most beans, the average number is increased certainly. For several years we have saved only those that contained five; but it is found that the beans (seeds) are smaller and that thus far nothing has been gained. What is gained in number is lost in weight. The strain known as King of the Garden, is thus far, the best Lima we have raised.

O. H. ALEXANDER, of Charlotte, Vermont, referring to the R. N.-Y.'s remarks regarding Macomber's white seedling of the Antwerp Raspberry, says that he has tested it for three years by the side of Cuthbert, and finds it just as hardy. He prefers it to any other. "The flavor," he says, "is all that one could desire." So it is, and we hope it may prove as hardy in other places where there is less snow than in Vermont. Mr. A. calls it "White Mountain."

THE English papers all contain reports of the "root market." Prices are given for mangels, beets and turnips as regularly as our papers give them for hay and straw. The annual root crop of England is immense, and the feeding value of this crop adds greatly to the value of England's agricultural wealth. In some sections of our own country, the root crop is an important item, but in others it seems to add little to farm forage. In a cool, moist situation, roots will be profitable. It is idle to advocate the growing of roots extensively all over the country. In some sections other animal foods can be more cheaply produced.

THE State Grange of South Carolina appeals to other State Granges, the National Grange and all farmers throughout the country to send aid to a large number of farmers in the lower section of the State who have been made destitute by the earthquakes. Hundreds of farmers have had their houses destroyed and are unable to build them without financial aid. They live in out-of-the-way places, and it takes time for reports of their condition to reach the towns and the world at large. Now that the Mayor of Charleston has announced that no further aid is needed in that city, why shouldn't the contributions which are still flowing in be turned over to the relief of the suffering farmers?

A PROVISION of the Pennsylvania constitution forbids a common carrier to engage in any other business. A number of the railroads of the State have also engaged in coal mining, and have lately combined to restrict the production of coal, a necessary of life, as well as to control its sale and extortionately advance its price. Governor Pattison has just very properly denounced the combination as "constantly, violently and flagrantly" violating the constitution, and he calls on the Attorney-General to enforce the law. Is there any check on powerful corporate monopolies?

Miscellaneous.

LAW.

RAILROAD FENCES.

As a rule, railroad companies are obliged to fence their tracks, and are responsible for all injuries to stock, whether by negligence or not, in case they have not done so. In one case some sheep got through a railroad fence and were killed on the track. The company pleaded that the fence was good enough for ordinary purposes; but that the keeping of sheep in that field had not been contemplated. The Court ruled in favor of the plaintiff. In Maine legal and sufficient fences must be made on each side of the road passing through inclosed or improved land or wood-lots belonging to a farm, and the companies are liable to a penalty for failing to make and repair them. In New Hampshire, if the roads neglect to maintain such fences, the owner of the land can build them and recover double the cost from the company. In Vermont the roads are obliged to maintain fences, where necessary, and in case of failure to do so, are liable for damages caused by absence of fences, except where the landowner has been paid for fencing the road, and has agreed to maintain the fences. In Massachusetts the companies are obliged to fence the entire length of the roads except at the crossings of highways, etc. In Connecticut every company is required to build and maintain fences on both sides of the road, except where the railroad commissioners may decide they are inexpedient or unnecessary. If the companies have agreed with the owners of adjoining lands to make and maintain such fences, and the latter fail to do so within 60 days after notification, the roads may build the fences and recover the cost in an action for debt. Where there are no laws, and no obligation is imposed by covenant or prescription, the common-law doctrine is in force, and the company is no more bound to fence its land than is the individual. At common law, owners of adjoining lands owe each other no duties, and are subject to no obligations to maintain fences. As owners of land, railroad companies are subject only to the same liabilities as other owners.

Railroad men frequently complain that farmers along the lines often have a strong inclination to find surreptitiously a profitable market for poor stock on the railroad tracks. The late Col. Thomas A. Scott, the great Pennsylvania railroad king, used to say that to enhance the value of scrub stock no cross was more effective than a cross by a railroad engine.

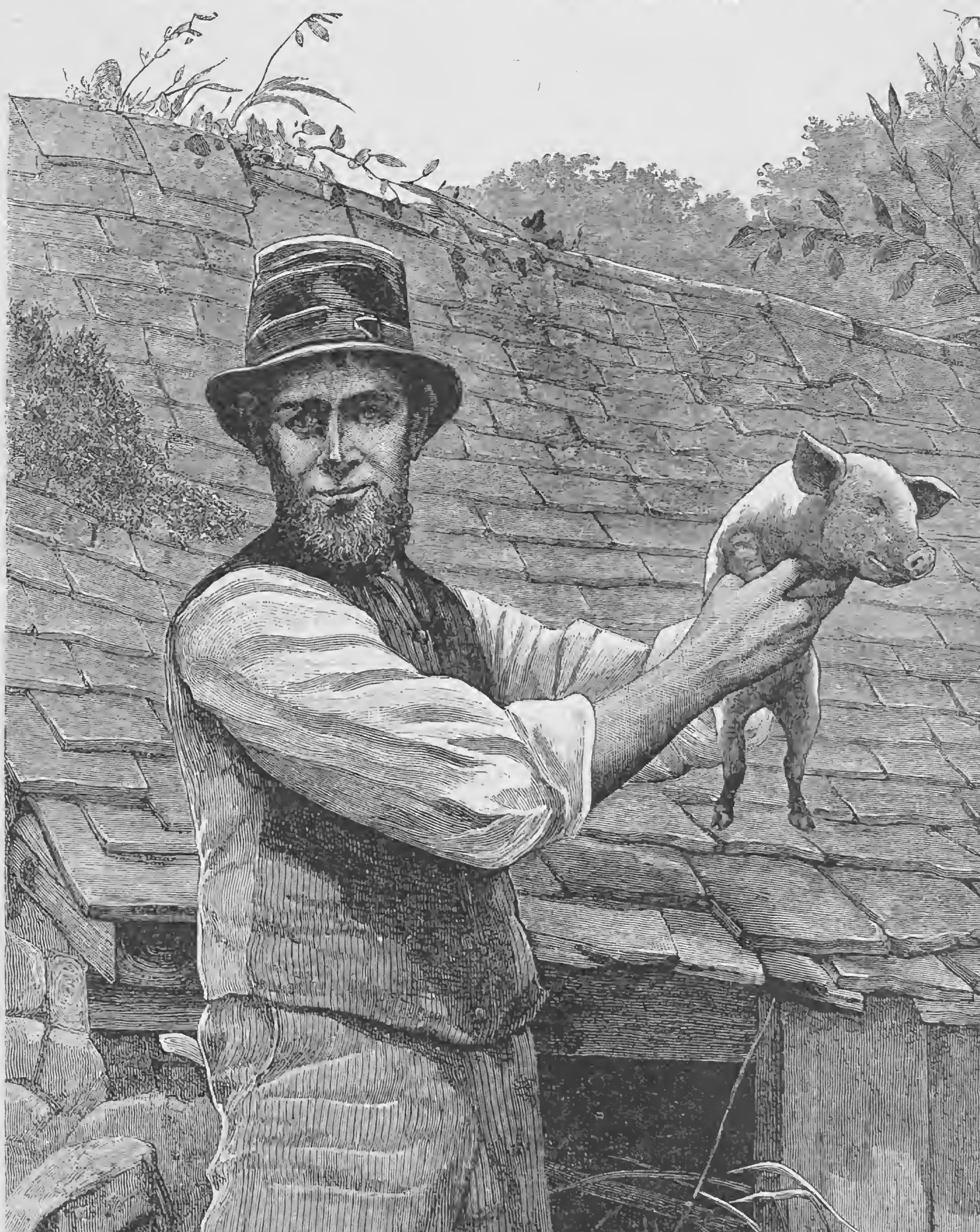
Here are some recent decisions of interest to farmers:

HOMESTEAD EXEMPTION.—In Kentucky, according to the decision of the Court of Appeals of that State, in the case of Roberts *vs.* Riggs *et al.*, the release or waiver of the homestead exemption, in order to be valid as against a mechanic's lien for additional improvements, must be in writing, subscribed by the defendant and his wife, and acknowledged and recorded in the same manner as conveyances of real estate, otherwise the lien of the mechanic is subordinate to the right of homestead.

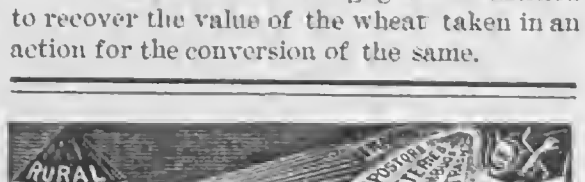
MORTGAGES OF FUTURE CROPS.—The Minnesota statute relating to the filing of chattel mortgages is applicable to mortgages of future crops, the seed for which had not been sown at the time the mortgage was executed, and which were, ther fore, not literally *in esse*. So held by the Minnesota Supreme Court in the case of Miller *vs.* Chapel. The Court says that the theory upon which chattel mortgages of crops to be grown are supported is that they are property having a potential existence, and that the mortgagor being in possession of the land upon which they are to be grown, has a present vested right to have the crops when they come into actual existence.

USE OF PUBLIC HIGHWAY.—According to a late decision of the New York Supreme Court (McCaffrey vs. Smith) neither the State legislature nor a village can confer authority on a person to occupy part of the public street as a hack stand as against the adjacent lot owners. The court said: The legislature undoubtedly had the power to authorize the village authorities to pass ordinances and by-laws (which they might enforce) limiting and restricting the use which the public might make of the streets beyond their rights of travel—ordinances which could be enforced as against the adjoining owners themselves, for the purpose of keeping the streets open to free and uninterrupted travel. But the legislature had not the power, neither had the municipal authorities, as against the adjoining owner, to confer upon any person the right to make use of the highway for any other purpose than to pass and repass without the consent of the owner of the fee.

CHATTEL MORTGAGE.—One Stewart held a chattel mortgage upon wheat and certain other personal property belonging to one Witherell. The mortgage, which was admitted to be usurious, contained a clause authorizing the mortgagee to take possession of the mortgaged property before the mortgage became due. A few days before the mortgage matured Stewart procured from Witherell a writing by which the latter in terms "turned over the property" covered by the mortgage to Stewart. The wheat, however, was not removed, but still remained in Witherell's granary and under his control. Stewart afterward came to Witherell's premises and without his consent removed and sold the wheat. The Supreme Court of Minnesota held (Witherell vs. Stewart) that the mortgagor was entitled to recover the value of the wheat taken in an action for the conversion of the same.



ISN'T HE A BEAUTY? Fig. 392. (See page 689.)



"Enormous fortunes awaiting claimants lie buried in the Courts of Chancery, Bank of England, England, Germany, and other countries. Over $180,000,000, which belong to the people, including all classes of the community. The Chancery Paymaster will gladly pay the money to the rightful owners if they will only put in their claims. Thousands of people in the United States are unconscious of the fact that a fortune has descended to them from remote ancestors, and because they have not any knowledge of these ancestors, they take no interest in what is of vital importance to them."

Such was the commencement of an $84 advertisement sent to us last Tuesday. Then everybody was urged to send to the British-American Claim Agency in this city for a list of 50,000 rightful heirs, "to whom this vast wealth belongs," and follow certain instructions. Then came "a few of the surnames of persons entitled to the money and property." The "few names" comprised an alphabetical list of nearly 1,000 in five long columns. We returned the advertisement to the esteemed agency which had sent it to us. "Upon looking into the matter we find that it is of such a character that we cannot consistently admit it into our columns," said our accompanying letter.

We find that those who answer the advertisement get a circular which invites them to purchase for 50 cents a book (a little pamphlet) containing a list of names of people who have left large fortunes which have never been claimed. Special attention is called to page 100, which gives the amount of fees, ranging from $1.50 to $13.25, which applicants must pay in advance for proposed services in searching for foreign inheritances. After paying all the fees, if the applicant desires to proceed further, he can do so by making additional disbursements. The concern alleges that it has a branch office in London which prosecutes inquiries; but it fails to give the address of such office. Its statement that there are vast sums awaiting claimants in the Bank of England is grossly exaggerated to say the least. The bank has issued an official statement which says: "There are no large amounts of unclaimed stock or dividends standing in our books. There are a few amounts of £1,000, and probably none that exceed this sum by more than £100 or £200."

As to the alleged unclaimed funds in the Court of Chancery, the Secretary of our Legation in London, prepared last year a statement, under Minister Lowell's direction, in which he said that there were in the custody of the court only £1,000,000, or less than $5,000,000, of dormant funds.

Those who think they are entitled to real estate or personal property in England should bear in mind the following declaration made by our Legation and sent to Congress last year:

"Any attempt to recover real estate from the Crown or individuals after a lapse of 12 years, (which may be extended to 30 under certain circumstances) and personal property after a lapse of 20 years, however valid the claim of the person making the attempt may have been originally, is certain to end in failure."

As to the numerous unclaimed properties awaiting heirs in Holland, Mr. Bell, our Minister at the Hague, in a late report to the Secretary of State, says the law of 1852 provides for escheating all unclaimed estates within a specified time, and adds: "The law has effectually and finally disposed of all unclaimed funds and estates in this country originating prior to March, 1852. There has, therefore, since 1852 been no such thing in Holland as an unclaimed estate originating prior to that date."

Over 30 years ago James Buchanan, then Minister to England, exploded the myth about the great Evans estate, and since then the cupidity of gullible Americans has been excited by the equally mythical Jennens estate ($500,000,000); the Mosher estate ($32,000,000); the Bradford estate ($122,000,000); the Lawrence-Townley or Chase-Townley estate ($800,000,000), to say nothing of numerous other vast properties in the United Kingdom, Holland, and Germany. Half a dozen or more of these swindles have been, from time to time, exposed in this Department. Whoever invests 50 cents, or even a postage stamp, in the pursuit of any inheritance on the list of the "British-American Claim Agency" will, to that extent, lose money and prove himself a gullible, greedy fool.

Woman's Work.

CONDUCTED BY EMILY L. TAPLIN.

WHY MAIDS WILL WED.

A GOOD wife rose from her bed one morn
And thought with nervous dread
Of the piles on piles of clothes to be washed
And the dozens of mouths to be fed.
"There's the meals to get for the men in the field,
And the children to fix away to school,
And all the milk to be skimmed and churned—
And all to be done this day."

It had rained in the night and all the wood
Was wet as it could be,
There were puddings and pies to bake
And a loaf of cake for tea;
And the day was hot, and her aching head
Throbbed wearily as she said:
"If maidens but knew what good wives know
They'd not be in haste to wed."

"Annie, what do you think I told Ned Brown!"
Called the farmer from the well—
And a flush crept up to his bronzed brow
And his eyes half bashfully fell.
"It was this" and coming near he smiled,
"It was this: That you are the best
And dearest wife in town."

The farmer went back to the field,
And the wife, in a smiling, absent way,
Sang snatches of tender little songs
She'd not sung in many a day.
And the pain in her head was gone and her clothes
Were as white as the foam of the sea,
And her butter as sweet and golden as it could be.
The night came down—
The good wife smiled to herself as she said:
" 'Tis so sweet to labor for those we love,
It is not strange that maidens will wed."

—*New Age.*

OF INTEREST TO WOMEN.

FROCKS for children are loose and short-waisted, with full skirts and wide belts. Coats are made after the same model. Woolen gowns are the only thing for street wear except in the case of old ladies, who may wear gray or black silk.

A pretty style for a little girl is a Gretchen frock with puffed yoke, and puffs in the armhole to match. Much velvet, astrakan and plush is used for pockets, vests, collars, etc., on little girls' frocks and jackets.

The author of "John Halifax" says that every girl who is not entirely dependent on her male relations—a position which, considering all the ups and downs of life, the sooner she gets out of the better—ought by the time she is old enough to possess any money to know exactly how much she has, where it is invested, and what it ought yearly to bring in. By this time also she should have acquired some knowledge of business—bank business, referring to checks, dividends, and so on—and as much of ordinary business as she can. To her information of a practical kind never comes amiss, especially the three golden rules, which have very rare exceptions: No investment of over five per cent, is really safe; trust no one with your money without security, which ought to be as strict between the nearest and dearest friends as between strangers; and lastly, keep all your affairs from day to day in as accurate order as if you had to die to-morrow. The mention of dying suggests another necessity—as soon as you are 21 years of age make your will. You will not die a day the sooner; you can alter it whenever you like; while the ease of mind it will be to you, and the trouble it may save to those that come after you, are beyond telling. It cannot be too strongly impressed upon every girl who has or expects that not undesirable thing, "a little income of her own," what a fortunate responsibility this is, and how useful she may make it to others. Happier than the lot of many married women is that of the "unappropriated blessing," as I have heard an old maid called, who has her money, less or more, in her own hands, and can use it as she chooses, generously and wisely, without asking anybody's leave, and being accountable for it to no one. But then she must have learned from her youth upward how to use it, she must not spare any amount of trouble in the using of it, and she must console herself for many a lonely regret—we are but human, all of us!—with the thought that she has been trusted to be a steward of the Great Master. Such an old maid often does as much good in her generation as twenty married women.

A PLEA FOR THE GIRLS.

"WHAT'S mine's mine" is a selfish saying, perhaps, yet what a satisfactory feeling it implies. To think that the veriest trifle belongs to us absolutely,—"a poor thing but mine own." And here we encounter a very great trouble to many girls. So very many well-meaning parents, while supplying all the material necessities for their daughters omit a greater need than all,—a little independence. We do not mean independence of parental duty, or freedom from the loving bondage of home life, but the independence of possessing something—it may be the veriest trifle, for personal use and expenditure.

We often hear men complain that women have no idea of spending money aright, or of keeping any record of the way it has been spent. Now, if a girl, from babyhood until marriage, is supplied with all she requires, without purchasing anything herself, excepting stray confectionery, it is not at all probable that her housekeeping expenditures will be marked by great prudence or economy. She may have some ideas of cost, and a vague idea of being economical, but she will be wanting in judgment. She would be something like Mrs. Oliphant's Lady Jane, who studied authorities on domestic economy when thinking of marriage with a poor man, and decided to buy only solid silver dishes, as they would obviate the expense of breakage, and keep a competent French cook, who would be so much more economical than an ordinary one.

The English plan of giving each girl an allowance of so much—or so little—on which she is to dress herself and pay all ordinary expenses, is admirable, and worthy of being more extensively adopted in this country. Where it is unnecessary or impossible for a girl to earn her own living there is every reason why she should have her own allowance. It should begin upon her leaving school, when she has, presumably a fair stock of clothes to begin with. The amount of the allowance and the purposes for which it is expended must be the result of circumstances. But one thing must be unchangeable: all gifts or charitable expenses must come out of the allowance; it must be an early lesson that gifts otherwise purchased are not personal gifts at all.

This matter of allowance or income is doubly an act of justice when the daughter is an energetic worker in the house. It is her bounden duty and service to work for her parents. Granted; but the duty of children should not cause us to lose sight of the duty of parents. And if regular work, well performed, is part of the daughter's service, some little compensation will show her that her parents appreciate it, without causing it to take a strictly commercial aspect. We repeat, a fixed allowance, that a girl may regard as her very own, will give her independence of character, and ground her in habits of prudence and economy that will be of infinite benefit to her in after life.

HOW MANY HOURS FOR SLEEP.

"Now blessings light on him that first invented sleep! It covers a man all over, thoughts and all, like a cloak: it is meat for the hungry, drink for the thirsty, heat for the cold, and cold for the hot."—Don Quixote.

Adages are not always to be depended on for good advice. The old saying in regard to sleep "nine hours are enough for a fool" has frightened many people from taking a rest that was necessary to them, "Nature takes five, custom seven, laziness nine and wickedness eleven," is wrong in at least two of its assertions. There are very few instances in which nature does not demand more than five hours sleep. It is true that sleeping, like eating is very much a matter of habit, and you may train yourself to dispense with more than five hours sleep, as you may to omit the third meal of the day. How long you will flourish under such a *règime* will depend upon the strength of your constitution. You may fare like the man's horse, who, when it had become reduced to a diet of one straw a day, in the most ungrateful manner, died on his hands.

A person may need nine hours sleep out of the 24, without being either lazy or foolish. Indeed he is a wise man if feeling that he requires them, he is sensible enough to take them. Goethe, when performing his greatest literary feats, took nine hours sleep.

A full grown adult in a healthy condition, will seldom require more than eight. If, however, he discovers that he is not sufficiently refreshed by eight hours, he should take more. It is a pretty safe rule to sleep as long as you are sleepy. "There are people," says a writer, "who are wise enough to eat when they are hungry, but who have never attained that higher degree of wisdom to sleep when they are sleepy." Unless you are a very lazy person indeed, you are not likely to take more than your constitution requires, for, of course, dawdling in bed is not sleeping.

By shortening the necessary hours for sleep, you may bring upon yourself "insomnia." There are scientific writers on the subject who claim that the best remedy for this is to learn to sleep in the daytime. This is very well where from some cause, work, watching or pleasure you may have failed to get your needed sleep for a night or two. There is undoubtedly a great virtue in naps, even short ones, and the art of napping in the day-time, although I could never acquire it, is a desirable one, and like most arts is a matter of practice. Still it is a bad practice to get into the habit of turning night into day, and if you are not kept awake by care or illness, but merely have lain awake because you could not sleep, I should recommend you to fight the consequent drowsiness of the next day, in order that you may, if possible, resume your natural rest at night. Sleeplessness is generally the result of an unfortunate habit of "thinking," generally on unpleasant subjects after one has retired for the night. Dr. Frank Hamilton, a great physician and a wise man, said: "Gloomy thoughts prevent sleep. The poor and unfortunate magnify and increase their misfortune by too much thinking. 'Blessed be he who invented sleep!' but thrice blessed be he who shall invent a cure for thinking." MARGARET NEWMAN.

THE AGRICULTURAL FAIR.

How much one's ideas are awakened on entering a country fair ground. Here are articles of almost every description placed for inspection, some of them cannot be equaled in our estimation, and such things create in us a desire for the improvements of modern ways. In one of the late RURALS was a picture of the Exposition building at Hornellsville. It was at this place I had the pleasure of attending a fair. On entering the grounds from the east, on either side were displayed the agricultural implements. One, a self-binder, was run by steam on the gounds to show its merits. Among other things that attracted our attention were the plows, harrows, drills, hay-tedders, potato diggers, reapers, mowing machines, cultivators, and all the mechanical appliances used on the farm. Passing along we entered the exposition building. About the first thing that met our gaze was the exhibit from North Carolina. I shall not attempt to name all the exhibits but some were as follows, flax, cotton, jute, sorghum cane, broom corn, sugar cane, crab grass, Hungarian, Red Top, Native clover, corn, chufas, fruits and nuts of every kind and description. There were beans no larger than the smallest pea, that looked very nice indeed. It was interesting to view the productions of that far-off sister state.

At each end of this building is a staircase leading to the second floor. At the east end on this floor is the picture gallery. In addition to the pictures there was one collection of coins that contained 1700 pieces; another collection of foreign coins contained one that was over 1000 years old. The display of arrasene and crazy work was exceedingly fine. There were numbers of silk quilts mostly crazy work, but one that was not of this style contained 9,534 pieces. A novelty in carpets was a hit or miss worsted and silk rag carpet. Some of the quilts had hand-made lace around them, and others had a border of dark maroon velvet pointed; on each point was a ball of old gold and maroon alternately. A large octagon frame contained 92,239 pieces in feather flowers showing much skill. One more thing worth mentioning was the floral hall on the first floor situated in the central part of the building. The flowers were arranged in pyramidal form; in the centre of this a fountain sent its mist and spray over all. Scattered among the flowers were pampas grass which grows in California; in its natural state it is cream colored or white, but these were colored in every hue.

There was a fine display of poultry of all kinds. One interesting exhibit was an incubator hatching young chicks; from 250 fertile eggs 218 chicks were hatched in three days. The little motherless things acted as though they were perfectly contented. In addition to this there was a dog show in a side pavilion.

On the second day Governor Hill was introduced by the Hon. H. Bemis, who gave us a very interesting address. He said: "The *farm* is the *true* home: and farmers should appreciate the good and blessed advantages connected with farm life. By diligent and careful study the farm home can be made the most attractive to all classes of people. Often the people from large cities flock to the country for more beautiful and attractive homes, even though they tarry but a while. True farming should not be confined merely to raising fine stock and horses, but the farmer should look well to the surroundings of his home." In his address the governer said: "I have known some men to be very particular in cutting every spear of grass in their fields, to have them look smooth and nice and at the same time the front yard where the lawn ought to be would be filled with tall weeds and grass. It would pay farmers to invest a few dollars and a little time in making their homes more attractive by planting and setting out trees and flowers, annexing a piazza or two with trailing vines running here and there. Also have bright and cheerful pictures arranged in your rooms together with other things that add to its attractiveness."

The helpful words of these addresses were among the many things calculated to instruct at this fair, and it was unanimously decided that these annual gatherings should do much for the social and material advancement of the class benefited by them.

MARY D. THOMAS.

GOLDEN GRAINS.

SOMEBODY has well said that a woman should never accept a lover without the consent of her heart, nor a husband without the consent of her judgment.....

THE Christian at Work says: "Every new church built is a fresh and emphatic announcement to every noisy infidel and scientific agnostic that the people are not yet ready to throw away their Bibles, their God, and their hope of immortality. Let such notices be multiplied on every hand. The best reply to an infidel is to build a church, and thus propagate the pure spirit of the Gospel."..... .

A PRIDE of doing all work well, and for the sake of doing it well, can be taken in almost any department of household labor. Happy the woman who has learned the secret and the art of how to get, and getting the most recreation possible out of her ordinary tasks.....

IN the light of duty performed, no life can be wholly commonplace, and in the seeking of what the highest is, many a truth will be stumbled upon which can never be found by any who work from lower motives. And in experience of every day life, the words of the German poet are verified, that

"Rest is not quitting the busy career—
Rest is the fitting one's self to one's sphere."....

A WITTY old deacon put it thus: "Now, brethern, let us get a supper and eat ourselves rich. Buy your food, then give it to the church; then go and buy it back again; then eat it up, and your church debt is paid."..... .

A LOVE of good books is one of the best safeguards a man can have.....

A REAL gentleman is as polite to a little girl as to a woman.....

THE right word is always a power, and communicates its definiteness to our action...

WALK boldly and wisely in the light thou hast; there is a hand above which will help thee on.....

A SWEET THING IN CORN.

THE picture shown at Fig. 393, which we

Fig. 393.

have re-engraved from a German paper, may give the ladies a new idea. We have no suggestions to make. It is rarely wise for members of the sterner sex to attempt to pry into the secrets of feminine loveliness. We make more of a success as critics, showing our approval in an earnest manner whenever the ladies seem particularly attractive, without detailing the various combinations of colors and shapes that have produced the pleasing effect. We see no reason, however, why bright corn husks or even a corn cob will not look just as well on a lady's hat as a collection of feathers or dead birds. The corn ornaments would certainly show a kinder heart, at least. A BROTHER.

Domestic Economy

CONDUCTED BY MRS. AGNES E. M. CARMAN.

"JUST HOW."

ALL branches of housework can be greatly lightened if we only know "just how" to go at the task.

When the clothes are brought in from the line, do not let your servant throw them into the basket helter-skelter in a crumpled heap. Fold them smoothly piled one upon another on the ironing table and cover with the ironing blanket. In the morning they may be sprinkled in half the time; roll up tightly until ready to iron.

A carpet can be brightened and cleaned by

scattering corn-meal or salt over it and giving a second sweeping. It should be thoroughly swept first, however. It will also look clean much longer if a tablespoonful of pearline be dissolved in a pail of warm water, and the carpet be wiped with a flannel cloth wrung out of this. Change the water as often as it gets much soiled.

If oil-cloth be occasionally rubbed with a mixture of beeswax and turpentine, it will last longer.

China that has become stained with tea or coffee can be made to look as good as new by scouring with brick-dust.

A pine floor can be stained oak-color by washing it with a solution of one pound of copperas dissolved in a gallon of strong lye.

Clean irons are one of the marks of a good housekeeper. If your irons trouble you by dropping black specks from the top or sides when ironing, put them into a pan of warm soap-suds and give them a thorough scrubbing. Dry them quickly or they will rust.

Blacking the kitchen stove is the *bete noire* of many a tidy housewife. An ingenious friend of mine saves all her paper bags from the grocery, and when this troublesome task has to be performed, she slips her hand into one of these bags. The hand is not at all soiled, the bags are much more easily put on than gloves, and can be dropped into the stove when you are through with them.

EXPERIENCE.

BUSY HANDS.

A COUNTRY-BRED woman living in a large city gave lessons in cooking to half-a-dozen working-girls. She found them ignorant of the simplest details of work, because they had never seen it done. If they had grown up in country homes she would have found them already familiar with the theory of cooking and only in need of practice.

Washington Gladden believed that country boys made the most successful men, so he sent letters to 100 successful men in all ranks of city life, asking them where their boyhood had been spent, and how their time, out of school hours, was used. The replies showed that most of them were from country homes where, out-of-school duties trained their hands and gave them habits of industry. In many large cities there are now schools where little city girls can learn to cook, set a table neatly, sew, darn, mend, sweep and dust, and their brothers are taught to use carpenter's tools, and to model in wood such things as houses, fences, and furniture, and as their lessons advance, to make many things of value and beauty, of suitable sizes for use. The Children's Industrial Exhibition, held last Spring in New York City, showed the work from such schools (and some work done out of schools) by children all over the country. And there is a stir, and a flutter of little hands in the cities as they busy themselves with these new lessons. The country children already know many things these little folks are studying out with active fingers; why can they not be helped to learn still more? Are there not possibilities for cooking, sewing and carpentering classes in the country?

A class of six or more little girls might meet once a week under the guidance of a grown-up sister, auntie, or mother, and cook the meal they eat together, each one bringing a share of uncooked materials and doing a share of the work, the teacher watching and directing all the work, but doing none. Setting the table and table manners would come in for a share of her care. A work-shop for the boys might be organized during the season when there is the least farm-work, and some farmer, handy with tools, could greatly benefit the boys of the neighborhood by giving them lessons in simple work with hammer, saws and nails. Studying books is good; training the hands to make the study practical is better.

The advantages of such classes would be many: first of all, the children would feel that good work is important, and it would become interesting, and, instead of hurrying through their out-of-school duties in the most careless way, they would find a pleasure in doing them well. Then, in a class, if only of three or four, the sense of companionship and the efforts made by each one to work as well as the rest would add a charm for the children. Try something of this kind and report the results.

ALICE BROWN.

PAINT FOR KITCHEN FLOORS.

FOR the benefit of several inquiring women, we wrote to Mrs. Fisher asking as to the paint for kitchen floors that she approved of in one of her housekeeping serials. She replies:

"The paint I alluded to was specific in nothing but color—as near the hue of dried mud as black and white can be mixed—a dust-gray. So many kitchen floor paints in yellows and browns, show every spot so readily that I thought the exact shade that least shows "dirt" ought to be put up in cans and labeled, 'Kitchen Floor Paint.' Some manufacturer of paints ought to act upon this suggestion.

MARY WAGER-FISHER."

Miscellaneous Advertising.

When Baby was sick, we gave her Castoria
When she was a Child, she cried for Castoria,
When she became Miss, she clung to Castoria,
When she had Children, she gave them Castoria.

HOUSEKEEPING RELICS.

THERE is not a housekeeper who is willing to say that housekeeping is not an advancing art, but there are not wanting women who do not practice in accord with this belief. Why can we not lay down the antiquated things and cease from retrogression? Why use the iron tea-kettle when the neat tin one is lighter and better? Why wring the clothes by hand when there are a score of wringers? Why boil your coffee when you well know it should never boil? Why maintain a yeast jug when for two cents you can buy a cake of the compressed yeast? Why sweeten cake with molasses when sugar is equally as cheap. Why buy flour by the sack and pay $9, when $7 will pay for a barrel of the same flour? I cannot answer. It is not because women are ignorant of the superiority of wringers, compressed yeast, tin tea-kettles, and the best sugar. It may be because we are thoughtless, and content to be behind the times in some things. Who can tell?

MRS. M.

HAPPINESS may not be the aim and end of existence, but it should be cultivated in every lawful way; for the happy child doesn't whine and fret; the happy woman doesn't scold, and the happy man doesn't darken his home when he enters the door.

DESK ORNAMENTS.

TAKE three penholders with pens in them, and paint them red or gild them; then tie together with narrow ribbon and arrange so that they will stand upright like an easel. Attach to this for holding pens one of the little silver or gilt buckets that can be bought at any store where materials for fancy-work are sold. It may also be used to suspend a photograph or birthday card from.

LETTER POCKET.

A pretty letter pocket to hang by the side of a desk is made from a palm-leaf fan, which may be covered with silk, satin, velvet or plush, or even with handsome cretonne. Put a pocket, lined with pasteboard to make it keep in shape, on the front of the fan for holding letters. Suspend with a handsome bow of contrasting ribbon.

LOVER OF FANCY-WORK.

CHILD'S BOOK SATCHEL.

A DURABLE and inexpensive book satchel is made from a common coffee sack, but it should be a fine one. Cut it of the required width, and about three-quarters of a yard long. Work a border in cross-stitch, in red Germantown wool, about an inch and a half from the edge, so that when it is doubled the border will be all around both sides. Cut a piece nine inches long and three wide, and double it together until it is half an inch wide. Whip the edges together with the yarn. Cut another piece and do the same with it, and fasten these pieces on the top for handles. Line the satchel smoothly with red calico.

WALL-SPLASHER.

A pretty one is made of deep gray crash, worked in seaweed design, with toilet set and cover stand to match. The edges of the splasher are fringed, and it is fastened to the wall with four bows of light and dark ribbon to match the embroidery.

RAG MATS.

Old stocking legs make very good mats. Cut them in strips finer than for carpet rugs, and sew and wind into balls. Crochet with a very coarse hook, in single crochet stitch either round or oblong. If you have enough of any particular color, you can make a center of it and then work hit or miss. They are durable and look very well in country bedrooms.

ELSIE.

DOMESTIC RECIPES.

PACKING EGGS FOR WINTER.

LAST year I found the eggs I had carefully packed in salt, according to my usual custom, were a great disappointment. The yelks had either become hardened or adhered to the shell, and not half of my store proved available for cooking purposes. Mentioning this to a friend who is an exceedingly good housekeeper, she said, "Your mistake was in using salt at all, to pack them in. It always has a tendency to make the whites of the eggs watery and the yelks solid. Of all the materials I have ever used I prefer bran or middlings; then I never have any trouble." I shall try that this year and see how it works. I try all the eggs I pack, to make sure they are good to begin with. Roll up a newspaper so that an egg will just fit in one end of the roll, and hold it up towards the light, and the veriest novice can tell at once a good, fresh egg from a poor one. Eggs put away for Winter are better if laid after the hottest weather is passed—say in September. Once on the recommendation of a friend I packed a quantity of eggs in ashes; but when I attempted to use them they were completely cooked. I have also tried lime-water with similar results. A cool, dry room is best for keeping them well. Most cellars are too damp. A friend says she has succeeded well in keeping eggs in salt if they were put down in stone jars. She thinks such jars are more nearly air-tight than wooden vessels.

ENGLISH CHRISTMAS PLUM PUDDING.

Two pounds of raisins, two pounds of currants, one-fourth of a pound of citron, or lemon-peel; one teacup of sugar, two thick slices of bread crumbled fine, seven eggs, a teaspoonful each of cloves, cinnamon and nutmeg grated; two pounds of beef suet, a piece of butter the size of an orange: about two pounds of flour. Mix it all with milk or water and boil four hours in a bag. This quantity makes two large puddings, and may be kept a month. Steam slices as it is wanted and eat with a sauce.

HICKORY-NUT CAKE.

Two cups of sugar, one cup of butter, three cups of flour, one-and-a-half cup of milk, one coffee-cup of nut meats, the whites of six eggs, one-and-a-half teaspoonful of baking powder mixed in the flour.

LEMON CAKE.

Two cups of sugar, one of butter, four of flour, three eggs well beaten, one cup sweet milk, one grated lemon, three teaspoonfuls of baking powder. Beat butter and sugar together first, then add other ingredients.

AUNT RACHEL.

EGG TOAST FOR INVALIDS.

Beat the yelks of four eggs and the whites of two thoroughly, and mix them with two tablespoonfuls of butter; put this in a small sauce-pan and set it over the fire, stirring in one direction until thoroughly hot. Have ready some thin slices of bread delicately toasted, and spread with the mixture of egg, and serve very hot.

Or, put three ounces of butter into a bowl, and stand the latter in boiling water until it becomes liquid. Now add four well-beaten eggs to this, pour into a sauce-pan, and set it over a slow fire, moving it around in one direction until heated; it must not be allowed to boil. As soon as warm pour it back and forth from the sauce-pan to the bowl until thoroughly hot. Have ready some nicely toasted bread, and spread this over while hot.

NURSE.

RICE TOAST WITH POACHED EGG.

Boil some rice the day before and set away in a flat dish until morning. Cut it in slices, brush each slice over with melted butter, slightly grease the broiler, and broil over a rather slow fire. Butter the slices and drop a poached egg on each.

CREAM POTATO BALLS.

Mix two tablespoonfuls of melted butter and the whites of two eggs well-beaten with a pint of finely mashed potatoes, season to taste and roll into little balls. Dip each ball in cream, roll in cracker dust, place in a buttered dish, and bake until a delicate brown.

COOK.

QUESTIONS ANSWERED.

TO REDRESS MAHOGANY; A MAHOGANY STAIN.

MR. A. H. asks how to clean and varnish mahogany furniture, also how to stain wood in imitation of mahogany.

ANS.—Remove every particle of the old varnish with soda water and *fine* sand-paper. Next rub well with powdered pumice stone and raw linseed oil, using as little oil as possible. Several thicknesses of flannel tacked to a block of wood of convenient size for handling will be found to expedite this part of the work. Next wash the furniture with warm water and Castile soap. After the wood has become thoroughly dry, give a coat of the best furniture varnish. Use a fine varnish brush for the purpose. The varnishing should be done in a warm room free from dust, and by a person who understands laying it on. For the stain, boil one-half pound of madder and two ounces of logwood in a gallon of water. To be applied with a brush while hot. When dry go over the whole with a solution of two drams of pearlash in a quart of water. Varnish after the wood is thoroughly dried.

WHEN buying dress goods that are not to be worn out at once, for a growing girl, it is economy to buy a yard or two extra for remodeling the dress for another season.

Wash window glass in clear, warm water—not soap-suds. Add a little ammonia, borax or baking soda to the water.

Why shouldn't the boys have as pretty and cozy a room as their sisters?

Miscellaneous Advertising.

Debility

Languor, and Loss of Appetite, are cured by the use of Ayer's Sarsaparilla. It removes that terrible sense of *Constant Weariness*, from which so many suffer, gives tone and vigor to the stomach, and restores health and strength more surely and speedily than any other medicine.

Three years ago I suffered from Debility and Loss of Appetite, the result of Liver Disease. After having tried various remedies, and consulted several physicians, without benefit, I was induced to take Ayer's Sarsaparilla. The first bottle produced a marked change, and the second and third accomplished so much that I felt like a new man. I have, since that time, taken about one bottle every year, and had no recurrence of the trouble.—William E. Way, East Lempster, N. H.

Ayer's Sarsaparilla,

Prepared by Dr. J. C. Ayer & Co., Lowell, Mass. Sold by all Druggists. Price $1; six bottles, $5.

MAKE HENS LAY

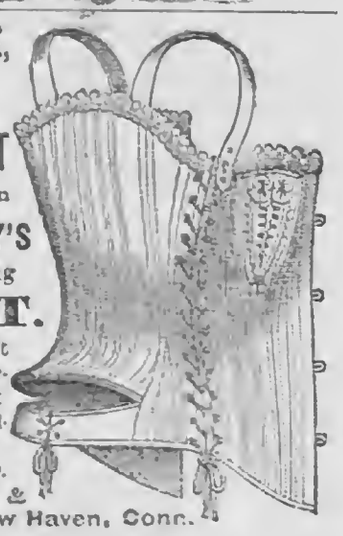
SHERIDAN'S CONDITION POWDER is absolutely pure and highly concentrated. It is strictly a medicine to be given with food. Nothing on earth will make hens lay like it. It cures chicken cholera and all diseases of hens. Illustrated book by mail free. Sold everywhere, or sent by mail for 25 cts. in stamps. 2½-lb. tin cans, $1; by mail, $1.20. Six cans by express, prepaid, for $5. I. S. Johnson & Co., P. O. Box 2118, Boston, Mass.

FRIENDS, IF YOU ARE IN ANY WAY INTERESTED IN **BEES OR HONEY,** We will with pleasure send you a sample copy of the **Semi-Monthly Gleanings in Bee-Culture,** with a descriptive price-list of the latest improvements in **Hives, Honey Extractors, Comb Foundation, Section Honey Boxes,** all books and journals, and everything pertaining to Bee Culture. NO THING PATENTED. Simply send your address, WRITTEN PLAINLY, to A. I. ROOT, MEDINA, OHIO.

WANTED A WOMAN of energy for business in her locality. Salary $50. expenses. E. J. Johnson, Manager, 21 Barclay St. N.Y.

"I NEVER!" Ladies, we make a specialty of giving Premiums for the forming of Tea Clubs. Now is the time to get up orders for our celebrated TEAS and COFFEES. Teas of all kinds, from 30 to 75 cts. per pound. **We defy the world on price and quality. No house can give the same quality of goods and premiums as we do.** We have a host of useful and ornamental articles to select from. Send us your address (mention this publication) and we will mail you our Illustrated Price and Premium List, and full particulars. Address NATIONAL TEA & COFFEE CO., Washington St., Boston, Mass.

ELEGANT SHAPE, HEALTH and COMFORT Perfectly Combined in **MADAME FOY'S** Skirt Supporting **CORSET.** It is one of the most popular and satisfactory in the market For sale by all leading dealers. Price by mail $1.50. FOY, HARMON & CHADWICK, New Haven, Conn.



GOLD MEDAL, PARIS, 1878. **BAKER'S Breakfast Cocoa.** Warranted *absolutely pure Cocoa*, from which the excess of Oil has been removed. It has *three times the strength* of Cocoa mixed with Starch, Arrowroot or Sugar, and is therefore far more economical, *costing less than one cent a cup.* It is delicious, nourishing, strengthening, easily digested, and admirably adapted for invalids as well as for persons in health. **Sold by Grocers everywhere.**

W. BAKER & CO., Dorchester, Mass.

GENUINE YANKEE SOAP

After half a century is still without an equal, **AS A SHAVING SOAP.** Its rich, mild and lasting lather leaves nothing to be desired. *All Druggists keep it. Avoid Imitations. Trial Samples by Mail, for* 12 cts. The J. B. Williams Co., Glastonbury, Conn., Formerly Williams & Bros., Manchester, 1840.

10 Scrap Pictures and Agent's Sample Case for a 2-cent stamp. HILL CARD CO., Cadiz Ohio.

Virginia Farms. Mild Climate. Cheap Homes send for Circular. A. O. BLISS, Centralia, Va.

News of the Week.

HOME NEWS.

SATURDAY, October 9, 1886.

IN the Canadian Northwest Territory the Gros Ventres Indians lately killed six of the Blood tribe, belonging to the Crowfeet reservation. The Bloods went at once on the warpath and on their way to the Gros Ventres settlement killed about 100 white settlers, perpetrating horrors as diabolical as those of the Apaches in the South. All the whites at the reservation, including the agent, have been massacred. In a fierce battle between 60 Gros Ventres and the Bloods over 50 of the former were killed and scalped, and 20 of the latter were killed and 30 wounded. Two companies of mounted police are trying to put down the rising; but the whole force—1,500—will probably be needed, besides 2,000 infantry and cavalry on their way to the scene. A general rising of the Indians is feared, as they have been grossly oppressed by dishonest officials and speculators.....Geronimo and his followers are still at San Antonio. Gen. Miles says he had full authority from Gen. Sheridan to act as he pleased in warring against them and giving them terms. They had killed over 400 whites in less than two years, and it was better to accept their surrender conditionally than to risk more outrages. Geronimo and band are reported to have been equipped, clothed, armed and encouraged in their deviltry by Mexicans who offered them a market for their plunder. Other bands of Apaches are still on the war-path in Arizona and New Mexico. .....Tuesday the steamer Mascotte, plying between St. Louis and Cape Girardeau, Mo., burst a boiler flue below Grand Tower—passengers,25; crew,40; burned and drowned, 30; rescued, 35.....The Dominion Government has special agents in this country trying to induce French-Canadians to emigrate to Manitoba—considerable success.. .....Members of the civil service in Canada have just been ordered to take the oath of allegiance to the Queen: on refusal their pay will be stopped. Some are suspected of being Fenians and more of being disloyal..... The Court of Appeals of the State of New York State has confirmed the conviction and sentence of boodle Alderman Jachne. The other 14 boodle Aldermen, now under $25,000 bail each, are soon to be tried..... ....Capt. Henn, the yachtsman, is out of pocket some $10,000 by his experiments with Galatea.....The United States Circuit Court at Cleveland, Ohio, has decided that the local option feature of the Dow Law is not in conflict with the Federal laws. It was maintained that the law was against the United States Constitution as it deprived a citizen of his property ....Mayor Courtney of Charleston has announced that no more public aid is needed. Trade brisk; all busy repairing damages and making money. Several slight earthquake tremors during the week. "Center of disturbance" has moved about 200 miles southwest. Total loss by earthquake, $5,000,000..... .....Eighty-one and a quarter tons of quinine were used in the United States during the past year, according to a report to the National Druggists' Association made Tuesday at Minneapolis. And still we have earthquakes and shakes!..... .....Of the $3,000,000 given to the South by Mr Peabody some years ago for educational purposes, one-third has been lost by repudiation of Southern State bonds..... ....There are 30,000 employed in the meat-packing business in Chicago. Last May they struck for eight hours, and many of them got what they wanted. The employers of the eight-hour men now say they can't compete with the others, and a lock-out or strike is threatened.....The Undertakers' Convention, at Cleveland, Ohio, the other day protested earnestly against the growing practice of cremation, and feelingly appealed to the public to stick to the old custom of being put under the sod by the association..... ....The Oklahoma boomers have finally given up, having generally gone to work on the railroad now building through the Indian Territory. Their recognized leaders, including Capt. Couch, declare no attempts will be made in opposition to the present policy of the Government, and that they will await and respect the decision of Congress.....The American fishing schooners Darsley and Scyylla, seized by the Collector of Customs at Halifax on Sunday, were released on payment of a fine of $400 each, Tuesday. . . ..Judge Gray, of Chicago, Thursday,denied a new trial to the Anarchists, seven of whom were sentenced to death and one to imprisonment for life. They made vehemently bitter harangues in the court-room, but are likely now to meet with the fate they so richly deserve.....The Atlanta Constitution avers that there is more suffering among the laboring people in Augusta, on account of the strike of cotton operatives, than there is in Charleston on account of the earthquake—3,000 out.. .... One thousand delegates, representing the million or so Knights of Labor, assembled in the armory of the 1st Virginia Regiment at Richmond, Va., Monday morning to begin the two-weeks' session of the 10th annual convention of the order. Master Workman Powderly called the gathering to order and made a rousing speech. Governor Lee, of Virginia, gave an address of welcome. Routine work almost exclusively during the week. Powderly will be re-elected..... ....For the quarter ended September 30, there were 1,932 failures in the United States, as compared with 2,173 for the third quarter of 1885. The liabilities, however, are $27,500,000 for the three months of 1886, as against $23,874,000 for the corresponding period in 1885.....Justice Gordon of the Pennsylvania Supreme Court Monday decided that the store-order system, under the act of June 29, 1881, was unconstitutional and void,inasmuch as by it "persons are prevented from making their own contracts." .....The President is looking right sharp after Federal office-holders who, contrary to his views, have engaged in political conventions.....Wiggins is going to leave Ottawa. The falsity of his predictions is making the weather too hot for him.....The President will visit the fair of the Virginia State Agricultural Society at Richmond, Va., the 21st. Mrs. Cleveland will probably accompany him. .....George Bancroft celebrated his 85th birthday last week.....At the jug-handled election in Ga., Wednesday, the Democrats made a clean sweep. Gen. J. B. Gordon, Governor.....Sec. Manning is to remain at the head of the Treasury.....There is not an iota of doubt of a mighty Blaine boom nearly everywhere among Republicans.....California cigar manufacturers who discharged their Chinese workmen, and employed Eastern men, are discharging the latter and again employing Mongolians. The "white" factory stamps were easily procured by the "Chinese" factories, which used them on their goods and undersold the others. To meet this competition the Chinese had to be taken back..... Of the 61 bodies reduced in the crematory at East New York since December last, only 21 were Americans..... ... .The steamer Anchoria of the Scotch Anchor line, plying between this city and Glasgow, is now 22 days out from that city and 12 days overdue. She has not been seen, though vessels are constantly passing both ways over the course she would take. Many report that her machinery was out of order before she started, and that some of her crew refused to go to sea in her. Her agents here still say there is hope, and that she will soon make some port in a disabled condition. Great anxiety among the friends of those on board, most of whom seem to have been from the country, judging by the number of telegrams received by the agents here .....

FOREIGN NEWS.

SATURDAY, Oct. 9, 1886

AFFAIRS in Bulgaria still in a muddle. Gen. Kaulbars still scolding, threatening and blustering unless the Czar's demands are obeyed. Issues orders to the troops to disobey the government under penalty of the Czar's displeasure and acts the part of an arrogant tyrant in a mutinous province. Has been traveling through the country trying to stir up the people against the Regency and in favor of Russia, but hitherto he appears to have been rebuffed by officials, troops and people, who do not seem very anxious to learn "the views and intentions of the Czar." Austria still determined to bar Russian aggression. Germany apparently playing a double game—not displeased with Austria, but very friendly to Russia. If Russia, Austria, Turkey, Italy and England become embroiled, Germany will doubtless try to pulverize France so utterly that she'll never recover. Outbreak of war possible any day; very probable within six months..... ....In British politics Lord Randolph Churchill, Conservative leader in the House of Commons, has put Lord Salisbury, leader in the House of Lords and Premier, completely in the background, and taken the place of Disraeli in speaking for and "educating" his party. In late speeches he has stolen Gladstone's thunder on all points except Home Rule for Ireland, and even in this respect he promises to introduce a bill giving Home Rule to each of the four provinces—Ulster, Leinster, Munster and Connaught. Churchill is now traveling, incognito, on the continent, and is expected to negotiate secretely, but in the name of the government, with Bismarck, Kalnoky and other great diplomatists about the Bulgarian trouble. ....In Ireland a vast number of notices of evictions indicate grave trouble in the near future. In England distress among the wage-earning class is very severe—thousands can't get work at any price; thousands are out on strike on account of recent reductions in wages, and hundreds of thousands are living on slim fare from day to day. Agricultural distress is so grievous that it is hardly possible for tenants to pay rents, so that a great number of farms are unoccupied and many more will be thrown up next rent day..

AGRICULTURAL NEWS.

SATURDAY, Oct. 9, 1886.

CONTAGIOUS pleuro-pneumonia is officially reported in parts of New York, New Jersey, Pennsylvania, Maryland, the District of Columbia, in one or two border counties of Virginia, and at Chicago. There are also some doubts as to its existence in Ohio, Kentucky, and Dakota. The Department of Agriculture is co-operating with the authorities of Illinois to suppress the plague there, and also with those of Maryland, paying for the destruction of infected animals and quarantining those that have been exposed. The authorities of Virginia, Pennsylvania, New Jersey and New York have not yet accepted the rules adopted by the Commissioner of Agriculture for co-operation in measures necessary for the extirpation of the plague..... ....The Ohio game laws, as amended at the last session of the Legislature, prohibit the killing of all song birds and all sparrows except the English sparrow. ..... The shrinkage in cattle values, together with reports of serious epidemics throughout the country, is causing great mistrust and uneasiness among Texas cattlemen. There are rumors that some of the most prominent have already become embarrassed, and that their paper has gone to protest. Extensive failures are looked for..... .....The Secretary of the Interior is considering a scheme to allow certain Indian tribes to utilize their lands by allowing them to take cattle of the whites to pasture at a fair consideration, but no white man to be allowed on the reservation..... It is proposed to locate all the Indians in Minnesota on one reservation. The change would throw upon the market over 3,000,000 acres of land The tobacco association of Lynchburg, Va., reports that the sales for the fiscal year just closed were 49,332,000 pounds of loose tobacco, 90 per cent. more than was ever before sold in one year.....Six thousand Percheron horses have been imported into this county, first and last; more than one thousand last year.....French Premier de Freycinet, replying to a deputation from the Bordeaux Chamber of Commerce, which prayed that the importation of American salt meats into France be prohibited, said that the government would consider the matter..... In the first eight months of this year Great Britain imported 80,508 live beeves from the United States, against 105,808 in same part of 1885; 140 cows, against 373; 5,225 sheep, against 9,625; no swine, against 67. The totals imported from all countries at the same time were 168,069 cattle, against 202,671 in 1885; 33,762 cows, against 36,033; 670,906 sheep, against 598,361; 14,722 swine, against 9,527... .....The corn canning of the country appears to be short. Complaints are heard from Maryland and Maine and also from the West; prices, therefore, are strong. .....It is alleged that many European wool contracts for America have been canceled by paying a penalty of from two to six cents bonus, and that all the wools in bond in America have been ordered back to seek markets at higher figures.....The average weight of hogs in Chicago last month was 230 pounds, the lightest September weight in over ten years. The average has been about ten pounds greater... .....No animal after leaving the Island of Jersey can be re-imported, except in the case of cattle sent to Great Britain for exhibition purposes, and these must be returned to the Island within fourteen days..... ....James W. Sykes, a large seedsman of Chicago, made an assignment last Saturday and was arrested Monday night for borrowing $38,000 from the banks, putting up as security warehouse receipts for seeds which had no existence.....First snow of the season at Marshfield, Wis., Oct. 2. Same day heavy frosts greatly injured vegetation nearly all over the nothern part of the country and as far south as Kentucky and North Carolina, doing a great deal of damage to tobacco..... .....The farmers of Wisconsin are very jubilant over their success in raising "the weed." If the prospect holds good Wisconsin will soon become one of the largest tobacco-producing States in the Union..... ....Destructive prairie fires are now raging near Moorehead, Minn., and in northwest and southwest Manitoba. Hundreds of settlers have lost a great part, or all, they possessed, including hay, stacked grain, fences, barns and often homesteads.....The cultivation of tobacco in Germany is decreasing, owing to the system of taxation. The decrease in the number of planters is 12,000, as compared with 1885.....Wool sales opened at Sydney, Australia, a few days since, at which prices show an average advance of something like 50 per cent, above those of last February..... .....At the Wilton, England, sheep fair, two weeks since, 70,000 animals were sold. Wether lambs sold at $11.75 to $14.40 each; fat lambs, $8.65 to $11.00; full-mouthed ewes, $12.50 to $15.00; wethers, $11.00 to $13.00. . .....It is claimed the Chicago's wool trade for 1886 will show an increase of 30 per cent. over last year, and Chicagoans assert that their market will soon pass Philadelphia and give Boston a hard fight for first place..... ....The California Southern Railway is sending out loads of grapes attached to each passenger train bound east. The rate this year is $450 a car, as against $600 last year.... ... ...Montana cattle to the value of $100,000 smuggled over the border will be seized by officials of the Canadian customs department. .... In September, Chicago received 198,215 cattle, 468,430 hogs, and 82,132 sheep—an increase in all kinds of stock over the same month last year .....During 1885 we exported agricultural implements to the value of $2,561,000 of which $1,348,000 was the value of the reapers and mowers..... ....The exports of live stock and dressed meats from Boston for the English markets last week were 1,013 cattle and 3,992 quarters of beef.....In the months of April and May, 1886, only four Short-horns were exported from Great Britain, and these came to the United States..... .... A telegram this morning from Camden, N. J., says pleuro-pneumonia recently made its appearance near Vincentown, Burlington County, and has spread to an alarming extent. The State Board of Health has attempted to eradicate it by killing infected animals and quarantining herds, but cases are still being found. State Veterinary Surgeon W. B. E. Miller, of Camden, has been ordered by the Government Department of Agriculture to examine into the contagion and report to the National Bureau.....Another from Chicago just as we go to press says notice has been given that persons removing milk for public use from premises infected by pleuro-pneumonia will be arrested. Owners of cows are advised to milk them on the floor, to prevent injury from neglect. The cattlemen say they are unable to pay men to milk these cows when the milk from them cannot be sold, and threaten to refuse to have the animals milked, and throw the responsibility of further sickness or disease upon the health authorities or the State Commissioner..... .....

The Value of Prompt Action.

"I SHALL move immediately upon your works," was the strong language of General Grant at one of the crises of his historical career. Such should be the declaration of every man and woman who feels himself or herself assailed by some lurking foe to health, and especially strong should be the resolution to act if the enemy has already intrenched himself in some vital part of the system. Consumption, Asthma, Neuralgia, Rheumatism, and kindred ailments become dangerous only when neglected. They can all be cured by Compound Oxygen if grappled with in proper season. Drs. STARKEY & PALEN send a Home Treatment that enables any one to cure himself in his own home. Send to them at 1529 Arch Street, Philadelphia, Pa., for a pamphlet giving testimonials. It costs nothing to obtain it.—*Adv.*

Crops & Markets.

SATURDAY, Oct. 9, 1886.

Returns received to-day from 36 of the principal grape-growing sections along the Hudson Valley show that the yield of Concords this Fall is enormous, and exceeds the most sanguine hopes of all interested. Already individual growers have shipped as much as 50 tons, and each expects to ship from 30 to 60 tons more. Large quantities of fruit are being shipped to Boston, Philadelphia, and to points north and west, in addition to the heavy freights now being sent by boat and rail to New York. Last year was a phenomenal season, but this Fall the estimates made show that the gross tonnage will exceed that of 1885 by at least 5,000 tons. The business has assumed such proportions between Cornwall and Coeymans, and in the country between Newburg and Rondout, a section 12 miles broad and over 30 miles in length, that scores of heavy producers, during the past month, saw the necessity of building air-tight "coolers." Hundreds of tons of the choicest fruit have been stored away this week, and the work has only fairly begun. The result will be that New York will be supplied with grapes until well along in the holidays and at reasonable figures.

One the curious features of the fruit culture along the Hudson this Fall is that ripe strawberries were gathered at 13 different points between Marlborough and Catskill on October 5 and 6.

The Baltimore Journal of Commerce publishes this morning special reports from the tobacco-growing sections of Maryland, Virginia and North Carolina. While a considerable part of the crop had already been gathered, the frost very seriously damaged what was still in the fields, ruining a small percentage of it, and thus still further reducing the yield. In some few instances the crop is stated to be as large as last year and the quality as good, but nearly all the reports claim that the yield will be much reduced, the estimates running from one-third to two-thirds of a crop, and with the quality, especially in parts of North Carolina and Virginia, very poor. In the great Durham district the yield is estimated at not over 40 per cent. of an average and of very inferior grade.

Heavy frosts, accompanied with ice, last Thursday night, did great damage to the cranberry crop in Burlington, Ocean and Atlantic Counties, N. J. At a moderate estimate the loss is put at 25,000 bushels.

A telegram yesterday from Grand Forks, Dakota, tells of a syndicate "composed of Detroit, Buffalo, Rochester and Scotch millers," which proposes to buy up all No. 1 Hard Wheat raised in the Red River Valley—not to speculate with, but to grind in their own mills. The No. 1 Hard of the Valley is worth from 10 to 15 cents more per bushel for actual grinding purposes than any other wheat, and hitherto it has been very hard to get it unadulterated by millers outside of Minneapolis, as that city controlled elevators along the railroad. The Northern Elevator Company is the only one that issues certificates of wheat stored in its elevators guaranteeing weights and grades, and during the present season the syndicate will confine its operations to the purchase of these tickets, and create such a demand for them as to induce farmers either to start their wheat with this company, or else force other elevator companies to guarantee their own weights and grades. It will begin business on the first of next month.

Packing operations in the West have been on a moderate scale the past week, the returns indicating a total of 140,000 hogs, against a like number for the preceding week, and 125,000 for corresponding time last year; total from March 1 to date 4,900,000, against 4,160,000 last year, making an increase of 740,000 hogs. The Eastern shipments of hogs have enlarged recently, which reduces the proportion available for Western packers. Values of hogs at Chicago have been maintained relatively higher than prices of product for future delivery, and are now about 45 cents per 100 pounds above last Winter's average price at that point, which would seemingly justify the view that, so far as relates to hogs, values may be expected to be lower than now ruling. Product for January delivery has sold this week down to a basis of about $3.60 for hogs, at Chicago, which is lower than the average price paid for hogs last Winter at that point.

The San Antonio, Texas, wool market has reached a point where buyers are holding off. The highest point touched last spring was 19 cents per pound, but this Fall it has run to 21¾ cents. The extremely high prices prevailing have scared off Northern buyers, and sales are consequently slow. The range has been from 17½ cents to 21¾ cents for exceptionally clean wools. A declension is looked for shortly. The total sales for the season, it is estimated, will be 4,500,000 pounds.

A cablegram to De Long Mayer & Co., of this city, on Oct. 6 says American apples had that day met with a very active demand at Liverpool, two steamers from New York and one from Boston having brought shipments. Prices as follows: Phœnix, $3.60 to $4.02; Greenings, $3.36 to $3.48; Baldwins, $3.12 to $4.38; Golden Russets, $3.12 to $3.60; Hubbardstons, $3.06 to $3.72, Kings, $5.04 to $5.28. De L., M. & Co. say apples of the frail nature of Astrachans will not stand the voyage, but the list of those that will do so is a long one: Baldwins, Seeks, Pomeroys, Jonathans, Russets, Kings, Phœnix, Spitzenbergs, Swaars, Greenings, Spies, Hubbardstons, Gravensteins and Newton Pippins all do well. Some shippers send all kinds and think that is the best plan. The trip across is now made in such a short time that apples keep very well, if they are sound when shipped and not over-ripe. The freight is about $1 a barrel.

The Russian Government has just issued its revised and final report of the Russian grain crops of 1885, which reduces the first estimate on wheat about 38,000,000 bushels. The final estimate is as follows: Winter wheat, 77,514,000 bushels; Spring, 100,196,000 bushels. Total, 177,811,000 bushels. The first estimate made last November was a total crop of 215,461,000 bushels. The total crop in 1884 was 266,056,000 bushels, and in 1883 was 218,440,000 bushels.

As We Go to Press wool is quieter, but strong. In spite of speculative buying, home prices are below foreign. The loss of cotton in Texas by the late storm is reported to amount to over 30,000 bales. Estimates of the loss to the Western tobacco crop are placed at from 5 to 10 per cent., Louisville reports inclining to the lower figure. There appears to be some doubt as to the extent of the loss by frost in the Virginia and North Carolina tobacco regions. Hog products are depressed and lower. There is no sign of a g aiiun wheat, despite the late excellent export demand. Receipts at the West and Northwest have declined some. Flour is depressed and lower, with continued heavy foreign consignments.

MARKETS BY TELEGRAPH.

SATURDAY, October. 9, 1886

CHICAGO.—Compared with cash prices a week ago, "regular" wheat is 2¼c. lower; No. 2 Spring, 3⅛c. lower. Corn, 1¼c. lower. Oats, ⅝c. lower. Rye, steady. Barley, 3c. lower. Flaxseed, 1½c. lower. Pork, 50c. lower. Cattle, from steady to 25c. higher. Hogs, light, steady; skips, 25c. higher; others from 5c. to 30c. lower. Sheep, somewhat higher.

WHEAT.—Weak; Sales ranged; October, 70¾@71¼c; November, 73⅜@73⅝c; December, 75⅝@75⅞c; May, 81⅛@81⅝c; No. 2 Spring, 70⅝c. CORN.—Steady. Cash, 35c; October, 35@35¼c; November, 36⅛@36⅜c; December, 37⅜@36⅝c; May, 41⅜@42c. OATS.—Weak; Sales ranged: No. 2 Cash, 24⅜@24⅞c; October, 24@24⅛c; November, 25⅜@25⅝c; May, 30⅛@30⅝c. RYE.—Quiet; No. 2, 48⅛c. BARLEY. Quiet; No. 2, 53⅛c. FLAXSEED.—No. 1, $1 02¾@1 03. MESS PORK.—Firmer; Sales ranged. Cash, $8 75@$8 8; October, $8 57½@9 02½; November: $8 57½@$9 02½; January, $9 77½@$10. LARD.—Steady; Sales ranged: Cash, $5 80; October, $5 70@5 75, closing at $5 70; November, $5 70@5 75, closing at $5 70; January, $5 85@5 92½, closing at $5 87½. Short Ribs.—Cash, $6 6.½. Boxed Meats.—Dry salted shoulders, $5 70@5 75; Short clear sides, $6 65@6 70. CATTLE.—Market Steady; Shipping steers, $3 60@5 15; stockers and feeders, $2 00@3 45; cows, bulls and mixed $1 50@3 25; bulk, $2 20@3 00; through Texas cattle, steady; cows, $2 20@2 75; steers, $2 60@3 30; Western rangers, steady; natives and half breeds, $3 00@4 05; cows, $2 40@3 25; Wintered Texans, $2 90@3 50. HOGS.—Rough and mixed, $3 50@4 10; packing and shipping, $3 90@4 50; light weights, $3 50@4 45; skips $2 25@3 50. SHEEP.—Market steady; Natives, $2 25@4 20 Western, $3 50@3 75, Texans, $2 25@$3 10; Lambs, $4 00@4 75.

BOSTON. APPLES.—Maiden Blush, $1 25@1 50; do, common, 75@90c; Gravenstein, $2@2 50 per bbl; Hubbardstons, $1 50. BUTTER.—Northern creamery, extra, 28@29c; do. firsts, 24@26c; Western creamery, extra, 27@28c.; do. firsts, 25@26c; do. choice, 20@21. dairy. Franklin County, finest, 25@28c; good to choice, 24@26c.; Vermont extra, 23½@26c; Northern, choice, 24@26c; do. fair to good, 14@15c., Western dairy, good to choice, 12@13c; imitation creamery, extra, 14@16c; ladle-packed, choice 12@13c; do. fair to good, 10@12c. BEANS.—Choice pea, Northern hand picked $1 75@1 75 per bushel; do. do. New York, choice, hand picked, $1 60@1 65, do. do. screened, $1 50@1 55, medium choice, hand-picked, $1 50@1 55; do choice screened, $1 15@1 30; Yellow Eyes, choice, $1 50@1 60; do. flat, $1 45@1 50; Red Kidneys, $1 70. CHEESE.—New York extra, 11@12c; do. good to choice, 9½@11c; do. common, 7@9c; Vermont extra, 11@12c; good to choice, 10@11c; common, 7@9c; Western extra, 11½@12c. do. fine, 11@11c; common, 4@6c. Sage, extra, 11@12½c. EGGS.—Near-by and cape, 21c. per doz Eastern extras, 22@23c; Aroostook County, 22@23c; New York and Vermont, 21@22c; Western, 19@20c; Provincial, 20@25c. CORN.—High mixed, 54c; steamer yellow, 53c; steamer mixed, 52½c.; and no grade, 51½@52c. per bush. as to quality. HAY AND STRAW.—Choice hay, $18@19 per ton; fair, $15@16; ordinary, $14@15; fine, $13@16; Swale hay, $10@11; poor, $10@13 50 per ton. POTATOES.—Early Rose, 50@63c; Beauty of Hebron, 50@63c. Sweet Potatoes—Virginia Yellow, $1 75@2 50 per bbl; Jersey, $2 75@3 00 per bbl. SEEDS. Clover, West, 10½@11c per lb; North, 11¾@11½c; do. white, 18@26c; do. Alaska 12@15c; red top, per sack, West, $2 25, do, Jersey, $2 40@2 50; Hungarian 90c@$1 00; Millet, 90c@$1 00; Orchard, per bush, $1 80@2 00; Blue grass, $1 40@1 60; Timothy, Western, $2 15@2 25; do, Northern, $2 25@2 40; Flaxseed, $2 25.

ST. LOUIS.—Compared with cash prices last week, No. 2 Red wheat is 2⅝c. lower. Corn. ¼c. lower. Oats, steady. Rye, ½c. lower. Butter, unchanged. Flaxseed, 3½c. lower. Pork, 62½c. lower. Cattle, very little change. Hogs, from 15c. to 30c. lower. Sheep, steady.

WHEAT.—Steady; No. 2 Red, Cash, 74c; October, 71c; November, 74⅛@74⅜c. CORN.—Weak; No. 2 mixed, Cash, 33¾@34c; October, 31c; November, 31c. OATS.—Weak; No. 2 mixed, Cash, 26@26⅛c; October, 26⅛c; November, 26⅜c. RYE.—Steady at 48¼c. BUTTER.—Creamery, 22@25c; dairy, 10@21c. EGGS.—13½c. FLAXSEED—96½c. HAY.—Timothy, $11; prairie, $5. BRAN.—48c. at mill. PORK.—$9 39½c. BULKMEATS.—Long clear, $6 60; short clear, $7 15. LARD, $5 62½. CATTLE.—Market steady; Good to Choice Native Shipping Steers, $4 25@4 85; Butchers Steers, $3 25@4 05; Texas grades, $1 75@3 50. HOGS.—Butchers and choice heavy, $4 25@4 40, Packing, at $4@4 30; Lights, $4@4 25. Pigs, $3 00@3 90, SHEEP.—Market steady; Good to Choice, $3@4 20.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, October 9, 1886.

STATE OF THE MARKET.—As compared with cash prices last week, flour is 5c. lower; Ungraded Red Wheat 1c. lower; No. 2 Red 1¼c. lower. Corn, No. 3, ¼c. lower; No. 2, 1c. lower. Oats, ¾c. lower. Pork, 50c. lower. Butter, 3c. higher. Cheese, ½c. higher. Eggs, steady. Vegetables steady.

FLOUR, FEED AND MEAL—FLOUR—Quotations: Fine, $1 90@2 60; Superfine, $2 15@2 85; No. 2, $2 10@3 05; Good to Fancy Extra State, $3 50@3 70; Common to Good Extra Western, $2 40@3 70. Good to Choice Extra Western, $3 80@4 75; Common to Fair Extra Ohio, $2 10@3 75, Good, $3 80@4 40; Good to Choice, $4 25@4 75; Common Extra Minnesota, $2 40@3 10; Clear, $3 50 4 00; Rye Mixture, $3 75@4 10; Straight, $4 25@4 50, Patent $1 65@4 90; Bakers' Extra, $3 90@4 90; St. Louis Common to Fair Extra, $2 40@3 65; Fair to Good, $3 70@4 50; Good to Very Choice, $4 55@4 75, latter an extreme; Patent Winter Wheat Extra, $4 30@4 80. City Mill Extra for West Indies, $4 35@4 50, latter in new pkgs.; South America, $4 60@4 70. SOUTHERN FLOUR.—Common to Fair Extra at $3 25@3 85, and Fair to Choice, $3 90@4 00. RYE FLOUR.—Superfine, $3 15@3 35. CORN MEAL. Dull; Yellow Western, quoted at $2 50@2 75 and Brandywine at $2 85@2 90. BUCKWHEAT FLOUR—Quoted $2 00@2 10. FEED.—40 lb, quoted at 65@70c; 60 lb, at 60@65c; 80 lb, at 70@77½c; 100 lb at 82½@87½c sharps, at 95c.@$1 00. Rye Feed at 80c, screenings at 70@80c.

GRAIN.—WHEAT.—Ungraded Spring, 78½c; No. 2 Chicago, 82½c; No 1 Hard, 87@87½c, Ungraded Red, 72@85c. do, 81½c; No. 3 Red, 81¼@82c; No. 2 Red, 83c; No. 1 Red, 87½c; No. 2 Red. for October, 83@83⅛c. do. for November, 84¼@85c; do. for December, 85⅞@86⅝c; do. for January, 87¾@88⅝c; do. for February, 89¼@89⅝c; do. for March, 90⅜c, do. for April, 92⅜c, do. for May, 93¼@94c; do. for June, 91⅜@18c. CORN. Ungraded Mixed, 41½@46c; No. 3, 41c; No. 2, 45½@45⅛c; No. 2 White, 45⅜@46⅛c; Low Mixed, 44½c; No. 2 for October, 45⅜@45⅝c; do. for November, 46⅝@47c.; do. for December, 47⅜@48⅝c; do for January, 48⅝@49⅜c; do. for February, 48⅝@49c, do for May, 50⅛c. OATS.—No. 3 at 30c, do. White, 31½@35c; No. 2, 30⅜@30⅜c; do. White, 35@35⅛c; No. 1 White, 37c, Western Mixed, 30⅛@33c; do. White, 35@40c; White State, 38⅛c. No. 2 for October, 30⅛@30⅜; do. for November, 31⅜@33 9⅛c; do. for December, 32⅜@32⅝c; do. May, 36⅛@36⅝c.

PROVISIONS.—PORK.—Mess, quoted at $9 75@10 00 for Old and $10 25@11 50 for New; $11 for Family Mess; $14 50@15 50 for Clear Back, and $10 00@10 50 for Extra Prime. BEEF.—Extra India Mess, $11 50@13 00; Extra Mess, in barrels, $7 50@8; Packet, $8; Plate, $7 25@$8. CUT MEATS. Pickled Bellies, 12 lb average, 7¼c; City Pickled Shoulders, 5¾@6c; Smoked Shoulders, 6⅛c; Pickled Hams, 10@10⅛c; Smoked Hams, 11@11¼c. MIDDLES. Long Clear in New York, 7⅛c; at West, Long Clear, 6.40c; Short Clear, 6.65c. DRESSED HOGS, City Heavy to Light at 6⅛@6⅝c; Pigs, 6⅞@6⅝c. LARD.—Western steam spot at 6.20, October, 6.08@6.09c; November, 5.95@6.0c, December, 6.10c; January, at 6.16@6.19c; February 6.25@6.2c; March, 6.30@6.33c; City Steam, firm, Refined, 6.35@6.40; Continent, 7.

BUTTER.—Creamery—State Dairy, pail, fine, 32c; do. prime, 29@30c; do, and Pennsylvania, tubs, 30@31c; Western, best, 29@29½c; do, prime, 27@28c; do, good 21@22c; do. June, best, 25@26c; do. do. prime, 22c pails choice, 25c; half-firkins, tubs, good, 24@25c; half-firkins, tubs, good, 21@22c; half-firkins common, 17@18c; Welsh tubs, best, 22@23c; do. do. prime, 20@21c. Dairy firkins, best, 25c; do. do. prime, 22@23. Western Imitation Creamery, best, 17@18c; imitation creamery, fair and good, 14@15; Dairy, fine, 15@16c; do. common, 13@14c: Iowa firkins, Junes, 12@13; Iowa tubs, June, best, 12@13c; Factory, poor, 8@@10c.

CHEESE.—State factory, fancy, colored, September, 12@12¼c; do. do. do. white, September, 12c; do, do, best, colored, August, 11⅝@11⅝c, do, do, white, August, 11⅛c. do, do, good and fine, 10½@11c; do, do, fair, 9½@10c, do, do, common, 9@9½c; Ohio factory, fine, flat, 10½@11c; State factory, night skims 8@9½c.

EGGS.—State, 21½@22c; Ohio and other choice lots 20½@21c; Western, best, 20¾@21c; do. held lots, 19½@20c; Canadian, 19½@20c; do. fair held lots, 18½@19c.

POULTRY.—LIVE.—Chickens, per lb, at 10@12c; fowls near-by lots, per lb, at 11@12c.; fowls, Western lots, per lb, at 11c, fowls Southern lots, per lb, at 10½@11c; turkeys, per lb at 10@12c, ducks, western per pair at 50@75c.; geese, western, per pair, at $1.25@1.50.

POULTRY.—DRESSED.—Turkeys, per pound, at 11@14c.; Spring chickens, Philadelphia, per pound at 15@17c.; do. western, per lb, at 12@13c; fowls, Pennsylvania, prime, per lb, 13@14c; do western, per lb, at 12@13c.

FRUITS.—FRESH.—Quotations: Pears.—Bartlett, per keg, at $2 50@4; Seckel, per bbl, at $3 50@5; Sheldon, per bbl, at $3 25@4. Apples.—Gravenstein per bbl, at $2 00@2 50, Maiden Blush, per bbl., at $2 25@2 50; common varieties at $1@1 75 per bbl; Pippins, at $1 75@2 50 per bbl; Greenings, $1 25@1 62; per bbl. Peaches.—Jerseys, best, at $1 50@1 57 per basket; do. good at $1@1 25, do. plain at 40@85c per basket. Grapes, 6@7c. for up-river Delaware, per lb; Catawba, at 5@6c. per lb; Concord, per lb, 3½@5½c. Plums.—$1 75@2 50 per bbl. for Damson; German prime, per quart, 10@12½c.; copper, per crate, $1@1 25. Quinces at $3 00 for choice medium; $2 50@3 50 per bbl, for up-river. Cranberries at $6 25@8 75 for Cape Cod; best at $5 75; $6 for choice; $4@5 for light; $2@2 52 for choice, per crate; $1 25@1 50 for Jersey, per crate.

FRUITS.—DRIED.—The quotations are as follows, Apples—Fancy evaporated, 9c; do. choice, at 8@8½; do. Tennessee quarters at —@—c; do. State sliced at —@—c; do, southern sliced prime at 2@3c; do, North Carolina, fancy sun dried, new, 5½@6c; do. do. choice 4c; do. do. new. 3c. Peaches—North Carolina, peeled choice new, 10@11½c; do. do. do, fancy, new, 12@12½c; do. Georgia, choice, at 9½@10c; do. Delaware, evaporated, peeled, 23@26c; do, do, do, unpeeled new, 12½@13½c. do. Georgia new, 10½@11c. Cherries, pitted, at 9½c. Evaporated raspberries, 14@14½c; sun-dried do. 12½@13c. Blackberries—Prime at 7¾c.

PEANUTS.—Quotations are: 5¼c. for best hand-picked; 4@4¼c. for farmers' grades.

HAY AND STRAW.—Hay, Choice Timothy, 85c; Good Timothy, 70@80c; Medium, 60@65c; Shipping, 50c; Clover Mixed, 55@60c Straw.—No. 1 rye, 60@65; short rye, 50@55c, oat, 35@40c.

COTTON.—The quotations, according to the American classification, are as follows:

	Uplands.	New Orleans. and Gulf.	Texas.
Ordinary	6 13-16	7	7
Strict Ordinary	7¼	7 7-16	7 7-16
Good Ordinary	8 3-16	8⅜	8⅜
Strict Good Ordinary	8⅝	8 13-16	8 13-16
Low Middling	9	9 3-16	9 3-16
Strict Low Middling	9¼	9 7-16	9 7-16
Middling	9 7-16	9⅝	9⅝
Good Middling	9 13-16	10	10
Strict Good Middling	10⅛	10 5-16	10 5-16
Middling Fair	10½	10 11-16	10 11-16
Fair	11⅛	11 5-16	11 5-16

STAINED.

Good Ordinary	6⅝	Low Middling	8⅛
Strict Good Ord	7 5-16	Middling	8⅞

VEGETABLES.—Quotations are for: Potatoes.—Long Island, rose, in bulk, per bbl., $1 75@2 00; Jersey, Queen, per bbl, $1 37@1 62; State, $1 37@1 62c; do Burbank, $1 37@1 62; Jersey, peerless, per bbl, $1 25@1 50; sweet potatoes, Va., yellow, per bbl., $1 50@1 75; sweet potatoes, Va., yellow, inferior, per bbl, $1 00@1 25; Corn, Jersey, per 100, $1 25@1 50. Cabbages.—Flat Dutch, per 100, $2 75@3 25. Cucumbers.—Pickles, per 1,000, 75c.@$1 25. Eggplant, Long Island, per bbl, $2 50@3 25. Lima beans, per bag, $1 75@2 00. Onions.—Conn., red, per bbl, $1 50@1 75; do. Orange County, red, per bbl, $1 50@1 75. Tomatoes—Long Island, per box, 35@40c.

LIVE STOCK MARKETS.

NEW YORK, SATURDAY, Oct. 9, 1886.

BEEVES.—State steers, 1310 lb, at $5 50; do, 1352 lb, at $5; Kentucky do, 1410 lb, at $5 30; do, 1515 lb, at $5 15; do, 1188 lb, at $4 65; West Virginia do, 1140 lb, at $4 40; Virginia do, 1306 lb, at $4 65; do, 1126 lb, $4 55; Indiana, do, 1080 lb, at $4 10. Heifers, 1030 lb, at $3 75; Colorado Half-Breeds, 1278 lb, at $4 70; do, 1352 lb, at $4 75; Chicago Native steers, 1330 lb, at $4 75; do, 1066 lb, at $4 15; do, 1002 lb, at $3 95; Buffalo Steers, 1614 lb, at $5 70; do, 1318 lb, at $5 35; do, 1278 lb, at $5 25; Kentucky do, 1304 lb, at $5 10; do, 1359 lb, at $5 10, less $5; Ohio do, 1270 lb, at $4 25; do, 1252 lb, at $4 80; Chicago Steers, 1122 lb, at $5 25; do, 1325 lb, at $5 25; Colorado do, 1322 lb, at $4 55, do, 1150 lb, $4 00, Stags; 1175 lb, at $4; Ohio Steers, 1505 lb, at $5 50; Kentucky do, 1325 lb, at $5 20, Indiana do, 1062 lb, at $4 05; Virginia do, 1117 lb, at $4 35; Dry Cows, 1065 lb, at $3 50; State steers, 1215 lb, at $5; Oxen, 1585 lb, at $4 50; Kansas Half breeds, 1306 lb, at $5 15; do, 1261 lb, at $5 10. do, 1285 lb, at $4 90; do, 1297 lb, $4 80, Kansas Texans, 1063 lb, at $4 25; do, 1073 lb, at $4 30; Colorado steer, 1145 lb, $4 25; Texans, 864 lb, $5; Michigan do, 897 lb, at $3 85; Ohio do, 1057 lb, at $3 95; Indiana do, 1211 lb, at $4 50; bulls, 1050 lb, at $3.

CALVES.—Yearlings, 425 lb, at 2¼c; Grassers, 238 lb, at $2 80, do. 161 lb, at $2 50; Yearlings, 484 lb, at 2¼c; Grassers, 240 lb, at 2⅛c; Fed Calves, 310 lb, at 3c, do, 224 lb, at 4c; Grassers, 255 lb, at $2 40; do. 211 lb, at $2 75; Veals, 146 lb, at $8 25.

SHEEP AND LAMBS.—Canada Lambs, 77 lb, 6¼c; Kentucky do, 71 lb, at 6c; do, 70 lb at $5 60; 101 do, 63 lb, at $5 50; Kentucky Sheep, 94 lb, at $4 65; do, 91 lb, at $4 55; do, 70 lb, at $4 35, Canada Lambs, 77 lb, at 6⅛c; Kentucky do, 60 lb, at 5⅛c, Kentucky Sheep, 96 lb, at $4 55; do, 86 lb, at 4⅛c, Ohio do, 74 lb, at 4⅛c, Indiana do, 73 lb, at 4c; State Lambs, 62 lb, at 6c; State Ewes, 98 lb, at 4c; Jerseys do, 111 lb, at 4⅛c; Western Sheep, 93 lb, at 4⅛c; Canada Lambs, 80 lb, at 6¼c; State Sheep, 78 lb, at 3⅛c, do, 76 lb, at 4⅛c; State Lambs, 61 lb, at 6c; Northern Canada Sheep, 111 lb, at 4⅛c; do, Lambs, 70 lb, at 6c; do. 81 lb, at 6⅛c; Canada do, 68 lb, at 6⅛c; do, 79 lb, at 6⅛c; State Sheep and Lambs, 63 lb, at 4⅛c. State Lambs, 81 lb, at 6⅛; State Bucks, 130 lb, at 3⅛c; Kentucky Sheep, 99 lb, at 4⅛c; do, 102 lb, at 4⅛c, less $10, Jersey Lambs, 60 lb, at 6⅛c; do, Ewes, 113 lb, at 4⅛c; do. 101 lb, at 3⅛c.

HOGS.—Receipts for six days, 33,893 head against 36,344 head for the same time last week. State Hogs, 176 lb, at 5c. per lb.

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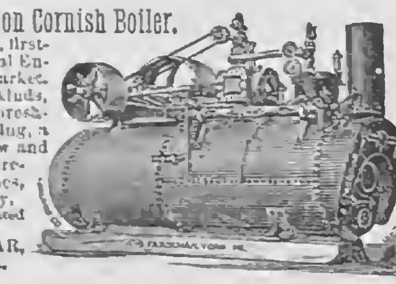

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For the Young.

THE STORY OF A DISTRICT SCHOOL.

A COLLEGE BOY'S DIARY.

(Continued.)

I STOPPED the game while it was loudest. It was getting far too rough, and I saw no reason why it should continue. The scholars took my interruption very much to heart. They appeared to think that it deprived them of one of the best portions of school life. There were many sullen mutterings and head-shakings as I broke up the circle.

The afternoon passed slowly away. An examination of the various classes developed some curious facts. Dozens of the scholars could tell the length of the Amazon River or the hight of the Rocky Mountains, but not one could name all the townships in the county or give the names of the counties immediately adjoining it. Several of the boys could spell through the spelling book with their eyes shut, but when it came to writing the words that rolled off their tongues so easily, they made the most ridiculous blunders. The best reader appeared to be the loudest shouter. Reading was purely a physical exercise. The same muscles were brought into play in shaking the sense out of the book that would be used in beating a human foe. Arithmetic appeared to be the favorite study. The scholars figured steadily at the "sums" in their well-worn books. As to the principles governing the "rules" which they repeated so glibly, they knew almost nothing. They were well satisfied that three multiplied by five necessitated the placing of 15 below the line as an answer. The book said so, and that settled it forever. Why or how this result was reached was another matter which had nothing to do with them. The educational system had been burned upon the altar of Bear Creek with the result of driving all the volatile elements into the air and leaving nothing but the ashes. These ashes must be planted again before a perfect growth could be secured.

I found that the last half hour had generally been devoted to spelling and writing. After a careful search I found but two writing books in the entire school; I found that there had never been more than six or seven. When I came to examine some of the writing I could well believe this.

When I called for the first class in spelling, two-thirds of the scholars rose and ran eagerly to form themselves in a long line at the side of the room. There was some little contest for the head, which I at last quieted by ranging the scholars according to size with the smallest at the head and the tallest boy at the foot. This arrangement did not give the most complete satisfaction for it brought my little friend of the morning to the head, where I found she was sure to remain, while it sent the dunce of the school to the foot, a position from which he found it impossible to extricate himself.

I was not long in discovering that much of the enthusiasm that clustered around Bear Creek education was bound into the spelling book. The dull faces grew bright with eagerness as the long words cut gashes in the long line of spellers and shuffled them about like the cards in a pack. Even the poor dunce at the bottom of the line flickered with hope when "triangle" gave him the chance of his life to go up five. But an evil-spirited "y" crept on to his tongue and spoiled his chances. There was a great deal of excitement about the spelling, but there seemed to be very little practical good. I determined to combine the writing and spelling by causing each scholar to write the lesson on the slate. I told them this without thinking that in so doing I struck at one of the cherished traditions of Bear Creek.

The effect of the days' skirmish was evident at night when I dismissed school. Several of the scholars, Mollie Brawn among them, packed up their books preparatory to taking them home. I supposed at first that this was done with a view to home study, but I was greatly disappointed. Mollie Brawn appeared as spokeswoman for the malcontents. She thrust her head in at the door and shouted:

"I can't learn nothin' frum no sech teacher as you be, an' I aint comin' agin. I'll tell my Pa too!"

After this explanation, she turned and ran with all her speed. The cover of the great dinner pail fell off, but she did not stop. I saw her at last far up the road, still running.

After the others had gone, Edith Bell, the little girl whose seat Mollie had usurped, came and tried to make me feel better over the desertion:

"I'll bring my sister tomorrow" she said. "Mamma will let her come, I know, when I tell her what a nice teacher we have this Winter."

As I was preparing to lock the door of the school-house, I noticed a little boy come cautiously out from behind the wood pile where he had been hiding. I recognized him at once. He had given his name as Johnny Billings. His clothes were ragged and seemed to have been cast off by a dozen different people before they fell to him. A great mass of almost white hair stood up straight all over his head. His cheeks were red, but his eyes were dull and grey. He looked as though some one had taken him by the head and pushed him down into his boots, and that when he came back to his old form the springs had broken and left him stunted.

This little fellow hurried up to me in great excitement. He caught hold of my coat in his eagerness, and his dull eyes looked up into mine, with an expression that I have seen on a dog's face before now.

"Say teacher," he asked earnestly, "when do Sunday come in the middle of the week?"

LETTERS FROM THE COUSINS.

DEAR UNCLE MARK: I have been reading the letters from the Cousins in the RURAL ever since Pa has taken it. I would like to join the Y. H. C. if you will let me. I am 12 years old, and live on a farm of 160 acres, in Dakota Territory. We have lived in Dakota four years, and like it very well. I have seen two blizzards; they were not very bad. I have four brothers and two sisters. We have 13 head of cattle, four mules and 19 pigs. We planted the Garden Treasures but they did not do very well it was so dry. We had green peas and ripe strawberries June 12. We picked two bushels of gooseberries. We will have a few Snyder blackberries this Fall which were sent to us to try, and our black currant bushes were black with fruit. We have a fine grove of young trees on our homestead of many different kinds which are doing well with us so far. The melon seeds which you sent have done well. We have thrashed our flax but not the other grain, and our flax went 14 bushels to the acre. Although the drought was so bad our crops are extra good. A part of this letter was written in June.

WALTER THORNBER.

Iroquois, Kingsbury Co., Dak.

[You took a long vacation in writing this letter. Glad the blizzards were not very bad. I guess most of us would like to see a mild blizzard just to see how it looked.—U. M.]

UNCLE MARK: I wrote to you once before and my letter was put in the waste basket, but I was not discouraged. I would like to be one of the Cousins—may I join? Pa has taken the RURAL for almost 26 years; and I always enjoy reading the Cousins' letters. Pa gave me the Garden Treasures. I planted them and most all of them came up. Our Alaska peas were very nice. We live on a farm and have lots of cows, so of course we have lots of good milk to drink. We milked 18 cows this Summer, and sold our cream. We have horses too, about a dozen I guess. When it is muddy I ride a horse to school, and when I get there I let her loose and she comes home. Well I guess this letter is getting too long, so I will have to close for fear you will put it in the waste basket. From your niece,

Freeport, Ills. ANNA WEAVER.

[Yes, you are now a cousin. I guess you take good care of your horses, so they are glad to come back home. I like milk too.—U. M.]

DEAR UNCLE MARK: I promised to write and tell you about that hen that hatched one chicken and lost it. I set her on 11 Guinea eggs; she hatched four of them. The noise that the little Guineas made was so different from the chickens that she was afraid of them and would not brood them at all. Finally she went into a corner and died. Now, what do you think caused her death? I have a melon that weighs 11 pounds; 31 inches around lengthways, 25 inches around it in the middle. I have an ear of the Angel of Midnight Corn 11 inches long. It has eight rows, having 52 kernels in a row. Your nephew,

Kirkdale. JAMES STEVENS.

[Too bad about that hen, I'm sure. Perhaps her heart was broken to think her children had frightened her. I will enter the melon and corn for the prize.—U. M.]

DEAR UNCLE MARK: We planted the Johnson grass soon after we received it, but it did not come up till this Spring. Some was full eight feet high. We had pretty bad luck with the seeds, for the rabbits ate the peas, the horse relished the corn, the pigs made acquaintance with the muskmelon, the chickens thought it would be fine fun to scratch in the flower-bed, and the watermelons seemed to think that if nothing finished their business up they would themselves, and so they did, for there is not a melon bigger than a baby's head. We have some sweet potatoes that are just getting big enough to eat. We had one last year that weighed 3½ pounds. Hoping this will not reach the waste basket, I will close. Yours truly,

Chickamauga, Tenn. JOHN HOLM.

[I am glad some of the family enjoyed the seeds any way. Too bad you could not keep the animals out.—U. M.]

DEAR UNCLE MARK: I like to read the Cousins' letters. I have some flowers. I water my flowers every day. I have a little black dog; her name is Pearly. I have a kitten named Snowball and a pet horse and cow. I am a deaf and dumb girl 15 years of age. I have two sisters and one brother. I go to school at the Deaf and Dumb Institute at Fulton, Mo. It is a nice school with about 200 pupils. We have not had any rain here for about four weeks. We are not going to have much corn. From your friend,

Warrensburg, Mo. ELSIE LAMB.

[I am very glad you can take so much pleasure from the flowers. We have a great many things to be thankful for, after all, haven't we?—U. M.]

OUR parrot has become very tame indeed. I told you how he fought when we first caught him. He was savage enough for a time, but when he found that we did not want to hurt him, he began to feel better. By treating him gently and patiently we have him now so that he will stand on our hands and make himself at home anywhere. This shows what kind treatment will accomplish. If we had poked sticks at the parrot and plagued him, he would be savage even now.

WE had a little black-and-white kitten named Clover. It was a very bright little thing and we thought a great deal of it. It was just getting large enough to jump about and play. We have a big dog that is something like an old bachelor. He doesn't like children, whether they are human boys and girls, or little cats or dogs, or chickens. He is a very selfish dog; he wants his own dish and always feels angry if any animal comes near him while he is eating. Poor little Clover came running up to the house the other day, just as the dog was eating his breakfast. The little cat did not know what a selfish dog it was. She thought everybody was just as happy and full of play as she was. She went dancing up to the plate to see what the dog was eating, without thinking of stealing anything. The old rascal caught her by the neck, gave her one shake and threw her away, dead. We all felt pretty bad over that. The dog got a good whipping and was glad to run off and hide in the barn. He has lost some good friends by his cruelty. Now, you see what comes of being quick tempered and selfish. I have seen selfish children try to keep things away from their playmates. When the others come near they will sometimes strike at them. Suppose they should strike some friend in the eye and put the eye out. Such things have been done. Don't kick and bite or strike people. Dogs do that, and you are not willing to be called dogs I hope.

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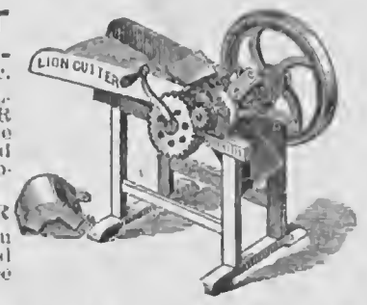

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PERSONALS.

THE wealthiest woman in California is Mrs. Mark Hopkins, the widow of one of the four original founders of the Central Pacific Railroad. Her fortune is estimated at $40,000,000. She divides her time between San Francisco and Great Barrington, Massachusetts.

British peers and sons of peers hold salaried offices under the new Tory government to the amount of $550,000 annually. In addition, the Duchess of Bucclench gets $2,500 a year as Mistress of the Robes, and eight other peeresses $2,500 apiece as Ladies of the Bedchamber.

AUGUST BELMONT, the banker, is a short man with a withered leg. His favorite position when speaking to friends is to stand on his left foot, stroking his right thigh, as if it pained him. Mr. Belmont has a square-cut, florid, heavy face and English-cut side whiskers, well sprinkled with gray,

MR. GEORGE J. Gould is an expert telegraph operator. It took him five months to learn the business, and now he can understand a great many messages not intended for him. During the late strikes he found this accomplishment of much service, and was able to talk with his father, who was in Havana.

VISCOMTE DE LA MOTTE ROUGE, Inspector General of the National Stud of France, has been visiting Com. Colman, at Washington. He came to the United States by appointment of the Minister of Agriculture of France, at the request of the Commissioner, to act as judge at the great horse exhibition at Chicago.

IT is said that, notwithstanding Dr. Ward's advice that he fish and shoot industriously while in the woods, in order to reduce his flesh, President Cleveland took it easy, ate very heartily, took a nap each afternoon, and thus came out of the woods 10 pounds heavier than when he went in, and has never weighed so much as now.

NUMEROUS country papers report that through the efforts of Roscoe Conkling the heirs of the so-called Mercer estate are about to realize on their shadowy claims for $500,000,000 worth of property in Harlem. The Ex-Senator says he has never had any connection with or knowledge of the case. A fraud on the credulous somewhere.

WHEN Bob Taylor was first talked of for Governor of Tennessee there was some doubt whether he would accept, and a telegram was sent him to know positively. He returned the following answer: "A poor old man once dragged himself 20 miles to see my mother. When he got ready to leave he said: 'Madame, if you don't believe I can tote a ham home just try me!"

GEN. FRANCIS A. WALKER and John Boyle O'Reilly, Boston celebraties, but of sufficient note throughout the nation to come under the head of "people we talk about," are very much alike in appearance. Says one who knows them: "Both are stout and square in build, with faces of a dark Italian type and expressive eyes." O'Reilly, however, is nervous and of lighter frame.

SAID Fanny Kemble to a Massachusetts countryman whose trap she had hired during a vacation: "Sir, I have engaged you to drive me, not to talk to me." When the vacation was over she sent for his bill. Running her eyes down its columns she paused. "What is this item, sir?" said she, "I cannot understand it." And with equal gravity he rejoined: "Sass, $5. I don't often take it, but when I do I charge."

MR. ROBERT ADAMS, Jr., who recently introduced into the Pennsylvania Legislature a bill to provide corporal punishment for men who beat their wives, quotes Mr. Darwin to the effect that, with the exception of the seal, "man is the only animal in creation which maltreats its mate or female of its own kind," and declares that in Maryland, where a similar law was passed three years ago, the crime of wife-beating ceased as if by magic, after the first conviction.

THE undertaker who embalmed the body of General Grant has been trying to find somebody to pay his bill, but without success, and has finally brought suit for the amount—$500—against Mr. Arkell, the manager of the company that owns Mount McGregor, who gave him the order. On the publication of these not very creditable facts in the New York Sun, the editor of that paper adds a note that if the undertaker will send the bill to him he will remit the amount.

Miscellaneous Advertising.

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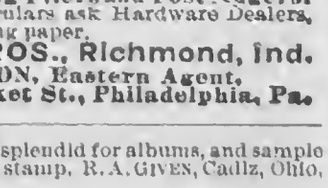

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Is the best general purpose wire fence in use. It is a strong net-work without barbs. Don't injure stock. It will turn dogs, pigs, sheep and poultry, as well as horses and cattle. The best fence for Farms, Gardens, Stock Ranges and Railroads. Very neat, pretty styles for Lawns, Parks, School-lots and Cemeteries. Covered with rust-proof paint, or made of galvanized wire, as preferred. It will last a life-time. It is better than boards or barbed wire in every respect. The Sedgwick Gates made of wrought-iron pipe and steel wire, defy all competition in lightness, neatness, strength and durability. We make the best, cheapest and easiest working all-iron automatic or self-opening gate, and the neatest cheap iron fences now made. The best Wire Stretchers, Cutting Pliers and Post Augers. For prices and particulars ask Hardware Dealers, or address, mentioning paper, SEDGWICK BROS., Richmond, Ind. EDWARD SUTTON, Eastern Agent, 300 Market St., Philadelphia, Pa.

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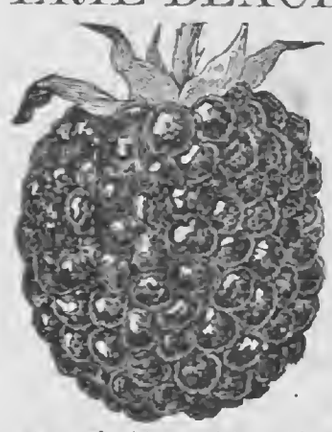
ERIE BLACKBERRY.



Hardy as the hardiest, large as the largest, unsurpassed in productiveness, of quality and early. Just what everybody should have. MONMOUTH STRAWBERRY an Improved Crescent, having a perfect blossom, fifty per cent. larger, *earlier*, firmer, of better quality, the same bright color, great productiveness and everlasting foliage of the Crescent. Golden Queen Raspberry, Lawson-Comet Pear, Japan Plums and a host of other valuable novelties with all the old varieties of both Orchard and Small Fruits worth growing. 200,000 Peach Trees, 75,000 Apple Trees, the largest stock of Blackberries in the U. S., and an enormous stock of Grape Vines. Price List—and full descriptions of novelties free; GUIDE TO FRUIT CULTURE, 10c., ORCHARD AND GARDEN, the best horticultural journal 50 cents. J. T. LOVETT, Little Silver, N. J.

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Best and most profitable LATE WHITE PEACH: Claire Choice best late yellow peach. Large stock of Peach trees suitable for all sections. William's Early Red, best early apple. Good stock Apple Trees, most popular and late keeping kinds. Pears, Cherry, Quince (and all fruit trees and fruit bearing plants. 200,000 2-year-old Asparagus roots. Large stock of Shade and Ornamentals. Send for Catalogue. S. E. ROGERS & SON, Mt. Holly, N. J.

ORIENTAL FRUITS LeConte and Kieffer Pears on their own roots; Bartlett and other Pears on LeConte roots; Prunus Simoni and Japanese Plums; Peen To & Honey Peaches; Russian Apricots. A large and general assortment of Fruit Trees. Catalogue with facts, Free. Address W. F. HEIKES, Manager, Huntsville Nurseries, Huntsville, Ala.

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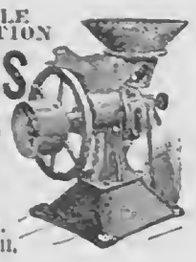

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The following rates are invariable. All are therefore respectfully informed that any correspondence with a view to obtaining different terms will prove futile.

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" " Six months..... 1.10
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Agents will be supplied with canvassing outfit on application.

Entered at the Post office at New York City, N. Y. as second class mail matter.

Humorous.

AFTER all it may turn out that the only honest butter is the goat.—*New Age.*

WHY is a locomotive like a comet? Because it has a headlight and carries a long train.—*Joker's Olio.*

THE biggest gum-boil on record has been discovered in a mucilage factory.—*Merchant Traveler.*

WOMAN'S greatest lory is her hair, and she should be very economical of it when she is cooking.—*New Age.*

THE model letter writer now directs that a letter from an affectionate son to his father shall begin: "I take my typewriter in hand to let you know, etc."—*Philadelphia Call.*

HE—"And now, Sarah, what kind of an engagement ring shall I get you?" She—"Solid gold, I guess, Henry; I'm so tired of wearing imitation gold for engagements."—*Farmer and M'f'r.*

THE major (rocking Nellie on his knee for Aunt Mary's sake)—"I suppose this is what you like, Nellie?" "Yes, it's very nice. But I rode on a real donkey yesterday—I mean one with four legs, you know." —*Texas Siftings.*

THE June-bug has the golden wing,
The lightning-bug the flame;
The bed-bug has no wings at all
But he gets there all the same.
—*Chicago News.*

"Do you like Winter, Mr. Litewaite?" "Not very much, Freddie," "Then why do you always go buggy riding on a cold day?" "I don't; what makes you think so?" "Why, sister Clara said it would be a cold day when you offered to take any girl buggy riding."—*Farmer and M'f'r.*

LITTLE Willie prayed long and ineffectually for a little brother. At last he gave it up as "no use". Soon after his mother had the pleasure of showing him twin babies. He looked at them a moment and then exclaimed: "How lucky it was that I stopped praying! There might have been three!"—*Babyhood.*

A WELL-DRESSED countryman stopped at the entrance of the petroleum exchange on lower Broadway, and gazed inside with considerable interest. A broker on the look-out for commissions said to him cordially, "Are you in oil, sir?" "No, mister," said the countryman moving away, "I'm no sardine."—*Harper's Bazar.*

A MAN who recently invested in some sausages says that when he got them home he cut them apart and left them. In the morning he visited them. Three of them were twined up together, and were sleeping sweetly. Two had crawled to the milkbowl and were lapping the milk, and one, a black and white one, was on the garden wall trying to catch a sparrow. He drowned the lot.—*San Francisco Call.*

BEFORE.

My love, a lover never loved
His love as I, my love, love you.
How dear the little hat you wear,
The knot of ribbon in your hair,
And I adore with passion rare
Each cunning little shoe.

AFTER.

My dear, wife never was so dear
As you, my dear, are dear to me;
For marriage only proves how dear
Your ribbons, shoes and gay headgear
Are to your husband, and I fear
'Twill end in bankruptcy.—*Henry Emerson.*

Shall I ever grow so large that people will put up such a sign about me?

Miscellaneous Advertising.

HOLSTEIN-FRIESIAN
CATTLE SALE
POSTPONED.

PLACE OF SALE CHANGED.

Owing to the excitement about pleuro-pneumonia at Chicago, the Auction Sale of Mr. F. G. BABCOCK'S Herd of HOLSTEIN FRIESIAN CATTLE has been abandoned at that point. The cattle will not be sent to Chicago, but are being forwarded from Kansas directly to New York, where they will be sold,

WEDNESDAY and THURSDAY, Oct. 20 and 21, 1886,

commencing each day at TEN o'clock, at the

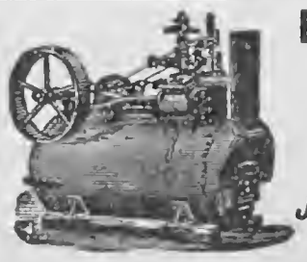
American Horse Exchange
LIMITED,
BROADWAY and 50th Street, New York.

Persons who have received Catalogues and Lithographs of this Herd will please mark thereon the change of place and dates of sale above-mentioned, in order to avoid confusion.

Money Furnished to buy these Cattle.

While the terms of sale will be cash, the BANK OF HORNELLSVILLE, Hornellsville, N. Y., of which Mr. F. G. Babcock is President, will have a representative at the sale from whom responsible buyers desiring loans at two to six months, to apply towards their purchases, can secure the same at 6 per cent. per annum on their notes payable at Bank.
For Catalogues, etc., address
PETER C. KELLOGG & CO.,
107 John Street, New York.

850,000 GRAPE VINES
100 Varieties. Also Small Fruits. Quality unsurpassed. Warranted true. Very cheap.
3 sample vines mailed for 15c. Descriptive price list free. LEWIS ROESCH, Fredonia, N. Y.



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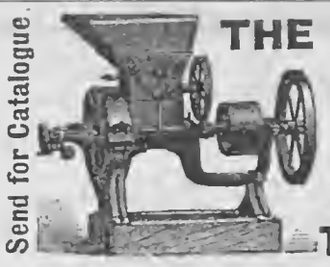
UPRIGHT AND HORIZONTAL,
3 TO 10 HORSE POWER.
OVER 3,000 IN SUCCESSFUL OPERATION.
Illustrated Pamphlet sent free. Address,
JAMES LEFFEL & CO., Springfield, Ohio.
Eastern Office: 110 Liberty St., New York.

Send for Catalogue.



THE SCIENTIFIC GRINDING MILL
THE BEST MILL ON EARTH
For Grinding Ear Corn, Shelled Corn, Oats and all Small Grain. Each set Plates guaranteed to grind 5000 to 8000 Bushels before wearing out.
THE FOOS MANUFACTURING CO., Springfield, O.

TOWER'S FISH BRAND TRADE MARK.

SLICKER The Best Waterproof Coat.
The FISH BRAND SLICKER is warranted waterproof, and will keep you dry in the hardest storm. The new POMMEL SLICKER is a perfect riding coat, and covers the entire saddle. Beware of imitations. None genuine without the "Fish Brand" trade-mark. Illustrated Catalogue free. A. J. Tower, Boston, Mass.

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BEST IN THE WORLD!
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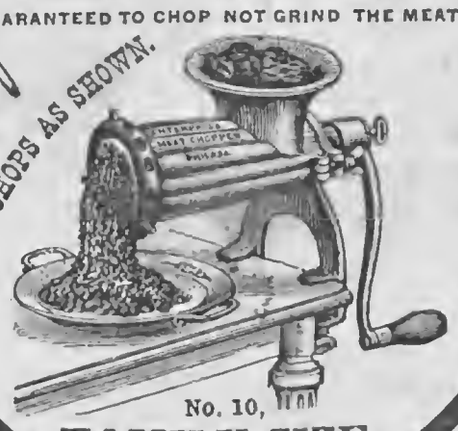
GUARANTEED TO CHOP NOT GRIND THE MEAT.
FOR CHOPPING SAUSAGE MEAT, MINCE MEAT, HASH SUET, HAMBURG STEAK FOR DYSPEPTICS, BEEF TEA FOR INVALIDS, SCRAPPLE, TRIPE, CLAMS CHICKEN CROQUETTES AND SALAD, SCRAP MEAT FOR POULTRY, HOG'S HEAD CHEESE, &C., &C.
CHOPS AS SHOWN.
RAPID CLEAN
NO STRINGS OR SINEWS CAN PASS THROUGH UNCUT.



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CAPACITY
No. 10. Chops 1 lb. per minute, $3.00.
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No. 22. Chops 2 lbs. per minute, $4.00.
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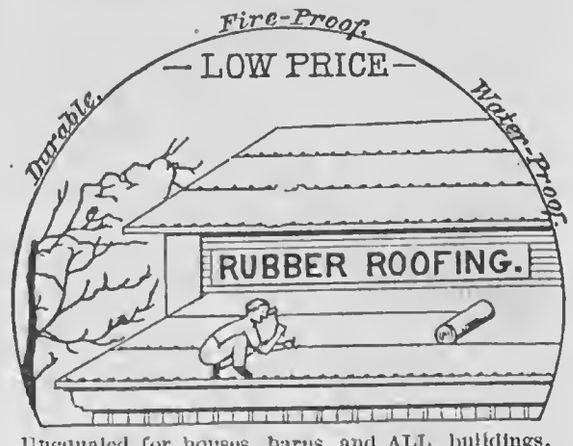
Farm and Fireside says:
"It is the only Meat Chopper we ever saw that we would give house room. It has proven such a very useful machine that we want our readers to enjoy its benefits with us."
American Agriculturist says:
"We have given this Meat Chopper a thorough trial with most satisfactory results. They excel anything of the kind made in either hemisphere."
"I have tried it for cooked and uncooked meats, and find it far surpasses any chopper I have ever used. My pupils, that have used it, are delighted with it."
Mrs. S. T. RORER, Principal Phila. Cooking School.

Fire-Proof. Durable. Water-Proof.
—LOW PRICE—



Unequaled for houses, barns and ALL buildings. Anybody can apply on steep or flat surface.
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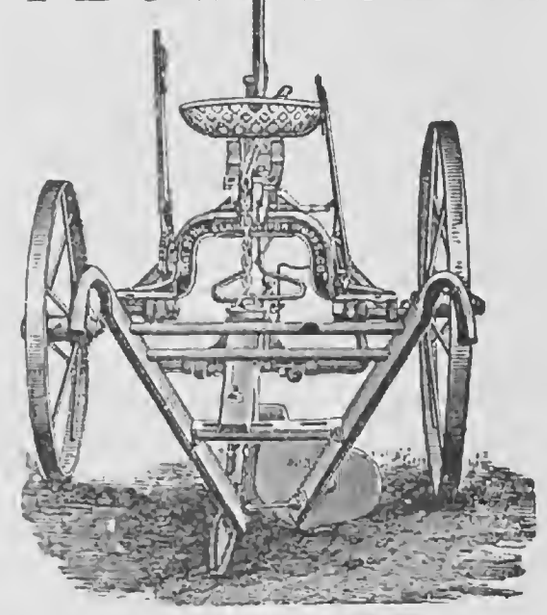
INDIANA PAINT AND ROOFING CO.
143 Dunne St., New York.
Samples free if you mention Rural New-Yorker.

THE ELKHART PLOW SULKY



READ THESE FACTS.
Lighter Draft with Driver Riding than ordinary Plow with Driver Walking. Turns square corner without backing. It is wholly constructed of iron except tongue and front lever.
We claim and GUARANTEE that a Plow attached to the Sulky and carrying the driver, is from five to 100 pounds lighter draft than the same Plow doing same work without the Sulky. Write for prices.
ELKHART IRON WORKS,
ELKHART, IND.
Mention Rural New-Yorker.

GUNS CHAMPION SINGLE BREECH LOADING SHOT GUN $13
BEST IN THE WORLD. HAS NO EQUAL. Insist upon getting the "Champion"; if your dealer hasn't it, send to us. Send 6 cents in stamps for Illustrated 84-Page Catalogue of Guns, Rifles, Revolvers, Police Goods, &c. Established 1840.
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500 PURE-BRED MARES & STALLIONS
Of the most popular families, all recorded with Extended Pedigrees in the Percheron Stud-Books of France and America, now in hand at Oakdawn Farm.

The Percheron is the only French breed possessing a Stud-Book in both France and America where eligibility to entry is based on authentic pedigree. I have a few imported Stallions of individual excellence (but not eligible to entry in the Percheron Stud-Book) which I will sell at half the price of pedigreed animals of equal appearance. 100-page Catalogue, illustrated with engravings sketched by Rosa Bonheur, sent free. Address, M. W. DUNHAM,
Wayne, Du Page Co., Illinois.

WHITMAN'S NEW PATENT REBOUND PLUNGER PERPETUAL
GUARANTEED SUPERIOR to any LEVER PRESS NOW MADE.

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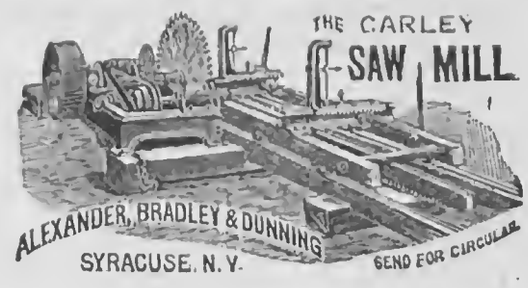

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THE RURAL NEW-YORKER

A JOURNAL FOR THE SUBURBAN AND COUNTRY HOME

VOL. XLV. No. 1917. NEW YORK, OCTOBER 23, 1886. PRICE FIVE CENTS. $2.00 PER YEAR.

Entered according to Act of Congress, in the year 1886, by the Rural New-Yorker in the office of the Librarian of Congress at Washington.

Rural Topics.

Experiment Grounds of the Rural New-Yorker.

EARHART EVERBEARING RASPBERRY.

STRONG plants were received from the introducers, Hale Brothers, South Glastonbury, Conn., Nov. 21, 1885. Our first note was made June 29, of this year. "First ripe berries. The bearing branches are wreathed with clusters. The laterals, from six to 12 inches long, bear from six to 10 medium-sized berries with a slight bloom. They are of good flavor and firm. The seeds are rather large. Canes thick and vigorous." Again, the following note appears in our records under date of Augnst 30: "Earhart bore its first crop with other medium-early caps. Many berries are ripening now, while others are quite green. Taking an average cluster, we count 30 berries all green."

The illustration, Fig. 394, was drawn from a cane cut Sept. 10. Most of the leaves were cut off so as to show the berries, several of which had dropped off, as shown. The berries continued to ripen until frost.

On September 1st, Hale Brothers sent us a box containing about 30 fruiting tips and longer stems. One six inches long bore 28 berries, all ripe. Six branches about one foot long bore respectively 29, 15, 21, 40, 35 and 25. One branch 15 inches long bore 69, half ripe, the rest green or red. The above may be considered an average of the 30 stems. On one stem with nine laterals there were 380 berries, one-third fully ripe, the others in various stages of development.

The productiveness of this variety is something remarkable. Even though it bore but a single crop, we should deem the Earhart a desirable variety, for its first crop was as large as that of ordinary kinds. When it is considered that it bears almost constantly during the entire season, and that the berries are in quality better than the Gregg and of fair size, we need only further to learn whether it will thrive as well generally as it has done here, with the Hale Bros. and in Illinois, to be satisfied that the Earhart is a valuable acquisition. That it is hardy and thrifty there is little doubt.

FROM THE REPORT OF THE FRUIT COMMITTEE R. I. STATE FAIR, SEPT. 23, 1886.

"An exhibit of fruiting canes of the Earhart Raspberry is worthy of special commendation. Single canes containing over 300 perfect berries are shown. Some of the berries are three-quarters of an inch and over in diameter and of as good quality as any black-cap. Other canes exhibited have buds, blossoms, green and ripe fruit, indicating that as an everbearing variety it is well worthy of consideration, and a special premium."

ITS HISTORY.

"Like many of our best fruits, the Earhart is a "chance seedling" found in the woods in Mason Co., Ill, about 1870, ripening its fruit in Oct., in such profusion as to attract attention. The original plant being removed to a family garden, and given good care for a year or two, proved to be an everbearing variety, producing its first or main crop with the other black-caps the last of June and early in July, while the new canes each season begin to bloom and bear fruit the last of July before the main crop is gone, and continue in fruiting till stopped by freezing in Fall. They bear not an occasional berry, but whole canes are thickly set with fruit.

My first knowledge of this berry was in 1884, when the editor of the R. N.-Y., handed me a letter he had received from Illinois regard to it, saying, "Here, Mr. Hale, it may pay to follow this matter up, for if half the story is true, it's the most remarkable new fruit yet produced." After some correspondence I was convinced of the honesty of the writer, and in June '85 visited Illinois to see the fruit, and there found one of the strongest-growing black-caps I had ever seen, carrying an abundant crop of fine, large fruit on the old canes. The strongest of the new canes were just beginning to bloom for the second crop, while the younger of the new canes were showing traces of buds, and three months later—Sept. 20th—rows eight rods long yielded 18 quarts of fruit at one picking, and had been fruiting continuously since June, and still had buds, bloom and green fruit that would ripen later. Early in May last, we planted out 600 plants on our farm here in Connecticut—tip plants with no wood on them, but plenty of good, strong roots. These made an early and rapid growth, and by the last of July began to bloom, and since August 15 there has at all times been an abundance of ripe fruit on nearly all these plants, many single canes producing over 100 perfect berries, while some plants have produced over 400 berries, many of them three-quarters of an inch cross-diameter. Early in July of this year I again went to Illinois and although the main crop had been about all picked there was some fruit left and some was ripening on the new wood. I counted 190 berries on one new cane, and a photograph of one taken September 16th shows 520 perfect berries. These qualities may not be of great value to the market gardener; but for the family fruit garden it is the most valuable novelty I have ever seen.—J. H. HALE."

THE EARHART EVERBEARING BLACK-CAP.
Drawn from a branch cut Sept. 10 at the Rural Grounds. Fig. 394.

* * *

MANURE *versus* FERTILIZER FOR POTATOES.

Our neighbor, Mr. A. J. Bogert, pretty nearly duplicated an experiment which we tried with potatoes last year. On one half of a measured acre he plowed under 11 tons of New York stable manure. On the other half 400 pounds of Mapes potato fertilizer were sown broadcast before planting, and 200 pounds were spread along the drills just before the first hoeing. The potatoes were planted in drills three feet apart and 15 inches apart in the drill. The manured half yielded 59 bushels of marketable potatoes and 11 bushels of small ones. The fertilized half-acre gave 78 bushels of marketable and 11 bushels of small potatoes.

* * *

PEAS PLANTED LATE.

OUR method of securing a succession of peas has been to plant, early in the season, the earliest, intermediate, late and latest varieties at about the same time, and in the order named so that the land could be cleared for later crops as the peas matured. Years ago we planted peas in July or August. They mildewed so badly that we rather hastily concluded that late-planted peas could not be made to pay. In a market sense perhaps this is true.

We were pursuaded to return to the experiment last August after a visit to C. A. Dana's island home in the Long Island Sound, where our contributor, Mr. William Falconer, the Superintendent, treated us to peas which seemed even more tender and delicious than those of early June. We planted a few rows of the Alaska Pea August 16. The vines, instead of growing to the length of three feet, as they did from April plantings, began to bloom when one foot high. The peas set freely and produced a very good crop by the first of October, the vines having remained quite free of mildew. The soil on either side of the young vines was mulched, the weather being dry, and two waterings were given afterwards. Two of the best peas picked are shown in our illustration Fig. 396, page 703.

The Alaska is a smooth pea, as our readers well know. Would it have been better to plant wrinkled peas—those of the thriftiest, bushiest growth, like Abundance or Everbearing? Or would the dwarf kinds, like American Wonder, or the half-dwarfs, like Stratagem, have been better?

The deliciousness of the Alaska when cooked will be borne in pleasant memory until another season, when we shall try the experiment again, though in order to escape early frosts, we shall plant from the 1st to the 5th of August instead of the 16th.

* * *

PRUNE D'AGEN. (?)

SEPTEMBER 4, we received from Mr. J. M. Ogle, of Puyallup, Wash. Ter., three plums which weighed 12¼ ounces. He calls it Gros D'Agen; says it is very common in the nurseries there and that many specimens will weigh four or more ounces. The tree he describes as a moderate grower, "requiring much cutting back to enable it to carry its immense load. As hardy as any one of our cultivated plums." He further says: "Its keeping qualities are good. I have a box now (Sept. 13) that are yet moderately firm, picked three weeks since and kept in an open room. They will readily bear shipment to New York."

With these large plums were others which he calls Petit d'Agen which were of the same color and quality as the others. This we have no doubt is the Prune d'Agen, but the large ones, a specimen of which is shown entire at Fig. 398 (page 705) and in half section at Fig. 397, we are in doubt about. The suture is small, the color reddish-purple. The flesh clings somewhat to the stone. The quality is superb, sweet, sugary, juicy and tender. We do not remember to have eaten finer plums.

Farm Topics.

CORRESPONDENTS' VIEWS.

DISCUSSIONS IN FARMERS' CLUBS ought to be the best part of the exercises. Sometimes they are interesting, but oftentimes they fail. Some farmers are no speakers, and do not like to talk. There are apt to be two or three loquacious members who are so fond of hearing themselves talk that they monopolize the whole time and disgust others who have good ideas to present. To make these discussions more interesting, we take a new plan which works well. The topic is announced a few weeks previous to the date of the discussion. An editor or compiler is appointed. He interviews the several members of the Club and gets their experience and opinions on the subject. These several opinions are written out in a condensed form with such mild comments as may suggest themseves, and are read as a whole. After the reading, short speeches can be given by those who wish to explain their views more fully. Many farmers who have valuable ideas are induced by this system to take part in the discussion. If they were obliged to speak their views they would remain silent. F. R. D.

Pittsfield, N. H.

LESS MEAT; MORE FRUIT AND VEGETABLES.—It has been said that it requires 15 acres to raise as much nutriment in meat as one acre will produce in fruits or vegetables. I consider that it requires more labor to sustain the animal creation than it would human beings without the aid of animals. Why not eat less meat and more fruit and vegetables? The old idea that we must eat just so much meat in order to live is all nonsense. Plenty of men keep fat and do good work who do not eat half a pound of meat per week.

Brandon, Vt. E. F. E.

GOOD USE OF A PREMIUM.—We propose to put the bell which we obtained as a premium for two subscribers for the RURAL on our school-house. This building, like those in many school districts, is used not only for school purposes, but for church and Sunday-school as well. The lack of a good bell has been a great inconvenience. The school board have always felt too poor to buy one, and there has always been a discussion between the church people and the school board as to which ought to buy the bell. If there are other districts like ours, this looks to me like an easy way out of the trouble. The ladies ought to be able to secure two subscribers in almost any district in this country.

Charlevoix Co., Mich. MRS. M. A.

A GOOD GRAVEL WALK, four feet wide—from my front door to the gate—a distance of 60 feet, was made as follows: I stretched a cord the whole length of each side of the walk to guide in digging. Large stones were placed along the borders of the walk, close together, so as to form continuous lines. The dirt was dug out of the place where the walk was intended to be built, and thrown over to the outside of the stones, thus holding them in place. The walk was then filled in with small stones with gravel on top of them. This was rounded off, leaving it a little higher at the middle, so as to shed water. The walk is built like a macadamized road on a small scale, and works finely. I did the work the latter part of August, when work was a little slack. A good walk is a great comfort. It is worth the extra work to get rid of tracking through the mud in Spring. A FRIEND.

GET A WAGON-JACK.—About the easiest tool to make is a wagon-jack, and yet I know farmers who never use one at all. Whenever they want to grease the wheels they hunt up an old rail and lift the wheel by main strength. A board under the rail will hold it up unless something tips it over, and, then, what harm does it do to have the axle drop into the dirt? The time and labor spent in running after the rail would count up were it not for the fact that such farmers never grease their wheels till they fairly yell out in agony. B. H. J.

Crawford Co., Pa.

A SNACK IN TIME.—Can we improve upon our present system of eating three meals per day? I claim that it never pays to let a person get very hungry A hired man will lose too much time in listening for the dinner bell. Talking about this to a friend last year, he said he always took a lunch when he went to a field far away from the house. Whenever he saw the hired man looking at the sun, he told him to go and get something to eat, either out of the basket, or, if near home, at the house. By eating a "piece" at intervals he never got very hungry, and kept up his work. There is more in this plan than people will see at first glance.

Ingham Co., Mich. J. M.

Field Crops.

THE BULLIFORM OR HYGROSCOPIC CELLS IN THE LEAVES OF GRASS.

DR. W. J. BEAL.

ON the upper surface of the leaves, running from base to apex of the blade, are rows of large, thin-walled cells which are really cells of the epidermis. They are very sensitive to changes of moisture and have been called hygroscopic cells. By the French they are called bulliform cells, as they often puff out like a blister. The rows of cells in each band is constant for any species, but varies from three to 12 or 15. These cells penetrate more deeply than the other cells of the surface, all of which are filled with water or air. The bulliform cells are different in different grasses. In Orchard Grass there is a single band above the mid-rib of the blade. When slightly dried, the bulliform cells contract, and as they run deeply into the leaf, the blade closes like the two leaves of an open book.

The leaves of June Grass have a band of bulliform cells near the mid-rid on each side. These when they dry cause the leaves to shut up or close in the same manner as those of Orchard Grass. The leaves of Timothy and Indian corn have several bands of bulliform cells all across them between the veins. These do not extend very far into the blade. When dry weather comes, the leaves roll up from each edge, as is observed when the leaves of corn "roll."

The leaves of Panicum plicatum, a grass cultivated for ornament, have bands of bulliform cells alternately above and below the blade. These contract when dry weather comes and the leaf closes in a zigzag manner like a fan. Other leaves have rows of bulliform cells differing from those mentioned.

The advantages to the leaf in closing or rolling are to protect the upper surface and so, to some extent, check the evaporation of moisture. If fastened open in dry weather a leaf will suffer more than when rolled up. A few leaves of grasses are absolutely indifferent and will not close on the approach of dry weather, while others roll up most of the time in all sorts of weather.

The leaves of most sedges (Cyperaceæ) grass-like plants, have single bands of bulliform cells above the mid-rib, which cause them to close in dry weather in the manner of Orchard Grass and June Grass.

Leaves of grasses are generally protected and strengthened by stout fibers which are just beneath the epidermis on one or both sides. One can form some notion of the extent of these fibers by the strength and the feeling of a leaf. In dry countries, the fibers are well developed.

There are many other interesting things to study in connection with the leaves of grasses, such as the different joints on the same plant, a comparison of the fibro-vascular bundles, a study of the old and the young leaves compared, a study of the tips of the leaves. Many experiments can be made to help to decide certain different points of structure and growth. There is none the less interest in the study of grasses, because many of them are useful, or because the order furnishes five-sixths of the money value of all the staple crops of the United States—and all this without considering the money value of our domestic animals. In speaking of matters of practical importance—of a money value—we are too apt to lose sight of the beauty that is in them. Those interested in this subject will find a more scientific and detailed account in the November number of the Botanical Gazette.

Ag'l Coll., Lansing, Mich.

The Herdsman.

CONTAGIOUS PLEURO-PNEUMONIA IN ILLINOIS.

Its introduction from Maryland; unsuspected ravages for months; retribution on the live stock dealers; authorities hampered by short-sighted parsimony; violence of the cattle owners; results of quarantining Illinois; risks of recklessly spreading the disease; precautions against shipping diseased dressed or canned beef.

IN the year 1883 pleuro-pneumonia was taken from Maryland to Ohio. The next year the plague was brought from Ohio to Illinois, and was thence sent into Missouri, Kentucky and possibly to Texas. After taking such measures as seemed to be in their power the Live Stock Commissioners declared that the malady had been eradicated in this State. It now seems to be more than probable that the disease has existed among the cattle of the northern part of Illinois ever since its presence here was first discovered in 1884. It is remembered that Mr. Clark, whose Jerseys were among the first cattle in Illinois to show the effects of the infection, said at the time when his herd was quarantined that a large number of cattle had been exposed to the infection by being brought into contact with his own stock before the nature of the disorder was suspected. The cattle thus exposed were scattered throughout the neighborhood, and no doubt that they conveyed the infection to other animals in scattered districts can be reasonably entertained. The wide publicity given at the time to information about the malady served to alarm owners of cattle, and at the same time it taught the unscrupulous among them to conceal the existence of the disease, and to hurry the ailing of their herds to market whenever such showed signs which led their owners to think that pleuro-pneumonia was the cause of their illness. There is no doubt that at the very time when the Illinois Live Stock Commission declared that this State was free from pleuro-pneumonia cases of that disease were concealed in the vicinity of Chicago. It is asserted by Dr. Rose that cattle have been dying in the Chicago distilleries during the whole of the last two years, of a disease like that which has created this alarm.

About the middle of September the announcement was made that pleuro-pneumonia had been discovered among the cattle in the northern part of Chicago. For some days the matter was kept from the knowledge of the public, those in the secret being unwilling to create a feeling of alarm before they could ascertain with certainty that this was the true bovine lung-plague. When there could be no longer a doubt upon this score it had also been learned that some 3,000 cattle had been exposed. Then began again the old, old fight between trade on one side, determined not to admit the truth, and science on the other hand, supported by the gathered knowledge of centuries of experience and loss, but unsupported by money or by effective laws. The stock-yard interest came forward, though unexpectedly, to urge that the most effective means known should be promptly adopted for the extinction of the disease; but the authorities are prevented from stamping out the plague, for, owing largely to the opposition offered by the very parties who are now most anxious to have all exposed cattle killed and sent to the rendering tanks, no sufficient appropriation for this purpose could be got from the last Illinois State Assembly. Opposition from the same sources had much to do with the refusal of the last Congress to appropriate enough money, and to give enough power to the Bureau of Animal Industry to enable that organization to act promptly and effectively. The veterinarians have therefore found that they are practically powerless so far as stamping out the malady is concerned. All they have been able to do in the case has been to prove that the disease is contagious pleuro-pneumonia, and by the aid of the General Government, to put a guard over the infected herds.

The present condition seems to be that, having learned what should be done in the case, the parties who should have power to act at once and effectively for the protection of the cattle interests of the whole country, find that they can do little or nothing to stay the course of the plague. Their position is an unpleasant one. By the stock-yard people and the packers and shippers of dressed beef they are urged to slaughter the exposed cattle and send all the carcases to the rendering tank. The local butchers want to get the beef of the cattle which may not show signs of the disease when slaughtered. The owners swear their stock shall not be killed before they are paid for, and have gone further than to threaten violence to the State and Government officials and the guard employed to prevent the removal of cattle or of infected articles. Last Friday one Irishman who owns two or three of the sick cows, and who has caused much trouble to the officials, attacked a watchman, and with the aid of half a dozen of his equally courageous countrymen succeeded in mauling the single guard unmercifully. The chief offender was arrested and will be fined, probably, for assault. One may well wish for the power of the effete monarchies for at least a long enough time to allow of dealing with this matter as it should be dealt with.

A report has come from Kankakee, a few miles south from Chicago, to the effect that contagious pleuro-pneumonia has appeared among some cattle taken to that place from Chicago. It is to be hoped that the outbreak will be found to be due to Texas fever. From Dakota a report came saying that pleuro-pneumonia had recently been taken there by stock from Chicago. The truth of that report, if it is true, has not been ascertained. Such statements indicate the existence of a feeling of fear which has found expression in declarations by a number of States and Territories of quarantine against cattle from Illinois. As most of the cattle taken to the West from the country east of the Mississippi pass through Illinois, the quarantine practically cuts off the movement of breeding stock from the East to the West. No one will, however, deny that simple prudence demands that such measures as will fully protect the cattle interests of the country should be at once adopted and maintained until proof shall have been given that cattle may be taken from the vicinity of Chicago without endangering herds with which they may come into contact. The statement that 160 of the quarantined cattle were last Sunday spirited away from under the very eyes of the guards placed over them by the State to prevent their removal, will scarcely tend to restore confidence among the cattlemen in the country. An assertion in one of the Chicago dailies, yesterday, to the effect that farmers and others continue to take cattle from Chicago to pasture and fatten on farms will alarm many. It is no more than fair, however, to say here distinctly, that as yet no evidence has come to light to prove that a single case of infection has been traced to the stock yards here.

Naturally enough, the shippers of dressed beef and the beef packers are somewhat alarmed about the effect the excitement may have upon people in the East, who do not know how the dressed beef and the canning business is conducted here. Those who are best acquainted with these two branches of the cattle business know that no crippled, bruised or diseased animal is ever knowingly bought by any of the larger firms. When, by some oversight, a beast that is not in good health is bought, it is condemned to the tank at once. No firm in good standing can afford to allow such an animal to go into its cans, or into its refrigerators. The loss from sending one or two, or as many thousands of cattle to the rendering tanks would be the merest bagatelle as compared with the injury that would be done to any business house if even so much as a single piece of glazed beef, or a can of spoiled meat should be discovered among its shipments. "E. VERO."

Chicago, Ill.

GUERNSEY HEIFER ENID 353.

THERE is no doubt that the Guernseys are steadily forcing their way by sheer merit into the dairy herds of this country and England. Their butter and milk are as rich as those of their rivals, the Jerseys, and the average yield of both is seldom less. They are larger, more robust, better foragers and able to withstand the inequalities of weather over a wider range of country. There are far fewer of them than of the Jerseys, both in their original homes and in the rest of the world; they have never been boomed, and no records have been widely published of enormous yields of milk or butter under forcing conditions. Probably the best thing that can be said in their praise is that wherever they are known they give entire satisfaction. A likeness of a fine specimen of the breed, re-engraved from the Live Stock Journal (London) is shown at Fig. 399, page 709. Enid is the property of Mr. G. Nevile Wyatt, Slough Place, Cuckfield, Sussex, and was winner of the first prize at the great annual show of the Royal Agricultural Society, at Norwich last July. There were 41 Guernseys, and as there was only one class for all sorts of Guernseys—that for Cows or Heifers in-milk or in-calf, calved in 1883—she must have been the finest specimen of the breed in the greatest cattle show in Europe.

DEVONS AGAINST JERSEYS.

BREEDERS are too modest in their praises of Devon cattle. In this rocky country they will beat any other breed when given ordinary farmer's care. There are many Jersey grades here which do well when housed and treated in first-class shape. The trouble is farmers who keep them won't always treat them as they need to be treated. On a cold, stormy day I have noticed the cattle in different barn-yards. Those with Jersey blood in them stand with rough coats, all humped up against the weather. The Devons are always bright and happy and ranging about for food. Our Devons always keep fat and hearty, and if there is anything to eat in a pasture they are sure to find it. A hillside pasture runs a Jersey down to skin and bones, but it has hard work to drive the ribs of a Devon into view. On common fare such as 90 per cent. of farmers give their cattle, I believe the Devon will beat the Jersey at both milk and butter.

Greene Co., N. Y. E. P.

JERSEYS AND ALDERNEYS; SELECTION OF A BULL.—Many farmers are hopelessly mixed as to the difference between Alderney and Jersey stock. The prevailing impression here seems to be that the cream-colored Jerseys are Alderneys. These are considered best for butter. A

grade Jersey bull, light in color, called an Alderney, is patronized while a bull of far better breeding, but darker, is neglected. In spite of all that has been said about fine stock, the use of thoroughbred bulls is far from extended. Good stock seems to range in localities. Somebody starts a herd in a township and the stock around him slowly improves. In the wide stretch of country that lies outside these places, it is hard work to get farmers to see that a blooded bull is any better than a grade. If they raise their own calves they seem to think that a calf from a good cow will be sure to turn out well, no matter what the bull may be. Too many of our bulls are simply overgrown calves. They are put to service as early as possible and are to be slaughtered at three years old. This system hurts the dairy business. V. H. S.

Bergen Co., N. J.

R. N.-Y.—There is no difference in this country between what are known as Alderneys and Jerseys. Both terms are applied to cattle from the Island of Jersey and their descendants. It is probable there are not 50 real Alderneys in the whole country; and whatever number there may be, they have doubtless been imported as *Guernseys*. Alderney is a little bit of an island with an area of about four square miles, a part of which is too rough for grazing purposes. Potatoes are the chief articles of export, and wheat is also largely grown. Not much land is, therefore, available for grazing purposes, and not many cattle have ever been raised there. Alderney Island is a part of the Bailiwick of its much larger neighbor, Guernsey, and Alderney cattle closely resemble the Guernseys, with which they compete at the cattle shows in Guernsey. They have no herd book of their own, but are registered in an appendix to the Guernsey herd book. St. Anne, the port of Alderney, is 20 miles northwest from St. Peter Port, Guernsey, and 45 miles due north from St. Heliers, Jersey, and nearly those distances nearer to England than either. It was, therefore, generally the last port at which vessels trading with the Channel Islands called, and the cattle they had on board when they reached England, whether originally shipped from Guernsey, Jersey, or the adjacent French ports, were all called Alderneys. The Jerseys were then, as they are still, by far the most numerous; hence in time the name Alderney was applied to animals of this breed exclusively, which are somewhat smaller, less robust, and more refined than either the Guernsey or real Alderney cattle.

The relative influence of the sire and dam upon the progeny, either for the dairy or the shambles, is a matter not altogether beyond dispute; but all agree, in a general way, that half the value of the calf comes from the sire, and in turn his excellence comes almost entirely from his parents. The great advantage a pure-bred bull has over a "scrub," grade, or cross-bred animal, is that he is far more likely to transmit to his progeny all or most of the characteristics of his breed, and the longer the breed to which he belongs has been established, the greater his prepotency, or power of transmitting these characteristics. The offspring of a "scrub" bull may resemble either of the parents, or hark back to some remote ancestor, or partake of some of the traits of several ancestors, or be different from either so far as recognizable. Neither in form, color, fattening nor milking qualities can any definite results be reasonably expected. The same is true with regard to cross-bred and grade bulls to a great extent. In all these cases no definite result can be foretold with regard to the progeny of any sire, however well formed and excellent the animal may be himself; whereas when a pure-bred sire is used we may always expect to see in the progeny many characteristics of the breed to which their sire belongs.

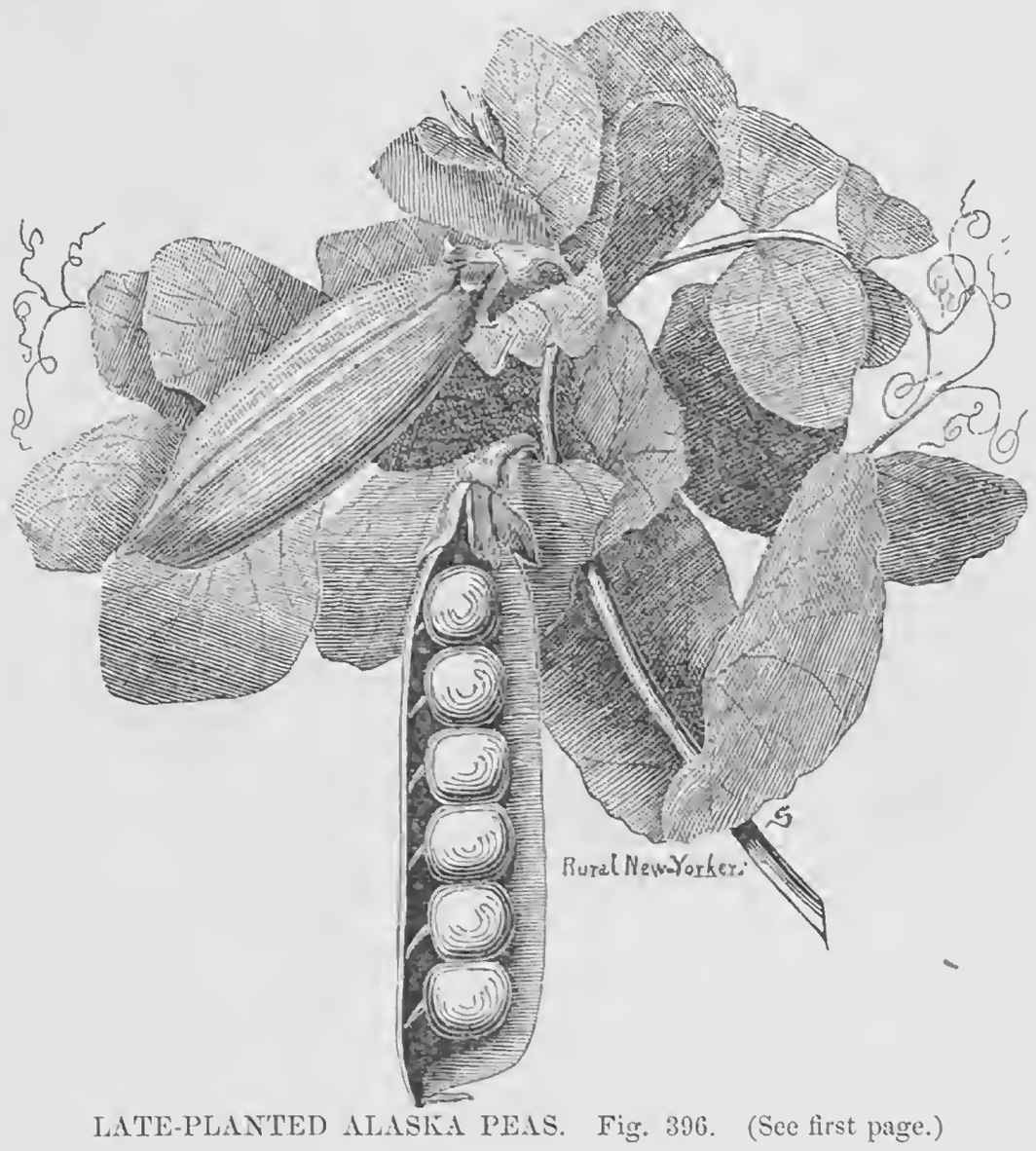
The characteristic colors of the Jersey are mostly light red or fawn, and black mixed and splashed with white, and solid colors with black points are preferred as indicative of the most careful breeding. So long as sire or dam adheres to the characteristic colors of the race, however, a preference for breeding purposes should depend on other considerations—on the bull's side, on his escutcheon (for a good escutcheon in a bull is as important as in a cow), on the milking capacity of his dam, granddam, and other female ancestors, on the performances of his previous progeny, on his temper, his freedom from faults, and his general appearance. If one wants "solid colors," or any other special feature, and can get them with plenty of milk, well and good; but the sensible breeder will look to more important points than color in selecting a bull to breed from.

THE LITTLE BRITTANY CATTLE are now attracting some little attention in the Gulf States and in New England. They are in size between a goat and a Jersey heifer. They have been well termed "Jerseys boiled down." Their milk is rich and the butter excellent. They can make a living where larger cattle would starve. It is claimed that they can produce more milk and butter from a given amount of feed than any other breed of cattle. There is a good place for them on rough hilly farms where with larger cattle a good share of the feed is consumed in providing motive power with which to hunt for more. Several Brittany cows kept in a herd of common cattle will improve the quality of the butter.

HEREFORD ON AYRSHIRE.—A noted Hereford breeder is trying, as a side issue, a cross of a Hereford bull on an Ayrshire cow. The cows from this cross are strongly marked with the Hereford marks, but are good dairy animals. It is generally considered best in crossing breeds, to use a male of the smaller breed.

AGAINST POLLS.—The arguments advanced against polled cattle are that a hornless head is but poorly confined in the ordinary stanchion, that a polled cow can get her head between rails and work them out of place, and that the lack of horns gives the herder overconfidence. He places too much reliance upon the supposed gentleness of his animals until he is crushed or pounded with the blunt head. The blow from a horn is like that from a spear. The blow from a polled head is like that from a sledge-hammer.

ECONOMY ON THE RANCHES.—The Montana Stock Growers' Association decide that no free meals shall be given on the ranches and that a list of all visitors shall be kept. Many cowboys make it a point to spend the Winter in visiting. They ride from one ranch to another getting their meals free. The rule will tak



LATE-PLANTED ALASKA PEAS. Fig. 396. (See first page.)

care of these fellows, but it is a poor one in that it prevents hospitality to those who are honest and deserving.

Horseman.

NECESSARY ATTENTIONS TO THE HORSE.

THE owner and driver have control over the sundry little things that appertain to their own personal comfort, but the poor horse that hauls the load and the driver both over good roads and bad, controls nothing. He is forced to pull a heavy load against a badly fitting collar, a galled shoulder, or with a check rein so tight that he is unable to get down to a comfortable and effective pull. It is the little things, not singly, but combined, that give the horse discomfort—the galled shoulder; the collar that in part cuts off the wind in ascending a hill; going up hill with head checked up taut; too tight a belly-band, cutting short the full expansion of the lungs. The direction of the draft is too high for a slanting shoulder, or too low for one that is upright. The shoes are too smooth for slippery roads, thus preventing the possibility of planting the feet firmly for a steady pull. In such a case, the fore feet slip to the right and the left, and the hind feet, one at a time, slip backward with a crack, in some cases giving a fearful strain to the leg and loin. Yet, in such a case, many a driver will give the horse a sharp cut with the whip for permitting a momentary check in the movement of the load.

Horses are made to pull heavy loads, and make speed over hard pavements or frozen ground when the feet are tender, no allowance being made for the discomfort to the beast. Many horses that perform hard labor, and do this from day to day on moderate feed, are hurried over the road or made to draw loads beyond their strength. To deny a frequent breathing spell is one of the many inhumanities put upon the horse. This denial of a brief, needed rest causes many a horse to become balky. A person ignorant of the horse's peculiarities and capabilities, buys a horse when thin in flesh and correspondingly weak, and being ignorant as to the real effect of this upon the animal's ability to pull a load, overloads; the horse stops with a wheel deep down in a rut, or at the foot of a hill—why? Not because he is, or ever has been, other than a willing horse, but because he is asked to do what his strength is not equal to, and he does the most natural thing for him to do under the circumstances, the only thing, in fact, left for him to do, namely, to *stop*. The new owner denounces him as a confirmed balker, and straightway resorts to the whip.

The man who has had experience with horses, can, at a glance at the countenance of a poorly fed and over-worked animal, pass upon his ability, or rather want of ability, to perform labor as readily as a medical expert would pass upon the condition of a pale, ill-nourished, over-worked shop girl, such as we meet mornings and evenings on the street cars of a crowded city; and the truism that you cannot expect something from nothing, applies to both these cases. After having bought a strange horse, if after putting him into use, it is discovered that he seems not to be equal to the work you put upon him, it is possible to show him favor by giving him the best of the road. The average driver permits his team to follow the beaten track, regardless of mud and ruts; and now and then a wheel drops into a rut hub-deep, giving the team a violent check back, and requiring the utmost effort to gain solid ground. By looking ahead, keeping the team "well in hand," as all competent drivers do, the best ground can be selected for the load to pass over. In making a stop to give a horse a little respite, a prudent driver will always come to a halt upon firm ground, and if practicable upon decending ground, thus insuring an easy start. Upon macadamized roads, where hills are cut through, and there are no ruts or soft places to shun, success hinges upon having strong legs and feet, and good wind, and so managing as to preserve these intact. "WESTERNER."

FEW PERCHERONS IN ENGLAND.—English papers do not like the statement recently made, that many Percheron horses have been carried into England. The Live Stock Journal says it would be hard to find a single Percheron stallion in the whole of England. With Shire, Clydesdale and Suffolk horses the English do not care for Percherons.

ILL-TEMPERED STALLIONS.—The editor of the English Suffolk Stud-book tells the truth about stallions. An ugly horse is set down for his true disposition. There are many otherwise splendid horses that are very fiends in temper. It is more than an even chance that this temper will be stamped upon their offspring, and thus fill sections with stubborn, brutal horses. Is it honest to sell colts from such stallions without speaking of the defect?

Dairy Husbandry.

DAIRY NOTE

T. D. CURTIS.

HOW MUCH PER 1000 POUNDS LIVE WEIGHT?

THE question has long been asked, How much per cow? More recently the question has been raised, How much per acre? The quantity of food consumed has also been agitated as a legitimate topic to be considered. This is closely allied to the question, How much product per 1000 pounds live weight? This is a proper question for experiment and record. The ration for each 1,000 pounds of live weight being tolerably well settled, the other question of amount of product from 100 pounds of live weight naturally follows, and the two combined must give us a closely approximative key to the value of the cow for dairy purposes. If the size of the cow and the amount of the ration are left out, we can form little idea of the value of the cow from the number of pounds of milk yielded, the quality of which is not given, or from the amount of the butter product, the cost of which is not known.

FALL SHELTER.

This is the season of the year when it is in order to remind dairymen of the suffering that comes to cows and other stock from exposure to the cold rains and the frosts that follow the hot season and precede the cold. The sudden falls of temperature often chill animals, as they do men, to the very marrow; but the animals have no overcoats to put on, and must bear the cold in their summer dresses. By these chills they contract colds and incur suffering from lung troubles and and rheumatism, the same as human beings do when thus exposed—for animal flesh and blood are the same in both cases, and are similarly affected by undue exposure to sudden changes of temperature. Cows in milk will attest their suffering by the shrinkage in the flow of milk. This shrinkage can never be fully regained, even though the cow may remain in apparent good health and the set-back caused by chilling will so affect the general health that the bad effects will continue for weeks if not months, and so far disqualify the animal for resisting the rigors of Winter. The best of health and condition should precede the going into winter-quarters. It pays the farmer, therefore, to provide good fall shelter for his stock, and to see that all animals have access to it at least as often as they naturally seek it.

VARIATIONS IN CREAM MEASURE.

That there is a marked variation in the quality of cream is a comparatively modern discovery, the cream of some milk being twice as valuable for butter making purposes as that of some other. And cream behaves differently under the same conditions. The amount of shrinkage or condensation, by standing after being raised, varies materially. For instance, at the Minnesota State Fair, the past season, in testing the milk of eight Jerseys, seven Holstein-Friesians, and one grade, by the cream gauge and test churn, the per cent. of cream was noted at the end of 12 hours, and again at the end of 12 hours more. It was found at the end of the last 12 hours that five of the Jerseys had increased the measure of cream and three had decreased it, while three of the Holstein-Friesians had increased the measure, three had decreased, and one remained the same. The cream in the grade-milk was increased. Now, why this difference, under precisely the same conditions, if it is not in some way owing to the quality of the cream? And the quality must be peculiar to each individual cow, for the cows were all blooded animals, and doubtless well kept, so that the difference in quality could not be attributed to difference in keep.

OLEO LAWS AND BUTTER PRICES.

SOME weeks since the RURAL published what it called a black list of Congressmen who voted against the Oleomargarine Bill. We were advised to show our disapproval of their course by refusing to vote for them again in case we ever got a chance. The farmers of the country seemed to consider it good, sound advice. Now, will they come right up to the mark and make their words good? Over here in New Jersey we are told that at least two of these black-listed Congressmen are again running for office. We have one Republican and

one Democrat that I know of. I shall vote against one of them anyway, and would vote against both of them if I lived in the district where my vote would reach the Congressman. I claim that the farmers of New Jersey have a chance now to show just where they stand. We sent in loads of petitions, now let us stand up like men and show what there was back of these petitions. If we fail to do it we might just as well keep our mouths shut in the future, for no House of Representatives will have respect for men who talk one way and vote another. We ought to rule this country, so everybody says, but we never can rule it by signing petitions. We have got to back up our talk with our votes. I don't believe there is a question that can be reached at the present State election of more vital importance to the farmers of New Jersey than this one of honest butter. It may be that we cannot send up the price of butter by defeating these men, but we can, at least, stop them from injuring us further, and add more dignity to the farmers' vote. C. W.

Passaic Co., N. J.

[There has been some little inquiry concerning the state of the New York butter market as compared with previous years. The following figures show the range of prices. The first row of figures gives the prices for the best creamery butter, and the next row prices for best dairy. These are taken from our market reports for the last five years. August and October are taken as sample months:

	CREAMERY.		DAIRY.	
	Aug.	Oct.	Aug.	Oct.
1882.....	25	31	24	29
1883.....	22	29	21	25
1884.....	22	29	19	23
1885.....	19	21	16	19
1886.....	20	32	17	26

These figures show that good butter is quoted in this market at a higher figure than at any time since 1882. Creamery butter is 11 cents higher than last year, while best dairy is seven cents higher. Since August the price has increased 12 cents on creamery butter and nine cents on dairy. Last year the increase, in the same time, was but two cents on creamery and three cents on dairy. The greatest increase known in the same time before this was in 1884, viz. seven cents on creamery and five cents on dairy. How much of this increase was due to the "oleo" law may be imagined when we consider that other articles of produce have advanced little if any. In 1880 New Jersey produced 9,513,835 pounds of butter. Figuring this, even at one-half the advance in price of the past few months, an idea can be gained of the importance of the oleomargarine law.—EDS.]

DAIRY CONTESTS AT FAIRS.—How much do the milk and butter contests at the fairs prove? That one breed is superior to another or that one breeder is more enterprising than another and can put a better cow into the field? It is too often more of a contest between feeders than between breeds. What the great public want to know is how to get the most milk and butter out of a certain amount of food. If one cow gives more butter than another, all right, but how much more meal or bran does it take to do it?

EXAMINE THE TEETH.—I notice that whenever a good dairyman wants to buy a cow he looks at her teeth. The udder, stomach and chest are all looked at, but the mouth comes in for a careful examination. That seems like good sense when you come to think about it. After all, it is the food that makes the milk and butter rather than the stomach and udder. One is the power and the others are the machines. A cow must have good teeth to take care of her food. Before I bought a dairy cow I should want to see her eat.

Ontario, Can. H. G. BROWN.

Sheep Husbandry.

Notes from the Western New York Farm.

FEEDING LAMBS.

WILL THE MANURE ALONE PAY?

THIS is the all-important inquiry in a long letter from a friend in Ohio, and it is one that equally interests every farmer of this country, especially such as desire to improve their farms and are not satisfied with the meager crops that barely pay the cost of cultivation. The vast majority of farms in all the older States are on the decline, and despite the better tillage are annually yielding less and less, and the area to which this rule will apply is extending rapidly westward. In localities where a score of years ago, the manure was considered a nuisance and was dumped into some ravine to be washed away by the Spring freshet, and where it was claimed that the fertility of the soil was so abundant that it could not be exhausted in a century of continuous cropping, men are now carefully saving all the manure made, and anxiously inquiring how the supply can be increased.

Farmers are becoming fully conscious of the fact that the soil is not a laboratory in which fertility is made, but merely the granary in which it is stored, and unless the supply is in some way replenished it must eventually become reduced beyond the point when paying crops can be grown, and the wisest cultivator is he who so manages his soil as to return a full equivalent for what is taken away as long as he can before this point is reached. Even the farmers on the rich prairies of the West cannot be too careful in returning to their fields every pound of waste material containing plant food. Of course, the elements of fertility can be obtained in bone dust and other sources of phosphoric acid; in potash salts; in oil meals, gluten meals, cotton-seed meals and other sources of nitrogen, and in many parts of the country it will pay richly to buy and use one or more of these things singly or combined in the various commercial fertilizers; but no one should use these to the neglect of all the barn manure he can make. Millions of pounds of oil meal, cotton-seed meal, gluten meal, bran and other foods rich in nitrogen, potash and phosphoric acid, the by-products of our manufactories are shipped across our starving fields and exported to the Old World, there to be fed and the residue used to enrich their fields. Every pound of this should be fed at home, and the manure used to restore and maintain the productiveness of our acres.

It is a beneficent provision that these so called waste products retain very nearly all the plant food contained in the whole grain, and that when fed to fattening animals very little is taken from them beyond such as come mainly from the atmosphere, so that were our farmers to provide suitable quarters and feed all these foods, together with other suitable foods, the exhaustion of our lands would be almost unappreciable.

Now, in answer to the question: Suppose a

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GROS D'AGEN PLUM. Fig. 397. See 1st page.

car-load (200) of lambs are put in to feed, and the quarters are of the best, and the animals are so cared for that the gain in price and weight will be sufficient to pay for the food consumed, and no more, what would the feeder have in the Spring to pay for the labor and profit on the investment? He will have fed of clover hay, or its equivalent, 30 tons; of corn, nine tons; of bran, four-and-one-half tons, and of oil meal, the same. Conceding that he must have the plant food contained in these foods, and that unless they are put upon his soil in this manner, he would be compelled to purchase them in the cheapest form to be found, it would cost him at least $240 to buy what would be contained in the hay; $54 for that in the corn; $49 for that in the bran, and $72 for that in the oil meal, or an aggregate of $415. This calculation is based on the very lowest valuation of grain by any chemist of the plant foods contained in these various foods; but suppose that one-half is wasted and lost (a thing which would be inexcusable), there would still be a profit of over one dollar per lamb. Surely the *manure alone will pay.*

* * *

Those breeding early lambs, and who have had rams and ewes together for the past two months, should have separated them the first week in October, unless perchance lambs are wanted after March. And after they have been taken away the rams should be put into extra good feed and grained a little every day, in which case they will be ready to use again in November for raising lambs for the next Winter's feeding.

A recent steamer brought from New Zealand to London 11,410 carcasses of mutton, averaging 65 pounds apiece; 523 legs, averaging eight pounds apiece, and 225 haunches averaging 24 pounds apiece, besides 75 quarters of beef averaging 200 pounds each, and 56 cases containing 2,520 dozen kidneys which brought 48 cents a dozen.

The Swineherd.

BERKSHIRE SWINE.

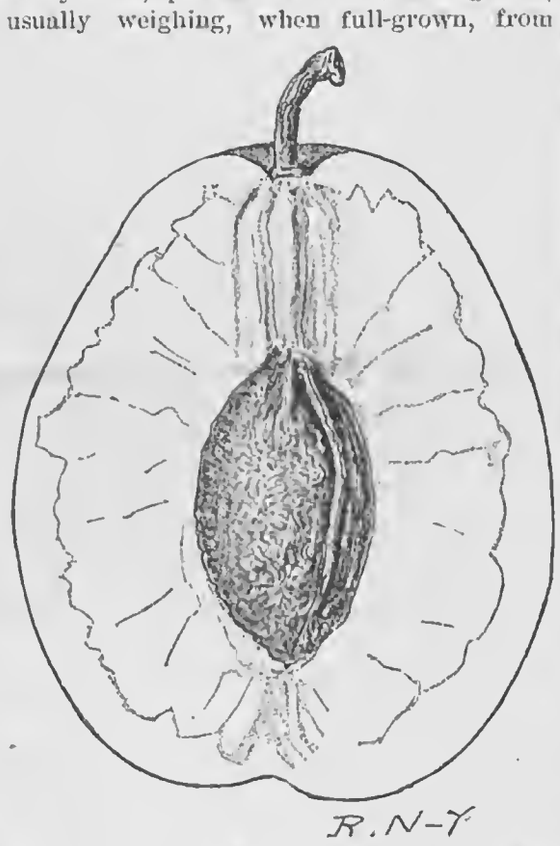
A. B. ALLEN.

Prepotency of Berkshires; antiquity of the breed; superiority for hams and bacon; origin of the Improved Berkshires; excellence of these; their early maturity; the American Berkshire Association, and Record; caution in buying; number recorded; points; as graziers; best feed; their popularity.

THIS is the most ancient improved breed known, which, with its other superior qualities, raises its value to the highest pitch; for the longer any breed of animals has been in existence, the greater the certainty of stamping its qualities in all their integrity upon its offspring. For crossing on other breeds less ancient, improvement is also more certain and rapid. When Berkshire boars are put to strange sows, there is not one of the resulting litter which will not prove superior to the dam, while several of the pigs almost invariably so closely resemble their sires in color and all desirable points, as to be taken by those not perfectly familiar with true Berkshires, for them.

The time of the commencement of the improvement in Berkshire swine is not known. When visiting England in the Summer of 1841, for the purpose of obtaining some foreign importation into the State of New York, to recruit my piggery there, I was informed by the most aged breeders that they had known Berkshires from the year 1780, in as great perfection as the best then existing in England.

Originally the Berkshires were a buff and sandy color, spotted with black; of large size, usually weighing, when full-grown, from



R. N-Y

GROS D'AGEN PLUM. Fig. 398. See 1st page.

about 800 to 900 pounds, and coarse in all their points. But notwithstanding this, their flesh was quite superior at that time to that of all other British swine for hams and bacon, in consequence of a greater predominance of lean to fat, so well streaked—or marbled, as it is termed—as to render it tender, juicy, and highly savory.

When English farmers began to grow more enlightened as to the best sorts of their domestic animals, they saw that these swine were too slow feeders for a good profit, as they did not mature and could not be properly fattened till they had attained the age of about 2½ years. Looking about them to see how they could be improved, particularly in this respect, a recent importation of Siamese stock struck them as most likely to do this, by crossing the males on the native females, which being done, and their produce bred together, they formed what has since been called the Improved Berkshire swine.

The Siamese were scarcely half the size of the native sort, but possessed a thick, round, deep body, with extra well-developed backhams and shoulders, a fine head, dished face, short, prick ears, and small legs and feet; it will be seen that it was admirably suited by crossing to make a rapid improvement in the form and earlier maturity of this large, coarse stock, without lessening its hardiness, thrift and good constitution. The color of the Siamese was from dark slate to a rich plum, with two or more white feet, and a white tuft at the end of the tail. This color and markings were generally imparted immediately to the cross progeny, as well as all other desirable qualities, making them, down to their present descendants, the best fleshed and most profitable swine to breed and rear that the world has yet known.

Those of the present day can be grown to weigh 300 to 350 pounds when 12 months old, 500 to 600 pounds at 18 months, beyond which time it is not generally profitable to keep them for slaughter. They can be easily well fattened at any earlier desired age, and always turn out a first quality of flesh, eagerly sought for at an extra price in all our markets. Being very hardy, thrifty and active, the present stock are found quite superior for crossing on different breeds with a view to improve their flesh for hams and bacon, while no others can in this respect improve them.

For the purpose of keeping the breed strictly pure, and to guard purchasers from being imposed upon by unprincipled men in selling them grade stock for full-bred, a large assembly of breeders met February 25, 1875 at Springfield, Illinois, and organized the American Berkshire Association, electing a President, Vice-president, Secretary, Treasurer and an Executive Committee of six persons. Soon after this the Association commenced the publication of the American Berkshire Record, for the purpose of recording the pedigrees of all such as the owners desired to enter, and which could be proved to be pure stock. The same thing was done in Great Britain in 1884, and the two Associations have had an elevating effect, and put an end almost entirely to the nefarious sales of grade animals for full-bred. When people wish to purchase now, they enquire as to the pedigree of the pigs offered for sale, and then refer to the published Record, and if the two correspond, the bargain is completed. Eight volumes of this have already been published, the first of which was issued in May, 1876. These recorded 11,518 head, and since this up to October 1, 1886, the additional number of 1,996 have been received for record in volume ninth. The aggregate now is 13,514, of which 4,626 are males and 8,888 are females.

At page 16, volume third, of the American Berkshire Record this improved breed of swine is officially described as follows:

"Body color, black, with smooth, pliable, plum-colored skin; hair rather fine, soft and thick; feet and tip of tail white, with dash of white in face, and not unfrequently the nose white, as also some white on jowl; forehead and face broad, the latter dishes, with eyes rather large and very clear, and snout short; ears of medium size, thin, and very soft, and carried rather upright; neck short, broad on top, with jowl large and full; shoulders broad on top, and deep through the chest; back broad; sides deep, and nearly straight on bottom line; hams large, reaching well forward on back and well down on hock, well rounded, and deep through, causing the legs to stand well apart, these as well as the forelegs, short and strong, and standing well on the toes; tail tapering and rather fine and set well up. In general form, a modern, well bred Berkshire, in good condition, is symmetrical throughout, attractive in appearance, and recognized at once as an animal of more than ordinary merit."

Lean, tender, juicy flesh predominates in the carcass of the improved Berkshire swine. This makes their hams and shoulders quite superior to those of all other breeds for smoking, and the side pieces for bacon. The meat is well defined as being fine-grained, rich, savory and nicely marbled. Possessing high vital powers the Berkshire is hardy, active, thrifty, and less liable to be attacked by prevailing diseases than most swine. Being good graziers, when nearly full-grown and subsequently, they thrive well in an abundant grass or clover pasture during Summer, and on vegetables in Autumn. Pigs of course should have some grain. When they come to be fattened, pure corn is not the best feed for them; it should be mixed from one-third to one-half with oats, barley, rye or buckwheat, the four latter grains probably in the order named. Peas are also an excellent mixture. All five of these have a tendency to make tender lean, instead of fat meat, while corn alone is too gross. The grain ought to be ground, for otherwise much of it will pass through the swine undigested, and be a great waste. Add to the above a pint to a quart of oil meal per day, and a few vegetables should also be fed with the provender, for with these all animals fatten faster and better than without them.

With so many excellent qualities, and such care taken in their breeding, Berkshires are multiplying more rapidly over the whole civilized world than any other sort of which we get an account. A knowledge of this is an important incentive to an increase in their careful raising, for the profit in doing this is highly promising. They are in great vogue now, and nothing can supplant the demand for their particular quality. Other breeds are preferable to make fat pork for salting and barreling; but for hams and bacon, the Berkshires excel in an eminent degree.

Farm Economy.

PORTABLE SILO.

AN illustration is given at Fig. 395 (p. 705) of an English arrangement for handling silage. A

portable silo with a foundation of concrete, wooden walls, and a corrugated iron top is coming into use quite extensively. Of late a system of packing the silage by means of a heavy roller has received considerable attention. This roller is shown at work in the cut.

It may be rolled to and fro simply by hand. For convenience and economy it is made hollow and filled with water or sand, or the roller may be solid or otherwise formed and weighted. Though primarily for use in the silo, the roller may be used for open stacks, with the addition of a few upright posts and boards at the sides, which can be afterwards removed when the pressing is finished. The roller, as shown in the sketch, is traversed back and forward over boards laid on the top of the grass. It should be noted that sand, where conveniently obtained, gives nearly double the weight of water ballast, without adding to the cost of roller.

This rolling process was first used in 1884, when with three of the rollers in use 1,000 tons of silage were packed. The rollers were also used in packing down stacks. The rollers give an even and continuous pressure far better than that of treading.

Indust'l Societies.

AMERICAN HORTICULTURAL SOCIETY AT CLEVELAND.

(RURAL SPECIAL REPORT CONTINUED.)

More about the Lucretia Dewberry; perfect fruit only wanted at shows; California for the next convention is 1888; the new Bureau of Pomology, and its proposed scope; the press and horticulture.

CONTINUING the small fruit discussion at the second evening session, Mr. Albaugh, speaking of the Lucretia Dewberry, said: "The original plant is now nine years old. My brother at Covington, Ohio, was the disseminator. I have seen its distribution attributed to E. Y. Teas. It came originally from Virginia, having been brought to Miami County by a soldier. The Lucretia ripens about with the Gregg Raspberry. It is larger than any blackberry I know of; vine probably about as hardy as the Taylor." Mr. Caywood; "The Lucretia, I think, is a wonder, a magnificent berry, almost a week before the standard varieties. It is a whole week ahead of our Minnewaski; being very large. We have an acre of it for market, planted four feet apart. We tie the upright canes to a stake, then let them trail over the ground near the stake." Mr. Crawford: "It is as good as it ever was claimed to be. The vines grow very long, eight feet at times; roots from the tips, but will also grow from root cuttings." Mr. Albaugh said his brother raised about 100 bushels of the Lucretia this year, which he sold at 18 cents a quart.

On assembling Thursday morning the various awarding committees reported. Mr. Vandeman said his committee (on apples) had acted upon the principle that when the only specimen shown was imperfect and defective, no first premium should be given. He thought perfect fruit only was wanted at these exhibitions. President Earle heartily sustained this position, and the members all voted aye. (Let every fruit committee in the land adopt this much needed reform inflexibly.) It was recommended by the committee that some place in California should be chosen for the next meeting of the society, the time being fixed in February, 1888, and the point to be located by the Executive Committee. At least some place on the Pacific coast was strongly urged, depending in some degree upon the adjustment of rates with the railway companies. President Earle read a letter from President Hilgard, of the California State Society, inviting them to meet there in 1888. Some of the members seemed a little startled at first. The broad scope of their association began to dawn upon them more fully. Many were calculating the cost to see if it came within their individual possibilities. Mr. Earle strongly urged the proposition, and no one seemed to oppose it. The matter was finally left to the Executive Committee to decide.

A paper was then read by H. E. Vandeman on "Pomology as a Division of the Agricultural Department at Washington." He enjoys the title and position of "U. S. Pomologist" under the new law; the first Pomologist created by the Government. Many members were wholly ignorant of any such Division, and few knew the law had passed, among them Pres. Earle. So Mr. Vandeman's paper really contained some surprising information pleasing to all. The appropriation of only $3,000 in addition to his salary, was, he thought, wholly insufficient, and he urged the members to use their influence to secure an increased amount next year. Some of the objects to be accomplished were mentioned by the Pomologist. The establishment and maintenance of Experimental Stations, one for each district, with systematic, careful and timely reports, were suggested. The collection of statistics of the great pomological industry of the Nation, its progress and possibilities, production and consumption of fruits, investigation of foreign markets, all these should receive attention as well as the cereal products, which he thought were scarcely greater in total value than the fruit product. New fruits should be tried and reported upon, and the adaptability of varieties to special sections of country be ascertained. The real facts about every fruit, good or bad, should be known. A cabinet of accurate fruit models, native and foreign, showing varieties as grown in different States and localities, together with a description of each fruit, plant, branch and foliage, was suggested. Reform in the nomenclature was also much needed. But at present "the garment must be cut according to the cloth." Our Congressmen must be urged to greater aid. "Let them know they represent pomologists as well as politicians and tradesmen." Several members spoke earnestly on this subject. Let us secure the proper appropriation. The total value of the annual fruit crop in the Union is now over $100,000,000.

"The Press and Horticulture" was the subject of the next paper by Herbert Myrick, it being read by the young editor himself. He said the press had done much for home fruit growing, but very little for the seller. There is too much space between the producer and consumer. Neglected reports of fruit crops should be looked after, and these should cover the whole country. The press has not done its whole duty to horticulture. Many papers refuse to notice new fruits, fearing to advertise some one. The subscriber wants his journal to print such news while it is fresh. More horticultural writers are needed. Some who have never written for the press sometimes send the best news because founded on experience. Local horticulturists should keep their papers informed of their doings. More attention to the business side of horticulture was urged. The proper marketing of the fruits is now more important than the further production of new varieties. Such are a few of the salient points emphasized by Mr. Myrick in his paper, which he read in a loud, clear tone of voice.

H. H.

NOTES FROM THE BAY STATE FAIR.

ALTHOUGH the statement is very generally made that the Bay State Agricultural Society was organized as a protest against the old New England Association, yet we think some of the managers, at least, have a higher object in view, and that while it is a protest against "the ring" as it is called; yet it will accomplish a much higher object for the farmers of New England in showing that a successful agricultural fair does not depend upon speech making, horse racing, or political wire-pulling.

The object of the Bay State Agricultural Society, according to its constitution, is to promote the interests of agriculture, horticulture and the mechanic and domestic arts connected therewith, and the raising of choice breeds of domestic animals in the Commonwealth, by holding exhibitions, institutes and courses of lectures and by publishing reports. Any person may become a member upon the payment of $1. Six consecutive annual payments, or the payment of $5 shall constitute life membership.

This is the first fair held by the society, and the first agricultural fair held in Boston for 30 years, the last one being held under the auspices of the National Agricultural Society of which the venerable Marshall P. Wilder was president at the time, in October, 1856.——A special bureau of information added materially to the comfort and convenience of visitors. Experienced men were in charge to direct visitors and give all desired information.

FRUIT AND VEGETABLE NOTES.

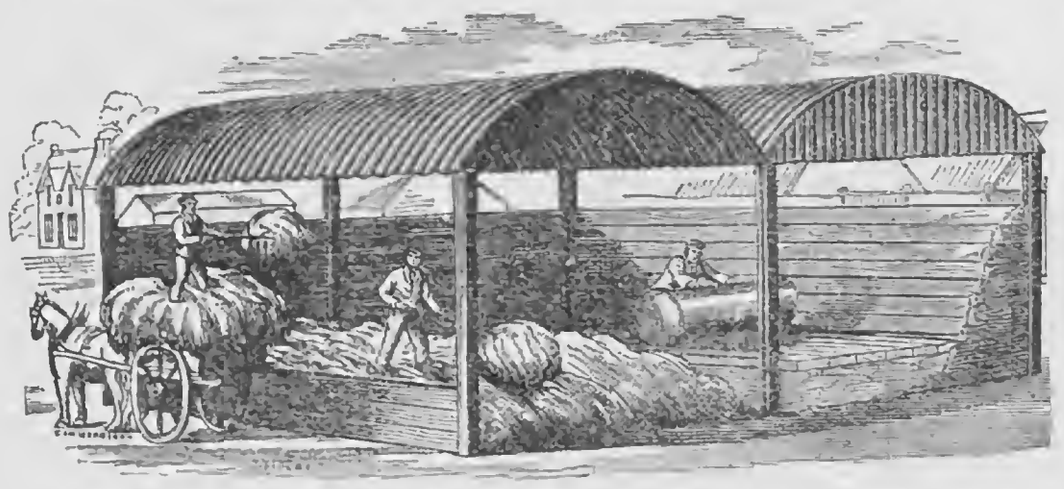
The special prize of $50, offered for the best show of apples, brought out a large and fine collection. They were shown on plates containing either half a dozen or a dozen of each variety.——Marlboro Grange showed 108 plates; Southboro Grange 72; Worcester Grange 168, and other granges smaller collections.——A number of new varieties, some of them unnamed, were shown——Maiden's Blush and a variety of sweet russet attracted much attention.

The show of pears, although not large, was of considerable excellence. As a matter of course, the venerable Marshall P. Wilder led the exhibit. Some remarkably fine specimens of Clairgeau, Angouleme, and Anjou, were shown.

Among the grapes we noticed many fine specimens of the Niagara. Two enormous clusters of the Black Hamburg and two of the White Syrian, exhibited by Mr. Simpkins of "Sandyside," Yarmouth Port, were fine.——The Eaton shown by Messrs. John B. Moore & Son, led all other varieties for size and beauty. The vines of this variety at the Rural Grounds have not fruited yet, but we are inclined to think very favorably of it, from the specimens we have seen and tasted.

The finest vegetable exhibit in the form of a collection, was that of Mr. James J. H. Gregory of Marblehead. An exhibit of over 200 kinds of vegetable seeds was of interest, and attracted much attention. A large number of seedling potatoes, some of considerable merit, were included in the collection. W. W. Rawson also exhibited a large number of seedling potatoes.

Houghton Farm made a big showing of potatoes, the product of each hill being put in a tray by themselves——In the general exhibit, Dakota Red led in number. Some very fine specimens of the Beauty of Hebron, Pearl of Savoy, and White Elephant were exhibited together with a large number of new and old varieties.——Messrs. Schlegel & Fottler showed a new cauliflower grown by Mr. Peter Fottler.——Mr. Aaron Low exhibited the Bay State Squash, a sport from the Essex Hybrid. The Bay State promises to be a valuable cooking acquisition. It has excellent cooking and keeping qualities.



PORTABLE SILO. Re-engraved from the London Live Stock Journal. Fig. 395. (See p. 704.)

IMPLEMENTS.

THE Brown Endless Cutter Mowing Machine attracted much attention. As its name indicates, the knives are on an endless chain, cutting always in one direction. If it will stand the test it is a great improvement in mowing machines. It has only been partially tested as yet.——Breed's Universal Weeder is a new implement. Its principle is something like that of the Thomas Smoothing Harrow. It consists of a series of steel rods placed vertically in a frame and is intended to scratch out the weeds and pulverize the surface of the soil, about young corn, potatoes, etc.——Peabody's Fertilizer Distributor is a new candidate for public favor. It is of such a character as to prevent a judgment of its merits without seeing it in actual operation——The new Blanchard Factory Butter-Worker was exhibited in operation in the Dairy Department. It consists of two cylindrical rolls between which the butter is run. It can be run by an unskilled dairyman, and the butter, it is claimed, cannot be spoiled by over-working. It is one of the best new dairy apparatus, and is already having a large sale.——Hill's aerator is a new device for cooling milk quickly after it is taken from the cow, by forcing a stream of pure, cold air through it from the bottom.——The Dana wind-mill was ingeniously arranged so that its merits could be shown without being in actual operation. Mr. Dana has made the subject of wind-mills an especial study, and his mill is the result of a long experience and many costly experiments——The Deerfoot Milk Cooler, shown by President Burnett, is so arranged that ice water from a tank flows through a hose into another tank, around the butter, and so keeps it cool——The Johnson Cream Separator is made in two parts so that the cream may be taken away in the upper vessel or cream holder, while the skim-milk is left in the lower one.——The Higganum Manufacturing Co. exhibited the new Clark's flexible disc harrow and the Sherman silage and fodder cutter. One of the novel features of this cutter is the arrangement of the feeding rollers so that they are adjusted and run with the knives, giving the machine a positive feed.——Belcher & Taylor showed their new reversible sulky plows. It is evident that sulky plows are increasing in popularity in New England. The Yankee swivel plow is evidently destined to be one of the most popular plows ever introduced. It has already had a large sale. This firm also manufacture and control the sale of the Hitchcock potato digger, which is not only an excellent potato digger, but may also, by a change in the mold-board, be used as a ridger or shovel plow.——The Planet Jr. implements are everywhere conceded to be valuable. It is not strange that the popularity of these tools should be so universal.——Mast, Foos Co., of Springfield, Ohio, made a large exhibit, showing their iron turbine wind-mill and Buckeye force pump, lawn mowers, etc.

Although the fair has cost in round numbers somewhere near $45,000, yet the probabilities are that the receipts will more than cover the expenses and leave a handsome sum in the treasury. This is especially gratifying, because it proves that even financial success may be attained without the adjuncts of horse racing and side shows, neither of which was allowed at the exhibition. It is not true that the financial success even of the largest and best agricultural fairs depends upon horse-racing, gambling, and leased privileges. G.

THE GREAT ST. LOUIS FAIR.

(RURAL SPECIAL REPORT.)

THE 26th annual great St. Louis Fair opened at St. Louis, Mo., October 4th, and continued until the 9th inst. The second day was Children's Day, and over 60,000 people visited the grounds, 40,000 of whom were boys and girls. All under 14 years of age were admitted free. On Wednesday the crowd numbered about 70,000, and on Thursday the attendance was the largest, over 140,000 being present. Practically Friday was the last day, and over 50,000 people gathered there. From this it will be seen that the fair was a financial success. The weather from the beginning to the end was all that could be desired. Not a drop of rain fell to dampen the ardor of those wishing to attend. Premiums to the amount of $70,000 were offered.

In the cattle department there was not an empty stall. A. Bourquin, Nokomis, Ill., exhibited a herd of Swiss cattle which attracted much attention as this breed is seldom seen in the West. Short-horns, Aberdeen-Angus, Holstein-Friesians and Jerseys were numerous. Altogether the show of cattle was a creditable one.

The sheep exhibit numbered, in all, about 300 head, consisting of all the prominent breeds. This department was better filled than usual. The accommodations for swine were found totally inadequate to the demand. Illinois and Indiana made the best showing.

In the poultry department Light Brahmas were first in number; then came the Plymouth Rocks. The show of turkeys was greater than last year. This department was full, and the exhibits much better than in former years.

Of agricultural implements the display was one long to be remembered. The long row of permanent buildings erected by manufacturers from all over the United States, presented a magnificent appearance. Osborne & Co. received the prize for the handsomest building erected in 1886, and Deere, Mansur & Co. received first prize for the largest display of implements. Among the new machines shown and deserving of mention was the Cyrus Roberts' shuck corn-sheller, cleaner and separator, made by Roberts, Thorp & Co. This machine cleans and separates the corn from the husks and cobs without shifting the elevator, and the grain can be delivered by means of the elevator spout at either side of the sheller into a wagon or gunny sack. The Whitman Agricultural Co. exhibited their new continuous hay and straw press in operation, with a new concentrating power device, which gradually changes the fulcrum from 21 down to seven inches, thus requiring great strength. This device gives the same plunger throw as in their former press, but with a great increase in power. They also showed their magic feed-mill, which is warranted to grind 30 bushels an hour with two-horse power. The old and reliable firm P. P. Mast & Co., exhibited their full line of implements tastefully arranged in their permanent building. Mast, Foos & Co. made a creditable display of implements, including the iron turbine wind-mill.

The Albion M'f'g Co., showed their spring-tooth harrow, cultivators, etc. We are pleased to see our old friend Col. A. W. Butt, (late a well known member of P. P. Mast & Co.,) financially interested in this old and thoroughly reliable firm, and heartily wish him all the success possible in his new enterprise. This company, as now organized, is officered as follows: Col. A. W. Butt, president and treasurer; Horatio Gale, vice-president; E. P. Burrell, secretary. The Syracuse Chilled Plow Co., exhibited a full line of their goods including hand and sulky plows, cultivators, and road scrapers. The latter articles being the only implements of the kind on the grounds, attracted much attention from the fact that they are inexpensive and capable of doing excellent work. They have received many encomiums from road commissioners and superintendents of streets. This company were the only exhibitors in their line from the Empire State. The Bucher & Gibbs Plow Co., manufacturers of hand, gang and sulky plows, made an excellent display. This enterprising firm have made and sold over 170,000 plows. F. E. Myers & Bro., showed the Myers' double-lock reversible hay carrier, one of the most perfect in use; also the new Myers' iron track carrier. This carrier is made of the best annealed malleable iron, and is very strong and neatly finished. They also show a full line of force and lift pumps. J. E. S.

A CORRECTION.—The RURAL's report of the poultry department at the New York State Fair is sadly at fault as regards numbers. The following are the exact figures: Fowls and guinea fowls, 740; turkeys, 16; geese, 140; ducks, 70; pigeons, 230; rabbits, 34; dogs and puppies, 28; making a grand total of 1258; noise-making specimens under one roof.

F. W. GAYLOR,
Sup't Poultry at N. Y. State Fair.

What Others Say

CINCINNATI'S LIVE STOCK TRADE.—In his annual address to the Pork Packers' Assoeiation of Cincinnati, Sidney D. Maxwell, secretary, presented the following synopsis of the live stock trade of that city during the past year:

The shipments from the eity in the past year aggregated of hogs 215,025 head, compared with 257,639; of cattle, 71,066, in comparison with 58,585, and of sheep, 382,983, compared with 373,128 Of these there were shipped from the Union yards, of hogs, 182,085, in comparison with 124,220; of eattle, 50,755, compared with 39,550, and of sheep, 348,891, in comparison with 332,238.

The net receipts, whieh are the only measure of manufaeture and local consumption combined, show a considerable increase in both cattle and sheep, little change having occurred in hogs. The net receipts of hogs were 564,931 head, compared with 566,052 in 1884–85, and 556,351 in 1883–84: of cattle, 127,738, in comparison with 111,562 in 1884–85 and 125,452 in 1883–4, and of sheep 182,279, compared with 167,154 in 1884–85 and 147,556 in 1883–84. The consumption of hogs shows no materinl change in three years; that of cuttle makes the largest exhibit in the same period, and a marked increase over 1884–85, while that of sheep is the iargest in the history of the city.

The weight of the different kinds of stock received, as indicated hy such as were weighed at the Union yards, which are fairly represeutative of the whole city, shows a slight increase in hogs, but a reduction in both eattle and sheep, the gross weight of the hogs having been 239.17 pounds, in comparison with 237.14 in 1884–84 and 228.10 in 1883–84; of cattle 980.04 pounds, compared with 987.33 in 1884–85 and 984.68 in 1883–84, and of sheep 78.18 pounds, in comparison with 78.59 in 1884–85 and 80.50 in 1883–84, the average weight of the sheep having been the smallest in eight years, the weight of hogs in the past year having been 2.03 pounds greater, and of cattle 7.29 pounds less than the preceding year.

A CORRECTION CORRECTED AND AN ABSURDITY EXPOSED.—

"We observe that some papers speak of the Martin Amber and Landreth wheats as being the same, or very similar. The editor who makes such statements knows nothing about the two varieties of wheat. They are very distinct from each other in growth, in straw and grain, and while the Landreth is an old variety under a new name, the Martin Amber is a *new variety*, and in many respects entirely different from any other sort. In fact, it is more distinct from other varieties than any other sort originated in many years."

The above statements, which we find in the Epitomist, published by the seedsmen J. A. Everett & Co., of Watsontown, Pa., are essentially untrue. The RURAL NEW-YORKER is the "some papers" alluded to. "The editor," it says, "that makes such statements knows nothing about the two varieties." We have three times raised the Martin's Amber beside the Armstrong or Landreth, a-d find them in all respects the same. Therefore it is untrue that "they are very distinct in growth, in straw and grain." "The Landreth is an old variety under a new name." How does the Epitomist know that? Merely beeause the R. N.-Y. has talked of the Armstrong for 10 years or thereabouts. But when was the Armstrong disseminated? Not until a year or so previous to the so-called Martin's Amber, and *then* it was called Landreth. If the originator of the Armstrong chooses to allow the Landreths to call it "Landreth," that is its proper name, since it was not generally known as Armstrong. It is *not* an *old* variety any more than Martin's Amber is an old variety.

This firm is now selling Yankee Prolific Oats at a high price, though it should know that this is an "*old* variety," viz., the White Russian. The same firm now offers a new wheat under the name of "Everett's High-grade," and the statement is made that it is a cross of "Martin's Amber on a number of other varieties!" This crossing was begun only *four* years ago, according to the statement, and although the cross was made upon "a *number* of different varieties" it has been *fixed* and offered for sale at $3.50 per bushel in four years! If the firm really knows anything about crossing wheat it would know that this statement is simply absurd. We dislike very much indeed to call attention to such matters, more especially in the present instance, since J. A. Everett & Co., are advertising patrons and friends of the R. N.-Y.

BOILED DOWN AND SEASONED.

PROF. SHELTON says that corn fodder to be valuable must be cut while it is yet bright and green .....

THE Farmers' Supply Association is the title of an organization of farmers, recently formed in Scotland to purchase agricultural supplies, especially fertilizers, from first hands at wholesale rates. This is the right way to proceed, says the Vermont Watchman. Co-operative buying for cash in large quantities does away with middlemen and enables manufacturers to sell on the closest possible profits....

MR. W. H. RAND tells the American Garden how the Marlboro Raspberry behaves in Vermont. With ordinary care it made the strongest growth for the first season that he ever saw, while the few berries which he allowed to mature were of large size and fine flavor. Naturally he looked forward to the next season's fruitage with much pleasure. But the plants seemed "suddenly to develop a decided antipathy to Vermont soil and treatment and were apparently tired of living. The few berries produced were of ordinary size and quality." Again he says: "So far the plant seems entirely hardy".... .....

MR. J. H. HALE, of South Glastonbury, Conn., speaks emphatically in favor of the Lucretia Dewberry, in the New England Homestead. He is convinced that it is a vigorous healthy plant, as hardy as the Taylor Blackberry, as productive as Snyder, as large as the Lawton and the best in quality of any of the blackberry family, and the earliest of all to ripen. He does not see how it is possible to produce a better fruit of its class.....

IN Ohio the Lucretia is planted in rows eight to 10 feet apart and four to five feet apart in the rows, forming a thick matted row or bed four to five feet wide. They throw up fruit spurs a foot high.....

ANOTHER writer in the same good journal condemns for one reason or other the following summer pears: Kirtland, Osband's Summer, Bloodgood, Clapp's Favorite, Madeline and Rostiezer. He commends instead of them the Summer Doyenné, Giffard, Manning's Elizabeth, Tyson, Margaret and Bartlett.....

WEBB & SONS' (England) farm-seed catalogue just received, gives an engraving of their Yellow Globe Mangolds, several of which weigh from 41 to 47 pounds.....

W. P. ATHERTON states that there are 3,500 named varieties of the apple; only 300 are in general cultivation, and of this number not over 50 possess any special value.....

MR. H. B. GURLER, the eminent dairyman, is an advocate of winter dairying, says the U. S. Dairyman. He claims that by changing from summer to winter dairying he has raised the average net profit on forty cows from $15 to $40 per head. His winter ration is early cut clover and Timothy, with equal parts by measure of wheat bran and corn meal. One Winter his milk suddenly shrank from 855 to 750 pounds, and on ascertaining the cause he found that late had been substituted for early cut hay. The above agrees with L. B. Allen's practice.....

MILK, it says, is a very necessary and nutritious article of human food, but unless produced from healthy cows, maintained under proper sanitary conditions with air and exercise, and provided with sound and wholesome food, there is probably no other article of food so full of danger and so liable to disseminate diseases of various kinds.....

THE Paris cows (25,000 in number) have been found a prolific source of pulmonary consumption, it is said... ....

A WRITER in the Dakota Farmer says that a few months since he visited a dairyman in New York, who had for years kept good common cows. Four years ago he bought a fine pure-bred Holstein bull and crossed upon his cows. Last year his two-year-old heifers gave double the quantity of milk his common cows did.....

ENGLISH cattle sales are well mixed up with oratory. At a recent Short-horn sale one speaker quoted a collier who said he must keep a bull-pup because "a man looks so stark-naked without a dog." In the same way, the speaker said every farmer ought to buy a good Short-horn because a farm will look so stark-naked without one. Another speaker said his cattle were descended from the stock of an old clergyman, consequently they were the most orthodox cattle in the kingdom..... ...

EVEN in Colorado farmers are taking steps to provide more fodder for the winter-feeding. There is serious talk of utilizing straw and stalks. We have seen tons of straw burned up to get it out of the way. Even during the burning farmers were complaining of hard times and taxes.....

SEE that the onions are *dry*, says the Farmer. Let them freeze solid. Then the thing is to *keep* them frozen till wanted. They must be well covered to keep them from thawing...

PROF. SANBORN, of the Missouri Agricultural College, estimates that the demand of sheep for food exceeds for each 1,000 pounds of live weight, that of cattle by 25 to 35 per cent.....

"IT must be remembered, however, that the sheep not only produces mutton, but a fleece of wool at the same time, while the steer converts its food into meat only. In another way the sheep is more economical than the steer. It feeds largely on what is rejected by the steer, and would otherwise go to waste.....

RANDALL tells us, says the National Live Stock Journal, that in trials as to the relative shrinkage from cooking between mutton and beef, the result was in favor of the mutton. Prof. Sanborn makes comparisons thus: "Given 100 pounds each of live steer and sheep at four cents a pound, live weight, if we substract eight pounds of wool at 20 cents a pound from cost of the sheep, the dressed carcass of the steer at 60 per cent. shrinkage, will cost 6.66 cents per pound; the dressed carcass of the sheep will cost 4.61 cents a pound; or the former costs 42 per cent. more than the latter." It would seem, from all the evidence, that there can be no doubt of the greater economy in growing mutton than in growing beef.....

ABOUT the last man to trust, says our Iowa contemporary, the Homestead, is the fellow who has left the farm years ago, has lost its habits, tastes, and instincts, and has no visible interest in it, and who is always putting himself forward as the friend of the farmer. This class of farmers will bear close watching.....

THE true friend of the farmer, says Edmund Hirsey, in the Massachusetts Ploughman, is not so anxious to circulate information that will encourage every one to go into the business of farming, as he is to better the condition of those who are already in the business.....

WITHIN the last five years L. F. Allen has adopted the progeny of thorough-bred Guernsey bulls on his herd of high-grade Short-horn cows, thus producing a better class of milkers for butter-making, the Short-horns not being always up to the required standard for that object. Thus he writes to the Agricultural Gazette, of England..... .....

THUS far, his short experience favors the Guernsey over either Ayrshire, Jersey or Holstein. He prefers them to Jerseys for their greater size and hardihood, robust forms, carrying more flesh and equal quality and quantity of milk, according to size.....

MR. ALLEN intends, as time progresses, with a continuous use of thoroughbred bulls, to breed the grades still higher, it having been fully proved with those who have long used both Guernseys and Jerseys that well-graded cows of those bloods give as rich milk and as high a quality of butter as thoroughbreds, at much less cost of purchase than they.....

MR. ALLEN says that we see occasional accounts of enormous American weights of butter in a seven days' trial of both Jersey and Holstein cows, the example being one cow selected from 50 or 100 or more, at an extra expense of food, oftentimes detrimental and sometimes fatal to the animal; but the tales reserve the average yields of the herds from which they are selected, which, if fully stated, would give us a much truer value of them. "Some people's geese are always swans." So it may be with the owners of these extraordinary cows. It may be that the regular quantity of butter given by these 25 to 40-pound butter cows in a single week's trial might not, on the same rations as other cows get, amount to over seven or eight pounds per week during the milking season of eight, nine or ten months.

THE proportion of different seeds which Mr. Allen has adopted is as follows: Six quarts of Timothy, four quarts of medium red clover and two quarts of Alsike Clover per acre. The smaller size of Alsike seeds makes them equivalent in number to the double quantity of the red, giving an equal number of shoots with the other. They come into full bloom about the same time, when the Timothy is just heading out, and when cut together at that period make, he thinks, the finest quality of stock hay for cattle, horses, or sheep.....

MR. CHARLES GIBB, of Abbotsford (P.Q.), Canada, says, in the report of the Montreal Horticultural Society that for general planting there is no evergreen like the Norway Spruce. It is cheap, transplants easily, grows quickly, and forms a large, beautiful tree. For wind-breaks and shelter belts it is the best evergreen; for hedges he prefers the native Arbor Vitæ, which makes a good hedge in less time.

WITH our 13 years' experience with evergreens, we should greatly prefer "for general planting," either the Oriental, White or Alcock's Spruce..... .....

ENGELMANN'S Spruce he says is a beautiful evergreen, perfectly at home in his climate. A specimen he has is remarkably glaucous. In Spring it is the color of frosted silver, not green at all. Nordmann's Fir is a beauty of a different type. Its long, dark, shining, rich foliage is very striking, but it is not hardy above the snow line. Engelmann's Spruce is is now known as Abies pungens. It is certainly the most silvery evergreen at the Rural Grounds and as hardy as any conifer ever grown there. Nordmann's Fir is indeed a grand tree, but even in this climate it is liable to be severely injured by peculiar Winters, though generally it escapes without the least harm.....

MR. GIBB has a variety of our White Spruce (A. alba caerulea) nearly as silvery as Engelmann's, but bluish. It is a dwarf and has borne its second crop of seed though the trees are not more than three feet high. The Siberian Fir (P. pichta) is remarkable for its refreshing green color, and such specimens as he saw in Russia showed no signs of early decay, as is the case with our native balsam. The Tiger's Tail Spruce of Japan (A. polita) is, he thinks, hardy or nearly so. It has stood the test of about five winters, but is small and often covered with snow. Its leaves are as sharp as pins. There is a dwarf form of our beautiful hemlock (Tsuga Can. macrophylla) a foreign-looking, compact shrub, just the thing to decorate a well-kept lawn with..... .. ....

IF we mistake not this Large-leaved Hemlock originated in the grounds of S. B. Parsons, of Flushing, Long Island. Our specimen is now about 12 years old and not over eight feet high. The leaves are twice as large as those of the common hemlock and the shrub is a fine plant for the lawn ....

A DELIGHTFUL companion to the Large-leaved Hemlock (macrophylla) is the Small-leaved Hemlock (microphylla). Growing near together, we are reminded of brother and sister ....

EXTRAVAGANT statements do not deceive intelligent farmers; but there are some young men who know nothing about farming, and some old men who are about retiring from business that catch at such bait, and are made to suffer by it.....

IT appears to Mr. Hirsey that the time has come when this class of writers should be banished from all leading agricultural papers, for they do a real injury without any corresponding benefit. What we want at the present time is facts fresh from the field of practice.

WE want to know what has been done, not what in our imagination we think might be done. Why should writers be continually trying to force everyone into the farming business by rose-colored statements. We already have farmers enough to grow all the grain and other products we need, and a great surplus besides. Had we not better turn our attention to the improvement of what farmers we have, so that they will be able to grow larger crops with the same expenditure of labor and material.... .....

MR. TUCKER tells the readers of the Farm Journal that his folks have all learned to like mutton. The children have clearer skins and the old folks less dyspepsia than when they ate lots of pork. The corned beef of the family is now corned mutton, having found out that there is no better meat for a change than a piece of mild, salted, fat mutton.....

MR. TUCKER thinks that grass seed is wasted by being covered too much. His experiment of sowing it all on top of the ground worked well—not a miss on a single field. His oats sown in the snow March 22nd on the wheat land came on wonderfully just as soon as the weather was warm enough for anything to grow, and they ripened with the wheat....

A writer in the National Druggist says that his son suffered with typhoid fever during a heated term, when the temperature of the room often rose to 90° or 95°, and the patient's temperature ran up to 105° F. and over. A number of tubs were placed in the room and kept filled with ice, and the doors kept closed. The temperature of the room sank to 80° or less, an average of 12° or 15° below the temperature of the other rooms in the house, and the cooler atmosphere not only added to the comfort of the patient, but aided in keeping down the body temperature and materially contributed to a final recovery.....

REICHMANN (Deutsche Med. Zeitung) draws, from a number of experiments, the conclusions as to the relative digestibility of boiled and unboiled milk; that boiled milk leaves the healthy stomach more rapidly than an equal quantity of unboiled milk and the digestion of boiled milk is more rapidly accomplished than that of unboiled milk.....

BANG, of Copenhagen, has expressed the opinion that milk taken from a tubercular cow is probably a fruitful cause of tuberculosis in children. He declares that tuberculosis of the udder of milch cows is by no means a rare affection, and is characterized by diffused, painless swelling of one, rarely of two, portions of the udder, proceeding without any constitutional implication. Boiling, he found, would destroy the bacillus, hence it is but prudent to resort to this process in every doubtful sample of milk.....

THERE is something very mysterious about the amount of medical knowledge possessed by old women, uneducated people generally—

and journalists, says the Druggists' Circular. It is an especially noticeable fact that the more ignorant a person, and the less commonsense he has, the more infallible remedies he can recommend.....

THE London Garden presents a beautiful colored plate of a new strain of zinnias called French Pompone. The development of this race has been the work of many years, the strain combining a refined and fully double flower with a dwarf and neat habit of growth.

IT is an open question whether cheap literature is helping us any toward becoming a thoughtful and reading people, says Charles Dudley Warner in Harpers'.....

Everywhere.

RURAL SPECIAL REPORTS.

Canada.

BELMONT, N. S., Oct. 4.—The hay crop, as a general thing, all over Nova Scotia is light. In some parts it is one-third below an average. Dry weather in June and July was the cause of the shortage. Since August we have had very wet weather which has helped the late hay and the after grass. The grain crops are fully up to an average. Potatoes are a light crop, and rottening badly. Other vegetables are fair crops. The apple crop is allowed to be the largest ever raised here. Large quantities are being shipped to the U. S. Prices: hay, $10 per ton; potatoes in bulk, f. o. b., 65 to 70 cents per barrel; turnips, carrots, beets the same; oats, 45 cents per bushel; barley, 60 cents; flour, $4.50 to $5.25 per barrel. L. D.

Colorado.

BOULDER, Boulder Co., Oct. 5.—This country is supposed to be remarkable only for scenery, but it is becoming remarkable for fruit also. We do not live quite on pure air, picturesque mountains and gorges, but find that with ordinary care and water, of which the supply is usually ample, as our irrigating system is excellent, we can grow almost any fruit or vegetable. I have on my farm 15 varieties of grapes—amongst them Agawam, Delaware, Diana, Brighton, Worden, Early Victor, Moore's Early, Salem, etc., all doing splendidly. All small fruits do as well as possible. Strawberries yield not less than 5,000 quarts to the acre, often much more, and I sold none at less than 12½ cents per quart. At first we got 25 cents per quart for blackberries, and the yield is said to be as much as 10,000 quarts per acre! I have the Hansell, Herstine and Turner Raspberries—Hansell does worst; Herstine has the best flavor; Turner fruits nearly till frost comes and is a very heavy bearer. Gregg does well, and for blackberries I have Snyder, Wilson and Kittatinny. We can grow apples here too. I have 40 trees, but they are not old enough to fruit except one crab only three years old, that bore this year. A Weaver Plum, planted last year, fruited this. My Washington Plum grows about three feet each year. Eastern people are surprised at our fruit and our mode of protecting it, as all small fruits and grapes are laid down and covered with earth in the Fall. H. M.

Illinois.

CHICAGO, Cook Co., Oct. 12.—It is now over 14 days since a drop of rain has fallen from Ohio to Kansas north of the Ohio River, and also extending up into Minnesota and Dakota. I do not consider that the severe drought of the late Summer and early Fall can be said to have yet been broken in Missouri and Kansas. Whatever rains these two States have had came in streaks. These two States also report more of a decreased acreage in wheat than any other State in the wheat belt. Michigan, Ohio, Indiana and Illinois have this Fall put in, I think, fully as much as they did last season. When the winter wheat crop was first thrashed farmers rushed it to market as fast as they could, as many wanted money, and many had been losers by holding their wheat for higher prices last year and the year before, and they wanted no risk this year. Many, too, who are able to hold their wheat refuse to sell at present low prices. Farmers in the spring wheat belt are now doing exactly the same thing as did the farmers in the winter wheat belt 60 to 90 days ago, and my advices from that region are to the effect that the movement of the crop has never been as large for the same length of time as exists now. Corn is drying out slowly. The weather was too warm and hot. We need more severe frosts to dry up the sap. So far October has seen only two killing frosts. R. N.

New York.

UTICA, Oneida Co., October 11.—The cheese market to-day ruled ⅛ cent lower than last week, and the result of the lower market was that some cheese was not brought out and the sales were over 2,300 boxes less than last week. The factory men want a higher price, not being willing to take less than 11½ or 12 cents for their September cheese, and the result was a somewhat cramped market. It may be that they will be able to bring it up next week, as the stock is held back considerably, and if other markets have done no better there will be a better demand next week. But the market appears to have reached the top. The sales to-day were 9,422 boxes ruling at 11⅛ cents. Little Falls sold 6,301 boxes, ruling at 11 cents. The butter supply is largely summer make and does not bring what the producers wish, as the jobbers are looking for fine September and October butter. This is not so easy to find. The latter sells readily for 25 to 28 cents. August and early September butter sells for 22 to 25 cents. There is nothing to say about hops. There have been no sales, though some hops of a fair quality are offered for 30 cents. Bad reports of the condition of hop roots are in circulation. R. L.

Ohio.

FLUSHING, Belmont Co., Oct. 4th.—Crops are good. Apples abundant. G. W. D.

Virginia.

RICHMOND, Henrico Co., October 11.—Despite all the crop reports, estimating the shortage of tobacco by frost from 12 to 25 per cent., this market has shown only a moderate firmness, and no decided advance has been sustained. It is true that some few sales of desirable bright wrappers have been made at prices at which they were formerly refused, and that fine cutters continue in strong demand, but of these, particularly fine-grade, the market has not been over-stocked. The weather has been warm, and what little late tobacco is out will be benefited thereby. There has been some speculative feeling shown in burleys, but manufacturers and others are too well stocked and manufactured goods are ruling too low for much advance. There has been no new tobacco offered in this market by which to judge of the crop, but in the upland market some fancy prices for cutters have already been paid. On the whole, prices are steadier, the decline has been stopped and the outlook is toward better prices for all desirable dark and bright leaf, by gradual steps only. T. H. M.

THE FARMER'S CLUB

ANSWERS TO CORRESPONDENTS.

[Every query must be accompanied by the name and address of the writer to insure attention. Before asking a question, please see if it is not answered in our advertising columns. Ask only a few questions at one time. Put questions on a separate piece of paper

MAKING CUTTINGS OF GRAPES AND CURRANTS.

W. S. E., Orrick, Minn.—1. When should cuttings of grapes and currants be made? 2. What's the matter with my Gregg Raspberries? The canes lie almost flat on the ground. The land is a heavy clay loam highly fertilized.

ANS.—1. Make cuttings of the new wood of currants, about six inches long and plant them somewhat diagonally in mellow soil so that the top of the cutting is just above the surface of the soil. Compact the soil about the cuttings. Place them six inches apart if to be transplanted, or, if not, plant them where they are to grow. They will sprout next Spring. Make cuttings of grape-vines with two joints, cutting just above the top joint and just beneath the lower one. Treat these just the same as the currant cuttings. A fair proportion will sprout in the Spring. It is well to cover the soil over the cuttings with straw or something of the kind held in place by sticks, branches or anything of the kind. 2. The richness of the soil has produced, very likely, a rapid, succulent growth. The canes ought to have been supported.

TRANSPLANTING BLACK-WALNUTS; TRIMMING GOOSEBERRY BUSHES.

A. N. T., Frankfort, Kans.—1. Can one-year-old black-walnut trees be transplanted? 2. Do gooseberry bushes need much trimming?

ANS.—1. Yes. Take them up carefully, so as to preserve all the fibrous roots. Cut off a part of the tap-root. Do not expose them to the air. Keep them moist and covered from the moment they are lifted until planted. 2. All old wood that has borne say three crops should be removed, and so much of the younger wood as to give the bush an open form, with the stems equally distant from one another. If otherwise the berries are liable to mildew and rot. Severer pruning will give larger and fewer berries. It should be borne in mind that both the gooseberry and currant fruit mainly on wood that is two years or more old, and that too much of such wood should not be removed. Cut out all old gnarly or diseased wood. Keep the bushes shapely.

PERIOD OF GESTATION IN A MARE: KEEPING MANGELS.

W. C. W., Shrewsbury, Mass.—The average period for a mare to carry the foal is 44 weeks or 11 months. There is nothing exact about it, however. With 582 mares observed in France, the longest period of gestation was 419 days; the shortest 287 days and the average 330 days. Many notions are common among farmers to the effect that a small mare will carry her foal for a shorter time than a large one, and that a horse colt will be carried longer than a mare colt. These observations are not confirmed by scientific observation. 2. The Mammoth Long Red and Yellow Globe or Golden Tankard Mangels are both good—we prefer the latter. They are stored in pits or cellars. They should be protected from the frost, for they are as easily injured as potatoes. They should be made dry before storing. Ventilation is needed where the mangels are stored in pits. An easy way to provide this is to nail four boards together so as to form a square long box. This is placed down among the mangels so as to project some four inches above the top. When the last covering is put on this box can be drawn out and the hole filled with straw. When fed to cows the mangels should be sliced or pulped. Sheep can gnaw them when in larger pieces that might choke cattle. 3. The Purple-top White Globe turnip is very popular.

BEET LEAVES AS FEED.

L. B. & Son, Gaines, N. Y. We do not think the leaves of beets would injure the milk of your cows. We have fed them in small quantities without noticing any ill effects. We have never fed them in the quantity that you propose to use. As compared with ordinary corn fodder, the beet leaves would be, chemically considered, a better food for milk than the fodder. The leaves contain more protein and fat, but less of the carbohydrates. Still, no chemist can analyze an appetite, and practical feeding alone can determine the exact value of any ration.

Miscellaneous.

C. A. T., New Brunswick, N. J.—1. What is the average wholesale price of mushrooms in New York during Winter? 2. Would burning a strawberry bed to kill the weeds hurt the berry roots?

ANS.—This question can hardly be answered satisfactorily. Last year the price varied from 35 cents to $1.25 per pound, with an average of about 75 cents. There is a good demand for all that can be offered. They are mostly sold directly to marketmen or grocers without passing through the hands of middlemen. Mr. Henry Kelley, 85 Washington Market, New York, handles mushrooms. 2. No. The best way to do it, supposing the land to be free from stones, is to run over the rows lengthwise slowly with the mower, leaving the cut foliage on the rows until it is dried sufficiently to burn readily. If that's not enough, strew along the rows sufficient of the cheapest available combustible matter, and when the wind blows lengthwise of the rows, set fire to the stuff at the windward ends. It is, however, usually better to get one good crop of large berries and turn under the vines, as the second crop is usually inferior in size and quality. In that case rotate, setting out a new bed in a different place.

L. H., Nova Scotia.—Agents are selling Russian mulberry trees about three feet high for $1 apiece. Are they worth it?

ANS.—The Russian mulberry is a very indefinite name. It means no more than American chestnut or American fruit of any kind. The fruit is, so far as we have seen or heard, quite inferior to the kinds sold by nurserymen—though the most of the trees are hardier. But we do not see why the Russian mulberry should be valued for hardiness alone, since there are handsomer and hardier trees and trees more valuable for timber. In any case, the price ($1.00) is too much.

D. D. W., Obneyville, R. I.—Has the Akebia quinata ever seeded at the Rural Grounds?

ANS.—The Akebia rarely fruits. We have carefully examined the flowers and find that the pistils and pollen do not seem to mature at the same time. Some say that a northern exposure is favorable to fruiting. About 10 years ago we gave a picture of the bean-like fruit Would be glad to receive a few seeds.

F. S. W., Sweetwater, Tenn.—1. What s a grape with a dark red juice, and sour enough to make good jelly? 2. Does the Clinton rot at the South? How can rot in grapes be prevented?

ANS.—1. Norton's Virginia is one of the best for red wine and will also make good jelly. 2. Not that we know of. There is no way to prevent rot. For red wine, we would also suggest Cynthiana and Lenoir.

H. L. C. Charlton, Mass.—I am a little puzzled what to do with my grape vines to keep the mice from eating them the coming Winter. They nearly destroyed some of them last Winter by gnawing the vines into short pieces, and this season they have been eating the grapes from the vines. I set the vines near the wall. Would copperas sprinkled about the vines drive the mice away and would it injure the vines?

ANS.—We doubt if the copperas would be effectual. The only remedy that occurs to us is to set a number of the common mouse traps near the vines, baited with cheese or something that the mice are very fond of.

G. H. G., Tenafly, N. J.—What steam heater is small enough to heat a wooden country house of small size—say 15 x 15?

ANS.—We should not think it advisable to use steam to heat so small a house. The Raymond Furnace Company, of 76 Beekman street, New York, make steam heaters of various sizes, and can probably furnish you with such a heater as you may desire.

J. T., No. Madison, Ind.—Is the World Manufacturing Company, New York, reliable and is the Woolwich gun the fine article represented in their ads?

ANS.—The World Manufacturing Company is reliable, and the gun is, we think, well worth the price asked for it.

C. A. B., New York.—Unfermented wine or grape juice is practically a "preserve." It is not wine at all. To make it express the juice from the grapes, sweeten to suit the taste and place in porcelain kettles over a good fire. Bring to a boil and skim off any impurities which may arise. Place hot in bottles or jars and seal tightly. Keep in a cool, dark place.

E. L. M., Charlemont, Va.—For information concerning Devon cattle write to J. Buckingham, Zanesville, Ohio. We understand the American Devon Record to be the only registry in this country for Devon cattle.

W. H. O., Montague, N. J.—Who in New York receives early lambs for sale?

ANS.—Jelliffe Wright & Co., 13, 15 and 17 Centre Row, West Washington Market, New York City. It is of course better to send an invoice with the shipment.

F. R., Summit Station.—The Belden agency of this city have thus far given satisfaction, so far as we know. The gun they offer is probably worth the money. We think you will obtain satisfaction from them.

Several Subscribers.—The list of book premiums will be published with the account of the Free Seed Distribution in our Thanksgiving Number—issued November 13.

A. E. H., Newark, N. J.—The grape sent for name is of the Æstivalis class resembling Herbemont.

J. A. G., Marion, Va.—We think you will like the "rustless" iron water pipes better than any others. The "Rustless" iron costs more than others; but it is cheaper in the end, as it is safe and clean. It is positively rustless, unless broken or cracked.

J. W. G., Mattituck, L. I.—The wheat sent for name seems to be the Clawson.

DISCUSSION.

H. R. JR., BROOKFIELD, MASS.—For the information of an inquirer in a late RURAL I would say that the true name for Squantum Corn is Potter's Excelsior. It was introduced by Thomas Potter, of East Providence, R. I.—a seed and vegetable grower. There is in Providence, a Squantum Club, the members of which go fishing in Narragansett Bay every Summer, and always take along with them Potter's Excelsior Corn, because of its excellent quality. Hence the name of Squantum Corn.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING October 16, 1886.

C. A. G.—G. O.—H. R., Jr.—I. W. G.—H. L. C.—A. G. M.—S. W. H.—P. S.—E. S. B.—A. E. H.—J. P. H.—E. P. J. H.—A. R. P.—F. D. C.—H. S.—A. E. M. B.—M. B.—A. B. J. B. E.—H. P. N.—E. W. P.—F. C.—H. E.—H. M. M.—T. E. H.—A. J. C.—H. H.—E. W. P.—J. B. R. K., many thanks—T. S. N.—L. C. H.—J. T.—J. G.—H. S. K.—L. H. M. R. B.—F. S. W.—F. T.—F. E. H.—E. & B.—P. B.—H. M. E. & S. M. P. W.—T. H. H.—T. V. M.—H. R.

Miscellaneous Advertising.

DIXON'S "Carburet of Iron" Stove Polish was established in 1827, and is to-day, as it was then, the neatest and brightest in the market; a pure plumbago, giving off no poisonous vapors. The size is now doubled and cake weighs nearly half a pound, but the quality and price remain the same. Ask your grocer for Dixon's big cake.

LADIES We make a specialty of giving premiums for the forming of Tea Clubs for our pure Teas and Coffees. **We defy the world on price and quality.** No house gives same quality goods and premiums. A host of useful and ornamental articles to select from. Silver-plated Casters for $5, $7, and $10 orders. Silver-plated Tea Sets, elegant designs, for $30 and $50 orders; or beautiful Gold-Band China Tea Set or handsome Decorated Dinner Set, Moss Rose Toilet Set, Gold and Silver Watches, Clocks, etc. Illustrated price and premium list, and full particulars sent free. **SPECIAL OFFER:** To every tenth person that answers this advertisement we will send **free one pound of choice Tea.** Write at once.

READ THIS

NATIONAL Tea and Coffee Company, BOSTON, MASS.

THE
RURAL NEW-YORKER.
A National Journal for Country and Suburban Homes.

Conducted by
ELBERT S. CARMAN.

Address
THE RURAL NEW-YORKER,
No. 34 Park Row, New York.

SATURDAY, OCTOBER 23, 1886.

We all of us know, or think we know, the effect of gormandizing on human beings. But we seem to take it for granted that the cow may be stuffed without any ill effects. A few generations will tell a different story.

In Broadway fruit houses the Niagara Grape is selling for 75 cents a basket weighing three pounds. They are fine bunches with the bloom well preserved, as if they had been grown in bags. We guess the Niagara is a success.

We shall be pleased to send the November 20 number of the R. N.-Y. to any list of names with which our readers may furnish us. We trust that our readers and friends will interest themselves in forming clubs of five or over, thus securing the club rate of $1.50 for each subscriber from now until the end of 1887.

Very soon we shall please our readers by a series of articles under the caption of "Bucephalus Brown's Notions and Ideas." They will appear monthly, or oftener, during the rest of the year, and during 1887. The author, whose real name will not appear—not until the end of the series, at least—is one of the most talented practical farm writers in America.

The Giant Pera Cucumber was tried at the Rural Grounds during the past season. The cucumber in form is much as represented in the engravings, few-seeded and tender-fleshed. The vines, however, were less rugged and productive than better known varieties. Nichol's Medium Green Cucumber is the best variety for pickles we know of. They are uniform in shape and size and the vines are very productive.

No one can doubt the efficacy of night soil as a fertilizer. In its raw state it is too offensive to be used, whatever its value. Its effect is immediate and its valuable properties are soon wasted unless carefully applied. It is far more agreeable and economical to apply it in the form of a compost. The compost can be prepared in the closet, by using light water-tight boxes or buckets and plenty of sand or dust. It is sensible, business-like farming to close up the old vaults and make compost of the contents.

Two specimens of the Fastigiate Oak were planted in the Rural Grounds about 10 years ago. The third year one was killed during the Winter. The other has never been harmed and is now 30 feet high, though scarcely more than six feet in diameter. In its way it is a first-rate tree. It holds its leaves fresh and green long after the leaves of most other trees have changed in color or fallen. For narrower portions of the lawn where paths or roads converge and there is little space for trees, the Fastigiate Oak is just the thing. It is a variety of the European Evergreen Oak.

As the result of the past season's work in still further crossing wheat and rye, we may report as follows: There are now growing from one cross of rye upon half wheat and half rye heads, eight plants which are therefore by parentage three-quarters rye; from another cross of the same, one plant; from another cross of the same, one plant; from another cross three plants half wheat and half rye, from another five plants which are seven-eighths rye: from another five plants which are also seven-eighths rye. These hybrid seeds are always shriveled and small, and the plants are for the most part small-leaved and delicate. The seeds were planted September 23.

One of our neighbors was successful last year in keeping celery until Spring in this way: He dug a pit wide enough for three rows of celery and nearly as deep as the hight of the plants. Then, instead of covering the tops with litter, old shutters were placed on either side, forming a peaked roof, the angle being about 45°. This gives a considerable air space within the roof, so that the leaves remain green and the plants do not begin to rot so soon as when the leaves come in contact with the straw or whatever material is used to protect them from frost. As the weather grows colder, litter is piled over the shutters. The pit is opened at one end as needed, and the shutters are removed as the celery is taken out.

The views of the Knights of Labor on the race question will make both friends and enemies. The idea that the colored laborers at the South should be educated, taught the real value of their labor, and upheld in an effort to obtain this value, will be considered doubly just by all who have never seen the negro exactly as he is. The great majority of people in this country who firmly believe that "a man's a man for a' that!" will applaud the action of the Knights in grappling with a vital question. The Southern members of the K. of L. and the property owners at the South will not look upon the matter so kindly. The country is sure to find some day that the proper educating and training of its mental paupers, both black and white, is the greatest problem of the day. We have no place in this country for ignorance or stunted manhood.

We examined a horse last week, that came as near our ideal of the perfect farm horse as we have seen. Broad and strong, gentle and kind, of good color, a willing worker, a fair roadster and with far more than the usual equine intelligence. The first reason her owner gave for her excellence was: "It cost $50 to sire her." There is a good deal in that remark. If you will think it over you will find that every first-class horse that you know of cost more money than the common horse. A $50 colt is a $50 colt, and a five dollar colt is a five dollar colt, every time. Back in the pedigree of every first-class animal will be found a good-sized service fee. We do not wish to be understood as saying that by simply paying a large service fee a farmer may consider himself sure to secure a good colt. We do mean that the service of a first-class, shapely, well-bred animal is worth ten times as much as that of a scrub. There is no law of nature that can enable scrubs to produce anything but scrubs.

Mr. J. T. Lovett, whose statements in such things we have always found trustworthy, says, in his fall catalogue, that he fears the Earhart Everbearing Raspberry will prove identical with the old Ohio Everbearing. This surprises us not a little. The writer is not familiar with the Ohio except from hearsay, and we have presumed that its "everbearing" power was confined to the production of a moderate crop in the Autumn. But the Earhart at the Rural Grounds bore during the *entire* season. Its first crop was abundant and its later crops scarcely less abundant. If *this* is the old Ohio Everbearing, then we are left to wonder why this old variety is not found in every garden instead of having fallen into desuetude because its first crop was less valuable than that of other blackcaps, while its second or fall crop did not amount to much. We are naturally exercised over this question, if question it is, since we have commended it to our readers as a new variety of high promise, and many of them no doubt have been induced to purchase it at a price much higher than that they would have been obliged to pay for the Ohio, which probably they would not have cared to purchase at any price.

NOTICE.

The Thanksgiving Number of the Rural New-Yorker will be dated November 20th. It will present a full account of the Rural's next Seed Distribution, and we shall issue 24 pages. Advertising rates will be the same as usual for the regular paper (30 cents per line) and 50 cents per line for the Supplement, which will be sent out from its date until next June. *Advertising space strictly limited to six columns.*

PRICES OF WHEAT.

Last Monday wheat at Chicago was 69¾ cents a bushel—the lowest price for 24 years except in December, 1884, when it was down to 69¾ cents. On a backward examination of market figures, we see that wheat was not so low since May, 1862, when it sold at Chicago for 66 cents. In the previous January the price was 65 cents, and in 1861 it was at one time 55 cents. In 1872 the lowest and highest prices were $1.01, and $1.61, and in 1877 they were nearly the same. In the intervening years the bottom prices ranged between 80 and 90 cents. In 1878 the price was considered very low at 80 cents; but owing to the enormous crop of 1884 (512,000,000 bushels) wheat at Chicago went down to 69¾ cents, the range being from that to 96⅛ cents; and in 1885 it was from 72¾ to 91¾. Last year the crop was only 357,000,000 bushels, but the large surplus carried over from the previous year and heavy foreign crops lessening the export demand, kept down prices.

The latest report of the Department of Agriculture indicates a crop of about 457,000,000 bushels this year—over 10,000,000 bushels more than was indicated by the previous report. This unexpectedly large crop, together with a heavy decline in demand for export, has knocked down the prices of wheat everywhere in spite of the threatening aspect of European politics. Should war break out across the Atlantic—and all indications are very warlike just now—prices of wheat here would at once jump up, as the foreign demand would immediately increase owing to the partial suspension of agricultural operations, the probable destruction of many crops and the greater consumption of cereals inseparable from the movements of vast armies in belligerent countries.

During July and August the foreign demand was lively, as we exported 27,000,000 bushels of wheat, including flour, against 12,000,000 in the corresponding months last year. These large receipts abroad, and the heavy deliveries in our home markets, induced foreigners to suspend buying in a falling market, although it is admitted that Europe will need an unusually large supply of wheat from abroad before next harvest, so that, war or no war, the export movement is likely to be soon resumed. Is wheat at 70 cents at Chicago profitable when the average yield is only about 12 bushels per acre, and a large proportion of the area under it must, therefore, yield considerably less? Prices will probably go up before long with the resumption of a brisk export demand, but "dollar wheat" in Chicago, is probably a blessing of the irrevocable past.

A CAUTION NEEDED.

That advertisement of vast estates in the moon is still appealing to public gullibility in the columns of some excellent papers. A few days ago we were pained to see it the most conspicuous display in the last issue of an esteemed agricultural contemporary in this State. Before that, it seemed to find place only in the weekly "agricultural" issues of the non-agricultural journals. From the large number of inquiries we have lately received with regard to it, it is very evident that it has been widely read by the farming community, and from the anxious tone of some of them there is no doubt that the writers are disposed to put faith in the tangible existence of the mythical fortunes it tells about. And why shouldn't they? The conductors of the papers in which it has appeared are intelligent, well educated, wide-awake men, and, of course, they must have thought the statements it contained trustworthy, otherwise as honorable gentlemen they could not have admitted it into their columns to beguile their patrons It cannot, of course, be for a moment supposed that any financial consideration blurred their perception of its character.

Many of the papers that have published it, however, have from time to time also published the exposures of the unsubstantial nature of the estates it speaks of, as made by the United States Ministers in England, Holland and Germany, through the State Department. But what publisher reads his own paper, or can remember all it speaks of—in business hours, at any rate? Then, again, who is free from mistakes? Do not deceitful advertisements occasionally creep into even the most carefully conducted papers?

True, these are generally small, inconspicuous items, as more pains are generally taken to investigate the character of lengthy advertisements demanding extra display; but the fact that the advertising company is incorporated under the laws of this State may have misled them, although a tyro ought to know the incorporation of a company is in no way whatever a proof of its trustworthiness.

When errors of this sort are made, however, by which others may lose money, it is certainly the duty of those committing them to make reparation by exposing the real character of the advertisements. In the present case the advertisers must spend a great deal of money for advertising, and must expect to recover much more from the gullible public, so that a warning to the unwary is all the more needful. We are glad to see that other papers are seeing the necessity of this. The New York Times and the Chicago Tribune have already editorially exposed the mythical nature of the estates. The New York Journal of Commerce, the oldest and one of the most conservative commercial papers in the country, has emphatically denounced the "enterprise." It is to be hoped that other papers, especially those that have published the advertisement, may be equally outspoken. Agricultural papers especially should speak boldly on the matter, as it is very evident that the advertisement was particularly addressed to the agricultural community in the expectation that farmers are superlatively gullible.

BREVITIES.

A friend sends us fruits of the beautiful hardy vine Akebia quinata. It has never fruited with us and rarely fruits anywhere.

One of the finest white grapes we have seen was sent to us by Marshall P. Wilder last week. It is called Minnehaha and is a second cross by E. S. Rogers, of Muscat of Alexandria on Massasoit.

Buhach or Pyrethrum powder is everywhere acknowledged as the most effectual of safe insecticides for the cabbage worm. We are glad that our early experiments with this powder have proven to be of service to all who have used it.

Our experience this season with Savoy Cabbages is unfavorable to planting them in large quantities either for home use or market. A large proportion do not head well. In quality they are richer than the plain-leaved kinds, that is, more oily—but not so tender.

At the Danbury Fair Mr. Theron E. Platt exhibited specimens of the Stray Beauty Potato and Bliss's Triumph as raised by him. They seemed exactly alike, and Mr. Platt thinks they are identical and says they have the same peculiar habits of growth.

Mr. Bruggerhoff, of Thorburn & Co., favors us with a few burrs of his Japan Chestnut to show that the nuts are much smaller than usual. They are about twice the size of the average American chestnuts, which, in the vicinity of the Rural Grounds at least, are also much smaller than usual. Mr. B. may be considered the introducer of the Japan Chestnut to this country.

Dr. T. H. Hoskins, of Vermont, writes us, under date of October 9, as follows: "I have just finished the gathering of my apples, a most toilsome job, as help that know anything about handling fruit are utterly unobtainable here. This is a point in orchard pioneering that did not occur to me in advance, and my orchard has become a terror to me. I have nearly 2,000 bushels on an orchard that in full bearing is capable of yielding more than as many barrels, and don't know how I am ever going to handle them. But perhaps you will say 'sufficient unto the day is the evil thereof.'"

The great success of the Bay State Agricultural Society's Fair at Boston last week is an instructive lesson to fair managers elsewhere. The new organization attracted some of the best farmers in the State, who were determined to dispense with horse racing, gambling, beer and liquor guzzling, and the numerous other disreputable attractions from which shameful profit is sought at too many miscalled agricultural fairs. The Society has made a brilliant success from the start, having cleared about $10,000 and enjoyed the satisfaction of having given sterling value for his entrance fee to every visitor at the fair.

The habit, on the part of a class of women, of carrying lap dogs is increasing A more senseless occupation for American women can hardly be imagined. Old Plutarch, centuries ago, wrote: "One day, in Rome, Cæsar, seeing some rich foreigners nursing and petting young lap-dogs and monkeys, inquired whether in their parts of the world the women bore no children—a truly imperial reproof to those who waste on animals the affection they should bestow on mankind." Women who carry these foolish dog babies about are apt to be those who would pass a crying child with contempt.

A telegram from Walla Walla, Oregon, on Thursday, says that a drove of 40,000 head of cattle from Northern Montana to British Columbia, had to be abandoned when nearing the British line, owing to the unusually dry season which had shriveled the grass and dried up the springs. The poor beasts had been reduced to skin and bone from hunger and fatigue, many had already died, and not over 200 of the 40,000 are expected to be alive next Spring. They belong to a St. Louis syndicate which will lose $250,000. Is your sympathy with the cattle or the syndicate? In any system of herding which causes such untold suffering to poor, dumb brutes, retribution on those engaged in it appears just and providential.

The great strike at the stock yards at Chicago, which has hitherto been confined to the establishments where hogs were slaughtered, is certain to extend to the dressed beef trade as well. Of hog products there is a vast quantity on hand, so that although the prices may be raised a little, there is no danger of scarcity for weeks; but the stock of dressed beef is small, and consumption follows so closely on production that a stoppage for a few days will seriously interfere with the beef supply of Eastern cities, which now receive a large share of what they need from Chicago. This may temporarily put up the price of beef stock in the East, and farmers should take advantage of any such rise to market their cattle. In the vast territory tributary to Chicago hogs and cattle should by all means be kept back or sent to other markets until the trouble is settled, for prices are certain to be unprofitable in an overstocked market.

The Apiarian.

INVERTING THE BROOD NEST.

PROF. A. J. COOK.

Inverting hives; new Hedden hive; the Shuck hive; advantages of inverting; invertable hives and reversible frames contrasted.

ONE of the late innovations in bee keeping which has gained favor so rapidly that we must think it has come to stay, is that of inverting the frames or hives. In either case the brood nest is turned up-side down. This was first accomplished by so arranging the frames that they could be readily inverted. Instead of the old Langstroth frame with its single top-bar, which had projecting ends, a perfect rectangular frame, with no projecting bars, was made to swing in a larger frame with projecting top bar and end bars which reached a little below the middle point of the end bars of the inner rectangular frame. By use of wire nails the inner frame is pivoted to the outer half frame, so it can swing in and be inverted in a moment at any time. I have used these frames now for two years, and like them so well that I am changing all my combs into these reversible frames.

Within the last two years an attempt has been made to improve upon this plan by inverting the entire hive. The new Hedden hive, which has caused more stir among bee-keepers than any other recent invention, is about the size of the common Langstroth hive, and consists of two horizontal sections, which can be used either independently or together. Thus it will be seen that the frames in this hive are only about half as deep as those of the usual Langstroth. These frames have close-fitting end bars, and when put into the hives rest on tin projections, which are tacked to the bottom of the end boards of the hive. When all the frames are put into the hives, a wooden thumb-screw which is set in the side board of the hive opposite the end bars of the frames, is screwed up. This holds all the frames firmly, and so when these screws are thus turned the frames are all held securely and the entire hive can be turned bottom up in a moment.

The Shuck hive which, like the Heddon, is patented, can also be inverted in a moment. This hive is full size, and is inverted by a sort of a derrick. I have both hives in our College Apiary. Both are practical, but from its severe simplicity I much prefer the Heddon. Perhaps, with longer experience, I might change my views.

The advantages of inverting are these: 1st, combs are built and fastened to the frame on all sides. Every bee-keeper knows that bees always fasten combs firmly at top and along the upper half of the edges. When this is once done we have only to remove the frames, when the union is made complete about the whole margin of the comb. The advantages of such entire union are, first, the combs are held securely and are in no danger of falling out when extracting or shipping bees. Second, the spaces between comb and frame which serve as hiding places for queens are removed. This last is a great gain, as any one who has sought for queens is aware. Third, reversing frames places the honey below the brood, which is unnatural. Hence if just as the season opens, when we place our sections on the hive, we reverse the frames, the bees at once fall to and carry the honey above the brood, or into the sections where we wish it, and once employed in filling the sections they make no halt till the season closes. If, when we reverse we uncap some of the honey, we will hasten this rush to the sections. Many who have been annoyed at the persistent refusal of their bees to work in sections will appreciate this argument in favor of reversible frames, though to the expert apiarist this is the weakest argument of the three.

Fourth, when a bee-keeper has all the bees he wishes he can preclude swarming by this simple work of inversion, which in case the hive is reversible is but the work of a moment. Curious as it may seem, the bees at once cut away or remove all queen cells as soon as the combs are turned upside down. Thus by inverting the hives each week swarming is prevented, and all but the work of a moment.

Of course, this last, indeed all the points argue loudly in favor of the reversible hive. To invert a hive takes a moment; to reverse all the frames is the work of several minutes. The object of the horizontal division of the brood chamber in the Heddon hive and also the advantages of the slatted queen-excluding honey board, and bee-spaces are marked and are worthy a separate consideration which they shall receive in another article.

Agr'l College, Lansing, Mich.

Miscellaneous.

TRANSCONTINENTAL LETTERS. LXVII.

MARY WAGER-FISHER.

The Tehachapi Pass; an inquisitive custom; Mojave Junction; flowers in a desert; an arid lake; alkaline sea beds; Barstow; a cheerless home; the "Great American Tree"; a desolate wilderness; in Arizona.

WE left Tulare at two the next morning, and it was full day-light as we approached the Tehachapi Pass. A very important feat of railway engineering was accomplished in building the road through this spur of the Sierra. The Pass is 27 miles in length. There are 17 tunnels, and from three to four hours are consumed in the transit. It is the custom on the transcontinental lines on the Pacific Slope for a man to pass through the trains every day at certain points, ask passengers their names, where they are from, and where they are going, and write thei replies in a book which he carries. The result of this investigation is that the names, etc., are forwarded by telegraph to the San Francisco and Portland newspapers, so that the readers of them who are in the habit of looking over the list of expected arrivals, if they come upon the name of a friend, often pleasantly surprise him by extending a welcoming hand at the station or wharf, explaining, "Why I saw your name in the paper, and that you would arrive in this train." Tehachapi is one of the places where the names are taken in the north-bound train. The slow movement of the cars through this pass, and the alertness of the passengers to see the construction of the road, oblige the busy trainman who sells books, papers, etc., in the cars, to take a rest and rearrange his wares. I asked one of them before reaching Tulare what were his daily profits. He answered the question by saying his average daily sales, including literature, fruit, and cigars, amounting to $30.

Between Tehachapi (pronounced Te-hash-a-pee) Pass and Mojave (Mohâve) Junction, a ride of an hour or so, the road lay through orchards of yucca, the trees being from six to 15 feet in hight, and looking very odd and lonesome in their arid and deserted surroundings. At Mojave we had breakfast, and as we here left the Southern Pacific Road for the Atlantic and Pacific, over which we were to travel several hundred miles into Arizona to the Grand Cañon of the Colorado, we had a wait of an hour or so. The delay gave us time to replenish our lunch basket (a necessity on all lines of travel) and for two small loaves of bread we paid 25 cents. The train-man charged the same for half a dozen oranges, such as were selling in San Francisco and Los Angeles for 15 cents per dozen.

The station at Mojave Junction is in the midst of what goes by the name of the Mojave desert—a desert from lack of water, but at this time it was gorgeous with flowers, and one could but wonder how the pretty things had the courage to live and bloom in that dry, sandy, treeless, almost rainless region. I picked three varieties of phacelia, John'swort, large and beautiful, a curious cruciferous plant, the gorgeous flowers set at regular intervals on large, canary-yellow stalks that were hollow and shaped like kelp bladders—also a variety of collonia, very beautiful. But one station east of Mojave every flower and sign of vegetation completely and suddenly disappeared, and we were launched (on wheels) on a dry alkali lake 2,100 feet above the sea level. This lake was six miles wide and probably four times as long. The train was stopped owing to a hot box, and we got out and took a promenade on this extinct sea—a strange and wierd sensation! Some sage brush grew in the sand dunes on the shore of this lake-bed which was as level as a house floor, and the conductor said that he had once seen the bed flooded by a cloud burst. It is very generally understood, I suppose, that all these interior alkali basins, and, in fact, most of these arid and desert regions were once under water, which has gradually evaporated, leaving its immense deposits of salts.

At Barstow we crossed the Mojave River, a slender stream. At this point the desert plain is broken by hills, and an occasional team of horses with a driver indicated the possibility of animal existence in that region. At Barstow the Southern California Railroad begins, which runs to San Diego, and the railway company has here built an attractive eating and lodging house. We waited here three and a half mortal hours for the overland train from Los Angeles. My heart ached for the few families placed in the forlorn wooden shanties planted about the station. A terrible place for women and children to pass their lives, hearing the wind forever blowing over the desert. Some cottonwood trees had been planted along the stream and were growing well. This beautiful, brave tree grows from coast to coast and spreads its grateful shade where nothing else will thrive. To my mind it is the Great American Tree, and I always feel like taking off my hat to it, particularly when it condescends to grow in a wind-and-sand-swept town of the desert.

As we rode on, the San Francisco Mountains came into view and bounded the desert on the north. East of a station called Newhall, we passed a large crater in ruins—two miles perhaps in diameter, some portions of the blackened walls a hundred feet high. To the north lay what is called Death's Valley, and the train skirted this dismal and foreboding region. At intervals all of that day our eyes were gladdened with beautiful flowers, specimens of which we were always enabled to obtain, and with the aid of a small California Botany (Rattan's) which I carried, we found out the names of most of them. The conductor and one of the brakemen became interested in our flower gathering, and brought me several beautiful specimens, among which were abronia and superb œnothera—white. In various places the action of the water in wearing away and shaping the mountains was very noticeable, and the forms produced by water sculpture have a peculiar beauty. Among the passengers was a man in blue overalls, whose talk could be heard from one end of a car to the other. He was 50 years old and this was his first ride in a steam car. He lived in Los Angeles and had crossed the "plains" with an ox team years before. Empty tin cans were scattered in profusion along the way, and at times we actually descried cattle with their noses to the ground apparently feeding on imperceptible grass, dry, brown, like threads as it was. The next morning at 5.45 we alighted at Peach Spring, in Arizona.

GUERNSEY HEIFER ENID 353. Fig. 399. Re-engraved from the London Live Stock Journal. (See p. 702.)

Pomological.

THE TYSON AND SOME OTHER PEARS.

I notice in the RURAL some dispute as to the qualities of the Tyson Pear. It is not a tardy bearer unless under conditions that will render most of our pears equally tardy. There are a few varieties, like Belle Lucrative, that are inclined to bear and overbear at a very early age and under almost all conditions; but most pears need special attention to a few points. 1. A pear tree that limbs out near the ground, say two or 2½ feet, will bear four or five years earlier from the nursery than one that branches only at seven or eight feet. This is so peculiarly true that when setting an orchard I have made special arrangements with nurserymen to furnish trees headed low. The Tyson does not differ from the Bartlett, Sheldon, Anjou, and others in this respect. Standard trees will bear as early as dwarfs and as profusely if treated in the same manner. 2. Pear trees vary in habit on different soils. I do not know that any rule, however, as to early bearing holds good except the above.

The Tyson, in my judgment, is the very best of our early pears. With me it has borne very early and very profusely. Its habit of growth is good, and the pear, while not showy, is marketable. It ranks among early pears where Sheldon and Seckel rank among later summer pears; and where Anjou stands among late autumn pears—among the best 10 of all varieties. Rostiezer, which the RURAL commends, is so straggling a grower and yields, although profusely to a branch, yet so small a quantity to a tree that it is unprofitable. Clapp's Favorite and Belle Lucrative are among the worst of pears to blight. Madeline is hopelessly given over to the same trouble. E. P. POWELL.

Varions.

AT French poultry shows it is said that the dressed birds always attract attention. The birds are killed and dressed and exposed in neat glass cases. Everything is so neat and dainty that this exhibition forms one of the best features of the show. Why is this not a good plan? At our shows we exhibit the live birds at all ages and their eggs. It would surely add to the interest if specimens of the different breeds could be shown without their feathers. Why not make a class for dressed poultry? Make out a "scale of points" so that the percentage of offal, of breast-meat, of neck, &c. can be obtained. Who will be the first to put this idea into practice?

FLESH OF DISEASED POULTRY—The meat of diseased animals is condemned as unfit for human food. This is right, but why not include the flesh of fowls suffering from chicken cholera? It cannot be other than injurious to take cholera germs into the system. We know families whose rule is to kill all "droopy" fowls for use on the table. Many birds sick with the cholera are killed and eaten in this way. A more disgusting practice it is hard to think of. Eggs or flesh from flocks where cholera is prevalent should never be taken into the stomach. We hope to have a law some day that will stamp out cholera as well as cattle disease.

HOUSE THE MANGELS.—It is high time the mangels were housed in all the Northern States. After the 15th of October a frost may occur at any time sufficiently severe to cause the skin to peel from them, and this will seriously injure their keeping qualities. They should be pulled on dry days; the tops be removed, and they should be at once stored in cellars or pits and be well ventilated until they are fully dried.

Niagara Co., N. Y. J. S. W.

Woman's Work.

CONDUCTED BY EMILY L. TAPLIN.

REAPING.

ALONG the east strange glories burn,
And kindling lights leap high and higher,
As morning from her azure urn
Pours forth her golden fire,

From rush and reed, from bush and brake,
Float countless jeweled gossamers
That glance and dazzle as they shake
In every breeze that stirs.

A bird, uprising from the grain,
Flutes loud and clear his raptured note
That mingles with as blithe a strain
As e'er thrilled human throat.

Amid the tasseled ranks of corn
She stands breast-high; her arms are bare;
And round her warm brown neck the morn
Gleams on her lustrous hair,

The sickle flashes in her hand;
The dew laves both her naked feet;
She reaps and sings, and through the land
She sends her carols sweet.

The wind breathes softly on her brow;
To touch her lips tall blossoms seek;
And as the stricken columns bow
They kiss her glowing cheek.

O happy maiden! in her breast
Guile hath no place; her virgin sleep
Vain thoughts ne'er trouble; she is blest;
She hath no tears to weep.

She knows nor longs for prouder things;
Her simple tasks are all her care:
She lives and loves, and reaps and sings,
And makes the world more fair.

—*James B. Kenyon, in The Century.*

OF INTEREST TO WOMEN.

BASQUES still show the styles prevailing last Winter. The fronts are unusually pointed, the back postilion, and the bodice is very short over the hips.

The Philadelphia Press says that the Tonka beans will keep away moths. This is certainly preferable to camphor, which leaves an odor disagreeable to many.

A narrow pleating at the foot of the skirt, though still used, is rather out of date. The newest fancy is a bias fold set on the same way.

Velveteen street gowns will be much worn this Winter. A good quality of English manufacture, possesses great wear-resisting qualities, and is uninjured by rain or snow.

We have heard for the past year that the Jersey is doomed, but new styles are constantly introduced, and they are as much worn as ever. The newest ones have whalebones in all the seams, and an inside belt to keep it in place.

The Philadelphia Press says that a certain titled lady, while learning embroidery lost her mind and was confined in a private madhouse. But she still retained her passion for needle-work. She spent her time in joining the odds and ends given her from the scrap-bag and invariably used contrasting colors of silk, and nearly every stitch was different. Specimens of her work found their way outside of the asylum, and thus originated crazy patchwork.

The Portland Oregonian very justly tells us that Mrs. Pennington, who lives on Five Mile Creek, in Wasco County is a heroic woman. A few days ago while walking out with her two children, one three years old, the other a baby at the breast, she was attacked by a large wildcat. Fortunately she had a revolver, which she emptied into the animal, and this not putting an end to him she finally beat out his brains with a stick of stovewood. Not less heroic, although in a different way, is a woman living in Grant County. Left a widow last Winter, she has carried on the farm and cared for her children without any help whatever. When plowing time came she constructed a box on the plow in which to carry her babe, and thus she plowed the ground. She then proceeded to harrow, plant and cultivate, carrying the child on her back, and in this way has produced a fine crop, and is now engaged in carting the truck to a neighboring town and disposing of it.

ONE THING NEEDFUL.

THERE is a recent novel of this title, from the pen of a prolific writer, who has written much chaff, fairly sprinkled with solid grain. But one thing needful and that is loving sympathy, says the novelist, and who shall gainsay her? Mr. Gradgrind would doubtless prove to us, in the most lucid manner possible, that proper sustenance, proper clothing, and proper mental occupation were the sum total of our requirements. But daily life disproves this; daily we see someone with all material requirements, starving in the midst of plenty; suffering saddest heart-hunger for the sympathy that should be freely given. Nor is it always the lonely one, bereft of friends and kin. There is the wife whose husband, good, kind soul though he may be, looks upon her unsatisfied longings as womanish vapors, beneath the dignity of masculine understanding. And sadder still is the man of high aims and lofty mind, whose life companion is some shallow little creature, lovable enough in the first bloom of youth, but trying beyond measure when the roses have faded, leaving the barren little mind bare. But now and then we see some gracious woman who is *sympatica*, as the Italians say, who draws love and confidence and sympathy toward her as the sun draws the flowers. The Irish say of such a one that she has a face like a fiddle, for she draws all tenderness to the surface. Such gift is born with the possessor; yet it may be acquired. And how it brightens and lightens this work-a-day world! How shall it be acquired? Perhaps the best and only way is to forget ourselves and our own personality, by putting ourselves in the place of others. Do not think: "What shall I say to this friend who is in pain or sorrow; good report or evil report." Strive rather to feel as your friend must feel; then offer the sympathy that would appeal to you in like place. That is the secret of genuine sympathy; complete disregard of self; thought only for others.

This does not imply loss of our own personality. This very identification with others impresses us more firmly on those we influence, and how much awkwardness and *mauvais honte* it removes! Someone says that the perfection of good breeding consists in listening with courteous concern to something we have heard before, related by a person less familiar with the subject than we are ourselves. That is the very epitome of this one thing needful; the entire sympathy with others' moods that, though it may begin with conventional good-breeding, becomes the Godly grace of charity, and fulfils the injunction of the Master: to weep with those that weep and rejoice with those that rejoice!

EMANCIPATION OF WOMEN.

THE emancipation of women is pretty firmly established when Yale College (that last refuge of conservatism) signalizes her new departure by making a maiden a bachelor, and when Columbia College turns out an M. D. of the gentler sex.

It is feared that under this new *regime* of enlarged liberty for women, we shall have no more fair Juliets; no more tender Desdemonas, but these doubting ones have yet to learn that to be feminine it is not necessary to be ignorant. In the first place all women are not fair, but she will be none the less lovely if she knows enough Greek and astronomy to pass a college examination, or enough of medicine to save a life.

One effect of the many avenues of support that are now opened to women, is that matrimony is no longer their *Ultima Thule*, and

"To sit on a cushion, and sew up a seam,
And live upon strawberries, sugar and cream."

is no longer their only refuge. If the seam were only a pretense, and the cushion were always of damask and down, and we could all look as charming as the young lady in the nursery rhyme who is so employed, this might do very well, but alas! the seams are so often endless, and the strawberries and cream are so often served on Sevres; in short women have learned that it is better to provide themselves with the necessaries of life which they can earn by their own unaided labor, than to wait for the very uncertain luxuries that a possible husband will provide.

ALICE GOLDSMITH.

PIN MONEY POINTERS.

SINCE the day when our mother Eve fashioned her robe of fig leaves, matters connected with dress have never ceased to be of interest to the feminine mind. If one only could obey the Bible injunction, and without taking thought for the morrow as to wherewithal we shall be clothed, still appear as one of the lilies of the field, many a head and heart-ache would be saved:

"Through tattered clothes small vices do appear;
Robes and furr'd gowns hide all,"

is a bit of wisdom that we learn very early in this world. The struggle to make a fifty cent bonnet or a five dollar gown appear to be Parisian creations is often a severe one with women.

Any one having a scarf or a quantity of black lace can have a pretty bonnet for evening wear with very little outlay. Purchase a suitable frame and arrange the lace on it in soft folds, not in plaits or gathers. A cluster of white or pink or Jacqueminot roses (which need not be expensive) will add the finishing touch. If one has any taste she will do better to trim her own hats and bonnets, for the creations of milliners in the cheap line are not apt to be satisfactory to any but servant girls. White illusion strings are a very pretty addition to a bonnet for evening wear and will last much longer if they be neatly rolled up each time after being worn. Gloves and ribbons will do double service if they are always put away neatly, the former pulled in shape and the latter rolled up.

For party dresses for young ladies there is nothing so charming as white, and although there are comparatively few days at this season that are warm enough to make thin white dresses either safe or comfortable, there are many other beautiful fabrics in white. Gypsy cloth is the most youthful of all the white draperies, and suggesting as it does bright ribbons, one is reminded of how many different toilettes may be achieved with this same white gown and a change of ribbons. Convent cloth is a trifle heavier and has a mottle surface. Clairette combines well with velvet and lace, and will be chosen by matrons and those who wish to combine a medium degree of warmth with the freshness of a white gown. It has a lustre like reflected moonlight, is smooth and opaque and falls in stately folds. Feather cloth, as its name implies, falls in soft folds. It combines well with satin. Any of these goods are economical as they will dye when the wearer is tired of them, and will make that indispensable portion of a lady's wardrobe—a light weight black gown that will not catch dust or grow rusty.

If, however, a young lady would appear well in the eyes of the man whose bright particular star she is or is to be, let her pay as much attention to her morning toilette as to that which she wears on the street or in the evening. It is said that the most favorable time to judge of a woman's character is in the morning. If she looks well then, she is in good health, if she dresses well, she is tidy. If she plans and executes a reasonable morning's work, she has mental and bodily activity. Beware of the young lady who gets up to a late breakfast, which she languidly eats in a faded and untidy gown, with her hair in curl-papers, and her slippers down at the heel. She may appear a radiantly beautiful being in the evening, but it will hardly atone for the fact that she is an unpleasant object to contemplate in the morning, when you consider how many mornings go to make up a life.

There are so many pretty cotton fabrics that one need not be at a loss for charming morning dresses. The pleated and belted jacket or the baby waist fitted over a tight lining are suitable for these goods. Almost any style of dress is preferable to the hideous "Mother Hubbard" which is never pretty on a child over eight, is ludicrous on a girl of fifteen, and reaches the hight of absurdity on a woman of fifty.

For those who can afford to wear them, a handsome Jersey waist is a great addition to a wardrobe. Beaded, they add richness and elegance to an otherwise plain toilette. It is poor economy to buy them already beaded, as the cheaper variety is used for this purpose, and a waist that could be had for a dollar, if beaded will cost ten. The better plan is to get a really good article, and then bead it yourself, the cost of the beads being a very slight one, and the time required being very little more than will be needed to fasten the loose beads on one already beaded.

A jersey that is past service on account of worn sleeves may be made to do good service again by putting a double row of lace up the outside of the elbow, and a jabot of lace down the front if the latter is at all worn. Simulate a vest by placing little loops of beads down the fronts, and no one will imagine your lace and beads are only employed to hide the ravages of time. SELMA CLARE.

GOLDEN GRAINS.

RICHTER says: "Every man has a rainy corner of his life, out of which foul weather proceeds and follows after him".....

JUST as every stroke of the sculptor helps to bring the angel out of the marble, so every thought, feeling and purpose of our souls today contributes something to the beauty or deformity of our resurrection bodies.....

REV. A. K. BOYD says: "You have been thinking well of yourself and your doings, when all of a sudden your little scaffolding of poor sticks breaks under you, and you see with a dismal clearness what a sorry thing you have made of it all, what miserable mistakes you have blundered into, what inexpressible follies, worse things than follies, which bow you down, and (in brief) what a poor creature you are.....

"I SAY to you, Welcome this fresh and startling view of things; turn to spiritual account this painful exercise which your soul is passing through. Do not take the heavy stripe and be none the better for it. You will bear this in quite a different spirit than you have possibly known till now, if you resolve that it shall serve, it shall leave you spiritually bettered; it shall be a humbling, trying, painful, yet searching and effective means of grace."

ACCUSTOM yourself to think vigorously. Mental capital, like pecuniary, to be worth anything, must be well invested—must be rightly adjusted and applied, and to this end careful, deep and intense thought is necessary if great results are looked for. There is no such thing as standing still in this world. Change is the eternal law of nature.....

BEAUMONT says: "As the deepest hate may spring from the most violent love, so the greatest ingratitude may arise from the largest benefits. It is said that Cicero was slain by one whom his oratory had defended when accused of his father's murder."

WE should love and seek the companionship of those who critisize us kindly, and advise us, rather than those who flatter and praise us .....

BE very moderate in sleeping; for he who does not rise with the sun cannot enjoy the day; and observe, O Sancho, industry is the mother of prosperity, and laziness, her opposite, never saw the accomplishment of a good wish.—*Cervantes*.....

THE Church Press says: "Somebody has discovered that Boston people like Broad Churchmen whose sermons are not flat; Philadelphians like preachers whose thoughts are deep and well rounded, and New York likes a square man with no frills about him, who can say it all in about 20 minutes."

Domestic Economy

CONDUCTED BY MRS. AGNES E. M. CARMAN.

WHY NOT?

A FARMER living near the Rural Grounds is often assisted by his daughters in gathering vegetables for the market. Before they go out in the sun they draw old stockings over their hands and arms, with holes cut in them for the thumbs and the toes cut off to give the fingers freedom. These improvised mitts save their hands from burning and tanning, and from scratches and stains. Farmer folk, both the women and the men, are apt to neglect their personal appearance. They show a lack of proper self-respect by allowing their finger nails to go untrimmed and uncleaned, and the hands to go half washed; boots are worn muddy and unblacked, collars are kept for extra occasions, and even smooth hair is considered too good for everyday. Such carelessness is too often looked upon as a badge of independence, and any efforts to improve made by one member of a family subjects him to endless ridicule or unkind contempt. He is called "high-toned," "stuck-up," "fussy," and finds that his efforts toward even the simplest refinements are made needlessly hard. A love of personal neatness and of becoming dress for every day should be encouraged, and any extra work necessary to make such habits and such dress possible should be considered well directed work.

BABY AMUSER.

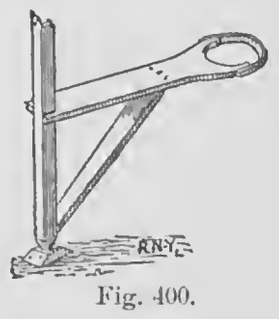


Fig. 400.

THE above contrivance I have found useful as a baby tender, keeping the little things out of mischief, while it prevents them from falling while learning to walk. The post is fastened into blocks above and below, and revolves around and around. The piece extending horizontally should be secured at a hight that will enable baby's arms to be just above the hoop while his feet touch the floor. Of course the "tender" must be firm, so that there is not the slightest danger of its falling upon the child. MRS. S. P. ADAMS.

WELSH RARE-BITS AND SUNDRY CHEESE COURSES.

THE best cheeses of France are *fromage de Brie*, which takes its name from the place where it is made, Roquefort and Neuchatel; Stilton and Cheshire are the most celebrated English cheese. Immense quantities of American cheeses are imported to England, and are considered great luxuries by epicures there. A taste for Stilton and Roquefort is generally an acquired one. The former is made by adding the cream of the preceding evening's milk to that of the morning's milking, producing a very rich and creamy quality. Roquefort is made from a mixture of sheep's and goat's milk. Parmesan, an Italian cheese, is made of skimmed milk, is not sent to market until it is six months old, and is frequently kept for three or four years. It is used in great quantities grated for cooking. Much of that sold already grated in bottles is largely

adulterated with Indian meal. Otsego County, N. Y., has acquired a reputation for the excellence of its cheese. Swiss cheese of a very superior quality is made near Los Gates, in California. A favorite plan with epicures is to cut the top from a Stilton cheese, hollow out a small space in the center, fill it with Port wine, replace the top and set it away. This is refilled with wine periodically for several months. The result is a very rich article warranted to produce indigestion in 24 hours. If served plain this cheese should have the top cut off, and the cheese neatly surrounded with a napkin. When taken from the table the top is replaced. No bit of dried cheese should ever be thrown away as it can be used for omelets, or grated for maccaroni. Thin milk crackers or wafer biscuits (put into the oven a moment before serving to crisp them) are served with cheese. The English serve celery or cucumbers with it, and a very delightful combination they make.

Welsh rarebit is a difficult course to serve at dinner unless you have well-trained servants. It should not be made until it is almost ready to serve and should be eaten the moment it is finished or it will be ruined. It is a very nice supper or lunch dish. Grate one pound of rich new cheese and mix it over the fire with a gill of milk, stirring it smooth with a spoon. Meantime toast carefully a dozen thin squares of bread with the crust removed, butter them slightly, and pour over the melted cheese. The addition of a little mustard powder or Cayenne pepper is considered a great addition by some. Very tiny diamond-shaped pieces of this are sometimes used for decorating a platter of macaroni with cheese. Sometimes the toast is dipped quickly into hot milk before being buttered. A poached egg may be served on the top of each slice.

Cheese Straws make a delightful accompaniment to a salad. The following is the recipe of the New York cooking school. Sift six ounces of flour on the pastry board, and having made a hole in the center put into it two tablespoonfuls of cream, three ounces of grated Parmesan or any dry cheese, four ounces of butter, a half teaspoonful of salt, a quarter of a teaspoonful of pepper and as much Cayenne as you can take up on the blade of a pen-knife; mix these ingredients with the tips of the fingers to a firm paste, knead it well and roll out the eighth of an inch thick. With a sharp knife or pastry cutter cut it in straws about eight inches long and a quarter wide. Lay on buttered tins and bake a light straw color in a moderate oven. The author accompanies the recipe with the assurance that a prolonged diet of this will produce a well-grounded case of dyspepsia in a very short length of time.

CHEESE SOUFFLÉ.

This course may follow the soup directly or be served just before the dessert. Serve bread and butter with it. Heat one cup of milk, and add a teaspoonful of corn-starch dissolved in a little cold milk; then a pinch of soda and pour it very slowly over four beaten eggs; add pepper and salt by way of seasoning, two tablespoonfuls of melted butter, and six of finely grated cheese. Beat thoroughly and pour into well-buttered custard cups. Bake in a quick oven until they puff up high and brown, which will take about 15 minutes.

Pieces left from any good pastry may be utilized in this way. Roll out and cut into strips three inches long and two wide; strew with grated cheese, season with pepper and salt, double the paste upon this lengthwise and bake in a quick oven. Brush over with beaten egg just before they are done. Spread a folded napkin on a dish, pile these on in log-cabin fashion, and serve warm with celery. Not good when cold.

RAMEKINS.

Boil two ounces of the soft part of bread in a scant gill of milk, add two ounces of butter, one-third of a teaspoonful each of mustard and salt, a small pinch of Cayenne pepper and the yolks of two beaten eggs. Beat this mixture thoroughly and add the whites of the eggs beaten to a stiff froth. Make from writing paper some little cases, butter them, fill them two-thirds full and bake five or six minutes. They will be puffed high above the edge of the paper and must be served immediately or they will fall. This recipe was invented by the cook of Louis XVI. Sometimes this mixture is spread over lightly toasted rounds of bread and browned slightly in the oven.

History has left us no record of the fashion in which the cheese cakes carried by Little Red Riding Hood to her grandmother were made, but I am quite sure that they were indigestible and unfit food for the old lady, so that if she had not been eaten by the wolf, she must in course of time fallen a prey to such a diet.

Those who live in the country do not need to be told of the delights of cottage cheese with cream. Those who do not have milk may make a very good substitute by getting a couple of the cheeses sold in the market under that name. Work them over, rubbing between the hands until very fine with two ounces of butter and as much cream as you can steal from your morning's milk. Mold on a plate and, if you can get it, pour over it a gill of cream. PALMETTO.

DOMESTIC RECIPES.

FRIED CHICKEN WITH HOMINY.

CLEAN and cut in joints a young chicken. Wipe dry, season with salt and pepper, and fry in a pan in which you have previously extracted, by frying, all the fat from several slices of pork. This fat must be very hot. Cook slowly, turning frequently to prevent burning, and if any more fat is needed, add a little sweet dripping. Have ready some cold boiled hominy, cut in slices and rolled in flour: take out the chicken and place on a hot dish in the warming oven, while you brown the hominy in the fat left after frying the chicken. Place it as a border around the chicken; add a half cupful of hot cream to the gravy in the pan and thicken with a scant tablespoonful of flour wet with a little cold milk. Send to table in a boat.

We have the word of an epicure for it that very ripe, medium-sized tomatoes, dipped quickly in boiling water, peeled and placed over night on the ice, are delicious if served the next morning at breakfast with cream and sugar.

Celery cooked *a la* asparagus may be a new dish to some of the readers of the RURAL. Cut the celery in convenient and equal lengths; boil in salted water until tender, but not watery; drain and serve with white sauce. Put in a small sauce-pan a tablespoonful of butter, and when melted stir in as much flour: add a cup of boiling milk, gradually, so that there will be no lumping, season with pepper and salt and pour over the celery. It can also be cut in half-inch pieces, put in a baking dish sprinkled with grated cheese, and baked with the above sauce poured over it.

AUNT EUNICE.

ENGLISH PLUM PUDDING.

HERE is a recipe for the real old English plum pudding, and everything appertaining thereto.

There are a few general rules for all boiled puddings that any one attempting to make a plum pudding should understand. If boiled in a mold it should never be more than two-thirds filled, and the cover must fit so tightly that no water can enter. If a bag or cloth is used, it must be thoroughly soaked in hot water, then wrung out and the inside dredged with flour. If this is done, and the bag plunged in cold water for a second after it is removed from the fire, it will turn out of the cloth without sticking. Plum pudding wants plenty of water to swim about in; therefore the vessel must be large and contain plenty of *boiling* water when it is put in. The water must boil the whole time, otherwise it will soak into the cloth and make the pudding heavy, and as the water boils away it must be replenished from another kettle of *boiling* water. If cold water is used it will be certain to make it heavy.

Armed with this knowledge, you may proceed as follows: Chop one pound of suet very fine, and mix it with three-quarters of a pound of bread crumbs, half a pound of flour; 1½ pound of raisins, stoned, one pound of Zante currants, washed and dried, and half a pound each of orange peel and preserved citron cut into shreds; stir all these well together with half a grated nutmeg and ten eggs well beaten. If boiled in a bag, leave a little room for it to swell. Boil it for six hours, ornament with holly, pour brandy around it, and set fire to it as soon as placed on the table.

The French have always viewed this national dish of England with disapprobation; but Louis XVIII., either to show his contempt for the prejudices of his countrymen, or because it suited his taste, always had an enormous plum pudding served up on Christmas Day.

An amusing story is told of one of the French monarchs, who, desirous to treat the English Ambassador with particular hospitality on Christmas Day, ordered a plum pudding for the entertainment given in his honor. He strictly charged his cook to follow in every particular the excellent recipe which he had obtained for making one, all of which directions were well attended to. But one trifle was wanting; the king forgot the cloth, and the pudding was served in a tureen like so much soup. ALICE G.

CHRISTMAS PLUM CAKE.

A CHRISTMAS cake should be made in October as it is vastly improved with age. Beat to a cream one pound of butter and one of pulverized sugar; stir in twelve eggs beaten to a froth; add one pound sifted flour and continue the beating for ten minutes. Now stir in two pounds of stoned raisins, two pounds of Zante currants, washed, picked and dried, a pound of citron sliced and cut into small pieces, two grated nutmegs, a quarter of an ounce of powdered mace, the same of ground cinnamon, and half a teaspoonful of ground cloves. Mix well together and bake in pans well and and smoothly lined with three thicknesses of tissue paper well buttered. Bake in a slow oven for four hours. MRS. L. G. M.

Chicago, Ill.

WHAT OTHERS SAY.

DR. J. W. KALES who has had considerable experience with the so-called victims of poisoned ice-cream, has come to the conclusion that the sickness is due not to poisonous matter in the cream but to the manner in which it is partaken. He says that every law of digestion is violated at the so-called "ice-cream" festival. Every fellow takes particular delight in gorging himself and his "best girl," not only with ice-cream, cake, candy, etc., but with every variety of indigestible substance. This process goes on for two or more hours, when outraged nature comes to the rescue and the indigestible matter is expelled with all the symptoms of acute gastro-intestinal irritation. It only excites the public because so large a company are sick at the same time. He has also seen isolated cases, presenting exactly the same symptoms, caused by eating oysters and other food and drinking ice-water. He thinks that if the poisoning was the result of vanilla extract we would have cases caused by drinking soda water, vanilla being a popular flavor. He also asks why we do not have cases at fashionable hotels where cream is served every day.

To know one subject in a masterful way will move you forever from the ranks of uninteresting or uneducated people, Louise Manning Hodgkins says in the Christian Union in an interesting article addressed to the girl who cannot go to college. In electing a study to pursue at home take that which gives most delight and fill yourself full of it.

IN speaking of the Wilson Strawberry, E. P. Roe, in Harper's Monthly, says that it is not ripe when red, and therefore is rarely eaten in perfection, but if allowed to get almost black in its ripeness, it is one of the richest berries in existence. He thinks that with a liberal allowance of sugar and cream it makes a dish much too good for an average king, and that it also is the best variety for preserving.

THE Housekeeper is of the opinion that it is not sufficiently recognized that clothes have a moral influence in addition to their effect upon the eye. The woman or child who is well dressed experiences a sense of moral elevation, an added self-respect, besides the pleasure of appearing becomingly arrayed. It further adds that lavish expenditure is not necessary for tasteful apparel.

WE don't advise anyone to work for an hour or more in the morning on an empty stomach.

Neither do we think anyone should work in the evening after being busy all day.

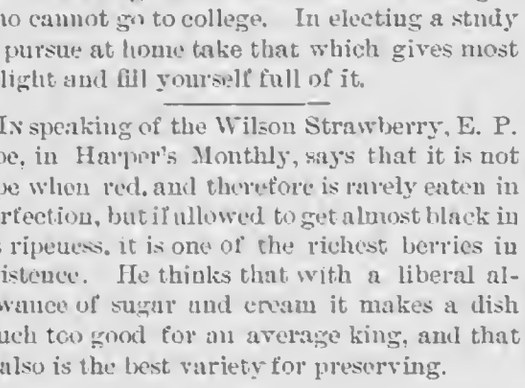
Two things children can't stand—nagging and discouragement.

Miscellaneous Advertising.

When Baby was sick, we gave her Castoria
When she was a Child, she cried for Castoria,
When she became Miss, she clung to Castoria,
When she had Children, she gave them Castoria.

Miscellaneous Advertising.

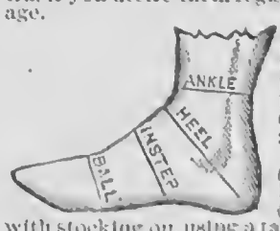
W. L. DOUGLAS' $3.00 SHOE



CONGRESS, BUTTON and LACE, all Styles of Toe. Best shoe for the money in the world, and equals those usually sold for $5 or $6.

$2 SHOE FOR BOYS.

Same styles as the $3 shoe. Carefully and substantially made, and gives a stylish Boy's Shoe for $2. If your dealer does not keep them, send measurements for either as below, enclosing price, with 10 cents extra. If you desire them registered. No charge for postage.



Ankle.....— Inches.
Heel.....— "
Instep.....— "
Ball.....— "
Length of Foot..— "
Cong., Button or Lace.
Style of Toe.....

Narrow capped), London (medium width, with cap or French (wide, without cap.) (Name Style.) Measure foot with stocking on, using a tape measure or a thin strip of paper, being careful to put in fraction of an inch. State whether you want them tight or easy, and give size usually worn. By following directions carefully you will get a fit equal to a CUSTOM SHOE, *and at one-half the price.* **Be careful** to give full mailing directions. See that each Shoe is stamped "*W. L. Douglas $3 Shoe. Warranted.*" None others are genuine. Address

W. L. DOUGLAS, Brockton, Mass.

Doctors Prescribe

Ayer's Cherry Pectoral, for three reasons:—it is perfectly safe for old or young,—can be relied upon in cases of emergency,—and possesses great curative powers.

I consider Ayer's Cherry Pectoral a medical success and a chemical triumph. I have found this medicine a powerful specific for Colds, Coughs, and Pulmonary Complaints. I use it in my own family and recommend it in my practice.—Parker Cleveland, M. D., Prof. of Chemistry and Materia Medica, Bowdoin College, Brunswick, Me.

Ayer's Cherry Pectoral is an invaluable remedy for Colds, Coughs, and all Pulmonary diseases. I use it myself and prescribe it in my practice.—A. S. Pettenger, M. D., Glen Gardner, N. J.

Ayer's Cherry Pectoral,

Prepared by Dr. J. C. Ayer & Co., Lowell, Mass. Sold by all Druggists. Price $1; six bottles, $5.

MAKE HENS LAY

SHERIDAN'S CONDITION POWDER is absolutely pure and highly concentrated. It is strictly a medicine to be given with food. Nothing on earth will make hens lay like it. It cures chicken cholera and all diseases of hens. Illustrated book by mail free. Sold everywhere, or sent by mail for 25 cts. in stamps. 2½-lb. tin cans, $1; by mail, $1.20. Six cans by express, prepaid, for $5. L. S. Johnson & Co., P. O. Box 2118, Boston, Mass

WANTED A WOMAN

of energy for business in her locality. Salary $50. References, E. J. Johnson, Manager, 24 Barclay St. N.Y.

EPPS'S
GRATEFUL-COMFORTING
COCOA

A NEW BUTTER PRESERVATIVE.

KELLOGG'S ROYAL SALT.

Positively Prevents Butter from ever becoming rancid.

Endorsed by George B. Douglas, Esq., Ex-President Mercantile Exchange; Putnam Conklin, Esq., Manager Thurber, Wyland & Co.'s Butter Department, New York City; Col. Wm. Crozier, Northport, L. I., N. Y.; St. Louis Dairy Co., Charles Cabanne, Gen'l Manager, St. Louis, Mo., and such Agricultural Journals as the Rural New-Yorker, American Agriculturist, Indiana Farmer, Country Gentleman, Farm Journal and others. Send for Circular.

BUTTER PRESERVATIVE SALT CO.,
OFFICE AND FACTORY, FOOT OF
West Eleventh St., New York City, N. Y.

PURE MILK.

WARREN MILK BOTTLES
Patented March 23d, 1880.
Adapted for the Delivery of Milk in all Cities and Towns.
A Long Needed Want at last Supplied.
DESCRIPTIVE CIRCULARS ON APPLICATION.
A. V. WHITEMAN, R. N.,
72 Murray Street, NEW YORK.

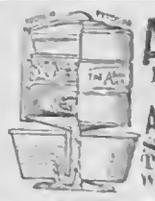
SOLID EMERY KNIFE SHARPENER.

"THE CARVER'S FRIEND."

A few strokes will give the dullest knife a keen edge, which every housekeeper will appreciate. Handy for table or kitchen use. Made of best Turkish Emery, with steel wire in center, and will last for years. Price, with fine Rosewood or Cocobola handle, 35 cents; Applewood handle, 20 cents. Sent, post-paid, on receipt of price, in postage stamps or any convenient way. W. H. PARKIN, 13 SOUTH WATER STREET, CLEVELAND, O

SPAIN'S CHURNS Star Churns, Rapid Ice Cream Freezers, Improved Tree Tubs, all made of CEDAR. Send for illustrated circular and prices. **Clement & Dunbar,** Philadelphia, Pa

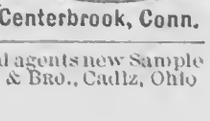
ALLEGER ORGANS you can get a strictly first-class organ from $50 to $75; Stool and book. Warranted 5 years. 20,000 now in use. Circular free. Address the manufacturer. **H. W. ALLEGER,** WASHINGTON, NEW JERSEY.



AGENTS WANTED
Everywhere for the **ARNOLD AUTOMATIC STEAM COOKER**
$75 to $150 per month easily made. This is a rare chance. Apply at once, WILMOT CASTLE & CO., Rochester, N. Y.

IT IS A FACT!

We have the prettiest lot of **Sunday School, Reward, Christmas and Visiting Cards** of any house in the trade. To introduce samples at once we make this **Liberal offer:** The person telling us the longest verse in the Bible **before Christmas,** will receive a lady's **Watch** worth **$60; Solid Gold,** Hunting Case, Stem Winding. If there be more than one correct answer the second will receive a gentleman's **Watch; Solid Silver,** Stem Winding, Hunting Case; the third an Open Face Silver Nickel **Watch. Enclose 25c.** in stamps with your answer, for which we shall send you a Pack of Samples of our Lovely Cards, Price List, Agents' Terms, a 32 page **Christmas Book,** over 100 Illustrations, and a plain **Gold Ring,** made from **heavy 18k. pure rolled gold** plate. We warrant every one for five years. See the cut.



W. C. GRISWOLD & CO., Box 76, Centerbrook, Conn.

500 Speeches, Selections, etc., and agents new Sample Cards for a 3c. stamp. GIVIN & BRO., Cadiz, Ohio

News of the Week.

HOME NEWS.

SATURDAY, October 16, 1886.

REPORTS from different sections of Berks and neighboring counties in Pennsylvania indicate widespread damage by drought, which is the severest for over twenty years..... .....The condemned Chicago Anarchists are senteneed to be hung on Dec. 3. Money is being raised to carry their case to the Supreme Court of Illinois, and eveu to the U. S. Supreme Court if necessary. The K. of L. are reported to be disposed to take action in their behalf. Other Anarchists still at liberty are violent in their denunciations of the sentence and in their threats against the Judge who presided at the trial, the lawyers who prosecnted the malefactors, the witnesses who testified against them, and the jury who brought them in guilty. This violence is injuring any chances the condemned may have.....After all, it appears by the latest report that Geromino and his band surrendered unconditionally as prisoners of war, and were distinctly told they must trust for clemency to the President. Arizonians warmly praise Miles—Next report! ....After all, it seems by latest accounts, that a draft of a treaty between this country and the British Empire, including Canada, was submitted to the Dominion Government several weeks ago, and over 40 objections were made to it, chiefly on account of the articles mentioned in the free list. Canadians have invested over $10,000,000 in manufacturing woolen and other fabrics, and a great deal in agricultural machinery works, and they can't compete with this country in any of these industries; hence they crave "protection."....The other day Captain Quigley, of the Canadian cruiser Terror, hauled down the American flag on the schooner Marion Grimes after the captain had hoisted it a second time in face of a caution not to do so. The vessel had been seized for alleged smuggling and was in Canadian custody. Our cutter Corwin on seizing the British sealing vessels in Alaskan waters, at once hauled down the British colors. Captain Quigley's over-zeal, however, is to be officially reprimanded. Much spread-eagle bluster about the Stars and Stripes. Too much "big-head" all around. ....The Standard Oil Company, Wednesday, absorbed the Raccoon Oil Company and its 7,000 acres of oil and gas territory at Shamokin, Pa., together with several large oil works—amount involved $2,000,000. The S. O. Co. will soon have a complete monoply of the oil business in the country. The Cotton Oil Trust Company, the great Southern monopoly, is run on the same monopolizing principles, and, it is said, by the same men... .....Governor Warren, of Wyoming Territory, dolefully complains that immigration is very seriously checked there by the efforts of the Land Office to prevent dishonest appropriations of the public domain by the cattle kings, land syndicates, etc. Secretary Lamar says land entries there amounted to 3,512 for the fiscal year ending June 30 last, against 2,923 for the preceding year.....Governor Stevenson, of Idaho, says that during the year the Territory has rapidly increased in wealth and population—crops and mining good. Apples, peaches, pears, nectarines, apricots, plums, prunes, grapes and all of the small fruits are produced in great abundance and of a quality unsurpassed. Chinese labor is one of the greatest evils .....Over 20,000 cigar makers on strike or locked out in Cuba. Highway robberies and assassinations of daily occurrence. Open violence feared.....The eleventh annual convention of the mutual benefit associations of America will be held in St. Louis on October 19, 20, 21 and 22, for the purpose of remedying abuses, affording mutual protection against fraud, and establishing a correct standard of rates.....Commissioner Colman is experimenting with silk reeling machinery.....Headquarters of the Department of Dakota have been changed from Fort Snelling, Minn., to St. Paul, same State, about six miles.....A new Board to decide appeals from the decisions of the Commissioners of Pensions is to be established at Washington. ..The baseball season closed last week. The interest in the game has been greater than ever. In the League Chicago again won with Detroit a close second, and New York third. But for several accidents to players the Detroits would undoubtedly have won. The New Yorks disappointed their patrons. The club has played in a lazy, half-hearted fashion. In the rival organization, the Association, St. Louis again won easily. It is generally thought that the St. Louis club is the strongest baseball aggregation ever brought together. A series of games between Chicago and St. Louis has been arranged..... .....N. M. Neeld, a partner in the well-known pork-packing firm of J. C. Ferguson & Co., Chicago, has joined the crowd of other dishonest rascals in Canada. He raised $400,000 on bogus receipts for pork, meat and lard, supposed to be stored in ware-houses. The amount there was worth much less; and what there was he sold a week before his flight to different people over and over again, and got the money. Has burst up his firm, capital $200,000. Loss will be confined to the banks that trusted the scoundrel, who lost most of the boodle in speculation.....A cliff of "as good glass as any ever made" has been discovered in the Yellowstone Park, half a mile long and from 154 to 200 feet high—an obsidian variety of volcanic lava....Queen Regent Christina of Spain has signed a decree liberating all the slaves in Cuba. The first move toward abolition was made by a law in 1869, which provided for the conditional liberation of certain classes. The law of 1879 freed at once all slaves 55 years old and over, and was gradual in its action, all bondsmen between 35 and 40 to be freed this year, while complete emancipation should take place in 1890, so that this decree anticipates by four years the date of general emancipation. The owners have received from the Spanish Treasury the liberal recompense of $350 for each slave. About Manistee, Mich., an oil fever, similar to the craze formerly common in Pa. is raging violently. While sinking a well for salt, R. G. Pellars, about 10 days ago, struck a 600-barrel-a-day flowing petroleum well "at a depth of several hundred feet." Land has gone up with a rush; speculators flocking in; operations on an extended scale begun..... .....The 1,000 delegates of the Knights of Labor talked all the past week also, and haven't finished yet. The Home Club of this city—the faction antagonizing trades unions, and the "machine" of the organization—has gained the ascendency, having elected a majority of the executive officers—Powderly, as Chief Master Workman among them—and increased their terms from one to two years. Much clap-trap talk, as if they really represented all the toilers in the country. Their expenses are $5,000 a day; their parade cost $5,000; the organization pays for it all.... ... Catholic Archbishop Elder of Cincinnati proposes to pay a part of the $4,000,000 Archbishop Purcell, his predecessor, together with his brother, Rev. Edward Purcell, lost some years ago in very reckless and wickedly foolish fashion, after the money had been intrusted to their care by the Catholics of the diocese—chiefly poor, credulous Irish. He lent much of it at six per cent., without security, and lost of course. Churches and schools were built in whole or part with some of it; and the creditors insist that these should be sold to partially pay the indebtedness. The Archbishop won't do this; and the creditors still grumble. ....Colonel Orlando B. Wilcox, 12th Infantry, has been made Brigadier-General, *vice* J. H. Potter, retired—a good old soldier.....A terrible storm Tuesday night did a world of damage along the Gulf coast, especially in La. and Texas. Sabine City, a small village at the junction of Louisiana and Texas, has been swept away by high tide driven in from the Gulf and consequent back water from the Sabine and Neches Rivers. Only two houses left standing and over 100 persons drowned—nearly the entire resident population—55 colored. The settlement of Bayou Johnson, La, was completely submerged, and over 20 persons were drowned. Nearly the whole La. and Texas coast is only a few feet above high water, and on most of it the water rose 10 to 12 feet. Vast numbers of cattle and hogs feeding in the swampy lands were drowned. Many isolated families, colored, creole and poor whites, must have perished. Loss in Plaquemine Parish, La., alone, over $500,000. Galveston and all the other sea coast Texas cities suffered severely..... .....About Sunday another storm developed in Utah and moved east, and still another in the extreme Northwest, moving south. Wednesday all three reached the Mississippi Valley where they were abreast. Wednesday night they seemed to have bunched their forces near Davenport, Ia., and a mighty storm moved eastward doing an enormous amount of damage in Chicago, Detroit, Milwaukee and all the intermediate country. Then it swept on to the lakes where it is supposed to have wrecked many vessels. Toledo, Cleveland, and other lake cities suffered greatly; but Buffalo at the end of lake Erie, has been most greviously afflicted. The driven waters piled up many feet, wrecked the low part of the town, while the hurricane knocked down unstable buildings and did a great deal of other damage. Six lives known to have been lost there, and several at Detroit and other places. The track of the hurricane is lost this morning, as all the telegraph wires are down; but it supposed to be raging along the St. Lawrence Valley, especially in Canada..... ....The boodle aldermen of this city are likely to find out that Broadway bribery leads to Sing-Sing. Here is the present status of the Board of Aldermen of 1884:

In Canada—Henry L. Sayles, Charles Dempsey, Robert E. De Lacey.
In Germany—Thomas Rothman
On the way there—Rudolph A. Fullgraff.
In Sing Sing—Henry W. Jaehne.
Dead—Michael F. McLoughlin, Patrick Kenny.
Innocent—Hugh J. Grant, John C. O'Connor, jr.
Out on $40,000 bail—Thomas Cleary, Michael Duffy, William P. Kirk, Arthur J. McQuade, Francis McCabe Patrick Farley, William H. Miller, John O'Neil, Charles H. Reilly, Thomas Sheils, Frederick Fink, Louis Wendel, James Pearson.
In the House of Detention for Witnesses.—Charles B. Waite.

Sayles out on bale of $25,000, was to be tried last Monday, but fled to Canada, and his brother, his bondsman, at once transferred all his property. The bail is forfeited, but there's nothing to seize upon. The courts are constitutionally obliged to release a prisoner on reasonable bail, except in capital cases; but the bondsman can transfer all his property five minutes after he has gone bail. The other boodlers who were out on $25,000 bail were rearrested, and $40,000 bail was required. All have given it, but why can't their bondsmen do as did Sayles' brother? The bribers also are likely to be indicted soon..... .....A great fire at Eastport, Me., yesterday, destroyed hotels, factories, government buildings, insurance records, many stores and dwellings, etc. Loss now estimated at $500,000.... .... Great strike of railroad switchmen is blocking all freight business at Minneapolis. Five mills already shut down for want of wheat; others to follow if strike continues. Much loss and inconvenience to farmers and others along the railroad lines as transportation of goods is entirely suspended.....

FOREIGN NEWS.

SATURDAY, Oct. 16, 1886.

THE Bulgarian embroglio still "holds the field" in European interest, and is the only complication of real interest to agricultural America, as the prices of our agricultural products can be seriously affected by the outcome. The elections for members of the Great Sobranje, which is to elect a successor to Alexander, has resulted in an overwhelming victory for the government, and a humiliating defeat for the adherents of Russia. As a result, Russia is said to have informed the Powers that the immediate occupation of Bulgaria is necessary, and has tried to effect a combination of France and Turkey against England and Austria, one of the terms of which was to be the occupation of Egypt by a Turkish garrison under a French general. This combination is said to have failed. Austria insists no election of a Prince must take place till the Powers have agreed upon the man, so that Bulgaria will merely have to endorse their decision..... Meanwhile the general aspect of affairs in Europe is anything but peaceable. In Germany, France, Austria-Hungary and Italy the government arsenals and manufactories are running day and night to convert army rifles into repeaters of the most improved and deadly fashion. Boulanger has secured an appropriation of $25,000,000 for the manufacture of vast bombs to hurl shells containing a new explosive the composition of which is a State secret; but which, it is claimed, is more terribly destructive than any hitherto discovered. Whole regiments are to be destroyed by single discharges. Germany is straining every nerve to keep ahead or abreast of France. Never was the latter in better condition for war. She can put 3,000,000 trained troops into the field armed with guns of destructive power, and tremendously encouraged, if not inflated, by Boulanger's words, actions and untiring energy. It is doubtful whether her fleet is not a match for that of England. She seems aching for a fight. The other great powers, however, especially Germany, are just as well prepared, except England, whose army is almost insignificant in numbers; and about the efficiency of whose fleet grave doubts have just been published by Admiral Lord Seymour and other naval authorities, native and foreign. There is no peace in Europe—merely an armed truce..... ...

AGRICULTURAL NEWS.

SATURDAY, Oct. 16, 1886.

GERMANY has prohibited the importation of poultry from Russia. Chicken cholera has been spread from previous importations..... An English farmer has been fined $25 and costs for keeping 150 sheep three days on a worn-out pasture without food....No contagious pleuro-pneumonia in Canada—it is claimed. ....Nothing yet done with the quarantined cattle at Chicago. Disease supposed to be in several other herds besides those at the distilleries. Great fear that it will spread, as farmers and graziers are foolishly buying dairy and beef stock in the Chicago market and spreading them over the country. The dilatoriness of the authorities is greatly injuring the live stock trade of the city, and unless amended promptly is likely to damage it for years.....About 20,000 meat packers are out on a strike for eight hours' work a day at Chicago. They are all pork-butchers except 1,200 beef-butchers employed by Armour, against whom the feeling is most bitter. Over 400 armed Pinkerton detectives are guarding the packeries; but no violence has hitherto been attempted. Two delegates were sent by the Knights of Labor from Richmond to try to compromise, but the packers refuse to treat with them as a body; and in any case insist on the right to manage their own business. The beef-packers in the 21 other packeries will probably strike on Monday. The Knights of Labor threaten to boycott Armour's goods throughout the country. Both sides very obstinate, strike likely to last two or three weeks or more. Packers offering large inducements to men from other places. Armour has 600, and will begin to work when he can get more. Serious rioting likely if scabs are employed. . .....Prices of hides low—100,000 foreign sold last week in Boston.....Freight on live cattle across the Atlantic now ranges from $7 to $10 per bullock, and insurance rates are three per cent .....The latest London cablegram reports American cattle better in English markets at 13 cents per pound estimated dressed weight. The trade is very dull, however, as European markets are overstocked... .....Boston exported to England last week 959 live cattle and 2,702 quarters of beef..... ....In conducting public sales in England the auctioneer inverts a sand glass at each bid, and if another bid is not made before the sand runs out, the animal is knocked off to the last bidder.....Less transfers of range stock have been made within the present year than for some years. Range marketing has been unsatisfactory and investments correspondingly unattractive. .....Oleomargarine stamps, now being printed, must be used after November 1.....The recent heavy storms in the gulf have caused a loss of over $200,000 to the rice growers of the Lower Mississippi by blowing the water inland, inundating the small rice farms five or six feet and washing away the stacks of rice, which had been an unusually good crop this year..... .....A contagious disease among horses about Canton, Ill., "like contagious pleuro-pneumonia among cattle"—a "complication of catarrhal fever and influenza," that ends generally in death ..Michael F. Battelle, of Minnesota, has been appointed Register of the Land Office, at Fargo, Dakota..... .... ..Most extensive and destructive prairie fires ever known are sweeping over the prairies in the Indian Territory. Millions of acres of splendid pastures, a charred waste. Large numbers of cattle burned to death. Immense amounts of baled and loose hay intended for winter feed, destroyed. Area burnt extends from Vinita on the north, to Muskogee on the south, and on either side of the Missouri, Kansas and Texas Railroad as far as the eye can see.....The Louisiana and Federal Governments are to divide the expense ($100,000) to close the Morganza crevasse, two miles wide, the largest break in the La. levees, by which over 3,000,000 acres of fertile land have been inundated for over two years..... ....Detectives acting under orders from State Inspector Newton of New Jersey, have been quietly securing evidence in relation to the sale of oleomargarine in New Brunswick. The other night they made a raid and secured conclusive proof against over 20 dealers..... .....Average price for Colorado wool the season 18 cents, clip 1,000,000 pounds more than that of last year..... ....That cotton-picking machine tested last Wednesday on a cotton field near Sumter, S. C., picked cotton at the rate of 180 pounds per hour, without injuring the bolls or plants. The general opinion of those present is that the machine is correct in its principle, does fairly good work now, and can be made completely successful.. .. The Land Court constituted under the Scotch Crofters Act has been opened at Dornoch, Sutherlandshire. On the opening day about 100 persons applied to the court to fix their rents.....The Department of Agriculture estimates the supply of hogs for marketing the coming Winter at seven per cent. below the number available last Winter. The Cincinnati Price Current places the reduction at 10 per cent.....Robert L. Green, Democratic candidate for governor of New Jersey, as member of Congress voted against the Oleomargarine Bill. How many farmers will remember the act against him at the polls?.. .....The Commissioner of Agriculture is about to issue a circular to all dairymen and officers of agricultural societies requesting them to send to the Department of Agriculture monthly statements of the production of milk, butter and cheese, and urging them to take especial pains to secure accuracy in these reports, so that the Department may be en-

abled to publish more reliable statistics of the dairy industry than heretofore.....

Crops & Markets.

SATURDAY, October 16, 1886.

The report of the Department of Agriculture for October gives local estimates of yield per acre of small grains, with condition of corn, potatoes and other late crops. The results corroborate the previous returns of wheat, confirming expectations of slight increase for the first records of thrashing, without making any very material addition to the crop aggregate. The average yield upon an area of fully 37,000,000 acres appears to be close to 12¼ bushels per acre, making the crop an average of a series of years. The area actually harvested is now the principal object of exact determination. The result will vary a little from an increase of 100,000,000 bushels over the crop of last year. The State averages of principal States are: New York, 17 bushels; Pennsylvania, 13; Kentucky, 11.5; Ohio, 15.7; Michigan, 16.3; Indiana, 15.1; Illinois, 13.1; Wisconsin, 12.3, Minnesota, 12.6; Iowa, 12.5; Missouri, 12.5; Kansas, 11; Nebraska, 9.6; Dakota, 10.5; California, 11.5; Oregon, 13 5.

The average yield per acre of oats is 26.6 bushels, making a crop of over 600,000,000 bushels. The Ohio Valley averages over 30 bushels per acre, Iowa over 33 bushels, with lower yields in Missouri, Kansas and the Southern States. The Eastern States have high yields.

The barley crop averages 22.4 bushels per acre, and the product will come nearly up to 60,000,000 bushels. The average yield of the rye crop is 11.8 bushels per acre, and the product over 26,000,000 bushels.

The high temperature of September and absence of frost have improved corn crop prospects and made the expectation 22 bushels per acre, and rendered certain a crop of at least 1,650,000,000 bushels. The final averages of condition of the seven States which produce seven-tenths of the crop are: Ohio, 90; Indiana, 93; Illinois, 74; Iowa, 78; Missouri, 68; Kansas, 65; Nebraska, 73. Averages of the Eastern States are above 90, and those of the Southern States mostly between 80 and 90. The general average is nearly 80, against 95 last year, when the yield was 26.5 bushels.

The general average of October condition of potatoes is 81, against 82 last year, 88 in 1884, and 93 in 1883. The average of New York is 90; Pennsylvania, 84; Virginia, 93; Ohio, 89; Michigan, 71; Indiana, 87; Illinois, 70; Iowa, 59, Missouri, 73; Kansas, 63.

The tobacco average condition is nearly 87; Kentucky, 92; Tennessee, 90; North Carolina, 80; Virginia, 77; Maryland, 75. Cigar tobacco averages high except in Wisconsin. Since the returns frosts have seriously hurt the crop in many places.

The promise of buckwheat is for a crop slightly under average. Condition in New York and Pennsylvania, 87; which is nearly the general average.

The potato crop of the Eastern States and the Provinces, the sections from which Boston and New York and tributary markets derive their supply, averages upon the whole about as last year, according to 600 reports received by the New England Homestead. The crop in New England and New York is considerably less than last year, and is not large at the West, but this deficit is largely made up by a big yield in the Provinces. When the average of all the reports shows an acreage within five per cent. of last year's, the same yield per acre and of fair average quality, there is small basis for expecting anything more than the usual course of the market—the price being 50 cents on the average now with the usual advance to 70 cents in March.

De Long, Meyer & Co., of this city received Liverpool cablegrams as to the price of apples on Oct. 11: Hubbardstons, $3.36 to $3.48; common Baldwins, $2.40 to $2.88; good Baldwins, $3.12 to $3.84; Phœnix, $3 to $3.12; Greenings, $2.64 to $2.88; Northern Spy, $2.88 to $3.36; Kings, $4.80 to $5.28. In the week ending Oct. 9, 6,909 barrels were shipped from New York to Liverpool, and 14,306 from other ports to Liverpool; 346 barrels left New York for London and none for any other port. For Glasgow 3,100 barrels left New York, and 1,086 left other ports, making a total export of 25,747 barrels for the week. From the opening of the season 96,864 barrels have been shipped from all ports, against 82,215 barrels to the same date last year. The rate of freight on apples now is 2s, 6d, or about 60 cents per barrel.

MARKETS BY TELEGRAPH.

SATURDAY, October 16, 1886

CHICAGO.—Compared with cash prices a week ago, "regular" wheat is 1¼c. lower; No. 2 Spring, ⅝c. higher. Corn, ½c. lower. Oats, ¼c. lower. Rye, steady. Flaxseed, 1½c. lower. Pork, 22½c. lower. Cattle, poorer sorts a trifle higher; best a shade lower. Hogs, from 5c. to 20c. lower. Sheep, steady.

WHEAT.—Sales ranged; October, 71@72¼c; November, 72¾@73⅝c; December, 74⅛@75¼c; May, 80¾@82⅛c; No. 3 Spring, 71¼c. CORN.—Firm; Cash, 34¼c; October, 34⅝@35⅛c; November, 35¾@35⅝c; December, 36¾@37c; May, 40⅝@41¾c. OATS.—Steady; Sales ranged; No. 2 Cash, 21@21¼c; October, 24½@24⅝c; November, 25⅛@25¼c; May, 30⅝@30⅞c. RYE.—Quiet; No. 2, 48c. BARLEY. Quiet; No. 2, 52c. FLAXSEED.—No. 1, $1 00¼@1 00½. MESS PORK.—Sales ranged; Cash, $8 97½@9 00; October, $8 90@9 00; November, $8 90@9 00; January, $9 87½@$10. LARD.—Sales ranged: Cash $5 75; October, $5 70@5 75; November, $5 75@5 80; January, $5 95@5 97½. Short Ribs.—Cash, $6 70. Boxed Meats.—Dry salted shoulders, $5 40@5 45; Short clear sides, $6 65@6 70. CATTLE.—Market Steady; Shipping steers, $3 40@5 20; stockers and feeders, $2 00@3 25; cows, bulls and mixed $1 50@3 00; bulk, $2 20@2 50; cows, $2 30@2 60; steers, $3 00@3 40. Western rangers, lower; natives and half breeds, $3 00@3 85; cows, $2 40@3 15; Wintered Texans, $2 30@2 65. HOGS.—Market slow; Rough and mixed, $3 50@4 05; packing and shipping, $3 75@4 50; light weights, $3 50@4 35; skips $2 25@3 75. SHEEP.—Market steady; Natives, $2 25@4 20; Western, $3 50@3 90; Texans, $2 25@2 75; Lambs, $4@4 75.

BOSTON.—APPLES.—King, $1 75@2 25; Baldwin, $1 37@1 50 per bbl; Hubbardstons, $1 50@1 62; Harvey, $2 00; common, 75c@$1 00. BUTTER.—Northern creamery, extra, 28@29c; do. firsts, 24@26c; Western creamery, extra, 27@28c.; do. firsts, 25@26c; do. choice, 20@21, dairy, Franklin County, finest, 27@28c; good to choice, 24@26c.; Vermont extra, 28@29c; Northern, choice, 24@26c; do. fair to good, 14@15c., Western dairy, good to choice, 12@13c; imitation creamery, extra, 14@16c; ladle-packed, choice 12@13c; do. fair to good, 10@12c. BEANS.—Choice pea, Northern hand-picked $1 80@1 85 per bushel; do. do. New York, choice, hand picked, $1 70@1 75; do. do, screened, $1 80@1 85; medium choice, hand-picked, $1 60@1 65; do choice screened, $1 20@1 40; Yellow Eyes, choice, $1 50@1 55; do. flat, $1 45@1 50; Red Kidneys, $1 75. CHEESE.—New York extra, 12c; do. good to choice, 10@11c; do. common, 7@9c; Vermont extra, 11@12c; good to choice, 10@11c; common, 7@9c; Western extra, 11½@12c. do. fine, 9@10c; common, 6@8c. Sage, extra, 12@12½c. EGGS.—Near-by and cape, 25c. per doz: Eastern extras, 23@24c; Aroostook County, 22c; New York and Vermont, 22@23c; Western, 15@20c; Provincial, 16@20c. CORN.—High mixed, 54c; steamer yellow, 53c; steamer mixed, 52½c.; and no grade, 51½@52c. per bush. as to quality. HAY AND STRAW.—Choice hay, $13@19 per ton; fair, $15@16; ordinary, $14@15; fine, $13@16; Swale hay, $10@11; poor, $10@13 50 per ton; Western choice, $10@17; do. fair to good, $15@14 50; rye straw, $16@17 per ton; do. do. machine, $12@13 per ton; oat straw, $8 00@9 00 per ton. POTATOES.—Early Rose, 40@55c; Beauty of Hebron, 58@63c. Sweet Potatoes.—Virginia Yellow, $1 75@2 50 per bbl: Jersey, $2 75@3 00 per bbl. SEEDS.—Clover, West, 9¾@10¾c. per lb; Norrk, 10¾@11c; do. white, 18@26c; do, Alaska 12@15c; red top, per sack, West, $2 25; do, Jersey, $2 30@2 50; Hungarian 90c@$1 00; Millet, 90c@$1 00; Orchard, per bush, $1 50@2 00; Blue grass, $1 40@1 60; Timothy, Western, $2 15@2 25; do, Northern, $2 25@2 40; American Flaxseed, $2 25.

ST. LOUIS.—Compared with cash prices last week, No. 2 Red wheat is ½c. lower. Corn, ⅛c. lower. Oats, ¼c. lower. Butter, creamery, 2c. higher; dairy, steady. Pork, 7½c. lower. Cattle, a shade higher. Hogs, 10c. higher. Sheep, from 10c. to 30c. lower.

WHEAT.—Active; No. 2 Red, Cash, 73½c; October, 73½c; November, 73½@74c. CORN.—Lower; No. 2 mixed, Cash, 32¾@33c; October, 33c; November, 33¼c. OATS.—Firm; No. 2 mixed, Cash, 25¾@26c; October, 25¼c; November, 25¼c. RYE.—Steady at 48½c. BARLEY.—Unchanged. BUTTER.—Creamery, 24@27c; dairy, 16@21c. EGGS.—13c. FLAXSEED—93c. HAY.—Timothy, $12; prairie, $8. BRAN.—17c. at mill. PORK—$9 30c. BULK-MEATS.—Long clear, $6 60; short clear, $7 05 LARD, $5 70. CATTLE.—Market slow; Good to Choice Native Shipping Steers, $4 25@4 90; Butchers Steers, $3 15@4 00; Texas grades, $2 90@3 55. HOGS.—Market weak; Butchers and choice heavy, $4 35@4 55, Packing, at $4 10@4 40; Lights, $4 15@4 35, Pigs, $3 10@4 00, SHEEP.—Market weak; $1 90@3 90.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, October 16, 1886.

STATE OF THE MARKET.—As compared with cash prices last week, flour is unchanged; Ungraded Red Wheat 2c. higher; No. 1 hard, ¼c. higher. No. 2 Corn, ½c. lower. Oats, No. 3, ½c. higher; No. 2, ½c. higher. Pork, steady. Butter, steady. Cheese, a shade lower. Poultry, 1c. lower. Eggs, steady.

FLOUR, FEED AND MEAL—FLOUR—Quotations: Fine, $1 90@2 60; Superfine, $2 15@2 85; No. 2, $2 40@3 05; Good to Fancy Extra State, $3 20@3 70; Common to Good Extra Western, $2 40@3 70; Good to Choice Extra Western, $3 80@4 75; Common to Fair Extra Ohio, $2 40@3 55, Good, $3 80@4 20; Good to Choice, $4 25@4 75; Common Extra Minnesota, $2 40@3 10; Clear, $3 40@4 00; Rye Mixture, $3 25@3 85; Straight, $3 60@4 85; Patent $4 20@4 85; Bakers' Extra, $3 90@4 50; St. Louis Common to Fair Extra, $2 40@3 65; Fair to Good, $3 70@4 50; Good to Very Choice, $4 55@4 75, latter an extreme, Patent Winter Wheat Extra, $4 20@4 75, City Mill Extra for West Indies, $4 85@4 90, latter in new pkgs.; South America, $4 60@4 70. SOUTHERN FLOUR.—Common to Fair Extra at $3 25@3 85, and Fair to Choice, $3 90@5 00. RYE FLOUR.—Superfine, $3 10@3 30. CORN MEAL.—Yellow Western, quoted at $2 50@2 75; and Brandywine at $2 80@2 90. BUCKWHEAT FLOUR—Quoted $2 00@2 10. FEED.—40 lb, quoted at 60@65c; 60 lb, at 60@65c; 80 lb, at 70@75c; 100 lb at 80@85c sharps, at 90c.@$1 00. Rye Feed at 75@80c; screenings at 45@55c.

GRAIN.—WHEAT.—No. 1 Hard, 86@87¾c; Ungraded Red, 73@85c; No. 3 Red, 81c; No. 2 Red, 83¼@84¼c; No. 2 Red, for October, 82@83¾c; do. for November, 81@83¼c; do. for December, 83 11-16@86¾c. do. for January 87⅞@88¼c; do. for February, 89@90c; do for May, 93¾@99c. BARLEY.—Western at 65@68c. CORN.—Ungraded Mixed, 44@45¾c; No. 2, 44¾c; No. 2 White, 45¾@46c; Yellow, 47c; No. 2 for October, 44½c; do. for November, 45¼@45¾c.; do. for December, 46¾@47¾c; do. for January, 47¾@48c; do. for February, 48@48¼c; do for May, 49⅞@49½c. OATS.—No. 3 at 30½c; do. White, 33¾@34c; No. 2, 31@31½c; do. White, 34½@35c; Western Mixed, 31@33c, do. White, 35@40c; White State, 36c. No. 2 for October, 30¾@31c; do. for November, 31½@3 9c; do. for December, 32½@32¾c; do. for January, 33c; May, 36c.

PROVISIONS.—PORK.—Mess, quoted at $9 75@10 00 for Old and $10 25@11 75 for New; $14 for Family Mess; $14 50@15 50 for Clear Back; and $10 00@10 50 for Extra Prime. BEEF.—Extra India Mess, $11 00@14 00; Extra Mess, in barrels, $7 50@8; Packet, $8; Plate, $7 25@$8. CUT MEATS. Pickled Bellies, 12 lb average, 7½c; do. 10 lb, 7¾c, City Pickled Shoulders, 5¾@6c; Smoked Shoulders, 6½c, Pickled Hams, 10@10½c; Smoked Hams, 11@11¼c. MIDDLES.—Long Clear in New York, 6¾c. DRESSED HOGS. City Heavy to Light at 6⅜@6½c; Pigs, 6¾c. LARD.—Western steam spot at 6.15@6.30, November, 6.05@6.10c, December, 6.17@6.17c; January, at 6.27@6.28c; February 6.33c; March, 6.41c; City Steam, 6.05; Refined, 6.50; Continent, 6.75.

BUTTER.—Creamery—State Dairy, pail, fine, 31@32c; do. prime, 30c; do, and Pennsylvania, tubs, 30c; Western, best, 29c; do, prime, 26@27c; do, good 24@22c; do. June, best, 23c, do. do, prime, 21c pails, choice, 20c; half-firkins, tubs, fine, 24@25c; half firkins, tubs, good, 21@22c; half-firkins common, 15@18c; Welsh tubs, best, 22@23c; do. do, prime, 20@21c. Dairy firkins, best, 23c; do. do. prime, 22@23. Western Imitation Creamery, best, 18@19c; Imitation creamery, fair and good, 16@17; Dairy, fine, 15@17c; do common, 13@14c; Iowa firkins, June, 12@13; Iowa tubs, June, best, 12@13c; Factory, poor, 8@@11c.

CHEESE.—State factory, fancy, colored, September, 11¾c; do, do, do, white, September, 11½@11¾c, do, do, best, colored, August, 11¾@11¾c, do, do, white, August, 11¼@11¾c; do, do, good and fine, 10¼@11c; do, do, fair, 9½@10c; do, do, common, 9@9½c; Ohio factory, fine, flat, 10½@11c; State factory, night skims 8½@9½c.

EGGS.—State, 21c; Ohio and other choice lots, 20½@20¾c; Western, best, 20½c; do. held lots, 19½@20c; Canadian, held lots, 19@19½c; do. fair held lots, 18@18½c.

POULTRY.—LIVE.—Chickens, per lb, at 9½@11c; fowls near-by lots, per lb, at 10c.; fowls, Western lots, per lb, at 10c; fowls Southern lots, per lb, at 9@10c; turkeys, per lb at 10@11c; ducks, western per pair at 50@75c.; geese, western, per pair, at $1.25@1.50.

POULTRY.—DRESSED.—Turkeys, per pound, at 12@14c.; Spring chickens, Philadelphia, per pound at 15@17c.; do. western, per lb, at 12@13c; fowls, Pennsylvania, prime, per lb, 13c; do western, per lb, at 11½@12½c.

FRUITS.—FRESH.—Quotations: Pears.—Bartlett, per keg, at $3 00@4; Seckel, per bbl, at $1 00@5; Sheldon, per bbl, at $3 25@4. Apples.—Gravenstein per bbl, at $2 00@2 50; Malden Blush, per bbl., at $2 25@2 50; common varieties at $1@1 75 per bbl; Pippins, at $1 75@2 50 per bbl; Greenings, $1 50@1 75; per bbl. Peaches.—Jerseys, best, at $2 00@1 50 per basket; do. good at $1 25@1 50, do. plain at 75c.@$1 per basket. Grapes, 6@7c. for up-river Delaware, per lb; Catawba, at 5@6c. per lb; Concord, per lb, 2½@3½c. Plums at 10@12c. per quart for German prime, $1@1 25. for copper, and 60@75c. for Damson's per crate. Quinces at $3 00 for choice Western; $3 per bbl, for up-river. Cranberries at $6@6 25 for Cape Cod; best at $6@6 25; for choice; $4@5 for light; $2@2 50 for choice, per crate; $1 25@1 50 for Jersey, per crate.

FRUITS.—DRIED.—The quotations are as follows: Apples—Fancy evaporated, 9c; do. choice, at —@8½; do. Tennessee quarters at —@—c; do. State sliced at —@—c; do. southern sliced prime at —@3c; do, North Carolina, fancy sun dried, new, 5½@6c; do. do. choice 3½@4c; do, do, prime 3c. Peaches—North Carolina, peeled choice new, 11@11½c; do. do. do, fancy, new, 12@12½c; do. Georgia, choice, at 9½@10c; do. Delaware, evaporated, peeled, 23@26c; do, do, do, unpeeled new, 12½@13½c, do, Georgia new, 10½@11c. Cherries, pitted, at 9½c. Evaporated raspberries, 14½@15c; sun-dried do, 12½@13c. Blackberries—Prime at 7¾@7¾c. Plums, at 7c.

PEANUTS.—Quotations are; 5½c. for best hand-picked; 4@4½c. for farmers' grades.

HAY AND STRAW.—Hay, Choice Timothy, 90c; Good Timothy, 80@85c; Medium, 65@75c. Shipping, 50c; Clover Mixed, 55@65c Straw.—No. 1 rye, 65@70; short rye, 50@60c; oat, 40@45c.

COTTON.—The quotations, according to the American classification, are as follows:

	Uplands.	New Orleans and Gulf.	Texas.
Ordinary	6 9-16	7¾	7¾
Strict Ordinary	7	7 3-16	7 3-16
Good Ordinary	8 15-16	8⅛	8⅛
Strict Good Ordinary	8⅝	8 9-16	8 8-16
Low Middling	9 13-16	9	9
Strict Low Middling	9⅛	9 5-16	9 5-16
Middling	9 5-16	9⅛	9⅛
Good Middling	9⅝	10 13-16	10 13-16
Strict Good Middling	10 15-16	10⅛	10⅛
Middling Fair	10 5-16	10⅜	10⅜
Fair	10 5-16	10⅝	10½

STAINED.

Good Ordinary	6⅜	Low Middling	8¾
Strict Good Ord.	7 1-16	Middling	8¾

VEGETABLES.—Quotations are for: Potatoes.—Long Island, rose, in bulk, per bbl., $1 50@1 75; State, $1 12@1 37; do Burbank, $1 25@1 50; Jersey, peerless, per bbl, $1 12@1 37; sweet potatoes, Va., yellow, per bbl., $1 25@1 50; sweet potatoes, Va., yellow, Inferior, per bbl, $1 00@1 25. Corn.—Jersey, per 100, $1 50@1 75. Cabbages.—Flat Dutch, per 100, $5@5. Cucumbers.—Pickles, per 1,000, 75c.@$1 25. Egg plant, Long Island, per bbl, $3@4 50. Lima beans, per bag, $2 50@2 75. Onions.—Conn., red, per bbl, $1 50@1 75; do. Orange County, red, per bbl, $1 50@1 75. Tomatoes—Long Island, per box, 50c. Celery, per doz. branches, $1 00. Turnips, Russian, per bbl., $1 25@1 50.

LIVE STOCK MARKETS.

NEW YORK, SATURDAY, Oct. 16, 1886.

BEEVES.—Kentucky steers, 1325 lb, at $5; do, 1284 lb, at $4 90; West Virginia do, 1196 lb, at $4 65; Virginia do, 1233 lb, at $4 65; Ohio do, 1257 lb, at $4 60; do. 1465 lb, at $5 35; Buffalo do, 1222 lb at $4 50; Cows, 1140 lb, at $4 25; Virginia steers, 1176 lb, at $4 35; Ohio do, 1235 lb, at $4 15; do, 1095 lb, at $4 12½; Kentucky Steers, 1532 lb, at $5; do, 1263 lb, at $4 55; do, 1341 lb, $4 65; do, 1245 lb, at $4 50; do, (part oxen) 1250 lb, at $3 95; Virginia do, 1178 lb, at $4 30, Indiana, do. 1271 lb, at $4 50; Ohio do, 1113 lb, at $4 10, Virginia do, 1253 lb, at $4 55; do, 1158 lb, at $; do, 1345 lb, at $3 75; Kentucky do, 1156 lb, at $4 40; West Virginia do, 1295 lb, at $4 45; Buffalo do, 1814 lb, at $4 80; Illinois do, 1237 lb, at $4 80; do, 1211 lb, at $4 90; Colorado Half-Breeds, 1296 lb, at $4 75; Texans, 970 lb, at $4; do, 1000 lb, at $4 30; Native Steers, 1183 lb, at $4 75; Native Steers, from Buffalo, 1695 lb, at $5 05; Indiana steers, 1168 lb, at $4 50, Colorado steers, 1110 lb, at $4 15; Ohio do, 1367 lb, at $4 85, do, 1325 lb, at $4 75, do, (part Cow and Stags) 1156 lb, at $3 75; Chicago do, 1285 lb, at $4 45, do, 1239 lb, at $4 40; State bulls, 755 lb, $2 85; do, 847 lb, $2 80; do, 940 lb, at $2 70; Heifers, 758 lb, at $3 25.

CALVES.—Grassers, 284 lb, at 2½c; do. 223 lb, 2¾c; Veals, 110 lb, at 7¼c, Grassers, 365 lb, at 2½c; Veals, 110 lb, at 6c; do, 136 lb, at 5c; Grassers, 197 lb, at 1¾c; Grassers, 216 lb, at 2¼c; Veals, 152 lb, at 7¼c; Fed Calves, (few Veals) 267 lb, at 4c.

SHEEP AND LAMBS.—Total for six days 40,907 head against 45,526 head for the same time last week. Northern Canada Sheep and Lambs, 70 lb, 5¾c, Northern Canada Lambs, 69 lb, at 6c; do, 68 lb at 6¼c; State Sheep, 73 lb, 4c; State Lambs, 91 lb, 5½c; State Bucks, 101 lb, at 3c; State Sheep, 123 lb, at 4¼c; Western do, 88 lb, at 4¼c; Michigan do, 80 lb, at 4¾c; Pennsylvania do, 95 lb, at 4¾c; State Lambs, 78 lb, at 6c; Western Sheep, 92 lb, at 4¼c; Pennsylania do, 98 lb, at 4½c; do, Lambs, 60 lb, at 5½c; Northern Canada 79 lb, at 4c; Canada Lambs, 84 lb, at 6¾c; Kentucky Sheep, 101 lb, at 4½c; Ohio do, 70 lb, at 3½c. Jersey Ewes, 129 lb, at 4¼c, Ohio Sheep, 81 lb, at $3 85, Kentucky do, 107 lb, at 4¾c; Kentucky Lambs, 69 lb, at 5¾c; do. 69 lb, at 5¾c; Indiana Sheep, 97 lb, at 4 70; Pennsylvania Sheep and Lambs mixed, 75 lb, at $4 05; Kentucky Lambs, 64 lb, at $5 65; Kentucky do. 106 lb, at 4¼c; Indiana Sheep, 91 lb, at 4¼; Ohio do. 85 lb, at 4c.

HOGS.—Receipts for six days, 41,368 head against 33,836 head for the same time last week. Very little doing and feeling steady. A bunch of 20 Rough Hogs, 190 lb, average, sold at $1 per 100.

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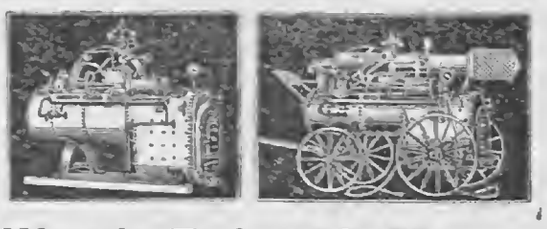
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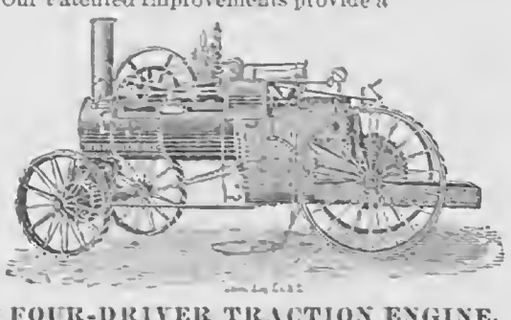
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RISING SUN, IND.

For the Young.

UNCLE MARK went on a little trip a few days ago. Down on Long Island at the edge of the Atlantic Ocean. We went hunting one day and went tramping over the salt meadows. There was no game to be seen and it was just as well, perhaps, for I am not sure that we could have killed any if it had appeared. Way down on the meadows we found a little shanty where a man and his wife lived. Their business is to guard the oyster beds. It must be a pretty lonely life. The shanty is built on a little island. There is no shade, no good water, and surely no society. The shanty is built on posts about four feet above the ground. This is necessary, for in Winter the high tides come sweeping all over everything, and sometimes even find their way into the house, high as it is. Great posts are driveu into the ground all around the house. These are to keep the ice back. There was a small tree growing in a keg placed on a platform. All around it pieces of bags had been nailed to posts to keep the wind away. A flock of long-legged hens were running about the house. I wondered what the tree and the hens do in Winter when the water and ice drive them away from the ground. There will be little room for them in the house, for the woman is almost as large as the house is. The man is so tall that he must have to sit down all the time that he is inside. It is hard to think that a man can't stand up in his own house. It must be a dreary, lonely place in Winter. They can see the lights on the main land, and yet know that their friends are out of reach. I think we are all lucky to find ourselves on dry land.

I hope we are all getting ready for Winter. The cold weather is surely coming and now is the time to make ready for it. Some houses need to be banked up, and there are boards at the barn to be nailed on. We want all these things done in season, then we can laugh at the cold. It will be no laughing matter if we have to turn out in cold weather to do the things we can do now.

SOME people have hard work to keep awake in church. They don't mean to show disrespect to the minister, but before they know it, they begin to nod away. When their chin comes down on their breast and they wake with a start, how ashamed they are. In olden times they used to have a man whose business it was to go around with a stick and poke sleepy boys and girls. Such a man would find plenty to do nowadays, I think. When I was a boy I knew that I should lose my dinner if I went to sleep in church. You may be sure I did my best to keep awake, for dinner was about the best part of Sunday. I have tried pins and pinching and kicking to keep myself awake, but sometimes sleep is just bound to beat you. I always have some sympathy for sleepy people now. The best way is to make sure of plenty of sleep at night. If you do that you won't find it so hard to keep awake during the day.

That dog that I told you about last week is a great coward. All cruel animals are cowards. Some time ago four dogs ran across the field. The largest was a big Newfoundland, while the others graded down to a little yellow cur dog. Our dog stood in the barn door and his master wanted to see a good race, so he told his dog to chase the others. The great fellow started off as hard as he could go, but which dog do you suppose he chased? Not the big dog that would have been a fair match for him, but he picked out that poor little cur and chased him as hard as he could. That is what I call a cowardly trick. It is like a big boy picking out some little fellow to try his strength upon. Whenever I see a boy do that, I want to see him well thrashed. The boy who won't take "somebody of his size," is no boy at all.

THE STORY OF A DISTRICT SCHOOL.

A COLLEGE BOY'S DIARY.

(Continued.)

"WHEN do Sunday come in the middle of the week?"

Johnny repeated the question, pulling earnestly at my coat. This was one of the most remarkable questions I had ever heard. I knew the teacher was expected to know everything, but this was a staggerer, surely.

"What makes you ask such a question, my boy," I said. I could hardly help patting the great bush of white hair.

"'Cause old Johnson, he sez I kin go an' see my mother when Sunday comes in the middle o' the week, an' I wanter see her mighty bad,"

"Where is your mother?"

"She's over yunder to the county house. She's sorter sick an' can't do nothin' ter speak on. I'd sorter like ter see her you know, cause she's the only mother I've got an' I'm the only boy she's got, an' we'd be sorter mates. When do you reckon Sunday's gouter skip a day or so, so'st I kin go?" It seemed almost cruel to tell the little fellow the truth. He was so eager as he looked up at me, that I did not like to tell him the time could never come.

"I don't know, Johnny, when it will come," I said at last.

The eager face clouded with disappointment. He pushed the mud restlessly with his foot and his hand fell from my coat.

"I'm mighty sorry, teacher. I reckoned you'd know all about it. Seein's you don't know, I reckon it won't never come. Say," he said suddenly, his manner changing, "how'd you lick a man ef yon wanted him fer ter feel it way down to his toes?" I could only look at him in surprise at this question. I had never felt that I should care to injure any person severely, so I had not decided which form of punishment would be most painful.

"Ye see," continued Johnny, "I'm gonter lick old Johnson when I git big enough, an' I want mightily fer ter do a good job. Like enough I won't have more'n one chance, so I wanter know what ter do. I heerd a feller read a piece onct about bilin' folks in fat. I reckon I'll bile old Johnson ef I kin git a kittle big enough. But yunder's Bill Johnson now, I reckon I'll git home."

He turned and ran to the gate and up the road. A horse's head appeared over the hill in the opposite direction from that which Johnny had taken. The head slowly grew to a pair of shoulders, and at last the whole horse came into view. He pulled a large wagon load of wood over the brow of the hill and then stopped to rest. A man sat on the wood. He eyed me critically as I walked down the road toward the director's house.

"Howdy, teacher?" he said, as I came near him. "Startin' in on school considerable brash aint ye? I've ben talkin' ter sum of the boys down yunder—like enough I kin give ye some pints."

Of course I told him I would thank him for any information he had to offer. He took off his hat, rubbed his head carefully for a moment, shut one eye and looked at me keenly.

I glanced around to see what had become of Johnny, but he was not in sight. He had climbed over a fence and run through the woods.

"I allus takes a big interest in schools," said Bill Johnson. "I ain't got no children o' my own fer ter send, an' I ain't no great scholar, but I've throwed three masters out o' that school house, so'st I sorter likes to see how things goes. I wuz a whale when I went ter school now I tell ye. Wis't I cud make it so'st I cud go this Winter. I expect me'n you cud lock horns in big style. But ez I wuz sayin' you 'pear ter be startin' in sorter brash, don't ye? Like 'nuff yer idees is all right where ye cum frum, but Bear Crick ain't figured up ter 'em yit. Ye done a poor job stoppin' 'em from playin' "The Needle's Eye." Thars whar ye rub agin the grain an' start fire. Then agin, ye sorter encouraged gamblin' when ye let them boys draw them cuts for that seat. Then agin them boys won't have no appetite fer lettin ye alone unless ye let 'em get a mouthful o' spellin' book. You make 'em write them words on the slate an' they'll write ye clean out the deestrict."

He would have given me more "pints" doubtless, but the horse showed signs of impatience and at last started on. So, with a cheerful "Good night teacher, better pickle up your muscle agin them boys," the load passed on, I went back to the director's house. He met me at the door.

"I congratulate you," he said "upon the remarkably auspicious opening you have made. I feel that we have put in the entering wedge of civilization and that the work we have this day begun will bear fruit in the after history of Bear Creek." I was in no condition to dispute this statement.

School went on fairly well through the week. I managed to maintain reasonably good order, though there was considerable muttering at times. Jack Brawn did not come. There seemed to be a general desire to wait until he put in an appearance before going into open rebellion. Johnny Billings was my favorite pupil. He was a very dull little fellow, and could not remember his words, but he worked so hard and followed me about so lovingly that I could not help liking him. It was partly my interest in him that led me to select Johnson's for my first place at boarding 'round. I sent word that I would come, and after closing school on Monday night, I started for Johnson's. Johnny had run ahead. I saw his white head in the barn as I turned into the yard. In answer to my knock at the door a harsh voice called out; "Walk!"

LETTERS FROM THE COUSINS.

DEAR UNCLE MARK: I am a boy nine years old. It has been very rainy for two weeks. Farmers are bothered very much to get their wheat sown. Apples are a large crop here this Fall. We raised some very nice melons from the seeds sent us by the R. N-Y., but they did not grow large; the season has been so dry. The cantaloupes were very fine, but not very large. I have a young Shepherd dog which affords me lots of sport.

Hillsdale Co., Mich. JOHN E. CORY.

DEAR UNCLE MARK: It is long since I wrote to you and the Cousins. I have 11 Plymouth Rocks. My brother Johnny and I bought a calf from my father. It is a muley, and her name is Norma. My father has one light brown muley without one white spot and her name is Mollie. We raised some very nice Plymouth Rock chickens this year. I am very much interested in the Cousins' letters and the College Boy's Diary. If you would come out here I would show you one of the nicest apples you have ever seen. We have 19 apple trees that carried apples this year, and 14 that did not. I go to school now and am the biggest of all the pupils. We have some very nice cabbage. Our potatoes were very small, because it was so dry. Our teacher has written for the Harper's Young People for eight months, as 12 of the pupils each gave five cents; the others did not give any. Do you think we should let them read our own paper? Another time I will tell you the names of those who paid. LEWIS W. PETERSON.

Brown Co., Wis.

[I have a great mind to come out and see those apples. As you are the largest boy at school, I hope you set the others a good example. I like that idea of sending for the magazine. That is a splendid plan. I wish other schools would do it. About letting those other scholars read it! I don't think it will be fair for them to get something for nothing. Perhaps if they read a few numbers they will be glad enough to pay their share.—U. M.]

DEAR UNCLE MARK: As usual, I spent my vacation at Grandpa's. Last month Mamma and little sister went to Philadelphia to see Grandma, and so I stayed a month longer in the country. I ride three miles on the street cars to school every day, but next week I will have to go back to the city, as Mamma is coming home. I raised beans, lettuce, cabbage and potatoes in my garden. I planted my potatoes according to the RURAL plan—flat culture—and got nearly a barrel and a half. Grandpa said they were the finest potatoes he saw here this Summer.

For the second crop I planted enough potatoes for next year's planting, and some beans, egg plants and celery; all did very well. Last night we had the first frost, but it did not do very much damage. Uncle Mark, you did not send me any seed last Spring, but I forgot to give my address when I wrote to you, and may be that was the reason.

Your nephew, HARRY B. STILZ.

Louisville, Ky.

DEAR UNCLE MARK: I would like to join the Y. H. C. I am a girl, eleven years old, and live on a large farm in Dakota. We moved here from New York State last March. I have one brother and one sister. We have raised 36 chickens, and I have one pet, one that I call Peter. We have nine turkeys, three pigs and three horses and one colt, two cows and two calves, and I have a striped cat I call Tiger. It has caught 10 gophers, and I don't know how many mice. We have wild geese, ducks and prairie chickens around us. Pa has taken the RURAL 25 years, and cannot do without it. The Garden Treasures all came up nicely, and we had a handsome flower garden. I planted the cantaloupe seed, and the largest one measured 20 inches one way and 26 the other. I did not think I could raise the largest one, so I did not send it. Your niece,

HELEN M. HAWLEY.

McCook Co., Dakota.

[That cat earns his living surely.—U. M.]

DEAR UNCLE MARK: I have written you a letter before, but it was not printed. We raised about 100 chickens this Summer, but there are some hawks around here and they have caught some of them. Papa shot one of the hawks. I have a rabbit which is so tame that when I call him he will come and eat out of my hand. He is black and white and his name is Dick. I had a steel trap set for a rat and caught a red squirrel in it. I had another trap set in a field and caught a woodchuck. We have a horse that is over 30 years old. I would like to correspond with Manson T. Dye, of Florida. I wrote him a letter but have not received an answer yet. I hope, if he sees my letter in print, he will write me a letter if he wants to correspond.

CLAYTON Q. WRIGHT,

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PERSONALS.

JAMES C. FLOOD has just finished a $2,000,000 dwelling in San Francisco.

EX-PRESIDENT ARTHUR is still a sick man. Looks a heavy shadow of his former self.

JEROME INCREASE CASE is the full name of Jay-Eye-See's owner, and he has a fortune of $5,000,000.

SECRETARY MANNING is in very good health, thank you, and has resumed his duties as head of the Treasury Department.

KATE FIELD says that prohibition in Iowa makes sneaks and hypocrites of otherwise well-meaning people, and that it turns the drug stores into grog-shops. How does Kate know?

THE New York heirs of the late Vice-President Hendricks' mother will contest the will which left the entire estate to his wife. They claim a one-third interest.

OVER 50 Southern women are connected with the new papers of the South, and on the 3rd of next month they propose organizing a Southern Woman's Press Association.

THE compromising stories about Mgr. Capel, circulating in the Eastern papers, have found their way back to California, and the priest telegraphs the New York Herald an indignant denial of the charges.

THE only Republican elected to the Georgia Senate is Ben Duggor, a veterinary surgeon from the mountain district. An Atlanta dispatch calls him "uncouth," but "immensely popular" in his district.

WALKER BLAINE is going to Chicago to live. His younger brother, Emmons, who married Joseph Medill's daughter, has worked his way up to be principal attorney for the Chicago and Northwestern Railroad.

A SON of John Brown, who owns a large vineyard at Put-in-Bay, is such a radical temperance man that he will not sell a pound of grapes to be made into wine, and he always votes the straight Republican ticket.

SOME of her admirers in the Argentine Republic have presented to Sarah Bernhardt, the actress, who is now performing in South America, 2,000 acres of land. She may yet settle down to the life of a stock farmer.

PRINCE LOUIS NAPOLEON, son of "Plon-Plon" and Clothilde, sister of the King of Italy, and heir to the Bonaparte Imperial pretentions, who arrived at San Francisco from Japan by the last steamer, left Wednesday for New York.

THE President has appointed Col. James C. Duane to be Chief of Engineers of the United States Army with the rank of Brigadier-General, *vice* General Newton resigned. Gen. Duane is now on duty in New York as engineer of the 3d light-house district.

THE Sultan of Turkey is a connection of the late Emperor of the French. He is directly descended from Mlle. Dubuc de Rivry, who was captured by Algerine pirates and became the favorite wife of the then Sultan, Selim; and she was a Creole, first cousin to Mlle. Tascher de la Pagerie—the Empress Josephine, grandmother of Napoleon III.

THE Hon. Cassius M. Clay will be 79 years old on the 19th of this month. He is hale and hearty, and looks as if he might easily live to see the century close. A few days ago he was unanimously nominated for Congress by the Republicans in the Eighth Kentucky District, but he thought the time for the canvass too short to make it thorough, and declined.

WHAT think you of a man who prizes children chiefly because they will be future soldiers? At a railway station in Saxony, Bismarck, stopping to change trains, addressed a porter by whose side stood a little boy: "Is that your son?" "Yes, Your Excellency." "Have you any more?" "Four, Your Excellency." "That is well. They will make good soldiers. God bless them!"

MR. BLAINE has a good story about General Grant, who once visited Maine and rode through the State with Ex-Governor Washburne and her favorite son. Washburne was boasting of Maine's glories, when General Grant, nudging Blaine, said: "I believe Maine is a great corn State; some of the corn patches we've passed remind me of the corn-fields in Illinois, in which a man on horseback cannot reach the tassels." Washburne did not see for a moment that in one case the horseman could not reach up to the tassels and in the other case could not reach down to them.

Miscellaneous Advertising.

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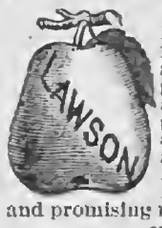

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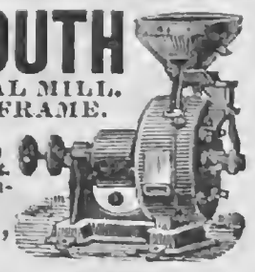

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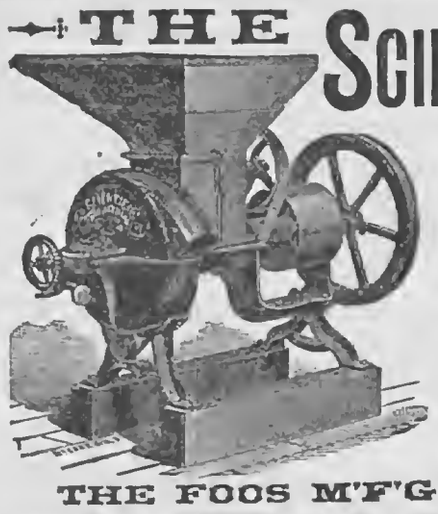

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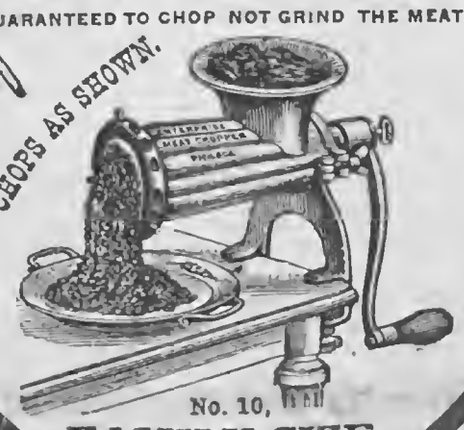

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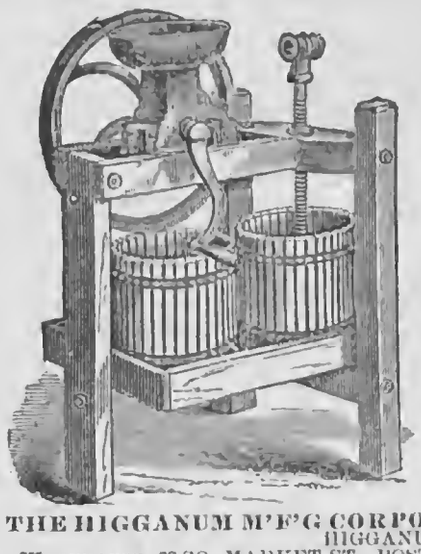

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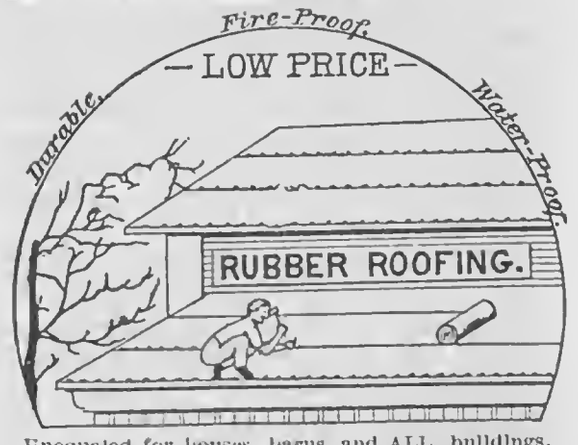

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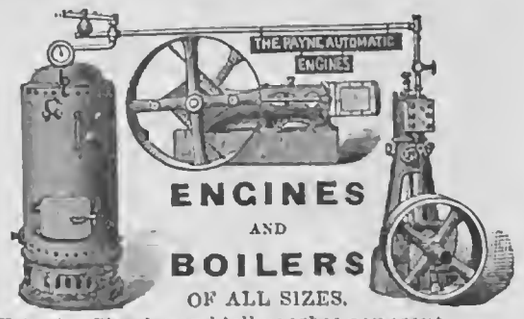

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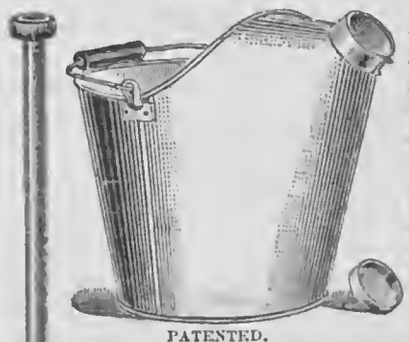

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A JOURNAL FOR THE SUBURBAN AND COUNTRY HOME

VOL. XLV. No. 1918. NEW YORK, OCTOBER 30, 1886. PRICE FIVE CENTS. $2.00 PER YEAR.

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Horseman.

TROTTING STALLION KING WILKES.

W. T. CHESTER.
(Of the Turf, Field and Farm.)

THE farmers of the country are rapidly waking up to the fact that it is the truest economy for them to breed their work mares to horses whose produce will have an initial and intrinsic value, because of the reputation of the sire. The horse-breeding interest in this country, both in thoroughbred and trotting lines, has made tremendous strides of late years, and, while it is true that the agricultural element has not kept up with its marvelous pace, it is also true, as I remarked, that farmers are beginning to note the advantage of breeding their, so-called, common mares to superior stallions. The instances, on the trotting turf especially, where great performers have been thrown by mares of unknown breeding to the embrace of favorite sires, have been very numerous, as is attested by the summaries in such a work as Chester's Complete Trotting and Pacing Record, where the sire is named, but the dam is given as unknown, in the case of many an animal that has trotted or paced in 2:30 or better. There are on the farms of this country positively thousands of excellent mares, which have the grand qualities of endurance, disposition and capabilities of motherhood, but lack fashionable breeding, yet which are as likely as any others to drop a fast and valuable trotter, if bred to the right sire. It should be borne in mind by owners of such mares that it costs no more to raise a foal when the service-fee of the stallion is $100 than when it is $10, but the chances of realizing $1,000 from the more expensive service are ten times greater than are the chances of realizing $100 from the cheaper service. There are true economies and false economies; but it can safely be said that it is always a false economy to breed a mare that is worth raising a colt from at all to an inferior stallion because his fee is low, when the services of a decidedly superior horse can be had at the expense of a few additional dollars. One fast and good colt is worth in the market anywhere from five to 50 or 100 times as much as a poor colt, and the chances of getting a first-class colt from a farm mare which is game in her work, level in her head, and of good disposition and conformation, are very little, if any, less than from a mare of the most fashionable lineage, that has nothing else to back her. We are far from advising that really worthless mares should be bred to expensive stallions, as that would be throwing money away in ninety-nine cases out of a hundred; but on every farm with several head of stock there are one or more tried and true mares, with no special pedigree behind them, in whose behalf it would be well worth while to spend a trifle of extra money for the sake of their progeny.

And this is especially to be advised in the case of those mares, of which nearly every prosperous farmer has one or more, which are the owners' favorites for driving, because they specially evince the trotting disposition. The produce from such mares, when bred to a first-class trotting sire, may be very valuable animals, and will surely be worth more than if the sire had been a "dung-hill."

KING WILKES (1867). 2:22¼. Fig. 401.

There are few localities in this country where the farmer cannot conveniently obtain the service of a good stallion, whose blood is such as to justify the expectation of good foals when coupled with such mares as I have indicated. At Fig. 401 is an excellent likeness, from a photograph, of the stallion King Wilkes, owned by R. B. Conklin, 146 Center Street, New York City. He is a son of the greatest sire of trotters, all things considered, that has ever lived, George Wilkes, and his dam was Missie, by Brignoli. George Wilkes had a record of 2:22, which was, for a long time, the fastest ever made by a stallion, and among his get are Harry Wilkes, the best performer of 1886, and 43 others with records of 2:30 or better. He was a son of Rysdyk's Hambletonian, indisputably the greatest of trotting progenitors, and had a rich infusion of Clay blood on the side of his dam. Brignoli, sire of the dam of King Wilkes, was a trotter himself, with a record better than 2:30, and was a son of Mambrino Chief, sire of the celebrated Lady Thorne, and the founder of the greatest of trotting families after the Hambletonian. On the side of his grandam, King Wilkes is rich in Thoroughbred lines, and from the strains that have been productive of trotters. He was foaled in 1876, and when very young showed so much speed that he was given little service in the stud, but trained for the turf, on which he had a series of brilliant victories.

In 1882 King Wilkes beat a field of four at Pittsburgh, Pa., for a $1,500 purse, and acquired a record of 2:26¼, and in 1883, at Utica, also for a purse of $1,500, he beat Frank, 2:19½; Index, 2:21; Stephen G., 2:20½, and several others, and lowered his record to 2:23. August 27, 1884, at Hartford, he trotted a grand and memorable race. It was a first-class party, and Fabian tactics were pursued with King Wilkes. Walnut, 2:19¼, took the first heat in 2:21¼; Judge Davis, 2:20¼, the second in 2:23¼, and Butterfly, 2:19¾, the third, in 2:25. At this juncture the game and lasting qualities of King Wilkes asserted themselves. The others fought bravely, but the son of George Wilkes and Missie beat them squarely down the homestretch in 2:22¼, his present record, in the fourth heat, followed it up by taking the fifth heat in 2:23¼, and defeated a tired party in the sixth heat in 2:24¾. The sort that give it up never trot such races as this one was.

King Wilkes made his first regular season in the stud in 1885, and, consequently, has very few sons or daughters old enough for public performances. Indeed, he sired but ten colts foaled prior to 1886 that are now living. One of them, Oliver K., foaled in 1880, was the sensational trotter of 1886. He got a four-year-old record of 2:24½, but this season astonished the entire country, winning the $10,000 purse at Charter Oak Park, Hartford, Conn., and in his last race defeating the invincible, as was supposed, Harry Wilkes, at St. Louis. His record was reduced this season to 2:16¼, but he is looked upon as the most likely of trotters to eclipse the record of Maud S. His owner sold him for $17,500, after the Hartford race, and had won much more than that with him during the trotting of the year.

HORSE SENSE.—For those who like to drive elephants, the Percherons and their grades are fine. I want horses with more sense and more life. It is easier to tone a nervy horse down to good, steady work than it is to put intelligence and energy into a great lump of muscle..... Many colts are given ugly tempers by careless currying. Some people curry a horse as though they wanted to hurt him all they can. To scratch and grind a young colt will work just as it does to wash a boy's face by poking soap into his mouth and eyes. They will both come to hate the operation and the operator.....I don't think much of the practice of bedding horses a foot or more deep with straw. Most horses lie down but a little. I have owned several horses that seemed never to lie down. Therefore, I consider it poor policy to put a great quantity of litter under them. "HORSEMAN."

The Herdsman.

A PRACTICAL MISSIONARY.

A GOOD bull is a missionary. His influence extends further and does more to elevate man-

kind than many who are familiar with him will at a first glance be able to see. He may carry no clothing to naked heathen in sultry tropics, but he does provide comfort for many needy nearer home, who may be better worth saving. He may teach no schools for benighted savages, but he does help people cultivate their mental powers for the good of mankind. He may not convert cannibals, but his influence does lessen want, and sin, and crime among the races now spreading over the world (as we believe) to rule it to its great benefit.

How this practical missionary does all these great and good things is so easily seen that there seems to be scarcely a warrant for telling the story—and yet it is only a few weeks since a paper published in the interest of live-stock breeders asserted that no bull is worth more than—I forget the exact figures, but say $1,500. It is plain that if he who causes two blades of grass to grow where but one grew before is a benefactor of his race, he who produces 100 pounds of beef where but 75 pounds were produced before is also the benefactor of his kind. If he can improve the quality while increasing the quantity he is so much the more a benefactor. To the extent that he has added to the available supply of food for man, he has added in effect to man's income. Increase of income means added comfort for the family, better housing, clothing, and nourishment for children, and from these better conditions come better health and longer life. Vigorous bodies support energetic minds in the effort to get the means wherewith to do the work the world requires of each. With increased intelligence comes aptness for yet higher culture, and greater and more intense dislike of offences against social, legal, or moral laws. With higher and more universal education there will be fewer crimes to punish, less cumbersome and costly machinery of police, of courts, of lawyers, and of prisons to maintain, and there will be fewer paupers for the industrious and honest to support.

Defining the extent of the influence of the missionaries under consideration is not easy. Men who have practical knowledge of cattle growing say that a well-bred bull of the established beef breeds will, even when coupled with an animal having no improved blood, produce offspring that will grow one-half faster and make one-quarter more and better beef from a specified quantity of food, than will an animal in which there is no good blood. Thus while a bullock of good breeding will in two years grow to a gross weight of 1,500 pounds and yield about 900 pounds of tender, juicy well marbled flesh, nutritious and palatable, the scrub will require much more food and from three to four years' time for making a like weight of beef of inferior quality. A bull of good milking or butter making race will increase the milk or the butter yielding capacity of stock so greatly that the daughter of a scrub cow coupled with such a bull may give quite double the quantity that her dam could produce. It is by no means difficult to see how important a matter this may be to the individual farmer, but I purpose to show in another paper something of the extent to which the country at large might be affected by a general use of pure blood. E. W. PERRY.

Chicago, Ill.

DEHORNING CATTLE.

I FAIL to see why the papers are so slow about taking up the practice of dehorning cattle. I consider the question a vital one to all cattle growers. Where do you find one of more importance? If dehorning is right then the people ought to know about it. I have studied the matter for years and convinced myself and hundreds of others that dehorning is safe, profitable and not essentially cruel. I have stood the test of a trial for cruelty to animals, and all the State Humane Society could not make up a case against me. Dairymen should know that dehorning saves 25 per cent. of hay in Winter, 50 per cent. of shed room, 50 per cent. of manure, all loss of human life, all loss of calves by abertion, and all loss of sheep, pigs, cattle and horses by horns. Most of those who talk about dehorning cannot tell anything about the anatomy of the horn. There is nothing about it in the books and the only way it can be learned is by studying the animal's head. I know that there is a point where the horn can be cut so that a stub will grow. There is another point where no stub will grow, and where the pain and bleeding will be so slight that the animal will suffer but little. Cut the horn above this point and the animal will bleed till it falls. These things I know because I have tried them. I am satisfied that my system of dehorning has never been practiced before. It is bound to come into general practice. H. H. HAAFF.

Henry Co., Ill.

SWISS CATTLE.

CONSUL WINCHESTER writes that while in pastoral countries generally cattle for milking, work and fattening are kept and treated separately, the Swiss cow is expected to unite all these qualities. It is thought that a cow is benefited by being worked in the forenoon. The cows are driven in harness. A cow that does not give 16 quarts of milk at time of calving is not considered worth keeping. Cheese in some parts of the country forms the staple article of food. Laborers are often paid in it. New cheese will sometimes cause illness; in that case the patient is treated with old cheese on the homœopathic theory. In 1885 Switzerland sent to the United States 3,500,000 pounds of cheese. At the district cattle shows, an examination of all breeding bulls is held. Prize bulls cannot be taken out of the Canton for at least one year after the show. No unregistered bulls can be used for breeding purposes. A prize cow cannot leave the Canton before calving. When any serious cattle disease arises all animals that may have been liable to contagion are placed under supervision; such as may be deemed necessary are killed and everything is done to completely stamp out the disease. The cattle destroyed are paid for by the general government. How would a few of such rules work here? Suppose we had, for example, a County Commissioner to go around and knock all scrub bulls on the head. Our stock would be 50 per cent. better, but what a howl there would be about this land of freedom!

SPAYING HEIFERS.—Among the stock owners all over the country there is a growing opposition to the use of scrub bulls, and on the ranges there is considerable talk in favor of spaying all common and low-grade heifers. So long as such heifers are allowed they will produce their kind—a poor and unprofitable sort, entailing a serious loss of feed each year. By spaying a stop would be put to the propagating of inferior stock, and the spayed animals would be turned to the most profitable use. The risk in spaying would be next to nothing in the hands of a skillful operator; the cost would be from 50 cents to $1. Spayed heifers are usually somewhat smaller but handsomer than steers, fatten more readily and make just as good beef.

DRESSED MEAT FROM THE FAR WEST.—That new National Consumers' Meat Company under the control of the Marquis de Mores, which began last July to supply New York with dressed beef from Montana, is doing a thriving business here, in spite of a rigid boycott by local butchers. It has two new buildings under construction, and expects by November to receive the carcasses of 200 beeves daily. Now the daily receipts are 10 cars of beef and 10 of pork. When all five places are open the coming Winter it expects to dispose of 300 beeves and 900 hogs every day. In Summer Medora supplies grass-fed cattle, and in Winter Kansas is to supply corn-fed beef, pork and mutton. The meat is on the road seven days, and gets here, it is claimed, in prime condition.

THE following dates are given for meetings of Cattle associations:—Red Polled Cattle Club, at Grand Pacific Hotel Chicago, Ills., Nov. 17. Devon Cattle Club, at same place Nov. 11. Oxford Down Record Association at Sherman House Chicago, Nov. 16. Missouri State Short-horn Breeders' Association at Kansas City, Nov. 26. The National Cattle-Growers' Association of America, will meet at the Sherman House Chicago, Monday Nov. 12. It is expected that the convention will ratify the agreement made last Fall for the consolidation of the Chicago and St. Louis Associations, under the name of the Consolidated Cattle Growers' Association of America. A call has also been issued for a grand assemblage of cattle men from all parts of the country at the same place, to commence Nov. 16.

RELIEF FOR CHOKING COW.—A choking cow can often be relieved by pouring cold water into its ear. Take cold water in a pitcher or teapot, turn the animal's head to one side and pour a good stream directly into the ear. This will cause the cow to jump and shake its head fiercely and the jerking motion will often dislodge the obstruction. The idea is to make the animal make an effort to free itself. The general practice of pushing the obstruction down the throat or crushing it gives the animal no chance to help itself. A good syringe would be the best thing to force the water into the ear with, but few families have one ready for use, so the common teapot will answer. FARMER'S WIFE.

THERE will be a butcher's contest at the Chicago Fat Stock Show. Prizes of $100, $75 and $50 are offered for the most skillful butchering. In the "scale of points" adopted in this contest 20 are allowed for time and 80 for skill in performing the work. The limit is 25 minutes. Where the work is done in this time, 20 points are scored. For every minute over this time two points are dropped, and for every minute under two points are added.

MILKING SHEEP.—There is a strong feeling in New Zealand in favor of milking sheep for the purpose of cheese making. Very large numbers of ewes are kept in one district of France where the celebrated Roquefort cheese is made from their milk. The making of cheese from ewes' milk was formerly quite a large industry in Scotland. The New Zealanders think that by adopting the practice dropped by the Scotch, but kept up by the French, they will add a very profitable item to their exports.

LOSS OF SHEEP IN BUENOS AYRES.—The loss of sheep in Buenos Ayres the past Summer must have considerable influence on the rise in the price of wool. According to the latest advices, the number lost was over 20,000,000, valued at $22,500,000, or 12 per cent. of the entire value of the flocks and herds in the whole Province. The disaster was caused by a disease known as "lung and throat worm," an affliction never before experienced in the Argentine Republic.

THE managers of the St. Louis Fair are criticized for appointing two breeders of beef cattle as judges of dairy cows. Much dissatisfaction resulted. It is hard to see how a man who has spent years in developing beef animals can be a good judge of dairy points. The custom at some shows appears to be that of selecting judges at random from the visitors. It can be readily seen that such a course gives a chance for much dissatisfaction.

SMITHS POWELL & LAMB send us a fine lithograph of a group of the Clothilde family of Holstein-Friesians. This picture, by Cecil Palmer, is the finest cattle group we have seen. It is even superior to the famous group of the Aaggie family published two years ago.

DEVON cattle are appearing in larger numbers than ever at the Western fairs. The Devons are fine cattle. They are shapely, serviceable and beautiful—but they have the most cruel horns of any breed

THE latest objection urged against polled cattle is that it will be impossible to tell their age except by examining their teeth.

Dairy Husbandry.

DAIRY NOTES FROM ENGLAND.

PROFESSOR J. P. SHELDON.

English opinion of American oleo legislation; English views on taxation of food imports; protection demanded against fraud not competition; bogus butter must be sold as such; justice all round; great depreciation of dairy products; slight improvement lately; fair crops on the whole.

WE are a good deal interested in England with the action which has been taken by your Congress in respect to artificial butter, its manufacture and sale; and we regard the language used by President Cleveland, on sanctioning the bill, with very considerable satisfaction. Probably we farmers should not wish to impose a tax on butterine made in this country, or coming into it; and even if we should our wish would not be easily granted. Such a wish, indeed, would be opposed to the spirit and traditions of a free-trading country. We admit, in fact, under certain conditions, the usefulness, though not the legitimacy, of artificial butter. In a country whose population greatly exceeds its capacity to produce sufficient food, it is well to think twice, and many times twice, before the sustenance of the people is curtailed by an imposition of taxation. Such an act would be regarded by the masses of the people (an enormous majority of whom are not at all connected with agriculture, save as consumers of agricultural products) as protection in the interests of a class, and would consequently be resented and opposed to the uttermost.

British farmers, indeed, do not ask for protection, but they ask for fair play. This, of course is protection in a sense, but not in the ordinary acceptation of the word. We ask for protection, not against competition, but against fraud. We do not ask for protection that will artificially increase the value and price of our products, but we do ask for protection against that which artificially decreases the value of such products. And as we object to having our products unfairly depreciated in price, so we do not claim that our great competitor, arrant impostor though it be, shall be handicapped by a tax. What we ask for is this, viz., that butterine shall be sold under a name which will not deceive anybody. We do not specially object to the word "butterine," though it is imitative and adventitious; but we do object, with all the might that is in us, to butterine being sold as butter. Our contention is simply this, viz., that all artificial butter shall be sold as such, in order that people may know what it is they are buying. If the public prefer butterine to butter as a throat lubricator, well and good, only let them be under no delusion on the subject. Butterine, we know, can be made and sold for a much smaller price than butter, and still yield a handsome profit: therefore we say—let it be sold on its merits, and at what the public choose to give for it with their eyes open. We demand, shortly, that every pound or parcel of butterine shall be distinctly marked by a name which designates its real character and indicates its artificial origin, and we would not hesitate to fine a man heavily, or imprison him for violating the spirit and the letter of this demand. We want to protect the public against a secret fraud, an insidious imposter, and butter against a swindling competitor. This done, the public may buy butterine if they prefer it, at a price which is not increased by legislative action, and butter must take its chance in the field. So far, however, we have not been able to accomplish this, though we have tried a time or two. The Irish Home Rule problem obscures everything else at present; but we intend to "peg away" until we have had justice done to the dairy farmers, and to the public too.

Meanwhile I am glad to be able to notify a general improvement, though not a great one, in the condition of dairy farming. During the past 12 or 18 months, butter has been lower in price than any one remembers to have been the case before, in this line, in this country. Cheese, too, has ruled very low, though I remember it lower; and cattle have gone down quite one-third, as compared with three years ago. Now, however, there is an all-round improvement, though not a great one, and farmers are cultivating hope once more. It is not to be expected that we shall recover lost ground, but if the improvement noted continues, we shall be able to hold on to what we have, and in time may get once more into smooth water. So far we have had an uncommonly fine Autumn; stock of all sorts have thriven well, and the grain harvest has been a decided success on the whole. The hay crop as a rule was not well harvested, owing to the wetness of the Summer months; but there is a plentiful supply of Winter forage, and of grass on the pastures. As I write, however, we are in almost hourly expectation of one of the storms you are in the habit of sending us, and of which you are good enough to notify us beforehand. This may break up the fine spell of weather we are having, and hasten the advent of Winter; but we hope it will pass over and have done, leaving no evil legacy behind.

The Swineherd.

PORK PACKING.

COL. F. D. CURTIS.

THERE are special and rigid rules in force in connection with the slaughtering, curing and packing of all pork products. Every animal is inspected before slaughter, to detect any unsoundness or disease, as such unsoundness or disease would make it unfit for packing. The packer's own interest would not allow of his using any animal of doubtful soundness, as one piece of the same would spoil a whole cask or box in which it might be packed.

For the same reasons the hog must be perfectly cooled before slaughter, and so must the meat before packing. Each piece of meat is inspected before packing and each shoulder and ham. Hogs are watered at the slaughter-yards, as it helps to keep them cool, and they are also fed. By being fed they are more quiet and not so liable to get heated. There are enough selfish reasons to insure care and comfort for hogs in the yards and at the slaughter houses, aside from all sanitary reasons. If hogs are not fed they consume themselves, or, in other words, draw for support on the internal stores of flesh and fat which support life. It is cheaper to give them food and so keep them from becoming wasted on the one hand and peevish on the other. The slaughtering is done rapidly and so is the dressing, with all the appliances to make haste and to do the work well. There are rules for cutting to conform to the demands of the trade, and some localities, like Cincinnati, have special forms.

The following are the different forms in which pork is cut and barreled. The most common form is called "mess pork." All of the others are made from a closer selection of the meat and more particular trimming and packing.

STANDARD MESS PORK should be made from the sides of well-fatted hogs, split through or on one side of the back-bone, an equal proportion being on each side, cut into strips of reasonably uniform width, properly flanked and not backstrapped. One hundred and ninety pounds of green meat, and, between March 1st and November 1st, 200 pounds, num-

bering not over 16 pieces, including the regular proportion of flank and shoulder cuts placed four layers on edge without excessive crowding or bruising, shall be packed in each barrel, with not less than 30 pounds of coarse salt, the barrel to be filled with brine of full strength; or 30 pounds of coarse salt, and in addition thereto fifteen pounds of salt, the barrel to be filled with cold water.

PRIME MESS PORK should be made from the shoulders and sides of hogs weighing from 100 to 175 pounds net, to be cut as nearly as practicable into square pieces of four pounds each, the shank of the shoulder to be cut off close to the breast. One hundred and ninety pounds of green meat in the proportion of 20 pieces of shoulder cuts to 30 pieces of side cuts shall be properly packed in each barrel, with not less than 20 pounds of coarse salt, the barrel to be filled with brine of full strength; or 20 pounds of coarse salt, and in addition thereto, 15 pounds of salt, the barrel to be filled with cold water. There shall also be put into each barrel 12 pounds of saltpeter.

EXTRA PRIME PORK should be made from heavy, untrimmed shoulders, cut into three pieces; the leg to be cut off close to the breast, and in all other respects to be cut, selected, and packed as mess pork.

LIGHT MESS PORK should be made from sides of reasonably well-fatted hogs; and in all other respects be cut, selected and packed the same as mess pork, except that as many as 22 pieces may be put into each barrel.

BACK PORK should be made from backs of of hogs after the bellies have been taken off, cut into pieces of about six pounds each, and in all other respects to be cut, selected, and packed in the same manner as mess pork.

EXTRA SHOULDER PORK should be made from heavy trimmed shoulders, cut into three pieces; the leg to be cut off close to the breast, and in all other respects to be cut, selected, and packed in the same manner as mess pork.

EXTRA CLEAR PORK should be made from the sides of extra heavy, well-fatted hogs, the backbone and ribs to be taken out, the number of pieces in each barrel not to exceed 14, and in all other respects to be cut, selected, and packed in the same manner as mess pork.

CLEAR PORK should be made from the sides of extra heavy, well fatted hogs, the back-bone and half the rib next the backbone to be taken out, the number of pieces in each barrel not to exceed fourteen, and in all other respects to be cut, selected, and packed in the same manner as mess pork.

CLEAR BACK PORK should be made from the backs of heavy, well-fatted hogs, after the bellies have been taken off and the back-bone and ribs taken out, cut into pieces of about six pounds each, and in all other respects to be packed in the same manner as mess pork.

RUMPS should be trimmed with only enough taken off to make them neat and smooth; the tails to be cut off close, and in all other respects to be cut, selected, and packed in the same manner as mess pork.

EXTENT OF THE TRADE.

These are cuts for the home trade, and styles for curing and packing, and also for the British market. Some of these cuts are in imitation of those which are the most popular on the other side. Some of the most extensive pork-packing establishments in this country are owned and conducted by foreigners or were established by them, and they have branch houses in Great Britain. The packing trade is moving westward, and recently it has been started at Omaha on a large scale. It is also increasing in Kansas City and becoming less at Cincinnati and Minneapolis. Few people realize the extent of the pork business in this country. The hog pays the balance in our foreign exchanges, and furnishes more meat food for the people than anything else. [We object to its supplying the butter.] The aggregate number of hogs of all ages now slaughtered annually in the United States is estimated at about 30,000,000, averaging in dressed weight 175 pounds each, or 5,250,000,000 pounds of gross product, making a total of cured meats, lard, and other products of 4,725,000,000 pounds.

The Poultry Yard.

NEST BOX AND PERCH.

THIS is one of the neatest and handiest contrivances for the purpose that I have ever seen. Fig. 405 is a view of the front and one end. Fig. 406 is a bird's-eye view of the interior. The box is six feet long, 21 inches wide and 12 inches high. The entrance to the nests is at one end, and along a passage back of them. The nests are 10x12 inches square, the passage nine inches wide. A strip, S, four inches wide, running lengthwise of the box, back of the nests, serves to confine the material comprising the nests and to prevent the eggs from rolling into the passage. At the end of the passage, opposite the entrance, a hole three inches square is cut to admit air and light. The eggs are gathered by opening the shutter in front. The perch, P, stands three inches above the top of the box. It may be extended 20 or 30 inches beyond either end of the box if more roosting room is desired. There is no bottom to the box; it rests on the floor of the poultry house, and when it is desired to disinfect, paint, whitewash or apply insecticides, it can be picked up and carried out, the nest material swept up and burned, the floor scalded, dashed with lime, kerosene or other insecticides and the entire affair made clean and sweet in a jiffy.

The nests being hidden from the other fowls and most of the light excluded, the danger of eggs being broken or eaten is reduced to a minimum. F. GRUNDY.

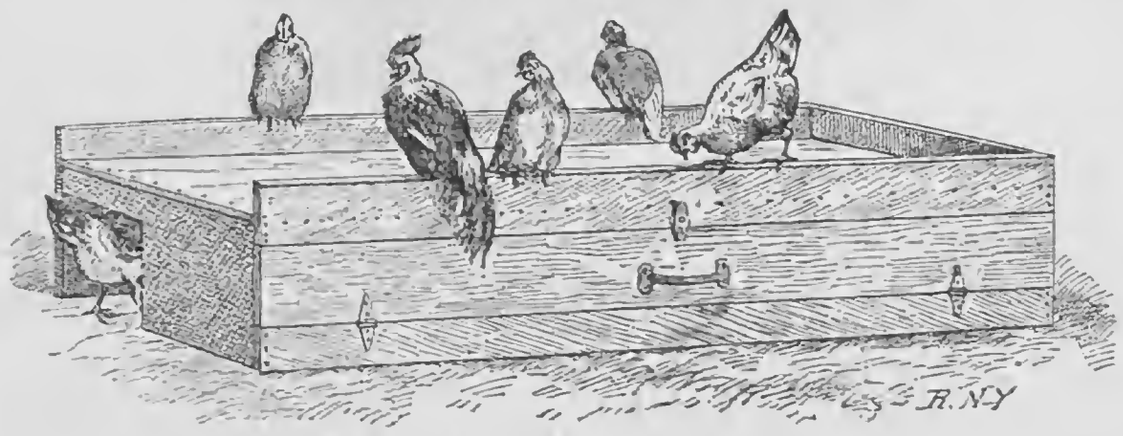
Christian Co., Ill.

POULTRY NOTES.

ON a narrow strip of ground just around our poultry yards, we are going to sow rye. It will be handy for green feed just when the hens need it. We are only waiting for a good rain now. The ground is as dry as a chip at present.

WE have planted two plum trees in each of our three yards. They are protected by means of flat stakes driven closely together around the trees, so far away that the hens cannot reach them.

NEXT Spring, when the hens first begin to stop laying, and when eggs go down in price, we expect to turn the hens all into two yards. This will give the third yard for oats, millet, or other forage crop. The cow will enjoy this, and it will go far towards keeping her. It will leave a good stubble for the hens to work over, and clean the soil in good shape. This will be cheaper than throwing out the surface soil and putting new soil in. It will give two years of manuring by the hens and one year of cropping.



NEST BOX AND PERCH. Fig. 405.

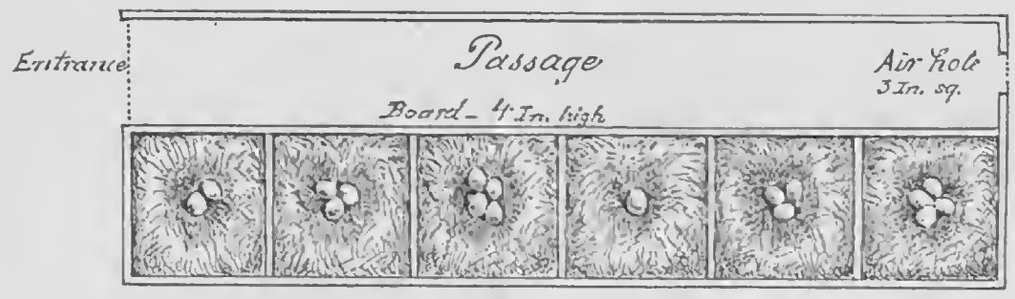


Fig. 406.

WE hope to keep lice out of the flock by not letting them get in. The houses are lined inside with tarred paper. Before the cold weather we mean to put a good coating of tar all over this. Lice can't stand tar. We make a business every now and then of dusting the fowls with insect powder. This is done at night while the hens are on the roosts. Take the hens from the roosts, hold them up by the legs and dust a pinch of the powder over their backs and under the wings. Two persons can easily treat a dozen fowls in 15 minutes. If we did not think this paid we should not do it.

WE expect to improve the laying qualities of our hens by setting eggs from our best layers. We mean to see which our best layers are and to mark their eggs for setting. As a rule, a square, "blocky," broad-chested bird, is a better layer than a long and slim bird. If we expect a calf from a good butter cow to make a good butter cow in her turn, there is no reason why we should not expect an egg from our best layer to produce a good layer. There is more in pedigree than there is in exterior markings.

THE Agricultural Gazette says that the time is coming when no good system of rotation of crops will be complete without poultry. It is proposed to move the fowls about from year to year to different fields. By means of light wire netting runs and houses on wheels this can be easily done. The design is to plow and cultivate the field in which the hens have spent a year. In this way the hens will manure the fields, the dangers from contagious poultry diseases will be lessened, and the waste product will be fed to advantage. This idea is sound. It will work well.

THE English papers are discussing the proper meaning of the terms cock, hen, cockerel and pullet. The idea appears to be that birds under one year old are cockerels or pullets. It is customary to speak of "chickens." Many farmers speak of their entire stock, young and old, as a flock of chickens.

Farm Topics.

CORRESPONDENTS' VIEWS.

FARM HELP.

Where can the farmer go to obtain good help, worth the cost? Cheap labor is the most unprofitable. No good farmer wants cheap hands. Near the city it is next to impossible to get skilled farm labor at any price. The temptation is great to employ cheap or tramp labor. Such service means a season of worrying and fretting over careless mistakes. Often the profits of a season are ruined by such cheap work. Cheap labor costs too much, yet good, intelligent farm labor is underpaid. A smart and capable young man is quick to see that he can make more money in a trade than he can on the farm, and have more time to himself. The trouble is that too much of the money for farm products goes into the hands of those who simply handle them. Consumers pay as much relatively for farm products as they do for other things. A quart of strawberries which nets the grower two cents, retails for 10 cents, and a pound of butter which retails at 30 cents nets the producer from 15 to 20 cents, and so on through the list. A swarm of middlemen, buyers, transportation companies, etc., take the legitimate profits of the farmer away from him. Unjust discrimination and unjust compensation make farming hard work and render farm labor difficult to obtain. The average pay of a locomotive engineer is almost $4 per day. This work does not require any more skill than it does to farm successfully and yet what former clears, as the result of his own labor, $1,200 a year? A brakeman or fireman can get $50 per month. The same grade of labor on the farm would ruin the farmer at over $20 per month and board. It requires as much skill to hoe corn or handle a cultivator as it does to couple cars or handle freight, and it is far more laborious. The farmer should be able to pay his hands as much as men of the same grade of intelligence could receive in any form of labor. Until he can do this, farm labor will be scarce and of miserable quality. The fact is that the handlers of farm products get so much more than their share of the compensation that they can pay higher wages than farmers can pay for the same grade of work.

Something must be done to equalize the compensation of labor. Farm products are worth so much in the hands of the consumer. The farmer must get more of this price and be enabled to improve the quality of labor by paying more for it. He must study out methods of getting his produce to market more cheaply. It must pass through fewer hands. Co-operation among farmers will work good and the support of laws that shall justly equalize transportation rates must be encouraged. J. H. G.

Queens Co., N. Y.

[R. N.-Y.—The real profits in farming do not appear in the amount of money actually laid up at the close of the year. If the engineer gets $4 per day for his labor, the point is how much can he put into the bank after providing for his family? Let him use the fruits, vegetables, milk, etc., that are used in the farmer's home, let him take his family out riding as often as the good farmer's family goes, and pay the regular price for such entertainment, and how much will he have left? When a boy on the farm years ago, there used to be young men who went to the city or railroads to work. They would come back at intervals with great stories of the money they could earn. But somehow they never *saved* any more than the young men working for $15 or $18 per month and board. The extra money earned was more than eaten up by the extra expenses. Farmers do support thousands of handlers. They do it grumblingly, but they do it all the same. They will continue to do it until they organize, study the question to the bottom and settle it themselves. The vast loads carried on the back of agriculture serve to show how much wealth lies hidden in the good old science for those who dig intelligently for it.

SOME CAUSES OF AGRICULTURAL DISTRESS.—Old farmers who came into this neighborhood 40 years ago paid for their farms with wheat at 50 cents, a market 25 miles away and merchandise higher than at present. Young farmers of the present day, with wheat at 75 cents and a market at the door, can hardly make both ends meet. Why? Politicians attempt to explain it all by the magic word —"Protection," but the thinking farmer finds other reasons. Besides the natural increase in the value of land, expenses have increased. Times have changed. Luxuries of the old days are necessaries now. Two things do much to keep the farmer back to-day. These are old debts and expensive machinery. Debts were contracted when wheat sold for twice its present price. Now to pay two bushels for one from land which yields less, is the task of these debt-ridden farmers. Can they do it? Could the manager of any legitimate business do it? The question must be answered in the near future or some of our best farms will pass from the hands of the workers into those of the capitalists. In the matter of expensive machinery the farmer should adopt these rules: 1. Buy no machinery until it is absolutely needed. 2. Buy no machinery until you know what you want and that the machine is what it is represented to be. 3. Buy nothing of tramp agents—buy from headquarters. To the farmer who is out of debt these times are as good as any the country has known. There are better bargains to be made now than at any time since the war, if one has capital.

Iouia Co., Mich. L. G. WOOD.

TOO HIGH A PRICE.—I met an old friend the other day, who has just been obliged to give up his farm. At least three times that I know of, he has taken money that ought to have helped pay his mortgage to buy things for his boys. These boys have had every chance, but they never have been made to work. Life came easy to them, and they seemed to think it always would. They are now married and doing common laborer's work or running farms on shares. They never have saved a cent, and owe plenty of small bills that they have been able to run up on the strength of their father's honesty. My friend says these boys have cost him $15 per month per boy. Figure that for 25 years, and it makes too much money to waste, even as a business venture. With that amount of money to spend upon a boy's education a good man ought to be produced—a man sound and strong to the core. How many farmers are making such men?

OBSERVER.

IF one-fourth of my hay was mouldy and damaged and I had four cows, I would sooner sell one cow than to scrimp the four on the good hay. That is my idea, every time.

Buck Co., Pa. H. T. D.

SEVERE drought has taught me one thing about growing grape cuttings. Beds of cuttings that were copiously watered came on better than ever before. I was once inclined to depend upon mulching and the natural rainfall, but hereafter I shall water copiously unless Nature does it for me. D. S. M.

Watertown, N. Y.

GOOD.—I dug on my farm a Rural Blush Potato that weighs six pounds. It is very irregular in shape. How is that for a giant?

Lake Co., Ohio. P. E. D.

THE picture of my Cheviot ram, in the RURAL of Oct. 9, was fine. He took first premium at the New York State Fair. He now weighs 275 pounds. He has taken eight first premiums and has never been beaten.

Otsego Co., N. Y. WM. CURRY.

MANY farmers have been ruined by the practice of lending their name as security for

a friend or neighbor. Never do it. It is hard to refuse sometimes, yet every man owes a solemn duty to his family. What is his is theirs, and he should run no risk of ruining them. R. C.

Orange Co., Vermont.

Field Crops.

KAFFIR CORN.

THIS is not a corn, except as all grain is called "corn" in some countries. It is a sorghum that will easily mature its grain as far north as Canada and probably in the southern part of that country. It will be remembered that the RURAL NEW-YORKER introduced the Rural Branching Sorghum years ago. It is now generally called Millo Maize in the South for the reason that some enterprising individual by the name of Millo advertised it and distributed it over the South by that name. As a northern plant we know of no other that will yield a larger amount of succulent, sweet leaves and stalks. It may be cut to the ground in midsummer, and it will not only continue to grow, but two or three stalks will start from the stump where one grew before. The trouble is that it will not with any certainty mature seeds north of North Carolina and Tennessee. We have now the Kaffir Corn, which, again, is merely one of the hundreds of different kinds of sorghum. But it is worthy of consideration by our northern as well as our southern growers. We have not as yet raised this Kaffir Corn, shown at Fig. 404. Seeds have

KAFFIR CORN. Fig. 404.

been sent to us by Mr. J. H. Alexander, of Augusta, Georgia, who furnishes the following account of it:

This grain was distributed in small quantity from the Georgia State Department of Agriculture in 1878, and in the hands of Dr. J. H. Watkins, of Palmetto, Campbell County, Ga., it has been preserved, and fully developed, and was first brought to public notice through him in 1885

It is distinctly different in habit of growth from all other sorghums with which we are acquainted. The plant is low, stocky, perfectly erect, the foliage is wide It does not stool from the root, but branches from the top joints, producing from two to four heads of grain from each stalk. The heads are long, narrow and perfectly erect, as shown in this illustration, and well filled with white grain, which at maturity is slightly flecked with red or reddish brown spots. The weight averages about 60 pounds per bushel. The average hight of growth on good, strong land is 5½ to six feet, on thin land, 4½ to five feet. The seed-heads grow from 10 to 12 inches in length, and the product of grain on good land is said to reach 50 to 60 bushels per acre. It has the quality common to all the sorghums of resisting drought. If the growth is checked by want of moisture, the plant waits for rain, and then at once resumes its processes, and in the most disastrous seasons has not failed so far in the South to make its crop. On very thin and worn lands it yields paying crops of grain and forage, even in dry seasons in which corn has utterly failed on the same lands. The whole stalk, as well as the blades, cures into excellent fodder, and in all stages of its growth is available for green feed, cattle, mules and horses being equally fond of it, and its quality not surpassed by any other variety. If cut down to the ground, two or more shoots spring from the root, and the growth is thus maintained until checked by frost.

The Kaffir Corn may be planted in the latter part of March, or early in April, in Middle Georgia. It bears earlier planting than other millets or sorghums. It should be put in rows not over three feet apart, even on the best land, and it bears thicker planting than any other variety of sorghum; it should be massed in the drill on good land, for either grain or forage purposes, and also on thin land, if forage mainly is desired. The first seed-heads form at the top of each stalk, and as soon as these show the grain well, the joints next below the top send up shoots which yield the second, third and often fourth seed-heads. If grain chiefly is desired, these heads may be all allowed to mature on the stalk, and then the whole stalk may be cured into fodder; for it is not, even then, so hard but that it will be easily cut up, and well eaten by cows and mules. But if the crop is wanted mainly for fodder, it is recommended to cut down the whole stalk when the first seed-heads come into bloom, at which stage it cures admirably and makes excellent forage. The second growth springing at once from the roots, will still mature a full crop of grain and a second full crop of forage before the middle of October —that is in Georgia.

Kaffir Corn is said to be as quick and early in its growth as the Minnesota Early Amber Cane—maturing seed about the same time. It is, therefore, reliable in any latitude in which the Amber Cane has been found useful as a forage plant, and by reason of the close massing of plants upon the land, and the wide and ample foliage, the yield of forage is equal in quantity and superior in quality to any of the later and taller-growing sorts, as the Rural Branching Sorghum, etc. The seed-heads of Kaffir are well eaten by all farm animals, and no harm has been found to result from continuous liberal feeding on both the grain and the whole plant, green or dry.

The Kaffir keeps green, and the stalk is juicy and brittle to the last, and is not a hard and cane like growth as other sorghums usually are found to be. Its low and manageable growth, ease of cultivation and harvesting, are points distinctly peculiar to it, and it leaves no troublesome stubble behind, as most of the sorghums do. Therefore, it is a desirable variety as a general-purpose plant, for green feed, grain, and dry forage on every farm, and for ensilage it should prove very valuable. Flour from the Kaffir grain has been found more nearly analogous to wheat than any other grain of its class. It is darker, of course, but is of like texture in the dough and in the cooking. For batter cakes, muffins, etc., it is excellent, having a slightly sweetish taste, otherwise not distinguishable from wheat; and for buckwheat cakes it is esteemed by many who have eaten of it, as an improvement on the original.

HOW A FINE CORN CROP WAS PRODUCED.

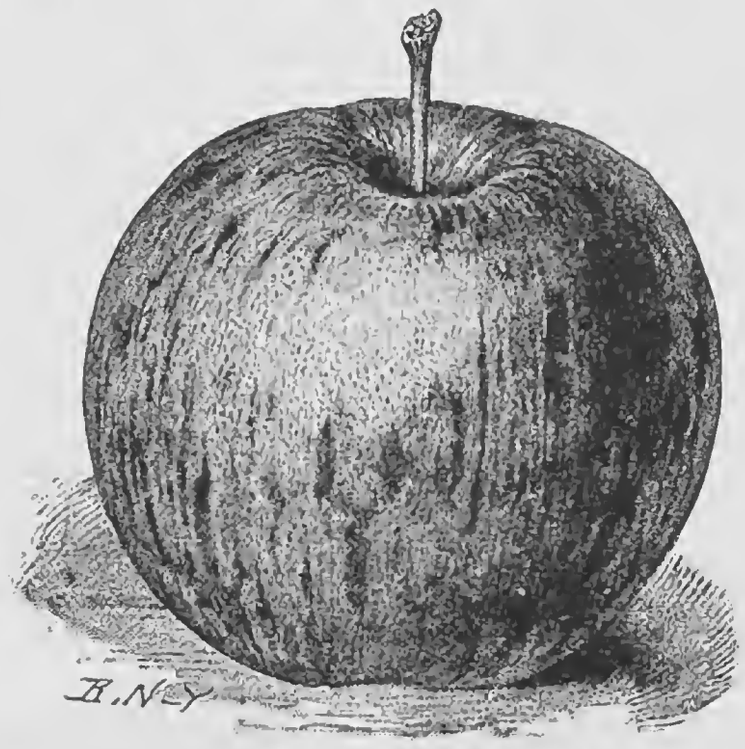
MY corn is extra good this year. I plowed up a clover sod that was not quite so good as I wanted, and put on a fair dressing of barn manure. Besides this, I used 300 pounds of phosphate per acre. The quality of the crop is the best seen from the price I got for it. I got $44 per acre for the standing corn, the buyer to do the cutting, husking and handling. The corn was worked with the horse four times and hoed twice. Can carry all the weeds on an acre in one hand. I put the phosphate into the hill on all the field but a strip at one side. In that I only put half the usual amount. When the corn got almost ready to tassel I put the rest of the phosphate at the foot of the stalk in the strip of ground I had left. This was easily done by scraping a little dirt away with the foot, dropping the phosphate and covering it with the other foot. The part of the field thus treated produced by far the best corn. The ears were larger and better filled. The part that received all the phosphate at first made the best start, but the other beat it in the end. That is the way I shall manure my corn hereafter. R. T. P.

Passaic Co., N. J.

Pomological.

THE PRESS APPLE.

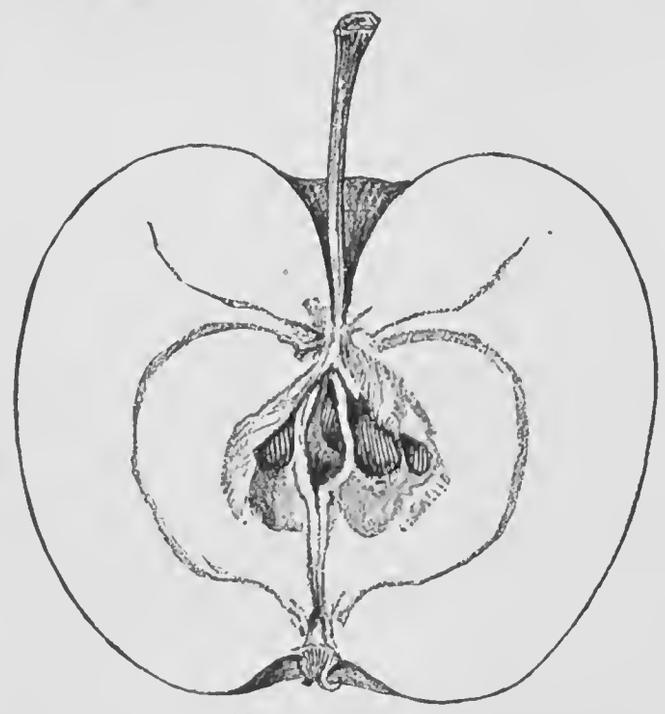
THIS lot of apples was received August 26. Our illustrations, Figs. 402 and 403, show the the shape. The color is a bright red streaked with darker red, sometimes like the Duchess



PRESS APPLE. From Nature. Fig. 402.

of Oldenburg. A very showy apple. Flesh tender, white, juicy, sprightly; agreeably subacid. We know of no better apple ripening at its season. It is well worthy of introduction.

F. L. Press, of New Providence, Ind., who sent us the specimens, says that about 12 years ago his father grafted several Early Harvest trees, one of which failed "to take" and sprouting up from the roots produced the tree that bore these apples. It has borne a full crop four times in the last five years. Its season is about with the Rambo or Seek-no-Further, October to December. Our readers should always bear in mind that engravings which are of the *exact* size of fruit always appear smaller in print.



PRESS APPLE. Cross Section. Fig. 403.

Miscellaneous.

CATALOGUES RECEIVED.

WHITMAN'S CONTINUOUS HAY AND STRAW PRESS.—Pamphlet from the Whitman Agricultural Co., St. Louis, Mo. This press is furnished with a new concentrated double-acting power, which is fully protected by U. S. patents. This new power is guaranteed to be fully one-third more powerful than the one used last season. The press as it now stands is claimed to be the most powerful, simple and rapid press in the world. Three sizes of presses are made which turn out bales 14x18, 16x18 or 18x22 of variable lengths. The 16x18 press with one horse will bale from six to nine tons in ten hours; with two horses, eight to 10 tons. A machine for making ties is sent with each press without charge. The pamphlet will be of interest to all who handle baled hay.

BROWN'S FENCE BUILDER.—Circular from John P. Brown, Rising Sun, Ind. This machine is used in making a picket fence, which is greatly praised for its durability and cheapness. The pickets are held in place by twisted wires fastened at intervals to posts. The builder runs easily and smoothly along on old boards laid on the ground, and works with such rapidity that a rod of strong fence can be built in eight minutes. Any kind of cheap material can be used for pickets. There are no nails to get loose. Boys or hunters cannot climb over it easily, as there is no support for the feet in climbing. All kinds of stock from chickens to cattle are kept out. The fence makes a good appearance. Send for the circular.

VICTORY CORN MILL.—Circular from Thomas Roberts, Springfield, Ohio. Four sizes of these mills are made, ranging in weight from 1,450 pounds to 75 pounds, and in price from $60 to $12. The larger sizes are designed for grinding feed, corn-and-cob meal, etc. The smaller size, No. 4, is designed for hand or machine power, for grinding corn, wheat, coffee, etc, etc. By its means meal can be ground for table use, and a good quality of Graham flour prepared. It is also useful in preparing food for poultry. These mills are highly praised by those who have used them. Mr. Roberts also manufactures stationary engines and boilers.

THE "CYRUS ROBERTS'" SHUCK-CORN SHELLER, CLEANER AND SEPARATOR.—Circular from Roberts, Throp & Co., Three Rivers, Mich. This corn sheller husks, shells and delivers the corn at any elevation. The corn can be run into a wagon or into bags as desired. The cobs are taken from the husk and delivered at one side, while the husks are blown out at the rear of the machine. Some remarkably strong letters of commendation are printed from those who have used the machine.

FARMER'S POULTRY RAISING GUIDE.—Pamphlet from I. S. Johnson & Co., Boston, Mass. Though intended primarily to advertise Sheridan's condition powders, this little pamphlet gives much information regarding poultry raising. Pictures of the various breeds are given. Hints as to the feeding and handling of poultry are made a special feature of the book. Aside from a tendency to unduly enlarge upon the profits of the poultry business by printing statistics and large "hen stories," the book contains much interesting matter.

LADIES' HOME JOURNAL published at Philadelphia, Pa. A very bright and readable paper which the ladies will surely enjoy. The stories are pure in tone, poor poetry is conspicuously absent, and the various departments devoted to the home are sensible and helpful. It is surely a Home Journal—one that will do good.

ALBERTSON & HOBBS, Bridgeport, Marion County, Indiana. A catalogue of fruits and ornamental plants. We notice the Lucretia Dewberry, Golden Queen and Carman Raspberries; the Purple-leaved Plum, Indian Apple, Salome Apple, Mariana Plum, etc, among the novelties.

WHITE HUCKLEBERRIES SCARCE.—A RURAL reporter says in the issue of September 11 that he understands 20 bushels of white huckleberries have been picked on the East Knob, Pike County, Pa. He must be able to make both news and huckleberries. I live within a mile of the East Knob and have picked over and around it for 10 years. I have never been able to find more than a handful of white berries at one time, and old berry pickers laugh at the idea of finding more than a quart. The writer must have mistaken the locality.

Blooming Grove, Pa. R. H.

A PATENT is pending for a new bug or insect catcher. This machine is mounted on four low wheels and runs astride of the row. The front is arranged so that the tops of potato vines are gathered in a bunch. At the back are two curved plates which strike the vines and are expected to knock the bugs into hollow cylinders where they can be caught and destroyed.

What Others Say

FEEDING SHEEP.—Jonathan Talcott's time of feeding, so he states in our esteemed contemporary, the Albany Cultivator, is at four to five o'clock in the afternoon for sheep or lambs that he wishes to fatten this season. That is a good time for the

farmer to begin to do his chores, as such work is commonly called on the farm. The sheep have pretty nearly done their grazing for the day, but will be very willing to eat a grain ration at that time. If this were fed to them in the morning, they would not have so good an appetite for grazing, and consequently would not do as well as when it is fed at night after their day's grazing is nearly over. The reason Mr. Talcott advises to sell wheat and rye, and substitute corn and oil meal in their places, is that he has seen sheep scour badly from eating wheat. No doubt they had too much to begin with, but they did not do well for some time afterward. Sheep feeding is very simple and easy, but it requires careful attention on the part of the shepherd to see that all have a chance to get their share; also that the sheep have full confidence in the person who feeds them, so that nothing is wasted either in feed or in flesh by fright or abuse of any kind. Mr. Talcott now has 45 lambs in a flock; they get a daily feed of oats, bran, with a little oil meal and salt, all mixed and fed about 5 P. M. It is an easy matter to take many of them around the neck and lift them; they seem to feel perfectly safe with him and show no fear. Such sheep or lambs if well fed always do well, and pay for their care and feeding in increased growth and early maturity, both in wool and flesh. As soon as the fall rains become cold and disagreeable, all fattening sheep should be housed at night, and fed a ration of first-quality hay, clover being preferred. After being fed their grain ration, they will eat a little every night, and that little will be of great benefit to either a fattening or store flock. Such attentions to a flock frequently show a balance on the side of profit, while the same flock neglected are kept at a loss.

SWILL FEEDING AND PLEURO.—Henry Stewart says, in the N. Y. Times, that the outbreak of contagious pleuro-pneumonia—as the disease is alleged to be—in the swill stables of Chicago is nothing strange. As this disease has its hotbeds in the swill milk dairies of Brooklyn, New York, Philadelphia and Baltimore, so the Chicago distillery-slop feeding sheds may be expected to breed this dangerous disease there. Hot, reeking wash from the stills, the foul and fetid atmosphere of the filthy dungeons in which the beasts are confined, and the insufficiency of this food to supply the needs of the animal system, all combine to poison the blood and produce disease. Just as hog cholera (intestinal fever) is produced in swine, so pleuro-pneumonia (lung fever) is produced in cattle by these overpowering unhealthy conditions. If the Bureau of Animal Industry is authorized to slaughter infested cattle, why should it not be empowered to prevent its origin in these pesthouses and from this pestilent feeding!

THE ROTHAMSTED ENSILAGE EXPERIMENTS.—The following summary of the conclusions at present to be deduced from the ensilage experiments appear from the pen of Sir J. B. Lawes in a late Agricultural Gazette: (1) That the crops which had been cut green and placed at once in the silo could be preserved for several months in a state suitable for food for stock. (2) That during fermentation in the silo, some of the nitrogen of the fresh food was destroyed, while another portion was changed from the albuminoid form to compounds of a lower food value. (3) That there was a considerable loss of other food compounds, amounting probably to about one-tenth of that contained in the crops when placed in the silo, while on the other hand there was no clear evidence that during fermentation any food was produced from substances which were not foods when placed in the silo. (4) That with very few exceptions, cows took readily to the silage, and when used with appropriate food—although slightly inferior to mangolds—it proved to be well adapted for dairy purposes. (5) That when used with cake and corn for fattening oxen, it proved to be quite equal to swedes and clover hay, used with like quantities of cake and corn. These results, comments the London Live Stock Journal, if they do not confirm the exaggerated statements that have been put forward by some of the advocates of silage, at all events prove it to be a useful food, and as such we may consider that further investigations in regard to its properties would be desirable.

THE JAPANESE BEAN.—We have several times called attention to the Soy Bean, which is so extensively eaten in Japan. Consul Hubbard sends to the State Department a translation of an article published by the Educational Museum of Tokio, from which we condense the following: The bean (Soja hispida) was first raised in China about 200 years B. C. Its use in Japan dates back to the 14th century. It is a round, yellowish-white bean, which in composition comes nearer that of animal food than any other vegetable product. The beans are used principally for making tofu or bean curd. They are soaked in water for 24 hours, and then ground in a stone mill into a thin pulp. This pulp is boiled, cooled with cold water, and then boiled again. It is then placed in a bag and pressed. The liquid is placed in a tub and receives a quantity of strong brine. This is well stirred into it, and as a result a curd forms about as thick as sour milk. This is the tofu. It is pressed into about the consistency of a cooked omelet, and cooked in various ways—fried, toasted, or made into soup. The warm water in which the beans are first soaked is used as soap, while the dry pulp is used as a fertilizer or as a feed for cattle and horses. An analysis of the Soy Bean shows it to contain:

Water	11.32
Ash	3.88
Fat	20.89
Albuminoids	37.75
Fiber	2.01
Starch, etc	24.08

It will be seen that it is particularly rich in fats and albuminoids; how rich may be seen by comparing it with other foods, as below:

	Albuminoids.	Fat.
Corn-meal	8.4	3.5
Oat meal	15.1	7.1
Rye-flour	6.7	0.8
Beans	23.2	2.1
Wheat-flour	11.1	1.1
Peas	22.9	1.8

The bean has been cultivated in Germany with success. The stalks and leaves of this plant, as raised at the Rural Grounds, are of little value as cattle food.

GENERAL-PURPOSE HORSES.—The "horse men" are down on the "general-purpose" horse Prof. Roberts says in the Weekly Press; but after all that's what the millions want. An old-fashioned Morgan enlarged to 1,100 to 1,300 pounds, with perfect feet and limbs, and after that as much style as one chooses to pay for—this is the type for every reasonable use and for money in any market. The general-purpose horse, no matter what name he is found under, is always inquired for. We admire the general-purpose man and woman. This country is populous with them. Not Jacks-at-all-trades and good for none; but evenly developed men and women good for everything their hands and heads find to do. But a very small fraction of the world's work can be done with slim, tucked-up thoroughbreds—or leggy, elephantine draft horses. Better far to raise first-class general-purpose horses for general-purpose men and women who want their work done cheaply, speedily and neatly.

GREAT FALL IN THE PRICE OF BEEF IN ENGLAND.—The wholesale price of beef has, says a Liverpool journal, of Oct. 2, not been so low for the last 30 years. Prime carcasses of American beef were disposed of a fortnight since at the Birkenhead Lairages at fourpence three-farthings (9⅓ cents) per pound. First-class store cattle were a drug at Chester fair, and could be sold only at a reduction of at least 50 per cent. as compared with the prices realized two years since. It is, therefore, expected that very heavy losses will be sustained by the exporters of American live cattle and dressed beef.

SILAGE FOR HORSES.—Mr. E. Stanley, Government Veterinarian for New South Wales, has conducted an elaborate investigation into the circumstances attending a serious attack of blood poisoning among horses at Coonong, in which sixteen valuable animals died. As a means of prevention, he suggests a change of feed for silage, such as chaff, with bran, oats, oaten hay and grass—and a constant supply of salt within their reach. The horses had been living on silage for the last six months, getting a fresh supply daily, and they did satisfactorily on it. "Cattle and sheep," remarks Mr. Stanley, "do well on this artificially-preserved food; but it is never advisable to limit animals to one article of diet. Change of food is as necessary for them as it is for human beings. No doubt ruminating animals, which have only to eat and sleep, and time to browse over the paddocks, stand a far better chance of thriving on food of this character than the single-stomached, hard-worked horse, who is required to exhaust his muscular strength day by day, so that he cannot thrive and work unless fed on clean and wholesome food with concentrated nutriment in small bulk. Hence, grain of some kind or other is his usual fare."

THE MINNEAPOLIS EXPOSITION.—It appears, according to the Minneapolis Tribune, that the recent exposition at Minneapolis was a success financially. The figures are given as follows: Cost of building, $270,636; mechanical equipments, heating, electricity, etc., $53,342; furniture, $4,354; total cost, $336,410. Total value of building and grounds, $550,000. The earnings have been $80,647, the last three days being estimated at $10,000. The net profit this year, the expenses being especially heavy, will be from $25,000 to $30,000. A dividend of from six to eight per cent. will be paid, and a fair surplus be left on hand for repairs on building and making preparations for next year's show.

CUTTING THE ROOTS.—In the case of the trees and large shrubs which we intend to transplant next Spring, we should now cut in their roots. This is done by describing a circle around the tree, say some three to six feet from the stem, and along this ring digging a deep, narrow trench in order to sever all the roots that stretch beyond. As soon as the trench is dug out, fill it up again. By this means, before planting time in Spring arrives the young trees operated on will so far have recovered themselves that with a hard heading in and proper attention in planting they do not suffer nearly so much as they would if the roots had not previously been cut around. This is the substance of excellent advice which Mr. Falconer gives the Press.

DEFECTIVE COTTON PICKERS.—According to the Savannah News the introduction of successful cotton-picking machines "is still apparently as far in the future as it was two years ago." The News adds: "There is no doubt that hopeful progress has been made by the inventors, and it is not disputed that experiments have been made in several instances that were very satisfactory to the parties concerned and to intelligent spectators; but if the practical success of the harvesters had been demonstrated it is pretty certain that the machines would now be in use on many plantations." The Mason Harvester Company, of Charleston, S. C., however, last Saturday invited the New York Cotton Exchange to send representatives to witness the trial of an improved machine in the open field at Sumter, South Carolina, on Wednesday last, and the Exchange appointed three delegates for the purpose. The value of the cotton crop is estimated at $250,000,000, and the cost of picking at $40,000,000, so there's room for a large saving by the use of machine power in the work.

THE COTTON HARVESTER EXPERIMENTS.—The Cotton Exchange committee, who attended the recent field trial of the Mason cotton harvester at Sumter, S. C., on the 13th inst., have made their report to the Board of Managers. They speak very favorably of the results of the experiment, saying:

"As a test we found upon timing its operations and weighing the result that the machine in its present shape has a picking capacity of about 2,000 pounds per day. We would further state that while some open bolls escaped the "picker stems" and were left on the plant, the general results were of such a character as to justify the belief that Mr. Mason has discovered the true principle, and may ultimately overcome all defects, and we congratulate him upon having made thus far the most successful solution of the problem."

The committee also speak in high praise of the Mason cylinder gin, based on the same principle.

SLUG-SHOT.—Mr. W. Barringer, of Ohio, says, in the Garden, he thinks the usually fair and impartial RURAL NEW-YORKER has become prejudiced against the use of slug-shot, or labors under a very imperfect experience in its use, and is unduly exercised in regard to its harmful influence. If it were necessary, he could cite many cases in his immediate neighborhood where it has been used, and not one bad result has come to his knowledge.

SLUG-SHOT AND PARIS-GREEN.—Dr. Hexamer says, in the same journal, that he believes that slug-shot is "less dangerous to higher animals" than the ordinary mixtures of Paris-green. Having used large quantities of Paris-green, and having had to entrust its mixing and application to hired men, he had ample opportunities to notice the constant danger to which those who handled it were exposed. In slug-shot—being already mixed and ready for use—all danger during the mixing operation is avoided, and also, on account of the arsenic contained in it being more evenly and uniformly distributed through the mass than this can be done on the farm, a given quantity of slug-shot can never contain as much poison as is frequently contained in an equal quantity of ordinarily mixed Paris-green and plaster. To this very fine and minute division of the poisonous principle contained in slug-shot, much of its efficacy is due, and it is mainly for this reason that even very small quantities of this insecticide prove so destructive to injurious insects.

SPIRIT OF THE PRESS.

WERE I establishing a home, my first act, after preparing protection from sun and storm, would be the planting of grape-vines says Chas. A. Green. Twine them about the stoops and piazzas, over the gables; cover the sunny sides of the out-buildings; build rough arbors of poles on the lawn and in the by-places, and let the vines clamber over these. Train them to stakes in the garden. Plant a vine.

THE coarsest manure, says Dr. Hoskins, in the Mirror and Farmer, should be drawn out and spread in the Fall, so as to allow the Fall rains and the melting snows to wash all soluble matter into the soil. Then in the Spring the coarse remainder can be turned under, and in its decay exercise an ameliorating effect upon the earth itself. The doctor is entirely opposed, upon grounds of experience, to composting or keeping manure, with the often and long recommended view of increasing its values. Dung is never worth any more than when it is dropped, and under all ordinary circumstances it is losing value every day afterwards until it is put where it is to stay..

THERE is still time to increase the rhubarb plantation by dividing the roots and replanting them. A litttle covering will help to secure a strong growth next Spring.....

THE farmers about the Rural Grounds all broadcast their seed rye. One of our best farmers uses the Cahoon broadcaster. He thinks that the rye is sown in half the time that it can be sown by hand, while it is distributed more uniformly.....

A WRITER in the Canadian Horticulturist living in Owen Sound, praises the Golden Queen Raspberry as a grand grower and altogether promising.....

THE Springfield Blackcap (thornless) has a peculiar and very pretty habit of growth. After the canes reach the hight of four or five feet they become mere switches and gracefully droop over on all sides giving the plant quite the appearance of a weeping bush.....

OLIVER W. HOLMES says that writing is like shooting with a rifle; you may hit your readers' mind or miss it; but talking is like playing at a mark with the pipe of an engine. If it is within reach and you have time enough you can't help hitting it.....

MR. HOLMES also says that only very rich persons can keep race-horses, and everybody knows they are kept mainly as gambling implements. They are gambling implements as much as roulette tables. .....

LONDON is like a shelled corn-cob on a Derby day, says Mr. Holmes, and there is not a clerk who could raise the money to hire a saddle with an old hack under it that can sit down on his office stool the next day without wincing.....

PROF. SHELTON finds that Orchard Grass will stand any amount of tramping and close grazing. He thinks, as we have already told our readers, that it is a mistaken practice to sow very thickly in order to counteract its tendency to grow in tussocks.....

THE S. S. Times truly says that skill in any one direction is commonly a result of toil in a great many directions. No man can do one thing well, if he never does more than that one thing. Let him who would be a mechanic or a farmer or a business man or a preacher bear this truth in mind.....

NOT one of the least of the qualities we desire in a rose is fragrance; in this regard all classes must do homage to La France, which H. W. Ellwanger characterizes as the sweetest of all roses. If he were compelled to choose one variety it would be La France. It is rather tender, but it can easily be protected, and so winter safely. It does not always open well, but it is a simple matter to assist it; an operation not practicable with most varieties that do not open perfectly. If La France does not develop well, by pressing gently with the finger the point of the bloom, and then blowing into the center, the flower will almost invariably expand, the pent up fragrance escape and almost intoxicate with delight our sense of smell.....

W. C. BAXTER, of Kansas, says the Industrialist, dug a sweet potato weighing six pounds.....

PROFESSOR LONG, of England, advises working people to keep a goat, because it can be kept more cheaply than any other animal and will yield a profitable return in milk. He thinks the expense of maintaining one would not exceed $5 a year, while it will eat almost any kind of food and yield from 1½ to two quarts of milk a day worth at least eight cents a quart. We find this bit of information in the Live Stock Indicator.....

IT is pretty certain that we shall have large importations of English potatoes this year, in spite of the import duty of 15 cents a bushel. In Cheshire, close to Liverpool, the crops this year of potatoes are absolutely unprecedented, and the price is lower than ever before quoted in the Chester market. Really splendid Magnum Bonums are quoted at wholesale prices as low as £2 ($10) per ton.....

FIVE pounds of common white beans ground fine, and fed in half-pound doses with bran twice daily, will cure the worst case of bloody milk, says a writer in the Farmers' Gazette, England .....

No man ever found pigs profitable who did not provide warm, sheltered beds for them in cold weather. Food supplies heat, and where

the heat is wasted by exposure to extreme cold, the animal cannot lay on fat. A little attention in providing comfortable quarters for the pigs will make all the difference between profit and loss in feeding.....

HENRY WOODS, of England, asks if the present system of over-feeding breeding stock leads to the beneficial reproduction of superior animals? He very much doubts it. He would ask any practical, thoughtful man if it is not an incontrovertible fact that the present pernicious plan of forcing breeding animals for exhibition by high and pampered feeding does not tend to make them impotent, delicate and unhealthy?.....

MR. WOODS could quote many instances where the produce of priceless animals have been sacrificed by being forced for exhibition. Mr. James How had a matchless Short-horn cow called Lady Anne, one of the best animals ever seen. She won him 26 money prizes, 10 cups and four medals, and bred three calves. The first, a bull calf, from a marked defect, was sold at a small price as a yearling. Number two calf was a heifer, and died when six months old. The third and last calf was born prematurely and only lived a few hours. Thus, a priceless animal and her produce were lost, not only to the owner, but to the breeders of the country. Had the cow been kept in fair breeding condition her progeny might have been available for the benefit of other herds.....

THE Farmers' Review says that though veterinarians scout the idea of spontaneous development of pleuro-pneumonia, there must have been such development to first introduce it, and what has once developed naturally may be repeated. This question was the subject of a controversy between Henry Stewart and Dr. Salmon in these columns last year...

THOSE who feed the well-kept horses of Adams Express Co. always put a handful or so of cut hay with the oats, otherwise a large part of the oats is not digested.....

OF all the signs of hopeless barbarism, says the Watchman, none is more infallible than the knife in the hand of a quack veterinary surgeon when he splits open a poor cow's tail to deprive her of what little blood she has got, and to season the rest with pepper and salt.....

A WRITER in the Live Stock Indicator believes it to be a fact that the Holstein is winning its way rapidly in the regard of our people as the grandest "combination cow" known. The cow in the hands of our farmers that will give the most milk, and then be easily turned into a good beef carcass, seems to be the Holstein.....

NIAGARA GRAPE.—An inquirer asks of Mr. J. J. Thomas, of the Cultivator, for the decision of cultivators on the present character and reputation of the Niagara Grape. After examining it for some years and fruiting it on his own ground, he says that while moderate in quality, its several characteristics of rampant growth, great productiveness, hardiness, and handsome appearance, will give it prominence as a market fruit until better sorts shall displace it. Its large and showy bunches have aided in giving it a high price in market, which will recede as it becomes better known. That is Mr. Thomas's opinion and we do not see that it is at variance with the RURAL'S opinion given several years ago when it first fruited at the Rural Grounds.....

LONDON dog owners are obliged to muzzle their pets. It is thought that by compelling all dogs to wear muzzles while at large, rabies can in time be exterminated. The police have orders to kill all unmuzzled dogs. The number of cases of rabies has been reduced, but so long as country dogs run at large, the disease cannot be entirely stamped out. Many people seriously object to the muzzles. It is claimed by some that the dogs are made ugly and bad-tempered by their use, and that they only prevent a muzzled dog from defending himself against a mad unmuzzled dog. On the other hand, it is claimed by veterinarians that a dog will become so accustomed to a muzzle that it will bother him but little more than a collar.

Everywhere.

RURAL SPECIAL REPORTS.

Massachusetts.

SANDWICH, Barnstable Co., October 7.—In many townships in the upper part of Cape Cod frost has done disastrous work in the cranberry bogs; while the bogs near the salt water were but slightly touched. Fully two-thirds of the cranberry crop had been harvested before the blighting frost appeared, but it is estimated that three-fourths of the berries remaining on the vines yesterday are a total loss. Many bogs were flooded yesterday, thereby saving the berries growing on them Colder weather is expected to-night, and it is feared to-morrow's reports will show heavier losses from frost than for years. L. M.

SPRINGFIELD, Hampden Co., October 7.—The average of tobacco is still on the decline throughout the Connecticut Valley, and the Hadley meadows are returning to broom corn. In the New England States potatoes yielded well and abundantly. The apple crop is not up to last year's, but pears were never so plentiful. M. L.

New York.

APALACHIN, Tioga Co., October 9.—Crops are very good. Oats a fair yield. Corn extra good. Potatoes an average crop—all the way from 100 to 200 bushels per acre in this county. Hay about two-thirds of a crop. Corn is worth about 60 cents; oats, 32 cents; potatoes, 35 cents, and no rot. D. E. S.

Texas.

ABELINE, Taylor Co., Oct. 10.—The crops were a complete failure during the early part of the season, but after the rains commenced (about August 30), a great many field peas, and turnips, and sorghum, and millet were planted, so that if we have a late frost there will be plenty "roughness" raised yet. There has been plenty of rain since it started, and the farmers are putting in a large crop of wheat under the most favorable conditions. C. R. JR.

Virginia.

RICHMOND, Henrico Co., October 16.—Our tobacco market this week shows more strength than last week, inasmuch as holders of desirable bright wrappers and fillers are not pressing sales as they were a few weeks back, and there is more disposition to buy even at prices asked, only the would-be buyers have all more or less undesirable stock that must first be unloaded. A few lots of good wrappers sold at advanced prices of two to three cents per pound. Several lots of bright cutters have also disappeared from the market at prices above 30 cents, and now more is asked for an inferior quality. Medium grades are firmer, but sales meager up to this time. There has been nothing to test the dark market, which must still be quoted quiet and without any interesting feature. The short and frosted crop has had no particular effect upon prices of offerings here, as there will be very few if any primings saved this year, and as this becomes known holders of low grades of old leaf hope to see better values for common in a short while. What new bright has been sold in the interior markets has sold very much higher proportionately than old. T. H. M.

ANSWERS TO CORRESPONDENTS.

(Every query must be accompanied by the name and address of the writer to insure attention. Before asking a question, please see if it is not answered in our advertising columns. Ask only a few questions at one time. Put questions on a separate piece of paper

COMB HONEY MAKING.

Subscriber, Nova Scotia.—I have a few colonies of bees, some in box hives and some in movable frame hives, how can I get them in the best shape for making comb honey? When I got them in movable frames I thought the trouble was all at an end; but I find they build their combs in the wrong places and of wrong shapes; what should be done? All the instructions I have seen, might suit a person who understands the business, but not a beginner.

ANS.—There are several things needful in order to get nice comb honey in abundance, and not the least among them is experience. The bees must be in movable frame hives, and it is better still if the frames are reversible. The colony too should be strong, which necessitates a prolific queen. Some warm pleasant day during fruit bloom next Spring, all the bees in box hives may be transferred to movable frames, or, what is now considered by many as a better plan, wait until the storing season begins, and transfer the bees upon empty frames, or frames filled with brood, and then the bees are obliged to go above to store the honey, and as fast as new comb is made below the queen will fill the cells with eggs. If this method is followed, a queen excluder must be used above the frames. By the use of a division board, keep the brood chamber contracted so it will only contain as many frames as the bees can well cover; then as the bees increase in number, add a frame of empty comb next to the outer one containing brood. The queen, if she does her duty, will soon fill it with eggs. Then as the bees increase in number enough to cover another frame, insert it in a similar manner and so continue until the brood chamber is filled. This chamber, according to Doolittle, who is good authority, should never exceed 1,500 cubic inches inside the frames. It is of prime importance that the queen be got to laying early in the season, so as to have the colony strong when the storing season begins, and then, if the brood chamber is well filled with brood, the bees will be forced to go above to unload their stores. If there is nothing for the bees to gather early in the season, and the queen is dilatory about laying, feeding a little each day will have to be resorted to.

If the bees are inclined to store within the brood-nest, by using reversible frames and turning the brood comb the other side up, the the bees will be induced to take the honey, which is now thrown below the bees, up into the boxes. If the frames are not reversible, the same end can usually be accomplished by breaking up the caps with a knife or stick. By keeping the frames the right distance—half an inch—apart, and using wired foundation, it is an easy matter to keep the bees from building comb in the wrong place and shape. Instructions for managing the honey-board and sections, are given in an article in a preceding number of this paper by Prof. Cook. Last, and most important of all, the novice should provide himself with the best bee literature If the instructions given in such works as, Prof. Cook's Manual of the Apiary, A. I. Root's A. B. C. of Bee Culture, or Quinby's New Beekeeping are well digested this winter, success will be almost certain.

KEEPING SWEET POTATOES THROUGH WINTER IN GEORGIA.

F. T. Carr, Mo.—How can sweet potatoes be kept through the Winter?

ANSWERED BY P. J. BERCKMANS, AUGUSTA, GA.

Digging the tubers should be delayed until the vines have been sufficiently touched by frost to check vegetation. Allow the potatoes to dry off in the field, which will take but a few hours. Then sort all those of eating size to be banked separately from the smaller ones. The banks are prepared as follows: Make a circular bed six feet in diameter in a sheltered corner of the garden, throwing up the earth about a foot high. Cover this with straw and bank up the tubers in shape of a cone, using from 10 to 20 bushels to each bank. A triangular pipe made of narrow planks to act as a ventilator should be placed in the middle of the cone. Cover the tubers with straw six to 10 inches thick and bank the latter with earth, first using only a small quantity, but increasing the thickness a week or ten days afterwards. A board should be placed upon the top of the ventilating pipe to prevent water from reaching the tubers. Several banks are usually made in a row, and a rough shelter of boards built over the whole. The main point to be considered in putting up sweet potatoes for Winter is entire freedom from moisture and sufficient covering to prevent heating. It is therefore advisable to allow the tubers to undergo sweating (which invariably occurs after being put in heaps) before covering them too much, and if the temporary covering is removed for a few hours, a week after being heaped, the moisture generated will be removed and very little difficulty will follow from that cause. If covered too thickly at once, the sweating often engenders rapid fermentation, and loss is then certain to follow. Sand is never used here in banking potatoes. Some varieties of potatoes keep much better than others. The Yellow Sugar Yam and the Pumpkin Yam are the most difficult to carry through, while the Trinidad potato keeps as readily as Irish potatoes, only requiring to be kept free from frost and light by a slight covering of straw if the tubers are placed in a house. Next in keeping quality come the Hayti Yam, the Red-skinned, Brimstone, Nigger Killer, and, last of the potato section, is the Nansemond.

FEED FOR FATTENING STOCK, ETC.

Subscriber, Lyndonville, N. Y.—1. Is there a thrashing machine that will cut the straw as fast as it is thrashed, and if so who is the manufacturer? 2. Will fattening stock—sheep and steers—eat more straw cut than when fed whole? 3. Will it pay to give fattening steers straw as their main forage, cutting it and mixing it with corn and linseed meals, the whole to be wet up?

ANS.—E. W. Ross & Co., of Springfield, Ohio, make a cutter which can be attached to any thrashing machine, in such a position that the straw will fall into it as it comes from the thrasher, and be cut as fast as thrashed. We know of no other, though there may be such. 2. Not unless it is wet and mixed with meal of some kind. The principal advantages in cutting it are that it packs closer in the mow and the manure from it handles much nicer and faster. 3. We think it not desirable to mix meal with any cut forage, wetting it up for fattening stock, but prefer to feed the meals mixed together and with bran, if that is fed, and the whole fed dry. It is less trouble, and we have had fully as good results. We prefer to give fattening steers one or more feeds a day of hay (clover hay we consider best), or one feed of hay and one of corn fodder, and in addition, all the good straw they will eat, and the more grain given, especially if it be such as is rich in albuminoids, the more straw they will consume. Of course, if one is short of hay, by feeding largely of linseed meals and bran the steers will do very well fed mostly on straw for forage.

LEGAL AND MORAL ASPECTS OF GATHERING WILD FRUIT.

R. M., Norwich, Conn.—For years it has been the custom for people to take nuts, wild blackberries, etc., without consulting the owner of the land; is doing so a sin in the sight of heaven, and is it illegal?

ANS.—From the earliest days in New England and many other States, fish in the streams, lakes and ponds, wild game wherever found, wild strawberries, blackberries and huckleberries in fields and pasture lots, chestnuts, hickory nuts and hazel nuts in the woods have been considered common property, which every one was entitled to take without consulting the owner of the land on which the game was taken or killed, and the fruit gathered. There is no doubt whatever, that the land owner has a perfect legal right to prohibit all the outside world from gathering such fruit on his premises, and any person who goes on the land for the purpose commits a trespass, and not only is the trespasser himself liable to the land owner, but all who buy and consume the berries so picked are responsible. In the case of Parker *vs* Wright in Maine, the plaintiff owned wild land over which berry-pickers had roamed without leave for years. They carried off 1,500 bushels of blueberries to the defendant who had a large blueberry canning establishment at Jonesport, Me. Parker brought suit and recovered over $1,000 from the defendant, although the latter had paid for the berries, and did not know the pickers had no right to them. Where fish, game and wild fruit have long been regarded as common property, however, it is advisable for any one who objects to the custom on his land, to make his objection known by putting a conspicuous sign, forbidding anyone to enter the land for the purpose of securing them; otherwise a magistrate may dismiss the case. Wherever the owner objects and makes his objection known, it is a legal trespass and a moral wrong to go upon his land for any such purpose.

ABOUT IMPORTING CATTLE.

F. C. S., Elizabeth, N. Y.—1. What is the probable cost of importing six head of Swiss cattle? 2. Does the steamship company take care of the cattle coming over, or is it necessary to have a man come with them?

ANS.—1. The probable cost of importing the cattle will be, for actual transportation, about five pounds, or $25, exclusive of food and attention. 2. The steamship company will take care of cattle coming over, charging only the actual cost of service and food; but if a considerable number are imported (say six), it would probably be better and cheaper to have a man come with them. The usual course of procedure in importing cattle, is, first, to obtain a permit from the Secretary of the Treasury. The cattle may then be purchased. It is then necessary to go before the Consul at the port of exportation and make an affidavit that they are intended for breeding purposes only. After the cattle arrive, they must be entered at the Custom House and another affidavit is required that they are intended exclusively for breeding. This of course is to avoid the import duty. The doctor at quarantine is telegraphed for and the cattle are taken to Garfield, near Passaic, N. J., where they are kept for 90 days from the date of their shipment from Europe or port of exportation. The sheds at quarantine are free, but the owner is required to furnish food and attendance. As a matter of course, these rules apply only to neat cattle. The Monarch Steamship Company is doing most of the cattle carrying trade, because its steamers are wider, higher between decks, and carry water ballast, thus rendering them steadier in their motion and permitting perfect ventilation.

THE BROAD-NECKED PRIONUS.

F. E. H., Cawker City, Kan.—The accompanying grub is doing some damage to young trees and vines here. It eats the roots in the ground and attacks apples, mulberries, and grapes. Here it isn't very numerous yet, but I have heard of vineyards in the neighborhood completely ruined by the pest. What is it, and what can be done to circumvent it?

ANSWERED BY PROF. A. J. COOK.

The large grub is one of our largest borers. The beetle is known as Prionus laticollis. It appears in midsummer. It is brown or brownish black, and sometimes more than 1½ inch long. The jaws are strong, the thorax short

and wide and armed with three teeth on each side like all of the beetles of the family to which it belongs—Longicorns or Cerambycidæ—it has long, slim antennæ—the horn-like organs which project from the head. The grub which does the damage is yellowish-white in color, with a hard brown head armed with two strong jaws. It may grow to two or three inches in length. It feeds as a larva for three years. It bores inside the roots just beneath the ground, and is often very harmful to grape-vines. As this borer is so well concealed we can not hope to know much of its presence till we find the vines are dying. In such cases the diseased vines should be carefully examined, and as soon as the enemy is determined and found, should be destroyed before it destroys any more. This insect has not been usually accused of injuring apples, but I see no reason why it might not do so; and if F. E. H. is correct, it certainly does damage to young apple trees as well as to grape-vines.

FEED FOR COWS, ETC.

J. M. S., Watertown, N. Y.—1. Which is the best food for milking cows, wheat or buckwheat bran, the price being the same for each? 2. What proportions of the various feeding stuffs make the most profitable food for cows? 3. What are the relative exhaustive effects of the various grains and grasses, also of potatoes and roots when raised as farm crops?

ANS.—Something depends on the purpose one has in feeding the cows; but in any case we prefer the wheat bran; buckwheat bran is more than half woody fiber. 2. If we knew what the cows were kept for, we could answer this much more definitely. A good ration for butter-making is composed of two parts of corn meal; one part each of new-process oil meal and wheat bran. Another would be oats and corn equal parts ground together, and one-half as much oil meal as of either added. If fed for milk alone, give more bran and less corn in the first ration. 3. To answer this would require a volume. In a general way, oats are regarded as a very exhausting crop. So is corn, particularly of potash. The same may be said of potatoes and mangels. Timothy is regarded as a harder crop than clover. In all cases if the refuse parts are fed to animals and the manure carefully saved and returned to the fields all crops would be much less exhaustive than they are as the land is usually treated.

DRAWING WATER FROM A DISTANT WELL.

J. G. L., New Alexandria, Pa.—What kind of a pump will draw water from a well 12 feet deep and 60 feet from the place for the pump, and what sort of pipe should be used?

ANS.—There would be no difficulty in drawing the water from the spring in the following manner: dig a trench from the spring to where the pump is to be fitted, deep enough to be safe from freezing. Lay a pipe—the rustless iron pipe will be the safest and cheapest—in the trench and attach it to any good suction pump. A check valve should be fitted to the end of the pipe in the spring to retain the water and prevent leakage. Care should be taken to secure the joints of the pipe by means of white lead packing on the screws. A pump has been used by the writer in this manner to bring water from a distance of 125 feet up an incline of 25 feet with perfect ease. The cost of the pump and pipe will depend on the size, and full information on this point can be obtained from the nearest plumber or tinman who deals in pumps.

APPLES ON PARADISE STOCK.

F. E. H., Cawker City, Kans.—1. Which is the better plan—to bud or root-graft the apple on Paradise stock? 2. What is a fair average crop of fruit per tree?

ANSWERED BY P. BARRY.

To bud by all means, and the tree should be planted so that an inch or two of the stock will be above the surface of the ground. If planted as dwarf apples frequently are, so that the point of union between stock and bud is below the surface of the ground, the tree will soon form roots above the bud and the advantage of the Paradise stock will be lost. 2. An average crop per tree will depend upon the age and condition of the tree as well as the care and culture it receives, and on the variety besides. We have seen dwarf apple trees produce a bushel. They are very prolific, and an important point in their management is to prevent their bearing too heavily.

GOVERNMENT LAND OFFICES IN NEBRASKA.

W. E. W., Medina, Mich.—1. What State or Territory in the West offers the best chances to a young man with a few hundred dollars? 2. From whom can I get information about land that can be homesteaded in Nebraska?

ANS.—1. That will depend entirely on the man himself and the business he is best fitted for. A vast fortune can be made by such a young man in every State and Territory in the West, if he is the right sort. 2. Apply to the Registers of the Government Land Offices. A short time ago the Registers were the following: E. S. Butler, Neligh; H. W. Parker, Beatrice; C. W. Pierce, Lincoln; B. F. Chambers, Niobara; C. Hostetter, Grand Island; A. D. Duckworth, North Platte; J. W. Switzer, Bloomington; Joseph Morris, Valentine, and G. S. Laws, McCook. A letter inclosing a stamp for answer, addressed simply to the Register, at any of the above places, should secure the desired information.

WHEN TO SOW FERTILIZERS ON WHEAT.

C. A. B., Grand Rapids, Mich.—Which would be better—to sow commercial fertilizers on the growing wheat at this time or wait until Spring, the land being level?

ANS.—We should not do either; but would sow the fertilizer on the snow in midwinter, or even February or early March. If the fertilizers are sown now, the finer portions would collect in the sheaths and injure the stems or leaves. Besides, more or less of the nitrogen, if in the form of nitrates or ammonia, would be carried through the soil before Spring, and be lost to the plants.

CORN AND BARLEY AS FEED.

D. O. D. (address mislaid).—1. What do you think of barley as a food for cattle and sheep? 2. How does it compare with corn at present prices?

ANS.—Barley is a splendid food for growing stock of any kind, as it contains more of the flesh-formers and of bone builders than corn, but less of the material (including oil) from which fat is made. It is more of the nature of wheat than corn, and contains only one-third as much free oil as corn. 2. At present prices, corn is much the cheaper food for full-grown, fattening animals. With the 48-pound bushel of barley and 56-pound bushel of corn the proportionate prices should be about 39 cents for barley and 35 cents for corn.

LAND OFFICES IN KANSAS.

L., Arkadelphia, Ark.—Information as to the location of government land in Kansas, can be best obtained from the land agents in that State. The following were the Registers some time back. If any changes have been made of late, a letter simply addressed to "The Register of Land Office," at any of the places should elicit an answer:—J. J. Fisher, Topeka; J. M. Hodge, Selma; M. J. Salter, Independence; R. L. Walker, Wichita; J. Bissell, Kerwin; S. H. Dodge, Concordia; W. R. Brown, Larned; B. J. F. Hanna, Wakeeney, A. C. Patchin, Oberlin.

Miscellaneous.

W. G., Mt. Cisco.—One of my hens seems paralyzed on one side. She holds one leg out straight, and will not bear any of her weight on it. She seems in great pain. What is the trouble?

ANS.—The trouble is probably rheumatism or paralysis. In either case there is not much hope of a cure. Give easily digested food, such as bread and milk, a little cooked meat, etc. Give also a pill of half a grain of colchicum and a grain of opium. Rub the leg with crude petroleum and keep the bird warm and quiet.

DISCUSSION.

AGAINST THE JAPAN CHESTNUT.

W. R. S., LAHASKA, BUCKS CO., Pa.—My two bearing Japan chestnut trees dropped their first nuts Sept. 26; to-day, Oct. 12, they are all off. The nuts are rather larger than good-sized American chestnuts; but some of the latter are fully as large. This is the eighth years since the trees were planted, and this is their first bearing year. Unless I saw the nuts planted, and the fruit on the trees, I must believe the statement that they bear in three years from planting pure and undulterated bosh and buncombe. Any prosperous graft will bear in three years—even hickory. As the RURAL is inclined to doubt all adverse reports about that wonderful chestnut, I inclose some leaves so as to leave no doubt that my trees are genuine Japan chestnuts. From the representations of catalogues one would suppose the nuts could be roasted whole with diffienlty, and after the hulls had been taken off they could be placed on the table for dessert and divided into large or small pieces, as appetite desired. One would have to hunt for the pieces carefully with a microscope.

R. N. Y.—We are not inclined to doubt anything respecting the Japan chestnut and are glad to hear from our friends all they know of it. We know of trees that bore when four years old from the seeds. We know of trees that bear nuts three times the size of the best American chestnuts, and we likewise know of trees that bear nuts scarcely larger than the latter. The seedlings vary as do our American chestnut seedlings. Some are excellent in quality; some poor.—EDS.]

THORNLESS RASPBERRIES.

S. W. H., PENDLETON, IND.—In the RURAL of September 25 is an article on thornless raspberries and blackberries. We have a thornless red raspberry growing in our garden and orchard that is entirely hardy, and has never failed to bear. I know nothing of its origin. It was about as early as Hansell this season, and continued bearing for a month. It grew beside Doolittle, Mammoth Cluster and Hansell, and is larger and more vigorous in growth, as well as more productive in fruit than they. The fruit in quality and size compares favorably with the Hansell. If a trial of a few plants is made at the Rural Grounds and if they do as well as here, the editor will modify his opinion that "there is no valuable thornless raspberry."

R. N.-Y.—We should be pleased to try a few plants.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING October 23, 1886.

B. P. M.—R. P. M.—W. C. T.—C. L. Y.—A. E. H.—M. G.—C. N. Y.—W. R. S.—C. R. W.—J. W. W.—N. W. S.—U. S. G. Mc. C.—M. N.—W. P. C.—L. B.—J. C. K.—E. W. P., thanks.—P. J. B.—W. G.—C. B.—W. P. C.—F. A.—F. Abbott, we are always glad to answer any questions which are likely to have an interest for the general reader.—L. D. A.—T. C.—J. G. S.—S.—C. E. A.—W. T. T.—T. H. H.—B. B.—H. M. E.—C. L. I.—A. L. J.—E. L. T.—N. H.—C. S. P.—E. S. G.—W. F.—B. P. V. H.—M. M.—D. Mc. C.—J. L.—

Miscellaneous Advertising.

Dyspepsia

Does not get well of itself; it requires careful, persistent attention and a remedy that will assist nature to throw off the causes and tone up the digestive organs till they perform their duties willingly. Among the agonies experienced by the dyspeptic, are distress before or after eating, loss of appetite, irregularities of the bowels, wind or gas and pain in the stomach, heart-burn, sour stomach, etc., causing mental depression, nervous irritability and sleeplessness. If you are discouraged be of good cheer and try Hood's Sarsaparilla. It has cured hundreds; it will cure you.

Hood's Sarsaparilla

Sold by all druggists. $1; six for $5. Made only by C. I. HOOD & CO., Lowell, Mass.

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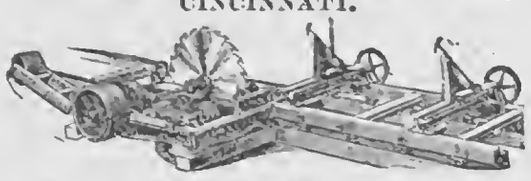

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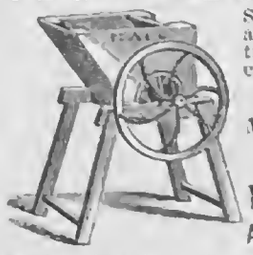

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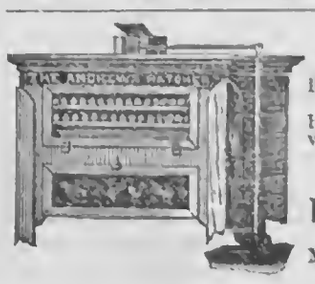

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SATURDAY, OCTOBER 30, 1886.

IN the supplement of the Thanksgiving Number of the R. N.-Y. we shall present, in addition to the articles offered in our regular premium-list, a carefully selected list of books.

WE have not thus far printed many of the reports received from RURAL subscribers of our seed distribution of last year. We have them all, however, and shall present them in a condensed form later. The Bird Cantaloupe has proven a fine acquisition. It has undoubtedly come to stay.

WE beg to express an opinion as to the Worden Grape: If any one were to eat first a Worden, then a Concord grape he could not tell which from the other. As to the time of ripening, there is very little difference. The Worden bunch will not average so large as the Concord bunch. The vine of either is as hardy as the other.

THE following note explains itself: "It has been decided by those who alone have the right to do so, that the Macomber white seedling of the Antwerp Raspberry is to bear the name of the beautiful lake on the shores of which it originated, "Champlain." I think Mr. O. H. Alexander is a little presumptuous to attempt to give a name to a fruit he is testing.
Grand Isle, Vt. J. T. MACOMBER."

"AMMONIATED superphosphate." What is it? Does it contain potash? If so, why call it an ammoniated phosphate? If not, how do you know that your land will respond to a fertilizer in which one of the important food elements is missing? It would seem that some of the fertilizer men are just as willing to muddle the names of chemical fertilizers as some seedsmen are to mix up the nomenclature of plants.

CALLING the attention of the reader to our cut of the everbearing blackcap "Earhart" last week, we may further add that our first plants were received from Mr. J. W. Sarff, of Havana, Ills., in May of last year, with a history of its discovery and propagation. What became of these we cannot tell. We presume they died. It was in the Fall of last year that other plants were received from the introducers, the Messrs Hale, and our observations were, of course, confined to these fall-set plants. We shall look for larger berries and more of them another season.

BULLETIN No. 19, from the Michigan Agricultural College, gives the results of Prof. Bailey's study of 76 so-called varieties of tomatoes. He has reduced the list nearly one-half, and is confident that this reduction will need to be reduced nearly another half after further study. He remarks that none are so well qualified to undertake this work of determining synonyms or duplicates, as well as a reformation of garden nomenclature as many of our seedsmen, and it seems strange that they should be the very ones who make the work necessary. The chief kinds tried by Prof. Bailey have been tried at the Rural Grounds and reports have been made from year to year. He confirms our statement that the Mikado and Turner's Hybrid are the same.

LAND COMMISSIONER SPARKS, in his annual report, reiterates his account of vast illegal appropriations of the public domain by native and foreign cattle kings and syndicates. The story has been told over and over again; what has been done to remedy the evil? We are told that fences illegally inclosing 2,714,926 acres have been removed: but this is only a small part of the great area appropriated. Over three years ago, under the last Administration, great promises were made of speedy action against the spoliators; such promises have been repeated several times since then; but it appears probable that the fresh spoliations offset the reclamations. The public heartily approve vigorous action; the reclamation of the public land fenced in and appropriated without the shadow of a title; and the punishment of the land thieves. Little progress has been made toward checking depredations on the public timber land also. Only between $100,000 and $150,000 have been recovered out of over $9,000,000 claimed. Depredations by powerful corporations, wealthy mill-owners and lumber companies are still committed to an alarming extent. The Land Office is doing all in its power to check the evils and punish the evil doers, but the government law officers should be more energetic in supporting its operations.

ASPARAGUS roots may still be planted. If not now it would be well to prepare the plot now for Spring, and to plant as early in the Spring as the weather will permit. Asparagus is really one of the easiest vegetables to raise—far easier than celery. We prefer to raise it from seed, and to sow the seed where the plants are to remain. In the preparation of the soil there is no difference whether we sow the seeds or plant the sets. A rich, deep, mellow soil is required, and that is the whole story. Our experiment of raising asparagus eight years ago from seeds may still be remembered by our older readers. Seeds of every supposed variety were procured from France, Germany and England, and sown side by side. These seeds were sown thickly in drills four feet apart and the plants thinned to one foot apart in the row. As to the size and flavor of the different kinds we never could detect any difference. The Argenteuil shoots were more silvery, the Red Dutch redder in color than the others.

The old way was to sow in a seed-bed and then transplant. But there is no reason for a special seed-bed; no need of transplanting. We merely make additional labor and defer the time when the shoots may be cut. An ounce of seed will cost 10 cents and there are fully 1,200 seeds in an ounce, and these will give plants enough for a large family. Were we preparing a bed of asparagus, we should have the plants at least two by four feet apart.

NOTICE.

THE Thanksgiving Number of the RURAL NEW-YORKER will be dated November 20th. It will present a full account of the RURAL'S next Seed Distribution, and we shall issue 24 pages. Advertising rates will be the same as usual for the regular paper (30 cents per line) and 50 cents per line for the Supplement, which will be sent out from its date until next June. *Advertising space in Supplement strictly limited to six columns.*

TAKE CARE OF THE HEALTH.

HAPPY is the farm house that does not contain its shelf of empty patent medicine bottles. It is not much of a compliment to the intelligence of farmers to say that there are few houses that cannot show this array. Why will people take so much medicine? Do they like to consider themselves sick? Is it fashionable to take medicine? Does it show poor taste to spend a little more time and money in keeping ourselves well and thus avoiding all necessity for taking medicine? Good health is the product of good food, plenty of sleep, cleanliness and a clean conscience. It is far cheaper to put the extra money and time into the work of making these four conditions perfect than it is to attempt to build up a wasted system on patent medicine. Bathing is too frequently neglected, and sleep is murdered by those who need it most. The writer does not take an ounce of medicine during the year, simply because he does not need it. A daily bath, eight hours' sound sleep, plenty of fruit at meals, a daily glass of lemonade during the Spring and an honest endeavor to look upon the bright side of every subject form a far better medicine than can be bought at any store. This treatment works so well that we feel like recommending it to others. Many people brood themselves into disease. They worry and study over their troubles until they seem too great to bear. Like the man who drinks to drown his sorrows, they take medicine to cure the blues. Others get the idea that half a dozen doses ought to cure a disease that has been gathering through years of neglect. When half a bottle fails to make them well, the medicine is discarded and a new kind ordered. Rather than have any waste, the "leavings" are given to the children. There are a few brutes left who work their wives almost to death's door, and then hurry to the store to buy, at random, a bottle of medicine with which to save the life they have sacrificed. All these people help to fill up the shelves with empty bottles. They could put a stop to the wasteful practice by paying decent attention to the laws of health.

THE CATTLE PLAGUE IN CHICAGO.

THE owners of the quarantined cows at Chicago, who were anxious to sell their milk, sought by injunction to restrain the Health Commissioner and Chief of Police from interfering with the sale of the stuff. It was shown to be unwholesome by the testimony of the physicians, and Judge Tuley, in rendering a decision against its sale, said the health officers had no discretion in refusing to allow the milk to be sold. "Clothes from a small-pox hospital," said he, "might as well be distributed around the city. If the court were to sustain the injunction against the health officers it would be a crime against society." Apart from the question of disease, it seems impossible that the milk can be wholesome after the revelations that have been made of the atrocious condition of things at the distilleries, where the cows never breathe pure air, are never properly cleaned, constantly stand knee-deep in filth, never see grass, and never have anything to eat but hot distillery refuse. Not only should the sale of such milk be strictly prohibited, but the feeding of cows under the present pernicious system at distilleries should no longer be tolerated in any part of the country. To prevent irreparable injury to the live stock trade of Chicago, and to remove imminent risk to the vast cattle interests of the country, the quarantined stock should be promptly disposed of, as well as all others that have been exposed to contagion. The plains are already excited over reports of contagious pleuro-pneumonia on the Dakota ranges. Once the disease gets a foothold on the large ranges there will be no means of checking it and the loss of the country will run high among the millions. At present it is charged that the quarantine is a paper one, and that cattle that have been exposed to the disease are being shipped not only to the more eastern States which have not yet scheduled Illinois; but also to the ranges. If this is true, it will not be over a year or two before the cattle business there will be on the road to ruin. It is quite possible, nay, very probable, that the careless nature of the quarantine, as well as the risks of contagion elsewhere have been exaggerated; but in such cases safety lies in the line of exaggeration.

MR. A. J. CAYWOOD AND THE RURAL NEW-YORKER.

MR. A. J. CAYWOOD is widely known as the originator of several valuable fruits, the result of many years of toil. He is now quite an old gentleman, and richly entitled to the thanks of the people for the good he has done them, and to a goodly share of consideration when, as in the instance we have to allude to, he shows that any adverse criticism of his fruits, impairs his sense of reason and justice. We have received a copy of his lately issued descriptive price-list in which he makes some reckless, angry statements respecting the editor of the RURAL NEW-YORKER, which, upon calmer thought, he will probably regret. The RURAL editor's offense seems to be that he has said in regard to the Minnewaski Blackberry, that "it did not promise to fill any unoccupied space." Mr. Caywood thinks that this opinion was expressed merely to injure the sale of the Minnewaski because he declined to send plants to the Rural Grounds to be tested. He then alludes to our reports of new fruits as "vacillating from bad to good and good to bad"; to the Rural Grounds as the "Valley of the Shadow of Death," and then concludes in this wise: "The country need not look for any more good words from the RURAL for any new fruits I may originate."

Here our friend is wrong. We shall speak of Mr. Caywood's productions in the future precisely in the same way as we would have done when he visited us several years ago and praised the Rural Grounds as beautiful indeed, and kindly spoke an encouraging word for the disinterested work we were doing, and offered and pressed upon us a half interest in the Marlboro Raspberry if we would consent to praise it and to keep it before the people in our advertising columns.

In our own behalf, it may be said, that it is hard to understand how anybody who has read the RURAL NEW-YORKER for any considerable length of time can fairly arrive at the conclusion that it would suffer personal likes or dislikes of any kind to influence its advice or direct its statements.

In order to place before our readers the earliest information regarding the value of novelties every year offered to the public, we endeavor to procure the seeds or plants as soon as we learn of their existence. If they behave well the first year, our report is necessarily favorable. If the next year they behave badly, our report is necessarily unfavorable. If this is what Mr. Caywood means by "unsteady" or "vacillating," he is quite right. The Marlboro is a case in point. It pleased us the first year; it has disappointed us since. Now that the Minnewaski is offered for sale we shall obtain plants and test them beside the many other kinds of blackberries that thrive in the Rural Grounds; and we shall hope that it will be found as Mr. Caywood predicts, worthy "of living to defend itself long after he and the RURAL are gone."

BREVITIES.

PRES. INGERSOLL informs us that the tobacco raised on the farm of the Colorado State College, by Prof. Cassidy, has been examined by experts, and at least two of the varieties show that they are A 1.

AMONG sorghums the "Kaffir Corn" is promising. The seed will ripen as far north as Canada, and the plant yields a large amount of leaves and stalks that farm animals are fond of. The grain makes a fair article of flour. What we need is machinery that will clean the seeds and leave the kernel alone—the same as thrashing gives us the kernel of wheat or rye.

THE land is as dry as a chip, and when plowed is broken into dust or brick-like lumps. We are suffering from the severest fall drought within the memory of our farmers. It is Oct. 19. We found one of our neighbors this morning sprinkling, through the rose of a watering-pot, a lot of "ammoniated superphosphate," intending to sow it on a field that he was about to sow to rye and Timothy, and proffered the advice not to do it, but wait until Spring rather, or even sow it upon the late snows of Winter or early Spring. Were we right?

MR. J. S. COLLINS, of Moorestown, N. J., has some fine specimens of the Japan Chestnut. At this time (Oct. 15.) the foliage is still green and very handsome. One specimen five years old has fruited finely; it is, perhaps, 20 feet high and is finely proportioned. He has also some young trees—the Japan grafted and budded upon the native stock. The grafted seem to do about as well as the budded. With Mr. Collins the Comet-Lawson Pear, grafted upon Kieffer stock, has made a remarkable growth during the past season.

AND our pansies are the last flowers that bloom out-of-doors—they were the first. Upon the dining table and in the parlor we have pansies with a spray or so of wild fern, and they are as bright and jolly as ever. Pansies in Spring, Summer and Fall—all the while. Few flowers can talk with you, joke with you, wink at you as can pansies. And then there are serious pansies that will keep you company when you are sad. The rose is the queen of flowers, surely; but the pansy is the flower that the queen would choose, could she speak.

THE wife of a prominent fruit grower says that she has noticed that people learn to like the Kieffer Pear. Attracted by its beauty, even though it be to the amateur but skin-deep, people continue to taste and eat, until finally they learn to like it very much in the same way as a taste for tomatoes, bananas and other similar fruits is acquired. Specimens from the same orchard, or from the same tree, differ greatly in flavor. In the Philadelphia market the wholesale condemnation of the fruit, due to its deceptive appearance, has given way to a moderate appreciation, and it brings readily from $1 to $1.50 per basket.

AFTER watching several sick horses of late we are convinced that many farmers are unable to distinguish between a colic and a kidney trouble. Whenever a horse shows signs of pain, moves uneasily about, lies down and strikes with his feet, the unskilled owner at once decides that it is colic and doses accordingly. The treatment does very little good, in some cases simply because the trouble is in the urinary system rather than in the stomach or bowels. When the horse straddles, looks around at his flanks, lies down and gets up, makes evident attempts to urinate, and shows tenderness at the back, the dose for colic will do him little good. In mild cases, sweet spirits of niter with hot applications at the back will relieve him. As was stated by a correspondent in a late RURAL, a foul sheath causes much trouble of this character.

PICKLE raising is becoming an important industry on the north side of Long Island. At Greenlawn it is estimated that nearly 25 millions of pickles will be put up during the season. The crop is largely in excess of last year, when only about 10 millions were gathered. The crop varies largely from year to year, a good average crop being from 50 to 70 thousand per acre. The average price is about $1 per thousand. This usually leaves but a small margin of profit for the raiser. Horse manure is used chiefly as a fertilizer. Some of the commercial fertilizers are coming into use and will doubtless take the place of the more bulky manures which are now brought from the city. No special method of cultivation is practiced. The seeds are planted in hills and cultivated in the usual way. One of our neighbors tried an acre this year, but not with great success. We are too far from a pickle factory, and there are more profitable vegetables that we can raise for the markets.

Indust'l Societies.

AMERICAN HORTICULTURAL SOCIETY AT CLEVELAND.

(RURAL SPECIAL REPORT CONTINUED.)

Comparative growth of trees; best selection; profit not sentiment in tree culture; fruit growing in the Northwest; experience in grape culture; the Delaware; care in grape-culture; more grapes desirable; grapes trained on walls and fences; tender grapes for the north side of buildings (?); salt and lime for fruits; award of premiums; great increase of fruit culture in the South; the Mississippi Agricultural College.

An address on "The Comparative Growth of Trees," by Prof. Lazenby, of the Ohio Experiment Station, was delivered by him at the opening of the last afternoon business session of the society. He said: "I regard the American Ash as one of our most productive forest trees for planting for profit. Locust and catalpa grow rapidly, and with profit. Locust is best for posts. The ash grows with great regularity, and stands crowding better than anything I have tried. Woodland never should be pastured. Worthless trees should be cut out in the Winter, and seeds of valuable kinds be planted in proper places. The Chestnut will not succeed on Ohio bottom lands: the trees are dwarfed. I would urge timber culture because it pays: not because it would influence the climate very much. Let us cultivate timber for the money there is in it, and if it improves the climate so much the better." Mr. Ward: "I have grown maples two feet high in six months from the seed. Plant seeds of trees where nature plants them, and they never fail." Mr. Cushman: "Why not memorialize State Legislatures to devise some plan to stop forest fires and preserve woodlands. Exemption from taxation of forest land might be tried." Prof. Lazenby: "I don't believe in sentiment in this matter, allowing all trees to grow, good, bad and indifferent. Let us plant those that pay, because they pay. I believe in the utility side of this question." Several members spoke on the subject. President Earle said: "The National Government can plant forests if it will, and I don't know why the time to do it has not already come. The influence of such additional woodland area is greatly needed in the production of crops in general."

Secretary Hilman, of the Minnesota Horticultural Society, then read a paper on "Fruit-Growing in the Northwest," by J. S. Harris, of that State. He said, "The Northwest is an empire in dimensions. The Winters of 1872 and 1873 nearly destroyed all tender trees in our orchards; remarkable success followed for ten or twelve years, then a drought and a severe Winter in 1883 destroyed many more trees. This experience led us to plant the hardy varieties from Russia and Siberia, and now our future looks hopeful." Mr. Ohmer spoke of the success of his son in fruit culture in Marshall County, Minn., where the mercury falls to 45° and 50° below zero in Winter. He raises Turner, Reliance, and Gregg Raspberries without winter protection, thoug Gregg kills to the snow line. He also gr good grapes.

"The Advantage of Better Culture of Grape-vines," was the subject of Geo . Campbell's paper then read by the veteran grape man. Said he, in part: "During my 40 years' experience in grape-growing, I have discovered that grapes produce in proportion to the care and intelligence given the vine. The best culture will give the best results. Those who will not care for the vines must be content with the hardier or inferior kinds. Man was placed in a garden by God, who ordered him to dress and keep it. Thirty years ago I planted a Delaware vine, and after great care for three years I had nine canes. Of the 300 clusters that set on these canes, 200 were promptly cut off, only four new canes being permitted to grow. I had 100 bunches of as fine Delawares as I ever saw. Without this care I would have had 300 clusters of small, inferior grapes, and an exhausted vine. The Delaware is a good grape: never saw it rot. I advise winter protection for all vines. In mild Winters they are improved, and in severe ones they are saved by it. I have long been convinced that winter protection is often the turning point between the brightest success and a complete failure. Nothing pays better. Injury from cold leaves the vine more susceptible to mildew and disease. In a general way, I advise growing the best kinds. These with the additional care can be readily grown, and they bring good prices, while others are a drug in the market.

Mr. Green said "All have room for a grape-vine. No man with a house is without room for a grape-vine. There is no cheaper food for farmers, or their help, than grapes." Mr. Ohmer: "Grapes should be grown by everybody (Applause). I find great advantage in winter covering. I have 17 varieties, and lay them all down in Winter." Mr. Campbell: "Grapes upon walls often escape the effects of cold and disease when others do not." Mr. Ford also believed in wall training and winter protection. "I grow grapes on three sides of every building I have. I never saw rot or mildew on vines near a building. I intend to plant along a high board fence and build a shed to extend partly over the vines." Mr. Vandemann said: "The north side of a building is the place to put any tender thing; it will succeed there when it will not on the south side, where the evaporating influences are greater. In nature we find that all tender plants grow on the northern hill slopes, none on the southern slopes." Several members spoke of the advantages in training grapes on walls and buildings, also on trees. Mr. Pierce: "Grapes will not grow in Ohio on the north side of houses."

Then members began pitching into the U. S. Pomologist from all sides, regarding his new theory, and he appeared a little uncomfortable as he arose and said: "I don't wish to be misunderstood. Winter-killing is the effect of evaporation; this is less on the north side. The changes on the north side are less frequent and extreme than on any other."

Mr. Miller, "We surround all our fields with fences on which grapes are trained; they look pleasant and do well." Dr. McKay, "We plant our figs on the south side of houses and get good crops. Where the trees are exposed to the north winds we get no fruit. Strawberries on south and south-east slopes are earlier and more productive. I would give $25 or more per acre for strawberry land on southern slopes, rather than to have northern lands given me without price." Secretary Campbell, "I would plant on the east, west, and south, but not on the north slopes." Mr. Ward, "I am fully satisfied that vines growing around dwellings get something which suits them, and that is salt. When I want to keep a bouquet I put salt in the water and the flowers keep fresh in the cellar for two weeks. I have great success with the English gooseberries by using salt about the bushes, which is much needed here so far from the sea." Mr. Tryon, Ohio, "I have much faith in salt for many fruits; have salted bearing trees for seven years past with good success. Every tree in my grounds gets salt and lime, one part salt to three of lime, also the vines and gooseberries. I never have any mildew; gooseberries grow two by one-and-a-half inches. Think of that!"

At this point the award of premiums on plants and flowers was reported. Mrs. Ella Grant Campbell got the $50 White sewing machine for best floral design and also the first premium for the best collection of cut flowers. Edwin Geering, of Cleveland, won the $25 special premium for the best plant collection.

The last evening session began with an address by Professor McKay, of the Mississippi Agricultural College, on "Horticulture in the South." He said, "Cotton was king there until recent years. Ten years ago two acres would cover all the strawberry fields in Mississippi. Now we find that almost all fruits grown at the North will do well in our State. Our college farm has nearly 2,000 acres of land, a fine herd of blooded stock, and the best system of education outside of the languages. We hold it requires as much education to become a good farmer, as it does to make a successful member of the learned professions. Our capacity is 350, and this year we shall have three times that number of applications. Ladies are admitted. All are obliged to work a portion of each day for which eight cents per hour are allowed and deducted from the board bill. Many paid all their expenses last year in this way. Our orchards are yet young, but very promising. I find less co-operation and associated effort among the farmers of the United States than in any other profession." H. H.

Floricultural.

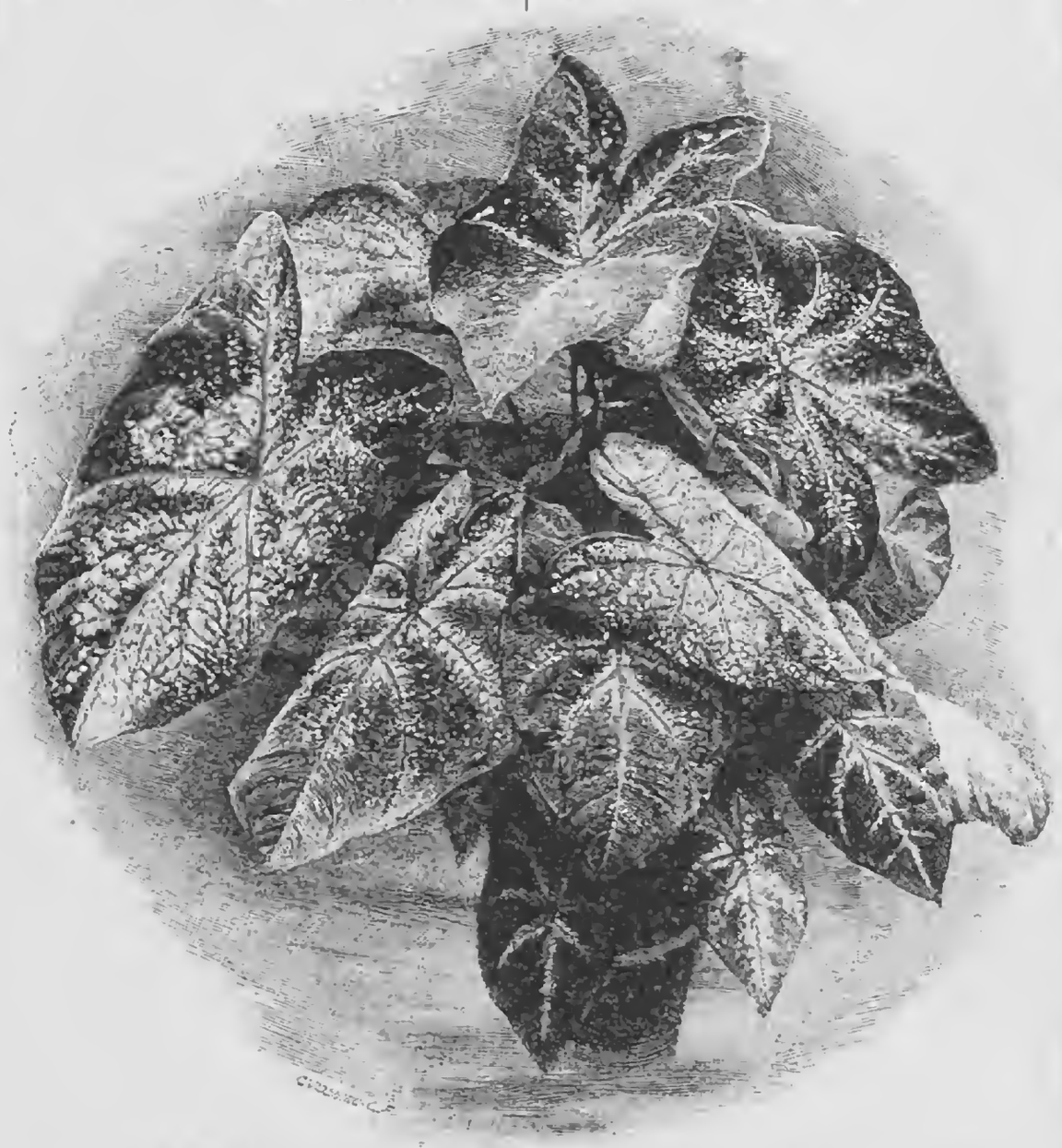
CALADIUMS INDOORS AND OUT.

This family offers us some of the most attractive foliage plants we possess; that they are not more commonly grown by amateurs is doubtless due to the mistaken idea that they are of difficult culture. Most growers are under the impression that the more ornamental variegated sorts are too tender for outdoor use; but this is an erroneous idea. These plants, like the calla, are deciduous, requiring a season of rest when the leaves die down. The root is tuberous. In March or April they should be potted in a mixture of loam, leaf mold, well-rotted manure and silver sand. Give plenty of drainage, as they require to be well watered, though the soil must not get sour. They may then be started with a fair amount of bottom heat, but this is not necessary after a few leaves have formed, and in this country they do well in an ordinary greenhouse during the warm weather. In the Autumn, when the beauty of the foliage begins to fade, the quantity of water given should be gradually diminished until it is entirely withheld. By this time the leaves will all be dead and the tubers at rest, when they are ready to be put away until Spring. The common usage is to lay the pots aside under the benches, until time for repotting, without any water. This is a mistake; the pots should be watered enough to keep the soil moist, from time to time, otherwise the tubers will be completely consumed with dry rot by Spring. The large, green variety—C. esculentum—is common enough in the subtropical garden where it forms a handsome decoration the Summer through. The root of this is eaten by the South Sea Islanders, under the name of taro; it tastes like a poor and watery potato.

The handsome variegated sorts do fully as well as the preceding out of doors, a fact recognized by few growers. They do admirably in shady spots, where ordinary bedding stuff is a failure. They need daily watering through the Summer, to be gradually decreased as the season wanes, just as if they were indoors. Then, when frost comes, they may be taken up, with a ball of earth, and laid away under similar circumstances to those grown indoors.

C. Meyerbeer, see Fig. 407, is a very ornamental variety, as the illustration shows. The ground color is white, veined with bright green, the mid-rib red. C. Verschaffeltii is dark green, irregularly blotched with red. C. Argyrites is the smallest and most elegant of the species. It has pointed, light-green leaves, irregularly blotched with white. In addition to the original species, we have innumerable hybrids, many of great beauty. They certainly deserve much more attention than is generally given them, and should find a place in every subtropical garden, since moderate shade and abundant water are their only requirements.

E. L. TAPLIN.



CALADIUM MEYERBEER. Re-engraved from the London Garden. Fig. 407.

Various.

LAW.

Here are some recent decisions of the courts on questions of special interest to farmers:

Homestead Exemption: A dwelling-house may be claimed as an exempt homestead even though built on leased ground and a mere chattel, according to the decision of the Texas Supreme Court in the case of Cullers vs. James. The Court said: "It is contended that the homestead, under the Constitution, cannot embrace personal property. The exemption is, in terms, of lots or acres of land, but the object was to secure the family a home. 'House is not necessarily embraced in the word 'homestead.' . . . If the head of a family owns a house, and no interest or estate in the land on which it stands, the house is a chattel. If he occupies it with his family it is their home. He may be compelled to move it from one lot to another as fast as legal process can oust him."

Municipal Corporation Liability: In the case of the Town of Rushville vs. Adams, the Supreme Court of Indiana held that cities and towns were liable in damages for injuries resulting from the fright of horses of ordinary gentleness at the sight of objects on the street, although such objects were placed and maintained on the street through a license from the city. Streets having objects on them calculated to frighten horses of ordinary gentleness could not, according to the court, be said to be in a reasonably safe condition.

The Rights of Bicycle Riders.—An interesting suit, involving the rights of bicycle riders on the road, was tried at Moorestown, N. J., the other day. The plaintiff, D. Maurice Haines, sued James Moore to recover $100 damages for negligence on the part of the latter for not dismounting from his wheel and endeavoring to avert an accident which occurred on the Camden turnpike several weeks ago, in which Haines' wagon was broken by his team taking fright at Moore's bicycle. The jury rendered a verdict for plaintiff in the sum of $90 and costs, and the defendant at once gave notice of an appeal. The League of American Wheelmen is interested in the suit, and is confident of securing a reversal of this decision upon a rehearing of the case.

Iowa Railroad Law.—The Attorney-General and District Attorney Wilkinson, of Des Moines, Ia., have been directed by the Governor to begin suit against the following railroads: Chicago, Milwaukee and St. Paul. Illinois Central, Chicago and Northwestern, and Chicago, Burlington and Quincy—the suit being to compel these roads to comply with chapter 76, act of the Twenty-first General Assembly, the Sweeney Railroad Law. The Governor states in his letter to the attorneys that he understands that the railroads named refused to comply with the law, on the claim that the act violates a constitutional provision, and he therefore directs suit to be brought at once in the United States Court. The law requires all non-resident corporations to domicile in Iowa, the principal object being to prevent them from taking their litigation by venue to the Federal courts. It is presumed that the Governor thinks that by going to the Federal courts at once the ultimate decision will be obtained the sooner. It is probable that a bill will be introduced next session refusing the right of eminent domain to railroad companies that ignore the law, which would prevent extensions of their lines.

We do not recommend the nostrum for the cure of "fits" advertised by Professor R. H. Kline, M. D., of Philadelphia, and therefore we have declined to advertise it. There is absolutely no panacea for all cases of epilepsy, and as it is pretended that this is such a cure-all it must be a humbug. . . . . "The Magnetic and Voltaic Electric Female Health Regulator, for the use of women only," advertised from Marshall, Mich., is a sheer fraud. . . . . Here are some eye-opening experiences: The other day, George Swarts, aged 76, a wealthy live-stock dealer of Amity, Pa., while out driving with two strangers desiring to purchase live stock, was compelled by them

at the muzzle of a revolver to sign a $5,000 check on the Third National Bank, of Washington, Pa. Swartz was then thrown from the vehicle and had to walk home several miles away, while the confidence men drove in the opposite direction.

Abel Chase, one of the wealthiest citizens of Haverhill, Mass., aged 80, was the victim of a party of bunko steerers the other evening, who obtained a large amount of money on the pretext of desiring to purchase a valuable lot of real estate. He was induced to purchase tickets in a lottery, and lost $1,000.

A pair of knaves worked an old, old swindle on a simple citizen of Reading, Pa. One of them went into a cigar store carrying a violin, and, after buying a cigar, asked to be allowed to leave the instrument there for an hour or so. His request was granted. Pretty soon knave number two came in and bought a cigar, saw the violin, examined it, admired it, praised it, and wanted to buy it. The cigar man explained how it happened to be in his store. Then the stranger offered to give him $5 if he'd buy it when the owner came back, and authorized him to go as high as $50. Then he left and the first man came back, refused $20 for the violin, declined $35, and, finally, with great hesitation, accepted $50 for it, because he needed the money. Up to date the second man has not called for the fiddle, which is worth just $5.

What a commotion there would be among our patent medicine venders if our city police followed the example of the Berlin police, who are continually issuing warnings to the public, of which the following is a specimen: "The tradesman, Paul Heider, of this city, Anklamer Street 28, is selling under the name of 'Hurz Mountain Tea,' a mixture of lavender flowers, sassafras root, peppermint, and several other plants, weighing 50 grammes. His price is 50 pfennings, and he advertises it as a remedy. Official analysis has shown that the real value of one of these packages is hardly 10 pfennigs."

Woman's Work.

CONDUCTED BY EMILY LOUISE TAPLIN.

LOVE AND PHILOSOPHY.

'Twas at the Concord sages' school,
We met one summer's day;
I guessed—and used no logic rule—
I guessed what she would say.
"'Tis very warm"—this with a sigh—
"The sun that shines from thence,"
She said, and pointed to the sky,
"Is rolling toward the Whence."

I told her that it must be so,
At least it seemed so there;
For there was much I did not know
Of the Whatness of the Where.
About the only thing I knew,
When she was standing near,
Was that the sky was much more blue
In the Nowness of the Here.

She smiled, and said perhaps 'twas well,
Those pretty themes to touch;
And asked me if the rule I'd tell
Of the Smallness of the Much.
I told her that I did not know
That rule, but then I knew
A rule that just as well would go—
The Oneness of the Two.

She blushed and looked down on the ground,
And said: "It can't be so;"
And then the whole earth turned around,
For my heart was full of woe.
"Unto the Ceaseless of my End,"
I said, "I now shall go."
She murmured: "Don't you comprehend
The Yesness of my No?" —*Puck.*

OF INTEREST TO WOMEN.

Twisted wire rings are popular, two or three being twisted together and loosely knotted.

Tourmalines, opals and chrysoberyls are fashionable stones, both in rings and scarf-pins.

New tailor gowns of this season are made with a polonaise.

A sash of cashmere or serge, with wide fringe tied into its ends, is a popular finish for a school-girl's frock.

A pretty theatre bonnet, which may be made by any woman handy with her needle, is a little poke shape, with Normandy crown. It is covered with red crape in loose folds and bordered with cut jet beads. On the top, among puffs of crape, are some upright jet sprays.

Feather toques and bonnets in new designs are to be seen at the leading milliners. The toques are long and pointed, with dented crown, something like a deerstalker hat minus the brim. They are lovely in pheasant feathers and very showy in peacock. Bonnets are made entirely of similar feathers.

There are no very great novelties in lingerie. Collars are still plain and masculine, to suit tailor gowns; the only novelty is a very high, plain collar, buttoned close on the left side with two garnet studs. There are also some pretty fancy chemisettes of sheer muslin, plaited and laced down the center with narrow, feather-edged ribbon; the neck is finished with a dog collar of the muslin, with two rows of the ribbon run through it, and a bunch of loops at one side.

Dog-collars form a pretty and easily added finish to many costumes. Cardinal velvet, edged on both sides with jet beads, and a velvet bow at one side is very pretty. Or the collar may be entirely covered with beads, having a pendant bead fringe in front.

So far, the shapes shown in winter hats are precisely like those worn all Summer. They are still tremendously high, in spite of ridicule. However, they may change very materially before Christmas. Toques matching the gown are too convenient to be given up, but most of the imported shapes are very clumsy, trimmed much in front, so that they have a very top-heavy aspect.

SOME WINTER GOWNS.

"In the Fall a maiden's fancy lightly turns to thoughts of clothes," to paraphrase a famous quotation. This is the season when the woman of small means, who has no wish to look "dowdy," tries with much deliberation to decide whether she shall turn her last season's gown upside down or downside up. Perhaps a few hints from practical experience may be of service in the making of useful gowns for the coming season.

A correspondent asks how she shall make a woolen gown for house wear. This need not be a very difficult undertaking, though perhaps formidable to a busy housewife. The first requisite in woolen gowns now is perfect neatness of finish, to imitate the work of a tailor. The make should be simple; its stylishness depends largely on the draping. The rough cloths popular last Winter are now rather out of favor; smooth material is preferred.

A pretty gown is of navy blue tricot cloth. The gored skirt is quite plain, without any plaiting. At the foot are three rows of black silk braid, laid on flat. At the left side is a side plaited panel, extending from the waist to the foot of the skirt. It is 18 inches wide at the bottom, narrowing to about 6 inches at the top. The drapery is all neatly bound with the silk braid. The back drapery is made of one breadth of the stuff, which is 54 inches wide; it is perfectly square, and is bound with the braid around one end and side. The top is plaited across in large side plaits, and the unbound side is also plaited right up into the waistband, so as to leave the drapery hanging in one large point, with the fulness in heavy vertical folds, which hang very gracefully over the dress improver. There is a short apron front, coming from under the panel. The bodice is short, pointed in front, with postilion back, all neatly bound with the braid. It should be fastened with small flat black silk buttons. This is really a stylish gown, and has a very neat tailor finish. A little bonnet or toque may be covered with the cloth, and with cardinal feathers or ribbon bows will be very smart.

The drapery here described is really the prevailing mode; it is repeated over and over again, with but trifling variation. The short apron shape is certainly to be in high favor again. Its contemporary, the kilted skirt, is again coming into vogue, and we see some handsome cloth gowns made in this style. The skirt must be kilted all round in shallow side plaits; the drapery over it is just the same as that described for the blue cloth, minus the braid. The bodice is similar in shape, or may be varied by a vest.

Vests are very much worn, and are a great assistance when one is renovating an old gown. This is sometimes difficult, when one has not enough of the original material to produce a good result. Suppose the experimenter has a partly worn gown of myrtle green cloth. After making a rough estimate we would purchase about three yards of germinum red cloth—that is, supposing the wearer is young and brunette. The green bodice should be a cutaway shape, with vest and cuffs of red. The skirt may be kilted in broad plaits, alternately red and green; the drapery green. Or, if the supply of the original stuff was scant, the entire kilted skirt may be of the red. This would be a handsome gown, not at all "made-over" in appearance.

The home dressmaker should always design with an idea to future making over; with a little care and taste, even the busiest housekeeper need not fear the appellation of dowdy.

GRANDMOTHER ON FASHION'S FOLLIES.

"Well girls, I am glad to be at home again. There is no place in the wide world, that seems half as comfortable as my home; to be sure, there are lots of pleasant homes, furnished nicer than mine; but they are not as pleasant to me. My dear old chair! I would not change you for all the crimson brocaded furniture in Mrs. Elgin's parlor! No, indeed! I do not wonder that she has a weak back, or that the children are crooked, round shouldered, and feeble. I am sorry for the poor creatures, especially Bell. She has got a spinal trouble, the Doctor says. I should have two spinal troubles if I sat in such chairs as they use; hollow-backed, rolling seats, and stuffed. Even the baby has a stuffed chair with a crooked back. I told the folks that God made folks straight, that it was a terrible thing for a child to get his backbone twisted; and that I would not let a baby sit in one of their hollow-backed fixings. I did not care if they did look handsome and scrumptious; it is wicked to put a young one in them, and that a straight back basket-bottomed chair for a child was ten thousand times better, and more comfortable than those fiddle-de-dees they used. Mr. Elgin said he was not sure but I was right about it, but his wife wiggled around and said, 'Grandmother has such funny ideas! How an old fashioned chair like the one I had when a little girl, would look now-a-days.'"

"Well, Bessie Elgin, I think it would look a heap better than those weak, tottering children do." I spoke right out and gave them a piece of my mind. The idea of killing children for fashion's sake! And then, just to think how uncomfortable a child is who has the backache all the time. "Here," said I, "is Harry, who ought to run out of doors, and jump and holler, and have a good time, and come in to his dinner as hungry as a bear, with cheeks as red as a peony. Poor fellow! he looks like a potato sprout that grows in the cellar, he is so pale and spindling; he never laughs nor speaks so you can hear him half way across the room, and you keep him at his books, in a stuffed, easy chair, bent up like a hoop; you wonder what makes him so round shouldered. Goodness! Bessie Elgin, you did it yourself, and he will be a regularly grown hunch-back by the time he is eighteen, if you keep on managing him as you do now! He is a bright boy enough, but you make his brain grow faster than his body. Remember what I tell you: if he kly, deformed man you have yourself to thank for it. And there is poor Bell; she was a bright, healthy child, could laugh and sing, and was as merry as the day was long the Summer she came up to stay with me on the farm. Now look at her! she is as white as a snow-ball, her back is weak so she can hardly walk across the parlor, and her ankles are all twisted out of shape wearing your French heels, and she is an object of pity. I tell you, there is no use trying to improve on Nature's works. If God had meant to have girls have peeks on their heels He would have made them there and not left their feet unfinished. It is just misery and sin to put those high-heeled boots on a child; I can see no sense in it. They walk just like a goose: go waddling along, expecting every minute to tip over. Why, old as I am, I can go across the house as spry again as one of the children, because my feet are just as God made them. I am sorry for Elgin's people; they have got three sickly, whining children, and they have only themselves to thank for it. It is a pity, but if one will sacrifice their children on the altar of fashion they must bear the consequences. Yes, Mr. Elgin is rich; but, girls, let me tell you that riches, or fine furniture, or splendid dresses do not make people happy. No indeed! I have seen more sorrow and pain and suffering the last two months in Bessie's family than you ever endured in your whole life. You are happier in your old home, with your flowers and chickens and your health, than these children are in their stately mansion and costly surroundings. Yes, you have to work. Thank God that you are able to work! Work is a blessing, and things that you work and earn yourselves make you happier than if you laid in an easy chair and had them bought for you. I tell you, girls, you ought to be contented with your lot. Health and strength cannot be bought with money, and you have these in plenty. Happiness is not a boughten thing, either! and a person that is sick and in pain all the time cannot be happy. I hope I taught Bessie some things; anyway I told her some truths to think of now I am gone, and Mr. Elgin said he always knew I was a sensible woman; I told him I hoped I had common sense and was not too proud to use it."

Grandmother.

ENTERTAINING ANGELS UNAWARES.

I am asked to send the Rural anything that may prove of interest to women, and I therefore venture to offer a few hints in regard to the duties of a hostess. My observations are addressed only to ladies who for lack of means can afford but one servant, or possibly must combine the duties of a cook with those of hostess. Of course in this latter case some will say, do not invite a guest at all, but there are times when circumstances seem to render it almost necessary to do so, or indeed when one's own wish for the sight of a friendly face is so strong that a little extra labor would be welcomed for the sake of the companionship. Indeed there is no reason why a person of very limited means who has a very hospitable heart cannot entertain a guest comfortably if not luxuriously. In the case of receiving a guest whose style of living is superior to our own, there should not be the slightest embarrassment, for there is no shame in the fact that our circumstances do not allow us to cope with those of larger means. Never make apologies, they are in bad taste and can only make your friend feel ill at ease. Show that you are trying to make up for any deficiency in luxury, or it may be, in comfort even, by the heartiness of your welcome. Such remarks as, "I am sure my cooking cannot compete with that of your servants," and, "You must miss your handsome house, and find our little rooms very uncomfortable," can only embarrass your visitor.

I received my first lessons in easy grace in entertaining from a little lady at whose house I used to visit in New York. Never with more than one servant, often with none. She had a way of making her friends feel perfectly at ease, and heartily welcome, to such an extent, that one forgot everything else except the delight of her society. She took you right into her family, and you never felt that your coming had made the slightest difference. When household duties called her away, she left you quietly and easily without profuse apologies, as if she did you the compliment of thinking that you were capable of passing a couple of hours with yourself, and the papers and magazines that were at hand, without *ennui*.

Allow a guest to amuse him or herself and they will be happier than if too closely looked after. It is positively hard work to visit at a place where some one is always showing that they are making an immense effort to entertain you.

It is a good plan in small households, where a guest is expected, to have various matters connected with housekeeping in readiness. See that there is a sufficient supply of fresh table linen to last through the allotted visit; have the silver newly polished and extra plates and glasses at hand on or in the sideboard. Do not attempt to provide for a style of living greatly different to what you are accustomed to during your own everyday life. It can only result in discomfort to yourself and visitors. We are all familiar with the flushed face, and look of tortured suspense with which some hostess has watched the bringing in of various dishes, that she is uneasily reflecting have had to be left to the mercy of an ignorant servant. Her preoccupied manner, and painful attempt to appear interested in the conversation are only too apparent for the comfort of the guests.

Endeavor to repress all such signs of nervousness. Try at least to feel equal to the task of laughing off any mistakes of your untrained cook, since no one will take it to heart as much as yourself. I have heard it said that a hostess who cannot preserve her serenity upon even the most crucial occasions, is lacking in one of the most essential qualities of an entertainer. The thoughtless spilling of her best wine, the soiling of her choicest linen, may even the smashing of a whole tray-full of her old family china, should not cause one muscle of her countenance to change. Few are equal to this heroism, for heroism it is, but it can be acquired.

Selma Clare.

GOLDEN GRAINS.

From an old number of the Christian at Work, we clip the following rules for the husband:

Husband love your wife .....

1. Never find fault with her before others..

2. Per contra, remember the counsel of the Good Book: Her husband shall praise her in the gates; that is, before folks.....

3. Bear all her burdens for her; even then she'll bear more than you do, in spite of you.

4. If you want her to submit to your judgment, never ask her to submit to your selfishness .....

5. A woman's life is made up of little things. Make her life happy by little courtesies.....

6. Love is a wife's only wages. Don't scrimp in your pay.....

Domestic Economy

CONDUCTED BY MRS. AGNES E. M. CARMAN.

Has experience taught you among other things that you much prefer the censure to the praise of some people? This is a trifle contrary to the old saw that it is better to have the good than the ill will of a dog. Or do you consider that the ill will of a dog is of more moment than that of some people?

OCTOBER BREAKFASTS.

Boiled salt mackerel, stewed potatoes and muffins make one of the nicest breakfasts imaginable for a slightly cool morning. The mackerel must be large, fat and white, and soaked to the proper degree of freshness. One of the large kind, weighing from a pound and a quarter to a pound and a half, should be placed over-night in a large pan of cold water, and laid skin down. The next morning put it over the fire in cold water; let it come to a boil slowly, and simmer very gently for ten minutes. Drain off the water, lay on a hot dish and season with two tablespoonfuls of thick cream, made hot, bits of butter, pepper and minced parsley. Slice cold, boiled potatoes in thin, even rounds; season each layer as you drop them in a wide stewpan, with salt, pepper and bits of butter; cover with cold milk and let them stew slowly for fifteen minutes. Dissolve one teaspoonful of corn-starch in cold milk and stir it in just before removing from the fire. Excellent muffins are made from bread dough that has been mixed over-night. Mold small, flat pieces and lay them in a warm place for three-quarters of an hour; fry in a very little hot

fat on the top of the stove. They must be pulled apart and buttered at the table, but never cut with a knife.

Many people do not like freshly cooked meats, such as steaks and chops, for breakfast, preferring cold meats that can be made into nice dishes. Cold veal is particularly happy in its possibilities. Try this with mushrooms. Put a few small mushrooms, or some larger ones sliced, into a stewpan with a bit of butter and a tablespoonful of water, and let them stew in their own liquor. Meantime take two cupfuls of minced and nicely seasoned veal, put this into another saucepan in which you have first melted a tablespoonful of butter, and stirred in as much flour, add four tablespoonfuls of cream and the stewed mushrooms, stir all together, simmer for five minutes and pour over thin slices of nicely toasted bread.

Miroton of veal is a preparation that one would never think of insulting with the name of hash. Take some slices of cold veal and mince them with less than half the quantity of cold boiled ham, season with pepper, grated nutmeg and a small onion minced and fried in a little butter. Add also a French roll that has been soaked in a little milk, a gill of thick cream, and a little grated lemon peel. Put all these into a pan over the fire and stir until heated through, then stir in a well-beaten egg, press the mixture into a buttered pudding dish and set into the oven to brown. Turn out on a hot dish, pour over a good gravy made from the bones of the cold meat.

Minced beef makes a delightful breakfast dish if seasoned by an artist. Take a pint bowl full of very finely minced beef to which has been added two ounces of salt pork. Mince a good-sized onion and fry in butter, add the beef, a gill of good gravy and seasonings. Have ready lightly browned and buttered pieces of toast on a hot dish, spread the mince over them and place on the top a poached egg for each person.

Beef cakes are made from three parts of finely chopped cold beef and one part of mashed potatoes, a little minced parsley and a beaten egg. Make into cakes about half an inch thick and as big around as a teacup; dredge with flour and fry in hot drippings. Serve with a tomato sauce and brown gravy.

Mutton sausages may interest where cold boiled or roast has ceased to do so. Mix together one pound of cold mutton, three ounces of beef suet (these two must be very finely chopped), as great a bulk of bread crumbs, a pint of minced oysters, two anchovies also minced, a seasoning of thyme, marjoram, pepper and salt. Mix all these ingredients thoroughly, moisten them with the beaten whites and yelks of two eggs until they form a stiff paste; form into balls or sausages and fry. PALMETTO.

A PLEA FOR THE OPEN FIRE-PLACE.

It is too early for anthracite, too late for a fireless house, and happy is that home where the family can enjoy the comforts of an open fire through the chilly autumn days. Few things possess more elements of cheer than a blazing log on the fire dogs in October. The hearth has an especial charm at this season, and the gleam of the firelight mingles with the yellow glow that is over the landscape from trees and mellow sunshine. Maple wood is constant and steady; one does not care for a noisy, sputtering backlog that carries danger in its sparks; but the perfection of a wood fire is reached when one can burn the aromatic branches of an old apple tree. One lies before me now, giving out fitful gleams, faithful in its life, and giving us comfort and cheer even in its cremation. Then the ashes are of rare value, and the tree lives again in some other form. By and bye architects will understand the needs of a home and build fireplaces, not for show, nor to be filled with feathery stalks of "sparrowgrass," as was once the fashion in the country; but to form the missing link between the summer's heat and the winter furnace. I remember entering a dry goods store in Boston one wet morning and being beguiled into the ladies' parlor where a blazing back-log in an open fire-place and a comfortable easy-chair, invited to rest. It was the poetry of shopping. When builders learn that the open chimney is the best means of ventilation, they will not seek to shut up every nook and cranny, as is now too often the case. Housewives object to branches and the frequent need of renewal, but there is less dust and disorder than is made by a scuttleful of coal, if carefully managed. And what a care this house-warming is in homes where there are no furnaces. Even these are not without some drawback; for I have seen in our city houses, many children who lost health, and became subject to frequent colds that parents could not understand, which might be traced to the pernicious habit of standing over the register or hovering around it. Not only in their homes, but in school, this is carried to excess and should be forbidden. And when I say "forbidden" I mean rather "explained," for children are reasoning beings, and if told of the evil of any habit, will be likely to give heed to the warning, while if sternly forbidden without a reason they are likely to rebel without understanding. Am I getting prosy over my wood fire? At least my thoughts are not the result of vitiated air, for the doors and windows are open; the October breeze is coming in and gently moving the sheaf of golden rod and asters that the little ones have gathered while out-of-doors, and "the maple leaf is blushing red." ANNIE L. JACK.

CLOTHES RACK.

Fig. 408 is a sketch of a clothes rack we have in use and find very convenient, as it is always ready for use, and never in the way. It is hung in a corner behind a door that usually stands open, and is the same size as the door. It is made as follows of pine lumber:

Two strips 6½ feet long by 1x2 inches are morticed to receive the tenoned ends of the upper, lower and middle bars, made of the same material, and 2½ feet long. The other bars are made of lath dressed to one inch wide, and let into the standards even with the front surface, and fastened with screws or small nails. This is hinged to another strip 1x2

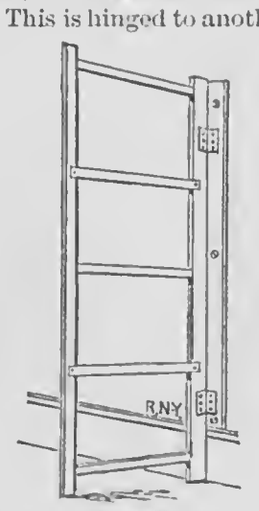


Fig. 408.

inches, which is fastened to the wall in the corner by two large screws. The outer upright bar should stand on the floor, the other one may be cut a little shorter. As the rack is light, the outer bar resting on the floor does not interfere with it swinging, but keeps it in place. When in use, it is swung out a foot or more from the wall; when not in use, it stands flat against the wall, and can then be used for small articles. The whole is planed, and painted the same as the room. Of course it is not essential that the rack should be behind a door; it may be put in any convenient place and made larger or smaller to suit the situation. F. S. NEWCOMB.

SUGGESTIONS.

Avoid waste in boiling potatoes by cooking only those of one size at a time.

From our own experience we believe that tea drinking makes women nervous and irritable.

If you are the happy possessor of a good umbrella it pays to take care of it. After it has been wet, keep it open until perfectly dry. If you would prevent cutting, don't strap tightly or keep it in its case.

Rancid butter or lard *cannot* be restored to its original sweetness. Better use it for soap than for food.

The "Queen" continues to be the leading style in watch chains for ladies' wear.

Don't stand up when you can do a piece of work sitting down.

Do not sacrifice your health and strength for economy's sake.

Keep your children in school. Nothing but sickness should keep them at home. It is unfair to both teacher and child to let every little unusual occurrence serve as a pretext for non-attendance.

REMOVING MOLD FROM CLOTHING.

Years ago I tried an experiment and was so well pleased with the result, that I have often tried it since, and been equally successful.

I found an article of white piqué badly molded; in fact, the mold stood on it in miniature trees. I concluded it was a vegetable growth and so tried *drying it out*. I dried it as thoroughly as possible, baking it in a cool oven for two or three hours; then I brushed it carefully with a stiff clothes brush, and when I was done there was no trace of mold, and when it was washed it looked as white and clear as ever. AUNT EM.

WHAT OTHERS SAY.

The U. S. Dairyman says that sweet and sour cream require different temperatures for churning, and that they cannot be churned together without loss.

The Household thinks it is refreshing now-a-days to meet a twelve-year-old girl who has not a "steady beau," and knows nothing about flirting.

Eliza Archard, in N. Y. World, tells women that fancy work is a genuine deadening drug, cheating them into a fool's paradise. While they delude themselves with thinking they are at work, they are absolutely doing nothing, or that which is worse than nothing.

The Monthly Magazine of Pharmacy says that the best preparation for the hands at night is the white of an egg with a grain of alum dissolved in it. Quacks have a fancy name for it, but anyone can make it. Slightly beat the egg, add the powdered alum, spread over the hands and draw on a pair of gloves.

DOMESTIC RECIPES.

ENTRÉE OF CHICKEN.

A very pretty and delicious entrée is prepared as follows: Take a good-sized young chicken; clean it well and free it from pinfeathers; with a small sharp knife cut off the entire breast; then place the carcass in a closely covered vessel with just enough water to cover it, and simmer slowly for half an hour. Lift it out and take off the legs, thighs and largest wing joints, which should be tender by this time. Stew the carcass for half an hour longer; take it out, pick the meat from the bones, throw aside the skin, and chop the dark meat very fine with plenty of parsley and a seasoning of salt and pepper. Mix a beaten egg with this and roll into little balls, which should be dipped in egg and bread crumbs. Make a sauce with the gravy in which the chicken was boiled, which should be reduced to a large cupful, half a can of tomatoes and a minced onion. Stew for half an hour and strain through a sieve and thicken with a little corn-starch. Meantime stew the breast which you have cut crosswise in pieces half an inch thick, until tender. Fry the legs, thighs and wing bones, and the little balls in some butter until delicately browned. Place the white meat in the center of the dish, the balls and pieces around, and pour the tomato sauce over all. MRS. A. G.

KEEPING EGGS.

I have kept eggs for winter use without any packing, but I was careful to keep them in a cool, not cold, place, and turned them twice a week. FARMER'S WIFE.

DOUGHNUTS.

Two eggs, one cup of sugar, one cup of fresh butter-milk, an even teaspoonful of soda, one teaspoonful of salt, one nutmeg and flour enough to make a soft dough. Roll to less than half an inch thick. Mold and fry in boiling lard. These will not absorb a bit of the fat, and are the least pernicious of the doughnut family.

AN IMPROVEMENT ON SALT-CURED MEAT.

Last year after our meat had taken the salt, and was ready to smoke, we made a hot soapsuds, and washed the meat, and dried it thoroughly, then took equal parts of ground red and black pepper, and with our hands smeared it over the meat very thick, then hung and smoked it, and this year our meat is delicious. The lean is a bright red, like fresh meat; the fat a clear white. Our neighbors say we have the best meat in the country. I also think I have learned something about lard. I suppose every one knows that a small quantity of sal soda added to the lard while rendering will make it white; but is it known that lye will answer every purpose if soda is not procurable? I kept my lard in a can on the smoke-house floor. I now find it slightly rusted on the bottom of the can. I think that if the can had been raised off from the floor, so that there would have been a free circulation of air around it, this would not have happened. MRS R. W. WILLIAMS.

(Will our correspondent kindly give us her proportions of sal soda or lye and lard.—Eds.)

Miscellaneous Advertising.

When Baby was sick, we gave her Castoria
When she was a Child, she cried for Castoria,
When she became Miss, she clung to Castoria,
When she had Children, she gave them Castoria.

Miscellaneous Advertising.

Catarrh

Is frequently an indication of a Scrofulous taint in the system. Ayer's Sarsaparilla purifies the blood, and thus restores health to the affected membranes. It also stops the nauseous catarrhal discharges, and prevents the infection from reaching the lungs and stomach. Catarrh should be treated as a blood disease.

I suffered for years from chronic Catarrh. My appetite was very poor, and I felt miserably. None of the remedies I took afforded me any relief until I commenced using Ayer's Sarsaparilla, of which I have now taken five bottles. The catarrh has disappeared, and I am growing strong and stout; my appetite has returned, and my health is fully restored.—Susan L. W. Cook, 909 Albany st., Boston Highlands, Mass.

Ayer's Sarsaparilla,

Prepared by Dr. J. C. Ayer & Co., Lowell, Mass. Sold by all Druggists. Price $1; six bottles, $5.

MAKE HENS LAY

SHERIDAN'S CONDITION POWDER is absolutely pure and highly concentrated. It is strictly a medicine to be given with food. Nothing on earth will make hens lay like it. It cures chicken cholera and all diseases of hens. Illustrated book by mail free. Sold everywhere, or sent by mail for 25 cts. in stamps. 2½-lb. tin cans, $1; by mail, $1.20. Six cans by express, prepaid, for $5. I. S. Johnson & Co., P. O. Box 2118, Boston, Mass

GOLD MEDAL, PARIS, 1878.

BAKER'S Breakfast Cocoa.

Warranted *absolutely pure Cocoa*, from which the excess of Oil has been removed. It has *three times the strength* of Cocoa mixed with Starch, Arrowroot or Sugar, and is therefore far more economical, *costing less than one cent a cup*. It is delicious, nourishing, strengthening, easily digested, and admirably adapted for invalids as well as for persons in health.

Sold by Grocers everywhere.

W. BAKER & CO., Dorchester, Mass.

"AN EXCELLENT JUDGE"

The late Gordon W. Burnham of New York, after his return from an extended tour through Europe, said: "I have bought and tried the finest Shaving Soaps made in England and on the Continent, but for months have been longing to be where I could again enjoy the Luxury of Shaving with the GENUINE YANKEE SOAP."

All Druggists keep it. Avoid Imitations. Trial Samples by Mail, for 12c.

The J. B. Williams Co.,
(Formerly Williams & Bros., Manchester, 1840.) Glastonbury, Ct.

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ORGANS.

Highest Honors at all Great World's Exhibitions for nineteen years. 100 styles, $22 to $900. For Cash, Easy Payments, or Rented. Catalogue, 46 pp., 4to, free.

PIANOS.

The Improved Method of Stringing, introduced and perfected by MASON & HAMLIN, is conceded by competent judges to constitute a radical advance in Piano-forte construction.

Do not require one-quarter as much tuning as Pianos generally. Descriptive Catalogue by mail.

ORGAN & PIANO CO

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WEAVER ORGANS

Are the Finest in Tone, Style, Finish and general make up of any goods made. Guaranteed for 6 years. Send for Catalogue, testimonials and terms, free, to

Weaver Organ and Piano Co.,
Factory, York, Pa.

AGENTS WANTED

Everywhere for the **ARNOLD AUTOMATIC STEAM COOKER**

$75 to $150 per month easily made. This is a rare chance. Apply at once.

WILMOT CASTLE & CO., Rochester, N. Y.

500 Speeches, Selections, etc., and agents new Sample Cards for a 2c. stamp. GIVIN & BRO., Cadiz, Ohio.

A SPECIAL SAMPLE OFFER.

Hand-forged, Razor Steel Blades, replaced free if soft. **New Pattern.** Price 50 cts. postpaid; 5 for $2; Regular price, 65 cts. Boy's 1-blade, 25 cts. Lady's 2-blade, Pearl, 50 cts. Gents' fine 3-blade, $1. Colorado 3-blade Stock Knife, $1. Grafting, 25 cts; Budding, 55 cts.; Pruning, 55 cts. to $1. Family Shears, 60 cts.; Button Hole Scissors, 50 cts. 56-page List Free. Also *How to Use a Razor.*

Maher & Grosh,
30 S Street,
TOLEDO, O.

News of the Week.

HOME NEWS.

SATURDAY, October 23, 1886.

Oakland, Ill., was almost entirely destroyed by fire last Tuesday—loss over $300,000 .. Whitelaw Reid is reported to have bought Henry Villard's palace here—price about $400,000.....Aggregate loss by that fire at Eastport, Me., about $800,000. While the town was in a blaze and the people were trying to save their effects a horde of Canadian fishermen from the neighboring Canadian islands invaded the place, and pillaged right and left, taking away furniture and all other movable property until frightened off by an American cruiser which arrived opportunely.....J. G. Blaine has been making rousing "protectionist" speeches in Pa.—hailed with tremendous Republican enthusiasm .....At Biloxi, Miss., 25 cases of yellow fever are reported. Too late to spread far this year.....Loss by fire at Salisbury, Md., now estimated at over $1,000,000.....Geronimo and Natchez and 13 of their principal followers, are to be kept in close confinement at Fort Pickens at the entrance of Pensacola Bay, Florida. The rest of the surrendered hostiles, consisting of 11 women, six children and two enlisted scouts, are to be kept with a lot of other Apache Indians at Fort Marion, near St. Augustine, Florida. Husbands and wives are thus separated.....The will of the late Samuel J. Tilden was admitted to probate at White Plains, N. Y., Wednesday. An attempt to break it is to be made by some of the heirs .....At Saco, Me., a family Wednesday drank cider which killed the son, while the father and mother were sickened. It came from a cask which had previously contained a poisonous embalming fluid, and had been purchased from an undertaker .. . After all, the Inman Line of steamships has been sold to Peter Wright & Sons of Philadelphia for $1,250,000. The Philadelphia firm is supposed to represent the Penn. R. R. .....The prohibitory law went fully into effect at Atlanta, Ga., last Tuesday. All liquor stores shut up; law to be rigidly enforced. City Council gave a local brewery permission to deliver beer at private residences; Mayor Hillen has vetoed the ordinance...In Canada the most important election since Confederation is probably that of the Province of Quebec, just over. The Liberals, or opposition, claim 35 out of 65 members, but there are so many contested elections that the result is a trifle doubtful. The English districts favor the present Government; the French are against it, 22 of the 40 French constituencies previously held by the Government having swung against it. Bad for the French to run on party issue, as their number increases slowly by immigration, whereas other races increase fast. According to census of 1881, the French in Canada number 1,208,929; English 881,301; Scotch one-half a million; Irish, nearly a million; Germans a quarter of a million.....Charleston is still getting lots of money, and wants more. Gov. Sheppard won't call an extra session of the Legislature to make a special loan for building purposes; and there isn't enough money in the place to re-build..... .....There's a great deal of sharp Congressional fighting all over the country, and it's a splendid time for farmers or any other independent voters to make their mark, because the uncertainties of the Congressional campaign are so great. The Democratic majority in the House is 43, and there are 44 districts in which the plurality of the present Congressmen was less than 900. Twenty-four of these districts are represented by Democrats; one each in California, Connecticut, Indiana, Kentucky, Louisiana, Massachusetts, New York, Pennsylvania, Tennessee, Virginia and West Virginia; two in Michigan; three each in Illinois and Iowa, and five in Ohio. Twenty districts went Republican by less than 900 plurality—one each in Connecticut, Illinois, Kentucky, Michigan, Nevada, New Jersey, Ohio, Tennessee and West Virginia; two each in California, Iowa, New York and Wisconsin, and three in Indiana. In most of these districts the plurality is much less than 900, in many less than 400, while the third party vote is often larger than the plurality, so that the call for sharp fighting is pretty evenly distributed over the country, and the result mighty uncertain till after election day. .... Much complaint in Mass. that the new law prohibiting the sale of tobacco to persons under 16 years old is openly violated—penalty a fine of $50 or under.... ...What a tremendous rush of dishonest rascals there has been from this country to Canada of late. Here they'd be pinched in prison; there they grow fat at hotels. The Dominion seems to have had enough of them—it has rascals enough of its own .....The Canadian cabinet Council has removed the extra $400 fine imposed on the schooner Marion Grimes and sent a letter of strong censure to Capt. Quigley of the schooner Terror for his action in hauling down the American flag. The Council was agreed that there was no precedent for such an act, and condemned it in unmeasured terms. .. .. Much complication about that Haddock murder case at Sioux City, Ia. Koskiniski, arrested in San Francisco, and Ganden, caught in the South, say they saw the shooting and were hired by the rumsellers for $100 each to pound the parson, while Leavitt and Arensdorf, already in jail, were looking on. Their courage failing, Arensdorf stepped out and began the altercation that ended in the shooting. But he was in front, and Haddock was shot in the back; who did the shooting?..... ....The stock-yard strike at Chicago collapsed Monday, the men offering to go to work at 10 hours a day instead of eight. Armour and the other packers won't discharge the hands they took on during the strike, but they are sure to go themselves to avoid "pounding" to death by the old hands. A lot of them together with about 100 Pinkerton men started on the cars from the packing houses Tuesday morning. The strikers and their sympathizers hooted and stoned them, and some of the Pinkerton men fired into the crowd, wounding several and killing a truck driver named Terry Begley. About 75 of the Pinkertons were arrested and a dozen of them are still in jail, and would be lynched by the populace if they were come-at-able. They say they didn't fire till they were attacked with stones and shot, Police Captain Markey says they fired first without sufficient provocation..... ....Mike McCool, the notorious pugilist died in the Charity Hospital at New Orleans, the other day—malarial fever complicated with diseases of the bladder which had reduced him to a mere skeleton.....A year ago, John B. Mannix, assignee of Archbishop Purcell of Cincinnati, who owed his people $4,000,000. when pressed for a settlement proved a defaulter, having speculated away $300,000 in the stock market. At a meeting of the creditors Sunday a letter was presented from ex-Governor Hoadly, one of the four bondsmen of the assignee, in which letter the ex-Governor proposed to pay the trustees of the Purcell estate his fourth of the amount of the Mannix bond—$62,500—and to transfer to them all his (Hoadly's) interest in the property which had come into his possession from Mannix. In doing this noble deed Gov. Hoadly wrecks his fortune and deprives his children of a heritage. By his action the assignees will receive $105,000, which will enable them to declare a dividend of 1½ per cent., the first sum the creditors have received since the failure. ....E. O. Graves, Chief of the Bureau of Engraving and Printing, denies most emphatically the stories of the flooding of Chicago with counterfeits of the new $10 silver certificates.....A National Convention of distillers, brewers, and wholesale and retail wine, spirit, and beer dealers numbering 400, in session at Chicago last Tuesday, effected a permanent organization under the name of "The National Protective Association." The platform opposes prohibition, favors license, and denounces disreputable places ....The Richmond Convention of the Knights of Labor has come to an end. It reëlected Terrence V. Powderly as General Master Workman by acclamation. J. L. Griffiths of Chicago was reëlected General Worthy Foreman by 490 votes, against about 125 for all others. Frederick G. Turner, of Philadelphia, the present Secretary and Treasurer, was reelected Treasurer; and Charles H. Lichman, of Marblehead, Mass., was elected Secretary. Powderley's salary was raised from $1,500 to $5,000 a year; and the salaries of the other chief officers were raised to $2,000 apiece..... .....Prohibition in Georgia has proven a wonderful stimulant to illicit distilling. The jail of Fulton County is filled with violators of the internal revenue laws, and eighty others are held in the inclosure on the same charge.....A fire which swept away one-half of Stockton, Utah, is believed to have been set by Mrs. Provost, who had threatened to burn the town unless the saloons stopped selling liquor to her husband.....Second Comptroller Maynard and Third Auditor Williams have just concluded a critical re examination of the accounts of the Signal Service from Sept. 1, 1880, to July 1, 1886. The expenditures aggregated $1,865,333; of this amount the accounting officers have disallowed and suspended items amounting to $1,801,669, as unauthorized by law, principally for telegraphing, the purchase of supplies, foreign service, etc John T. Jones, a tramp is reported to have lately made $5,000,000 in two months. He discovered that the refuse ore rock of the iron mines in the upper peninsula of Mich., contains 50 per cent. of good ore, yielding, when sorted, $5.50 per ton. He contracted for the heaps at 25 cents per ton, sold the ore, and now vast reduction works are being constructed, and a new industry which will give work to thousands is being started. ....The switchmen's strike at Minneapolis is still paralyzing railroad business there. The roads refuse to arbitrate or yield an inch.... The steamer Anchoria with all her crew and passengers, arrived safely at St. Johns, Newfoundland, having broken her screw shaft . ...Mr. Jacob Sharp, Mr. James W. Foshay, Mr. James A. Richmond and Mr. Thomas B. Kerr, the chief officers of the Broadway and Seventh Avenue street railroad of this city, were indicted and arrested for bribery Tuesday. They gave $50,000 bail each to appear for trial. Solomon Sayles, a wealthy butcher of this city, who gave $25,000 bail for his brother "boodle" Alderman Sayles, who fled to Canada, has paid into court $25,000 forfeited bail. .....The strike of the cigarmakers in Havana is ended. The operatives have been conceded all their demands by the manufacturers. .... The Prohibitionists are rather more active in Michigan than in most States. Until the campaign opened they were organized in but 18 of the 77 counties in the State, while now they have 50 county organizations, congressional candidates in every district but one, and 17 Prohibition papers pleading the cause. They publicly claim a vote of 25,000, a gain of 7,000 in two years, and privately they say that their State canvass indicates a vote of from 30,000 up. ... Jay Gould is reported to have tightened his grip on the transportation facilities of St. Louis, and to have killed the project for a rival to his bridge across the Mississippi..... .... Great preparations here for unveiling the great statue of "Liberty Enlightening the World" on Oct. 28; will be a general holiday; and delegations from all States and Territories are expected. From France, De Lesseps, of Panama Canal fame, and several representatives of the Government will take part in the ceremonies. So will Bartholdi, the sculptor of the marvel. Military organizations from all the neighboring States will add to the glory of the day. .....Earthquake shocks, well defined but comparatively slight, were felt in Georgia, South Carolina, North Carolina, Tennessee, Ohio and the District of Columbia yesterday morning. Charleston seems to have suffered the most. Buildings were somewhat damaged and there was considerable fear, but no people were hurt... .....

A Novel Treatment for Rheumatism.

IF you have ever had a touch of this disease you will appreciate what is said by the following correspondents in reference to the results of treatment by Compound Oxygen:

Mrs. Margaretta Bair, a Philadelphia lady living at 19th and Filbert Streets, says: "Nearly twenty years ago I was attacked by rheumatism. I suffered from it for years and was reduced almost to a skeleton. My condition led my physician to conclude that I could not live more than a few weeks. About this time, in 1881, a friend had been wonderfully helped by Compound Oxygen. With hardly a hope of success I began the treatment. I am no longer an invalid in any respect. *Rheumatism is gone long ago.*" This is only a specimen. Hundreds of letters of similar character are on file in the office of Drs. STARKEY & PALEN, 1529 Arch Street, Philadelphia; some of them are printed in full in a monograph on "Rheumatism," and others in a volume of nearly two hundred pages, both of which you may receive free by mail for the asking.—*Adv.*

FOREIGN NEWS.

SATURDAY, Oct. 23, 1886.

THE Bulgarian muddle is still the chief topic of European interest. Reports relating to it are so contradictory that there is little doubt that many of them are made for the purpose of influencing prices of stocks and agricultural produce. There seems to be an agreement among the Powers that the re-election of Prince Alexander of Battenberg, cannot be permitted, as he is politically and personally very distasteful to the Czar and Czarina. Turkey seems to have made an agreement with Russia, and urges the Bulgarians to postpone the meeting of the Great Sobranje for the election of a prince in order to allow Russia and the Porte to agree upon a ruler; but the Regency declares this cannot be done unless a specified time is announced within which the ruler must be chosen .....A vast majority of the newly elected deputies to the Sobranje insist on the necessity of electing a prince at the date appointed for the meeting of that body, Oct. 28. Germany and Austria however, according to this morning's cablegram, side with Russia in declaring the election illegal, on condition that Russia will not occupy the country. Russia lacks the "sinews of war" and may therefore moderate her claims; though it is seldom war is prevented by scarcity of money. Reliable reports describe the condition of Southern Russia as deplorable. Discontent is universal. The Nihilist propaganda is in a more active and flourishing state than ever before. The prisons, especially those at Nicolaieff, Odessa and Ekaterinoslav are filled to overflowing, and the proportion of officers and students comprising those who are confined in the prisons and those who are under police surveillance is a source of alarm to the authorities. This year's harvest in Southern Russia has been unusually abundant, but the high German duties absorb the profits, and the value is therefore diminishing year by year. Landowners are selling out at a ruinous sacrifice, and Moscow merchants declare that commerce is at a complete standstill. The scarcity, and in many places the entire absence of banking institutions of any kind combine to complicate matters, and the near future promises no improvement.... ....In the United Kingdom there's something of a lull in political excitement. At the adjournment of Parliament it seemed likely that it would reassemble in November to legislate on Irish matters; but lately affairs in Ireland have been quieter than for years. A great number of eviction notices have been served on tenants who are backward with their rent; but there is a strong disposition among landlords to make considerable reductions where investigation leaves no doubt that the tenants can't pay up in full. Where the reductions are satisfactory, the rent is paid; where they are not large enough no rent is offered. A considerable number of agrarian outrages are perpetrated, especially by "moonlighters"—disguised men who prowl about collecting arms, maiming cattle of obnoxious farmers and committing other deviltries—but the National League appears to be opposed to these doings and the priests and Catholic bishops certainly are, and their number is less than was expected..... ...

In England unusually great distress prevails among the wage-earning classes. Business is very dull; wages are low, and hundreds of thousands are compulsorily idle. The work-houses are uncommonly full, and while in Ireland "wards of honor" are set apart for those who go to the poor houses on account of the land troubles, for English work people there is no way of lessening the humiliation. Among the general distress the Socialists, who preach a more equal distribution of property, are making thousands of converts. At the Lord Mayor's Show in London next week, at which much antiquated mummeries usually excite laughter, jeers and curiosity, there is likely to be trouble, as the "labor reformers," or Socialists, threaten to follow the show from 80,000 to 150,000 strong to emphasize their strength and distress. The police authorities cannot manage such an assemblage, and are trying to induce the leaders to forego the display..... . ...Last Saturday and Sunday the United Kingdom was visited by a hurricane fully as bad as that which swept over the Gulf of Mexico and some of the Northern States about the same time. Considerable destruction of life, and great destruction of property ....In France, apart from war preparations, which always hold first place in public attention, the chief topic of interest just now is the withdrawal of English troops from Egypt. There was an international agreement that they should be withdrawn; but no specified date for doing so was mentioned. France says England keeps them there with the hope that the trouble in Europe may enable her to occupy the country permanently. Frenchmen are as deeply interested as Englishmen in the enormous Egyptian debt, and the permanent occupation of the country by England would give her command of the Suez Canal, the route to the French Eastern colonies, and make her mistress of the Mediterranean. Hence France with the aid of Turkey and Russia seeks to coerce England to withdraw..... France is squandering money in Touquin, having just appropriated 30,000,000 francs for use in that grave of so many French soldiers. Her trouble with the people of Madagascar is not yet over, as the latter are very dilatory in complying with the terms on which peace was concluded, which gave French trade an advantage over that of all other countries. English intrigue is bitterly opposing such concessions..... .....Germany still dominates Europe. If war is avoided in the Bulgarian embroglio it will be because Bismarck objects to it; and his objection is due solely to the great age of the Emperor, who does not want the last years or months of his reign to be disturbed by war. Moreover, his friendship for the late Czar has descended to his son, and in case of war Germany and Russia would most likely be on opposite sides. Hence Bismarck is coercing Austria to take a less hostile attitude, and urging Russia to moderate her demands. It was doubtless by his advice that General Ghourko, one of the heroes of the Turko-Russian war, when Russia "created" Bulgaria, is to replace the truculent Kaulbars as Russian agent in that country. Reports are very conflicting as to the health of the old Emperor.....

AGRICULTURAL NEWS.

SATURDAY, Oct. 23, 1886.

THE Territory of Montana will send to the Eastern markets this year not less than 250,000 head of cattle and perhaps the number may reach 275,000. From 75 to 100 car loads of these are being shipped daily to Denver, Chicago and other cities to the east of the Territory, and that rate of shipment is to be maintained until the close of the year. The cattle are shipped on the Northern Pacific Road on trains made up for that particular purpose and moved at the rate of 25 miles per hour.....Sumac gathering is becoming a recognized industry in portions of Virginia. This year the quantity gathered is unusually large, some gatherers having made $500 each by collecting the leaves and branches of the shrub, which they call "shomeake."....

Prominent grape growers of Hammondsport, N. Y., estimate that 500 tons of grapes were frozen on the vines on the shores of Lake Keuka Saturday night, when the mercury went down to 20 degrees above zero .... .. Here is what somebody thought worth while cabling yesterday. Two Short-horn bulls, a cow and a heifer have been purchased from the Queen's farm at Windsor, and have left for the United States, where they are to be used for breeding purposes. Lots of Short-horn herds in England might better than the Queen's——a colored gentleman somewhere in the wood pile.....The shipments of live stock and dressed meats per steamships from the port of Boston for the English markets last week, were 1,101 cattle, 64 sheep and 4,024 quarters of beef.... ...The Governor of Western Australia has issued a proclamation prohibiting the importation into that colony of all cattle, sheep and swine from Great Britain or Ireland, or from any other place beyond the limits of the Australian colonies .....A vessel from Montreal, loaded with 500 cattle sailed last week with a lot of oil aboard, to test the claim that oil poured on the ocean when rough will give smooth water in which to move. The captain has tried it before, with alleged success. At this season rough weather is anticipated ..... A company has been incorporated in St Paul, with a capital of $1,500,000, which has now under construction immense feed stables, slaughtering and packing houses, and other appliances for the purpose of accommodating large herds of cattle and sheep for feeding, and packing them for shipment.....A late computation shows that New South Whales has 602,559 cattle which contain some Short-horn blood, 178,357 of Hereford, 55,299 of Devon, 2,745 of Ayrshire, 1,253 of black poll, and 162 of Jersey. Of this total of 840,385, purebreds number 53,732 head. Beside all these there are crosses numbering 476,930 .....Not less than 20,000,000 pounds of starch are made annually in Maine from potatoes.....Since January 1 sugar beets have been imported at New York from Germany to the amount of 107,231 tons, against 61,105 tons in the same time last year .....The cultivated area of the State of Kansas is estimated to be 14,352,815 acres. Of this acreage there was sown to winter wheat, 1,801,151 acres; spring wheat, 90,826 acres; corn, 5,266,035 acres; rye, 187,473 acres; flax, 122,199 acres; tame grasses of all kinds, 1,034,242 acres..... The Mark Lane Express publishes a table giving the prices of English wheat in London since 1641—a period of 245 years. The highest figure was in 1812—$30.36 per quarter (eight bushels) and the lowest in 1873—$5.30 per quarter. The present price is $7.82 per quarter.

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READERS of the RURAL are entitled to a back No. of the PHRENOL. JOUR. and Science of Health, and list of books FREE. Send address on postal to Fowler & Wells Co., 753 Broadway, N. Y.—*Adv.*

Crops & Markets.

SATURDAY, October 23, 1886.

A telegram from San Antonio, Texas, last Tuesday, says those who are best posted on the wool market now predict that the season's clip will not exceed 3,500,000 pounds, for the reason that sheep are not shearing as heavily as expected. There was no change in prices, and holders were firm. Seven hundred thousand pounds had been received, and 678,000 pounds sold at prices ranging from 19½ to 22¾ cents per pound. Growers were well satisfied and much fewer lambs and sheep than usual will be killed this season, so as to increase the clip next year.

Here are some Cincinnati Price Current figures about wheat: Available surplus of previous growth, 25,000,000; crop of 1886, 455,000,000—total available supply, 480,000,000 bushels; domestic requirements for food and other uses, 282,000,000, for seeding, 53,000,000 total, 33 ,000,000 bushels, leaving a remainder of 145,000,000 bushels available surplus, by reducing reserves corresponding with the low point in 1882, or 120,000,000 bushels by reducing reserves to the same point as at the beginning of the year

The interruption to hog packing at Chicago, owing to the strike, didn't greatly diminish the total packing at the West, as more hogs were packed at other points. The total for all places in the West was 145,000 hogs for the week, against 105,000 the preceding week, and 195,000 for corresponding time last year. From March 1 the total is 5,150,000 hogs, against 4,515,000 last year, showing the increase to be 635,000 at date. Present prices of hogs at Chicago average closely to $4, while hog product for January delivery is selling on the basis of $3.65 to $3.70 for hogs, as cost. This would imply that if values of hog product for future delivery do not essentially improve hogs should decline 30 to 50 cents per 100 pounds to afford a margin of profit in operating.

The Canadian Agricultural Bureau reports the yield of winter wheat at 18,056,000 bushels, and of spring wheat 6,528,000 bushels, making a total of 24,584,000 bushels, or nearly 4,500,000 bushels less than the average for the last four years. The barley crop is represented by 19,656,000 bushels, or rather more than the past four years' average.

THE LATEST: Wool is easier, with a tendency toward weakness. The lockout in the knitting mills at Amsterdam and Cohoes, N. Y., checks sales and stimulates resales to some extent. The labor troubles at the Philadelphia textile mills, where a lockout to affect 75,000 employés is threatened Nov. 3 unless the latter keep agreements alleged to have been made, promise to become a disturbing influence. The switchmen's strike at Minneapolis is practically ended, after having delayed traffic for over a week. Wheat is firmer and higher on a better export demand, and the arrival of cold weather will stimulate the hog products industry. Cotton is weaker on heavy movement of new crop and pressure to sell at the South.

MARKETS BY TELEGRAPH.

SATURDAY, October 23, 1886

CHICAGO.—Compared with cash prices a week ago, "regular" wheat is 2¼c. higher; No. 2 Spring, 3c. higher. Corn, ¾c. higher. Oats, 1⅛c. higher. Rye, 1c. higher. Barley, 1c. higher. Flaxseed, 3c. lower. Pork, 2½c. higher. Cattle, somewhat higher. Hogs, a shade lower. Sheep, somewhat lower.

WHEAT.—Sales ranged: October, 72¾@74¼c; November, 73¾@75¾c; December, 75½@77¼c; May, 83¼@83¾c; No. 2 Spring, 74¾c. CORN.—Firm, Cash, 35¼c; October, 34¾@35¼c; November, 34⅝@35⅜c; December, 36½@37c; May, 40⅜@41¼c. OATS.—Firm; sales ranged: No. 2 Cash, 25¼@25¾c; October, 24⅝@25¼c; November, 25¼@25¾c; May, 30⅝@30⅞c. RYE.—Quiet; No. 2, 49c. BARLEY.—Quiet: No. 2, 53c. FLAXSEED.—No. 1, 96@97¼. MESS PORK.—Ruled active; sales ranged: Cash, $8 85@8 90; October, $8 72½@9 00; November, $8 75@9 02½; January, $9 07½@9 87½. LARD.—Steady; sales ranged: Cash, $5 70; October, $5 67½@5 75 closing at $5 70; November, $5 67½@5 72½, closing at $5 72½; January, $5 87½@5 95, closing at $5 92½. Short Ribs.—Cash, $6 87½. Boxed Meats.—Dry salted shoulders, $5 40@5 50; Short clear sides, $6 85@6 90. WHISKEY.—$1 14. CATTLE.—Market Strong: Shipping steers, $3 75@5 00; stockers and feeders, $2 25@3 60; cows, bulls and mixed $1 25@3 00; bulk, $2 10@2 50; through Texas Cattle, weak; cows, $2 25@2 90; steers, $2 70@3 80; Western rangers, slow; natives and half breeds, $3 00@3 90; cows, $2 35@3 00; Wintered Texans, $2 95@3 40. HOGS.—Market active; Rough and mixed, $3 40@3 95; packing and shipping, $3 75@4 00; light weights, $3 50@4 15; skips $2 25@3 75. SHEEP.—Market steady; Natives, $2 00@3 85. Western, $3 50@3 60, Texans, $2 10@3 00; Lambs, $4@4 50.

ST. LOUIS.—Compared with cash prices a week ago, Wheat is ¾c. higher. Corn, unchanged. Oats, ⅛c. to ¼c. lower. Flaxseed, 2c. lower. Pork, 7½c. lower. Cattle, from 5c. to 20c. lower. Hogs, 5c. to 25c. lower. Sheep, 5c. to 10c. higher.

WHEAT.—No. 2 Red, Cash, 71½@71⅝c; November, 74⅝@74¾c; December, 76½@76¾c; May, 85½@85¾c. CORN.—No. 2 mixed, Cash, 32½@33¼c, January, 31c; May, 37¾@38c. OATS.—Dull; No. 2 Cash, 25¾c; November, 26c; December, 24c. asked; May, 28c bid. RYE.—Nominal at 48c. BARLEY.—Little doing. HAY.—Dull; prairie, $7@7 50; Timothy, $9@9 50. EGGS.—Firm at 13½@14c. FLAXSEED.—Steady at 94c. PORK.—$9 37½. LARD.—$5 60. BULK MEATS.—Loose lots, long clear and short ribs, at $6 70; short clear, at 7c; boxed lots, long clear, at $7 30@7 40; short rib, $7 30@7 40; short clear, $7 60. CATTLE.—Choice Native Shippers, $4 80@4 75; Butchers Steers, $3@4 10; Texas and Indiana Steers, $2 10@3 60; Feeding Steers, fair to good, $2 70@3; Stockers, fair to good, $1 75@2 20. HOGS.—Market slow, and irregular prices; Choice Heavy and Butchers' selections, $4 15@4 30, Packers, fair to best, $3 90@4 10; Yorkers, fair to choice, $3 85@4 10. Pigs, common to good, $2 90@3 85. SHEEP.—Market uneven and dull; common to extra, $2@3 95.

BOSTON.—APPLES.—King, $1 75@2 00; Baldwin, $1 37@1 50 per bbl; Hubbardstons, $1 50@1 60; Harvey, $2 00; common, 75c@$1 00. BUTTER.—Northern creamery, extra, 28@29c; do. firsts, 24@26c; Western creamery, extra, 27@28c.; do. firsts, 25@26c; do. choice, 20@21, dairy, Franklin County, finest, 27@28c; good to choice, 24@26c.; Vermont extra, 25@26c; Northern, choice, 24@26c; do. fair to good, 14@15c., Western dairy, good to choice, 12@13c; imitation creamery, extra, 14@15c; ladle-packed, choice 13@14c; do. fair to good, 11@12c. BEANS.—Choice pea, Northern hand-picked $1 80@1 85 per bushel; do. do. New York, choice, hand picked, $1 70@1 75; do. do. screened, $1 80@1 85, medium choice, hand-picked, $1 60@1 65; do choice screened, 1 25@1 50; Yellow Eyes, choice, $1 55@1 60; do. flat, $1 50@1 55; Red Kidneys, $1 75. CHEESE.—New York extra, 12c; do. good to choice, 10½@11c; do common, 7@9c; Vermont extra, 12c; good to choice, 10½@11½c; common, 7@9c; Western extra, 11½@12c, do. fine, 9@10c; common, 6@8c, Sage, extra, 12@12½c. EGGS—Near-by and cape, 25c. per doz; Eastern extras, 23@24c; Aroostook County, 22c; New York and Vermont, 22@23c; Western, 16@20c; Provincial, 20@21c. HAY AND STRAW.—Choice hay, $18 00@19 00 per ton; fair, $15@16; ordinary, $14@15; fine, $13@16; Swale hay, $10@11; poor, $10@13 50 per ton; Western choice, $10@11; do, fair to good, $13@14 50; rye straw, $16@17 per ton; do. do. machine, $12@13 per ton; oat straw, $8 00@10 00 per ton. POTATOES.—Early Rose, 40@55c; Beauty of Hebron, 48@53c. Sweet Potatoes—Virginia Yellow, $1 12½@1 25 per bbl; Jersey, $1 37@1 62 per bbl. SEEDS.—Clover, West, 9¾@10½c. per lb; North, 10¾@11c; do. white, 18@26c; do, Alsike 12@15c; red top, per sack, West, $2 25; do, Jersey, $2 30@2 50; Hungarian, 90c@$1 00; Millet, 90c@$1 00; Orchard, per bush, $1 80@2 00; Blue grass, $1 40@1 60; Timothy, Western, $2 15@2 25; do, Northern, $2 25@2 40; American Flaxseed, $2 25.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, October 23, 1886.

STATE OF THE MARKET.—As compared with cash prices last week, flour is 5c. lower; Ungraded Red Wheat 1c. lower; No. 2 Red ½c. higher. Corn, Ungraded Mixed, ½c. higher; No 2 steady. Oats, ½c. lower. Pork, steady. Butter, 1c. lower. Cheese, steady. Eggs, 1c. higher. Poultry, a shade higher. Fruits and vegetables steady.

FLOUR, FEED AND MEAL—FLOUR—Quotations: Fine, $1 80@2 60; Superfine, $2 15@2 85; No. 2, $2 45@3 05; Good to Fancy Extra State, $3 30@3 70; Common to Good Extra Western, $2 40@3 70; Good to Choice Extra Western, $3 80@4 75; Common to Fair Extra Ohio, $2 40@3 75, Good, $3 80@4 20; Good to Choice, $4 25@4 75; Common Extra Minnesota, $2 45@4 10; Clear, $3 40@4 00; Rye Mixture, $3 20@3 85; Straight, $3 60@4 65; Patent $4 30@4 90; Bakers' Extra, $3 90@4 30; St. Louis Common to Fair Extra, $2 40@3 65; Fair to Good, $3 70@4 50; Good to Very Choice, $4 55@4 75, latter an extreme, Patent Winter Wheat Extra, $4 20@4 75, City Mill Extra for West Indies, $4 25@4 50, latter in new pkgs.; South America, $4 60@4 70. SOUTHERN FLOUR.—Common to Fair Extra at $3 25@3 85, and Fair to Choice, $3 90@5 00. RYE FLOUR.—Superfine, $3 10@3 30. CORN MEAL.—Yellow Western, quoted at $2 50@2 75; and Brandywine at $2 75@2 85. Sales—200 bbls. BUCKWHEAT FLOUR—$1 70@1 90. FEED.—10 lb, quoted at 65@70c; 60 lb, at 62½@65c; 80 lb, at 70@75c; 100 lb at 80@90c sharps, at 95c.@$1 00. Rye Feed at 75@77½c; screenings at 45@75c.

GRAIN.—WHEAT.—Ungraded Milwaukee, 81½c; Ungraded Red, 75@85¼c; No. 3 Red, 82c; No. 2 Red, 84c; White Canada, 90c; No. 2 Red for October, 84¾; do. for November, 84¾@85c; do. for December, 86⅝@86 9-16c; do. for January, 87¾@88¼c; do. for February, 89½@89¾; do. for March, 91@91¼c; do. for April, 92⅜@92½c; do. for May, 93¼@94½c; do. for June, 94¼@94⅞. CORN.—Ungraded Mixed, 44½@45¾c; old No 3, 44½@44½c; No. 2, 44⅝@45c. in elevator, 46c. afloat; Yellow, 46¾c; No. 2 for October, 45c; do. for November, 45⅛@45¾c.; do. for December, 46¼@46½c; do for January, 47¼@47½c; do. for February, 47¾@48c; do. for May, 49½@49¾c. OATS.—No. 3 at 31c; do. White, 34@34¼c; No. 2, 31½c; do. White, 35@35¼c; Western Mixed, 31½@33c, do. White, 35@39c; White State, 36c; No. 2 for October, 31¾c; do. for November, 32@32½c; do. for December, 32½@33c; do. for January, 33⅝c; May, 36c.

PROVISIONS.—PORK.—Mess, quoted at $9 75@10 00 for Old and $10@10 50 for New; $14 for Family Mess; $14 50@15 50 for Clear Back; and $10 00@10 50 for Extra Prime. BEEF.—Extra India Mess $11 00@14 00; Extra Mess, in barrels, $7 50@8; Packet, $8; Plate, $7 25@$8. BEEF HAMS.—$18 50@$ 9 00. CUT MEATS.—Pickled Bellies, 12 lb average, 7¼c; City Pickled Shoulders, 5¾c; Smoked Hams, 11@11¼c; Smoked Shoulders, 6¼c, Pickled Hams, 10@10¼c. MIDDLES.—Long Clear in New York, 6c. DRESSED HOGS.—City Heavy to Light at 6@6½c; Pigs, 6¾c. LARD.—Western steam, 6c; Choice, 6c; City Steam, 6c; Continent, 6.40c; South American, 6.75@6.80c, October, 6.00c; November, 5.97@6c; December, 6.09c; January, at 6.14@6.16c; February 6.24@6.25c; March, 6.31c.

BUTTER.—Creamery—State Dairy, pail, fine, 29@30c; do. prime, 26@28c; do, and Pennsylvania, tubs, 28c; Western, best, 27@27½c; do, prime, 25@26c; do, good 20@21c; do. June, best, 23@23c; do. do. prime, 21c pails, choice, 24@24c; half-firkins, tubs, fine, 23@24c; half firkins, tubs, good, 21@22c; half-firkins, common, 17@18c; Welsh tubs, best, 24c; do. do. prime, 21@23c. Dairy firkins, best, 23c; do. do. prime, 21@23. Western Imitation Creamery, best, 18c; imitation creamery, fair and good, 16@17; Dairy, fine, 16@17c; do common, 14@15c; Iowa firkins, June, 12@14; Iowa tubs, June, best, 14@15c; Factory, poor, 8@10c.

CHEESE.—State factory, fancy, colored, September, 11¾c; do, do, do, white, September, 11½@11¾c; do, do, best, colored, August, 11¾c; do, do, white, August, 11¼c; do, do, good and fine, 10½@11c; do, do, fair, 9½@10c; do, do, common, 9@9¼c; Ohio factory, fine, flat, 10½@11c; State factory, night skims 8½@9¼c.

EGGS.—State, 21@22c; Ohio and other choice lots, 21c; Western, best, 20½@21c; do, held lots, 19@19½c; Canadian, held lots, 19@19½c; do, fair held lots, 17@18c, Limed, 17@17½c.

POULTRY.—LIVE.—Chickens, per lb, at 8c; fowls, near-by lots, per lb, at 8c.; fowls, Western lots, per lb, at 7@8c, fowls Southern lots, per lb, at 7@8c; turkeys, per lb at 8c; ducks, western per pair at 45@60c.; geese, western, per pair, at $1.00@1.25.

POULTRY.—DRESSED.—Turkeys, per pound, at 12@13c.; Spring chickens, Philadelphia, per pound at 15@17c.; do. western, per lb, at 8@10c; fowls, Pennsylvania, prime, per lb, 12@ 3c; do western, per lb, at 8@9c.

FRUITS.—FRESH.—Quotations: Pears.—Bartlett, per keg, at $3 00@4; Seckel, per bbl, at $3@4 50. Apples.—Gravenstein per bbl, at $2 50@3; varieties at $1@1 75 per bbl; Pippins, at $1 75@2 50 per bbl; Greenings, $1 50@2 per bbl. Grapes, 6@9c. for up-river Delaware, per lb; Catawba, at 4@5c. per lb; Concord, per lb, 3@4c. Quinces at $2 50@3 for choice. Cranberries at $6 50@6 25 for Cape Cod best; at $6@6 25 for choice; $2 50@3 for light; $2@2 25 for choice, per crate; $1 25@1 50 for Jersey, per crate.

FRUITS.—DRIED.—The quotations are as follows; Apples—Fancy evaporated, 9c; do. choice, at —@8½; do. Tennessee quarters at —@—c; do. State sliced at —@—c, do. southern sliced prime at 2½@3c; do, North Carolina, fancy sun dried, new, 5@5½c; do. do. choice 3½@4c; do. do. prime, 3c. Peaches—North Carolina, peeled choice new, 11@11½c; do. do. do, fancy, new, 12@12½c; do, Georgia, choice, at —@10c; do, do, prime fancy, new, 12@12½c; do. Delaware, evaporated, peeled, 23@26c; do, do, do, unpeeled new, 12½@13c, do, Georgia new, 10½c. Cherries, pitted, at 9½c. Evaporated raspberries, 14½@15c; sun-dried do. 12½@13½c. Blackberries—Prime at 7¼@7½c. Plums, at 6½@7c.

PEANUTS.—Quotations are: 5@5¼c. for fancy handpicked; 4@4¼c. for farmers' grades.

HOPS.—American—New York State, crop of 1885, common and medium, 25@30c; do. 1884, prime to choice, 16@18c; do. common to medium, 12@15c; Pacific Coast crop of 1886, prime to choice, 30@32c; do. 1885, good to choice, 13@16c, Foreign—avarian and Bohemian, crop of 1886, 30@35c; mixed German do. 25@28c; Altmarks do. 30@32c; Kents do. 25@30c; Sussex do. 30@25c.

HAY AND STRAW.—Hay, No. 1 Prime Stock, 85@90c; No. 2 do, 70@80c; No. 3 do. 60@60c; Shipping, 50@55c; Clover, Mixed, 60@60c Straw.—Long rye, 65@75c; short rye, 50c; oat, 45@55c; wheat, 45c.

COTTON.—The quotations, according to the American classification, are as follows:

	Uplands.	New Orleans and Gulf.	Texas.
Ordinary	6 9-16	6¾	6¾
Strict Ordinary	7	7 3-16	7 3-16
Good Ordinary	7 15-16	8⅛	8⅛
Strict Good Ordinary	8⅜	8 9-16	8 8-16
Low Middling	8 13-16	9	9
Strict Low Middling	9⅛	9 5-16	9 5-16
Middling	9 5-16	9⅜	9⅜
Good Middling	9 9-16	9¾	9¾
Strict Good Middling	10 13-16	10	10
Middling Fair	10 3-16	10⅜	10⅜
Fair	10 13-16	11	11

STAINED.

Good Ordinary	6¾	Low Middling	7⅞
Strict Good Ord	7 1-16	Middling	8¼

VEGETABLES.—There is a very fair demand for potatoes, with prices without change and held steadily notwithstanding supplies continue full. Quotations are for: Potatoes.—Longisland, rose, in bulk, per bbl., $1 75@2 00; State, $1 25@1 50; do Burbank, $1 25@1 50; Jersey, peerless, per bbl, $1 25@1 37; sweet potatoes, Va., yellow, per bbl., $1 25@1 50; sweet potatoes, Va., yellow, inferior, per bbl, $1 00@1 25. Corn.—Jersey, per 100, $1 50@1 75. Cabbages.—Flat Dutch, per 100, $5@6. Cucumbers—Pickles, per 1,000, 75c.@$1 25. Egg plant, Long Island, bbl, per $3@3 50. Lima beans, per bag, $2 50@2 75. Onions.—Conn., red, per bbl, $1 50@1 75; do. Orange County, red, per bbl, $1 50@1 75. Tomatoes—Long Island, per box, 50c. Celery, per doz. branches, $1 00. Turnips, Russian, per bbl., $1 25@1 50.

WOOL.—The latest sales reported are: 1,850 lb Super Pulled; 2,450 do Low Texas and Colorado s rts, on private terms. 5,000 do. Scoured Texas, 55c; 6,000 do. Spring do. 25@26c; 120 bales California, 21@22½c.

LIVE STOCK MARKETS.

NEW YORK, SATURDAY, Oct. 23, 1886.

BEEVES.—Colorado Half-Breeds, 1302 lb average, at $4 50; do, 1212 lb, at $4 20; do, 1163 lb, at $3 75; Native steers from Chicago, 1451 lb, at $5 20, do, 1440 lb, at $5 12½; oxen, 1661 lb, at $4 30; Ohio Steers, 1341 lb, at $5 12½; do, 1295 lb, at $5 05; do, 1291 lb, at $5 00; West Virginia steers, 1422 lb, at $5 25; do, 1140 lb, at 5; do, 1336 lb, at $4 85; Ohio do, 1060 lb, at $3 90; do, 1042 lb, at $3 25; Texans, 1027 lb, at $3 70; do, 1018 lb, at $3 60; do, 1028 lb, at $3 55; Kentucky Steers, 1378 lb, $5; do, (oxen) 1423 lb, at $4 10; Ohio steers, Heifers and cows 910 lb, at $3 35; do. 923 lb, at $2 95; bulls, 855 lb, at $2 40; do, 1056 lb, at $2 65; Kentucky Steers, 1600 lb at $5 45; do, 1398 lb, at $5 15; Oxen, 1504 lb, at $4 50; Ohio do, 1967 lb, at $4 90; do, 1350 lb, at $4 65; Steers and Heifers, 1133 lb, at $4; Virginia steers, 1429 lb, at $5 20; do, 1371 lb, at $5 10; do, 1348 lb, at $4 90; Chicago steers, 1392 lb, at $5 00; do, 1356 lb, at $5 10, do, 1197 lb, at $4 70; Virginia do, 1255 lb, at $4 65, do, 1270 lb, $4 55; Kentucky steers, 1462 lb, at $5 30; Oxen, 1396 lb, at $4 37½; Colorado Texans, 1069 lb, at $3 85, do, 1084 lb, at $3 60; Indiana steers, 1119 lb, at $4 20.

CALVES.—Grassers, 168 lb, at 2c; do, (few Fed Calves), 251 lb, at 2½c; Fed Calves, 240 lb, at 3c; do, (few Veals), 208 lb, at 3½c; Fed Calves, 572 lb, at 3¼c; do, 316 lb, at 3½c; Veals, 155 lb, at 7½c; Fed Calves, 376 lb, at 2¾c; Veals, 166 lb, at 5½c; do, 151 lb, at 5½c.

SHEEP AND LAMBS.—Western Sheep, 94 lb, at 4c; Canada Lambs, 82 lb at $5 55; Western Sheep, 88 lb, at 3¾c; do, 116 lb, at 4½c; Canada Lambs, 79 lb, 5¾c; Pennsylvania Sheep, 95 lb, at 4c; Pennsylvania Lambs, 58 lb, at 5c; Indiana Sheep, 85 lb, at 3½c; Kentucky do, (few Lambs), 89 lb, at $4 20; do, 69 lb, at $3 85; Canada Sheep, 119 lb, at $4 40; Kentucky do, 99 lb, at $3 80; Kentucky Lambs, 65 lb, at $4 85; Canada do, 86 lb, at $5 90; Kansas Sheep, 80 lb, at 3¾c; Kentucky do, 85 lb, at 3c; Clipped Texas do, 69 lb, at 2½c.

HOGS.—Receipts for six days, 33,143 head against 41,368 head for the same time last week. Dealers quote 4¾@5c. for Fair to Prime corn-fed Hogs.

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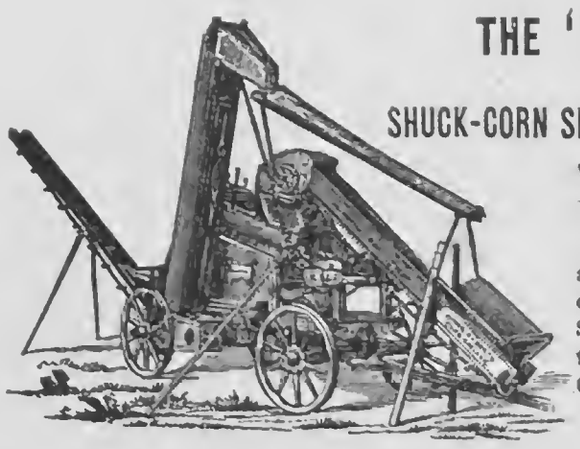

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For the Young.

THE STORY OF A DISTRICT SCHOOL.

A COLLEGE BOY'S DIARY.

(Continued.)

It was hard to say from the tone in which this invitation was shouted whether I was expected to walk off the premises or into the house. I decided to adopt the latter view of it, so I pushed open the door and walked in. I found myself in the kitchen; the members of the family not actually engaged in doing the chores had gathered there to meet me. A man, whom I found to be "Old Johnson," sat by the stove watching a pan of milk which he was heating for the calves. He had on an old, beaten hat, the rim of which lopped down at the sides and stood up straight at front and back. Through a hole at the top a tuft of gray hair stood up like an Indian's plume. A great brush of gray hair covered most of his face below the eyes. An irregular hole, apparently cut with a very dull pair of shears, had been opened in this brush about his mouth. Through this opening a set of enormous false teeth glanced into view whenever his jaws moved. He wore a ragged coat and vest and a pair of patched overalls. On the corner of the stove not occupied by the pan of milk, a young woman with very red hair and very sore eyes was frying doughnuts. A very tall, thin woman, who looked as though she had been dried and smoked for years over a hot stove, was moving wearily about at the work of setting the table, I said "good evening" and hung my coat on a nail back of the door. Old Johnson watched me keenly over his pan of milk. It was impossible to make out from his manner what he thought of me.

"Howdy, teacher," he said at last; "how be ye? Make yerself ter home. Ef they's anything ye want ye don't see, jest call fer it."

The elder woman, who I found to be Mrs. Johnson, brought me a chair. I selected a place by the stove where I thought I would not be in the way and sat down. I had had very poor luck at starting a conversation with the Bear Creek people that I had met thus far, so I said nothing but waited for old Johnson to open. He stirred away at his milk industriously for a time without a word. He monopolized so much of the stove that the red-haired young woman was driven to one corner where the wood-box on one side and the table on the other, made it impossible for her to get away from the stove. Having driven her into this inclosure, old Johnson piled so much wood into the stove that the iron in front grew almost red hot. The young womans' face grew as red as her hair, and she fairly gasped at the heat. Having accomplished this much desired result old Johnson winked at me in a way that nearly threw his false teeth out of his mouth. Then he took the pan of milk from the stove and poured it into a bucket.

"Here you Johnny," he shouted, "come here an' git this milk fer them calves."

In a moment Johnny's white head came in at the door. The little fellow smiled with pleasure as he saw me, but old Johnson's harsh voice quickly called him back to business. "What ye standin' thar grinnin' fer? Git out an' feed them calves or I'll take the strap to ye!"

The little face clouded over at once. Johnny took up the bucket and walked towards the door. It was pretty heavy for the little arms, but he tugged at it bravely. As he turned around to shut the door, there was a look on his face just like the one that had appeared when he said, "I'm gonter lick old Johnson some day."

Old Johnson leaned back in his chair with a well satisfied expression on his face.

"What ye got fer an appytite teacher?" He said at last. "Most on 'em comes here with an appytite like a hoss. The poorer the the teacher the bigger the eater—I alluz jedges 'em that way. When I wuz on the school board I alluz sed 'set by an' let me see ye eat 'afore I hire ye.' I never missed 'em onct. They done a poor thing when they 'lected this Forest in my place. I 'low we'll hev ter bridle ye up so'st ter save our vittles."

Mrs. Johnson came up to the stove to feebly defend the honor of her house. "Why Iry ai'nt ye 'shamed? He don't menn nothin' teacher—its jest his joke."

Old Johnson gave me another wink that fairly made his false teeth clatter. Then he turned his attention to the red haired young woman.

"My hired gal alluz makes it a pint to stand up for the master. She said ——"

What the young woman said must have been of a very startling nature, for the idea of having it repeated caused her to scowl in a dreadful manner,

"Look at them sour smiles," said old Johnson exultingly. "Aint that ere a putty countenance? It's lucky I got that milk offen the stove, fer that smile 'o hern would a soured it, sure's ye live. Them calves dunno how clos't they run to a sour supper."

This enraged the young woman so greatly that she shouted "shut up!" and threw a large doughnut, which, with a genuine woman's aim went as far as possible from its mark.

Old Johnson shouted with laughter till the false teeth caught at the back of his mouth and choked him into silence.

"What's the fun 'o runnin' folks ef they don't git mad? I'm sorter sorry fer ter see good fried cakes wasted, but then I s'pose they'll do ter go inter the teacher's pail 'o dinner termorrer. Say teacher, when the boy comes in I'll show ye sum fun. He's a panper, ye see. I tuck him frum the County house. His marm's sorter foolish an' he aint noways bright. You wait till he comes in."

Pretty soon Bill Johnson and Johnny came in from the barn. Johnny had soaked his face with cold water at the pump. Now he polished his red cheeks with the course towel until they shown like a bright apple.

"Say Johnny," said old Johnson, "I reckon I'll hev ter make it sos't I shall hev ter go over ter Ben Edwardses 'fore long. How'd ye like ter go an' see yer marm?

Johnny rushed forward in breathless eagerness. "When do you reckon you'll go?" he said.

"Wall," said old Johnson with a cruel chuckle, "I reckon I'll be sure fer ter go when Sunday comes in the middle 'o the week," and both old Johnson and Bill Johnson leaned back and roared with laughter at this marvelously funny joke. They seemed to wonder why I did not laugh, but I was watching Johnny's face.

LETTERS FROM THE COUSINS.

DEAR UNCLE MARK: My sweet peas have gone. I am sorry to say they did not blossom till the last part of August. I waited too long. I asked Papa if the frost was out of the ground the first of May, and he said he did not think it was, so I waited till the last week of May, and I planted the seeds in fine dirt under a window and they ran as far as the window on strings. I think the reason they did so poorly is because the ground is so dry, but I watered it every night after supper when the sun was gone. But the driest part of the Summer they did not get much water because the wells and the creek were all dried up, and we had to carry all the water. Mamma has a nice verbena bed and I took care of it for her this Summer as she is not very well. We had a hard wind storm which shook all the apples off of the trees and so we will not have very many this year. Hoping I may remain a member of the Y. H. C. Your niece,

LOUISE SCHOENFELD.

DEAR UNCLE MARK: I have become interested in reading the Cousins' letters and would like to join the Y. H. C. I am a little boy nine years old and live with my Grandma and Grandpa on a farm of 160 acres. We have four horses, three calves and two cows. My Grandpa takes the RURAL and thinks he he couldn't live on a farm without it. We have sold all our hogs except one little pig which I have named Tiny. I have for a playmate a little puppy and he is a great pet and can chase rabbits and birds and I named him after the Roman Emperor Nero. I do not go to school, but study at home. For fear of the waste basket I will close now. Your nephew,

LEE BEARDSELL.

DEAR UNCLE MARK: It has been a long time since I wrote you. I expected to write long ago but something would bother that I did not get it done. I got the sweet peas, but did not plant them or any of the Rural Treasures as Mamma and I were both sick; but I will plant them next Spring, and I will write you what luck I have. We have some very nice house plants now, among them are 11 different kinds of geraniums, five different coleus, three different oxalis, two flowering maple, two hydrangea, four fuchsias, three begonias, and lots of other plants, and I have got six little orange trees started so you see I intend to have oranges to eat some day. There are no potatoes in this part of the country at all. I expect they will be high in price this year. I have got a coon for a pet. A little pedler came along one day and asked if that was a wild hog we had. Papa told him it was a coon. Your niece,

AMY UNDERWOOD.

Douglas Co., Oregon.

DEAR UNCLE MARK: It has been a long time since I wrote my last letter to you, but I hope the Cousins will excuse my silence. The weather is very fine now, just the kind I enjoy. But I don't think it will last long, for Winter is close at hand. I have been at work all Summer. I live on a farm of 200 acres, and father and I did all the work ourselves. We tended 40 acres of corn, and put in 80 acres of wheat this Fall, so I haven't had much time for pleasure, except now and then a half a day to go fishing, and there is nothing I like better than fishing. Uncle Mark, do you ever go fishing? I am going to school now. I ride to school every day four miles to Brownsville, and I have seven studies. As I come home of an evening, I drive the cows from the pasture. We have four fine calves and about 50 Berkshire hogs. Uncle Mark, couldn't you manage to crowd in a few more letters in the letter columns? I enjoy reading them so much. I wish we could have a whole page every week. The "Story of a District School" is rather comical—I like it. Uncle Mark seems shy about telling his age. My birthday will soon be here. I will be 17 years old. I went hunting yesterday and killed two squirrels. I went 'possum hunting with one of my cousins the other night, and it was nearly midnight when we got back home, and we had lots of fun, I tell you. I would like very much to correspond with any Cousin about my age, who lives in some distant state. Your nephew,

Brownsville, Mo. N. C. RIGG.

[UNCLE MARK does not go fishing very often, and when he does he has rather poor luck. He is quite a ball player though, and likes a good game of ball as well as the next one. We often play ball with a big rubber ball and a light bat. All hands take sides and some of the ladies are our best players. The dog would make a good fielder, for he will run and pick up the ball in his mouth as though he wanted to play too. I like to see boys and girls, and men and women too for that matter, play ball. It is a good exercise and does nobody harm if played as it should be.]

DEAR UNCLE MARK: Will you let me join the Youths' Horticultural Club? I am 12 years old. Pa has taken the RURAL NEW-YORKER for three years. I don't know whether you can read my writing or not. I have not studied writing much, but I am studying farming. Can you tell me what will kill cabbage lice. There are a great many on our cabbage this years. ERNEST FURLONG.

Lawrence Co., D. T.

[Buhach will kill the insects.—U. M.]

DEAR UNCLE MARK: I am a little girl, nine years old, and I thought I would write you a letter this cold day. We live by the side of Lake Champlain and it looks cold and lonesome. We can see the snow on the Green Mountains in Vermont. It looks like Winter. We have a bushel of walnuts and over a bushel of pop corn, so Uncle Mark if you will come and see us you may have some to eat. We have four pigs, two-year-old ones, and two young ones. The young ones can jump a fence as well as any boy. It is fun to see them jump out of their pen. I have a cat; his name is Spot. When he is poor he will play and is very nice, but just as soon as he gets fat he gets so lazy that he won't do anything but sleep under the stove. MINNIE SIBLEY.

Essex Co., N. Y.

[I have a great mind to stop work and come at once. It is probably more fun to see those pigs jump over the fence than it is to drive them back again. I have seen pigs before now fastened to a stake by tying a rope to one of their hind legs. Some people as well as some cats get lazy when they eat too much.—U. M.]

DEAR UNCLE MARK: I have written you several letters and have had but one printed. But I am not discouraged, and thought I had better write again, for I guess the Cousins have forgotten to write lately, by the looks of those advertising columns.

I was 13 years old on Sept. 3rd. I had quite a number of presents given to me. My sweet peas came up quite well, and were very nice (what there was of them), for between the chickens and the dry weather there were not many left, though I tried to take good care of them. My brother and sister and I have three little Bantams (two hens and a rooster) that a lady gave us. We have not named them yet. Perhaps you can tell us some nice names for them. I raised eight rows of onions this Summer; the rows were nearly four rods long. I would like to correspond with Lena Bennett, of Hector, Schuyler Co., N. Y., for she is about my age, and I hope if she sees my letter in the RURAL, and wishes to correspond with me, she will write me a letter.

Yours respectfully, SADIE E. WRIGHT.

North Ridge, N. Y.

[I should have to know more about the Bantams before I could name them. It is better to name our own things, then we will think more of them.—U. M.]

Miscellaneous Advertising.

DIXON'S "Carburet of Iron" Stove Polish was established in 1827, and is to-day, as it was then, the neatest and brightest in the market; a pure plumbago, giving off no poisonous vapors. The size is now doubled and cake weighs nearly half a pound, but the quality and price remain the same. Ask your goocer for Dixon's big cake.

THE COCAINE HABIT.

THE WORST SLAVERY KNOWN—NEW REVELATIONS OF POWER.

Cincinnati Times-Star.

WHEN cocaine was first discovered, the medical world exclaimed "thank heaven!"

But useful as it is, it is also dangerous, especially when its use is perverted from the deadening of pain for surgical operations, to the stimulation and destruction of the human body. Its first effects are soothing and captivating, but the thraldom is the most horrible slavery known to humanity.

J. L. Stephens, M. D., of Lebanon, O., was intervied by our reporter yesterday at the Grand Hotel, and during the conversation the doctor said: "The cocaine habit is a thousand times worse than the morphine and opium habits, and you would be astonished," he said, "if you knew how frightfully the habit is increasing."

"What are its effects?"

"It is the worst constitution wrecker ever known. It ruins the liver and kidneys in half a year, and when this work is done, the strongest constitution soon succumbs."

"Do you know of Doctor Underhill's case here in Cincinnati?"

"That leading physician who became a victim of the cocaine habit? Yes. His case was a very sad one, but the habit can be cured. I have rescued many a man from a worse condition."

"What, worse than Dr. Underhill's?"

"Indeed, sir, far so. Justin M. Hall, A. M., M. D., president of the State Board of Health of Iowa, and a famed practitioner, and Alexander Neil, M. D., professor of surgery in the Columbus Medical College, and president of the Academy of Medicine, a man widely known, Rev. W. P. Clancey, of Indianapolis, Ind., from personal experience in opium eating, etc., can tell you of the kind of success our form of treatment wins, and so can H. C. Wilson, formerly of Cincinnati, who is now associated with me."

"Would you mind letting our readers into the secret of your methods?"

"Well, young man, you surely have a good bit of assurance to ask a man to give his business away to the public; but I won't wholly disappoint you. I have treated over 20,000 patients. In common with many eminent physicians, I for years made a close study of the effects of the habits on the system and the organs which they most severely attack. Dr. Hall, Dr. Neil and Mr. Wilson, whom I have mentioned, and hundreds of others, equally as expert, made many similar experiments on their own behalf. We each found that these drugs worked most destructively in the kidneys and liver; in fact, finally destroyed them. It was then apparent that no cure could be effected until those organs could be restored to health. We recently exhausted the entire range of medical science, experimenting with all known remedies for these organs, and as the result of these close investigations we all substantially agreed, though following different lines of inquiry, that the most reliable, scientific preparation was Warner's safe cure. This was the second point in the discovery. The third was our own private form of treatment, which, of course, we do not divulge to the public. Every case that we have treated first with Warner's safe cure, then with our own private treatment, and followed up again with Warner's safe cure for a few weeks has been successful. These habits can't be cured without using it, because the habit is nourished and sustained in the liver and kidneys. The habit can be kept up in moderation, however, if free use be also made, at the same time, of that great remedy."

"Yes, it is a world-famed and justly celebrated specific! Like many other physicians, I used to deride the claims made for it, but I know now for a fact that it is the world's greatest blessing, having sovereign power over hitherto incurable diseases of the kidneys and liver, and when I have said that, young man, I have said nearly everything, for most diseases originate in, or are aggravated by, a depraved condition of the kidneys."

"People do not realize this, because, singular as it may seem, the kidneys may be in a very advanced stage of decomposition, and yet owing to the fact that there are but few nerves of sensation in them the subject will not experience much pain therein. On this account thousands of people die every year of kidney disease unknowingly. They have so called disorders of the head, of the heart and lungs and stomach, and treat them in vain, for the real cause of their misery is deranged kidneys, and if they were restored to health, the other disorders would soon disappear."

Dr. Stephens's experience, that can be confirmed by many thousands whom he has treated, adds only more emphasis to the experience of many hundreds of thousands all over the world, that the remedy he refers to is without any doubt the most beneficent discovery ever given to humanity.

PERSONALS.

THE Grand Duke Nicholas, heir of the Czar, has consumption, and it is feared he can't get over it.

PRESIDENT CLEVELAND has appointed "Cousin Ben" Folsom to the Consulship of Sheffield, England—salary $2,500 and fees about as much more.

ANY insurance company that will insure Dan. Flowers's Montana cattle range and secure him against all loss this Winter can have $250,000. This is Flowers's standing offer.

MISS MOLLIE GARFIELD is reported engaged to Stanley Brown, who for so long had confidential relations with the late President Garfield, and was his private secretary after he went to the White House.

CHIEF-JUSTICE Waite is said to be a persistent pedestrian. He walks daily both ways between his home in the West End of Washington and the Capitol and cheerfully greets acquaintances he may meet.

THERE are in the employ of the Government 550 Smiths, 360 Browns, 320 Johnsons and 270 Joneses. The number of those who bear these names who are willing to serve the Government has never been recorded.

SENATOR WARNER MILLER is often seen on Broadway. He wears a great man's shabby hat, but otherwise cuts a disappointing figure to those who expect to see something remarkable about a Senator of this great State.

PHIL. ARMOUR says: "The day of Chicago's supremacy as a pork packing center will soon be a thing of the past. Kansas City, Omaha, Cedar Rapids and other Western points are fast taking the business away from here."

JUDGE Manning, of Louisana, the new United States Minister to Mexico, arrived at the City of Mexico Tuesday and was greeted by representative American merchants and others. It is understood that he will re-open the Cutting case.

MISS ROSE ELIZABETH has struck for $300 a month salary and a half interest in Literary Life. Capitalist Elder is undecided whether to lock out, or take the salary himself and give Miss R. E. the magazine. It was on its last legs when she bolstered it up.

THE Tennessee Republican candidate for Governor, Alfred A. Taylor, at the age of 15 delivered a lecture in Faneuil Hall, Boston, on the condition of the negro in the South, and one year later spoke from the same platform with William Lloyd Garrison.

THE President, Monday, appointed Dabney H. Maury to be United States Envoy Extraordinary and Minister Plenipotentiary to the United States of Columbia. Mr. Maury was nominated to this office during the session of Congress, but the Senate did not act upon his nomination.

GEORGE F. EDMUNDS has been re-elected United States Senator by the Vermont Legislature, receiving 228 out of 264 votes. There was but one vote against him in the Senate and 35 in the House. He first took a seat in the United States Senate on April 5th, 1866, and has served continuously since.

SENATOR GORMAN, of Maryland, was one of the few who were in favor of the sweet-wine bills which were defeated in the Senate last Winter. He is now in California, and has been invited by the Viticultural Society to visit the grape districts and make a study of the wine question at its home. He will probably go to Napa, Sonoma and Los Angeles Counties.

OCTOBER 10 Mrs. Grant received $150,000 from Webster & Co., as her share of the profits from "The Personal Memoirs of U. S. Grant." With the other payment made Feb. 28, 1886, this makes the total receipts to date $350,000. Out of the sum still due, but not collected, she is entitled to something over $100,000 more, and she receives 70 per cent of the profits on all sales while the copyright runs.—28 years.

MR. DANA, of the Sun, paid the $500 bill of Holmes & Co., for embalming Gen. Grant, and Col. Fred. Grant, on behalf of his mother, sent a check for the amount to Dana, and in the accompanying letter denied the validity of the claim, and cast reflections of Dana's motive for paying the bill. C. A. Dana was in Europe at the time, but his son Paul declined to receive the check, on the ground that Col. Grant's statement as to the validity of the claim rendered it impossible to do so.

Miscellaneous Advertising.

A Great Reward

will be secured by those who write to Hallett & Co., Portland, Maine. Full information will be sent you, free, about work that you can do and live at home wherever you are situated. That will pay you from $5 to $25 and upwards a day. A number have earned over $50 in a day. Capital not needed. Hallett & Co. will start you. Both sexes; all ages. The chance of a lifetime. All is new. Now is the time. Fortunes are absolutely sure for the workers.

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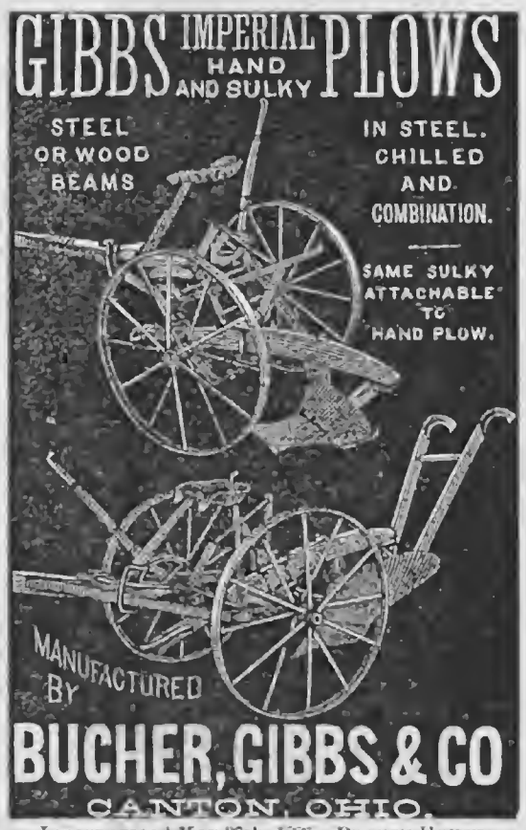

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390 Funny Selections, Scrap pictures, etc., and nice Sample Cards for 2c. HULL CARD CO., Cadiz, Ohio.

WYANDOTTES. Thoroughbred Stock, at $1 each. J. T. COTHRAN, Greenwich, N. Y.

STOCK FARM FOR SALE.—The best Stock Range on the Georgia Coast. Good Fishing, Gunning, and unlimited supply of Oysters. EZRA COE, Care of GRAHAM & HUBBELL, SAVANNAH, GA.

CHOICE POULTRY. STANDARD BIRDS.
White Leghorns and P. Rocks. $1 to $1.25 each. **Wyandottes.** $1 to $1.50 each. Don't patronize "poultry sharks," but send direct to the SAYBROOK VALLEY POULTRY YARDS, OAK HILL, GREENE CO., N.Y. Satisfaction guaranteed. **ORSON WINANS.**

POULTRY SUPPLIES.
Fresh Ground Beef Scraps, Granulated Bone and fine Bone Meal, Oyster Shells, etc.
Send for circulars and samples.
C. A. BARTLETT, WORCESTER, MASS.

OXFORD DOWNS.
Another importation will arrive Sept. 1st from the celebrated flock of John Treadwell, whose sheep have again this year won 1st, 2d and Champion prizes at the "Oxfordshire," "Bath and West of England," and the great "Royal" shows. His best Rams are by my grand imported, 420 lb., "Bicester," winner at these Shows '83, '84 and was 1st at sweepstakes, *over the other Downs*, at Chicago, Madison, Wis., and St. Louis. Mr. Treadwell wanted him back last year. For sale, Imported Rams, Ewes and Lambs by Imported "Bicester," "Sir John," "Baron Campsfield" and "Donatus."
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Five Thoroughbred and Reg. *BULLS*, various ages (ECHO Strain); 30 Head of Graded *HOLSTEINS*, consisting of Cows, Heifers, and Spring Calves. Great inducements offered, and good reasons for selling.
Address **LEWIS BROTHERS,** Mitchellville, Steuben Co., N. Y.

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DOG BUYERS' GUIDE. Colored plates, 100 engravings of different breeds, prices they are worth, and where to buy them Mailed for 15 Cents. **ASSOCIATED FANCIERS,** 237 S. Eighth St. Philadelphia, Pa.

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HIPPARCHUS No. 11672; Sire Orange Peel, P. 288; Dam King's Fertile, No. 22765. Service Fees, $100.
BRIGHTSON No. 11671, Sire Farmer's Pride P. 322; Dam Nellie Flanders, No 22764. Service Fees, $100.
PRINCE NERO Sire Nero, P. S. 249; Dam Mrs. Langtry, C. 3746. Service Fees $100.
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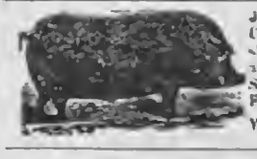

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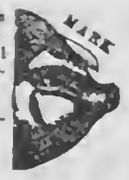

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Humorous.

THE chestnut of the present season is coal.—*New Age.*

"WELL, Uncle Zeke, what compensation do you want for whitewashing the fence?" "Doan want no kompensashun, Massa Backus; only just fo' dollars an' a half."—*New Orleans Picayune.*

NEW YORKER (at an art exhibition): "What is this picture?" Bostonian: "Ah! No. 144. The Desert of Sahara." New Yorker: "What a magnificent ball ground that would make, hey?"—*New Age.*

TRAMP: "Please help me, I am a Charleston sufferer." Old gentleman: "Ah, indeed—a sufferer by that awful earthquake? What did you lose?" Tramp: "I lost a bet how many shocks there was."—*Life.*

"BUT, Marie, I thought you despised Mr. Slimson." "So I do." "Then what did you marry him for?" "So that he would stay down town evenings and not hang around me all the time."—*Chicago News.*

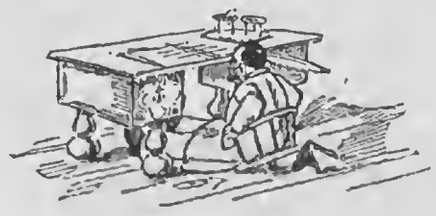
A TRAIN was delayed for an hour in Troy, N. Y., recently, and a drummer remarked to the conductor: "This is a sort of twelve ounces to the pound affair, ain't it?" "How's that?" "Troy wait, you know."—*Pittsburg Chronicle-Telegraph.*

A PROFESSOR at Cornell, lecturing on the effect of wind in some of the Western parts, remarked, "In traveling along the road, I even sometimes found the logs bound and twisted together to such an extent that a mule couldn't climb over them, so I went around."—*Traveler's Record.*

IT was not love which actuated Mose Schaumburg, when he plunged into the briny waves to rescue his wife. When Mose was subsequently asked how he came to display such heroism, he solved the mystery by saying: "Vat you dinks, vould I let Repecca trown pefore mine own eyes, ven dose diamonds vat she had on vas alone wort more den two tousend tollars, eh?"—*Texas Siftings.*

A YOUNG lady was sitting with her lover in a charmingly-decorated recess. On her knee was a diminutive niece. In an adjoining room, with the door open, were the rest of the company. Says the little niece, in a jealous and very audible voice, "Auntie, kiss me, too." I leave you to imagine what had just happened. "You should say *twice*, Ethel, dear; *two* is not grammar," was the immediate rejoinder. Clever girl, that!—*The Critic.*

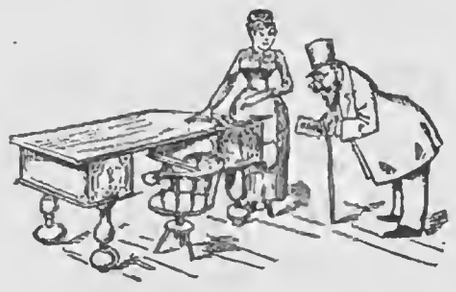
Hans takes a chance in the lottery.



Something breaks.

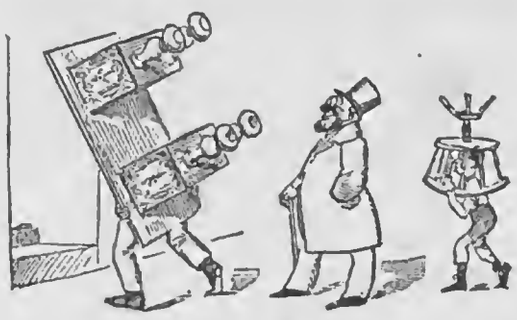
He wins a new desk.

Thinking it over.



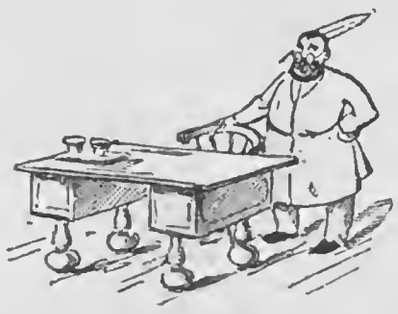
Here it is.

Hoop la!

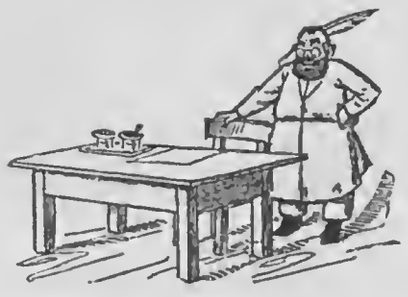


Large as life he takes it home.

A total wreck.



Now for comfort.



After the battle.

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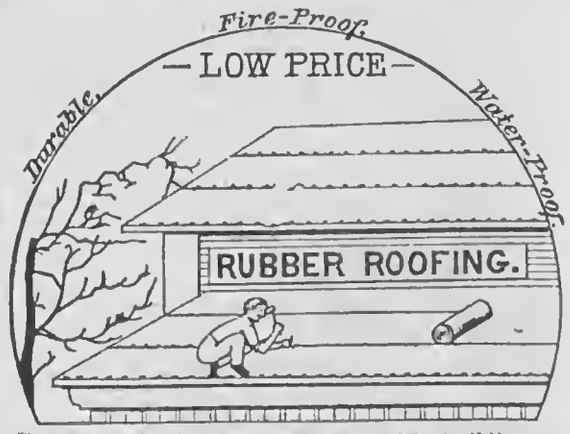

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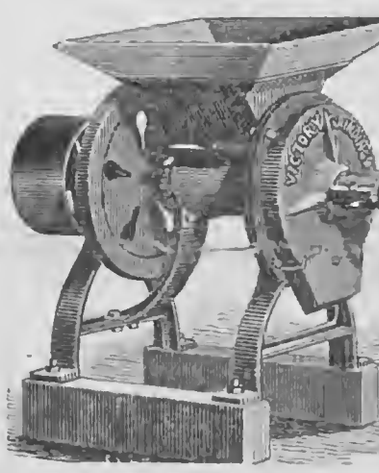

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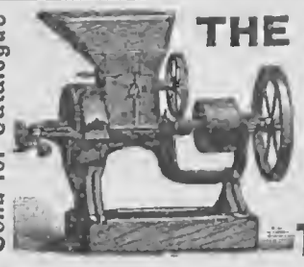

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THE RURAL NEW-YORKER

A JOURNAL FOR THE SUBURBAN AND COUNTRY HOME

VOL. XLV. No. 1919. NEW YORK, NOVEMBER 6, 1886. PRICE FIVE CENTS. $2.00 PER YEAR.

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The Vineyard.

THE NEW GRAPES—G. W. CAMPBELL AND BELL.

T. V. MUNSON.

In 1881 I selected seeds of Elvira and Campbell's Triumph grapes from the finest berries of the finest clusters grown on young, thrifty, four-year-old vines. The seeds were planted in open ground late in the same year in rich, loamy, sandy land, and many hundreds of each of these lots of seed came up nicely the next Spring. During the Summer every plant that showed any weakness was pulled up. About 15 of the finest of the Triumph seedlings, and probably 100 of the Elvira seedlings were planted in my test vineyard. The soil—ordinary limestone, now cultivated for nine years without manure of any kind—with the commonest kind of attention produced a healthy, vigorous growth of these vines equal or superior to the parents. In 1884 they bore a few clusters, and from the first their quality attracted marked attention. They have increased in productiveness and size of cluster, until this season when our long, severe drought materially reduced the size of both cluster and berry. The G. W. Campbell ripens about two weeks earlier than its parent, approaching the foreign Chasselas. It ripens with the Delaware, and so far seems as hardy as any of Rogers's Hybrids with much less rot. Several other Triumph seedlings are very fine; but all are late like their parents, or later, good only in the Middle and Southern States.

Quite a number of the Elvira seedlings have proved of great excellence, but the particular one here referred to is designated in my records as No. 21, and with the name "Bell." It is the finest Elvira seedling I have in quality, yellowish white, quite early persistent, productive, of excellent health and growth; skin tough and not at all inclined to crack like its parents. It showed no indication of rot, even last season when the rot was so severe here. Still I would not call it rot-proof, as even the Norton sometimes has a few rotten berries, though one of the most resistant. I think it will prove hardy wherever Clinton is hardy, and it ripens earlier. It takes the Rupertris species fully to sustain "rot-proof" claims, and of this steel-clad species we are now getting some fine improvements. In purity no species excels it.

Dennison, Texas.

R. N.-Y.—Mr. Munson sent us quite a number of his seedlings which were received July 29 in perfect order. We have selected two for illustration; *viz.* G. W. Campbell, see Fig. 410, and Bell, see Fig. 409. The berries of the first were about the size of fine Delawares, very juicy, sprightly, vinous, no pulp, one to two seeds, white with bloom, the skin tough though thin. We consider it of fine quality. The Bell is sufficiently described by Mr. Munson. Such grapes sent to Northern markets by August 1st, would meet with a ready sale.

MR. P. BARRY sends us a basket of grapes from his cold vinery. One bunch of Calabrian (white) weighs 38 ounces. Of the several different kinds we should prefer the Alicante (black) for its large, showy berries, as well as for its quality.

Floricultural.

THE WINDOW GARDEN.

WILLIAM FALCONER.

All plants should now be arranged and in place for Winter. Coleuses, alternantheras, acalyphas, dracænas and rex begonias, had better be kept in warm quarters, though not necessarily in sunny windows. Oxalises, nasturtiums, bouvardias, heliotropes, carnations and callas in bloom love the sunny windows. Sweet alyssum will keep on blooming in company with violets, pansies, carnations, Paris-daisies, meteor marigolds and mignonette, in a light window, even if the temperature will now and then descend to the freezing point. Chinese primroses now are coming into bloom and are admirable window plants: they will even thrive inside a light, cool room, away from the window for many days. I have Chelsea Blue Chinese Primrose now in bloom: the flowers are good, and of a pleasing dark lavender color. Lobster-claw cactuses (Epiphyllum) are in their fullest beauty from October into November. They don't want sunshine. Cactuses of all sorts and other succulents too, for instance, century plants, stapelias, yuccas, cotyledons and sedums, if kept rather dry at the root and overhead, may be kept in the shady places till next Spring. Ferns of all sorts love faintly shady places, while cinerarias and calceolarias love to be kept cool and near the glass; they dislike direct sunshine, and should be kept from freezing. While a slight frost will not hurt the calceolaria it will kill a cineraria as fast as a heliotrope or balsam.

REPOTTING.—Don't do this if you can avoid it. Cinerarias and calceolarias may need repotting, but very few other things will. A window isn't a greenhouse, hence you cannot with impunity repot your plants in November or December.

STIMULANTS.—If the nasturtiums, Paris daisies, callas and other vigorous plants have become tightly pot-bound and exhausted the soil, scrape off some of the surface earth and replace with a compost of turfy loam and finely rotted manure, half of each. Liquid manure is a nasty thing to use in a dwelling-house.

WATERING.—Never use icy water. That at a temperature of 50 to 60 degrees, or about the same as that of the room in which the plants are growing, is best. All plants in full growth, as callas, cinerarias, Chinese primroses, heliotropes, stevias, nasturtiums and streptosolons need lots of water, but never water them if they already are wet; wait till they begin to get dry before you give them a further supply. To stove plants, that is, pelargoniums, fuchsias, coleuses, plumbago, abutilons and the like, that you are merely wintering over for next year's garden, only give water enough to keep them from shriveling. And give very little water to your "cutting" pots, that is, the rooted slips you are keeping on in pots. Cactus and other thick-leaved plants should get very little water; indeed, there is no call for giving a cactus a drop of water before next March. Camelias, azaleas, myrtles, bays, oranges and other evergreen shrubs should never be allowed to get dry at the roots; at the same time, never deluge them.

CLEANING.—Pelargoniums and almost all plants that have recently been lifted from the open ground and potted to keep over Winter will lose many of their leaves, also a good many ends of branches may mold, or the fallen petals of flowers may lie on the foliage and rot spots in it. Look to this and remove every bit of decaying matter you may find on or about your plants. November and December are the worst two months for molding and decaying leaves.

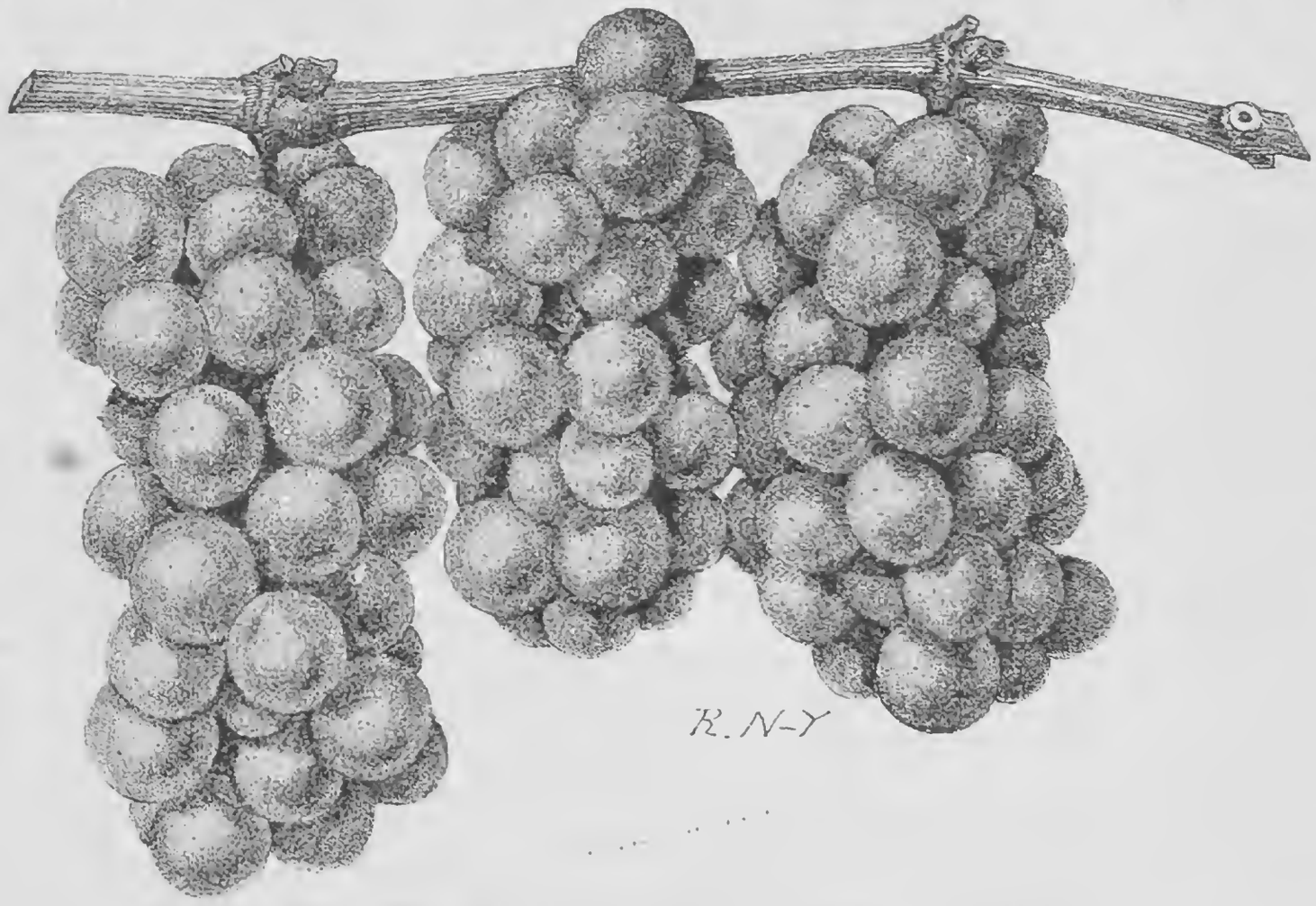
INSECTS.—Eternal vigilance alone can keep these in check. Green fly are extremely partial to calceolarias, cinerarias, the young growths and flower buds of roses, and like tender morsels. Brush or wash them off, or dip the plants (but not the roots) head foremost in tobacco water the color of very strong tea. Fumigating with tobacco smoke in a dwelling-house is too disgusting to be entertained, and I can assure you as impracticable (except on paper) as it is offensive. Red spider too have to be washed or brushed off. Sprinkling the foliage with water will never rid the plants of "spider," no matter how often you may be advised to the contrary; furthermore, it is utterly impossible to keep the atmosphere of a dwelling-house so saturated with moisture as to kill or even dispel red spider. Tobacco in any form is harmless to this rapacious little pest, and the same is true in the case of mealy bugs and scale. These last two must also be washed or brushed off. How aggravating it is to find that our bouvardias and cactuses that were planted out in Summer and looked so clean and thrifty, are now so freely sprinkled with mealy insects But such is very often the case; the bugs repair to the ground and live about the roots while the plants are out-of-doors in Summer; but on indoor plants they forsake the roots in favor of the tops. Look out for little green worms on your mignonette, heliotrope and other plants.

FROST.—While Chinese primroses, calceolarias, Paris daisies and rose geraniums will bear a slight frost with apparent impunity, chrysanthemums will bear a few degrees, and pansies, violets and carnations a good many, not one of them is benefited by frost. Therefore be on the safe side and don't let any of your house plants get frozen.

VENTILATION.—Ventilate freely in warm weather, but avoid draughts even in genial weather. In ventilating don't open the windows wide all at once, but rather a little at a time. Ventilate early and shut up early.

"DUTCH" BULBS.—Keep them cool and let them alone. If you want fine, large, showy flowers don't hang up your bulbs. The Roman hyacinths are about the first that will come into flower.

LILY-OF-THE-VALLEY. — I have a bed of this in an open sunny spot and every Fall after cutting over the leaves I mulch the beds with a heavy coating of well rotted manure. In Spring I get splendid sprays from this patch, and in Winter it yields me my roots for forcing. I lift them in large clumps, shake the earth away from them, then tear them apart into bunches just big enough to get into a nail keg. I get the empty nail kegs from the stores in the village, they don't cost anything, saw them across the middle and use the bottom ends for my Lily-of-the-Valley, and capita pots they make. By starting in September the clumps are in good condition for forcing in December, and the foliage comes up with the flowers. I leave them outside till hard frost is likely to occur, then transplant them to a cold-frame where I can get at them handy whenever I want them for forcing in Winter. After forcing, I return the plants to the bed whence they were first taken where they soon recruit themselves, grow and open, and in a year or two, are apparantly as good as ever.



ELVIRA SEEDLING (No. 21) BELL. From Nature. Fig. 409.

The Herdsman.

LIVE STOCK NOTES FOR NOVEMBER

NOVEMBER, with its fogs and sleet by day, and its frosts by night, is a rigorous month for the stock that are unprovided with warm shelter. No animals should be at large at night during this month; and none can be expected to pay its owner for the feed it consumes if it is exposed to the cold in open, comfortless

sheds. The sheds and stables should therefore be made tight and weather-proof. A good supply of leaves, if they can be procured, should be stored while dry to be used as litter. Leaves are the most comfortable and cleanly bedding for all kinds of stock, and when decayed make valuable manure.

HORSES.

The most thorough grooming should be given to all the horses, to cleanse the skin and remove the scurfy matter which gathers upon it and prevents free perspiration. This causes a feeling of cold, and chills the animal. A healthy coat of soft hair is very warm, being an excellent non-conductor of heat, and good currying and brushing secures this soft, healthy coat. If horses are annoyed by any vermin or itching of the skin, apply a little crude petroleum to the brush, and work it in the skin. If freed from these pests now, freedom will be secured through the Winter.

Brood mares should be spared from hard work and well fed. The foal is now arrived at a stage when its growth draws heavily on the mare's system. The pregnant mares should not be irritated or worried, lest the disposition of the foal should be affected by it. Good temper should be encouraged by kind treatment. A roomy, loose box should be provided for brood mares, in which they may move around freely. They are less fretful when unconfined by a halter. Work horses require careful attention after having been exposed to a cold storm. They should be rubbed dry as soon as they are brought into the stable, and then blanketed for a time. The rubbing is useful to restore the circulation in the skin.

Some persons think clipping horses in the Winter advisable, and some think otherwise. If a horse is clipped the operation should be performed at once. A horse may be clipped which has a thick, wooly undercoat, that holds the prespiration and keeps damp. This is hurtful and keeps the animal thin and poor, and often causes hide-bound. Horses with a thin coat don't need clipping.

Colts require some increase of food at this time. Over-feeding with grain is to be avoided. The best of hay should be given to growing colts, and a quart of oats daily is enough for a newly weaned colt. If a colt has not been yet weaned it should be separated from the mare without delay. Don't forget to use the brush on the young colts and weanlings. The training of a colt should be begun at once. The first lesson is to use it to the halter and to be tied up and led. The halter should be strong enough to resist all attempts to break it. If it is once broken the colt will not forget, and will make a halter-pulling horse, which is a nuisance.

The harness will now need overhauling, cleaning and soaking with oil. To clean the harness, take it all apart, wash it with warm water and soap, using a sponge and brush; wipe it dry, and rub in as much warm tallow and lamp-black as will be absorbed, and rub off the excess with a cloth until the hands are not soiled with it. Soft harness will not gall the skin.

Give salt at least twice a week; avoid condition powders, saltpeter, resin and all other popular "remedies," which do more harm than good. Feed and water regularly; use the curry-comb and brush; keep the stables clean, and your horses will need no physic.

COWS AND CATTLE.

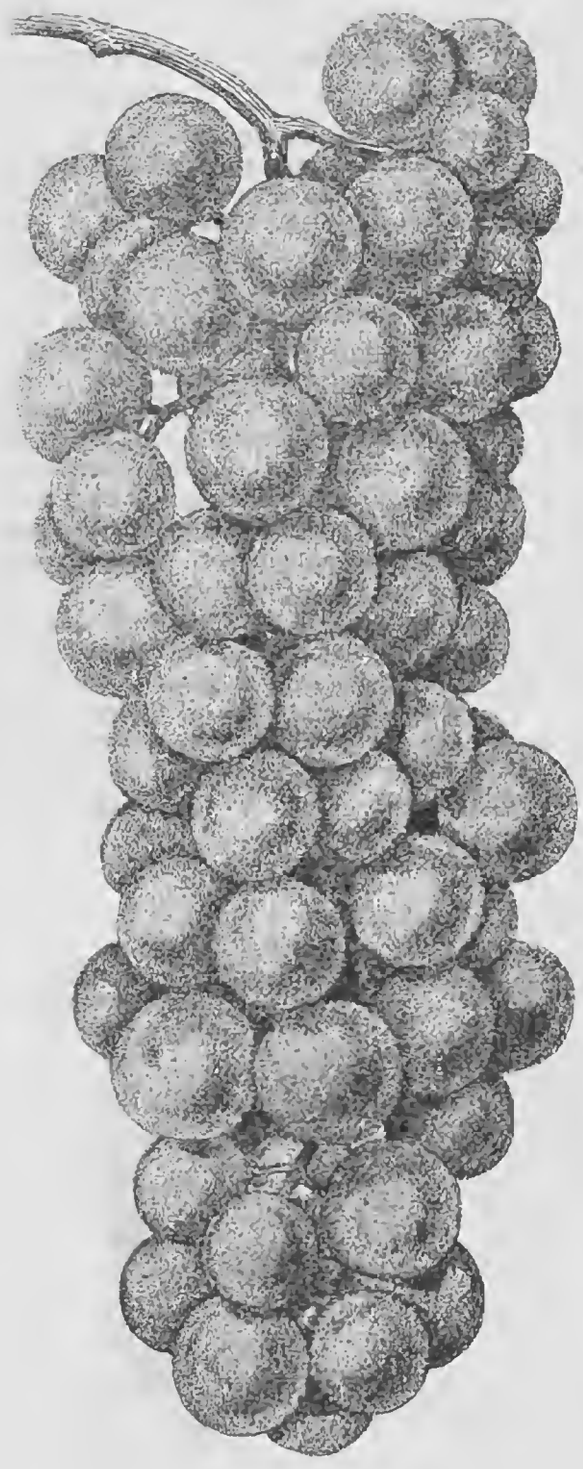
Give the cows a mess of ripe, sweet apples, sliced or chopped with a sharp spade, and a quart or two of bran with them, and note the difference in the milk pail. The cow will be grateful, if she does not return it in milk. Be careful in feeding apples or roots to cattle. It is very easy for a piece to slip down the wrong way and it is not always easy to get it back again. Remembering the danger, one will exercise due caution. The card and the brush will show the good results in the milk pail. There will be more milk and there will be no hairs in it. Ample short litter will make clean cows. Lay in a stock of dry swamp muck for use in the cows' stables.

A leather neck cover to keep rain and snow from the oxen under the yoke, will prevent sore necks. Keep ox stables clean; it will prevent sore feet.

Calves should have a pen and yard by themselves and as comfortable a lodging as the cows have: it will avoid danger of accidents (?) by which the young animals may be injured. A lousy calf will not thrive, and almost all calves will be pestered by these vermin if they are not protected against them. Fowls should be kept out of the stables or the animals will surely become infested with fleas and lice. Rats and mice also convey these pests into farm buildings. The remedy is a few well-fed cats and open places under all the buildings. Calves that are still unweaned should get their milk warm and it should be given as long as it can be furnished.

SWINE.

March pigs should be thought of now In choosing a boar for service, a year old and well grown one will be preferable to an older one. A pure bred one should be procured at any reasonable cost. Healthfulness and soundness of constitution are points that should be insisted upon. Close breeding insures weakness of constitution. Sound, vigorous parents produce strong, healthy progeny. Brood sows require exercise. A close pen is injurious to them. Grain food alone is not advisable. Cut corn fodder and clover hay, wetted and mixed with bran and middlings, are readily eaten by the sows, and make a good substitute for roots. But where brood sows are kept roots should be grown for them. Give all the store pigs a run in the cleared corn field, in the potato lots and root fields, as long as the weather permits. A temporary shed should be provided for use in stormy weather. Their usual feed, however, should be given in addition to what they pick up. A clean pig is an evidence of carefulness and thrift. It is a



R. N-Y.

G. W. CAMPBELL GRAPE. From Nature
Fig. 410. (See first page.)

rare sight, but a most pleasing one and the beauty of it is evident to the sense of smell as well as to the sight. The fattening of swine should be hastened by the most liberal feeding. When a pig has eaten all the corn it can, it will eat a little more if a lean, hungry pig is turned into the pen. When a pig is once filled up it will eat but a little at a time. More food will be eaten by a fattening animal if a little is given often, than if a large quantity is given at once. Feed the pigs at least four times a day, and for drink give water with some finely ground corn meal stirred in it. The secret of rapid fattening is to get the most food into the stomach in the shortest time. The first pork in the market is made for the least money, and brings the best price of the season.

Keep store pigs in a growing condition. As a rule, no pigs should be fed over Winter except the brood sows, and the March pigs should make the fall pork. But if any are kept over Winter they should be gaining weight all the time. Soft corn is not a fattening food If given to fattening pigs, at least one meal a day of sound, dry corn or peas should be given. Hogs which run at large on the range in the Southern States and feed upon the mast which is now fallen, will do better with one feed of corn a day. It will pay to keep a supply of corn in the lot and go half a mile daily to feed it to the swine. Sweet potatoes are excellent food for swine and where they are grown cheaply should be raised for this purpose. Sweet, ripe apples make the best of pork for domestic use when given with some corn, and they are very healthful food. The common practice of running the pigs in manure stables is objectionable, and leads to disease. At this season the bedding of the pigs in the hot manure is exceedingly hurtful and should be avoided.

SHEEP.

Push on the lambs. But to do this they must be kept in a yard by themselves. Keep the stock ram in vigorous condition by a daily allowance of corn and rye mixed. Ewes that are safely in lambs should be given a little extra food. The quality of the lamb and the strength and milk of the ewes will depend upon this. Where sheep are not sheared in the Fall, a dry shelter should be provided whenever they are kept out of doors, as in the South. Fall-sheared sheep suffer less from the cold winter rains than unshorn ones whose fleeces hold so much water that they chill and benumb the animals. This fact applies everywhere to sheep exposed to wet and cold together. Dry beds are indispensable for sheep at this season, and damp air is to be avoided. Sheep laugh at dry cold; but are made miserable by wet. An unhappy sheep will soon be a sick one.

Examine the feet of the flock and pare overgrown hoofs. When a sheep is seen upon its knees, look to the feet; they will be found in bad condition and in need of attention. See that salt is given at least once a week; and observe regularity as to the time of feeding, especially with fattening sheep.

POULTRY.

All poultry intended for fattening should be put up at once Three weeks of feeding will make a fowl as fat as can be. Clear out all the dead-heads. A fowl is a small thing, but it will eat its head off very soon. Male birds are useless and should be got rid of somehow. The cost of feeding one over Winter, will be as much as that of a good pure-bred bird from some other flock. If early eggs are desired a warm spot in a sunny corner should be made with a few hot-bed sashes, and a few hens given quarters in it. Fresh bones broken into small fragments or coarse bones are the best form in which to give lime for making egg shells. A few clean nests made of bright straw will go a long way towards the appearance of eggs from the early pullets. Clean out vermin and make the fowls happy by the liberal use of petroleum about the house, keeping the floor clean and well dusted with dry air-slaked lime. A dry earth floor well warmed by the sun will please the fowls and impel them to sing their lays all through the Winter. There will be no eggs where the fowls shiver through the dismal November days in a dark, dreary, damp, cheerless house, no matter what feed is wasted upon the flock: Warmth and sunlight are the most effective provocatives of fresh eggs at this season.

BOGUS PEDIGREES.—Jersey breeders in this country have been having trouble about bogus pedigrees. Grades have been sold as pure bloods. Prompt measures have been taken to put a stop to the matter. The English Cleveland Bay Society has also had to contend with forged pedigree certificates. Men can be punished for obtaining money by false pretenses.

THE FATTENING OF DEER for market was practiced in Hertfordshire, England, in the last century. On 250 acres 350 deer were kept through the Winter, and 30 sheep and 10 cows were pastured with them during the Summer. The winter feed was hay, straw, grain and tree foliage. The browse left in making faggots of ash, elm and spruce was saved and fed out. This was said to save hay and give a more gamy flavor to the venison. The fat deer sold at $75 per pair. Various writers of late have proposed the raising of fat rabbits on waste tracks of land. How about fat deer?

Sheep Husbandry.

Notes from the Western New York Farm.

WINTER FEEDING OF SHEEP OR LAMBS.

THE SHEPHERD AN IMPORTANT FACTOR.

No matter what class of sheep are fed, whether it be mature sheep or lambs for fattening, or ewes for early lamb raising, the profit can come only from the amount of growth as compared with the food consumed. While much depends upon the selection of sheep and of the food used, success or failure is very largely dependent upon the characteristics of the man placed in charge. It may seem strange that so much importance should be attached to the mere agent supplying food and water and scattering litter in their pens. Most people look upon these as mere mechanical operations, and think that any one, even a "wooden man," who could fill the racks with forage, and the troughs with water, and daily distribute the grain and roots, would be all that could be required; but every feeder of experience knows that there is a wonderful difference in the way in which these things are done and in the men who do them. Sheep are peculiar animals, and seem to have likes and dislikes; to some men they have an aversion and never cease to be afraid of them, and whenever they approach the yards the sheep will cease to eat and run about like mad; others they readily take to, and soon come to care nothing for their presence anywhere in and about the pens. A peculiar man is needed and the young feeder cannot be too particular in his selection.

A SHEPHERD SHOULD NOT BE a rough, boisterous, noisy, quick-tempered, or a swearing man; such a one is very disagreeable to have about; he is sure to kick and cuff the sheep and to keep them in a constant state of unrest, and, no matter how thoroughly or promptly he does his work, the sheep cannot make the highest gain with such treatment. Besides, such a man is very apt to care more for story-telling, and the society of similar companions than for the the quiet of the sheep pens, and thus be tempted to hurry up his work and be away and not to come back till the very latest moment, and such neglect though seemingly but a little matter, counts very largely on the wrong side when figuring profit.

I shall be asked, no doubt, how swearing disqualifies a shepherd. As a rule swearing men are quick-tempered and to this there are so few exceptions and a quick-tempered man is so very objectionable that it is safest to reject every swearing man when choosing for so important a position.

WHAT THE SHEPHERD SHOULD BE.—He should be *good-natured*, and this to such a degree that though the sheep in their eagerness at feeding time should happen to get him down and run over him he will not fly mad and ill-treat them (this is about as severe a test of good nature as can be given). He should be *observant*, should know the sheep and see that every one has an equal chance at its food, and if raising early lambs he should be able to select any lamb and its mother; in short, he should see that everything is right, and be able to instantly detect anything wrong with any individual sheep. He should possess *good judgment*, which with his observation will enable him to determine when the sheep are receiving as much food as they can profitably eat and digest, and when any change in the proportions of the different ingredients may be desirable. He should be gentle and quiet; every movement made about the pens should be so made as not to disturb or frighten the sheep. Of two men having the other qualifications, the one nervous and quick in every motion, the other quiet and even rather slow, I would choose the latter, for, though he might not accomplish quite as much in a day, he would do what he did in such a way that the sheep would not care for him and with the same food they would make greater gain. He should be *methodical* and *prompt*. A sheep's stomach is as good as a clock (better than some) and when it is time for them to be fed they want it, and if it is not forthcoming, they will rush impatiently around the pen and soon run off as much flesh as the feeding would gain, so that the shepherds should feed every pen promptly on time, and always in the same order. He should *love the business*, not alone for the money it brings him, but because he has a love for the sheep. No matter how much the shepherd pets and fondles the sheep and lambs, never find fault, as in this case he will never abuse or neglect them, and the sheep are as quickly won as any other animal, and if well treated they soon come to know the attendant, and his presence does not disturb or disquiet them. Of course, it goes without saying that the shepherd should be strictly and conscientiously honest; otherwise he will shirk as much as possible and when not watched neglect the sheep, and in no other animal does neglect tell so quickly or disastrously.

NEVER CHANGE SHEPHERDS unless absolutely necessary, as every change, even from a worse to a better one, disturbs the sheep and causes more or less loss of flesh. Select good ones as soon as possible, and then let each one have charge of the same pens and always of the same sheep. It is as true now as of old that the "good shepherd knows his own sheep and the sheep know his voice," and "he carries the lamb in his bosom," and when a good shepherd is secured he is a jewel, and should be retained year after year, even if asking what might be considered large wages.

THE OWNER'S EYE BETTER THAN ALL.—But no matter how good and trustworthy the shepherds may be, the sheep feeder should have a general oversight of the whole business, and not only this, but he should be always about and familiarize himself with every detail. He should possess every good quality desired in the shepherd and be able to detect the least neglect or delinquency on his part. And then every shepherd, no matter how good he may

be, likes to have the owner about to consult with him, and will naturally do better if he sees that he is working for one who is master of the business, and who takes a lively interest in it.

* * *

A friend at Lyndonville, N. Y., asks if fattening sheep and lambs will eat cut straw any better than the long, and if it would be better for them. Fattening sheep, when fed largely on bran, linseed meal and other nitrogeneous foods, and also mangels or other green food, will eat largely of straw, and it pays to give them all they will eat; but I could never see that it made the least difference to them whether it was cut or not. All the advantage I can see in cutting straw for this purpose is that the manure is finer, and can be handled a little more easily, but in this respect there is not half the difference with sheep manure that there is with that from any other stock. It will pay to put the straw under cover for in this case the sheep will eat it very much better.

* * *

Another friend in Williamstown, Vt., asks if he could stock his 150-acre farm with coarse-wooled sheep and have them do well; also if he could keep up the fertility of his farm as well with sheep as with cows; also if sheep kept for spring lamb raising should be kept as warm as for fatting.

Coarse-wooled sheep will not bear close stocking; that is, putting them in large flocks. In all the countries I have ever visited in which coarse wools are kept, from a dozen to 50 are as many as are allowed together, and even in Winter I have observed that the long-wools, when put more than 20 in a flock, always have more or less culls among the number. I should much prefer the middle-wools or cross-bred sheep. There is no doubt that sheep will keep up the fertility of land fully as well as cows. They will certainly keep it much freer of weeds. But in feeding any stock no improvement of the farm must be expected, unless other foods than those raised on the farm are used. It does not enrich a man to take money from one pocket to put into the other; no more does it enrich the soil to put manure on one field made from feed taken from another; but when bran, oil meal and other foods, rich in the elements of fertility, are brought upon and fed on the farm, and the manure is put upon the fields, then will its fertility be increased. The saving of foods by housing store sheep is as great in proportion as with those fattening, as cold has precisely the same effect upon the one as the other. If they need exercise give it to them by a brisk drive, returning to the stables at the end.

Farm Topics.

BUCEPHALUS BROWN'S NOTIONS AND IDEAS.

I DO not exactly understand, Mr. Editor, why you should ask an old landlubber like me to write for your paper, when so many smart young men are filling it up with the latest and most improved views of things. When a man gets to be 60 and upwards he is generally supposed to believe that all progress and improvement have come to an end, and that it is time to rest and be thankful. Well, it is. There is no doubt of that. I am resting—when I can get a chance—and I cannot help being thankful and saying with the shepherd king, "Surely goodness and mercy have followed me all the days of my life." But certainly there is a great deal of writing in the agricultural papers yet of which it can be said, as was said once by an old minister of a young minister's sermon, that it contained many new things and many true things, but the new things were not true and the true things were not new!

One able editor expresses his opinion that "the day has passed when farmers can afford to spend their time in the study of the formation of Greek and Latin roots and all their lifetime remain in ignorance of the formation, nourishment and growth of corn, wheat and apple-tree roots." Now, as old as I am, I cannot remember the time when farmers ever did spend much time in the way named. One might travel among them many a day's journey before he could find one of the "horny-handed" who could even tell what a Greek "root" is, or how it differs from a parsnip. I have a suspicion which may do him injustice, that the writer himself didn't know. But he wanted to make the point that farmers need an education suited in some degree, at least, to their business. They do; but those who are now farmers must gather that education themselves, by experience, by conversation, by reading and, above all, by keeping their eyes and minds on the alert for knowledge that will do them good.

THERE is a good deal of agricultural knowledge among farmers. Each knows something that others do not know. I never spent half an hour going over a neighbor's farm in his company during which I did not pick up something well worth knowing. We do not visit each other enough. Each farmer has an agricultural college all around him, on his own farm, as well as on his neighbors'. Let him learn and reduce to practice what he may learn in these ways, and in time he can graduate with the well-earned degree of M. M. F.—a regular Money-Making Farmer.

IT is the fashion to call the older farmers narrow-minded, bigoted, unprogressive. But some who appear so to the hasty observer are pretty full of meat, as you may find if you know how to get it out. It is quite often the case that ways which seem awkward and behind the times are really the very best ways to follow under the circumstances, and in the conditions that exist. The newcomer may not see this. It is hardly likely that he should, for such facts have to be learned by experience. Eastern people have had a good deal to say about Western farmers burning their corn for fuel. The forestry fellows are urging the farmers everywhere to plant wood-lots. If we are to raise our fuel, who can say that we cannot raise it cheaper from seed-corn than from seed-acorns? Even manure wasting may be justifiable under certain circumstances.

ONE, and the chief cause of slow progress among farmers is, too much land not paid for. Indebted men can rarely do as well as they know, and are still less able to make experiments, or branch out into new things. While the old way may not be the best, it may be the safest way to meet one's interest without failure, and pay a little on the debt. Oh! that debt! How much better it would have been to have bought only as much land as you could pay down for. The most profitable land (and often the only profitable land) is that which is well fertilized and well tilled. Men who have sunk all their capital in a farm, and yet have not paid for it, are in poor condition to get a profit out of their farming. It is getting more and more difficult to make anything on borrowed money. That is the secret of the present low rates of interest.

WITH all the outcry about hard times, I do not see that farmers who are out of debt have any great cause to complain. Where is there any honest business that is paying any better interest on the investment, or for the work done? I do not know where to look for it. The grumbling farmers are either the unskilled or the indebted ones. The only exception I know is one who has wanted to get rich fast and has been trying to breed fast colts. But that is not farming.

DOES butter making pay? Is your granny a woman? Butter is a luxury—good butter, I mean. Corn and potatoes are staple articles, and like all that class of goods the profit per cent. is small, and much of them must be handled to make much money. But when farmers have the monopoly of something that everybody with money wants and will have if it can be had, what have they got to complain of? Some of my neighbors have been selling their butter as low as 14 cents. Others have not sold a pound for less than 25 cents. One who keeps between 20 to 30 cows says, "I haven't sold a pound of butter for the last five years for less than 50 cents." Here is a man whom oleo does not scare. He milks his herd the year round, averages 275 pounds of butter to the cow, grows every mite of his own feed, and buys not an ounce of fertilizers. Let him die to-morrow and let his next neighbor who has sold his butter for 14 cents take the farm and stock, and the first lot of butter he sends off will be graded as all his butter has always graded—near the bottom. There is more in the man than there is in the land—or the cattle.

IN Massachusetts the Democrats have nominated two farmers for Congress, and very popular farmers too, Russell, Secretary of the Board of Agriculture, and Burnett, President of Bay State Agr. Society, whose recent fair was such a success. Will the farmers of the other party vote for them? It seems to me that it is about time for us to throw off the party harness, and put our votes where they will do the most good for the people. As long as the leaders feel sure of us, they will do just as they please, and many of them are very well pleased to sell their votes to the corporations which treat all the farmers' demands with scorn. Something has got to be done to break the power of our big monopolies. The RURAL's head is mighty level on this subject.

NOW is the time for the young farmers to start up that farmers' club. Let the boys go ahead, elect their officers, and invite the old men in. Invite your mothers and sisters, too, and make the invitation strong enough to secure their attendance. Let the subjects for discussion at each meeting be so varied as to have some interest for all. Don't wait for the old men to lead off—let it be a young farmers' institution, and push it on with all your youthful vigor. Elect your most enterprising member as president, with the one with the best literary gift as secretary. The local paper will be glad to print his reports of the meetings. A good jokist is a valuable member, and such often puts shrewd thoughts in the most effective way. The farmers' club is an agricultural college that is open to all.

CORRESPONDENTS' VIEWS.

FREE AND SECTARIAN SCHOOLS IN TEXAS.—Of all the aids to civilization, free schools are hardest to start in this country. The majority of the people object to being taxed for the purpose of educating the negroes. The Catholic Church here is a great drawback to free education, as it is more in favor of parochial schools. The Baptists and Methodists have each built fine brick buildings for the education of colored people. The schools are well patronized and conducted. These sectarian schools do not encourage the public school system as they might, because they are not entitled to any benefit from the large school fund. A proposition to lay a tax of one-fourth of one per cent. on all the taxable property in the city for school purposes is submitted to the people, but cannot be carried.

Marshall, Texas. A. G. N.

DRESS BECOMINGLY.—A man rode down on the cars with me the other day who has money enough in bank to support him for the rest of his life without doing a stroke of work. He always complains that when he goes among business men he can't command the attention that other farmers do He thinks people make fun of him because he is a farmer. He had on an old hat with a broken rim and a quarter of an inch of dust in the wrinkles. His shirt collar had no starch in it, and he wore an old-fashioned stock. One leg of his pants was rolled up far above his shoe. He had not cleaned his shoes since coming in from the stable. No wonder he didn't get the respect he thought he ought to have. At a cost of $5 he could have given himself the appearance of a good business farmer. Nobody expects a farmer to but on a "stovepipe" hat or kid gloves when he goes out on business, but he can at least look respectable. H. A. J.

Orange Co., N. Y.

WE can sell our calves at $12 when a month old. Yearling heifers, common stock, sell at about the same price. According to these figures it will not pay to raise a calf unless it is extra good. We are pretty safe in patronizing a good bull, however, for even if the calf is a bull we can sell it for enough to pay for the service. If it is a heifer we can afford to raise it.

Bergen Co., N. J. V. H.

Farm Economy.

A CONVENIENT PRIVY.

WHEN we moved on our farm three years ago (for we were city born and bred), our privy was a constant offense to us; for we had been used to the clean and convenient water-closet. It was situated quite a distance from the house; but in the most prominent position, with the entrance exactly facing the road. Right adjoining our kitchen piazza I had a snug little closet built, so that we had no need to step off the stoop. I procured two common pails, and had one placed on a shelf directly under the seat. Then there was a little door opening from the outside through which the pail could be removed, which is done daily, oftener if my family is large enough to make it necessary. In front of the seat there is a step made of a box, with a hinged lid, and it is filled daily with the ashes sifted from the kitchen range, and a small fire shovel hangs beside it. Every morning the pail is taken out, and its contents are carried to the manure pit, and the empty one, which has been airing from the day before, is put in its place.

We think we have solved the problem, for the ashes keep down all unpleasant odors. We have a good earth closet, and it costs us nothing but a little time, for we built it out of the old privy—and it is a comfort never to have to step out of doors in stormy weather or at night. AN OLD SUBSCRIBER.

[R. N.-Y.—We presume coal ashes are meant. Wood ashes would not answer so well, and there are other uses to which they could be profitably put. Road dust, or dry sand or muck will answer admirably and cost nothing but the labor to secure them. This matter of farm sanitation is a most important one.]

CHEAP SHED.

THE shed shown at Fig. 415 is usually made of poles in this country; but can be just as easily made of sawed timbers. It can be of any length, but should not be more than 30 feet wide for a double shed, or half as wide for a single shed. It consists of three rows of posts two or more feet in the ground, five to seven feet apart. The middle row should be enough higher than the others to give sufficient pitch. Each row should have a strong plate 4x4 or 4x6. No cross-ties are needed, except at the ends to receive the sidings. Rafters pass each other on the ridge pole and are fastened together by pins, as our grandfathers fastened theirs. They should also be spiked

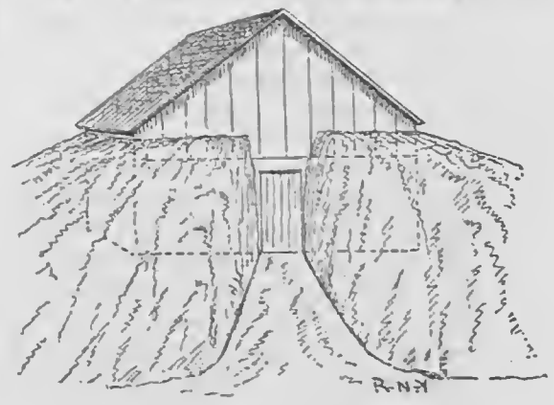
CHEAP SHED. Fig. 415.

to plates. The top can be sheathed and shingled or covered with hay or straw and weighted down. Framed barns are made in this country on the same plan. All cross-ties and beams are done away with, which makes them much more convenient for hay barns.

Corneau, Mo. GEO. W. F.

CHEAP ROOT CELLAR.

I MADE a cellar as shown at Fig. 416. Nothing freezes in it even when the mercury touches 30° below. I dug a hole in the ground about four feet deep, and then put in a frame with 1½-inch lumber perpendicularly around it, and banked it up with the earth I took out. I put in joists with a floor 10 inches below the earth banked around it, and filled in the 10 inches with sawdust, laid a row of tile drain



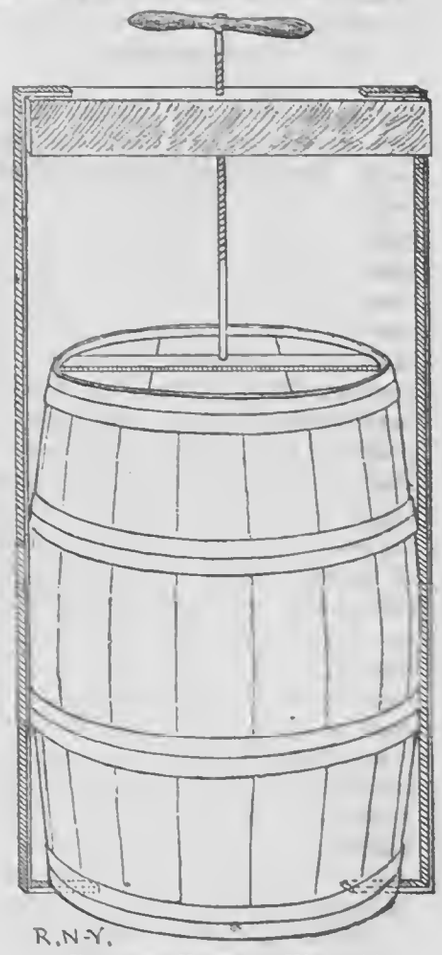
CHEAP ROOT CELLAR. Fig. 416.

just outside the heavy plank and put 2x4 scantling on the ground on which to lay a floor. This I find better and cheaper than having a cellar under the house or above ground with double walls filled in with sawdust. Rock or brick walls would be better yet, if one could find the materials handy.

Hancock Co., Ind. A. H. B

BARREL PRESS.

G. W. PELTON & SONS of Sauk Co., Wis., have in use the arrangement shown at Fig. 414. Two pieces of strap-iron two inches wide and 40 inches long, are fastened by screws on to a 3x3 oak joist 20 inches long. The straps are bent at the bottom of the barrel, as shown in the cut, and fastened both at the



BARREL PRESS. Fig. 414.

end and top of the joist. A screw is placed in the center of the joist. This plays upon a follower eight inches wide and long enough to go across the head of the barrel. Fill the barrel full, place the heads in position with the follower crosswise of the heads; adjust the screw and press the head into place.

Dairy Husbandry.

A SCRUB COW AND HER DESCENDANTS.

THE illustrations and remarks on the scrub in a late RURAL remind me of an experience I have had with the offspring of a cow during nearly a quarter of a century. Twenty-two years ago I purchased an old scrub that had been brought up on the plains of Nebraska—a poor old red, raw-boned thing that had never seen a fence and had been kept tied to a stake and fed a half bucket of hard corn ears three times a day. The hide around the base of her horns was all worn away by the rope. Cows then were very dear here and very scarce. The only noticeable peculiarity with regard to her qualities as a milch cow was the large quantity of butter made from the very small yield of milk. She never tried to pass over a fence, even when it was no higher than her knees, and she was a very delicate eater. We kept her several years, feeding her with great care. She gave milk for five years and then calved, giving milk up to calving. We got two heifer calves from her; the sires were scrubs running loose. This old cow improved somewhat in her milk yield. Her heifers were carefully treated. Their offspring were treated equally well. We now have two cows by scrub bulls from that old cow's offspring. They resemble the old cow, except that they are very fat. They are just alike, and we have made 14 pounds of butter per week for several weeks from one, besides using cream freely. No richer, nicer milk was ever tasted. The skim-milk is a delicious drink. Our neighbors around have fine, costly, pure-bred Jersey and Aberdeen-Angus cows, but there is not one among them equal to ours.

I ascribe this to unceasing daily care. Never once has either of them been neglected. They have been pets, fondled from birth. They were just as easily milked the first time as the last. They have had good pasture all Summer; fine clover hay all Winter, and nice slops of chopped feed twice a day the year round, with access to the best salt and water.

Meanwhile, people complain that fine stock deteriorates here, the climate is unfavorable! The truth is, they feed nothing but dry corn and poor hay. They are surprised to hear of "slopping" cows. After each milking twice a day, we give a good, liberal pail of mixed feed to each cow. No matter how full they may be, they are perfectly crazy to get this. They come right up to be milked to get that bucket of feed. I incline, therefore, to believe, that good feed is half breed. C. J.

Holt Co., Mo.

The Poultry Yard.

QUALITY AGAINST FEATHER.

HENRY HALES.

THE main object in keeping or raising any kind of live stock on a farm is profit. How much this has been over-looked at different times during manias for certain breeds of poultry and other animals is a matter of history. A few years ago Jersey cattle were much admired for form and beauty, while too little regard was paid to their milking qualifications. Many animals realized high prices on pedigree alone; now the butter or milk test is taking the lead. It is high time that more attention should be given to individual fowls regarding their laying capabilities. It is not enough that a breed should be entirely relied upon for its productiveness; individual hens, known as better layers than others of the flock, can always be picked out by an intelligent poultry breeder on a farm, or by a fancier. Much more benefit would be derived by selecting such hens to breed from, than by sacrificing such excellent qualities for the markings of feathers. This is especially so with the farmer who makes profit from eggs, not from the sale of birds. The fancier can select such hens from his best pens, but the fact is, we hear of nothing of the kind being done, as he pays more attention to markings. That there is a very great difference in birds of any particular breed I am sure from long experience. Take Light Brahmas, for instance; I have known some flocks where the hens laid but a very few eggs and then wanted to sit, spending most of their time eating or sitting, while another man's fowls of the same breed kept on laying all Winter. In one instance of this kind the flock of hens were shut up in a garret in the business part of New York City. In another case, a friend kept a popular breed that proved very poor layers; he changed for several different strains of the same breed with no better results; yet this same breed have done well with other people. It was not the care, but only the character of the birds that made the difference. It can be easily seen that selection for quality among the birds in any flock is of as much importance as the selection of breed that is supposed to possess said quality, and of far more importance than selection for feathers. If every farmer's wife or children who take charge of the poultry, will notice which hens lay the most and largest eggs, no matter what the breed, if good varieties, set their eggs and select the pullets for keeping—if this is done for several years, the result will be a fine prolific lot of poultry that could not be obtained by any other means.

FOWLS FOR TABLE.—At English shows, poultry fitted for the table is shown. There is found to be a great lack of skill in preparing the birds in an attractive form. A cross of the Dorking on the Game gives the best table bird. It is thought that birds from such a cross will be fit for roasting earlier than any other.

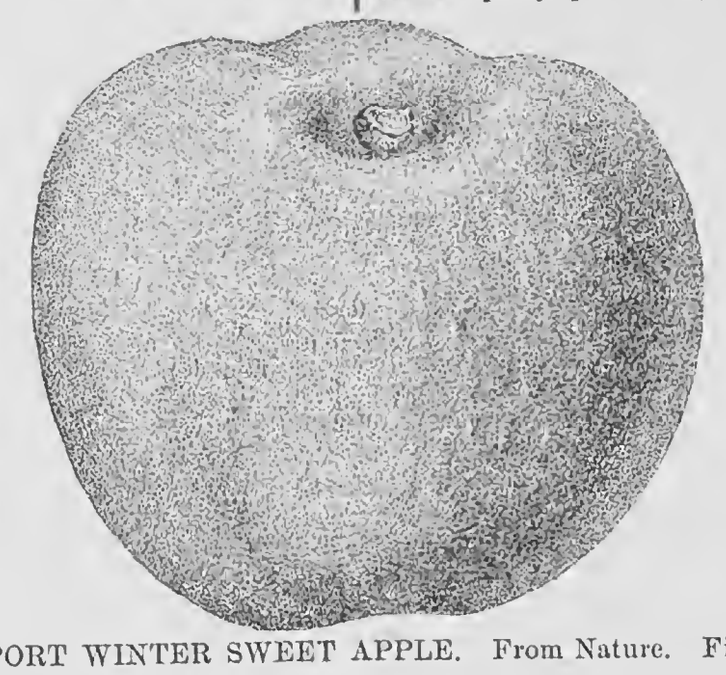
PRIZES FOR PRESERVING EGGS.—The first prize on eggs preserved for three months at the London Dairy Show was won on a lot of eggs packed in sweet bran with the small ends down. The second prize lot had been rubbed with a mixture of olive oil and beeswax and packed in coarse salt. The third prize lot had been rubbed, when new-laid, with mutton dripping and then put in powdered, dry lime. All these were in good condition for cooking at the end of 90 days.

Pomological.

NEWPORT WINTER SWEET.

T. H. HOSKINS, M. D.

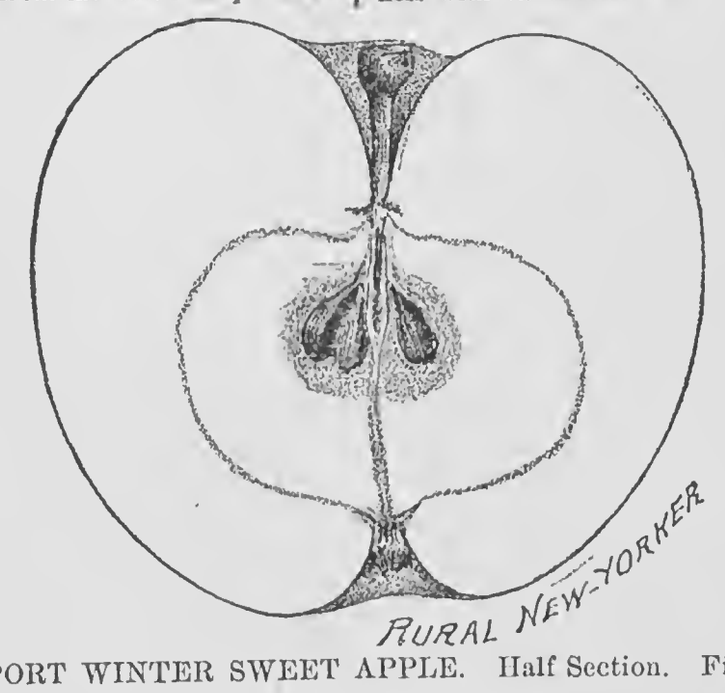
THIS apple (Fig. 412, with cross-section at Fig. 413) is a native seedling of Newport, Orleans Co., Vermont. The original tree, which, until the present season, is the only one which has produced fruit, is about 40 years old and is situated in an open field, where it sprang up, about half a mile from the west shore of Lake



NEWPORT WINTER SWEET APPLE. From Nature. Fig. 412.

Memphremagog. It is perfectly sound and healthy, and produces a large crop nearly every year. Six years ago I top-grafted cions from it upon a number of small nursery trees, which were set in an orchard the next season, and have this year produced their first fruit, from one of which the engraving is made. As these young trees, as well as the old one, passed through the fearful test Winter of 1884-85 (during which the thermometer four times went more than 40 degrees below zero, wiping out entirely my Ben Davis, Tolman Sweet, Red Astrachan, and all the root-grafted Favorites) without even the slightest injury, this variety may safely be claimed to be a true "iron-clad." It is a free-growing sort, with long, slim branches and twigs, the trees forming round heads with limbs drooping to the ground, even when grafted quite high. The leaves are a dull green, whitish beneath, quite narrow and partially folded, giving the tree a unique look, not unlike a willow.

The apple, which is a long keeper, is at maturity grass-green in color, with a brownish-red cheek, ripening during the Winter to a clear straw-yellow. In form it is roundish-conical, sometimes slightly ribbed or angular. The stem is short, not large, in a shallow, abrupt cavity; calyx small and closed in a very small, regular basin. Flesh white, core small, with smallish, dark-brown seeds. Flavor a pure sweet without bitterness or acidity, rather rich, making it considerably better than Tolman for eating uncooked, while it is quite as good for baking. In size it runs rather larger than Tolman. It seems equally productive, and I believe it would be a better apple to grow, even where the seasons would admit of a less hardy sort. The Tolman lives here through all but our hardest winters, but produces very little fruit.



NEWPORT WINTER SWEET APPLE. Half Section. Fig. 413.

Indust'l Societies.

AMERICAN HORTICULTURAL SOCIETY AT CLEVELAND.

(RURAL SPECIAL REPORT CONCLUDED.)

Improvements in marketing through co-operation of growers; bagging grapes; Ulster Prolific and Poughkeepsie Red Grapes; bagging as a preventive of rot; close of the convention.

AFTER the reading of a paper on "Horticulture in the Mountain Regions of the South," by Dr. Samuel Hape, Mr. Myrick read a paper on "Selling Peaches," by Wm. P. Corsa, of Delaware. An outline of the operations of the "Delaware Fruit Exchange" was given, and the advantages to growers fully set forth. This was the third season of active operations, he said, with increased success for the Exchange and those doing business with it. Better distribution and more uniform prices are secured, and the condition and grading of peaches are improved. The commission men, of course, oppose this method of growers selling their own produce. Many advantages claimed for the system were enumerated, and the writer concludes with the following pertinent sentence: "I believe that if a determined effort could be made in many localities to improve the marketing methods of farm products, we would introduce a wholesome thrift into agriculture that would eliminate much of the lottery nature that now palsies effort."

President Earle spoke of the necessity of bagging grapes. "Where I live we cannot grow grapes at all without bagging, they rot so badly. All through Southern Illinois, Missouri and Arkansas, the rot is universal. Almost every kind rots, no matter about the soil or anything else. Rot can be largely prevented by bagging, by which we get delicious grapes. The cost does not exceed one-half cent per pound certainly. I think, in all that region of rot, grapes can be grown with profit by bagging."

Mr. Green, "I think this discussion should not close without some mention of the Ulster Prolific and Po'keepsie, which we now have on the tables here. They certainly are very fine and promising." Inquiry was made as to how far north the Ulster had been grown, without eliciting any reply, the variety not being planted much as yet. Mr. Smith, of Wisconsin: "Bagging improves the grapes. I heard of a gentleman who sold bagged grapes for twelve cents, when those unbagged from the same vine brought only seven. Bagging makes them a few days later." Mr. Myrick had understood that bagging made the skin thinner and the grapes would not stand shipping as well. Mr. Caywood: "Such I think is the fact; they are more tender when so ripened." Members generally agreed to this. If grapes are kept perfectly dry they never rot. Mr. Crawford: "I find the Po'keepsie Red not a good grower, no better than Delaware; would like to have it much better. Empire State makes a much better growth than either Ulster or Po'keepsie."

Friday, the next day, was wholly given up to sight seeing. The members took an early train for Lake View Cemetery and Euclid on the invitation of the Eastern Cuyahoga Horticultural Society. The Garfield remains and monument were visited. On alighting from the train at Euclid, on the Nickel Plate Road, all were driven through the many extensive vineyards there, 3,000 acres in extent, and were greatly pleased with the high and successful culture everywhere shown. In the afternoon a sumptuous banquet was partaken of on the shady lawn of E. H. Cushman, where the Euclid Concert Band discoursed pleasant music. After this President Earle called out many pleasant speeches in response to appropriate toasts from members and guests, and it was nearly night when the party returned to Cleveland. H. H.

NORTH AMERICAN BEE KEEPERS' SOCIETY.

(RURAL SPECIAL REPORT.)

Converting honeycomb into beeswax; melting the comb; the solar wax extractor; its discovery; "separators"; foul brood and the remedies; honey plants; alsike, etc.; Chapman's honey plant; the "coming bee"; control of mating a prerequisite of artificial improvement.

THIS society held its 17th annual convention October 12—14 at Indianapolis, Ind., several other organizations of bee keepers joining it in convention.

The process of converting comb into beeswax was thoroughly explained in a paper by C. P. Dadant, Illinois. This can be accomplished by artificial or solar heat; but many inexperienced persons spoil their wax either by melting it without water, by over-boiling, or by using dirty iron kettles. When comb is melted over the stove it is not absolutely necessary to have an apparatus made especially for the purpose. Any ordinary boiler will answer, but plenty of water must be used and only a moderate heat should be applied. When the wax is melted a basket of wire cloth can be placed inside the boiler and sunk down in the melted wax. The wax can then be dipped up inside the basket of wire cloth which acts as a strainer, and prevents the coarser impurities from being dipped up. Even the oldest and blackest combs will make nice yellow wax when thus treated; but, as a matter of course, a wax extractor will leave the wax cleaner at the first melting. If steam is used in melting comb it ought not to be turned directly upon the comb, but into water below it, the steam often damaging the wax, giving it a granular character and greenish color. This unpleasant result is sometimes brought about by over-boiling. If some wax remains in the dregs it is not advisable to throw it away; put it in a box and expose it to the weather which will dissolve the foreign substances, but not the wax, when it can be re-melted. Cappings of honey, removed when extracting, ought first to be allowed to drain, and then be washed, the sweetened water thus obtained can be used in making vinegar. The solar wax extractor makes the best wax, as it not only melts but partially bleaches it. So far but little use has been made of this invention, but the time is not far distant when it will supersede the steam or stove wax extractor.

O. O. Poppleton, Iowa, said that he discovered the use of solar heat for melting wax, about 10 years ago, when he was experimenting in wintering bees under glass. The heat of the sun melted the wax. The melted wax from a solar wax extractor ought not to stand

n the shade, but in the sun's rays, where the wax will remain in a liquid state which allows the impurities to settle, when the pure wax can be dipped off the top. From 500 old combs, each one foot square, he had secured 100 pounds of wax. A. I. Root, Ohio, said that those who had small quantities of wax to render could put the combs into a sieve, set the sieve and contents in a dish pan, and place all in a stove oven, when the wax would melt and run through into the pan.

Mr. N. N. Betsinger, of New York, gave a history of "separators;" that is, sheets of wood, tin or some other substance placed between the sections for the purpose of compelling the bees to build straight combs. Glass was first used, but the breakage was great, and the bees attached many combs to the glass. They also attached combs to wood, and, strange though it may appear, the smoother the wood the greater the trouble. This same objection applied to the use of tin. Mr. Betsinger believes that the use of any unperforated substance for separators lessens the crop of honey, hence he has, for the past four years, been using wire cloth for this purpose. The meshes are four to the inch, which allows the bees to freely pass through. After the wire is woven it is dipped in molten metal, which fixes the wires so that the meshes will remain of the same size. Mr. B. has a patent upon his invention.

A paper written by A. J. King, New Jersey, entitled "Foul Brood," was next read. Mr. K. has spent a year in Cuba managing an apiary of nearly 400 colonies, and when he first took it in charge he found nearly 100 colonies affected with that dread disease called foul brood. He thought it was first introduced into the apiary by purchasing queens from infected districts. He cured it by using what is known as the "phenol" cure. The method he employed is as follows: some phenol crystals are dissolved by placing them in a bottle in hot water. To one part of the dissolved phenol is added 499 parts of a mixture composed of one-third pure honey and two-thirds water. This is heated to 150 degrees Fahrenheit and then fed to the bees. At the close of the reading of the essay, Mr. R. L. Taylor, Mich., said that he thought that the descriptions of foul brood were not always interpreted correctly; many think that before the bees have foul brood the combs must be full of dead brood, and the odor is so great that it can be detected by simply walking in the vicinity of the hive. This description may be applicable to the advanced stages of the disease; but when it first appears only a few cells will be affected, and the odor is not noticeable unless the nose is brought close to the diseased brood. The brood, when dead, is of the color of coffee with milk in it. If a pin is thrust into the dead larva and an attempt is made to effect its removal, it will draw out "stringy" to the length of an inch. It finally shrivels and dries up, and looks like a speck of tar upon the lower side of the cell. He is curing it in his apiary (where it was spread by feeding honey taken from infected colonies), by what is known as the starvation plan. The bees are shaken from the combs into an empty hive, and shut up until they have consumed all the honey in their sacks, when they are given their liberty and fed.

Upon the subject of "Honey Plants" Mr. A. I. Root, Ohio, said that it is desirable that a plant should be cultivated for something aside from the furnishing of honey. For this purpose Alsike Clover stands at the head; buckwheat comes next, then rape and raspberries. He was not certain that there are any plants that it would be profitable to raise for honey alone; possibly there are a few. Sweet clover, figwort, spider-plant and the so-called Chapman honey plant, are the most promising of any plants that yield honey alone. The latter yields honey during a drought better than any plant with which he was acquainted. It is a biennial resembling a thistle, blossoms just after basswood and continues in bloom about three weeks. It is self-seeding and requires no attention after it is once started. The seed should be sown in early Spring. Mr. Root had visited Mr. Chapman, of N. Y., last Summer, for the purpose of learning more in regard to the plant. Mr. Chapman had two acres of the plant in bloom, and his 130 colonies of bees were gathering honey from it in such quantities that they were building comb in the sections and storing it with honey. The honey is white, and of a nearly pure sweet taste. Mr. T. F. Bingham, Mich., mentioned that the stalk is of a very fibrous nature and perhaps the fiber might be utilized in the manufacture of straw paper. Mr. H. Chapman, N. Y., had ground 2¼ pounds of the seed, and pressed from it nine ounces of fine, clear oil.

R. S. Taylor, Mich., read a paper upon "The Coming Bee," in which he took the ground that nature had, for centuries been turning the bee in exactly the direction most desirable, which has not been the case with some of our domestic animals, and, until the mating of the queens and drones can be controlled, there is little that can be done for the improvement of our bees; but if this is ever accomplished, we can do with bees in 10 years what would require 100 years in breeding cattle. If ever an improvement is made in our bees, Mr. Taylor thought it would be done by a crossing of varieties.

C. P. Dadant, Ill., thought prolificness is a very desirable trait. A. B. Mason, O. disagreed; the most prolific queen he ever had was the least profitable. Large quantities of bees were reared, but they stored no great quantities of honey. W. Z. HUTCHINSON.

Genesee Co., Mich.

What Others Say

PITTING POTATOES.—A writer in the Philadelphia Weekly Press remarks that if many potatoes are to be kept over Winter, pitting them is much preferable to putting into the cellar. Only enough should be put into the house for use during severe cold weather when the pits cannot be got at. Much sickness in farmers' families in Winter is due to keeping large quantities of potatoes and other vegetables stored under sleeping rooms. Besides, in the pit potatoes can easily be kept at a uniform low temperature without freezing. Most cellars are too warm the greater part of the time, and yet are liable to freeze in sudden cold spells. In pits the temperature varies only slightly. Potatoes for pitting should be dry and covered, first, with six or eight inches of straw. Then cover with four to six inches of dirt, leaving a hollow around the heap with an outlet on one side to carry off water that may settle there. Just before cold weather add a second light covering of straw and a heavy coating of dirt. If the ground is frozen so that dirt cannot be got, use manure from the horse stables. At the first covering a wisp of straw should be left sticking up through the center for ventilation. At the second this may be covered up with soil or manure. Potatoes thus kept will not freeze and will come out in Spring hard and sound, with only trifling loss of weight. In warm cellars there is often a loss of one-sixth or more by evaporation, shrinking and rotting.

VICTORIA.—After all we have said in favor of Miner's Victoria Grape, we are glad at length to have a little support from other grape authorities. Mr. J. T. Lovett, of Little Silver, N. J., prints the following in his fall catalogue: "The Victoria is the best white grape yet introduced. I have carefully and thoroughly tested the entire collection of Concord seedling grapes raised by the late T. B. Miner, and I find that Victoria far exceeds in value all others, and is of remarkable merit. I have now fruited it for several years, and find it without a fault, both in vine and fruit. The clusters are large and handsome, berries medium to large, most attractive, greenish-white with light bloom; pulp tender, rich and sweet, quality good to best. Vine exceptionally free from mildew, a strong grower, entirely hardy and very prolific. One of the few grapes that have not as yet been affected by rot. This invaluable grape has been figured and frequently commented upon editorially by that best of agricultural papers, the RURAL NEW-YORKER, and I can fully indorse all that has been said in its favor."

COLORADO TOBACCO.—Among the exhibits made by the State Agricultural College at the Exposition, Pres. Ingersoll writes us that there were eight "hands" of tobacco, representing seven different varieties, grown by Professor Cassidy in the Agricultural College grounds from seeds furnished him by Mr. Colman, the Commissioner of Agriculture. In the opinion of Professor Cassidy the showing made by Colorado is a very favorable one. The climate and the soil are both suited to the growth of tobacco, and the question as to whether it would be a profitable industry depends for its answer upon the quality of the tobacco raised. Owing to the fact that the conditions of the soil and climate in Colorado are different from what they are in the East, it is possible that a peculiar and very excellent kind of tobacco may be grown.

CATS AS RABBIT EXTERMINATORS.—Some portions of Australia have become literally covered with rabbits. They eat crops and gnaw the trees in a most disastrous manner. The idea of exterminating them with cats was conceived. Large numbers of cats were bred for the purpose. These are kept for a time in wire cages and fed upon rabbit meat entirely. When they are released they are left to support themselves. The Agricultural Gazette says that the plan has worked admirably. The cats multiply and the rabbits are killed in vast numbers. It will be as hard to get rid of the cats, eventually, we fear.

SEVERAL cases have occurred in England of late where people have been prosecuted for keeping poultry because the roosters made such a noise in the morning that late risers could not sleep. Of course, such trouble arose in towns where the houses are close together. A screaming rooster is as bad as a howling dog—so think the people who like to turn day into night. Poultry lovers in such cases will be forced to let the roosters go and keep hens alone. A rooster that will not crow is worse than a hen that will.

WIDE AWAKE ITEMS.

IN an old book on horse breeding, published in 1721, we are informed that no stallion should ever be used before he is six years old; that 20 mares in a season is an extreme limit of service, and that a foal should suck until it is 12 months old. Did they have better horses in those days, or has not improvement in horses kept pace with progress in other sorts of breeding!.....

PERMANENT PASTURES are looked upon by Prof. Arnold as a stumbling block in the way of progressive dairying and a thing to be avoided, except under peculiar circumstances. He tells the Farmers' Advocate that permanent pastures and meadows are great institutions in the eyes of lazy and dull men, and perhaps are as well suited to their capacity as anything .....

PASTURE land in its best state generally pays the poorest of any of the arable part of the farm, and permanent pasture poorest of all. There are several reasons why this should be so. First, the grass in a pasture is necessarily unthrifty, because it is so frequently cropped. No plant can flourish and be vigorous which is denuded of its green herbage. Every time it is wounded by cropping its growth is put back. It stands still, or grows but feebly, till it recovers from the shock and has time to gather renewed energy sufficient to throw out new shoots, only again to be stunted, and to repeat the same thing over and over again through the season, or until frost silences any attempt at growth. The present season has furnished a sorrowful demonstration of the short-sighted policy of subjecting cows solely to the uncertain supply of food furnished by pasture only, even if of the best and freshest sort. Almost all sections have suffered more or less. And this is repeated to some extent every year. Cheese factories and creameries have been closed for lack of milk, and the returns from private dairies have dwindled to a ruinous pittance almost everywhere, and loss is common. Prof. Arnold takes the view that all this is avoidable—not a necessity. Such men as Hiram Smith, of Wisconsin; John Gould of Ohio; Harris Lewis, of New York, and Edward Burnett, of Massachusetts, and many others of the same sort, go through such crises without wincing at all, and make money while others are losing. These men have learned that it is unwise to put their sole trust in pastures, especially old ones, and that tillage and rotation of crops are better, and by their steady success, whether drought prevails or not, they are public examples of the fact that, be the seasons what they may, hot or cold, wet or dry, dairying is one of the most profitable and certain of all agricultural industries when a fair share of common sense is employed in its management. .....

A WRITER in our London contemporary, the Fanciers' Gazette, is of the opinion that it does not make as much difference as people think, whether hens are allowed to sit or not, except in often-sitting breeds. In others, if they are debarred they lay rather sooner than if allowed; but to set against this, they usually get broody again very much earlier, so that in a year's account there is not much difference .....

NEAR Stockholm (Sweden) a farmer and his father before him have successfully cultivated tobacco upon the same few acres of land for nearly 50 years.....

THE Agricultural Gazette (England), says that silage to subserve the best ends must be *made* with judgment and *used* with judgment.....

THE same journal says that fat calves and fat heifers rarely develop into good dairy cows. Moderation is the golden rule. The calf, for a milch cow should never be allowed to lose ground, but it should not be allowed to become fat.....

THE American Garden knows of a man in a New York town who makes a handsome income by buying rough and unattractive house-lots, staking out the outline of a house, and then making a neat lawn of the rest of the lot, with shrubbery and flower beds in proper order. Then the lot is ready for sale at a large advance on its first cost, the lawn being the sole cause of the increased value, and its own advertisement.....

MR. J. T. LOVETT finds the Springfield (cap raspberry practically the same as, if not indentical with the old Davidson's Thornless..

THERE is a class of people, Mr. Hersey says in the Ploughman, who make farming a side issue, getting their bread and butter from some other occupation, who make themselves ridiculous in the eyes of those who are thoughtful tillers of the soil by trying to convince the public of the great profits of farmming and by extravagant statements generally. Well, to show how ridiculous this appears to the farmer, let us suppose that a few hundred well educated farmers, who for recreation, dabble a little in medicine, and doctor their sick neighbors, should also take up the pen to write for medical journals, instructing physicians how to treat diseases, and showing in columns of figures the great profits of the business, giving the exact details as to how many visits, at two dollars each, a good smart physician can make in a day, how many in a year, and what would be the profits at the end of five years. Would any real practicing physician thank such men? Would they feel that their condition was being improved by such writers?..... .....

THE man who thinks he can run successfully some professional business, and at the same time run a farm so much better than others as to enable him to become a public teacher, deceives himself, for if he gives his attention to the farm sufficiently to keep in the front ranks of progress, his professional business must suffer, just the same as a farmer's business would suffer if he should devote a considerable portion of his time to the practice of medicine, law, or mechanics..... .....

MAJOR ALVORD mentions that a cow years ago was considered good that gave 6,000 pounds of milk in a year. Nowadays cows giving 10,000 pounds a year are not uncommon. He has lately been watching a cow whose milk record was 26,000 pounds of milk in a year.....

"POTATOES will be raised, in the future, in large tracts more and more," says T. B. Terry in the Ohio Farmer. "There are men this year who have hundreds of acres. With the smoothing harrow and planter and digger, and other tools, they can handle such large fields without any trouble. Particularly is this true on the mellow soil of the West. Now whether this is wise or not, it will be done, and the railroads will move the potatoes to city markets at low figures. Machinery has enabled the big farmers of the West to make wheat almost a drug. If it wasn't for the twine-binder wheat would bring $1 to-day, Mr. Terry thinks. Look at the low price of Timothy seed. It is raised by the thousands of acres on some farms, and harvested with binder and thrashed with huge steam thrashers. So tools will work a revolution in potato raising. Unless a farmer can raise enough to afford the tools, his profit will soon be about the same that it is on 75-cent wheat."..... .....

KEEP seed-corn, squashes, tube-rose bulbs, canna roots in warm, dry places.....

PUCK thinks that the city out-countries the country. The countryman sends to the city to buy his trees and feeds his squirrel on nuts bought in the city. If you want fresh eggs or fresh vegetables the city is the place to get them. You can get a stronger dose of malaria in Central Park in a week than you can get in the country in a year. You can get sweeter and lovelier roses in any florist's shop in the city than ever grew in the country. No one thinks of buying meat in the country because country meat is not good. Even country sausages are made in the city.. ....

EDITOR CHEEVER says, in the N. E. Farmer, that a market garden makes a most excellent school for a family of growing children. They can all help earn their living and at the same time acquire ideas of manly and womanly independence, that will aid them in after life whatever occupation or profession they may follow.....

MR. O. S, BLISS says, in the N. Y. Tribune, that he keeps but one Leghorn cock to 36 or even 40 hens. In May last he set 65 eggs and 57 hatched.....

WHEN the editor of the Garden, Mr. E. H. Libby, visited Dr. Jabez Fisher's vineyard, recently, he specially noticed the thrift of the vines, their freedom from disease and the high quality of the fruit. Dr. Fisher attributes this result largely to the fact that he now uses only chemical fertilizers, which supply all the food of every sort that the vines need for the varied wants of stem, leaf and fruit. In the former use of stable manures, Dr. Fisher found that they produced strong vines, with but little fruit, and that rust and mildew were common.....

AT the London Dairy Show a class was

made for butter from cows feed on silage alone. The prize went to cows fed on a daily ration of 50 pounds of rye silage. Other prizes were offered for ornamental designs in butter; also for modeling in flowers.....

Everywhere.

Colorado.

MONTROSE, Montrose Co., Oct. 18.—Everything is grown here by irrigation, and although crops are lighter than ever before in this valley, there will be a very fair average, excepting potatoes, which are only one-half a crop, but of extra quality. Prices are only fair: wheat, per 100 pounds, $1.50, oats and barley, $1.90; potatoes, $1. N. N. J.

Illinois.

CHICAGO, Cook Co., October 26.—No general break-up as yet in the beautiful seasonable weather which October has so far given us. It might have sent us a little more rain in Southern Ohio, Indiana and Tennessee for the newly sown wheat, as already complaints are coming in that the ground is getting too dry for the newly sown crop. In Dakota and Northern Minnesota fall plowing goes on steadily, but under difficulties. Much stubble land will lie over, and there has been but little breaking up this Summer. In Stanton, Kidder and Burleigh Counties, along the line of the Northern Pacific, less than two inches of rain have fallen since harvest and not a thorough wetting in over twelve months. All surplus wheat beyond seed is moving out as soon as thrashed, and farmers accept fifty cents as readily as though that was a boom figure. I have as yet no hard frosts to report, with a week of very mild weather up to Monday night. The corn is drying out slowly. With the absence of frost there does not seem to be any desire on the part of farmers to gather the crop, and dealers are not anxious to take hold of it while it is as green as now. Millers are reporting a very excellent and in fact heavy demand for mill feed. I think this goes to show conclusively that neither the corn nor the oat crop is as large as is generally supposed. Another fact which confirms this statement is that the cribbed corn at railroad stations is yet in large supply. Farmers and grain dealers continue to report that the standing corn is in very poor condition for a wet Fall. Hog cholera does not seem to be very prevalent this Fall except in some counties in Southern Ohio and Indiana, and no matter how fatal and widespread the disease may be, the area of our country is so great that it actually seems to make very little difference at the end of the season, in the number of hogs which are packed, whether we have had any disease or not. Farmers this Fall seem inclined now to fatten their hogs as early as possible and get them into market irrespective of prices. There never has been a season when farmers have taken prices so freely as they have this Fall, rather than to wait for an advance. R. N.

Montana.

FRIDLEY, Gallatin Co., Oct. 15.—The crops in this county are all gathered in and no one seems to complain of the yield, and prices are good. No frost yet. Tomatoes not hurt yet. Onions are one of the best paying crops here; they are never less than three cents per pound, and generally five cents, and we raise as nice, large ones as I ever saw. Potatoes this year run about 200 bushels to the acre, and bring 75 cents per bushel. Oats and wheat are selling at 1½ cent per pound. We have the finest kind of land here for all kinds of farming purposes, and the very best of spring water. One of the best locations for a creamery that I know of would be here in the vicinity where I am. Plenty of fine pasture, and nearly double prices of Eastern markets for butter and cheese. I suppose some time some one will go into it—there is a fortune in the business in a short time. Butter from a good-sized creamery can be sold at an average of 35 cents for the entire season right here. Vegetables of all kinds bring good prices and ready cash sale, and plenty of places can be got reasonably for such business. The ranchmen as a rule don't pay much attention to anything else than looking after increase in their herds of cattle and horses. B. P. VAN H.

New York.

JAMESTOWN, Chautauqua Co., N. Y., October 25.—The grape season on the Lake Shore region in this county has about closed and plethoric pocketbooks attest that it has been a very profitable one to the growers. While the south shore of Lake Erie rises into hills a few miles back from the water, the most of the way from Buffalo to Cleveland, the locality which receives especial attention from viniculturists is mainly in the town of Portland, in this county, the railroad shipping station of which is Brocton, on the Lake Shore and Michigan Southern and Nickel Plate Railways. From some unaccountable reason grapes are said to grow larger and to attain a greater degree of richness of flavor in that vicinity than elsewhere along the Lake Shore, and land owners are taking full advantage of that fact, for where a few years ago one could purchase farm lands at $50 per acre the figure is now three or four times that price. In 1885 a very profitable season was experienced, the bearing being exceedingly large and the market ready and at good prices. But the season just closing has exceeded anything ever known. From Brocton alone considerably over 200 cars have been loaded with grapes and sent East and West, New York, Chicago and St. Louis taking the bulk of the crop, which will net the grape growers of the town of Portland between $100,000 and $200,000 in addition to the receipts from the sales to the immense wine houses at Brocton and to peddlers who take them inland. The Concord grape is the staple, while the Delaware, Pocklington, and especially the Niagara, are the choicest and hightest priced varieties. About three cents a pound is the average price which the growers receive, and so profitable is the industry that last Fall the acreage devoted to grapes in Portland was doubled, and the ratio promises to be even greater this year before Winter sets in. The contrast between the prosperity of the grape-growers on the shores of Lake Erie and the dairy farmers of the central and southern portions of Chautauqua County is very marked and not altogether agreeable for the latter to contemplate. Should there be several successive good seasons the lake shore portion of the county will become immensely valuable as the center of the grape-growing interests, and nearly every acre will be set out to vines. L. M. K.

UTICA, Oneida Co., Oct. 25.—There was a fairly active cheese market opened to-day, with sales much smaller, ruling the same as last week. The sales amounted to 8,529 boxes, ruling at 10⅞ cents, as follows: 3,006 boxes at 10⅞ cents; 1,026 boxes at 11 cents; 328 boxes at 11⅛ cents; 1,123 boxes at 11¼ cents; 867 boxes at 11⅜ cents; 1,087 boxes at 11½ cents; 410 boxes on private terms, and 692 boxes on commission. It is probable that the next Board will show a slight falling off. Little Falls sold 6,115 boxes cream and 945 boxes dairy—total, 7,060 boxes, ruling at 11 cents. There is a fairly good demand for best dairy. The butter market is falling and the make is becoming poorer, as the pastures have thinned out, and in some places have been frosted. There is plenty of medium butter for sale, but buyers are shy, and while the prices are nominally the same, the bottom has fallen out. Really first-class, however, readily commands more than quotations, and there is considerable of this laid down. Only 110 packages reached this market last week; the dairy selling for 22 to 24 cents, and creamery at 25 to 28 cents Little Falls to-day sold 90 packages dairy and four packages creamery at these quotations; bulk at 22 cents and 25 cents. Nothing new in hops, and everybody waiting for something to turn up. Dealers do not feel like moving under present circumstances, and there is general apathy. Prices are therefore nominal. Old dealers say they will do nothing at present, in fact, cannot. Commissioner Coleman announces his intention to thoroughly investigate the hop pest in this section. Reports of unusually fine hop crops in Oregon and Washington Territory tend to make buyers reluctant to invest at present prices here; and high prices cause the use of many adulterating substitutes in beer-making. R. L.

THE FARMER'S CLUB

ANSWERS TO CORRESPONDENTS.

[Every query must be accompanied by the name and address of the writer to insure attention. Before asking a question, please see if it is not answered in our advertising columns. Ask only a few questions at one time. Put questions on a separate piece of paper

KINDS OF DUCKS; AILING CHICKS.

W. A. L., Kingville, S. C.—1. What is the difference between common ducks and "ring ducks"—the latter, I think, are called Rouens. Don't both kinds lay light, greenish-blue eggs? 2. What kind of a duck is the Avery? Have canvas-back ducks ever been domesticated? 4. The combs, ear-lobes and gills of my chicks are sore and festered, and their eyes are watery. They eat well, but move about sluggishly and look drooping; what ails them?

ANSWERED BY H. HALES.

The domestic duck in all its varieties, except the Muscovy, which is another species, is bred from the mallard (Anas boschas) which in its wild state inhabits all the wild parts of the Northern Hemisphere and northward to the arctic regions; on our continent from Mexico northward. In Europe, when not disturbed, they become very tame, coming to a call to be fed by a person who regularly feeds them. In Aberdeenshire, Scotland, hundreds live on a mill-dam and are so fed. From some other places similar instances are reported. The Rouen duck is nearer in color to the wild mallard than other domestic ducks, having the white ring on the neck more perfect than that on the others. The superior size has been gained by selection and feeding. The white ring is not as well preserved in many tame ducks as in the wild ones. There is a variety of wild sea duck known as the ring-necked duck (Fulix collaris) which has a tufted head, which with the upper neck is greenish-black, with purple reflections. On the neck is a brownish-red ring, widest in front. It is met with along the upper coast and in the interior. It swims, dives and flies well: and its flesh is said to be excellent. Eggs of all the varieties of the domestic species are bluish-green; but in the white varieties some of the eggs are nearly white, especially the last eggs of a clutch. 2. I know of no duck called Avery. 3. The Canvas-back duck (Aythyta vallisneria) is entirely a North American species, breeding principally from Oregon north to the Yukon River, and the lakes and rivers of the fur country. I never heard of any being bred in domestication; such a case is highly improbable, as they are wilder in their nature than the mallard. In Winter they migrate as far South as Central America. 4. I suspect the chickens are suffering from small ticks, which, in the Southern States, attach themselves and burrow into the combs and exposed skin of the head; or the trouble may be chicken pox, in which case the scabs are first small and whitish, enlarging all over the comb and head, closing the eyes. The description of the trouble is not clear enough for me to judge. If the first, anoint the head with carbolic salve (carbolic acid and lard). If the latter, kill off every affected chicken; for the disease is highly infectious.

PREPARATION FOR GRAPE-VINE POSTS; MUCH ABOUT THE JAPAN CHESTNUT.

F. A., Jefferson, N. J.—1. Is pulverized charcoal boiled in linseed oil a good preparation for grape posts; and how should it be fixed? 2. How near together should Japan chestnuts be planted; that is, how large do they grow? 3. What is the earliest-ripening, grafted, reliable variety, and how large are the nuts? 4. Will it do to top-work sapling chestnut trees? 5. Would it be better to chop them down and graft the suckers on land that has never been cleared, or would it be advisable to let the American chestnut grow?

ANS.—1. We think coal tar or roofing pitch would be better and cheaper than the charcoal and linseed oil. The best of all are cedar or locust posts. 2. So far as known the Japan nuts in this country are of dwarf habit as compared with our native kinds, and may be planted like cherry or pear trees, say, 20 feet apart. 3. The trees propagated in this country are seedlings, and, like other seedling fruits, differ greatly. Care is being taken to graft from the best, though nothing entirely reliable is on the market as yet, as the first graftings were of a mixed lot, and it will take time to ascertain which are most worthy to propagate from. 4. The trees seem to be of species or varieties sufficiently different to make grafting not very easy, like apple and pear worked together. Cleft grafting on large stocks has not been very successful, as the wound seems difficult to heal often forming a sort of callus, the graft growing for several years and finally blowing out. A friend who has had much experience, always succeeds best in splice grafting with cion and stock nearly equal in size, and they must be cut very smooth and fit well, and be well covered with wax, and even then there will be many failures. The best way of all is to graft the roots of one-year-old trees. 5. It might do to try in some-years'-old suckers; but let only one or two grow at a stump. 6. For timber, the American grows very rapidly; but it may be many years before it fruits. Then, too, comes the seedling problem: some will bear when 10 or 15, others not until they are 30 or 40 years old.

SQUANTUM AND POTTER'S EXCELSIOR SWEET CORN, etc.

A. A., Holyoke, Mass.—1. In a late RURAL a correspondent says the Squantum and Potter's Excelsior sweet corns are the same; why then, does Gregory catalogue both kinds? 2. Is the Optimus Tomato as smooth as the Favorite? 3. Which sweet corn is the best for market?

ANS.—Squantum was introduced about three years ago. The ears average six inches long, about two inches in diameter at the butt tapering to the tip. Rows variable—from 10 to 18. Kernels large. Plant about the hight of Concord. It bears its ears low. Potter's Excelsior was introduced eight years ago. The rows are often so irregular that they can not be traced. The ears average shorter than those of the Squantum and taper less towards the tips; rows less variable as to number; kernels not quite so large. Plants about the same size and habit. The above and Concord grow to just about the same hight and mature about the same time. Evergreen is a taller plant and bears its ears higher. 2. The Optimus Tomato is fully as smooth as the Favorite, and is more solid and a better keeper with us. 3. Our choice of the varieties of sweet corn mentioned would be Excelsior for intermediate and Evergreen for late.

FUTURE PRICES OF POTATOES AND OTHER CROPS.

L. D. (no address).—What are the prospects for higher prices for potatoes?

ANS.—The only basis on which we or anybody else can form a reasonable estimate with regard to the future price of any product is an approximate knowledge of the probable yield thereof, and demand therefor. With regard to any crop the surplus of which is marketed in other countries where there is a competition with similar surpluses from other nations, we must have a pretty accurate knowledge of the yield not only at home, but in all other competing countries also, including that in which our market lies, before we can make even a good guess at the future prices. Potatoes are so bulky in comparison with their price, that it will not pay to export them to Europe, except, perhaps, from the Atlantic States when they have a large surplus, while there is a great shortage across the water, so that while prices are unusually low here, they are unusually high there. The great comparative expense of transportation to which this is due, also prevents us from supplying the shortage in one section at home from the surplus of any other section, if the two are far distant from each other. Thus if New York had a very abundant potato crop and Kansas a very scanty one, the shortage there could hardly be made good from the overabundance here. Prices, therefore, might be high in Kansas and very low in New York at the same time. The difficulty would be less where the price of the product is higher in comparison with the cost of transportation, as in the case of wheat or flaxseed; and greater where the price is lower in comparison with the freightage, as in the case of pumpkins or watermelons. With our present knowledge of the crop hereabouts we do not think that the price of potatoes will rise enough to compensate for shrinkage, rot and interest; but the case may be different in some other sections, and we do not know where our correspondent lives. Great care is taken to collect all attainable information with regard to crops at home and abroad, and condense it every week under the caption "Crops and Markets." If our friends will read that Department carefully every week, they will be able to form a very fair idea of the yield of the various crops not only in the whole country, but also in the different parts of it, and in the rest of the world, and in this way be in a position to form a pretty correct idea of what prices will probably be.

FRUIT QUERIES.

"Amateur," Delaware Co., O.—1. What apples are likely to succeed in Central Ohio, hardiness of tree and quality of fruit to be also taken into consideration? 2. What about Jonathan, Pewaukee, Sops of Wine, Wealthy and Yellow Transparent? 3. What are half a dozen of the hardiest peaches? 3. What about the Kilbourne Ironclad Peach? 5. Will the grafting of cions from two-year-old apple trees into bearing trees hasten their bearing? 6. In Spring can the tops of small trees be grafted at the same time the trees are transplanted?

ANS.—Belmont, Ben Davis, Grimes's Golden, Peck's Pleasant (Winter); Rambo (late Autumn); Red Astrachan (Summer); Red Canada (Winter); R. I. Greening (Winter); Rome Beauty (late Autumn); Summer Queen (Summer). To these we could add many that succeed in many localities in the State; but the above are those that succeed generally. Baldwin, Bullock's Pippin, Early Joe, Early Strawberry, Esopus Spitzenberg, Fameuse, Garden Royal, Gravenstein, Jefferis, Melon, Mother, Newtown Pippin, Northern Spy, Rawle's Genet, Primate, Porter, Summer Rose, Swaar, Wagener, Westfield, Seek-no-further—all of which are of the best quality, thrive well in some parts of Ohio. 2. The Jonathan is a very good winter apple of medium size. It is an American apple suitable for family or market. The Pewaukee is a large American winter apple of fair quality only. Sops of Wine, medium size, fair quality, early Autumn. Wealthy is of medium size, very good quality—Winter—American. The Yellow Transparent is of Russian origin, medium size, fair quality, early Summer. Alexander is a Rus-

sian of fair quality, large, ripens in Autumn. 3. Oldmixon Free, Stump the World, Red-cheek Melocoton, Royal George, Crawford's Early and Crawford's Late, George the Fourth and Grosse Miguonne. 4. No. 5. Yes. 6 It would not do.

LAMPAS; INTESTINAL WORMS IN A HORSE.

A. H. G., Lawrence, Kans.—My seven-year-old horse and two-year-old colt are troubled with lampas, swelled gums and itching tails. Both are in good condition, but are uneasy and disposed to rub against the fence or stable. The horse often has small boils where the harness presses and under the collar; what should be done?

ANSWERED BY F. L. KILBORN.

"Lampas" is a symptom of digestive or other disorder, or is due to local irritation, as from teething or injuries, and is not a disease of itself. In the old horse it is evidently due to digestive disorder caused by intestinal worms. With the young animal it may be due in part to the same general cause or entirely to dentition. In either case the old custom of burning out should be condemned as barbarous and unnecessary. The congestion, if severe, may be temporarily relieved by slight bleeding with the knife between the front teeth and the third wrinkle. For young, healthy animals nothing more should be required, and the "lampas" will disappear after the eruption of the permanent teeth. Feeding dry, hard corn in the ear is often practised with benefit. For the intestinal worms in the horse give five drams Barbadoes aloes; the following morning before feeding give two drams tartar emetic and one dram each carbolic acid and sulphate of iron, and continue for six consecutive mornings; on the seventh day give a second dose of the aloes, varying the size of the dose either more or less according to the action produced by the first dose. Injections of several quarts of a strong solution of quassia will be useful in removing the worms in the lower colon and rectum. If worms are suspected in the young animals, the two-year-old may receive one-half, and the spring colt one-eighth of the above dose. Following the above treatment, half an ounce each of gertian, ginger and sodium carbonate in the evening, and two drams each niter, aloes, and sulphate of iron in the morning, continued for two or three weeks, will aid in bringing the system into a healthier condition. Thorough daily grooming will also greatly improve the condition of each.

COMBINED ICE-HOUSE AND MILK ROOM.

E. B. D., Columbus, Kans.—How would a practical dairyman build a combined ice-house and butter-making room for a dairy of 25 to 30 cows?

ANS.—A building 16 x 30 feet would be about right, and if half of it was over a cellar, all the better. In the absence of a cellar if the site is not suitable to have one, it would be well to have the building two stories in hight; the ice-house being 16 x 16 and the butter room 14 x 16. Instead of having the ice-house run from the ground to the top, we would have a cold store-room, with ice above it. The ceiling of the cold store-room should be inclined and made of galvanized iron, water-tight. Fill with ice above, to the roof, and have the sides and roof built in modern ice-house style—three thicknesses of ceiling and paper with two air spaces. So built, little or no saw-dust packing is needed, so the ice is quite clean for butter making. The cold store-room is needed to hold and keep the butter cold for a short time till sale-day. The butter making room, 14 x 16 feet, is large enough for the creamery tanks, a 100-gallon churn, the butter-worker, etc. The chimney for the make-room should be put as far from the ice-room as possible. This would leave a room over the make-room; but such a room never is empty on a farm. The room would be large enough so that the herd of cows might be enlarged to 50 or 60 and still have space enough, while to make it smaller would be a mistake, because there would not be passage-way between the tools that must be used. The ceiling of the cold store-room should be made to incline towards one side of the building so that the drip of the ice could be used in the creaming tank, and so much anti-caloric saved. This could easily be done by having the cross joists put higher upon the studding on one side. Of course, to hold the ice safely the cross joists must be strong or supported in the center.

POULTRY RAISING.

W. P. C., Augusta, Ga.—1. In a late RURAL a correspondent, speaking of poultry raising, says: "Let a man invest $1,000 in the enterprise, and if he has any gumption whatever he can, the first year, realize six per cent. on his capital." Is there not some mistake about this? If that is the only hope a fellow would have for his money, to say nothing of the "strictest attention," "wide-awakedness," etc., etc., necessary, it is but poor encouragement. 2. What is the best incubtor?

ANSWERED BY C. S. COOPER.

1. The profits in poultry-keeping will depend entirely on the proportion of chickens a man can hatch and his success in rearing and marketing them. A novice will be always less successful in the business the first year than afterwards, especially if he enters it in a large way without any previous study or practical training. It would be always prudent before investing even $1,000 in it, to obtain some practical experience from those who have successfully handled fowls extensively. The raising of poultry in large numbers for eggs or fowls for market seems an easy business to those who have not tried it; but it is risky for a new beginner, though many who have experience make it very profitable. A good brooder is as essential as a good incubator. The Buckeye, made by the Buckeye Brooder Company, Ada, Ohio, I know to be good. Of incubators there are several good ones. I have the Perfect Hatcher, which is very good; made by Perfect Hatcher Co., Elmira N. Y.; but it is well to dispense with the clock work if one can. The Monarch, made by Jas. Rankin, South Easton, Mass.; the Thermostatic, for sale by E. S. Renwick, 19 Park Place, N. Y., the Eureka and Andrews' Hatcher I know are all good and successful machines.

KILLED BY DRINKING TOO MUCH.

J. C. K., Peru, Ind.—My eight-year-old cow dropped a calf at noon, and she and the calf appeared all right; in the evening she was given all the cold water she wanted; next morning she couldn't get up: her feet and legs were cold; she kept on getting worse and died in 48 hours after drinking the water. What was the matter?

ANS.—Probably she was killed by drinking too much cold water. A cow in her condition should have received very little, if any, cold water. She should have had water "with the chill taken off," and warm mashes given frequently in small quantities for at least 24 hours before allowing free access to cold water. There would have been little hope of a recovery with the best of treatment.

HEELING IN SMALL FRUIT VINES FOR WINTER.

W. W. T., Waterville, O.—Can plants of raspberry, blackberry, grapes, etc., be taken up in the Fall and wintered without a cellar? If so, how can it be done?

ANS.—Yes. Select a sheltered, well-drained place in the garden or anywhere. Dig a hole or trench as needed, and place the plants in it. Work the soil well in among the fibers and roots the same as in planting them. The plants may in this way be placed so near each other that the roots touch. This is called "heeling in." A slight cover of leaves or straw may be placed over the trench when the weather becomes cold. If properly done, plants treated in this way will often start earlier in the Spring than if set out now where they are to remain.

CONTAGIOUS FOOT ROT IN CATTLE.

A. G., La Center, W. T.—Last March a cow of mine became lame, but I could notice nothing the matter with the hoofs; but now there are sores between the toes. She doesn't seem to be pained much, and she travels as far every day for feed as the other cattle, and eats as fast. A calf she dropped in March is also somewhat lame, but not so badly as the dam. On the calf the sore is between the toes on the front right foot, running all the way from the front to the rear. It discharges a bad-smelling pus. The place is very raw and the discharge appears to have rotted the skin to the flesh. The cow is affected in the same way only worse. In neither case is the leg so swollen as to be noticeable. There is no sore where the hide and horn join outside the hoof. The pasture is not wet. What is the matter?

ANS.—Clean the foot and pare away all diseased horn to expose the whole diseased surface. Cauterize thoroughly with commercial hydro-chloric acid, using a cloth swab on a stick, so as to eat away all diseased tissue. Then apply a dressing of tar. Also apply a light dressing of the acid and tar to the healthy feet as a preventive. Examine the feet and dress once or twice a week until cured. The disease being contagious, all sick animals should be kept apart from the healthy until healed.

Miscellaneous.

E. W. B., Sanford, N. Y.—1. I have a sick cow and lost another by the same disease. First, the eyes run; then turn white and milky and bulge out, and in 48 hours the animal becomes blind; the nose grows sore and matter runs from it and the mouth. The animal is hot and feverish, has a good appetite, but loses flesh rapidly. The second one has been sick about a week. What is the matter? 2. Who is the N. Y. State Veterinarian?

ANS.—The symptoms are unsatisfactory; but if the cattle had access to low, damp, marshy places, or were otherwise exposed, it is probably malignant catarrh. If this is the case, treatment is not very satisfactory, except at the very outset. Better to prevent the disease by removing the cattle from such localities, and protect from exposure. 2. Dr. James Law, Cornell University, Ithaca, N. Y.

R. A. B., Monroeville, N. J.—For six weeks my two-months-old colt has stepped on the toe of the left fore-foot, and "crinkled" forward in walking. It is lamer sometimes than at others. On examination I can't see what is the trouble; can the RURAL? 2. The two teats on the right side of a Jersey calf are fastened together just by connecting skin; could a surgeon separate them?

ANS.—1. We suspect the back tendons are too short and require cutting across, an operation requiring the services of a competent veterinary surgeon. If our diagnois is correct all other treatment will be useless. 2. Yes; any good surgeon can safely separate the teats.

W. M. K., Washington, D. C.—1. My cow's teats keep very sore all the time, though I grease them after milking; what is a remedy? 2. Would it do to put crude petroleum on hens under the feathers, to get rid of vermin?

ANS.—1. What is the nature of the sores? As to the cause, you give us no clue in your brief description. Try cauterizing the sores with a stick of nitrate of silver, after which apply daily an ointment of equal parts of spermaceti and almond oil. The teats must be kept dry and milked carefully. If milking by hand appears to irritate the sores so as to prevent healing, it may be necessary to use milking tubes until healed. 2. Yes; in small quantities. But it must be used cautiously.

S. S. S., Dover, Del.—My young horse chews up all the harness he can get hold of; what is the cause and what a remedy?

ANS.—Either a habit, occasionally contracted by young horses from pure wantonness when idle, or a depraved appetite. In the first case, the very simple remedy is to give the horse something else to do, so that he will have less time for such practice, and to keep the harness out of his reach when necessarily idle. If due to a depraved appetite, the animal is out of condition and needs a course of treatment. But if such is needed we should have a careful description of the case to enable us to prescribe.

J. K. P. A.—(*address mislaid*)—Can I get a cheap mill for grinding corn meal or Graham for table use?

ANS.—The Frank Wilson No. 0. mill will do good work. We have examined a specimen of Graham flour made in this mill; it is excellent. Price $5. Wilson Bros. Easton Pa.

T. B. H., Wellsville, Pa.—The tree is evidently a seedling. Oftentimes seedling pears and apples do not blossom or fruit in many years. The pear will grow on the apple—the apple on the pear. But usually they will be short-lived.

H. G., Hamburg, Conn.—Is it advisable to plant potato onion setts in the Fall? 2. In what proportion should kainit and raw bone be mixed for application to plum trees, and, 3, how much of each should be applied to trees planted two years ago next Spring, now in thrifty condition?

ANS.—1. No—in the Spring. 2. This can not be answered because we do not know whether your land most needs phosphoric acid or potash. We should advise using one bag (200 pounds) of kainit to one bag of bone. 3. The trees being thrifty, apply not over at the rate of 800 pounds of the combined fertilizer to the acre. This would give a couple of heaping handsful to each tree.

DISCUSSION.

AGRICULTURAL COLLEGES AND AGRICULTURAL EDUCATION.

L. E. B., LINCOLN, NEBRASKA.—The RURAL advises farmers to stop nagging at the agricultural colleges and to support them by sending their children. Such advice should not pass without comment. If it is supposed that the attendance at one of the agricultural colleges necessarily means that one will get a farm education there, I must object to the RURAL'S advice. It is well known that a large part of the income from the agricultural college endowment is used to educate anything but a farm spirit. Those who want their boys to become farmers find little inducement held out by these schools. Before the college course is over it is a fair chance that their boys will be led into some other field of thought. While this uncertainty exists these schools cannot ask the support of earnest farmers, and it is no wonder that they are reticent and inclined to ask "leading questions." We know that but very little successful work in agricultural education has been done in this country. This is not from lack of opportunity, but from lack of men who have the work at heart and are trained for it, and can carry interest and enthusiasm into earnest effort. I write this after some experience in farm school work. I know that farmers are awake to their best interests in educational matters, and do not think they deserve the scolding the RURAL gave them.

R. N.-Y.—The RURAL'S opinion is that the farmers of the country have the power to make a grand success of a majority of our agricultural colleges. This opinion is based upon a personal examination of two of the most successful institutions and a study of several feebler ones. In Michigan, Mississippi and Kansas we have agricultural schools that offer no apology for existing, and are not ashamed to place their course of instruction beside that of any school. The progressive farmers of Michigan made their college by sending their boys there and keeping them there. If in the beginning they had hung back and sneered at the school and sent their boys to sectarian colleges, the institution would long since have been swallowed up. There is an enthusiasm about numbers that counts in colleges as in any other place where men meet. Surely if Michigan, 30 years ago, could find men to start her college, other States can get them to-day if they care to look for them. If the farmers do not believe that agricultural education is possible, and that their boys can make better men by learning poor Latin and worse Greek at a second-rate college than they can at any possible agricultural college, that is their own affair. We believe, 1, that it is possible to create, in every State in this country, an agricultural college that will be a positive benefit to the State; 2, that the farmers of any State have the power to make or unmake these colleges just as they wish. The history of the half-dozen colleges that can be rated as anything of a success will prove these propositions. Let the farmers' organizations of any State all pledge themselves to give their agricultural college their warm and hearty support for five years. Let them send boys there as students and committees there to investigate, and keep up the work honestly and fairly and the result would astonish them. You will say you do not care to experiment with your boy's education. What else do you do when you send him to any other college? Can you tell what he will make as the result of his college training? One favorite argument of farm writers is to the effect that farmers' boys should never be surrounded by any education or influence that would draw them away from the farm. There is far more sense in permitting a boy to select his own profession. He will be a happier and a better and more successful man for such a selection. There are natural farmers, natural doctors and natural lawyers. They are frequently found in the same family. Give them special training and you make three good men; give them all the same training and you make three second-rate men. We have normal schools for teachers, special schools for lawyers and doctors—we need them for farmers. We can have them when we send our genuine farm boys together. They will make the institution and give it dignity.

Miscellaneous Advertising.

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We do not claim that Hood's Sarsaparilla is the only medicine deserving public confidence, but we believe that to purify the blood, to restore and renovate the whole system, it is absolutely unequalled. The influence of the blood upon the health cannot be over-estimated. If it becomes contaminated, the train of consequences by which the health is undermined is immeasurable. Loss of Appetite, Low Spirits, Headache, Dyspepsia, Debility, Nervousness and other "little (?) ailments" are the premonitions of more serious and often fatal results. Try

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THE
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A National Journal for Country and Suburban Homes.

Conducted by
ELBERT S. CARMAN.

Address
THE RURAL NEW-YORKER,
No. 34 Park Row, New York.

SATURDAY, NOVEMBER 6, 1886.

We want a complete volume of the Rural New-Yorker for 1883, bound or unbound. We also want copies of the issues of July 3 and 31, 1886. Those having these numbers to dispose of will oblige us by notifying us at once.

We are now about to give up our Wyandottes, having tried them for three years, and told our readers all we know of them. Our conclusion is that they are a first-rate all-purpose fowl—as good as any. The only fault we have to find is that their eggs are rather small. We have now the Langshans to try next. We endeavored to procure a stock from eggs last year but failed.

While we are reforming the nomenclature of fruit names, it would be well to make a change in the words "basin" and "cavity" as applied respectively to the depression about the calyx and stem. There is nothing about these words to impress them upon the memory. We would suggest the words "stem basin" and "calyx basin," or "stem cavity" and "calyx cavity." These terms would be understood by all and need no fixing in the memory.

Thirty-two carp were put in the little lake at the Rural Grounds nearly three years ago. They varied in size from two to five inches in length. That was the last of them so far as we know. The lake is about 150 by 100 feet in area, occupying a natural basin, and averages four feet deep. It is fed by many springs that never fail, and the excess of water flows over a dam five feet high and thence by a circuitous route to the Hackensack River four miles distant.

At the late convention of the Knights of Labor at Richmond a resolution was passed, on October 18, to appoint a committee "to promote fraternal relations between the Knights and the Patrons of Husbandry." There is no reason why a very friendly feeling should not exist between the workers in the shop, road and factory and those on the farm. The object of both classes is the same—to obtain for their own benefit a juster proportion of the proceeds of their own labor.

The time is now coming when we may expect to hear fresh account of deaths from trichinosis. The season for extensive pork eating is now at hand. It appears that there are far more cases of trichinosis than people imagine. The disease is not always fatal. Many cases of so-called typhoid fever, rheumatism or diarrhea are really due to this disease. Cases of a general attack of bowel complaint among the company at picnics or other gatherings, have been traced to the serving of large quantities of underdone ham. There is only one safe way to serve pork, and that is to cook it thoroughly.

In this State we have a law which forbids the killing of of "any wild bird other than a game bird," and, furthermore, it is provided that no one shall "purchase or have in possession or expose for sale any such song or wild birds or any part thereof, after the same has been killed." This law applies not only to the man who offers song birds or any part of them for sale, but also to the woman who wears them. It is now in force. There isn't a milliner's store in this city or in any other town in the State where it isn't violated. Lawbreakers are met with on every street in this and other towns in the State. Wouldn't it be well to make some attempt to enforce the law and put an end to an infamous business?

The Ear-leaved Magnolia, M. auriculata of some, M. Fraseri of Gray, does not seem to be well known though far better suited to small grounds than the Cucumber Tree, M. acuminata. It is very hardy at the Rural Grounds and bears two crops of its yellow blossoms every season—one in May the other in September. It does not grow so tall as the Cucumber Magnolia, while the leaves are as large and the habit more compact. Another item in its favor is that it retains its leaves fresh and green for two weeks or more after frost, while those of the Cucumber Tree are blackened by the first frosts. The hardy magnolias are not half appreciated as ornamental trees. They should be transplanted in Spring.

The North Jersey Water Company proposes to supply pure water to the cities and towns in the Passaic and Hackensack Valleys. The design is to secure possession of the range of hills running through Northern New Jersey. In these hills it is proposed to construct reservoirs in which the water from springs and brooks can be stored. The great elevation of these natural reservoirs will easily enable the projectors to force water into any part of the large cities between the hills and the river. Much of the water used in these cities is at present indescribably filthy. About Paterson the river is simply blue, yet human beings are expected to drink it. The village sewage, cesspools and privies all add their quota of disease to the supply of drinking water. The sending of pure spring water into these cities will be an inestimable boon.

There is no fouler blot on the face of our country to-day than the grog shop. Honest men who love their homes should hate the saloon as they hate a loathsome disease. There is no reason why the rumseller should be regarded by honest men as any better than a criminal. The temperance movement in this country will make wonderful progress when the rumseller is placed just where he belongs in the estimation of respectable people. The saloon has no respectability because it works only to destroy the elements of self-respect. It replaces hope with despair, kills courage, dims manhood, and ruins health. It has no right to the respect of man, and he who gives it even the encouragement of silence is an enemy of morality. See to it that no son or daughter of yours can ever learn from you that the saloon is entitled to anything but their abhorrence.

There is a great deal of discussion in the South with regard to reducing the cost of growing and handling cotton. It is insisted that the cost of growing and spinning can both be reduced, and that the changes possible would make cotton growing as profitable as it was before the war. It is proposed, in the first place, to save one cent a pound by doing less work with the hoe and more with the cultivator. With the new cotton-picking machine, which, it is claimed, is nearly perfected, a saving of a cent and a half a pound can be made in gathering. Then it is proposed to have spinning mills alongside the cotton fields. The following calculation is made: Cost of cultivating and gathering, 4½c.; cost of spinning, 2c.; total 6½c. per pound; sale of yarn, 14c. This leaves the grower 7½c. per pound after all expenses are paid. If the cost of transporting the raw material to the mills of New England and Europe can be saved, the planter, of course, will be the gainer.

The Supreme Court of the United States, in the case of the Wabash, St. Louis and Pacific Railroad *vs.* the State of Illinois, has just rendered a decision which is of great importance to the public. A State law forbids discrimination against persons or places in railroad charges, and the State Courts had decided that the law applied to rates charged on shipments from points inside the State to points outside it. A test case was taken to the United States Supreme Court which has just decided that legislation by any State against discrimination in rates applied to transportation which is continuous over several States, including the one whose lands are in question, is in contravention of the Constitution. A majority of the Court rules that such legislation is not within the province of State Legislatures; but that Congress alone has the right to pass laws regulating inter-State commerce. Chief Justice Waite and two of his associates dissented from the opinion of the majority, so that, while the principle is affirmed, there is a good deal of doubt as to its application in the particular instance before the Court. Whatever else may be the effect of this decision, it ought to insure the prompt passage of either the Reagan or Collum inter-State commerce bill, which the railroad agents in the last Congress managed to shelve.

"Self help is the remedy for all evils of which men complain." So said Abram S. Hewitt in a recent speech. No truer words ever came out of the mouth of man. There is a fair chance for every man in this country. Every man who makes an honest effort to help himself will be helped, and all cowards who fall back at the first obstacle will be cursed. The stern justice that makes this decree cannot be moved to change it. Every self-made man has the same story to tell. He can point to times in his life where had he given up and called for help, he would have ended his life dependent instead of independent. Instead of giving up he pushed on, helped himself and made a way. He found that every self-denial made the next one easier, that every determination not to give up, added just so much strength to his character. All this has been proved true time after time. The young men of this country should understand that it lies in the possibilities of every healthy man's life to make of himself just what he will. There is another thing to be considered. Excellence in any line of work is simply the representative of so much self-denial, so much energy and solid work. This has been said over and over again, but it is true every time it is said.

THE KIEFFER ON LONG ISLAND.

In the R. N.-Y. of August 14, page 527, is given an account of how Kieffer cions were worked on a pear tree 100 years old. The grafting was done three years ago. The grafts bore two peach-basketfuls the second year, and this year they were loaded. Mr. Augustus T. Hewlett, the owner of the tree, now (October 26) sends us 16 of these pears. They weigh four pounds 12 ounces an average of nearly five ounces each. They are mostly keg-shaped, the rest Diehl or pyriform. The color is yellow, often with a red cheek. As to quality, they were pronounced "relishable" by those who ate them. There is a sourness about them peculiar to Kieffers and hard to describe, which is agreeable to some and disliked by others. It is more the sour of some apples than the sprightliness of pears. They were very juicy, tender in some parts but for the most part coarse, with many lignine grains. It may interest many of our readers to know how the Kieffer succeeds in the sandy-loam soil of the south side (ocean) of Long Island.

THE CHICAGO MENACE.

The official report just made by Dr. Salmon, Chief of the Bureau of American Industry, with regard to the outbreak of contagious pleuro-pneumonia at Chicago, confirms all we have said on the subject. The inspection of city and suburban herds leaves no doubt that the contagion has been very widely disseminated. The existence of the disease has been known since 1884 to the owners of distillery-fed cows; but they tried to conceal its presence and to lessen the loss from it by inoculation. While this did lessen the losses, it scattered more widely the contagion. The experience of the world with this plague leaves no doubt that the only reliable way to exterminate it is to slaughter every affected animal and, as a precaution, every animal that has been exposed to contagion. In the present case, Dr. Salmon says such a measure cannot be carried out without additional legislation, both State and National. Neither the State law nor the appropriations are adequate to the emergency, and the cattle industry is declared to have "reached a crisis."

A press dispatch yesterday says the owners of quarantined cattle "continue killing their healthy animals" under the inspection of the State Veterinarian. The flesh of unsound animals is sent to the rendering tanks; while that of healthy beasts is sold in the markets. Another dispatch declares that milk from the distillery cows is constantly smuggled into the city, and that numbers of the quarantined cattle are "spirited" away every week. The cattle dealers of Chicago have done more than any other class of men to create doubt and suspicion with regard to the existence and nature of the plague, but it is very likely that the delay in suppressing it, which is largely due to their action, will entail well merited punishment upon them. But even for the satisfaction of punishing them the vast cattle interests of the country—amounting to over $1,200,000,000—should no the exposed to prolonged danger.

HELP THE GOOD WORK.

The United States Department of Agriculture is engaged in a work which, if carried out fully in the line proposed, will be of immense benefit to the cattle interest of this country generally, and to breeders of pure-blooded stock particularly. It is collecting information from which it expects to be able to present a full and accurate report showing the number of pure-bred cattle of each established breed in each county and State, and their ages and sex; the general average prices for which such cattle were sold last year; the cash values of so-called "scrub" or native cattle, and of animals sired by pure-bred bulls of the several breeds. An effort will be made to show what increase in weights of beeves resulted from the use of pure-bred bulls; also, what increase in the quantity of milk, butter or cheese produced per cow per year has resulted from the use of Ayrshire, Guernsey, Holstein-Friesian, Norfolk-Suffolk, Short-horn and Swiss bulls. The difference between the cost of beef produced by high-grade cattle and that from common native or scrub cattle, and the difference between the cost of milk, of butter and of cheese from grades and that from natives, will be shown, if possible, as will also the average duration of productive life of "scrub" cattle, and of improved cattle, the average number of calves born for each hundred pure-bred cows, each hundred grade cows, and each hundred "scrub" cows, so-called, and what percentage of these calves reach maturity. Many efforts have been made to show the value of the influence of pure blood in cattle, but they did not cover the ground fully and satisfactorily—indeed the work is of too great magnitude to be successfully done by individuals. Even the Department of Agriculture itself can not carry out the plan without the aid of the thousands of breeders who, having experience with cattle of the various kinds mentioned, and intelligence to observe and note the results of their work, are competent to give valuable evidence bearing on the subject. Prominent breeders express a very cordial appreciation of the project and a desire to see it completed at an early day. The details of the work are under the charge of Mr. E. W. Perry, 234 La Salle Street, Chicago, who has for many years been known as a student of and writer on live stock interests.

BREVITIES.

We would call the attention of our lady readers especially, to the Rural's list of book premiums, which will be presented in our supplement of the Thanksgiving Number. The terms upon which they are offered should engage the services of all.

A heavy mulch or dressing of sifted coal ashes about currant and gooseberry bushes is said by some writers to keep the currant worm away. The experiment thoroughly tried at the Rural Grounds for two years past has not had this effect. The mulched bushes were just as much infested as those not mulched.

The farm papers reiterate the perennial advice to gather the fallen leaves and add them to the manure pile. We gather most of the leaves at the Rural Grounds as much with a view of keeping the place tidy as to profit. We doubt if it pays to gather the leaves. It requires the services of a man for a day to gather enough leaves to make, when decomposed, a barrel of soil. Is the barrel of soil worth a dollar or more?

And the drought continues—the severest of this season we have ever known. The air is filled with smoke from many burning woods and meadows. It is worse than useless to plow for rye and much remains unsown. Early sown rye is burning up in places. Many of the wells in the country about the Rural Grounds in New Jersey and the Rural Farm on Long Island are dry. Later: October 27. The drought has been broken by showers.

Poultry supply a good proportion of the meat on most farmers' tables. It should supply more. We have been discussing breeds, crosses and grades of cattle and sheep, why not discuss meat poultry? What breed or what cross gives the best meat, and is there the same difference between scrub poultry and thoroughbred poultry as there is between scrub beef and thoroughbred beef? People who have looked into it say there is. If this is so, it will pay any farmer to look into it.

Well, is it satisfactory to have the question officially decided by the highest authority in the land. Webster's Unabridged, the cyclopedias and common opinion have hitherto regarded the tomato as a fruit; but the Government, through the Treasury Department, has just decided it is a "vegetable." The Collector at this port insisted on assessing duty on tomatoes as "vegetables" instead of as 'fruits," under which head importers claimed they should be assessed, and the Treasury Department has sustained the action of the Collector.

The opinion of those who examined the preserved eggs at the London Dairy show was that no plan seems superior to putting them in dry salt, without any other precaution. Strange to say, this plan was not followed by any competitor. This matter of preserved eggs is an important one. It would be a great convenience to farmers' wives if eggs could be cheaply and easily packed while they are plenty. Specimens are sent to the managers of English poultry shows 90 days before the date of the exhibition. They are kept until the opening of the show and then examined and tested. Our poultry shows should include classes for preserved eggs and dressed poultry.

Miscellaneous.

TRANSCONTINENTAL LETTERS. LXVIII.

MARY WAGER-FISHER.

Peach Spring Station; a nice breakfast; on the way to the Grand Cañon of the Colorado; Farlee, the cosmopolitan "boss"; a "tremendous ride" on a "mud wagon"; "the most marvelous road in America"; nothing overwhelmingly wonderful; a six-mile trip in the Grand Cañon.

PEACH SPRING STATION is an important point for railway trains on the Atlantic and Pacific Railroad, as it affords an unfailing supply of water of great excellence, which in Arizona, where rain does not fall sometimes for a year or more, is worth more than gold. The spring is four miles distant and the water for the town is conveyed through a pipe. Some peach trees were planted several years ago near the spring which gave it its pleasant name, and as we rode past them on our road into the Grand Cañon they were in full bloom. It was the second day of April.

Although Peach Spring is the station to alight at for the Grand Cañon, comparatively very few people have as yet stopped off to visit this unparalleled scene of desolation, where one fairly sees where the "foundations of the earth were laid." The visitors of most note have been scientific men. The railroad through here is of comparatively recent construction, and while the place has for several years been known as one of the "seven wonders" of this country, its renown is still a thing of the future as a tourists' resort. Railway folders announce it as being 18 miles from Peach Spring Station, and I have seen spirited pictures of the stage coach drawn by four horses conveying travelers from the station to the cañon. But I can only write of it as we actually found it. The station is the usual forlorn place of these arid regions—shanties planted about, saloons, maybe a land office; but here there is a tolerably good eating-house, large and airy. However, the railway officials had advised us, if we wanted a good breakfast, to go to a certain shanty where a "nice white woman" did the cooking, and served meals. Thither we went, and sat on high stools by a counter, and watched the "nice white woman" cook the breakfast over a stove on the other side of the counter. Although she fried the beefsteak in fat, we had the satisfaction of seeing that the cooking was done neatly. She gave us hot biscuits, griddle cakes, fried eggs, boiled potatoes, coffee and bread and butter at 75 cents for each of us. Every article of food was imported. We bought bread here for our lunch basket, each small loaf costing 20 cents. Two days later we breakfasted in the railway eating house, or hotel, and had an equally good meal

Meantime Anaximander had found Farlee, the proprietor of the stage coach and the road leading to the cañon, and had engaged him to take us into the cañon and bring us back to the station, and for this service we were to pay the usual charge of $10, for each person. Farlee said the distance was 23 miles; that it would take us about 3½ hours to go and six to return; that we could stay as long as we liked; that we could take our own "provender" or he would furnish our meals at 75 cents; that he had built a hotel in the cañon where we would find comfortable lodging. As Farlee was an individual character, it may be of interest to add that he had been all over the United States, had served in the war, had been in a rebel prison, had been shot and maimed, had at one time been nearly "done for" with lung trouble, but had come into the wonderful air of Arizona and was then as healthy and handsome a man as one would find in a day's travel. He went into a corral near the station and took out a pair of small horses which rejoiced in the names of Pop and Rowdy, and hitched them to a two-seated buckboard. This was the actual stage, and into it we clambered. It was without cover, the sun was hot, it was dusty for the first few miles, but the air was altogether delicious, marvelously dry and pure. It must have been the atmosphere that sustained us for the undertaking, tired as we were at the outset from loss of sleep and a fatiguing journey. I wore my gloves into tatters hanging on to the seat, and if there had been any unoccupied places I should have been bounced into them all during that tremendous ride.

Peach Spring Station is 4,890 feet above the sea level, and from there to a ridge a mile or so distant there is an ascent of 200 feet. The road from the ridge to the Colorado River level descends 3,960 feet. The road follows the bed of what is called Peach Spring Cañon, and Farlee told us that he had spent several thousand dollars in making the road traversable, and several more will be required to make it a good thoroughfare. However, Pop and Rowdy knew every inch of the way, and wormed the buckboard in and out among the rocks and boulders, and to hear Farlee screech to Rowdy for any misbehavior was equal to the scream of a steam engine. Although this road through the Peach Spring Cañon is undoubtedly the most marvelous road in America, it probably impresses no one as being such in making the descent. At all events, I was silently disappointed at not being more profoundly impressed. I remembered when I thought Watkins Glen quite a gorge, and Williams's Cañon and the Ute Pass in Colorado were not to be spoken of derisively. I knew that all the gorges I had ever seen—including the Marshall Pass which Anaximander had seen—and which a flood had prevented me from having crossed—were mere pigmies in comparison with this, still nothing was overwhelming as I expected. Some curious rock exposures rose high in the air—one was called the Great Chimney. It was 60 feet perfectly square—it looked the size of an ordinary chimney. Another point was called the Beehive. There was a great deal of trap rock in places supporting enormous layers of sandstone, the strata of which were perfectly horizontal. Everywhere cacti were growing—some in bloom—Farlee said there were 17 varieties of cactus in the cañon. A part of the way we rode through an avenue of Ocatiro (Fouquiera splendens) just bursting into bloom, and most of the flowers and shrubs were new to us. Finally we came to the "hotel" which Farlee had built with his own hands—a rude affair, but delightfully clean, and a precious haven of rest. We had dinner—Farlee was a capital cook; he had pretty decorated china and nice silver—he was tidy, deft, ingenious, a jack-at-all-trades, and good at all.

Refreshed by our meal, we set out with Farlee for guide, who took us into a tributary cañon called Diamond Creek. The water in it is clear, but there are no diamonds. We had not proceeded far before it became evident that we were too heavily weighted with clothing. The laddie flung off his blouse. Anaximander and Farlee took off their coats, and I parted with the skirt of my woolen frock. As we were to return by the same route we hung our cast-off clothing on the limb of a tree. The cañon was utterly uninhabited by human beings, as the Indians from some superstition never enter it. We had previously listened to a statement from a scientist in California that one peculiarity of the cañon was its freedom from noxious creatures. To be sure we saw horned toads—one was caught for the laddie—and georgeous lizards and strange insects. But presently Anaximander came to a halt and quickly said: "Hello, Farlee! What do you call this?" Farlee stopped and exclaimed "By jolly! if it aint a rattlesnake! I fairly lived in the cañon for three years, and that't the first varmint ever seen here," putting the heel of his high boot upon its neck. The poor thing had but one rattle and seemed harmless enough; but it made me think of similar "varmints" occasionally during our six miles' tramp that afternoon. But we encountered nothing unpleasant.

CATALOGUES, ETC., RECEIVED.

THE PREVENTION OF FIRE.—Pamphlet by Wm. P. Gerhard, C. E.—Published by the author at 9 Aster Place, New York.—Most of the matter in this work refers to methods to be employed in preventing fire in large buildings where many persons are found at one time—like churches, hospitals, asylums, etc. There is much that will be useful to the occupant or builder of an ordinary residence however. It is stated that the origin of a fire, incendiarism excepted—is always traceable to carelessness either on the part of the builder or occupant. There are too many cheap, shoddy buildings put up. They look fairly well from the outside, but within are filled with inflammable material, while the spaces between partitions and ceiling joists form concealed passages for rats, foul air and odors as well as smoke and flames. Through these a fire can spread with marvelous rapidity, while it is next to impossible to reach it with water. The first step towards the prevention of fire, then, is to see that the house is well built. Some excellent advice is given regarding sound building construction. The hollow spaces between floor boards and lath and plastering are objectionable. We often find them filled with chip shavings, painters' rags and other inflammable material. Rats and mice revel in their spaces. Rats often accumulate unburs. matches and also oily waste and greasy rags. Many a mysterious fire can be traced to these collections. All such spaces between floor joist should be closed by completely filling in from the sill or girder upon which the floor joists rest, to the wall, with concrete, plaster or brickwork. It is thought that for a roof on a country house, shingles laid over mortar are better than slate laid in the ordinary way. The careless manner in which timber is placed near to the masonry of flues and fireplaces is often the cause of fires. Where woodwork is placed near stoves it should be covered by bright tin. Warm air furnaces frequently prove causes of fire. They should be inspected frequently, from the furnace to the register. Furnaces should always be of ample size. If too small there are times when they must be forced to redness. It is safest to locate hot-air registers in side walls. When they are placed in the floor fine wire netting should cover them—otherwise combustible substances may be dropped into the flues. Hot ashes should never be placed in wood receptacles, nor piled up in the cellar nor against the building. Matches should be kept in tin or earthen boxes out of the way of rats, mice or children. Safety matches are best. The so-called "parlor" matches are dangerous. Speaking of protection against strokes of lightning, it is stated that the French Academy of Sciences formulate the rule that a conductor protects a circular area whose radius is equal to twice the hight of the rod above the roof. There are many excellent hints in the pamphlet which all builders or superintendents of public buildings will find interesting. Price, 60 cents.

MISSISSIPPI INDUSTRIAL INSTITUTE.—This institution is located at Columbus, Miss. It is, as we understand, the first school of its class for girls. At several other industrial schools, girls are admitted, but this appears to be the first one from which boys are excluded. The school is doing an admirable work. There are 341 young women in attendance, as we learn from the last catalogue. This is a remarkable showing for a State where local tradition so violently opposes an industrial training for women. The design of the institution is to fit young women to help themselves in the world; to make them independent and selfreliant. We should say that the institution had attempted too wide a scope. There are four departments; viz., Collegiate, Normal, Industrial and a Department of Music, and Fine Arts. Mississippi has already a normal school, and the university and other colleges are open to women. There are now, unfortunately, too many teachers of music and "fine arts." We should prefer to have the school more like that for the boys at Starkville, where the industrial side is so well advanced that one can see no other. The industrial department includes instruction in telegraphy, type writing, cutting and making garments, etc. We should prefer to see classes formed in dairying or poultry raising. It will be interesting to note the kinds of work these young women prefer. We find that 86 are studying type-writing, 52 telegraphy, 51 printing and 32 dress-making. Many are taking more than one of these studies at one time. We should prefer to see fewer typewriters. In order to obtain profitable work typewriters will be obliged to go to the cities. There are no large cities in Mississippi. The young women could do more good to themselves and their State by studying dairying, housekeeping and woman's part in agriculture. This would be more practical and profitable.

A LEAF OF THE CUT-LEAVED NORWAY MAPLE. From Nature. Fig. 411.

Arboricultural.

THE CUT-LEAVED NORWAY MAPLE.

ONE of the best of maples for small places or where round-headed trees are desired is a variety of the Norway called Dissectum (Acer platanoides dissectum). The specimen at the Rural Grounds has been growing about nine years; that is, the tree was received from the nursery nine years ago and was two or three feet high. It is now about 12 feet high, and being round-headed is also 12 feet in diameter. The stem is eight inches in diameter at the base, and branches out two feet above. The branches are crooked, or rather most of them changed their direction at every joint. The tree is well clothed with leaves, which as shown in the illustration, Fig. 411, are deeply cut into three parts, while each part is variously lobed. The leaves remain green later than many other kinds of maples, and do not change to the beautiful fall colors which we see in the Sugar and Swamp Maples.

Woman's Work.

CONDUCTED BY EMILY LOUISE TAPLIN.

THE WOMAN OF TO-DAY.

[POEM READ BEFORE SOROSIS.]

As you walk the broad highways of culture and art,
O sweet, earnest women, of beautiful lives,
In your care of the intellect slight not the heart—
That germ of the old-fashioned mothers and wives.

The fair fields of progress are lovely, indeed,
With the white robes of women who march on to fame,
And the world is as ready to wish them God-speed
As once it was ready to hiss them to shame.

Oh! ho! for this era! this age of progression!
Be glad that you live in this wonderful time.
From the ruts of old creeds that bred wrong and oppression
We are marching out into a future sublime.

No more 'midst the sneers of an insolent throng
The woman of talent must make her gifts known.
Now the world doffs its hat as she passes along;
She is courted and sought, like the queen on her throne.

The feminine "doctor," once rudely assailed
By ridicule's shafts, has attained her true place;
And daintily habited, booted, and veiled
She enters sad homes like a vision of grace.

The pert paragrapher falls flat in his mirth
When he jests of the "blue-stockings" careless array
Her exquisite toilets are models for Worth
(Sorosis itself proves my statement to-day).

The women who *think*—in our cities and towns—
Are no longer objects of insult or fear;
"Society" copies their coiffures and gowns,
And whenever they speak the world pauses to hear.

Then, ho! for this century! Thought is the fashion!
The pathways are crowded to culture and art!
But, alas! for us all, if the warm springs of passion
Run dry in that time-honored organ, the heart.

In the drama of life, full of pathos and pain,
The scenes call for sympathy, tenderness, fire;
And the women whose hearts have dissolved into brain
Are not the star actors, who teach and inspire.

We were meant to be creatures of sweetness and love
Though the highways of knowledge are lofty and broad,
I know of fair hilltops that tower above—
The hills of affection that lie close to God.

In your strong, earnest efforts great good to attain,
Oh! earnest-souled women, remember this truth
It was love and compassion, not talent and brain,
That Buddha and Christ brought the world in its youth.

Brave, beautiful army, march onward and pray
For the truest conception of duty and right;
You can haste the dim dawn of a wonderful day
When the fair brow of Justice shall shine with new light.

A day when the sins of your fathers and brothers
By the eyes of the world are regarded the same
As the errors and sins of your sisters and mothers—
When men shall admit there is no sex to shame.

Formed by the same clay, by the same God created,
By the same passions stirred, the same temptations vexed,
Why should not our faults by the same rule be rated?
Why pardon one sinner and sentence the next?

This age is for women! The pathway is clear,
The boulders are gone that obstructed the past;
There is much to be hoped for and little to fear,
Your purpose and strength are respected at last.

The gates are wide open to knowledge and art:
As you cultivate gardens in intellects soil
Sun the fruit of your brain in the warmth of your heart
And the world shall acknowledge the worth of your toil.

ELLA WHEELER WILCOX.

OF INTEREST TO WOMEN.

EDELWEISS is now a fashionable bridal flower. They are dried in their European home, and steamed before using to restore the shape. This flower is an illustration of the glamor cast over the common place by poetic associations. It is a very ordinary woolly little thing, that would hardly attract attention were it not for its habit of growing on inaccessible precipices, or on the borders of glaciers. It is not half so pretty as our pearly everlasting, and greatly resembles the little mouse-ear so common on our hillsides in early Spring. If we honor the plant for its courage in growing on these bleak hillsides, why not give equal honor to the pretty, but not specially romantic cranberry? This chooses even more forbidding places of growth than the Edelweiss; we saw some tiny, careworn cranberry plants brought by the Greely expedition from Cape Sabine.

We saw an encouraging little incident on the Sixth Avenue Elevated Road recently. The cars were crowded, and seats were at a premium. An aqueduct laborer, covered with mud and clay, got up and offered his seat to a middle-aged woman, evidently returning from a matinee. She thanked him profusely, but energetically refused the seat, and insisted on his sitting down again, saying she knew he was returning from a hard day's work, and needed rest far more than she did. Such an example of courtesy on one side, and consideration, that is the essence of courtesy, on the other, needs no further comment.

ANXIOUS MARTHAS.

Some of Ruskin's sharpest and most trenchant words are directed against what he describes as "immoral cheapness"—cheapness so much below the actual value of the article, that it tells of dishonest workmanship or underpaid toil. The great critic continues to tell us that nothing is ever really *cheap*, and if we purchase an article for one-half its market value, some one must be cheated. This same rule holds good applied to household labor; there is a class of energy we may describe, after Ruskin's adjective, as "immoral industry." It is this that reduces a woman to a machine, and makes her forget all the graces that might have been in an unceasing round of drudgery. She is indeed a very Martha cumbered with many cares, too busy to listen to the voice of her Divine Master, even though He sit in her very household.

Domestic work does not always mean domestic drudgery. It simply depends on the point of view. But to make it more than drudgery, we must needs possess "a soul above buttons." Household cares must not be the main end in life, but simply a means to that end.

Morally speaking, the wife and mother has the highest of destinies, and her character and intellect should receive the highest cultivation. But alas! she does not always take this view, and too many appear to think that their duties end with their material cares.

And so they toil, until sweetness and comeliness is fled, and intellect or spirituality mere empty sound, perfectly content if they can be described as the most energetic and forehanded housekeepers in the district.

How we do feel for their children? Poor little predestined victims; to whom "mother" means no friend of loving sympathy, but an energetic machine, wound up for life, with no idea of duty save in making bread and butter, and pickles and preserves; in rubbing and scrubbing, and sweeping and dusting, until the very enumeration of her duties becomes a weariness of the flesh. This is not the type of every energetic housekeeper. We know many like "Josiah Allen's wife," who, in the midst of many cares, have practical sympathy for the suffering, aid for the needy, and a ready interest in every good idea agitating the community. And this is the type of busy housekeeper we honor. She is energetic in mind as well as body, and though she recognizes the material necessities brought before her, she does not confine her active mind to this alone.

It is a popular error—and a popular sneer—to say that the woman with a "mission" or the professional woman, is neglectful of her home duties. This may sometimes be a fact, but it is not by any means a self-evident axiom. It seems to us that a woman who gives herself up to material drudgery, to the extinction of intellectual growth, is as greatly to blame, as she who ignores the sweetness of working for those she loves. Domestic works alone, or intellect alone, will not make a perfect woman, she needs the combination of both. But, ah me! how full of briars is this work-a-day world, if we do but step out of the beaten path on either hand.

AN ILLOGICAL PROTEST.

"ELEANOR KIRK."

THE sensible article of "Worker" in last week's issue of your paper has stirred me up to send you a letter recently received from an indignant "wife, mother and housekeeper."

It is the strangest of all strange things that the busiest and most overworked women are the ones who usually resent any suggestions or advice in the matter of labor-saving, and generally insist that their daughters shall follow carefully in their footsteps. This is the letter:

DEAR MADAM: It seems very singular to me that a lady who boasts that she is an experienced cook and housekeeper should advise all of her sisters to become type-writers, stenographers, photographers and what not. I want to ask you if all the women rush to professions who is going to take care of our men and what will become of the children? Is it possible that you believe in giving up our kitchens to foreign servants? Now, I think there is as much credit in being able to cook a meal of victuals as to write a good story for a newspaper or take a photograph of a mass of rocks; and it is very wrong to keep saying to women, as you and some other woman's-rights women do, that they are overworked. In fact, I think it is a great shame. It is the fashion for women to complain now-a-days and blame their husbands for their own shiftlessness and laziness, and it is very easy to make some women nervous and dissatisfied. And then for you to make a mountain out of such a little mole-hill as the making of yeast. I can make yeast that will keep and make good bread and at a less expense than bought. I believe in saving my husband's money. In fact, I do all my own work for nine in the family, and make every garment that we wear, excepting shoes and boots, and if I was put to my stumps I could make them too. I don't ask any odds of anybody, and that was the way I was brought up. As a sample of the effect of such writing as yours, my daughter, who can't bear housework, said after reading one of your letters, that if she ever kept house she wouldn't break her back making soap and yeast, and her husband might starve to death before she would get up cold winter mornings, as I did, and make the fires.

It seems to me that such teaching is very dangerous. We are told in Holy Writ to do what our hands find to do with all our might, and though the shirkers of the world may have an easier time here, a day of reckoning will surely come hereafter.

Now, I haven't intended to hurt your feelings, but when I see a thing that I think is wrong, I feel that I have a commission to set it right. Yours respectfully,

MRS. ————,
Wife, Mother and Housekeeper.

"P. S.—I want to say that my husband is willing and able to hire help for me if I thought best to have it. In the Summer I average 50 pounds of butter a week."

The above is doubtless as honest an expression of opinion as ever came from the heart of woman, but how frightfully narrow and illogical. And what a showing! Fifty pounds of butter a week, and all the cooking, washing and ironing, scrubbing and sewing, for nine persons. It does not seem credible, and yet I am sure that every word of this dreadful story is true. I have seen and talked with just such ambitious workers, women, who at night are too tired in soul and body to read or visit, and who drag themselves out of bed every morning in the year, wan, weak and unrefreshed. Some go to pieces in harness, others suffer from chronic maladies, and some become helpless invalids. Others still lose their good looks, and their good nature, and grow as sour as the pickles they are so fond of making and spoiling their children's stomachs with.

Then look at the moral and religious side of this subject. How much spiritual growth is possible to the woman whose time from year's end to year's end is entirely occupied with the practical details of housekeeping? My correspondent asks what will become of our children, and who will take care of our men? God knows what would become of them if all our wives and mothers were like this one. Then she imagines that she performs all her duty toward her family when she washes their clothes, fills their stomachs and darns their socks? Is there no higher service than this? A woman can set a greater value on the ability to "cook a meal of victuals" than the writer. In her opinion, no woman has approximated toward an education until she can cook enough dishes to comfortably feed a family in an emergency, and knows how to care for the sick in practical fashion. She may sing with the sweetest of the poets, calculate an eclipse, or preach the most eloquent sermons. Sometimes these talents, grand as they are, have seemed like the veriest rubbish when some dear one has needed the special service that alone could preserve life, or make life endurable until the physician and nurse could be summoned.

Only a few days ago I heard a most accomplished woman remark that she had seen the time when she would gladly have exchanged every talent she possessed for the ability to make "a bowl of drinkable gruel."

No, No! Let us have as thorough a domestic foundation as possible, but let us at the same time instruct our girls that it is a sin and a shame to waste their strength and nervous energies anywhere, in the parlor, in the church, in the ball-room, in the kitchen. If women are so situated that they must do all of their own housework—as unfortunately too many of them are—wash, iron, bake and brew for "nine in a family," heaven grant them grace and patience. But when as in the case of my correspondent, this is unnecessary, may they come to have more sense than she has shown for if they do not she may well ask who will take care of our men, and what will become of the children?

Surely "Big oaks from little acorns grow," the acorns in this case being an innocent little yeast cake, a photographic camera, and a type-writer.

During the past Summer my heart has been cheered by the sight of girls striking out in new and unexpected directions, and I have not hesitated to make mention of these facts. Now, was it not for a woman who loves her sex, a novel and cheering spectacle to see young, intelligent and attractive women earning good money by taking photographs? There have been several such artists on the Rhode Island coast this Summer. One of these was an invalid from the effect of late hours tight lacing and fashionable life generally, in obedience to the infernal practice of dressing to please the eye of some rich man with a view to marriage. This girl not only took first-class pictures, but she entirely regained her health.

The next count in the indictment is the writer's advice to busy house-keepers to raise their bread with Fleischmann's yeast cakes instead of puttering and failing with home-made experiments.

In the name of common sense why should women add to their heavy burdens when skill and science have done so much to save them?

The time may come and perhaps is not far distant when this active and ambitious housekeeper will be very glad to have the baker stop before her door and leave the loaves which now she doubtless holds in as much contempt as the labor-saving material above mentioned.

HOBBIES.

ALICE GOLDSMITH.

"A HOBBY is one of the most useful things in life, and something which every young person should cultivate."

There is a world of truth and thought in the above. With a hobby the poorest clerk or the richest millionaire is supplied with a cure for *ennui* or worry, that will save him many a doctor's bill. If a young man who is confined to his desk for 10 hours a day, has a decided taste for botany or geology, he will employ his holidays in making excursions into the country, and the arranging of the specimens he may collect, will while him from sadder thoughts in the evenings. A talent for woodcarving, painting, mechanics or any of the many pursuits requiring deftness of hand, or quickness and correctness of eye, will prove a resource against business worry that will add years to his life. Children should be trained to encourage a taste for simple and wholesome pleasures that do not depend upon money for their gratification. To aid a child to develop his natural taste for any pursuit is the best way to form a "hobby." If a boy takes kindly to tools or mechanics, help him along; skill in any handicraft is a valuable possession. If he shows a partiality for any science help him to make a collection, or to do some original work, start him toward his hobby. If he has an enthusiasm for study and work, the subject makes little difference. At that critical age when the confidence of the youth is not tempered by the judgement of the man, devotion to a hobby, may serve to prevent the formation of habits which might wreck a career.

It is the inability of the business and professional men of this country to take rest from the wearisome routine of their life which drives so many of them to madness or suicide. Newspaper men are especially liable, by including Sundays and holidays among their workdays, to bring on a state of mental collapse that is almost as distressing as downright insanity. A little devotion to a "sane madness" for growing tulips or fancy peas, or raising birds, has saved more than one life. When a man has no resources of recreation in himself, business becomes a treadmill, and if he persists in it for many years, he will decrease in mental and physical vigor to an alarming degree.

I once knew a boy who had a hobby for collecting postage stamps. His time and money all went in collecting and arranging his beloved stamps. This only lasted for a few years of his boyish life, but even this was not useless. He was saved from idleness and its attendant evils, and from bad associations. He became a connoisseur in stamps and their values, and while gathering knowledge about them learned much that was worth knowing about the countries that produced them. When at 10 years of age he became the proud producer of a small printing press, he threw all his acquired habits of work and research into the production of his amateur paper, and to-day at the early age of 22, is a successful journalist standing high in his profession, still, however, with a "hobby"—this time for music.

Individuality is not encouraged as it should be in our schools. Teachers are overworked and have little time to study the mental peculiarities of their pupils. A child with a good memory may outstrip in class honors many a schoolmate simply by virtue of the superficial knowledge of all the studies which he has no trouble in acquiring. A boy or girl of an original turn of mind asks questions, wants to know the why and wherefore of things, and revolts at the mere memorizing of lessons, that he does not understand. The chief object of the best educators is the development of this tendency to ask questions and to refuse to be content with the mere learning of rules.

Life is too short to master more than a single department of any science. The ten-

dency of the day is in the direction of specialties. Law and medicine have been split up into specialties and if a man would make a name for himself he must narrow his field of work and cultivate it to the highest point.

GOLDEN GRAINS.

HAPPINESS consists not in possessing much, but in being content with what we possess. He who wants but little, always has enough....

To feel with and for others—what a glorious widening out and enriching of one's life that is? How it increases our joys because of the pleasure that we take in the joys of others! How it renders selfish brooding over our own woes impossible because of the sympathy we must give to the sorrows of others! Not generosity only, not kind-heartedness only, nor courtesy, nor unselfishness, nor keen perception, nor quick understanding—it is all these, and more than these.....

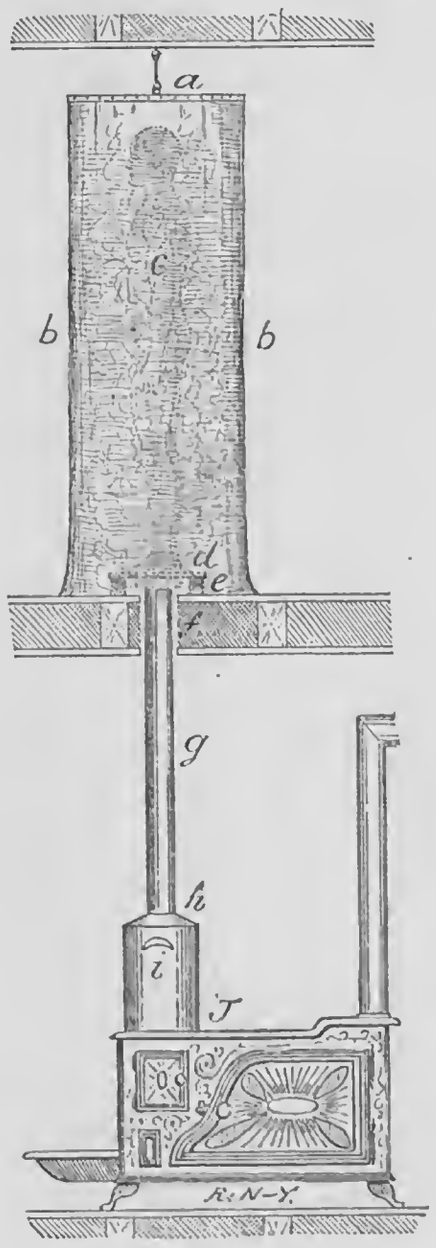
THE end of man is an action and not a thought, though it were the noblest.....

MAZZINI says: "Seek not to isolate yourselves; imprison not your souls in sterile contemplation, in solitary prayer, in pretending to a grace which no faith not realized in works can enable you to deserve. You can only save yourself by saving others. God asks not what have you done for your soul? but: what have you done for the brother's soul I gave you? Think of these. Leave your own to God and His law. Labor unweariedly for others' good. Such is the holiest prayer."..... .

LAY by a good store of patience and be sure to put it where you can find it..... .

Domestic Economy

CONDUCTED BY MRS. AGNES E. M. CARMAN.



A STEAM BATH.

THE above illustration shows how the luxury of a steam bath can be enjoyed by any person in his own home at a small expense. I have had one in successful operation in my own family for over a year. To those who believe in keeping the body clean it will, I think, prove a boon.

A is a round piece of wood about two feet in diameter, and suspended from the ceiling of the second story. B is a large blanket tacked around A and reaching to the floor. C shows the position of the bather. D is a piece of board 18 inches square, resting on buttons E.E. (the ends being left open for the steam to come up) and placed over the opening in the floor F. The stove pipe G, which sets over a hole nearly as large as itself in the cover H, of wash-boiler I passes up through the opening in floor. To use it, build and maintain a "baking fire," put half a pail of water in the boiler, and place over the fire. Put up the pipe, which should reach entirely through the floor to prevent the steam from escaping. When the steam comes up in a cloud, step in, having previously placed a cloth by the openings at D, with which to regulate the flow of steam. Steam will soon condense on you, but that is not perspiration. In 10 or 12, possibly 15, minutes the perspiration will start in earnest. If the steam becomes too oppressive put the nose out between the edges of the blanket. Rub yourself all over from head to foot, thoroughly while in the steam. When the perspiration begins to trickle down the body step out and rinse down with plenty of cool water, and rub quickly until dry. The cold water and rubbing are necessary to prevent taking cold.

L. C. HOLMES.

IT is poor economy to scrimp in fires and lights.

MUSHROOMS.

THE GENUINE ARTICLE AND TOADSTOOLS. A DISTINCTION WITH A DIFFERENCE.

THIS most delightful and delicate edible, which Marion Harland calls a "contemptible and ill-smelling fungus," is most plentiful at the East in September and after the early fall rains. In San Francisco they may be had all the year, but, of course, are most abundant after the rains set in. At such times they are sold at very reasonable prices, and in the country may be had for the picking. The wild variety are much superior to the cultivated kinds, and there is less danger of poisoning from eating the former than is generally supposed. If you buy them from a reliable dealer you are not likely to purchase toadstools; if you gather them yourself you will soon learn the difference between the true mushroom and its less virtuous kindred. The first are of a dirty white color on top, and pink or salmon underneath, when they first spring up; after 24 hours, whether gathered or not, the pink turns to brown. The poisonous kinds are of all colors, some of them very beautiful, but like many other beautiful things, very dangerous. Those of a dead white above and below are especially to be avoided. The skin can also be easily peeled from the edges of a real mushroom, which is not the case with the false. If you are still in doubt, stir them while cooking with a silver spoon, and if it turns black, you will be on the safe side if you throw them away.

Beefsteak and mushrooms is a dish that few can resist. To have it at its best, lay a porterhouse or sirloin steak an inch thick upon a hot frying-pan. Use no fat except such as is on the steak, cook for three or four minutes, turn and cook on the other side. Season with salt and pepper *after* it is done, lay on a hot dish containing some bits of butter. Have ready a pint or more of mushrooms, according to the size of your steak, that have been peeled, washed and drained on a napkin; if they are large, slice them. Put a tablespoonful of butter in the same pan in which the steak was cooked, lay in the mushrooms, season with salt and pepper and cook for five minutes. Pour them over the steak; put a little water in the pan, give one boil, and add it to the gravy that will have already formed in the dish. This dish is greatly inferior if made with canned mushrooms.

Stewed mushrooms make a delicious little entrée at breakfast or dinner. Place a quart of peeled mushrooms, stems and all, in a stewpan with a very little cold water, and cook for fifteen minutes; mix a tablespoonful of flour with three of cream, and stir it into the boiling vegetable, add butter the size of an egg, and salt to taste.

Mushrooms of the larger size are nice for baking. Lay them, tops down, upon a baking dish; season with salt and pepper and place a bit of butter in each inverted cup. Bake in a hot oven for twenty minutes, basting several times with butter and water. If they are at all dry, pour a little melted butter over them when going to the table, and in any case, squeeze a few drops of lemon juice over them. The larger sized ones may be broiled on an oyster gridiron. Score the tops, dip them in melted butter, season well and broil over a clear fire. About two minutes on each side will suffice. Lay on a hot dish, and pour a little melted butter and lemon juice over them.

Mushroom patés should never be indulged in unless made with the freshest of mushrooms. Choose the small button size, stew them in as little water as will keep them from burning and add, for a pint of the mushrooms, a half cupful of hot cream, and thicken them by stirring one tablespoonful of flour in one of melted butter. Season to taste and place in ready-baked shells, freshly heated. Sprinkle a little finely chopped parsley over the top of each.

A mushroom catsup, much superior to that ordinarily sold under the name, can be made as follows: Lay mushrooms and salt in alternate layers in an earthen vessel, in the proportion of three ounces of salt to two quarts of mushrooms. After several hours break them in small bits, and set in a cool place for three days, stirring them every morning. Then strain, and to every quart of juice allow half an ounce each of allspice and ginger, a teaspoonful of Cayenne, and half as much powdered mace. Put into a covered stone jar, set it in a pan of boiling water, and do not let it relax its boil for four hours. Empty it into a porcelain or granite kettle and boil slowly an hour longer. Let it stand for twelve hours in a cool place; pour carefully from the sediment and bottle in very small bottles, as it spoils quickly when exposed to the air. PALMETTO.

KITCHEN TALKS.

ANNIE L. JACK.

THE Poultry Tender wonders if feeding on grapes is really bad for the hens: she does not get many eggs, and all the poultry have free access to the vineyard now that the crop is off. There are always unripe bunches left, and the chickens spy them out and eat them even after frost has made them quite tasteless. Some people say it is injurious to them, but we have never seen the question decided. Certain it is that eggs are a valuable article of food and well repay the necessary care given to the hens. They ought to be freely used at every farmer's table, for they, like milk, contain all that is required to make a perfect food. An egg contains about as much nourishment as an ounce of meat, and an ounce of bread. The Spaniards have 360 ways of cooking them, but to make a good omelet, and to boil, fry, scramble and poach them to perfection might satisfy any family. The "Epicure" looked delighted at the prospect of an omelet for supper and then with his usual "Why don't you," asked the reason we never made coffee with whipped egg and cream on it. The Amateur Cook said because good coffee like "good wine needs no bush" or egg to improve it. The white of an egg is very good for burns, and the skin of an egg is a cure for a boil. It is also a cure for a bruise if at once applied. So as the shell and white are useful to settle coffee, there is no part of the egg without its use. And it is encouragement for those who keep poultry to know that there is always a ready market for such merchandise. So far it is profitable to give the chicks the very best of care and to study the subject with intelligence. The old Plymouth Rock rooster crowed loudly at the door, and as the children drove him away, they repeated the old saying that "visitors were coming."

GLEANED FROM A STORY.

A STORY in the Overland Monthly, by Henrietta R. Eliot, entitled "Janet," contains a beautiful description of a daughter's love for her mother. The mother had married a man whose ideal wife possessed a true heart, a pleasing exterior, and youth with its large possibilities. Being a good little maiden, the daughter of a ranchman, and very pretty, her lover believed in the "large possibilities." But when he had married her, he found that he had mistaken an empty mind for one capable of being filled.

The husband died young leaving the mother to educate their daughter. This she did faithfully, and after the school days in the best Eastern schools were over, three years of careful study were spent in Europe before the mother and daughter returned to the mining town where Janet, the daughter, was born. Janet shrank from the society of the town—flashy, material and essentially vulgar, and for awhile so longed for the atmosphere of some Eastern city with its lectures, reading clubs, libraries and concerts, that she was almost ready to urge a removal thither.

Then she realized, without allowing the thought to fully shape itself, that where society is crystallized there would be no circle congenial at once to her mother and herself. This was decisive, for to take the devoted mother, who lived but for her, into surroundings that would constantly emphasize her deficiencies was a thing of which she was incapable.

At 19 she had been thrown into constant companionship with her mother. Before that she had nursed wild hopes that from constant association her mother's mind and tastes might grow like her own. But her hopes were now dead, and she had learned to take the fair gift of a mother's love as God gave it, and to let it manifest itself without that pecking surveillance with which the love would quickly have acquired a chronic attitude of semi-apology. For Janet's mother was as quick to feel a wound aimed at her heart as she was slow to take an idea aimed at her head.

"It is not given to one person to do much" was Janet's thought, "or if it is, the greater will grow from the less, but it is time that I, who have so long received should in my turn begin to give and help to improve my social surroundings if in ever so small a degree, instead of running from them." Are there not many educated daughters who might enrich their own lives and the lives of all about them by an equally unselfish attempt to make the most and the best of the society in which they find themselves placed? And especially by giving loyal love to those of their own homes, like Janet, allowing no pecking at peculiarities and deficiencies to fill their homes with painful unrest. ALICE BROWN.

THE fruit of the barberry makes a pretty garnish for meats and adds to the attractiveness of mixed pickles.

WE think plum and other boiled puddings are better if steamed instead of boiled in the water. The principle is the same and there is no danger of their becoming water-soaked.

DOMESTIC RECIPES.

RICE PUDDING.

One pint of boiled rice, one quart of sweet milk, four eggs and a spoonful of butter. Beat the rice, butter, milk and yelks together, bake one-half hour. Beat the whites of the eggs for frosting, add a little lemon, put this on the pudding and let it stand long enough in the oven to dry.

COTTAGE PUDDING.

Two cups of flour, one of sugar, two tablespoonfuls of butter, one teacupful of milk, one teaspoonful of baking powder, one egg. Stir together as you would cake, bake and eat with vinegar sauce.

GRAHAM PUDDING.

Two-thirds of a cup of molasses, two-thirds of a cup of sweet milk, two tablespoonfuls of butter, one teaspoonful of sugar, a little salt, two teacupfuls of Graham flour. Raisins if desired. Season with cloves, cinnamon and nutmeg. Steam one hour.

APPLE JELLY.

Pare and slice the apples. Take two quarts of water for one dozen large, tart apples, boil soft and strain through a flannel bag. Add to one pint of juice one pound of loaf sugar and the juice of one lemon. Boil 15 minutes, putting in the peel, and strain again.

LEMON JELLY.

Rind and juice of one lemon, one cup of sugar, one tablespoonful of water, one egg, one teaspoonful of butter, one of flour and thoroughly scald together. AUNT RACHEL.

Miscellaneous Advertising.

When Baby was sick, we gave her Castoria
When she was a Child, she cried for Castoria,
When she became Miss, she clung to Castoria,
When she had Children, she gave them Castoria.

Miscellaneous Advertising.

Clergymen

Lawyers, Actors, and Singers, are often troubled with loss of voice, resulting from a slight cold, weakness of the vocal organs, or inflammation of the throat, and in all such cases may be promptly relieved by the use of Ayer's Cherry Pectoral.

I would not be without Ayer's Cherry Pectoral on any account. It is an invaluable remedy in Bronchitis and Lung Complaints, and speedily relieves Hoarseness or Irritation of the Throat, caused by public speaking.—Rev. E. Bethune, Janesville, Tenn.

I have been so much afflicted with Bronchitis that I should be unable to perform my clerical duties without the use of Ayer's Cherry Pectoral.—A. G. Kirk, Pastor Baptist Ch., Hillsville, Pa.

Ayer's Cherry Pectoral,

Prepared by Dr. J. C. Ayer & Co., Lowell, Mass.
Sold by Druggists. Price $1; six bottles, $5.

MAKE HENS LAY

SHERIDAN'S CONDITION POWDER is absolutely pure and highly concentrated. It is strictly a medicine to be given with food. Nothing on earth will make hens lay like it. It cures chicken cholera and all diseases of hens. Illustrated book by mail free. Sold everywhere, or sent by mail for 25 cts. in stamps. 2½-lb. tin cans, $1; by mail, $1.20. Six cans by express, prepaid, for $5. I. S. Johnson & Co., P. O. Box 3118, Boston Mass.

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WARREN MILK BOTTLES

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A Long Needed Want at last Supplied.

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HOME STUDY. Book-keeping, Business Forms, Penmanship, Arithmetic, Short-hand, etc., thoroughly taught by MAIL. Circulars free.
BRYANT & STRATTON'S, Buffalo, N. Y.

News of the Week.

HOME NEWS.

SATURDAY, October 30, 1886.

UNTIL about three years ago a duty of 10 per cent. was imposed on goods imported from the Spanish West Indies or on Spanish vessels, more than on similar goods imported from other places and on other vessels, because Spain imposed similar duties on American goods and on goods imported on American vessels. Pres. Arthur removed such discriminating duties on the understanding that Spain would reciprocate. Spain insisted, however, that the treaty referred only to American goods imported on American vessels, whereas we insisted that it applied to any goods on American vessels—that the flag covered the goods. Two weeks ago, President Cleveland, by proclamation, restored the 10 per cent. discriminating duty, and it went into effect last Monday. Spain at once accepted our interpretation of the treaty, so the duty is again removed..... .....The great Minneapolis switchmen's strike is "petering out." The roads have appealed to the Federal Courts for injunctions and protection against the strikers. It was the action of the Federal Courts that caused the collapse of the great St. Louis strike..... ..... The great St. Louis Exposition just closed has cleared $80,000 in its 40-days' run... .....The world base-ball championship was won by the St. Louis American team at St. Louis Saturday, the sixth game with the Chicago League champions resulting 4 to 3 in favor of the home team .....The 50,000-candle-power electric light at Hell Gate this city, the only one of its kind in the world, proves a failure and will be discontinued by the light-house board. The light was so dazzling that pilots were blinded on emerging from the circle of light into the darkness beyond.....Rose Elizabeth has no more connection with Elder's Magazine—illness some say; fraternal displeasure say others..... .. Corporation Counsel Hoffman of Chicago has decided that bucket-shops in the city should not be protected by licenses and the mayor has been asked to close them. He said that he would rather have 50 gambling-houses in Chicago than one of the dangerous bucket-shops.....William Walter Phelps says that Mr. Blaine will not be a candidate before the next convention unless "the minority of the party—those who opposed him last time—ask for his nomination in 1888"..... .....William Gillespie Walker, nephew of James G. Blaine, has entered the Order of Jesuit fathers at Santa Clara, California. He is 19 years old and has been a student at the college for a year. Mr. Walker's mother was the favorite sister of Mr. Blaine and was buried on the day that President Cleveland was inaugurated.....We're having the liveliest sort of a canvass here for Mayor between Henry George, labor agitator, and land reformer; Abram Hewitt, Congressman, and manufacturer, and Theodore Roosevelt, ranchman, hunter, and good young fellow generally. The last is likely to got the solid Republican vote: the other two will divide the Democratic vote. Judging by the positive assertions of the followers of each, we are sure to have three mayors for the next two years, as each of the three is certain to be elected.....Blaine has been "stirring up" the Pennsylvania Republicans as vigorously as he ever "stirred up" Ben. Hill, but after a diametrically opposite fashion..... ....The Grant Memorial Fund has reached the sum of $123,503.....The hard coal owners of Penn., having formed an iniquitous combination and put up the price of coal, the soft coal owners are now plotting a similar combination for the same purpose. How long will the people endure such monopolistic extortion?..Four of the Pinkerton men engaged in the shooting among a crowd after the stock yard strike at Chicago, have been held for trial for the murder of Begley.... A patent has been issued to George Westinghouse, Jr., of Pittsburg, Pa., inventor of the Westinghouse air brake, for a new system of distributing electricity to be used for lighting and other purposes. The new invention will, it is said, effect a saving of about 95 per cent, in distributing main wires, as compared with the present system.....Baltimore is to have a crematory. Two years ago there was but one in the country; now there are 12 ....Much carping in Virginia and the South generally because President Cleveland on his visit to the Virginia State Fair at Richmond, last week, was not accompanied by Mrs. Cleveland. Many say she would have gone were it not that she would have had to "receive" with Winnie Davis, daughter of Jeff and of the South, and, however popular Frankie is, or was, in "Dixie," Winnie is far more popular.....Ex-Head-Chief Le Flore of the Choctaw Nation has died at the age of 75,--a man of rare administrative ability, considerable culture and high character. Was Governor for eight years and has been State Auditor since 1870.....Geronimo arrived at Pensacola, Fla., Monday and is confined with 14 other warriors at Fort Pickens on Santa Rosa Island, opposite the town. Chief Maugus, the last of the hostiles captured, with two or three followers, is to share his quarters.... The number of immigrants arriving at United States ports during the nine months ended September 30 was 294,720, against 268,688 for the corresponding period of 1885 .....It is estimated at the Treasury that the ultimate issue of the new $1 and $2 silver certificates may aggregate $50,000,000 and of the $5 silver certificates $60,000,000. This is an increase of the currency.....Any amount of disgraceful election scandal is still being ventilated in Ohio—bribery, ballot-box stuffing, election forgeries, etc., etc., have already sent several rascals to prison and are holding others under heavy bail for trial.....Sargeant Brainard (now a lieutenant) of the disastrous Greely arctic expedition, wants two years' time and $50,000 tod is coverthe limits of Grinnell Land. .....The President has suspended M. E Benton, District Attorney for the Western District of Missouri, a Democrat; and W. A. Stone, District Attorney for the Western District of Pennsylvania, Mugwump, for taking too active a part in politics contrary to the policy of the Administration.....From all indications it is pretty certain that the Canadian Government is preparing for general elections before the end of the year. Although the Liberals have carried the Province of Quebec, the present Conservative Government need not resign until the Provincial Government meets next year and the Ministry is defeated, and Sir John Macdonald thinks he will gain most there if the elections take place while his friends, the Ross Administration, are still in power. In the other Provinces also he expects to gain more if the elections are held this year than if they are deferred..... Cornell will henceforth grant no honorary degrees.....The Northwest Council has decided to appoint a committee of elected members to devise a scheme for dividing the Northwest Canadian Territories into Provinces and securing responsible government at the earliest possible moment ....Barnum's show took in $14,000 at Charleston in one day, since the quake!.....The mackerel season for 1886 has been one of the most discouraging ever known to New England fishermen. The total amount of mackerel packed at Portland, Me,, only foots up 2,000 barrels against 80,000 in 1885, and 155,000 in 1884. The amount packed there this year is the smallest known in the history of the place with two exceptions. The total catch of the New England fleet for 1886 foots up 69,000 barrels against 310,000 in 1885 and 404,000 in 1884..... ....Thursday 20,000 troops from this city and State and the neighboring States, tramped here through mud and slush caused by heavy rains for the most part of the previous 24 hours, from Madison Square to the Battery—a distance of 3½ miles—in honor of the unveiling of the colossal statue of "Liberty Enlightening the World," just erected on Bedlow's Island in New York harbor. A million of people, more or less, in spite of light showers, lined the muddy sidewalks, or stood on the steps and other elevations along the route. The President and most of his Cabinet, and a host of other celebrities added dignity and glory to the occasion. What with loss of wages, suspension of much business and extra extravagance, the thing must have cost New York $1,000,000 outside of the legitimate expense of the display. What a harvest the grog-shops gathered, and what a harvest the doctors must gather!..... .....It is estimated there are 1,000,000 French Canadians in the United States. A large meeting of them held Monday, at Chicago, enthusiastically favored annexation; their brethren in Canada, they said, also favor it,.. .... .. Postmaster-General Vilas says there was a postal deficiency of less than $1,000,000 on the last fiscal year against $9,000,000 expected. About $1,000,000 were lost by reduction in newspaper postage and $2,000,000 by the cheaper postage on letters .....Tuesday night, Oct. 25, the express car on the St. Louis and Pacific Road was robbed of $50,000 near Pacific Mo., by a man who brought the messenger in charge a forged note purporting to be from the route agent of the express company at St. Louis, telling him to instruct the bearer in the details of the business, as he was to be an extra hand. When the messenger was thrown off his guard, the stranger, after a struggle, overpowered, gagged and bound him; took all the bank notes and jewelry, leaving a great deal of silver as too bulky. The robber said he was "Cummings," one of the old Jesse James gang .. ..

AGRICULTURAL NEWS.

SATURDAY, Oct. 23, 1886.

TREMENDOUS rain storms have destroyed the Scotch oats and barley crops.....The steamship Rowena, fitted out with refrigerating compartments by the Anglo-American Fresh Meat Company of London, has arrived at Galveston, Tex., to take the first cargo of fresh meat to Loudon from any Texan port. She will carry 300 tons on her initial trip, though she has a capacity for 1,400 tons. If the venture proves a success the Rowena will make regular trips, and other vessels will be constructed for the Texas trade .....A telegram from New Orleans yesterday says: "White frost is reported at all points along the Mississippi Sound and within ten miles of this city. At Baton Rouge the mercury fell to 40 degrees above zero this morning. There was a killing frost at Jackson, Miss".....The Illinois Grain Dealers' and Shippers' Association at their meeting last week, appointed a committee of five to prepare a bill for presentation to the next legislature for the purpose of securing such legislation as is regarded important in the way of securing better inspection of grain and more uniform rates of transportation.....Two California tramps who took possession of John Joy's granary, near Chualar, helped themselves to some poisoned wheat which had been prepared for squirrels. Joy had hard work to keep them alive until the doctor came and gave them antidotes..... The price of milk delivered at the condensing factory in Elgin, Ill., from October 1 to April 1, averages three cents per quart net, and the farmers are dissatisfied, because in 1882-3 they got 3.8 cents. The average price at the Duchess County (N Y.) condenseries for this Winter is 3.21 cents per quart, or only about six per cent. higher than the Elgin price.... .. American apple buyers are making heavy purchases of Gravensteins in Nova Scotia, having lately bought 15,000 barrels in a fortnight. No import duty on apples; but most of the purchases were for European markets.... ....F. F. & and C. M. Austin, poultry and game dealers, in Faneuil Hall Market at Boston, received last week a consignment of live geese by rail from New York, which were to be fattened for market upon their farm at Mansfield. The geese were in crates, piled one upon another, and upon arrival 1,600 were found to be dead from suffocation. The remaining 1,400 are in bad condition and many will die. Loss about $2,000.... ...Hog cholera very virulent at the Westfield town farm, Mass. Affected hogs to be killed ..... A firm of cider manufacturers in Massachusetts has closed a contract with a party in New Hampshire for 50,000 bushels of apples at nine cents a bushel, delivered on the cars ready for shipping.....New Mexico is overstocked, and will, it is expected, market 50,000 beeves this Fall, unless the markets are ruinous..... The Anti-Horse-thief Association of Ohio, a growing body, held a meeting at Chillicothe a few days ago .....The exports of live stock from the port of Montreal from the opening of navigation to this time have been 55,533 head of cattle and 72,413 head of sheep against 56,060 cattle and 36,847 sheep in 1885, and 52,091 cattle and 50,443 sheep in 1884.....A parliamentary orator states that there are 800,000 less men employed in British agriculture than ten years ago.....The potato crop of Europe is reported to be much below the average in quantity, as well as somewhat affected by disease.....The American Cotton Oil Trust Company continues to be the subject of discussion in the Southern press. The whole matter is being thoroughly aired in the Texan papers and a very firm determination shown in that State to resist the monopolistic tyranny of this great corporation. There is a rumor that a number of New York capitalists are to start opposition mills in the largest planting districts as soon as the consolidation puts on the last twist of the screw. By selling the Oil Trust stock "short," they expect to make a pile by the fall in its price after the new mills are started..... .. .Attorney-Genera. Garland has given an opinion that the oils or samples used in the manufacture of oleomargarine are not subject to the tax unless made in imitation or semblance of butter.....The French Commission appointed to consider the question of an increase of duties on imports of grains and flour into France, will recommend a fixed duty of five francs per hectoliter—about 26½ cents per bushel. It is said French farmers can't pay their taxes unless they get higher prices for their products, hence the rise is likely to be made in spite of the workingmen's protest against dearer bread.....Prime Minister de Freycinet, of France, in reply to a deputation of merchants and workmen of Bordeaux, asking for a revocation of the embargo on American pork, the other day, said he had no doubt that the meat properly cooked is harmless, and promised to bring the matter before the Cabinet; but nothing is likely to be done unless we retaliate by imposing prohibitory duties on adulterated French wines, etc.....

CLAREMONT COLONY.

Offers great inducements. Send for free illustrated circular and maps. J. F. Manch, Claremont, Va.—*Adv.*

Crops & Markets.

SATURDAY, October 30, 1886.

WITH regard to the potato crop, the last report of the Department of Agriculture says that while the average condition in July was 96.6, that of August declined to 88.3, the lowest for any August on record. Drought at time of planting, in some of the States of largest production, was the cause of this poor condition so early in the season and this, aided in New England and the Eastern States by rot, and more or less in every section by the Colorado Beetle, lowered the average still further, to 81.4 on the 1st of September. Since that time the decline has been very slight, standing now at 81.0, the lowest October average, with three exceptions, since the commencement of crop reporting in 1858. Usually the falling off in this month has been very sharp, ranging from three points in 1880 to 11 in 1885. In the New England States there has been little change in the condition of the crop, though rot still continues in many counties. The product in that section will apparently differ but slightly from that of last year. The States bordering the Atlantic, from New York to Georgia, show a marked decline, ranging from two points in South Carolina to 10 in New Jersey. This heavy falling off is attributed to excessive rotting, especially in New Jersey and Pennsylvania, with damage from Colorado Beetles and white grubs in various sections. The crop of New York is a medium one, fully one-third more than the product of last year, the average being 90 against 66. That of Pennsylvania is also a little better than that of last year. According to the September report, the Gulf States made the best showing, condition being high, and but slightly lowered from August. In this section the past month has wrought but little injury, and the average is still high, promising a crop of good quality and medium size. In the Ohio Valley and Northwest, the condition, while still very low, has materially improved since last report. The rains which broke the protracted drought of some sections, while too late to repair the injury from dry weather, were sufficient to essentially help the late crop. Some complaint of damage from rot and bugs comes from these States, but the short crop will be almost entirely due to unseasonable weather. The Michigan crop is this year far below an average. condition 71, last year 890 Ohio has a medium crop, and Indiana nearly an average one, while Illinois and the States beyond the Mississippi suffered greatly from the drought, causing a comparative scarcity in the West. In Kansas the injury from drought has been supplemented by serious damage from rot, and there was a decline of 13 points during the month. There has been a like serious falling off in California, Oregon and Dakota, attributed mainly to the injury from drought, its effects becoming more apparent as harvest is begun.

The area devoted to the sweet potato crop was largely increased in those States where it is a material part of the agricultural production, and the condition on July 1 was high. The wet weather in the South during that month was not conducive to good growth, and there was a slight falling off in the average of the larger States. This decline was continuing and more marked during August, and the figures of condition on September 1 gave evidence of local injuries from supersaturation in some sections and drought in others. There has been a further reduction during the past month, mainly from drought, in portions of South Carolina, Georgia, Mississippi, and Louisiana. Condition in principal States is: North Carolina, 93; Georgia, 90; Alabama, 92; Mississippi, 92; Tennessee, 95, and South Carolina, 94.

The supply of hogs at leading markets has been somewhat irregular the past week, being quite liberal a portion of the time, with some days of light receipts. The aggregate packing appears to be about 230,000 hogs for the week at all points, against 145,000 last week, and 265,000 for corresponding time last year. The approximate total packing from March 1 to date is 5,380,000 hogs, or 415,000 in excess of the aggregate to the close of the month last year, which was 4,965,000. In prices of hogs there was a decline at the beginning of the week at Chicago, and on Wednesday there was a further decline, prices averaging 30 cents per 100 pounds lower than a week previous, and about 20 cents per 100 pounds higher than a year ago. At Cincinnati prices are 15 to 20 cents lower than a week ago. Present prices of product at Chicago for January delivery are on the basis of $3.80 to $3.85 for hogs, while the average price paid last Winter there was about $3.70.

MARKETS BY TELEGRAPH.

SATURDAY, October 30, 1886

BOSTON.—APPLES.—King, $2 00@2 50; Baldwin, $1 37@1 52 per bbl; Hubbardstons, $1 50@1 60; Harvey, $2 00; common, 75c@$1 00. BUTTER.—Northern creamery, extra, 28@29c; do. firsts, 24@26c; Western creamery, extra, 27@29c.; do. firsts, 23@26c; do. choice, 20@21; dairy, Franklin County, finest, 27@29c; good to choice, 24@26c.; Vermont extra, 25@26c; Northern, choice, 24@25c; do. fair to good, 14@15c., Western dairy, good to choice, 12@13c; imitation creamery, extra, 14@16c ladle-packed, choice 13@14c; do. fair to good, 11@12c. BEANS.—Choice pea, Northern hand picked $1 80@1 85 per bushel; do. do. New York, choice, hand picked, $1 70@1 75; do. do. screened, $1 80@1 85; medium choice, hand-picked, $1 60@1 65; do choice screened, $1 25@1 50; Yellow Eyes, choice, $1 25@1 60; do. flat, $1 50@1 55; Red Kidneys, $1 75. CHEESE.—New York extra, 12c; do. good to choice, 10@11c; do. common, 7@9c; Vermont extra, 12c; good to choice, 10@@11½c; common, 7@9c; Western extra, 11@@12c; do. fine, 9@10c common, 6@8c. Sage, extra, 12½@13c. EGGS.—Near-by and cape, 25c. per doz Eastern extras, 23@24c; Aroostook County, 22c; New York and Vermont, 22@23c; Western, 16@20c; Provincial, 20@24c. HAY AND STRAW.—Choice Northern and Eastern at $17 00@18 00 per ton; fair to good, $15@17; fine, $13@16; poor and damaged, $9@13; Western choice, 16@17; do. fair to good, $14@15; rye straw is held at $16@16 50 for choice new, $12@14 for common to good. Swale hay, at $10@11; oat straw at $8@10 per ton. HOPS. New York choice, 1885, 28@30c; per pound; do, 1886, 30@35c. California, 30@35c; low grandes, 15@33c. POTATOES.—Early Rose, 45@55c; Beauty of Hebron, 18@25c; Sweet Potatoes.—Virginia Yellow, $1 12@1 25 per bbl; Jersey, $1 37@1 52 per bbl. SEEDS.—Clover, West, 9¾@10¾c. per lb; do. North, 10¾@11c; do. white, 13@26c; do. Alsike 12@15c; red top, per sack, West, $2 25; do. Jersey $2 30@2 50; Hungarian 90c@$1 00; Millet, 90c@$1 00; Orchard, per bush., $1 80@2 00; Blue grass, $1 40@1 60; Timothy, Western, $2 15@2 25; do. Northern, $2 25 2 40; American flaxseed, $2 25.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, October 30, 1886.

STATE OF THE MARKET.—As compared with prices last week, flour is 10c. higher; Ungraded Red Wheat 3c. higher, No. 3, 4c. higher; No 2 steady. No. 2 Corn, 1c. higher. Oats, ¼ to 1½c. higher. Pork, steady. Butter, a shade lower. Cheese, steady. Eggs, ½c. higher. Poultry, a shade higher. Vegetables steady.

FLOUR, FEED AND MEAL—FLOUR—Quotations: Fine, $1 90@2 70; Superfine, $2 15@2 85; No. 2, $2 60@3 10; Good to Fancy Extra State, $3 35@3 75; Common to Good Extra Western, $2 60@3 75; Good to Choice Extra Western, $3 85@4 75; Common to Fair Extra Ohio, $2 60@3 85, Good, $3 90@4 35; Good to Choice, $4 35@4 75; Common Extra Minnesota, $2 60@3 15; Clear, $3 50@4 10; Rye Mixture, $3 35@3 95; Straight, $3 65@4 45, Patent $4 35@5; Bakers' Extra, $3 90@4 90; St. Louis Common to Fair Extra, $2 60@3 75; Fair to Good, $3 85@4 60; Good to Very Choice, $4 65@5, latter an extreme. Patent Winter Wheat Extra, $4 30@5, City Mill Extra for West Indies, $4 40@4 50, latter in new pkgs.: South America, $4 60@4 70. SOUTHERN FLOUR.—Common to Fair Extra at $3 25@3 85, and Fair to Choice, $3 90@5 00. RYE FLOUR.—Superfine, $3 10@3 30. CORN MEAL.—Yellow Western, quoted at $2 50@2 75; and Brandywine at $2 75@2 85. Brandywine, $2 85. BUCKWHEAT FLOUR—Quoted $1 80@1 90. FEED.—40 lb, quoted at 67½@75c; 50 lb, at 65@70c; 80 lb, at 75@80c; 100 lb at 85@90c sharps, at 95c.@$1 00. Rye Feed at 75@80c; screenings at 65@70c.

GRAIN.—WHEAT.—No. 1 Hard, at 89c; Ungraded Red, 78@85½c; No. 3 Red, 82½c; No. 1 Red, 85c; Extra Red, 86½c; No. 2 Red, 84½@84½c; No. 2 Red, October, 84¾c; do. for November, 84 3-16@84¾c; do. for December, 85 13-16@86 7-16c; do. for January, 87½@88 1-16c; do. for February, 89@89½c; do. for March, 90½c; do. for April, 92½c; do. for May, 93½@93¾c; do. for June, 94½@94¾c. CORN.—Ungraded Mixed, 44½@45½c; No. 2, 45¼ c; No. 2, White, 46¼c; No. 2 for October, do. for November, 45½@45¾c; do. for December, 46@46¾c; do. for January, 47@47½c; do. for February, 48¾c; do. for May, 49½@49¾c. OATS.—No. 3 at 32c; do. White, 33@35½c; No. 2, 32½c; do. White, 35½@37¾c; No. 1, White, 36c; Western Mixed, 34½@36c, do. White, 35@40c; No. 2 for October, do. for November, 32¼@32½c; do. for December, 33½@33¾c; do. for January, 34c; do. for May, 36¼c.

PROVISIONS.—PORK.—Mess, $9 75@10 00 for Old and $10@10 50 for New; $14 for Family Mess; $14 40@15 50 for Clear Back; and $10 00@10 50 for Extra Prime. BEEF.—Extra India Mess, $11 00@14 00; Extra Mess, in barels, $7 50@8; Packet, $8; Plate, $7 25@$8. BEEF HAMS.—$18 50. CUT MEATS.—Shoulders, 5¾@5¾c; Bellies, 12 lb average, 7½c; Fresh Hams, 8¼c; City Pickled Shoulders, 5½c; Smoked Hams, 10½@11c; Smoked Shoulders, 6¼c; Pickled Hams, 9½@10c. MIDDLES.—Long Clear in New York, 6¼c. DRESSED HOGS.—City Heavy to Light at 5¾@6¼c; Pigs, 5¾c. LARD.—South American, 6.80@6.85c, October, 6.06c; November, 6.02½@6c; December, 6.13c; January, at 6.20c; February, 6.26½@6.29c; March, 6.37@6.38c; April, 6.31.

BUTTER.—Creamery—State Creamery, 25@28c; Pennsylvania Creamery, 27@28c; Western, 20@27c; State Dairy, half-firkins, tubs, 17@23c; Welsh tubs, 20@22c; Western Imitation Creamery, 14@16c; Western Dairy, 10@11c; Western Factory, 10@13.

CHEESE.—State, 9@13c; Night Skims, 8@9¼c; Western Flat, 10½@11c.

EGGS.—State, 22@23c; Western, 20½@21½c; Canada held 19@19½c; Limed, 17@18c; State, 22@22½; Ohio and other choice lots, 21½c; Western, best, 21@21½c; Do, held lots, 19½@20c; Canadian, held lots, 19@20c; Do. fair held lots, 17½@18; Limed, 17@18c.

POULTRY.—LIVE.—Chickens, per lb, at 8@10c; fowls, near-by lots, per lb, at 9@10c; fowls, Western lots, per lb, at 9@10c, fowls Southern lots, per lb, at 8@9c; turkeys, per lb at 8@9c; ducks, western per pair at 45@60c.; geese, western, per pair, at $1.00@1.25.

POULTRY.—DRESSED.—Turkeys, per pound, at 12@14c.; Spring chickens, Philadelphia, per pound at 15c.; do. western, per lb, at 8@10c; fowls, Pennsylvania, prime, per lb, 11@12c; do western, per lb, at 10@11c.

FRUITS.—FRESH.—Quotations: Pears.—Bartlett, per keg, at $3 00@5; Seckel, per bbl, at $3@4 50. Apples.—Gravenstein per bbl, at $2 50@3; varieties at $1 50@2 per bbl; Greenings, $1 75@2 per bbl. Grapes, 7@8c. for up-river Delaware, per lb; Catawba, at 4@5c. per lb; Concord, per lb, 3@4c. Quinces at $2 50@3 for choice. Cranberries at $6@6 50 for Cape Cod best; at $5 50@6 75 for choice; $4@5 for light; $1 75@2 for choice, per crate; $1 25@1 50 for Jersey, per crate.

FRUITS.—DRIED.—The quotations are as follows Apples—Fancy Evaporated, 9c; do. choice, at —@—c do. prime, 8@8¼c; do. Tennessee quarters at —@—c

do. State sliced at—@—c; do. southern sliced prime a 2½@3c; do, North Carolina, fancy sun dried, new, 5@5¼c; do. do. choice3¼@4c; do, do. prime 3c. Peaches—North Carolina, peeled choice new, 11@11½c: do. do. do, fancy, new, 12@12½c; do. Georgia, choice, at —@10c; do. do. prime fancy, new, 12@12½c, do. Delaware, evaporated, peeled, 23@25c; do, do, do, unpeeled new, 12½@13c, do, Georgia new, 10½c. Cherries, pitted, at 9½c. Evaporated raspberries, 14½@15c: sun-dried do. 12½@13½c. Blackberries—Prime at 7¼@7¾c. Plums, al 8½@9c. do. California evaporated, —@—.

HAY AND STRAW.—Hay, Choice Timothy, 80@85c; Good, Timothy, 70@75c; medium, 60@65c; Shipping, 50c; Clover, Mixed, 55@65c Straw,—No. 1 rye, 65c; short rye, 50@55cc.

COTTON.—The quotations, according to the American classification, are as follows:

	Uplands.	New Orleans and Gulf.	Texas.
Ordinary	6⅛	6 11-16	6 11-16
Strict Ordinary	7 15-16	7⅛	7⅛
Good Ordinary	7⅛	8 1-16	8 1-16
Strict Good Ordinary	8 5-16	8⅛	8⅛
Low Middling	8¾	9 15-16	9 15-16
Strict Low Middling	9 1-16	9¾	9¾
Middling	9¼	9 7-16	9 7-16
Good Middling	9⅝	9 11-16	9 11-16
Strict Good Middling	9¾	9 15-16	9 15-16
Middling Fair	10⅛	10 5-16	10 5-16
Fair	10¾	10 16-16	10 15-16

STAINED.

Good Ordinary	6 5-16	Low Middling	7 13-16
Strict Good Ord	7	Middling	8 11-16

VEGETABLES.—There is a very fair demand for potatoes, with prices strong. Quotations are for: Potatoes.—Long Island, rose, in bulk, per bbl., $1 75@2 00; State, $1 25@1 50, do Burbank, $1 25@1 50; Jersey, peerless, per bbl, $1 25@1 87; sweet potatoes, Va., yellow, per bbl., $1 25@1 75; sweet potatoes, Va., yellow, inferior, per bbl, $1 00@1 25. Cabbages.—Flat Dutch, per 100, $1@5. Cucumbers—Pickles, per 1,000, 75c.@$1 25. Egg plant, Long Island, bbl, per $3 10@4 50. Lima beans, per bag, $3 50. Onions.—Conn., red, per bbl, $2 00; do. Orange County, red, per bbl, $1 75@2 00. Tomatoes—Long Island, per box, 50c. Celery, per doz. branches, $1 00. Turnips, Russian, per bbl., $1 50@2 00.

LIVE STOCK MARKETS

NEW YORK, SATURDAY, Oct. 30, 1886.

BEEVES.—The trade in City Dressed Beef thus far this week is slow and prices are unchanged. Texan and Colorado Beef sold to-day at 5½@6½c; Ordinary to Prime Native sides, at 6½@7½c; and Choice and Extra at 7¾@8c. Chicago Dressed quiet at 5@6½c for Texas and Colorado sides, 6½@7¾ for Common Native Beef.

CALVES.—Market quoted steady at yesterday's ruling prices, or at 2½@2¾c for Grassers, 2¾@3½c for Fed Calves; and 5½@8½ for Veals.

SHEEP AND LAMBS.—State Lambs, 63 lb, at $5 65; State Sheep, 92 lb, at $3 50; State Sheep and Lambs mixed, 69 lb, at $3 87½.

PRODUCE COMMISSION HOUSE
ESTABLISHED 1865.
S. H. & E. H. FROST,
100 PARK PLACE, N. Y.
Shippers desiring to favor us will be furnished stencils, shipping cards, etc., on application. Promptness guaranteed. References, RURAL NEW-YORKER, Irving National Bank, etc.

POULTRY BOOK and FIVE STANDARD LITERARY WORKS **FREE!** For 35 cts. in currency we will mail the above Books and THE FARM AND HOME VISITOR, our new Agricultural, Truck, Poultry, and Home Paper, for six months. Best offer ever made. Agents wanted. Samples free. Ehst & Emes, PUB'S, BOYERTOWN, PA.

GRINDS
FINE FEED & TABLE MEAL, TOBACCO STALKS and STEMS, DRUGS, SPICES, CHEMICALS, etc.
Send for circulars.
EMPIRE CITY MILL
A. Rickard,
110 John St., N. Y.

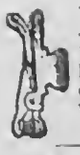
WORK FOR ALL. $30 a week and expenses paid. Valuable outfit and particulars free. P. O. VICKERY, AUGUSTA, MAINE.

CANADA Unleached Hard-Wood **ASHES** solicited. Supplied in carload lots. Acknowledged one of the best Fertilizers in use. Quality guaranteed. Correspondence B. L. NOWELL & CO., MONTREAL, CAN.

WE WANT YOU! a live energetic man or woman needing profitable employment to represent us in every county. Salary $75 per month and expenses, or a large commission on sales if preferred. Goods staple. Every one buys. Outfit and particulars Free. STANDARD SILVERWARE CO., BOSTON, MASS.

NEW Sample Book of beautiful cards, 14 Games, 12 tricks in magic, 636 Album verses. All for a 2c. stamp. STAR CARD CO., Station 15, Ohio.

"SINGER" MODEL SEWING MACHINES for $12.00 up. Warranted, 5 years. New and perfect. Sent on trial if desired. Organs given as premiums. Send for circular with 7,000 testimonials from every state. We can save you $15 to $50. GEO. PAYNE & CO., 42 W. Monroe St., Chicago.



Brewster's Patent Rein Holder. Your lines are where you put them—not under horses' feet. One agent sold 12 doz. in five days; one dealer sold six doz. in 15 days. Samples worth $1.50 FREE. Write for terms.
E. E. BREWSTER, Holly, Mich.

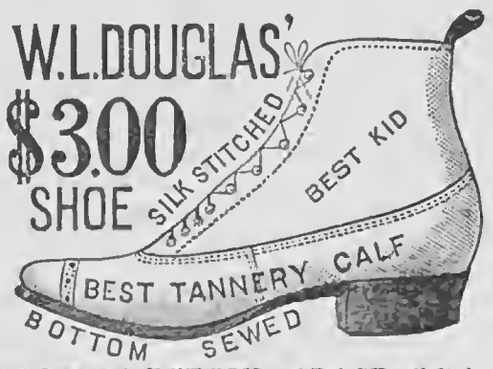
100 Choice New Recitations 13 Songs, Elegant Sample Cards, all for a 2c. stamp. CADIZ CARD CO., CADIZ, O.

GUNS Our $15 Shot Gun now $10. "$15 Breechloader" $9.50 All kinds Guns guaranteed lower than elsewhere. Send stamp for illustrated catalogue. POWELL & CLEMENT, 180 Main St., Cincinnati, Ohio.

WEAVER ORGANS Are the Finest in Tone, Style, Finish and general make up of any goods made. Guaranteed for 6 years. Send for Catalogue, testimonials and terms, free, to Weaver Organ and Piano Co., Factory, York, Pa.

LADIES We make a specialty of giving premiums for the forming of Tea Clubs for our pure Teas and Coffees. We defy the world on price and quality. No house gives same quality goods and premiums. A host of useful and ornamental articles to select from. Silver-plated Casters for $5, $7, and $10 orders. Sets, elegant designs, **READ** Silver-plated Tea for $20 and $30 orders; or beautiful Gold Band China Tea Set or handsome Decorated Dinner Set, Moss-Rose Toilet Set, Gold and Silver Watches, Clocks, etc. Illustrated price and premium list, and full particulars sent free. SPECIAL OFFER: To every tenth person that answers this advertisement we will send free one pound of choice Tea. Write at once. **THIS**
NATIONAL Tea and Coffee Company, BOSTON, MASS.

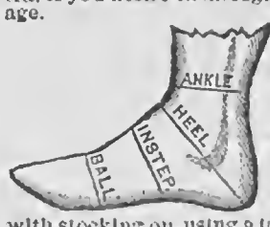
W. L. DOUGLAS' $3.00 SHOE



CONGRESS, BUTTON and **LACE**, all Styles of **Toe.** Best shoe for the money in the world, and equals those usually sold for $5 or $6.

$2 SHOE FOR BOYS.

Same styles as the $3 shoe. Carefully and substantially made, and gives a stylish Boy's Shoe for $2. If your dealer does not keep them, send measurements for either as below, enclosing price, with 10 cents extra, if you desire them registered. No charge for postage.



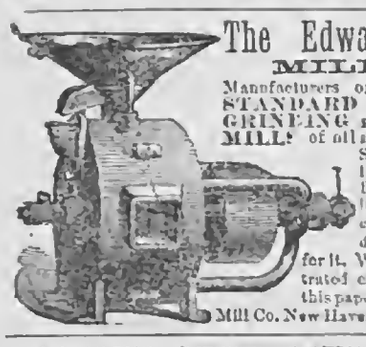
Ankle.....— Inches.
Heel.....— "
Instep.....— "
Ball.....— "
Length of Foot..— "
Cong., Button or Lace.
Style of Toe.....

Narrow (capped), London (medium width, with cap) or French (wide, without cap.) (Name Style.) Measure foot with stocking on, using a tape measure or a thin strip of paper, being careful to put in fraction of an inch. State whether you want them tight or easy, and give size usually worn. By following directions carefully you will get a fit equal to a CUSTOM SHOE, *and at one-half the price.* **Be careful** to give full mailing directions. See that each Shoe is stamped "*W. L. Douglas $3 Shoe. Warranted.*" None others are genuine. Address
W. L. DOUGLAS, Brockton, Mass.

IMPROVED CHAMPION SAWING MACHINE.

One man can do the work that heretofore required two. Utilizes the *weight* of operator. *Lightest running, cheapest and only practical* log sawing machine made. *Saws cord an hour.* Weighs but 35 lbs. Price complete only $12.00. To introduce, will deliver one machine free to any address on receipt of price. *Address* Champion Mfg. Co., Quincy, Ill.

Ag'ts wanted



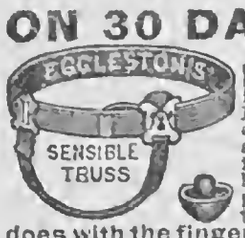
The Edward Harrison MILL CO.,
Manufacturers of HARRISON'S STANDARD BURR STONE GRINDING and FLOURING MILLS of all sizes and varieties for Steam, Water, Wind, Horse & Hand Power. Possessing great capacity and durability. Every Mill warranted to do just what we claim for it. Write for our new illustrated catalogue and mention this paper. The Edw. Harrison Mill Co. New Haven, Ct., or Columbus, O.

10 PER CENT. INVESTMENT.
THE MASS. REAL ESTATE CO.
Has earned 10¼ per cent. net upon its capital invested to the present time, and now owns about half a million dollars worth of first-class business real estate. It is under the management of such men as Lieut. Gov. Ames, Mayor Green of Fall River. Send to offices of Co. for prospectus, to GEO. LEONARD, Agent, 246 Washington Street, Boston, Mass.

A NEW INVENTION!

7¾ Cords of Beech have been Sawed by one man in 9 hours. Hundreds have sawed 5 & 6 cords daily. "Exactly" what every Farmer and Wood Chopper wants. *First order* from your vicinity secures the *Agency.* Illustrated Catalog *FREE.* Address Folding Sawing Machine Co., 305 S. Canal St., Chicago, Ill.

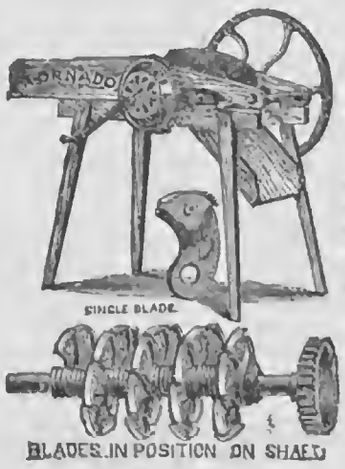
ON 30 DAYS' TRIAL.



THIS NEW **ELASTIC TRUSS** Has a Pad different from all others, is cup shape, with Self-adjusting Ball in center, adapts itself to all positions of the body while the ball in the cup presses back the intestines just as a person does with the finger. With light pressure the Hernia is held securely day and night, and a radical cure certain. It is easy, durable and cheap. Sent by mail. Circulars free. EGGLESTON TRUSS CO., Chicago, Ill. Mention this paper.

THE BEST CATTLE FASTENING!
SMITH'S
SELF-ADJUSTING SWING STANCHION,
The only Practical Swing Stanchion Invented. Thousands in use. Illustrated Circular free. Manufactured by F. G. PARSONS & Co., Addison, Steuben Co. N. Y.

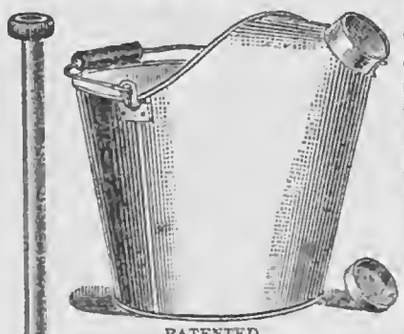
The TORNADO Feed Cutter



A new invention for cutting hay, straw, sheaf oats, ensilage, and thoroughly cutting and splitting corn fodder, either **husked** or **unhusked.** Cuts on an entirely **new principle.** Not liable to get out of order. **Will cut faster with less power** than any other cutter. Has been thoroughly tested and found perfect in every respect. Farmers, Dairymen, Livery-men, and Stock-feeders can save **money, time,** and **labor** by using a **Tornado Cutter.** Made in sizes to suit everybody. Every machine warranted to give satisfaction. Responsible agents wanted in unoccupied territory. Write for prices and circulars giving full particulars.
W. R. HARRISON & CO., Mfrs., Canton, Ohio, U. S. A.

BUCK-THORN BARB FENCE.
A flat strip of **Solid Steel,** ⅝ inch wide. **Twisted.** Plain to be seen. Small barbs, only ½ inch apart. **Effective. SAFE.** Strong, Handsome, Lasting, **Cheap.** Easy to build, simple to repair. Any bright farmer's boy or smart farm hand can boss the job. Write for sample and circular.
THE BUCK-THORN FENCE CO., Trenton, N. J.

THE "COMMON SENSE" MILK PAIL.



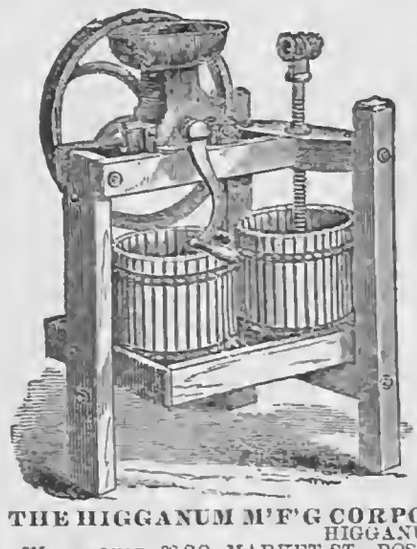
PATENTED.

This is the only *perfect* Pail made.—There are no seams in the front to catch the dirt. It has a perfectly fitting strainer, which can be instantly removed, so that every part of the pail may be *quickly* and *thoroughly* cleaned. Extra strainers can be obtained at any time.

The Pail is made from heavy XX tin, and is in all respects the **best in the world.**
Send for special circular. Agents wanted.

MILKING TUBES.
FOR MILKING COWS WITH SORE TEATS.
This is the best Tube in the market. Sent, post paid to any address, on receipt of price One Tube, 25 cents; Five Tubes, $1.00. Send for special circulars to
BARTLETT & DOW,
LOWELL, MASS.
Please mention this paper.

NEW CIDER MACHINERY.



The most complete line of CIDER MACHINERY ever offered. Seven sizes, from the smallest Hand Mill to an Eight-Barrel Press.
THREE NEW PATTERNS.
Send for New Illustrated List, Just Issued.

THE HIGGANUM M'F'G CORPORATION,
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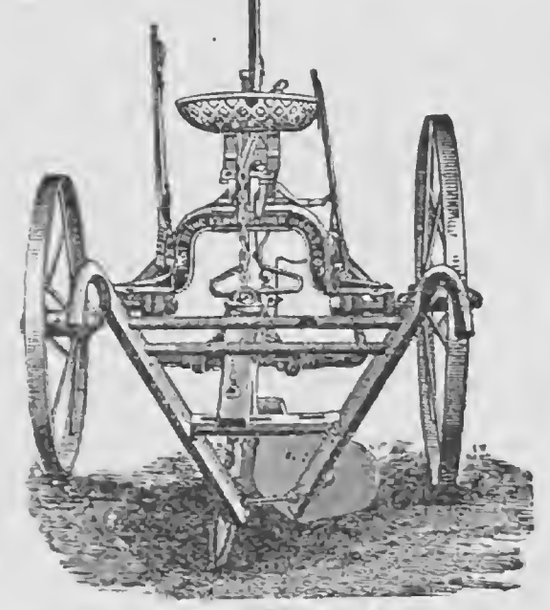
WAREHOUSE: 38 SO. MARKET ST., BOSTON, MASS.

THE ELKHART PLOW SULKY



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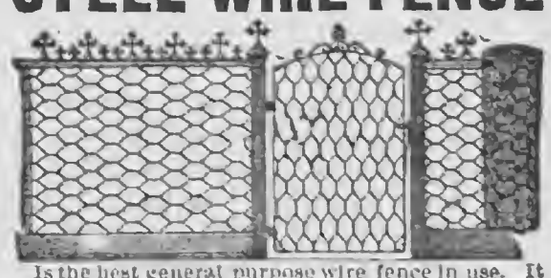
Lighter Draft with Driver Riding than ordinary Plow with Driver Walking. Turns square corner without backing. It is wholly constructed of Iron except tongue and front lever.
We claim and GUARANTEE that a Plow attached to the Sulky and carrying the driver, is from five to 100 pounds lighter draft than the same Plow doing same work without the Sulky. Write for prices.
ELKHART IRON WORKS,
ELKHART, IND
Mention Rural New-Yorker.

SEDGWICK STEEL WIRE FENCE



Is the best general purpose wire fence in use. It **is a strong net-work without barbs.** Don't injure stock. It will turn dogs, pigs, sheep and poultry, as well as horses and cattle. The best fence for Farms, Gardens, Stock Ranges and Railroads. Very neat, pretty styles for Lawns, Parks, School-lots and Cemeteries. Covered with rust-proof paint, or made of galvanized wire, as preferred. It will last a life-time. It is **better than boards or barbed wire** in every respect. The **Sedgwick Gates** made of wrought-iron pipe and steel wire, defy all competition in lightness, neatness, strength and durability. We make the best, cheapest and easiest working **all-iron automatic or self-opening gate,** and the **neatest cheap iron fences now made.** The best **Wire Stretchers, Cutting Pliers** and **Post Augers.** For prices and particulars ask Hardware Dealers, or address, mentioning paper.
SEDGWICK BROS., Richmond, Ind.
EDWARD SUTTON, Eastern Agent,
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AGENTS WANTED Everywhere for the **ARNOLD AUTOMATIC STEAM COOKER** $75 to $150 per month easily made. This is a rare chance. Apply at once. WILHIT CASTLE & CO., Rochester, N. Y.

390 Funny Selections, Scrap pictures etc., and nice Sample Cards for 3c. MILL CARD CO., Cadiz, Ohio.

I WILL INSURE YOUR HOGS!
DR. JOS. HAAS'
HOG AND POULTRY REMEDY

[None Genuine without this Trade Mark.]
Is the only Practical Preventive of the so-called Swine Plague.

If used in proper quantities, it will
1. *Prevent Disease;*
2. *Arrest Disease;*
3. *Pay for itself with the increased pork it will put upon the hogs.*

AS AN EVIDENCE OF FAITH
in my Remedy, I make the following offer:
I will insure herds of swine of not less than one hundred in number against disease, at a small fee per head, provided they are fed my Remedy under my direction, and prove upon examination prior to contract that they are in a healthy condition, and neither inbred, close-bred, or the progeny of such.

WHAT IS SAID OF THE REMEDY.
"It has stopped the hogs dying and improved their appetite."—F. C. GOLDSBOROUGH, Easton, Md.
"Have used the remedy with success."—D. G. BARBER, Easton, Md.
This medicine has been thoroughly tested and its merits established on the eastern shore."—Record and Gazette, Pocomoke, Md.
"I will not be without Haas's Hog Remedy if it costs three times the present price."—JOHN CASTIN, Grant City, Mo.
"We would not risk feeding a pen of hogs without the remedy."—WHITE & Co., Gibsonton, Pa.
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"It gives satisfaction every time."—J. G. BARTLETT & SON, Suncook, N. H.
"It has never failed to arrest the disease yet."—JONES & MUSSELMAN, St. Paris, O.
"I have sold over $3,000 worth, and am pleased to say that it has given good satisfaction."—MELLE WILLIAMS, Druggist, Taylorville, Ill.
The Remedy can be procured of all druggists, or from my Laboratory, upon receipt of price.
Prices, $2.50, $1.25, and 50 cents per package. 25 pound cans, $12.50.
JOS. HAAS, V.S.,
Member of Indiana State Veterinary Med. Association,
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A NEW BUTTER PRESERVATIVE.
KELLOGG'S ROYAL SALT.
Positively Prevents Butter from ever becoming rancid.
Endorsed by George B. Douglas, Esq., Ex-President Mercantile Exchange; Putnam Conklin, Esq., Manager Thurber, Wyland & Co.'s Butter Department, New York City; Col. Wm. Crozier, Northport, L. I., N. Y.; St. Louis Dairy Co., Charles Cabanne, Gen'l Manager, St. Louis, Mo., and such Agricultural Journals as the Rural New-Yorker, American Agriculturist, Indiana Farmer, Country Gentleman, Farm Journal and others. Send for Circular.
BUTTER PRESERVATIVE SALT CO.,
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For the Young.

THE STORY OF A DISTRICT SCHOOL.

A COLLEGE BOY'S DIARY.

(Continued.)

JOHNNY tried hard not to cry. One big tear squeezed out over his red cheek, but he bravely brushed it away with the sleeve of his jacket. The disappointment was great, but Johnny bore it well. His face worked a little, but he crept round behind the wood box where nobody could see him. I was glad to see the red haired young woman hand him a big doughnut while old Johnson was trying to straighten out his false teeth. Johnny kept his face in the shadow, but he put the doughnut into his pocket all the same.

We took our seats at the table in response to old Johnson's invitation—"Set by 'an see ef we can't take some 'o the heft offen these table legs," he said, and this answered every purpose.

He filled my plate so full that passing it was a dangerous operation. "Now then," he remarked "We won't call on you fer no remarks till ye clear that up. I jedge you ter hev a good idee of the vally 'o vittles. Thar won't be no room in your mouth fer no words whilst that plate holds out."

Bill Johnson could only roll up one eye in approval of these remarks. He had already begun a masterly attack upon his plate and could not talk. Johnny soon forgot his troubles. He tried to eat and watch me at the same time. This made rather dangerous business, for on several occasions he lost the range of his mouth and nearly ran his knife into his eye.

Mrs. Johnson was very polite. "Will you have your tea seasoned, professor?" She asked. I did not know exactly what the "seasoning" might be, but determined to risk it. I found that tea was "seasoned" when it contained both sugar and milk.

Old Johnson stopped his eating for a moment. "What be ye perfessor off" he called out in his harsh voice. "Don't wunter take no names thet don't belong to ye in this deestrict." I had no answer to make, so a silence fell upon us, broken only by the industrious knives playing upon the plates.

At last old Johnson pushed his plate away with a sigh of satisfaction.

"I guess I'll finish in the mornin'" he said after a careful survey of the table. "Ef you fellers eats this way right along, I'll hev ter kill another hog termorrer."

After supper I took my old place by the stove. Bill Johnson put on his hat and tilted back in his chair against the wall The ladies began to clear away the dishes. Johnny got out a broken slate and seated himself on the wood-box, where he worked laboriously at some writing.

"Say, teacher," broke in old Johnson's file of a voice. "I've got an idee for ye. When ye git sorter tired o' wanderin' round, why don't ye come here an' make yer suppositions to my hired gal. Il'l say a good word for ye whenever ye need it"

Here the young woman rushed frantically from the room with her apron over her face. Old Johnson's laugh spurred her on to extra speed.

"Now Iry, ain't ye 'shamed? You ain't settin' no example. What will you do with all them things ter answer fer—" said Mrs. Johnson solemnly. She took her hands out of the hot dish-water to hold them up on either side of her head. The steam from the hot water formed a thin frame about her face.

"Jest hark at them Methodist groans," said old Johnson with a chuckle. "Them's genewine Methodist groans, them is. Makes a feller feel sorter doleful, I reckon"

Mrs. Johnson went back to her dish washing with a deep sigh. The "hired gal" did not make her appearance again though old Johnson did his best to induce her to come. While he was shouting at her Johnny brought his slate to me. He kept his finger in his mouth and his eye on old Johnson as I read. This is what he had written:

"I recken ile bile Himm."

As soon as he saw that I understood it he hastily rubbed the writing out and went back to the wood box.

Shortly after the table had been cleared away, there came a loud knock at the door. Without waiting for any invitation, the door opened and a strapping young fellow walked in. He nodded to the company, hung his hat on the nail and brought a chair up to the stove. There he tilted back and put one foot up against the woodbox, pushing Johnny into one corner. There was no formal introduction, but I soon learned from the conversation that this was the redoubtable Jack Brawn himself. He paid little attention to me, so I had a good chance to examine him.

He was a strong, well-built fellow, with great arms and shoulders that were fairly bunched with muscles. I was obliged to admit to myself that if he should once get hold of me, my chances of remaining master of Bear Creek school would be decidedly dim.

Jack was evidently far from being at his ease, though he was dressed in the very hight of Bear Creek fashion. His boots were well greased, the "store lines" had not been rubbed out of his clothes and great cuffs and a collar were making his wrists and neck as uncomfortable as possible. His hair was well oiled and a bright red necktie gave him a very gallant appearance. But in spite of all this finery, Jack was ill at ease. He crossed one leg over the other, pulled at his collar and cuffs a dozen times and sharpened his knife on his boot.

Old Johnson seemed to understand matters. "Walk in an' see how things is Jack," he said. "Don't let nobody stand in yer light. Teacher here sorter frightened her away, but I'll lay you'll find her in the front room. I've set some wood in yunder, when thet burns up its time ter go home."

Jack glared fiercely at me during this speech. It was like a big dog looking at a smaller one. After some futher bantering he got up and walked into the other room. It is to be supposed that he found the red-haired young woman as he did not return.

I went to bed early. I did not care to listen to old Johnson's harsh voice, and I was tired. I had been asleep several hours when I was awakened by a step in my room. I started up suddenly to find Bill Johnson standing by the bed. He carried a bag in one hand while with the other he motioned me to be silent.

OUR drought is over at last. The rain came with a rush when it did come. I was caught out in it too. It began to rain just as I got off the cars to walk home. It was so dark that an owl couldn't have seen anything. The rain came right into my face. I borrowed an old umbrella and started. It was pretty hard to keep in the road. It is almost impossible for people to walk in a straight line when they can't use their eyes—did you know that? They are sure to go to one side or the other. I ran into several trees and apologized thinking they were men. I guess if I had run into a man I should not have said a word. I got home at last, all right, but pretty wet. There is only one thing to do in such a case and that is to get dry just as soon as you can. I took off my wet clothes and rubbed myself with a dry towel. After supper I "toasted" my feet in the oven. I am all ready for another night just like it now—doubly ready because I have brought a pair of rubber boots and a rubber coat. If I am going to be out in bad weather I mean to be dressed for it. I think it is pretty poor economy to try and save some money by not buying comfortable clothes, and then get cold or sick from exposure. Every dark and rainy night now, you can imagine Uncle Mark with his rubber coat and boots walking through the mud.

LETTERS FROM THE COUSINS.

DEAR UNCLE MARK: I am 13 years old. I live on a farm 20 miles from Pittsburgh. I have been reading the letters from the Cousins for some time back. I would like to join the Club if you will let me. Please do not put this letter in the waste basket.

I planted the Garden Treasures last Spring, but they did not grow very well. I set 30 hens last Spring, some with 18 eggs under them. They nearly all came out well; I raised over 250 fine chickens. I would have had 300 only for the rats killing some of them. I set two hens with turkey eggs. They came out middling well, but I only succeeded in raising one turkey. I suppose I killed them with kindness.

I drive a buggy to the store every week. I milk three cows and do half of the kitchen work. I intend going to school to-morrow. We had a fine crop of apples—1,000 bushels in the cellar and 500 bushels of potatoes.

I am trying to learn penmanship. Do you think I will succeed?

Yours truly, LIZZIE GARDON.

[Yes, you are going to be a very good writer. You are a good worker, too. I guess you are going to make a business woman. That is the kind Uncle Mark likes to see.]

DEAR UNCLE MARK: I am a little boy nine years old. My Grandpa has taken the RURAL ever since I can remember. I would like to join the club. I had a garden of my own for three years and sometimes the seeds did well and sometimes they didn't. I saw in the RURAL May 8, 1886, some Bantams I would like to have. Will you please tell me where I can get the birds, or eggs, and oblige

HENRY H. STEVENS.

[The Bantams were owned by Mr. Belmont Perry, of Woodbury, N. J. They were good ones, too.—U. M.]

DEAR UNCLE MARK: I am a little girl 13 years old, and would like to join the Cousins. Mamma has taken the RURAL for four years. I live on a farm of 80 acres. I live three miles from school. My riding horse died this Summer, so I have to walk now. The seeds that you sent us came up, but were killed by hail. The rest of the flowers did not do very well, because it was so dry. I have 15 ducks and one turkey. Your Niece,

Warrensburg, Mo. ELLA LAMB.

I have been wondering if Uncle Mark would give old Aunt Gerusha a chair for a few minutes in the Cousins' corner. I would like to tell them I have been surprised that they have not been more successful with the Garden Treasures from Uncle Mark. Now the seeds we get more than pay for the RURAL every year. If I don't want a hotch-potch of a flower garden, I just pour the seeds on a paper, take a pen-knife and in a few minutes separate them. I wish you could see an evening primrose that came from these seeds. It is a lovely lemon color and is the admiration of every one. In the afternoon it is covered with lovely lily-like blossoms which last until the next day, when new clusters appear. I took a slip last Fall which blossomed nearly all Winter in our city home. (We leave the farm and go home in the Winter.) You ought to see the admiring glances turned to our parlor window in the cold, stormy Winter at this beautiful flower. I have others very handsome, but fear my letter will be too long if I tell you about them now. I think I must say something about Uncle Jonathan's seed, else he will look cross. He has quite a field of thousandfold rye, which he saved from last year's yield, which is just splendid. The farmers come to look at it, and you ought to hear him brag. He sowed it the same day with the old kind, and it looks three weeks ahead of it. The Angel of Midnight Corn is also nice. I think that a queer name, don't you? but it yields well, and "what is in a name."

I fear if I tell about the peas and melons my letter will be too long and Uncle Mark won't let me visit you again? AUNT GERUSHA.

[Why, yes, Aunt G., we are glad to hear you talk. Come again and bring Uncle Jonathan with you.—U. M.]

DEAR UNCLE MARK: I would like to join the Y. H. C. and become one of the Cousins. I live on a farm of 320 acres, so there is lots of work for me to do. Our potatoes are not dug yet, so I will have to pick up potatoes, a job which I do not like to do. We have 95 sheep and lambs, 22 cattle and 10 horses.

Yours truly,

Brockway Centre, Mich. JOSEPH FOSTER.

[Your letter came some time ago. I hope the work is over.—U. M.

DEAR UNCLE MARK: I wrote to you once before and I saw it in your paper so I thought I would write again. My sister planted the flower seed. They were nice. We got one hive of bees last Fall. They swarmed in May then again on the first of June and the last of June. Our grapes are ripe. I want you and the Cousins to get some to eat. We have got 300 or 400 vines of different kinds. We have got the Concord, Pocklington, Niagara and two or three other kinds. We have a clover lot but musk-rats have just ruined it.

Your nephew.

Green Co., Pa. ALFRED P. STEVENSON.

DEAR UNCLE MARK: I thought I would write again. I am seven years old. I am going to school and reading in the Third Reader. Corn husking is at hand. Crop good. We have been having considerable company; some from Walla Walla, W. T., Iowa, Illinois and Indiana. We are having fine weather now. We have no bearing apple trees, but Pa has some coming on, and I hope they will bear soon. We thought the Garden Treasures were treasures indeed. Pa likes the RURAL very much. Which do you think the most profitable chicken? From your niece,

Edinburg, Ind. ALPHA A. DEUFREE.

[That is hard to say. I like Wyandottes and Plymouth Rocks pretty well, but the neighbors think they can make more out of White Leghorns.—U. M.]

We had a great time here at the celebration. The parade passed directly in front of our office. I shall say more about the Statue of "Liberty" next week. Perhaps, though, you all know about it now. We can't know too much about such things.

Miscellaneous Advertising.

DIXON'S "Carburet of Iron" Stove Polish was established in 1827, and is to-day, as it was then, the neatest and brightest in the market; a pure plumbago, giving off no poisonous vapors. The size is now doubled and cake weighs nearly half a pound, but the quality and price remain the same. Ask your goocer for Dixon's big cake.

A NEW VIEW OF CONSUMPTION.

And one which Appeals to Common Sense. Many Curable Cases.

[*Medical Stilys.*]

"MANY persons die of Consumption who could easily be cured," says Dr. S. C. Clark, of Watertown, N. Y., "if they should go at it right. I have a new view of the disease. Consumption is not always of lung origin."

"How so? What is it then?"

"Many cases of consumption are secondary. The disease itself prevails everywhere, but the best practitioners refuse to attribute it entirely to inheritance or the weather. If a person lives in the most favorable climate in the world and has any tendency to lung weakness, if certain conditions exist in the system, that climate, however favorable, will not prevent development of the disease. The disorder in such cases is only a secondary symptom in the lungs of some other ailment, and can never be cured until approached through its source."

"Yes, doctor, but what is the method of its approach?"

"If you dip your finger in acid you burn it; do you not?"

"Yes."

"If you wash this burnt finger every second with the acid, what is the result?"

"Why, constant inflammation, festering and eventful destruction of the finger."

"Precisely! Now then for my method, which commends itself to the reason and judgment of every skilful practitioner. You know certain acids are developed in the body. Well, if the system is all right these acids are neutralized or utilized and carried out. If the system is run down by excesses, anxiety, continual exposure or overwork, these acids accumulate in the blood. If there is any natural weakness in the lung, this acid attacks it, having a natural affinity for it, and if the acid is not neutralized or passed out of the system, it burns, ulcerates and finally destroys the lung. Is this clear?"

"Perfectly! But how do you prevent the accumulation of these acids in the system?"

"Irregularities of the liver and kidneys create this excess of acid and the supply can be cut off only by correcting the wrong action of these organs. The kidneys alone should carry out in quantity, in solution, enough of this acid daily, which, if left in the blood, would kill four men. When the stomach, the liver and the kidneys are *all* conspiring to increase the acid, the wonder is that weak lungs resist death as long as they do!"

"But you have not told us how you would treat such cases."

"No, but I will. The lungs are only diseased as an *effect* of this acid or kidney poison in the blood. After having exhausted all authorized remedies to correct this acid condition, I was compelled, in justice to my patients, to use Warner's safe cure; though a proprietary remedy, it is now recognized, I see, by leading physicians, by Presidents of State Boards of Health and by insurance physicians, as a scientific and the *only* specific for those great organs in which over ninety per cent. of diseases originate or are sustained."

"Is this form of treatment successful?"

"It is wonderfully so, and for that reason I am only too willing that you should announce it to the world of consumptives."

Note by the Publishers:—We have received the above interview from H. H. Warner & Co. Rochester, N. Y., with the request that we publish it *for the good of suffering people.* In a foot note to their letter they say:

"The experience of Dr. Clark is not strange to us. In our correspondence we have found that many thousands of people are suffering from what they think is Consumption, whereas the real difficulty is with the liver and kidneys, proven by the fact that when these organs are restored to health by the use of Warner's safe cure, the consumption disappears, and so does uremic or kidney poisoning, which causes so many symptoms of diseases that the human system is subject to. The same may be said of rheumatism, caused by an acid condition of the system. We insist upon what we always have claimed, if you remove the cause, the system will soon *perfect the work already begun.* Mrs. Rev. Dr. Theodore Wolf, of Gettysburg, Pa., wife of the editor of the *Lutheran Quarterly*, said her friends thought her "far gone with Consumption," but after a treatment with Warner's safe cure, she says: "I am perfectly well." We can cite thousands of such cases, but one is enough. If you publish the above article, *kindly send us a marked copy.*"

We gladly give place to the article, for if we can in any way stay the ravages of Consumption, which carries away so many millions yearly, it is our bounden duty so to do.]—PUB.

PERSONALS.

THE Crown Prince of Germany turns an honest dollar by selling milk from his dairy farm near Berlin. Sales 1,000 quarts a day

BARON FREDERICK FERDINAND VON BEUST, the distinguished German statesman, is dead in his 78th year.

HARRY GARFIELD, eldest son of the late President Garfield, is soon to marry his cousin, Miss Mason, of Cleveland, O.

ONE Australian farmer has just offered $75,000 for a rabbit-proof wire fence to extend 203 miles.

PRESIDENT FRANCES E. WILLARD and all the old officers of the National Woman's Christian Temperance Union have been re-elected.

MISS FORTUNES didn't come singly to Thomas Fortune, of Columbus, Wis., whose wife presented him with three girl babies at once the other day.

THE Rev. A. L. Dobson, of Quogue, has been awarded one of the four prizes of $25 each offered by Austin Corbin for the best crop of peanuts grown on Long Island.

WHILE chopping down a tree the other day Gladstone was stung on the face by a wasp; the papers reported that a swarm of them had put a horrible head on the Grand Old Man.

PRINCE ALEXANDER BATTENBERG, late of Bulgaria, has just bought the Charlottenfeld estate, near Schaffouse, Switzerland—price $100,000. He is reported to have feathered his nest pretty warmly.

A DISPATCH to a Chicago paper says: "Michael Davitt is soon to be married to Miss Yare, of Oakland, Cal. She is an orphan and lives with her aunt, is pretty, 20 years old and is highly accomplished. She has, it is said, $00,000 in her own right.

DURING the recent Western tour of Jay Gould, son and daughter-in-law, Jay told the people of Kansas City that their town would yet be a far greater city than Chicago, because it "has no lake to cut a large cantle out of its agricultural territory."

THE Pope has refused to allow any ornament to be placed on Liszt's grave, beyond an unpainted wooden cross bearing his name and the words: "Orate pro nobis." The more that becomes known of Liszt's life the more shamefully immoral does it prove to have been.

MR. W. W. CORCORAN has just started a suit to protect his title to land purchased by him in Washington 50 years ago. In the bill which he has filed he states that he is an adult and has been for more than 87 years a resident of the District of Columbia.

GOV. PATTISON, of Pennsylvania, says that at the conclusion of his present term of office, next January, he will return to his West Philadelphia home and resume his law practice. Being considerably under 40, he feels that his professional career is still before him.

IN Berlin, Tuesday, General Von Moltke celebrated the 86th anniversary of his birth. He is hale and hearty, rises at six o'clock every morning and passes much of his time in looking after the field laborers. He has constantly in his hand an ax, which he uses in chopping and trimming trees.

SINCE the Chevreul centennial celebration a great crop of centenarians has sprung up in France. The woods are full of them. It is seriously proposed to get a hundred of them together at a public dinner, M. Chevreul presiding. It would be as attractive as a baby-show.

J. I. CASE has bought the Glenview stud farm near Louisville, Ky. It contains 647 acres, and he paid $113.50 per acre for it. He also bought seven blooded horses, paying nearly $2,500 each for them. Jay-Eye-See, Phallas and Brown, the two-year-old, will be put into winter-quarters at Mr. Case's home in Racine, Wis.

MRS. CORNELIA MITCHELL STEWART, widow of many-times millionaire Alexander Turney Stewart, who died 10 years ago, died of pneumonia, after 24 hours' sickness, at her white marble palace in Fifth Avenue, this city, at 9:30 A. M., Monday, Oct. 25. Maiden name Chinch; born in this city Oct. 20, 1803—83 years five days old, therefore, at death. Married Stewart, then a small store-keeper, in 1823. A small, slight woman with an excellent figure and a smooth, fresh complexion, which she retained, to a great extent, to the last. Has left behind her about $35,000,000 probably to be fought for by relatives.

Miscellaneous Advertising

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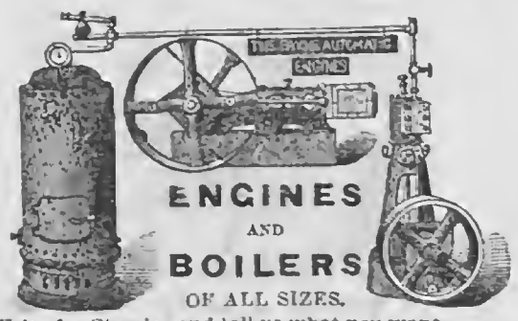

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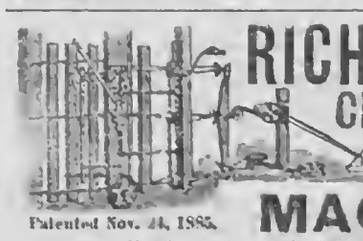

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OPERATORS in wool—moths. —*Courier.*

A MOTTO for young lovers: So-fa and no father.—*Independent.*

THE small boy learning the alphabet is very much like the postage stamp—he often gets stuck on a letter.—*The Critic.*

LITTLE JACK: "My mamma's new fan is hand painted. Little Dick: "Pooh! who cares? Our whole fence is.—*Farmers Call.*

THE fly is not much of an astronomer, but if there is a cream jug within his orbit, he'll find out all about the milky way.—*The Critic.*

"AUCH! that horrid man stepped on my big toe." "My dear young lady, that is impossible. How can a person having such a beautiful little foot as you possess a big toe."—*Berlin Times.*

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AN excited and not comely old maid, at a temperance meeting a few evenings since, read an original poem entitled, "The Lips that Touch Liquor Shall Never Touch Mine," and the young men present gave three cheers.—*Washington Post.*

QUIPS FROM THE AUTHORS.—The Three Feathers"—Contents of a boarding house pillow. "Nora's Love Test"—Letting him see her when she wasn't powdered up. "The Lonely Heir"—The one on the dude's lip. "Picked Up Adrift"—The snow in the snow shovel. "Beyond the Breakers"—Ornaments out of the children's reach. "What he Cost Her"—Not half as much as she cost him. "Cometh Up as a Flower"—The weed. "Lady Audley's Secret"—Her age.—*Life.*

THE OPENING OF THE HUNTING SEASON.

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The only Cow that has given 26,021 lbs. 2 oz. of milk in a year.
The only four-year-old that has given over 23,000 lbs. in a year.
The only two-year-old that has given 18,484 lbs. 13 oz in a year.
The only herd of mature Cows that has averaged 17,166 lbs. 1 oz. in a year.
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The only herd in which 37 two-year-olds have averaged over 11 lbs. each in a week,
Twenty-three Cows in this herd have averaged 18 lbs. 3 oz. of butter in a week.
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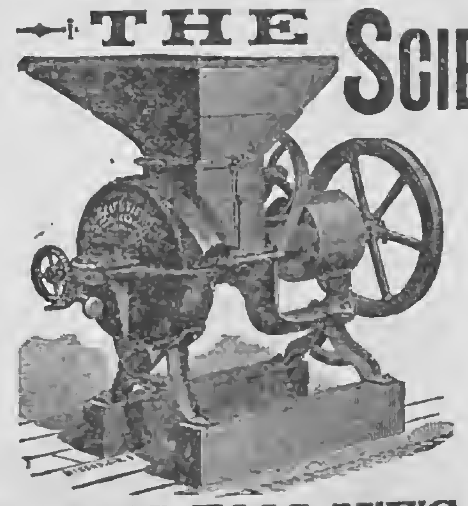
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150,000 HORSES
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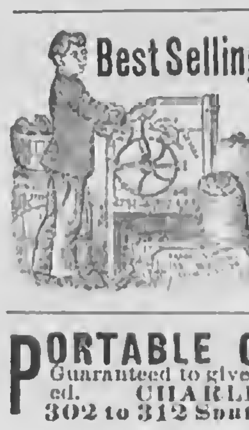
MANGE, SCAB, all Insect Pests, all Skin troubles, and many other Diseases of Live Stock. Recommended by many prominent Breeders. See circular, sent on application. **T. W. LAWFORD & CO.,** Baltimore, Md.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Adjusts itself to all size Corn without the use of Springs. AGENTS WANTED to take Exclusive Sale in every town. Sample Sheller at wholesale price.
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A GREAT ENTERPRISE.
THE CENTURY MAGAZINE, with its enormous circulation (edition of November number is a quarter of a million) and great resources, has never undertaken a greater work than the one which will be its important feature during the coming year. This is a history of our own country in its most critical time, as set forth in
THE LIFE OF LINCOLN,
BY HIS CONFIDENTIAL SECRETARIES, JOHN G. NICOLAY AND COL. JOHN HAY.

This great work, begun with the sanction of President Lincoln, and continued under the authority of his son, the Hon. Robt. T. Lincoln, is the only full and authoritative record of the life of Abraham Lincoln. Its authors were friends of Lincoln before his presidency; they were most intimately associated with him as private secretaries throughout his term of office, and to them were transferred upon Lincoln's death all his private papers. Here will be told the inside history of the civil war and of President Lincoln's administration,—important details of which have hitherto remained unrevealed, that they might first appear in this authentic history. By reason of the publication of this work,
THE WAR SERIES,
which has been followed with unflagging interest by a great audience, will occupy less space during the coming year, but will by no means be entirely omitted. Stories of naval engagements, prison life, etc., will appear.
NOVELS AND STORIES
include a novel by Frank R. Stockton, two novelettes by George W. Cable, stories by Mary Hallock Foote, "Uncle Remus," Edward Eggleston, and other American authors.
SPECIAL FEATURES
(with illustrations) include a series of articles on affairs in Russia and Siberia, by George Kennan, author of "Tent Life in Siberia," who has just returned from a most eventful visit to Siberian prisons; papers on the Labor Problem; English Cathedrals; Dr. Eggleston's Religious Life in the American Colonies; Men and Women of Queen Anne's Reign, by Mrs. Oliphant; Clairvoyance, Spiritualism, Astrology, etc.; Astronomical papers; articles on Bible History, etc.
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THE RURAL NEW-YORKER

A JOURNAL FOR THE SUBURBAN AND COUNTRY HOME

VOL. XLV. No. 1920. NEW YORK. NOVEMBER 13, 1886. PRICE FIVE CENTS. $2.00 PER YEAR.

Entered according to Act of Congress, in the year 1886, by the Rural New-Yorker in the office of the Librarian of Congress at Washington.

Dairy Husbandry.

OUR ANIMAL PORTRAITS.

JERSEY BULL, BRUNETTE'S PRINCE 7115.

A GOOD likeness of this animal is shown at Fig. 418. The bull stands in an easy posture, and there is nothing strained in the position of the neck and head as is the case with most bulls when standing for a photograph. Brunette's Prince is owned by M. B. Rowe, Fredericksburg, Va., and is a fine Jersey rich in butter lineage. His dam, Brunette Hammond 7284 (imp.) made 18 pounds 8 ounces of butter in seven days. His sire, Prince Hammond 3572 (imp.) is a son of Young Prince P. 182 H. C., which was half brother to Princess 2nd. with a record of 46 pounds 12½ ounces of butter in seven days. In the pedigree of Brunette's Prince appear such names as Khedive, Lee, Coomassie, Welcome and Princess, all honorable in Jersey history.

DAIRY NOTES.

T. D. CURTIS.

WINTER DAIRYING.

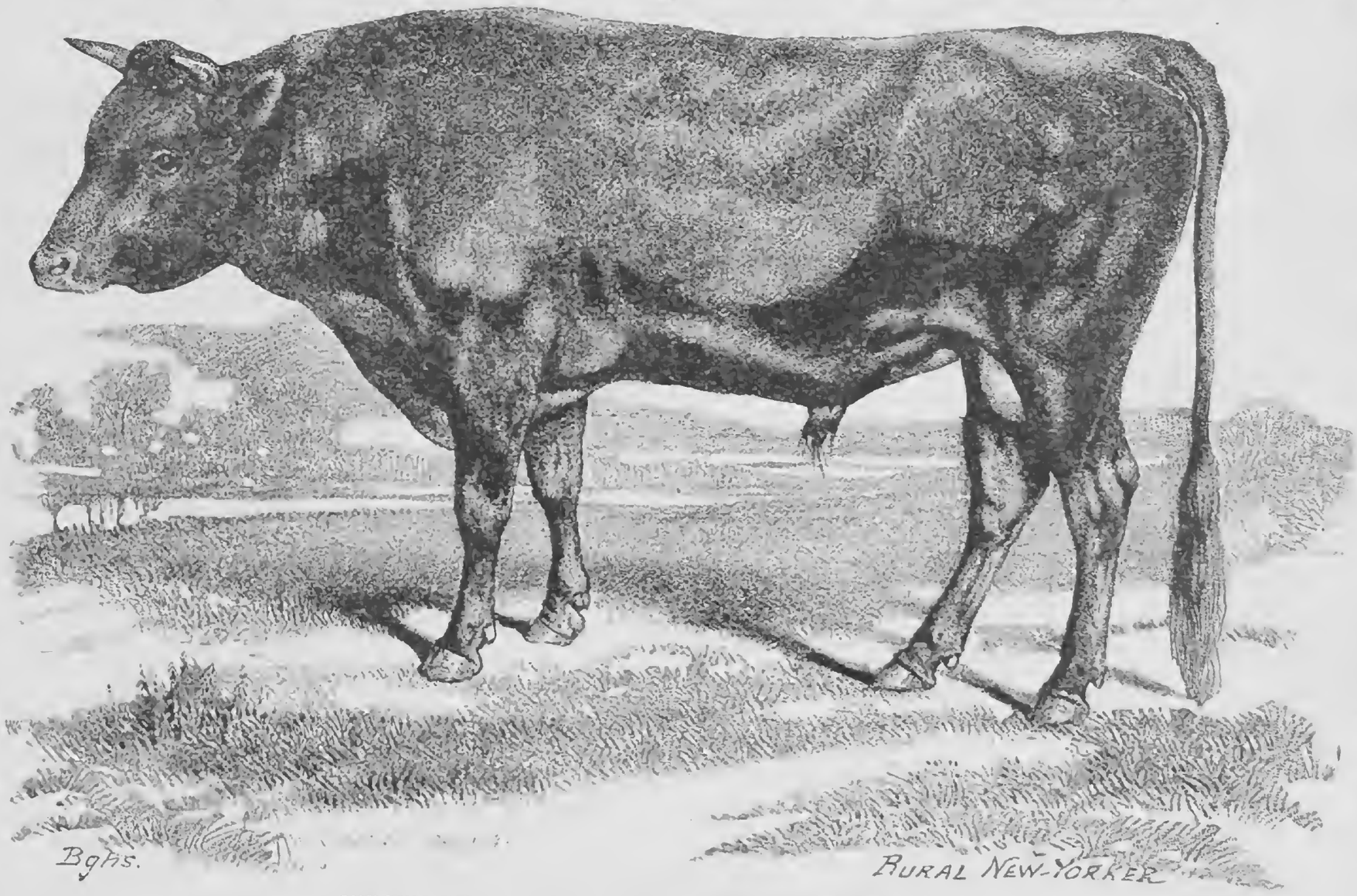
Cows ought to be well kept through the Winter, whether giving milk or not. How much more will it cost to keep a cow in good condition if she is giving milk than it will to keep her if she is dry? Whatever may be the additional expense is what must be charged to winter dairying—no more. The balance of the cost of keep is the normal one which must be borne anyway. It is therefore not so very difficult to figure out the cost of winter dairying over summer dairying. And it should be borne in mind that it costs more to keep a milch cow in the Summer than it does to keep a dry one; She must have enough additional feed out of which to elaborate her milk. So if winter dairying is carried on at an increased expense of keeping the cow, she is kept in Summer at a reduced expense. Then winter dairying secures better prices for dairy products, gives employment at a season of the year when most farm work is suspended, and gives the cow and family a rest in dairying through the Summer when other farm work is crowding. Thus the work of the year is more balanced throughout. These are all advantages not to be thoughtlessly thrown away.

CONDITIONS FOR WINTER DAIRYING.

Next to plenty of good nutritious food are warm, well ventilated stables for cows in Winter; and more especially are clean, airy quarters requisite in winter dairying. Few stables are as clean and sweet as they should be for dairy purposes. The milk, being warmer than the air, is constantly exhaling vapor instead of absorbing gases from it. The taints, therefore, are not so much from bsorption as from minute particles filth falling into it. But a still greater source of taint exists in a foul stable. The air is loaded with exhalations and odors from the cows and their droppings. Those are inhaled by the cows, and through the lungs are mingled with their blood. They thus go directly into the circulation, and as the milk is elaborated in the udder from the blood, the taints and odors are carried into the milk and give it the "taste of the barn-yard," which is so often justly complained of in Winter. In fact, the whole system of the cow is poisoned by the filthy fumes of the dirty, badly-ventilated stable. It is a marvel how little regard many who are counted good dairymen have for cleanliness and a sweet atmosphere in the cow-stable. This has suggested the remark that every one has some idea of cleanliness, however imperfect, but some people appear to have no sort of idea of nastiness. To them, all things are clean!

CHEAP SALT.

Just now the rage is for cheap salt, on the score of economy, notwithstanding the best salt can be used at a cost of less than a mill a pound for the butter salted. Dairymen and creamerymen have been heard to say, "My butter is contracted for at the highest market price, and I get just as much for it when I use cheap salt as when I use the best." This is dishonest. It throws the loss from the short life of the butter on the buyer, in case it does not go immediately into consumption. A Chicago expert, while in New York, examined some Elgin creamery only three weeks old, and found it abominable. Yet it had been bought for a high price, and should have been perfectly sweet at that age. But the Elgin district has been seized with cheap salt economy. Buyers who have been bitten will either refuse to buy, or look into the cause of the early decay of some of the Elgin butter. They will probably find it in the cheap salt used.



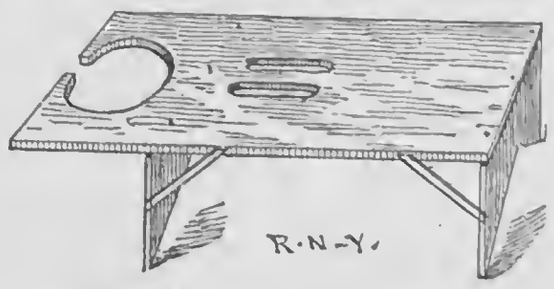
JERSEY BULL, BRUNETTE'S PRINCE 7115. Fig. 418.

TO PREVENT MILK FEVER.

MR. KEMP BOURNE, of England, for years past has kept his cows free from milk fever by the simple practice of allowing the calf to remain with the dam for three days at least and suck what it would. During this time if any quarter of the udder became much distended in consequence of the calf neglecting it, he then milked as much from that quarter as was necessary to remove the painful pressure of the milk within it. He explained that after parturition, the womb and contiguous parts were naturally in an inflamed condition, and the sudden removal of the milk causes the upper portion of the udder to become chilled, and that this was the cause of the disease. A friend to whom he imparted this method of preventing milk fever had a large dairy herd, but he found it desirable to remove the calves from the cow immediately after birth. An hour from this he drew about one-fourth of the milk from their udders by hand; on the second milking, one-third; at the third milking, one-half; on the fourth milking, three-quarters; on the fifth milking, which would be on the third day after calving, he drained the cow dry. Out of 2,000 cases of parturition that passed under his hands since 1862, he has never had a case of milk fever.

A GOOD MILKING STOOL.

I SEND you a drawing of a milking stool which I like better than any I have seen illustrated in the RURAL. It is shown at Fig. 423.



A GOOD MILKING STOOL. Fig. 423.

The stool is 10 inches high and made as shown in the picture. My milking pail has a tilting handle near the bottom. I put the pail in the hole of the stool, with tilting handle at opening, and push it down until the handle is under the stool, and then twist the pail to right or left, and it is secured to stool, but can be taken out and put in in a few seconds. The hole must be of proper size so that the pail will fit closely but not too tightly. The holes near the center of the stool make a good handle for carrying it about.

Halifax Co., N. C. G. C. WEEKS.

OLEO IN INDIA.—In 1857 the sepoys or native soldiers in the service of the East India Company, rebelled in the vast Presidency of Bengal, British India, and the rebellion was suppressed only after the rebels had committed the most fearful outrages on the "whites," and the whole military resources of the British Empire had been taxed. The cause of the trouble was a report that in order to convert the men to Christianity the cartridges for their rifles were defiled with grease which they would have to tak into their months on biting the cartridges, and so lose caste, or commit an abomination, which they thought equivalent to conversion. A panic has lately seized upon the Bengalese on account of a discovery that ghee, the clarified butter which they eat themselves, and which they offer to their gods, is being adulterated with fat. The Mohammedans fear that their ghee may be larded; the Hindoos are equally afraid that their ghee is mixed with the fat of oxen or of sheep. To eat such fat is in their eyes a deadly sin; to offer it to their gods an infamous sacrilege. Hence legislation in hot haste against impure ghee, and suspension of all standing orders in order to hurry the bill through all its stages without delay. Who can say how many souls might be lost forever if oleomargarine were once to be introduced among the natives of India? What a fertile field of speculation is opened up by this incidental illustration of the political, social, and religious effects of a simple invention in the art of manipulating fat.

CLEANLINESS IN THE MILK BUSINESS.—When I was in the milk business I tried to be as neat as possible. I always changed my boots and took off my overalls before I got into the milk wagon. We strained the milk three times into a can that stood just back of the cows. Still we had customers that complained. I would see some of them turn up their noses as they came near me. Of course, I called them "dudes." One day a good friend said to me: "I can smell the barn whenever I get within five feet of you. You can't notice anything wrong about yourself, for you are used to it, but your customers are not, and they notice it at once." That set me to thinking. There is a good deal in the idea that people who do the barn work are in danger of

losing that nice discrimination in the matter of smells that their customers possess. We can't be too clean about handling milk and butter. I never could satisfy my customers till I strained the milk outside the barn and changed my clothes entirely.

OLD MILKMAN.

A GOOD MOVE.—The managers of the Brown County Agricultural Society have hit upon a new plan which is noted in the Breeder's Gazette. They propose to invest the surplus funds of the society in Short-horn, Hereford and Holstein-Friesian bulls. These bulls are to be placed in the neighborhoods where several society members live. In this way it is calculated that the value of the live stock will be greatly increased, and it is probable that many farmers will be led to take an active part in the society, who otherwise would not join. The idea was a good one—others might follow it.

The Herdsman.

THE ARITHMETIC OF GOOD BREEDING.

E. W. PERRY.

Worth, in dollars, of the services of good bulls; what "might have been;" productive value of a good bull; comparative value of "scrubs" and good grades; in the shambles and the dairy; differences in prices for a series of years; specimen losses in Texas; $9,000,000, the cost of pure-bred bulls there, would have brought the stockmen from $48,750,000 to $112,500,000; now is the opportune time for improvement.

IN the year 1884 the Department of Agriculture, which is doing good work for the farmers of America, ascertained that there were in this country 45,547,300 cattle. Of these 13,501,206 were milch cows, and 29,046,101 were working oxen and other cattle. The value of these cattle, unimproved, would have been $819,263,787; but of the entire number 18 per cent. were improved by the influence of good blood. The increase in value was equal to 35 per cent, or $287,451,900. That shows with reasonable exactness what the work done by good bulls was worth. To show what increase in wealth cattle owners might have made by using the influence of good blood as fully as they might have used it, I will suppose that the owners of all those cattle had in every instance used highly-bred bulls to improve the entire supply of cattle. It is clear that if the improvement of 18 per cent. was worth $287,451,900 that of the remaining 82 per cent. would at the same rate have equaled $1,309,503,555, which, added to the above sum, would have given $1,596,955,555 as the actual cash value of the influence of the four-legged missionaries whose praise I proclaim. It cannot be said that this could not have been done, for more good bulls than would have been needed to do this great and good work have been sacrificed in their early youth, or cut down in their prime. As there were some 13,501,200 milch cows, it is clear that, allowing to each bull a congregation of 40 female members, 337,530 missionaries would have been required. The value of their work, as shown above, would pay an average of $4,731.30 for the services of each bull. Deduct from that the cost of his keeping and interest on his price, and we have the productive value of each really good bull; yet there are those who will still declare that no bull can be worth the fancy figures asked by breeders—figures ranging from $50 upward.

In 1884 a common "scrub" cow was not worth an average of more than $30; but the half-Jersey or half-Holstein cow at that time sold readily for $50 to $75, and many of those kinds were sold for $100 to $150 each. Suppose a purely-bred Holstein or Jersey bull had begotten each year, from forty cows, thirty-two calves that would have reached maturity, and that half of them were females, the cash value of his services that year would have been, through that one-half of his get alone, and at the lower prices then received for half-breed cows, from $320 to $720. At the higher figures, which were by no means uncommon, the increased value he would have given to those calves would have been from $1,120 to $1,930. Those female calves would have been to the plain farmer who sells milk or butter or cheese actually worth more than the difference in price between them and the scrub or unimproved cows, as any progressive, intelligent dairyman can prove.

But, leaving the consideration of the milk and the butter breeds, let us look at the production of beef, which is perhaps the least profitable use to which our cattle are put. For many years Texas has sent to market an average of a quarter of million beeves. These have averaged some 900 pounds in weight and have not averaged more than $27 in price. During those years grade bullocks averaging 1,000 to 1,200 pounds have sold for 4 cents to 4¾ cents per pound, or for $40 to $57 per head. The difference in price between the two classes was from $13 to $30 per bullock, making a total difference of $3,350,000 to $7,500,000 between the prices Texas might have received and those she did get for her 250,000 cattle yearly. This has been going on for fifteen years, for although Texas now sends many improved cattle to market she continues to send about a quarter of a million unimproved beeves each year. To beget the 250,000 improved cattle each year, Texas would have required 6,000 purely-bred bulls. At $500 each they would have cost $3,000,000. If each had served five years as he could have done with profit, three lots costing $9,000,000 would have been needed. But if those bulls had added only two cents per pound to the selling value of the 250,000 cattle they would have increased by some $4,500,000 the annual income of Texas, even if they had added nothing to the weight of the stock. The fact is that $9,000,000 worth of bulls would no doubt have brought to the purses of the Texas cattlemen, in these 15 years, $48,750,000 to $112,500,000 more than they have received.

There is enough in these few simple examples in the arithmetic of good breeding to give an idea of the value of the influence of pure blood; and many more illustrations can be given if need be. Is it not high time to preach the gospel of pure blood to the masses, to that vast multitude who having ears hear not, or hearing do not heed? Was there ever a better time than this in which to begin the work of improvement? We have got the breeders down now—their best cattle sell for less than they could have been sold for three years ago, and their good stock, not quite so fancy perhaps as the best, are selling for little more than two-thirds the sums they would have readily brought then. Cattle of all kinds are going at low figures; the cattle business is in a hollow between the waves; will it not be a very good plan indeed to go in now that we may be ready to rise on the coming wave to prosperity? Is it not a duty to ourselves, our children and the nation to so add to its wealth that there will be billions of dollars more than there will be if we go on in the old, slipshod, ignorant way, to spend in educating the coming generations?

Cook Co., Ill.

A CHEAP STOCK RACK was made by us in one evening by using three 6-inch boards the length of the wagon box, for each side, six 6-inch boards four feet long for standards for each side, to be bolted with ⅝-inch bolts three inches long; standards to be fastened 3½ inches from the ends of the rack and in center spaces 6 inches; length of standards below bottom board 18 inches. Bolt a 2 x 2-inch strip 30 inches long on each end of side boards for cleats, for the end gates. The end gates are made of the same material as the sides—only bolt 4 standards 8 inches wide, 4 inches from each end. Use iron rod through the middle boards on each end as in the end gates of a wagon box: 42 ⅜-inch bolts are necessary. The rack may be painted. The standards of the rack are to slip over or down on the outside and inside of the wagon box.

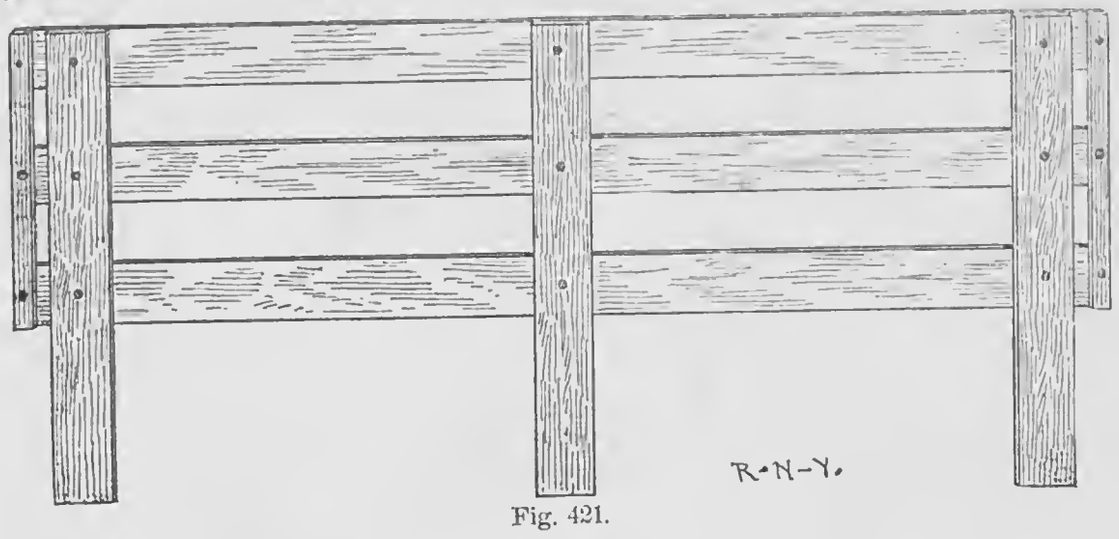


Fig. 421.

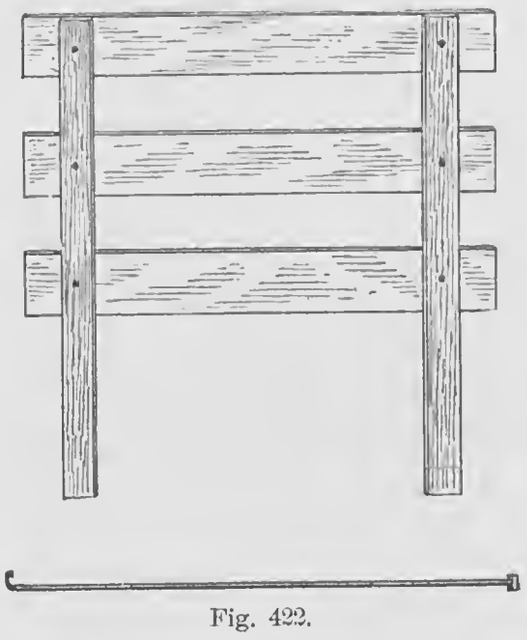


Fig. 422.

GEO. PELTON & SONS.

Sauk Co., Wis.

ONE thousand sheep were recently poisoned in South Africa by the use of an arsenical powder dip. The sheep were dipped for the scab. After a second dipping they died in great agony in consequence of the absorption of the arsenic through the skin. With the efficient yet absolutely safe means of exterminating insect pests in our hands to-day, we have no place for poisons on living animals.

Horseman.

THE BREED OF HORSES IN FRANCE.

THE improvement in the breeds of horses is helped considerably by the Government, which each year appropriates certain money which is paid in awards to successful horsemen. Each year a report is furnished by the Government, which shows the number of horses and their values at the various establishments. This report has just been published and states that the total number of sires in the 22 depots belonging to the State was 2,517 at the beginning of last year, and that out of this total, 2,463 were in actual use. The loss was 43 by death, and 219 were cast, so that 262 vacancies have to be filled up. The total number of stallions belonging to private individuals which had received the State certificate of approval was 1,308, and of these 260 have since died or been rejected as unsound. Nearly a fourth of the stallions belonging to the State as well as the approved ones were weeded out for roaring or other affections of the throat or lungs. Out of the 242 sires purchased during the year 162 were half-breeds, 50 cart-horses, 20 Thoroughbreds, and the rest Arabs. Of the 20 Thoroughbreds five were bought in England and cost $37,500. During the past year 784 Thoroughbreds were foaled in France, and the total amount of the prize-money given at the various meetings was more than $1,000,000, so that owners of Thoroughbreds have plenty of opportunities for making them pay their way, more in proportion than in any country in the world. The number of Thoroughbred mares on the stud-book last year was 1,997, or 51 fewer than in 1884. Out of the 3,734 stallions belonging to the State or approved, 288, or not quite eight per cent., were Thoroughbreds. There were 261 Arabs, 2,385 half-breeds of all kinds, and 800 cart-horses. Altogether there were 189,078 mares. The exports, which in 1884 exceeded the imports by 3,320 head, last year rose to 13,481 head. This is owing to the large number of Percherons that are coming to this country.

CANADIAN HORSES UNFIT FOR CAVALRY.—The committee sent by the English government to examine Canadian horses with a view to purchasing some for cavalry purposes, after inspecting over 2,000 horses on the northwestern ranches, report that they have been able to obtain very few that meet their requirements for the following reasons:—1. Being too young. 2. Being too small, with shoulders more for draught than riding purposes. 3. Being unsound. A year or two would remedy the first objection; but to obviate the second the use of thoroughbred sires is necessary. More attention must be paid to handling and breaking the yearling colts; scarring all over with branding irons must be avoided. As regards soundness, much may be due to the sire, but a great deal is due to the rough handling and lassoing of the young stock, which in some cases nearly kills them outright, and oftener is the cause of curbs, spavins, etc., being sprung by an undue exertion of the joint in the struggles of the young stock during their rough treatment. The Clydesdale and Percheron seem to be favorites, and the Commissioners say these may be good as heavy draft stock producers, but for all saddle purposes they are utterly useless. The cross between these large sires and the undersized mares is too violent. No one would think of crossing the Newfoundland and the toy terrier, and hope to produce an animal of any value or use, and it will be found the same with horses so different in size, and damage will be done that never can be eradicated.

The Swineherd.

PICKLED MEATS, ETC.

COL. F. D. CURTIS.

BESIDES the different forms of dressed pork, there are standard pickled meats, shipped in pickle in casks for both domestic and foreign trade. Large quantities of bacon packed in salt dry, in boxes, are shipped abroad and smoked on the other side of the ocean. The following are the descriptions of standard pickled meats, the cut meats and those cut in imitation of the British "cuts." The list also includes lard as required to be tried and put up for the trade:

STANDARD SWEET PICKLED HAMS should be cut short and well rounded at the butt, properly faced, shank cut in or about the hock joint; to be reasonably uniform in size, and to average, in lots, not to exceed 16 pounds. Three hundred pounds, block weight, shall be packed in each tierce, with either 24 pounds of salt, three quarts of good sirup, 12 ounces of saltpeter, the tierce to be filled with water; or the tierce is to be filled with sweet pickle made to above standard.

STANDARD SWEET PICKLED SHOULDERS should be cut and trimmed, reasonably uniform in size, and to average in lots not to exceed 16 pounds. Three hundred pounds, block weight, shall be packed in each tierce. Pickle the same as used for hams.

NEW YORK SHOULDERS should be made from small, smooth hogs, shank cut off one inch above knee joint, trimmed close and smooth, reasonably uniform in size, and to average, in lots, not to exceed 14 pounds. Three hundred pounds, block weight, shall be packed in each tierce. Pickle the same as used for hams.

SWEET PICKLED BELLIES should be made from nice, smooth hogs, well cut and trimmed, to average, in lots, not to exceed 14 pounds. Three hundred pounds, block weight, shall be packed in each tierce. Pickle the same as used for hams.

BRANDING.—The packer's name, location, number of pieces and date of packing shall be branded on the head of each package of pickled meats at the time of packing. All pickled meats should be sized when packed; the light, medium and heavy separately, as nearly as practicable.

CUT MEATS.

HAMS should be cut short, well rounded at the butt, properly faced, cut in or above the hock joint.

SHOULDERS should be cut as closely as possible to the back part of the fore arm joint, butted off square on top: neck bone and spare ribs taken out, blood vein lifted and cut out, breast flap to be trimmed off, and foot to be cut off in or above the knee-joint.

BLADED SHOULDERS should be cut the same as standard shoulders, except that the shoulder blade is to be taken out and the corners rounded.

ROUGH SIDES should be made by slitting the hog through or on one side of the back bone, and an equal proportion of both sides must be delivered on sales to make them standard.

SHORT CLEAR SIDES: the back-bone and ribs should be taken out, the hench-bone or breast-bone sawed or cut down smooth and even with the face of the side; the feather or blade-bone is not to be taken out, and the sides are not to be backstrapped or flanked.

SHORT-RIB SIDES: the back-bone should be taken out, the hench-bone and breast-bone sawed or cut down even with the face of the side, the feather or blade-bone not to be taken out, and sides not to be backstrapped or flanked.

LONG CLEAR SIDES; the back-bone, shoulder-bones and ribs must be taken out, the leg cut off close to the brisket, the hench-bone and breast-bone be sawed or cut down smooth and even with the face of the side, and the sides are not to be backstrapped or flanked.

CUMBERLAND SIDES: the side and shoulder should be left together in one piece; the leg be cut off below the knee-joint; shoulder-ribs, neck-bone, and back-bone taken out; the blood vein lifted and cut out; the hench-bone and breast-bone sawed or cut down smooth and even with the face of the side, and sides not to be backstrapped or flanked.

LONG-RIB SIDES should be made in the same way as Cumberlands, except that the shoulder-bones must be taken out and leg cut off close to the brisket.

STRETFORD SIDES should be made from hogs weighing about 140 to 160 pounds net: the back-bone and half of the ribs should be taken out,

the blade-bone taken out, knuckle left in, and leg cut off close to the breast.

BIRMINGHAM SIDES should be made from hogs weighing about 170 pounds net; the backbone, ribs, blade-bone to be taken out, the pocket piece cut out and pocket nicely rounded, knuckle-bone left in, and the leg cut off close to the breast.

SOUTH STAFFORDSHIRE SIDES should be made the same as Birminghams, except that the loin should be taken out fully to the top of the shoulder-blade, leaving only a thin strip of lean along the back; knuckle left in, and leg cut off close to the breast.

YORKSHIRE SIDES should be made the same as Cumberlands, with ribs out and legs cut off about two inches above the knee.

IRISH CUT SIDES should be made same as Long Clear, except top of the pocket cut off, knuckle-bone left in.

LONG HAMS should be cut from the side by separating with a knife the hip bone from the rump, properly rounded out, foot unjointed at first joint below the hock joint.

SOUTH STAFFORDSHIRE HAMS should be cut short, hip-bone taken out at socket-joint, hock unjointed at first joint below the hock joint.

IN PACKING MEATS in boxes, the pieces should be classified, the light, the medium and the heavy separately, as nearly as practicable, in packages made to suit the different sizes; all the salt possible to get in is put into the boxes, between the layers of meat and on the top and bottom. Cut meats, also hams and shoulders are packed in the slaughter-houses in tiers with salt at the bottom and between. Meat is cured in this way by the absorption of the salt. The meat is left in this way from six to eight weeks.

LARD.

CHOICE LARD to be made from leaf and trimmings only, either steam or kettle-rendered, the manner of rendering to be branded on each tierce.

PRIME STEAM LARD shall be standard when made from the head, gut, leaf and trimmings, in the proportions in which the same came from the hog, but shall not include any material which has been salted.

Much of the above matter is taken from the report of the U. S. Pork Commission of which I was a member, and the correctness of the descriptions I know from an extended personal observation.

The Apiarian.

SLATTED HONEY BOARD AND DOUBLE BEE SPACE.

PROF. A. J. COOK.

Extracted and comb honey; best package for comb honey; advantages of the slatted honey-board; its size; how to use it; double bee space; use of both; the only objection.

WHILE it is a fact that extracted honey possesses all the intrinsic excellence of comb honey, and will go much further, yet it is equally true that comb honey, because of its appearance and the fact that the comb acts as a wholesome and pleasant dilutent, will ever find readiest market. Fine comb honey is so attractive that it rarely goes begging. Extracted honey, because of its real excellence and cheapness, will surely be in great and ever-increasing demand as its virtues come more and more to be understood and appreciated, as they must be; but while the bee-keeper will have to push the sale of his extracted honey, the markets will come seeking after his beautiful comb honey. Hence, there is an incentive for every bee-keeper to study the methods of securing a fine harvest of comb honey.

Any novice can secure a good crop of extracted honey, while only the expert can secure as much of the beautiful comb. Some of our bee-keepers say they can secure only about one-half as much comb as extracted honey. Others say they can secure nearly as much of the comb. Surely, then, it behooves every bee-keeper to study the methods of comb honey production, that he may secure the most of that which sells best. One of the things we must look after in working for comb honey is to get our product in the neatest form with the least labor. There is no need of urging all to use the one-pound sections, made of the whitish poplar or bass-wood. All know that these alone can compete in the honey markets of to-day. It is just as important to keep these sections neat and clean. Of course, they can be scraped, but this is attended with labor and danger. How much better to secure our sections full of honey with the very minimum of propolis or bee-glue to mar their beauty. To do this we find the Hedden slatted honey-board just the thing. This is made exactly the size of the top of the hive; that is, the part of the hive containing the brood. If the outside measure of the hive is 14 by 20 inches, the honey-board will be 14 by 20 inches. For the Langstroth hive, I make it 13 by 19¼ inches. The slats are tacked to a rabbited rim, which, below, is in the same plane as the slats, but which projects above three-eighths of an inch. Thus while the whole under surface is flat and of the same level, above the rim projects three-eighths of an inch above the balance of the honey-board. The slats which need not be more than one-fourth of an inch wide are three-eighths of an inch apart, and are so made as to break joints with the frames below. If the frames run lengthwise, as do the Langstroth, then the slats should extend lengthwise of the hive. If cross-wise, as do Gallup frames, then the slats of the honey-board should run cross-wise. This honey-board is used between the brood frame and section case, and if any one is troubled with the queen going into the section case to lay eggs, the zinc excluders should be fastened in the three-eighths inch spaces between the slats, then the workers can go into the sections while the queen cannot. Now, if we use this honey-board in connection with the double bee space I find we secure our sections very neat and clean—often as free from stain as when freshly put into the hive.

To secure the double bee space, the brood frames should come within three-eighths of an inch of the top of the hive. That is, if the rabbits for the frames are three-quarters of an inch deep, and the top bars of the frames three-eighths of an inch thick, we shall just secure this space. Now, when the slatted honey-board is laid on to the hive we note that three-eighths of an inch is the perpendicular distance between the plane of the top of the brood-frames and that of the bottom of the honey-board, and if our sections come in a plane with the bottom of the honey case, and this is set on the slatted honey-board, we have a second three-eighths inch space between the upper surface of the slats and the lower surface of the sections. With these two spaces, even in crowded hives, the bees keep the sections mainly clean. I feel sure that no one, after once trying these slatted honey-boards in connection with the double space, will ever discard them. I have now used them three years and am more than pleased with my success.

There is just one thing that might be considered an objection to this arrangement—everything must be just right, or it does not work well. Get the space a little too deep or shallow and the bees stick in the glue and brace comb with an energy that may well discourage the bee-keeper. But why not have it just right. Accuracy should be the motto in hive-making.

Ag'l Coll., Lansing, Mich.

Farm Economy.

THAT MANURE QUESTION.

MR. STEWART'S advice as to the application of manure to the land, page 656 of the RURAL, is correct, when the soil is a heavy loam and especially a stiff clay. For years past I have practiced this method of plowing it in as fresh as possible on such land, before freezing weather comes on in Autumn; and again early in the Spring, although the application is not so beneficial then for the coming crops. But in a very sandy or light gravelly soil, I have found it best to cart out and spread the manure as fast as it is made in the stables, broadcast on the land, from November to Spring, and not plow it in till just before planting. Such soils suffer considerably when exposed naked to the sun and wind, and well littered stable manure, when Autumn weeds are not allowed to grow over them, is the only thing proper for their protection, as a mulch of leaves, straw, or hay is rolled up in heaps and more or less blown off. I could never discover leaching of any consequence from this well littered stable manure. For the use of some rotted manure for a special purpose the coming Summer, I have occasionally made a bed, about four feet thick of stable manure, from November to December, on a patch of nearly barren white sand. I let this lie there for five months or more, and yet when removed, I could not find that the sand was discolored over two or three inches deep, and that slightly; and the few weeds which grew up on this patch the following Summer, were no ranker than those on the soil alongside. This shows that it got little fertilization from the manure bed which lay there so long. Commercial fertilizers, such as guano, superphosphate, etc., leach rapidly through light soils when cultivated in hoed crops; but are very beneficial spread broadcast on wheat, rye and oats well up in the Spring, and also on grass. D.

Farm Topics.

CORRESPONDENTS' VIEWS.

THIS season among my seedling grapes, planted among the bearing vines, was a male with the sweetest and most profuse bloom I ever saw. When the Rose Bugs came they centered on this vine. To get rid of them I had only to visit this vine twice a day and destroy them; rarely was a chaffer found on any other vine among 140 varieties. The pecan trees froze to within four feet of the ground last Winter; diameter five inches. Two that barely exist have passed the Winters with sublime indifference for some fifteen years. The thrifty are all conquered by the Winter. The Japan Chestnuts had from one to three nuts in a burr, oftener one and two than three.

Bucks Co., Penn. WM. K. STAVELY.

WHEN strawberries first came we left one quarter of our mouth open to say they were "God's best gift to man." We were forced to say the same thing about cherries, raspberries, peaches, melons and grapes. Looking back over the season, it is hard to say which was the best. We have, down cellar, a can of fruit for every day in the Winter. We believe in fruit. It makes life "less of a chore"—as the old lady said. M. S.

Lenawee Co., Mich.

ALMOST every farmer has at some time met with an accident on the road. A broken shaft or trace will make bad work in a lonely place. Even those who have been troubled the most rarely make provision for an accident. I have a hook on the side of my wagon where a bunch of stout twine is always hanging. A spool of copper wire is a fine thing to have under the seat. C. H. B.

Monroe Co., N. Y.

[A "kit" or light box containing just the articles needed in case of a "break-down" is now on the market. It can be carried under the seat, and is a great convenience.]

SOME people wonder why it is so hard to induce city or town workmen to go into the country to live. It is usual to point to the crowded condition of labor in the towns and to the comparative space in the country. It is easy to say that a man could easily make a living in the country, but it is harder to do it. I find the great complaint among workmen who try to make farmers out of themselves is that they miss pay day. They have lived so long on a cash basis that when they come to try and farm for themselves, and have to pay themselves wages, they feel mixed up.

Fitchburg, Mass. S. D. L.

AN agricultural paper ought to be like a great farmers' club. Members don't go to a club simply to hear somebody preach. They can exchange ideas and get new facts from the other members. Every good farmer has some little contrivance that suits him. Perhaps he has learned some little trick about raising a crop, that is worth money to him. Let him send these things in and get others in return. Nobody could estimate the influence and value of a paper with such a membership.

Orange Co., N. Y. M. H. C. G.

"GOING TO LAW" is poor business. How many farmers would do it if they could see what kind of a country the road runs through? I never saw a law case where both parties were satisfied with the result; and I know of many where neither party could claim complete satisfaction. If the farmer could see how hungry lawyers are for fees, the kind of men who are apt to make up juries, and the long hours of worry the case will cost him, he would do almost anything rather than go to law. The great majority of cases could be settled quietly at far less cost than an appeal to "law" will bring. There are too many scrub lawyers now. They feed on the disputes of farmers. Take the work away from them by keeping cool in all disputes. "WITNESS."

LARGE FARMS IN CALIFORNIA. — Forty thousand acres in one farm! Such a statement sounds like prosperity; but is it? The lands of California were unfortunately divided into large tracts. Through the Sacramento and San Joaquin Valleys there are many farms containing thousands of acres. The routine work is plowing and seeding through the Fall and Winter; eight or 10 men, with mules, gang plows and seeders doing such work on a farm of 6,000 acres. The harvest commences in June and lasts, with thrashing, until about the middle of September. Few buildings are necessary; for the climate is such that the grain is stacked and thrashed in the field, and can be hauled from there to the nearest railroad station. The grain is handled in sacks, and elevators are not necessary. Perhaps 20 men, on the same farm, will be engaged in this work. The owner lives in some town or city; his foreman, or overseer, lives on the place. The work is done by tramp workmen who seldom stay in one place more than one season. What is the result? The soil is continuously robbed by successive crops of wheat or barley—everything is taken away and nothing is returned. Every large ranch will have its "home place" which is the headquarters of the workmen and mules; but a country divided in this way has no villages, no schools, no society, and tramps are encouraged instead of steady citizens who will make the country really rich. Many other States and Territories are afflicted with "big farms." Such a system has no place in our country, and it is a relic of feudal ages, and it must go down before the progressive intelligence of the American farmers, who work for themselves and are independent because they work. B. CHARLES.

TWINE FOR SELF-BINDERS.—It is estimated that the farmers of this country consume each year on self-binding harvesters, 35,000 tons of twine. This would make a piece long enough to go more than six times around the earth. About 1,200 feet of twine are used per acre. This should cost about 25 cents. Manilla hemp makes the best twine. It sells for more than that made from Sisal hemp, yet it is cheaper in the end. Sisal hemp breaks much oftener while running through the binder. Every break necessitates a stop. These stops in the wheat field cost time. Time is money. It pays well to get a good quality of twine.

A "SADDLE SULKY" has been invented. The axle is curved upward so that the rear of the horse comes directly between the wheels. The shafts are continuous, reaching around the rear of the horse. The seat is practically a saddle fastened by means of strong springs to the shaft. The driver thus sits with his feet resting on the shafts almost at the horse's flanks.

The Vineyard.

LADY DOWNES GRAPE RAISED IN THE OPEN AIR IN ONTARIO, CANADA.

I SENT the RURAL, by express from Detroit, a bunch of grapes to show that foreign grapes can be grown in the open air here. The variety is Lady Downes, one of the very latest to ripen. If it ripens here I think there would be no difficulty in ripening the earlier sorts. I have only one vine with a three-year-old shoot four feet high, on which were eight bunches, some of them larger and finer than the one sent, but a severe hail-storm wrecked the best of them, after which I bagged them. The bag was too small and burst with the expansion of the grapes, so that the weather got in and took the bloom off them before I noticed. The vine is trained to a pole in the open ground, and has not been manured as it should have been. It is planted slanting, so that the stem may be laid down and covered with a few inches of earth in Winter. I hope to have better specimens next year, and will bag them earlier, though bagging makes them ripen later. One bunch not bagged was fully colored a month ago. JAMES DOUGALL.

Windsor, Ont.

R. N.-Y.—The facts stated above by Mr. Dougall should be instructive to many RURAL readers. It is pretty well known that many kinds of so-called tender foreign grapes (Vitis vinifera) do not thrive in Northern climates, rather because of enfeeblement from mildew than from sensitiveness to cold. We have raised seedlings in the open grounds from the "Malaga" white grape, and carried them through the Winter with protection. The seedlings died the next year from mildew of both the stem and leaves. Now, in many localities where the soil is covered with snow during the Winter, certain varieties of the Vinifera class would do well if they were not enfeebled by mildew and if the canes were laid down and protected during the cold season. The bunch of grapes sent by Mr. Dougall is of medium size—the berries large and of very fine quality. One thing notable is that the flesh is less meaty (slightly inclining to pulp) than the flesh of the same grape raised in houses.

Horticultural.

PUDDLING AND WATERING PLANTS.

THE RURAL'S report of the Cleveland meeting of the American Horticultural Society mentions Mr. Greiner's essay on Plant Setting, but gives none of his ideas. In the Farm and Garden Mr. Greiner gives a summary of the points brought out in the essay referred to. Two of his positions as there outlined, are at variance with my practice; and one of them, I consider, to be entirely mistaken. My experience with plants is confined to sweet potatoes;

but I take it that the best treatment for them is likewise best for most other plants in the particulars to be noticed—puddling and wateriug.

Mr. Greiner says: "Plants set out just as they came from the seed bed, . . . do exactly as well as those the roots of which were dipped in water or mud before transplanting. *The famous puddling is of no account.*" The *italics* are his. It may be that an active amateur within the snug limits of a village garden, can set out plants much as they came from the seed-bed, but I do not think it is possible where the plant-setting is on a larger scale; for in any extended operations a good many plants will of necessity be out of the ground at the same time—in transit, distributed for the convenience of the planters, etc.—and if handled just as they are pulled, it is my observation that before some get in the ground the moisture will be evaporated from their roots. Even where plants have been taken out of water, in quantity sufficient for setting a short row only, I have found that in drying weather it is impossible to keep some of them from drying out. Plants are apt to die if their roots become even partially dry; while if puddled, and every care is used, many will be lost in unfavorable weather, unless they are also properly watered.

Many gardeners wait for what they call a "season" for plant-setting, but I prefer to begin when I get ready, and the plants are the right size for setting, and keep at it till it is finished, regardless of a hot sun and thirsty soil. While this necessitates watering, it insures, in my experience, a perfect "stand." Mr. Greiner finds watering a dry soil before setting of "decided advantage;" but he makes no mention of the plan of watering at the instant of setting—as a part of the operation of setting out—which seems to me by far the best. Not to go into details, this is done by partially setting the plant, using no pressure, and leaving a cup-shaped cavity around it sufficient to hold a gill or more of water, which is filled from a watering pot. The water "sets" the dirt around the rootlets and stem of the plant far closer than any amount of pressure can do it; and with strong plants, previously puddled, substantially insures growth. As soon as the water soaks away, the "cup" is filled with dry earth—called in gardener's parlance, "dusting"—which prevents the baking of the soil around the plant.

The expense of puddling I should not estimate at more than 10 cents per thousand plants. The cost of watering depends largely upon the convenience of water for loading and the length of haul. When the haul is not more than a mile and the water can be dipped out of a stream or pond directly in to the water-wagon, one man and team can furnish water for setting 10,000 plants a day. Counting 10,000 plants a day's setting, without water, for three men, it will take just four men to water and set that number in a day; which at $2.50 per day for man and team and $1.25 for laborers, makes the additional cost of setting with water, over setting without, $3.75 for 10,000 plants, or 37½ cents per thousand. The expense of watering will be somewhat reduced if a larger number is taken as a day's work. A "gang" of four men can set 16,000 plants a day, as a regular day's work; and if the water is near-by and convenient of access, one water-wagon can keep two gangs going.

Wyandotte Co., Kans. EDWIN TAYLOR.

"CONDENSED STEWED TOMATOES."

At the stores and restaurants of late we have been confronted by the above sign. Economy, convenience and extra flavor are the three points claimed for this new preparation, which is coming largely into use. Vast quantities have been put up at the canning factory of Thurber, Whyland & Co., Moorestown, N. J. By means of evaporation and condensation the bulk of the tomato is reduced about one-third, while the nutritive qualities and the full, rich taste of the fresh fruit are preserved. The "Baldwin" Tomato is used by this firm. Most of the larger canning establishments use kinds of tomatoes of their own production. A tomato for canning should be without a central seed core and possess considerable firmness and be of fine quality. Great improvements have been made of late years both in the quality of the vegetable and in methods of canning. The demand increases with the improvement in quality. Most farmers' wives seem to think they can buy canned corn and tomatoes cheaper than they can put them up at home.

"POTATO-LEAVED" TOMATOES.

The Mikado, *alias* Turner's Hybrid, is not the only tomato with the broad, potato-like leaf, as one would suppose from editorial remarks in a recent RURAL. The "Potato Leaf" sent out by Mr. Livingston the past season is quite distinct from the Mikado. It might be called a potato-leaved Acme, though with me the fruit averaged a little smaller than that of the latter. [We were impressed that this was merely a superior selection of the Mikado or Turner's Hybrid.—EDS.] In 1883 I grew a broad-leaved variety under the name of Key's Early Prolific, that very closely resembled the Mikado in foliage, but the fruit was very much smaller, and scarlet instead of purplish red. It was also called Broad-leaved Dwarf. E. S. GOFF.

THE RURAL states—page 627—that it does not know whether the Netted Gem Cantaloupe and Golden Jenny are identical. I find them different. The Netted Gem is of medium size, deeply netted, nearly round, flesh thick and of delicious flavor. The Golden Jenny is smaller and with a smoother skin. It is of fine quality. J. S. B.

Mercer Co., N. J.

Pomological.

NATIVE PLUMS.

AMONG Northern fruit-growers a good deal of interest has been developed within the past few years in regard to native plums. The kinds commonly cultivated in the Eastern and Middle States cannot be successfully grown in this climate. The fruit of the typical native is not very desirable on account of its acerbity, but it enters largely into home use where the others can not be grown, its extreme softness and non-keeping qualities unfitting it for market. Though it is indigenous to nearly all parts of the country and adapted to almost any soil, no great success has attended the attempts to bring it into cultivation. Some of the Chickasaws are attracting attention at the South, and a few Northern varieties as far as they have been tested are believed to be well worthy of general cultivation. It is believed also by our most observant fruit growers that success, with the delicious flavor and other excellent qualities of the best Europeans, but cultivation and hybridizing may yet enable us to grow varieties that will compare favorably with any of them.

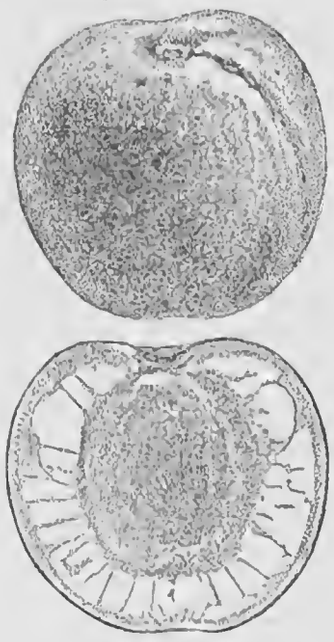
D. B. Wier, who is good authority, having had much experience, says that the finest varieties of natives he has seen, were from the woods of Northern Wisconsin. Some of the best natives brought to notice have been found on the margins of the small streams entering the Mississippi, in Wisconsin, Minnesota and Northern Iowa. Among them, the Rollingstone, as a dessert plum, deserves especial mention. It was found growing near the Rollingstone Creek in Winona Co., Minn., and has been cultivated till its character appears to be well established. The fruit when perfectly ripe is very firm and sweet, is easily peeled and entirely free from the acerbity common to other natives. The tree is perfectly hardy as to cold, an annual bearer, and bears when much younger than most other kinds. It is of low, spreading habit, fine foliage, and easily trained into a beautiful form. Trees twenty years old are still vigorous and productive.

A prominent experimenter, Wyman Elliott, says we frequently find a very good wild plum on a tree entirely worthless when under cultivation. While we have in these trees a good ground-work or starting point for improvement, it is still hoped that others will be brought to notice combining all the desirable qualities of a perfect fruit. O. M. LORD.

Winona Co., Minn.

THE ROLLINGSTONE PLUM.

WHILE I was attending the Minnesota State Fair, in 1885, Mr. J. S. Harris, Superintendent of the Horticultural Department, called my attention to what was thought to be a superior plum for a native, named the Rollingstone. There were but a few specimens on exhibition, and owing to the lateness of the season for this variety all were past the stage of maturity at which any test could be made of their quality. On August 23rd of this year I received a small package of the Rollingstone Plum by express from Mr. O. M. Lord, Minnesota City, Minn., the gentleman who first transplanted, from a grove of wild plums, the tree the fruit of which has received the name Rollingstone. When the specimens came to hand at least 70 hours had elapsed since they were placed in the hands of the express company. They were large, round, of a purplish-red color; flesh firm; flavor very good, and they were remarkable for an almost total absence of the bitterness in the skin of almost all of the so-called Canada plums. They are good dessert fruit for a native, and have characteristics from which I should judge they would probably can, preserve, or cook well. Most of the Canada plums are extremely soft, and hence poor keepers. The Rollingstones kept two weeks from the day they came to hand. This variety (see Fig. 419, with pit at 420) may be said to be a favorable sample of the best of the native plums now being cultivated



Figs. 419.

in Wisconsin, Minnesota, and Northern Iowa, a section where, owing to the extreme rigor of the Winter, none of the better varieties of the domestic plum can be grown. It has not been propagated to any considerable extent, and may be said to be untried except on the ground of Mr. Lord. The reputation it has there made has induced very many of the horticulturists of Minnesota to recommend the putting out of trees of this variety for sale, which Mr. Lord has at length consented to do.

Fig. 420.

New Jersey. J. B. ROGERS.

What Others Say.

TIN IN MOLASSES.—Director Jordan of the Maine Ex. Station, according to Bulletin No. 10, has been analyzing samples of molasses with a view to detecting the presence of tin. Of eight samples tested, tin was found in appreciable quantities in six, indicating that tin exists in molasses quite generally at the present time. The claim is made that tin is introduced into molasses in the form of the chloride (muriate), the object of its use being to lighten the color of the molasses and thus improve its appearance. It is also stated that a portion or all of the tin thus introduced separates from the molasses, the completeness of this separation varying greatly in different cases, without doubt. That which remains in solution does not seem to be enough to produce immediate poisonous effects, although it is possible that the continuous presence of tin in human food might prove to be injurious to health. Three grains of chloride of tin are a sufficient quantity to act violently upon the organs of digestion, but even if we were sure that all the tin in molasses remains in the form of the chloride, a person would be obliged to eat a large quantity of molasses at one time in order to poison himself. At the same time it is undoubtedly safer and wiser to eat molasses free from tin, and so it is considered that the presence of this metal in one of our common articles of food is a matter of some public interest. Two or three observations in connection with these analyses Director Jordan considers of importance. 1. The color of molasses seems to have no relation to the amount of sugar it contains, or in other words, to its sweetening power, or food value. The dark brands of molasses are usually cheaper than the light, so that it is economy to use the former where the effect of the color of the molasses upon the appearance of the food is not considered. 2. When it is merely a question of making food sweet, and not of securing the molasses flavor, molasses is very little more economical that granulated sugar, at present prices. A gallon of molasses weighs 11 pounds very nearly. The eight samples analyzed, contained on the average, 65.4 per cent of sugar, or 7.2 pounds to the gallon. Allowing the retail price to average 45 cents per gallon, the cost of the sugar per pound would be 6¼ cents. Nearly one-third of this sugar, however, is glucose, which has a lower sweetening power than granulated sugar, and when we allow for this fact, the cost of sugar in the better grades of molasses must be nearly as large with present prices as when bought in the form of pure granulated sugar.

EXPERIMENTS WITH FERTILIZERS.—Bulletin No. 12 gives the comparative production from different forms of phosphoric acid. Dissolved bone-black, fine ground bone and fine ground S. C. rock are used on separate plots in combination with potash and ammonia, forming "complete" fertilizers in each case. Where dissolved bone-black was used the yield of oats was at the rate of 83 bushels to the acre. Where fine ground bone was used the yield was 77 bushels per acre. Where fine ground South Carolina rock was used the yield was 72 bushels per acre. The plots not fertilized at all averaged 55 bushels per acre. Other plots received potash and ammonia only—that is, no phosphoric acid in any form. The average yield was 65 bushels to the acre. Thus the complete fertilizers with the dissolved bone-black gave an increase of 19 bushels; that with fine ground bone gave an increase of 13 bushels; while that with S. C. rock (not dissolved) gave but eight bushels' increase. Yard manure, 20 tons, gave a yield of 74 bushels per acre. We omit fractions. This is a good series of experiments. We want to know whether the increased cost of superphosphate (phosphate and sulphuric acid) pays. We also want to know whether it pays to use bone phosphoric acid, which costs seven cents a pound, or rock phosphoric acid, which costs two cents a pound.

WHEAT CULTIVATION IN SOUTH AMERICA.—It is announced that the extension of railways in the Argentine Republic has so far progressed as to connect Buenos Ayres and San Juan. This must count for a good deal in extending the area planted to wheat, and concerning which (in South America so much has been written of late In reference to this item the London Miller says that England with her narrow area and teeming population must welcome any accession to the various granaries of the world, and there can be no doubt that the Argentine Republic will enter the ranks of the great wheat-exporting countries of the earth as soon as the means of internal transit are fairly developed. The area of land available for wheat-growing is known to be of very respectable dimensions, and Englishmen may look forward to a time in the not distant future when La Plata wheat will be no insignificant factor in their supply of foreign grain.

REGISTER OF DAIRY COWS.—Robert Turnbull has been writing for the English papers a series of articles on dairy cattle. He considers the Short-horn the best dairy cow. He suggests the establishment of a herd book for pure-bred Short-horn dairy cattle. To be eligible to entry a cow must have given six times her own weight in milk in a year. G. W. Rust suggests that the American Short-horn Society open an appendix or dairy register where first-class dairy cows can be registered. Short-horn breeders have gone in wild pursuit of honors in the beef ring, but it does seem as though Nature intended the Short-horn for the "general purpose" animal after all.

GREAT WASTE OF WOOL GREASE.—At the Tanners' Convention at Boston the other day a delegate pointed out the fact that millions of pounds of wool grease are wasted annually in the United States, which could be saved and used instead of the English and French degras grease so liberally imported for tanners' use. The speaker stated that the viscous, absolutely non-drying oil or grease was being poured into the rivers of the New England and Middle States to the extent of 40,000,000 pounds a year. The woolen manufacturers are polluting the streams with it, but it is expected that loud protests will soon be entered against the practice, and then "necessity, the mother of invention," will devise some means of converting it to commercial uses. It has been proposed to treat wool with naphtha from which the grease can be recovered and purified. The ordinary method of scouring wool is by the use of alkalies, and the European degras is recovered and treated by very cheap labor, hence the low price at which it can be laid down here. Why not adopt here at once the lately discovered French method of making soap from this grease, as described in a recent RURAL.

AS OTHERS SEE US.—Mr. Grant Allen, an English writer, on returning from a recent trip to this country, made the following statement concerning American farmers:

"The farmers in the States are not capitalist farmers, but laboring farmers. The wife has to do all the cooking, housekeeping, and washing for her husband and her sons, by whom the farm is tilled, and also for the hired man if the holding is sufficiently large to justify his employment. They have less leisure than the English laborer, and they dwell more apart. They have no books excepting religious publications of a low intellectual type, and the newspaper. The result is that every one who can live in towns flies from the country as from a pest-smitten city. The overcrowding of the great urban centers is one of the most difficult problems before American society. No one will remain on land longer than is

necessary to enable him to get into the town. The unending monotony and heavy strain of the field labor have produced two ugly phenomena, of which I heard a great deal during my sojourn in America. One is the prevalence of brutal murders. On this side of the Atlantic brutal murders are usually committed in towns; in America it is the reverse. That is one phenomenon. The other is the fact that the women in a good number of cases become insane."

What do you think of the picture? Is it entirely untruthful? Would it be possible to find in this country a community in which a stranger would get such an idea from the appearance of the people?

PERIOD of GESTATION.—

	Days.	Average
In the mare	330 to 400	340
" cow	220 to 320	280
" sheep and goat	143 to 156	150
" pig	104 to 127	120
" dog	55 to 70	63
" cat	50 to 64	55
" rabbit	28 to 30	30

These periods vary with individuals and with breeds; with the sex of the offspring, the age of the dam, and her strength and condition. They also vary because of the length of the season of heat, for this may continue several days, and impregnation may occur some time after service, when the ovule passes through the Fallopian tube. This passage requires four to five days in the cow and sheep, and eight to ten days in the dog. Some animals always carry their young for an abnormal period, either shorter or longer, and this habit becomes characteristic with them. The Dutch cows are said by Professor Brown to be more regular, and to keep closer to the average period of 280 days than any other breed. A mare served by a Thoroughbred horse will go longer with foal than one served by a cold-blooded horse, and a mare goes longer with a mule colt than with a horse colt.

YEARLY COST OF A DAIRY COW.—At a meeting of the Wisconsin Dairyman's Association last Winter, says the Farmers' Review, the question how much it costs to keep a dairy cow through the year came up and a number of prominent dairymen gave their estimates of the cost. Striking an average, the amount was about $35.00 as the cost in Wisconsin. At this rate the value of the products of the cow should not fall below $60.00 per annum, or a profit, above cost of keeping, of $25.00, to make a living business for the dairyman. At this rate twenty cows would only net $500 per year. The Dairyman makes the statement that Sibley & Miller, of Pennsylvania, have learned the secret of keeping a cow a year—and well too—on $12.00. Taking the above figures—$60.00—as the value of the products of the cow, she would give a profit of $48.00, and a dairy of twenty cows would net $960 a year instead of $500, as in Wisconsin. The secret is in growing enormous crops of fodder corn on ground made rich by heavy manuring. These crops were formerly cured, but for the last two years have been converted into silage.

"THE GOOD OLD TIMES."—"I guess that all those farmers who are groaning so about low prices and high taxes and who are longing for the 'good old times' don't remember much about these same 'good old times,'" said a veteran Orange County farmer, at Goshen, New York, the other day. "I can remember," he said, "when we were compelled to haul our grain, butter, pork, and eggs all the way to Newburg, going one day and returning the next. We generally got 15 cents a bushel for oats and 10 cents a pound for butter. Seventy-five cents a bushel for wheat was a fancy price. If we got six or eight cents a dozen for eggs we thought we were doing well. Nice, corn-fed pork, dressed, we carted to market for $2 a hundred. The butter we put on the market in those days was the genuine Orange County article, yellow as gold and as hard as a walnut. I've sold tubful after tubful of butter for 10 cents a pound that would not me 75 cents easy if I had it, or any like it, to sell now. That was long before the Erie Railway came through here and put us up to selling our milk instead of making it into butter. We didn't have any lime-preserved eggs in those days to sell, either. As for taxes I paid $100 on my farm of 100 acres when I was getting only 10 cents a pound for my butter. On the same farm now I pay $42.50, and my dairy brings me the year round what is equal to nearly three times ten cents a pound for butter. There is a great deal of humbug, I tell you, in this mourning for the good old times, and I know it."

MILK AT LESS THAN ONE CENT A QUART.—Experiments have been made at the Massachusetts Agricultural Experiment Station to determine the cost of a quart of milk when feeding various kinds of food in different combinations. These consisted of bran, shorts, corn meal, gluten meal (the refuse from glucose factories), hay, corn fodder and corn silage. The result is reported as follows: In feeding the bran, or shorts, corn meal and gluten meal, 3¼ pounds' weight of each was used. Two of the foods were also combined, making 6½ pounds to feed each cow daily, and at times a combination of three kinds was used, making 9¾ pounds' feed daily to each cow. The remaining food was either hay, dry corn fodder or corn silage. The highest amount of hay eaten by any cow in one day was 20 pounds, and of silage 55 pounds. The apparent bulk of the silage over the hay, as shown by weight, may be explained by the fact that the hay is dry while silage is juicy. The highest cost of milk per quart was from a liberal hay and grain feed, being 2.03 cents per quart. The milk produced at the lowest cost was from a moderate feeding of silage and corn meal, and was but .83 cent per quart. It may be noticed, therefore, that a quart of milk produced by feeding hay and grain costs as much as 2¼ quarts produced by feeding silage and corn meal, and so far as the quality of the milk was concerned under the varying conditions of feed given, no serious alteration in its composition was noticed.

M. CHARLES GIRARD, chemist of Paris recently amused himself by investigation of the ingredients of a beautiful red currant jelly charmingly put up for export to the United States. There was not an atom of fruit in the mass, as was demonstrated by the adding to it of methylated alcohol, which would have turned it green had it contained any fruit acid. It was found to consist of gelatine, sweetened with glycerine residue, colored with pichsine (a poisonous mineral extract) and flavored with no one knows what. A great many people in this country imagine no currant jelly so good as that which is imported from France.

TRUE INWARDNESS.

AT the recent London Dairy Show, the prizes went to the cows giving the largest yield of richest milk. There is naturally some fault found with this system of judging. The cost of production should always be taken into account. A cow that gives 20 quarts of milk with a profit of only five per cent. on the cost of feed, is less profitable than one that gives 15 quarts with a profit of 10 per cent. The best cow is the most profitable. Reckoned in this way, some of the smaller breeds will beat the larger.

MR. ROBERT DOUGLAS, of Waukegan, Ill., has done a great deal to bring the merits of the Wild Black Cherry (Prunus serotina) before the people, both East and West. He says it grows rapidly in all the tree-bearing territory east of the Rockies, and this can not be said of any other forest tree of so much value.

MR. GREGORY, in the Weekly Press, says no one can keep squashes to advantage until he has learned to keep the temperature of the storehouse near the freezing point. The great desiderata are a low temperature and a dry air.

MR. HENRY STEWART, who has had some experience with sheep in North Carolina, has found that they go through the Winter better after having been sheared, and stand the cold rains and storms better than with a thick fleece on them. Some pure Cheviot sheep suffered severely with their fleece five or six inches in length, and some of the ewes were unable to rise on account of the weight of the water in the wool after a night's heavy rain. With a thin fleece the water is shed and shaken off, and the sheep do not suffer from the cold. Hence fall shearing, even of the spring lambs, Mr. Stewart thinks, is good economy.

THE cow must be kindly treated or the milk is poisoned, says George T. Angell. Milkmaids who can sing while milking are paid a higher price in Switzerland than those who cannot.

ACCORDING to the Government returns there are in Great Britain about 900,000 agricultural laborers, farm servants and cottagers. About one in 50, namely, 17,302, have either a run on a farm for a cow, or land on which to keep a cow.

HERE is what Professor G. T. Brown, professional head of the English Agricultural Department, says of inoculation in connection with contagious pleuro-pneumonia among cattle. "If inoculation is practiced at all as an alternative to slaughter in the case of cattle which have been exposed to the contagion of pleuro-pneumonia, but are not discoverably affected, the inoculated cattle should be kept in the infected place until they are in condition for the butcher, and the infected place should not be declared free while any of the inoculated cattle remain alive." It will generally be agreed, after this declaration, that stamping out is the easier way of getting rid of the disease.

THERE are several reasons, Mr. Stewart says, why any practical dairyman will use salt dry and not dissolved in brine for the purpose of butter making, but the greatest of all is the simple fact that butter cannot be salted with brine unless the liquid is actually mixed with it, and this mixture of water would be an adulteration and a fraud upon the consumer.

AT the Rural Grounds we are now (Oct. 25) eating the new pear Dr. Reeder. It is medium in size—larger than Seckel and otherwise, as to appearance, much the same. In quality it is more juicy, less sweet, not quite so fine-fleshed, but more sprightly. The tree has borne a very fair crop.

A CLASS in vocal music or a singing school is an excellent thing for rural neighborhoods during the Winter, says the Orange Co. Farmer. Music and books will make the poorest home brighter.

A WRITER in our esteemed contemporary the Chatham Courier, asks farmers to consider whether they lose or gain by allowing their buildings to go unpainted; whether they lose money by giving their stock and swine good bedding and comfortable winter-quarters; how many of the needy poor might be fed with the grain that is eaten by rats and mice?

THE Western Agriculturist says that many experiments have been tried in Germany for the purpose of discovering whether pure water, taken in large quantities by animals which are being fattened, is favorable or otherwise to the process. The conclusion come to on this question is that water introduced in large quantities into the digestive organs increases the elimination of carbonic acid by the animal, and consequently hinders the formation of fat. When cattle are to be fattened, therefore, no more water should be given to them than is necessary for diluting the food and quenching thirst.

IN some parts of England Prickly Comfrey is said to be a first-rate food for pigs. Mr. James Howard, in the Journal of the Royal Agricultural Society, says that even well-fed pigs are exceedingly fond of comfrey and that it is the best of green food for them. This is important. Comfrey will yield an immense amount of leaves and a constant supply of them.

THE Sanitary Committee of the Port of London report that while very small quantities of frozen meat are constantly condemned as unfit for food, many large lots come to hand in a condition to warrant this procedure. It has always been supposed that Australian frozen meat was sure to reach England in a fine state of preservation. This does not look like it. Bad eggs are hardest to detect by the Board of Health officials. Many decayed eggs are sold simply because there is no practical test for large quantities.

GOV. ROOS, of New Mexico, in his annual report to the government, recommends "a system of storing basins at the heads of the several streams" to save a vast amount of water for irrigating purposes. "This would reduce to cultivation many millions of acres of productive land now barren and desolate."

As an instance of the advantage of using a pure-bred bull, rather than even a good grade, the National Live Stock Journal tells of a farmer who by using a good grade sire has been enabled to turn off three year-old steers that average close to 1,100 pounds, while one in the lot, of the same age as the others, and treated in the same manner, but sired by a pure-bred bull, weighed close to 1,300 pounds, or a gain of nearly 200 pounds through the added quality of the sire alone. This steer dressed 80 pounds more than the best four-year-old he had marketed during the same season, and dressed 206 pounds more than two car-loads of the progeny of grade sires averaged.

THIS is the way an English farmer prepares food for his work horses:—Hay 400 pounds, corn 300, oats 200, beans 100. The hay is cut and the grain is bruised and all mixed together. From 20 to 24 pounds of this mixture form a daily feed for large horses.

PROFESSOR GLEASON'S advice is good, viz.: Never to say "whoa" to a horse except when you want him to stop motion at once. If you merely want him to slacken his speed, say "easy" or "slowly" or "steady".

SELDOM is either party to a great lawsuit satisfied with the result, says the Cultivator. Even to the one who obtains a favorable verdict, the long list of expenses, vexatious delays and uncertainties more than offsets the fruits of victory.

A WRITER in the Breeder's Gazette says of the milk of Holsteins that it takes the cream longer to rise than it does from the milk of other breeds; that Holstein milk is more dense and does not sour as soon as other milk; hence this quality is particularly valuable to the milkman and cheese manufacturer; that Holstein milk is remarkably rich in casein, the cheese basis; hence for the production of cheese it has no equal; that Holstein milk is rich, and has a good body even after it has been skimmed.

THERE seems little doubt that Prof. Wiley's experiments to manufacture sugar from sorghum cane by the diffusion process have proven successful.

Everywhere.

TRANSCONTINENTAL LETTERS. LXVIX.

MARY WAGER-FISHER.

Still in the Grand Canon; length and hight of the cañon; scenery and climate of the cañon; view from Prospect Point; Solomon's Temple; the Pyramid; Babel's Tower; Sunset Peak; other striking features; growing grandeur; the start to the train.

ON the following morning we went in quite an opposite direction from the Diamond Creek Cañon, and after a walk of three-quarters of a mile from the hotel we reached the Colorado River, which, at this point, is 320 feet wide and varies in depth from 150 to 225 feet—a muddy-looking stream and one upon which I should not like to venture in a boat. The entire length of the cañon is 325 miles, and the highest cliffs—called Aubrey Cliffs—rise to a hight of 7,800 feet, and it may serve for comparison to bear in mind that 5,280 feet constitute a mile. The cliffs in the Diamond Creek do not rise much above 3,000 feet, and in some places they rise nearly, if not quite, to that hight, perpendicularly, and to the very top, in the crevices, grow cacti or some variety of vegetation. We went up this cañon for three miles, and in this distance saw but one waterfall, and that not high. Anaximander and Farlee climbed to the top of the cliffs at one point, and enjoyed an outlook over the surrounding country. Pedestrianism at no time in the Diamond Creek Cañon is particularly difficult when one is equipped with stout boots and a dress suitable for such a tramp. There are no bridges or ladders, and for a good part of the way one could go on horseback. The air is delightful—one can walk a great distance without any sense of fatigue.

Radiating from the spot where the rude hotel stands, the cañon in every direction is open and sunny, and of considerable width, filled with a sandy soil in which grass and flowers grow, and thickly planted with boulders. It would seem that here at one time a mighty stream must have flowed, where now there is only the shallow Diamond Creek reinforced, maybe, by the even less significant contribution from Peach Spring Cañon, and in order to enter the Diamond Creek Cañon proper, or to reach the river, one must traverse this open sunny plantation of rocks. The shore of the river is deep sand, and in it was growing and blooming a most exquisite white ubronia. Farlee said it bloomed there the entire Winter, and the year round, as well as various other flowers. The temperature varied but slightly in the course of the year—there was neither dampness nor dew, but a marvelously pure, dry air at a low altitude, and he grew enthusiastic over the future of the cañon when it should become the great resort of invalids in need of just that kind of a climate. As dry air usually can only be had in high altitudes, the cañon certainly has a claim on the attention of people who demand a peculiarly dry atmosphere, and still cannot endure the nervous strain produced by a high altitude. However, on that morning, Farlee was particularly desirous that I should climb to Prospect Point—a hight 1,500 feet above the river level, whence we could take in all the great features of the cañon. It was a most fatiguing scramble, Farlee going ahead and reaching down a hand to pull me up the declivities. The laddie climbed on his hands and knees, and ere the day was done he was in tatters like the ideal beggar. All the way up we found an abundance of new and beautiful flowers—never failing to gather specimens—and on the very top of Prospect Point I found masses of the exquisite Mariposa Lily—its large, mauve-colored cup spotted with red and brown. On the top we added stones to the cairn already there—wrote our names on a slip of paper which went into a bottle kept there for the purpose, and sat down to wonder and to gaze. Farlee sent out some of his tremendous screeches—we all screamed ourselves hoarse, to hear the echoes carried from peak to cliff and back again.

So far I have led the readers of these letters concerning this cañon on a rather unentertaining scamper I fear, for the sole reason that the great features of the cañon are indescribable by pen, photograph or pencil. Moreover, they grow hourly in magnitude. The longer we looked at the cliffs, the walls, the enormous rock exposures, eroded ages ago under water,

shaped into marvelous and superb architectural forms by the action of the water, and then slowly lifted by the hand that made the world to their present hight, the greater they became, until the scene was overwhelmingly appalling.

From Prospect Point we could see these enormous rock structures—as we could in part from Diamond Creek Cañon—from base to to summit. They were all very near to us, apparently within a few rods. We could note their foundations of granite or trap rock, count the horizontal strata, then the talus, then the strata, the corners of each great piece sculptured into bastions with wonderful exactitude, the facade diminishing toward the top where the structure ended may be in a perfectly shaped pyramidal peak in the center. Some of the facades were curiously sculptured. On one were the colossal figures of an elephant and owls, standing out in bold bas-relief The principal architectural forms have from time to time been named, and for the most part fitly. One goes by the name of Solomon's Temple. Its actual hight is 6,250 feet above the level of the river (the river is 1,130 feet above the sea), and the estimated width of its facade is from two to four miles. Try to imagine a stone structure of perfect proportions and of beautiful workmanship, over a mile high and correspondingly wide! The peaked cupola on the top—we could see from this point, as we could not below—was the face of a ridge or wall running back, Farlee said, for 15 miles. Another piece called the Pyramid, because of its shape, rose to a hight of 4,200 feet. Babel's Tower, a structure with beautifully sculptured buttresses, was majestic in its hight of 5,000 feet.

"Sunset Peak" has not been accurately measured, but its hight is reasonably estimated at 6,000 feet. After the sun has set and not a ray of sunlight can elsewhere be detected, this peak reflects a golden glow; a point of glory away up against the clear, blue sky. One group is called the "Castle on the Rhine" and is 5,000 feet in hight, and other equally notable portions are yet unnamed. On none of these great ruins, cut and shaped into distinct and separate structures, was there any vegetation—may be an occasional spear of grass—but on the cliffs running landward from the river trees grow abundantly. From where we sat, the river below looked but a slender stream that we could leap across, and innocent enough of ever having had a part in fashioning the tremendous scene we gazed upon. If the talus were removed from above each layer of rock strata each would present, to a very considerable degree, a succession of enormous steps from base to summit. Farlee related to us some of his experiences in reaching the top of one or two of the highest structures—one hardly knows what term to apply to these abodes of the giants; in any case an exceedingly daring and perilous undertaking.

It was two in the afternoon when we reached the hotel—the descent being as fatiguing as the ascent—and Farlee said that we should be off for the station not later than four; but it was a half hour later when we started. I was too tired to move with my usual expedition, and then I dreaded the hot sun in the long ride ahead of us, quite forgetting that we were to be in the shadow of a mighty wall, and things more wonderful than any we had yet seen were to come into view in that outward drive.

"It will be eleven o'clock when we reach the station," said Farlee; "but we must reach Westminster Abbey before dark."

Fortunately Pop and Rowdy were fresh for their long pull. Farlee, who had spared himself in no way to serve us, was still in the best of humor. The sky was cloudless, but bats had begun to fly in the evening air.

RURAL SPECIAL REPORTS.

Connecticut.

GALES FERRY, New London, Oct. 27.—Hay here about an average crop. Corn fair. Potatoes owing to drought mostly a failure; Apples set well but nearly all fell off. Eggs 28 cents a dozen and scarce at that. W. M. W.

Illinois.

ELGIN, Kane Co., Ill., November 1.—On the Call Board to-day butter was slightly lower, with heavy sales at 26 to 27 cents; over 200,000 pounds sold; the lower price made a fairly active market; receipts continue large. Cheese quiet but firm; full creams 10 to 11 cents; half skims three to eight cents, with fair demand. L. R. M.

Indiana.

MILFORD, Kosciusko Co., Oct. 26.—Our wheat crop was a failure on account of the fly. Corn a partial failure on account of drought; what there is is badly blown down. Oats a good crop. Potatoes an average one.

J. B. A.

Michigan.

OVID, Clinton Co., Oct 24.—Old Michigan is doing her best to equal her Southern sisters by way of second crops of grain, fruit and flowers. This season we have a second crop of oats two feet in hight all headed and well filled; hills of strawberries with six to eight large ripe berries, and apple trees with ripe fruit and blossoms on the same limbs. Wheat is making a splendid growth. I have five acres of the Surprise and D-M Wheat sown this Fall, that is now as thick as a mat and five inches high. The Shumaker sent out in the Rural Free Seed Distribution a few years ago, does very well here, growing a long straw; but it falls down badly. A. F. B.

New York.

UTICA, Oneida Co., Nov. 1.—The first of the Winter months finds no falling off in cheese as was expected, but total sales of 11,394 boxes ruling at 11¼ cents, or 2,820 boxes more than last week, ruling ⅜ cent higher. The market was active and fairly a surprise, being firm at the opening and vigorous at the close. This was owing to the buyers having largely disposed of their surplus in shipments, and the anxiety of the sellers to get their October cheese, which is of fine quality, on the market. Little Falls sold 7,692 boxes, ruling at 11½ cents. It was a strong market and a slight gain in sales. The butter receipts were about 150 packages, the general market being a little weaker but prices about the same for best makes. The quality last week has been improved. The best will probably be brought out for the holiday trade. Little Falls to-day sold 100 packages dairy at 20 to 23 cents, and 25 packages creamery at 24 to 25 cents. Prices here about the same. Hops—All is quiet and nothing reported save a few damaged '86s at 16 cents. R. L.

Tennessee.

WARTRACE, Bedford Co., Oct. 27.—We have been having a most remarkable Fall. We had no rain in 40 days, which has much retarded the coming up of wheat, and caused a large per cent. to be parched by the hot sun we have been having throughout this month. Acreage about the same as last year, most of the land having been turned before dry weather set in. We had frost on October 2; but none since, so that corn ripens very slowly. It is an average crop; price 35 cents; wheat 70 cents; apples the least crop for years. Of peaches we had none. Hogs are scarce and still dying with cholera in some sections; price $3.50 per 100 pounds; shoats $3.25 per 100 pounds. Cattle are only worth $2.50 for best butcher's, while $2.00 is the average price. W. S. W.

Virginia.

RICHMOND, Henrico Co., Nov. 1.—At present it is only safe to say of tobacco, that for fine wrappers, cutters and smokers the market is stronger. The prices paid for common stock are low at 1 to 2½ cents in the interior markets and 3¾ to 8½ cents here, but standard, fine and desirable bright new tobaccos are selling high wherever offered in this State and North Carolina, white wrappers reaching as high as $1 per pound, and fancy at 37 cents and over. Holders of good old bright leaf believe in much better prices still, but a slow rally in prices is probable. Planters are advised not to send to market any new till there is a better chance to sell, and old stocks are reduced. Sun-cured leaf is more active and higher. A fair business has again been done in Western burleys for home manufacturing at 4 to 8½ cents. The exports of manufactured tobacco from this district have been large, and were over 400,000 pounds, from Petersburg, Va., for the month of October. W. E. D.

THE FARMER'S CLUB

ANSWERS TO CORRESPONDENTS.

[Every query must be accompanied by the name and address of the writer to insure attention. Before asking a question, please see if it is not answered in our advertising columns. Ask only a few questions at one time. Put questions on a separate piece of paper.

JAPAN CLOVER; TREATMENT OF MUCK, ETC.

G. G., No. White Sulphur Springs, Va.—1. How much Japan clover seed should be sown to an acre? 2. At what season should it be put in? 3. Will it yield anything of a crop of hay? If sown in woodland shaded much by trees will it flourish? 4. Where can seed be got and at what price? 5. How can a quantity of tenacious black muck from a swamp, apparently with a lot of vegetable decomposed matter in it, be best utilized as a top-dressing for meadows? I have been advised to mix lime or kainit with it; would that be advisable? 6. What kind of a mower is the Eureka?

ANS.—1. We do not know, but should sow about the same quantity as of clover seed. 2. November for your section. 3. Our friend is referred to page 656 of the R. N.-Y. of Oct. 2. On rich, damp soil, it will grow a foot or 18 inches high. But the leaves are small and the stems are too woody for hay. On sandy soil it is low-growing and procumbent in habit. This plant is spoken well of by certain farmers in Louisiana. "It will grow and form a sod on the thinnest land," they say, "and even in the roads and naked places where nothing else will grow." Still, we should advise caution in sowing it except as an experiment. The writer of this has seen it in North and South Carolina on thin, hillside land, and its growth was by no means luxuriant. We are not aware that it would thrive in woodlands. 4. A. P. Rowe, Fredericksburg, Va., will inform you where the seed can be purchased. It was sold last year at eight dollars per bushel. 5. Yes, mixing it with lime would be as good a way as any to break it up—a few bushels of refuse lime to a cord of the muck; mix both together and keep in good condition to shed rain; or mix at least a bushel of fresh lime with a ton of muck. The lime hastens decomposition, and until the muck is decomposed, it is of little or no use. It would be well to mix kainit with it if potash is desired. The salt and potash would also act as a solvent and hasten the period when the muck could be best utilized for the purpose required. 6. The Eureka is a first-rate machine. We decidedly prefer it to the side-cutting mowers. The cutter-bar is directly behind the horses and in front of the driver. We are not aware that it runs more heavily than the side-cutter. At all events a pair of ordinary farm horses have served us well enough for the past five years.

TESTING COWS FOR CREAM AND BUTTER.

W. C. H., Shrewsbury, Mass.—What is the best way to test cows for cream and butter, and what should be the grain feed during the test?

ANSWERED BY H. STEWART.

Testing cows is a particular business, and to be of any use the test should be made systematically and with precision. The cow is fed in the ordinary manner, and the food is weighed and measured as well as the product, twice a day for a week, as a beginning. It should be done accurately, and the feeding and watering should be done at regular hours. Then the food is increased by regular steps one week at a time. The hay or coarse fodder is kept constant, but the various grain foods, as bran, corn meal, cotton-seed meal, pea meal, or other substances which may be given, are increased week by week. In my own tests, I have made five pounds of cut hay per meal, three times a day, the standard of this fodder, and the standard grain food has been made up of 200 pounds of corn, 100 pounds of oats and 100 pounds of fine bran—wheat or rye—all ground together; of this eight pounds per day have been the regular food, three pounds being given with the cut and moistened hay night and morning, and two pounds of dry with five pounds of dry hay at noon. To this standard ration various additions may be made, but I have had the most and best butter from the addition of four pounds of fine ground corn meal and two pounds of cotton-seed meal per day, given in two meals—morning and night—half at each meal, in addition to the regular ration. For a working dairy this is as highly as a cow can be fed with profit as a steady thing, and then watchfulness must be exercised lest any untoward accident may bring on an attack of gurget. The only use for testing, is to find how much food can be given to a cow with profit—not how much can be given without killing her. And this business way of testing cows should be a part of the regular management of a dairy until the capacity of each cow is found, and then that should never be exceeded.

COTTON-SEED HULLS AS A FERTILIZER.

G. B. K., Mobile, Ala.—Would cotton-seed hulls among which there are some seed grains be a good fertilizer for Irish potatoes or other vegetables? Would it be a good way to make a compost of them with an equal amount of fresh horse manure in alternate layers, putting a cord of compost on eight drills 200 yards long, and then using as a top-dressing 200 pounds of cotton-seed meal and 200 pounds of cotton-seed hull ashes?

ANS.—A fertilizer for potatoes needs to contain lime and phosphoric acid chiefly, with some potash. Cotton-seed hulls are rich in potash, phosphoric acid, and lime, their ash containing 23¾ per cent. of potash, nearly 8 per cent. of phosphoric acid, and 30 per cent. of lime. It would be a good plan to compost the hulls with horse manure, but the addition of some leaf mold or black soil from the woods or a swamp would be beneficial, as the dryness of the manure and the hulls would cause the compost to heat vigorously, unless it was watered occasionally. No doubt the manuring described would be advantageous to the potato crop. The drills 200 yards long would cover about one-third of an acre, hence the cord of compost would make a very fair manuring with the cotton-seed meal and the ashes. These should be sown evenly on the harrowed ground before planting; the planting will mix them with the soil.

FATTENING HOGS ON TURNIPS, ETC.

B. R., Jr., Abilene, Texas.—I am in the droughty district and all crops were a failure. I have 25 hogs which I want to fatten in the cheapest way possible. I have a large crop of turnips. Would it pay to boil them and mix with them some cotton-seed meal (worth $1 per 100 pounds) and wheat bran (worth $1 per 100 pounds)? What proportion would be best? 2. Would cotton-seed meal and bran be a good fertilizer for vegetables?

ANS.—1. The mixture proposed would be excellent for the hogs; but there is no necessity to boil the turnips. These may be chopped up; a spade with the edge ground sharp cuts very fast in a shallow box about six by eight feet. For 25 head of hogs six bushels of turnips may be chopped for a meal. This can be done in about three minutes in the manner mentioned, then two pounds per head of bran and half a pound of cotton-seed meal may be sprinkled over the cut turnips. Two meals a day of this kind would fatten hogs very soon. The quantity of cotton-seed meal mentioned should not be exceeded, as this meal is exceedingly rich food. 2. Yes.

GRAPES FOR THE SOUTH.

W. T. T., Salisbury, N. C.—1. What is a good, hardy, prolific grape that will ripen 10 days or two weeks later than the Concord? 2. Will Brighton and Moore's Early bear transportation to Northern markets? 3. What is the best time to apply ground bone and ashes to bearing grapes, and how much per acre? Soil, sandy loam with clay subsoil.

ANSWERED BY T. V. MUNSON, OF TEXAS.

1. The Triumph has proven the best late variety tried here. It is a fine, large table grape. 2. Moore's Early and Brighton carry quite well to market, but the latter rots severely. 3. Apply ground bone and ashes early in Spring when cultivation begins, and cultivate in after having been sown broadcast at the rate of 500 pounds of bone dust and one ton of fresh wood ashes to the acre. A few hundred pounds of lime would be excellent on sandy soil, in addition to the ground bone and ashes. Compost manure and leaves would also be excellent for such soil.

DANGER FROM COPPER EVAPORATORS FOR CIDER.

H. S. K., Cavendish, Vt.—1. What is the best way to clean a copper evaporator used in making cider jelly? 2. Is there any danger of poison as long as the cider keeps the pan bright?

ANS.—1. Wash the copper bottom with cider vinegar and then thoroughly with hot water and rub dry with a clean cloth. The cider may then be boiled without danger if it is sweet, but not otherwise, as the acid would produce acetate of copper or verdigris, which is very poisonous. 2. Yes, the brighter the cider keeps the copper, the more danger there is, as the bright surface indicates that the copper is being dissolved, and the cider is acquiring a decidedly poisonous character.

TOBACCO STEMS AS MANURE.

C. C., Warrenton, N. C.—What fertilizing elements do tobacco stems contain? How should they be prepared for manure?

ANS.—Tobacco stems contain a large quantity of fertilizing matter. When dried they have nearly 20 per cent. of ash, or 200 pounds in 1,000 pounds, and these 200 pounds of mineral matter consist of 54 pounds of potash; 7¼ pounds of soda; 20½ pounds of magnesia; 73 pounds of lime; 7 pounds of phosphoric acid; 7⅜ pounds of sulphuric acid and 8¾ pounds of chlorine, and 9 pounds of silica. They are therefore an exceedingly valuable fertilizer on this account, without considering a large but undetermined amount of nitrogen which they contain. They are best composted with cow manure, or some other moist matter which will help to decompose them. A large quantity might be spread on the land and be plowed in.

SELLING PLANTS NOT TRUE TO NAME.

"A." Baraboo, Wis.—Three years ago I ordered from B. 72 Worden grape-vines. When they began to bear fruit they all proved to be Janesville. Wordens sell here at from 6 cents to 12 cents per pound; the others are worthless. I shall, therefore, have to take out these vines and plant others. Should not the nurseryman pay not only the original price of the vines, but also damages for three years' loss of time in selling the crop?

ANSWERED BY JUDGE WILLIAM PARRY.

A. has been sadly disappointed, and possibly he has sustained a loss by the plants not proving to be Wordens; but it would be impossible to estimate the prospective value of the plants or fruit had they been Wordens, or the damage sustained by their proving to be Janesvilles. B. should, however, be required to furnish genuine Wordens to the amount of the price of the spurious plants, and if the Wordens at the time of purchase were worth more than their market value now, the difference should be placed to the credit of A., and stock of his selection should be furnished at market rates to balance. Most nurserymen, where such errors occur, are willing to settle in this way, which is generally satisfactory to the purchaser.

R. N.-Y.—The decision of Judge Parry seems rather unfair. Owing to B.'s mistake in sending plants not desired, A. loses three years of time. It would unquestionably be difficult to decide in dollars and cents what this loss would be equivalent to; but there ought in justice to be some compensation beyond replacing the Janesvilles with Wordens. Suppose the *second* lot of vines proves to be other than Wordens; A. would then be obliged to wait three years more.

Miscellaneous.

J. P. M., Somerville, N. J.—1. Four years ago I planted some Fay's Prolific Currants; year after year they continue to keep the tree form: no sucker or cane has ever grown from the roots. The growth of wood too is comparatively small; while the new wood often bends towards the earth. Would planting the cuttings tip end down produce such an effect? 2. In August last I bought and set out 400 potted strawberry plants, the ball of earth surrounding each plant not exceeding the diameter of a broom-stick, consequently the roots were small and weak. As a result, more than half the plants have been lost. What is the size of the pots generally used for this purpose? 3. The plants referred to were well soaked three times and slightly covered with long straw to partially shield them from the sun; was this right?

ANS.—We doubt whether it would make any difference in the habit of a bush or vine or tree whether the cutting was rooted one way or the other. That the currants have not formed suckers is no doubt owing to some injury which the lower buds or shoots have received. The Fay is a sprawling grower—more so than the old Dutch, but no more so than the Grape or Cherry Currants. 2. A nurseryman should be ashamed to send out such stuff for "potted" plants, and our friend ought to have returned them. The object of potting plants is to secure an abundance of roots and also of of soil, so that when transplanted, the plants will continue their growth. A three-inch (diameter) pot is none too large. We have never favored "potted plants" even though well and properly grown, but the stuff that is often sent out as such is simply an imposition. 3. Yes; that was right certainly.

W. C. H., Shrewsbury, Mass.—Is this a good feed for milch cows: two pounds of middlings and shorts mixed; two pounds of linseed meal (new-process) and two pounds of gluten meal?

ANS.—Gluten meal is a rich food. It is the nitrogenous part of the corn left after the starch has been taken out. But as linseed meal is also rich in gluten or albumen, and the shorts contain also a large proportion of gluten, this feed is not a desirable one excepting for some special purpose. At least two pounds of corn meal should be added in place of one pound each of linseed and gluten meal. This would make a better balanced feed for a cow giving milk.

M. F. McC., Darlington, Pa.—Can I get a cement for repairing cracked ironware, like pots and kettles?

ANS.—Stove dealers do not know of any such cement. The Scientific American gives the following as a cement used for large steam pipes: Litharge two parts, powdered slaked lime one part, sand one part. Mix the mass with a sufficient quantity of hot linseed oil varnish to form a stiff paste. This cement must be used while fresh and warm.

T. M. Raymond, Dak.—Last Spring I bought some Saskatchewan seed wheat and sowed it; the grain I harvested from it is considerably shrunk. Would it pay to use it for seed next Spring?

ANS.—Yes. It will germinate, grow and yield just as well as unshrunken kernels.

F. H. H., Manchester, Va.—At what stage of maturity should black cow-peas be plowed under to give the greatest advantage as a fertilizer?

ANS.—The cow-pea of whatever variety it may be, is at its most useful stage for plowing in or for feeding when the blossom is fully matured and faded, and the seed is beginning to form.

C. C. P., Naples, N. Y.—We have not before seen the bean you send for name. Probably it is a new cross.

A Reader (address mislaid), asks about the preparation of pickles.

ANS.—First soak the salt pickles in water long enough to take all the salt out of them, (this can be done quickly by changing the water often); then pour in vinegar to cover them; spice to suit taste Some people prefer to use hot vinegar.

DISCUSSION.

WORDEN, CONCORD AND SOME OTHER GRAPES.

E. P. P., CLINTON, N. Y.—The reports from the Rural Grounds often surprise me—last of all the comparison of Worden and Concord. I have the best grape situation in Central New York—a swale facing southeast and perfectly drained. Now in this vineyard of mine, Worden was in good condition for eating two weeks ahead of Concord. It is a superb grape for this reason, and also because it is agreeable for the table even though not entirely ripe; while a Concord is abominable till dead-ripe. The flavor of the Concord and Worden are certainly decidedly different. I could surely not be deceived in the dark about them. The Worden I sold readily for seven cents; the Concord for from three to five. There is nearly double the difference in profits owing to time of ripening. But, say what any one will, we have not yet outlived Rogers's Hybrids: Massasoit, Agawam, Lindley, No. 30, Gaertner, Herbert are among our very best grapes, and likely to remain so. I agree with the RURAL about the Niagara—it is wondrously taking, but it is not a very superior grape in quality. Pocklington is a very fine grape, when perfectly ripened, which it seldom is. Duchess needs a little winter care and is a magnificent affair. Grapes are hardly ever eaten when dead-ripe, hence all sorts of opinions. Martha as marketed is only tolerable, but let it hang on the vines till the last of September and then try it. Lady is good on August 25th; but let it hang till September 10th, and each berry is a bag of honey. Yes, plant grapes; only plant lots of them, so you won't have to eat them green. A small vineyard well cared for is less trouble than two or three sprawling vines.

R. N.-Y.—What we stated with regard to the Worden was the result of careful comparisons between it and the Concord. We are told by Mr. E. Williams, who gave us our vines, and who is confident it is a true Worden, that this variety is liable to change as it grows older. This may prove to be the case with our vine at the Rural Grounds. Our correspondent must have noticed that there is a great and unaccountable difference of opinion as to the Worden.

J. T., NORTH MADISON, Ind.—In reading the RURAL's description of the Fastigiate Oak trees on the Rural Grounds in a late issue I was led to think some slight mistake had been made. "Ten years ago two were planted; one died; the other is now 30 feet high, though scarcely more than six feet in diameter. For narrower portions of the lawn where paths or roads converge and there is little space for trees, the Fastigiate Oak is just the thing." It appears to me that for its age it is a tall oak. As to the diameter—six feet—you must be a little off; maybe you meant inches. As for a six-foot tree being suitable for a small space in a lawn, you must be a little off there. In this country a six-foot oak or poplar tree is a rarity. Four-foot trees are now scarce, and they are 100 to 120 feet high.

R. N.-Y.—Why our friend should take for granted that the stem or trunk is referred to when neither word is mentioned, while the leaves are spoken of, is not quite clear to us. At any rate, we alluded to the diameter of the entire tree.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING November 6, 1886.

M. H. B.—C. S.—M. W. F.—J. O. E.—J. R. C.—B. F. A. E. M. H.—J. H.—S. C. H.—O. F. C.—W. R. H.—E. R. D. C.—A. J. C.—H. T. D.—F. W.—W. P. H.—E. J. G.—W. L. S.—J. W. B.—C. W. O.—W. H. H.—C. S. C.—W. U. F.—M. M.—N. J. C.—N. T.—N. H., thanks—T. B. H.—L. D. A.—D. P.—E. G.—T. H. H.—E. T.—A. L. J.—S. H. R.—B. V.—M. F.—E. T. C.—G. G.—G. A.—A. J. C.—M. H. S.—A. A.—H. H.—W. H. P.—E. C. W.—R. A. L.—W. H. L.—L. E. P.—W. A. L.—J. H. A.—E. P. P., thanks—S. T.—E. S. G.—J. T.—O. P.—A. A.—C. A. B., book premiums, a goodly list, will be offered in our Thanksgiving Number—G. G.—S. B. K.—W. L.—M. W. F.—G. P. & S.—J. H. E.—J. B. A.—F. M.—T. M.—G. C. P.—F. B.—C. A. G.—A. T. H., pears rec'd; thanks—H. F. S., oats rec'd; see Farmers' Club later—E. Taylor, thanks—C. A. B.—M. W. F.—E. L. T.—L. G. M.—C. H. W. B.—A. A. D.—J. L. B.—H. A. M.—J. P. M.—E. D.—L. B.—J. D.—W. N. J.—P. B., thanks—J. P. M.—L. G. M.—W. P.—J. L. B. P.—J. G. E., potatoes rec'd—C. A. B.—F. D. C.—J. P.—J. B. A.—A. P.—A. L. J.—A. B.—M. W.—T. V. M.—A. F. B., thanks—G. B. M.—E. W. P.—R. C.—M. S. H.—C. D. P.—W. K. S., thanks—E. S. B., thanks—J. B. R.—J. H. H.—M. P. W., cuttings rec'd—H. E. B., Thousand-fold Rye rec'd—H. F. S.—W. W. F.—S. W. W.—U. S. M.—E. C. S., thanks—E. S. B., thanks—C. D. P.—S. H. P.—E. & P.—C. S. C., thanks—E. P.—J. B. L.—J. L. B.—J. P. R.

Miscellaneous Advertising.

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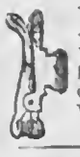

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SATURDAY, NOVEMBER 13, 1886.

The man who is capable of allowing himself to be influenced by a hint, without waiting for a kick, is to be congratulated. Such men are not so plentiful as they should be. We see a good many barns with unfilled cracks, with loose boards, or leaky roofs. There are plenty of houses that need banking up, plenty of windows that let in the cold, and plenty of ill-fitting doors. The sharp frosts that come in at this season constitute a hint that ought to be heeded. Those who do not heed it will wait for the kick, which will come in the shape of a rousing storm later in the season. Then there will be a rush to do the work that should be done now. It will take twice as long, and a good deal of property will be destroyed before it is done. Learn to appreciate the value of a hint.

Nothing of importance has yet been done towards stamping out contagious pleuro-pneumonia in Chicago, and there is a good deal of danger that this careless dilatoriness on the part of the authorities will beget a careless disregard of danger on the side of the public. Already there are numerous indications of the growth of such a sentiment. The presence of the disease in the city is likely to prove injurious to the fat stock show, as the owners of fine stock elsewhere will very naturally be reluctant to risk danger of contagion by sending them to the exhibition. The Ohio Live Stock Commission has ordered that all cattle sent from that State to Chicago, to be exhibited at the show or for any other purpose, shall be subject to quarantine for ninety days at the owners' expense before they are permitted to return. Other States are also pretty sure to take similar precautions.

Over 15,000 men are on strike at the Chicago packeries for ten hours' pay for eight hours' work. To show what the men are losing by remaining out, the payrolls of two firms show that one, Morris, pays from $19,800 to $21,000, and the other, Swift, from $21,500 to $22,000 per week in wages. Every day the old hands remain out takes them farther away from their places, as new hands are being constantly engaged. We have a good deal of sympathy with any real grievance of wage-earners and with those suffering oppression of any sort, but we have no sympathy whatever with these Chicago strikers. Their demands are extortionate; their methods are tyrannical; their conduct is atrociously selfish. To gain an advantage enjoyed by those engaged in no other industry, they are doing their best to injure the vast cattle trade that centres at Chicago, and thus inflict losses amounting in the aggregate to tens of thousands of dollars on the cattle raisers on one hand, and the meat consumers on the other.

The long rows of bob-tailed horses at our Horse Show called forth a vigorous protest from Mr. Henry Bergh. The practice of docking the tails of horses is as senseless as it is cruel. Mr. Bergh well says: "This cruel mutilation of the noblest animal given to mankind by a bounteous and all-wise Providence, whose wisdom is thus wantonly insulted, is not the result of necessity, but is a pure and simple freak of thoughtless fashion." Does not that state the case in a nutshell? One has only to watch the long lines of docked and mutilated creatures to be convinced of the utter senselessness and barbarity of the practice. These butchered tails are the result of the same paucity of intellect that has given us the eyeglass, the cane, the tight boots, and torturing collar of the "dude." In the latter case man only inflicts ridicule upon himself. In the former case he inflicts cruelty upon a helpless animal and lessens its ability to defend itself against insect enemies. We join with Mr. Bergh in urging the managers of the National Horse Show to discountenance this practice. They can drive it out of fashion if they wish to do so.

The strength of the vote cast for Henry George in this city was a great surprise to the politicians. No wonder they are frightened. That such a new party, without organization, without funds and without the help of experienced politicians can poll 67,000 votes in this city is indeed surprising. The George ticket was the earliest in the field. Hundreds of extreme party men pledged themselves to support George before the other nominations were made. They supposed, naturally enough, that each of the old parties would put up some political "boss," as in previous years. Having given their word, they supported George even though their own parties were forced into nominating the best set of candidates ever placed before the people of New York. Farmers can learn a lesson from this movement. By taking a determined and dignified stand in favor of what they know to be right, by thoroughly organizing and holding their organizations, they can force honest and courageous candidates upon parties. Is it not worth doing this?

The farmers have done fairly well at the hands of the voters. Mr. Luce is elected Governor of Michigan, Messrs. Russell and Burnett go to Congress from Massachusetts, and many other farmers have been honored by an election to State or National offices. In many districts the farmers' vote made itself felt unmistakably. It is high time that it should. The farmer has carried political hacks on his back long enough. It is time he shook off the burden and carried himself more erect. That is just what he is going to do, as we have faith to believe. The old argument that no one but a lawyer can make a law is growing weaker. The old sneer at "farmer legislation" is heard less frequently. We need men of all classes in our legislatures. We need farmers, mechanics, business men and lawyers. Our laws affect them all. Their views should be taken into consideration. The idea that we must pick out the town lawyer to send to the legislature has been killed forever. Why should a class of men select as their representative a man of theories who knows nothing of their wants or of their ways of life? This question fairly put to the mechanics in more than one of our manufacturing towns destroyed the political hopes of dapper young lawyers. Let the farmers of the country adopt the same tactics. In a few years they will notice a wonderful improvement in the character of their candidates.

A MARVELOUS SCHEME.

The extortions of the Cotton Oil Trust Company in the South have given rise to a gigantic scheme looking to a combination of the cotton planting industry of the four States of Texas, Arkansas, Mississippi and Louisiana. It is proposed to organize a syndicate or trust company composed of large capitalists from all parts of the country and the planters of these four States, and that the latter should exchange their property for stock certificates in the corporation, to the full value of their holdings, the company to manage each plantation through the planter or an overseer under a district supervisor, one supervisor to be in each parish or county, the planter, if in charge, to be allowed a reasonable salary for his services. The company is to furnish money to purchase for cash from first hands all the supplies necessary to carry on the business, and to handle the products through competent agents, thereby saving immensely in the expenses of handling, selling, and freights, as well as in the cost of production. The company would be able to demand from the Trust Company, in spite of its $35,000,000 capitalization, fair and remunerative prices for its cotton seed, or in case of refusal, establish mills and make cotton-seed oil and cake itself. Of course, if the scheme proved practical and successful in the above four States, it would be very easy to extend its limits over all the Cotton States, while a similar organization might be formed to farm all the land in the rest of the country. The plan seems a trifle chimerical; but the very conception of it and its thoughtful consideration by practical men show very forcibly the straits to which the agricultural interests of the South are forced to seek an escape from the oppression of a gigantic monopoly.

HELPING MANKIND.

A young student recently gave us his ideas about the regeneration of mankind. He graduated at one of our leading universities and then studied several years in Germany. He was supposed to be well grounded in the theory of progress. He talked well. What he said seemed plausible enough. It did seem as though happiness could be manufactured to order, and that a few cold philosophers could live in seclusion and guide the world, outside their retreat, to a higher standard of enjoyment and comfort. As we walked up the street a woman sat on a door step. She carried a crying baby. Weary and worn she had stopped for rest. She dropped her handkerchief into the street. She could not secure it without putting the baby to one side. Did our young philosopher, with his intense desire to increase the comfort and happiness of the world, help her? Not he! His great plans could not be interrupted by such things. He walked on proving most logically that our system of government was all wrong, while a laboring man picked up the handkerchief, gave the baby a smile and passed on. Which man is doing the most good, the theorist or the man who believes in practical benevolence? They are like two men climbing up a ladder. One has his eye only at the top; he neglects to watch his feet. The other goes slowly up watching the rounds and making sure of his work. It is far easier to theorize than it is to practice. We can all tell what ought to be done for those who need help, but how many of us have the patience and courage to do the little things that go to make life what it ought to be? The fact of it is that there are chances for doing good all around us. He does the most for mankind who makes the circle of his immediate influence as bright as possible. He is a poor reformer who reaches over the heads of those near him to put his hand a little nearer the lamp of popularity.

TOO MUCH TRUST A CAUSE OF DISHONESTY.

While business dishonesty is so generally commented upon as one of the appalling sins of the day, would it not be well for the defrauded ones to consider how much they—themselves—are to blame for it? How many housekeepers who buy sugar and tea, meat and muslin, weigh or measure the same, and know that they are dealing with honest tradesmen? How many tradesmen have a realizing sense that if they defraud their customers, even in a small way, they will surely be found out and suffer for their dishonesty? How many bank directors make it practically impossible for the cashier to make away with all the available funds? Is it not true that a false sentiment has grown up in the land, which is fostered by laziness and inertness—that it is "narrow" and "mean" to make it difficult for people to be dishonest. Everybody likes to be "popular"—to be thought "liberal-minded" by his fellows. This infinite trust in everybody's honesty goes beautifully until the supposed honesty looms up in the shape of fraud, when everyone cries aloud for an argus-eyed being who is "mean" enough, and suspicious enough, to *know* that affairs are dishonestly conducted and unwilling to trust to the honesty of the honestest man alive. We may not "love" the precise, accurate man, who is just to the last cent, both ways, so well as we do the easy-going fellow; but we trust and respect him a great deal more, in fact.

If nobody "finds fault," the "general average" of excellence is quickly lowered. The pound of butter weighs but fifteen ounces, the "new" milk is made up half of yesterday's skimmed milk, the dressmaker retains for her private use the leftovers from the fabrics she cuts into gowns, and tells you upon her honor that not a scrap was left. The workman gossips for half an hour with the hired man on the other side of the fence and calls his day a 'full" one—and so on, *ad infinitum*,—purchasers and employers "let things go" because it is too much trouble to make a "fuss." The "fuss" may not be nice, but if properly made, it goes a long way in keeping things up to a righteous level and the sense of honor whetted. It is to the credit of human nature that it has civilized itself—what civilization it has attained to But all uplifting of the race comes from certain individual heroism and courage, which quite as often wins opprobrium at the time, as glory. But it is the saving salt, nevertheless, just as strict discipline, and the requirement of strict service, on the part of those in power, tend to a higher morality in those who serve.

THE OLEOMARGARINE LAW IN FORCE.

The oleomargarine tax law went into effect on Monday. A considerable number of the manufactories have either shut down entirely or suspended the manufacture of oleomargarine for the present, confining themselves entirely to the production of the oils, which the United States Attorney-General has lately decided are not within the scope of the law. Most of the manufactories and a considerable number of wholesale dealers have already taken out licenses, but there is less alacrity among retailers. In this city there were more than 3,000 retail dealers in oleomargarine before the new law went into effect. Few of these were selling the stuff frankly and without disguise, while a great many deliberately deceived and defrauded their customers who bought the counterfeit for genuine butter. There is no eagerness among any class of retailers to take advantage of the new law and sell the concoction solely on its merits, for less than 100 of them have hitherto taken out licenses.

In addition to the two cent tax upon the manufactured article, every manufacturer must pay a yearly license of $600; while wholesale and retail dealers must pay, the former, $480 and the latter, one-tenth of that amount, and very heavy penalties are attached to violation of any provision of the law. The Federal authorities are more vigilant and efficient in detecting and punishing any violation of the Internal Revenue laws, than are those of any of the States. There are hundreds of liquor and cigar dealers in this and other large cities who pay no State taxes; but the number of those who evade United States taxes is very small. At first there will probably be some difficulty in detecting bogus from genuine butter, but the risks for dishonest dealers will be greatly increased by the fact that manufacturers and wholesale dealers must make monthly returns to the local collectors of internal revenue specifying the quantity made and the parties to whom it was sold.

There is a good deal of difference of opinion as to the effect of the law on the sale of oleo. Many say that as the stuff must be sold without disguise under its real name, the falling off in the number of customers must be great. Others insist that as the law charges the revenue officers with the duty of inspecting the manufactured article, and empowers them to condemn all unwholesome material, this inspection will certify to the consumers that the article offered for sale is pure, and thousands will prefer pure, cheap oleo to dear butter that may be less palatable however pure.

BREVITIES.

The Thanksgiving Number of the R. N.-Y. next week.

We have received fine heads of Thousandfold rye from H. E. Boyd, of Wilmington, Vermont.

Mr. A. J. Caywood informs us that he is but 62 years of age. We may therefore hope that he will not only live long enough to learn that what little we have said against his fruits has not been said from the low motive he ascribes to us, but that he will live to originate lots of other varieties so perfect that no one in the land can justly say one word against them.

Encouraging! The Rural New-Yorker has been coming to me for 30 years or more, without a single year's omission, save one, during the war, when the Potomac River was blockaded for a term. The Rural has not a more constant and abiding friend in all its list of subscribers. No paper has come up more fully to my idea (and particularly of late) of what is the *perfection* of a rural family paper. I feel that my days are nearly numbered, and don't know but what I shall have my family to continue it in my name. J. G. R.
Lovellsville, Va.

The San Francisco papers are doing well in once more urging the wine growers of California to stop giving foreign names to domestic wines. The idea of American names for American wines is gaining headway; but it should be encouraged still more by all who have the best interests of American vineyardists at heart. The average quality of good American wines is held to be better than that of imported wines; and the latter would steadily fall into disrepute were it not that their reputation is kept up by the superior quality of domestic wines sold under their names.

There can be no doubt that the evil of indorsing notes has resulted in the ruin of many good farmers. Young men particularly should shun this practice. The responsibility is too great. The indorsee assumes every responsibility, yet he has no share in the profits of the business transaction, and no voice in its management. He must simply pay the full amount, if by means of misfortune, mismanagement or rascality the maker of the note cannot pay it. There is nothing to be made but everything to lose. The demands of friendship are great, but the duty one owes to himself and those who are dear to him should never be overlooked.

Prof. Roberts, who examined the famous cow Clothilde during her recent test, says that before she was milked he saw the pail turned bottom up by the milker. The object was to make sure that no milk was contained in the pail before milking began. It was not to insure cleanliness—the cow could not have made her record in a filthy place. It was a simple thing to do, and yet thousands of dollars would be added to the value of our dairy products if the practice could be made universal. Often do we see milkers sit at the cow's side with the pail on their knees. After a few brushes at the udder and side they begin to milk, regardless of the hairs, dirt and dust they have brushed directly into the pail. All this dirt hurts the price of butter far more than oleomargarine ever can.

Sheep Husbandry.

Notes from the Western New York Farm.

SHEEP VERSUS COWS.

IS IT ADVISABLE TO CHANGE?

Of late so many letters have come to me asking as to the advisability of changing from cows to sheep, or sheep to cows, and also as to the comparative numbers of each that can be kept per acre, the labor involved, the effectiveness of each in keeping down weeds and in maintaining the fertility of the farm, and the profit to be derived from each, that I propose to answer the whole in a body and general way.

No matter in what line of husbandry a man may have been engaged, or how much he may be discouraged, he should make no radical changes without a careful study of the matter in all its bearings, and even then it is better to go a little slow. Not every farm is equally well adapted to both systems of farming; for while cows do splendidly on rich, level land, even if a little wet at times, such pastures are not suited to sheep. They will not thrive nearly as well on the herbage natural to such lands, and if confined to such a range more than temporarily they would be almost sure to become diseased. On the other hand, on land so rough and rocky that the cows would need shoeing, and where the grass is so short and so much hidden by the rocks that cows could barely pick a subsistence, sheep would be perfectly at home and soon become "fit for mutton." The water supply also has much to do in the matter. While the cows would be discontented, wandering about lowing and losing flesh without an abundance of water, sheep would do very well on good, succulent feed without any water, save what they would get while eating the dew-laden grass, and in any case they would thrive with "a drink" once in 24 hours. And then the demands of the market and the means of transportation should be considered. The products of the cows are less bulky than wool, and if sent as ordinary freight would cost less for transportation, but they require more care in handling and, as a rule, must be sent by express or in refrigerator cars, and thus do actually cost more in freight charges than wool, which, if kept dry, can be sent in any way without danger of injury.

As to the comparative number of each that can be kept per acre, so much depends upon the breeds of each that may be selected, that it is very difficult to lay down a rule; but, taking both cows and sheep as generally found among farmers, it is not far from correct to assume that eight sheep may be substituted for one cow while running at pasture; but of course in Winter, if both are put into warm stables or barns, as they should be, the sheep, while consuming no larger proportion of food, will occupy a greater proportionate space. With sufficient ventilation and proper care a cow will be perfectly comfortable and her attendant have ample room to perform his labor in a space 3½ by 14 feet, making 49 feet of floor space, but if sheep be crowded to the utmost limit of safety not more than four could be put into the same space; but, then, if the barns are of sufficient hight, they can be "double-decked" (one floor put above another) and the sheep can be safely kept one lot above another, thus getting eight in place of each cow.

The Labor Question is, without doubt, greatly in favor of the sheep, for while they should be seen daily and salted once a week, and will need some further attention in the way of washing, shearing, and separating the lambs, etc., etc, these are only trivial matters compared with the labor of driving the cows to and from pasture twice each day, milking and converting the milk into butter or cheese, and then if the waste milk is to be utilized, a lot of hogs must be kept, and, of course these must be fed and looked after—so much for the Summer care. In Winter there would not be so great a disproportion, especially if both were kept as store stock, and further if, as is usually the case in the dairy districts, the cows were allowed to "run dry" from four to four and a half months; but even then a man will care for 100 sheep more easily than for a half dozen cows providing he gives each the best of care; for while the difference in giving to each will be but little, the cow stables will need cleaning twice daily, and the cows should be carded daily; the sheep pens, on the contrary, will need cleaning but twice or, at most, three times for the entire Winter, and if when put into the stables the sheep are properly treated for ticks, they will need nothing beyond feeding and watering and a little care to see that the proper ventilation is given.

As weed and bush exterminators there is no comparison between the two. While the cows will when first turned out in Spring while the leaves are fresh and green, or perhaps in case of very scanty food during severe droughts, eat many kinds of shrubs and bushes to a limited extent, they will not touch the thousand and one varieties of weeds that pester the tidy farmer, and the fields in all the dairy districts as well as in those devoted to grain raising are yearly becoming more foul and a greater disgrace to the careless owners. On the contrary, no animal, unless perchance the donkey and the goat, has a more varied taste than the sheep, and while it, unlike the others, will not live on a steady diet of tin cans, old boots, etc., it readily eats almost all kinds of noxious weeds; and if given a chance will entirely eradicate ragweed, golden rod, daisies, wild carrots, ripple and nearly all other weeds that make the careful farmer's life a continual warfare; and even Canada Thistles will eventually succumb to their persistent cropping. Nothing will so quickly eradicate the bushes in newly cleared fields, or those that line the fences or grow in clumps in too many of the older fields, as a flock of sheep. If they are cut so low early in Summer that the sheep can reach the topmost leaf that is left and the fields be closely pastured, a single season will see the end of every green thing. Very much of the prevalence of weeds and bushes on all the older farms is due to the fact that sheep have ceased to be kept, and I shall hail the day when their increasing numbers shall destroy those eye-sores and make our farms once more decent and presentable.

Since the middle of September we have had an abundance of rain, with very warm weather, and wheat is making a luxurious growth, in fact, some pieces which were sown the last week in August and first in September are in danger of getting so large that with heavy snows they will smother.

* * *

There is nothing which so greatly aids in putting the soil in the best possible condition for receiving the seed wheat, as a good soaking rain. It settles down the under soil to a proper hardness for receiving the seed, helps to fine the top as no amount of rolling or harrowing will, and then there is something in it which seems to make the grain start off as though it "meant to get there." I have one field, sowed about Sep. 10th, and before the big rains, and others sowed 10 days later and after the rain, and though both are equally good land, and received a like amount of fitting, the wheat sowed after the rain has the best appearance, and I have no doubt it will give the best account next harvest.

* * *

Those old fogies who claim that a heavy clover sod cannot be fitted for wheat and again re-seeded the following Spring, would do well to come and see a field we have on the Western New York Farm. In the Summer of 1885 it cut two tons of clover hay, was then fitted and sown to wheat, and this year 12 acres gave over 500 bushels, and Prof. Roberts can speak of the clover catch, as he saw it the latter part of June. There is no trouble in getting clover to grow when the proper material is put into the soil.

J. S. WOODWARD.

Miscellaneous.

LAW.

Here are some recent legal decisions of interest to farmers—and the rest of the world:

Mortgage.—In the case of Cheney *vs.* Woodruff, the Supreme Court of Nebraska held that the Act passed by the Legislature of that State in 1869 extending the period of limitation of mortgages of real estate to ten years, necessarily extended the limitation of debts secured by such mortgages to the same period as the mortgages.

Note Signed on Sunday.—A promissory note signed on Sunday, but not intended to be delivered till Monday, and not in fact delivered till that day, is not subject to the objection that it is a Sunday contract, according to the decision of the Supreme Court of Iowa in the case of Bell *vs.* Mahin *et al.*, decided October 5. The Court based its decision on the principle that a promissory note becomes a contract at the time of its delivery.

Discrimination in Freight Rates.—The words "discrimination in freight rates" used in a statute embrace an "overcharge" for the transportation of freight, according to the decision of the Texas Court of Appeals in the case of Missouri Pacific Railway *vs.* Parkhurst.

Constitutionality of the Assisted Immigration Act.—A decision was rendered in the United States Court at Detroit recently affirming the constitutionality of the "Assisted Immigration Act" of February, 1886. The defendant, Craig, imported ship carpenters from the Province of Quebec during the shipyard strike of last Spring. The defendant's counsel had interposed the objection that the entire law against importing labor was unconstitutional. The court held that the law is within that provision of the United States Constitution permitting Congress to regulate commerce. To the objection that the laws can not punish an offense committed in Canada, he answers that Craig's offense was committed on this side by the actual landing of the Canadians. This is equivalent to the law punishing an accessory to a crime. If the crime is not committed, the accessory is not guilty, but as soon as it is committed the accessory becomes liable.

Shop Orders and Cash.—Five years ago the Pennsylvania Legislature passed a law prohibiting mining and manufacturing companies from paying the wages of their employés in "store orders." The Supreme Court of that State has just set aside this enactment as unconstitutional. The Court says:

> The law is an attempt by the Legislature to do what, in this country, cannot be done—that is, prevent persons from making their own contracts. The act is an infringement alike of the rights of the employer and the employe; more than this, it is an insulting attempt to put the laborer under a legislative tutelage which is not only degrading to his manhood, but subversive of his rights as a citizen of the United States. He may sell his labor for what he thinks best, whether money or goods, just as his employer may sell his iron and coal, and any and every law that proposes to prevent him from so doing is an infringement of his constitutional privileges, and consequently vicious and void.

The general principle that persons should be left free to make their own contracts is a sound one. There is a growing tendency toward too much restrictive legislation on the relations between employer and employé. The Pennsylvania statute was, however, aimed at an abuse of which working people may justly complain. It may be well enough to say that whether a hired person shall be paid in shop orders or cash is purely a matter of agreement between him and his employer. But it is an agreement into which he may be forced by the want of employment, and one which must deprive him of the advantage of buying his supplies with cash.

R. M. H., Brooklyn, N. Y.—A leases to B house and stable. B sublets stable and part of house to several under tenants. A wishes to dispossess B for non-payment of rent. Has A to serve all parties occupying stable and house with dispossess papers, and if so, how is he to do so, not knowing how many under tenants there are or their names? If B, on receiving dispossess papers, wishes to pay rent, has he not to pay all costs and disbursements and fees for lawyer, if any are required? If A should start a suit against B only for amount of rent due, has B to pay all costs, disbursements and lawyers' fees?

Ans.—The sub-tenants need not be served with dispossess papers; they will be duly ejected by the marshal. In order to obtain a stay of proceedings, the delinquent tenant must tender the amount of rent due, and also pay or secure to be paid, the costs; but these do not include the lawyers' fees. The same would be the case in the supposition last mentioned.

L. R. H., Syracuse, N. Y.—In this State, when a wife dies leaving real estate inherited by her mother, to whom does it go, in case she leaves no will, and her father is still alive? Does not her father have the use of it during his life?

Ans.—According to the laws of New York, the real estate of persons deceased descends in the following order: 1. To the descendants. 2. To the father. 3. To the mother, and, 4, to the collateral relatives, subject to various other provisions. Thus, if the deceased be a married woman, and she leaves a husband by whom she has had issue, he will be "tenant by the courtesy" of her real estate during his life; or, if the inheritance came to her from her mother, then if her mother be dead, the inheritance goes to the father for his life time, and the reversion to the brothers and sisters and their descendants. If none such are living the father will have it in fee.

L. H., Newark, N. J.—The rear of my lot abuts upon a lot whose level is several feet below mine. Upon whose property should a wall be built to prevent the earth of the higher lot from falling upon the lower one, and upon the owner of which lot should the expense of building the wall fall?

Ans.—Neither owner is compelled to build such a wall. The inferior lot owner is under no obligations to support the higher level, but if the latter has been artificially raised, and the soil falls over on the lower in such a way as to cause appreciable damage, the injured owner may have his action for damages. The legal maxim *de minimis*, etc., (the law does not concern itself with trifles), is quite likely to apply in the case.

W. L., Troy, Pa.—I shipped by express a a package of goods, the value of which was over $500, but did not specify same. Am I bound by law to be satisfied with $50, as the express company claim that according to their printed receipts they are only liable to amount of $50, in case of loss, except I state at time of shipment exact value?

Ans.—The limitation being known to the shipper, he cannot recover more unless he can show that the property was lost through the gross carelessness or neglect of the carrier.

We have received a considerable number of complaints with regard to "The National Co." of this city, which advertises that it will "give away" 1,000 self-operating washing machines to those who send their addresses. When the addresses are sent, certain services are required as a preliminary to getting the donation. The "washing machine" is declared to be worthless by a few who received it; but nearly all who complain do so because, after having done what was required, no machine was sent to them.

Be slow to have any dealings with any party who advertises to give you anything of value "free." Sometimes the word appears in large letters in the advertisements of concerns that deal "on the square," but they are usually engaged in some picayune business and are willing to resort to a dubious trick to attract attention and secure correspondence. In four cases out of five, however, the word is used for the same purpose in the advertisements of those who are trying to get an unfair advantage over the public in some way. Advertising costs money, and these people usually advertise quite extensively, so that they must be scooping in a good deal of money to be able to stand the drain. It stands to reason that if anybody really wants to give something valuable for nothing, there is no need whatever to advertise for people willing to accept the gift. Either some service or work is always required in payment of the article offered, or other goods must be bought for a price high enough above their legitimate cost to pay for the "present," on the same principle on which chromos are given free by many grocery stores to the purchasers of a certain quantity of goods; or they are mere traps laid by sharpers to catch the greedy and gullible.

In all cases where anything of value is given payment is required in one way or another, and those who offer it always take care that their dupes, however smart they may think themselves, never get the best of them. What is given for nothing is worth just that.

To Several Inquirers.—B. H. Rowley, J. Stewart and James Dixon all of this city, are "sawdust" swindlers, who are papering the country with circulars soliciting dishonest dupes to purchase counterfeit money...The "Common Sense Evaporator" made at Newark, Ohio, is as great a fraud as the Arnold Evaporator denounced here and in our editorial page over six months ago. Both have been heartily praised by "The Fruit and Vegetable Growers' Association" which is itself a humbug and a fraud. "Dr." Orlando Smith forms the whole active force of this "Association" and "Orlando" is either one of the numerous *aliases* or a mere mouth-piece of J. M. Bain, the pestiferous Ohio swindler. This clever rogue has again taken in several newspapers by getting them to publish Orlando's commendation of his worthless evaporator.

CATALOGUES, ETC., RECEIVED.

Sherwood Harness Co., Syracuse, N. Y., Catalogue of the goods made by this trustworthy firm. We have repeatedly called our readers' attention to this harness, having seen it at several fairs and having always heard it well spoken of. Among the many letters published in this catalogue, we find the following from Major Alvord, late Manager of Houghton Farm, and now Professor of Agriculture at the Mass. Agricultural College. "We ordered a set of your Novelty Harness for the express purpose of using it in plowing in orchards, and not expecting to find it useful otherwise. We have tried it, however, with almost every kind of farm work where a two-horse team is required, and are so much pleased with it as a general farm harness, that I write to express the great satisfaction which we derive from its daily use."

Ferrier's Improved Corn Sheller.—Circular from Philo Ferrier & Son, Ypsilanti, Michigan. It is claimed that this sheller is entirely different from all others. It is a right-hand machine and stands at a convenient hight. The cob is separated by means of a sieve. It is the lightest working sheller made.

Woman's Work.

CONDUCTED BY EMILY LOUISE TAPLIN.

OF INTEREST TO WOMEN.

A LITTLE kindly courtesy goes a good way in a busy household, and if in our home we use the same politeness as we offer our guests, we shall see no ill-fitting "company manners."

The new winter wraps seen so far differ little from those of last season, excepting that the majority display a tight cape coming to the waist-line. Some very shapely Newmarkets with these capes are seen, made of smooth cheeks. The rough homespuns so popular last Winter seem to have disappeared entirely from the counters of large stores; it is impossible to purchase them. What becomes of these out of date goods is a profound mystery to the uninitiated.

At this season the perennial church fair and its allies appear before the public, and the promoters of such enterprises are usually anxious to provide some novelty. A good idea for such an entertainment is a loan exhibition with some novel supper in addition. Articles of "bigotry and virtue," as Mrs. Malaprop says, may be borrowed from every one possessing such; tastefully arranged they make a pretty show. Such an affair in a New Jersey town had in addition a Dutch kitchen, arranged with real old Dutch furniture, where meals *a la Hollandaise* were served by waitresses in gowns of genuine Dutch antiquity. It looked like a Washington Irving interior and was a great success on the ground of its novelty.

NOVELTIES IN DECORATIVE ART.

SINCE decorative art became chief idol of all feminine souls the dealers in bric-a-brac and like vanities have been making constant efforts to propitiate that exacting deity, until earth and sea and sky are ransacked for novelties in decoration. We may congratulate ourselves that the reign of æsthetic gloom is past—we are no longer required to sit on impracticable chairs in the dim shadows of impossible windows, all in the name of art. This season we seem to have entered an era of gilding and metallic effects, since everything is thus adorned, from gilded wash-boards to gilded Chianti wine flasks, the latter, by the way, making a very quant and pretty ornament when tied with a big bow of vari-colored ribbon.

A decided novelty this season was a genuine Hindoo punkah, made from the great leaves of the stately Chusan palm, a near relative of our own palmetto. They are gilded or bronzed, then decorated with garlands of natural flowers and foliage, preserved by some secret process similar to electro-plating, keeping the delicate natural form under its coating of metal. But if the gorgeous Hindoo fans suggest Scherezade and her train, some dainty little French china candlesticks must have been designed for Queen Titania herself. Imagine a full-bloom La France rose, with its curving, silvery-pink petals, bearing in its centre a dainty rose-pink spiral that it seems positive profanation to call a candle. They are, without doubt, the daintiest trifles imaginable, quite irresistable to any feminine heart.

Who would imagine that a decorative future lay before the pith of everyday, unromantic corn-stalks; yet we are shown charming hanging cabinets covered with a tressellated design in this material. It is prepared with fish-glue, according to a process known only to the inventor, and has a soft whiteness very pleasing to the eye. These cabinets are mounted with stuffed birds; their natural treatment affords a great relief after the stained-glass attitudes and conventional designs affected by the average taxidermist. The same artist, we believe, is designer of some exquisite bird screens; one specially worthy of note was of peacock blue plush, mounted in brass, bearing a single snowy egret; it is bordered with soft white and Quaker-tinted feathers, with one tiny bird in an upper corner.

We are all familiar with the use of straw-matting as a dado, but we saw it put to a new purpose; it was made into a screen or panel, handsomely painted in oils, a work of infinite difficulty on such a rough and porous surface. A screen of this material, mounted in gilded bamboo, depicted a Cardinal's reception.

We may stop to listen to the chimes of a tall, ancestral-looking clock, though the case is a reproduction, the works are old English, striking the hours with a clever imitation of old Westminster chimes. It is too saddening, however, with it ceaseless

"Never, forever
Forever, never;"

We pass on to a quaint chiffonier in Dutch marquetry, similar in style to Sheraton furniture, and containing enough secret drawers to hide away the wills of a regiment. Here is a carved Flemish cabinet, too, which would have gladdened the heart of Edwin Forrest, whose taste in that direction was above reproach. The deep-toned carving of the cabinet brings out in fine relief some of Webb's English glassware that suggests in form and color some of the old semi-opaque Venetian. Of old Venetian there is a choice display, perfect in form and matchless in coloring, while Crown Derby and Royal Worcester, Modern Bretby and quaint Satsuma make a background suggestive of Keramos itself. Truly, of making of bric-a-brac there is no end, and we shall continue to worship the Proteau fetich we call decorative art indefinitely, unless Dame Fashion steps forward, and orders us, in the language of Mrs. Gradgrind, to go and be somethingological immediately.

LETTING THINGS SLIDE.

ALICE BROWN.

HOUSEKEEPERS who are mothers and have care and work in unlimited quantities often let all that is worth living for slide out of their lives, and themselves slide early into the grave or worse into hopeless, disappointed drudges.

They have seen a long procession of valued things slide away. Leisure and strength, the approbation and praise of husband and children, time to give to the society of friends and the enjoyment of books and papers, or for attention to the details of neat and becoming dress. Perhaps good temper and loving kindness have joined the procession and beautiful hope sorrowfully and reluctantly followed as the last of the departing train.

It is unselfish women who do this, but they make an idol of this virtue and sacrifice themselves to it. They give to their households all that they thoughtlessly demand and find their gifts exhausted long before their families cease to need their wealth of hand and heart.

The home should come before the house, the heart before the body, the mind before the appetite, the woman before the drudge, and she who aims and strives for the higher things will not become a cipher in her own household.

It may take more moral courage to refuse to do all the drudgery of the house than to accept it. But if by any managing or contriving the heaviest work can be done by some other than the mother, the home will gain more than the house will lose. It is often impossible to hire a girl by the week or month, but there may be a boy or girl in the neighborhood who could come for half of each day, to bring in wood and water, gather and prepare vegetables, do the churning, if not too heavy for the size of the child, and save countless steps in many ways. If treated with kindness and justice the boy or girl would be glad for the chance to earn something. If no boy or girl is available, some wash-woman in the neighborhood may be glad to do the churning in exchange for a share of the buttermilk each time or to help during house-cleaning time in return for old carpeting that she could use in her smaller rooms.

When any variety of good fruit has become a drug on the market, the same woman may be glad to give a few days' work and receive her pay in the fruit. The pay in such a case ought to be at the market price of the fruit be that as low as it may. When a man is employed for the year, on the farm, his duties should include during the Winter, building fires, carrying wood, and any heavy work that comes within his skill. Any such work ought to be specified when he is hired and accepted with appreciation if done cheerfully.

If the children are old enough to assume some responsibility, they can lighten the mother's load and ought to take delight in their work. Rewards given with judgment, and a regular allowance of money for regular work done by the oldest ones, will brighten the work very much for all.

Having divided the labor relieving the head of the household department of as much as is possible, the time thus gained ought to be given to something recreating and uplifting; something enjoyable. At least once a week the mother should have some evening set apart to entertain husband and children, that they may become her warm friends as well as her nearest relatives.

Giving and receiving the same courtesy from each other that is thought due other friends will beautify home wonderfully, and it will be as attractive as the home is hateful, where drudgery, cross words and selfish strifes dwarf and distort the family life.

HINTS FOR ACCIDENTS AND EMERGENCIES.

THERE are comparatively few mothers who know just how to act in case of a sudden illness or accident. At such times, all the remedies one has ever read or heard of, seem to escape one as if by magic. Such of our readers as have a family of young children with ever present bumps and bruises and illnesses may find it worth their while to cut out this article, which has been carefully compiled, and paste it where they can have ready access to it in case of need.

In case of a cut or wound, decide first whether the blood comes from an artery or a vein If it is of a dark color, oozes slowly and evenly, it is from a vein, while if from an artery, it will be bright red, and spurt in jets. In the former case you can generally check the bleeding by binding on a hard pad. In the latter case tie the limb with a twisted handkerchief or cloth between the wound and the body. Then apply cold cloths, ice, or in severe cases cloths dipped in a solution of alum or tannin. As soon as the bleeding is checked, bring the edges of the cut closely together with adhesive plaster. If any matter forms, wash the cut frequently with a solution of carbolic acid, one part of the acid to 100 parts of the water.

If a sprained ankle occurs, remove as quickly as possible the shoe and stocking. Wash frequently with cold salt water, and if there is much heat in the joint, apply cloths wet with witch hazel, which is generally on hand in the family medicine chest. A mixture of seven ounces of water, one of opium, and one dram of sugar of lead is also excellent. Keep the foot elevated, and cool, do not stand on it, and move it as little as possible. For the sting of a bee or the bite of any insect, apply a bruised onion, ammonia, diluted, witch hazel or bi-carbonate of soda to the part affected.

Children frequently suffer greatly with earache; a drop of warm olive oil mixed with an equal amount of laudanum will often relieve this if dropped in the ear. Place a little cotton well saturated with chloroform in the bowl of a clay pipe; insert the stem into the ear of the sufferer and plow gently. The evaporating chloroform will relieve the pain immediately. If there is any foreign substance in the eye, take hold of the lashes of the upper lid with the left hand and pressing the dull point of a pencil against the middle of the lid, turn it upwards, then remove the substances with a camel's hair brush or the corner of a soft handkerchief. Particles of lime often cause great pain if they get into eye. Apply weak vinegar to neutralize the alkali and remove the particles as directed.

MANY a fond mother has been so frightened at being awakened by the peculiar ringing rattling cough that heralds croup, as to be unable to apply or think of a remedy. This disease always attacks its victims in the night, and is to be greatly dreaded on account of the extreme rapidity with which it developes. If possible, in this as in all cases where you distrust your own ability to act, send for a physician, but meantime, until his arrival, much may be done to check its ravages and relieve the patient. Give an emetic, ipecac in teaspoonful doses every five minutes until vomiting ensues, is the easiest to give a child; put hot, moist poultices of flaxseed or hops on the throat and upper part of the chest. A hot bath if practicable will often give relief.

DIPTHERIA is another malignant disease where a little prompt action will sometimes avert the most serious consequences. The symptoms are soreness of the throat, pain in swallowing, and the formation of a grayish membrane in the back of the throat. There is always a low fever, depression of spirits and a rapid decrease of strength. An eminent physician told me that one of the best remedies to be applied in the early stage, is to paint the throat inside with iodine, if this is not at hand, use lemon or lime juice until it can be obtained. If the patient is old enough to use a gargle, pure lemon or lime juice, a solution of chlorate of potash, sulphur and water, or alcohol and water are very affective. Powdered sulphur blown into the the throat is also good.

HICCOUGH is disagreeable and sometimes dangerous. A few drops of ether on a little sugar will frequently give relief when all other remedies fail.

SELMA CLARE.

GOLDEN GRAINS.

THE Holstor Methodist says: Seek to be useful and let greatness take care of itself.....

THE nerve-force invested in fretting and complaining is the poorest investment in the world .....

DO not trouble yourself so much about whether your church is a regular gospel church, as whether you are a regular gospel Christian.....

YOU laugh at the quaintness of the country preacher, and fail to profit by his words of truth. It is the old "Go up bald-head" spirit.

MAY the Lord give me such an insight into what is really good, that I may not rest contented with making Christianity a mere addendum to my pursuits, or with tacking it as a fringe to my garments!—*George Eliot*....

HON. P. T. BARNUM says that the argument to which he surrendered when he became a total abstainer from intoxicating beverages was presented by the late Rev. E. H. Chapin. It was this: "Either you can stop drinking without difficulty, or you cannot. If you can stop without difficulty, then you ought to do so for the sake of your example. If you cannot stop without difficulty, you are already in great danger and you cannot escape it a moment too soon."..... .....

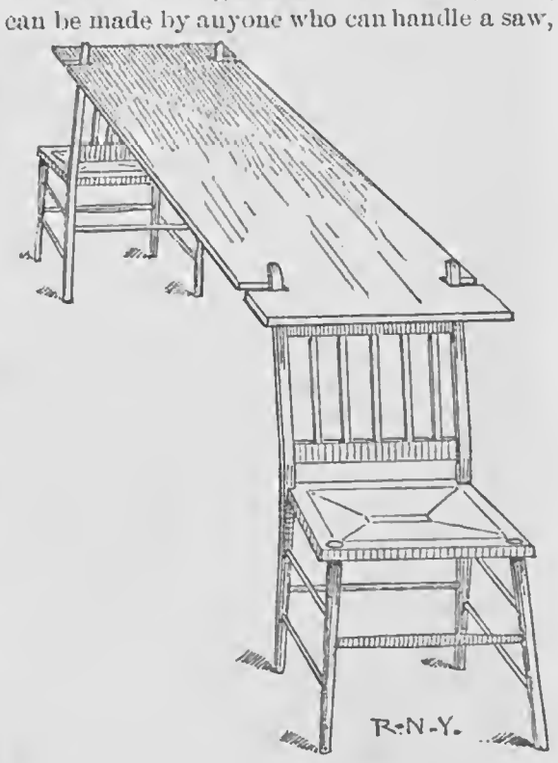
Domestic Economy

CONDUCTED BY MRS. AGNES E. M. CARMAN.

What can be more hopelessly, helplessly unhomelike than a parlor full of span-new furniture?

IRONING BOARD.

A VERY handy board for ironing dresses, shirts and in fact garments of all descriptions, can be made by anyone who can handle a saw,



plane and square. The illustration shows how the board is notched near the ends to allow of the tips of the chairs passing through. Place the clothes' basket on one of the chairs.

GEORGE PELTON.

ONE WINTER.—No. 1.

ANNE THRIFTY.

WE were poor that Winter and we faced the fact cheerfully; if the elders of the family, my uncle and myself, were not always happy, the growing twin boys seemed to be, and that we felt was a great deal to say of the little city home that had lost the presence of wife and mother in the early Autumn.

Economy was absolutely necessary and was practised in the kitchen and pantry as carefully as elsewhere in the house. We had a cow and two hens, and from an eighth of an acre of ground we had saved for winter use a dozen fine Hubbard squashes and a few dry Lima beans, and had canned two dozen quarts of tomatoes. Our food was plain and frugal. For breakfast we often had a loaf of corn-bread made by pouring boiling water over two cups of corn meal first salted (we always used white meal in Indiana) and the batter being right to pour readily it was poured into a hot greased pan and baked to a nice brown in a brisk oven.

Heat was the secret of success in this bread, and when rightly made and baked we thought it very toothsome. We often ate it broken into new milk and said, as we enjoyed our simple breakfast, that a king might envy us. Our cow and the two hens gave us good food for the growing boys, and we felt that with good milk we dared economize in meats without danger to health.

The hens faithfully provided one egg every day and all of us being fond of bean soup, I often made it for dinner with egg dumplings in it. Soup beans were six cents a quart, and after the Limas from our garden were gone I bought those for our soup. When boiling the beans for the soup the water was poured off twice and fresh added, otherwise the soup would have had a strong, unpleasant flavor.

The dumplings were made of two eggs beaten light, into which was stirred about a half-cup of flour and a half-teaspoonful of baking powder and a pinch of salt, making a batter which, dropped in spoonfuls into the soup, puffed into light yellow balls; and they were ready to serve with the soup after five minutes' boiling.

For several days I would save the daily egg and then use the four or six, as it might be, for a dish of scrambled eggs, made by breaking the eggs into a pint of milk and stirring when they began to harden. We liked it better so than to beat up the eggs before mixing them with the milk. Sometimes when the

eggs were few I used a little flour, beaten to a smooth paste, to thicken the milk, before putting in the eggs; for the boys came from school with healthy appetites and our dishes were few at each meal, so I always tried to have plenty. Just before Thanksgiving the boys came in from school one day running over with anticipations of a Thanksgiving feast, and both talking so fast that I could not understand either.

But finally I learned that they were trying to tell me what they wanted for the Thanksgiving dinner, and my heart sank to think of the disappointment in store for them as I thought helplessly of our limited purse. But their anticipations were so eager, and their faith in Cousin Anne so abiding, that I felt I *must* do something to meet them.

ONE way to economize in light—buy kerosene by the barrel.

HIRED MEN ON THE FARM.

MRS. F. N. D. writes us that she would earnestly urge all farmers' wives to protest against the boarding of farm hands. She considers that the average hired man is the most vexatious element that the housewife has to contend with, and that a home cannot be a home where he exists. She thinks that the extra cooking, washing and ironing that his presence necessitates furnish the last straw to the already over-burdened wife. But our correspondent's grievance reaches the climax when she tells of the selfish, inconsiderate actions of the man on Sunday. He is invariably late to breakfast on that morning thereby preventing the mistress from attending church while the rest of the day is spent in loafing around the house and making as much noise as possible. While we sympathize with our correspondent's trials we beg to be permitted to state that we should be mistress in more than name in such a situation, and that it is in our humble opinion more the master's fault than the man's, when the latter is allowed to increase instead of lighten the wife's work.

OIL FOR DOMESTIC MACHINERY.

MUCH time and worry can be saved by busy housekeepers, by "having things handy by," as my Yankee neighbors say. If the pantry is across the room from the cook-stove, a shelf or table beside the stove having on it at least salt, pepper, knife, fork and spoon needed in cooking, will save miles of steps in a year. Sugar, flour, spices—plainly labeled—baking-powders, flavoring extracts, etc., kept in one place, and molding-board, rolling-pin, cake-cutters and baking-dishes in another group, rob baking day of half its trials. Broom, dust-pan, duster and floor-cloths hung side by side, help sweeping day to "start fair." If at some distance from a store, a slate hanging in the pantry, with pencil tied to it, on which to jot down needed supplies as soon as exhausted, is a real help. An emergency corner in a closet, where rolls of worn linen and muslin, sticking salve, sweet oil for burns, ammonia for bee-stings, arnica for sprains, etc., are kept, and another corner where paper bags, wrapping paper and strings can always be found, prove treasures indeed. Mrs. Fisher once said that "every room in the house ought to contain needles, thread and scissors." A scrap-bag hung on the sewing-machine—fancy or plain—will save a deal of sweeping threads and bits of cloth from the carpet. Last, tho' not least, a cushioned chair kept "handy by" in the kitchen to rest in, if only for five minutes, when one is so tired, and a good book or paper—R. N.-Y. for instance—within reach to pick up at odd minutes will refresh both body and mind. Many other things will suggest themselves to quick-witted housewives intent on making the most of everything, themselves included. HOUSEKEEPER.

RUBBER gloves are a boon to women whose hands chap easily. They can be had of any dealer in rubber goods, and cost $1.25. Get them a size larger than the hand.

A DISHWASHING machine has been invented. The dishes are placed on a rack and a light cover is fitted over them. Below is an arrangement something like a turbine water wheel. This is fitted with hot water and rapidly turned by means of a crank. The hot water is dashed violently against the dishes and washes them.

ACCORDING to Harper's Bazar frank people are interesting in certain aspects. They have a pleasant knack of letting us know all their opinions; they never mince the matter. They tell you exactly what they think of you and of all the world, and what everybody else thinks, as far as they know. There is naturally little reserve about them; if your nose is not to their mind, they feel it their duty to enlighten you; if your gown is not becoming, they do not spare your feelings, from the kindest motives; otherwise you might be going about the world in the belief that they approved of you.

FANCY muffs will be fashionably worn, and will be even more popular than fur ones, for the reason that they admit of greater change, and can be easily made to match the costume. The prettiest that we have seen are made in both velvet and plush, and are in the form of a bag gathered at the top, and much trimmed with bows and long loops of narrow ribbon.

DOMESTIC RECIPES.

GOOD COOKIES.

RUB together two cups of white sugar and one cup (six ounces) of butter, add nutmeg or whatever flavoring preferred, also three-fourths cup of sweet milk and two cups of flour with which has been mixed and sifted two teaspoonfuls of cream-of-tartar. Mix, then add one-fourth teacupful of sweet milk in which is dissolved one teaspoonful of saleratus, beat well, pour all into the center of the pan of sifted flour, mix to roll out, as soft as possible, roll somewhat thin and bake in a quick oven.

EUREKA COOKIES.

TWO cups of sugar, one cup of butter, scant, three eggs, one teaspoonful of saleratus dissolved in half cup of water, nutmeg, and flour merely enough to roll. Beat the butter and sugar together, add the eggs and beat well, then the other ingredients, pour into flour and mix: roll thin.

TOMATO SOUP.

THIS is a most excellent dish for those who are fond of the tomato. Take five or six large, ripe tomatoes: pour boiling water over them, after which the skins are easily removed; cut the tomatoes up fine, put them in a suitable dish, add water, two quarts or less as you like; season to taste with salt and pepper, add a small piece of butter, boil until the tomato is well cooked to pieces, now stir a scant tablespoonful of flour, smooth with a gill or so of rich, sweet milk; stir this in, let it boil a few minutes and serve it hot. Rightly seasoned this soup is very nice. Canned tomatoes may be used instead.

A NICE WAY TO COOK PARTRIDGE.

DRESS, joint and wash the bird, slashing the breast through the outside layer lengthwise, on each side: put to cook in water to well cover it, adding, presently, some salt and pepper and a small piece of butter. When tender pour off nearly all the broth, and set it aside for the gravy; there should be a bowlful. Now add to that remaining in the kettle an ounce or so of butter, cover and let it boil up briskly until the broth boils away nearly to roasting, then remove the meat, cover and keep warm. Pour the broth saved back into the kettle and when it boils thicken with a spoonful of flour mixed smooth with some butter and perhaps a little water. When done and rightly seasoned to taste, it should be immediately served. Pour over the partridge or serve separately.

GLADDYS WAYNE.

MOLD OF CHICKEN.

BOIL a chicken or chickens in as little water as possible until very tender, pick the meat from the bones, rejecting skin, and chop or cut into small pieces—not mince. Season with pepper and salt. Boil until hard a half dozen eggs and cut into slices. Put into the bottom of a mold some slices of egg, cover with chicken, then arrange some slices of egg around the sides of the mold pressing in the chicken against the pieces to keep in place. In this way fill up the dish. Boil down the broth so that there will be about a cupful for each chicken; season and to each cupful add a teaspoonful of gelatine, which you have first soaked in a very little cold water. Pour over the chicken while warm, not hot and set aside for a day or night. Turn onto a platter and garnish with celery leaves or parsley.

MRS ECONOMY.

POTATO YEAST.

The compressed yeast, now in general use is so convenient for housekeepers, it appears hardly worth while to give recipes for making yeast. Yet for those who cannot avail themselves of it I give the following directions for making excellent yeast. Place upon the fire a sauce-pan of boiling water, add one-half teaspoonful of salt to a quart of water. Pare three large potatoes, use a coarse tin grater and standing by the range grate the potatoes rapidly into the boiling water, stirring occasionally and let remain a few minutes over the fire until very thoroughly cooked. On this depends the keeping qualities of the yeast. On the manner of grating depends the snowy whiteness of the yeast. We for a long time grated the potatoes into a bowl and added to the boiling water. Even one moment's exposure to the air gave the grated potato a dark color. Remove from the fire and when nearly cold add one cake of dissolved dry or compressed yeast to raise it. Set aside in a warm place and in about six hours it is ready for use. Keep afterwards in a very cool place. To this may be added cooked grated potato as often as is desired to make new yeast, and you will always have a good article with little trouble.

POTATO BREAD.

At this season with potatoes at their best, it is well to use them in the bread as well as yeast. Set the sponge at night. At dinner-time boil a half-dozen extra potatoes for the bread sponge. We use Snowflakes now as white as flour and nearly as dry. When cooked take them into a pan with about one pint of flour. Mash them fine and pour over them and the flour the water in which they were boiled, if clear, but if cooked in an iron kettle do not use it, but take boiling water from the teakettle. Work together in a smooth paste, thoroughly scalding the flour. When nearly cold add one cupful of the potato yeast, beat well together and set aside until evening. It will then be of feathery lightness. Add to this one pint of warm milk and flour to make a thick batter, indeed all the flour you can stir in. Let stand over-night in a warm place, and in the morning sift three quarts of flour with one even teaspoonful of soda. Pour the sponge on to the moulding board and work it long and well, resting the hands from time to time by using a chopping knife to chop the dough. This will give a very fine, light grain and is easier than the tiresome motion of kneading. Very moist, white, light bread will be the result.

BUTTER-MAKING IN WINTER.

As cold weather approaches the difficulty of churning is increased, especially where one cow only is kept, and the cream is a long time in gathering enough for a churning. As you skim the cream, salt and stir it every day. Churn it every week if you have but little. When you put it into the churn add an equal quantity of very warm, sweet milk. Let the milk be almost scalding, not quite, for, of course, that would turn the cream to oil. Turn the crank of the churn slowly as you pour in the milk to mingle it with the cold cream. Many of us have no thermometers for determining the exact temperature. Our experience is that this will help to bring the butter in a very short time, and good, sweet butter too, if you do not let the cream stand too long. Sometimes neglecting to salt the cows makes the churning very tedious, and allowing the cream to stand in a very cold place will cause it to "swell"—that is, rise up in its wrath, and remain wrathy till one's patience is exhausted. Try the warm milk to appease said wrath. C. J. S.

CORN-STARCH PUDDING WITH VARIATIONS.

I MAKE my plain corn-starch pudding as follows: One pint of rich, new milk, two tablespoonfuls of corn starch, a scant half cupful of sugar, the whites of four eggs and a little salt. Put the milk over the fire, when boiling-hot add the sugar, then the corn starch which should be dissolved in a little cold milk. Stir constantly until smooth, then add the whites beaten to a stiff froth. Stir a few moments on the back of the stove and turn into a mold. Dip the mold into cold water before turning in the corn starch. Turn out when cold and eat with a soft custard made of a pint of milk, a half cup of sugar and the beaten yelks of the eggs. Put these ingredients together *cold* into a small tin dish, and set into a dish of boiling water. Stir until it thickens. When cold flavor with vanilla. One change of this pudding that we enjoy very much is this: When that part of the pudding I turn into the mold is done, stir in a cupful of grated cocoanut, and then turn out. This is delicious. Another pretty variation is to take out a third of the white corn starch while hot, and add to it three spoonfuls of grated chocolate melted in a very small quantity of milk. Now put into the mold a layer of the white, then the chocolate and cover with the white. Again you may vary the plain pudding by dropping seeded raisins or small pieces of citron into the corn starch as you turn it into the mold.

MRS. E. G.

IT is time to think of Christmas presents.

YOU can keep lemons fresh for some time if they are put into a glass jar or stone crock and covered with cold water. Change the water twice a week and keep in a cool place. We have kept them good in this way for three weeks.

Miscellaneous Advertising.

When Baby was sick, we gave her Castoria
When she was a Child, she cried for Castoria,
When she became Miss, she clung to Castoria,
When she had Children, she gave them Castoria.

Miscellaneous Advertising.

Pain in the Side

Is a symptom of disease. It may be caused by Rheumatism, or by Neuralgia, but it usually indicates a disordered condition of the Stomach, Liver, or Kidneys. Ayer's Sarsaparilla corrects the action of the vital organs, and removes every trace of disease from the system.

Last fall and winter I suffered from a dull, heavy, pain in my side. I did not notice it much, at first, but it gradually grew worse until it became almost unbearable. During the latter part of this time, disorders of the Stomach and Liver increased my troubles. I began taking Ayer's Sarsaparilla, and, after faithfully continuing the use of this medicine for some months, the pain disappeared and I was completely cured.—Mrs. Augusta A. Forbush, Haverhill, Mass.

Ayer's Sarsaparilla,

Prepared by Dr. J. C. Ayer & Co., Lowell, Mass.
Sold by all Druggists. Price $1; six bottles, $5.

MAKE HENS LAY

SHERIDAN'S CONDITION POWDER is absolutely pure and highly concentrated. It is strictly a medicine to be given with food. Nothing on earth will make hens lay like it. It cures chicken cholera and all diseases of hens. Illustrated book by mail free. Sold everywhere, or sent by mail for 25 cts. in stamps. 2½-lb. tin cans, $1; by mail, $1.20. Six cans by express, prepaid, for $5. I. S. Johnson & Co., P. O. Box 2118, Boston Mass.

LADIES We make a specialty of giving premiums for the forming of Tea Clubs for our pure Teas and Coffees. **We defy the world on price and quality.** No house gives same quality goods and premiums. A host of useful and ornamental articles to select from. Silver-plated Casters for $5, $7, and $10 orders. Sets, elegant designs, Silver-plated Tea for $20 and $50 orders; or beautiful Gold-Band China Tea Set or handsome **READ** Decorated Dinner Set, Moss-Rose Toilet Set, Gold and Silver Watches, Clocks, etc. Illustrated price and premium list, and full particulars sent free. **SPECIAL OFFER:** To every tenth person that answers this advertisement we will send **free one pound of choice Tea.** Write at once. **THIS**

NATIONAL Tea and Coffee Company, {BOSTON, MASS.

MASON & HAMLIN

ORGANS.

Highest Honors at all Great World's Exhibitions for nineteen years. 100 styles, $22 to $900. For Cash, Easy Payments, or Rented. Catalogue, 46 pp., 4to, free.

PIANOS.

The Improved Method of Stringing, introduced and perfected by MASON & HAMLIN, is conceded by competent judges to constitute a radical advance in Piano-forte construction.

Do not require one-quarter as much tuning as Pianos generally. Descriptive Catalogue by mail.

ORGAN & PIANO CO

154 Tremont St., Boston. 149 Wabash Ave., Chicago.
46 E. 14th St. (Union Sq.), N. Y.

GOLD MEDAL, PARIS, 1878.

BAKER'S Breakfast Cocoa.

Warranted *absolutely pure Cocoa,* from which the excess of Oil has been removed. It has *three times the strength* of Cocoa mixed with Starch, Arrowroot or Sugar, and is therefore far more economical, *costing less than one cent a cup.* It is delicious, nourishing, strengthening, easily digested, and admirably adapted for invalids as well as for persons in health.

Sold by Grocers everywhere.

W. BAKER & CO., Dorchester, Mass.

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TRADE ORA ET LABORA MARK.

FOOD

FOR INFANTS AND INVALIDS.

The only perfect substitute for Mother's Milk. The most nourishing diet for invalids and nursing mothers. Keeps in all climates. Commended by physicians. Sold everywhere. Send for our book "The Care and Feeding of Infants." Sent free.

DOLIBER, GOODALE & CO., Boston, Mass.

A SPECIAL SAMPLE OFFER.

Hand-forged, Razor Steel Blades, replaced free if soft. **New Pattern.** Price 50 cts. postpaid; 3 for $2. Regular price, 75 cts. Boy's 1-blade, 25 cts. Lady's 2-blade, Pearl, 50 cts. Gent's fine 3-blade, $1. Colorado 3-blade Stock Knife, $1. Grafting, 25 cts; Budding, 35 cts.; Pruning, 35 cts. to $1. Family Shears, 60 cts.; Button Hole Scissors, 50 cts. 56-page List Free. Also *how to Use a Razor.*

Maher & Grosh,
30 S Street,
TOLEDO, O.

News of the Week.

HOME NEWS.

SATURDAY, November 6, 1886.

THE elections just held have been fruitful in surprises, and will undoubtedly afford material for reflection to party leaders and managers for some time to come. The results have been very much mixed, and in some cases the contests have been so close that their outcome still remains in doubt. No groundswell in favor of either party is apparent on the face of the returns. The gains and losses are pretty evenly divided between the two great parties. The Democratic majority in the House of Representatives has been greatly reduced, but the Republicans have lost ground in the Northwest, a section toward which their rivals have for some time cast anxious eyes. The vote of the workingmen has made itself strongly felt in a number of directions. Among the surprises of the election must be counted the defeat of Mr. Morrison in Illinois, and the narrow escape of Speaker Carlisle in Kentucky. In some quarters these events, as also the defeat of Mr. Hurd, are regarded as evidences of a desire to rebuke these legislators for the part they have taken in agitating the tariff question. The most genuine surprise of all to the average observer was the large vote polled by Mr. Henry George for Mayor of New York city. Mr. Hewitt, the Democratic candidate for the office, was elected by 113,000 votes, but the labor candidate was second in the race with 68,000 votes in round numbers, or over 7,000 more than were polled by the Republican candidate. . .Another earthquake was felt in the Southern States yesterday—the most severe since that that upset Charleston. It was most severe in Savannah, Ga., and Columbia, S. C. Very slight damage was done and no casualities are reported.....

A MEETING of the Western New York Salt Manufacturers' Association is soon to be held to establish a pool and raise the price of salt. Although common salt is now sold as low as 60c. a barrel, the barrel costing 25c., "still there is little profit in its manufacture at this price by the most economical manufacturers." Those who oppose a pool think that higher prices would bring in many new manufacturers. .....Public debt reduction in October, $13,101,519.....A big strike of beef packers for eight hours at Chicago, and a big pork packers' strike at St. Louis.....Mrs. Stewart's will leaves her estate among her own folks, with discretion on the part of Judge Hilton, her executor, to apply some of it to the services of the Protestant Episcopal Cathedral and its belongings which she had built and endowed at Garden City, Long Island, a place founded as a business speculation by her husband. No public benefactions ..... Monday, Liberty's torch was lighted on Bedlow's Island, New York harbor, and there was an elaborate display of fireworks, which had been deferred from the unveiling of the statue, owing to wet weather..... .Louis Berial, for 25 years an employé in the Custom House in New York, shot Surveyor of the Port H. S. Beattie three times on Monday. Had been dismissed, on Beattie's recommendation, for illegally charging duty on an immigrant's baggage.....A council of Roman Catholic archbishops at Baltimore has favored leaving each archbishop to treat the order of Knights of Labor as he sees fit in his own diocese. This doesn't antagonize Cardinal Taschereau of Montreal, or commit the Church one way or the other, while leaving each archbishop free to pounce upon troublesome Knights in his own section—a very diplomatic stand.....Frank Walworth, the murderer of his father in 1873, in this city, died at Saratoga, Saturday, of pneumonia, aged 31....."Red Top," President Cleveland's country place, will be formally opened November 15, when the horseshoe will be nailed over the door. .... Jay Gould says he found business so good out West that he has ordered between 4,000 and 5,000 new cars for the Missouri Pacific, mostly freight cars, but including 150 passenger coaches; also 100 locomotives..... Consul Brigham says the rumor that a large filibustering party had been organized to go to Mexico with A. K. Cutting at its head, is positively untrue ....That St. Louis train robber took $120,000 instead of $50,000 as first reported Officials "know who he is and he'll soon be arrested".....The St. Louis Sugar Refinery, the largest in the West, has shut down, unable to compete with the Sandwich Island sugar, which is admitted free of duty. Several other refineries have lately shut down for the same reason.....In the new Vermont Legislature the House has passed a bill granting suffrage to women, by a vote of 132 to 82..... Two alleged Know-Nothing organizations in Chicago are reported to have 1,500 to 2,000 members devoted to the theory that foreigners shall not hold office in America, and working by secret circulars and private meetings.. .....It is semi-officially announced in Canada that a dissolution of the Dominion Parliament has been decided upon. It will be the most important election since the act of federation.....The Chinese laundrymen of New York have decided to form a trade-union for the purpose of keeping up the rates on their work, and will fine every Chinaman who does not join or who cuts rates $100, boycotting him if he fails to pay. Chinese cheap labor will soon be a thing of the past..... . .....The estimates of the expenses of the postal service for the next fiscal year aggregate $55,346,150 while the appropriation for for the current year was $54,365,863, showing an increase in the estimates for the next year of $976,286.....The Secretary of the Treasury has this week issued the 144th call for the redemption of bonds. The call is for $10,000,000 of bonds of the 3 per cent loan of 1882. We're wiping out the public debt at an "alarming" rate. What shall we do with surplus taxes when they can no longer be applied to its payment?.... ....

FOREIGN NEWS.

SATURDAY, November 6, 186.

EUROPEAN news of little general interest. Bulgaria embroglio still menacing the peace of Europe. Grand Sobranje for electing a Prince is in session at Tirnova, but making little or no headway, owing to the evident opposition of Russia and the timidity of some, the indifference of others and the want of combination of all the other Powers. Kaulbars issues orders in the name of the Czar, in opposition to the Government, as if in a Russian Province. All parties—politicians, military officers and soldiers—engaged in the conspiracy against Prince Alexander in May, have been set at liberty on the peremptory demand of Kaulbars. Nabokoff, the military leader, has started a rebellion in favor of Russia, at Bourgus, and Karkoff, Karaveloff and Metropolitan Clement, the political leaders, are plotting a new *coup d'état*. War likely in Spring or before, unless Russia is allowed her own way.....

AGRICULTURAL NEWS.

SATURDAY, Nov. 6, 1886.

THE Dairy Commission of this State cost $30,000 in 1884; $50,000 last year, and $105,000 is wanted this year. Now that State laws are backed up by Federal law ought not something really good be got for this outlay? .... State Dairy Commissioner Hurst reports that the sale of butterine and oleomargarine in Ohio has declined 75 per cent. within the first five months of the operation of the State dairy laws.... First dead duck—Easterbrook & Co., oleomargarine manufacturers, at New Haven, Ct., have suspended on account of the Government tax law which went into effect Monday.....Dr. Merriam, chief of the new Bureau of Ornithology, denounces the English sparrow. The pest spreads over 130,000 square miles annually.... At least $4,000,000 were paid out for leaf tobacco in Danville, Va., in the year ended September 30, and as much in Lynchburg.....The factories in Manitoba have increased from six cheese factories in 1885, to seven cheese and five butter factories in 1886. ....The hop crop of Washington Territory this year was about 2,550 bales..... ..In the summer packing season of 1886, Chicago packed 258,000 more hogs than Kansas City, St. Louis, Milwaukee, Cedar Rapids, Indianapolis, Cleveland and Cincinnati combined. In the same part of 1885, Chicago was 542,000 ahead . .....The man who puts up a barbed wire fence in Nebraska is responsible for any damages sustained by men or animals coming in contact with it.....The State convention of the Anti-Horse-thief Association of Missouri met at Sedalia, on the 21st inst., 200 members being present. Reports by the committees showed the order to be increasing in orders and influence, and horse stealing decreasing as the means of detection and capture become more certain.... .....During the seven weeks ending September 18th there were 82 fresh outbreaks of pleuro-pneumonia reported in Great Britain, and there were 319 cattle attacked. The above figures show an increase over the returns for the corresponding week of last year, when there were 64 fresh outbreaks and 276 animals attacked. ....The great Killerby Herd of Short-horns belonging to the late J. B. Booth, Yorkshire (England,) was sold recently, 58 animals bringing an average of $464.12.....The exports of live stock and dressed meats per steamships from Boston for the English markets last week were 827 cattle and 1,280 quarters of beef..... .....The London market for American live cattle is flat, at 11 cents for best, estimated dressed weight. .....It is rumored that the International Range Association is about to establish huge stock yards at St. Louis, intended as special opposition to Chicago..... .....Latest cablegrams state that the November wool sales in London have been postponed one week, to the 30th. Great efforts have been made to increase the available supply, which is now claimed to be 125,000 bales. A quiet market is expected.... The grain elevators in middle and northern Minnesota and Dakota are overflowing, and 3,000 cars of wheat billed to Minneapolis cannot be brought into the city because the transfer roads cannot handle it. .. ..The National Horse Show which has been in operation here during the week, was moderately successful. It was altogether a "dudish affair" patronized almost exclusively by fashionables to whose tastes and whims it catered. We have a long report of it; but we do not think it worth the space it would occupy..... .. ..

Crops & Markets.

SATURDAY, November 6, 1886.

The regular weekly review of the Mark Lane Express of Monday last, concerning the English breadstuffs markets and stocks held abroad, contained the following: "The deliveries of native wheat have been small at 6d. to 1s. above the previous week. The sales of English wheat were 48,910 quarters at 30s. 3d., against 56,950 quarters at 31s. 4d. during the corresponding period last year. Country flour is firm and 6d. dearer. Foreign wheats are firmly held. Values are unchanged. Corn has risen 3d to 6d. The domestic wheat markets have not shown much change during the week, except that the tendency has been to hold well to the slight gains.

That usually careful journal, the Cincinnati Price Current, furnishes some statistics and conclusions concerning the peanut crop which are of interest. It reports the supply as follows:

	Bushels.
Stocks in all markets, Oct. 1885	985,000
Tennessee crop	800,000
Virginia crop	1,800,000
North Carolina crop	150,000
Total supply	3,735 000
Less stocks on Oct. 1, 1886, at—	
Cincinnati	459,700
Virginia	300,000
Tennessee	175,000
Wilmington	35,000
Other points	50,000–1,019,700
Total consumption, 1885-86	2 715,300
Consumption in:	
1884-85	2,905,000
1883-84	2,170,000
1882-83	1,970,000
1881-82	1,520,000
1880-81	2,168,000
1879-80	1,957,000
1878-79	1,389 000
1877-78	1,066,000
1876-77	1,187,000

Stocks at "other points" include 35,000 bushels at St. Louis, 4,000 bushels at Louisville, and estimated 11,000 bushels at Evansville. Eastern cities hold about the same as a year ago—Boston 5,000 bags, New York 8,000 bags and Philadelphia 6,000 bags; but these do not enter into the account in either year. The supply available for consumption during the ensuing year—October 1, 1886, to September 30, 1887—as deduced from the foregoing statistics and estimates (which are no doubt carefully made) is given as follows:

Stock on hand Oct 1, 1886	1,019,700
Tennessee crop	800,000
Virginia crop	1,500,000
North Carolina crop	160,000
Total available supply	3,479,700

The aggregate pork packing in the West the past week has been 210,000 hogs, compared with 230,000 the preceding week, and 255,000 for the corresponding week last year. This moderate movement of hogs is attributed to various influences; the weather has continued favorable for feeding, and too warm for packing without the use of ice; the unsettled feeling in regard to labor employed by packers has had some influence; prices of hogs are regarded as low by farmers, and this may have had some effect in retarding the marketing. Prices at Western points, however, are well up to the Chicago basis. As compared with a week ago, prices of hogs at Chicago are without quotable change—a slight advance within this period having been lost at the close; the average of prices is about $3.65 per 100 pounds, the better grades of both light and heavy ranging up to $3.95 to $4.00. The range of prices of product at Chicago during the week for January delivery has been as follows: Mess pork $9.77 to $10.37½, lard $5.87½ to $6.05, per 100 pounds; short rib sides $5.02½ to $5.30, showing an advance of 32½ cents on pork, 15 cents on lard, and 25 cents on short rib sides, compared with a week ago. This strengthening of prices has partly been due to fear of a strike among packing house hands at Chicago, which might for an indefinite time interfere with the manufacture.

CHICAGO report of the visible supply of grain last Saturday: Wheat, 56,154,000 bushels; corn, 13,097,000 bushels; oats, 5,409,000 bushels; rye, 467,000 bushels; barley, 2,232,000 bushels. This shows an increase of 780,000 bushels wheat; 50,000 bushels oats; 31,000 bushels rye, and a decrease of 339,000 bushels corn and 71,000 bushels barley.

New York statement of the visible supply of grain October 30: Wheat, 56,652,991 bushels, increase, 778,651 bushels; corn, 13,098,041 bushels, decrease, 337,520 bushels; oats, 5,409,153 bushels, increase, 50,784 bushels; rye, 466,584 bushels., increase, 30,717 bushels; barley, 2,233,071 bushels, decrease, 70,187 bushels.

The Indian corn market has been quite firm, the visible supply report for last week showing a decrease of 337,520 bushels. Late advices as to the crop are that it is turning out much worse than intimated by recent estimates. The Chicago Tribune states that some estimates, covering large areas in Nebraska, Iowa and Kansas, place the yield at not much above 40 per cent. of a full crop.

Oats have been fairly firm, with the increase of 50,784 bushels reported in the visible supply and the outlook continuing for a good crop as compared with late years. The demand has been fair. Oats were a shade stronger on Friday and wanted, though actual business was slow. Rye and barley were very dull and unchanged.

The butter market has been entirely nominal, and prices are unchanged. Exporters are almost out of the market, and late shipments compare very unfavorably with those of last year for the same time.

	Nov. 5.	Nov. 5, '85.
Creamery, new choice to fancy	27@29c.	27@29c.
State, new dairy fancy	21@25	21@23½

A good deal of activity has been infused into the cheese market during the past few days, and prices have advanced. Fancy cheese is scarce, but exporters do not fall in very freely with the advanced views of holders.

	Nov. 5.	Nov. 5, 85
New cheese (f'cy)	12¼@12¾	10

INGERSOLL, Canada, November 2.—Twenty-seven factories offered 21,925 boxes September and balance of season. No sales reported. Factorymen holding for 12¼ to 12½ cents, which price buyers do not seem inclined to to pay. Thirty-three factories represented and eleven buyers present.

All of the principal wool markets are quiet and show no promise of increased activity for the present. Fine and fine medium, Territory and pulled wools are noticeably weak. Manufacturers are not inclined to buy at present in excess of near-by wants, the outlook for the fabrics which they are about to present samples of being still uncertain. The latest advices from London show a great degree of strength in the English market, but Melbourne dispatches are less encouraging. Purchases in that market on American account are almost entirely wanting, and a decline of five per cent. has been reported within a day or two. The next series of sales at London will open on the 30th. The demand for wool for the knit-goods mills of Central New York continues slack, the lockout being apparently as far as ever from settlement. At Boston there is no quotable change in values. The current quotations for leading sorts, compared with a year ago, are as follows:

	Nov. 6, '85.	Nov. 5, 86.
Ohio & Penn. X	32@33c.	31@35c.
Ohio & Penn. XX	34@35	36
Ohio & Penn. XX and above	35@37	37@38
Michigan X	31@32	32@33
Fine Ohio delaines	36@37	38
No. 1 combing	36@38	38@40
Texas spring, 12 months	22@25	23@26
Super A	33@37	33@37

The sales of the week at Boston are reported at 3,145,000 pounds, as compared with 2,181,600 last week and 2,400,600 in the corresponding week a year ago. At Philadelphia wool has been extremely dull, the week's business aggregating less than 450,000 pounds. There is no quotable change in prices, the majority of holders refusing to increase sales at the cost of price concessions, and having confidence in the future of the market.

MARKETS BY TELEGRAPH.

SATURDAY, November 6, 1886

CHICAGO.—Compared with cash prices a fortnight ago, No. 2 Spring Wheat is 1⅝c. lower. Corn, ½c. higher. Oats, unchanged. Rye, 2c. higher. Barley, unchanged. Flaxseed, ¼c. higher. Pork, 45c. higher. Lard, 27c. higher. Cattle, 15c. to 50c. lower, Hogs, 5c. to 20c. higher. Sheep, 5c. to 10c. lower.

WHEAT.—Dull; No. 2 Spring, 73¾@73¾c; No. 3 Spring 63@66c; No. 3 Red, 73¾c. Futures ranged: November, 73¾@73¾c; December, 74⅝@74⅝c; January, 75@75¾c; May, 81¼@81¾c. CORN.—Quiet, No. 2, 35½c; Futures—November, 35½@35¾c; December, 36⅜@37⅛c; January, 37@37½c; May, 42@42½c. OATS.—Weak; No. 2, 25@25½c. Futures, November, 26@26¼c; December, 26½@26¾c; January, 26¾@26⅝c; May, 30⅞@31⅛c. RYE.—Quiet; No. 2, 51c. BARLEY, No. 2, 53c. FLAXSEED.—No. 1, 97½@98. MESS PORK.—Cash, $9 30@9 37½. Futures, November, $9 95@9 97½, closing at $9 30; December, $9 30@9 35; January, $10 15@10 25. LARD.—Cash, $5 95. November, $5 92½@5 95; December, $5 97½@6 00; January, $6 02½@6 05. SHORT RIBS.—Cash, $5 00. BOXED MEATS.—Dry salted shoulders, $5 10@5 20; Short clear sides, $6 10@6 15. CATTLE.—Market slow; Shipping steers, $3 30@5 00; stockers and feeders, $1 90@3 30; cows, bulls and mixed $1 25@2 70; bulk, $2 00@2 10; through Texas Cattle, lower; cows, $2 00@3 05; steers, $2 50@3 05; Western rangers, lower; natives and half breeds, $3 00@3 65; cows, $2 40@2 90; Wintered Texans, $2 75@3 20. HOGS

—Market active; Rough and mixed, $3 50@4 00; packing and shipping, $3 80@4 00; light weights, $3 50@4 00; skips $2 50@3 40. SHEEP.—Market dull; Natives, $2 00 @3 75 Western, $3 00@3 50, Texans, $2 00@3 00; Lambs, $2 75@4 50.

ST. LOUIS.—Compared with cash prices a fortnight ago, No. 2 Red Wheat is ½c. higher. Corn, 1¼c. higher. Oats, ½c. higher. Rye, ½c. higher. Pork, 50c. higher. Cattle, from 5c. to 30c. higher. Hogs, 10c. to 20c. higher. Sheep, steady for common, 10c. higher for extra.

WHEAT.—Dull: No. 2 Red, Cash, 74¾c; November, 74¾c; December, 75⅞@76⅛c. CORN.—Quiet; No. mixed, Cash, 31@31⅝c; November, 34⅜c; December, 35c. OATS. Dull: No. 2 Cash, 25½@26c; November, 27c; December, 27c. RYE.—Quiet at 48½c. BARLEY at 10@65c. BUTTER.—Creamery, at 24@25c; dairy, 12@23c. EGGS—18c. FLAXSEED, 94c. HAY.—Timothy, $11 50; Prairie, $7 50. PORK.—$9 87½. BULK-MEATS.—Long clear, $6 00; short rib, $6 00; short clear, at $6 30. LARD.—$5 90. CATTLE.—Market strong; Good to Choice Native Shipping steers, $4 30@4 80; Butchers Steers, $3 10@4 15; Texas grades, $2 00@3 70. HOGS.—Market steady; Choice Heavy and Butchers' $3 90@4 10, Packing, $3 70@4 00; Light, $3 70@4 00. Pigs, $2 70@3 60. SHEEP.—Market firm; common to extra, $2 00@4 05.

BOSTON.—Compared with cash prices a week ago, apples are unchanged, Butter, steady. Cheese, from ½c. to 1c. higher. Eggs, steady. Potatoes unchanged.

APPLES.—King, $2 00@2 50; Baldwin, $1 37@1 52 per bbl; Hubbardstons, $1 50@1 60; Harvey, $2 00; common, 75c@$1 00. BUTTER.—Northern creamery, extra, 28@29c; do. firsts, 24@26c; Western creamery, extra, 27@29c.; do. firsts, 25@26c; do. choice, 20@21, dairy, Franklin County, finest, 27@28c; good to choice, 24@26c.; Vermont extra, 25@26c; Northern, choice, 24@25c; do. fair to good, 14@15c., Western dairy, good to choice, 12@13c; imitation creamery, extra, 14@16c; ladle-packed, choice 13@14c; do. fair to good, 11@12c. BEANS.—Choice pea, Northern hand picked $1 80@1 85 per bushel; do do. New York, choice, hand picked, $1 70 @1 75; do. do. screened, $1 80@1 85: medium choice, hand-picked, $1 60@1 65; do choice screened, 1 25@1 50; Yellow Eyes, choice, $1 55@1 60; do. flat, $1 50@1 55; Red Kidneys, $1 75. CHEESE.—New York extra, 12c; do, good to choice, 11c; do common, 7@9c; Vermont extra, 12c; good to choice, 10½@11¼c: common, 7@9c; Western extra, 11⅝@12c; do. fine, 9@10c common, 6@8c. Sage, extra, 12½@13c. EGGS—Near-by and cape, 25c per doz Eastern extras, 23@24c; Aroostook County, 22c; New York and Vermont, 22@23c; Western, 16@20c; Provincial, 20@21c. HAY AND STRAW.—Choice at $18 00@19 00 per ton; fair, $15 @16; ordinary, $14@15; fine, $15@16; swale hay, at $10 @11, poor, $10@13; Western choice, 16@17; do. fair to good, $13@14 50; rye straw, $16@17; do. machine, $12 @13, oat straw at $8@10 per ton. Hops, New York 1886, good, 26@28c do, 1885, choice, 22@28c. English, 1886, 30@35c; California, 1886, 30@35c: low grades, 15@23c; Canada malt, 9 c@$1 00; six-rowed State 88@92c; Western, 65@80c. POTATOES.—Early Rose, 45@50c; Beauty of Hebron, 48@53c Sweet Potatoes, Virginia Yellow, $1 12@1 25 per bbl; Jersey, $1 37@1 62 per bbl. SEEDS. Clover, West, 9⅜@10½c. per lb; do. North, 10¾@11c; do. white, 18@26c; do. Alsike 12@15c; red top, per sack, West, $2 25, do, Jersey $2 40@2 50; Hungarian, 90c@$1 00: Millet, 90c@$1 00; Orchard, per bush., $1 80 @2 00; Blue grass, $1 40@1 60; Timothy, Western, $2 15@2 25; do. Northern, $2 25@2 40; American flaxseed, $2 25.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, November 6, 1886.

STATE OF THE MARKET.—As compared with prices last week, flour is unchanged. No, 1 Hard Wheat, 2½c. lower; No 2 Red, steady; No. 2 Red, 1c. lower; Ungraded Mixed Corn, 1c. higher; No. 2, ½c, higher. Pork, steady. Lard, 6c. higher. Butter and Cheese, steady. Eggs, 2c. higher. Poultry, a shade higher. Fruits and Vegetables steady.

FLOUR, FEED AND MEAL—FLOUR—Quotations: Fine $1 90@2 70; Superfine, $2 15@2 85; No. 2, $2 60@3 10; Good to Fancy Extra State, $3 35@3 75: Common to Good Extra Western, $2 60@3 75; Good to Choice Extra Western, $3 85@4 75; Common to Fair Extra Ohio, $2 60@3 85, Good, $3 90@4 35; Good to Choice, $4 35@4 75; Common Extra Minnesota, $2 60@3 15; Clear, $3 50 4 10; Rye Mixture, $3 35@3 95; Straight, $3 65@4 45; Patent $4 35@$5; Bakers' extra, $3 90@4 90; St. Louis Common to Fair Extra, $2 60@3 75; Fair to Good, $3 85@4 60; Good to Very Choice, $4 65@$5, latter an extreme. Patent Winter Wheat Extra, $4 80@$5, City Mill Extra for West Indies, $4 40@4 50, latter in new pkgs.; South America, $4 60@4 70. SOUTHERN FLOUR.—Common to Fair Extra at $3 25@3 85, and Fair to Choice, $3 90@5 00. RYE FLOUR.—Superfine, $3 10 @3 35. CORN MEAL. Dull; Yellow Western quoted at $2 50@2 75; and Brandywine at $2 75@2 85. BUCKWHEAT FLOUR Quoted $1 85@1 90. FEED. 40 lb, quoted at 77@77½c; 60 lb, at 65@70c; 80 lb, at 77½@80½c; 100 lb at 85@90c; sharps, at 95c@$1 00, Rye Feed at 75@80c; screenings at 45@70c.

GRAIN.—WHEAT. Old No. 2 Milwaukee at 82c; No. 1 Northern at 88c; No. 1 Hard, at 87¼c Ungraded Red, 81@87¾c. No. 3 Red, 83@82¼c; No. 2 Red, 83¾c; No. 2 Red for November, 83⅝@85⅝c; do. for December, 85⅛ @85⅞c; do. for January, 86 11-16@87 3-16c; do. for February, 88⅜@88⅝c; do. for March, 9c; do. for April, 91¼c; do for May, 92 9-16@93c. do. for June, 93¼c. CORN.—Ungraded Mixed, 45¼@46⅞c; New No. 3, 44c; No 2, 45⅞@46c; No. 2 November, 45½@46c; do. for December, 46⅞@46¼c; do for January, 47⅛@48⅜c; do. for February, 48⅝c. do. for May, 50⅝@51⅛c. OATS.—No. 3 at 32c; do. White, 35⅛@35⅝c No. 2, 32⅜@32¾c; do. White, 38c; No. 1, White, 38c; Western Mixed, 32@34c do. White, 35@40c; White State, 36½c; No. 2 for November, 32⅝c, do. for December, 33⅝@33⅞c; do. for January, 34¼@34⅝c; do. for May, 36⅛@36⅝c.

PROVISIONS.—PORK.—Mess, $9 75@10 00 for Old and $10 37½@10 75 for New; $11 for Family Mess; $14 50@15 50 for Clear Back and $10 00@10 50 for Extra Prime. BEEF.—India Mess in Burton, $17 00; Extra India Mess, $11 00@17 00; Extra Mess in barrels, $7 50@8, Packet, $8; Plate, $7 25@$8 BEEF HAMS.—18 50. CUT MEATS.—Pickled Bellies, 7 lb average, 7c; City Pickled Shoulders, 5¾c; Smoked Hams, 11@11½c; Smoked Shoulders, 6¾c, Pickled Hams, 10@10½c. MIDDLES.—Long Clear in New York, 6⅜c. DRESSED HOGS. City Heavy to Light at 5½@5 15-16c. Pigs, 7¼c. LARD.—Western Steam Spot, 6.25@6.27½c; City Steam, 6.15c; Refined, 6.65c; Continent, 6.85@6.90c; November, 6 22@6.27c; December, 6.24@6.27c, January, at 6.33@6.37c; February, 6.41@6.44c; March, 6.49@6.53c.

BUTTER.—Creamery—State Creamery, 25@29c; Pennsylvania Creamery, 29c; Western, 20@27½c; State Dairy, half-firkins, tubs, 17@28c; Welsh tubs, 20@23c; Western imitation creamery, 11@16c; Western Dairy 10@11c; Western Factory, 10@13.

CHEESE.—Stronger and in fair demand. State, 9@12¾c: Night skims, 9@11c; Western Flat, 11⅝@12c.

EGGS.—State, 25c Western, 22@23c; Canada held, 20 @21c; Limed, 17@18c.

POULTRY.—LIVE.—Chickens, per lb, at 9@10c; fowls, near-by lots, per lb, at 9@10c., fowls, Western lots, per lb, at 9@10c fowls Southern lots, per lb, at 8@9c; turkeys, per lb at 9@10c ducks, western per pair at 50@65c; geese, western, per pair, at $1.12@1.50.

POULTRY.—DRESSED. Turkeys, per pound, at 12@13c.; Spring chickens, Philadelphia, per pound at 15c.; do western, per lb, at 12@15c; fowls, Pennsylvania, prime, per lb 2c, do western per lb, at 11@12c.

FRUITS.—FRESH —Quotations Pears, Beurre d'Anjou, per bbl, at $4@6; Beurre Rose, per bbl, at $5@5; Duchess, per bbl, $3 50@5 50. Apples, Gravenstein per bbl, at $2 50@3; varieties at $1 50@2 per bbl; Greenings, $1 75@2per bbl. Grapes, 4@6c per lb; Concord, per lb, 3@4c, Quinces at 2 50 for choice, Cranberries at $6@6 50 for Cape Cod best; $5 50@7 75 for choice; $4@5 for light; $1 75@2 for choice, per crate; $1 25@1 50 for Jersey, per crate.

FRUITS.—DRIED.—The quotations are as follows: Apples Fancy Evaporated, 9c; do. choice, at 8½@—c; do. prime, 8@8½c; do. southern sliced prime at 2½@3c; do, North Carolina, fancy sun dried, new, 5@5½c; do. do. choice 3½@4c do. do. prime 2c. Peaches —North Carolina, peeled choice new 11@11½c do. do. do, fancy, new, 12@12½c; do. Georgia, choice, at —@10c; do. do. prime fancy, new, 12@12½c, do. Delaware, evaporated, peeled, 23@26c; do, do, do, unpeeled new, 12½@13c; do, Georgia new, 10½c. Cherries, pitted, at 9½c. Evaporated raspberries, 14½@15c sun-dried do. 12½@13½c. Blackberries—Prime at 7½@7¾c. Plums, at 6½@7c.

PEANUTS.—Quotations are: 5c. for fancy hand-picked: 4c. for farmers' grades.

HAY AND STRAW.—Hay, Choice Timothy, 80@85c; Good, Timothy, 70@75c: medium, 60@65c: Shipping 50c; Clover, Mixed, 55@65c. Straw.—No. 1 rye, 65c; short rye, 50@55c.

COTTON.—The quotations, according to the American classification, are as follows:

	Uplands.	New Orleans. and Gulf.	Texas.
Ordinary	6⅝	6 9-16	6 9-16
Strict Ordinary	7 13-16	7	7
Good Ordinary	7¾	8 15-16	8 15-16
Strict Good Ordinary	8 3-16	8⅜	8⅜
Low Middling	8⅝	9 13-16	9 13-16
Strict Low Middling	8 15-16	9⅛	9⅛
Middling	9⅛	9 5-16	9 4-16
Good Middling	9¾	9 9-16	9 9-16
Strict Good Middling	9⅝	9 13-16	9 13-16
Middling Fair	10	10 3-16	10 3-16
Fair	10⅝	10 13-16	10 13-16

STAINED.

Good Ordinary	6 3-16	Low Middling	7 11-16
Strict Good Ord	7⅛	Middling	8 9-16

VEGETABLES.—Quotations are for: Potatoes.—Long Island, rose, in bulk, per bbl. $1 50@2 00; State, $1 25 @1 50, do Burbank, $1 25@1 50; Jersey, peerless, per bbl, $1 25@1 37; sweet potatoes, Va., yellow, per bbl., $1 25@1 75; sweet potatoes, Va., yellow, inferior, per bbl, $1 00@1 25. Cabbages. Flat Dutch, per 100, $4 @5. Cucumbers Pickles, per 1,000, 75c@$1 25. Egg plant, Long Island, bbl, per $3 00@3 50. Lima beans, per bag, $2 50 Onions.—Conn., red, per bbl, $2 00. do. Orange County, red, per bbl, $1 75@2 10, Tomatoes—Long Island, per box, 50c. Celery, per doz; branches, $1 00. Turnips, Russian, per bbl., $1 00@1 25.

LIVE STOCK MARKETS.

NEW YORK, SATURDAY, November 6, 1886.

BEEVES.—Texans, 1069 lb at $3 75; do, 1090 lb at $3 65 do, 1062 lb at $3 62½; Kentucky steers, (few oxen) 1543 lb at $4 80; do, 1119 lb at $4 50; Kentucky steers, 1111 lb at $4 40; Chicago do, 1320 lb at $4 80; do, 1272 lb at $4 60 less $5; bulls, 870 lb at 2c. per lb; West Virginia steers, 1660 lb at $5 30; do, 1464 lb at $5; do, 1337 lb at $4 75, Maryland do, 1410 lb, at $4 25; do, 2009 lb at $4 15; Kentucky do, 1371 lb at $4 70; Chicago Steers, 1452 lb at $5 10; do, 1315 lb at $5 00 Indiana do, 1067 lb, at $3 85; do, 974 lb at $3 50; State, 1650 lb at $3 25; do, 1458 lb, at $3 00; Indiana steers, 1443 lb, at $5 00, do, 1332 lb at $4 65; do, 1276 lb at $4 65 Kentucky do, 1423 lb at $5 10; do, 1307 lb, at $4 80; Ohio steers, 1313 lb at $4 70; do, 1300 lb at $4 70; Steers and Cows mixed, 1055 lb at $3 40; do, 865 lb at $2 55; Bulls, 1716 lb, at $3 20; Chicago steers, 1411 lb at $ 00 per 100 lb do, 1388 lb at $5; Iowa Steers, 1439 lb at $5 30; do, 1489 lb at $5 20, Western do, 1567 lb at $5 25; Ohio do, 1293 lb at $4 35; do, 1304 lb at $4 65; do, 1164 lb, $4 40; Steers and Oxen 1403 lb, at $4 45; do, 1230 lb, at $4 25; State Steers, Yearlings and Heifers, 796 lb, $2 50.

CALVES.—Fed Calves, 360 lb, at 3¼c; Veals, 225 lb, at 4c; Grassers, 244 lb, at $2 60; do, 206 lb, at 2c; do. 251 lb, at 2¼c; Veals, 139 lb, at 8½c; Grassers, 308 lb, at 2½c; do, 249 lb, at 2½c; Fed Calves, 323 lb, at 3c.

SHEEP AND LAMBS.—Receipts for six days 27,561 head against 42,151 head for the same time last week; Pennsylvania Sheep, 88 lb, at $3 50; do, 92 lb, at 3¾c; Pennsylvania Lambs, 51 lb, at 5¼c; do, 57 lb, at 5⅝c; State Sheep, 86 lb, at 3⅝c; do, 108 lb, at 4c; Indiana do, 99 lb, at 3¾c; Northern Canada Lambs, 71 lb, at 6¼c; Pennsylvania Sheep, 91 lb, at 3¼c; State do, 94 lb, at 3½c; do, Lambs, 60 lb at 5½c; State do, 71 lb, at 6¼c; do. Sheep, 94 lb, at 3c; do, 71 lb, at 3⅝c, do, 104 lb, at 4c; Pennsylvania do, 108 lb, at 3¼c, Pennsylvania Lambs, 58 lb, at 5¼c; do, 66 lb, at 5⅝c; Western Sheep, 84 lb, at 3⅛c; Canada Lambs, 81 lb, at 6¼c; Pennsylvania Lambs, 65 lb, at $5 70; Sheep, 92 lb, at 3c; Kentucky Sheep, 89 lb, at 3⅞c; Kentucky Lambs, 77 lb, at 5⅝c; Ohio Sheep, 83 lb, at 3⅝c.

HOGS.—Receipts for six days, 38,994 head against 44,866 head for the same time last week. State Hogs, 291 lb, at $4 75; State Pigs, 51 lb, at 5c; Hogs, 216 lb, at $4 70; Pigs, 136 lb, at $5 25.

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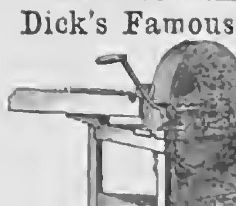
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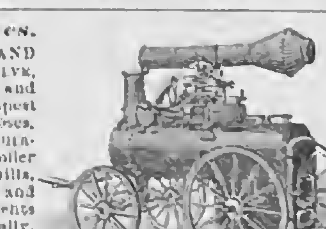

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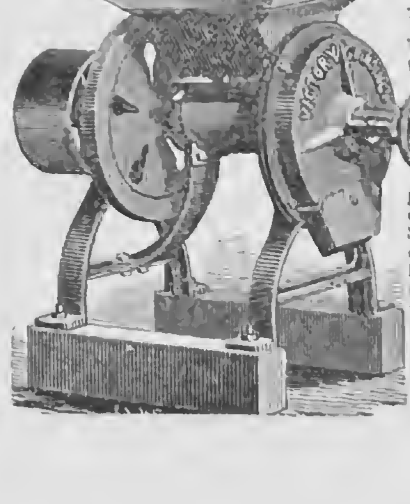
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was made by the COOLEY PROCESS, by ALFRED RODMAN, Dedham, Mass., whose butter brings 80 cents per pound in the Boston market.
The Creamery or Factory Butter scoring the most points, viz: 97, was made by the
SHELBURNE FALLS, (Mass.) CO-OPERATIVE CREAMERY.
The Creamery Butter scoring the second number of points, viz: 96, was made by the
WINDSOR (Conn.) CO-OPERATIVE CREAMERY.
Both of these factories are conducted on the COOLEY PROCESS OF CREAM GATHERING.
The Judges were Prof. L. B. ARNOLD, than whom there is no greater DAIRY AUTHORITY in this country or Europe, and Mr EDWARD NORTON, the oldest and most experienced creamery manager n New England.
We submit these facts to intelligent dairymen and invite their closest scrutiny.
These Premiums are not exceptional. The COOLEY PROCESS has taken more GOLD and SILVER MEDALS and 1st. Premiums, than all other methods or processes combined.
VERMONT FARM MACHINE CO.,
Send for illustrated circulars. Bellows Falls, Vt.,

Incorporated May 27th, 1886. BRANCH HOUSES. *Birdsall & Sons*, 1814 Market St., Phila., Pa.; *Scobie & Parker*, Pittsburgh, Pa.; *C. Knoblock*, 230 E. Water St., Milwaukee, Wis.; *E. A. Almond*, Gen'l Ag't, Indianapolis, Ind.; *H. T. Conde*, Indianapolis, Ind.; *R. L. Hicks*, Gen'l Ag't, St. Louis, Mo.; *J. Wilder & Co.*, 159 & 161 W. 6th St., Cincinnati, O.; *De Long & Co.*, Lexington, Ky.; *Stanton, Thompson & Co.*, Sacramento, Cal., *Brown & Foster Hardware Co.*, Los Angeles, Cal.

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80 lb. boxes........ $1.25 | 100 lb. bags........ $2.75
60 lb. " .... 2.00 | 200 lb. bbls........ 5.00
CRUSHED OYSTER SHELLS.
50 lb. boxes........ $ .75 | 200 lb. bags........ $2.00
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Expressly manufactured for fowls from superior stock. Pure and sweet. Sent by freight on receipt of price. Samples, 5 cents. Fine ground Oyster Shells same price as crushed. C. H. Dempwolf & Co., York Chemical Works, YORK, PA.

IMPROVED CHAMPION SAWING MACHINE.

One man can do the work that heretofore required two. Utilizes the *weight* of operator. *Lightest running, cheapest and only practical* log sawing machine made. *Saws cord an hour.* Weighs but 35 lbs. Price complete only $12.00. To introduce, will deliver one machine free to any address on receipt of price. *Address* Champion Mfg. Co., Quincy, Ill. Ag'ts wanted

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On Farming in all its branches, Fruit Culture, Cattle Raising, Poultry, Roots, Horses, etc. All writers on Agricultural Topics are invited to compete. For full particulars and terms of award, address M. T. RICHARDSON, 21-27 New Chambers Street, New York.

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BLACKSMITHING on the FARM
Save time and money by using Holt's celebrated FORGE and KIT of TOOLS For $20
Larger Size, $25. Single Forge, $10. Blacksmiths' Tools, Hand Drills, &c.
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Is the best working and most powerful Wind-Engine in the world, because it is the only one which unites the most perfect form of wind-wheel with the most perfect method of regulation. Geared Mills a specialty.
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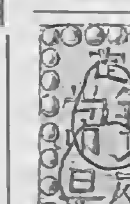
Best and most profitable LATE WHITE PEACH; Chairs Choice best late yellow peach Large stock of Peach trees suitable for all sections. William's Early Red, best early apple. Good stock AppleTrees, most popular and late keeping kinds. Pears, Cherry, Quince (and all fruit trees and fruit bearing plants. 200,000 2-year-old Asparagus roots. Large stock of Shade and Ornamentals. Send for Catalogue. S. E. ROGERS & SON, Mt. Holly, N. J.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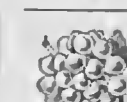
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For CIDER, SORGHUM, FRUIT JELLIES, and MAPLE, has corrugated pan over fire, *doubling capacity;* small syrup pans connected by siphons, easily handled for cleansing and interchangeable to distribute wear; automatic regulator, and other advantages too numerous to mention. Catalogues free. G. H. GRIMM & CO., Hudson, O.

PORTABLE GRINDING MILLS. Guaranteed to give satisfaction or money refunded. CHARLES KAESTNER & CO., 302 to 312 South Canal Street, Chicago.

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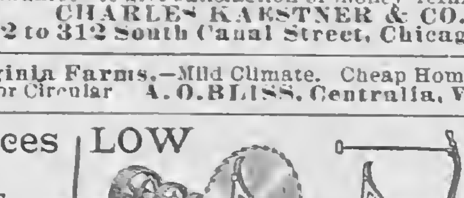
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RUNS EASY. NO BACK-ACHE!

7¾ Cords of Beech have been Sawed by one man in 9 hours. Hundreds have sawed 5 & 6 cords daily. "Exactly" what every Farmer and Wood Chopper wants. *First order* from your vicinity secures the *Agency.* Illustrated Catalog *FREE.* Address Folding Sawing Machine Co., 303 S. Canal St., Chicago, Ill.

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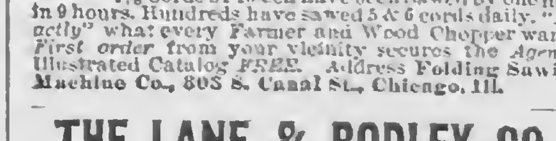
MANUFACTURERS OF SAW MILLS AND ENGINES for all purposes. An experience of thirty years permits us to offer the best. Good work at low prices. Send for circular R.

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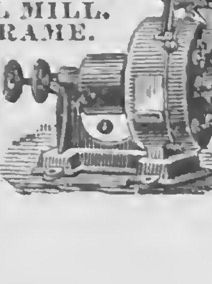
THE BEST VERTICAL MILL. IRON AND STEEL FRAME. FRENCH BUHRS. Neat, Durable, Compact. Write for Descriptive Circular. Mention this paper. Straub Machinery Co., Cincinnati, O.

For the Young.

THE STORY OF A DISTRICT SCHOOL

A COLLEGE BOY'S DIARY.

(Continued.)

"DON'T make no noise teacher," whispered Bill Johnson, "I'm gonter pay off a trick on Jack. Don't say nothin' but watch the fun."

He crept carefully along to one side of the room. The moonlight which came streaming in at the window, gave him light enough for his purpose. I saw him carefully push away an old husk mat which lay on the floor. As he did so a light shot up from the room below. A hole through which a stove pipe had once passed was revealed.

Bill fairly shook with suppressed laughter as he untied the bag. He held the mouth open and suddenly shook the contents through the hole. A sadly mixed collection of dried apples, oats and flour, plunged into the room below. Bill at once pushed the mat over the hole and fairly rolled on the floor with laughter. "He set right under it," he said, "an' gut the hull charge."

There was a great commotion in the room below. A great crash was heard as though Jack's chair had broken down. The red-haired young woman screamed and old Johnson's voice could be heard somewhere in the depths of the house shouting out some loud instructions. Bill Johnson crept out of the room and carefully shut the door after him. In a short time I heard the door slam violently and concluded that Jack had gone away in no very enviable frame of mind.

I walked down stairs the next morning just as breakfast was leaving the stove. Old Johnson sat on the wood-box shaping an axe handle to suit him.

"Mornin' teacher," he said through his false teeth, "Ef ye wanter wash them bad dreams out, jest step outside an' I'll lay ye'll find a bucket."

On a wooden block by the well stood a battered tin basin. I washed my face and hands and came dripping back to the house to find a towel. A large roller towel hung by the stove. I was walking towards this with my hands and head held out when Mrs. Johnson rushed and took it down and then proceeded to hunt for a clean one, leaving me standing there with the water trickling down my neck.

"What's the matter," broke in old Johnson, "He aint no better'n other folks is he? There he stands lookin' like a toad under a harrer. Take the table cloth teacher ef ye wanter hurry up the wimmin folks. You sorter make me think of a feller I heard tell on onct. He went to a tavern to spend the night. When he come to wash he cud wring water outer the towel. He sorter spoke up about it an' the landlord he sed—"you're a putty man ain't ye? There's fifteen men ben ahead o' you an' you're the fust one to complain."

I could not see anything very funny in this story, but old Johnson laughed and choked till he was fairly black in the face. Mrs. Johnson at last brought a dry towel.

The young woman's eyes were redder than usual as we sat down to the table. Old Johnson lost no time in trying to make her feel as comfortable as possible.

"Jack sorter took Scotch leave last night didn't he? I expect I made a couple o' sticks o' wood out of it. I expect I'll have to gin teacher a vote o' thanks for throwin' them things down. Only I'd sorter hate to be in teacher's boots when Jack sorter ketches him out."

Here the young woman came to my defense. "It wasn't, teacher—it was Bill Johnson—that's who it was. You needn't tell me." Here she fell upon her main defense of throwing her apron over her face and running out of the room. Johnny nodded his head sturdily as much as to say that he could add evidence in my favor whenever it should be needed.

Old Johnson kept up his comments all through the meal, but nobody took the trouble to argue with him, so he had the whole field to himself. After breakfast Mrs. Johnson and the young woman put up my "pail o dinner."

If old Johnson's rule concerning teachers held true, they must have considered me a very poor educator—for they selected food enough to feed a small army for my dinner. There was quite a discussion for a time as to whether they should pack the food into a pail or a basket. It was finally decided to use the basket as it would hold more than the pail. A large cup of apple sauce was placed in the centre of the basket bottom. Around this were firmly wedged pieces of cake. Two large pieces of pie formed the next layer, with the odd corners filled up with thick doughnuts. Nearly half a loaf of bread cut into uneven slices with great irregular lumps of butter placed between them, and several slices of meat filled the basket so full that it required most of the young woman's strength to fit the cover on. The cover was at last pushed on and fastened on with a string. I did my best all through the packing to explain that I never could possibly eat all the food, but old Johnson laughed me to scorn.

"Needn't tell me that," he said. "You'll eat all that an' then come back early fer ter git a piece afore supper."

Old Johnson had some original ideas about serving food. "When you make up a pail o' dinner," he said, "ye wanter run big slices all ye kin. Ye kin eat a big slice o' bread quickern' ye kin two small ones. That's what ye wanter figger on."

The young woman had just fastened the cover to the basket when the kitchen door opened and Mr. Moderator Hardhack walked solemnly in.

"I've gut sum terrible bad news fer ter tell" he began. "'Squire Barues died last night—funeral to onct. I'm spreadin' the news sos't I can't make no stay. Better call off school fer two days teacher." He walked back to the door. There he stopped as if he remembered something. "An' word come over this mornin' that Miss. Billin's over ter the county house wuz dead. Funeral ter day. Like enough the boy orter go." He stamped out. Poor little Johnny. Sunday had come "in the middle of the week" at last.

FAMOUS TREES.

EVERY tree was once small and insignificant and some never get to be anything else. Others are very beautiful and have peculiar features, but there are few that are so wonderful in any way as to make them really famous. The largest tree in the world is the great Baobab of Africa. It is found south of the desert of Sahara. This tree seldom gets to be much taller than a hundred feet, but it is frequently more than that in circumference. The inhabitants of Africa build their houses among its branches and there have been known to be as many as thirty families living in one tree at once. The foliage is dark green, making a strong contrast with its white flowers that are borne on stems of a yard in length. The fruit is a dry, white, pulpy substance enclosed in a long green pod. The pulp between the seeds, as well as the juice from the leaves is used by the natives for flavoring their food. This tree is said to live to be of a greater age than any other. Some are known to have lived for thousands of years. When it dies it is from a softening of its woody structure, and it falls one mass of ruins.

The Banyan tree found in India is very wonderful because of its peculiar way of growing. The branches drop roots to the ground which form new stocks, and thus it goes on until one tree often covers a space of many hundred feet.

The big trees of Mariposa, California, of the variety Sequoia gigantia are very famous because they are the largest found in America. They are from three to four hundred feet in hight, the first two hundred feet of their growth being without a branch. The circumference of the trunk at the largest part is often more than one hundred feet.

The cedar tree, which is found in many parts of the world, has been known to have a trunk measuring 36 feet in circumference The cedar is noted for the durability of its wood, which has been known to last in a building for a thousand years. The cedar is often used as a simile because of its strength and durability.

Among famous trees of history is the Charter Oak of Connecticut, so called because the charter of that colony was hidden in its hollow trunk when the royal governor tried to take it from the colonists. Another famous tree is the Elm of Kensington, under which William Penn made the treaty with the Indians. And there is living now the famous Elm of Boston, under which Washington took command of his troops during the Revolutionary war. CERISE E. A CARMAN.

WE all know what a wonderful polish there is upon collars and cuffs that come from a city laundry. Our folks at home never could get such a gloss. I have asked some laundrymen how it was done. They say that the first thing necessary is to learn how to do up clothes. It is a regular business just like anything else. It can be studied out and made much of, or it can be slurred over and be turned into common work. Most of the polish used is made out of white wax and spermaceti, two ounces of the wax and one of the spermacete. These are melted together with a gentle heat. When the starch is made up in the usual way, a piece of this polish is put in. For a dozen pieces, a piece about as large as a pea is used. If any young woman had the reputation of being able to do up collars and cuffs as well as they are done in a city laundry, she could easily get work enough at good prices. Some people think that washing is a dishonorable work. That is all nonsense. No honest work is dishonorable.

IT is pretty close to Thanksgiving. I hope all the turkeys will be fat, and that the mince pies and apples will be just right. Uncle Mark wishes he could come and eat dinner with all of you. He would have to be a pretty good-sized man though, in order to do justice to every meal, and he doesn't believe in eating too much.

LETTERS FROM THE COUSINS.

DEAR UNCLE MARK: I intended to write to you during the holidays but my attention was so much taken up I did not find time. The holidays came in the midst of the berry time, and I had all I could do to help Mamma pick the berries. After all the fruit was taken care of, I went down to one of the islands on the mighty St. Lawrence and camped out two weeks. I enjoyed myself very much. I was on the river a great part of my time. I learned how to row and would have learned how to swim could I have remained longer. Every day about two o'clock we started out in a row-boat to ride on the swells of the mail steamer. It was grand! Our vegetable garden is looking rather empty, as we have taken up nearly all the roots. My Sweet Peas were beautiful and bloomed profusely. My time is very much taken up at school, as I passed into he second form in July and I am trying to pass into the third or highest form by Christmas, and then I will be allowed to try for a teacher. Papa found an apple on a tree called the "General Grant Crab" with a small apple grown into the stem of a large one. He said he never saw an apple grown like it before, and he wished me to send it to you to describe it to the Cousins. Papa bought it for a crab, but he is doubtful whether it is a crab or not. Please give your opinion and what variety it is. I enjoy the story of the District School very much. Your niece,

Cornwall, Ontario. ELLA M. TURNER.

[We cannot name the apple. It is rather a curious growth—a little apple growing just at the base of the large one. Probably two buds were close together. One grew and developed nicely and the other only half developed.—U. M.]

DEAR UNCLE MARK: I would like to join the Y. H. C. The seeds that you sent to Papa were doing nicely when the frost killed them. I have four sisters and two brothers. Papa has 18 head of cattle and three horses. I helped raise six of the cattle. We like the RURAL very much. Mary is writing you a letter also. Good-by. W. LEWIS ROBERTS.

Goffstown, N. H.

DEAR UNCLE MARK: I should like to join the Y. H. C. I am nearly 14 years old and I guess that is one-third as old as you are. I have three sisters and three brothers—I am the oldest of all. My sister Susie and myself have a flower garden. We planted the Garden Treasures and the hens got in and scraped some of them up but the most of them came up and had lovely flowers. I must close now. Good-by. MARY J. ROBERTS.

[You are coming pretty near to my age, yet you have not hit it yet.—U. M.]

DEAR UNCLE MARK: I guess you think I am slow about letting you know how the seed you sent me came out. We had a dry spell of weather after planting that hindered their coming up, so we have nothing to be proud of. Some came up after a long time and did better than we expected. I had two watermelons that weighed 17 and 16 pounds apiece, but not thinking them large or heavy enough to enter for the prize, I did not measure them, and now its too late. The Midnight corn—one ear measured 11 inches, one 10½. The Bird Cantaloupes grew large, but began to rot before ripening. All our muskmelons, and Cantaloupes seemed to be affected in the same way this season. The flower seeds were also affected by drought. Quite a number came up but were late. Had one mammoth sunflower, but very few of the seeds filled. Had eight kinds phlox, and as many kinds of petunias. There were five plants that grew like young trees, but did not bloom. I would like to know the name of them. There were six varieties of peas. A blue and white flower having much the appearance of a petunia is also unknown to me. In the Fall it became lousy which much impaired its beauty in my mind's eye.

Your affectionate nephew,

Sauk Co., Minn. E. R. CHILDS.

Miscellaneous Advertising.

DIXON'S "Carburet of Iron" Stove Polish was established in 1827, and is to-day, as it was then, the neatest and brightest in the market; a pure plumbago, giving off no poisonous vapors. The size is now doubled and cake weighs nearly half a pound, but the quality and price remain the same. Ask your goocer for Dixon's big cake.

DANGEROUS DRUGS.

How to Control Effectually all such Horrible Habits.

[*Rochester, N. Y., Post-Express.*]

A GENTLEMAN who has spent the Summer abroad, said to our reporter, that the thing that impressed him most of all was the number of holidays one encounters abroad and the little anxiety the people display in the conduct of business affairs. "Men boast here," he said, "that they work for years without a day off; in Europe that would be considered a crime."

Mr H. H. Warner, who was present at the time, said, "This is the first Summer in years that I have not spent on the water. Been too busy."

"Then I suppose you have been advertising extensively?"

"Not at all. We have always heretofore closed our laboratory during July, August and September, but this Summer we have kept it running day and night to supply the demand, which has been three times greater than ever before in our history at this season."

"How do you account for this?"

"The increase has come from the *universal recognition of the excellence of our preparations.* We have been nearly ten years before the public and the sales are *constantly increasing* while our newspaper advertising is *constantly diminishing.* Why, highly scientific and medical authorities, now publicly concede that our Warner's safe cure is the only scientific specific for kidney and liver diseases and for all the many diseases caused by them.

"Have you evidence of this?"

"Abundance! Only a few weeks ago Dr. J. L. Stephens, of Lebanon, Ohio, a specialist for the cure of narcotic, etc., habits, told me that a number of eminent scientific medical men had been experimenting for years, testing and analyzing all known remedies for the kidneys and liver; for, as you may be aware, the excessive use of all narcotics and stimulants destroys those organs, and until they can be restored to health the habits cannot be broken up! Among the investigators were such men as J. M. Hull, M.D., President of the State Board of Health of Iowa, and Alexander Neil, M.D., Professor of Surgery in the College of Physicians and Surgeons and President of the Academy of Medicine at Columbus, who, after exhaustive inquiry, reported that there was no remedy known to schools or to scientific inquiry equal to Warner's safe cure!"

"Are many persons addicted to the use of deadly drugs?"

"There are forty millions of people in the world who use opium alone, and there are many hundreds of thousands in this country who are victims of morphine, opium, quinine and cocaine. They think they have no such habit about them—so many people are unconscious victims of these habits. They have pains and symptoms of what they call malaria and other diseases, when in reality it is the demand in the system for these terrible drugs, a demand that is caused largely by physicians' prescriptions which contain so many dangerous drugs, and strong spirits, and one that must be answered or silenced in the kidneys and liver by what Dr. Stephens says is the only kidney and liver specific. He also says that moderate opium and other drug eaters, if they sustain the kidney and liver vigor with that great remedy, can keep up these habits in moderation.

"Well does not this discovery give you a new revelation of the power of safe cure?"

"No, sir; for years I have tried to convince the public that *nearly all the diseases of the human system* originate in some disorder of the kidneys or liver, and hence I have logically declared that if our specific were used over ninety per cent. of these ailments would disappear. The liver and kidneys seem to absorb these poisons from the blood and become depraved and diseased."

"When these eminent authorities thus publicly admit that there is no remedy like ours to enable the kidneys and liver to throw off the frightful effects of all deadly drugs and excessive use of stimulants it is an admission of its power as great as any one could desire; for if through its influence alone, the opium, morphine, quinine, cocaine and liquor habits can be overcome, what higher testimonial of its specific power could be asked for?"

"You really believe then, Mr. Warner, that the majority of diseases come from kidney and liver complaints?"

"I do! When you see a person moping and groveling about, half dead and half alive, year after year, you may surely put him down as having some kidney and liver trouble."

"The other day I was talking with Dr. Fowler, the eminent oculist of this city, who said that half the patients who came to him for eye treatment were affected by advanced kidney disease. Now many people wonder why in middle life their eyesight becomes so poor. A thorough course of treatment with Warner's safe cure is what they need more than a pair of eye glasses. The kidney poison in the blood always attacks the weakest part of the body; with some it affects the *eyes*; with others the *head*; with others the *stomach* or the *lungs*, or *rheumatic* disorder follows and *neuralgia* tears them to pieces, or they lose the *powers* of *taste*, *smell* or become *impotent in other functions* of the body. What man would not give his all to have the vigor of youth at command?"

"The intelligent physician knows that these are but *symptoms*; they are not the disorder, and they are symptoms not of disease of the head, the eye or stomach, or of virility, necessarily, but of the kidney poison in the blood and they may prevail and no pain occur in the kidneys."

It is not strange that the enthusiasm which Mr. Warner displays in his appreciation of his own remedy, which restored to him health when the doctors said he could not live six months, should become infectious and that the entire world should pay tribute to its power. For as Mr. Warner says, the sales are constantly increasing, while the newspaper advertising is constantly diminishing. This speaks volumes in praise of the extraordinary merits of his preparation.

PERSONALS.

GEN. JAMES LONGSTREET is about to write a book upon the late War.

REV. HENRY WARD BEECHER has returned in excellent health from his European trip.

THE President didn't go to Buffalo to vote this year, but he sent $500 to this city to help along his party. Gov. Hill did the same.

PRINCE LOUIS NAPOLEON has been receiving a good deal of attention in New York, Philadelphia, Baltimore and Washington.

MARTIN IRONS is back in St. Louis tending a feed store for the secretary of the Knights of Labor assembly while the latter looks after politics.

THE son of Ex-President Arthur and the two sons of the late President Garfield are studying at the Columbia College Law School this year.

MISS VAN VECHTEN, whom it was once said President Cleveland would marry, is now visiting Miss Rose Elizabeth at "The Weeds," at Holland Patent, N. Y.

JOHN D. ROCKEFELLER of the Standard Oil Company, now claims, by virtue of his $114,000,000, William H. Vanderbilt's old title of "the richest man in the United States."

GLADSTONE says that he is poor, but he declines a $10,000 pension, to which all ex-Prime Ministers in straitened circumstances are entitled, because he does not believe in the principle of it.

THE engagement is privately announced of James Russell Lowell, ex-Minister of the United States, to the dowager Lady Lyttleton, widow of the late, and aunt by marriage of the present, Lord Lyttleton. Newly-elected Congressman Burnett, his son-in-law, denies the report.

"GEN." BOOTH, of the Salvation Army, opens his campaign in this country at Chicago, coming from Canada. There they call him "a negro exhorter translated into English," and say that his effect comes solely from his iteration and vigor.

M. DE LESSEPS brought one of his daughters to this country during his latest visit, but left 10 of his children with their mother in France. The daughter suffered from seasickness during the voyage, but the octogenarian father did not.

WHEN Chauncey M. Depew came down from the stand under the Bartholdi Statue after his oration, he declared, with a long-drawn sigh, that it was the first time he had ever delivered an address to an audience of applauding steamboats.

F. W. STEWART, representative of a New York syndicate, is negotiating with the Cherokees for the purchase of the Cherokee Strip. The syndicate will offer $3 per acre for the 6,000,000 acres, to be used mainly for grazing purposes, as "little of it is fit for tillage."

SENATOR EDMUNDS'S fortune is now estimated at $250,000, principally made at his practice and by judicious investments in real estate. He owns two houses in Washington, his home at Burlington, Vt., and is supposed to make nearly $50,000 yearly practicing law.

M. PASTEUR, last Wednesday, informed the Academy of Sciences of Paris that he had treated during the past year 2,490 persons who had been bitten by animals, and that out of this number only 10 had died. Seventeen-hundred-and-twenty-six of the patients were French.

SAMUEL PAYTON was discharged from the prison at Jackson, Mich., Saturday, his sentence of five years for a Detroit burglary having expired. Payton is a grandson of Commodore Perry and is said during his incarceration to have been left a fortune of $250,000.

THE alleged Sir Roger Tichborne or Arthur Orton, famous as the Tichborne claimant, is now living in destitution at New York, confined to his bed by blood poisoning and kept alive by the ministrations of the St. George Society. He bitterly regrets his voyage to America to lecture, as it has turned out a miserable failure.

GENERAL VALLEJO, who played so prominent a part in the early history of California, and who once owned a principality in Sonoma County, is now living on his last small remnant of land in the suburbs of the town of Sonoma. He has just brought a suit in San Francisco to recover possession of a portion of the Presidio, or military reservation of that city, which he claims under a Mexican grant, confirmed to him in 1836.

Miscellaneous Advertising.

A Fearful Leap

into the abyss of poverty, over the precipice of short-sightedness is taken by thousands, who might become wealthy, if they availed themselves of their opportunities. Those who write to Hallett & Co., Portland, Maine, will be informed, free, how they can make from $5 to $25 a day and upwards. Some have made over $50 in a day. You can do the work and live at home wherever you are located. Both sexes; all ages. All is new. You are started free. Capital not needed. Now is the time. Better not delay. Every worker can secure a snug little fortune.

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PERCHERON HORSES.
Island Home Stock Farm, Grosse Isle, Mich.—200 to select from, latest importation arrived Aug. 12th; personally selected in France by one of the firm. All stock registered in French and American Stud Books. We will make it to your advantage to deal with us. Large Illustrated cloth bound Catalogue free by mail. Address SAVAGE & FARNUM, Detroit, Mich.

IMPERIAL EGG FOOD
WILL MAKE YOUR HENS LAY.
Packages Mailed for 50c. and $1.
6 Boxes, $2. 10 Boxes, $3. 25 lb Kegs, $6.25. By Express or freight.
WHOLESALE AGENTS.
C. N. Crittenton, N. Y.; Wm. Henry Maule, Phila.; J. C. Long, Jr., N. Y.; Parker & Wood, Boston; Jos. Breck & Sons, Boston; Geo. A. Kelly & Co., Pittsburgh, Pa.; Western Chemical Co., St. Louis, Mo.; John Anglum & Co., Denver, Col.; Geo. W. Wickson & Co., San Francisco, Cal.; Plant Seed Co., St. Louis; Richardson Drug Co., St. Louis; J. M. McCullough's Sons, Cincinnati, Ohio; T. W. Wood, Richmond, Va.
F. C. Sturtevant, Prop.,
Hartford, Conn.

THOROUGHBRED BERKSHIRES.—Will sell for 30 days at Half Price. All ages. Fine lively full marks. Vigorous and handsome. Address
D. J. Mattocks, LAKEVIEW HERD, TOLEDO, O.

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Care of GRAHAM & HUBBELL, SAVANNAH, GA.

POULTRY SUPPLIES.
Fresh Ground Beef Scraps, Granulated Bone and fine Bone Meal, Oyster Shells, etc.
Send for circulars and samples.
C. A. BARTLETT,
WORCESTER, MASS.

OXFORD DOWNS.
Another importation will arrive Sept. 1st from the celebrated flock of John Treadwell, whose sheep have again this year won 1st, 2d and Champion prizes at the "Oxford-shire," "Bath and West of England," and the great "Royal" shows. His best Rams are by my grand imported, 420 lb., "Bicester," winner at these Shows '83, '84 and was 1st at sweepstakes, *over the other Downs*, at Chicago, Madison, Wis., and St. Louis. Mr. Treadwell wanted him back last year. For sale, Imported Rams, Ewes and Lambs by Imported "Bicester," "Sir John," "Baron Campsfield" and "Donatus."
F. C. GOLDSBOROUGH, EASTON, TALBOT Co., MD.

"MARCHMOOR FARM."
HIPPARCHUS No. 11672; Sire Orange Peel, P. 288; Dam King's Fertile, No. 22765. Service Fees, $100.
BRIGHTSON No. 11671, Sire Farmer's Pride P. 322; Dam Nellie Flanders, No 22764. Service Fees, $100.
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CHAS. R. HOE,
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WHAT OTHERS SAY.
"The finest herd this season."—Dr. Tarrington, U. S. Quarantine Station, N. J.
"As a herd, away up! up!! up!!!"—Dudley Miller Esq., Oswego, N. Y.
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Five Thoroughbred and Reg. *BULLS*, various ages (Echo Strain); 30 Head of Graded *HOLSTEINS*, consisting of Cows, Heifers, and Spring Calves. Great inducements offered, and good reasons for selling.
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Newton's Improved **COW TIE** holds them firmly, draws them forward when lying down, pushes back when standing, gives freedom of head, keeps clean. E. C. NEWTON, *Batavia, Ill.*

The world-renowned 50 acre POULTRY FARM OF FANNY FIELD, that pays her a profit of $1,600 annually, is having an immense sale. Tells about houses, runs, incubators, brooders, chickens and capons. Every man, woman and child should read it. Price 25c. Stps taken. R. B. Mitchell, 69 Dearborn st., Chicago.

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ABSOLUTELY THE BEST FEED FOR
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SHEEP AND HOGS.
The Oil Meal from the mills of the undersigned is found by many Feeders of
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to be of great service during the
SUMMER MONTHS
when grass is good. No room here to give particulars; but try it, and you will see the good results. It is sold by all leading feed dealers.
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Best Hatcher
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Hatches Ducks, Turkeys, Geese and Chickens. Received First Premium where exhibited. Send for Circular.
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Hatcher Co.
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Mention RURAL N.-Y.

Ohio Improved Chester
The best Hog in the world. Not subject to Cholera. Sold 788 in 1885. Two weighed **2806 lbs.**
Send for discription of this famous breed, also fowls.
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Containing full information on Breeding, Feeding, Treating and Incubating Poultry, by a practical man; and a sample copy of our paper and a **large illustrated Premium List,** containing illustrations and descriptions of over 100 new and rare varieties of Flower, Vegetable and Field Seeds included in our next Free Seed Distribution (we give 20 well filled packets free to every subscriber). Book, sample copy and Premium List will be sent **Free,** postpaid, to any one who will send us the names and addresses of ten reading Farmers, Dairymen, Stockmen, etc. Those who make vegetable or flower gardens, or experiment with new varieties of grain, etc., preferred. Address FARM, FIELD AND STOCKMAN, Chicago, Ill.

MAPLE LAWN POULTRY YARDS & KENNELS
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Reference: Editor RURAL NEW-YORKER.

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GODEY'S, at the present time is admitted by press and people to be superior to any ladies' magazine in America, having the greatest variety of departments. The literary features are: **Serials, Novelettes, Short Stories, Charades, Poems, etc.**
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Practical Hints upon Dressmaking show how garments can be made over by the patterns given.
Practical Hints show young housekeepers how to manage with economy and ski ll.
Fashion Notes at Home and Abroad.
The Colored and Black Work Designs give all the newest ideas for fancy work.
Cooking Recipes by an expert housekeeper.
The Architectural Department is of practical utility, estimates being given with each plan.
Remember, there is only one Godey's, and you can have it for one year for $2.00.
Address, **GODEY'S LADY'S BOOK** BOX HH **Philadelphia, Pa.**

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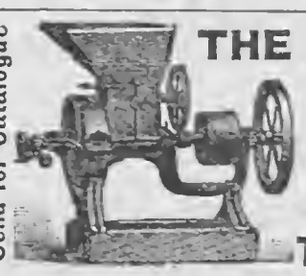
100 Varieties. Also Small Fruits. Quality unsurpassed. Warranted true. Very cheap. 3 sample vines mailed for 15c. Descriptive price list free. **LEWIS ROESCH,** Fredonia, N. Y.



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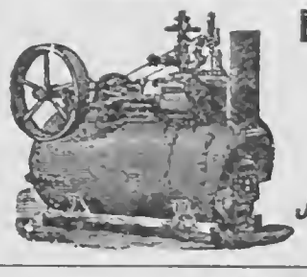
THE BEST MILL ON EARTH
For Grinding Ear Corn, Shelled Corn, Oats and all Small Grain. Each set Plates guaranteed to grind 5000 to 8000 Bushels before wearing out.
THE FOOS MANUFACTURING CO., Springfield, O.



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OVER 3,000 IN SUCCESSFUL OPERATION.
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THE CHEAPEST MUSICAL INSTRUMENT EVER OFFERED.
This is universally owned to be the most complete, perfect, and superior instrument of its kind ever manufactured. Not only is its form more artistic, and its works more simple, but it contains **double the number of reeds** to be found in any other instrument of its description. It has also the unusual and most valuable quality that
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TWO STOPS.
TWO FULL SETS OF ORGAN REEDS.
With a Concert Organette in your parlor you can give dancing parties, and it is equally appropriate for sacred music.
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EXTRAORDINARY OFFER we will sell this splendid Twelve Dollar **Concert Organette** for **Only Seven Dollars**
TO ANY PERSON WHO WILL ORDER BEFORE FEB. 15, 1887. So Take Advantage of this offer now and send your order at once. We send free, with each order, a good selection of music and guarantee every instrument perfect. We will send C. O. D., if Three Dollars is sent with the order, the balance, Four Dollars can be paid at express office when the Organ otte is received. Send P. O. Money Order or Registered Letter to **RENNIE & ALLSON MFG. CO.,** 725 Filbert St., Philad'a, Pa.

ON 30 DAYS' TRIAL.

THIS NEW **ELASTIC TRUSS**
Has a Pad different from all others, is cup shape, with Self-adjusting Ball in center, adapts itself to all positions of the body while the ball in the cup **presses back the intestines just as a person does with the finger.** With light pressure the hernia is held securely day and night, and a radical cure certain. It is easy, durable and cheap. Sent by mail. Circulars free. EGGLESTON TRUSS CO., Chicago, Ill. Mention this paper.

390 Funny Selections, Scrap pictures, etc., and nice Sample Cards for 2c. HULL CARD CO., Cadiz, Ohio.

I CURE FITS!
When I say cure I do not mean merely to stop them for a time and then have them return again, I mean a radical cure. I have made the disease of FITS, EPILEPSY or FALLING SICKNESS a life-long study. I warrant my remedy to cure the worst cases. Because others have failed is no reason for not now receiving a cure. Send at once for a treatise and a Free Bottle of my Infallible remedy. Give Express and Post Office. It costs you nothing for a trial, and I will cure you.
Address Dr. H. G. ROOT, 183 Pearl St., New York.

Humorous.

MADE of Orleans—Taffy.—*New Age.*

IF marriage is a lottery, love letters ought not to be allowed in the mails.—*Puck.*

AN hour glass is made smallest in the middle. It shows the waste of time.—*The Critic.*

WHY is a bootblack like a bee? He improves each shining hour.—*San Francisco Call.*

QUEER country this! There is very often wind enough to blow a town out of existence, but seldom enough wind for a yacht race.—*Hartford Post.*

FIRST LEGISLATOR: "I don't believe you have opened your mouth this session." Second Legislator: "Oh, yes, I have. I've yawned every time you made a speech on the tariff question."—*Texas Siftings.*

"WHAT shall I do with such a boy?" said a loving mother, as she strove to impress on the mind of her six-year-old tow-head his manifold troublesomeness. "Oh, you let me alone; I ain't half as bad as I can be!"—*Spectator.*

CITY GIRL: "Are those great strong cows over there yours, sir?" Farmer: "Yes, mum; and they are the strongest in this section." City Girl: "Then you must be the man that makes that awfully strong butter, ain't you?"—*Lowell Citizen.*

TWO POPS.

1. Young Jones takes a day in the woods. 2. He sees a strange bird sailing o'er the top of a hill. 3. Here we behold the bird. 4. Young Jones Pops at the bird, and rushes up to see the effect of his aim. 5. He does the best thing under the circumstances, viz., pops again—this time with better success.—*London Fun.*

Miscellaneous Advertising.

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UNEQUALLED IN
Tone Touch Workmanship and Durability.
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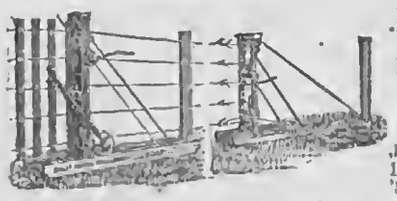

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SLICKER The Best Waterproof Coat.
The FISH BRAND SLICKER is warranted waterproof, and will keep you dry in the hardest storm. The new POMMEL SLICKER is a perfect riding coat, and covers the entire saddle. Beware of imitations. None genuine without the "Fish Brand" trade-mark. Illustrated Catalogue free. A. J. Tower, Boston, Mass.

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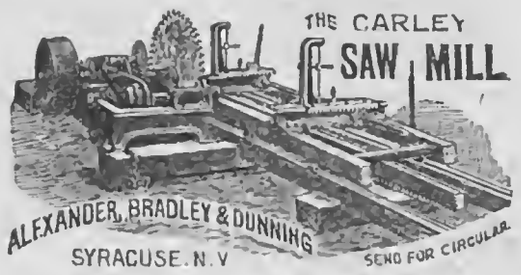
200 Imported Brood Mares, Choicest Families.
LARGE NUMBERS ALL AGES, BOTH SEXES, In Stock.
300 to 400 Imported *FROM FRANCE* Annually.
Send for 120-page Catalogue, illustrations by Rosa Bonheur. Address
M. W. DUNHAM,
Wayne, DuPage Co., Illinois.



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HE
PAYS the FREIGHT
5 Ton Wagon Scales, Iron Levers, Steel Bearings, Brass Tare Beam and Beam Box for
$60.
Every size Scale. For free price list mention this paper and address
JONES OF BINGHAMTON,
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RICHMOND CITY MILL WORKS,
RICHMOND, IND.
Manufacturers of
MILL STONES, FLOURING MILL MACHINERY,
and the BEST French Burr Corn and Feed Mills
In the country. Send for description and prices.

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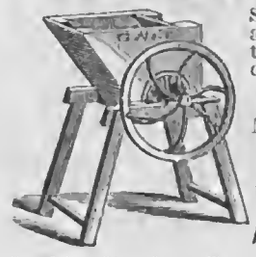

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Lowest in Price. Easiest Worked. Most Rapid and Durable in Use.
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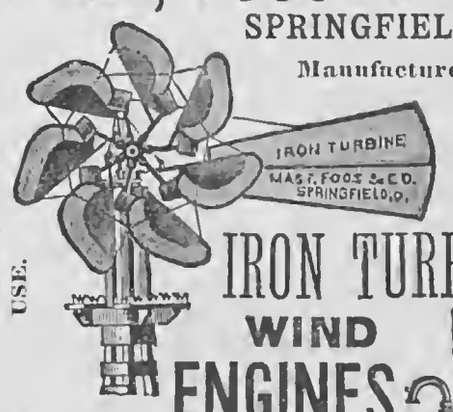

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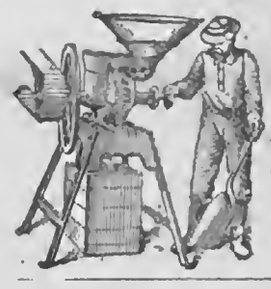
IRON TURBIN WIND ENGINES
Strong and Durable, will not Swell, Shrink, Warp, or Rattle in the Wind.

A CHILD CAN USE THEM.

BUCKEYE FORCE PUMP
Works easy and throws a constant stream. Has Porcelain lined and Brass Cylinders. Is easily set. Is the Cheapest and Best Force Pump in the World for Deep or Shallow Wells. Over 90,000 in use. Never freezes in Winter. Send for Circulars and Prices, giving depth of well. Also manufacturers of the Buckeye Lawn Mower, Buckeye Iron Fence, Buckeye Hose Reel, Lawn Sprinkler, etc., etc.



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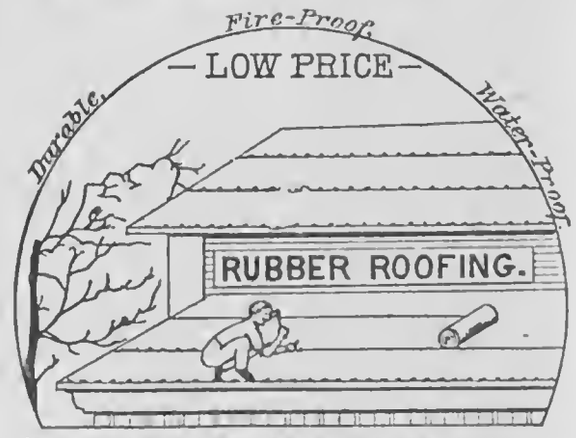
Fire-Proof. —LOW PRICE— Water-Proof. Durable.



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WRITE AT ONCE FOR BOOK CIRCULAR.
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Samples free if you mention Rural New-Yorker.

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PRIZE STORIES:

$1,500 First Prize Story "Blind Brother" will begin Jan. 1st.

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The other Prize Stories, eight in all, will be published during 1887.

Free to Jan. 1, 1887. To any one who subscribes now, and sends us $1.75, we will send the Companion free from the time the subscription is received to January 1st, 1887, and a full year from that date. This offer includes the Double Thanksgiving and Christmas Numbers. *Remit Money Order, Check, or Registered Letter.*

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THE RURAL NEW-YORKER

A JOURNAL FOR THE SUBURBAN AND COUNTRY HOME.

VOL. XLV. No. 1921. NEW YORK, NOVEMBER 20, 1886. PRICE FIVE CENTS. $2.00 PER YEAR.

Entered according to Act of Congress, in the year 1886, by the Rural New-Yorker in the office of the Librarian of Congress at Washington.

THE RURAL'S THANKSGIVING GREETING TO THE FARMER.

God bless you, Mr. Farmer;
  May nothing you dismay,
May peace and happiness be yours
  This bright Thanksgiving-day.
Your friends are all before you,
  We bring you words of cheer,
Let not your heart be troubled
  About the coming year.

We greet you, Mr. Farmer,
  We love the dear old farm,
We're proud to work and do our best
  To keep your babes from harm.

We come to greet you kindly,
  Our compliments to pay,
E'en though our lives be offered up
  To celebrate the day.

Be thankful, Mr. Farmer,
  That this slow-changing year
Has left you strong and hopeful,
  And kept your conscience clear.
What if your gains are meagre,
  If on Truth's golden door
You still can write, "I've wronged no man!"
  A king could write no more.

Have patience, Mr. Farmer,
  The right shall yet prevail.
The good we do is never lost,
  Truth's purpose cannot fail.
Work on! work on with patience;
  Be firm; be just; be true;
To right the wrong, to clear the way
  The world shall come to you.

Have courage, Mr. Farmer,
  For half the fight is lost
To him who lets his manhood
  On Fear's dark wing be tossed.

Thought magnifies our trouble,
  Care eats the heart away;
Think only of your blessings
  And give your joys full play.

And so we say—God bless you,
  May nothing you dismay,
Be thankful, Mr. Farmer,
  This glad Thanksgiving-day,
For health and friends and love and home
  That money could not buy;
Be thankful that the changing years
  So lightly pass you by.

Farm Topics.

A NOTE FROM SIR J. B. LAWES.

THE LEACHING OF VARIOUS SUBSTANCES THROUGH THE SOIL.

SOME substances are held mechanically, some chemically, some are decomposed, one portion is retained, another portion is washed ont. Clay has a strong affinity for various vegetable substances, many of which are highly colored; the black water from dung heaps will therefore pass through a soil and become clear. Sulphate and nuriate of ammonia and potash are decomposed in the soil, and the acids form soluble compounds with lime, which are washed away. So completely had the lime been washed away on one of our pasture experiments where very large quantities of these salts have been applied for 30 years in succession, that the crop which used to cut four or five tons of hay per acre is now reduced to almost nothing. If we apply chalk or lime the crop will be as good as ever. Common salt passes through the soil unchanged. In our three drain gauges of 20, 40 and 60 inches deep of soil, the amount of salt found in the drainage water every year is the same in quantity as that found in the surface gauge. Our annual rainfall contains very considerable quantities of salt: if our drain gauge were covered with vegetation a portion of this salt would be used by the plants, but as we have no vegetation, and common salt does not enter into combination with the soil it all passes through in the water. All the salts of nitric acid are soluble in water and do not combine with the soil, but they are taken up greedily by vegetation. The amount which leaches through the soil varies greatly. Nitrates are formed in the soil; they are also under certain circumstances destroyed in the soil. From 40 to 50 pounds of nitrogen pass through our drain gauges annually per acre. The annual amount varies with the rainfall, but we have no clear indication that the amount is becoming less from exhaustion of the nitrogen compounds in the soil. Some recent experiments appear to show that soils fix the nitrogen of the air. As the rain does not furnish more than five or six pounds of the 45 pounds of nitrogen found in the drainage water, our soils must have lost 500 or 600 pounds of nitrogen per acre since they were under experiment, and we must before long expect to find some reduction in the annual quantity removed unless the fixation of nitrogen by the soil furnishes a portion of that removed. J. B. LAWES.

Rothamsted, England.

BUCEPHALUS BROWN'S NOTIONS AND IDEAS.

FARMERS' PENURIOUSNESS.—Did you ever think that the alleged "penuriousness" of many old farmers is but one of the battle-scars of a long and hard fight with fortune? This penurious, this "stingy" man began life in a time when money was very scarce and exceedingly hard to get. When he was young the richest farmers often found it difficult to obtain enough cash to pay their taxes. In the time when his habits of life were being formed, he could himself rarely get together and keep more than $15 or $20 in money in a year. A York shilling was in those days a bigger coin than our "dollar of the daddies" (very rarely seen by the daddies though) is now, and harder to be got. If the old farmer is honest, industrious and neighborly, don't give him a bad name because he looks stern, and says "No," when he is asked to subscribe five dollars for the support of "the national game." The national game, in his time, was played with a chopping axe, instead of a bat, and if he won in it, 'twas by the hardest work, and without the help of any subscriptions.

EYES NEEDED ON THE FARM—Nobody has any more need to use his eyes than the farmer who wants to make his farming successful. "What are you staring at?" said a neighbor to me, as I was looking across a field of nearly ripened wheat for a possibly profitable "variation" last August. The mining prospector travels hither and yon amongst the hills and mountains of the mineral regions, hammer in hand and pick on his back, his restless eyes ever alert for "indications." He stops and examines any cropping and every vein of the ledges and cliffs of the mountain side, and makes thousands of trials here and there, knowing that it will not do to pass anything that looks like a show. A good farmer's eye should be as sharp as a prospector's. His land, his crops, his stock, everything about his premises needs the sharp eyes of their owner constantly inspecting them as he goes about. The eyes see, but they see to profit only when the alert brain behind them sees along with them and takes close note of what it sees.

POLITICAL ECONOMY FOR FARMERS.—I think the RURAL would be improved by the introduction of a "Political Economy" column. Farmers need instruction in this new branch of science very badly. Many of them feel and see that things are not as they should be. Their feelings are roused against certain evils, especially against the various financial, manufacturing, transporting and trading "monopolies" which have sprung up all over the country. We feel that they are drawing our means away from us, but we do not understand exactly how it is done, and still less do we see the way of remedy. We hear of the Socialists and the Anarchists, of the Knights of Labor and many like organizations, but do not quite know what they are all after. We have a sort of consciousness that our interests are not quite the same, nor are the remedies for the evils we endure identical with those demanded by the organized bodies of other workingmen. The farmer who owns his land unites in his own person the qualities, the rights and the needs of both workingman and capitalist. He is a laborer and an employer of labor; he is a producer of raw material, but he is also, to some extent, a manufacturer and a dealer in both raw and manufactured goods. In the farmer, then, must be harmonized many of the conflicting demands now being voiced on all sides of us. When the farmers' needs are met, in the adjustments of the world's business, the residuum of justice unsatisfied will not be large. In the hands of American farmers resides the power which can and must stand between capital and labor to do justice to both and to enforce the rights of each. Do not the farmers, more than any other class of citizens, need to be taught the principles which underlie these great interests so far as they are yet demonstrated, and should not their leading newspaper do its part in teaching them?

ARTIFICIAL FERTILIZERS.—The use of these is increasing faster than the knowledge of how to use them, or how to make a profit out of them. Nearly every reading farmer now has some ideas about nitrogen, phosphoric acid and potash as necessary plant foods. But farmers have much to learn about the source whence they come, their cost, the cost of their manufacture, their real value when manufactured, and the possibilities of getting them more cheaply and using them separately or together in the most economical way. That they are good we know, but how to get the most good at the least cost is not yet sufficiently known.

Farm Economy.

THE LABOR QUESTION ON THE FARM.

PROF. E. M. SHELTON.

Paramount importance of good management of labor on the farm; farm hands to-day as good as in "ye olden time;" improved implements indispensable; even distribution of farm labor; advantage of being ahead of work, and of Fall plowing; value of timely work; ten hours' work enough; married, self-boarding help the best.

IN view of the fact that the prices of well-nigh all farm products have been steadily "hammered" down for years past, while the price of farm labor has during the same time at least held its own, the question of the use of labor on the farm seems to me to be one of first-class importance. Indeed it may well be doubted if there is a single qualification of the good farmer, not excepting technical knowledge of the art or familiarity with those principles which in the aggregate we call the science of agriculture, which will pay in ready cash as does that nice business sense which enables him to get all that is to be had from the labor force which he employs. I am the last one certainly to disparage or in any way belittle scientific knowledge as related to farming; but when I remember the tremendous outlay of energy involved in inverting six inches of the surface of a field in the familiar process of plowing, or in cultivating or harvesting a crop, agriculture seems as much now as it always has been, and is always likely to be, a question of doing rather than thinking—a matter chiefly of work. The farmer will always be the "horny-handed" one, "a son of toil," but every year will show a more complete subordination of his work to intelligence.

I am not of those who believe that the quality of the labor employed on the farm has degenerated in these latter days. It is true that the familiar boast of the farm hand of 20 years ago—that he could cradle four acres of wheat between "sun and sun," or in the same time chop and pile two cords of four-foot wood—is not now often heard, and when heard sounds strangely enough in presence of modern harvesters and our depleted forests. But a large proportion of our modern farm hands may safely be trusted with a mower or even a self-binder, while not infrequently I find among farm hands a man competent to operate a small steam engine or take charge of a herd of pure-bred cattle. What our farm hands have lost in one direction they have more than made up in others.

How, then, may the farmer to greatest profit utilize the physical forces at his disposal? In the first place, he must employ, and generally he must own, the improved labor-saving machinery suitable to his needs. It is futile to talk of the great cost of improved plows, cultivators and harvesters. The farmer must use these, because not to use them will cost him vastly more than the price of the machinery. It is often possible for small farmers to own jointly expensive machines like the self-binder, but such joint ownership often has its disadvantages. I am inclined to doubt if the farmer who raises 30 acres of small grain can afford not to own a self-binder. The farmer who undertakes to raise his produce by hand must sell it at the prices which machine-made products have created. He is simply trying to compete single-handed with the most potent forces of the nineteenth century.

The course of cropping should be so arranged that the labor of the farm will be evenly distributed through the year. By this means help may be engaged by the season or by the year, and day labor—the most inefficient and expensive that the farmer employs—can be measurably dispensed with. Increasing the live-stock of the farm, particularly cattle and sheep, is, under most circumstances, attended by a corresponding diminution of the hand labor required in its management. The absentee owners of the great Irish estates found no means so effectual in ridding the land of a too abundant tenantry as substituting cattle for grain. The example is not one for general emulation, but it ought to give a useful hint.

The importance of keeping ahead of the work, of pushing it instead of been constantly crowded by the pressure of important duties, cannot be too strongly insisted upon. The farmer who keeps well abreast of the season is certain to do his work with the least effort, to do it in the best manner, and to secure the largest returns for his labor. I know of no practice nearly equal to fall plowing in starting the farmer right with his work in the Spring, and there is certainly no other useful farm practice so generally neglected by American farmers. I know that it is urged that husking consumes all the time of the farmer during the fall season: but husking may be done when plowing cannot, and fall plowing, for oats and barley at least, should have the preference. The farmer who starts out in the Spring with the oat and barley ground in readiness for the seed has a tremendous leverage on the work of the entire season.

Farmers too often fail to appreciate the importance of the element of time in connection with their work. I can best show my meaning by an illustration: A field of corn may be thoroughly hoed by one man in 10 days or by five men in two days; now, if one man alone does the work, before the 10 days have passed the weeds in the unhoed portions of the field will have increased enormously in number, size and vigor, and the difficulty of eradicating them will have proportionately increased, to say nothing of the damage done the corn crop meanwhile. The man who does the work with the five men saves both time and labor, both of which are "money." I have in mind a neighbor who undertook to cut up a single field of corn single-handed. Before one-half of the field had been shocked the fodder on the remaining half was in ruins from frost, sun and rain. In some such ways as the above the forces of the farm may often be used cumulatively with great saving of time, labor and produce.

There are other matters in connection with this "labor problem," which equally with those referred to above, deserve the attention of RURAL readers, but which can be only briefly outlined in this letter:

The practice, known nowhere I believe except among farmers, of working men and teams from sun-rise till sun-down seems to me to be one that agriculture should have outgrown. An experience of 13 years with the ten-hour system upon the farm has convinced me that as much or more is accomplished, of a better quality in 10 hours than can be extorted under the old barbarous all-daylight plan. Married men are the most reliable help and these should be engaged by the year or season, and cottages should be provided for them upon the farm. The home of the farmer who boards his own help can never be a model farm home. I think of no spectacle in connection with the farm quite as unlovely and degrading to all concerned, as that presented by the farmer's wife and daughters whose lives are largely given over to the abject drudgery of cooking and washing and bed making for hired men.

Manhattau, Kan.

Dairy Husbandry.

THE REFORM OF IRISH DAIRYING.

PROFESSOR J. P. SHELDON.

Agrarian and political troubles impediments to progress; agricultural depression the source of discontent; increase of creameries; the reason; Professor Arnold in England.

THE condition of the butter trade in Ireland is causing much concern among the leading friends of agriculture in that country. The farmers are torn by various disturbing influences, and are not in a frame of mind to take united action in such a matter as dairy reform. The question of land as an element of first-rate importance in the economics of the people, involving that of the laws by which that element is at present regulated, is altogether too potent and absorbing, too desperate in its bearings, too harsh and grinding in its *modus operandi*, to admit of tenant farmers settling down into the earnest and sustained consideration which is necessary to bring about the much needed improvement in the art of butter making. The country is too much disturbed by political questions to admit of the rank and file of the people engaging quietly in the pursuit of manufacturing and commercial reforms, and the result is that no great deal of solid progress has hitherto been attained. There are, nevertheless, a number of patriotic and public-spirited men who, in the midst of chaos and uncertainty, are doing their best to bring about a state of things which will have a beneficent and lasting influence on the fiscal interests of the country.

For it cannot be denied that agricultural depression has a great deal to do with the unhappy condition of the people. I say nothing about the behavior of landlords to their tenantry, for this is a topic outside the scope of an article in an American agricultural paper; but it is, nevertheless, true that the inability of farmers to pay their way and live is at the root of most of the mischief which occurs in the beautiful Emerald Isle. The abnormally low price of everything which the Irish farmer has to sell, the most important of which is butter, is, as I have said, causing much concern to the friends of Irish agriculture, and these gentlemen, many of whom are practical farmers, the better type of landlords, and not a few professional men, and so on, are endeavoring to multiply the number of associated creameries or butter-factories. I think I have aforetime told the readers of the RURAL NEW-YORKER of the dairy education which is in progress, and of the factories which have been established in Ireland; and I have now to speak about the greatened impetus which is being given to the movement, of the reasons which are at the root of it, and of the methods which are being pursued.

The impetus and the reasons for it are closely allied. It is felt that the second or third-rate position as a butter-producing country, which Ireland feels herself to occupy, is a matter which admits of a remedy at once comprehensive and permanent. As a preliminary consideration it is well understood that the climate and soil of Ireland are unsurpassed on the face of the globe as factors in the production of the finest butter; and this at once suggests the inference that man alone is to blame for the inferior reputation Irish butter at the present time possesses. Once a train of facts such as this takes possession of the minds of those who are accounted leaders in dairy husbandry, the impetus is accounted for and the reason too. To realize the need and feasibility of improvement is the first step, and an indispensable one, in the path of progress; and this preliminary step has, I am glad to say, been well taken in the sister island. The journey to be traversed is, of course, a long and difficult one—more difficult on account of the disturbing influences I have alluded to—and can only be accomplished by careful and sustained thought, energy and perseverence. It remains to be seen whether our Irish agricultural friends, who have no warmer well-wisher than I, will be able to carry out their programme.

It is known to American readers that the British Dairy Association, which has entered on its second decade, and has already done much good to the industry it represents, has recently begun the practice of holding conferences in the more important dairy counties of England. Two of these gatherings have been held, the one in Cheshire and the other in Derbyshire. At the second one your Professor Arnold, whose name is a household word in other countries than America, was present;

and since his return home he has told his countrymen what he saw and heard amongst us. And I am glad to say that our next conference will, by invitation, be held in Dublin. The meeting will take place next June, and we may confidently hope that it will add to the impetus which has been given to the reform of Irish dairy husbandry.

IN PRAISE OF CENTRIFUGAL CREAMERS.

If pure butter is what is wanted, I think the centrifugal process is the only one by which it can be obtained. Take the milk from a dairy of cows kept in the cleanest barn that can be found, and properly cared for and fed, and milked with every possible precaution with regard to cleanliness, and run it through a centrifugal machine, and you can readily see by what is left in the machine, that the milk was far from being pure and clean. Indeed, I venture to assert that if anybody of ordinary cleanly instincts had seen the residue in the machine, and then beheld it, with his own eyes, worked into butter, nothing would induce him to eat the stuff. Now the case I have cited is exceptionally favorable for the production of pure butter; for butter is usually made from milk that comes from a "promiscuous" lot of dairies where rigid rules for cleanliness are not always observed. If any one can tell of any way of making really pure butter without the use of a centrifugal machine, I would go round the world to see how it can be done. Until this machine came into use I don't think it was ever accomplished. The fact that the centrifugal process will give more butter than any other from the same quantity of milk is of small consequence compared with the importance of the difference between pure and filthy butter. Do I call all butter filthy that is not made by this process? I do, and would not knowingly eat it. Further than this—I believe that milk, before it is sold to families, should be run through a centrifugal machine, and then the cream should be remixed with the skimmed milk, and then one would have pure "clarified" milk.

The use of the centrifugal machine is not a hobby with us, and we have no interest in their manufacture further than to buy, pay for, and use them. We use the Danish Western and Laval machines, and think one as good as the other—both are good. They are expensive and difficult to run. The process is probably the most expensive known for raising cream. Many careful men who have tried them have become disgusted with them and discarded them, and I admit that it requires patience and skill to run them: yet for all that I believe in them. W. ROWELL.

Boston, Mass.

The Herdsman.

PRINCIPLES OF BREEDING

PROFESSOR G. E. MORROW.

An animal's congenital characteristics inherited from its ancestors; its subsequent development dependent upon its environment; the fundamental principle of breeding—heredity; causes of variation; rules of practice from this principle; atavism; "freaks of nature;" animals to be selected as breeding stock.

The improvement of our domestic animals has been accomplished by breeding in accordance with a few fundamental principles. Sometimes these have not been understood by those who acted in accordance with them. Oftentimes improvement has been retarded by failure to recognize them. There is still much in relation to the art of breeding which is not understood; but, fortunately, the essentials to success are known and comparatively easily applied in practice. It is purposed to point out these fundamental principles and some of their applications, in a brief and familiar way, with the hope that especially young breeders and beginners in the business may be profited.

The characteristics which an animal possesses at birth, it has obtained from its parents. What it is to become, the extent to which its powers are to be developed, will depend very largely on its surroundings—its food and care, the climate, the help or hindrance it has from man—but it can possess no quality which, somehow, it did not receive from or through its parents.

The most casual observation shows that, as a rule, with comparatively few exceptions, the offspring resemble the parents; that like produces like. This is the one great foundation principle from which the whole science and art of breeding start. Without it there could be no certainty; no hope of any permanent improvement. This is called the law of inheritance or heredity. Any characteristic of the parent may be transmitted to the offspring, whether it be an outward, visible quality, as color or shape; or one relating to the disposition, or some internal and invisible quality; whether it be desirable or undesirable, of much or little importance. It is not true that a quality possessed by the parent will always appear in the offspring, but it may. The distinction between the words *may* and *will* should be kept in mind in all this discussion.

No two animals are exactly alike. Each animal has two parents. These have not precisely the same qualities, hence the offspring cannot exactly resemble both. Here we have one cause of variation. Experience shows that the offspring may closely resemble one parent, or it may be intermediate between the parents in the qualities in which they are unlike. We cannot foretell, with certainty, which parent will impress its distinctive characteristics on the offspring, or whether there will be an intermediate manifestation. The rule of practice from this principle of heredity is obvious. Select animals as parents which possess the characteristics desired in the offspring. First of all, the successful breeder must know what he wants; must have a definite idea of the qualities he desires. Then he will select animals possessing these as nearly as possible. If he can find but one animal with the desired characteristic, he may find this reproduced; if both parents possess it, the probabilities are great that it will be reproduced. If any animal, otherwise desirable, possesses some one objectionable quality, the wise breeder will endeavor to avoid any approach to this defect in the other parent.

An animal may receive from one of its parents a tendency which does not appear. There may be a tendency to some disease of which favorable surroundings prevent the development; or there may be a possibility of development in a certain direction, but circumstances may never cause this to be manifested. Many horses with the possibilities of developing great speed have lived and died without this fact being suspected; and so of any other quality. It will readily be seen that this undeveloped quality may descend to the offspring and appear in it, perhaps because of more favorable conditions. Experience shows us that this often happens. Frequently an animal does not closely resemble either parent in some point, but does have a close resemblance in this to a grandparent, or some still more remote ancestor. In such cases it is most natural and sensible to say the animal inherited this quality through its parent, although the parent did not apparently possess it, the characteristic having descended from the more remote ancestor.

While, in the large majority of cases, animals closely resemble one or both parents, the instances in which they more closely resemble a more remote ancestor, in some one or more characteristics, are not infrequent. Hence we modify the statement of the foundation principle so that it reads: Like produces like, or the likeness of some ancestor; the offspring resembles the parent or some more remote ancestor. This modification we call the law of reversion or atavism, or "breeding back."

Occasional instances of striking unlikeness to either near or remote ancestors are hard to explain. Monstrosities, abnormally or imperfectly developed animals are produced, and we cannot certainly tell why. We have what we call "freaks of nature," or "sports." But the number of these is comparatively small. The breeder may rely, with great confidence, on the almost certain resemblance of all the progeny of his flocks and herds either to the near or remote ancestry.

The rule of practice from all this is again easily seen. The wise breeder will endeavor to select, as breeding stock, animals which not only possess the characteristics he desires in the offspring, but which have descended from ancestors also possessing them. Experience shows that the probability of the reappearance of any quality rapidly decreases as the number of generations since it was seen increases. If both parents have any quality in common, probably the offspring will also have it. If the parents and all four grandparents have it in common, the probability of its transmission is greatly increased. If all the ancestors for five or six generations, have had this characteristic, its descent may be expected with almost absolute certainty. And it is not important whether we say it is transmitted from the near or remote ancestor.

Champaign, Ill.

(To be Continued.)

ECONOMY, NOT EXPENSE, IN LIBERAL FEEDING.—If farmers, in general, could get the heresy out of themselves that it is an expense to feed their animals well, and, on the other hand, believe the true gospel on that point—that it is economy to do so, they would soon be counting greater net gains. The same truth holds well as applied to feeding land; and modern farming proves that the cheapest way to feed the land is to feed the animals. The feeding animal pays in growth, in meat, milk or wool, and does not abstract from the manurial value of the food eaten, but rather fits it for plant food. Why can't farmers believe these truths and be free-handed instead of begrudging the salable food their animals eat, as an expense? The enlightened farmer, who said he only regretted that his well-fed cows could not healthfully digest more than he fed them, took the right view of it. The end of farming with him was to turn the products of the farm into milk, horses and wool and manure. The less machinery (animals) he had to run to make the transformation, the more he had left at the end. B.

Horseman.

BROKEN WIND, HEAVES.

F. L. KILBORN.

Broken wind or heaves in horses is a disease usually dependent upon some affection of the digestive organs, either acquired through faults in care and diet, or by inherited predisposition. The almost or quite general implication of the respiratory system is a result and not a cause of the disease. A horse with the heaves is in very much the same condition as a person with dyspepsia; while a temporary or even permanent relief may often be quite easily obtained by proper diet and care, it is doubtful if a permanent cure is ever made of a genuine case of heaves; that is to say, so that the animal is as strong and healthy as before. A recent case or a young animal may occasionally be apparently cured, but that animal will always remain more susceptible to those causes that tend to produce heaves than if he had never been previously affected.

In view of this fact, that the disease is almost, and I may say practically incurable, greater care should be exercised in its prevention, which is, after all, the only rational way of keeping free from the disease. We should constantly treat our horses as if they were quite liable to have the heaves, not by dosing with medicines, which at the best are usually of very little use except as temporary disguisers, but by carefully watching their feed and care to see that it is at all times suitable and not such as is liable to make broken-winded animals.

One of the most common causes is overfeeding on coarse, over-ripe, woody, indigestible fodder or hay, and particularly clover or other leguminous plants used for hay. Musty or dusty clover hay of poor quality is a very common cause; while hay that is over-ripe and musty, dirty, inferior or badly cured fodder of any kind is very liable to produce the disease. Allowing a hearty horse (and the appetite usually becomes ravenous as they become diseased) to eat all the hay he can stuff when standing idle, rapid driving or hard pulling when thus over-loaded or immediately after a full drink of water, and drinking large quantities of water, especially just after feeding, are all common causes. Over exertion at any time and bronchitis tend to favor or aggravate the disease. Horses with small round chests—"barrel-chested—are the most liable to become broken-winded. The disease or rather a predisposition to the disease, is inherited by the offspring of broken-winded or predisposed animals.

To prevent the disease we simply have to exercise a little more care and judgment in avoiding the causes. To be sure even under the same unfavorable treatment, all horses will not become broken-winded, some animals being apparently proof against the disease. But so many are susceptible that we cannot afford to run the risk of general exposure.

Avoid over-feeding, especially on coarse, musty, dusty, or otherwise inferior fodder, and, above all, when idle. If such fodder must be used, feed sparingly and only after being dampened. When possible, feed only clean, bright, well-cured hay, preferably Timothy that is not over-ripe. For horses that stand idle most of the time bright oat or wheat straw, with a little extra grain and linseed meal or a few roots, is preferable to hay. Also avoid severe exertion or drinking large quantities of water soon after a hearty meal. Do not breed from animals even predisposed to heaves, and thus lessen the danger by lessening the more susceptible stock.

For animals already affected treatment is palliative rather than remedial. Special care should be exercised in chosing the diet, and also as to how and when it is supplied. Give no clover hay, or musty or dusty food of any kind. Bright, clean oat straw with plenty of grain is preferable to any but the very best of Timothy hay. When uncut hay is fed it should be of the best quality, well dusted and given in small quantities, mostly at night. Well dusted uncut hay, with which ground feed may be mixed and the whole dampened, is an excellent ration. In fact, this makes one of the best of feeds for any horse, and there is in this way much less danger of overfeeding. From one to three pecks of the loose cut hay, with three to eight quarts of the ground feed, according to the size and condition of the animal, and the whole moistened, make an excellent ration for either a heavey or healthy horse. The ground feed may consist of equal parts by weight of ground oats, corn-meal, wheat-bran and one-fourth part oil or linseed-meal, mixed, or the proportions may be varied to suit circumstances.

Wherever an animal has acquired a ravenous appetite so as to eat the bedding, etc., it will be necessary to remove the litter during the day and apply a muzzle at night, and such horses should not be turned into pasture, except for one or two hours at a time, or they will even there often overload themselves.

Water should be allowed frequently, but always in moderate quantities, not to exceed one-half bucketful at one time. Offer the horse water *before* feeding the grain and not *after*, as is the common practice with many. When standing idle for a few days, reduce the feed, or, what is preferable, give daily exercise. Do not allow the horse to go to work immediately after eating. If possible, allow an intermission of one or two hours. The bowels should be kept easy by green food in Summer, and in Winter by roots, potatoes or apples, or in their absence by laxatives in small doses. Arsenic given in daily doses of four or five grains, or Fowler's solution, and continued for several weeks, is often beneficial. Unscrupulous dealers frequently resort to various methods to temporarily mask the symptoms of heaves, in order to sell a diseased animal as one apparently healthy. A common successful method is by witholding both hay and water for two or three days; but if the hay and water be resupplied the symptoms will speedily return in every case. Large doses of butter or other oleaginous substances or one or two pounds of fine shot will often hide the symptoms. Also large doses of antispasmodics, as belladonna, stramonium, etc. But the symptoms will always return as soon as the temporary effect of the dose has passed,

The Swineherd.

PIG ABORTION.

COL. F. D. CURTIS.

It is not common for sows to abort. There are causes, however, which will produce this result. Abortion is occasioned more frequently by keeping sows in an inclosure with other hogs. A RURAL subscriber has just written to me to know why his sow aborted with seven pigs. He very sensibly gave her a variety of wholesome food, so that there could not have been any cause for the trouble on account of her diet; but he, very unwisely, kept her in a small yard with a boar about a year and a half old. If this sow had been put into a field a month or two before the pigs were to be born, there would unquestionably have been no abortion. When a sow is very forward with young, sometimes a slight thing will cause inflammation or such a derangement of the fœtus as to destroy the young. In the case alluded to, a blow from the boar when eating, or a strain by slipping in attempting to get out of the way of the boar, would be sufficient. Dragging the belly over a trough, or bruising it going in and out of a pen will also cause abortion. Catching cold, owing to exposure, will also cause internal inflammation, resulting sometimes in abortion. Dogging sows heavy with young, or chasing them and otherwise over-heating are alike dangerous. Every pig breeder ought to know that constipating foods will cause abortion, and so will a frenzied condition of the mother changing her maternal instincts into savage ferocity.

There is no place on earth where a breeding sow will do so well as on a bit of pasture with a little shed for a sleeping place. There she will never have any trouble, and will always have strong and active pigs. She may require a little feeding if there is not sufficient grass, and it is always well to feed a little extra as it gives her greater growth, but she should never be fed so much that she will become fat. A fat sow is always a poor breeder and makes a poor mother. I have never had better success than this year in raising pigs. They were mostly born in the fields, and out of nearly 200 Duroc-Jerseys none has died from weakness or sickness. I find that it is always best to give sows an open range, unless the weather is too cold, and not to attempt to feed them after the pigs are born until they leave the nest and come out themselves to seek food.

I am satisfied that the instinct to eat the

placenta should not be interfered with, as it supplies just the kind of food which nature requires to replenish the system. When this is eaten a sow will remain quiet and is more docile than when she is deprived of it. I have known sows to kill and eat a live pig because of a ravenous desire for animal food, and when they have eaten the placenta they would not touch a dead pig which they had accidentally killed by lying upon it. After a sow has gratified her instincts by this kind of food she will remain quiet in her nest for hours, perhaps for a whole day and meanwhile the udders are not inflamed by an excessive flow of milk caused by extra food. A great many pigs are injured by being compelled to take milk from feverish udders; the milk itself in turn inflaming their little stomachs and making them sick. Such pigs show the bad effects of their food by rough coats and a general delicate and sickly appearance. Less care and less food than are usually bestowed on the breeding sow will cause less abortion and better success.

When a sow aborts from an accidental bruise or blow on the womb she will usually breed again all right. When abortion proceeds from congestion and acute inflammation caused by cold or fever, the risks are more. Sometimes a blow or bruise or strain will kill one pig in the womb, and a long time afterwards the balance of the litter may be born all right. Sometimes an injured pig will decay in the womb and cause abortion, or if the time of pigging is near at hand some of the pigs may be born alive and do well. Sows should never be kept in close and slippery pens. They will do best on the ground, with a dry, warm bed to go to. Sows in pig should be kept alone as much as possible, and in no more than good, thrifty order.

The Poultry Yard.

POULTRY FOR EGGS IN WINTER.

HENRY HALES.

To those who intend making poultry keeping for winter eggs a specialty the month of November is one of activity. The plans and arrangements necessary for the success of the business must be fully completed before cold weather sets in. In the first place, all houses that have previously been used must be thoroughly cleansed, whitewashed and fumigated, that all tendency to disease may be entirely removed by disinfection. Runs or yards should be dug or plowed, and where they are large enough to allow grass to thrive, grass seed should be liberally sowed. Broken windows should be all reglazed, and all cracks or holes in the wood-work should be promptly stopped. With all this shutting out of outside drafts, provision must be made to admit plenty of air and afford good ventilation whenever the weather is moderate enough to allow it, and ventilators near the ceilings should never be closed except in extremely cold weather, and then only for as short a time as possible, and this in houses without artificial heat. Where there is any heating apparatus, never close the ventilators entirely. Too much stress cannot be laid on this matter of cleanliness and ventilation; for, no matter what fowls are kept, no good results can be expected with carelessness in these matters.

Pullets hatched early in Spring are much better for winter laying than hens, as they will commence in October or November, and keep on laying; while hens do not commence so early; some, indeed, do not lay till February, when eggs are getting cheaper. Internal arrangements for making the birds comfortable and satisfied are of much more importance than many people think. Some persons imagine that because they are hens they *must* lay eggs; but a great deal can be done by coaxing. Change a hen from one house to another and it will be found that she always stops laying till she gets settled down in her new quarters. This shows that her good-will and comfort must be consulted. Good, clean nests in quiet places are appreciated. Avoid over-crowding. More profit can be made from a small flock well kept than from a large one crowded too closely together, no matter how well they may be fed. If one has room enough, the number of hens and of houses and yards may be increased indefinitely.

It must be borne in mind that only liberal feeding will produce an ample number of egg food. Hens must have the material for making a plentiful supply of eggs, and herein lies one of the secrets of making hens lay in the Winter. During the Spring, Nature supplies much of the food that is conducive to egg production, in the form of worms, bugs, flies and tender vegetation, and when we try to produce eggs two or three months before Nature is ready with her natural food, we must supply the deficiency. Avoid all kinds of nostrums claiming to be egg-producing powders or foods, and feed good sweet grain—no damaged stuffs. A morning's meal should be of boiled potatoes mashed up with wheat middlings and corn meal, or varied with oatmeal at times for a change Feed in troughs, so that the stock cannot get into and soil the feed. Give them all they will eat up clean, and no more—at noon a little meat, such as haslets, "graves" from the packing-house, etc. The "graves" come pressed into hard cakes. These should be broken to pieces with an old axe and soaked in cold water till they fall to pieces. Then the stuff can be chopped up fine; but never give it to them in the house in such large pieces that they can drabble it through the dirt, as that is one of the easiest ways to make fowls sick The evening meal should be grain—wheat is best—with some corn mixed with it. A little oats or buckwheat is very good for a change; but do not rely on them alone. Cabbages should be fed when there is no grass; in fact, almost any vegetable is relished, such as turnips, onions, or carrots. Many people recommend throwing corn among cut hay or straw to make fowls scratch for the sake of exercise. This would be a good thing to do outside when the birds can get out, but in the house there is danger of their eating dirt with it. All such feeding, however good, must be scrupulously clean. When cabbages are given, they should be hung up by the stalk within easy reach.

Field Crops.

Experiment Grounds of the Rural New-Yorker.

A NEW WAY TO MULCH POTATOES.

VALLEY MULCHING.—The old RURAL method of mulching potatoes is sometimes very successful and at other times useless or harmful. The effect depends upon the soil and season. When the early Spring is backward and wet, the mulch keeps the soil cold; the seed pieces are delayed in sprouting and an imperfect stand is the result. What is wanted is a mulch that will conserve moisture and yet not intercept the warming rays of the sun. The "valley" system accomplishes this. Whether it is practicable or profitable each must judge for himself. Following is an account of our

COMPARATIVE TESTS.

The soil (a much impoverished, sandy loam) was plowed, raked, and leveled the same as if grass seed were to be sown, as shown by the line *a*, Fig. 430. The seed pieces (two eyes)

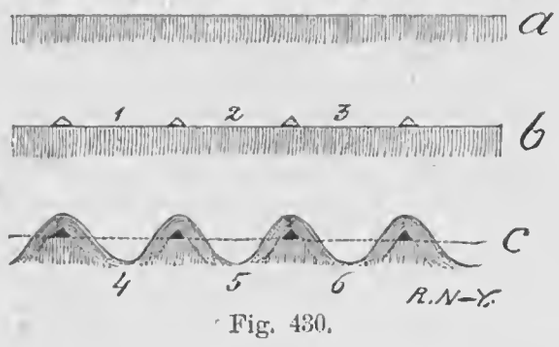


Fig. 430.

were then placed *on* the soil one foot apart in rows three feet apart, as shown at *b*. These pieces were then lightly covered with soil hoed from between the rows (1, 2, 3,) and at the rate of 1,000 pounds per acre of Baker's potato fertilizer strewn evenly over it. Then more soil was hoed over the fertilizer until continuous hills five inches high were formed, as shown at *c*, forming the valleys, as shown at 4, 5, 6. The valleys were then filled with a mulch of coarse straw and hay that had been raked up into cocks from a part of the field where it had lain all Winter, thus, filling the valleys, as shown at the dotted line. The design is that such plots are not to be cultivated during the entire season. If the mulching material is old, few seeds will sprout *in* the mulch, while those that sprout *beneath* it will be smothered. The weeds that grow on top of the hills may be pulled up. But the vines very soon cover the hills, forming a shade not favorable to their growth. The yield of potatoes was 45 pounds, which was at the rate of 352 bushels to the acre, 60 per cent. of which were marketable as to size.

If it were desirable to try this system on a large scale, a small plow run both ways, or a shovel plow would serve to turn furrows over the pieces, leaving the valleys to be mulched. In the

SECOND experiment, which is by no means new, the pieces were placed on the top of the leveled soil as before, and the same kind of mulch spread over them five inches high directly over the pieces and sloping gradually towards the other rows. Upon this mulch the same quantity of the same fertilizer was sown. The yield was at the rate of 330 bushels to the acre. In this trial there were 316 tubers (45 pounds), of which 162 were of marketable size. Many, however, were injured by grubs of the May Beetle and wire-worm. The next test was the Rural's trench-mulch system, well known to our readers, using the same quantity of the same fertilizer. The yield was 316 potatoes (31¾ pounds), of which 156 were marketable. This was at the rate of 276.83 bushels to the acre.

ANOTHER trench without mulch, and fertilized with the same manure, at the rate of 1,200 pounds to the acre, yielded at the rate of 278.66 bushels to the acre, there being 314 tubers (38 pounds), 146 marketable.

THE fertility of the soil is shown by the yield of two trenches that were not fertilized. The first yielded 162 potatoes (12¼ pounds), of which 54 were of marketable size, though very scabby. This is at the rate of but 91.66 bushels to the acre. The second unfertilized trench yielded 156 tubers (15½ pounds), of which 60 were marketable as to size, and also much injured by scab. This is at the rate of 113.66 bushels to the acre.

The average yield of the unmanured trenches was 102.66 bushels per acre. The trench (not mulched) which received 1,200 pounds of fertilizer yielded at the rate of 278.66, an increase over the unfertilized trenches of 176 bushels. The trench which was mulched (old Rural trench-mulch plan) and given 1,000 pounds of fertilizer, gave an increase over the unmanured plots of 174.18 bushels; the surface mulching an increase of 228.66 bushels, and the "Valley" mulching an increase of 250.66 bushels to the acre.

We shall try the Valley method again next year on a larger scale. The philosophy of the method seems sensible enough. About a foot of soil in width directly over the pieces is without any mulch, and the mellow, loose soil receives the air, the sun's rays and the rain, while the mulch in the valleys must assist in retaining the moisture so received for the benefit of the roots until the growth of the tops covers all.

* * *

SOUTH AMERICAN WILD POTATO.

OUR first specimens of this variety were received from Charles E. Brown of Yarmouth, Nova Scotia, who had raised it for two years without much improvement. We planted three hills, using a whole tuber for each, April 12. The vines were dead August 14. The yield was 60 potatoes which weighed 1¾ pound or at the rate of 141 bushels to the acre. The engraving, Fig. 431, shows the average size. All were of the same shape. There were two decayed tubers. The skin is reddish-purple, the flesh, when cooked, pinkish, the quality sweet and good. The vines were much the same as those of other potatoes. Crossing this potato with cultivated kinds might produce curious results. It did not bear any fruit. This potato is quite different from any of the other wild species we have seen, and we have raised the several kinds found by Mr. Lemmon in the Rockies.

Fig. 431.

JAPAN CLOVER.

THE following note is published for the benefit of several who have asked where Japan Clover seeds can be purchased since it is not offered in seedsmen's catalogues:

"Japan Clover made its appearance on my farm about nine years ago. Its introduction in this section of the South still remains a mystery; but for grazing we have nothing that will compare with it. It comes early in the Spring and remains till late in the Fall. The proper time to sow is the Fall and Winter; then it comes up early in the Spring. We do not sow it here, as it comes up spontaneously all over the fields that are not cultivated. Should any of your subscribers wish to make a trial, I can furnish small quantities of seed.

E. DASHIELL.

Williston, Fayette Co., Tenn."

Floricultural.

THE WINDOW GARDEN.

WILLIAM FALCONER.

ATTEND to the wants of the plants so far as watering, cleaning and ventilating are concerned. Keep geraniums, oxalises, nasturtiums, petunias and other gay plants in sunny places to prolong their blooming season. If your Roman hyacinths are well rooted, bring in a pot or two to a moderately warm room to get them into bloom for Christmas; but if they are not well rooted don't try to force them, else they will be very poor flowers. Keep a pot or two of musk growing; also some lemon-scented verbena. Most old folks love them both.

PALMS are capital house plants providing you save them from furnace heat and gas, and even these they will stand for some weeks without showing much injury. The Livingstonas and Kentias are, I think, about the most desirable. They don't want sunshine, but they do like warmth and moisture. Seaforthias grow too quickly, and the commoner Chamærops lack beauty or elegance.

DRACÆNAS.—The "colored"-leaved kinds are pretty useful for a time, but after a while they lose their lower leaves and look "leggy." When this is the case I make a notch nearly all the way around the stem and close up under the leaves, and around the incision tie some swamp moss mixed with sand, and moisten it two or three times daily. In a few weeks young roots will appear all through the moss, then remove the top, and its new roots pot and treat as new plants. Dracæna fragrans is a large, green-leaved kind, and one of the very best plants I know of for continuing a long time in good condition inside a dwelling room.

GOOD GREEN-LEAVED PLANTS.—The common or variegated-leaved aspidistra lasts longer in healthy condition inside a dwelling room than any other decorative plant I know of, and if need be we can safely winter it in a cold-pit or cold-frame. Then we have the English ivy, which is a hardy vine; the rubber plant, large-leaved begonias, sweet bay, and palms, screw pines and ferns.

FERNS.—No matter whether the ferns are in vigorous growth or at rest, in a warm or a cool room, the soil in which they are growing should always be moderately moist. Of course, those that are in the most vigorous growth should get the most water, and those that are at rest the least. Aspidium falcatum has thick, glossy leaves, and is the best of all for room decoration. But we can have maiden hair, onychium, nephrolepis, staghorn, silver-leaved pteris, and some others in very good condition. Where room is limited and many ferns cannot be accommodated, you may cut over your common maiden hair and onychium ferns and set them aside in your cellar over Winter, but be careful that neither frost nor drought reaches them there.

FERN CASES are usually set in the hallway or inside sunless windows, and are filled with ferns, club mosses, cyperuds, rex begonias, and red or white nerved fittonias. Don't keep them soaking wet. They should be thoroughly well drained by means of a layer of rubble in the bottom and a faucet at one lower corner to lead off the water. The atmosphere should be kept moist and the plants be sprinkled gently from an atomizer, syringe or finely bored water-pot rose every day or two, but not enough water should be given to wet the soil much. The three chief points to observe in fern-case gardening are, not to overwet the plants or soil; to ventilate continuously by tilting up the lid a little, and to wipe dry the glass casing inside daily.

CHRYSANTHEMUMS.—Those that have been blooming out-of doors may be cut over, and a thick mulching of leaves or litter placed over the roots. Or it will be safer to lift and bring them into a cool cellar till Spring; but the roots must be kept moist during Winter. Those in pots may also be wintered in a cool cellar.

FLOWER ROOTS.—I winter cannas, dahlias, four-o'clocks, Caladium esculentum and Madeira Vines on wide, airy shelves in a warm cellar. Gladiolus and tigridia bulbs I keep on shelves or in boxes in a dry, moderately cool room, but where frost never enters. Gloxinias, fancy-leaved caladiums and gesnerias may be left in the pots in which they had been grown, and kept in a room, cellar, or elsewhere where the temperature never falls below 50 degrees. Tuberoses like warm, dry winter-quarters. Tuberous begonias and montbretias like a cool, but frost-proof place.

COLD-FRAMES.—Have them well banked around with coal ashes, dry leaves or other warm material, and afford ready means for water to pass away from about them. While a few degrees of frost may not visibly hurt

violets, pansies and polyanthuses, it does them no good; hence, don't subject them to it. Uncover them in warm, mild weather; tilt up the sashes in bright, sunny weather, even if it freezes a little; but shut up early and keep in a little sun-heat. Cover over the sashes with straw mats, Russia mats, thatch, straw or other available material to exclude hard frost, and it will greatly add to the warmth of the coverings if you have tight half-inch pine shutters to lay over the covering to keep all snug and dry. But avoid coddling your plants, else they will damp or rot off, bleach or spindle, and become unable to yield good flowers. Occasionally stir the soil between the plants to keep it sweet and the plants healthy, and remove all decaying leaves and the like from the frames.

THE GREENHOUSE.—If you have only one greenhouse and in it only one compartment, so arrange your plants that the poinsettias, crotons, draccenas and other heat-loving plants shall be at the end next the fire-place, and the carnations, cyclamens, cytisus, primroses and others requiring low temperature, at the cool end. Don't be too kind and keep the house extra snug and warm, as such is very injurious to your plants. Hang up a thermometer about the middle of your house, and let it indicate an average temperature of 50 degrees; this will give five degrees higher at the warm end and five degrees lower at the cool end. Ventilate in fine weather. Open the ventilators early and only a little at a time, and shut up early in the afternoon, so as to keep in a little of the sun heat and save firing. By syringing the large-leaved plants—but never the flowers—and wetting the benches and paths, maintain a damp atmosphere; but never sprinkle the hot pipes so as to raise steam.

Pomological.

CROSSING OF ORCHARD FRUITS.

PROFESSOR J. L. BUDD.

OVER large areas of our country the desirability of securing systematic crosses of our orchard fruits with a view to combining the season and quality of one variety with the perfect foliage and hardiness of tree of another, is not questioned at this time by our thoughtful fruit growers. Hoping to enlist the attention of a few readers of the RURAL and induce them to plan some work of this kind for their next season of blossoms, these brief notes on crosses effected on the college grounds the past season are penciled.

SELECTION OF PARENTS.—Of course, the selection of parents will depend on climate and the end to be gained by the proposed cross. With us the primal thought is to secure varieties hardier in the tree, and more perfect in leaf than the Willow or Roman Stem Apple, the Early Richmond or English Morello Cherry or the Lombard or any other West Europe plum. Hence we selected for mother varieties of the apple such undoubted iron-clads as Hibernal, Lieby, Anis, Antonovka, and Longfield, and crossed the blossoms with pollen of Grimes's Golden, Roman Stem, Northern Spy, etc. Among cherries we selected for the female part of the the cross some really good varieties of the Griotte type introduced from Orel, Russia, and crossed them with the sweet and half-sweet varieties of North Silesia. Again, to increase the size of the prospective trees to be grown from pits, we crossed the Large Montmorency on the Dwarf Vladimir Cherry, and on the dwarf sort known as Schatten Amarelle. With plums our crosses as yet are of varieties of the native sorts, the purpose being to secure combinations of desirable points in tree and fruit. As instances, De Soto was crossed with a strong-growing native sort known as Speer, and also with Maquoketa, the best in size and quality of fruit of the Chickasaw plums, but not quite hardy in tree. Again, Wolf Plum, a native sort with some trace of foreign blood, and not quite good enough in quality of fruit, was crossed with Maquoketa and with the Yellow Mirabelle.

SAVING THE POLLEN.—The success of crosses of the apple, cherry, and plum, will depend largely on having a supply of pollen at the exact nick of time when the stigmas are coated with the needed nectar to receive it. As practiced here, pollen-gathering is a simple and rapid work. When the blossoms of the varieties of apple, pear, cherry, or plum we intend to use as male parents are fully expanded, a student is set at work plucking the nearly-ripened anthers, with filaments attached, with thumb and finger, and dropping them into a new, clean tin cup. No attempt is made to avoid plucking the pistils also, as they do no harm, and sorting out the stamens would make slower work. In an hour enough pollen can be gathered in this way to fertilize a thousand or more blossoms. After gathering, the pollen is placed in a warm, dry room for drying and the bursting of the cells of the anthers. If kept dry in this form it retains its potency for many days, and may be sent long distances by mail. Hence in all cases where a given female parent expands its blossoms earlier than the variety we wish to use for fertilizing its blossoms, we can send to a friend farther south for the pollen.

THE SACKS.—I do not like paper sacks. Thin, white muslin sacks, four inches long and four inches at the mouth by 3½ inches at the top, I have found to answer the purpose best. In practice I find them to handle much better if widest at the bottom. With a sewing machine 1,000 are soon made. We fasten them in place with pins, as strings are too bothersome in putting on and taking off.

REMOVING THE ANTHERS.—The right time to remove the anthers from the blossoms to be pollenized is when, now and then, a flower of the tree is fully expanded. With a pair of small forceps they can be nipped off rapidly after a little practice. Cover with a sack at once after the anthers are removed. We usually take the anthers from the two strongest buds of a cluster, and pinch off the remaining ones.

POLLEATING.—As the development of the stigmas depends largely on temperature, etc., we remove the anthers one day and touch the stigmas with the pollen brush on the two succeeding days. We find as many stigmas in condition for pollen reception the second day as the first. If the brush is slightly moistened, it takes up the pollen from the dish readily, and it can be applied very rapidly. The boy who takes off and replaces the caps has the main work. At the second application of pollen we believe it well pays to touch the base of the blossom with weak arsenic water or London-purple, as we find the coddling moth, curculio, etc., specially apt to get under the cloth caps. About five days after the blossoms have been fertilized, the cloth caps should be removed and the forming fruits covered with (pinned on) pieces of mosquito bar, to remain until the fruit is ready to be gathered.

OUR RELATIVE SUCCESS.—The season with us has been specially unfavorable, yet we have saved seeds of every cross made upon the apple except the Wild Crab, and from every cherry and plum cross fertilized. In some cases the crossed specimens were the only ones retained on the trees during the frost and storms of the season of blossoming.

MODIFICATION OF FRUIT AND SEED.—This can be only noticed at this time. In two or three cases the change of fruit was remarkable. As an instance, the Longfield apple fertilized by Roman Stem was wholly changed in form, and some of the specimens had every external mark of the Roman Stem, but the flesh was not appreciably changed in texture or flavor.

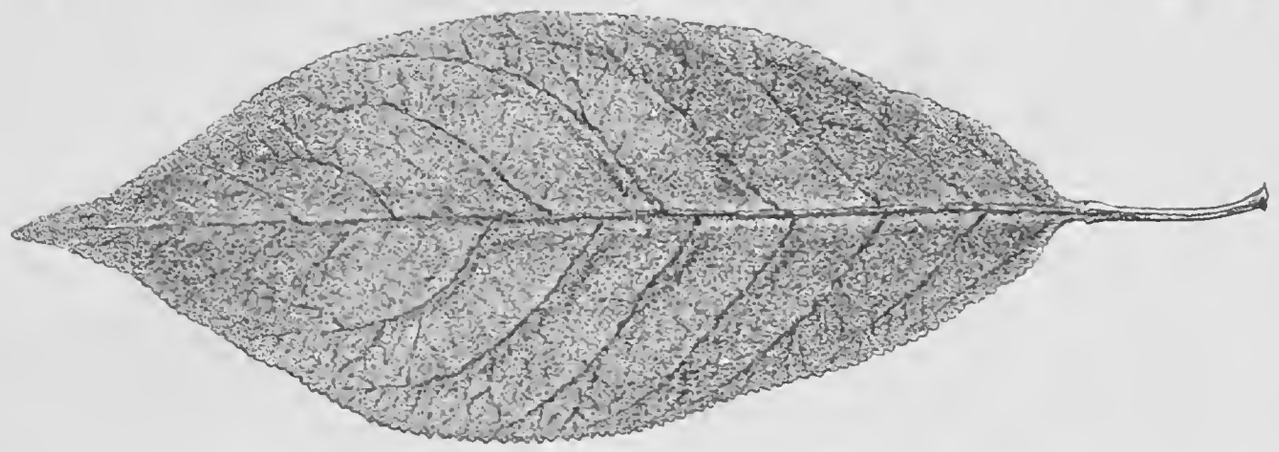
Ames, Iowa.

KELSEY'S PLUM.

OUR illustration of Kelsey's Japan Plum, Fig. 432, is an accurate portrait of a specimen sent to us by P. J. Berckmans of Augusta, Ga. September 20. Mr. Berckmans writes:

"I send you a specimen of Kelsey's Japan Plum, the first I have so far had to arrive at full development. Some specimens injured by birds matured a month since, and were quite purple in color. To prevent further injury from the same source, I had mosquito netting put around the fruit, which may have prevented the full coloring. The trees are very vigorous and healthy. Fruit set in 1885 upon trees budded in June, 1884, but was blown off, and failed, therefore, to show its size."

This plum was eaten by the writer of this note on September 26, as the halves had been carefully preserved after they had been sketched. The skin was very firm, without any bitterness, and of a yellowish-green color. The flesh was thick (as the engraving shows), sweet, juicy, meaty and tender. It was not so sprightly as some of the best of well-known plums. In this respect it would probably have improved, had it been allowed to ripen more fully. This plum, to speak with all needed conservatism, promises to be a first-rate acquisition. The first tree was imported by Mr. Kelsey, of California, after whom it is named. It probably has a Japanese name, by which, of course, when known, it should be called. It is said to be exceedingly productive in California, and to bear when trees are three years of age or less. Sometimes the plums are nine inches in circumference. The pit is relatively very small, as our engraving shows. It is said to excel other plums for canning, and when dried to equal the best dried prunes. Unquestionably this plum will prove a good shipper on account of its firm skin and solid flesh. In so far as we can ascertain, the tree is hardy, thrifty and healthy. Our engravings show true to nature the leaf, the entire fruit, a half section showing the thickness of the flesh, and finally the small pit.



KELSEY'S JAPAN PLUM. From Nature. Fig. 432.

Horticultural.

IMPROVING OLD CURRANT BUSHES.

IN nearly every farmer's garden there are a few bushes of the common red currant, many of which have been growing in the same spot so long a time that they have become nearly worthless, the fruit being very small and scattering on the stems. The bushes are mere clumps, the roots have become so matted together that there is little space left for new roots to form. Manure spread around such bushes can be of very little benefit to them on account of there being little chance for new roots to grow. The question arises what can be done in the way of improving such bushes. Trimming off all of the old wood in the Fall and allowing but four or five shoots to grow the following Spring is often recommended; but this is of doubtful expediency, as the roots, being so matted together, can only with great difficulty provide nourishment for the new growth. The benefit derived can be of but short duration.

I have found it a much better method to dig up the roots, and after dividing them, reset in a new place. One such clump often makes from 10 to 20 roots, each of which will, the following Spring, send up several strong, thrifty shoots. Several years ago I divided several of such clumps, giving them good cultivation. The second year thereafter they produced a good crop of currants that were so very large that it was difficult to distinguish them from the finest Cherry Currants. M. H. B.

What Others Say.

FERTILIZER ANALYSES.—Bulletin No. 40, just issued by the New Jersey Agricultural Experiment Station, gives upwards of 150 analyses of different chemical fertilizers. These analyses show the amount of phosphoric acid, potash and nitrogen each contains. They represent the retail cash cost of these plant foods *before* the crude materials containing them have been mixed with each other. These valuations, therefore, are not intended to cover the expenses of mixing, bagging and transporting fertilizers from the factory to the farms. If, for example, the Station estimates the value of a given brand at $40 per ton, it means that for $40 a farmer can buy enough *unmixed material* to furnish the amount of nitrogen, phosphoric acid and potash shown by analysis to be present in that brand. The farmer must add to the $40 the expenses of mixing the crude materials with each other, packing the mixture into bags, cost of bags and freighting it to his farm. Many analyses are given which do not present the selling price at all, so that we do not see that they are of any present value to the farmer. In considering the differences between the Station valuations and the selling price at the factories, one important fact is liable to be overlooked. For instance, a certain brand of corn manure is valued at $40 per ton. The selling price is $44. Here we have a difference of four dollars. This difference amounts to 10 per cent. Another brand is valued by the Station at $20 per ton. It costs $24 at the factory—a difference also of four dollars. But this difference amounts to 20 per cent. Then, again, the farmer should consider that it costs just as much to transport and spread over the land the $20 fertilizer as it does the $40 fertilizer. Those of our readers who desire this bulletin may apply to the Director, Prof. George H. Cook, New Brunswick, N. J. But the Station is under no obligation to furnish copies to applicants outside of New Jersey.

VARIATIONS IN RICHNESS OF JERSEY MILK.—John E. Parmly writes to the American Dairyman that there are some families of Jersey cows that give quite a large volume of milk, and at the same time make good records of performance as butter cows. He has one, "Lily Scituate," that in seven days in June last, gave 366½ pounds of milk, which made 24 pounds 9½ ounces of butter. This would show that 14¾ pounds of milk made a pound of butter. He has another cow that gave 336 pounds of milk that made 19 pounds of butter; another that gave 43 pounds of milk per day and made 18 pounds nine ounces of butter per week; another that, at four years of age, gave 39 pounds of milk per day and made 17½ pounds of butter per week. So it appears that the four cows made 80½ pounds of butter in a week. As the cows of the country run, it would require a drove of about 16 of them to produce so much butter. Can a farmer afford to feed 16 cows to do the work of four? Money will buy the better sort, and care and feed will make them perform. Then consider the value of the calves of such cows!

PROFIT IN SMALL FRUITS.—Editor Cheever says in the N. E. Farmer, that if we would make money raising small fruits we must go into the business to stay, not for a year, but for many years or for life. There will be bad years for fruit growers as well as for producers of any other products, but those who learn the business most thoroughly and who establish a name for quality of products and for fair dealing, will be the ones to succeed in the long run. They will have to sell with lit

tle profit some years, when everybody else i in it, but they will make money when others fail through ignorance of the business or because of periodical under-production. It is the earnest workers and steady plodders, after all, who come out ahead in the struggle for existence.

THE GERM THEORY.—In his opening address at the Royal Veterinary College, Professor Robertson remarked that in both human and veterinary medicine the elaboration of the germ theory of Pasteur in its earlier triumphs in the department of surgery is likely to be surpassed by what we may reasonably expect will yet be achieved in the domain of medicine. In preventive medicine as applied to animals the recognition of the specifidity of many of those diseases which have attracted attention through their destructiveness, has given us a solidity of basis in dealing with them which was unattainable while they continued to be regarded as the result of variable influences, sanitary and dietetic; while the doctrine of the production of a protective material, by the cultivation or modification of the specific virus of these diseases, although not yet undoubtedly demonstrated in all its fullness, has, from what has been already wrought out, clearly indicated that a new field in pathological inquiry has been opened out, and that results of marvelous and far-reaching influence, almost beyond our conception, seem shadowed more or less distinctly around us. He touched upon the relations of these speculations and ideas to the practical application of medicine to men and animals, and showed that if disease is to be treated, or its causes investigated with a view to prevention, work of essentially similar nature requires to be done, whether men or cattle are the subjects of our operations.

A NEW METHOD OF GLAZING SASH.—Peter Henderson says that it is well known that all glass now (both in portable sashes and in fixed greenhouses), is simply imbedded in putty, and kept in place by glazier's points, no putty now being used on top, as was formerly done. It has been found that when the glass lies on the sash-bar thus imbedded the putty soon rots or wears out, and water gets in and not only loosens the glass but rots the bar as well. A most simple plan to obviate this is to pour along the junction of the bar with the glass a thin line of white lead in oil, over which is shaken dry white sand. This hardens and makes a cement that effectually checks all leakage. It is quickly done.

RURAL LIFE NOTES.

ANNIE L. JACK, of Ontario, Canada, writing to Our Country Home, says that she valnes Brinckle's Orange the most of her yellow raspberries. This is tender in the Northern States if not protected by snow. The new Golden Queen, she says, bids fair to rival it, having stood the Winter well.....

W. H. BULL, of Massachusetts, according to the New York Tribune, raises water-cress in the greenhouse for market during the Winter, putting it up in bunches weighing about two ounces or loosely in quart strawberry boxes, the former bringing 60 cents a dozen and the latter about 10 cents each. He takes cuttings from brook plants in the Fall, and roots them in the well-enriched earth of the greenhouse bench. These root at once and if well watered yield a succession of tender cuttings all Winter.....

WALDO F. BROWN expresses the opinion, in the above paper that there is no more contemptible meanness practised than the one of making misrepresentations as to the profits of the silk business and the ease with which it can be managed, that they may induce poor widows to send their hard-earned dollars, when the result is almost certain to be loss and disappointment.....

HE cites several cases: A farmer near him in Ohio owned three acres of land. These he filled with mulberry trees. He sent off for eggs and hatched out a large quantity of worms, turning his house into a cocoonery. His income from them was represented by a 0, and it cost him half the price of his land to grub out the mulberry trees.....

FOR several years past we have never fed our poultry either shells or lime, and they are always confined. Bone meal answers every purpose We never have soft-shelled eggs and rarely have a case of sickness.....

A WRITER in the Indiana Farmer believes that while there is a place for all breeds, the Herefords may claim a first place for cheap beef, early beef and best beef. He considers them the poor man's beef cattle.

MR. STAHL says that he knows of many daughters, hard-working and economical, whose hardest task is to ask the father for money for a pair of shoes or a dress.., ...

A FARMER near the Rural Grounds has lost a number of pigs this year. He has fed them a great deal of sweet corn that was caught by the frost last year, and was, consequently, somewhat decayed and decidedly musty. He does not attribute their sickness to this food, however, but to the wicked work of witches. This is the truth: and he is looked upon, not only as a hard-working, industrious man, but as a farmer of very good judgment.

I THINK it is a perfect shame that all the illustrated papers portray the farmer as such a distressed ignoramus. So says Mrs. A. E. M. Carman.....

STEEP the shingles in thin lime-wash for a few hours. Each bundle of shingles may be immersed in the lime and then taken out to drain, when they will have absorbed enough of the lime to coagulate the albumen of the wood, which is the part that decomposes first. So says Henry Stewart. Or the shingles may be steeped in crude petroleum. It pays well..

CROWDING animals in close quarters is always conducive to disease, whether the animals be swine, sheep, fowls or human beings. Overfeeding is another foremost cause of disease—and finally faulty breeding.....

DR. LORING, at a late farmers' meeting, as reported in the New England Farmer, takes a somewhat gloomy view of the situation of the Massachusetts dairy farmer. He says it has come to the point that cows are kept for the manure they make rather than for their other products, just as the Connecticut river tobacco growers formerly fed oxen at a loss of $12 per head every Winter to get manure to run their farms with in Summer. Animals are usually, he says, a costly necessity on New England farms. He would himself keep but a single cow for family use if he could keep up the fertility of his land by other means.....

DR. LORING thought the old average of about five quarts per day per cow by the year had not been much advanced these later years, and at present prices for milk the business cannot pay except in the manure. The great yields of 30 quarts per day and over were rather above his comprehension. He would gladly go as far as San Francisco to pay his respects to a cow of that description. Making veal is poorer business than making milk. He would prefer his own cows would never have calves, but they are a necessary evil.....

HE thinks no better butter or cheese can be made by machinery and modern methods than the old farmers' wives of former generations made by their simple methods. He has seen repeated evidences of this in his own county, where wealthy merchants farming for pleasure and with all their modern methods, had failed in taking the prizes at the cattle shows away from the old women of the farm dairies, who had never so much as heard of a thermometer, but stuck their fingers in the cream to test the temperature.....

THE Holstein cow, according to Mr. Houghton's statement, as also reported in the N. E. Farmer, could convert a greater portion of her food into milk and butter than cows of other breeds; and if fed as they should be, with a liberal hand, the Holsteins would give much larger profits. The two-year-old heifers, he says, give more than mature cows of the average farm herd. They excel the Jerseys, both as milk-producers and as butter-makers. They are small eaters for their size.....

OIL the harness now.....

THE Farm Journal says that in setting a gate post it is a good plan to fill the hole with gravel and small stones and then run in thin cement mortar. "The post will never rot." We don't care much whether the hole is filled with gravel, sand or soil. Pack it firmly and fill in at the top with lime, heaping it somewhat about the post. This will preserve the post as well as cement.....

IF a calf, colt or pig is placed in a dark stall or box at a distance from the light, and there is put alongside a young, growing plant, we can rest assured, says the Indiana Farmer, that the dwarfed and sickly aspect sure to overtake the plant will as surely, though to the average observer less obviously, overtake the young animal .....

MR. J. MCLAIN SMITH, of Ohio, having in the Ohio Farmer said that the only breeds the cows of which were entitled to the appellation of "general-purpose cows" were the Short-horns, Devons, Holstein-Friesian, and Red Polls, another correspondent of the same paper held that he ought to admit to the ring the Herefords. This would leave among the "special-purpose breeds" only the Jerseys, Guernseys and Ayrshires. The classification is a mere question of opinion for which no man can be called to account, any more than for his tastes .....

WITH regard to docking horses, the (London) Live Stock Journal says that there can be no doubt that in order to be performed in a way that causes a minimum of cruelty the operation must be conducted by a thoroughly trained veterinary surgeon. The other day at Chorley, England, two parties were fined for cruelty in docking a horse—the ground of thi judgment being that the operation had not been shown to be necessary.....

A STANDARD for a good cow is said to be 600 gallons of milk a year, and of this there should be 10 per cent cream.....

STRONG unbleached muslin is excellent in place of glass for poultry houses or chicken runs, and is much less expensive. ....

PLENTY of rubbing will produce a good coat on your horse. "Elbow grease" opens the pores, softens the skin and promotes the general health.....

A GENIUS in Troy, N. Y., has just invented a stove that saves tree-quarters of the wood, while the ashes it makes pay for the remainder. Name? Can't give it yet.... .....

Everywhere.

RURAL SPECIAL REPORTS.

Arizona.

DUDLEYVILLE, Pinal Co., Oct. 26.—We are having nice weather here. We had frost on October 14, but we have nice peaches on the trees yet. Crops good. Times are hard; but we expect better now because the Apache war is over. None on the war path now in Arizona. My farm joins the reservation, and I know. W. A. L.

Illinois.

CHICAGO, Cook Co., November 10.—One of the largest movers of grain in Central Iowa writes me to-day to this effect: "We are buying wheat every day, much of it under 50 cents a bushel, which leaves the farmer a very small margin for his labor, and it seems to us that with this condition of things he will have very little money to spend." In some portions of Central Dakota the crops are so poor that farmers have a hard lookout for a bare existence this Winter I have another report made from Lacrosse as a base and covering a distance of 400 miles through Southern Minnesota and into Dakota. For the first 200 miles the report says the farmers are not depending on any one kind of grain, but they raise a good deal of stock, are generally out of debt, and apparently get along about as well as ever: but for the next 200 miles the situation is different. A very large class of the settlers are in debt for their land and machinery. The flax crop has been a great help to them for the past two years, but the present price is so low that farmers will not attempt to grow it in the future as they have in the past. Railroad freights have declined considerably the past year, and everything the farmer buys is reduced to a price which has had the tendency to keep him and meet the low price of grain. But my correspondent sums it all up that if there is not a change for the better in the prices of grain, seeds and live stock, the average farmer, in the far Northwest at least, will have to go to the wall. Four-fifths of the flax, nearly all the Timothy seed and fifty per cent. of the wheat is in. We look for good receipts of grain as soon as the ground freezes up, and do not think farmers have held back on the crop on account of prices at any time. It is now nearly four weeks since we have had any rain that amounts to anything; but we have not had any general rain in the Northwest this Fall. A year ago at this date the ground was thoroughly soaked everywhere, and up until to-day the whole State of Illinois is as dry as it was in July and August. We have had a period of remarkably fine weather for gathering the corn crop, and for a series of years it was never probably in as dry a condition to crib and ship as it is to-day. Ohio and Indiana are the freest shippers of new corn. There seems to be very little disposition at present among farmers in the other States in the corn belt to move new corn. The strike at the stock-yards of Chicago among the packing-houses is completely demoralizing the stock interests of the Northwest. Farmers cannot ship, packers do not want to buy, and the general stock trade is at a standstill. There is not the slightest doubt but that the packing interests will be successful, and that when business resumes again it will be a long time before another strike occurs. R. N.

ELGIN, Kane Co., Nov. 8.—Butter was a little firmer to-day under light offerings and colder weather. Regular sales on the Call Board were made at 27½ to 27¾ cents. Part skim cheese at 6½ cents; full cream cheddars 11½ to 12 cents; flats at 10½ to 11½ cents, closing firm for all grades. S. A. T.

Iowa.

OSAGE, Mitchell Co., Oct. 31.—Some say the crops of grain and vegetables were fair, though the straw was light and short. Others think the crops very light, save only corn. At our county fair very few vegetables were on exhibition, because they failed to grow to an ordinary size. Potato crop very short. The prices rule so low that some charge it to poor crops, that is, the crops look lighter than they are. Ours is largely a dairying section. Grain raising will meet the wants of the family with a little to spare. Prices unchanged. All Summer there was a drought. L. S. E.

New York.

ALBANY, Albany Co., Nov. 8.—There is an improvement in the live stock business of the East. The receipts at West Albany during October were the largest of the year, numbering 3,594 car-loads. Old-time buyers are again seen about the stock-yards, and new life seems to move an interest that a year ago was on the decline. The receipts of cars for months of August, September and October of last year were 7,726, against 9,451 for the corresponding months this year. A large part of the increase is of cattle. The demand for the same as dressed beef is becoming larger constantly. A fresh complication has arisen which will call for action by the Knights of Labor. It relates to the slaughtering of cattle for dressed beef depots, and is an outgrowth of the great Chicago strike. Saturday and yesterday 40 car-loads of live cattle were received at West Albany from Chicago, billed to this city, Troy and points in New England. Agents of the dressed beef firms instituted a search, and after some little trouble found that only one butcher would kill stock for them. It is thought that if the strike in Chicago, which has caused the forwarding of cattle on the hoof by these firms, continues, they will have difficulty in finding accomodations in the East for the killing of their stock. The Knights of Labor are bound to support their striking brethren in Chicago and will not kill any cattle for the dealers, and they will also bring their influence to bear to prevent others from slaughtering for them. The live stock dealers will also use their best endeavors to prevent Eastern butchers from accommodating their business adversaries. L.

WHEELER, Steuben Co., Nov. 1.—We have had an unusually good season in this locality. Hardly in years have our crops been more generally good than they have been this year. Hay was an average crop, of the best quality, and put up in good order. Winter wheat was good, but not very heavy-strawed. Barley a fair crop, but not much raised. Buckwheat generally good and giving about 25 bushels to the acre. Oats are splendid, and very heavy. Corn as a rule is a magnificent crop—the best we have for some years. Potatoes were a very large crop, and the quality above the average. Apples are a fair crop, and only bring $1 per barrel in market. Feed has been plentiful and so are stock, and prices have been low. About the same acreage of wheat and rye was sown this Fall as usual, and both are looking splendid. J. W. B.

Virginia.

RICHMOND, Henrico Co., Nov. 8.—The past week this tobacco market showed but slight variation from the preceding week. Common grades depress the market, and as almost every dealer has more or less of these and will be slow getting rid of such stock, it is not expected that an improvement can be reported for a long time. Receipts of new and loose tobacco are almost nothing, and it is well it is so, for new would almost surely bring the farmer in debt. The sovereign remedy for the present low prices is the heroic one of lessening the production, and it would seem as if planters would be forced to acknowledge and heed this advice. Tobacco was high and advancing when the necessaries of life and other products were very low and getting lower. Stimulated by this state of affairs overproduction came a little later, but surely, hence the plethora. Anything in fine shipping, stripping or brights may bring comparatively high values this season, but the great bulk and average crops, it is feared, will bring this section as well as others in debt. The assurance of a very small planting may help prices later in next year's transactions. There may be something in the abolition of the tax. The people favor it on general principles. T. H. M.

THE FARMER'S CLUB

ANSWERS TO CORRESPONDENTS.

[Every query must be accompanied by the name and address of the writer to insure attention. Before asking a question, please see if it is not answered in our advertising columns. Ask only a few questions at one time. Put questions on a separate piece of paper.

NAVICULAR DISEASE.

J. C. M., New Alexandria, Pa.—A valuable horse becomes lame in his left front leg after

a few days' work, but his lameness disappears when he has rested awhile. I can detect no swelling on the leg or shoulders, and there are no indications of corns; what ails him?

ANS.—Navicular disease is suspected, although we cannot say positively from the incomplete description. Try removal of the shoe and paring of the hoof well, so as to allow pressure on the frog. Cause the animal to stand in a puddle of clay several hours daily, with a poultice on the foot at night. After a week or two, apply a mild blister around the top of the hoof and sides of pasterns, to be repeated as soon as the effect of one blister has passed off. When the soaking of the foot has been discontinued it should be daily anointed with some hoof ointment to prevent excessive drying. Equal parts of tar and vaseline mixed, is excellent for this purpose. A rest of two or three months may be desirable, during which time it may be necessary to blister several times. Feed sparingly on a laxative diet.

CHRONIC BRONCHITIS; SYNOVIAL SWELLINGS.

C. H. W. B., St. Elizabeth of Joliette, Can.—1. My fast three-year-old horse had strangles last Spring, and now after a drive of six to nine miles a mucous, milky liquid is secreted in his nostrils; what is the cause and what should be the treatment? 2. At the pasterns in both front legs there are slight swellings, which are not sore, but are disagreeable to the eye; what are they and how can they be removed?

ANSWERED BY F. L. KILBORN.

1.—Probably a mild form of chronic bronchitis attendant on the strangles. Give a hot bran mash every evening to steam the nostrils. The diet should be restricted and laxative, consisting in part of roots, potatoes, linseed or oil meal, etc. Feed very little bulky food, but more grain if it seems necessary. Clover hay and dusty or musty fodder of any kind must be avoided. Every precaution must be taken to prevent the animal from catching cold or becoming chilled after exercise. The stable should be above ground, warm, dry, clean, airy and free from all disagreeable odors. Twice daily give one dram of sulphate of iron, one-fourth dram of sulphate of copper, one ounce of powdered gentian and one-half ounce of niter. If the feed does not keep the bowels quite easy, add one dram of aloes to the above, and continue as long as necessary. Daily moderate exercise is desirable. If the animal is at all predisposed to broken wind —"heaves"—special care must be taken in the feeding to prevent this very unfavorable result, which is frequently attendant on chronic bronchitis; so much so, in fact, that the disease is called glander heaves by some practitioners. (See article on "heaves" under "Horseman," in this issue). 2. Simple synovial swelling which may have resulted from rapid action or slight bruises. They are merely eye-sores and will not lame the animal. Mild blisters or drawing off the liquid with a hypodermic syringe and applying wet bandages should remove them.

APPLE PARINGS AS A FERTILIZER.

W. S., Mason, Mich.—About an acre of land on a hill is so worn out that nothing will grow on it except sand burrs—soil a light sand and gravel. I can cover it with apple parings from a "drying" house without expense, would it be worth while?

ANS.—A worn-out soil can be restored to fertility only by restoring to it the food of crops that has been taken from it in such quantity as to make it incapable of producing more crops. Such constituents are especially phosphoric acid, potash, lime and nitrogen compounds. This restoration can be effected only by the addition of substantial plant food in stable manure or in commercial fertilizers. Apple parings are poor in such substances as these above mentioned. A ton of them in the fresh condition would contain about two pounds of potash, four-fifths of a pound of phosphoric acid, and one and one-fifth pound of nitrogen. A ton of good stable manure, on the other hand, would contain about 12 pounds of potash, five of phosphoric acid and nine of nitrogen; and all of these plant nutrients would be in a much better condition for ready consumption by the plant than in the apple parings.

GROUND ROCK PHOSPHATE AS A FERTILIZER.

W. L., Hawkesbury, Can.—Mills for grinding phosphate rock are close to this place; it is shipped to the States where it is made into a fertilizer. Would it be advisable to use it on land in its present condition?

ANS.—Nothing can be safely predicted as to the effect of ground rock phosphate as a fertilizer. Many experiments have been tried with it, and with widely different results. These results depend partly on the character of the phosphate itself to begin with, partly on the fineness of the grinding, partly on the season and on the character of the soil and of the crop. South Carolina "floats" has in many instances undoubtedly paid for its application. But the South Carolina phosphate is a better material originally than the Canada phosphate, because it is more readily attacked by the solvent liquids of the soil; and, in the second place, this "floats" is a very fine dust of the rock phosphate, probably much finer than any product of the Canada mills. There is nothing for the inquirer to do but to experiment with the phosphate of his own locality, ground as fine as he can get it, on his own soil and with his own crops; but, so far as we can judge from previous experience with phosphate of that character, the chances of finding profit in it are against him.

INJURED THIGH IN A HORSE.

G. A., Campville, Conn.—Two weeks ago my five-year-old mare was kicked, or in some other way bruised on the inside of the thigh between the hock and stifle joint. The leg is now swolen to the hoof, but there is no running sore; what should be done?

ANS.—Place the animal in slings with the feet just touching the floor, so that the horse can settle into the sling when weary. This will prevent irritation of the injured limb by lying down and rising. Apply a loose bandage and keep constantly wet with cold water. Remove the bandages frequently and rub with the hands for several minutes at a time, continuing the cold water. The diet should be laxative—roots, apples, linseed meal, etc. in part, and restricted in quantity. If at any time there is any evidence of suppuration, the cold water must be replaced by warm poultices. If relief is not obtained in a few days, consult a veterinarian to treat complications.

ABOUT PUGET SOUND AND THE WILLAMETTE VALLEY.

A. W. McK., Norwood, N. Y.—What sort of a climate have they in Puget Sound and the Willamette Valley? Would either be a good country for people with weak lungs? Is there malaria, and what sort of water have they?

ANSWERED BY MARY WAGER-FISHER.

The climate of the Puget Sound Basin is delightful for nine months of the year with much rain and a heavy atmosphere in the Winter with an intermixture of superb days. While it is never cold enough to freeze very hard, it is very chilly from the humidity of the air, which, however, is "salt." There is no malaria in the form of ague or "chills and fever." The climate is not considered very salubrious for lung diseases; in some cases it acts curatively, in others disastrously. Upon the whole, local physicians speak of it favorably rather than otherwise for pulmonary weakness, but it is not so good, by far, as some parts of Southern California that are protected from the coast winds. The Willamette Valley is hotter in the Summer than the Sound, and "wetter and soggier" in the Winter, and there is malaria at different points. Water excellent in Puget Sound and good in the Willamette Valley.

Miscellaneous.

W. H. H., Sadlersville, Tenn.—1. I have sown 20 acres of wheat on corn land. I intended to have drilled in some bone dust with the seed, but the Fall was so dry I was afraid to do so; would it pay to sow about 100 pounds of bone dust, broadcast, on the snow in February? 2. What are the three best varieties of grapes for eating purposes? The ground is very poor, can I dig holes and fill them with rotten manure for the vines?

ANS.—1. Yes it would be the best way in which you could now use the fertilizer. We should add potash in some form—wood ashes preferably. The quantity mentioned is a small amount per acre. Better sow 200 pounds, or more. 2. It is hard to choose. We mention the following: Brighton, Jefferson, Moore's Early, Hayes (F.B.), Victoria, Empire State. You may plant now or wait until Spring. For your climate there will be little advantage either way. Dig holes or trenches as large as you choose—the larger, the better—18 inches deep. Fill in with the rotted manure and mix it with soil. Spread out the roots carefully and cover them firmly with *soil*.

Subscriber, Beeders' Hills, Ia.—Last Spring my horse was cut on a wire fence between the fetlock and the hoof; the sore healed, and I worked him about a month when he began to get lame again. I gave him rest, and in two days he appeared all right, and I worked him again, but again he became lame. He hasn't been worked since. His leg from the hock nearly to the knee swells slightly and feels feverish after a very little exertion. What should be done for him?

ANS.—Judging from your brief description, the lameness may or may not be due to the injury, and without knowing more definitely we cannot well prescribe. Perhaps important structures were injured, and their functions have not yet been restored, but will be in time. Better consult a veterinarian, if possible. Otherwise allow a few months' rest, with daily walking exercise, thorough grooming, and light diet.

B., Tom's River, N. J.—Do the late bearing canes of the Earhart Raspberry, live over the Winter to bear the next season? If not, being the latest Summer growth, how is the crop produced the following season?

ANS.—The late bearing canes of Earhart do not live over Winter. The main crop in June or July of each year is produced on canes of the previous season's growth that did not fruit the Fall previous, there being such in each hill. Two or more canes in each hill produce the crop out of season, the rest living over and giving the main crop next year, soon after which the earliest of the new growth of cane begin to produce fruit and continue till stopped by freezing in the Fall.

R. A. S., Greenville, Ky.—Is it possible to cure a horse that has had the heaves for four or five months?

ANS.—See article on this subject under Horseman in this issue.

DISCUSSION.

BLOODY MILK.

H. S., HIGHLAND, N. C.—The Farmers' Gazette's remedy for bloody milk in the RURAL of Oct. 30, is based upon the fundamental principle that improper feeding and nutrition are the cause of nearly every ailment that animals are subject to. Ground white beans and bran are highly nitrogeneous, while the too common feed of our animals is too carbonaceous. The excess of carbon must be burned out. This term is strictly exact, for the carbon disposed of in the animal system is actually consumed by heat; hence the blood is disordered and many febrile diseases are developed in consequence. The presence of blood in the milk indicates plethora and a too active circulation, and a change from carbonaceous to nitrogenous food—in moderation, however—restores the balance of the system. Mr. Wood's instance of the ruin of a matchless Short-horn cow Lady Ann has two sides to it. Had she never been forced to show what she was capable of, no one would ever have known of her surpassing excellence. Her example reflected on the whole race of Short-horns, however; just as the similar sacrifice of many noted Jersey cows has given character to the Jersey breed. It is hard upon the poor beasts, but it is natural. How many men sacrifice themselves to show what humanity is capable of!

S. H., HACKENSACK, N. J.—Several articles in late issues of the RURAL speak for and against the spontaneous origin of contagious pleuro-pneumonia. To me it seems curious that veterinarians should deny what physicians admit and conform their practice to, viz., proving the spontaneous origin of contagious diseases and the efficacy of sanitary precautions in preventing them. The explanation seems to me to be that there is a prevalent idolatrous worship of the evolution doctrine of which the germ is the grand fundamental principle; and this leads to the belief that there must be a germ from which everything grows. This theory, however, does not necessarily apply to the diseases of animals any more than it does to fire. Fire spreads by contact, but it has an origin in chemical action; and why do not some diseases occur through chemical action as well?

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING November 13, 1886.

J. L. P.—S. B.—M. A. T.—W. H. H.—F. L. W.—B. F. A. W. R., thanks—O. F. C.—D. W. B.—M. H. B.—C. P. G.—W. L. S., thanks—E. J. G.—E. G. M —H. T. D.—J. H. A. I. P. R.—A. E. M., thanks—H. S., thanks—W. Z. H.—J. S. W.—A. J. C.—E. G. M.—H. W.—W. F.—P. W.—M. H. B.—C. S.—M. W. F.—J. O. E.—I. R. C.—B. F. A.—E. M. H.—J. H.—S. C. H.—O. F. C.—W. R. H.—E. R. D. C.—A. J. C.—H. T. D.—F. W.—W. P. H.—E. J. G.—W. L. S —J. W. B.—C. W. O.—W. H. H.—G. W. C., thanks—G. W. S. corn rec'd—J. P. S.—J. H. A.—J. P. S.—P. H. J.—P. P. R. J. M.—E. B.—W. A. H.—A. Q. McD.—W. R. W.—C. W. O. —A. B.—R. R. V. H.—B. L. B.—G. C. C.—K. S. H.—J. W. R.—J. S.—C. T. K., thanks—J. H. J. C.—E. D. H.—C. W. G.—R. S. Cole, plants rec'd.—

Miscellaneous Advertising.

Catarrh Cured

Catarrh is a very prevalent disease, with distressing and offensive symptoms. Hood's Sarsaparilla gives ready relief and speedy cure, as it purifies the blood and tones up the whole system.

"I suffered with catarrh 15 years. I took Hood's Sarsaparilla and now I am not troubled any with catarrh, and my general health is much better." I. W. LILLIS, Chicago, Ill.

"I suffered with catarrh six or eight years; tried many wonderful cures, inhalers, etc., spending nearly one hundred dollars without benefit. I tried Hood's Sarsaparilla and was greatly improved." M. A. ABBEY, Worcester, Mass.

Hood's Sarsaparilla

Sold by all druggists. $1; six for $5. Made only by C. I. HOOD & CO., Lowell, Mass.

100 Doses One Dollar

CATARRH SAMPLE TREATMENT **FREE**

So great is our faith we can cure you, dear sufferer, we will mail enough to convince, free. B. S. LAUDENBACH & Co., Newark, N. J.

10 PER CENT. INVESTMENT.

THE MASS. REAL ESTATE CO.

Has earned 10¼ per cent. net upon its capital invested to the present time, and now owns about half a million dollars worth of first-class business real estate. It is under the management of such men as Lieut. Gov. Ames, Mayor Green of Fall River. Send to offices of Co. for prospectus, to GEO. LEONARD, Agent, 246 Washington Street, Boston, Mass.

100 Choice New Recitations 13 Songs, Elegant Sample Cards, all for a 2c. stamp. CADIZ CARD CO., CADIZ, O.

WE WANT YOU! a live energetic man or woman needing profitable employment to represent us in every county. Salary $75 per month and expenses, or a large commission on sales if preferred. Goods staple. Every one buys. Outfit and particulars Free. STANDARD SILVERWARE CO., BOSTON, MASS.

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Will quickly cure any case of Hernia or Rupture. Explanation and testimonials free. Address O. FRINK, 24 BROADWAY, NEW YORK.

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The Popular **Fireside Comfort SHOES.** Now worn everywhere. Woven by Hand & Lined with Wool. The only shoe combining Warmth, Pliability and Durability. If your dealers have none order a sample pair of us. Ladies' sizes **$1.35**; Men's **$1.60.** Mailed to your address postage paid. Write plainly and give size of shoe. W. H. DICK, Manf'r, Dansville, N.Y.

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CONSUMPTION.

I have a positive remedy for the above disease; by its use thousands of cases of the worst kind and of long standing have been cured. Indeed, so strong is my faith in its efficacy that I will send TWO BOTTLES FREE, together with a VALUABLE TREATISE on this disease, to any sufferer. Give express & P. O. address. DR. T. A. SLOCUM, 181 Pearl St. N. Y

SPAIN'S BURNS. Star Churns, Rapid Ice Cream Freezers, Improved Tree Tubs, all made of CEDAR. Send for illustrated circular and prices. Clement & Dunbar, Philadelphia, Pa.

General Advertising Rates of

THE RURAL NEW-YORKER.

The following rates are invariable. All are therefore respectfully informed that any correspondence with a view to obtaining different terms will prove futile.

ORDINARY Advertisements, per agate line....80 cents.
One thousand lines or more, within one year from date of first insertion, per agate line. 25 "
Yearly orders occupying 4 or more lines agate space..... 25 "
Preferred positions.....25 per cent. extra.
Reading Notices, ending with "*Adv*," per line, minion leaded..... 75 cents.

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Single copy, per year.....$2.00
" Six months..... 1 10
Great Britain, Ireland, Australia and Germany, per year, post-paid..... $3.04 (12s. 6d.)
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Any one sending a club of seven is entitled to one copy, one year free.

Agents will be supplied with canvassing outfit on application.

Entered at the Post-office at New York City, N. Y. as second-class mail matter.

THE
RURAL NEW-YORKER.
A National Journal for Country and Suburban Homes.

Conducted by
ELBERT S. CARMAN.

Address
THE RURAL NEW-YORKER,
No. 34 Park Row, New York.

SATURDAY, NOVEMBER 20, 1886.

In reply to our note a few weeks ago which quoted a paragraph in Mr. Lovett's catalogue, which expressed some fear that the Earhart Everbearing Raspberry is the same as the old Ohio Everbearing, we are told by those who have both kinds growing that they are quite distinct and that the foliage of the Earhart is quite unlike that of any other blackcap raspberry known.

It will be remembered that we succeeded in crossing the blackberry upon the raspberry and, *vice versa*, the raspberry upon the blackberry. Quite a number of the hybrid seeds were obtained and planted at once. Without experience in raising raspberry-blackberry seedlings, we had supposed that, like fresh grape seeds, they would sprout in a month or so. They have not sprouted yet, and the boxes containing the seeds have been buried so to remain until next Spring.

Suppose you buy a chemical fertilizer which costs you $44 per ton and is worth by analysis $40 per ton, the difference being four dollars. Suppose your neighbor buys a ton of commercial fertilizer that costs him $24 per ton which is worth by analysis $20, the difference also being four dollars. Suppose the latter farmer goes to the other and says: "I want to try an experiment. Give me 200 pounds of your fertilizer and I will give you 400 pounds of mine." How much would the first farmer lose by the exchange?

Under date of November 3, Secretary George W. Campbell, of Delaware, Ohio, writes: "I am now pruning my vines preparatory to laying them down for Winter, and this is what *you* ought to do, and not only practice but preach it to all who want to grow the best grapes successfully." If there is any man in this country better qualified to give instructions as to out-door grape culture than Mr. Campbell, we don't know who he is. The reason why we have never protected our vines is that we have desired to subject them to the severest tests possible, so that those influenced by our reports could never be misled.

A lad a dozen years old could readily be taught to start and stop a locomotive, without comprehending the first principle of its operation, but who would care to risk his life with such an engineer in a journey on one of our fast railway trains? The narrow-minded farmer who is most strongly prejudiced against scientific farming would not dare to ride behind an engineer whom he knows is not well acquainted with the principles of the machine he is trying to operate. If a man is unfit to be an engineer who does not understand the science of the steam engine, why may not a man be a better farmer by understanding what is known of the science that underlies his calling.

In reply to many inquiries it may be said that the new potato, to be called the "Rural New-Yorker, No. 2," is the first of our many seedling potatoes that we have cared to introduce. Any inferior novelty is sure to injure the originator sooner or later. We do not suppose that we shall be able to distribute this potato among our subscribers before the Fall of 1888. In other lands and climates it may not prove an acquisition. As raised at the Rural Grounds it possesses more points of unusual merit than any of the 600 kinds there tested during the past 12 years. It *seems* to be about perfect in every way. We know nothing of its parentage, never having kept any record. No attempt has ever been made at the Rural Grounds to cross-breed potatoes since seed-balls rarely form, and it is like hunting for a needle in a hay stack to find pollen.

Miss Alice Brown, the daughter of the good Waldo F. Brown, so well known to the reading farmers of America, begins with this number of the R. N.-Y., in Miss Taplin's Department of "Women's Work," the first of a series of papers which she calls "Some Ways and Things at the Rural Grounds." The design of these papers is to tell her readers without any reserve whatever, all that she deems worth the telling, of what, in her daily life, she sees, thinks and does. Miss Brown was, for a time, employed in the Rural Office, a position she resigned over a year ago to become a member of the Rural family, where she has made the education of the children her first duty. These papers, as will be seen, are perfectly sincere and frank: real names are used and neither fear of giving offense, nor a desire to please those of whom she speaks will be permitted to influence her writings in any way. Miss Brown is one who, if she can not speak the truth, will do the next best thing—hold her tongue.

The following articles will appear as soon as space permits:

Recuperative Agriculture. In two parts, by Prof. I. P. Roberts, of Cornell University.

Principles of Breeding (continued) by Professor Geo. E. Morrow, of Campaign, Ills.

Dairy Husbandry in England, by Prof. J. P. Sheldon.

Stock Articles, by Henry Stewart, A. B. Allen, Col. F. D. Curtis, E. W. Perry and others.

Sheep Notes (continued), by J. S. Woodward, N. Y.

Bee Notes, by Prof. A. J. Cook, Michigan.

Transcontinental Letters (continued), by Mary Wager-Fisher.

Notes from the Rural Grounds. Fertilizer tests on a poor soil. Self-Husking Corn, Brazilian Flour Corn, etc.

Floral Notes, by William Falconer, N. Y.

Horticultural Topics, by many writers.

There is a whole sermon on our first page. The text is plain. The farm animals, like faithful servants, have chosen Thanksgiving Day as a fitting time to show their respect for their master and his family. They have done their best through the year to make a good return for the kind treatment they have received. The old turkey makes a fine spokesman. How promptly he reads his "resolutions;" how honest are the good wishes of the faithful "committee" behind him; how sincere is the pleasure of the farmer upon being "called out" at such a time. They have all worked well together now, and when they come to figure up the good things of life they find themselves ahead. It is a good thing to have the respect of one's animals. It is a matter of profit and it makes a better man out of the farmer to encourage kindness and respect in his stock. Every department of the farm will reflect the character of the farmer. Impossible is a true Thanksgiving on the farm where animals shrink away in dread at the coming of their master. Let us be merry this year. "Care will kill a cat," and we want none of it now. Let us heartily take these words out of the old turkey's mouth:

"Thought magnifies our troubles,
Care eats the heart away,
Think only of your blessings,
And give your joys full play."

A DUTY OF THE AGRICULTURAL DEPARTMENT.

That lengthy advertisement concerning the alleged existence of vast fortunes awaiting unknown claimants in England, Holland, and Germany, is still appearing in some of the best weekly or agricultural issues of the great dailies, and has lately also found a place in a few agricultural papers. The falsity of the assurances contained in the advertisement has been proved more than once by the investigations of our Ministers in London, Berlin, and the Hague, published through the State Department at Washington. We very distinctly remember clipping such official disclosures from the Washington correspondence of some of the papers which now give admission to this deceptive advertisement. The English Court of Chancery and the Bank of England, the alleged depositories of these nebulous fortunes, have both officially declared that they hold no such trusts. By the statute of limitation in England any attempt to recover real estate from the Crown or individuals after the lapse of 12 years, or personal property after the lapse of 20 years, is certain to meet with failure, however valid the claim may have been originally; yet the great majority of these supposititious fortunes are supposed to have been lying unclaimed in England for periods of from 50 to 150 years! In the Rural of October 16 the mythical nature of these fortunes was fully exposed. At our suggestion, the Department of Agriculture, about a year ago, started to expose frauds upon farmers in its monthly reports; but dropped the task after one or two issues. The advertisement of these bogus estates is addressed almost exclusively to bucolic gullibility; should not the Department of Agriculture officially warn its friends of the true nature of the humbug? The records of the Department of State, readily accessible, will prove the truth of our statements, and the official character of the Department's report will leave no excuse to the publishers of papers for inserting an advertisement designed to bamboozle their patrons.

TO EVERY READER.

There is a thing or so respecting the R. N.-Y.'s Seed Distribution that we would gladly impress upon our readers. First, the object of these distributions is *not* to send out seeds in *quantity*, but merely in *trial* lots so that our subscribers without expense, may test them. Second, we do not sell our seeds or offer them as *premiums*, and never have done so in any case. *Every* subscriber who *applies* is entitled to them. If subscribers wish to *purchase* the seeds they must deal with seedsmen. We have always laid great stress upon the fact that we do not sell seeds, plants, or anything whatever except the Rural itself. We want our readers to believe, indeed to *know* that our advice in these pages is unbiased by any interest in seed or plant raising as a business. We hold that the proprietors of a journal that is worthy of the full confidence of its patrons have no right to use it for advertising their own wares, or, in other words, that journalism and mercantile pursuits should never be combined. The only legitimate exception is that of the so-called *trade* journal, which, in point of fact, is merely a catalogue or an advertisement of certain goods offered for sale, rendered more or less interesting and instructive by the reading matter it contains.

The R. N.-Y. has certainly introduced some of the most valuable varieties now in cultivation, some of which have originated in its experiment grounds, while others have been sent out before they were known to our seedsmen. In this way they have been tested all over the country and their value has been positively ascertained without cost, except to the Rural—while the seedsmen have reaped the profit of all sales consequent upon the demand which the popularity of the seeds so distributed has created.

Our readers will certainly excuse us for feeling annoyed when at a very heavy cost and with the best of motives, the object of our laborious Seed Distributions has been misrepresented. We dare to make the statement that no other journal has so profited the seedsmen and nurserymen of the country as has the Rural New-Yorker, through its tests of plants and seeds, and through its free distributions of the best varieties it is enabled to secure for that purpose.

SALES OF OLEOMARGARINE.

The reports of the Commissioner of Internal Revenue at Washington say that the oleomargarine tax promises to yield an annual revenue of $1,000,000 to $1,500,000, whereas a short time back the prospective revenue from it was not expected to be over $600,000. The haste with which this prognostication is made public indicates a wish on the part of the officials to give the new commodity a place among the legitimate industries of the country. They reason that the dairy interests made a mistake in the notion that to levy a tax on bogus butter would lessen the consumption of it. Its inspection and sale under government supervision, they say, guarantee to the public its purity and healthfulness, and hence when the difference in price is made clear, good oleo will certainly be preferred to bad butter. Already the Boston papers are publishing market reports giving the comparative prices of oleomargarine and butter, quoting good butter at 24 to 25 cents per pound, while the best oleo can be had fo 17 cents. It seems to us probable that the notion of the prospective increase in the manufacture and sale of this concoction, as indicated by the amount of taxes paid, is due to a mistake with regard to the quantity made before the enforcement of the law. Most of it was then sold for genuine butter, and no correct statistics existed as to the amount annually turned out, as it was to the interests of manufacturers and dealers to belittle the quantity. Owing to a deficiency of competent officials the Government inspection is at present merely nominal, nor is it likely at any time to be thorough and ubiquitous; government inspection therefore cannot possibly guarantee the purity and wholesomeness of oleo.

The local authorities in most of the States in which oleo laws exist, appear to have been much more active than formerly since the National legislation went into force on November 1, and in such States the State and National authorities ought to have little difficulty in enforcing all the provisions of State and National legislation. There is considerable complaint that Congress did not make sufficient appropriations to enable the National Government to properly supervise the enforcement of the law; but this and other mistakes should be rectified early in the approaching session of that body.

BREVITIES.

Thanksgiving Number of the Rural New Yorker—24 pages.

Wind up your clock before it has run down.

The next Special of the R. N.-Y. will be the New Year Number—the first of 1887.

The Departments of Woman's Work and Domestic Economy are unusually interesting this week.

The continuation of our report of the North American Bee Keepers' Society is necessarily deferred another week.

"The home of the farmer who boards his own help can never be a model farm house." See Prof. Shelton's article, page 766.

Yes, we would advise our friends to plant a Kelsey's Japan Plum, a Simon's Plum, and a few Earhart Everbearing blackcaps.

We are satisfied of one thing, viz., that potatoes will "straggle," if inclined to do so at all, more when raised under level culture than when hilled up.

At the request of several readers we have delayed the awarding of prizes for the corn, melons and peas. We shall make our awards December 1.

We commend Prof. Budd's article on page 769 to the consideration of every progressive pomologist. It may seem unseasonable; but now is the time to think over and plan for next Spring's work.

We hope that most of our readers will feel like celebrating Thanksgiving day heartily—and we extend our sympathy to those who are likely to pass it in sorrow or in pain. God help those who suffer, whether their suffering be of the mind or body.

Marshall P. Wilder sends us bunches of a new white grape, the "Minnehaha," the result of a cross of Muscat of Alexandria on Rogers's Massasoit. He also sends us two cuttings of this vine which we hope to be successful in rooting, since we know of no better hardy grape. He also sends us a shoot of the rose Marshall P. Wilder, six feet long. This gives promise that this fine hardy rose may become a pillar rose. If so, it would be magnificent, indeed.

The use of portable and traction engines is becoming more general in all sections where farming is done on a large scale. The roads and bridges must be made to accommodate them. In a Pennsylvania town a traction engine fell through a bridge and the town was obliged to pay all damages. The cost of the bridge and the damage to the engine amounted to enough to build a bridge capable of holding up a locomotive.

This is the first compliment we have ever known the experienced and well-known farmer and farm writer, Henry Stewart, to pay an agricultural paper:

"I think the last Rural the most interesting and valuable paper I have ever met with. There are some good things which pay for being chewed and digested over again, and I have noted some of these. But this paper is filled with them, and might be usefully folded and put away for a weekly re-reading. I think the Rural has taken the lead—easily—of the agricultural journals."

The New York Court of Appeals has just decided a case involving the construction of the new State oleomargarine law of 1885. One Arensberg was convicted in Brooklyn of having violated the law. In charging the jury the trial judge submitted to them the bare question whether the defendant had manufactured or sold oleomargarine not made from milk or cream, and charged that if he did he was guilty under the law. The Court of Appeals has reversed the judgment, holding that the guilt of the defendant did not, and could not be in the simple manufacture and sale of the article; but depended on the further inquiry whether it was manufactured in imitation or semblance of butter; and whether by the use of ingredients not essential in the article itself it was sought to accomplish such imitation or resemblance. It was thought that the constitutionality of the law would be raised by the case; but the question was not considered. After a time we shall know how to formulate an oleomargarine law that will not only stand judicial decision, but will also prove effective in accomplishing the legitimate aspirations of the dairy community.

THE RURAL NEW-YORKER FREE PLANT AND SEED DISTRIBUTION FOR 1887.

THIRTEENTH REGULAR SEED DISTRIBUTION

OF THE

RURAL NEW-YORKER.

The collection will be sent to every subscriber who applies, without any charge or conditions whatever. The application, "Send Seeds," is all that is required.

Let it be understood that the object of these distributions of Seeds or Plants is (1) to introduce new varieties of merit, and (2) to enable readers to test them in a small way without expense. If larger quantities be desired, our readers must purchase the seeds of those who sell them, or wait until they are offered for sale. The proprietor of the R. N.-Y. wishes it to be known by all the patrons of the paper that we never sell seeds, plants, or anything whatever, except subscriptions to the R. N.-Y. itself.

THE POND CORN.

AS EARLY AS ANY FIELD CORN IN CULTIVATION.

It glazed at the Rural Grounds in 85 days. Plants six feet high, ears born low. Red, yellow, and variegated grain from one seed. From eight to twelve rows. Large kernels, small cobs. Never offered for sale.

Extra Early Orange Squash.

Much earlier than the Boston Marrow, and equally valuable as a Summer or winter squash. Very prolific.

Northern Pedigree Sweet Corn.

The earliest and best sweet corn known. Selections of seed made for 25 years. The dwarfest plants. Ears perfect in form and of exquisite quality. A first-rate acquisition.

Cleveland's Improved Valentine Bean.

"The Earliest String Bean grown—two week's earlier than the Round-pod Valentine and much more prolific. Unequaled in uniformity of ripening. Nearly the whole crop can be taken at one picking.

The Rural's Garden Treasures.

These flower and shrub seeds are collected at the Rural Grounds and bought of seedsmen. There will be at least 150 different varieties. All are thoroughly mixed before being put up in the packets sent to subscribers.

The Pond Corn.

THIS was not planted at the Rural Grounds until the 5th of June. The grain began to glaze August 25th, and was ready to harvest in 85 days. It is a remarkable variety of flint corn in several respects. Some of the ears bear only yellow kernels, some variegated, some red, and all may sometimes be found on a single plant. The kernels average as large as any flint corn we have tried; the cobs are as small as it is desirable they should be. The rows vary from eight to 12. The plants are of medium hight, or about six feet. They sucker very little. The ears are borne low. It is our belief that this corn will ripen anywhere that any field corn will mature. It originated with Mr. Emmons Pond, of Jewett Heights, Green Co., N. Y., who writes as follows in regard to it: "I have seen red, white, yellow and streaked on one ear, but usually the red ears are distinct. I have also seen red and yellow ears on the same stalk; also eight, 10 and 12 rows on one stalk. I think a yellow ear would produce all colors. I think it will ripen with you in 90 days. It is colder here and takes a little longer. The ears grow low on the stalk, about one foot from the ground. With ordinary cultivation it grows six feet high, but I have seen it 10 feet high. The best ears are 12 to 13 inches long. Many ears are 12 rowed with a *wonderfully* small cob, as you may know from the size of the kernel. I never saw a corn that can run so large a stream from the sheller. The cobs are not much larger than a man's finger. The corn from which this has been bred was given to my uncle. I at once commenced crossing it with kinds having long ears, always saving the ears showing the best characteristics of the parents on both sides, and I now think it will produce more shelled corn to the acre than any I ever saw raised in the North. I never thought of distributing it until you sent me the Angel of Midnight Corn, which is inferior in the size of the kernel, ripening much later and having a larger cob. I am no seedsman, though I take great pleasure in experimental farming. I did not send the corn to you with any idea of making money out of it, but merely with a view of benefiting your readers, should you think well to introduce it. Had the season proved favorable, I think I could have shown you ears equal to the Western dent corn with the advantage of early ripening."

At Fig. 425 is shown an ear of this corn sent us by Mr. Pond. This drawing is the exact size of the original ear. The kernels are variegated, being dark red streaked with yellow. At Fig. 426 is shown a section of an ear grown at the Rural Grounds. Here the kernel is a solid red. At Fig. 427 is shown a cross section of Fig. 426 reduced.

NORTHERN PEDIGREE SWEET CORN.

WE raised a small plot of this new variety the past season in the same field with 20 other kinds. It was the earliest of all and as sweet and tender as any of the later kinds. The ears are small, though the kernels are large and set closely together in straight rows. In the poor soil of our experiment field the plants were scarcely more than knee high. The originator writes as follows:

"I can give no history of the Northern Pedigree Sweet Corn, except that for many years it has been a favorite early variety in my family. I do not know where it first came from, as the time is beyond my remembrance. For at least 25 years the earliest and best formed ears have been saved for stock. This has resulted in securing the sweetest and most perfectly formed ears of any early sugar corn known. I have tested it side by side at different times with all the early varieties I could hear of, and with the single exception of the Cory it has always proved to be from six to 10 days earlier than the earliest. This season it was fit for the table but two or three days before the Cory. But in *all* those qualities that go to make up a first-class sweet corn it was more than "head and shoulders" above the Cory. All who tested their comparative merits decided that the Northern Pedigree was the sweetest, richest, most tender, earliest, and had by far the most compact and best formed ears. The Northern Pedigree is more even and uniform in size and shape, being but a trifle larger at the butt end than at the tip. The Cory, like its twin brother the Marblehead, has a large, heavy-butted cob on which the kernels are loosely and awkwardly placed. The growth of stalk is dwarfish, allowing *close planting*. Nearly every stalk gives two of these handsomely formed ears."

We have only to add that the seed corn of our experiment plot was given to us by J. M. Thorburn & Co., of New York, and that it is through that firm that we have been enabled to purchase seed enough for this distribution. (See Fig. 428, exact size.)

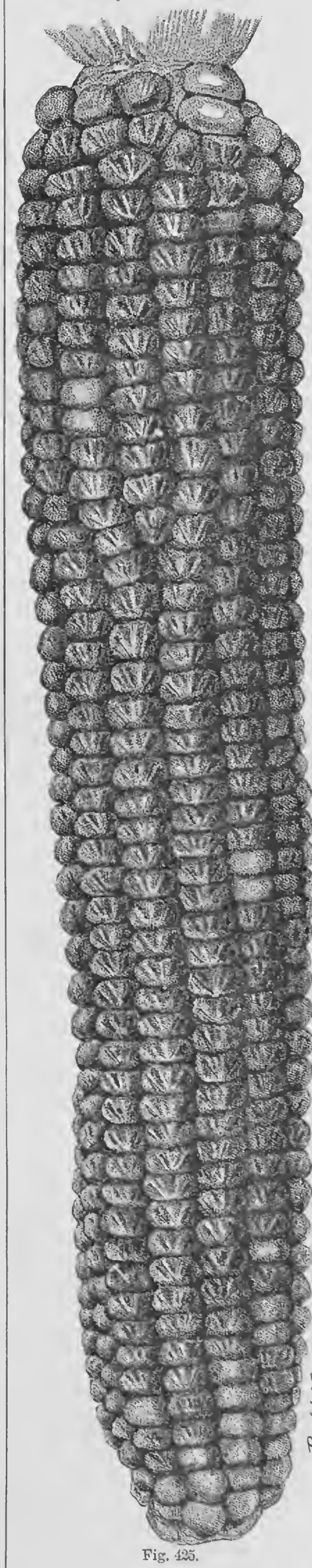


Fig. 425.

CLEVELAND'S IMPROVED VALENTINE BEAN.

THIS originated with A. B. Cleveland & Co., of Cape Vincent, N. Y., who writes us: "In reply to your favor we would say that we believe this bean to be the earliest string bean grown. Its habits are similar to the regular Round Pod Valentine, but it is two weeks earlier and much more prolific. The pods are unusually thick and fleshy and of the finest quality, and unequaled in uniformity of ripening. Nearly the whole crop can be taken at one picking."

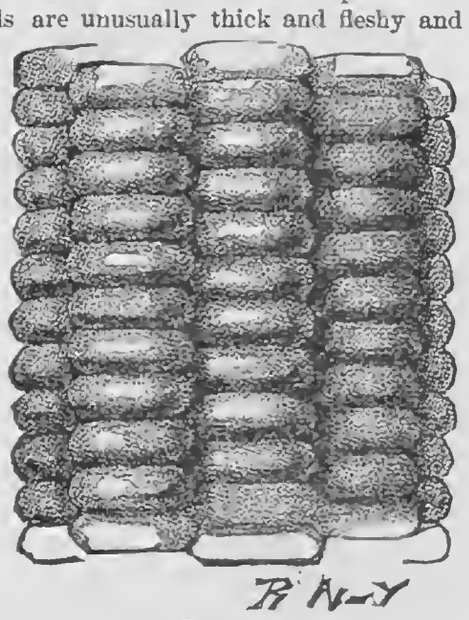


Fig. 426.

THE RURAL'S GARDEN TREASURES.

WE call these "Garden Treasures" for want of a more appropriate name. Let it be understood that the *bulk* of these flower seeds is made up merely of the good old popular varieties, which all seedsmen offer. To these are added small quantities of such choicer varieties as we are enabled to gather at the Rural Grounds and elsewhere through friends and subscribers. It would well pay our readers for their pains if they would spread out the seeds of the envelope sent them on a smooth piece of paper and separate into as many little lots those which seem to be the same. In this way each might be sown separately, if so desired, and the shrub or tree seeds be given the different care they require. The

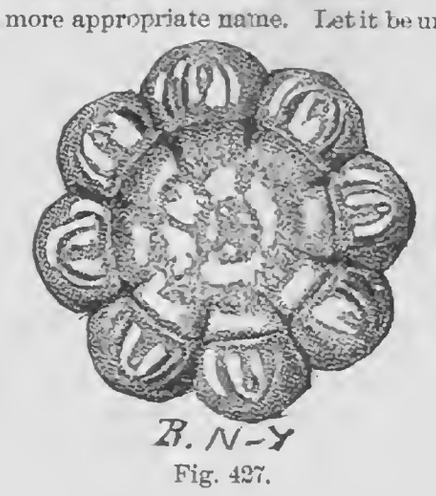


Fig. 427.

Fig. 428.

seeds of which the largest quantities have been obtained are as follows: Vitus heterophylla variegata (Ampelopsis), Eulalia Japonica Zebrina, Pinks in variety, Clematis (requiring a long time to germinate). Canna in variety, Asters in variety, Perennial Phlox, Spiræas, Yellow-wood, Coluteas, Geranium sanguineum, Marsh Mallow, Yuccas, Viburnum Lantanoides, Verbenas in variety, Sweet Williams in variety, Magnolias, Sweet Peas in variety, Virginia Stock, Zinnia, Portulaca, Poppies, Phlox Drummondii, all in variety; Petunias, Pansies, Nigella, Nemophila, Dwarf Nasturtiums, Marvel of Peru, Mignonette, mixed Lupins, Godetias, Gaillardia picta Lorenziana, Eschscholtzia, Chinese Pinks, Heddewigii, etc., Convolvulus, major and minor mixed; Candytuft mixed, Calliopsis mixed, Calendula, Balsams double mixed, Amaranthus, Sweet Alyssum, Agrostemma, Ageratum, Adonis, etc., etc., etc.

We have seen a number of gardens filled with plants from last year's Garden Treasures and they were very pretty, interesting and instructive to those who care to learn the names of such flowers. We hope our lady friends, for whom they are chiefly intended, will give these seeds good care and the young plants ample space.

EXTRA EARLY ORANGE SQUASH.

As its name indicates, this new squash is of a beautiful, deep, orange color, and the earliest of all squashes, excepting the summer varieties. In form it is a little more elongated than the Boston Marrow, to which it seems to be distinctly related, as the rim, leaf and manner of growth are nearly the same. But in the fruit of the vine the resemblance ceases. The Early Orange is very much more prolific; is of a deeper, richer color both inside and out; is finer grained, richer flavored, and a much better keeper. But its main distinctive feature, and the one which will give it the greatest and most widespread popularity, is its extreme earliness. It is at least 10 days earlier than any other long keeping variety and will keep as late as the latest.

PLEASE NOTE THIS.

THE RURAL NEW-YORKER has never in any case SOLD SEEDS OR PLANTS to subscribers. This being well known, our reports of the results of our tests are fully accepted as trustworthy, and the true value of hundreds of new and high-priced seeds and plants is made known. When, by such tests, we find that a given plant is more valuable than others of its kind which have been generally cultivated, we, at once, if practicable, place it in our next Distribution, and send it without charge to all of our subscribers who APPLY. These distributions are not premiums and are

ABSOLUTELY FREE,

and their primary object has always been, and is, to promote the interests of agriculture and horticulture.

AND, FURTHER,

in order to protect ourselves from imposition, we shall send the seeds to such applicants ONLY as are regular subscribers and whose names are therefore upon our lists.

☞ IT WILL SAVE ☜

us trouble, and it will save our subscribers trouble and expense if they will make their applications for the seeds and plants in the same letter in which they renew their subscriptions. It is only necessary to say ☞ "Send seeds." But the application ☜ must be made upon a *separate slip* ☞ *giving the full name and address of the applicant* ☜

WE SHALL BEGIN

to distribute the seeds about the end of January—or sooner if possible. The request is made that none will apply for the seeds unless they are willing to give them a careful trial.

Previous Free Seed Distributions Of the Rural New-Yorker.

We give below a list of the leading seeds and plants which have been sent to our subscribers through the RURAL'S Free Seed Distributions since they were begun in 1877. This list also shows how many of these seeds and plants have been popularized.

1877—Pelargonium (seeds mixed), Moluccella lævis (Shell-Flower), Dioscorea batatas (Chinese Yam), Ricinus Gibsonii (Purple Castor-oil Plant), Cleome spinosa.

1878—Pearl Millet, Beauty of Hebron Potato, Voorhis Watermelon, Golden Rural Tomato, Acme Tomato, Bronze Ricinus, Hibiscus Moscheutos, Callicarpa Americana, Chater's Lemon Hollyhock, Weigelas in variety (seeds), Deutzia crenata fl. pl., Hibiscus militaris, Eringium Lævenworthii, Geranium sanguineum, Yucca filamentosa, Vitis heterophylla, Rural Hybrid Aquilegias, Defiance Wheat, Grindelia spuarrosa.

1879—Cuthbert Raspberry Plants, Chester Co. Mammoth Corn, Telephone Pea, Mold's Ennobled Oats, Bebb's Aquilegia (seed), Magnolia seeds (in variety), Abies Sibirica, Pentstemons, Ipomœa leptophylla, Iris lævigata, Aristolochia Sipho, Mangel New Golden.

1880—Blount's White Prolific Corn, Champlain Wheat, Clawson Wheat, Salix pentandra (cuttings), Pentstemon Hybrids, Rural Hybrid Ricinus, White Elephant Potato, Rural Branching Sorghum, Argenteuil Asparagus, Giant Dutch Purple Asparagus, choicest strains of Chinese Pinks, Carnations and Picotees, including "Eastern Queen', and "Crimson Belle."

1881—Rural Dent Corn, Rural Thoroughbred Flint Corn, Wysor's Fultzo-Clawson Wheat, Surprise Wheat, Shumaker Wheat, Challenger Lima Beans, Perfection Golden Heartwell Celery, Perfect Gem Squash, Rural Chater Hollyhock (mixed.)

1882—Catalpa speciosa, Black-bearded Centennial Wheat, Niagara Grape (seeds), Rural Blush Potato, Garden Treasures (in great variety), Perfection Watermelon.

1883—Wysor's Early Shoe-peg Corn, Rural Union Corn, Cleveland's Rural N. Y. Pea, cross-bred Diehl-Mediterranean Wheat, Thousand-Fold Rye, Horsford's Market Garden Pea, Black Champion Oats, Best varieties of tomatoes mixed.

1884—Corn, 50 different varieties, crossed at the Rural Grounds, Carter's Stratagem Pea, Sorghum halapense, Rural Bicolor Tomato, King Humbert Tomato, Prince of Wales Pea, Green Flageolet Bean, Garden Treasures.

1885—Bird Cantaloupe, Alaska Pea, Best Watermelons, Angel of Midnight Field Corn, Hackensack Melons, Garden Treasures.

The Seed Distribution is not to be considered in any sense as a premium. Its prime object is to promote the interests of agriculture or horticulture. Our aim is to carefully test the varieties before they are sent out. We desire to place in the hands of our subscribers seeds of promising novelties, so that they may be tested at a small cost, saved if good, rejected if inferior. As to the value of the distribution, we can only point to the fact that many of the most valuable plants in cultivation have been given to the public in this way. No seedsman would care to send to us for distribution a new plant that did not possess superior merits. Anything like a unanimous condemnation on the part of the readers of the RURAL would kill any plant forever.

OF INTEREST TO ALL.

We may be pardoned for speaking about ourselves. Our own opinion concerning the merits of the RURAL NEW-YORKER may be different from that of others, but it at least represents what we attempt to carry out in the management of the paper. The best way to judge of any paper, as we have always claimed, is to examine it carefully, in comparison with others. We only ask our friends to send for specimen copies so that they can carefully and critically examine them. If the paper is not then considered worth its price, we have nothing more to say.

Those who are familiar with this journal will, as we believe, support us in the following claims: 1. The RURAL NEW-YORKER is filled with original reading matter from beginning to end by the best writers of America and England. 2. It is printed upon fine, natural-colored paper. 3. It contains yearly not less than 500 engravings, mostly original, by our own artists. 4. It is conducted by practical farmers, whose first aim it is, irrespective of advertisers and all merely pecuniary or personal interests, to tell the whole truth. 5. The RURAL is the first newspaper to have established Experimental Grounds in connection with journalism. All new farm and garden implements, seeds and plants are there tested and the results are impartially reported upon in its columns. 6. The RURAL NEW-YORKER is conscientious, progressive, aggressive, sparkling and original. It admits no ambiguous or fraudulent advertisements. It is pure in tone. It contains 16 pages weekly and four-page supplements are issued whenever advertising would otherwise trench upon its reading matter. 8. The value of its

FREE SEED DISTRIBUTIONS

is now well and widely known. Only seeds or plants which have originated at the RURAL'S Experiment Grounds, or which are new or the best of their kinds, are distributed. 9. We have introduced or disseminated during the past eight years not less than 100 different species or varieties among our subscribers without cost to them. 10. Truth, progress; the real interests of the land and those who cultivate it, the dissemination of improved seeds and plants and of the knowledge how best to cultivate them; and finally so to conduct the journal that it may have a just claim upon all who love nature, are among the aims of the RURAL NEW-YORKER.

Among its most important departments are cattle, horses, sheep, poultry, swine, arboriculture, dairy, domestic economy, farm economy, field crops, garden crops, floriculture, pomology—especially grapes and all small fruits—farm implements, landscape gardening, veterinary, crop reports from all parts of the country, industrial societies, agricultural science, chemical fertilizers, news from all parts of the world, rural architecture, and a department for women.

The Rural Experiment Grounds, conducted as they are purely in the interests of readers, offer rare facilities for making the paper valuable. All new and high-priced seeds are tested at once, and reported upon according to their worth, so that subscribers have before them a trustworthy guide as to what novelties are worthy of trial. The present season, for example, we have tested, or are testing 80 different kinds of new potatoes, 25 different kinds of corn, many different kinds of wheat and oats, 60 of grapes, 66 of strawberries, all of the different kinds of raspberries, blackberries, currants, besides a rare collection of the most hardy shrubs, trees and herbaceous plants.

We ask all progressive farmers and horticulturists to examine the RURAL NEW-YORKER before subscribing for any family journal another year. For this purpose, as we have said, specimen copies will be cheerfully sent to any address. We wish to make the truth appear, and to show that those who would meet with success in land-culture cannot afford to do without the journal, and that it should be subscribed for as a measure of economy.

The price is $2 per year for single copies; $1.50 in clubs of five or over. Those who would aid in getting up clubs should send for our new premium lists and posters, which will be promptly forwarded at once. A postal card addressed to the R. N.-Y., Park Row, requesting specimen copies, premium lists, or outfits, is all that is needed.

SPECIAL NOTICE TO ALL.

The R. N.-Y. is as hitherto invariably **$2.00** *a year in advance. But in clubs of five or over,* **$1.50,** *that is* **50** *cents commission for each subscriber is allowed. Those who prefer premiums to cash must, of course, send us* **$2.00** *for each subscriber. The regular Premium List which will be sent on application, will be found to be so scaled as to allow from one to two dollars for each subscriber in the articles therein offered.*

WHAT OUR ADVERTISERS SAY.

PERHAPS a word of commendation of your paper as an advertising medium from us may not be out of place, and I certainly think it is due you. We have been, as you know, quite extensive advertisers; and while it is difficult for us to determine what one of the many papers paid us the best, yet we have felt for some time that yours was one of the best mediums which we have ever used, and we sincerely hope that it will continue to improve, not only as a good medium for advertisers, but also as an exponent of the best agricultural thought. We believe it has been and is now in excellent hands, and, judging by the past, its future progress is assured.

Yours, very truly,
W. H. BOWKER,
President Bowker Fertilizer Co.

THE fact that we are introducing many of the celebrated Cornish Organs and Pianos through your paper in new localities is all the guarantee we want that it is a valuable medium. Such we emphatically consider the RURAL NEW-YORKER.

CORNISH & Co., Organ and Piano Mfrs.

REFERENCE to our advertising books show that the RURAL NEW-YORKER is one of the very best papers on our list. It brings us more inquiries than many papers which cost double the money. Yours very truly,
S. L. ALLEN & Co.,
Mfrs. of the "Planet Jr." Implements.

OUT of the few agricultural papers that we have used extensively the past season the RURAL NEW-YORKER is one that has always made good return for our investment, and a large and thrifty patronage. It gives us pleasure to speak highly of its merits as an advertising medium. Yours truly,
B. L. BRAGG & Co.
Seedsmen, Introducers of the Top Over Corn.

WE have advertised in the RURAL NEW-YORKER a number of years and the results have always been very satisfactory. We hope to continue to use its columns, and are pleased to recommend it to others who wish to reach the best class of farmers.
Respectfully, WM. PARRY.

THE advertisement of the Dutton Mowing Machine Knife Grinder in your paper brought us very satisfactory results, and we shall continue to use your valuable publication, for this useful tool, as well as for our general business. Respectfully,
R. H. ALLEN COMPANY.

I HAVE had my card inserted in the RURAL NEW-YORKER frequently for several years, and I consider it a very valuable advertising medium. JOHN S. COLLINS,
Pleasant Valley Nurseries.

IN the course of our advertising experience we have had occasion to use most of the journals throughout the United States, and in some instances the results have been very meager. Our experience however with the RURAL NEW-YORKER has been very satisfactory and we regard it as one of the best paying papers on our list. It will, no doubt, prove a valuable advertising medium to any one wishing to reach the better class of the agricultural population.
Yours respectfully,
IND. PAINT & ROOFING CO.

THE RURAL NEW-YORKER has proven to be one of the best mediums for advertising our seeds. In fact, it heads the list.
JOHNSON & STOKES,
Seedsmen, Phila., Pa.

WE have always obtained good results from advertising in the RURAL NEW-YORKER. Regard it as one of our very best advertising mediums for reaching our customers; that is, a dollar with you will go as far, or farther, than in any other direction.
Respectfully, A. B. FARQUHAR.

THE RURAL NEW YORKER is on precisely the same footing with the Nation, the Evening Post, the New York Times and all the other good papers in which we advertise.
Yours truly,
HOUGHTON, MIFFLIN & Co.,
Publishers, Boston, Mass.

RURAL NEW-YORKER: While we do not get as many calls for our small fruit catalogue from our advertising in the RURAL as from some other papers, it does bring us an unusually fine class of customers. A class that appreciate a good thing and are willing to pay for good stock. A class of customers that stand by us every year and want every new and choice plant that we have to offer. Therefore, we consider the RURAL a very valuable advertising medium.
Truly yours, G. H. & J. H. HALE.
Elm Fruit Farm and Nursery,
South Glastonbury, Conn.

EXPERIENCE convinces us that we discriminated wisely in selecting the RURAL NEW-YORKER as a medium for making our invention known to the public.
THE DANA WINDMILL CO.
Fairhaven, Mass.

BEAR in mind that the RURAL never *sells* its premiums. We give them as payment for work. We will not, under any circumstances sell them for cash. The RURAL sells nothing and hence is not bound to praise any implement or plant except as it deserves praise.

THE RURAL NEW-YORKER is for the West, North and South, as well as for the East. It circulates on the Pacific slopes as well as in the States of the Alantic; on Southern plantations as well as Eastern farms. It is for the North, South, East and West. Its writers are everywhere.

The Premium List of the RURAL NEW-YORKER *has never been equaled for liberality by any paper in the country. One subscription agent who writes: "I have canvassed for dozens of papers, but never knew one to offer such terms as these," voices the sentiments of those who have studied our Premium List. Examine the list of premiums on page 777. Where can you make better terms?*

BOOK PREMIUMS.

We have selected the

Newest and Best Books

from the Catalogues of our leading Publishers with which to recompense those of our friends who send us new subscriptions.

The list merits a careful examination, and our readers will, no doubt, find books that they want, ought to have, and can secure with a little effort.

☞ **These Premiums are available to Present Subscribers, or those who may become so, or to Agents for Yearly Subscriptions to the RURAL NEW-YORKER at the regular price of $2 00.**

That is to say—any PRESENT subscriber who sends us a NEW subscription at $2.00 is entitled to

His Choice of any Book

offered for one subscription. If he sends us two, then he is entitled to any Book offered for two, etc. The object is

To Procure New Subscribers,

and to offer adequate pay to our friends and agents for the effort required in obtaining and forwarding them to us.

Any Person Becoming a Subscriber may then send new subscribers and be entitled to the Books, as above stated.

☞ In ordering Book Premiums write out the title and name of the Publisher in full.

☞ POSTAGE at the rate of ten cents for each dollar's worth of books must accompany the order.

THE COMPLETE WORKS OF SHAKESPEARE. Comprising his Dramatic and Poetic Works. Accurately printed from the text of the corrected copy left by the late George Stevens, Esq., with a Glossary and Notes, and a memoir by Alex. Chalmers, A. M. Royal octavo, 828 pages. With full illustrations. We know of no complete editions of Shakespeare published in this country, of equal grade and character, that will compare with the above as regards prices. The price varies from $2 to $3, according to style of binding. We will give the "Gilt Edge" edition for two subscribers and 31 cents for postage.

PERSEVERANCE ISLAND. By Douglas Frazar. (Postpaid for two subscribers.) A new book which will take the place of Robinson Crusoe. It is of thrilling interest, and at the same time full of instruction for young people. Price $1.50.

THE BOOK OF ELOQUENCE. By Charles Dudley Warner. (Given for two subscribers.) A Collection of Extracts in Prose and Verse, from the most famous Orators and Poets. Price, $1.50.

YOUNG FOLK'S HISTORY OF THE UNITED STATES. T. W. Higginson Jr. $1.50. (Given for two subscribers.) This book is having a very large sale and is one of the best juvenile histories we have ever seen.

MY LADY'S CASKET OF FLOWERS AND JEWELS FOR HER ADORNING. With Original Designs printed in Colors. By Eleanor W. Talbot. Oblong quarto. Cloth, gold and silver colors, full gilt edges. Price, $3.75 (Given for three subscribers.) This is a lovely book, suitable for a wedding, birthday or Christmas present for a lady. The various virtues and graces considered appropriate to the gentler sex are here combined with illustrations of different gems and flowers, chosen with reference to their meaning.

IN TRUST. A novel, by Amanda M. Douglass. Price $1.50. (Given for only one subscriber.) Miss Douglass is a strong and entertaining writer, and our readers who get this book will certainly want the whole series (comprising 16 volumes) written by her. This is a special offer, and we should have calls for several hundred.

Also, for ONE NEW SUBSCRIBER, we will send any one of LEE AND SHEPARD'S "DOLLAR" JUVENILES, or complete sets for as many subscribers as there are volumes in the sets, comprising the following New Books and New Editions, in attractive English cloth binding, and illustrated:

I. FAMOUS BOY SERIES, comprising: (1) The Patriot Boy, and how he became the Father of his Country; being a popular life of George Washington. (2) The Bobbin Boy, and how Nat got his learning; or, The Early Life of General N. P. Banks. (3) The Border Boy, and how he became the Pioneer of the Great West; being a popular life of Daniel Boone. (4) The Printer Boy; or, How Ben Franklin made his Mark. That is four volumes in all.

II. FRONTIER CAMP SERIES, comprising: (1) The Cabin on the Prairie. (2) Planting the Wilderness; or, The Pioneer Boy. (3) The Young Pioneers of the Northwest. (4) Twelve Nights in the Hunter's Camp. (5) Stories of emigrant perils in the Great West. (6) Exploits of hunters and naturalists. Nothing of the wild, bandit, cowboy life, but real, healthy woodlife, with its perils and prospects; such life as made Horace Greeley utter his now famous sentence: "Go West, young man."

III. GALLANT DEEDS LIBRARY, comprising: (1) Great Men and Gallant Deeds. (2) Yarns of an Old Mariner. (3) School Days. (4) Sand Hills of Jutland. (5) Tales of warlike adventures by the Crusaders. Sea stories of thrilling interest, schoolboy escapades by sea and land, and a volume of fairy stories by the great master of fairy lore, Hans Christian Andersen, make as attractive a series as boy or girl could desire.

IV. INVINCIBLE LIBRARY, comprising: (1) The Young Invincibles; or, Patriotism at Home. (2) Battles at Home. (3) In the World. (4) Golden Hair. This series contains four excellent stories, bright, adventurous, entertaining and instructive. For home and school libraries they are exceedingly appropriate.

V. LIFE BOAT SERIES of Adventures, comprising: (1) Dick Onslow among the Red Skins. (2) The Young Middy; or, The Perilous Adventures of a Boy-Officer. (3) The Cruise of the Frolic; a sea story. (4) The Life Boat; a tale of our coast Heroes. (5) Antony Waymouth; or, the Gentlemen Adventurers.

VI. NATURAL HISTORY SERIES. By Mrs. R. Lee. Illustrated by Harrison Weir, comprising: (1) Anecdotes of Animals; Their Habits and Instincts. (2) Anecdotes of Birds, Reptiles and Fishes; Their Habits and Instincts. (3) The African Crusoes; or, The Adventures of Carlos and Antonio. (4) The Australian Crusoes; or, The Adventures of an English Settler and his Family in the Wilds of Australia. (5) The Australian Wanderers; or, The Adventures of Captain Spencer, his Horse and Dog.

VII. THE LIVE BOY SERIES. Six Vols.

VIII. THE CASTAWAY SERIES. Six Vols.

IX. THE WILD SCENES LIBRARY. Five Vols.

Or for one subscription we will send two of Lee & Shepard's Handbooks, selling at 50 cents each. These include, Blunders, Punctuation, Conversation, The Earth, Elocution, The Parlor Gardener, Hints on Language, What is to be Done, etc., etc.

The above books are selected from the very complete catalogue of Messrs. Lee & Shepard, Boston, Mass. We should be glad to have our readers send for it.

We will give any book found in this catalogue as a premium. Rates quoted on application:

TEN DOLLARS ENOUGH.—By Catherine Owen. Price $1. (Given for one subscriber.) The writer of this little book shows how one dollar may either be made to do the service of two, or may by skill and care be made to produce a result (in the way of food and housekeeping) not merely twice as good as is commonly realized, but infinitely more satisfactory both to the palate and to the family happiness. She tells a pleasant story, and weaves into it recipes, descriptions, directions for cooking and housekeeping, admirable for their clearness and for their salutary effect on the family life.

UNCLE TOM'S CABIN; or Life among the Lowly. A story of Slavery. By Harriet Beecher Stowe. Price $1. (Given for one subscriber.) "Uncle Tom's Cabin" should never be permitted to go out of print. A copy of it should be kept in every family library, that succeeding generations of American children may read it, and weep over Uncle Tom as their mothers and grandmothers wept; yes, and their fathers, too. Our younger readers who have heard of, but never read this remarkable book, and older readers who have read it and would like to read it again, will thank us for putting it in their way.

BIRTHDAY BOOKS—EMERSON, LOWELL, WHITTIER, LONGFELLOW. (Either book for one subscriber, or the set for four subscribers.) Each book has a fine portrait and 12 illustrations. Elegantly bound. These are gems of books. On the left-hand pages are choice extracts from the writings of Longfellow, Emerson Whittier and Lowell, for each day of the year. On the right-hand pages are interesting memoranda—birthdays of famous persons are indicated, the occurrence of noteworthy events, and there are blank spaces for the autographs of friends on their birthdays. Price $1 each.

The above books are published by Houghton, Mifflin & Company, 4 Park Street, Boston, Mass.

SCRIPTURE READING LESSONS FOR FAMILY WORSHIP; containing in consecutive order the more devotional parts of the Bible, arranged in daily lessons for a year, with brief explanatory and practical notes and exercises in scripture history. By J. T. Chaplin. (Post-paid for one subscriber.)—This is a book long needed by the Christian public. It embraces all devotional parts of the Bible from Genesis to Revelation, and with the notes present a very complete outline of the whole. Being already selected with brief explanatory notes, they will be found very convenient and instructive for use in families and schools where the Scriptures are read. At the same time the exercises in the Bible history, at the end of the book, will be of great service to the young. Every family should have one. The price is $1.50, but we will send it for only one subscriber and postage paid.

RAMBLES THROUGH OUR COUNTRY. (For one subscriber.)—A geographical game, conducting the players through the United States of America, pointing out and impressing upon their memories the chief points of interest in the Physical Geography, industries and history of the country, and thus combining instruction,—an element which but few games possess—with amusement, and although particularly intended for the young, people of all ages find it exceedingly entertaining. A delightful excursion for a whole family. This is one of the best premiums of the kind we have ever offered, and we should have calls for hundreds of them. The game includes an elegant lithographic pictorial map of the United States, 25x35 inches, an illustrated text book, and a Tee-to-tum Counters, etc. It is enclosed in a neat box. It's former price was $2. It will be sent for only one subscriber if ten cents to pay postage is sent.

D. L. MOODY AND HIS WORK ON BOTH SIDES OF THE SEA. By Rev. W. H. Daniels, A. M. This is a book which every Christian should have, for no one can understand the nature and power of the work of this great evangelist without knowing something of his personal history. This book contains such a grouping of the facts, and such a tracing of the agencies of the great awakening under the labors of Mr. Moody, as will help the reader to see the glorious and soul-stirring picture in some degree of unity and completeness. It also contains biographical sketches of Mr. Sankey, P. P. Bliss and wife, and other co-workers with Mr. Moody, and a number of sermons, addresses, etc., by him. Price, cloth $1.25. (For one subscriber). The game and above books are supplied by the American Publishing Co., Hartford, Conn.

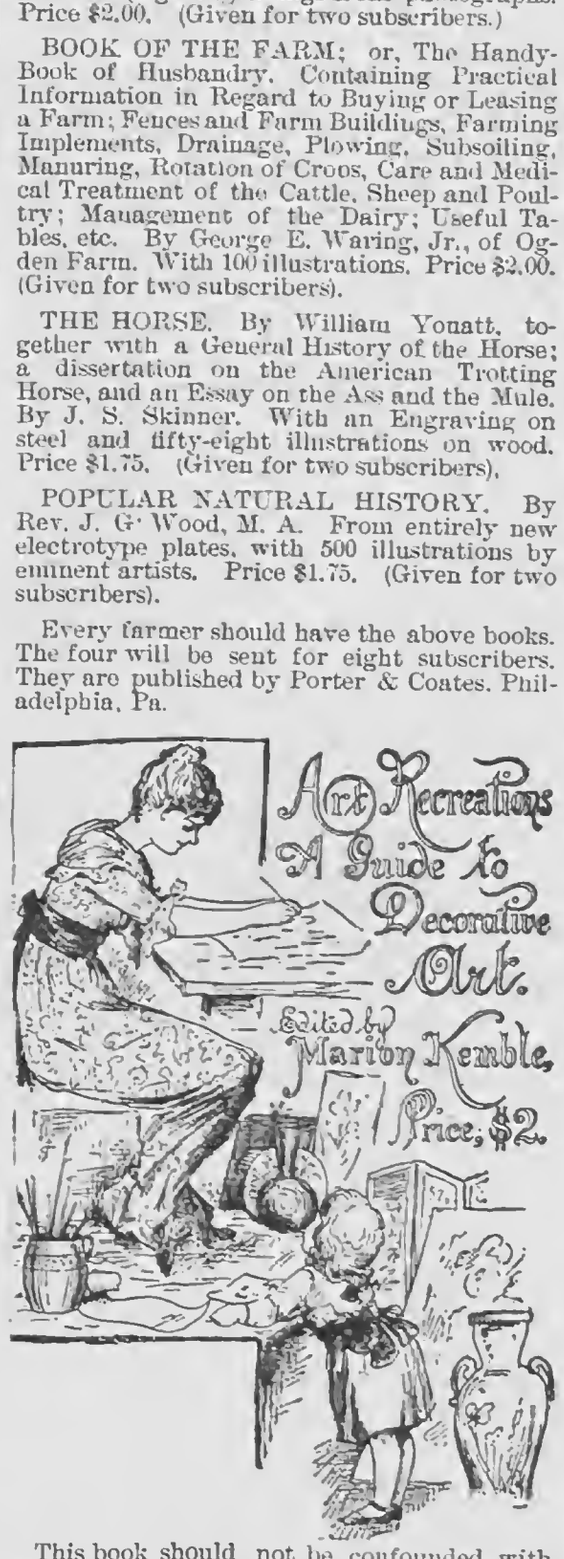
THE HORSE IN THE STABLE AND THE FIELD. His Management in Health and Disease. By J. H. Walsh, F. R. C. S. (Stonehenge). Illustrated with over 80 engravings, and full-page engravings from photographs. Price $2.00. (Given for two subscribers.)

BOOK OF THE FARM; or, The Handy-Book of Husbandry. Containing Practical Information in Regard to Buying or Leasing a Farm; Fences and Farm Buildings, Farming Implements, Drainage, Plowing, Subsoiling, Manuring, Rotation of Crops, Care and Medical Treatment of the Cattle, Sheep and Poultry; Management of the Dairy; Useful Tables, etc. By George E. Waring, Jr., of Ogden Farm. With 100 illustrations. Price $2.00. (Given for two subscribers).

THE HORSE. By William Youatt, together with a General History of the Horse; a dissertation on the American Trotting Horse, and an Essay on the Ass and the Mule. By J. S. Skinner. With an Engraving on steel and fifty-eight illustrations on wood. Price $1.75. (Given for two subscribers).

POPULAR NATURAL HISTORY. By Rev. J. G. Wood, M. A. From entirely new electrotype plates, with 500 illustrations by eminent artists. Price $1.75. (Given for two subscribers).

Every farmer should have the above books. The four will be sent for eight subscribers. They are published by Porter & Coates, Philadelphia, Pa.



This book should not be confounded with the cheap so-called "art-books" with which the country is flooded. It is rather a series of lessons which will enable almost any person of ordinary intelligence and taste to beautify their homes at a trifling cost. In all art matters pertaining to home decorations, for presents to friends, for contributions to fairs and private exhibitions, and for general sale to make money, this book will furnish desirable information and assistance.

THREE HUNDRED DECORATIVE AND FANCY ARTICLES SUITABLE FOR PRESENTS. For all occasions, such as Weddings, Birthdays, Christmas, &c., &c., and for Fairs. Illustrated with nearly 100 Decorative Designs. By Lucretia P. Hale and Margaret E. White. (Given for two subscribers.) It also contains a special chapter for Christmas, with suggestions for Christmas Eve, Hanging the Stocking, Christmas morning, Hiding the Presents, Christmas Dinners, Table Decorations, Menus, Cards, Christmas Tree, Parties, Entertainments, Post Office, Santa Claus, etc., etc. Beautifully printed on tinted paper and bound in muslin. Price $1.50. Published by S. W. Tilton & Co., Boston.

POPULAR FAMILY ATLAS OF THE WORLD. Sent postpaid for only one subscriber. This Atlas contains 24 maps; neatly colored, and with all the recent changes and discoveries. The size is 10x12 inches. Every family should have a good atlas. Although sent for only one subscriber, yet it will be found very convenient and instructive, and as accurate as the most expensive. Published by J. B. Lippincott Company, Phila.

SMITH-PELOUBET'S DICTIONARY OF THE BIBLE. Given for two subscribers. This book contains Antiquities, Biography, Geography, Natural History and Literature of the Bible. Latest Researches and References to the Revised Version of the New Testament. Over 800 pages, with eight Colored Maps and 440 Illustrations. This is a valuable book. It contains "the fruit of the ripest biblical scholarship of England." Every Sunday School teacher and Bible student should have one. Price with unique binding in black and gold, $2.00. Published by Porter & Coates, Philadelphia, Pa.

PICTORIAL FAMILY BIBLE. (Given for four subscribers.) This splendid Royal Quarto Edition of the Family Bible contains 1,300 pages and is made self-explaining, being a complete and concise Library of the Holy Scriptures, from the most exhaustive researches. The amount of matter (extra) aside from the Bible proper, were it bound in separate volumes, would cost at least $20. This matter will be found reliable, exact and clear. Illustrated with 600 engravings, which alone cost more than many other bibles in the market. These Bibles are 10½ inches wide by 12½ long, and from 4½ to 5 inches in thickness, containing the old and new testaments, concordance, Lives of the Reformers and Translators, illustrated, Scenes and Events in the Life of Christ, illustrated, Temple of Solomon, Heads of the Apostles, family record and marriage certificate, colored map of Palestine, and a vast number of other interesting bibical articles, without photograph cards. By a special arrangement with A. J. Holman & Co., Philadelphia, Pa., we are enabled to send this, one of the best of the medium priced editions of the Bible (price $4.50) for only four subscribers. Send to them for descriptive circular.

ARCHITECTURAL STUDIES. One large Quarto Vol. Cloth. Price $5.00. Given for five subscriber. Containing 60 large Lithographic Plates, treating on the following subjects:

Part 1—Low-cost Houses, including prize designs, with elevations, plans, details, specifications, bills of materials and estimates of cost. Twelve large (11x14) plates of practical designs, costing from $500 to $3,000. Part 2—Store Fronts and Interior Details.—Twelve plates and descriptive letterpress. Part 3—Stables.—Containing 12 plates of stables, suitable for village lots ranging in cost from $300 upwards. Part 4—Seaside and Southern Houses.—Twelve plates of designs for cheap houses, with ample verandas, suited to a summer climate. Average cost, $1,500. Part 5—Outbuildings.—Containing 12 plates of designs of small stables, summer houses, pavilions, privies, fences, gates, etc. Each of these parts may be obtained separately when desired. Paper portfolio, 12 plates and descriptive letterpress, $1.00 each. Sent for One Subscriber. W. T. Comstock, Publisher, 6 Astor Place, New York.

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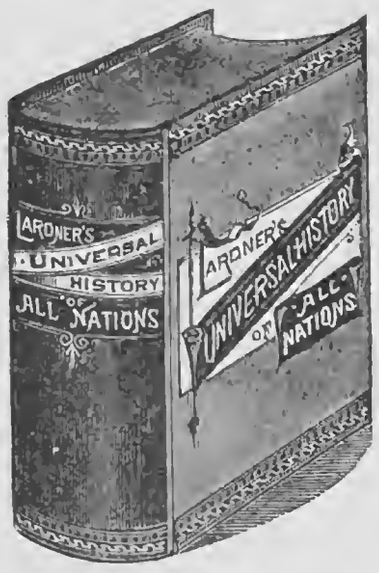

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LITERARY.

HOW TO STRENGTHEN THE MEMORY. (M. L. Holbrook & Co., New York. Price, $1.25.) We consider this, in many respects, a remarkable book. It is well worthy the thoughtful attention of all who wish to possess that most desirable aid—a good memory. The idea is advanced that the memory can be cultivated and improved by a series of mental gymnastics, just as the muscles of the arm can be developed by proper training. This we know to be true from our own experience. The best foundation upon which a good memory can be based is robust health. Just as a nervous disease will change the temper, and completely alter the features and expression of a mild and gentle person, so a constitutional weakness will in time almost ruin the ability to recall facts and ideas. We remember things best when we are fresh and vigorous. All know how a tired feeling dulls the keenness of recollection. Facts learned while we are tired are always hardest to recall. A perfect circulation of healthy blood is absolutely essential to the development of a good memory. Good food and plenty of sleep cannot be dispensed with. Liquor, tobacco and drugs that excite the nervous system improve the memory for a time, but eventually cripple it. The memory is made unreliable, and impressions received while under these influences are most easily forgotten. Memory appears to be a very variable faculty. Some people seem to have natural memories. Some authors can repeat pages from their works even years after they were written. In such cases the facts pertaining to their characters were as deeply impressed upon the brain that total erasure was impossible. There are slow thinkers and quick thinkers. One studies a moment to arrive at a fact that is reached by the other like a flash. The slow memories are generally most reliable. Memories are destroyed by overwork, worry and an attempt to carry too much on the brain at one time. Poor food and unhealthy surroundings, dissipation, or anything that tends to create an abnormal circulation of unhealthy blood, will surely impair the memory. Two points are absolutely necessary if we would improve the memory. We must cultivate attention and method; there must be a logical association of ideas, so that one fact will call up another, until the desired fact is reached. We are often at a loss to remember a face or a fact. Thousands of other ideas crowd into the mind, but the right one is hidden. Suddenly it comes upon us like a flash. We strike some fact in the chain connecting us with it, and in an instant it all comes to mind. The design is to connect these chains one with another; to have the events of life that we wish to remember closely connected. To cultivate a good memory one must live earnestly. He must cultivate attention and learn the art of forgetting unimportant things. Much can be done by constant practice. The most simple exercise is to devote half an hour each night to thinking carefully over the events of the day. The idea is to give a history of your movements; people you have met, things you have seen, what you have done, etc. This practice carefully carried out from day to day will strengthen any defective memory. We once tried the plan of giving a few moments each night to writing out our vocabulary. We tried to think of every word that we really understood. The practice resulted in fixing the words firmly in the mind and at the same time served to show how few words the average person can control. Shakespeare is said to have used about 12,000 different words in his plays. We do not believe that the average vocabulary is over 800. This practice of writing out the vocabulary tended to increase it by developing a desire to learn new meanings, and also gave the memory new strength. The rules contained in the book under consideration are sensible and simple. We are glad to commend the work to those who are interested in this subject.

THE MAKING OF PICTURES, by Mrs. Sarah W. Whitman, (The Inter-State Publishing Co., Boston,) is the work of an artist. She evidently understands what she writes about. Her advice seems to be sensible and practical. We think this little volume, carefully studied, will be a help to those who desire to "make pictures." We are glad to see that the author insists that excellence in drawing can only be obtained by thorough preparation and careful and pains-taking study. There are too many "botchy" artists now. Two people draw lines on paper; one line is a black mark, the other speaks out the result of years of study and care. The ability to sketch or paint fairly well will make many an otherwise monotonous life pleasant. Art should be pursued for itself alone. There is no money in it for the many who want to be artists simply because the life is an easy one. There is but little ease in any successful life. As a means of beautifying the home or of cultivating our finer feelings by the ability to copy scenes or colors that please us, a fair knowledge of art is a most desirable accomplishment.

A WHITE HERON, AND OTHER STORIES, by Sarah Orne Jewett (Houghton, Mifflin & Co., Boston, Price $1.25), is a good book. Most of the stories were originally printed in the Atlantic and Harper's. They are as good as new in their present dainty dress. We like them more and more as we read them over. There is a quaint charm about them that many far more pretentious books cannot convey. Who can read that last sentence of the "The Gray Man" without dropping the book for a moment to think? The poor, amiable "Dulham Ladies" and their first experience with false hair can hardly be forgotten. There is a wonderful pathos mingled with a quaint humor to be found in these pages. There is nothing sensational or blood-stirring in the stories, but they awaken the right kind of feeling. The best story in the book is Marsh Rosemary. It is the story of an old maid who married a worthless young fellow, just because he proposed to her. Of course they could not live happily. He ran away from her at last and never came back. She thought him dead until years after; she heard of him living in a distant town married to another woman. In her anger and shame she went to his home to expose him. She came to his home after dark, and saw him through the window. As she watched him she understood why he had left her. She could never have been a companion for him. He had married a woman of his own age who had tastes, feelings and ambitions like his own. She was making a man out of the worthless scamp. He leaned over the cradle and raised the baby to show its latest trick to his wife. The shame-eaten, weary woman on the outside saw it all—herself unseen. She thought that this man never could care for her again. By exposing him she would only spoil his chances forever, break the new wife's heart and fill the baby's life with shame. She turned and walked silently away—like another Enoch Arden—back to her old lonely life. There are many who will question her judgment in doing as she did, but few can read the story of her struggle without feeling glad that she did not speak.

THOSE who read the November Harper's will be interested in studying the faces of New York literary men there given. As a rule, people are disappointed in such faces. When we judge a man by his writings we feel that somehow his thoughts must have written themselves on his face, so that we can read them there. We seldom find this to be so. There is always a disappointment in the sight of a great man. It would be better if we could see the man first and enter into his thoughts afterwards. The majority of writers and public men would do well to make themselves more of a mystery and keep their faces out of print. The picture of E. P. Roe will, we think, surprise most of his readers. They have an entirely different man in mind. Julian Hawthorn looks like his father, but seems to have more force, and yet a keener sense of fun.

THE noblest characters are not always sure to live in song and story. Men and women having crosses from which the bravest might shrink, live and die unheeded. The world knows nothing of their greatness unless some dear friend forces the evidence into view. An instance of this is seen in the life of Judge Richard Reid, of Kentucky. Our readers may remember something of the circumstances connected with his death. He was publicly beaten most shamefully by a brother lawyer. Local tradition left but one course open to him—that was to kill his assailant. This he could not do. As a Judge he could not break the law, and as a Christian he could not shed blood. He did his best to hold to his convictions, even in a community where men and women thought him a coward. He endured it until the tortured heart broke, and he took his own life. The story of this crime, told by his wife, is a wonderful book. W. D. Howells well says in Harper's that "he wishes, for the sake of civilization, of religion, that the book might have a wide currency"

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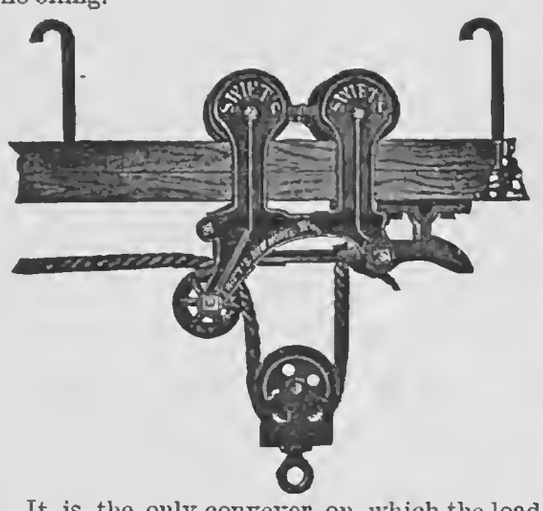

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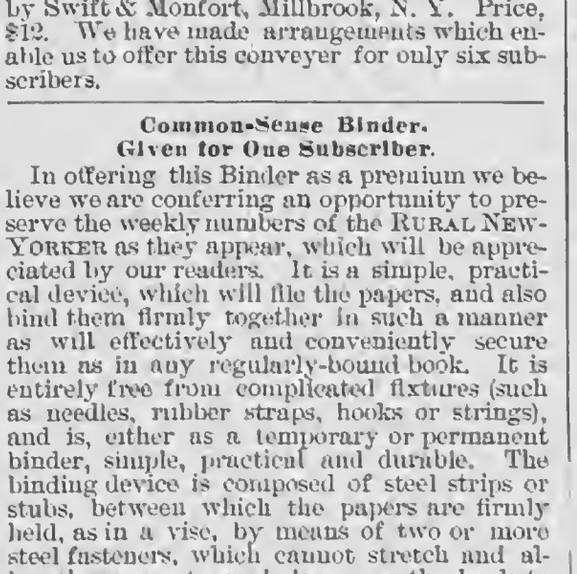

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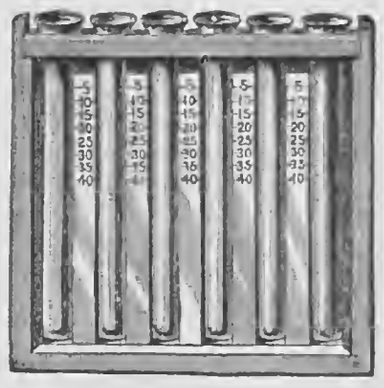

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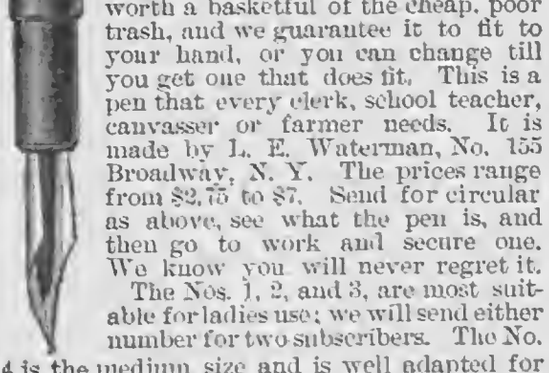
A farmer or any one else who fails to use every labor saving devise of merit makes a mistake. If you spend five minutes every day for a year getting out your inkstand and looking up your pen, you lose in a year, nearly three working days to say nothing of loss in worry and ill nature over dry ink-stands and broken or rusted pen-points. The Ideal Fountain Pen is a labor-saving implement just as much as is a harvesting machine or a sulky plow, and everyone who has writing to do should have one. It is a pen for every-day use at the desk, or can be carried in the pocket and used when occasion requires. It is a first-class gold pen attached to a hard rubber pen-holder, carrying ink sufficient for from 12 to 16 hours continuous writing. The entire pen is plainly shown in the cut. The handle or inkholder is made in two pieces, the point section and the barrel, which are secured together by a screw joint, at which place it is opened for filling with ink. The pen (a first-class gold pen) is held in the point section by the feed bar, which also carries the ink from the reservoir to the pen only so fast as used up in the writing. The fourth piece is merely a cap which covers the pen when not in use, to protect it from injury in the pocket, and also to prevent the ink from drying up, and when removed from over the pen, it is put on as shown in cut, to lengthen the holder for use in writing. We have used this pen for 15 months, and can fully recommend it to every one as the best pen we have ever seen Last year we handled hundreds, giving it as a premium for four subscribers. It is now offered for only two subscriptions, and every one of our friends should secure one. We do not wish our readers to confound this with the cheap fountain pen, or with the old stylographic pen, as it is fully equal to any gold pen made, and is worth a basketful of the cheap, poor trash, and we guarantee it to fit to your hand, or you can change till you get one that does fit. This is a pen that every clerk, school teacher, canvasser or farmer needs. It is made by L. E. Waterman, No. 155 Broadway, N. Y. The prices range from $2.75 to $7. Send for circular as above, see what the pen is, and then go to work and secure one. We know you will never regret it.

The Nos. 1, 2, and 3, are most suitable for ladies use; we will send either number for two subscribers. The No. 4 is the medium size and is well adapted for ordinary use. We will send one for two subscribers. The larger sizes, No. 5, 6 and 7 will be sent for three, four and five subscribers respectively. If you desire the pen sent by registered mail send 10c. for fee. Farmers, Clergymen, Boys, Girls, School-teachers. Everybody, here is a chance you cannot afford to neglect. No more useful or appropriate present can be found for Christmas, New Year's or birth-day, and you can earn one with a little effort. Send to L. E. Waterman, 155 Broadway, N. Y., for circulars.

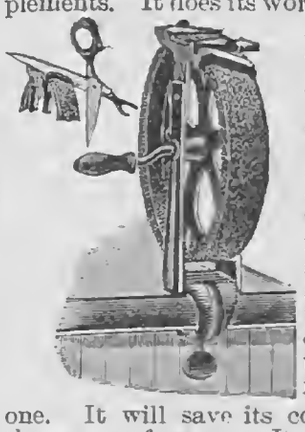


Given for One Subscriber.

Ladies don't buy a new carpet. If you wish to be economical, you can cover those worn places with home-made rugs. If you do not have enough bright colored pieces in your rag bag, you can color them at a trivial expense with the Pearl Rug Maker; many ladies make an entire carpet. When making large rugs or carpets, it is advisable to make them in sections, or pieces about 1¼x2 feet, and then join them by sewing the edges securely together on the back. (This is fully explained in the illustrated directions.) It can be used on any sewing machine or by hand. Price, postpaid $1. Supplied by the Pearl Art Co., 23 Union Square New York City.

The "Household" Patent Emery Wheel Knife Grinder.
Given for One Subscriber.

This valuable machine meets the demand for a practical and inexpensive article for sharpening Knives, Scissors, and other cutting implements. It does its work quickly and effectively. The Adjustable Table with Scissors Guide, enables anyone to sharpen knives or scissors properly. It can be raised or lowered as desired. The wheel is 6 x 1, with rim of solid emery, and warranted durable. The Machine is fastened to a table or shelf by turning a thumbscrew. Every family should have one. It will save its cost many times in the course of a year. It will be sent to any address by the Crystal Emery Wheel Co., of Northampton, Mass. for $1.50 or we will send it for one subscriber.

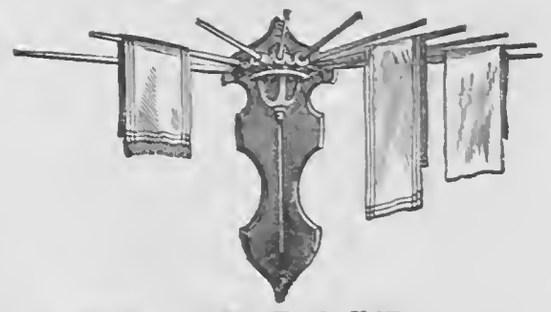


"Grand Rapids" Carpet Sweeper.
Given for Two Subscribers.

An implement which saves labor in the house is just as important as a labor saving device for outdoor use. The Grand Rapids sweeper possesses all the qualities of broom and dust-pan combined, its brush being so constructed as to be perfectly self-adjusting under the slightest pressure. Lightly running, it will take up anything that a broom will, from any kind of carpet, while if pressure is given to it as with a broom, to remove dirt,

imbedded in the carpet—still running easily—it will work wonders, being more effective than any broom. It is adapted for the lightest as well as the heaviest sweepings. Its case is unique in shape, made of rich woods, and handsomely hand decorated, which, with the contrast afforded by the color of the rubber band encircling it, makes it the handsomest as well as the best of carpet sweepers. It sells for $3, and is manufactured by the Bissell Carpet Sweeper Company, Grand Rapids, Mich. Eastern branch, 103 Chambers street, New York.

Empire Drying Bars.
Given for One Subscriber



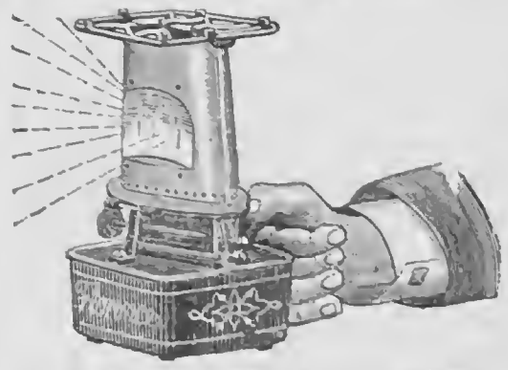
OPENED FOR USE.

CLOSED.

This is one of the neatest, most compact and best made towel or clothes racks for drying purposes in the market. It requires small space when in use and can be folded up out of the way when not wanted. It is nicely finished, and the castings are galvanized. Its capacity when opened is ten arms each two feet in length. The price is $1. It is made by the Empire Wringer Co., Auburn, N. Y., who also make the celebrated Empire Wringer.

The "Florence" Lamp Stove.
Given for Two Subscribers.

The cut below represents a lamp stove of such dimensions as to be easily carried about and yet so thoroughly made as to meet the requirements of both a stove and lamp. It illu-



minates the room as well as a large table lamp, and affords sufficient heat to boil a quart of water in eight minutes. It is absolutely safe, and free from odor. The price is $2, and it is manufactured by the Florence Machine Company, Florence, Mass.

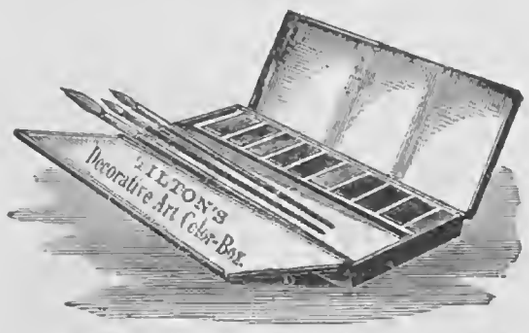
Torrey's Pocket Folding Scissors.
Given for One New Subscriber.

These handy little scissors are sharp pointed and are readily opened for use, but when closed the points are firmly held and protected by steel sheaths. They are perfectly safe and will please you. Made by J. R. Torrey & Co., Worcester, Mass.

"Stop Thief" Scale.
Given for One Subscriber.

This scale will weigh from ½ oz to 10 lbs., and is one of the most popular premiums we have ever offered. It retails for $1.15, and is worth it.

Artist's Outfit.
Given for One Subscriber, with 10c. for postage.



How to Learn to Draw and Paint in Water Colors Without a Teacher, and ten moist water colors and three brushes in a japanned tin box.

The above is a complete outfit for learning to paint in water colors without a teacher.

The book is a series of introductory lessons, in Drawing and Painting in Water Colors, by Marion Kemble. It is more than a text book. It is a series of lessons, and should be appreciated as such.

Either of the above sent by mail on receipt of 50c., or both for $1 by S. W. Tilton & Co., 333 Washington street, Boston.

Lansing Spring Tooth Harrow.
Given for 15 Subscribers.

This harrow has many advantages over the other so-called "floating" harrows. The peculiar shape of the frame enables it to work over rough or uneven ground. The construction and shape of the teeth are such that the frame is carried clear of the ground while the dirt is cut or sliced, instead of being pushed aside. It can in five minutes be adjusted to run shallow or deep or for hard or soft ground: this is done by changing the pitch of the teeth. In this harrow the teeth and spring are separate and not liable to break at the same time, this makes the cost of repairing merely nominal. Besides all these, the use of coiled springs gives greater freedom to the action of the teeth, enabling it to do good work in strong, rooty ground, so bad that the ordinary spring-tooth could not be used. Made by E. Bement & Sons, Lansing, Michigan. Price $25.00.

The Improved Root Corn Sheller,
Given for 10 Subscribers.

It requires no more time or labor to shell corn properly than it does to shell it in the slovenly, incomplete way of the olden times, but it requires a better implement. With some of the old fashioned shellers, we have seen corn enough left on the cobs to almost pay the cost of the shelling. The Root Sheller cleans the corn in the best possible manner, ready for the market. It is made with steel springs throughout, and is adjustable for corn of all sizes. The construction of the shaker device is most complete and durable. Each sheller has two casters, or rollers, fastened within an inch of the surface of the frame: this when tilted, will place the entire sheller on rollers, and can be moved with great ease. It has wrought iron shafts all through and is finished in the best possible style; capacity, by hand, 200 bushels, and 500 bushels by power per day. Price with shaker, $20. Given for 10 subscribers, or the single spout sheller price $10, for five subscribers. Supplied by The Spangler Manufacturing Co., York, Pa.

Any of our present subscribers, or any one becoming a subscriber or anyone choosing to act as an agent who will send us one new subscriber will be entitled to any of the premiums offered for one subscriber. The object is to offer compensation to all who will assist in increasing the circulation of the RURAL NEW-YORKER. THE ONE-SUBSCRIBER OFFER IS FOR NEW SUBSCRIBERS ONLY.

Rural Topics.

CORRESPONDENTS' VIEWS.

MORE PLAY—LESS WORK.

It is about time a halt was called on the people who are so wonderfully anxious to find something for the farmer to do in every moment of his spare time. There is no end to the "odd jobs" that are proposed to keep the farmer out of mischief. Why should the farmer, of all men, be urged to turn himself into the "busy bee?" He works too hard now. He sticks too closely at his business. He doesn't know what is going on around him because he thinks he hasn't got time to stop and find out. If anybody wants to learn the truth of the old song, "Work while you work and play while you play," it is the farmer. A business man will rush into New York and do an immense amount of work in eight hours and then go home to enjoy himself. The farmer goes slowly through his chores, stops to talk with every visitor and trains himself to move as slowly as possible. The consequence is he never has time to go anywhere—so he thinks—the paper is unread and work accumulates. If farming is a business, the farmer has got to be a business man. He must push his work, do it in a reasonable time, and then quit. I say, instead of hunting around for new jobs, hunt for a good chance to put in a holiday. This work, work, work, and grind, grind, grind, not only drives the boys away from the farm, but it drives the best part of the man out of the farmer. I am glad to see this talk in the papers about 10 hours on the farm. It can't be done? How do you know? Did you ever try it? The farmer has got to change his mode of life before he gets his place and his political rights. He has got to do his work in shorter time by pushing it harder, and to take more time for pleasure and information. Any man who has spent 15 minutes in gossip with a neighbor who came to borrow a rake, knows how much he can compress his working hours, if he cares to do so. I have taken plenty of quarter-days, here and there, to play ball or go fishing. I can find the time to go to gatherings now and then and still keep my work up. We do work enough now. We don't want to add more to it, but we want to improve what we do. What do we live for anyway? To grind ourselves into a bank account, or to make the most we can out of life? I have my own idea on the subject.

Orange Co., N. Y. C. H.

Last Spring I wrote to the RURAL asking about new potatoes. The answer decided me to try the Empire State. I procured a barrel from Leonard, of Chicago, which cost here $6.85. After digging them I find my account with the RURAL to stand about as follows:

Yield on eight rows Empire State, salable, 45 sacks; yield on eight rows of main crop, 23 sacks, making a gain of 22 sacks of about 110 pounds each. This gives me

24 cwt. @ 80 cents	$19.20
Less cost of seed	6.85
	12.35
Seed of Empire State sold	7.95
Total gain	$20.30
By gain over potatoes tried through kindness of RURAL	$20.30
Less two years' subscription	4.00
Net profit	$16.30

Add to this the entertainment and general information I have obtained from the paper. Does an agricultural paper pay?

Weld Co., Colorado. WILL. D. SAWYER.

I HAVE, perhaps, one-third of a pint of potato seed, the product of a very fine white potato that I received from the product of seed of the wild potato gathered in Central America about 18 years ago. This seed is the third generation. The potato from which the seed came grows to good size, a large yielder, and but few below the market size. Very white flesh, fine flavor, and excellent quality. From 29 feet square of ground, very small amount of manure, and clean level culture, I raised this season 11½ bushels of marketable potatoes. Only little less than half a bushel small, and had a half bushel of seed-balls from which the seed came. From the time of planting until dug there was not rain enough to wet the ground one inch deep.

Chautauqua Co., N. Y. E. S. B.

THE Premium List of the RURAL NEW-YORKER has never been equalled for liberality by any paper in the country. One subscription agent who writes: "I have canvassed for dozens of papers, but never knew one to offer such terms as these," voices the sentiments of those who have studied our Premium List. Examine the list of premiums on page 777. Where can you make better terms?

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ANOTHER TRIUMPH IN THE REALM OF ART.

NATURE'S HALLELUJAH.

From Original Designs by IRENE E. JEROME, Author and Artist of "One Year's Sketch Book," "The Message of the Bluebird," etc.

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Miss Jerome's second book will be another surprise to those who believe that genius can only be crowned after years of trial. The enthusiastic young artist not only shows improvement in every page of her new book, but has succeeded in producing novel pictures of great beauty and variety from fresh points of observation, making a twin volume that is in no wise an imitation. It is a realization of what the Chicago Advance said in a glowing notice of her first books:

"Miss Jerome has the quiet determination and earnest spirit of one who feels that the object of life is to grow, and it is wonderful to note how quickly she casts aside the obstacles that arise in the way of her onward march. She possesses great fertility of fancy, and an exuberant sense of the beauty of outward objects. Her pictures make one more in love with Nature; more ready to perceive—

The voice of the Deity, on height and on plain,
Whispering those truths in stillness, which the word
To the four quarters of the world proclaims.

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The reigning favorite of two holiday seasons, and now the most popular of "All the Year Round" books, since the large sale continues through the year. New editions in the various styles are in preparation for this season.

"It is a very remarkable book, and the publishers have been well repaid for their outlay in presenting it in this elegant dress in which it greets our eyes. It is a book to charm the soul. We could spend hours gazing upon these marvelous views of flowers, lake and mountain, in which the artist has etherialized nature. It is a book to dream over, and every one is justified in going into ecstacies over a book. Miss Jerome has given us full reason for so doing as we gaze on these gems of nature and of art."—Golden Rule.

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OH, WHY SHOULD THE SPIRIT OF MORTAL BE PROUD?
OUR FATHER IN HEAVEN. The Lord's Prayer in a series of Sonnets.
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Mail, Toronto, Canada, $2.50.
Sentinel, Milwaukee, Wis., $2.50.
Republican, Springfield, Mass., $2.50.
Ohio State Journal, Columbus, Ohio, $2.50.
Times, Ciuciunati, Ohio, $2.25.
Farm Implement News, Chicago, $2.50.
Kansas State Journal, Topeka, Kan., $2.50.
Herald, Omaha, Neb., $2.25.
Journal, Kansas City, Mo., $2. 35.
Times, Philadelphia, $3.00.
Register, Wheeling, W. Va., $2.75.

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Price, with the RURAL NEW-YORKER, including Seed Distribution:

Cottage Hearth	$2 25
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Godey's Lady's Book	3 00
Peterson's Magazine	3 00
Harper's Magazine	5 00
" Weekly	5 20
" Bazar	5 20
" Young People	3 50
The Century	5 50
St. Nicholas	4 50
Building; a Journal of Architecture, weekly	5 50
" monthly	2 75

THE New York Times says: "The editor of the RURAL NEW-YORKER is a New Jersey farmer who has an experiment station of his own, which is not equaled in value for useful, practical results by any of the scientific stations operated by a staff of Professors at great cost."

Our regular Premium List and Posters will be sent to all applicants without charge. Specimen copies will be mailed free to any name or list of names with which our readers or agents may favor us in order to aid them in obtaining subscribers.

CORRESPONDENTS' VIEWS.

THE wagon which I received as a premium last year came to hand all right. It was so well packed that there was not a scratch on it. A wagon-maker at our place calls it the finest-finished piece of work he ever saw. The Columbus Buggy Co. write me that this wagon is not a special article, but just what they furnish to all. It is light, but strong, carrying three with ease. It is a real treat to ride in such a carriage after a day's hard work on the farm. If any reader of the RURAL wants to get a good carriage, he can't do better than to go where mine came from. Such a carriage makes fine pay for my work at canvassing.

Chenango Co., N. Y. W. S. MOORE.

I WAS glad to see the RURAL speak of Kaffir Corn. Wherever wheat and Indian corn are sure crops, these new or old sorghums will have less value or no value, but with us both Indian corn and wheat are very precarious, and the sorghums offer us certain returns in grain almost as good as Indian corn, and forage in far greater abundance. After years and years of dependence on one or another sort, I would feel as if I could ill get along without them. For ensilage, any early sort of sorghum should have a place with you.

Augusta, Ga. J. H. ALEXANDER.

THE tests for fattening cattle at the college farm at Champaign, Ill., gave some surprising results. Prof. Morrow writes that the heaviest cattle are half-blood Holsteins. The greatest weight is 1,785 pounds for a steer not 31 months old. The steer of best quality is a three-quarter Hereford. A pure-bred Ayrshire weighs 1,525 pounds at 32 months. The steer of best form is a pure-bred Shorthorn, but a local trouble has reduced his weight 200 pounds or more. This "battle of the breeds" was harmless enough. L. V. C.

GRANGES and Farmer's Clubs can help the agricultural colleges materially. The colleges need students and there are plenty of bright farm boys who need educations. Let each flourishing Grange provide for one or more scholarships at the agricultural college—that is to say, let them each lay aside at least $75 each year, to go towards paying the expenses of at least one boy from the neighborhood. Let the boys be put to some test to determine the one best qualified for the place. With $75 back of him a bright boy can easily work his way through an agricultural college and there are plenty of boys who would jump at such a chance. If the farmers of any State want to make something out of their agricultural college, let every farmers' organization pledge itself to provide at least one student. Try five years of such a policy and see what the result will be. GRADUATE.

WHEN I first started reading the RURAL NEW-YORKER three years ago, I could hardly interest myself in the contents, but now I welcome it eagerly, and can hardly wait until evening to scan its well-filled pages of sound, wholesome reading. I used to think, too, that you were fearfully one-sided and partial; but after getting acquainted with your ways and views, I am convinced that you do sometimes speak the truth when it hurts, but for a good purpose and in the best of spirit, for the good of all. I well know that agricultural editors, like all others, must educate their readers to their particular duty, and practice as they profess, or accomplish nothing.

Dayton, Ohio. WILLIAM BARRINGER.

I FIND by experience that the way to grow the best crop of potatoes at the least cost of labor, is to plow in November the ground that is to be planted the next Spring. After plowing, manure broadcast with 12 three-horse cart loads of barn-yard manure to the acre. Let it be until Spring without harrowing. The action of the weather will completely pulverize the ground. In the Spring the weed seeds will sprout early and grow vigorously. When in the seed leaf, put the harrow on, giving the ground a rough harrowing, destroying them with ease and dispatch, and at the same time leveling the ground.

Chester Co., Pa. CHARLES C. MOORE.

ON a space of my strawberry bed one-half rod wide by one rod long I picked 90 quarts of berries. It was a fair average of the whole. Who beats that? The plants were Crescents, a trifle over a year old. They were in matted rows 3½ feet apart. The field was a sandy loam. It had a fair dressing of stable manure, and I applied to the plants a little "patent medicine," as I call commercial fertilizer. N. C. JESSUP.

Suffolk Co., N. Y.

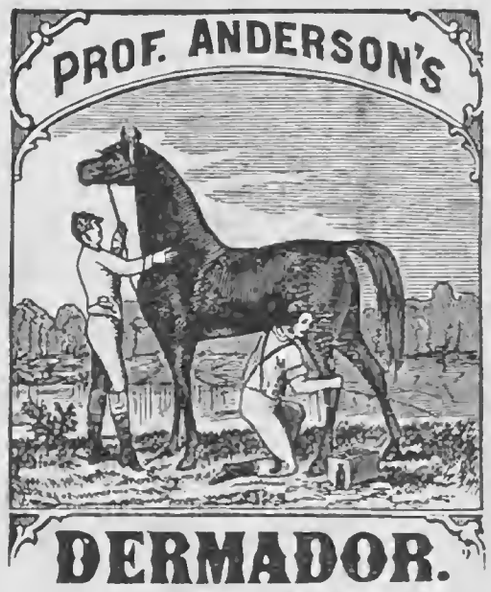
PRINCESS, the fine English hackney mare, recently died suddenly. She had been carried about from one show to another, spending most of the time, in the cars, the stall and the show ring. High feeding for months without proper exercise had made the horse "soft." Whenever turned into the pasture on returning from a show, she was so glad to be at liberty that she spent the first hour trotting at full speed up and down the pasture. This in her "show" condition, engendered a chill which resulted in inflammatiou of the lungs, and death. There are doubtless many cases where animals are killed or injured by the treatment necessary to fit them for exhibition or the result of this treatmeut. We seldom hear of such cases. It is poor policy to let the public know of them. Our horse shows are filled with fat horses. They present a fine appearance to the visitor, but their condition is unnatural. We want fat in the steer, but muscle in the horse.

THE EARLY BEAUTY SWEET POTATO I consider the most promising variety. The vines are of strong and vigorous growth. The potatoes are large in size, very round and short, and of the yam species. I think it a variety worth trial. It originated in Florida. J. S. B.

PARTICULAR
ATTENTION IS CALLED TO THE LIST OF JOURNALS WITH WHICH THE RURAL NEW-YORKER CLUBS. ANY OF OUR READERS WHO DESIRE TO SUBSCRIBE FOR ANY OF THESE PAPERS IN CONNECTION WITH THE R N.-Y. ARE PROMISED THAT THEIR COMMANDS SHALL RECEIVE CAREFUL AND PROMPT ATTENTION.

BEAR in mind that the RURAL never *sells* its premiums. We give them as payment for work. We will not, under any circumstances sell them for cash. The RURAL sells nothing and hence is not bound to praise any implement or plant except as it deserves praise.

GOOD FOR MAN AND BEAST.



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This magazine was originally devoted to market gardening and will continue to pay special attention to this great industry, giving notes and illustrations of new vegetables and improved ways of cultivation, crop reports, &c.
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will be treated in a like manner, giving essays written by the eminent Fruit Growers of the day, also notes and illustrations of new Fruits. *Pleasure and Profit.*
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Notes will continue to be a strong and pleasing feature. Then there is "Aunt Martha's" HOUSEHOLD, and the CARP POND, POULTRY and PET STOCK, and the PUZZLE DEPARTMENT which gives prizes each month to the best solvers. Although our subscribers say that single numbers are worth a dollar our price is but
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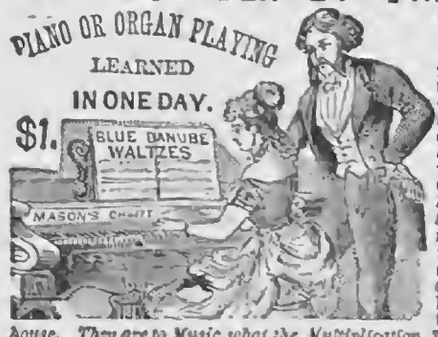
MASON'S INDICATOR CHART, Attachable to any Piano.
A child 10 years old can understand it perfectly.



This wonderful invention has been before the public (in its perfected form) less than two years, and we have sold over 40,000, which is the surest test of its merit; and orders have been received from every country on the globe. **Mason's Indicator Chart is a machine** which fits over the keys of a Piano or Organ, *indicating where and how the hands are to be placed, and the proper keys to strike*, changing its position and arrangement to suit the different keys. *They are infallible in result.* If you can read you can play the Piano or Organ in **one day** *better than a Teacher could teach you in many lessons.* If you have no Piano you can learn at some friend's house, and astonish all with your acquirement. DEXTER SMITH, the editor of the leading Musical Paper in the world, says, "*They should find a place in every house. They are to Music what the Multiplication Table is to Arithmetic.*" It gives satisfaction in every case. MUSIC TEACHERS UNRESITATINGLY ENDORSE IT. The price is **$1.00** for a complete set (4 charts). Favorable terms to Agents and the Trade.

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THE ESTIMATION IN WHICH THE RURAL NEW-YORKER IS HELD.

I am much pleased with the R. N.-Y, Its special numbers and reports upon fruits—especially small fruits, in the cultivation of which I am engaged for market, give your paper value with me. R. M. WELLES.
Towanda, Pa.

I have taken the RURAL 15 years, and shall continue to take it as long as I can raise two dollars. I am taking two other agricultural papers, and I like the RURAL the best. Shall continue to speak a good word for it, and am in hopes to get some to subscribe.
Hudson, Ohio. E. A. SEASON.

Wishing a good farm journal I have sent for a good many sample copies of different ones, among the rest the RURAL NEW-YORKER, and after examining them all thoroughly, I find your paper stands head and shoulders above the rest, and I work on the maxim—"Try all things and hold fast that which is good." Please put my name down for the RURAL. F. H. BATES.
Dudley, Wis.

I like the RURAL better each year. I take it because it gets right down to hard-pan, and tells what practical men are doing, and how they are doing it, instead of indulging in fine-spun theories of some dreamer, who never did a hard day's work on a farm in his life.
Whitewater, Wis. JAY D. STANNARD.

At the annual meeting of the Kentucky Horticultural Society in Glasgow, Ky., on the 2d, 3d and 4th of December, 1885, the subject of horticultural literature was presented in a paper read by J. B. Nall, editor of the Farmers' Home Journal, and the following discussion was had:

A. D. Webb, of Warren County: "I take probably a half dozen papers, and consider them all good. The RURAL NEW-YORKER is a good paper."

Judge Dulaney, of Warren: "I think the RURAL NEW-YORKER is by far the best horticultural paper I take, and I take a dozen."

I can truly say I would much rather live on one meal a day less through the Winter than give up the RURAL. This may be thought untrue by some, but it is true.

I can truly say that if the RURAL cost double its present price I would not deprive myself of its weekly visits—to say nothing of its valuable Seed Distribution. You are doing a grand and noble work and I sincerely hope your life will be spared to make the RURAL all that it can be.
Portage Co., Wis. REV. CHARLES SMITH.

We have taken your excellent paper many years, and although we take a good many other papers, we cannot give up the good old RURAL, and want to increase its circulation.
Orient, L. I. A. J. BEEBE.

In my estimation the R. N.-Y., stands at the head of the list of Agricultural papers of the country and is deserving of the widest circulation.
Moorton, Del. R. M. COOPER.

Believing it would be a great National benefit if you could double your list for the year 1886, I wish you the largest success.
Canon City, Col. REV. L. J. TEMPLIN.

The premium spoons came to hand all right yesterday, and in good order. They look very nicely. Many thanks to the RURAL for so fine a present for so little work, and my prayer is that the RURAL may go on to perfection, exposing all of the frauds that may come in its line of advertising. Yours respectfully.
Binghamton, N. Y. E. POTTER.

Many thanks for free seeds received. They are worth the $2. I cannot give vent to my feelings of respect, and thankfulness for the reliability and general superiority of the RURAL New-Yorker. Hoping you will always be as original and impartial in your publication, I remain. F. W. WILSON.
Chatham, Canada.

I wish to add my mite of appreciation to the sterling worth of the RURAL. It is a common sense, able, scientific exponent of advanced agricultural thought and progress. Its influence and teachings must make every individual reader a more thorough, painstaking and *business-like* farmer, and its value as such a teacher is but poorly expressed by its extremely low price of subscription. I am a RURAL subscriber, and shall continue to be as long as I can appreciate a *good investment*.
Troy, N. Y. MARVIN E. STOW.

It affords me great pleasure to read the R. N.-Y. Some things that it contains, it is true, attract my attention more than others because I am more especially interested in them. The various topics of agriculture are treated in a plain and practical manner. The methods suggested are in the main suitable for the farmer. The brief explanations and kind criticisms by the editors, inserted when necessary in the various themes pertaining to agriculture by your intelligent writers, correct many misleading statements and prevent, no doubt, numbers from engaging in unwarrantable experiments, where money, time and labor would be lost. The terse and direct answers to inquiries in the "Farmers' Club" give much valuable information in a condensed form. The exposure of swindlers, frauds and fraudulent concerns in the "Eye Opener" forewarns the reader if he but heed the advice. In the "Women's" and "Domestic Economy Departments" there are many important things. The editorials, the summary of the home and foreign crop reports, the markets, and home, foreign and agricultural news are of special interest. All efforts to secure the latest and most reliable crop reports, both at home and abroad, so as to be able to prognosticate with some certainty in regard to future prospects, are highly appreciated by the farming community. Your positive, clear, concise and conservative views in dealing with subjects of general interest, as well as your earnest endeavors to elevate and ennoble agricultural pursuits, are highly commendable. SAMUEL G. ENCKE.
Albion, Mich.

I do honestly believe the RURAL NEW-YORKER to be the best agricultural paper in the world. There is nothing I can say against it, but a great deal that I can say for it.
LEWIS B. AVERY.
Lenawee Co., Mich.

Your old friends are not going to leave you. For me to know you once is to keep up that acquaintance for life. You come so near my ideal of the right man in the right place, that it would take more than $2.00 a year to drive me off. You are enthusiastic in the dissemination of new fruits, which pleases me, and yet so careful not to commend until you have proof, that I am saved from disappointment and expense. I have always believed a straight honest course in business of any kind would bring lasting success.
Leavenworth, Kansas. C. W. KEIFER.

I am very well pleased with the RURAL although I differ with some of the writers and correspondents and sometimes with the editorials, yet I consider it honest in its suggestions, practical in its views and fearless in its editorials and a paper that does not try to please everybody. It is just the paper that the practical and experienced farmer or fruit grower wants and those just beginning cannot afford to be without it. Having nothing to sell and no humbugs to impose upon people it fearlessly exposes frauds and aims to keep the eyes of the people open. L. M. LOOPE.
Cortlandt, N. Y.

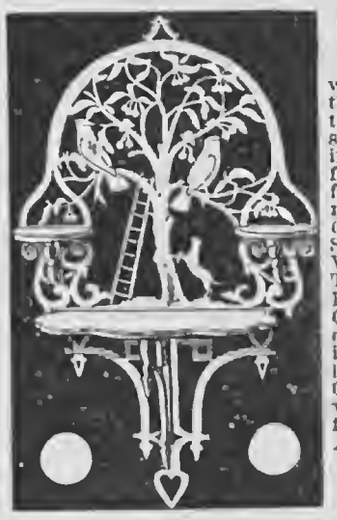
We think the RURAL the best agricultural journal published and would not try to farm without it. Yours Respectfully,
Parsons, Kansas. M. WALKER.

As long as the RURAL continues as good as it now is you may be sure of our continued support. It undoubtedly takes the lead of all the agricultural papers I have seen.
W. A. BISHOP.

Father died on the 20th of December after a lingering illness, but he told me before he died not to give up the RURAL. So you will find enclosed $2.00 for renewal for another year.
Nanticoke, Ont. JOHN LINDSAY.

I regard your paper as one of the best two, if not the best, weekly published and you will find, that I not only renewed my subscription but sent three new ones.
Boston, Mass. C. B. FAXON.

There is not a paper in this Country that fills the bill in every respect (to my notion of a paper) like the RURAL NEW-YORKER. I have taken it at different times ever since it was published by D. D. T. Moore at Rochester and I think there is a steady change for the better every year. God bless the old RURAL and long may it live to make the life of the farmer brighter.
Oakland, Mich. D. P. TUCKER.



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B. & J. W. BELCHER,
BOX 25. CHICOPEE FALLS, MASS.

Miscellaneous.

CALIFORNIA NOTES.

Differences in growth of fruit trees in the East and California; yield of vineyards; abundance and prices of grapes; favorite varieties; peaches; potatoes, hops and other crops; benefits of railroad competition; rainfall in Sonoma County; Mary Wager-Fisher's sketches; climate and products of Northern California.

YOUR Old World ways are not our ways. Even Nature strives to outdo herself in California. The thought is suggested by looking over the report of a meeting of fruit growers recently published in the RURAL NEW-YORKER. One of the members, a noted horticulturist of Rochester said that the annual growth of wood on his pear trees was about two feet, which, perhaps, may be called a good average. Now, look on that picture and then on this. From one graft put in by the writer the last day of April, the present year, which was not as thick as a lead pencil, there have grown branches from three buds, just measured and yet growing, one four feet six inches long; one four feet seven inches, and another five feet two inches. I have grown the French prune on almond, 12 feet in one season, with lateral branches in addition. Most fruit trees make the enormous growth above noted under favorable conditions.

An acre of vines eight feet apart numbers 680. The product this year for ten-year-old vines, on the best land, well tilled, with careful pruning, is often 50 pounds each. The crop of Missions on the vineyard of Mr. J. Hessions, near Santa Rosa, is referred to; but the yield is exceptional, for, like farming the world over, there are lazy and heedless owners who do not average over half a crop. The Rose of Peru is a magnificent grape. Mr. G. H. Cornelius, of Sonoma, exhibits a bunch weighing 16 pounds. Plenty of other sorts—Muscat, Flame Tokay and the like—weigh from five to 10 pounds per bunch. Our best grapes do not bear transportation, and are never seen in the Atlantic States outside of conservatories. Though our valley is studded with wineries, there is scarcity of cooperage to hold the wine, and it is feared that many tons of grapes will rot on the vines for lack of a market. They are selling for from $10 to $18 per ton delivered—Missions being the cheapest. One of the cellars crushes 90 tons daily from wagons which wait patiently for their turn to unload, like hauling corn to the railroad depot in an Illinois prairie town. Muscats, Black Morocco and others bear berries an inch in diameter, each being a good mouthful of delicious eating.

To-day there have been touches of white frost in exposed places. The leaves on vines and maples are turning, and the woods and vineyards are aflame with red and purple colors. The first rain of the season, after more than five months of dry weather, has laid the dust and rendered out-door life more endurable.

Just now the late sorts of peaches, such as Smock and Salway, are in perfection. I often wonder why more are not grown. They are of good size and quality, and marketable at about twice the price paid for early fruit. Trees of the peach, apricot and nectarine are subject, as elsewhere, to diseases, exuding gum, with the annual loss of many branches. We find it best to head back, so as to keep the reproduced boughs near the trunk.

So far as our observation extends, the Burbank Seedling is the best potato here. Other localities may have better. The crop is light this year. Hops were a full yield and very profitable. Owing to the unusual rainfall of the past season, California raised bonanza crops, so that farmers and all others are experiencing unusual prosperity. People abroad, who only think of this State as a producer of the precious metals, will be astonished to learn that the yield of the gold and silver mines, say $25,000,000 yearly, is hardly a drop in the basket as compared with the proceeds of our other industries. The wheat and barley harvests alone were in the neighborhood of 100,000,000 bushels. The crops of raisins, wine, hops, fruit, lumber and dairy products are immense; while far overshadowing either one enumerated was the luxuriant yield of grass, of more intrinsic value than any when we consider the question of cheap food.

Competition has worked a revolution in the scandalous rates of freight long prevailing from Eastern points. It used to cost five cents a pound for stuff from Chicago to San Francisco, now the rate is about 25 cents per 100 pounds.

Those who read for amusement as well as for information sometimes like cold facts. The writer keeps a rain gauge, and gives the following statistics of the rainfall at Cloverdale, 80 miles north of San Francisco, at a point where there never is snow and seldom frost, and oranges, olives, and like tropical fruits are grown in perfection. For "the season" means beginning with the fall rains and extending to their close, about the first of the following May. During that time all the outdoor pursuits of a farmer's life are carried on almost without interruption; for it does not rain continuously more than in the Middle States. True, sometimes, but not often, there are two or three days of bad weather. Then, again, it may not happen during a whole season that plowing must be stopped more than one day.

Rainfall for Season of			1882-3.....	27.38 inches.
"	"	"	" 1883-4.....	28.77 "
"	"	"	" 1884-5.....	21.26 "
"	"	"	" 1885-6.....	46.65 "
Average yearly rainfall.....				31.01 inches.

which is about the same as at Santa Rosa, Healdsburg, and Napa. The temperature I do not give, as it varies little. The barometer we have no use for. It never rains in Summer, nor does it thunder or storm at any time.

The sketches of your fair correspondent, Mary Wager-Fisher, were fairly drawn and attractive. She is an artist of no mean ability, and knows what objects to place in the foreground. California as it is, if faithfully reproduced by the observer, presents many attractive scenes. But vine growing never, by any chance, yields $500 an acre profit. Somebody has imposed upon her credulity. The average product of grapes per acre, throughout, will not justify a higher estimate, one year with another, than $100 per acre. On account of the low prices of grapes this year, the average profit will be much less. But this is far more profitable than other kinds of husbandry. There are isolated cases, to be sure, in which this estimate is exceeded, as there are others in which it is too high. The equable climate within 100 miles of this coast, Summer and Winter, is the one thing which may be honestly recommended. It is the principal attraction—the solid basis of our prosperity. But an erroneous impression has gone abroad that the country north of the Bay of San Francisco is cold and inhospitable—wrapped in snow storms and wintry frosts. It is not so. There is no appreciable difference between the climate of Sonoma and Los Angelos Counties, owing to the influence of the Japan current, which tempers both. We also grow oranges, olives, figs, peaches, and in wine this is the second county in the State. The citrus show, held at Sacramento, last January, proved that Sonoma was not behind any other place in the variety and quality of her fruits. We certainly offer much cheaper land, and it does not require irrigation.

Cloverdale, Cal. J. B. ARMSTRONG.

THE Bohemian Grain and Cereal Company, of Ypsilanti, Michigan, has been operating quite extensively in Michigan, Western New York and other places in grain swindles, and its agent has just got into trouble in Rochester, New York. Like the other similar swindling schemes which have been fleecing the farmers for years, it sold wheat at $10 per bushel. As an inducement the company gave a bond to the purchaser in which they agreed to sell for him the following year double the quantity he bought, at the same price. Last year W. H. Clark, a wealthy farmer of Groveland, Mich., bought a large quantity of wheat on these terms. The company's agent called on him a month ago and sold the wheat to farmers on the same terms, retaining 33⅓ per cent. for his share of the profits and giving Clark notes for the balance. These proved worthless, and Clark followed the agent to Rochester, and intends to prosecute him criminally for swindling. Probably there is no other single species of fraud by which farmers have lost so heavily within the last few years as they have by these grain speculating concerns. They are managed in a very plausible way, and men of means and reputation have figured prominently in them; but they have, without an exception, lost in reputation in proportion as they have gained in means by their connection with the swindles. The Bohemian oats and several similar frauds entered largely into Ohio politics during the late election. Generals Robinson and Kennedy, on the Republican ticket, were accused of being interested in the schemes, and had they not indignantly denounced the charge and proved their innocence they would have been buried beneath a mountain of hostile votes. No man desirous of public confidence or of a reputation for common honesty should have any sort of connection with these swindling concerns.

HERE is a long list of humbugs that should be strictly avoided:....The "American" and European Search Service, Cincinnati, Ohio... "Professor" J. H. Armstrong, Philadelphia, Pa...."Prof." Lew H. Anderson, alias Garden City Novelty Co., alias "Lovers' Gazette," alias John Thomas & Co., alias Dr. McLean's Medical Institute, alias Welcome Guest, alias Madame Le Clare, alias Mrs. D. Thomas & Co., alias John Thomas & Co., alias Harrison Bros. & Co., 152 La Salle Street, Chicago, Ill.....Emil Bassett, alias Dr. Edward Nahtau Ganz, F. Theo. Eenck: Marsh, Bassett & Co., Norman Electric Light Co., Philadelphia, Pa....J. M. Bain, alias Campbell & Co., alias W. H. Griffith, alias "American Poultry Advertiser," alias Shepherds Nat. Journal and Rural Era," alias Common Sense Incubator Co., alias Chase Plating Co., etc., Zanesville Sago, Hyland Park or New Concord, Ohio.. . Boroff, J. F. & Co., Cincinnati, Ohio..... ....Crescent Art Co., Revere, Mass., alias 19 Central St., and P. O. Box 5170, Boston.... Crown M'f'g Co., alias Edw. W. Braton, 294 Vine Street, Cincinnati, Ohio....M. A. Dauphin, State Lottery Co., New Orleans, La.... ...."Dr." J. Flynn, alias "Dr." J. A. Lawrence, Brooklyn N. Y..T. S. Gardner, alias F. Album, alias Foreign Art & Loan Exchange, alias Ledger, alias Farming World, alias Ocean to Ocean, alias Cotton Belt, alias Chicago Farm Journal, Cincinnati, O., Chicago, Ills., or Memphis, Tenn.....W. H. Hale, "M. D.," alias Dr. Carson, alias Dr. Lightfoot, alias "Health and Home," 723 12th Street, N. W., Washington, D. C., now at 92 La Salle St., Chicago, Ill.....J. W. Harris. P. O. Drawer 5150, Boston, Mass....Edgar Jones, alias Youth Pub. Co., alias Home M'f'g Co., Wilds & Co., Tremont Jewelry Co., G. W. Ingraham & Co., Domestic M'f'g Co., 3 Tremont Row, 86 or 282 Washington St., 17 Batterymarch, corner Milk Sts., P. O. Box 3630, Boston, Mass., alias also Middlesex M'f'g Co., Ashland, Mass., Graham & Co., Walnut Hill, Mass., Sanderson & Co., Readville, Mass., H. Lee, Box 293 S. Framingham, Mass., Frederick Lowey, 90 11th St., Brooklyn, N. Y., and 96 Fulton St., Union Electrical Co., 131 William street, New York City..... Mich. Loan & Pub. Co., alias Farmers' Interior Magazine, Charlotte, Mich., alias Gaylord & Co. C. H. Gurney, alias Boston Cutlery Co., 23 Central St., Sheffield Cutlery Concern, or Knife Co., 155 Milk Street, alias International M'f'g Co., 18 Arch Street, Boston, Mass.,....Golden Specific Co., "Drunkenness Cured," 185 Race St., Cincinnatti, O. F. Millard & Co., aliases F. W. Hoyt, Decorative Art Works., N. E. Trading Co., Columbia Trading Co., Placque & Panel Art Works, Kensington Art Co., Industrial Co., and Carlton & Co., Boston; alias Royston & Co., and World M'f'g Co., Revere, Mass, alias also Royal M'f'g Co., Providence, R. I.... Royal Dominion, N. B., Canada Lottery, alias L. N. Beckwith & Co., St. Stephen, Can.... John Smith, Jr., alias A. L. Smith & Co., 197 or 242 or 280 Washington St., alias Great English Sterling Cutlery or Knife Co., alias Birmingham Knife or Cutlery Co., 45 Milk St., Boston, alias J. G. Simpson & Co., alias Birmingham Cutlery Co., Box 101 Faulkner, Mass.....Reliable M'f'g Co., alias Venables & Graham, P. O. Drawer 1503, 811½ Walnut St., Philadelphia, Pa. Also Globe M'f'g Co., alias Crescent Art Co., alias E. J. Venables & Co., Revere, Mass., and Boxes 5344 and 5170 and 19 Central St., Boston Mass.....W. F. Thompson, Washington, N. J.

CATALOGUES, ETC., RECEIVED.

A. W. STEVENS & SON, AUBURN, N. Y.—An illustrated circular of Stevens's French buhr-stone, corn and feed mill. This circular gives a full description of the goods made by this old established house, and in a straightforward manner, the reasons why they claim buhr-stone mills are the best and cheapest in the long run. They also make mills with bolting attachments for making marketable meal, a large-sized corn-sheller, engines and thrashers. An illustrated descriptive circular will be sent to all RURAL readers on application.

KELLOGG'S ROYAL SALT.—We have spoken of this preservative several times, but the more carefully we examine it the better are we satisfied as to its good qualities. We have made several tests with it in our own dairy, and in every instance it has done all that was claimed for it. Butter preserved with it is certainly superior to that kept for the same length of time with common salt. The action of this preservative is a chemical one. It arrests rancidity, and is, so far as we can judge, harmless to health. It seems probable that this salt will prove of great benefit to Southern dairymen. Dairying at the South is rapidly developing. Heretofore the greatest drawback has been found in the difficulty in securing a temperature low enough to keep the butter properly. Either ice must be imported or manufactured at a great expense, or deep caverns must be dug into the earth for storage rooms. This butter preservative promises to lessen the expense of storage for Southern dairymen. Experiments have fully proved its ability to preserve butter under the most trying circumstances. Southern dairymen will do well to give this preservative a fair trial. The office of the company is at 384 West Eleventh Street, New York.

JOHN SAUL, Washington, D. C., Wholesale Catalogue of Fruits and Evergreen and Ornamental Trees, Shrubs, Greenhouse Plants, Roses, etc. A first-rate general list.

Woman's Work.

CONDUCTED BY EMILY LOUISE TAPLIN.

A THANKSGIVING.

LORD, Thou hast given me a cell,
Wherein to dwell;
A little house whose humble roof
Is weather-proof;
Under the sparres of which I lie,
Both soft and drie;
Where Thou, my chamber for to ward,
Hath set a guard
Of harmless thoughts, to watch and keep
Me while I sleep.
Low is my porch, as is my fate,
Both void of state;
And yet the threshold of my doore
Is worn by the poore,
Who thither come and freely get
Good words or meat.
Like as my parlour, so my hall
And kitchen's small;
A little butterie and therein
A little byn,
Which keeps my little loafe of bread
Unchipt, unflead;
Some little sticks of thorne or brier
Make me a fire,
Close by whose vir coals I sit,
And glow like it.
* * * *
All, these and better, Thou dost send
Me, to this end,
That I should render, for my part,
A thankfull heart;
Which fired with incense I resigne,
As wholly Thine;
But the acceptance, that must be,
My Christ, by Thee.

Robert Herrick, 1674.

THE COMPLIMENTS OF THE SEASON.

WHEN those Pilgrim Fathers, whom we love to honor, decided, in their stern piety, that Christmastide was a Romish superstition, if not a relic of heathenesse, they only carried out the spirit of rigorous religion, which was the very bone and marrow of the struggling colony. But Puritan nature is human nature after all, and in default of pagan's Saturnalia or churchman's Holy Nativity, they made a new feast of good will to men—Thanksgiving Day.

We always felt a warm pity for the children of Pilgrim Fathers. Poor little square-toed victims, they never hung up their sad-colored hose in the ingle nook; they were totally unacquainted with Santa Claus, and careless of the red-berried holly, while mention of the mystic virtues possessed by the sleek mistletoe would have caused a thrill of horror in that pious community.

But once a year, let us hope, the stern elders unbent; once a year the little victims were allowed to forget the whole duty of man, and after a decorous public thanksgiving in the bare meeting-house, there was the feasting and gayety we always connect with the season. So, with many another legacy, the old Puritans have left us this—our oldest national holiday. It is—it should be—the happiest of holidays, for Christmastide is a solemn gladness, out of tune with careless merriment. Mayhap we feel as if we had not very much to give thanks for;—our pet plans have miscarried, or our worldly affairs are unprosperous; perhaps some heavy grief or loss makes the thought of thankfulness harsh and discordant. But there must ever be some cause for thanksgiving, "for our creation, preservation, and all the blessings of this life," as the church liturgy says.

Yes, the occasion is a happy one, but with a slight touch of solemnity, as befitting the balancing of our mental and moral accounts So, with the hope that the Thanksgiving side will weigh the heavier, inasmuch as we all alike find cause for gratitude, we end, like Dickens's Tiny Tim, "God bless us, every one."

THREE THANKSGIVING DAYS—THE STORY OF A SPRING FRESHET.

THE PROFESSOR.

"To be sure I'm goin' up to 'Hampshire for Thanksgivin'. You folks down here to York are mighty clever 'n all that sort o' thing, but horses couldn't keep me away from home on Thanksgivin' Day;" and so saying Aunt Tildy Jenks adjusted her spectacles, settled the strings of her cap and folded her hands in her lap.

"No! no! There's not been that day in any year, for now nigh onto sixty when the Randses and our side of the Doolittles hasn't all met and dined; though let me tell you they make a crush in the biggest house in the Mosquasset Valley. Three of what the literary writers call eventful and providential anniversaries to me fell one arter another in '27, '28 and '29, and they will be celebrated as long as our folks continner to exist around New England."

"The Mosquasset River has got a modern name in the geographies now-a-days, but I don't mind that, for I like the old names and the old times best, and I do wonder why these legislater chaps, with all their innervations,

don't change the name of the Merrimac, into which the Mosquasset falls. It was aloug in the twenties when Sam Rand, old Bijah Rand's oldest boy, was about twenty-three years old. But maybe you'd rather go shoppin', now you've all got your good clothes on, than hear me yarn about somethin' you ain't so much consarned in as I am."

"We will none of us move, Aunt Tildy," was the almost simultaneous reply of the girls, "until we've heard the story."

"Well, well, if so I'll go on, for I'd jest as soon be talkin' as rockin' or knittin', all alone. As I was sayin', plain Sam Raud was about twenty-three, and he was powerful in love with Samanthy Doolittle, who was only a year or two younger, an' the prettiest girl in the valley. Sam an' Manthy had allus been friendly an' intimate an' allus called one another 'cousin,' 'coz old Bijah Rand had married Manthy's aunt Mercy, for his second wife an' Sam an' Manthy wa'n't no blood relations at all. But for all Sam's goodness Manthy didn't seem ever to fancy him in the marryin' way; an' when Markis Rellins Pugsley come home from college an' studyin' law to stay a spell 'fore he set up an office in Manch'ster, an' bein' a real good-lookin' feller with no end of smooth talk, he just walked into Manthy's affections, an' the first thing the town knowed they was engaged to be married."

"The Doolittles was delighted, for old man Pugsley was a member of the legislater an' great things was prophesied of Mark. An' I guess the Pugsleys wa'n't much put out, for Manthy's father was the richest man in the valley, kept store, was postmaster, an' had a mortgage on the Pugsley farm itself."

"So things run on an' Sam never let on that anythin' was the matter with him, for he was allowed to be the pluckiest an' best-hearted young feller in them parts. But he took it to heart an' grew quiet-like, an' worked eighteen hours a day to engage his attention an' keep hisself from broodin'. Well, the weddin' day was set for sometime in May '24, an', in early April, Mark Pugsley come over from Manch'ster, to do his final courtin' an' get things proper for marryin'."

"Manthy had been over to Jenksville, that was named for my dead husband's grandfather, on the northside of the Mosquasset, to take her girl's leave of some cousins an' schoolmates, an' was expected home on the follenin' Sunday. The river was runnin' pretty high with the Spring freshet, but nothin' more'n usual was thought about it till Sunday mornin' when the banks was dreadful full an' some ice comin' down, and the ricketty old bridge below the mill was sufferin' from the shocks, an' Sam Raud suggested some one should go over an' stop teams comin' across into the village, though two or three early teams had already crossed to church. But nobody caught the idea that Sam was afraid of Manthy's comin' an bein' in danger on the old bridge. As for Sam he thought some one else should do the lookin' out for Manthy, an' reckoned it would be counted interferin' if he went over, an' so he went to church. The minister was just givin' out the last hymn, and the people all on 'em ready for their dinners when Abram Stickney's boy ran in an' shouted, 'The old bridge's gone an' Bill Doolittle an' his sister's drowned.' That last hymn was never sung."

"In less'n two miuntes the hull congregation was on the river bank, an' the situation of affairs was thrillin.' Down stream about a hundred yards was a rock about as big as a house, flat, an' ordinarily about six feet out of water, but now not more'n two. Agin' it was the wagon an' the two hosses, but slowly edgin' around to foller the current. Young Doolittle had crawled onto the rock, an' was tryin' to pull up Manthy, a good lump of a girl, from the bottom of the wagon, in front of the seat, where she had fainted. But it could easily be seen it wa'n't no use of his strivin'."

"Mark Pugsley allers let on that he was the best swimmer an' runner an' ball-player in the valley, havin' as he said, been boss of the college in them departments of larnin' but they didn't seem to hold him in stead that Sunday mornin', for he stood shiverin' an' blubberin' on the bank, implorin' some one to save his Manthy. It takes times like that to show what's in a man. Sam Rand didn't say a word to nobody, but jest quietly run up the bank a hundred steps or so, an' throwed off his coat an' vest an' hat, an' jerked off his boots, and slipped into the water. It was a tough work, but Sam Rand was a strong an' hardy young feller, an' his heart an' muscles was both at work on that occasion. He swum eatin' across the stream, sometimes swirled around by the current an' sometimes swept down by a chunk of ice, but though in deadly peril, his curly head an' broad shoulders would lift above the water agin, and the folks on the shore, some shouted an' some prayed as they saw him grasp the tailboard of the wagon an' pull himself in. The hosses were out in the stream an' the wagon just tremblin' on the extreme corner when Sam raised Manthy, throwed her over one shoulder an' slipped out on the inshore side, jest as the wagon an' team fetched loose from the rock an' disappeared. It was 10 good minutes, though it seemed an hour, afore a thousand willin' hands, at the point on the turn of the river about 60 rods below, was reached out to take the two chilled and drippin' bein's to land. Without sayin' a word, Sam started on a run agin' up the bank, refusin' the proffered hands of everybody till he came to where he had first gone into the water, where stood his good old father with a tearful eye an' outstretched arms."

"Manthy had come to, an' was cryin' in the embrace of her mother an' sisters, when Mark Pugsley came up, smilin' as wide as a bullfrog takin' in a fly. 'Thank God,' he says, 'you are saved, my Manthy.' An' he offered to take her away from her mother, But old Mr. Doolittle's blood was up, an' he stepped between em, with an ugly look on his not over handsome face, an' he says, 'Not so fast, Mr. Pugsley; things has taken a different turn, an'if we can't do Manthy's pettin' and carin' for hereafter we'll send for the man that has the next best right to us,' he says.

"Bijah Rand wan't a drinkin' man, but when he saw Sam go into the ice-cold water he was jest thoughtful enough to step right across the road to Bill Weymiss' tavern an fetched out a bottle of licker without sayin' a word or offerin' pay; an' when Sam had come back, as the old man knew he would, to where his clothes was, the bottle was pinted right at him. He didn't offer to take it. 'No father,' he says, 'the boy is on the rock, an' it'll be under water in less'n fifteen minutes, an' I won't take any of that stuff till I've brought him ashore.'"

"That startled his father. 'Don't you go agin', my son,' he says, his voice all broke an' husky. 'You've done your duty like a man, an' all a man could be expected to do. Take a drop of licker, pick up your clothes an' come home to your bed.'"

"Sam only shook his father's hand, pushed the proffered bottle aside, an' before the old man could stop him, was in the stream again, now runnin' harder an' faster'n ever, an' fairly ri-in' by jumps. The people held their breaths, an' stood like statures, an' ag'in a cheer went up, an' thanks to Providence, as Sam drew himself onto the rock, which was only a foot out of water, to rest a spell, an' young Doolittle was seen to put his arms about Sam's neck an' kiss his rough, brown cheek. There was mighty few dry eyes on the river bank."

"Then Sam slipped into the water, made some motions to the boy, who let go the rock an' put his hands on Sam's shoulders, an' with half-a-dozen of them brave, strong strokes they was out in the parted river an' dartin' down stream. Just as everythin' seemed to be goin' well, an' hearts on shore was beginnin' to beat ag'in, the cry came from the abutment of the ruined bridge, 'The Whitney dam has broke!' In an instant the water rose full five feet an' went roarin' along a merciless torrent. The mass of water struck Sam Rand an' he an' the boy disappeared. But only for a minnit. Up they came an' close to shore; so close that the current didn't seem to affect 'em much, when all of a sudden a great, heavy, black timber fairly leaped out of the water, an' in fallin' it carried young Doolittle down the stream, and Sam Rand, throwing up his hands, was seen no more."

"There was mournin' in that village then for a good long year. Everybody found words of praise for the brave an' hearty boy that was gone, an' the folks wouldn't let the Rand family put up a gravestone for Sam, but the public raised a big lump of money an' they erected a monument on the town square, which was inscribed to his memory an' had the motto 'May all New Hampshire's sons emmylate his example when danger lowers or humanity calls.'"

"In the Spring of '27, old Mr. and Mrs. Doolittle died, an' Manthy went over to Bijah Rand's to live, for him an' Mercy said she would in some sort take the place of the boy they had lost, it now seemed like an age ago, an' things was all settled down in the valley. There hadn't been no Thanksgivin' in the Rand family since Sam was drowned. They said they wa'n't a goin' to fly in the face of Providence, but it didn't seem, yet, as though they had anythin' to be thankful for. Mark Pugsley had soon found out how his neighbors regarded him, an' he had gone to Manch'ster, an' then to the bad through drink, an' some say disappointment. But I don't believe he ever had heart enough to be disappointed. However, in the Fall of '27, the Rands made up their minds they would have a Thanksgivin', an' all things was fitly prepared, an' when the day came round, there was about 20 collected at old Bijah's. There had been some cryin' done, as one after another dropped in, but along about three o'clock, an' it was a beautiful November day, bright an' sunshiny an' cold, the atmosphere in the house was about as clear as it was out doors, an' dinner was announced by one of the Weymiss girls, who had come in to help at table, bein' used to it in her father's tavern."

"Sally Weymiss knowed Sam Rand well, an' had had hopes, so the neighbors said, but maybe only liked him in a friendly way, an' grieved some at his loss, but bein' no relation had got over it, an' almost forgotten him, bein' engaged to a Jenks from Jenksville. Well! she said, 'diuner is ready,' and went out of the settin' room into the hall, when she screamed out, loud enough to hear over to the church and back, 'A ghost,' an' went down, bang, onto the floor in a faint. Everybody rushed out, an' then stopped rushin', for there stood Sam Rand in the open door."

"Bijah Rand was white as a sheet, but he walked out as steady as on trainin'-day an' said: 'It is my son: come back from death or still alive, here is where he belongs.'"

"'Not dead, father, but till jest six weeks ago I most wished I was,' an' then the strong men's arms were about each other, an' the sobs that rose in their breasts were not of sorrow neither. It wasn't the return of a Prodigal Son, for Sam was always a good boy and thoughtful, an', quite properly, his father's pride."

"The news spread like wild-fire, an' that evenin' they had to open the church where Sam, an' his proud old father, an' Mercy Rand an' Manthy had a regular what you call now-a-days a grand reception."

"He wasn't drowned then? Of course he wasn't, but poor young Doolittle was. The timber that killed the boy saved Sam, for as it was a passin' him, he grabbed it an' got astride a bit after it had swept around the turn, an' rode it clean down to the Merrimac River, a good 12 miles. When he was taken ashore, he started right back for home, but hadn't got more'n a mile when he thought to himself 'Well, now, I've saved Manthy for Mark Pugsley's wife, an' there's nothin' left there for me. They won't expect me to come back after bein' struck by that timber, an' 'll think me dead. They've got to mourn for me sometime, I suppose, an' it don't make much difference if they do it now, as well as then', an' so he turned his face to the southward. In the three years he was gone, he come here to York, an' bein' steady an' clever, fortune favored him; an' what with inventin' some new fixin' about a wagon, an' a way to make bone buttons, an a sellin' of a part interest, Sam was a good deal better off 'n if he had come home from his first navigatin' experience."

"As he said, about six weeks before he was down on one of the wharves when a vessel came into York from Portsmouth an' along shore, an' the first man Sam sees was Hiram Pendergrast Doolittle, mate, an' Manthy's second cousin on her father's side. They didn't chat very long afore Sam knew how the land lay up in New Hampshire an' had found out there was room in his father's house an' Manthy's heart for him."

"Of course, you know the rest. Next Thanksgivin' Day Sam and Manthy was married, an' the next I was born. Yes! I'm the oldest an' only child of Sam an' Manthy, an' seem to feel that them three Thanksgivin' Days has made a sort of claim on me to be up at the old Rand place in Mosquasset Valley on Thanksgivin' Day as long I'm alive."

SOME WAYS AND THINGS AT THE RURAL GROUNDS.

ALICE BROWN.

THE readers of the RURAL are already familiar with many things concerning this quiet country place. They know of its trees and shrubs, its flowers, and fruits, the experiments carried on within its limits, and they have read, year after year, the writings of its owner. More interesting than these because controlling and originating them, are the family, and their thought, study and work. The same questions that come to hundreds of other homes, come here to be answered, and are met fearlessly if not always successfully. Let what may of blunders and mistakes be found in a home, if it is full of affection and a spirit of earnest striving after what is noblest and best, it will be a true home.

The members of the household here are Mr. and Mrs. Carman who are already known to the RURAL readers; Cerise is the only daughter, a bright, thoughtful, blue-eyed girl, not quite thirteen. Travers is the only son, and very proud to have passed his seventh birthday, he has under his tangle of light-brown curls a mind full of awakening thoughts, and a child's eager, wondering questions.

The children study at home and are my pupils. The house is small to contain, as it does, the little school, an office for editorial work, and during the Winter the work and workers incident to the preparation of the Free Seed Distribution. There are two parlors, a hall, dining-room, kitchen and wash-room on the first floor. Three bed-rooms, the office, and a hall with a little room at each end, on the second floor. The cellar extends under the whole house. The grounds immediately around the house are about two acres in extent. In their midst is a little lake full of living springs. Around the margin of the lake are grouped and clustered trees and shrubs that droop their branches toward the water as though they love it, and in their shade grow some of the delicate native flowers and ferns.

A rowboat and a canoe float upon the surface of the lakelet and at its inlet a rustic bridge spans the water, and forms part of the carriage drive. West of the lake are the barn and poultry yards, sheltered by old apple trees, and beyond and beside them lie the vegtable garden, the grape-vines, the blackberry, raspberry, currant and gooseberry bushes and the strawberry beds. Around the house, which is east of the lake, are most of the rare trees and plants that have been selected from the thousands that during past years have been tested here. Rustic seats in shady retreats and vine-covered arbors offer pleasant resting places, but a plain, red, wooden chair and a little low bench under the Yellow-wood tree in front of the house attract Mr. and Mrs. Carman oftenest.

This is a real country home, one mile from a railroad station and post office, less than 20 miles from New York, and as free from city conventionalities as from city noise and confusion. It is not a place of summer residence and winter neglect, but a home all the year and all its members love the country and nature, in all their changes and seasons.

Having given a glimpse of the surroundings of the home and its inmates, something of its life may be interesting when Mr. Carman puts aside editorial work to talk of other subjects, and Mrs. Carman, after collecting recipes, preparing "copy," studying, attending to the little boy's wants, and setting all the household in order, finds time to entertain us with music, or to join in the walks and the games that are a part of the pleasure of country life.

Domestic Economy

CONDUCTED BY MRS. AGNES E. M. CARMAN.

BE thankful those of you who have been spared troubles during the past year, and let those who have suffered be thankful that things were no worse.

THANKSGIVING DINNERS.

THERE is not much variety in Thanksgiving and Christmas *menus*. So long as there is an abundance of the time-honored dishes, well-cooked, both hostess and guests are satisfied. The orthodox soup is oyster, although a bisque of clams or a thin tomato soup is appropriate.

A very nice oyster soup that may be new to some of the readers of the RURAL, is made as follows: Cut the blanched parts of a bunch of celery into dice, and cook until tender, but not watery, in a pint of slightly salted water; take out the celery with a strainer, add the liquor from a quart of oysters, and skim until clear. Put in the oysters, and as soon as the beards begin to open pour into the tureen into which you have previously put a pint of boiling milk, and butter the size of an egg. The seasoning should be added just before the oysters are put in. The celery may be served with a white sauce as a vegetable.

The turkey, which "some like baked, and some like boiled," is essentially an American institution. It is one of the things that we do not owe to our "mother country." I was much amused recently at a conversation at the hotel table between an Australian Englishman and an American. The former was greatly surprised to find that Americans knew of such a dish as roast turkey, and was completely paralyzed when told by the latter that the turkey was a native of this country, and that Benjamin Franklin wanted it for the national emblem, instead of the eagle, because of its nativity.

For the highest gastronomic effects, it must be a young hen turkey, killed after a fast of 24 hours, and if the weather is cold, allowed to hang four or five days before cooking. If just before the sacrifice you give the victim a spoonful of the best vinegar, it will "die gamer," that is the meat will be whiter, tenderer and sweeter. Of course, you know how to clean and truss the bird—at least you do if you read the RURAL last November—so we will proceed at once to the dressing. To half a pound of the sweetest bread crumbs, add half a pound of boiled mashed potatoes, a quarter of a pound of the best butter, sweet marjoram, summer savory and salt, pepper and a little grated nutmeg by way of seasoning; a small portion of the best sausage meat, chopped mushrooms (if you can get them,

about a quarter of a pint can), a few boiled chestnuts reduced to a paste, and the grated rind of one lemon. The mushrooms will add a crowning and superb relish to your turkey, not to be obtained by any other means. Baste frequently while roasting and allow at least two hours for a ten-pound turkey. When it is done to an elegant brown color, place it on your largest and handsomest dish, and serve with the rich, brown gravy sauce made of the drippings.

You will have celery, the whitest and crispest, and ruby jelly, with your turkey. For vegetables you can scarcely do better than to serve mashed potatoes, also browned sweet potatoes after one of the recipes recently given in the RURAL. A chicken pie, a pair of roast partridges or a roast of beef may be placed at the other end of the table if you care for greater profusion, but you will by no means miss the pie of a Thanksgiving dinner—pumpkin. The pumpkin should be strained through a sieve or colander, and for every pint of this allow a pint of rich milk, or, better still, of cream. Five beaten eggs, cinnamon and ginger for spice, and brown sugar for sweetening. Bake in deep dishes lined with paste.

A very delicate dessert to close the dinner can be made by any one possessing an ice-cream freezer. Boil one quart of milk and stir into it a full teaspoonful of arrowroot, moistened with milk. When smooth pour it over the well-beaten yelks of six eggs, stirring hard. Add strawberry preserves, any kind of brandied fruits cut small, bits of fruit cake, sliced citron and orange peel, stoned raisins and currants. Sweeten to taste. Flavor with vanilla, freeze as ice cream. Mold in a melon-shaped mold. After turning out the pudding, spread over it the whites of the eggs whipped to a stiff froth, with a little sugar.

PALMETTO.

THANKSGIVING CRUMBS.

How long ago it seems since that first harvest of the New England colonists in 1621, when Governor Bradford instituted the first day of Thanksgiving with praise and prayer. One can well imagine the primitive manner in which it was observed, and that the vintage was of wild grapes; "white and red, very sweet and strong also," wrote J. E. Winslow in that first year. Now with the vast and varied crowd that are mingled in this wonderful America, the day seems simply a holiday—a breaking away from regular duties, and sometimes a reunion of families—and in this way it becomes sacred. How the children enjoy its appetizing odors and savory preparations. There is a flavor to Thanksgiving that no other season possesses, and it comes in the dreariest month of the year to brighten and beautify it. For the trees are bare and leafless in many parts of the country, there is snow in the air, and a prospect of gloomy, colder days. So Thanksgiving, with its cheery hospitality, is doubly welcome, and why need I tell the housekeeper how to prepare the turkey or the mince and pumpkin pies? Did she not learn it from her mother, and she from her mother away back ever so far? But the boys have been after partridges, and if by any chance another housewife has a crowd of sportsmen in her house, it may be useful to know how to cook the delicacy in various ways when the game bags are full. If baked, tie a thin slice of bacon over the breast of each bird, put them in a baking dish with a little hot water, and cover closely; cook for a quarter of an hour, then take off the cover and the bacon and put into the oven and cook "a handsome brown." Serve with currant or grape jelly. Another method is to prepare them like fried chicken, making them into the form of cutlets, and fry, after dipping them in fine cracker crumbs. These gamy little birds make a nice variety in the Thanksgiving dinner, and add flavor to it by the pride the youthful sportsmen take in being good shots, and in adding a choice morsel to the larder. And let there be plenty of fruit at this festive dinner—ripe apples and grapes are cheap and wholesome. Those who cannot grow can buy these necessary adjuncts to success, for there is less danger of hankering after forbidden fruits if the table is kept well supplied with those that grow in this wonderful country, of which all should share on Thanksgiving Day.

ANNIE L. JACK.

ONE WINTER.—II.

ANNE THRIFTY.

ONE of the boys always wiped the dishes for me while the other brought in wood and coal in the morning, and helped at the cow stable in the evening. While I put the kitchen in order and tried to answer Bertie's questions on every subject conceivable by his inquiring mind, I was turning over in my own mind what we could have for the Thanksgiving dinner, and had decided on a part of its details, when Uncle John and Sammie came in from the stable and we gathered in the sitting-room for the evening. The darning and mending usually occupied my evenings, but men and boys having no accomplishments corresponding to the needlework we must be so devoted to, uncle had a kindly fashion of entertaining us with stories of his life as a soldier in army blue, and of later experiences among the pioneers in the West. He loved his two boys with all his heart, and since their mother's death his care over them had become more tender and thoughtful, and I often thought that he felt the pinch of poverty chiefly through their wants. In every way in his power he tried to make home happy for them, and his stories were appreciated and begged for if he failed to volunteer one.

After the boys had listened breathlessly to an account of a narrow escape from flying bullets when their father was the sole target for a whole volley from the guns of the gray coats, they hurried to bed, racing to see which would be undressed first and ready to shout good-night to the other. This was a habit of theirs, and each boy kept a careful account of the number of times he beat his brother, and at the end of the week the boy who had beaten oftenest claimed the right for the coming week to sleep in the "big bed," as they called it, instead of the cot. After they were quiet I told Uncle John of my plans for the coming holiday dinner, and asked for suggestions and advice. He gave me both and a dollar besides. My ideas broadened with the extra money, and I suggested what I had not felt we could have before, namely, a few friends, just two or three to share our dinner. We were living among people who, like ourselves, found it hard to make a little go a great way, and we decided to invite a family living just around the square, consisting of a young man, his wife and mother. They had been very kind during Aunt Helen's last sickness, and Uncle John wanted to show his gratitude to them. We then discussed the dinner in all its details.

The best dishes, silver knives and forks, large tablecloth and dinner napkins, that had been packed away for months, were to be brought out and two leaves added to the extension table.

Part of the dollar should go for a small fresh ham to be roasted in my best style, and its tender white meat should take the place of turkey. Uncle John advised buying the bread, and doubting my skill in that line I accepted his advice. I wanted cranberries, but they were high and scarce that Winter, so I did not mention my wish, for I had decided to make some sauce from tart apples and give it a holiday air by rubbing it through the colander and sprinkling over it five cents' worth of round, red candies. The potatoes should be mashed, put into the vegetable dish and browned in the oven. A dish of squash and one of tomatoes should be seasoned to perfection, and to end the dinner a pan of apple-dumplings to be eaten with cream and sugar should make the happiness of the boys complete; for they thought apple dumplings "the best things Cousin Anne ever made." Apples were cheap, and having our own milk we could have the luxury of real cream for this occasion. As I made butter from our one cow, after using part of the new milk for the breakfasts, we could not have cream every day. Having planned the dinner so it might be an unusual treat for the children, my thoughts turned to our guests and plans for their entertainment during the afternoon. I was not used to entertaining and fell asleep with a troubled vision of myself vainly attempting to make our guests enjoy themselves.

OUR THANKSGIVING PIE AND OTHER THINGS.

IN making my pie I am very much like Aunt Chloe, I just put the "gregenses" together and stir it a little; but I will try this once to give you the recipe, as you have asked for it. First you must have good ripe pumpkins, well stewed, and rubbed through a wire sieve. Take one cupful of pumpkin, one-and-a-half cup of rich milk, one egg, and sugar to suit the taste; spice with ginger or cinnamon. When ready for the oven, put small lumps of butter over the top; bake well. Never hurry a pumpkin pie out of the oven, but let the crust bake well through. If you have plenty of eggs, use two instead of one, and less pumpkin, and the flavor will be more delicate. Such a pie as this will grace our Thanksgiving feast this year. In planning the dinner for that day most people think of the turkey first, but I say first be sure of the very best bread and the sweetest butter.

Our dinner will be plain this year. I shall have one of my own turkeys that will weigh about 15 pounds, sweet potatoes, boiled 20 minutes, then baked to a light brown; white potatoes boiled and mashed and seasoned with butter and cream, then beaten with a spoon until light; turnips boiled, mashed and seasoned with butter, pepper and salt; pumpkin and mince pies, plum sauce, hot slaw, celery and cucumber pickles. We will eat this dinner not later than 12 o'clock, laugh and talk while we eat it, to aid digestion, and after dinner have a candy pulling, in which young and old will join.

MRS. WALDO F. BROWN.

Do you sift your coal ashes? It pays.

By thankfully accepting the half loaf we may one day possess the whole.

Another way to economize in light is to keep the lamps in perfect order. Empty out the oil and wash the inside of the lamps occasionally; wash the wicks when they become clogged with sediment or use new ones; trim the wicks evenly; boil the burners in soda water every two or three weeks; keep the chimneys clear; have a stated time for cleaning the lamps and don't spill the kerosene.

THANKSGIVING RECIPES.

CHICKEN PIE.

Joint and boil two chickens in salted water just enough to cover them, till they are nearly done. Line a good-sized earthern or tin pan with crust, put in the chicken, adding thin slices of broiled salt pork, say one-half pound of it; season it well, dredge in a little flour, add enough of the liquor it was boiled in to fill the dish. Cover with quite a thick crust, pinch down the sides well, cut a slit in the middle of the top crust and bake nearly an hour in a good oven.

PUMPKIN PIE.

STEW your pumpkin the day before you wish to make your pies. Peel and cut it up just after breakfast. To a good-sized pumpkin put a small cup of water in your kettle before putting in the pumpkin. Let it cook slowly at first, and you will find it watery enough, then cook faster, stirring often, and boil it down until it is very thick and rich. If cooked in iron or tin (I always stew it in a porcelain kettle) turn it into an earthen dish to cool. Strain through a colander and proceed according to the directions found below.

Many only boil the pumpkin like potatoes, and skim out of the water, and mash, but pies made thus never taste as nice as when the pumpkin is well stewed down and the juices preserved. To one quart of strained pumpkin add three quarts of rich milk, one teaspoonful of salt, two of ginger, one teaspoonful of powdered cinnamon, one grated nutmeg, and a little mace, six or eight well beaten eggs and sugar to your taste. Bake with a bottom crust and rim, until solid in the middle.

AUNT EM.

MONEY MATTERS IN MARRIED LIFE.

The London Queen says that harmony is essential to the happiness of married life. Hence it follows that all causes of aggravation should be carefully avoided, and as nothing so frequently creates dispute as the discussion of money matters, it results that a good system of expenditure is necessary to the happiness of married life. There must be division of labor in the management of the income, and division of responsibility and privilege in the ownership. It is unfortunately true that men are apt to be unreasonable in money dealings with their wives, daughters and sisters. They have so thoroughly accepted the popular fallacy that women are extravagant, that their first impulse is to oppose every request for money. Most women are ready to believe this of men in general, but many a young wife imagines she has married the one exception to the rule, and therefore readily gives in when her first request for an allowance is answered by: "All that is mine is yours, and I will always give you all you ask for." If such a speech is followed up by the offer of a check book, with leave to draw to an almost unlimited extent on the husband's account, then an exceptionally conscientious and business-like woman might manage very well, without risking the peace of her household or the solvency of her husband. But it is more likely that he may mean her to personally ask for each separate sum she wants, and she will probably find that he is decidedly galled by frequent appeals for funds; indeed, the more careful the wife is, the less likely is it that such an arrangement will work well. If very anxious to be economical, she will probably ask for too little at once, and these constant driblets of expenditure will make more impression on his mind than rarer requests for larger sums. Besides, a man who would like such an irregular system, or want of system, would be sure to be unbusiness-like and not to keep accurate accounts, so that the wife would run the chance of being supposed to spend much more than she really received. Even the very best and most truly just men are worried by appeals for money, and all require to be watched carefully, so that they may be taken at the right moment. Every wise wife will, therefore, endeavor to persuade her husband to at least give the plan of an allowance a fair trial to promote family happiness.

Miscellaneous Advertising.

Worth Knowing.

THAT, as a household remedy, for children and adults, Ayer's Pills are invaluable.

THAT, in Colds, with headache, backache, coated tongue, symptoms of fever, and a constant feeling of weariness, Ayer's Pills will often effect a cure when other remedies fail.

THAT these Pills are sugar coated, perfectly safe to take, do not gripe, and contain neither calomel nor any other dangerous drug.

I have used Ayer's Cathartic Pills in my family for the past thirty-five years. For stomach or liver troubles, or any irregularity of the bowels, and in case of Colds, Ayer's Pills are unequaled. I am never without them.—Frank Tisdale, Montpelier, Vt.

Ayer's Pills,

Prepared by Dr. J. C. Ayer & Co., Lowell, Mass. Sold by all Druggists and Dealers in Medicine.

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SHERIDAN'S CONDITION POWDER is absolutely pure and highly concentrated. It is strictly a medicine to be given with food. Nothing on earth will make hens lay like it. It cures chicken cholera and all diseases of hens. Illustrated book by mail free. Sold everywhere, or sent by mail for 25 cts. in stamps. 2½-lb. tin cans, $1; by mail, $1.20. Six cans by express, prepaid, for $5. I. S. Johnson & Co., P. O. Box 2118, Boston, Mass.

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Do not require one-quarter as much tuning as Pianos generally. Descriptive Catalogue by mail.

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W.L.DOUGLAS' $3.00 SHOE

CONGRESS, BUTTON and **LACE**, all Styles of **Toe.** Best shoe for the money in the world, and equals those usually sold for $5 or $6.

$2 $1.75 FOR BOYS.

Same styles as the $3 shoe. Carefully and substantially made, and gives a stylish Boy's Shoe for $2. If your dealer does not keep them, send measurements for either as below, enclosing price, with 10 cents extra. If you desire them registered. No charge for postage.

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Instep..... —— "
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Length of Foot.. —— "
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Style of Toe.....

Narrow (capped), London (medium width, with cap) or French (wide, without cap.) (Name Style.) Measure foot with stocking on, using a tape measure or a thin strip of paper, being careful to get in fraction of an inch. State whether you want them tight or easy, and give size usually worn. By following directions carefully you will get a fit equal to a Custom Shoe, *and at one-half the price.* **Be careful** to give full mailing directions. See that each Shoe is stamped "*W. L. Douglas $3 Shoe. Warranted.*" None others are genuine. Address

W. L. DOUGLAS, Brockton, Mass.

ON 30 DAYS' TRIAL.

THIS NEW **ELASTIC TRUSS** Has a Pad different from all other. Is easy shape, with Self-adjusting Ball in center, adapts itself to all positions of the body while the ball in the cup **presses back the intestines just as a person does with the finger.** With light pressure the Hernia is held securely day and night, and a radical cure certain. It is easy, durable and cheap. Sent by mail. Circulars free. EGGLESTON TRUSS CO., Chicago, Ill.

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News of the Week.

HOME NEWS.

SATURDAY, November 13, 1886.

THE strike at the Chicago packeries is still in force, though there are strong expectations of speedy settlement by arbitration. The packers will not yield the eight-hour demand, although the men are willing to make a proportionate reduction in wages and to work over-time at the daily rate to make up the deficiency—it's the eight-hour principle they contend for, certain that they can get the 10 hours' pay soon. Agents of the packers have been hiring men in Boston, New York, Philadelphia and other Eastern cities to take the places of the strikers, and hundreds have been shipped West. Some of them deserted at Chicago owing to the persuasions of the strikers; but most of them are at work. Two regiments of State infantry and one of cavalry together with several hundred Pinkerton detectives guard the packeries and the "scab" workmen. No heavy rioting, but many deeds of violence and outrage. Whenever crowds of strikers could attack the Pinkertons or non-union workmen, they have invariably pounded them unmercifully. Business very sluggish as the new hands are a "poor lot." Many of the old hands are nearly starving, as they had saved nothing and the stores refuse credit. Much suffering to the men; much injury to the packers; much lost to the meat producers and consumers, especially the former..... The evidence in that St. Louis Adams Express robbery case so far as made public goes to prove that the messenger, David C. Fotheringham, was an accessory, or at least a willing victim in the affair.....Surveyor Beattie, of this port, who was shot by a discharged Custom-house employé last week, is out of danger. The would-be assassin is held for trial. .....The feat of jumping from the Suspension Bridge into the Niagara River, a drop of 195 feet, was successfully performed Sunday by Larry Donovan, who recently jumped from the Brooklyn Bridge. Broke some ribs and was nearly swept into the whirlpool by the fierce undertow.....At Lacrosse, Wis., the Law and Order League have compelled the authorities to enforce in their entirety the Sunday laws of the State. Great inconvenience to the citizens followed as a matter of course .....All the Mormons in Idaho, single-wived or many-wived, are disfranchised. Nearly all the inhabitants of Southern Idaho are Mormons..... ..... President Cleveland visited Boston and Harvard Monday, for the first time, to be present at the grand celebration of the 250th anniversary of the foundation of the University. He regretted that he wasn't a graduate of any college, but found consolation in the fact that only 12 of his 21 predecessors had a collegiate or university education. He, very properly, declined to receive an honorary degree..... ....The students of Packer Institute, Brooklyn, one of the largest female seminaries in the country, pledge themselves not to use the feathers of wild birds for decoration, and to discourage such use in others.....At Gettysburg a Confederate monument to the memory of the second Maryland infantry has been erected. The first Confederate..... .. Saturday Theodore Roosevelt sailed from New York for Europe, where he will get married..... ....Woman suffrage, passed last week in the Vermont House by a vote of 132 to 82, has been defeated in the Senate 18 to 10..... Lord Lansdowne, the Governor-General of Canada has returned from England, and it is expected that the new elections will soon be ordered .....Geysers in the Yellowstone Park are in a disturbed state, the earth in the vicinity quakes and an eruption is expected... The Central Labor Union in New York City is booming a national political party for 1888, with George as the Presidential candidate. The Knights of Labor element, however, does not appear to be harmonious in its consideration of the scheme.... ....Prof. Foster, an Iowa Wiggins, predicts a great meteorological disturbance from December 4 to 17, during which periods there will be blizzards and great electrical commotion. The Eastern States are warned that their dose will come along about Dec. 9....President Cleveland has given public notice that until Congress meets he can see no visitors except upon actual public business of importance, not connected with office-seeking.....The long-standing factory troubles at Augusta, Ga., by which over 3,000 hands were idle, have been settled.. .....The Supreme Court of Mississippi has decided that the prohibition or local option law recently passed is constitutional..... ....The Board of Missions of the Methodist Episcopal Church, which closed its session in New York Saturday, appropriated $569,447 for foreign, and the home missions will probably reach $11,000,000.....It is said that Colonel John Moore, U. S. A., now at San Francisco, will be tendered the Surgeon General-ship of the army..... .. ....,. ....A syndicate of window glass manufacturers was formed at Pittsburg Pa., Tuesday, "to regulate prices and control production".. The Western Nail Associations and the Flint Glass Veal Associations have been separately in session at Cincinnati "to regulate prices".. In the famous or notorious case of the Government against the Bell Telephone Company, in the United States Circuit Court at Cincinnati, Ohio, Judges Sage and Jackson, last Thursday, in a voluminous decision, dismissed the case for want of jurisdiction, without prejudice to instituting a suit elsewhere. It was decided that the parent company had no general agent in Ohio, and that service had been made only on local agents. As to the claim of the Government that the dealings in a patent made the company a domestic in the entire territory of the United States co-existent with the patent, the court held that it could not be sustained. The grant to a patentee is the right to exclude others from making or selling his patent. His right to sell is only the common law right and is not a franchise from the Government. The headquarters of the parent company are in Boston, and the suit should have been brought in Massachusetts. The case all along has been of such a dubious nature that it is hardly likely it will be renewed by the Government elsewhere.... ... The Supreme Court, at Washington, has granted the motion made last week to advance and hear together the six telephone cases now on the docket, and ordered that they be set for argument as one case January 24 at the head of the calendar. ....A filibustering expedition into Mexico, with Editor Cutting as one of the leaders, is being organized in the Southwest. It is proposed to make an independent Republic of the three Northern States of Mexico. Many capitalists, native and foreign, having large land and mining interests in those States, are reported to be backing the movement..... ....The conditions for admitting the territories of Saskatchewan, Assiniboia and Alberta as a new province into the Dominion have been practically settled, and it will soon be admitted.... ...Wisconsin voted to amend its constitution so as to give women the ballot in elections for school officers, except in cities where the school boards are appointed by the Aldermen.....The proposal to amend the Constitution of New York State has been carried..... .....

FOREIGN NEWS.

SATURDAY, November 13, 1886.

IN Bulgaria, the Great Sobranje, last Tuesday, elected Prince Waldemar, third son of King Christian, of Denmark, to succeed Prince Alexander of Battenberg. Christian's eldest son and heir is married to a daughter of the King of Sweden: the second son is King of Greece, the third is Waldemar. His oldest daughter is the wife of the Prince of Wales, and will be Empress-Queen of the British Empire: his second daughter is Empress of Russia, and his third, Duchess of Cumberland, wife of Prince Ernest August, cousin of Queen Victoria and claimant for the throne of Saxony. His brother, the King of Greece, would resign, if Waldemar became Prince of Bulgaria, and, moreover, the Czar is strongly opposed to his election; consequently his father says he must not accept the position on any account. Prince Nicholas of Mingrelia is Russia's only candidate, but Austria-Hungary is opposed to him.—Foreign news next week is likely to be interesting and will be full.....

AGRICULTURAL NEWS.

SATURDAY, Nov. 13, 1886.

THE Stock Yards Company of St. Paul Minn., has purchased ground on Staten Island N. Y., with 1,100 feet water front, for terminal facilities for the exportation of cattle. It has made arrangements for securing great facilities for slaughtering and caring for large numbers of American cattle at Barrow, a new port 45 north of Liverpool, England..... Very large quantities of apples are being shipped from Halifax to New York and England. The British Queen took 7,000 barrels for London the other day. One Nova Scotia dealer is handling 30,000 barrels, mostly for New York markets.....It is the general opinion at Havana that the total production of sugar in the season 1886-'87 will amount to over 80,0000 tons and exceed the largest crop hitherto raised on the island.....In a fight Thursday between fence-cutters and State Rangers near Brownswood, Texas, two of the former were killed after cutting 1½ mile of barbed wire fence..... .....Boston exported last week, by steamer, 396 live cattle and 2,376 quarters of beef. American meat is very cheap in England—8½ cents pter pound for prime.. ...Sheep feeding is being prepared for most extensively in Nebraska, and plenty of fat sheep, and good ones, may be expected from that State next Spring. .....Oregon pays two cents for every squirrel killed, and one man was recently paid for 125,000 squirrel tails which he had collected... ....

.....The Farmers' National Aliance met in convention, Thursday, in Chicago..... J. C. Greenough, the lately deposed President of the Massachusetts Agricultural College, has been elected Principal of the Westfield Normal School. He used to be Principal of the Rhode Island Normal School..... .....The Treasury Department has decided that poppy oil is free of duty, and that linseed oil is dutiable at the rate of 25 cents per gallon.....The culture of tobacco in Germany which has declined since 1881, is now progressing, 1,086,597 acres having been planted this year against 1,052,859 acres last year. In the last census year the United States had only 638,841 acres under tobacco; but the yield per acre here is much heavier than in Germany. In 1879 the above acreage yielded 472,964,158 pounds. .....The Commissioner of Agriculture has been notified by chemist Wiley, from Fort Scott, Kans., that by the diffusion process he has secured an average of 120 pounds of sugar per ton from 83 tons of Louisiana cane. It is claimed that the old process would have yielded only 80 pounds to the ton. This is regarded by the authorities at the Agricultural Department as the fulfillment of the promises of important results given by the first incomplete experiments in the diffusion process as applied to sugar cane. The process was developed in Europe for application in the manufacture of beet sugar, and has been several times tried in this country upon the sugar cane, but hitherto without success, owing to improper machinery, and the necessity of considerable modifications to meet the difference in the material to be worked... ....Fish Commissioner Baird is distributing carp from the Government ponds to applicants in all parts of the country. Individual applicants get 20 fish—52,000 would be required to fill private orders for Ill., Ia., Wis. and Ind., and the State Commissioners of those States ask for 38,000 more—a hint at the number required for the whole country..... The census of the island of Cuba shows 1,200 sugar plantations, 5,000 tobacco plantations, 160 coffee plantations, 25 cocoa plantations, 5,000 grazing farms, 20,000 small farms, 90,000 warehouses, factories, etc..... ....United States Senator Plumb, referring to the reports that New York and Colorado syndicates had been formed for the purpose of purchasing the Cherokee Strip, says the Cherokees have not the original right to make such sale, that the Government has an option to purchase, which it will not waive to permit purchase by any private parties, and that no sale will be permitted by Congress except to the Government, and that for the only and sole purpose of resales to actual settlers in 160-acre tracts....Paris has just been taking its annual meat census and finds that she is eating more horseflesh and less pork than ever. Donkey and mule meat are also growing in favor with the Parisians..... ... State Inspector Lowe, of N. J., has ordered three very sick cattle to be killed at Verona, Essex Co., N. J., as affected with contagious pleuro-pneumonia, and a number of exposed animals to be quarantined. Much alarm among local farmers..... .....State Veterinarian Casewell and Acting Health Commissioner Garroth have decided to cooperate in a house-to-house inspection of cattle at Chicago. A number of cows in the stables of wealthy citizens are reported to be "exposed to disease." It seems nothing in the way of stamping out the disease can be done till Congress and the Illinois State Legislature meet to pass suitable laws and make adequate appropriations; meanwhile some of the cattle dealers persistently deny that the disease is contagious pleuro-pneumonia...Dr. Seabright, of the Indiana State Board of Health, reports that a month ago 100 calves were received at Frankfort from Ohio and sold to farmers. They soon showed signs of pleuro-pneumonia, One man—Baker—killed and buried 30 he had bought, but several of his own cattle had taken the disease, showing its contagious nature. It is reported that more than 1,000 cattle are affected with the plague in Jasper and Clinton Counties, Indiana..... ... A telegram from Parsons, Southern Kansas, says reports come from all directions that cattle are dying in great numbers from dry murrain, owing to short pastures and semi-starvation first, and then gorging when turned into the corn-stalks .....Black-leg is proving disastrous about Shelbyville, Ill..... .....It is reported from Minneapolis, Minn., that syndicate of Canadian lumbermen, with partners in that State, have acquired the title to about 500,000,0000 feet of pine timber in Northwestern Minnesota, and are arranging to gobble up the rest of the vast timber belt on the northern slope—an area including about one-half of the entire State. It is charged that the clauses in the Sundry Civil Bill providing for a commission to treat with the Indians now occupying these lands for their removal to White Earth Agency was secured directly in the interest of this Canadian syndicate. Should the proposed treaties be confirmed, it is alleged that $10,000,000 worth of Indian pine will certainly go into the hands of a foreign syndicate and $15,000,000 worth of lumber that Minnesota and Dakota will shortly need, will be owned by the same pool.

..The stockmen of Upper Monanta have driven 75,000 cattle on the Piegan Reservation to range during the coming Winter. They claim they had to do this, as feed is scarce. The authority of the Indian agent and the Indian Bureau was obtained.... The Ohio Live Stock Commissioners report that in the last six years 890,566 hogs died of disease in the State, worth $4,130,285. About 10 per cent. of the "crop" die each year. The present appropriation for the Commission is only $2,000; the Board considers $100,000 would not be exorbitant next year. At its meeting the other day Dr. J. S. Butler, of Piqua was appointed State Veterinarian, and the following gentlemen consulting veterinarians at the points named: J. B. Hilloek, Columbus; J.C. Myer, jr., Cincinnati; W. R. Howe, Dayton; W. C. Fair, Cleveland; J. V. Newton, Toledo; R. W. Whitehead, Youngstown, and W. F. Kerr, Wooster. ....A Canadian Order in Council ordains that from Nov. 6 all cattle imported into the Dominion from any part of the United States must undergo a quarantine of 60 days—restriction to extend from ocean to ocean..... The National Grange, Patrons of Husbandry, composed of delegates from every State and Territory in the Union, commenced their 20th annual session in Philadelphia, Thursday. The meetings are secret and will continue about eight days.....The annual convention of the National Butter, Cheese and Egg Association began in Chicago the same day. About 600 leading dairymen of the Eastern and Central States are in attendance.....

Mr. Wilson's Neuralgia and Headache.

Mr. Edward L. Wilson, of No. 1125 Chestnut st., Philadelphia, Pa., was photographer to the Centennial Exhibition at Philadelphia, and also to the recent International Cotton Exhibition at New Orleans. He is also widely known as a lecturer on Egypt, Sinai, and Palestine, which countries he illustrates to his audiences by photographic views taken by himself in 1882. He writes as follows:

"I was several years ago so run down in physical condition that the insurance men would not take a risk on my life. I became so prostrated that I could not sleep more than an hour or two in the course of a night. I suffered with acute neuralgia, and with headache, which, when they came on suddenly, would render me powerless to think or act. I consulted Drs. Starkey & Palen, and concluded to give their Treatment a thorough trial. In less than a month I began to feel a great change and *it was not long until it was as good as new.* I have since engaged in my old duties with more than my former activity, and my work seldom tires me."

A monograph on neuralgia, published by Drs. STARKEY & PALEN (whose Compound Oxygen Treatment has been so successful that they have received hundreds of letters from patients who report cures of neuralgia and headache), will be furnished free to all who ask it by mail or personally at their new offices No. 1529 Arch Street, Philadelphia.—*Adv.*

Crops & Markets.

SATURDAY, November 13, 1886.

The Mark Lane Express, in its review of the British grain trade during the past week, says: Deliveries of wheat are restricted. The provincial markets are very sparingly supplied. Quotations are firm. The sales of English wheat during the week were 49,325 quarters at 30s 8d, against 60,431 quarters at 31s 1d during the corresponding period last year. The London wheat trade is slow and values are unchanged. The supplies or American wheat have largely increased exceding all precedent. The stocks of flour are heavy. Corn is scarce and three to six cents higher.

The report of the Department of Agricul-

Miscellaneous Advertising.

When Baby was sick, we gave her Castoria
When she was a Child, she cried for Castoria,
When she became Miss, she clung to Castoria,
When she had Children, she gave them Castoria.

ture says the cotton returns for November attest the rapid progress of picking, the unusual cleanness of fiber and the shortness of the late crops on light uplands and districts most affected by drought. Light frosts, sufficient to arrest growth, have occurred in the northern districts, reaching to the center of the cotton belt. In Arkansas and Tennessee a large yield is assured, and in Texas the yield is higher than in the census year, when the product was thirty-seven hundredths of a bale per acre. On the Atlantic coast the effect of the excessive early rains and the long-continued drought of the later season is apparent in reduced production. The following percentages of the several States indicate the probable produce: Virginia 71, North Carolina 74, South Carolina 72, Georgia 76, Florida 82, Alabama 74, Mississippi 77, Louisiana 78, Texas 71, Arkansas 86, Tennessee 88.

The yield of corn, according to the revised returns of yield, is 22 bushels per acre, making a product upon the present adjustment of acreage, of 1,668,000,000 bushels. This accords well with recent returns of condition, and will not be materially changed in the final review of the work of the year. The potato product is nearly the same as last year, with higher yields in the East and lower in the West. The average is 73 bushels per acre, giving a product of 163,000,000 bushels. The buckwheat crop makes a yield of about 13 bushels per acre, promising a product exceeding 11,000,000 bushels. The apparent production of tobacco is at a rate slightly exceeding an average of 70 pounds per acre, or about 485,000,000 pounds, which is equal to the average requirements of consumption and exportation. The average rate of yield for the hay crop is close to one and two-tenths tons per acre, and the apparent product about 45,000,000 tons.

Winter packing starts with a movement for the first week in hogs below that at the same time last year, returns from nine leading points showing a total of 295,500 hogs against 390,000 last year. The labor troubles at Chicago have curtailed operations and directed many shipments to other points. But the Chicago trouble has demoralized the trade in all directions, for Western packers at all the chief points are reluctant to contract for future delivery through fear of a general strike of employés. Hence the prices of hogs have fallen nearly $1 all around—a tribute the farmers have to pay to the discontent of labor organizations. The cattle and sheep interests also have suffered to a considerable extent.

Brown's Bronchial Troches

Are known and used all over the world, and at all seasons, for the relief and cure of Coughs, Colds, Sore Throat, and Bronchial troubles. Sold only in boxes, with the fac-simile of the proprietors, John I. Brown & Sons, on the wrapper. Price 25 cents.—*Adv.*

MARKETS BY TELEGRAPH.

SATURDAY, November 13, 1886

CHICAGO.—Compared with cash prices a fortnight ago, No. 2 Spring Wheat is ⅜c. lower; No. 2 Red, ½c. higher. Corn, ½c. higher. Oats, ½c. higher. Rye, ½c. higher. Barley, 2c. lower. Flaxseed, 5⅜c. lower. Pork, 5c. lower. Cattle, 10c. to 25c. higher. Hogs, from 15c. to 35c. lower. Sheep, a trifle lower for common, and a little higher for choice.

WHEAT.—Dull; No. 2 Spring, 73¼@73⅜c; No. 3 Spring, 63@66c; No. 2 Red, 73⅜c. Futures ranged: November, 73⅜@73⅝c; December, 71⅛@71⅜c; January, 75⅛@76c; May, 82@82c. CORN.—Quiet. No. 2, 35⅜c; Futures—November, 35@35⅜c; December, 36¾@37⅛c; January, 36½@37⅛c, May, 41⅜@41⅝c. OATS.—Weak; No. 2, 25⅝@26c; Futures, November, 25⅝@25⅞c; December, 26⅛@26⅜c; January, 26⅝@26⅝c; May, 30⅝@30⅝c. RYE.—Quiet; No. 2, 51⅜c. BARLEY. No. 2, 51c. FLAXSEED.—No. 1, 91⅛. MESS PORK.—Cash, $9 10@9 50; Futures, November, $9 12½@9 30; December, $9 17½@9 30; January, $9 90@10 02½. LARD.—Cash, $5 95 November, $5 90@5 90; December, $5 90@5 90; January, $5 95@5 95. Short Ribs.—Cash, $5 30. Boxed Meats.—Dry salted shoulders, $5 10@5 20; Short clear sides, $5 85@5 90. CATTLE.—Market strong for extras; lower for common; shipping steers, 950 to 1500 lbs, $3 30@5 15; stockers and feeders, $2 00@3 30, cows, bulls and mixed $1 25@3 00; through Texas Cattle, slow, but steady; steers, $2 50@3 10; Western rangers slow; natives and half breeds, $3 00@3 70. Wintered Texans, $2 90@3 25. HOGS—Market slow, closing 5@10c lower than yesterday; Rough and mixed, $3 35@3 75; packing and shipping, $3 70@3 85; light, at $3 35@3 75; skips $2 25@3 10. SHEEP.—Market slow, but steady; Natives, $2 00@3 85. Western, $2 90@3 10, Texans, $2 00@3 00; Lambs, $3 00@4 10.

ST. LOUIS.—Compared with cash prices a week ago, No. 2 Red Wheat is 1⅜c. higher. Corn, unchanged. Oats, 1⅜c. higher. Rye, 1½c. higher. Barley, steady. Butter, from 1 to 3c. higher. Flaxseed, 3c. lower. Pork, unchanged. Cattle, a shade lower. Hogs, 20c. to 30c. lower. Sheep, 10c. lower.

WHEAT.—Steady; Sales No. 2 Red, Cash, 75⅞@76⅛c; November, 76⅛c; December, 76⅝c. CORN.—Steady; No. 2 mixed, Cash, 31@34⅜c, November, 34c; December, 31⅝c. OATS.—Dull; No. 2 Mixed, Cash, 27@27⅜c, November, 27c; December, 26⅝c. RYE.—Quiet at 50c. BARLEY at 40@65c. BUTTER.—Creamery, 23@25c; dairy, 14@23c. EGGS—18c. FLAXSEED.—91c. HAY.—Timothy, $11; Prairie, $8. BRAN, 55c. at mill. PORK—$9 87½. BULK-MEATS.—Long clear, $5 65, short rib, $5 75; short clear, $5 90. LARD.—$5 85. CATTLE.—Market steady, with strong demand for desirable feeders and stockers: Choice Native steers, $4 30@4 75; Medium to good shipping Steers, $3 50@4 75; Butchers Steers, fair to good, $3 10@4 10; Feeders, fair to good, $2 40@3 30; Stockers, fair to good, $2@2 85; Texans and Indians, common to choice, $1 90@3 80. HOGS.—All kinds cleaned up early at steady figures; New York buyers are again in the market; Butchers' Selections and Choice Heavy, $3 70@3 85. Packing, fair to best, $3 55@3 70; Yorkers, medium to choice, $3 50@3 65. SHEEP.—Market quiet; common to extra, $1 90@3 95.

BOSTON.—APPLES King, $2 00@2 50 per bbl; Gravenstein, $1 75@2 25; Baldwin, $1 50, Hubbardstons, $1 50; Harvey, $2; common, 50c@$1. CRANBERRIES.—Cape Cod, $6@6 25; country, $3@5. BUTTER. Northern creamery, extra, 28@29c, per lb; do. firsts, 24@26c; Western creamery, extra, 27@29c.; do. firsts, 23@26c, do. choice, 20@21c, dairy, Franklin County, finest, 28c; good to choice, 24@26c., Vermont extra, 25@28c; Northern, choice, 21@25c; do. fair to good, 14@15c; Western dairy, good to choice, 12@15c; imitation creamery, extra, 14@16c, ladle-packed, choice 13@14c; do. fair to good, 11@12c. BEANS.—Choice pea, Northern hand picked, $1 80@1 85 per bushel; do. do. New York, choice, hand-picked, $1 70@1 75, do. do. screened, $1 50@1 55, medium choice, hand-picked, $1 60@1 65; do choice screened, $1 25@1 50; Yellow Eyes, choice, $1 55@1 60; do. flat, $1 50@1 55; Red Kidneys, $1 75. CHEESE.—New York extra, 12c. per lb; do. good to choice, 11c; do. common, 7@9c; Vermont, extra, 12c; good to choice, 10½@11½c; common, 7@9c; Western extra, 11½@12c; do. fine, 9@10c common, 6@8c. Sage, extra, 12½@13c. EGGS—Near-by and cape, 26c. per doz Eastern extras, 25@26c; Aroostook County, 23@24c; New York and Vermont, 23@25c, Western, 21@22c; Provincial, 23@24c; Ice-house, 17@20c; Limed, 18c. HAY AND STRAW.—Choice, $17@18 per ton; fair, $16@17; ordinary, $14@15; fine, $12@15; swale hay, $10@11. poor, $10@13 50; Western choice, $16@17; do. fair to good, $13@14 50; rye straw, $16@17; do. machine, $12@13, oat straw, $9@10 per ton. POTATOES.—Early Rose, 45@55c per bush.; Beauty of Hebron, 48@53c. Sweet Potatoes, Virginia Yellow, $1 12@1 25 per bbl; Jersey, $1 37@1 62 per bbl.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, November 13, 1886.

STATE OF THE MARKET.—As compared with cash prices last week, flour is unchanged. No. 1 Northern Wheat, 1c. lower; No. 2 Milwaukee, ⅜c. lower; No. 2 Corn, 1c. lower; No. 3, ½c. lower. Oats, ⅜c. to 1c. lower; Pork, unchanged, Butter, stronger; Cheese, a grade higher; Eggs, 1c. higher; Fruits and Vegetables steady.

FLOUR, FEED AND MEAL.—FLOUR—Quotations: Fine $1 90@2 70; Superfine, $2 15@2 90; No. 2, $2 60@3 10; Good to Fancy Extra State, $3 25@3 75; Common to Good Extra Western, $2 60@3 75; Good to Choice Extra Western, $3 35@4 75; Common to Fair Extra Ohio, $2 90@3 85, Good, $3 90@4 35; Good to Choice, $4 35@4 75; Common Extra Minnesota, $2 60@3 15; Clear, $3 50@4 10; Rye Mixture, $3 35@3 95; Straight, $3 65@4 15; Patent $4 35@$5; Bakers' Extra, $3 90@4 90; St. Louis Common to Fair Extra, $2 60@3 75; Fair to Good, $3 85@4 60; Good to Very Choice $4 65@$5, latter an extreme Patent Winter Wheat Extra, $4 30@$5, City Mill Extra for West Indies, $4 40@4 50; South America, $4 60@4 70. SOUTHERN FLOUR.—Common to Fair Extra at $3 25@3 85, and Fair to Choice, $3 90@5 00. RYE FLOUR.—Superfine, $3 10@3 25. CORN MEAL.—Yellow Western quoted at $2 50@2 75; and Brandywine at $2 75@2 85. BUCKWHEAT FLOUR Quoted at $1 90@2 00. FEED.—40 lb, quoted at 67½@77½c; 60 lb, at 65@72½c; 80 lb, at 75@80c; 100 lb at 85@90c sharps, at 95c.@$1 00. Rye Feed at 75@80c, screenings at 45@70c.

GRAIN.—WHEAT.—No. 1 Northern 86¾@87c; Old No. 2 Milwaukee, 81⅛c; Ungraded Spring, 84c; Ungraded Red, 79@85⅛c; No. 3 Red, 82c; No. 2 Red, 85⅜@85⅝c; No. 2 Red for November, 85⅜@85⅝c; do. for December, 84⅞@85 3-16c; do. for January, 86⅛@86¾c; do. for February, 87⅞@88⅜c; do. for May, 92¼@92⅝c; do. for June, 93⅜@93½c. CORN.—Ungraded Mixed, 43⅛@45⅛c; No. 2, 45c; New No. 3, 43⅛c; No. 2 White, 45⅜c; No. 2 November, 45c; do. for December, 45⅝@46c; do. for January, 46⅝@47⅛c; do. or May, 49⅜@49⅝c. OATS.—No. 3 at 31⅛c; do. White, 35⅛@35⅛c; No. 2, 32⅛@32⅝c; do. White, 35⅛@35¼c; No. 1, White, 38c; Mixed Western, 31@34c, do. White, 35@40c; White State, 36c; No. 2 for November, 32⅝c; do. for December, 33@33⅛c; do. for January, 31⅝@34⅛c; do. for February, 34⅜@35⅛c; do. for May, 36c.

PROVISIONS.—PORK.—Mess, $9 75@10 00 for Old and $10 37½@10 75 for New; $14 for Family Mess; $14 50@15 50 for Clear Back; and $10 00@10 50 for Extra Prime. BEEF.—India Mess, $11 00@17 00; Extra Mess, in barrels, $8@8 50; Packet, $8 50@9; Plate, $8@$8 50. BEEF HAMS.—17 50@17 75. CUT MEATS.—Pickled Hams, 9c. MIDDLES.—Short Clear, November, 5⅜c, Long and Short Clear, November, 5⅝c; Long Clear, 6⅛c. DRESSED HOGS.—City Heavy to Light at 5 9-16@6c; Pigs, 6c. LARD.—Western Steam Spot, 6.22½c; City Steam, 6.05c; Continent, 6.40c; South American, 6.90c; November, 6.22c; December, 6.20@6.23c; January, at 6.25@6.27c; February, 6.33@6.36c; March, 6.41@6.45c.

BUTTER.—Creamery—State, pails, fine, 29c; State, prime, 28@28½c; State and Pennsylvania, tubs, 28@28½c; Western, best, 28c; Western, prime, 24@25c; Western, good, 20@21c; Western, June, best, 22c; Western, do, prime, 20@21c; State Dairy, half tubs, best, 25@26c; half-firkins, tubs, fine, 22@23c; half-firkins, tubs, good, 21c; half firkins, common, 17@18c; Welsh tubs, best, 24c; Welsh tubs, prime, 22@23; Dairy firkins, best, 23c; Dairy firkins, prime, 21@22; Western, imitation Creamery, best, 19@20c; Imitation Creamery, fair and good, 15@17c; Dairy, fine, 16@18c; Dairy, common, 12@14c; Factory, poor.

CHEESE.—State factory, fancy, colored, September, 12c; do, do, do, white, do, 12¼@12⅛c do, do, good and fine, 11⅛@12⅛c; do. do. fair, 11@11⅛c; do, do, common, 10¼@10⅞c; do, do, light skims, 9@10c; Ohio factory, fine, flat, 11⅛@12c.

EGGS.—For strictly fresh lots the market stands firm as the receipts are light; parcels from remote points are a little steadier in price. Quotations are for: State, 26c. Ohio and other choice lots, 25c; Western, best, 24@25c; do, held lots, 22@23½c, Canadian, held lots, 20@22c; Limed state, 18c; do. Western, 17@17½c.

POULTRY.—LIVE.—Chickens, per lb, at 9@9½c; fowls, near-by lots, per lb, at 9c.; fowls, Western lots, per lb, at 8@9c fowls Southern lots, per lb, at 8c; turkeys, per lb at 9@11c; ducks, western per pair at 50@65c.; geese, western, per pair, at $1.12@1.50.

POULTRY.—DRESSED.—Turkeys, per pound, at 12@14c.; Spring chickens, Philadelphia, per pound at 13@15c.; do, western, per lb, at 10@12c; fowls, Pennsylvania, prime, per lb 11c. do western, per lb, at 10@11c.

FRUITS.—FRESH.—Quotations: Pears.—Beurre d'Anjou, per bbl, at $4@6; Dutchess, per bbl, $3 50@5 50. Apples, Gravenstein per bbl, at $2 45@3; varieties at $2@2 50 per bbl; Greenings, $2 00@2 50 per bbl. Grapes, —Catawba at 1½@1⅝c, per lb; Concord, per lb, 3@5c. Diana per lb, 2½@3c; Isabella, at 2@2½c; per lb. Quinces at $2 25@2 50 for choice. Cranberries at $6@6 50 for Cape Cod best; $5 50@6 00 for choice; $1 50@5 00 for light; $1 75@2 for choice, per crate; $1 37@1 75 for Jersey, per crate.

FRUITS.—DRIED.—The quotations are as follows: Apples—Fancy Evaporated, 9c; do, choice, at 8½@—c; do. prime, 8@8½c; do. southern sliced prime at 2½@3c; do, North Carolina, fancy sun dried, new, 5@5½c; do, do, choice 3½@4c; do. do, prime 2c. Peaches —North Carolina, peeled choice new 11@11½c do. do. do, fancy, new, 12@12½c; do. Georgia, choice, at —@10c; do. do, prime fancy, new, 11@12½c, do, Delaware, evaporated, peeled, 24@27c; do, do, do, unpeeled new, 13@14c, do, Georgia new, 10@11c. Cherries, pitted, at 9½c. Evaporated raspberries, 17@17½c. sun-dried do. 15@16c. Blackberries—Prime at 7½@7¾c. Plums, at 6@6½c.

PEANUTS.—Quotations are: 4⅜c. for fancy hand-picked; 3⅜c. for farmers' grades.

COTTON.—The quotations, according to the American classification, are as follows:

	Uplands.	New Orleans. and Gulf.	Texas.
Ordinary	6⅜	6 9-16	6 9-16
Strict Ordinary	7 13-16	7	7
Good Ordinary	7¾	8 15-16	8 15-16
Strict Good Ordinary	8 3-16	8⅜	8⅜
Low Middling	8⅝	9 13-16	9 13-16
Strict Low Middling	8 15-16	9⅛	9⅛
Middling	9⅛	9 5-16	9 5-16
Good Middling	9⅜	9 9-16	9 9-16
Strict Good Middling	9⅝	9 13-16	9 13-16
Middling Fair	10	10 3-16	10 3-16
Fair	10⅝	10 13-16	10 13-16

STAINED.

Good Ordinary	6 3-16	Low Middling	7 11-16
Strict Good Ord.	7⅛	Middling	8 9-16

HAY AND STRAW.—Choice Timothy, 80@85c, per 100 lb. Good Timothy, 70@75c; Medium, 60@65c; Shipping, 50c; Clover, mixed, 55@60c Straw No. 1 rye, 60@85c; short rye, 45@50c; oat, 40@45c.

HOPS. State, new, fair and very good, excluding choice, 25@29c; State, 1885 crops, best on offer, 16@17c; State, 1885 crop, inferior, 12@14c; California, new, prime and best, 28@32 California, old, best, 15@16c; California, old, low grades, 13@14c, German, new, best, 31@33c; German, new, medium grades, 24@28c; English, new, best, 26@27c; English, new, low grades, 20@22c.

VEGETABLES.—Quotations are for: Potatoes.—Long Island, rose, in bulk, per bbl., $1 75@2 25; State, $1 37@1 62 do Burbank, $1 37@1 62; Jersey, peerless, per bbl, $1 37@1 50; sweet potatoes, Va., yellow, per bbl., $1 25@1 75; sweet potatoes, Va., yellow, inferior, per bbl, $1 00@1 25. Cabbages.—Flat Dutch, per 100, $3@4 50. Cucumbers Pickles, per 1,000, 75c.@$1 25. Egg plant, Long Island, bbl, per $3@3 50. Onions.—Conn., red, per bbl, $2 25@2 75; do. Orange County, red, per bbl, $2 25@2 50. Celery, per doz. branches, $1 00@1 25. Turnips, Russian, per bbl., $1 00@1 25. Cauliflowers, per bbl, $1 00@3 00.

LIVE STOCK MARKETS

NEW YORK, SATURDAY, November 13, 1886.

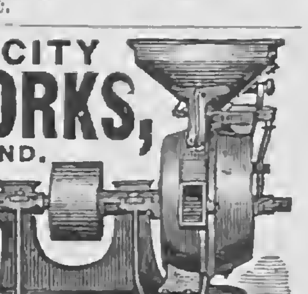
BEEVES.—Indiana Steers, 1495 lb at $5; do, 1530 lb at $4 90; Ohio do, 1365 lb at $4 80; do, 1391 lb at $4 75; Virginia do, 1385 lb at $4 80, Chicago do, 1010 lb at $3 75; do, 1211 lb at $4 50; State do, 1123 lb at $3 75; do, 1133 lb at $3 65; State Oxen 1750 lb at $4 50; do, 1500 lb at $4 00; bulls, 1137 lb at $2 27½; Chicago Steers 1367 lb, at $4 65; do, 1209 lb, at $4 60; do, 1348 lb, at $4 50; Kentucky steers, 1552 lb at $5; do, 1353 lb at $4 80; Ohio do, 1366 lb at $4 30; Stags, 1310 lb at $3 50; Indiana Steers, 1377 lb at $4 50; do, do, 1318 lb at $4 50; do, 1266 lb at $4 30; Ohio Steers, 1370 lb at $4 65; do, 1385 lb at $4 95; Indiana do, 1162 lb at $3 95; Virginia do, 1182 lb at $4 15, Stags, 1290 lb at $3 25; Illinois steers, (extra) 1481 lb at $5 40; do, 1413 lb at $5 15; do, 1283 lb at $4 50; Kentucky do, 1267 lb at $4 70; Bulls, 1348 lb at $2 70; do, 1228 lb at $2 55; Ohio Steers, 1517 lb at $4 95; do, 1363 lb at $4 57½; do, 1165 lb at $3 75; Buffalo steers, 1115 lb at $4 10, do, 1023 lb at $3 45; Kentucky steers, 1461 lb at $5 05; do. 1116 lb at $4 90; oxen and steers and stags, 1246 lb at $4; Dry Cows 1292 lb at $3 65; do. 1740 lb at $3 65; Bull, 1700 lb at $3 75; Ohio steers, 1575 lb at $4 50; Kentucky do, 1126 lb at $3 40.

SHEEP AND LAMBS.—Receipts for six days 44,087 head against 27,561 head for the same time last week; Canada Lambs, 85 lb, at 6⅛c; do, 87 lb, at $6 10, Kentucky do. 70 lb, at $5 90; do, 71 lb, at 5⅛c. do, Sheep, 101 lb, at 4⅜c; do. 91 lb, at $4 80; Kentucky do, 87 lb, at 4c; do, 91 lb, at 4⅛c; Indiana Sheep, 93 lb, at $4 80; State do, 97 lb at $4 25; do, 65 lb, at $3; State Lambs, 63 lb, at $5 00; Ohio Sheep, 81 lb, at $4 20; Kentucky Sheep, 96 lb, at $4 40; do, 98 lb, at $4 45; Jersey Ewes (poor), 94 lb, at 3c; Michigan Sheep, 84 lb, at 4c; State do, 101 lb, at 4c; State Lambs, 63 lb, at 6c Northern Canada do, 85 lb, at 6⅛c; Canada do, 89 lb, at $6 15; do, 83 lb, at $6 20; Canada Lambs, 77 lb, at 6c; State Sheep, 84 lb, at 4c; do, 24 lb, at 4⅛c, Ohio do, 81 lb, at 4⅛c; State Lambs, 58 lb, at 5⅛c;

HOGS.—Receipts for six days, 43,857 head against 33,991 head for the same time last week. No sale of Live Hogs. Nominally weak at $3 40@4 60 for Fair to Good.

PRODUCE COMMISSION HOUSE
ESTABLISHED 1865.
S. H. & E. H. FROST,
100 PARK PLACE, N. Y.
Shippers desiring to favor us will be furnished stencils, shipping cards, etc., on application. Promptness guaranteed. References, RURAL NEW-YORKER, Irving National Bank, etc.

RICHMOND CITY
MILL WORKS,
RICHMOND, IND.
Manufacturers of
MILL STONES,
FLOURING MILL MACHINERY,
and the BEST French Burr
Corn and Feed Mills
In the country. ☞ Send for description and prices.



7,000 CHALLENGE WIND MILLS,

IN USE IN EVERY State and Territory of the U. S. It is a sectional wheel, has been made by us ... 15 years, and has never blown down without tower breaking, a record no other mill can show. MILLS SENT ON 30 DAYS TEST TRIAL. BEST FEED MILLS, CORN SHELLERS, ETC. GOOD AGENTS WANTED in all unassigned territory. Catalogues free. CHALLENGE WIND MILL AND FEED MILL CO., Batavia, Kane Co. Ill.

F ALL SIZES.
Write for Circular and tell us what you want.
B. W. PAYNE & SON, Drawer 1005, ELMIRA, N. Y.
New York Office, 107 LIBERTY STREET.
Eastern Agents, HILL, CLARKE & Co., Boston, Mass.
Our Patented Vertical Boiler will not prime. danger of burning flues.

IMPROVED CHAMPION SAWING MACHINE.
One man can do the work that heretofore required two. Utilizes the *weight* of operator. *Lightest running, cheapest and only practical* log sawing machine made. *Saws cord an hour.* Weighs but 35 lbs. Price complete only $12.00. To introduce, will deliver one machine free to any address on receipt of price. *Address* Champion Mfg. Co., Quincy, Ill. Ag'ts wanted

BUCK-THORN BARB FENCE.
A flat strip of **Solid Steel**, ⅝ inch wide, **Twisted.** Plain to be seen. Small barbs, only ¾ inch apart. **Effective. SAFE.** Strong, Handsome, Lasting, **Cheap.** Easy to build, simple to repair. Any bright farmer's boy or smart farm hand can boss the job. ☞ Write for sample and circular.
THE BUCK-THORN FENCE CO., Trenton, N. J.

I WILL INSURE YOUR HOGS!
DR. JOS. HAAS'
HOG AND POULTRY REMEDY

[None Genuine without this Trade Mark.]

Is the only Practical Preventive of the so-called Swine Plague.

If used in proper quantities, it will
1. *Prevent Disease;*
2. *Arrest Disease;*
3. *Pay for itself with the increased pork it will put upon the hogs.*

AS AN EVIDENCE OF FAITH
In my Remedy, I make the following offer:

I will insure herds of swine of not less than one hundred in number against disease, at a small fee per head, provided they are fed my Remedy under my direction, and prove upon examination prior to contract that they are in a healthy condition, and neither inbred, close-bred, or the progeny of such.

WHAT IS SAID OF THE REMEDY.

"It has stopped the hogs dying and improved their appetite."—F. C. GOLDSBOROUGH, Easton, Md.

"Have used the remedy with success."—D. G. BARBER, Easton, Md.

This medicine has been thoroghly tested and its merits established on the eastern shore."—Record and Gazette, Pocomoke, Md.

"I will not be without Haas's Hog Remedy if it costs three times the present price."—JOHN CASTIN, Grant City, Mo.

"We would not risk feeding a pen of hogs without the remedy."—WHITE & CO., Gibsonton, Pa.

"I would not think of raising hogs without it."—J. M. ELLSWORTH, Martinsville, Wis.

"It gives satisfaction every time."—J. G. BARTLETT & SON, Suncook, N. H.

"It has never failed to arrest the disease yet."—JONES & MUSSELMAN, St. Paris, O.

"I have sold over $2,000 worth, and am pleased to say that it has given good satisfaction."—MELLE WILLIAMS, Druggist, Taylorville, Ill.

The Remedy can be procured of all druggists, or from my Laboratory, upon receipt of price.

Prices, **$2.50, $1.25,** and **50 cents** per package. 25 pound cans, **$12.50.**

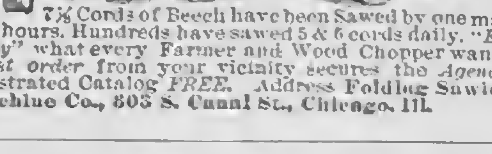
JOS. HAAS, V.S.,
Member of Indiana State Veterinary Med. Association,
INDIANAPOLIS, INDIANA.

NEW CIDER MACHINERY.

The most complete line of CIDER MACHINERY ever offered. Seven sizes, from the smallest Hand Mill to an Eight-Barrel Press. THREE NEW PATTERNS. Send for New Illustrated List, just issued.

THE HIGGANUM M'F'G CORPORATION, HIGGANUM, CONN.
WAREHOUSE: 38 SO. MARKET ST., BOSTON, MASS.

A NEW INVENTION!
RUNS EASY. NO BACK-ACHE!



7¼ Cords of Beech have been Sawed by one man in 9 hours. Hundreds have sawed 5 & 6 cords daily. "*Exactly*" what every Farmer and Wood Chopper wants. *First order* from your vicinity secures the *Agency*. Illustrated Catalog *FREE*. Address **Folding Sawing Machine Co., 303 S. Canal St., Chicago, Ill.**

REED & BARTON,
ESTABLISHED 1824.
37 UNION SQUARE, NEW YORK,
MANUFACTURERS OF
ELECTRO GOLD AND SILVER PLATE,
INVITE INSPECTION OF THEIR EXTENSIVE STOCK OF
TABLE WARE,
Which Embraces Everything Required for Use or Decoration of the Table.
Coffee, Tea, Dessert and Water Sets,
Cake and Fruit Baskets, Meat, Vegetable and Baking Dishes,
Epergnes, Candelabra, Spoons, Forks, Cutlery, &c.
They would also Call Attention to their Large Assortment of Novelties in
OXIDIZED SILVER, GOLD INLAID AND APPLIED WORK,
SPECIALLY ADAPTED FOR
HOLIDAY GIFTS.

For the Young.

I HOPE every one of the Cousins will have a good Thanksgiving. We have lots of things to be thankful for. Think them over when you get a chance and you will find that they would fill a good-sized book. Lots of us may think we have pretty hard times, and it may seem as though things are all wrong and never can be better. But wait a little, keep easy and cheerful, don't give up, but keep on doing the best you can. These things always work out right in the end if we only stick to them. The right thing to do on Thanksgiving Day is to let all the troubles go and keep nothing but the good things in mind. Remember this, and have just as good a time as you can.

THE STORY OF A DISTRICT SCHOOL.

A COLLEGE BOY'S DIARY.

(Continued.)

THERE was a good spot in old Johnson after all.

"I'm sorter sorry fer the boy," he said, as he rubbed his hand over his mouth. "He ain't over bright, but I dunno ez I'd a run him last night ef I'd a knowed this wuz commin'. Hows'ever, we don't none on us know mor'n half on it, an' the time hez fer ter come when we find it out, too."

Johnny had started for school little thinking how near he was to his long-promised holiday. Old Johnson saw him from the window trudging sturdily along the road.

"I wish you'd tell him, teacher, I've got ter go ter the woods. Like enough he kin hit a team goin' over."

I think old Johnson was glad to have me tell Johnny. I hope he was a little sorry for what he had said, and so did not care to face the little boy. Be that as it may, I promised to do the errand and started for the school house. Mr. Hardhack's sad news appeared to have made its way about the district. The proposed holiday, in consequence of the death of 'Squire Barnes, kept the children at home. I found Johnny at the school house alone. He stood kicking his heels against the door and smiling up at me till his round face seemed like one ripple. It seemed hard, indeed, to take the pleasure out of that little face.

"Johnny," I said, "we have just heard from your mother."

"She ain't dead, teacher, is she?" he asked eagerly.

I think he must have read it in my face. We cannot hide such things.

"Yes, my boy," I said slowly, "she is." The light look faded out of his face. Two great tears forced themselves out of his eyes, and he gave one great sob, and turned his face towards the door. He put his jacket sleeve over his eyes and pushed his face far into the corner of the door. Poor little fellow, there was a dreadful loneliness about his grief. He never had known what sympathy meant. His only thought was that he must grind down this great sorrow alone.

"Never mind, Johnny," was all I could say. I patted the great brush of hair. The little mourner pushed his face deeper into the corner, but reached up his other hand to take hold of mine.

"Well, well, what's this?" broke in a voice behind us. "Been thrashing that boy? I'm sorry. You should have taken a bigger one, sir."

I turned to find the director standing by us. I explained matters in a few words. The director dropped his pompous manner at once.

"That's bad," he said, kindly. "Come little boy, you must be a little man now. I'm going to drive over that way, and I'll take you and the teacher along. Come on, now, brave folks never give up, you know."

He took hold of Johnny's arm and led him out of the yard. I do not think he had any errand that would have led him past the County house, but he had a big, warm heart that felt for the poor, lonely little boy. He never let Johnny stop until we reached his own house. Then he took pains to show the little fellow the rabbits, the lame cat and the parrot. He talked so pleasantly that Johnny was at last induced to take his jacket sleeve away from his eyes and let Mrs. Forest wash his face. A great piece of mince pie went far towards stopping the sobs, and a piece of cake enabled him to look up at the director and say without choking—"I reckon you're the best man I ever seen, an' old Johnson don't know nothin' about it."

We brushed up Johnny's strange assortment of clothing, and then we all got into the director's wagon and started for the County house. It was a sad journey for us. Johnny choked now and then in spite of the director's words, and there were two wide tracks down his cheeks from his eyes. As we rode along the words of an old poem kept running over and over in my mind. Do what I would I could not keep them out:

"Rattle his bones over the stones,
He's only a pauper that nobody owns."

—I kept thinking over and over again, why should there be paupers and poor people and so much trouble and sorrow? If we could make the world, doubtless we wouldn't have them. But the world is made: we can only make it over as best we can.

Miscellaneous Advertising.

DIXON'S "Carburet of Iron" Stove Polish was established in 1827, and is to-day, as it was then, the neatest and brightest in the market; a pure plumbago, giving off no poisonous vapors. The size is now doubled and cake weighs nearly half a pound, but the quality and price remain the same. Ask your goocer for Dixon's big cake.

SCIENTIFIC TRUTH.

REGARDING THE FUNCTIONS OF AN IMPORTANT ORGAN.

Of Which the Public Knows but Little, Worthy Careful Consideration.

To the Editor of the Scientific American:

Will you permit us to make known to the public the facts we have learned during the past eight years, concerning disorders of the human Kidneys and the organs which diseased Kidneys so easily break down? You are conducting a Scientific paper, and are unprejudiced except in favor of TRUTH. *It is needless to say no medical Journal of "Code" standing would admit these facts, for very obvious reasons.*

H. H. WARNER & CO.,
Proprietors of "Warner's Safe Cure."

That we may emphasize and clearly explain the relation the kidneys sustain to the general health, and how much is dependent upon them, we propose, metaphorically speaking, to take one from the human body, place in the wash-bowl before us, and examine it for the public benefit.

You will imagine that we have before us a body shaped like a bean, smooth and glistening, about four inches in length, two in width, and one in thickness. It ordinarily weighs, in the adult male, about five ounces, but is somewhat lighter in the female. A small organ? you say. But understand, the body of the average size man contains about *ten quarts of blood, of which every drop passes through these filters or sewers*, as they may be called, *many times a day*, as often as through the heart, making a complete revolution in *three minutes*. From the blood they separate the waste material, working away steadily night and day, sleeping or waking, tireless as the heart itself, and fully of as much vital importance: removing impurities from 65 *gallons of blood each hour*, or about 49 barrels each day, or 9,125 hogsheads a year! What a wonder that the kidneys can last any length of time under this prodigious strain, treated and neglected as they are?

We slice this delicate organ open lengthwise with our knife, and will roughly describe its interior:

We find it to be of a reddish-brown color, soft and easily torn; filled with hundreds of little tubes, short and thread-like, starting from the arteries, ending in a little tuft about midway from the outside opening into a cavity of considerable size, which is called the pelvis, or, roughly speaking, a sac, which is for the purpose of holding the water to further undergo purification before it passes down from here into the ureters, and so on to the outside of the body. These little tubes are the filters which do their work automatically, *and right here is where the disease of the kidney first begins.*

Doing the vast amount of work which they are obliged to, from the slightest irregularity in our habits, from cold, from high living, from stimulants, or a thousand and one other causes which occur every day, they become somewhat weakened in their nerve force.

What is the result? Congestion or stoppage of the current of blood in the small blood vessels surrounding them, which become blocked; these delicate membranes are irritated; inflammation is set up, then pus is formed, which collects in the pelvis or sac; the tubes are at first partially, and soon are totally, unable to do their work. The pelvis sac goes on distending with this corruption, pressing upon the blood vessels. All this time, remember, the blood, which is entering the kidneys to be filtered, is *passing through this terrible, disgusting pus*, for it cannot take any other route!

Stop and think of it for a moment. Do you realize the importance, nay the vital necessity, of having the kidneys in order? Can you expect when they are diseased and obstructed, no matter how little, that you can have *pure blood and escape disease*. It would be just as reasonable to expect, if a pest-house were set across Broadway and countless thousands were compelled to go through its pestilential doors, and escape from contagion and disease, as for one to expect the blood to escape pollution when constantly running through a diseased kidney.

Now, what is the result? Why, that the blood takes up and deposits this poison as it sweeps along into every organ, into every inch of muscle, tissue, flesh and bone, from your head to your feet. And whenever, from hereditary influence or otherwise, some part of the body is weaker than another, a countless train of diseases is established, such as consumption in weak lungs, dyspepsia, where there is a delicate stomach; nervousness, insanity, paralysis or heart disease in those who have weak nerves.

The heart must soon feel the effects of the poison, as it requires pure blood to keep it in right action. It increases—its stroke in number and force to compensate for the natural stimulus wanting, in its endeavor to crowd the impure blood through this obstruction, causing pain, palpitation, or an out-of-breath feeling. Unnatural as this forced labor is, the heart must soon falter, becoming weaker and weaker until one day it *suddenly stops*, and death from apparent "heart disease" is the verdict.

But the medical profession, learned and dignified, call these diseases by high sounding names, treat them alone, and patients die, *for the arteries are carrying slow death to the affected part*, constantly adding fuel brought from these suppurating, pus-laden kidneys, which here in our wash-bowl are very putrefaction itself, and which should have been cured first.

But this is not all the kidneys have to do: for you must remember that each adult takes about seven pounds of nourishment every twenty-four hours to supply the waste of the body which is constantly going on, a waste equal to the quantity taken. This, too, the kidneys have to separate from the blood with all other decomposing matter.

But you say, "My kidneys are all right. I have no pain in the back." Mistaken man! People die of kidney disease of so bad a character that the organs are rotten, and yet they have *never there had a pain nor an ache!*

Why? Because the disease begins, as we have shown, in the interior of the kidney, where *there are few nerves of feeling* to convey the sensation of pain. Why this is so we may never know.

When you consider their great work, the delicacy of their structure, the ease with which they are deranged, can you wonder at the ill-health of our men and women? Health and long life cannot be expected when so vital an organ is impaired. No wonder some writers say we are degenerating. Don't you see the great, the extreme importance of keeping this machinery in working order? Could the finest engine do even a fractional part of this work without attention from the engineer? Don't you see how dangerous this hidden disease is? It is lurking about us constantly, without giving any indication of its presence.

The most skillful physicians cannot detect it at times, *for the kidneys themselves cannot be examined* by any means which we have at our command. Even an analysis of the water, chemically and microscopically, reveals nothing definite in many cases, even when the kidneys are fairly broken down.

Then look out for them, as disease, no matter where situated, to 93 per cent., as shown by after-death examinations, has its origin in the breaking down of these secreting tubes in the interior of the kidney.

As you value health, as you desire long life, free from sickness and suffering, give these organs some attention. Keep them in good condition and thus prevent, as (is easily done) all diseases.

Warner's Safe Cure, as it becomes year after year better known for its wonderful cures and its power over the kidneys, has done and is doing more to increase the average duration of life than all the physicians and medicines known. Warner's Safe Cure is a true specific, mild but certain, harmless but energetic and agreeable to the taste.

Take it when sick as a cure, and never let a month go by if you need it without taking a few bottles as a preventive, that the kidneys may be kept in proper order, the blood pure, that health and long life may be your blessing.

H. H. WARNER & CO.

FLORIDA. SEVILLE, on the high pine ridge, a district unexcelled for fruit and vegetables, with delightful climate, is a fast-mail station on the NORTH AND SOUTH RAILWAY TRUNK LINE, 80 miles south of Jacksonville, and has a complete system of water works and sewerage. An excellent hotel is now open. Lots for Sale on reasonable terms. Address SEVILLE CO., Seville, Fla.
MASON YOUNG, President, 35 Wall St., N. Y.
R. H. MASON, Sec'y and Treas., Seville, Fla.

Sick Headache cured by Frost's Headache Powders. Sample Free. 50c. a box, 3 boxes, $1, postpaid, by T. W. PARR, Barron, Wis.

6 PIECES SILVERWARE In Satin-lined Case, FREE to all who will take Agency or help make sales. Address NORTHFORD SILVER PLATE CO., Northford, Conn.

PORTABLE GRINDING MILLS. Guaranteed to give satisfaction or money refunded. CHARLES KARSTNER & CO., 302 to 312 South Canal Street, Chicago.

Virginia Farms.—Mild Climate. Cheap Homes. Send for Circular. A. O. BLISS, Centralia, Va.

EPPS'S
GRATEFUL—COMFORTING
COCOA

HOME STUDY. Book-keeping, Business Forms, Penmanship, Arithmetic, Short-hand, etc., thoroughly taught by MAIL. Circulars free.
BRYANT & STRATTON'S, Buffalo, N. Y.

As an experiment, to test the value of advertising in this paper, and to get it introduced into every family in the land, we offer the

PHILADELPHIA LADIES' Home Journal AND **PRACTICAL HOUSEKEEPER 3 MONTHS** *ON TRIAL!* ON RECEIPT OF **ONLY 10 CTS.** *Silver or Stamps.*

It has the largest circulation of any newspaper or periodical published in the United States, having over

400,000 Paid Subscribers,

of which over 300,000 are permanent YEARLY subscribers, all secured in 3 years, thus proving that where it is once read, for at least three months, it is indispensable ever afterward.

A Story that will make you laugh and make you cry:

"THE CHARITY OF THE JONESVILLIANS"
BY
Josiah Allen's Wife

Written for the JOURNAL, and will begin in December. It is rich---full of spice, keen wit, humor and pathos. While it is extremely humorous, full of irony, brilliant hits, and irresistibly funny, it is tender and pure, and comes from the depth of the author's heart, appealing as it does to charity for the unfortunate family of a drunkard. The "Jonesvillians" can be found in all our towns and villages, as well as in the larger cities.

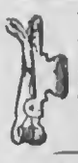
HOME COOKING.
HOLIDAY DAINTIES & DESSERTS.
PRIZES GIVEN for best Recipes and Contributions. How to prepare delicacies suitable for afternoon teas, or small evening companies, that are not too expensive.

Instructive articles on "HOW TO APPEAR WELL IN SOCIETY," "HOW TO TALK WELL AND IMPROVE YOUR GRAMMAR" by Mrs. EMMA C. HEWITT.

HINTS ON ETIQUETTE, How to Entertain, &c., by Sophie Orne Johnson, [Daisy Eyesbright].

"MOTHER'S CORNER," "ARTISTIC NEEDLEWORK," and "FLOWER" Departments are all Special Features.

CURTIS PUB. CO., Philada., Pa.



Brewster's Patent Rein Holder. Your lines are where you put them—not under horses' feet. One agent sold 12 doz. in five days; one dealer sold six doz. in 15 days. Samples worth $1.50 FREE. Write for terms.
E. E. BREWSTER, Holly, Mich.

WEAVER ORGANS Are the Finest in Tone, Style, Finish and general make up of any goods made. Guaranteed for 6 years. Send for Catalogue, testimonials and terms, free, to
Weaver Organ and Piano Co., Factory, York, Pa.

GUNS Our $15 Shot Gun now $10. "$15 *Breechloader*" $9.50 All kinds Guns guaranteed lower than elsewhere. Send stamp for illustrated catalogue. POWELL & CLEMENT, 180 Main St., Cincinnati, Ohio.

WORK FOR ALL. $30 a week and expenses paid. Valuable outfit and particulars free. P. O. VICKERY, AUGUSTA, MAINE.

PERSONALS.

EX-PRESIDENT ARTHUR'S friends, who visit him in his retirement, are hopeful of his recovery, because he is hopeful.

PRESIDENT CLEVELAND has contributed $25 for the purchase of seed wheat for the sufferers by the drought in northwestern Texas.

SENATOR DON CAMERON'S daughter is a noteable horsewoman. One of her latest trips on horseback was from her father's home in Pennsylvania to his home in Washington.

ANDREW CARNEGIE, the millionaire philanthropist, of Pittsburg, Pa., who has been ill with typhoid fever for several weeks, is said to be convalescing. His brother died last week and his mother last Wednesday.

TOM FINTY, the biggest railroad-tie merchant in the West, was formerly a section hand on the Ohio and Mississippi Railroad. He is now the richest man in Clay County, Illinois, and employs 100 hands. He lives alone, and dresses like a day laborer.

MR. ROBERT GARRETT, president of the Baltimore and Ohio Railroad, has three private secretaries, one of whom has become rich by speculating in stocks on tips given him by his employer. Mr. Garrett owns one of the finest private libraries in the country, and has decidedly literary tastes.

M. PAUL BERT, French Minister Resident in Annam, has died of pestilential fever. M. Bert was long professor of physiology in the faculty of science at Bordeaux, and achieved a high reputation in the scientific world. He was elected to the National Assembly in 1871, and 10 years later was appointed Minister of Public Instruction. He wrote much on scientific topics. He was 53 years old.

FRED ARCHER, the most successful and celebrated of English jockeys, shot himself dead, Monday, while half crazy from illness brought on by over-training in reducing his weight to 116 pounds, to fit him for the saddle. He rode like a demon to win every time; was not only the employé, but the companion, of lords and ladies, and left over $500,000, every cent of which he had earned or won himself. His death caused a greater sensation than would that of a Prime Minister.

Miscellaneous Advertising

How to Make Money.

No matter in what part you are located, you should write to Hallett & Co., Portland, Maine, and receive, free, information about work you can do and live at home, at a profit of from $5 to $25 and upwards daily. Some have made over $50 in a day. All is new. Capital not needed; Hallett & Co. will start you. Either sex; all ages. Those who commence at once will make sure of snug little fortunes. Write and see for yourselves.

PURE MILK.

WARREN MILK BOTTLES

Patented March 23d, 1880.

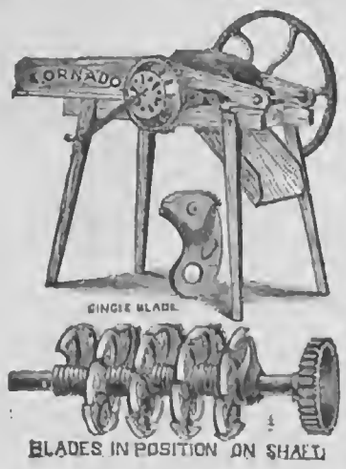
Adapted for the Delivery of Milk in all Cities and Towns.

A Long Needed Want at last Supplied.

DESCRIPTIVE CIRCULARS ON APPLICATION.

A. V. WHITEMAN R. N.,
72 Murray Street, NEW YORK.

The TORNADO Feed Cutter



A new invention for cutting hay, straw, sheaf oats, ensilage, and thoroughly cutting and splitting corn fodder, either **husked** or **unhusked.** Cuts on an entirely **new principle.** Not liable to get out of order. **Will cut faster with less power** than any other cutter. Has been thoroughly tested and found perfect in every respect. Farmers, Dairymen, Liverymen, and Stock-feeders can save **money, time, and labor** by using a **Tornado Cutter.** Made in sizes to suit everybody. Every machine warranted to give satisfaction. Responsible agents wanted in unoccupied territory. Write for prices and circulars giving full particulars.
W. R. HARRISON & CO., Mfrs., Canton, Ohio, U. S. A.

THE OLD RELIABLE HALLADAY
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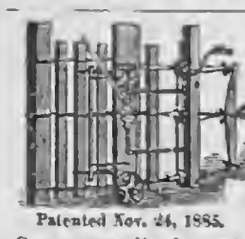

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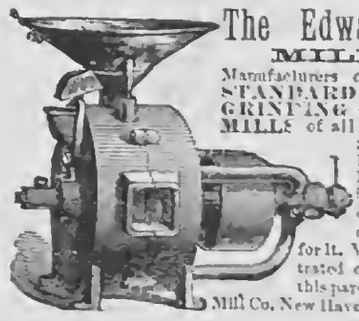

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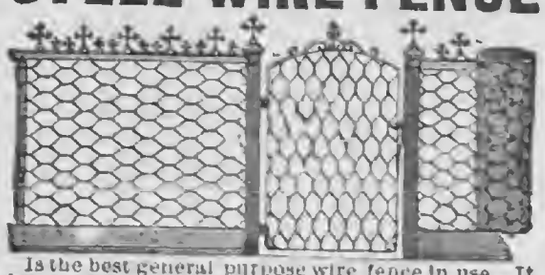

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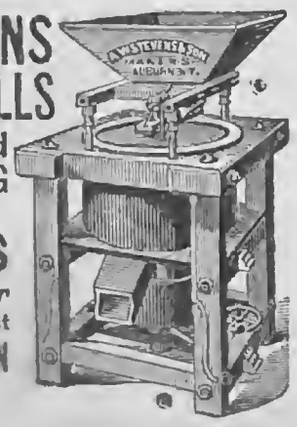

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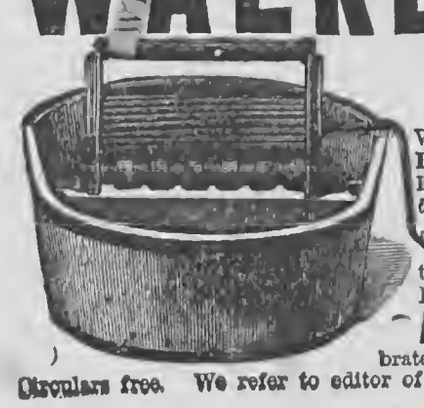

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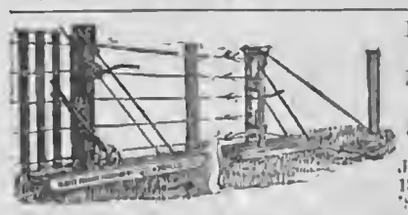

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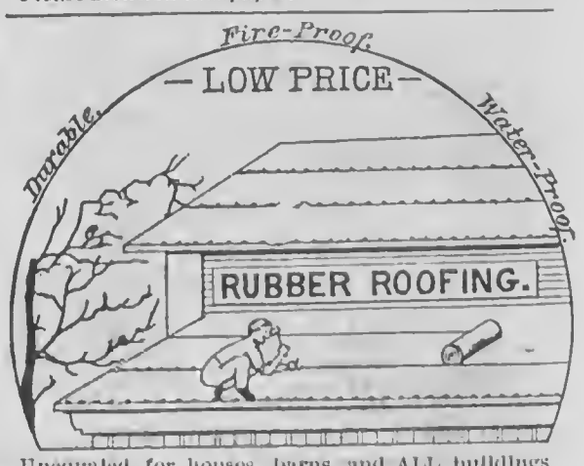

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THE RURAL NEW-YORKER

A JOURNAL FOR THE SUBURBAN AND COUNTRY HOME

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The Vineyard.

HUBER'S SEEDLING GRAPES.

HUBER, of Illinois City, Ills., again sends us a number of his seedling grapes. Plants of all were sent to the Rural Grounds in 1884, but they were nearly dead when received. Some have survived, and will fruit next year; others died. The following grapes are all large and showy. The fault would seem to be, so far as quality is concerned, that they resemble each other too closely. If all were equally productive and hardy, two or three might well be selected for propagation, the rest destroyed. But we bear in mind that a new grape which is a success in one place is a failure in others, so that these seedlings must be tried in different States ere a just estimate of their worth can be arrived at.

JOHN A. WARDER, Fig. 434, p. 791, is a jet-black grape with a dense blue bloom. The berries are large, two to three-seeded. The quality is much the same as that of Concord, though the flesh is sweeter. The skin is quite firm, and we should suppose the grape would ship and keep far better than the Concord. The illustration shows the average bunch. Mr. Huber writes us that the berries commence ripening with him Aug. 15, and that they are black before fully ripe. He says it is an extraordinary bearer.

MARIE LOUISE, Fig. 435, p. 791, is a white grape of a golden color when fully ripe, with considerable bloom. The berry is large, two-seeded, sweeter, sprightlier, and better than Concord. The skin is thin, but quite firm, and the grape ships well. It is showy and excellent. The illustration is an exact counterpart of one of the bunches sent to us. Mr. Huber says it ripens with Concord, and is very hardy.

BERTHA is a light-green grape, with medium-sized berries crowded in the cluster, as shown. The quality is scarcely better than that of Concord, though we should judge the variety to be very prolific from the number of clusters on the stem sent to us. See Fig. 433.

Emma is a light-green grape, of medium size, with thin bloom, and in quality scarcely better than the Concord. T. T. Huber is about the same as Concord, with two to three large seeds in each berry. The berries are large light-green, with ample bloom. Alphonse is a large, light-green berry, with the quality of Concord. Henry is a smaller berry of the same color and quality. Barbara Braendly and Marguerite are much the same. These varieties are said to be hardy.

GRAPE CUTTINGS.

IT is now time for making grape cuttings, and putting them in condition for the Winter. Different methods are in use for their preservation during the cold season, but all of them include the idea of keeping them moist and unfrozen. Freezing ruptures the cells, and makes the cuttings decay; heat without moisture dries them up, and they cannot take root. Every perfect cutting has sap enough stored away in its cells to make it take root if properly treated. I have been successful in raising vines from cuttings by three different methods.

1st. Take cuttings of two buds in the Fall from last year's wood, tie them in bundles properly labeled, and bury them in the ground out of the reach of frost, or protected from frost in some way. They should be cut quite close to the lower bud, and a space of an inch or two should be left above the upper bud. In the Spring set them in fine loam in a warm location; keep them moist, and there will be no trouble in making them live.

2d. Take cuttings of two buds as before; place them in earth in pots or boxes in the cellar, the cuttings being set as you would set them for growth out-of-doors, being careful to place them where they will not freeze. Keep the earth around them moist all Winter. In March or early Spring they may be brought into a warm room, and they will start very early.

3d. Take two-bud cuttings in the Fall, bundle and label, the butts being all placed the same way, and put them into pails or any vessel that will hold water. Put in the bundles butts down, and keep an inch or two of water in the vessel all Winter. Care must be taken that the water does not evaporate and leave the cuttings dry, as it would be fatal to them. They should be kept in a cool cellar, where the mercury is above freezing point. In March they can be put into pots or boxes of earth, and placed in a warm room, or where the ground is warm enough out-of-doors, they can be set where they are to remain.

I have been more successful in this last way than in any other. The cuttings come out bright in the Spring, start immediately, and the vines make a good growth. It may not be the best way for nurserymen, but for small growers I do not know of any better method.

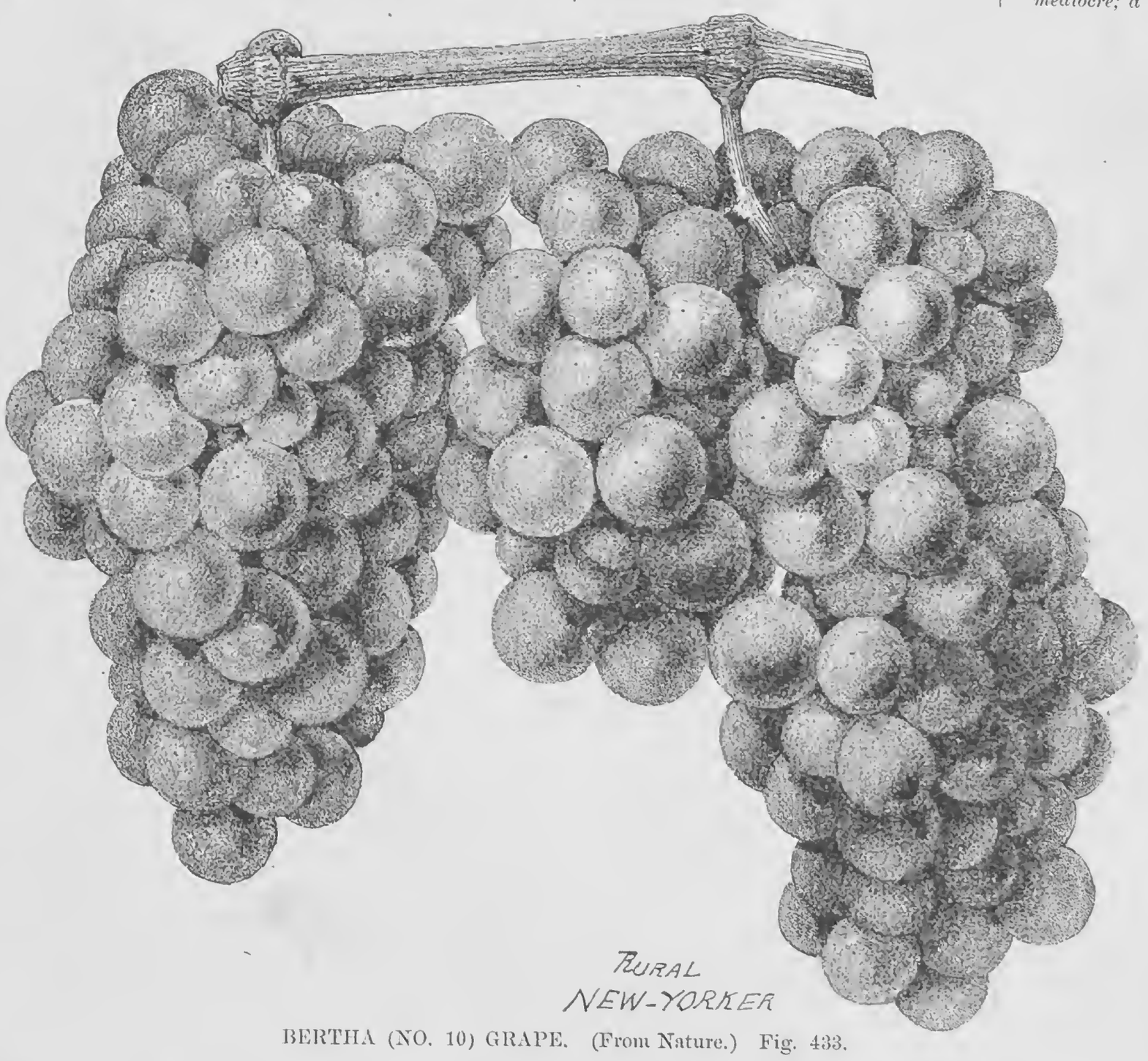
Providence Co., R. I. C. T. KEITH.

ALICANTE GRAPE.

PRES. P. BARRY.

THIS variety has long been cultivated in European collections. Like most other popular sorts, it has a long list of synonyms—Dr. Hogg, in his Fruit Manual, gives 10 or 12. It is supposed to be of Spanish origin, but the history of its introduction seems to be in obscurity. A few years ago it was brought prominently before the public by W. Meredith, of the Garston Vineyard, near Liverpool, England. He had at one time, when I visited there, entire houses filled with this sort, bearing enormous crops. This gave it a start in popularity. I had my vine from that establishment. The variety was then called "Meredith's Alicante" to distinguish it from others bearing the name Alicante.

It is a large, handsome, oval black grape of not more than second quality, but valued for its free fruiting and good keeping qualities. In England it is largely grown for market. I have three vines in my cold grapery, and they never fail to give a heavy crop. A little heat to finish the ripening, would no doubt improve the quality. The bunch is broad-shouldered, compact and large to very large, weighing from two to four pounds, according to treatment, and it is a superb grape and easily grown—a pity the quality is not better.



BERTHA (NO. 10) GRAPE. (From Nature.) Fig. 433.

Floricultural.

THE NEW YORK CHRYSANTHEMUM SHOW.

(RURAL SPECIAL REPORT.)

Show held too early; general effect not striking; new Chrysanthemum Mrs. Cleveland; old favorites; new seedlings; designs mediocre; a petty extortion; the Pompon Class; other classes; orchids; a moderate success.

THIS year the New York Horticultural Society secured a fairly good place for their exhibition, giving a better opportunity for sightseers and exhibitors alike. Cosmopolitan Hall is not without its disadvantages, but it is immeasurably superior to the melancholy structure where the last show was held, and the excellent concerts daily were an additional attraction to many.

Unfortunately, the show was fixed for an earlier date than last year, while the season is much later; so many of the plants were not really sufficiently advanced for exhibition. This disadvantage made the display of cut flowers better than that of plants, since it is always possible to find odd blooms in perfection, when the effect of the entire plant would be poor.

On entering the hall, the first attraction was a table of cut flowers, for the most part remarkably fine specimens of old varieties. This table had a back-ground of evergreens, cutting off any view of the interior, where the mass of plants was displayed. Although the arrangement was good, the general effect of the hall was not striking on first entry: it was too much on a level, so that it could hardly be appreciated except from the balcony. There was a good backing of evergreens and autumn leaves on each side shutting off the space beneath the balconies.

The central group of plants was the finest, containing such old favorites as, Golden Gloire de Rayonnante, Gloriosum, Golden Dragon, and a whole gamut of other yellows from sulphur to deep brouzy buff, relieved by silvery Brise du Matin or snowy Jeanne d' Arc.

On a pedestal in the center of this mass was a vase containing the much-praised new seedling, Mrs. Cleveland. It was veiled in feathery adiantum, and patriotically draped with a tri-colored sash; but the flower itself is disappointing. It is a narrow-petaled, greenish-white Japanese seedling from President Cleveland, which we all admired at the last show. It is not nearly so handsome as the parent plant, and being narrow and scant of petals the general appearance is distinctly

scraggy. Some of our floricultural writers have been praising this flower so much in anticipation as the coming chrysanthemum, that a great many were disappointed by it; probably the taking name has much to do with its transient popularity.

Groups of bushes and standards were massed down the sides of the hall, with an occasional palm, the shining green foliage making an artistic break in the poly-chromatic blossoms. The standards were appropriately placed at the back, so that their tall heads showed above the shorter bushes; standing alone they have a painfully artificial aspect, like plants on stilts. In the Japanese section Admiration attracted much favorable comment; it is a beautiful clear-pink, without the aniline shade usually seen in this flower.

All our old favorites were there, of course—Hero of Magdala, with its rich crimson, shaded by bronze Kata Kanka, and all the myriad golden shades, relieved by purest white. Of the new seedlings Silver Chalice is perhaps the most characteristic. It is a Japanese, with snowy petals curving up cup-like from a yellow center. Thorpe Junior is another good seedling, long, golden-yellow petals coming from a daisy-like center. Margaret Thorpe, also new, has curving petals, crimson on one side and buff underneath. The finest uncut flowers were of course on disbudded plants, consisting of one melancholy stem supporting a single flower, all the vigor of the plant having gone into the one blossom; the result was surpassingly fine, viewed as a flower; the plant itself could hardly be admired.

The exhibition of designs was small and of noticeably poor quality from an artistic standpoint. There were some vases and baskets, some screens and what we suppose to have been intended for a center-piece. In most cases the makers fell into a very common error—they used light, feathery ferns for drapery, when foliage with this flower should always be of a heavier quality. Delicate leaves make the flower look coarse, and the arrangement seems patchy. The screens for the most part showed this mistake; the solid groundwork of crysanthemums craped with feathery adiantum was ungraceful, to say the least. One panel, however, showed a better arrangement. The background was of crimson liquidamber leaves, and on this was a trailing spray of white crysanthemums with their own foliage. Another panel showed careful and clever work, having a solid backing of yellow flowers, with a Japanese pagoda worked on it in red; but though the good workmanship gave it the look of a real Japanese screen it could hardly be recommended from a floral standpoint.

At one end of the hall was a detachment from the Japanese village, consisting of two rooms furnished, or rather unfurnished, in the Japanese style, where two neat, sleek-haired little orientals painted chrysanthemums on satin, with much dexterity and despatch. These were always surrounded by interested sightseers.

One feature of this exhibition, which caused much dissatisfaction, was the substitution of numbers for the names of the plants. Instead of the unbotanical but flower-loving public being able to ascertain in a moment the name of any favorite, there was a tedious reference to the catalogue, as at a picture gallery, and as people are very apt to pick up a number, and then carelessly put it down again on the wrong plant, the name was often a matter of uncertainty. The catalogue appeared to have been hurriedly compiled, and showed the work of a very poor proof-reader, and as the lithographed cover was calculated to give an artist a pain in the eye it was scarcely a success in any particular. Many people were inclined to grumble at having to pay for these catalogues: it seemed the general impression that they should have been given away like the programmes.

The exhibition in the Pompon class—Chusan Daisies, as they were formerly called—was not so good as last year, as few of the plants were sufficiently opened. The single-flowered specimens were good. This class—the old-fashioned artemisias—receives more attention now; for a few years they were cast in the shade by variations of the double form. The "three little maids from school" were there—Ynm-Yum, Pitti-Sing and Peep-Bo—while the odd, red-rayed Ko-Ko mounted guard over them. The anemone-flowered class, too, was well represented, though it is usually more noticeable for oddity than beauty

It is almost impossible to give a list of the best flowers; it would read like a page from a nurseryman's catalogue. Last year I made a list of the very best flowers seen at three exhibitions, and it numbered 200 and odd varieties, all of remarkable beauty.

Taken as a whole, the late New York exhibition was not so fine as some preceding ones, inasmuch as the plants were not so fine individually. But the great quantity of plants present, varied by occasional palms and evergreens draped with Bittersweet, made a showy and striking interior, and after the long and tedious judging was over, the plants were rearranged with a much better effect than at first.

In addition to the chrysanthemums there were a few orchid flowers and nepenthes, which always excite much admiration, and some blooms of Mr. Evan's new white rose, the Puritan. The delicious tea fragrance of this flower will always prove attractive, whatever its other qualities may be. Taken all round, the show may be counted a success in spite of a fair share of defects, and the conception and carrying out of such an enterprise bespeak both energy on the part of the society, and interest on the part of the public.

EMILY LOUISE TAPLIN.

Farm Topics.

CORRESPONDENTS' VIEWS.

NO SALT FOR CABBAGES.—We used salt on our cabbages in diluted form this season with poor results. We do a large business with one of the wholesale grocery firms in New York. They ship us their codfish (salted) skins and backbones. We made a compost heap of them and after letting them lie a year, used them on cabbage. The plants had to be replanted twice, and then only about 15 per cent. lived. The few that lived were a little better than the average. Salt, we think, killed the plants. SCUDDER & TOWNSEND.

Queens Co., N. Y.

UNWISE TAXATION.—There seems to be something unfair in the way improvements are taxed. If I paint my house and barns, put a lawn in front of my house, plant shrubs and flowers or dig out a lake and surround it with trees, my taxes are at once raised. The more I add to the beauty of my home, the higher they assess my property. In many cases this increase is entirely out of proportion. It is so great, in fact, that many think they will make money by neglecting improvements, and either put their money in the bank or store it up-stairs where the taxes won't eat it up. There is very little inducement in this system to fix things up, and miserly farmers are quick to take advantage of it. V. J. K.

Bergen Co., N. J.

PROTECTION AT RAILROAD CROSSINGS.—The frequent killing of farmers and their employés, to say nothing of the still more frequent killing of horses and stock at railway crossings, should attract more attention than it does. It is astonishing how reports of accidents of this kind are hushed up, being seldom heard of outside of the locality where they occur. There are few railroad crossings where one or more farmers or hired men have not been killed, and it is high time something was done to stop this wholesale and unnecessary slaughter. In all large towns gates are provided, but at country crossings there is usually no protection or warning except the whistle. In these days of electric alarms, there is no reason why a bell should not be kept ringing continuously at every crossing while the train is dangerously near, or, what would be better yet, there should be a gate or folding bar worked automatically by the weight of the train. Unfortunately the railroad companies usually escape paying damages on the plea of contributory negligence if the whistle is blown or the bell rung. A law which would compel the railroad companies to pay damages in all cases of loss of life or property at regular crossings would soon force them to adopt some life-saving device. In the meantime, there is a chance for our inventors to devise an automatic gate or bar which can be operated by a train as it approaches a crossing. J. H. G.

Queens Co., N. Y.

R. N.-Y.—This is a timely subject. Some crossings are located at the side of a hill or near a bend in the track, so that it is impossible to see the on-coming train. Many farmers are careless in the matter. Some market-men driving into New York during the night, fasten the lines to the seat and go to sleep: The horses walk on, crossing several railroad tracks on their journey.

SLAUGHTERING GAME.—On the first day of legal hunting, November 1, I counted no less than 76 men and boys out with dogs and guns. Very few of them came back empty-handed. There was a tremendous slaughter of quail. The law is well respected. Copies of the game laws are posted in all conspicuous places and a society has been organized to protect game. Special fees are given to informers and extra watchfulness is encouraged. It would be a fine thing if the Legislature would pass a law to protect game for five years. Let them do entirely away with the present short shooting season, and give the game a chance to increase. There would be better shooting to pay for it.

Bergen Co., N. J. H. J. J.

R. N.-Y.—But wouldn't the crops suffer? One of the greatest grievances of English tenant farmers is due to the great injury done to their crops under the game laws. Where these are strictly enforced, and game is not thinned out by sportsmen for a few years, the losses of the farmers are often disastrous. Quail, woodcock, partridges, etc., are always harmless, but rabbits, etc., do much harm.

LET THE BOYS HAVE SOME FUN.—People still wonder why boys want to leave the farm and try the fortunes of the city. There is little wonder in it when the matter is looked into. Too little effort is made to make the homes, from which boys want to run away, attractive. The almighty dollar gets in the way. How many boys are governed as they should be? Boys are not wild animals. They do not need pounding because they do not do their work as well as an older person. They have not had experience. How much could you get for a young colt that had no more life and spirit than a horse of 20 years? The trouble is that too many farmers have too much to say about big "I" in talking to their boys. Why not say "we" or "ours" in talking about the farm or the stock, and encourage the boys to say the same. They will learn to take an interest. Subscribe for the paper in their name, and if there is something a little extra in stock or vegetables, let them take it to the fair. You can get along just as well if you do drop a little importance. Boys like a little fun now and then, and they ought to have a play day. When work gets a little crowding and they try to have a little sport what good does it do to scold and growl? Put in a word yourself; the work will go off all the easier to pay for it. Never mind if they throw a nubbin of corn at one another. It won't hurt you; it wouldn't hurt you to throw one yourself. Don't think so much of your dignity. A little fun will oil up the joints of your life and make it run easier. Do anything to make the boys think they are having a pleasant time. A little fun and good nature will go far towards turning work into play. When you get a boy so that he loves his work, he will love his home and his parents, and you will have a strong arm to rest on as you go down the slope of the declining years of life. The time is coming when you won't be the boss that you are now. Your treatment of your boys now will govern their treatment of you then. O. T. H.

Bath, N. Y.

WASTED PASTURES are frequent throughout the West. They are ruined by poor judgment in running cattle and hogs over them. Can we not find some better method in feeding cattle at pasture? My observations are confined to farms which feed, say, 40 hogs and a dozen neat cattle. I have seen many a splendid pasture that could sustain that much stock destroyed in a single season. I saw eight hogs fed from May 1 to October, from such a small patch of clover that I was astonished. These hogs were fed from small shoats till they were of great size, and that by a boy who cut the clover, carried it to them three times per day, and kept at school too. At the same time I saw where only a few more hogs had eaten down and totally ruined by November several acres of what would have been splendid pasture if left alone and cut carefully. I consider that the waste made by such pasturing and the careless feeding of corn will offset all we can make. Custom and prejudice are at the bottom of it. Time and the circulation of such papers as the RURAL may correct matters. Who can suggest a better remedy.

Oregon, Mo. C. I.

Farm Economy.

RECUPERATIVE AGRICULTURE.

(FIRST ARTICLE.)

PROFESSOR I. P. ROBERTS.

A change of system or a foresting of worn-out land necessary; unproductiveness of much land at present; permanent pastures and sheep; dogs must go; need of stock food not grown on the farm; transformation of crude plant food; fertility retained in droppings.

How to restore a sufficient portion of the original fertility of impoverished fields so that their occupancy and culture may be fairly remunerative while improving them, is a problem that requires careful consideration. Through ignorance, carelessness and greed, many once fairly fertile acres have been so far impoverished as to preclude profitable cultivation now or hereafter, if the same systems that robbed them are persisted in. If this be so, a change of some sort becomes necessary if we preserve for cultivation the lands that have once been brought under subjection by the plow. There is much land so steep or rocky, or naturally so poor and of such narrow capabilities that it should be given over to the growth of forest trees, or to Nature's slow but sure methods of soil improvement.

It is not my purpose, at the present time, to speak of lands which, under any management, would prove unprofitable if kept under tillage, but of those which in time can be so far improved as to make their cultivation profitable. Neither is it my purpose to give details, instructive of improving the land, except so far as may be necessary to explain and emphasize certain principles, as environments always control, to a large extent, the means used to accomplish our ends.

A large amount of our cultivated land—I believe fully one-half—is not producing, under present management, over 10 bushels of wheat or its equivalent in other products, per acre; and over an eighth—to put it mildly—is not producing over half that much. Although my readers may not agree with my estimates, they must admit that the income from thousands upon tens of thousands of acres is so small that it is insufficient to give even European starvation wages to the farmer. If land will not give fair wages and a profit under tillage, then it should be permanently seeded to grass and clover. Why spend the equivalent of a dollar for the pleasure of receiving in return 95 cents. A field well set in grass will improve rapidly in fertility if all the manure that the animals produce that consume the grass, and a reasonable amount of bran and other like by-products, be returned to it. Of all domestic animals, sheep are best suited to improve poor lands. They graze closely, which causes the grass to tiller and cover bare spots. They eat nearly all species of weeds and brambles. They pack and level the surface of the land without poaching it. They usually lie at night on the high land, thus leaving their droppings largely where most needed. They furnish the best and most convenient means of securing fresh, cheap, healthful meat at all seasons of the year. There are the *dogs!* Yes; I know, but the dogs must go. Shall a great and profitable industry be destroyed because there is a superabundance of worthless, mangy curs? A good gun and the law will soon drive them out of any locality.

There are many acres especially in the South, where even Bermuda Grass could get but a feeble footing at first—places where the grass would sustain but one sheep per acre. Under such circumstances the animals should receive a liberal supply of bran, cotton-seed or sorghum-seed meal, at least some food not produced on the land to be improved. But this you say is robbing Peter to pay Paul. In some cases it may be; but it is not necessarily so. There are vast and inexhaustable stores of plant food in and upon the earth, which are either going to waste or inert and valueless to the farmer in their present condition. It is the province of improved agriculture to seize upon crude and cheap material and through the aid of plant and animal transform it into merchantable food and clothing. The phosphoric acid found in the rock and bone for which is paid eight cents per pound, will be found in the milk, a thousand pounds of which contain:

1.5 pounds potash.
1.7 " phosphoric acid
5.1 " nitrogen

The total cost of the above in the form of fertilizers would be one dollar; in solution in milk they sell readily for from $10 and $40. Then, why not purchase more liberally of the crude, cheap products; mix them with brain and muscle and sell at these advanced prices. A ton of bran, costing $14 with us this season, furnishes, in round numbers:

Nitrogen	41 pounds.
Potash	28 "
Phosphoric acid	54 "

If fed to sheep not less than 80 per cent. of these valuable constituents would be found in their droppings, as follows:

Nitrogen, 35 pounds @ $ .16	$5.60
Potash, 22 " " .04	.88
Phosphoric acid, 43 pounds at .03	3.44
	$9.92

If we take some other products, as cotton-seed meal, the showing will be still better. There is not the slightest doubt that the surest and cheapest way to profitably improve poor land is to seed it down even with weeds of the least harmful sorts, if it will not grow grass at first, and then supplement the pasture with other food.

(*Concluded next week.*)

DEVICES FOR GATHERING FOREST LEAVES.

LEAVES are exceedingly rich in fertilizing matter. Leaf mold makes the richest soil and is made expressly by gardeners by heaping leaves in piles to decompose, for use in their greenhouses and forcing beds, also for potted plants. They are, therefore, valuable for use in stables and yards for litter, and this not only for their manurial value, but because they are the softest, warmest and cleanest

bedding that can be procured. This is the season when they should be gathered in abundance and stored for use during the Winter. They will thus become an excellent substitute for straw and leave this for use as fodder, along with some meal and bran, which will make it as good as hay.

For gathering leaves one wants a heavy rake with strong, wooden teeth, and a head three feet long. This is necessary to resist the snags and brush in the woods. A peculiar and very effective contrivance for taking up the leaves is made of two light poles four or five feet long, having a sheet of common bagging, four feet wide, stitched to them as here shown (Fig. 439).

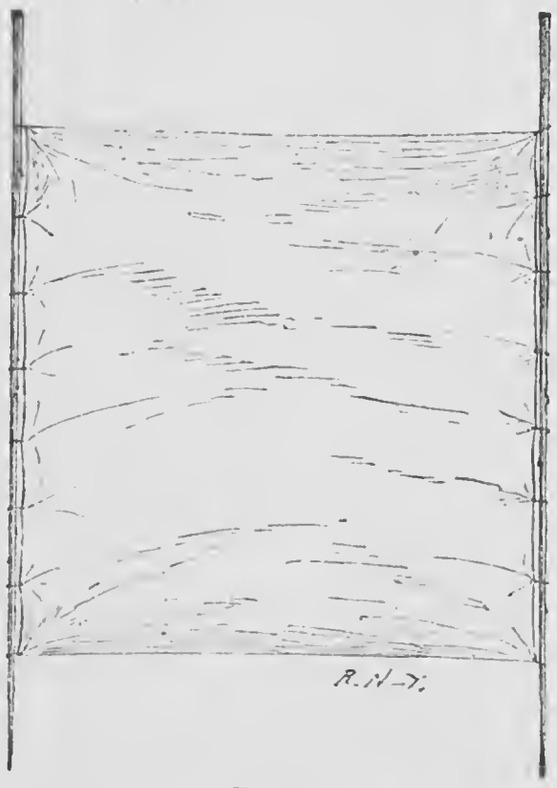


Fig. 439.

The leaves are raked up in heaps; this sack grip, or grip-sack, as it might be called, is turned down over the heap; the handles are brought together, gathering a lot of the leaves, and these are lifted up and emptied into the rack or the wagon. Another contrivance is made of a light hoop-pole about 12 feet long, or a light hickory rod, to which a piece of bagging is fastened loosely, so as to make a sort of basket (See Fig. 440). A large

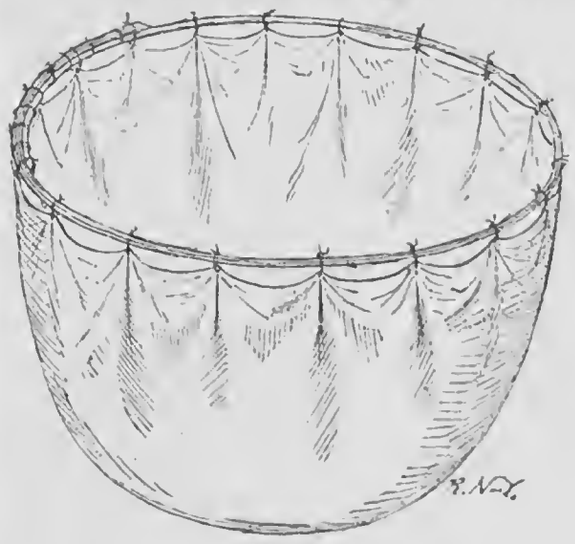


Fig. 440.

quantity of leaves may be picked up with one of these, laid on the ground and the leaves raked in a large pile on it. Several bushels may be taken up at once with this leaf lifter.

Rural Topics.

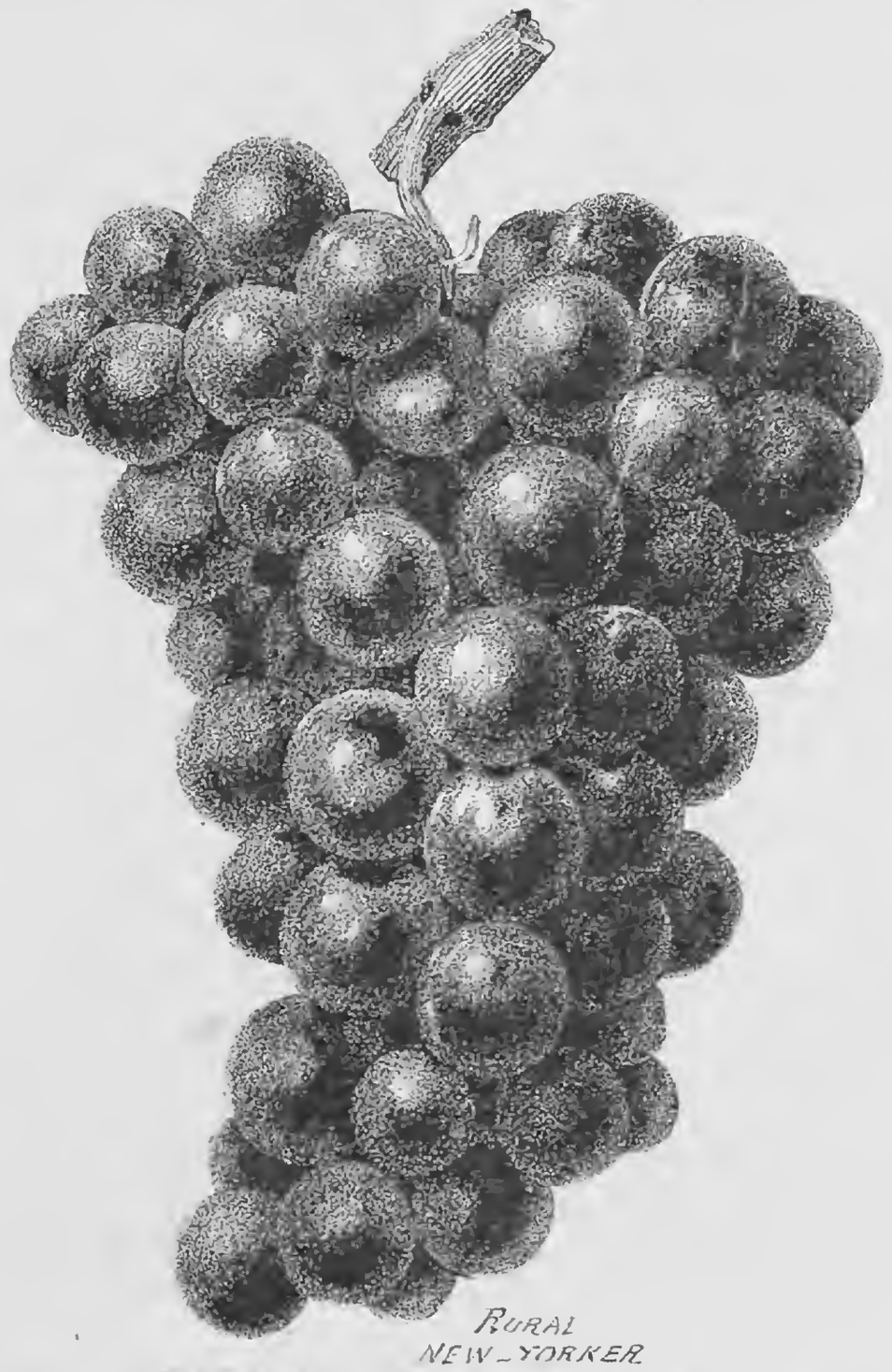
RUMINATION.

HENRY STEWART.

DEHORNING CATTLE.—Mr. Haaff, in the RURAL of Oct. 30, rides his hobby on this subject too hard. Dishorning cattle is a painful process. When he writes as he does so incorrectly about horns, intelligent persons will lose confidence in his judgment. Any book on anatomy gives a clear description of the horn of an ox, and shows that the inner core of it is a continuation of the frontal sinus, and is lined with the periosteum, a most sensitive membrane and full of nerves and blood-vessels. Further, when he says if the horn is cut above a certain point the animal will bleed to death, but will not if cut lower down, he states an absurdity, for there can be no blood above a point if there is no artery below it. Cutting with a saw prevents bleeding because it tears and does not divide the blood vessels smoothly.

MILKING EWES.—When I was at Roquefort 25 years ago, I saw a good deal of cows' milk made into the celebrated cheese of that place, and the keeping of ewes for the milk has been gradually falling off as less profitable than keeping cows. The New Zealanders will be going backwards if they go to keeping ewes for making cheese.

THE HORNS OF THE DEVONS are a serious objection to this excellent breed. Long and sharp as daggers, the owner of a Devon is always on the brink of sudden death from these weapons. I kept Devons once, but a young cow once turned upon my wife, who was petting her calf, threw her down and thrust the long, sharp horns completely through her clothing, tearing the skin quite across the breast. It was done in an instant, and but for a hay fork standing near by both my wife and I would have fallen victims to those "cruel horns." If Mr. Haaff would adopt the practice of dehorning young calves before the horns are grown—a simple operation—I will aid him as far as I can.



JOHN A. WARDER GRAPE. From Nature. Fig. 434. (See first page.)

MARIE LOUISE GRAPE. From Nature. Fig. 435. (See first page.)

A GREEN CROP FOR FOWLS.—It is an excellent plan to have a yard sown with some green crop for the fowls; but why take it from them and give it to the cows? A flock of hens are as valuable as a cow, if not more so, and should be equally well cared for. The plan of having two yards for a flock and each sown with a green crop alternately, I believe was first introduced by me, and I found it indispensable when my flocks numbered nearly a thousand in all.

ENSILAGE—Sir J. B. Lawes has done American farmers invaluable service by his occasional contributions to the pages of the RURAL, the first American paper for which he ever wrote. The summary of the Rothamsted experiments with ensilage given on page 721, puts this subject in a very clear light. We can understand how all vegetable substance suffers loss during fermentation in the silo. What we want to know quite as much is what changes occur in the curing of hay and corn fodder, that we cannot get equally good butter and cheese as from the green fodder.

WHEN TO SPREAD MANURE.—Dr. Hoskins is always sound, and his statement that animal excrements are never worth any more than when they are fresh from the animal, is sound common sense and fact, and should stop the flow of the abundant nonsense written about the increased value of litter and manure by decomposition. If this could happen something could be got for nothing; and the chemical action of decomposition—which is a force, because heat is developed by it—would occur without any cause that could produce it. It is of great importance that this fact stated by Dr. Hoskins should be clearly understood by every farmer.

THE MUZZLING OF DOGS is a safe and reasonable practice, and should be universally adopted. I have a large flock of sheep which require my care day and night to preserve them from roaming dogs. I have lost 20 the past Summer, without counting the injury to the others by the chasing and fright. If one of my sheep should trespass on my neighbor's field or garden, there would be a howl of disapprobation; hence I keep the flock inside of safe fences. But when my neighbors' dogs trespass upon my pastures and kill and mangle my sheep it is considered a matter of course. If a man will keep a dog, why should he not be compelled by law to keep him on his own premises. If this were done, there would be an end of the dog nuisance, and the owner could have all the hydrophobia to himself.

MR. BAXTER'S six-pound sweet potato, dug in Kansas, is a poor thing compared with a crop I have seen taken up in North Carolina: where a heap of 30 or 40 bushels of selected potatoes were all over six pounds each, and some weighed more than eight pounds.

Macon Co., N. C.

Dairy Husbandry.

CONVENTION OF THE NATIONAL BUTTER, CHEESE AND EGG ASSOCIATION.

(RURAL SPECIAL REPORT.)

THE Thirteenth Annual Convention of the National Butter, Cheese and Egg Association closed on the 12th instant, in D Battery, Chicago, after a three days' session. The first day was devoted to the reception of delegates, from the leading cities of the country, at the Columbia Theatre, speeches of welcome from the President of the Board of Trade, President of the Produce Exchange, who presided, Governor of the State, Mayor of the city, an address from Hon. W. H. Hatch, of Missouri, and the annual address of the President of the association on taking the chair for business. Instead of a regular newspaper report it will be more satisfactory to report by topics and so boil the whole down into a few paragraphs.

BOGUS BUTTER.

This topic was introduced by Mayor Harrison, who declared himself a butterine man because he is a Chicagoan, and called butterine the poor man's butter. This fell like a wet blanket over his hearers, and a voice twice shouted "No," while he responded "Yes, Chicago has the floor." Hon. William H. Hatch, of Missouri, declared that bogus butter "is not the poor man's friend, but the rich man's fraud." He had eaten more dry bread in the last two years than in all his previous life, because he was afraid when he dined at hotels, restaurants and in dining cars, that some of the abominable compound would be smuggled down his throat. He did not touch the so-called butter in Chicago. It is safe to say that consumption has in this way been greatly reduced, as the writer and thousands of others share in the repugnance of Mr. Hatch to the bogus stuff. In fact, no one of any refinement or sensibility will knowingly eat it. The sentiment of the convention was strong against it, and the determination was expressed to see that the national statute is enforced, and any needed amendments to render it more efficient be demanded of Congress. A committee of three from each State was provided for to secure State legislation against the manufacture of bogus butter "in semblance or imitation" of the genuine, as in New York. Mr. Hatch declared there is not the least danger of the present Congress repealing or doing any thing to weaken the present national law; that its constitutionality is undoubted, and the law will be found stronger before the end of the first year than either the dairymen or bogus butter men are aware. He thinks that only a small amount of the counterfeit article will be sold, and that almost wholly to caterers for restaurants, hotels, boarding-houses, steamboats and dining

cars. Hence the need of State legislation to directly protect consumers who may be imposed upon through these channels. The principal revenue receipts from bogus butter will be confined to the licenses of the first quarter of the year's enforcement of the national statute. Congress was called upon for an immediate appropriation to enforce the law.

CHEESE.

THE President in his opening address denounced skimmed and adulterated cheese as one of the worst evils of the dairy business. It has greatly lessened the home consumption of cheese as the stuff is not only indigestible, but unpalatable. Mr. Seymour, of New York, was convinced that if the dairymen would give our home consumers none but the best whole-milk cheese, the consumption would be doubled in five years. A State brand for full cream cheese, like that provided by the State of New York, was recommended by the convention. The superiority of Canada cheese was referred to, when the writer explained that it is due to the fact that the Canadians use the sweet-curd process introduced by Prof. L. B. Arnold which consists in drawing the whey sweet, keeping up the temperature of the curd, and developing the acid out of the whey. In this way, there is no danger of sour cheese, nor of cutting out the phosphates and fats with acid, since only a very small per cent. of the sugar remains in the curd and will not develop acid enough to do any injury. Failure on the part of those who condemn the sweet-curd process comes from too great a hurry to put the curd to press after the whey is drawn, and not holding it a sufficient length of time for the development of acid and the rennet action to take place. When this is done, a rich, mellow and firm, but never a hard and dry or sour cheese is the result.

BUTTER.

The best form of package for butter was declared by a vote of the convention to be tin, covered with a wooden jacket. There is complaint of a "woody flavor," caused by contact of the butter with the wood. This arises mainly from the laziness and neglect of the dairyman to properly soak and scald the tub and then saturate it with brine, and partly from the use of bitter or other bad-flavored woods in making tubs. The only objection raised against tin is the ease with which it bruises, which is remedied by the wooden jackets, and the possibility of the generation of chloride of tin, which is poisonous, from the contact of the salt or brine with the tin. Only one case of this kind had been heard of, while in years of practice in canning and sending butter to South America no complaint has been heard. The fact that the United States Government has butter put up in tin cans for long sea voyages was referred to as evidence that no serious results follow the action of the salt on the tin. Salt is a very common and very stable compound, and in all probability the combination is not likely to be broken by the attraction of the chlorine for the tin, or of the sodium for the fats of the butter, especially when the air is excluded. Objections were made to the use of paraffine, or of paraffined paper, a cotton cloth to cover the package being preferred. Tin is more liable to oxydation, but the smearing of grease protects it in this respect. One member called attention to the fact that if two tin pails, exactly alike, were filled, one with brine and the other with soft water, the one filled with water would be first attacked by oxygen and suffer the most.

COLORING.

The president expressed the opinion in his address that people are generally becoming aware that coloring butter and cheese adds nothing to improve their quality, and that it might be proper to discuss the question of abandoning coloring, especially as this is one of the chief means of successful counterfeiting. It is a fact worth observing that the only foreign ingredient, of modern origin, used by dairymen, should afford the most efficient aid to the counterfeiters of dairy products. Coloring, aside from appearance, can do no possible good, and theoretically is objectionable. It enables the maker of inferior goods to give them the hue of the finest. He may half starve his cows and make naturally a butter as pale as it is poor, but by the use of color he is enabled to deceive his customer as to appearance. Abolish coloring, and leave all butter to be sold for just what it is, and what it appears to be, and the dairyman would be compelled to keep up the color, if it is kept up, by keeping his cows in good thriving condition and giving them the best food for butter production. He could not conceal the condition of his herd behind the bottle of prepared coloring fluid. Although the convention took no action, and favored the toleration of coloring by the dairyman, while opposing it in the manufacture of imitation butter, it nevertheless might be in the interest of honesty and progress to abolish the practice of coloring altogether. Butter and cheese may as well wear their natural garb as any other article of food, and honesty in food products and manufactures is a desideratum of the times.

HONESTY AND QUALITY.

The writer read a paper in which he insisted upon strict honesty on the part of the dairyman, and the keeping up of the quality of his product by using the best salt, the best coloring—if any—and doing the best work possible. Any inferiority is an aid to the bogus butter manufacturer by lowering the standard. By keeping up the quality, imitation is rendered more difficult, confidence is established on the part of the consumer, consumption is increased, and thereby prices are enhanced. The rage for cheapness, the desire to obtain goods for less than they are worth, regardless of equity or the rights of the laborer, is demoralizing all branches of industry and rendering the moral atmosphere as corrupt as the commercial, and full of violence and danger. In the end, the farmer has nothing to gain by dishonesty, and of all classes can afford to remain honest through all temptations and mutations. If his industry is corrupt, it demoralizes all the industries resting upon it. Some day it will be found that "the god of cheapness is also the god of deceit and swindling." A national anti-adulteration law is demanded by the exigencies of the times. It is time all the necessaries of life were honestly exhibited and sold for just what they are. If mankind would try it for a while, they would find that honesty is the best policy.

EGGS.

Which is the best package for eggs—the barrel or the case or box? The barrel seems to be preferred in New York, because of the system of delivery by express, which makes it cost no more for a barrel than for a box containing half the number of eggs. The smaller markets of Boston, Philadelphia and other cities appear to prefer the box or case. The suggestion that egg packages be returned was voted down as too laborious and expensive for the receiver. Although feasible in other cities, it is not so in New York, and the judgment was against shipping eggs in second-hand and more or less damaged packages. It appeared to be conceded that the barrel is not so good to keep eggs in, the center being specially liable to injury; so that boxes are preferable where they can be used with satisfaction to the customer. President Winsor specially protested against keeping eggs in cold storage, as they are liable to get musty and so quickly spoil when removed to a higher temperature. It is better to give them to the customer as fresh as possible. He had no objection to liming eggs, which is a philosophically correct practice, and could not see the justice of holding limed eggs at a low price. For all cooking purposes, they are just as good as new-laid eggs. It is only when boiled that the objectionable flavor appears.

PRESERVING BUTTER.

Mr. Tower, of Michigan, described a process of melting newly-churned butter before salting, and raising it to a temperature of 120 degrees Fahrenheit, where it is held until all the caseous matter is precipitated and the lighter matter has risen as a scum. The latter is taken off and the oil run into ice water. At a temperature of 55 degrees it is packed in tubs, being put in by layers and the salt sprinkled on and worked in only by the use of the packer. The tub is headed, filled with brine through a hole, and then plugged up and set away in a cool place, where it is claimed it will keep for an indefinite period. It has no flavor or taste of butter, all the flavoring oils being expelled. In this way, the butter is kept until the market is satisfactory. Then it is raised to a temperature of 110 degrees, emulsified with skimmed milk, and thus made into a cream. This is treated the same as natural cream, the development of lactic acid being depended upon to give flavor. We thus have a good quality of oleomargarine made out of clean and wholesome material. This is all that can be claimed for the product.

OFFICERS.

A representative creameryman, H. B. Gurler, of De Kalb, Ill., President of the Illinois Dairymen's Association, was unanimously chosen President for the ensuing year, and Col. R. M. Littler, Secretary of the Chicago Produce Exchange, was unanimously re-elected Secretary and Treasurer.

T. D. CURTIS.

THE USE OF ICE IN THE DAIRY.

FIVE of the 300-word essays on butter-making, contributed to the management of the Iowa State Fair have been published. They are unanimous about the first most important requisites—good butter-cows well fed; partially with grain feed. Cleanliness of the cows, milkers, milk and cream comes in next. Not one says a word about the necessity of aerating the cream; but all insist upon the frequent stirring of it, and especially if new cream is added. All insist upon frequent churning, and aerating the cream when churning. Part of them recommend the use of ice-water to keep the butter in granules till the salting is effected. Only one betrayed a lack of information when giving the advice, "Keep ice out of milk and cream." Many a factory has been saved from great losses by using ice to cool the cream both in and out of the churn. While it is true that plenty of ice-water in which to keep the pails, and into which to wash the butter will do good, yet it is just as true that milk is not harmed by being poured directly upon ice; and cream can be mixed with it when needful to do so; and to my certain knowledge a perfect article and a long-keeping butter can be made by the "direct ice process." It is a mistake to hold that pure ice, rightly used, is damaging to milk, cream or butter. Millions of dollars' worth of all three "go to the bad" every year for the want of it. If people would get old-fogy notions out of their heads, and put up more ice and use it in butter-making, and in keeping milk over-night for the cheese factories, they would save money that is now wasted. "BADGER."

The Poultry Yard.

MODE OF VENTILATING A HENNERY.

THE device shown at Fig. 438 is an excellent one for heating and ventilating a medium-sized hen house. It consists of a piece of,

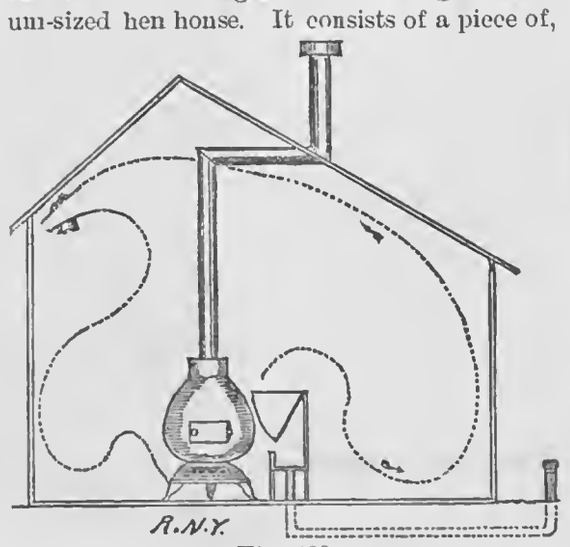


Fig. 438.

say, three-inch iron pipe running underground from the chicken house to the open air, so arranged that the cold and pure air comes out directly against the heated stove, passing upward as it becomes heated, and, finally, escaping from a circular, or other form of ventilator placed near the roof. The end of the pipe should be a few inches above the surface of the ground and covered with a sieve, to prevent the entrance of sand and dirt. The box should be so arranged as to admit the cold air directly on the stove, and should have a lid so arranged as to regulate the quantity admitted. The ventilator at the top of the hen house may be arranged in almost any way, so that it permits the escape of the foul air. This device will secure a uniform temperature and a free circulation of warm and pure air. It is the invention of Mr. Bates, of East Rockaway, L. I., and is not patented. It can be adapted to almost any hen house by almost any one, and at a trifling cost.

The Apiarian.

NORTH AMERICAN BEE KEEPERS' ASSOCIATION.

RURAL SPECIAL REPORT CONTINUED.

Wintering bees; causes of winter losses; proper food and temperature paramount requisites; brood raising; feeding bees in Winter; curtailment of drone production; hiving swarms; how to limit drone production; the use of foundation.

DR. A. R. MASON, of Ohio, read an essay upon "Wintering Bees." The following are extracts:—The first question that would naturally be asked is, what is the cause of our winter losses? All kinds of causes are mentioned, such as cold, confinement, too much and not enough moisture, excess of ventilation and want of ventilation, brood rearing, bad honey, starvation, pollen, lack of hibernation, etc., but nearly all the bees lost have dysentery, and it is pretty generally admitted that this is the great cause of winter loss. The next question, then, would be, what is the cause of bee-diarrhœa? The answer to this is not so unanimous. That it is the result of an over-loading of the intestines but few will deny. Poor honey in the hive may, but does not always produce it. The same is true of pollen, but diarrhœa is so seldom produced without pollen that the exceptions need hardly be taken into consideration.

Many things might be named as aids in successful wintering; but all may be included in two—proper food and right temperature. Proper food is first in importance, and may consist of either honey or sugar sirup, or both, and may, or may not, include bee-bread. If it is desired to have brood-rearing going on before the bees can gather pollen in the Spring, then it must be included in the winter stores. Many successful bee-keepers say they do not want their bees to rear broods until they can gather pollen from natural flowers in the Spring; but my own experience satisfies me that I can get a much larger yield of honey from a colony that commences to breed in January or February than I can from one that does not.

Second only to proper food is right temperature. I have had the best results with a temperature of about 45°, during the first part of the Winter, and until brood-rearing begins. From this time on, I prefer a higher temperature, gradually increasing to about 55°. A damp repository requires a higher temperature than a dry one. The bees should be placed in the cellar as soon as cold weather has become settled, which, in Northern Ohio is usually about November 15th. An essay by James McNeill of New York, was read entitled "Feeding Bees for Winter," in which he defended the practice of wintering bees upon stores of sugar. There is no safer, or cheaper, food for bees during the Winter than pure cane sugar. Its use has been objected to upon the ground that honey is thereby cheapened, but the essayist asserted that all improvements had produced the same result.

W. Z. Hutchison, of Michigan, read an essay on "Drones and Drone Comb" in which he took the ground that the only important function performed by drones is that of fecundating queens. The bees rear drones only when they are needed, or soon will be needed, for the fertilization of queens, and when there is no further need for them in this direction the workers either kill them or drive them from the hive. It costs honey and the time of nurse bees to rear drones, hence their production should be curtailed. It may be asked why do bees rear so many drones if their only use is the fertilization of queens? Nature is always very prodigal in all matters pertaining to the certainty of reproduction, and we can often step in and interfere to an advantage. A few dozen drones to each hive are sufficient. We have, and very properly too, paid a great deal of attention to the rearing of queens; while the drones have been reared hap-hazard. The breeders of stock well know that prepotency is on the male side, and work accordingly. We may some time be able to control the mating of queens; until then, the best we can do is to control the production of drones in inferior or ordinary stock, and rear large quantities of them and in the best possible manner, in superior colonies.

Mr. Hutchinson had, for four years, practised hiving swarms upon empty frames, allowing the bees to build their own combs in the brood nest; and had found it profitable. Since he had written upon the subject, others had adopted the plan. Some had succeeded, while others complained that the bees built too much drone comb. To prevent this he advised as follows: Do not have the brood chambers larger than five Langstroth frames. Have the frames supplied with "starters" half an inch in width. Place the frames not farther apart than an inch and three-eighths from center to center. Use a queen-excluding honey-board. Have young queens. Remove the supers from the old to the new hive at the time of hiving, adding an extra case of sections next the hive, if necessary to give the bees sufficient room.

Mr. T. F. Bingham, of Michigan, asked why not use full sheets of foundation? Mr. Hutchinson replied that they would soon be drawn into full combs, when honey that would otherwise have been stored in the sections is placed in the brood nest. Mr. Bingham had tried, several times the hiving of bees upon shallow frames, both with and without foundation, and had secured better results by its use. Bees, he said, would occupy an empty brood chamber sooner than they would a super filled with foundations. Mr. H. said that he did not put on supers filled with foundations only when hiving swarms, but moved the supers from the old to the new hives, and the sections in these supers have combs in all stages of development, and the bees are soon back at work upon the very sections they had so hastily deserted.

Mr. O. O. Poppleton, of Iowa, had attended the Iowa State Bee-keepers' Association a few days previous, and this question had there been discussed, and five-sixths of those who spoke upon the subject favored the use of foundation, as by its use more honey had been secured and the production of drone comb controlled. Mr. P. thought the success of Mr.

H. might be attributable to his location; for example, the flow might be slow. Mr. Hutchinson said he knew that he and some others succeeded, and he had given all the reasons he could think of why he succeeded, but he was aware that there might be other reasons, and the one mentioned by Mr. P. was a fair one for consideration.

The following officers were elected: President, C. C. Miller, Marengo, Ill.; Secretary, W. Z. Hutchinson, Rogersville, Mich.; Treasurer, Chas. F. Muth, Cincinnati, O.

The next annual meeting will be held in Chicago, Ill., in the Fall of 1887.

Genesee Co., Mich. W. Z. HUTCHINSON.

Pomological.

THE IDAHO PEAR.

On October 26, we received from Mr. John H. Evans, Lewiston, Idaho, some specimens of the pear illustrated at Fig. 436, with a cross section at Fig. 437. Mr. Evans writes us that the tree grows in the orchard of Mrs. Mulkey, of the above town, which is in the same latitude as Quebec, though the climate there is warmer. About 18 to 19 years ago four seeds were saved from a fine, large, oblong pear resembling the Bartlett. All were planted, but only one germinated, making a growth of about two feet the first year. It grew so thriftily, with such fine foliage, that it was resolved not to bud it. Next Spring it was transplanted, and four years from the seed bore some fine fruit, and has continued bearing ever since. It is about a month later and keeps better than the Bartlett, and is thought by all who know both to be fully its equal in all other respects. When received here, the fruit was in color a bright golden-yellow, with a red cheek covered with dots a little darker in hue. Others were more oblong but all were about as large at the apex or stem end as at the base or calyx end. There is no pear of this shape that we know of. It more nearly resembles an oblong apple in shape than any pear. It is a most remarkable, beautiful distinct pear, which must have a future. It has never been our fortune to have a new fruit sent to us which strikes us so favorably as this.

Miscellaneous.

CATALOGUES, ETC., RECEIVED.

EMPIRE CITY MILL.—Catalogue from A. Richard, 110 John Street, New York City. It is claimed that this mill requires less attention and less power, and will do more and better work than any other iron mill in the market. We have seen the mill in operation, run by a 16-foot Dana wind-mill, and with a fair wind it will grind from 12 to 15 bushels of corn per hour. The perfection of the feed-mill so that it can be run by wind-power and grind all the feed required by the average farmer is a matter of great importance, and will go far toward solving the problem of feeding farm produce in the most economical way. If, with no greater power than a 16-foot windmill or a 2-horse tread-power, a small-sized, low-priced iron feed-mill will grind in an hour feed enough to last a good-sized herd several days, there is no excuse for a farmer if he does not grind such grain as can be best utilized as ground feed. The Empire City Mill would seem to combine all the good qualities of the older mills, with several important improvements. Parties having power would do well to make a trial of these mills.

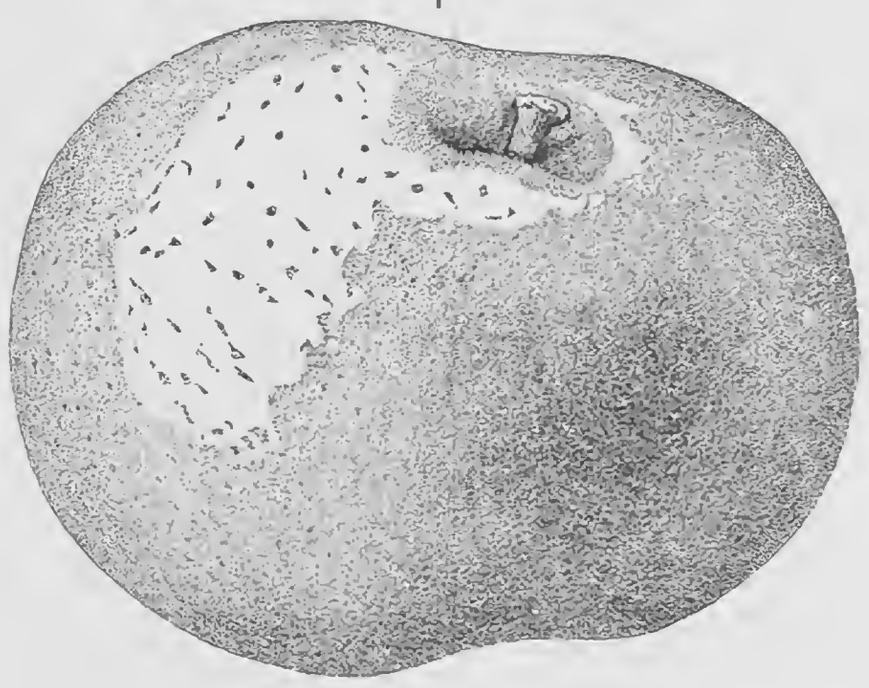
IMPERIAL EGG FOOD Circular from F. C. Sturtevant, Hartford, Conn.—The trade mark of this food represents a hen standing beside a pile of eggs, several times larger than she is. This pile of eggs is supposed to be her work—the result of the Imperial Egg Food. This picture well shows what is claimed for the food. We have never used anything of the kind ourselves, and cannot state from actual experiment anything as to its merits. Messrs. Felch, Knapp, Hawkins, and others prominent in the poultry business, praise this food without reserve. Knapp Bros., who ought to be good authority, say they would not go through the moulting season or fall and winter months without it.

MAGIC FEED MILL. Circular from the Whitman Agricultural Co., St. Louis, Mo. It is claimed that the "magic" of this mill consists in its ability to do a large amount of work with a small amount of power. It is guaranteed to grind 30 bushels of feed in an hour with a two-horse railway power. Each mill is provided with two sets of steel grinders. One is for grinding feed for stock and the other for fine family flour. These grinders can be quickly changed. One set will grind 2,000 bushels or more. It is claimed that the meal comes from this mill cool, hence no danger from souring or heating. A Junior Magic mill is made for a family grist mill.

SCROLL SAWS, LATHES, FANCY WOODS, ETC. Catalogue from A. H. Pomeroy, 216-220 Asylum Street, Hartford, Conn.—This is a well-printed pamphlet of 35 pages in which the various articles manufactured by this firm are well described. We know that these scroll saws are excellent. We have offered them as premiums with great satisfaction to our agents. Nothing could be finer for a present to a boy with a mechanical turn of mind than one of these saws. The catalogue is filled with pictures of knives, drills and other useful tools. Those who need good, well-made tools will do well to send to headquarters for them. Send for the catalogue and look it over.

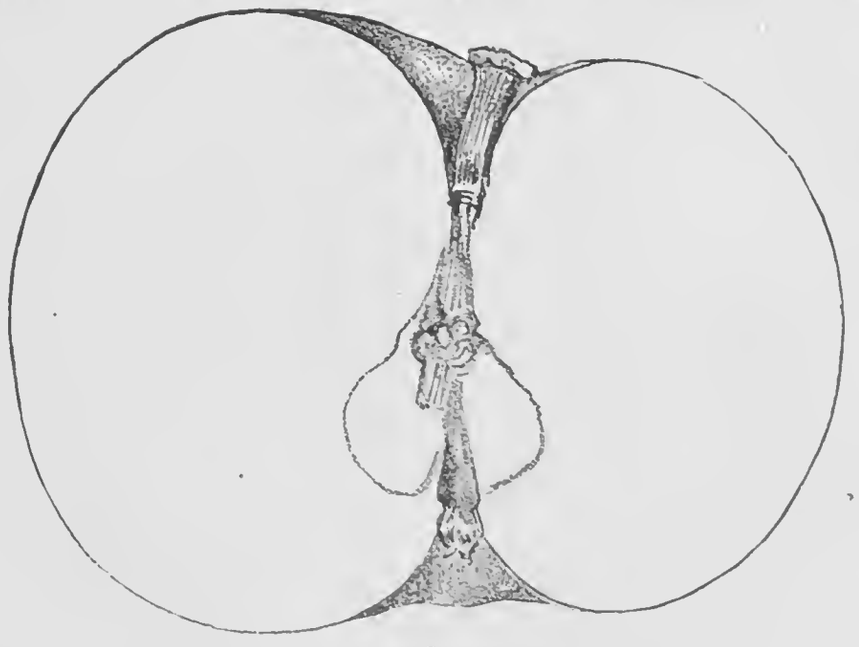
KNABE PIANOS. Catalogue of Grand, Cabinet and Square Pianos, manufactured by Wm. Knabe & Co., Baltimore, Md.—This catalogue contains fine illustrations of the celebrated pianos made by this firm, and also a brief statement of the origin of the firm and the success it has attained during the 50 years of its existence. It is claimed for the Knabe pianos that they unite every advantage of the best pianos manufactured. The high character and responsibility of the firm make it desirable for any one wishing to purchase an instrument to write for prices and terms.

FARMERS' POULTRY RAISING GUIDE. I. S. Johnson & Co., Boston.—In noticing this pamphlet a few weeks since, a mistake was made. The pamphlet is not intended for free circulation. It costs 25 cents.



R. N-Y.

IDAHO PEAR. From Nature. Fig. 436.



R. N-Y.

IDAHO PEAR. Cross Section. Fig. 437.

What Others Say.

A NEW DISINFECTANT.—The stalls at the recent Horse Show in this city, were exceedingly clean. There was no offensive odor perceptible. This result was largely due to the care exercised by those in charge, but the new disinfectant, "Sanitas," is attracting considerable attention just now, and bids fair to become popular. It was brought out by Mr. Kingzett, an English chemist. He remarked the peculiar healthfulness of pine forests, and sought to discover the cause. He satisfied himself that the healthy atmosphere of a pine wood is due to the presence of peroxide of hydrogen and camphoraceous substances produced by the atmospheric oxidation of the essential oils secreted by those trees, and that these valuable natural purifiers can be produced from common turpentine. The study then was to reduce this "forest balm" to such a condition that it can be brought into practical use in neutralizing the foul odors in unclean places. A large quantity of turpentine, floating on water, is exposed to a hot blast of air—much the same as molten iron is in the Bessemer "converter"—with the effect of producing a watery solution, composed of peroxide of hydrogen, camphoric acid, camphor, thymol, etc., and an oxidized oil, containing a great quantity of camphoric peroxide. In the crude form, these products, known as "Sanitas" make a cheap disinfectant. The oil is volatile at a low temperature and is an excellent air purifier, producing an atmosphere much like that in the pine forest. It is also said to form an excellent insecticide and liquid soap or sheep dip.

IMPROVEMENT IN POULTRY SHOWS.—We find the following in the Poultry Keeper: "Recently the following item appeared in the RURAL NEW-YORKER, which in our judgment is very interesting to the rank and file, and which is a move long advocated by us. It said:

> The time has arrived when the poultry shows and agricultural associations should recognize true merit. A scale of points should be arranged for judging not only the living market fowls, but the dressed carcasses and encouragement should, with those objects in view, be given to the crossing of the different breeds.

To which Mr. Harker in the Poultry Bulletin replied as follows:

> This is an old cry, but the fact is no one takes any interest in cross-bred mongrels and dressed dead poultry. Time and again have special and regular prizes been offered to call out such displays at poultry shows, with absolutely no competition resulting therefrom. If comparatively few people will come to see a grand show of beautiful blooded fowls, how many would visit a collection of cross-bred market poultry? It strikes us that it is just as easy to improve our pure bred poultry as it is to make better mongrels, and a deal more sensible.

If Brother Harker will stop and consider he will recall the fact that those great millions of figures he sometimes displays are due to the business in "cross-bred mongrels and dressed dead poultry." What does he mean by improving the thorough-bred poultry. It is to give one-third the points to head, feet, earlobes, and wattles—useless parts. Yes, we want better mongrels, and they may be competed for at the shows if given a chance. The present standard does not improve anything. It is not even plain English."

THE CHIEF OF THE INTERNAL REVENUE BUREAU ON OLEO.—In closing his report the other day Commissioner Miller of the Internal Revenue Bureau reviews the action taken by him for the enforcement of the Oleomargarine Bill, and says:

> It is impossible at this time to estimate the amount of internal revenue which will be derived from oleomargarine. If, however, the operation of the law should prove unsatisfactory in its present form, which is construed to levy a tax only upon the article manufactured and sold or removed for consumption or sale as suppositious butter, the law can be so amended as, while imposing a tax upon oleomargarine—oil, neutral oil, and such like substances, without which the suppositious butter cannot be extensively manufactured—to provide also for the use of such substances by subsequent compounders without the payment of a second tax, as rectifiers are allowed to compound distilled spirits on which the tax is paid without paying an additional gallon tax, simply by delivering up the original tax paid stamps and receiving in exchange other stamps representing the same quantity; also for refunding the tax on so much as is used for lubricating purposes or otherwise in the arts and sciences.
>
> In my opinion the advantage in securing the tax from the manufacturer, who derives his material from the slaughtered animals, cannot be overestimated. These manufacturers are comparatively few in number. By requiring them to stamp and brand all their productions and to keep such books as will indicate the destination of their products, such products can be followed to the dealers and through the dealers to the consumers.
>
> At the same time, by the use of a system of exchanging stamps similar to that now in operation as to distilled spirits, the article may be readily identified by the consumer without necessitating the imposition of a second tax.

SUNFLOWER RAISING UNPROFITABLE.—There is a manifest tendency in many quarters to boom the sunflower as profitable for poultry feeding. Mr. O. S. Bliss says, in the N. Y. Tribune, that it is a gross feeder, each plant requiring as much room as a hill of corn, producing nothing of value but a few seeds. It is like raising a hog for its bristles. He would not underrate the value of the seeds. He always wants a few old ones for his old hens at moulting time, and a few for any ailing fowl in Winter. He thinks they are almost a specific for sundry ailments and weaknesses. It is the most difficult of all crops to save and cure. Long before they are ripe enough to harvest, the birds begin to get the seeds. When harvested the heads are so full of water that if they touch one another they are sure to rot. Mr. Bliss further states that the stalks are a nuisance all Winter and have to be gathered up and burned in the Spring. They may in some places be worth something for fuel, but if a man can earn 50 cents a day he can better afford to buy wood at $8 a cord than spend time fitting them for the stove. There is no profit in raising the sunflower.

SCALDING FEED.—The London Live Stock Journal tells of the practice of a feeder who objects to turnips and yet wants to take something of the "dryness" out of his feed. A water-tight trough, or box, 12x2x2½ feet, is filled with chopped hay and straw, which are mixed with grain and meal. It is then well scalded with boiling water. The lid is then shut down and the mixture is allowed to ferment for about 10 hours, a new mess being put in as soon as the old one is taken out. Such food is both succulent and digestible, and the results were not belied in the pail. There is nothing new about this plan, but there is much good in it.

GRAIN GRADING AT BUFFALO.—The opening of two new elevators at Buffalo, connecting with all the railways centering there, in which 820,000 bushels of grain may be stored in bulk and graded, opens up some possibilities in the way of speculation at the Buffalo Merchants' Exchange, which have not hitherto been enjoyed. The railway grain business at Buffalo is declared by the Commercial to have been neglected heretofore. It is also pointed out that "the issuance of negotiable warehouse receipts will greatly facilitate option trading; in short, it will place Buffalo on an equality with Chicago, Milwaukee and New York as regards the speculative features of the grain business."

WASHINGTON TERRITORY DEVELOPMENT.—In the report made by the Governor of Washington Territory to the Interior Department at Washington the writer refers honefully to the growing products of the Territory. There are now in operation 450 miles of railway, and this leads him to call attention to the fact that a number of the roads have not earned the lands which have been granted to them, and he recommends that the same be forfeited. He is anxious that Washington Territory be admitted to the Union, a privilege which he claims for her increased population and importance as a commonwealth.

WIND AS A SEED CARRIER.—Prof. Alfred Russell Wallace speaks of the fact that some species of plants which have a wide distribution in the Southern Hemisphere are also common plants of the North. There are from 50 to 60 species in New Zealand and the same number in Australia and Patagonia, which are identified with those of northern latitudes. Five causes of distribution of seeds are prominent: 1, sea currents; 2, birds eating fruits the seeds of which, after digestion, are found to be widely distributed; 3, seeds of marsh plants, being in the mud which adheres to the

feet of wading birds, are carried long distances; 4, sticky seeds which attach themselves to the feathers of birds; and, 5, the agency of the wind. The latter is considered most effective. Dust particles from the Java eruption, of greater weight than many seeds, were found on the decks of vessels 1,000 miles distant at sea. The plants introduced were mostly light-seeded ones. Prof. Wallace estimated that if a single seed per square mile of territory were deposited once per hundred years, it would be sufficient to keep up the stock and to maintain the purity of the species.

THE ST. LOUIS STOCK-YARDS SCHEME.—A movement is on foot by the International Range Association to establish a large cattle-yard at St. Louis. The object, it is said, is to overcome the alleged monopoly resulting from the combinations between the stock-yards and dressed-beef men in Chicago, which is stated to include the stock-yards in East St. Louis, Chicago, Kansas City and Denver. The proposed yards at St. Louis will be controlled by the rangemen, with close relations, however, between them and commission men.

FULL AS A TICK.

PUCK says that some of the New York dailies publish their flood-tide circulation. If they would also publish their ebb-tide circulation, the public would be amazed at the mighty flow between. .....

OUR friendly contemporary the Canadian Horticulturist, says that the Marlboro Raspberry, which was so highly puffed some time ago, is now set down by many as not bearing out its good reputation, especially after the first two or three seasons. .....

WE see that the Iowa State Agricultural College (Ames) has 305 students, male and female. The total number of graduates is 323. No charge is made for tuition to Iowa students; to those from other States only $15.00 per term. All other charges are extremely moderate. The catalogue for 1886 is now ready...

ONE of the interesting novelties of which we read is the Spaulding Curculio-proof Plum. This is said not to belong to the Chickasaw species and to offer some resistance to the curculio on account of its thick skin, but for some reason the egg of this horrible little creature fails to hatch and so there is no grub or larva to work any mischief. The female makes a mistake and deposits her egg in a bad place. The Spaulding it seems is a close relative of the Green Gage, Lombard, etc. It is claimed to be very productive, a remarkable grower, with leathery, large leaves, ripening its fruit in late August.....

"LIFE" says that a great deal of the poorest "copy" in a newspaper office comes from professional contributors.....

DR. HOLMES says that nobody can do anything to make his neighbors wiser or better without being liable to abuse for it.....He also says that he finds the great thing in this world is not so much where we stand, as in what direction we are moving. To reach the port of Heaven, we must sail sometimes with the wind and sometimes against it,—but we must sail, and not drift, or lie at anchor.....

THE N. E. Farmer, so much improved under its present publisher, says that many farmers grow strawberries for home use by "hits and starts" as it were. After considerable teasing by other members of the household a few strawberry plants or raspberry bushes are purchased or begged from a neighbor, and planted in the garden. They are well cared for till one crop of fruit is taken and greatly enjoyed. But no provision is made for crops every year. The old beds get full of weeds and finally the plants are all dead, and nice berries on the table are things only in memory . .....

THE most skillful poultryman that we know of provides his hen-houses with perches nearly three inches wide, slightly oval or rounded on the upper surface. They are only 18 inches from the floor.....

IT was intended, says the American Garden, that our Department of Agriculture should test new varieties and tell us what to buy; but the seed business has developed into an entirely different thing—an electioneering instrument, antagonistic to seedsmen and growers rather than helpful to them.....

OUR Champion Quince this year bore as usual a large quantity of fruit, no larger than Rea's Mammoth or the Orange, and later. It will be remembed that the R. N.-Y. was sharply criticized for its comments upon this quince in past years. But a longer trial shows that we did it no injustice. In some parts of the South this quince is preferred to the older kinds. As to Meech's Prolific, everything that we have said regarding it is about correct

J. T. Lovett, of Little Silver, N. J., advertises the Japan Giant Chestnut. He says that trees but three years planted bore abundantly, and that *some* of the burrs contained six large chestnuts. "Many clear-headed farmers are planting it largely for profit."....

Our friend, Sec. E. Williams, a careful and conscientious horticulturist, tells the Weekly Press that the berries of the Worden are invariably larger than those of the Concord, the clusters generally longer and the quality better—sweeter and more juicy. It generally ripens before Concord, but varies in this respect. He hardly thinks it will supersede the Concord as a market grape, because it cracks more easily, having a thinner skin.....

THE cultivation of pecan nuts in the South is said to be profitable, notwithstanding they grow wild in great quantities in Texas and other parts of that section. A correspondent of the Baton Rouge Truth, who says he lost money growing cotton, now declares he is going to get rich from his pecan trees. The Savannah News also records that pecans are being successfully grown in the coast country of Georgia. It is a crop which requires no work after the trees are fairly started, and would be just the thing for a lazy man, who could reap the kindly fruits of the earth without laboring for them.....

AN Illinois farmer sent a quantity of honey to a Chicago commission merchant, and, in order to test the latter's honesty, visited the city and bought his own honey, paying 14 cents a pound for it. When the returns from the consignment came back it was represented that the honey had been sold for 12 cents a pound. This idea need not be altogether thrown away. It might be worth while acting upon it occasionally by those who consign farm produce of various kinds to large markets for sale on commission.....

TESTIMONIALS are cheap things, says the Western Rural. You can buy them at about 50 cents a hundred. Every patent humbug is well supplied with them, and the greater the humbug the more testimonials , ...

A WRITER in the N. Y. World calls attention to the benefit of a good supply of charcoal in fattening turkeys. Two turkeys were fed on meal, boiled potatoes and oats. Two others of the same brood were also at the same time confined in another pen and fed daily on the same food, but with one pint of finely pulverized charcoal mixed with it. They had also a plentiful supply of charcoal in their pen. The four were killed on the same day and there was a difference of one and one-half pound each in favor of the fowls which had been supplied with charcoal, they being much the fattest and the meat being greatly superior.. .. ..

THERE is one crop, suggests Waldo F. Brown in the Farmers' Review, that grows faster in Winter than in Summer—the manure crop..... .. ..

A WRITER in the Cornhill Magazine says that the Moor is expressly commanded to be kind to the horse, but nothing is said about the donkey. As a consequence, the poor donkeys are battered and braised, and are forced to absorb all the ill temper and cruelty their masters possess, while the horses go free. Has anybody noticed anything of this spirit about scrub farmers? Do they hammer their stock at random, or do they pick out a few animals to practice upon? As a rule, the hens are forced to take a good share of the abuse.....

THE Scientific American gives a mode of fire-proofing wood, which may be available for shingles or siding. Soak 27½ parts by weight of sulphate of zinc, 11 of potash, 22 of alum and 11 of manganic oxide in lukewarm water in an iron boiler and gradually add 11 parts by weight of 60 per cent. sulphuric acid. The wood is to be completely covered with this liquid for three hours and then air-dried.....

IN an old book, written some 80 years ago, an account is given of a horse dealer who whipped his horses as a matter of business. It gave them life, as he claimed. When he cracked his whip in the presence of a customer the frightened horses gave every evidence of activity and a desire to get out of the way. He thought he had the same right to whip his horse that any other tradesman had to show off any article to advantage. We would interfere very seriously with such an arrangement in this day..... .. ..

A MULE in California, which had for years had the reputation of being a gentle beast, was terrorized almost to insanity by the smell of blood, from some fresh beef. The Pacific Rural Press says that the mule's sense of smell is as acute as that of a dog. Men who have been engaged in slaughtering should give horses and mules a wide berth until their clothes can be aired or changed.....

DR AMES says that in Montana they generally consider the Holstein-Friesians as their most valuable breed both as milk producers and butter makers. They are of a desirable size for beef. So he states in the Massachusetts Ploughman ....

PROF. HENRY, the Farmers' Review says, dehorned a vicious bull which cared so little about it that in ten minutes after the operation he went to grazing as quietly as if nothing unusual had happened.....

Everywhere.

TRANSCONTINENTAL LETTERS—LXX.

MARY WAGER-FISHER.

The road out of the Grand Canon; the Sphinx; a cliff cave; Westminster Abbey; Temple of Jupiter Ammon; arrival at Peach Spring; the Mojave Indians; arrival at Los Angeles.

IN riding out of the Grand Cañon the road lies for 10 miles between walls which range in hight from 2,2000 feet to 4,800 feet above the road-bed. For reasons, atmospherical and otherwise, this mighty wall which did not particularly impress us on our downward way seemed during the past 24 hours to have grown thousands of feet in hight, and suddenly to have become thronged with enormous undreamed of sculptures. "I don't point out these things going down," explained Farlee, "because so much depends upon the point of observation, and they are all seen to better advantage on the outward ride."

When about four miles from the hotel we were nearly opposite the Sphinx which is 6,000 feet high. The outline of the top of this portion of the left wall, considerably over a mile high, is so curiously like that of the Egyptian Sphinx, as to merit its name. On the right-hand side we noticed a cave well up to the top of the wall—Anaximander remarking that it was not common to see caves in red sandstone rock. Farlee tried our guessing powers in measuring the distance from the top of the wall to the cave, as well as its outward dimensions. In his various investigations in the c ñon, he had at one time with an exploring party, had himself let down from the top of the wall by a rope in front of this cave, and found the distance to be 320 feet, and the entrance to the cave 62 feet high. But his experiment proved what was not visible to the eye—that the top of the wall projected considerably, and when in front of the cave, he was so far removed from it that he was unable to find any means by which he could swing himself into it, so it still remains unexplored. Four miles from the Sphinx is the little pile of rocks called Westminster Abbey—so named by an English woman for its remarkable resemblance to that historic structure,—and it is every whit as beautiful. The real Abbey is overgrown with ivy, while this is draped with vines and pendant grasses growing in the crevices of the rocks, and so arranged as to produce the effect of windows, doors, and exquisite architectural designs.

For some distance before coming to the Abbey, and on the same side of the canoñ my eyes had feasted on what to me was in effect the grandest feature of the Great Wall—of immense hight and size, marvelously sculptured, the facade having a center-piece full of carvings. Farlee said it had never been named and that I had better christen it on the spot! The structure seemed so much more colossal than any name I could muster, that for the nonce we called it the "Great Temple of Jupiter Ammon." On the opposite wall were various groups like sculptured human figures—one had been named "Moses Striking the Rock;" another we called the Profit at Prayer. But over and above all the striking, peculiar features of this tributary of Peach Spring Cañon, the Great Wall itself, on our right, was most impressive; its immensity in every way a mighty breastwork against which all the shot and shell in the world might pelt in vain for centuries.

From nine o'clock until we reached Peach Spring Station, nearly three hours later on, we were sensible of a considerable degree of cold, although well provided with warm cloaks and coats. But not a particle of dew fell, and there was no dampness in the air. However, we enjoyed the brisk wood fire which Farlee had lighted for us in his house, where we were to lodge for the remnant of the night, and in which he had lately fitted up a neat sleeping room for stray tourists. He awoke us next morning at seven o'clock with the announcement that the train was in from the East and that we had half an hour in which to breakfast. As it turned out, the train was held there for several hours, as the road west of the station was blocked with a wrecked car. Meantime, the passengers beguiled the time in making expeditions out upon the foot-hills near by, gathering strange flowers, while the Hualapais Indians, loafing around the train, were quite a source of interest—being made up chiefly of hair, heads and dirt.

From Peach Spring west, to a station called "The Needles," so named for the high, sharp pointed rocks that here abound, the country abounds in cacti, with jagged, picturesque mountains on either side. At The Needles we crossed the Colorado River, and here is the headquarters of the Mojave Indians, who rarely go east of the river, owing to a superstitious belief that if they should die while away from home, they would never be able to join their kindred in the land of the Hereafter. I have seen Indians and Indians—and while the Alaska Indians display more skill and capability than any others, still I have seen none that I liked so well upon a short acquaintance as these Mojaves. The tribe now numbers only two or three hundred—they receive no aid from the Government, and no missionaries have invaded their realm. They wear very little clothing—the little they do wear being chiefly decorative. Their bodies are superb, their teeth of dazzling whiteness, and they display a sense of good humor and affection unusual among red men. They have sun-dried pottery for sale, and the women were not above keeping their pappooses hidden unless paid five cents for showing them! Whenever the trains stopped at the Needles in daylight hours, the Mojaves reaped quite a harvest for their wares, including bows and arrows. They were a happy, gentle-looking race, quite tidy in appearance, although some of the women had their hair bound tight around the head, and then plastered over with a thick coat of clay—this for the purpose of killing the lice in the hair. Indians generally have a great aversion to the barber's art, and, like the Chinese, attach much importance to the hair.

The next morning found us back again at Mojave Junction, where we breakfasted, waited for the overland train from San Francisco, and went speeding southward toward Los Angeles, which city we reached in the middle of the afternoon. Before leaving the Mojave desert we saw a number of mirages—those beautiful but delusive sheets of water that often are seen in deserts. We saw them encircling the mountains which rose out of the apparent water like islands, and the water reflected the masses of color produced by flowers on the mountain slopes. We went through a tunnel 7,000 feet in length cut through the San Raphael Mountains, and while the desert gave way to farming lands, the appearance of the country on to Los Angeles was not attractive. We saw some fields of wheat and grass, some bee ranches, but the country was rugged and broken, with an arid, infertile look for the most part. Once landed in a clean hotel in the City of the Angels, we bathed, dined and went to bed—tired out seven times over, that fifth day of April.

RURAL SPECIAL REPORTS.

Illinois.

CHICAGO, Cook Co., November 16.—Rain is greatly needed in Dakota, in Iowa, and all over Illinois, where, in many places, there has been no rain to amount to anything since last June. It is not quite as dry in Missouri; but Kansas complains, and is crying for water more than any other. Fall plowing has been prosecuted under great difficulties. Wheat lands have not been gotten into order as well as they ought to have been, and my advices from Tennessee and Kentucky as late as Saturday indicate six weeks of dry, clear weather, with not enough moisture in the ground for wheat to sprout. So far, with the exception of Kansas, there does not seem to have been any injury to the growing crop. The opinion is very general that winter wheat ought to have good soaking rains before a general freeze-up takes place. Where the winter wheat crop was the poorest in 1885, there I find that the reserves of the crop of 1886 have been marketed the closest. As fall plowing is now over and as the country roads are good, it is now generally thought that the marketing of wheat will continue free, irrespective of price. The dry weather has proved exceptionally fine for the gathering of corn. Fully two-thirds of the crop has been secured in an unusually fine condition, but farmers do not seem to care to part with their corn with the same degree of freedom as they have their wheat. This side of the Missouri River, in the majority of large corn growing districts, corn is worth for home consumption from three to five cents a bushel more than it will pay to ship to the great grain centers of the country. In Michigan and Ohio the clover and Timothy seed crop is more or less varied in yield; Kansas, Wisconsin, Indiana and Iowa are short, and as the tendency and the demand every Spring by farmers to sow clover for the enrichment of the land is on the increase, we are likely to see a large demand for clover in the Spring. Up to this time the demand in Europe for clover has been practically nothing. The strike at the stock yards has completely fizzled out, but no one has any conception, except those who are directly interested as packers or as contributors to these vast interests as stock growers

and shippers, of the utter demoralization of the meat interests of the Northwest which this strike has made. There were no better fed or paid men in the United States than the men who went out upon the strike in Chicago recently. They have accomplished nothing, have gone back like a lot of whipped curs, and actually produced more financial ruin than they can ever repay as long as they live. N. W.

Montana.

FRIEDLEY, Gallatin Co., November 4, 1886.—Our season is open and fair yet Our cold weather lasts only from the middle of December to the middle of February; at any rate that is my experience so far. The old settlers all claim that the weather has been growing better for everal years, and I tell them it is on account of Eastern men getting in here and thawing them out. Snow is two feet deep now back a few miles in the mountains; but there is none at all on the line of the river bottom land. We have no use at all for sleighs or cutters on the river road even in the Winter time. Crops have been very fair the past season. One neighbor of mine had 1,530 bushels of oats from 14 acres of measured land, and a good many have had over 60 bushels of wheat per acre from large fields of 60 to 100 acres. Potatoes run about 250 bushel to the acre and some run as high as 500 bushels. The largest yield I have known is from the White Elephant first sent out some years ago in the RURAL Free Seed Distribution. I have seen some that weighed as high as 3½ pounds each. Some were sent to New Orleans that weighed over four pounds. They are really elephants in size. I have not tried any for cooking, but those that have them say they are good. Turnips, beets and carrots grow to a monstrous size. I have lots of White Globe Turnips this year that will weigh over 10 pounds each and Rutabagas ditto. B. P. VAN H.

New York.

UTICA, Oneida Co., November 15.—The cheese market was a little slow and several good factories sold completely out. Skims will begin to appear more plentifully soon. Full cream sold Monday at 12 to 12½ cents. Total number of sales 7,338 boxes, ruling at 11½ cents. There will be but three more sale days, the last being December 6. Little Falls sold 3,764 boxes, ruling at 12 cents. There is still plenty of poor stock of butter in market, with slow sales and plenty of this kind offered. Best butter is rare and brings readily 24 and 25 cents; good creamery 26. There were 200 packages brought in last week, for which 22 to 25 cents were paid; bulk at 23 and 24. Still no market for hops, although dealers say a break will come before the holidays. Growers are holding for 25 and 30 cents hops that will eventually have to be sold for 15 to 20. Some hops bought here for 20 cents awhile ago will not bring 12 now. The State crop is in a rather hopeless condition. Choice hops will readily bring 25 to 30 cents, but there are none offered. Most of them rate from poor to fair. R. L.

Virginia.

RICHMOND, Henrico Co., November 15.—There has been rather a better business done this week than last in bright old tobacco wrappers, and the opinion is strengthening that the new crop will be of poor, defective quality, although breaks of new have been too small to fairly test the question. Cutters have again sold well, and it now appears that there is nothing reliable and fine to be had, new or old, under 25 cents, and from this up into the thirties. Fine bright fillers are in better demand, but all medium and common grades are dull. Old dark tobaccoes show no disposition to move, and the market for such is without interesting features. The receipts of new have not yet commenced, and will not perhaps for several weeks yet, when planters will want to sell a little anyhow for Christmas money. The market has not been such lately that tobacco could be handled for market. There is some demand for bright English shipping. T. H. E.

THE FARMER'S CLUB

ANSWERS TO CORRESPONDENTS.

[Every query must be accompanied by the name and address of the writer to insure attention. Before asking a question, please see if it is not answered in our advertising columns. Ask only a few questions at one time. Put questions on a separate piece of paper.

WINTERING FARROW COWS.

J. G. G., Hornellsville, N. Y.—I have a half dozen young thrifty cows that have failed to get with calf and am offered only $20 for them. I have plenty of coarse fodder, but there is a scarcity of hay. If I sell these cows now I shall have to buy others in Spring to take their places, and if I milk them through the Winter they will give but comparatively little milk next Summer. What course would be most advisable?

ANS.—The best thing you can possibly do with this class of cows is to put them into good warm quarters—so warm that frost will never be seen inside. Feed them all they will eat of a mixture of corn meal three parts, oil meal one part, and bran one part, all by weight. Also give them all the coarse fodder they wish and a moderate feed each day of hay—clover hay if you have it. If you have plenty of roots give each cow from a peck to a half basket of sliced roots daily; if no roots are provided, wet up the provender with hot water 12 hours before feeding, keeping in a comparatively warm place. If you can get three cents or more per quart sell the milk; if not, make gilt-edged butter and send it to some first-class dealer in some large city, using the skim-milk for feeding pigs or last Spring's calves, using, besides, plenty of grain. We think the milk or butter will considerably more than pay for all the feed, and the cows, if crowded as they should be, would sell in Spring for beef at more than twice the price at which they can now be sold, and probably for more than you would have to pay for other cows coming fresh. This gives something to do in the Winter. It keeps on the farm the feed raised there and puts on several tons besides, and if no more, saves at least $20 on each cow, which would be the difference between what you could sell them for now, and what you would have to pay for others next Spring.

BLACKBERRIES.

C. L. Y., Orient, N. Y.—1. What varieties of blackberries would be best for a half acre for home market? 2. Will wild blackberries sell readily at 10 cents a quart for eating and canning purposes? Would it be profitable to raise blackberries for market at that price? 3. I have a few plants already, how can I propagate new plants?

ANS.—1. At present, for your soil and climate, we must select for you the Kittatinny for the most part. If you choose to protect your plants, we should add Early Harvest, because of its earliness and handsome berry. We are not as yet prepared to recommend any of the new kinds. 2. Yes, it would be profitable to raise blackberries to sell at 10 cents per quart; but in many parts of the country during the past season that price could not be obtained. 3. Make root cuttings three inches long and put them in a box, first a layer of sand, then a cutting, etc. Bury the box in a well-drained soil and plant in the Spring. Or you may wait until Spring, and make and plant the cuttings then.

MANURING WHEAT.

J. E., Keokuk, Ia.—I have a piece of wheat which when put in this Fall I was able to manure only in part. The land is clay and sand with a red clay subsoil. The part which was manured before seeding looks much better than that which was not. I also sowed Timothy with the wheat and have a good stand so far. I have on hand and can get for hauling 2½ miles all the coarse stable manure made from horses and cows. I have also about 50 loads of well-rotted manure made from hogs, sheep, horses and cows Would you advise me to draw and spread this manure on now, or if not now, when should it be done, if at all?

ANS.—We should spread after the land is frozen hard. It should be spread very evenly. A clod lying upon a wheat plant will kill it. It may be doubted whether it is well to spread long, coarse manure on wheat plants at all. But the "well rotted manure from hogs" etc., will unquestionably help the wheat if evenly distributed and not so heavily as to smother the plants. We speak from our own experience. In any case our friend should avail himself of the manure at a cost of hauling it 2½ miles. He will never regret it even though half the Winter be given to the work.

YEARLINGS AND UNDER.

C. W. O., Little Hocking, O.—When does a pig cease to be a pig? Can an exhibitor at a fair show three-months-old pigs with hogs, say, one or two pigs with three hogs when the entry says, "four hogs or more." In another case one man had a sow with suckling pigs by her side, and another had three-months-old pigs, and the former claimed that the three-months old pigs were not pigs but hogs.

ANSWERED BY COL. F. D. CURTIS.

With horses, cattle and sheep the young are called yearlings when one year old and under two, and are so recognized by buyers and sellers, and by the rules of agricultural societies. Previous to that age they are called colts, calves and lambs, as the case may be. By the same rule a pig should be called a pig until it is a year old, when it may very properly be denominated a hog. A number of pigs and hogs should be called swine, just as calves, cows, steers and other stock are called cattle, and lambs, ewes and rams are called sheep. It will be improper to class young suckling pigs as hogs, and the same objection would hold for not considering pigs three months old as pigs. Joseph Harris, in his work on swine, preferred to use the word "pig" instead of hog, and on this account mixed the terms, and if his example is followed it will always lead to confusion. We do not have in our American list of words any special ones to denote swine of certain ages, as they do in foreign tongues. The term shote means young hogs in a growing condition. It includes pigs under one year of age, and stands for young store hogs. The latter word applies to any animals kept for moderate growth and designed to be kept through the Winter. It is used in contradistinction to stock intended for more immediate slaughter.

APPLE-TREE-ROOT LICE.

J. W. K., Valley Station, Ky.—I send herewith specimens of apple seedlings from my nursery, which failed to grow, while many have died, involving a heavy loss; what is the cause, and is there a remedy?

ANSWERED BY PROFESSOR A. J. COOK.

On the underground stem, just beneath the earth, are seen on each plant a large number of white, woolly aphides. The insects are Schizoneura lanigera, or apple-root lice. They are easily told by the bluish-white, woolly covering which makes them very conspicuous. They suck at the stem, and are often very harmful to the apple-trees. I have found that all aphides are quick to succumb when treated with the kerosene emulsion. We make it as follows: One quart of soft soap, one gallon of water, all heated to the boiling point, when one pint of kerosene is stirred thoroughly into the mixture. While this kills all plant lice, I have not found it injurious to any plants, or even foliage. In case of these apple-tree-root lice, I would turn the liquid mixture on to the stem just as it enters the earth. It would follow down the roots and kill the lice. There would be no danger of using it too freely. If used in quantity it could be made with little labor.

MAKING CIDER VINEGAR.

M. A. T., Moawequia, Ill.—How should cider vinegar be made?

ANS.—It is always desirable to have some old cider vinegar to start the new. When making vinegar from new cider, in new barrels, pour into each two gallons of old cider vinegar, and laying the barrels on their sides, with the bungs out, fill them only half full with the new cider, which should first be filtered through sand, or strained through flannel strainers. Tack netting over the bung-holes to exclude insects, place the barrels in a sunny spot, and the process of vinegar-making will go on rapidly, so long as the temperature does not fall below 45 degrees. As cold weather approaches, if the acidifying process has been well forwarded, a part of the barrels may be nearly filled from the rest, and placed in the cellar with the bungs loose. In the Spring the vinegar will generally be found fully made. Only *ripe* apples are fit to make vinegar from.

SOCIALIST AND COMMUNIST.

R. H. L., Newark, N. J.—What, if any, is the difference between a Socialist and Communist?

ANS.—Socialism is a theory which advocates a thorough change or reform of the social relations of mankind, and one who advocates this is a Socialist. Communism in theory proposes a similar change by reorganization, and the Communist insists, perhaps a little more strongly than the moderate Socialist, on an absolute community of property. Webster defines communism as socialism, but the general understanding in the use of the two words is that the Communist is a little more radical in his views as to methods, and would effect the change proposed, if need be, by more violent means. "Scratch a Russian and you find a Tartar," said the first Napoleon; and within the fairest exterior of either Socialism or Communism there lurks the spirit of Anarchy ready to express itself in deeds of blood under very little provocation.

Miscellaneous.

W. N. J., Montrose, Colo.—The specimens of barley sent us for name, arrived in such bad order that we could not identify the variety. The Manshury is a strong grower and grows much taller and with a broader, darker leaf than other barley. It has a long, full head, large kernels and on each side of the kernel there is a dark stripe, at least until the grain is fully ripe. It ripens a week at least later than ordinary six-rowed barley. It can now be obtained of most large seedsmen or of H. M. Jacques, Lockport, N. Y.

C. W. G., Canterbury, Conn.—Should Niagara grape-vines be protected here through the Winter? Out of 13 seedlings from the Niagara seed sent me by the RURAL, I saved only one which bore four or five nice but small clusters the past season,

ANS.—Yes, it would be better to protect them. Lay the canes down and hold them there by any sufficient weight. Cover them lightly. A good plan is to lay over them the twigs, etc., from cuttings of trees or evergreens. Your seedling may do better another year. It is never safe to judge of seedling fruit the first bearing year.

W. R. H., Kingston, N. J.—Which is the best time of the year to top-dress sod with commercial fertilizer, to improve the yield of hay?

ANS.—In the Spring. If you could sow it on the snow just before the last thaw, then you would get it about right. If this is not practicable, sow it as early in the Spring as possible.

L. M. H., Newark, Ohio.—What are cotted fleeces?

ANS.—Cotted fleeces as they come to market are more or less closely felted on the sheared side, often the feeling being so solid that it is impossible to separate the fibers, without destroying them. Such fleeces are in a solid piece as if woven. They are known as hard cotts and are intrinsically worth perhaps one-half a healthy fleece of like grade. Soft cotts are such as allow the fibers to be opened without breaking or destroying them.

W. E. B., Washeta, Kans.—What is the standard weight of a bushel of ripe tomatoes, and do the canning factories buy according to this weight?

ANS.—The recognized weight of a bushel of ripe tomatoes is 60 pounds. The canning factories generally pay 25 cents per bushel of this weight.

J. W. R., Barre, Mass.—Is the Victoria an early or late-ripening grape?

ANS.—It ripens at the Rural Grounds just with Concord, or possibly a day or so later.

H. B. C., Rumbelt, Kans.—Law's Farmers' Veterinary Adviser, $3, published by Dr. James Law, Ithaca, N. Y., is probably the best veterinary work of its size extant.

DISCUSSION.

HOW THE RURAL BRANCHING SORGHUM WAS CALLED MILLO MAIZE.

J. H. A., AUGUSTA, Georgia.—A mistake was made in a late RURAL as to the origin of the name "Millo Maize." There was never any one of the name Millo connected with it.

Pratt, a missionary from Honduras, first introduced it into upper S. C. in 1877–8, giving it away under the name of Honduras Corn. I got the seed of Satterthwait, of Aiken, who, I believe supplied the RURAL—that was pedigree seed direct from Pratt's hands. In 1881, Pratt, the missionary, and his brother Chas. Pratt conceived an idea of making money out of the seed, having before that time written of it only as a thing Pratt had given away. They advertised the seed then for the first time as "Millo Maize" at $2.00 per pound, and the Rev. Mr. Pratt explained that "Millo" (Meel-yo) signified "bread" in the native dialect—Bread Corn, the staple food in Honduras. I had also advertised the seed locally at 28 cents per pound, as the seed introduced by the Rev. Mr. Pratt, and did so innocently, ascribing to him full credit for the introduction of it, that being all he claimed or wanted, so far as I had ever heard.

I discovered the Pratts had applied at the Patent Office for registration of the name "Millo Maize" with proprietary rights, excluding others from using that name. I filed my showing and defeated the registration.

Previous to that controversy, the RURAL had the seed, and had named it Rural Branching Sorghum, and I was fully aware of the identity of the RURAL seed with mine and Pratt's, and I set out evidences of that fact at the Patent Office also.

"Millo Maize" was, then, a new name devised by the Pratts with a view to exclude others from the sale of this seed, for their own profit.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING November 20, 1886.

T. H. H.—A. H. G.—G. W. R., apple rec'd.—C. L. Y.—G. E. B.—J. W. R.—S. W. Hution, plants rec'd., thanks.—W. E. B.—W. B., thanks.—F. M. V.—O. S. B.—J. O. L. A. L. C.—D. A. F.—W. T. T.—A. O. B., answer by mail to Derby, Vermont.—L. W. P., thanks.—F. B. B.—E. S. M.—F. H. R., thanks.—G. W. C.—M. B. P.—J. P. S., thanks.—F. G.—G. E. M.—F. A. L.—S. W. G., thanks.—C. O.—J. H. R., thanks. J. L. B.—F. G.—J. J. A.—F. J. W.—P. E., thanks.—E. W. H.—W. T. M.

Miscellaneous Advertising.

DIXON'S "Carburet of Iron" Stove Polish was established in 1827, and is to-day, as it was then, the neatest and brightest in the market; a pure plumbago, giving off no poisonous vapors. The size is now doubled and cake weighs nearly half a pound, but the quality and price remain the same. Ask your grocer for Dixon's big cake.

THE
RURAL NEW-YORKER.
A National Journal for Country and Suburban Homes.

Conducted by
ELBERT S. CARMAN.

Address
THE RURAL NEW-YORKER,
No. 34 PARK ROW, New York.

SATURDAY, NOVEMBER 27, 1886.

A QUESTION SUBMITTED TO RURAL READERS FOR DECISION AND A QUESTION WHICH THE RURAL DECIDES FOR ITSELF.

It has been our constant aim—an ever cherished, never satisfied desire—to improve this journal as circumstances permitted, or may permit us to do. Space need not be taken to dwell upon the improvements made during the past 10 years. Old subscribers are familiar with them—while all are chiefly interested in the paper as it is or as it is to be. Respecting the *contents* of the R. N.-Y. for 1887, little need be said. We have no promises to make further than that we shall continue to do our best. During the present ownership of this journal, or since the RURAL NEW-YORKER followed *Moore's* Rural New-Yorker, we have always been decidedly opposed to any reduction in its price. We have been pained to see the price of one farm paper after another drop from a figure already too low, to another at which, as soon as the temporary advantage so gained had ceased, they could not be published without a corresponding reduction in their cost of publication which, of course, means a poorer quality of paper and a lower standard of reading matter. It is a very easy thing to reduce the price of a journal when the cost of publication is for one reason or another very low; but to restore the higher price when the cost of publication increases has generally proven a disastrous experiment. Instead of lowering the subscription price of their publications, we had hoped that the proprietors of farm journals would, during the recent prosperous times, invest their surplus capital in making more instructive, trustworthy and presentable papers, and in *this* way hold or increase their circulation during prosperous times, while elevating the general character of the American farm journal.

Last week our readers doubtless noticed the betterment in the quality of paper, and took for granted that the change was merely a part of a holiday dress-up occasion. The paper was supercalendered. Our present contract for white paper expires in two or three weeks. It is then proposed either to use this supercalendered paper for the future, beginning with the issue of December 10, or else a *heavier* paper, less highly finished, but of equivalent cost. In order to ascertain which kind our readers prefer, several editions of each will be printed—first the supercalendered, then the heavier.

We had nearly determined, without consulting our readers, to use the supercalendered paper—but it was suggested that the gloss might be objectionable to those who have weak eyes or who read at night. It was, therefore, determined to submit the question to a *vote*, and the object of this note is to request all readers after the trial shall have been made (about February 1st) to mail us a postal card on which is to be written either "Plain" or "Gloss." The "election" will settle the question, and thereafter the RURAL will be printed on the paper "elected."

A certain class of readers—those whose ideas of value are reckoned by lowness of price—may *prefer* cheap papers. But the RURAL, while anxious to extend its circulation among all good people, when driven to choose between excellence on the one hand and inferiority or mediocrity on the other, must plainly state that its first and ruling desire is to EXCEL.

MANY thanks to the many friends who have kindly offered to supply the desired back numbers of the RURAL.

WE have received a number of ears of white dent corn—as large and perfect as we have ever seen—without any advice to show by whom they were sent.

TRY the "Superfin" Pear. It ripens in October. It is of fair size and with a sprightly, rich flavor that does not cloy. The flesh is tender, juicy and melting—the tree vigorous.

CHESTER ALAN ARTHUR, twenty-first President of the United States, died at his house on Lexington Avenue in this city at five o'clock Thursday morning, at the age of 56 years, one month and 13 days. A man of kindly nature, true in all relations of life, cordial to his friends, magnanimous to his foes, a faithful citizen and a just, conservative statesman, he won the regard and respect of the whole country which deplores his untimely death. Though a strong Republican, he always displayed great courtesy towards the opposing party, and thus made friends everywhere, and every generous heart in the land can join in respect and sorrow over his grave.

SEC'Y CAMPBELL (Delaware, O.) writes us that he thinks the Empire State Grape will prove one of the best long-keeping varieties, and, of course, be more valuable for that reason. He has been from the first favorably impressed with this grape because of its vigorous growth and healthy foliage; its hardiness and apparent adaptedness to general culture. The only point in which he thinks its introducers have over-stated its merits is in its earliness, which was claimed to be equal to that of the Hartford. With Sec'y Campbell it has not reached what he calls maturity, or its best condition, quite as early as the Concord. The clusters may be allowed to remain on the vine long after the berries are ripe, and instead of deteriorating, they seem to get better. We should be glad to hear from others respecting the Empire State.

ONE of our first grape authorities writes us as follows:

"Do you not think Mr. Lovett is just a little too enthusiastic over the Victoria Grape? I know the RURAL has recommended it, and said many favorable things about it, but to say it is the best white grape yet introduced is hardly warranted; or I should say at least, is not proven."

Yes, we *do* think Mr. Lovett's statement "too enthusiastic." While we are pleased to have our own estimate of the Victoria supported by experienced vineyardists, we are by no means prepared to class it as the "*best* white grape." Hardiness, productiveness and comparative freedom from rot and mildew are the qualities in which we have found the Victoria to excel, and in these respects it has no superior among the varieties at the Rural Grounds. In quality, though less foxy, it is no better than the Concord.

NOT long ago an agricultural college, or rather an agricultural annex of a State university, needed a professor of agriculture. There were many applicants for the position. Among others were several bright young men, graduates at agricultural colleges, full of enthusiasm, eager to make a reputation for honesty and earnestness, and ready to work hard at work with which they were familiar. Were their claims recognized? No; a broken-down politician was put into the place. It was a good hole into which he might retire and draw a comfortable salary. That annex has to-day some half dozen students. It never will have any more until some new blood is let into the institution. If the agricultural college money is to be spent in thus providing a wintering place for political hacks, it is high time that Congress examined into the matter and discovered where the money has gone.

IT would be interesting and instructive to know the weight of the largest ears of corn (flint and dent) in cultivation, and the separate weights of grain and cob. We have just weighed an ear of white dent (thoroughly dry) having 16 rows, 57 kernels to the row, or 913 altogether. The grain weighs 19 ounces, the cob five ounces, the entire ear 24 ounces, or one pound and a half. Length of ear 12½ inches. Average circumference of ear 7¾ inches; of cob 4⅛ inches. It will be seen that the kernel is very deep. The size of the cob is a secondary consideration, provided we have a corresponding *depth* of *kernels closely set*. We should be glad to hear from our readers on this subject. If all who have well-cured ears weighing more than a pound and a half would advise us, we could place the increasing weights before our readers from time to time, and in this way the heaviest weights might be obtained. We will gladly pay $10 each for the heaviest ear of flint and dent as thus determined and present its portrait and give an account of how it was raised, etc.

THE agents of the British Dairy Association, in their efforts to instruct the people in improved dairy methods, have adopted many practices that could well be followed by our own dairymen. The holding of competitive dairy tests is an excellent means of creating an interest. Liberal prizes are offered to those who will make the best butter in the presence of picked judges. Each competitor is furnished with eight quarts of cream, as nearly uniform as possible. Any kind of churn can be used and any method of working or salting employed. The test is held in a hall or tent and a small fee demanded from visitors. The butter is sold at auction to the visitors. Some noted dairy authority closes the exercises with a lecture, and answers questions propounded by the audience. The wives and daughters of farmers are encouraged to enter into the competitions, and it frequently happens that young women high in social position may be seen working the churn or butter worker. This plan has been highly successful. It ought to be introduced at every one of our agricultural exhibitions. A score of pretty young women competing in such a test would prove a stronger attraction for all sensible men than the much-berated horse-track. What society will be the first to put this plan in operation?

THE annual convention of the Farmers' National Alliance, consisting of about 200 delegates, chiefly from Illinois, was held at Chicago the other day. One of the chief points urged upon the attention of the agricultural community was the necessity of organization against encroaching monopolies. Railroad extortion was declared to be one of the principal causes of agricultural distress, and government control of all railroads and other corporations was urged. A graduated income tax; the State control of the police in large cities, and the union of producers of every class in the reform of unjust systems through the ballot-box were advocated. The Secretary's report showed that the Alliance, organized in 1880, had now a total membership of 500,000 and was in good financial condition. The grain buyers' unions were denounced as organizations which fixed their own price for grain in all small towns, controlling the market to the detriment of the producers, and the latter were urged to organize to defeat the combination. An organization backed up by half a million votes should have considerable influence on State and National legislation, and by judicious action and alliance with other agricultural associations could do much to remedy the evils of which it complains and from which a vast majority of the people suffer. These evils will not be amended by mere resolutions, however strongly expressed or often repeated. Why is it that so vast an association, which denounces wrongs so vehemently, does so little at the polls to abolish them?

STANDARD FERTILIZERS.

ONE of our young farmers, a positive, impulsive man, recommended last Spring in very high terms to his neighbors, a chemical fertilizer known as H. B. Griffing's Ammoniated Superphosphate, costing delivered $3.80 per bag or $38.00 per ton. He said that he had tried it beside other high-grade fertilizers costing $44.00 per ton and it gave far better crops. One of our neighbors bought a quantity of it, and, as were talking with him one day in his barn, asked the writer's opinion. So far as we could judge from merely looking at and handling it we were not favorably impressed. At our request the Director of the New Jersey Agricultural Experiment Station sent an agent to River Edge to draw a sample for analysis. The bulletin presenting the Station's analysis is just received. The Station chemist values this fertilizer at $16.07 per ton; that is, the raw material would cost that amount at *retail* prior to mixing, bagging and shipment—a difference as compared with the finished article delivered, of $22.93 per ton.

The farmer who asked our opinion was requested to try, in different plots, the same quantity of this and the $44.00 fertilizer. The trial was made on potatoes. The vines from the higher-priced fertilizer were thriftier from the start and the crop evidently larger, though how much we cannot say, since the hurry of marketing his products prevented the farmer from measuring it. The attention of not less than 20 visitors to the Rural Grounds was called to the two plots and they were requested to say which vines were the thriftier. All at once decided in favor of the $44 fertilizer. We mention this matter somewhat at length in order to show our readers that it is far better to judge for themselves what fertilizers are most economical for them to buy than to accept the "say-so" of any agent or indeed of any farmer who from an imperfect trial concludes that the lower-priced fertilizer of an unknown manufacturer is worth more than the higher-priced article of manufacturers whose goods have been analyzed again and again—always to show that the margin between the selling price and the station valuation is not incompatible with honest dealing. Our readers should always bear in mind that a low-priced fertilizer should analyze higher proportionately than a high-priced fertilizer, to make up for the cost of transportation and spreading which in both cases is the same. We are convinced that the trusty fertilizer firms of the country sell their goods as low as is consistent with a legitimate profit, and the farmer who buys an article at $38 per ton, which is represented as being worth more than a standard article at $44 per ton, will generally find that he has been deceived.

BREVITIES.

BRILLIANT bubble, shining skin;
Can thy gaudy, boastful splendor
Make thee aught but frail and slender,
Hide thy hollowness within?

THE "god of cheapness is also the god of deceit and swindling." See Mr. Curtis's report, page 767.

TURKEYS at 12 cents a pound at retail in the N. Y. market. There is not much money in such prices for the poultrymen.

THE Michigan State Horticultural Society will hold its annual meeting in Grand Rapids, Nov. 30th and Dec. 1st and 2nd. A fine meeting is anticipated. Chas. W. Garfield Secretary.

THE report of the Butter, Cheese and Egg Convention, found on another page, is a model. Reports of such meetings are far more instructive and entertaining when the various topics can be grouped in this way.

YES, there are lots of fine colors; purple, red, yellow, green, blue. And then there are the neutral colors—brown, gray, orange and drab. One costs scarcely more than another, and an agreeable combination of several may help to enliven the house or barn, or both. The choice of colors or combination of colors may, in a degree, show the taste—not to say something of the character—of the owner, as a decided want of any color certainly does.

SECRETARY GEO. W. CAMPBELL writes us that in the many years he has grown and fruited the Worden, it has always colored earlier and ripened earlier than the Concord. There are many Concords growing that are called Wordens—the lower price of Concords affording too strong a temptation for the virtuous tree-peddlers to resist, and both being black grapes of the same general character, many persons, without having genuine Wordens for comparison, "see no difference."

WE take the life of the murderer. We either take it from him in an instant, or grind it out through years of hopeless imprisonment. What is to be done to the man who knowingly adulterates food? There are men who, for the sake of a few dollars profit, are ready to sell food which is charged with slow poisons. The health officials of this city condemn vast quantities of unhealthful food every year. They find it everywhere. They should be upheld in their warfare against disease.

LAST year, Mr. Austin Corbin, president of the Long Island Railroad, distributed a quantity of seed peanuts among the farmers of Suffolk Co., L. I. It was proposed to introduce peanut culture if possible. The first year they promised to be a successful crop, but this year the success has not been so great—judging from the statements of the farmers. It is a question whether they will be more profitable than the usual cabbage and cauliflower. The experiments will be continued

AMONG the old household notions is that of placing a pan of water on the stove in a close room. The moisture is supposed, in some way, to "purify" the air. Does it do any more beyond making the air a little more pleasant to breathe? Would not proper ventilation, by which means a quantity of pure air could be constantly introduced into the room, answer every purpose? There is plenty of pure air on the outside of a building; why not let enough of it in instead of trying to improve it after it has been imprisoned?

PANSIES 2½ inches in diameter at the Rural Grounds growing in the open borders Nov. 15., and this after two hard freezes. There is no other bedding flower that has given us more pleasure during the entire season. The varieties are of the finer kins—bronzes, light blues, blacks, reds, red and yellow, many with distinct margins of other colors. We have never before given careful attention to pansies, though the trouble of doing so is not great. The soil is rich. For the rest we have merely kept them *moist*. During the hottest and dryest weather of the Summer and Fall, these beautiful, bright, speaking flowers, have bloomed continuously and in great profusion.

The Herdsman.

OUR ANIMAL PORTRAITS.

GALLOWAY COW SEMIRAMIS 3D.

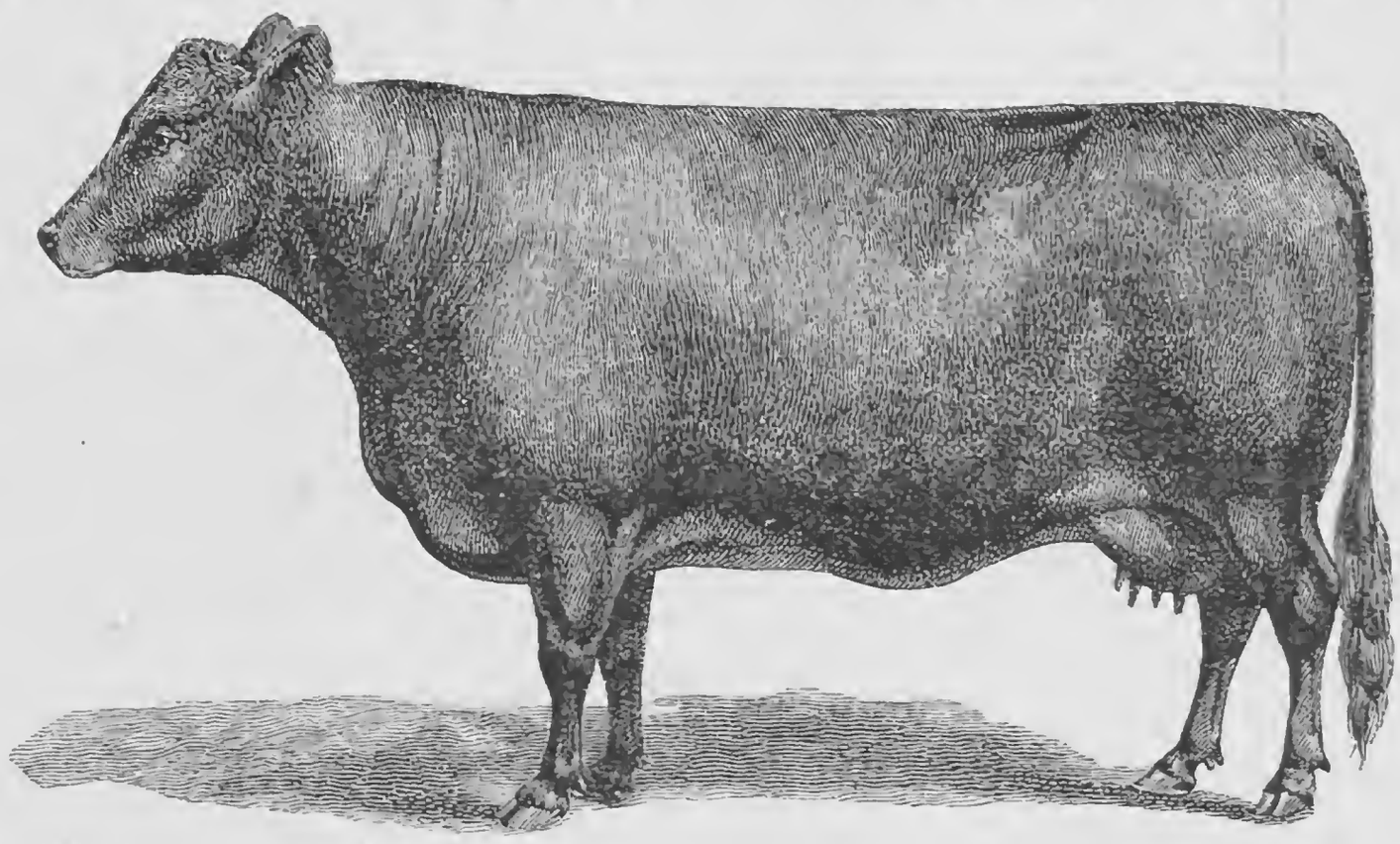
Of late the Galloways have been fully sharing in the "boom" which did so much a few years ago to popularize the other black polled Scotch breed, the Aberdeen-Angus. At the recent fat stock shows they made a very creditable exhibit, although their number was considerably smaller than those of other breeds which have been longer and more extensively introduced and propagated. They are remarkable for their round, compact bodies, short legs, and especially for their thick, heavy, black, shiny, and often curly coats of hair. They are exceptionally hardy and thrive better perhaps than any other pure breed in the northern parts of the country, such as Idaho, Montana, and Dakota. The fine specimen shown at Fig. 441, (re-engraved from the London Live Stock Journal) is the Galloway cow Semiramis 3d, (4,220) the property of the Duke of Buccleuch, Dunlaurig, Dumfries, Scotland, and a prize winner at several shows in England and her native country.

PRINCIPLES OF BREEDING.—No. II.

G. E. MORROW.

Breed; pedigree; selection; variation.

A *breed* may be defined as a collection of animals possessing distinctive characteristics which are uniformly transmitted to the offspring. There must be certain distinctive characteristics distinguishing the animals from others of the same general class. These characteristics must not only be possessed, but they must be transmitted to the offspring with reasonable certainty. Possession by both parents of any property makes its transmission probable; possession of it by not only the parents but by all the ancestors for several generations makes its transmission almost certain. By persistent selection of breeding animals which possess some quality desired by the breeder, rejecting all which do not possess this, it will become so fixed as a characteristic that it may with confidence be expected to reappear in the offspring; and whenever this is true of any collection of animals, they may with propriety be called a distinct breed or variety.



GALLOWAY COW SEMIRAMIS 3. Re-engraved from the London Live Stock Journal. Fig. 441.

Here is seen the value of *pedigree*. It is the best possible guarantee of purity of blood; hence of certainty of transmission of the distinctive qualities of the breed. If the breeder relies on the quality of the parents alone, there is no certainty that some undesirable quality may not appear through reversion. If these parents each have a trustworthy pedigree, showing they have descended for several generations from animals which possessed the same qualities, it becomes a matter of no consequence whether or not there be reversion. The test of value of any pedigree is the merit of the animals which are now entitled to it. Merit in the immediate and near ancestors is of much more importance than equal merit in those ten generations back. Undue importance may be attached to pedigree, but it has great value, and cannot safely be ignored by the breeder.

No breed is so perfect that continued *selection* is not essential to successful breeding. Equally purely-bred animals possess the desired qualities in different degrees. They will not all be alike in size, for instance. Only by continued selection can the size desired be maintained. And so of any other quality. When a change of quality, or size, is desired, selection of animals showing a variation or a tendency to it, will naturally be made.

Variation in many qualities can be secured and fixed not only by selection of animals which, through reversion among other causes, manifest a tendency in the desired direction, but also by changing the conditions under which the animals live—their food, shelter, management. Obviously the size of twin animals, alike at birth, may be greatly affected by food and care, so there shall be marked differences at maturity, the one being above, the other below the usual size. There will be a tendency for these variations to reappear in the offspring. By continuing the variation in treatment and by continued selection, this variation, like any other, may be reasonably fixed as a characteristic of the family, or breed.

When an animal, or a pair of them, show a remarkable variation from the usual type, this variation is not usually reproduced, at least not in a full degree. In some cases extraordinary variations are transmitted, and by selection have become fixed as a characteristic of a breed—as the fifth toe of some breeds of fowls. It is more safe, however, to select, for breeding purposes, animals of only moderate development in any quality, if that quality be usually highly developed in the breed, than to select those of great development in a quality not common to the breed.

Side by side with wise selection of the parents, must go appropriate feeding and management of the progeny. G. E. MORROW.

University of Illinois, Champaign.

KANSAS CITY FAT STOCK SHOW.

(RURAL SPECIAL REPORT.)

Poor attendance; unsatisfactory exhibits of sheep and swine; superb cattle exhibit; a wonderful Aberdeen-Angus champion steer; a fine Hereford bunch; Sussex and Galloways ahead at the block; fast-growing youngsters.

The fourth annual Fat-Stock Show at Kansas City, held from October 23 to 30, inclusive, was favored with as good weather as could be desired, but notwithstanding this, the attendance from both city and country was disgracefully small. For the meager attendance by residents of the city, which should send 5,000 visitors to this show every day it is in progress, it is convenient to account by saying that Riverview Park is from 1½ to 3 miles from the main residence and business portion of the city, and only to be reached through streets not the most pleasant at their very best and now especially disagreeable from an immense amount of work being done for their improvement, in the way of paving and cable railroad-building.

The exhibits of swine and sheep were not satisfactory, and were only a small fraction of what they should have been at a show held, as this is, almost in the heart of the great American pork-producing and wool-growing region. This year about 25 head, mainly of Cotswold blood, constituted the sheep show, and four or five exhibitors with some 30 swine in all, none of them more than mediocre, made up the swine department. Why every one of these shows has not brought out 100 or more exhibitors with at least 1,000 meritorious porkers—the best in the world—has always been a mystery and surprise to the management.

This year, as heretofore, the strong feature of Kansas City's show was in the cattle department. Last year 108 head were here, and this year there were 130—a superb collection, averaging much younger, of wonderfully good quality and showing great improvement in the direction of early maturity. Of breeds the following is the list: Thoroughbred Short-horns, 26; Aberdeen-Angus, eight; Herefords, four; Galloways, two, and Sussex, one. Grade Short-horns, 23; grade Aberdeen-Angus, 18; grade Herefords, 38, and grade Galloways, 11. Of these 49 came from east of the Mississippi—17 from Kentucky, nine from Indiana and 23 from Illinois. The big animal of the show was a grade Hereford from Indiana, weighing 2,545 pounds, and 1,611 days old. He won no prizes. The champion animal (alive) of all was a pure Aberdeen-Angus steer reared at Independence, Mo., named Sandy. His age 939 days and his weight 1,855 pounds, showing a gain per day from birth of 1.97 pound. He won the prize as first in his class, the class sweepstakes, the sweepstakes by age in the two-year-old ring, the grand sweepstakes as the best animal in the show, the first prize for early maturity and the Breeder's Gazette challenge gold medal for the best animal in the show bred and fed by his exhibitor. The same steer was shown here last year as a yearling with the magnificent weight of 1,455 pounds at 581 days of age, and a gain of 2½ pounds per day from birth; he then won the first in his class, the sweepstakes as the best yearling in the show, and the first over all for early maturity. He was bred and is owned by Messrs. Gudgell & Simpson of Independence, Mo.

The winners of the $100 prize for best lot of five steers, one and under two years old, were grade Herefords, averaging 621 days old, and weighing an average of 1,359 pounds. These steers won here and at Chicago last year as the best five steers of any age or breed under one year old, averaging at that time 751 pounds when 271 days old. In the 358 days since they were first weighed at Kansas City, their average gain per head has been 608 pounds. These handsome fellows were bred, fed and shown by Mr. James A. Funkhouser, of Plattsburg, Mo.

Rightly, in a show of this character, no class attracts more attention than that for dressed carcasses, for there it is conceded the most critical and careful judgment can be given. Here, for best carcass of steer, spayed or barren heifer three years old or over, the prize went to a pure Galloway cow, 2,406 days old, weighing, alive, 1,825 pounds, and dressing 66½ per cent. of her live weight. For best two-year-old carcass the prize went to a pure Sussex heifer 805 days old, weighing 1,360 pounds and dressing 67½ per cent. of her live weight. Her gross gain per day from birth had been 1.68 pound. This same carcass also won the $100 sweepstakes for being the best over all exhibited.

The best carcass one and under two years old was that of a grade Galloway steer 694 days old, weighing alive 1,385 pounds, showing a gain per day of practically two pounds, and dressing 64 per cent. of his live weight. The lowest per cent. dressed by any animal was 53, by a hard-looking, aged, Short-horn cow that really had no sort of business in such company. She was the only pure Short-horn slaughtered. A lot of youngsters that attracted much compliment, was made up of five grade Angus calves, ranging in age from 199 to 251 days, and in weight from 620 to 650 pounds. Of these the youngest showed a gain per day of 3.12 pounds; but even he was surpassed by another, two months younger, that had grown 3.24 pounds for every day of his life. Awards were in nearly every instance made by judges from abroad, and probably their decisions came as near giving satisfaction to all concerned as is ever the case at any like exhibition. The show was under the general management of Secretary J. W. Sanborn, who is serving his first year, and the Superintendent was Mr. George Y. Johnson, well known to the public as Secretary of the Kansas State Fair, and Superintendent of the Department of Agriculture at the New Orleans World's Exposition.

THE CHICAGO FAT STOCK SHOW.

(RURAL SPECIAL REPORT.)

The American Fat Stock, Horse and Dairy Show has begun and may be safely written down as, taken in all, the most interesting yet held. The number of cattle is smaller than of recent years, because of the fear of disease, but my first impressions are that the average quality is very good—with some animals nearly or quite equal to any ever shown here. There are no remarkably large animals; a fact not to be much regretted. Short-horns, Herefords, and Aberdeen-Angus are very well represented with a few Holsteins, Devons, a single Ayrshire, etc. They come from several States, Canada and Europe. The swine and sheep departments are at least creditable in quantity and quality. The horse show is very large and good, and proves a great additional attraction. Dairymen have made, as it seems to me, a serious mistake in sending forward only a comparatively small exhibit of butter and cheese, apparently very satisfactory in quality. There is an exceedingly attractively shown exhibit of butterine, and the fats of which it is made—shown in a separate room and without prizes or classification.

There is a very large and good poultry show, and let us give honor to the agricultural press—undoubtedly the most extensive show of corn ever made in this country, in competition for prizes offered by the Prairie Farmer.

I have attended all these shows, and have seen none in which there was quite so much to interest and instruct. There is good promise of attendance at the various meetings of stock associations.

The State Live Stock Commission has decided to have the cattle exposed to pleuro-pneumonia appraised, then slaughtered; the owners to receive certificates, to be paid when the Legislature makes appropriation. Most of the owners consent willingly to this plan. The healthful meat will be sold.

Chicago, Nov. 10. G. E. MORROW.

Law.

LIABILITY FOR LOSSES OF SHEEP BY DOGS.

Not only is the owner of a dog liable for its acts, but any one who harbors it or allows it upon his premises, is also liable. But a person is not responsible for the acts of a dog which he tries to drive away from his premises, or for those of a dog allowed to remain temporarily there, as in the case of one who keeps boarders and permits them to keep a dog on the premises; but in that case the owner of the dog is liable. The laws with regard to liability for injury done by dogs to sheep vary considerable in the different States. In Vermont, New York, Pennsylvania, Delaware, Ohio, California, Tennessee, Alabama, Minnesota, Oregon, Illinois, New Jersey and Mississippi the statutes expressly provide that any person may kill a dog found worrying or injuring sheep. In Michigan any person may, without rendering himself liable to civil or criminal action, kill a dog he may see chasing, worrying, wounding or killing sheep, swine, cattle or any other domestic animal. In Maryland the owner of a dog is exempted from liability for sheep killed, if he kills the dog immediately on receiving notice of the injury; but if he fails to do so, the owner of the sheep may kill the dog and recover double damages. In New Hampshire and Massachusetts the owner of any domestic animal, and in Wisconsin the owner of any sheep or lambs, may recover from the town for any injury inflicted by a dog. If he choses the owner of the injured animal may sue the owner of the dog, instead of claiming damage from the town; but if he prefers to prove his loss to the town supervisors, and accepts an order on the town treasurer for the amount, the claim is transferred to the town which may recover against the owner of the dog; but the owner of the sheep cannot thereafter recover against him. In Rhode Island, the first time a dog worries a sheep the owner can recover damages from the person who harbors or owns the dog. If after the first notice the dog is still allowed to live and injures sheep again, his owner is liable for double damages, and the Court may order the animal killed. In Alabama, California, Vermont and Wisconsin double damages can also be recovered. In Connecticut whoever has lost by dogs worrying or killing his sheep must give notice to the town selectmen, and these may sue the owner or harborer of the offending dog, and unless the sheep owner is reimbursed by the suit, the town becomes liable for the damages. To provide a fund to meet this liability, dogs are licensed, and the license fees are held to meet such claims.

When several dogs belonging to different owners unite in committing mischief, at common law each owner is liable only for the acts of his own animal. There would naturally be considerable difficulty in ascertaining the extent of the injury done by each dog, but the jury can adopt any reasonable rule for ascertaining the damages. If the animals are of unequal size and have different capacities for mischief, the jury may take into con-

sideration the damage done by each in approximating the liabilities of the owners. By statute, however, in Connecticut, Vermont, and Ohio, the several owners of dogs that unite in mischief are jointly liable therefor; while in Pennsylvania each owner is liable for the whole injury in the doing of which his dog was jointly engaged.

R. M., Rome, N. Y.—I hold a note duly signed, now over six years old, interest on which has been paid to within three years; is it outlawed, or does payment of interest keep it within the limit of the statute of limitations?

ANS.—An indorsement of interest or principal, made by authority of the debtor, takes the note out of the statute of limitations. Parsons on Contracts vol. 3, page 79; Lowery v. Gear, 32 Illinois, 382. "Payment of interest stops the running of the statute against the security, as well as against the principal." Lawrence Co. v. Dunkle, 35 Mo., 395; Whitaker v. Rice, 9 Minn, 13. The period named in the statute will begin to run from the last authorized indorsement of interest.

C. G, Montclair, N. J.—1. Can a patent be obtained here for an article made in Scotland for many years, but which has never been patented here? 2. Can a man make a patented article solely for his own use without laying himself liable to a suit for infringement?

ANS.—1. No patent can be obtained here for any article that has been in public use here or elsewhere for two years before the application for a patent. 2. It is just as much an infringement of a patent to make the protected article for one's own use as for sale.

Woman's Work.

CONDUCTED BY EMILY LOUISE TAPLIN.

A SONG FOR THE GIRL I LOVE.

I.

A song for the girl I love—
God love her!
A song for the eyes that tender shine
And the fragrant mouth that melts on mine,
The shimmering tresses uncontrolled
That clasp her neck with tendrils of gold;
And the blossom mouth and the dainty chin—
The girl I love,
God love her!

II.

A song for the girl I loved—
God loved her!
A song for the eyes of faded light,
And the cheek whose red rose waned to white,
And the quiet brow with its shadow and gleam,
And the dark lashes drooped in a long, deep dream,
And the small hands crossed for the churchyard rest,
And the lilies dead in her sweet dead breast.
The girl I loved—
God loved her!

—*Credit Lost.*

OF INTEREST TO WOMEN.

A FARMER'S wife writes as follows to the New York Witness: "I was reading some time ago that a large portion of the women that go insane are farmers' wives, and when I look her life over I almost wonder that they do not all go insane." She rises in the morning and cooks breakfast for the family (I am writing of the average farmer's wife), then the work is to be done up, milk to skim, butter to work, two or three little ones to get ready for school, a nice lunch to put up for their mid-day meal, while baby is all the time crying to be dressed for breakfast. She must wash and dress him, and put him to sleep for his morning nap, all the time watching the clock to see how fast the hands travel toward twelve. Now, while he sleeps, the beds are to make, bedrooms to sweep, and a thousand other things to do too numerous to mention. Before this is done it is time to start dinner, for she knows the clock-hands are no more sure to point to twelve than the men are to be there for dinner and she knows too well how many glances of dissatisfaction will be cast at the unset table, even if the tongue is silent. She catches the now wide-awake baby in her arms and carries him around for awhile, then sets him upon the floor, hunts some playthings, and every time she passes speaks to him to keep him quiet. Dinner over, here are dishes to wash again, baking to do, perhaps the kitchen to scrub (I am only glancing at the common every-day work, leaving out extra work, such as washing, ironing, house-cleaning, sewing, etc., etc.), then supper to get, and the dishes to wash by lamp-light, while the men are resting and reading the papers; then sit down to knit or patch (after baby is disposed of): then when she is tired and feeling blue, by way of amusement she can hear the men talk of how much easier times women have than they do. In the Summer she is in the shade (of course the hot stove don't count), then in the Winter she can sit by the fire, while they are out in the cold. They forget the cold dishes she must handle bare-handed, and the cold rooms she must attend to. But I think that the part that really drives them insane is yet to come. They spend day after day, even into the weeks often, without seeing one of their own sex. How many days do men pass without meeting other men, if only for a few moments, and comparing views? Do you ever stop to think of how much better you feel after that little chat while the team is resting? Then, do you ever think of your wife all alone, day after day, longing for a few moments' talk with some woman? Is it any wonder that as time passes she gets tired of home, sick of the sight of everything around it; and, if to this is added heart-hunger, what wonder that she longs to lay the burden down and take an eternal rest? How many times when you have the team hitched up, and have an errand to neighbor A's, you might ask her to go along! Even if for only five or ten minutes, it would, at least, show her that you are thoughtful for her comfort (which she is sometimes led to doubt). I, for one think it no wonder that so many become insane.

EMELINE.

FRESH FIELDS FOR WOMEN.

ALL writers on women's work are alike in protesting against woman's conservatism in labor; her tendency to move only in beaten tracks, and they of the narrowest. It seems to us that the best advice to every feminine worker is to turn her energies to whatever she feels her special work, whether it be old or new. To advise all women to adopt a profession, whether suitable or not, is a most mistaken idea. Many country girls who feel the necessity of working for themselves, are troubled with a sore uncertainty as to what field they shall enter. They prefer leaving domestic service to the horde of untrained foreigners who come down like the Assyrians of old, and flock to the manufacturing towns and cities, to wear out health and freshness in underpaid labor. In our grandmother's time farmers' daughters saw no disgrace in doing light field work, but this is a thing rarely seen now-a-days. The "Nebraska Horticulturist" speaks with much contempt about the superficial twaddle one hears about the degrading effect of out-door work upon women. They must be peculiar women who are more degraded by working in God's pure air, amid the beautiful sights and sounds of nature, among the wonderful plants of garden and field, than by being cooped up in a hot kitchen handling pots and kettles, doing chamber work and mending old clothes. No honest work is degrading to any woman, unless it injures the moral nature or weaken the body.

As a pair of model women, who, when they want any rights, just get up and take them, we may mention two Kansas sisters, who are proprietors of a large florist's establishment. They have large greenhouses and store, the result of their own unaided exertions, and in business tact and enterprise they are not to be excelled by any of their brother professionals. Of course they employ help, but they manage their work independently and are quite able to show their employés what to do and how to do it. One of the firm is State Vice-president of the Society of American Florists, and a valued member of that body. What these courageous women have done others can do, and there is no doubt that many branches of horticulture and agriculture offer a healthful and remunerative field for feminine labor.

WOMAN'S CHIEF END.

SELMA CLARE.

IT is said that woman's chief end is to marry; as, however, after marriage a woman's life with all its possibilities of happiness or utter misery is really only just beginning, it is necessary to have some end in view. With the true wife this will be to keep her husband's best gift—his heart A wise woman does not desire to rule the man to whom she links her destiny; she wishes to be guided by him and sees no bugbear in the word "obey" of the marriage service. But it is not necessary to be wise after the philosophy of "Ouida," to know that a woman cannot keep her husband's love merely by loving him. "Man," says a writer who shows considerable knowledge of the subject, "is of all animals the most susceptible to creature comforts." A loving heart is all very well as far as it goes, but if it neglects to season the soup, and shows an utter forgetfulness where sock heels and shirt buttons are concerned, it loses some of its enchantment.

A woman must possess not one but all the virtues. She must never make the mistake of supposing that her husband is indifferent to the neatness of her hair, or the daintiness of her gown. She must be bright and entertaining, though every limb aches, and she be almost ready to sink in sheer despair from the thousand and one annoyances of her daily life. Above all, she must know how to hold her tongue. She may be bursting with righteous indignation, but must give no sign.

A cynic who peeps over my shoulder asks if it is worth while to go through so much to gain so little. That question, dear reader, can only be answered by each one of you individually.

FOR AND ABOUT WOMEN.

ALICE.

I ONCE heard a great philosopher asked what quality he esteemed most highly in a woman. He replied: "A sweet and happy spirit, what the French call *gaieté de coeur*." Not learning, not beauty, but simply a sunny disposition that enables her to find pleasure in all things, great and small. This it is within the power of every woman to possess. Every one knows how utterly disagreeable a "contentious woman" can make herself, and everyone is familiar with the type of woman who is never pleased, be the skies sunny or cloudy No beauty of face or form can atone for such a disposition, and it is a peculiar circumstance that the mildest and most inoffensive men usually immolate themselves on the shrine of such women. A woman who can smile when the bread comes out of the oven underdone, or burned, when the kitchen fire smokes, when the clothes will not dry, and when the children are unusually cross, does not add to her own burdens and lightens those of everyone else. If you are inclined to a peevish, and fault-finding disposition, and would see how unlovely you make yourself to those around you, read "Our Mutual Friend," and my word for it, you will lay down the book resolving not to be a Mrs. Wilfer.

There is as much difference between nagging and scolding, as between a heavy Scotch mist and a downright rainpour, and to my mind the former is by far the most disagreeable of the two. Still as regards both the nagging and scolding, we say "don't." No greater misfortune can befall a child than to be grown up under the influence of everlasting complaining and fault-finding. It has the effect of making him callous-hearted and unamiable, and often malicious as well. When one is always getting the blame of doing wrong, one begins to think as the children say that one might as well have "the game as the name." A child loses all ambition to gain a favorable opinion when he finds that he only strives in vain. A scold is a wicked destroyer of the morals and happiness of children, and we sometimes regret that the good old-time way of treating such has gone out of fashion.

Custom has a powerful hold over women. What the world will say, the restraints of her family or social station, keeps back many a woman from making a career for herself. It is only in such isolated cases that we hear of a woman running a saw mill in Florida, of another who owns a stock ranch in Colorado, and still another who navigates a steamboat in Louisiana, that these few cases seem anomalies. In two of these instances drunken husbands, and in the other the death of her husband set these three plucky women afloat. Many women have thrift, tact and judgment, and are quite as capable of taking charge of a business as men. Where women have entered offices as clerks, I am invariably told by business men that they make better clerks than young men at the same salaries would do. If a woman has a strong leaning toward some vocation, be it service, trade or profession, and she has no maternal duties to restrain her, let her follow that leaning, regardless of what the world will say. Fanny B. Merrill, in the New York Graphic, says, "I love women so well that I would rather see them anywhere than out in the world fighting for themselves. I would rather see a daughter of mine wearing linsey-woolsey gowns and eating hoe cake in a log cabin, with a man for a husband who was seven-eights perfect (as men grow), than to see her the most brilliant, clever, gay, powerful woman of American looking out for herself."

This is all very well, and is quite the sentiment of any right minded woman, but unfortunately there is a great deal beside sentiment in this world. Few men are seven-eights perfect, and barring all this, the fact that there are more women than men, precludes the possibility of every women having a husband. I know more than one woman who is to-day fighting for herself on account of an unfortunate ticket drawn in the lottery of marriage, who will tell you if she is honest, that she has met with more courteous treatment from what Fanny Merrill calls a "jeering, disrespectful public," than she ever met with from her husband.

GOLDEN GRAINS.

THE books that delight the mind and sweep the cords of the heart as with a magic hand are those that have been written by men and women whose pens have been urged on to genial tasks by gifted intellects and sympathetic, loving hearts.....

IF a man be gracious to strangers, it shows he is a citizen of the world, and that his heart is no island cut off from other lands, but a continent that joins them.....

EMPLOY thy time well, if thou meanest to gain leisure; and since thou art not sure of a minute, throw not away an hour. Leisure is time for doing something useful; this leisure the diligent man will obtain, but the lazy man never; for a life of leisure and a life of laziness are two things,... ....

FOR the best results there needs be the longest waiting. The true harvest is the longest in being reached. The failures come first, the successes last. The unsatisfactory is generally the soonest seen..... .....

WHAT an argument in favor of social connection is the observation that by communicating our grief we have less, and by communicating our pleasure we have more.. ....

HE that has something to do has less temptation to doubt the man who has nothing to do but to doubt. Heresies in the Christian Church come never from the city missionary, never from the faithful pastor, never from intense evangelists; but always from the gentlemen at ease, who take no actual part in the holy war..... ....

Domestic Economy

CONDUCTED BY MRS. AGNES E. M. CARMAN.

What can be more hopelessly, helplessly sad than an uncongenial husband and wife?

PITHS.

WORSE fates are in store for girls than becoming "old maids."

IT is not your duty to keep your children busy every minute they are out of school.

WHEN a child returns from a neighbor's house, don't question him as to what each member is doing, or as to what was said, unless you wish to sow seeds of gossip and mischief.

THERE are coming days when the small chicks can't play out. Let them have their fun in the house even at the expense of your tidy kitchen. We have in mind a child made fretful through keeping in the house, who was transformed into a sunny little fellow by means of a pile of white sand with patty-pans, colander, cup, spoon, etc. in one corner of the kitchen.

PROVIDE your children with rubbers and see that they are worn when they go out. They are just as necessary when the ground is cold and damp as after a rain. What protection are the paper soled shoes that we often see little tots wearing at this season of the year? Is it to be wondered at that they have colds and croup?

DON'T give Christmas presents because you feel that you *must* do it. Give for the love of it or not at all.

KITCHEN TALKS.

ANNIE L. JACK.

THE pleasant, sunny days that come now and then are fully appreciated in November as gala days are to those who are past their youth. And so the years pass on alternating sunshine and shade, and we are once more looking forward to a new year, that is heralded by the beautiful Christmas-tide. I was thinking all this in the kitchen this afternoon when one of the children came in—"Only four weeks to Christmas!" she exclaimed with a satisfied sigh, and I thought how happy a childhood was, that was not sated before its time, and could enjoy at any time the simple home festivities, and live content in the anticipation. Truly Longfellow wrote: "Of the past the old man's thoughts were and the maiden's of the future."

Yet how many of us must realize the beauty of the poet Whittier's verses,

"Not mindless of the growing years
Of care and loss and pain,
My eyes are wet with thankful tears
For blessings that remain.

If dim the gold of life has grown
I will not count it dross,
Nor turn from treasures still my own
To sigh for lack and loss."

And speaking of "loss," there is no sorrow for riches that have taken wings and departed, that is equal to the grief felt for the loss of affection. A mother said to me lately, "I did not believe it when 'grandma' told me that I was seeing my best days while the children were small, but I know now she was right. When my little girls were about 12 and 14 years of age I was everything to them, and they had no secrets from me, but now that Lulu is married and Mattie is engaged, I find there are many things changed. Some one else gets the first, best thoughts of their hearts, and though they do not love me the less I am not all in all to them. I do not say it is not best so, they will have some one when I am gone, but it is rather a hard experience. And though in earlier years we might have been more to each other, yet it is now that they are of an age to be more like companions to me, and to understand me as children cannot do."

Yes, so it is we are never contented; there is

always that craving for something else, let us hope it is for "something better." And one of *my* subjects of discontent was the flies that will not leave the kitchen. They came in when the wire doors were taken off these later sunshiny days, and have taken up their abode with us—quite strange guests in our kitchen. The Amateur Cook one day determined to be rid of them, so put rolled brimstone on the stove and set fire to it, the fumes penetrating through the house. But when the kitchen doors were opened the flies were as lively as ever, they had breathed through it all. It is generally supposed that this nuisance is due to uncleanliness, but whether of your own household or your neighbors it is sometimes hard to judge. And I know some farm homes where the women are thoroughly clean and neat about the door-yards, but the barn-yard is kept reeking with filth all Summer, and they are unable to remedy the evil.

Besides the annoyance, it is certain that such people are responsible for the ill health, not only of their own families, but for the spread of any disease that will feed upon these filth germs wherever found.

SKATING TOQUE.

A CHARMING skating or evening toque is made from zephyr wool. Make a chain of 44 stitches, and then crochet across with the single crochet stitch, that is, by winding the wool once around the needle, until you have a piece the length of which will go around your head. Double it and sew it half way up; gather all the rest of the aperture and draw it to a point in front. Roll up about two inches of the lower part or that which goes around the head, and finish with two enormous pompons to hide the seam which must come in front. These are made by winding the worsted very full around a small book or box, and tying it securely in the middle, after which cut the ends.

A black one with a black and white pompon is very effective. For a child, cardinal, scarlet or blue, or white with scarlet or blue pompon is pretty. MOTHER.

A MEDICINE SPOON.

THIS is made by bending an ordinary spoon so that it will stand level. It has been found

Fig. 442.

of great convenience in dropping out medicine with a child in arms. A. C. CARPENTER.

GLOVE CASE.

TAKE a piece of silver-colored leather canvas 21 inches long and six and-one-half broad; slope off one end to form a point, leaving the sides to measure 16 inches. Work a border in cross and loose stitches in Berlin wool of any shade you may prefer. Line with cashmere in some delicate shade to match or contrast with the embroidery, and fasten around the edge with wide buttonhole stitch in white silk. One-and-three-quarters inches from the edge on each side place straps of white llama three-quarters of an inch broad, which button over each other to form six divisions for placing gloves. At the pointed end have a ribbon a yard long fastened in the middle for tying the case when rolled up. EMMA.

WEANING THE BABY.

A MOTHER who has not a plentiful supply of milk, should begin very early to accustom her child to a little simple food, and if possible give it from a spoon, as weaning from a bottle is often as troublesome as weaning from the breast. A child can be taught to eat from a spoon when a month old. It is a great mistake in weaning a baby to begin by giving it little bits of everything. I have seen mothers dip a crust of bread in bacon fat, or gravy, or even give small pieces of bacon or beef to very small babies. Even if this is not injurious to their health in the small quantities in which they get it, it is injurious in one way as it gives them a taste for such things, and by making them reject with scorn the simple diet which should form their staple food, trebles the trouble of weaning them. NURSE.

THE KITCHEN SINK.

THE possibilities of a kitchen sink that is not kept rigidly clean, for producing typhoid fever are great. A sink should be of iron, or, better still, porcelain-lined. Nothing of a very greasy nature should be allowed to flow into it, such as the water in which ham or pork has been boiled. If you wash your dishes properly, the dish water will not be so greasy as to be harmful. At any rate the sink should be scalded every day with plenty of boiling water, and at least once a week throw down a solution of washing soda with a gill of crude carbolic in it, and, my word for it, the health of the family will improve. A good housekeeper will see to it that the closet under the sink is as neat as any other part of the house, instead of being what it often is, a receptacle for all the dirty dish-cloths and greasy rags that have been accumulating for ages.

PALMETTO.

ONE WINTER.—No. III.

ANNE THRIFTY.

THANKSGIVING morning was clear and cold with a powder of snow covering the ground. The boys were in great glee and wanted very much to help me, especially about the work they could not do. Bertie was sure he could baste the roasting ham, and Sammie wanted to roll the dough for the dumplings, until between the teasing of the twins and my anxiety lest the dinner should be a failure, I seemed likely to drive out the thankful spirit of the day by an outburst of sharp scolding. Feeling my temper was getting the better of me, I caught both boys at once by an arm and hurried them into the sitting-room. The action was so sudden and unexpected that a funny mixture of fright and surprise showed itself in their faces, and I found myself laughing before I had begun to scold; that reassured them and Bertie started up to run into the kitchen again, but I detained him and then told both boys, kindly and seriously, how much they had troubled and worried me, ending my talk by asking them if they would now do something to please me. Both were ready to promise, so I asked them to get their slates and make the prettiest figures with straight lines that they could think of, to show to our visitors. The idea pleased them at once, for drawing was their favorite study at school, and thinking out new designs in straight lines part of their lessons. For an hour they were as busy as little beavers, each keeping his slate from the other, and both trying to make the "prettiest figure in the world for Cousin Anne." Uncle John was doing a half day of extra work at the engine works, where he was employed, for the extra pay, though little enough, was something to us, so I was quite alone with the work of getting up my first company dinner. I watched everything with the greatest anxiety, for not only was my reputation as a cook at stake, but should anything be spoiled in cooking I had nothing to replace it with. But everything went well, and Uncle John and our friends came in together, just as everything was ready for a hot dinner. Young Mr. and Mrs. Turner and the old lady were generous-hearted, friendly people, and made themselves at home at once. Mr. Turner praised the drawings the twins showed him, until they blushed with pleasure and confusion, and his wife and mother complimented my dinner in such a hearty way, and said such kind things of Aunt Helen and of her many neighborly favors to them, that in my pleasure I forgot to be embarrassed or to be worried about the serving of the dinner. Mrs. Turner was an energetic worker, and told us a good story at her own expense of going to bed one cold Sunday night determined to waken at four in the morning to begin her washing. After a sound sleep she wakened with a start, very much annoyed that she had overslept. Dressing with haste, the fire was soon burning under the wash-boiler, and after a hasty bite of breakfast, she was busy rubbing the clothes, when a knock at the door called her from the tub to answer the anxious questions of a friendly neighbor, "Is anything the matter? Are any of your folks sick?" and to learn by looking at the clock that her washing was well under way at half past one in the morning. Other stories followed this, and as the dessert of dumplings disappeared, a laughing party rose from the table. Mrs. Turner insisted upon helping me wash the dishes, although I had meant to leave them until our company was gone, as I knew Uncle John would put on a big apron and help me with them, and keep the boys busy too. When we had finished the kitchen work, and were ready to go to the sitting-room, Uncle John came out to ask for the dish-pan and some soap.

Somewhat puzzled I saw him take them, fill the pan full of water and put it on the table and make a fine suds; then he began to search in his pockets and to draw out odd shaped bundles, one for each of us; opening them we found in each a clay pipe. Bertie was the first to shout "soap bubbles, soap bubbles," but we were soon all as busy as he, in blowing "monsters," or rather in trying to blow them, for most of them met with untimely destruction.

The afternoon was gone before we realized that it was going. Our friends carried home the pipes they had used as mementoes. Young Mrs. Turner said hers would remind her of the afternoon when she laughed enough to add 100 pounds to her weight, if there is any truth in the saying: "Laugh and grow fat."

We needed only a light supper and as we ate it the boys talked so constantly of the fun they had on Cousin Anne's Thanksgiving, as they persisted in calling the day, that none of us heard a knock at the door, and were surprised to see it flung open and the boys' uncle Rob, with a great coffee sack over his shoulder and a jug in one hand, standing in the doorway.

A DAINTY APRON.

WE recently saw at "Macy's" a "love of an apron" made of cream-colored scrim, Torchon lace and blue satin ribbon. The scrim part was 24 inches in length and 27 in width with a three quarter-inch hem all round, the lace two and a half inches wide, extending down the sides and across the bottom. It was sewed on without fullness, except at the corners. The fullness at the band was put into four plaits, two on either side, all turning toward the center. These plaits were an inch in width and the distance between the two, on either side, was two and-a-half inches. Longitudinal threads were cut half way down the length and drawn out from the top. There were four places of this drawn work—two on each side—one between the plaits and the other the same distance from the plait on the outside. These places were wide enough to weave inch ribbon in and out, the lower ends of which were covered with jaunty little bows, while the others were concealed by the band. The fastening was at the right side, and finished with a bow of long loops of ribbon.

CHRISTMAS SUGGESTIONS.

IN answer to your request for a description of home-made gifts, I can only describe some made and received by members of my family last year. One gift that was very acceptable consisted of a dozen medium-sized, fringed, plain, linen fruit napkins. In one corner of each was a simple outline design worked in colored cotton, of fruit or leaves—each different.

A black walnut paper-cutter carved with a jackknife, smoothed with sandpaper, and oiled carefully; made a useful present. A loop and bow of gay ribbon attached to the handle served both to ornament it, and to hang it up by. (It is strong enough and smooth enough to cut the heavy double leaves of Harper's Magazine).

A much appreciated gift was a tiny book, three by five inches made of card-board leaves tied together with ribbons. On each page were pasted bits of garments worn by members of the family; of the grandmother who left us years ago; of the "sister who died;" of the father's brocaded vests worn in his youth, and the "changeable" silks of the mother's girlhood; bits of frocks worn by the two girl-babies born to the house; graduating dresses, wedding dresses, etc. The covers were of perforated card-board, with "Keepsake" worked on one, and a fancy figure on the other, in shaded embroidery silk.

Another book was in palette-shape, also of card-board leaves tied together with gay ribbon through the thumb holes. It had but five leaves, one for each national holiday. Each leaf had written on it appropriate quotations in prose and rhyme for the day to which it was dedicated. The Christmas leaf was first and had this: "Behold! I bring you good tidings of great joy, which shall be to all people. For unto you is born this day in the city of David a Saviour who is Christ the Lord."

"The Belfries of all christendom
Now roll along
The unbroken song
Of Peace on Earth, Good-will to Men."

Candy bags made of coarse lace, four by six inches, tied with gay worsted cord and balls, and filled with home-made confectionary, were not despised I can assure you.

[Will our correspondent please favor us with her recipes for home-made candy.—EDS.]

In a friend's house, I recently saw a novel "key-board" that seemed to me in better taste with cottage furniture than the elaborate plush-covered ones so much used. It was a small-sized school slate with two or three children at play painted on it; the frame spattered with "artist drops" as we see on palettes, and quite thickly set with brass hooks on three sides. It was suspended by a brass chain. A clever sketch in black and white, and the frame painted or stained might be equally effective.

If one has a little money to spend on Christmas gifts, nothing can be better than good books, but do not, I pray you, buy *trash*.

I trust that no one will neglect to decorate his or her room with at least a little evergreen in honor of Christmas, and see to it that every child in the family and every poor person in the neighborhood have some gift, however trifling, to help to make them glad on this great Birthday. MISS. E. BECKER.

Miscellaneous Advertising.

Doctors Prescribe

Ayer's Cherry Pectoral, for three reasons:—it is perfectly safe for old or young,—can be relied upon in cases of emergency,—and possesses great curative powers.

I consider Ayer's Cherry Pectoral a medical success and a chemical triumph. I have found this medicine a powerful specific for Colds, Coughs, and Pulmonary Complaints. I use it in my own family and recommend it in my practice.—Parker Cleveland, M. D., Prof. of Chemistry and Materia Medica, Bowdoin College, Brunswick, Me.

Ayer's Cherry Pectoral is an invaluable remedy for Colds, Coughs, and all Pulmonary diseases. I use it myself and prescribe it in my practice.—A. S. Pettenger, M. D., Glen Gardner, N. J.

Ayer's Cherry Pectoral,

Prepared by Dr. J. C. Ayer & Co., Lowell, Mass. Sold by all Druggists. Price $1; six bottles, $5.

GOLD $100.

We will pay one hundred dollars gold in premiums for best results from eight weeks' trial of **Sheridan's Powder to Make Hens Lay.** Send your name and post-office for particulars. I. S. JOHNSON & CO., 22 CUSTOM HOUSE STREET, BOSTON, MASS

MASON & HAMLIN

ORGANS.

Highest Honors at all Great World's Exhibitions for nineteen years. 100 styles, $22 to $900. For Cash, Easy Payments, or Rented. Catalogue, 46 pp., 4to, free.

PIANOS.

The Improved Method of Stringing, introduced and perfected by MASON & HAMLIN, is conceded by competent judges to constitute a radical advance in Pianoforte construction.

Do not require one-quarter as much tuning as Pianos generally. Descriptive Catalogue by mail.

ORGAN & PIANO CO

154 Tremont St., Boston. 149 Wabash Ave., Chicago. 46 E. 14t St. (Union Sq.), N. Y.

ON 30 DAYS' TRIAL.

THIS NEW ELASTIC TRUSS

Has a Pad different from all others, is cup shape, with Self-adjusting Ball in center, adapts itself to all positions of the body while the ball in the cup **presses back the intestines just as a person does with the finger.** With light pressure the Hernia is held securely day and night, and a radical cure certain. It is easy, durable and cheap. Sent by mail. Circulars free EGGLESTON TRUSS CO., Chicago, Ill.

Mention this paper.

TRAVELERS

or those who shave at home are invited to try **WILLIAMS' SHAVING STICK.** An exquisite Soap, producing a rich, mild lather that will not dry on the face while shaving. Delicately perfumed with Attar of Roses. **A MOST ACCEPTABLE HOLIDAY GIFT** to a gentleman who shaves.

Obtain it of your Druggist, or send **25 cents** in stamps to **THE J. B. WILLIAMS CO.,** GLASTONBURY, CONN.,

Manufacturers for 50 years of "*Genuine Yankee*" and other celebrated Shaving Soaps.

GOLD MEDAL, PARIS, 1878.

BAKER'S Breakfast Cocoa.

Warranted *absolutely pure Cocoa*, from which the excess of Oil has been removed. It has *three times the strength* of Cocoa mixed with Starch, Arrowroot or Sugar, and is therefore far more economical, *costing less than one cent a cup.* It is delicious, nourishing, strengthening, easily digested, and admirably adapted for invalids as well as for persons in health.

Sold by Grocers everywhere.

W. BAKER & CO., Dorchester, Mass.

A SPECIAL SAMPLE OFFER.

Hand-forged, Razor Steel Blades, replaced free if soft. **New Pattern.** Price 50 cts. postpaid; 5 for $2; Regular price, 65 cts. Boy's 1-blade, 25 cts. Lady's, 2-blade, Pearl, 50 cts. Gents fine 3-blade, $1. Colorado 3-blade Stock Knife, $1. Grafting, 25 cts; Budding, 55 cts.; Pruning, 55 cts. to $1. Family Shears, 80 cts.; Button Hole Scissors, 50 cts. 56-page List Free. Also *How to Use a Razor.*

Maher & Grosh, 30 S Street, TOLEDO, O.

News of the Week.

HOME NEWS.

SATURDAY, Nov. 20, 1886.

CHESTER ALAN ARTHUR, twenty-first President of the United States, died at five o'clock Thursday morning at his home in this city in his 56th year. He was unconscious for several hours before his death. The immediate cause of death was the rupture of a blood vessel in the brain—apoplexy. His only son and daughter, his sisters, and a nephew were at his bedside during his last moments. He had been ill from his third year in the White House, from two distinct diseases—fatty degeneration of the arteries and Bright's disease of the kidneys. For some time his digestive powers were nearly destroyed, and for months past he lived entirely on milk. His heart was seriously affected, the organ being enlarged and the aorta (the great artery from which all the other arteries branch off) was diseased. Funeral at nine o'clock Monday morning; body to be buried in the Rural Cemetery, Albany, N. Y., where his father, mother, wife and infant son are now buried. Son of Rev. Dr. William Arthur, a Baptist minister who came from Ireland when 18 years old. Born October 5, 1830 at Fairfield, Vt. Attended Union College, and taught school two Winters to help pay expenses. Graduated in 1848. Taught village school for next two years. In 1850 came to New York with $500 savings and studied law. Later history already public property.....The New York Anti-Saloon Republicans are to hold a convention at Cortland on Nov. 30 and Dec. 1 to perfect State organization and plan future work.....The sloop Mayflower is offered for sale at cost, the offer to remain open until December 1..... The total amount of standard silver dollars in circulation November 1 was $61,353,240 out of a total coinage of $244,767,386. The balance lies idle in the Treasury, which can't get it into circulation.....An Iowa barber has been found guilty for refusing to shave a man of his own color, the U. S. Circuit Court having decided that the civil-rights law is Constitutional, and that a barber-shop is a public place under the law.....The U. S. Supreme Court has just decided a suit brought to settle all existing claims of the Choctaw Nation against the United States. The Choctaws get over $2,500,000, and Col. Lamont, Lincoln's friend and biographer, gets a fee of $250,000 for winning the case after years of litigation. Lieut-Gen. Sheridan has submitted to the Secretary of War his annual report, showing the operations of the military forces during the past year. The army of the United States at the date of the last returns consisted of 2,102 officers and 23,946 men, distributed as follows. General officers, 10; general staff, 375 officers, 1,212 men; 10 regiments of cavalry, 411 officers, 6,042 men; five regiments of artillery, 272 officers, 2,473 men; 25 regiments of infantry, 836 officers, 10,721 men; Indian scouts, 595 men; detachments, recruiting parties, etc., 2,003 men..... It is said that the Dominion Government is sick of its fishery policy and will soon put the cruisers in winter-quarters and drop the prosecutions..... There are threats of a strike on a large scale by the operatives of the cotton mills of Fall River. They have long been dissatisfied with the scale of wages paid, but every effort to obtain an advance has failed. The mills are making large profits, while the operators are paid starvation wages..... The receipts at the late fisticuff when Sullivan "knocked out" Ryan at San Francisco in the third round, amounted to $11,000. The expenses were $2,000, and of the $9,000 Sullivan got 75 per cent., or $7,750, and Ryan 25 per cent., or $2,250—the fight lasted about eight minutes.....The public school system of Georgia is an impoverished institution. It contracts with its teachers for a term of 65 days at five cents per day per capita and settles with them at about 65 cents on the dollar.....Tuesday a fire destroyed a large part of the business portion of Durham, N. C.; loss, $3,000,000, including 1,500,000 pounds of loose tobacco. The Tobacco Plant newspaper office was destroyed. Insurance about $200,000. .....Delegates representing 17 fraternal societies, with a membership of 530,000, met at the Riggs House, in Washington, and organized a National Congress of Fraternal Beneficiary Societies.....One of the latest ways in which Wall Street men have found the opportunity to invest funds as a speculation is a scheme that has several thousand dollars back of it to preserve Autumn leaves by a new process, the invention of a Yankee college professor. The leaves—so promise the bulls in the enterprise—will retain all their fresh and bright hues for years, and remain fast to the limb just as nature produced them. .....Mr. Ward, a Clyde shipbuilder, is crazy enough to assert that Secretary Whitney has—in a public advertisement—attempted to bribe English ship designers by offering a high price for the best plans for our new war vessels. It is charged that this was a bribe to men in the service of European Governments to betray the plans for European war ships. Englishmen, themselves, build war ships for all foreign governments able to pay for them, and, of course, Whitney was perfectly justified to seek suggestions for our new ships from every quarter.....Pay Director Fulton has been appointed Paymaster-General of the Navy. Born in Tenn. in 1835; a State legislator in 1857-58; purser in the Navy in Nov. 1877; always served with distinction in the Navy since then.....There are reports of plots and counterplots for the annexation of the 40,000 square miles of Honduras to this country. Soil rich with vast amounts of gold under it, but an obstreperous, refractory people on it... ....Austria is willing to settle that diplomatic squabble, and Charles Jonas, of Wisconsin, has been appointed Consul at Sprague. Formerly Austria refused to receive him, as he was an ex-Austrian subject and conspirator, and a bitter enemy of the Emperor. Austria will soon appoint a Minister at Washington; and we'll send one to Viennia, vice Kieley rejected.....Ingersoll has "no time" to plead for the Chicago Anarchists.....Mr. Benton, United States District Attorney for the Western District of Missouri, has been reinstated in the office from which he was suspended for what was deemed undue political activity. All the Democratic Missourians were earnest in his favor.....A Chinese has bought for $16,000 the exclusive right of selling opium in Panama, and the money will be devoted partly to the hospitals and partly to reducing the public debt,.... ....A fierce, blinding blizzard and snow storm prevailed in the Northwest Tuesday night and Wednesday; the worst in 10 years in Dakota. Snow began falling at St. Paul early Tuesday morning and continued all day. After midnight a blizzard set in, and Wednesday morning the streets and sidewalks were badly blockaded, so that travel was next to impossible. The blizzard began in the western part of the State and swept east and south through Wisconsin. Railroad travel is greatly impeded and street cars find it almost impossible to run. The wind was blowing hard Wednesday and drifting the snow as fast as it fell. No such storm had occurred there so early in the season for years. The thermometer at Denver, Col., stood at four below zero Wednesday, and in different parts of the State dropped to 20 below. The Colorado railroads are open, but in West Kansas and Nebraska, where the snowfall was much heavier, blockades are reported. The gale and snow storm swept over the great lakes with terrible violence, and the loss to shipping will probably be great. Already it is known that over 100 lives and $1,000,000 worth of property have been lost. Wednesday night and Thursday snow fell over the northern part of the Middle and Eastern States and rain deluged the rest, while high winds were everywhere prevalent..... .....Of the "boodle" aldermen of this city, McCabe has been declared insane, and McQuade is now on trial. Waite, Fullgraff and Duffy have turned State's evidence and testified that 13 of the Board of Aldermen of 1884 (24 in all) conspired to vote away the franchise of the Broadway railway for a bribe of $20,000 apiece, and deputed "Billy" Moloney, clerk to the Board, to get other votes to override the Mayor's veto. These were obtained. States prison appears to be the certain home of all the boodle takers and givers who have not already fled from the country, unless some may manage yet to escape, forfeiting their bail of $40,000. .. ..The Chicago stock-yard strike has ended. Powderly, a week ago, ordered the men to return to work, and after considerable grumbling by some extremists, they obeyed. The packers, however, refuse to discharge the new hands they have taken on; and on this account and because the supply of hogs has been short, not much over one-third of the old hands have yet been taken back. The best and least turbulent men have been selected. All have to sign a contract that they will not quit work again without giving a fortnight's notice in advance, and each has to make a deposit of $50 as security that he will keep his pledge, the packers paying five per cent. interest thereon. Many of the new hands, or "scabs," have quit work, as they are afraid of violence from the old hands, who show their ill-will plainly, though as yet they have committed no violence. They are very much discontented at the new regulations, and the trouble may be renewed. Doubtless the new hands will soon all disappear..... .....

Acts like a Charm.

FROM the record of cures of Asthma, sufferers may rest assured in Compound Oxygen they will find at least relief, and, in reasonable probability, perfect cure. Not all have been cured who have tried Compound Oxygen, but all have found relief.

Mrs. E. A. Porter writes from Hydesville, Cal., Nov. 24, 1885: "It is now seven months since I received the first treatment for my son's use, and he has not had symptoms of a return of the *asthma* since taking the first dose. I take pleasure in recommending it to all my friends who are afflicted with any chronic disease. It seems to act like a charm on the disease peculiar in this climate."

A monograph on Asthma, with many other reports, and a brochure on Compound Oxygen of nearly 200 pages, will be sent, postpaid and free, on application by Drs. STARKEY & PALEN, 1529 Arch Street, Philadelphia, Pa.—*Adv.*

AGRICULTURAL NEWS.

SATURDAY, November 20, 1886.

SOME English producers lately sold potatoes in London at $4.97 per ton. The expense of shipping and selling was $7.66 per ton, or $2.69 per ton above the returns from the sale. At Chester, near Liverpool, potatoes were selling for half-a-cent a pound a fortnight ago..... .. ....The National Bureau of Statistics says that not more than 1,000 buffaloes are now in existence..... The Vermont Legislature has just passed a bill providing that all hotels and restaurants using oleomargarine shall put up large signs notifying the public of the fact. .....At a meeting of the Cotton Factors' Association at New Orleans, Monday, it was unanimously resolved that charges for storage, drayage, weighing and labor on all cotton received from and after that date, when sold and delivered within 60 days, be reduced from 75 cents to 60 cents per bale. The Commercial Press, an independent establishment, reduced the charge for storage, for 60 days, from 50 to 40 cents; compressing from 65 to 50 cents; drayage to ship 25 to 15 cents and 18 cents per bale. This will force a reduction of excessive charges on cotton at other Southern ports also, much to the benefit of planters.... ....Prof. Wiley, chemist of the Department of Agriculture, telegraphs that the yield of 83 tons of Louisiana sugar-cane by the diffusion process was 11,100 pounds, or 134 pounds per ton of "first" sugar, instead of 80 pounds to the ton, as he telegraphed last week. This he considers a phenomenal yield, being, as he states, about double the ordinary yield obtained by the old milling process with the same kind of cane. He will boil for "seconds" at once..... .. According to the Philadelphia Textile Association, the estimated wool clip of the United States for 1886 is as follows:—Unwashed wool, 227,101,580 pounds; washed wool, 55,229,446 pounds; total, 282,331,025 pounds. The number of sheep is estimated at 48,332,331..... On November 15 a company of soldiers was ordered to Caldwell, Kans., from Fort Reno, to keep prospectors out of the Indian Territory. The greatest excitement prevails. Thousands of claims have been staked out in the Territory below Caldwell, where silver is believed to exist in large quantities..... In his fourth annual message, Chief Bushyhead, of the Cherokees, recommends that the 30 Indian tribes in the Territory form a confederation for the purpose of anticipating and resisting the passage by Congress of an act creating a Territory out of "No Man's Land" and portions of Indian Territory..... The lungs of the cattle in Clinton County, Ind., where pleuro-pneumonia was reported to be rapidly spreading, are found to be full of worms about the size of a cambric needle, which had eaten out chambers in the lungs and built up partitions. Parts of the lung would be hardened and often the air-cells closed. The pleura, however, was found to be in a normal condition and there were no adhesions either of lung or pleura, as would be expected in a case of genuine pleuro-pneumonia. Great alarm is felt among farmers over the progress of the plague.....A Newburg (N. Y.) pumpkin is said to have grown to weigh 250 pounds by being fed on milk. One of the roots rested in a pan of milk, of which it consumed a pint a day..... ....The crop of apples in Great Britain averages 85,000 tons, valued at $50 per ton; about 12,000,000 gallons of cider are made yearly. The production of cider in France averages 220,000,000 gallons. The orchards of Great Britain cover 180,000 acres; an acre with 40 good apple trees will produce 1,200 gallons of cider. Great Britain imports 900,000 barrels of apples yearly from the United State and Canada.....

Hoarseness Promptly Relieved.

The following letter to the proprietors of "*Brown's Bronchial Troches*" explains itself;

CINCINNATI, OHIO, April 12, 1884.

"*Gentlemen:—The writer, who is a tenor singer, desires to state that he was so hoarse on a recent occasion, when his services were necessary in the church choir, that he was apprehensive that he would be compelled to desist from singing, but by taking three of your 'Bronchial Troches' he was enabled to fully participate in the services. Would give my name, but don't want it published.*"

"*Brown's Bronchial Troches*" are sold only in boxes, with the fac-simile of the proprietors on the wrapper. Price 25 cents.—*Adv.*

Crops & Markets.

SATURDAY, November 20, 1886.

Foreign markets have been generally firm during the week, though prices have not advanced. Farmers' deliveries in the United Kingdom have declined. In France wheat-sowing has been practically completed under generally favorable conditions. Farmers' deliveries of wheat have increased and values have improved, and the trade is very firm. There is little likelihood of anything being done about the raising of duties on grain in France prior to January. In England the quiet markets, despite the low stocks and reduced deliveries, are attributed to milder weather, weakness of quotations here, and the

Children Cry

For PITCHER'S

CASTORIA

A Practically Perfect Preparation for Children's Complaints.

increase in the American "visible supply," the increase in the bulk of breadstuffs afloat, and "the withdrawal of French buyers from the cargo trade." Shipments of wheat from India have greatly declined, and Russia cuts no particular figure as a shipper at this time. The opinion is offered that heavy exports from those countries are not likely to be made again until the price is higher.

Our wheat crop was large, but we have already sent a goodly portion of it to Europe. The export clearances of wheat and flour from four Atlantic ports Tuesday were equivalent to 491 000 bushels of wheat. The quantity of wheat exported in the first four months of the current fiscal year—July, August, September, and October—was 52,001,482 bushels, flour included at the rate of four and a half bushels to the barrel. In the corresponding months of last year the quantity exported was less than 26,000,000 bushels, and for the entire year the wheat exports amounted to less than 95,000,000. It does not seem probable that the export movement will become less active during the remainder of this year, for the local effect of short crops abroad does not appear to have been fully realized thus far. Foreign consumers are fortunate in having been able up to this time to get American wheat at low prices.

During the four months since harvest, the northwestern receipts of grain have been about 120,000,000 bushels, shipments 85,000,000, and Atlantic receipts nearly 80,000,000, the last in excess of any year since 1881. The movement to the sea-board is now declining, and the receipts for the last week in October were small. While the stock of grain at Northwestern ports is 30 per cent. greater than that of last year (nearly all the excess being at Duluth), the visible supply at those points of wheat is only about 10 per cent. larger than it was last year, although the total crop of wheat was 30 per cent. larger. The London market seems favorable to higher prices for wheat, but hitherto it has "kicked against" every attempt at an advance.

The butter situation has not changed to any material extent and there is no improvement noticeable. There is a little demand for fancy Elgin creamery, but otherwise the market is decidedly dull and in some cases depressed. The inquiry for exports is very limited.

	Nov. 19.	Nov. 19, '85.
Cremery, new choice to fancy	27@29½c.	27@28c.
State, new dairy fancy	2½@21	22@23½

Exporters of cheese have not done much for the past day or two and the market is rather weak with a tendency toward lower figures. Cable advices, however, are firm, but this is not reflected in the buying of exporters.

	Nov. 19.	Nov. 19, '85.
New cheese (f'cy)	12¾@12½	9½@9⅝

The marketing of hogs has been unusually small during the week, aggregating only 230,000 at the nine chief points against 440,000 for the corresponding week last year. There was somewhat of a gain at other places. At Chicago the deficiency was greatest, as hogs were held back on account of the strike. apart from this, the shortage is due to several causes: Owing to the drought, hogs in many places were marketed very closely last Summer; the weather has been very favorable for feeding, and as prices have been lower than farmers expected, many prefer to keep on feeding than to sell at current figures. There is an unsettled feeling as to future prices, due mainly to the uncertainty with regard to future labor troubles. There has been a very heavy export movement, especially in lard. Compared with a year ago January pork is 30 cents higher, lard 25 cents. per 100 pounds lower, and sides 32½ cents higher, while green hams are $1 per 100 pounds higher; hogs are about 20 cents per 100 pounds higher.

In wool, the only important feature in Boston during the week has been a liberal movement of Territory stocks, which have weakened lately and are going off freely. Fine medium wool is by no means strong as a year ago on account of diminished request. Delaine is weak and lower, but combing wool is in excellent demand and sales of exceptionally good lots have been made as high as 42 cents. In other departmets there is no quotable change. The current prices for leading sorts are as follows in comparison with last year:

	Nov. 20, '85.	Nov. 19, 86.
Ohio & Penn. X	32@33c.	31@25c.
Ohio & Penn. XX	31@35	36
Ohio & Penn. XX and above	35@37	36½@37½
Michigan X	31@32	32@33
Fine Ohio delaines	36@37	36@37
No. 1 combing	37@38	39@41
Texas spring, 12 months	22@25	23@26
Super A	33@37	33@37

LATEST.—Raw wool continues dull, though stronger at the interior and abroad than at domestic seaboard markets. Hogs are higher at Kansas City and pork is expected to follow, though speculation in hog products has not been active. Wheat has been a little firmer and more active, but prices are still below the level anticipated, owing to the enormous stocks in sight and heavy receipts.

MARKETS BY TELEGRAPH.

SATURDAY, November 20, 1886

CHICAGO.—Compared with cash prices a fortnight ago, No. 2 Spring Wheat is ½c. lower; No. 2 Red, ½c. higher. Corn, ¾c. higher. Oats, ¼c. higher. Flaxseed, 2c. higher. Pork, 10 to 20c. higher. Cattle, somewhat lower. Hogs, from 10c. to 40c. higher, according to grade. Sheep, steady.

WHEAT.—No. 2 Spring, 73¾@74⅛c; No. 3 Spring, 66@68c; No. 2 Red, 71½c. Futures ranged: November, 74@74⅛c; December, 71@71¼c; January, 74¾@74⅞c; May, 80¾@81¼c. CORN.—Quiet, No. 2, 36⅛c; Futures—November, 35@35⅝c; December, 36@36⅛c; January, 36¾@36¾c; May, 42@42⅛c. OATS.—Weak; No. 2, 25⅛@26⅛c; Futures, November, 25⅞@25⅞c; December, 26⅛@26⅛c; January, 26½@26⅛c; May, 30@30⅛c. RYE.—Quiet; No. 2, 53c. BARLEY, No. 2, 53c. FLAXSEED—No. 1, 93½. MESS PORK.—Cash, $9 60@9 65; Futures, November, $9 55@9 55; December, $9 52½@9 52½; January, $10 10@10 12½. LARD.—Cash, $5 95, November, $5 92½@5 92, closing at $5 92½; December, $5 92½@5 92½, closing at $5 92½; January, $5 97½@6 10, closing at $6 00. Short Ribs.—Cash, $5 50. Boxed Meats.—Dry salted shoulders, $5 10@5 20; Short clear sides, $5 75 @5 80. CATTLE.—Shipping steers, $3 00@5 00; stockers and feeders, $1 90@3 50; cows, bulls and mixed $1 25 @2 80; bulk, $2 00@2 50; through Texas Cattle, dull; cows, $2 40@3 00; steers, $2 40@3 30; Western rangers lower; natives and half breeds, $2 75@3 75; cows, $2 @2 40; Wintered Texans, $2 80@3 50. HOGS—Market strong; Rough and mixed, $3 65@4 05; packing and shipping, $3 90@4 20; light weights, at $3 60@4 10; skips $2 40@3 40. SHEEP.—Market steady; Natives, $2 00@4, Western, $3 00@3 50, Texans, $2 00@3 00; Lambs, $3 00 @4 50.

ST. LOUIS.—Compared with cash prices a week ago, No. 2 Red Wheat is ⅜c. lower. Corn, ⅜c. lower. Oats, 1c. lower. Flaxseed, 5c. higher. Pork, unchanged. Cattle, steady. Hogs, 25c. to 35c. higher. Sheep, unchanged.

WHEAT.—Steady; Sales No. 2 Red Winter, at 75⅛c. November, 74¾c; December, 76⅛c. CORN.—Steady; No. 2 mixed, Cash, 33@33⅛c; November, 34c; December, 34⅛c. OATS.—Dull; No. 2 Mixed, Cash, 26@26⅛c; November, 27c; December, 27c. RYE.—Quiet at 50⅛c. BARLEY at 49@65c. BUTTER.—Creamery, 23@27c, dairy, 14@25c. EGGS.—19c. FLAXSEED.—93c. HAY.—Timothy, $11; Prairie, $8. BRAN, 55c, at mill. Corn Meal, $1 95. PORK —$9 87½. BULKMEATS.—Long clear, $5 65; short rib, $5 75; short clear, $5 90. LARD.—$5 85. CATTLE.—Market strong; Good to Choice Native Shipping Steers $4 30@4 75; Butchers Steers, $3 55@4 10; Texas grades, $1 90@2 75. HOGS.—Market steady; Choice Heavy and Butchers, $3 00@4 15, Packing, $3 90@4 10; Light, $3 65@3 85; Pigs, $2 50@3 75. SHEEP.—Market dull; common to extra, $1 90@3 90.

BOSTON.—GRAIN—Corn, mixed, 51c; steamer yellow, 51c and steamer mixed, 49c, per bush. OATS.—Cash, No. 2 white, 37c. and fancy white, 40@41c, per bush.; January No. 2 white, 38c. RYE—60@62c per bush. BRAN —$11 25@11 50 for spring, and $15@16 for winter. Fine Feed and Middlings, $14@18; and Cotton Seed Meal, $24 50 on spot, and $22 per ton to arrive. GRASS SEEDS —Clover, Western, 10@9c. per lb, and New York, 8@9c; Timothy, $2@2 20 per bush; Red Top, $1 90@2 25 per bag. HAY AND STRAW.—Northern and Eastern, $17 per ton, $15@16 for fair to good, $12@14 for fine, and $9@13 for poor and damaged; Western, choice, $15@16; do, fair to good, $13@14; rye straw is held at $15@16 for choice new; $12@14 for common to good; swale hay, $9@10; oat straw, $8@9 per ton. BUTTER.—Northern and Eastern creamery, 26@28c, for extra firsts to extra; firsts, 22@23c; Western creamery, 25@28c, for extra firsts to extra; firsts, 20@22c; Northern dairy, 20@21c, for Vermont extra firsts to extra full; firsts, 17@19c, seconds, 12@15c. Western dairy, 12@15c, for firsts; seconds, 9@10c; imitation creamery, 16@22c, for extra firsts to extra; ladle-packed, 12@15c, for extra firsts to extra; firsts, 8@10c; grease, 3@5c. CHEESE.—New York and Vermont extra, 12@12½c; do. do. firsts, 10½@11½c; do. do. seconds, 7@9c; Western extra, 11¾@12c; do. firsts, 10@11½c. EGGS—Cape and near-by, 28c. per doz, Eastern extras, 27c; do. firsts, 24@25c; New York firsts, 24@25c; Western firsts, 21@22c, Provincial, 24@25c. BEANS. Choice Northern hand picked pea, $1 75@1 80 per bushel; do. do. New York, small, $1 70@1 75, do. do. screened, $1 25@1 50, medium choice, hand-picked, $1 55@1 60, do. do. screened, $1 25@1 50; Yellow Eyes, improved, $1 55@1 60; do. choice flats, $1 40@1 50; Red Kidneys, $1 75@2. POTATOES.—Sweet, range from $1 25@3 per bbl. PROVISIONS.—PORK Extra prime, $10 a 10 50; new mess, $11 25@11 50; Boston long-cut clear, $14@14 50; do, short-cut, $14 50@14 75; no, backs, $13@15 50; lean ends, $14@14 50; Beef, Western extra mess, $8@8 50; Western plate, $8 50@9; Western extra plate, $9@9 50. Hams—Western smoked, 11½@12½c. per lb, and Boston smoked, 11½@12c. per lb. Lard—Western choice kettle, 7½@7¾. per lb, Western steam, 6¾@7c, City rendered, 6¾@7. POULTRY AND GAME.—Northern and Eastern fresh killed—Turkeys, choice yellow, per lb, 15@16c; do, fair to good, 12@14c; chickens, choice large, 15@16c, do, common to good, 10@12½c, fowls, choice, 13@14c; do. common to good, 9@11c, Western turkeys, choice, 14@15c; do, common to good, 10@13c; do. Kentucky, 9@13c; chickens, choice, 14@15c; do, common to good, 9@12c; partridges, per pair, 60@75; grouse, per pair, 70@85c; quail, per doz., $2@2 50; mallard ducks, per pair, 50@65c; black ducks, per pair, 80@90c; venison, short saddles, per lb, 12@14c. FRESH MEAT.—Beef, choice steers, per lb, 8@8½c; do, good steers, 8c, do, do, light western steers, 6@7c, do, hind quarters, choice, 11@11½c; do, common to good, 6½@10c; do, forequarters, choice, 5½@6c; do, common to good, 4@5c; mutton, extra, 7@8c; do, common to good, 4@6c; Spring lambs, 6@9c; veal, choice, 9@10c, do, fair to good, 7@8c; do, common, 4@5c; do, Worcester County, choice, 8@10c; do, do, do, common, 5@6c.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, November 20, 1886.

STATE OF THE MARKET.—As compared with cash prices last week, flour is unchanged. Ungraded Red Wheat, 1⅛c. lower; No. 2 Red, ⅛c. lower; Ungraded Mixed Corn, ⅜c. lower; No. 2 ⅜c lower, No. 3, Oats, ⅛c. higher; No 2, ⅛ c. higher; Pork, 25c. higher; Butter, about steady. Cheese, ⅛c. higher; Eggs, about the same; Fruits and Vegetables, steady; Poultry, lower.

FLOUR, FEED AND MEAL.—FLOUR Quotations. Fine: $1 90@2 70, Superfine, $2 15@2 90, No. 2, $2 00@3 10; Good to Fancy Extra State, $3 35@3 75; Common to Good Extra Western, $2 60@3 75, Good to Choice Extra Western, $3 85@4 75; Common to Fair Extra Ohio, $2 60@3 85, Good, $3 90@4 35; Good to Choice, $4 35@4 75; Common Extra Minnesota, $2 60@3 15; Clear, $3 50 4 10; Rye Mixture, $3 35@3 95; Straight, $3 65@4 45. Patent $4 35@5 5; Bakers' Extra, $3 90@4 90; St. Louis Common to Fair Extra, $2 90@3 75; Fair to Good, $3 85@4 60; Good to Very Choice, $4 65@5 5, latter an extreme. Patent Winter Wheat Extra, $4 30@5 5, City Mill Extra for West Indies, $4 40@4 50, South America, $4 60@4 70. SOUTHERN FLOUR.—Common to Fair Extra at $3 25@3 85, and Fair to Choice, $3 90@5 00. RYE FLOUR.—Superfine, $3 00@3 20. CORN MEAL. —Yellow Western quoted at $2 75@2 85; and Brandywine at $2 75@2 85. BUCKWHEAT FLOUR Quoted at $1 85@2 10. FEED.—40 lb, quoted at 75@80c. 60 lb, at 70c; 80 lb, at 75@85c; 100 lb at 85@90c sharps, at 95c. @$1 00. Rye Feed at 75@80c, (30 tons sold yesterday at 70c.); screenings at 45@70c.

GRAIN.—WHEAT. No. 1 hard, at 90½c; Old No. 2 Milwaukee, 82½c; Ungraded Winter Red, 81@87⅛c; No. 3 Red, 85½c; No. 2 Red, 84⅝@86⅝; No. 1 Red 88c; Extra Red, 88½c; No. 2 Red for December, 87⅛@85⅛c; do. for January, 86 9-16@87c; do. for February, 88⅛@89⅛c; do. for May, 92⅛@92⅛c. CORN.—Ungraded Mixed, at 41@45⅛c; No. 3 Red, 1⅛c; No. 2, 45⅛c; do. for December, 45⅛@45c; do for January, 47@47⅛c; do. for May, 50@50⅛c. OATS.—No. 3 at 32⅛c, do. White, 35⅛@35⅛c; No. 2, 32⅛@32⅛c; do, White, 35⅛c; No. 1, White, 38c; Mixed Western, 33@31c, do. White, 35@40c; White State, 35@37c; No. 2 for December, 33⅛@33⅛c; do. for January, 34⅛@34⅛c; do. for May, 36⅛c.

PROVISIONS.—PORK.—Mess, $10 60@10 25 for Old and $10 50@11 00 for New; $13 for Family Mess; $11 50@15 50 for Clear Back, and $10 00@10 50 for Extra Prime. BEEF.—City Extra India Mess, $11 00@17 00; Extra Mess, in barrels, $8@8 50, Packet, $8 00@9, Plate, $8@8 50. BEEF HAMS.—17 50@17 75. CUT MEATS.—Rib Bellies, 12 lb. average, 7½c; Pickled Bellies, 10 lb, average, 7@7½c; 12 lb. Pickled Bellies quoted at 6¾@7c; City Pickled Shoulders, 5⅛@5⅜c; Pickled Hams, 9@9⅛c; Smoked Hams, 9c; Smoked Shoulders, 6⅛@6⅜c. MIDDLES.—Long Clear in New York, 6c. DRESSED HOGS.—City Heavy to Light at 5⅛@6c; Pigs, 6@6⅜c. LARD.—Western Steam Spot, 6.21c; City Steam, 6.12c; Continent, 6.60c; South American, 6.90c; November, 6.23c; December, 6.21@6.23c; January, at 6.27@6.29c; February, 6.34@6.35c; March, 6.11@6.42c; April, 6.42½c.

BUTTER.—Creamery—State, pails, fine, 28@29c; State, prime, 27@28c; State and Pennsylvania, tubs, 28@29c; Elgin, 28@30c; Western, best, 28@29c; Western, prime, 24@26c; Western, good, 20@21c; Western, June, best, 22c; Western, do, prime, 20@21c; State Dairy, half tubs, best, 26@27c, half-firkins, tubs, fine, 22@23c, half-firkins, tubs, good, 20c; half-firkins, common, 17@18c; Welsh tubs, best, 25c; Welsh tubs, prime, 22@23; Dairy, firkins, best, 21c; Dairy firkins, prime, 21@22; Western, Imitation Creamery, best, 20@21c, Imitation Creamery, fair and good, 17@18c; Dairy, fine, 18@20c; Dairy, common, 12@14c; Factory, poor, 8@10c; Factory best Iowa, 18@20c.

CHEESE.—State factory, fancy, colored, September, 12⅛c; do, do, do, white, do, 12½c do, do, good and fine, 11¼@12¼c; do, do, fair, 10¾@11¼c; do, do, common, 10¾@10⅛c, do, do, light skims, 9½@10c; Ohio factory, fine, flat, 12@12⅛c, Ohio factory, good, 11@11⅛c; Pennsylvania skims, 2½@3½c.

EGGS.—State, 25@26c; Ohio and other choice lots, 24⅛c; Western, best, 24@24½c, do, held lots, 21½@23c; Canadian, held lots, 20@22c; Limed State, 18c; do, Western, 17@18c.

POULTRY.—LIVE.—Chickens, per lb, at 6@7c; fowls, near-by lots, per lb, at 7c., fowls, Western lots, per lb, at 6@7c fowls Southern lots, per lb, at 6@8c; turkeys, per lb at 9@10c; ducks, western per pair at 50@60c.; geese, western, per pair, at $1.12@1.50.

POULTRY.—DRESSED.—Turkeys, per pound, at 9@10c.; Spring chickens, Philadelphia, per pound at 12@15c.; do. western, per lb, at 7@9c; fowls, Pennsylvania, prime, per lb. 11c; do western, per lb, at 8@9c.

FRUITS.—FRESH—Apples.—Gravenstein per bbl, at $2 75@3; other varieties at $2@2 50 per bbl; Greenings, $2 00@2 50 per bbl. Grapes.—Catawba at 4@5c. per lb; Concord, per lb, 3@4½c; Diana per lb, 2½@3½c; Isabella, at 2@3c. per lb. Cranberries at $6@6 50 for Cape Cod best; $5 50@6 00 for choice; $5 00@5 50 for light; $1 75@2 for choice, per crate.

FRUITS.—DRIED.—Apples—Fancy Evaporated, 10c; do. choice, at 9c; do. prime, 8½c; do. southern sliced, prime at 2½@3c; do, North Carolina, fancy sun dried, new, 6¾c; do. do. choice, 1¾@5¼c; do. do. prime, 3¾@4½c. Peaches — North Carolina, peeled choice new, 11@11½c. do. do. do, fancy, new, 12@12½c; do. Georgia, choice, at 10c; do. do. prime fancy, new, 11@12c, do. Delaware, evaporated, peeled, 26@30c; do, do, do, unpeeled new, 13@14c, do. Georgia new, 10@11½c. Cherries, pitted, at 9½c. Evaporated raspberries, 18@20c; sun-dried do. 16@17c. Blackberries—Prime at 7½@7¾c. Plums, at 6@6½c.

PEANUTS are wanted moderately at steady prices. Quoted at 4¾c. for fancy hand-picked; 3½c. for farmers' grades.

COTTON.—The quotations, according to the American classification, are as follows:

	Uplands.	New Orleans. and Gulf.	Texas.
Ordinary	6 7-16	6⅝	6⅝
Strict Ordinary	6⅞	7 1-16	7 1-16
Good Ordinary	7 13-16	8	8
Strict Good Ordinary	8¼	8 7-16	8 7-16
Low Middling	8 11-16	8⅞	8⅞
Strict Low Middling	9	9 3-16	9 3-16
Middling	9 3-16	9⅜	9⅜
Good Middling	9 7-16	9⅝	9⅝
Strict Good Middling	9 11-16	9⅞	9⅞
Middling Fair	10 1-16	10¼	10¼
Fair	10 11-16	10⅞	10⅞

STAINED.

Good Ordinary	6¼	Low Middling	7¾
Strict Good Ord	15-16	Middling	8⅝

HAY AND STRAW.—Choice Timothy, 80@85c, per 100 lb; Good Timothy, 70@75c; Medium, 60@65c; Shipping, 50c; Clover, mixed, 55@65c Straw—No. 1 rye, 60@65c; short rye, 45@50c; oat, 40@45c.

HOPS. American—New York State, 1886, prime, 28@30c; State, common to medium, 25@27c; State, 1885, prime to choice, 16@18c; do. common to medium, 12@15 Pacific Coast, 1886, prime to choice, 28@30c; do, fair to good, 26@26c; do. 1885, good to choice, 13@16c. Foreign—Bavarians and Bohemians, 1886 28@35c; mixed Germans do, 24@27c; Altmarks, do, 18@20c; Kents-do. 23@25c; Sussex, do. 20@22c.

VEGETABLES.—Potatoes.—Long Island, rose, in bulk, per bbl., $1 75@2; State, $1 37@1 62 do Burbank, $1 37@1 62; Jersey, peerless, per bbl, $1 37@1 50; sweet potatoes, Va., yellow, per bbl., $1 50@1 75; sweet potatoes, Va., yellow, inferior, per bbl, $1@1 25. Cabbages.—Flat Dutch, per 100, $3@4. Cucumbers.—Pickles, per 1,000, 75c.@$1 25. Egg plant, Long Island, per bbl, $3@3 50. Onions.—Conn., red, per bbl, $2 25@2 75; do. Orange County, red, per bbl, $1 75@2 25. Celery, per doz. bunches, $1@1 25. Turnips, Russian, per bbl., $1@1 25. Cauliflowers, per bbl, $1 50@4 00.

LIVE STOCK MARKETS

NEW YORK, SATURDAY, November 20, 1886.

BEEVES.—Indiana Steers, 1476 lb at $1 92½; do, 1292 lb at $4 55; do, 1212 lb at $4 30; Ohio do, 1489 lb at $5; do, 1588 lb at $4 40; Colorado Steers, 1119 lb, at $3 25. Steers, Dry Cows, and Stags, 930 lb, at $2 65; Indiana Steers, 1148 lb at $4; Chicago Steers 1110 lb, at $4 75; do, 1373 lb, at $4 50; do, 1302 lb, at $4 45; Indiana do, 1280 lb at $4 25; do, 1211 lb at $4; do, 1247 lb, at $4; Ohio do, 1598 lb at $4 75; do, 1461 lb at $4 87½ do, 1476 lb at $4 80; Cows, 950 lb at $3; Pennsylvania Steers, 1162 lb at $4 10; Ohio do, 1216 lb at $4 15; do, 1301 lb at $1 45; do, at $5; Indiana do, 1144 lb at $3 55; Chicago Steers, 1432 lb at $4 70, do, 1298 lb at $4 55; do, (Oxen, Steers, and Stags), 1367 lb at $4; Western steers, 1408 lb at $4 1?; do, 1398 lb at $4 40; Indiana do, 1531 lb at $4 52, do, 1354 lb at $4 45; 1106 lb at $3 70; do, 1110 lb at $2 50; do, (part Oxen and Stags), 1293 lb at $3 40; do, 1115 lb at $3 50; Ohio Cows and Stockers, 941 lb at $3; Dry Cows, 917 lb at $2 60; Bulls, 1360 lb at $2 75; Western Steers, 1055 lb at $3 75; Chicago Steers, 1482 lb at $4 80; do, 1291 lb at $4 70.

CALVES.—Grassers, 203 lb, at 2¼c; do, 205 lb, at 2¼c; Veals, 271 lb, at 4½c; do, 215 lb, at 5c; do, 135 lb, 6c, do, 146 lb, at 7½c. Grassers, 175 lb, at 2c

SHEEP AND LAMBS.—Receipts for six days 36,736 head against 14,087 head for the same time last week; Michigan Sheep, 76 lb, at 1¾c; Canada Lambs, 93 lb, at 6¼c; Western Sheep, 77 lb, at 4½c; do, 84 lb, at $4 30; Canada Lambs, 89 lb, at 6¾c; Pennsylvania Sheep, 81 lb, at 4½c; do, do, 107 lb, $4 15, do, Lambs, 62 lb, at 5¾c; Western Sheep, 108 lb, at 1¾c; Canada Lambs, 82 lb, at $6 20; do, 88 lb, at 6¾c, State Sheep, 87 lb, at 4¾c; Indiana do, 70 lb, at $3 55; State Lambs, 60 lb, at $5 30; do, 60 lb, $5 50; Ohio Sheep, 91 lb, at $1 50 per 100 lb, Kentucky Sheep, 106 lb, at $4 15; Jersey Ewes, 106 lb, at $4 35; do, 117 lb, at $1 35; State Lambs, 68 lb, at $5 80; Indiana Lambs, 72 lb, at 5¾c; Western Sheep, 97 lb, at 4½c; do, 109 lb, at $1 40.

HOGS.—Receipts for six days, 40,950 head against 43,557 head for the same time last week. Feeling firm and prices a shade higher with reported sales at $4 55@4 75 per 100 lb; Ohio Hogs, 153 lb, at $4 55; State do, 203 lb, $4 55; State Pigs, 93, at $4 75.

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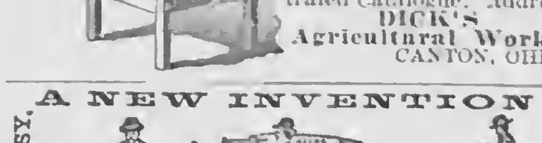

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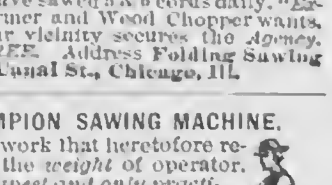

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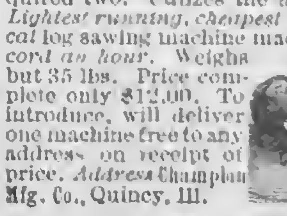

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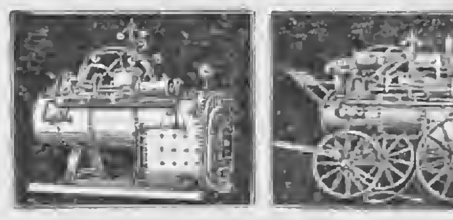

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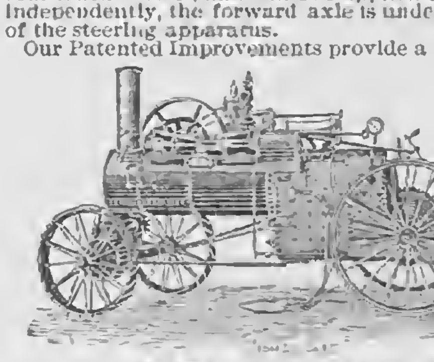

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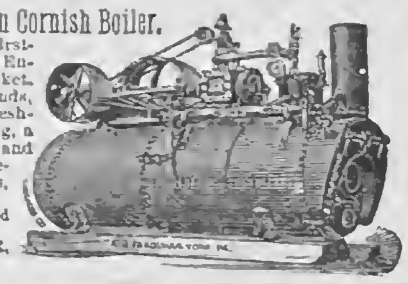

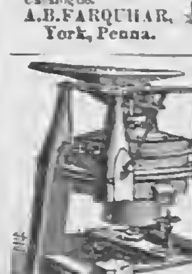

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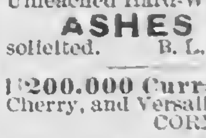

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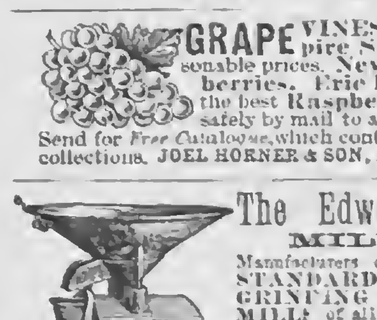

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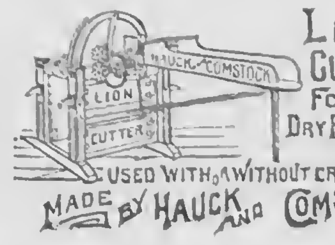

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For the Young.

HERE is a right way and a wrong way to blow out a lamp. Some people never turn down the light before blowing it out. They just blow down the chimney as hard as they can. Some day they will blow the light down into the oil and blow themselves up at the same time. The safe way to put a light out is to turn down the wick and blow across the top of the chimney. It takes a little more work perhaps, but it would pay better to follow this practice for 500 years in safety, than to have one explosion as a result of the wrong way.

LAST Summer I saw a man doing a good business at selling ice cream to newsboys. He had a box on wheels in which were two large cans for the cream. This cost two cents per glass. The glasses were pretty small, too. No spoons were provided. The boys licked the cream out with their tongues. They seemed to enjoy it too. This week I saw the same man with the same box on wheels. Instead of the cream he had a large can of baked peas. These were sold at two cents per plate. Each boy had a tin spoon and a little plate and the way the peas went out of sight was a wonder. The box was surrounded by a crowd all through the dinner hour. Most of the boys held their spoons in the proper way, and none of them ever tried to cheat. Baked peas are good. Many people prefer them to baked beans.

WHILE I was waiting for a train at a little station on one of the great rail-roads, I noticed a young man, evidently not used to traveling, who was also waiting for a train. When the train came along, we both got on board. Pretty soon the conductor passed through the train collecting the tickets. When he reached this young man he said: "You are on the wrong train, you want to go West, and you are going East at the rate of 40 miles an hour." At the next station he got off, saying that he would find out where a train was going before he got on board again. I could not help thinking that a good many people were just like him, on the wrong train and being hurried in a direction they did not want to go. I wish all my boys and girls would ask themselves what direction they want to go, and then ask themselves if they are on the right train if not, don't lose any time in getting right. A good many folks get started in life the wrong way, just because they don't look ahead a little. Keep your eyes open.

THE STORY OF A DISTRICT SCHOOL.

A COLLEGE BOY'S DIARY.

(Continued.)

"The worst about this is," said Johnny, with a choke, "that I figgered on helpin' my mother big some day. When I got big 'nuff I wuz gonter take her outer the County house an' sorter start a new home. Me an' her wuz gonter to keep house—now we can't do nothin.'"

"That's so," said the director, kindly; "but here's something else. She had a hard time here—now she has a good deal better place than you could give her. She can see you, too, and when you come to be a man she'll know it all, and you can fix things just as you think she'd like to have them. You wouldn't want her to wait in the County house till you got to be a man, would you?"

"I reckon not," said Johnny, after a long study.

There was no danger of our riding by the County house. We knew it at once. There was no look of the home about it. It seemed as though the people that lived there had given up all hope. The blinds at the front were all closed—paupers had no need of parlor or sitting room. There was no path up to the front door. Paupers must go in at the back door. They could not be choosers. The fence was falling into ruins. Two black hogs and an old cow went wandering about the yard. Several ragged men stood about the door as we drove up. There was no mistaking the place surely. A little white-haired man came hobbling down the worn steps as we halted. He beckoned to us with one hand and pointed over his shoulder with the other.

"Walk right inside," he said in a squeaky voice, "the mourners is all on hand, an' the funeral's gut ter begin to ouct, 'cause Mr. Jones he aint no hand fer waitin'."

He stood by while we fastened the horse, and then hobbled back to the door and ushered us into a large bare room, where the funeral services were to be held. Johnny kept close by the director. He did not cry any more. He took off his hat and let the great white brush of hair stand up about his face. We sat down on some rough looking chairs at the front

A pauper's funeral! It is hard to think of anything more sad, more desolate, and yet with less to regret. There were sincere mourners in this bare room. These poor, childish, wrecked paupers, children of charity, mourned the loss of their friend. They could not ask her to come back, they could only feel glad that she had escaped the wretchedness of their lives, and yet her death had taken something away from them—they could not tell what it was.

The rude coffin was placed on two chairs in the center of the room. The sun straggled in through the broken blinds and fell upon the thin white face that looked up at us from the coffin. The paupers were crowded around the room. They were mostly old men and women. What a place in which to pass the years of life that ought to be the best of all. There were a number of children too—like Johnny, ragged and unkempt. A foolish girl sat on a seat by the door and giggled and cried by turns. At one end of the room sat the keeper of the County house and his family. He was evidently in a hurry to have the services concluded, for he looked at his watch several times and at last nodded a little impatiently to the minister who sat by the side of the coffin.

I did not like what the minister said very well. His great desire seemed to be to make everybody cry. He seemed to be well satisfied when the paupers began to sob. It seemed to me that he made death appear just as sad and bitter as he could. I don't think that is right. At such times people need strong and hopeful words that will not make them cry, but will give them courage. I was surprised that Johnny did not cry with the rest. He sat and watched the minister with his eyes wide open. At last the minister paused, and nodded to an old man who sat near him. At this motion the old pauper rose and came feebly tottering forward. He placed his hands on the side of the coffin to steady himself, bowed his head till the long, white hair nearly touched the white face so near him, and in a voice that trembled with age prayed as only a pauper with his past dead, his life a wreck, his only hope in death could pray. The sun glittered on his white hair, and seemed to surround his face with a glory. The paupers hid their faces in their hands in the hopelessness of their grief, and even Mr. Jones forgot the pressure of his business and listened attentively. After the prayer, the old man who had met us at the door, stood up. He seemed to consider himself manager of the services. He wiped his red eyes with one sleeve of his ragged coat, while the other brushed back his white hair. As he did this, he said in his squeaky voice, "Them as wants to look at the remains will walk 'round this way an' out yon door."

He indicated the direction by limping over the desired route himself. The others followed him. We went last of all. The director lifted Johnny up a little so that he could see better. Johnny reached out his hand as if to touch the thin face, and then suddenly withdrew it. He looked wistfully at us and then slowly followed us out of the room.

On the way back to Bear Creek Johnny sat studying and pondering over something.

"What are you thinking about?" said the director at last.

"I wuz thinkin' of somethin' that happened onct. Ez long ago ez I kin remember, I got sorter hurt an' run in ter my mother. I found her asleep and I hated so ter wake her up that I didn't say nothin', and found out I want hurt much after all. My father, he said I must allus do that—sorter make it as easy for her ez I could. When I come to that coffin it 'peared ter me jest ez ef she wuz asleep again, an' ez if it would a ben sorter mean fer me ter wake her up in that County house. So I didn't say ner do nothin'. I expect that's the best way."

That night Old Johnson did much to atone for his treatment of Johnny. He fed the calves himself, brought in some of the wood and never once joked the little boy. He gave him the largest piece of pie, too.

The next mornin' as we went to school together, Johnny said in confidence: "I don't reckon I'll lick old Johnson after all. Like enough he don't mean nothin'."

LETTERS FROM THE COUSINS.

DEAR UNCLE MARK: Our first snow fell today and I have the whooping cough so I could not go out and play in the wet snow. My brother George and I topped six barrels of carrots. I learned to milk this Summer. The Garden Treasures did not do well as it was so dry. George is seven years old and wishes to know if he can join the club or is he yet too young? Your nephew,

JOHN SCHOENFELD.

[George can join. I am glad you kept out of the wet snow. I guess your wrists ached when you began milking.—U. M.]

DEAR UNCLE MARK: It is a long time since I wrote to you. I planted the sweet peas you sent me in a bed of loam. They grew to be about three feet high. The flowers were very nice through the Summer. The corn did not do very well. We are setting out an orchard of apple trees, when is the best time to set it out, now or next Spring? We have a dog named Prince and he will sneeze for his dinner. I have a cat named Mollie, and she will sit on a chair and rub her nose on the back of it when she is hungry.

Wolf Island. BYRON IRVINE.

[It is pretty late to plant the trees now.—U. M.]

DEAR UNCLE MARK: As I am not going to school I will write to you this afternoon. We have trouble in our school. The two directors hired a teacher and nobody else wanted her. The whole District was against her. Uncle Mark, do you think that was right? My brother started for Nebraska Monday evening; he is going to school this Winter. We are having beautiful weather now. My other two brothers are husking corn. Ma and I have been busy cleaning house, but it is done now. Last Sunday, after church, I saw a couple of young ladies baptized in the Mississippi River. Yours respectfully.

Henderson Co., Ill. BERTHA L. BANTA.

[Uncle Mark couldn't say about the school without knowing more about it. Sorry the trouble occurred. You ought to have a good school.]

DEAR UNCLE MARK: I received the sweet pea seed you sent me and return thanks for them. They bloomed a little about the first of July, but they were not very pretty, and there were not many blooms. I do not think they will do well in this climate because we tried some before and they did not do much. My father gave me one Bird Cantelonpe hill, and I raised one melon that weighed 11 pounds. I thought that was too light to get the prize but I see in the RURAL that the heaviest one only weighed nine pounds. I sold $1.46 worth of Cantaloupes this year. We have been pretty well shaken up down here by the earthquakes. I raised some popcorn this year and it turned out pretty well.

Your nephew,

Henderson N. C. ABRAM H. PRINCE.

[The prizes have not been awarded yet. You will see about them December 1. I guess you had a pretty hard shaking.—U. M.]

DEAR UNCLE MARK: I have read the letters of the Cousins with much interest, and I thought it was time to add my mite, and so I come knocking for admission into the Y. H. C. Will you let me come in? Perhaps, Uncle Mark, you have not heard of the famous Cheshire Decorated Cart and the Cheshire Grange Statue; at least, all of the Cousins have not, so I will write and tell them about it. The Cart belongs to the Farmers' Club of this place, and was made for exhibition at the Connecticut State Fair at Meriden, where it took first premium. The design was an immense horn of plenty with vegetables of all descriptions pouring from its mouth. It rested on a bed of flowers, and was surrounded with all kinds of vegetables. The sides of the Cart were fringed with grain, and festooned with strings of apples, and ears of corn. It was considered very fine. The Goddess of Grain was sent to the State Fair by the Cheshire Grange (of which I am a member) and was thought the most artistic work of the kind ever seen in New England. The statue stood on a pedestal which rested on bales of hay, and was 15 feet high. The Goddess held a sickle in her right hand, and in her left a wreath, all made of grain. Her robes were made of heads of grain. Her face and arms were covered with very fine seeds, and her hair was made of corn silk. The pedestal was covered with ears of corn split in two, and tacked on. It had also figures worked on it with different kinds of seeds. The Cart and Statue were invited to the New England Fair at Boston, and also to several fairs in this State. Uncle Mark, you ought to have seen the Cart and the Goddess. I would like to say to N. C. Rigg, that if he would like me for a correspondent, and will write, that I will reply, as I live in a distant State and am about his age. M. C. HOTCHKISS.

West Cheshire, Conn.

[I wish we could see that Cart.—U. M.]

DEAR UNCLE MARK: My Grandpa has taken the RURAL longer than I can remember. I have been reading the letters from the Cousins for some time. We live on a farm of 83 acres. It belongs to my Grandpa. My Pa farms it on shares. Our corn was good; the oats were a fair crop; wheat was poor on account of freezing out in the Winter. Pa has a Jersey heifer. We call her Nelly. I have one bird, two rabbits and five bantam for pets. We raise Plymouth Rocks and Wyandotts and Black Javas, and Rouen Ducks.

Yours truly. EDNA VORHES.

Harrison Co., Ohio.

DEAR UNCLE MARK: My Papa takes your paper, and I would like to be a Cousin. I live 10 miles below Parkersburg on the Ohio River. It is just a little way to the river from our house. I live on a large farm in the country. My Papa had about 1,500 bushels of apples this year. I have three little sisters, and they are all full of mischief as they can be. I go to school. Our teacher's name is Miss Mary Ames. I have a cousin from Parkersburg visiting me now. I planted the Garden Treasures, but few came up. I am 12 years old. I took music lessons this Summer and I had to go three miles to my teacher's house. I want to be a music teacher if I can, for I like music so well. We have a melodion. Your niece, CORA OAKES.

[I am glad you like music. If you are going to be a teacher be sure and make a good one.—U. M.]

DEAR UNCLE MARK: I am 13 years old and live on a farm of 10 acres. We have 13 cows, and four calves, two horses and about 25 hens. I live 2½ miles from school and have only missed two days since Sept. 7th, 1885. I like to read the Cousins letters, also The Story of a District School. In the seeds that were sent to Papa, there were some Cantaloupe seeds, which were planted and we had one weighing 10¾ pounds. The watermelon seeds did not do very well. There were eight kinds of flower seeds that came up. The Alaska peas did well; the Angel of Midnight field corn did well, there was one ear of the corn which measured at husking time 12 inches (but now only 11½ inches) and containing 456 kernels. I want this to be entered in for the prize. Out of 60 kernels sent us there were 105 ears 20 of which measured over 10 inches long and the remainder over six inches long.

Yours truly.

Vestal, N. Y. BERTIE LA GRANGE.

[I will enter the corn.—U. M.]

DEAR UNCLE MARK: I am a little boy 10 years old and would like to join the Y. H. C. I am much pleased in reading the letters from the Cousins. Papa takes the RURAL and likes it very well. We planted the corn and one ear measured 12⅛ inches. We planted the Garden Treasures and they were very nice. We have five head of cattle and nine pigs. Papa has taken two cows for a year and they give but little milk. I don't think it pays, do you? I have five sisters. Ma has been sick for two months and I hope she will get well before long. If you think this is worth putting in your paper, I will write again.

Grant Co. Dak. SEARS W. BARDINE.

[I don't think those cows will pay very well. I do hope your mother will get well soon. I guess she will, too.—U. M.]

Miscellaneous Advertising.

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Catarrh is a very prevalent disease, with distressing and offensive symptoms. Hood's Sarsaparilla gives ready relief and speedy cure, as it purifies the blood and tones up the whole system.

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PERSONALS.

J. H. PULESTON, of London, Eng., has bought for $1,037,500 the S. J. Rose domain of 1,950 acres, near Los Angeles, Cal.

THE President has invited his sister, Miss Cleveland, to take a Christmas dinner with him at Oak View, the latest name for his country place, Pretty Prospect, or Red Top, and she will probably remain some time thereafter.

THE nurse of the baby Alfonso XIII. of Spain is a famous girl now. When the royal youngster received his three decorations from the King of Portugal she exclaimed: "Now I trust his little Majesty will keep his nose clean."

GEORGE W. BAXTER, the new Governor of Wyoming, is a very young man, not over 30. He is a son of Judge Baxter, formerly Governor of Arkansas, and one of the principals in what was known as "the Brooks-Baxter war" in 1874 in that State.

DR. WARREN, an associate of the Washington Ornithological Bureau of the Agricultural Department, says that hawks and owls feed on mice and insects, and not on poultry as has been commonly supposed! In examining a number of the stomachs of these birds he found no poultry.

WALTER S. GORDON, brother of Governor Gordon, of Ga., who recently died, amassed three fortunes in six years. He and his brother realized in the Georgia Pacific $167,000; in the Shellield they cleared $100,000, and shortly before Walter's death they sold the Indiana, Alabama and Texas Railroad for $150,000.

LETTERS which have been published in Paris reveal the fact that the Comte de Paris visited the Bartholdi Foundry in 1878 and subscribed $1,000 toward the cost of the statue of Liberty. In the letter accompanying the gift the Comte said he took the greatest interest in everything contributing to the union of France and America.

WHEN Rev. Sam Jones, in Omaha, Neb., asked any man present who had never spoken a cross word to his wife to stand up, a round-faced, good-natured individual, with a beard, stood up. "Thank God, there's one man who never said a cross word to his wife!" said Rev. Sam. "I'm a bachelor!" shouted the round-faced man.

GOVERNOR GILBERT PIERCE, of Dakota, who was appointed by President Arthur just after the Chicago Convention, has again tendered his resignation to accept the managing-editorship of the St. Paul Pioneer-Press, at a salary of $5,000 a year. He is a Stalwart Republican, and tendered his resignation upon the incoming of the present administration; but was asked to hold over as a personal favor to President Cleveland, as no better man could be found.

MISS WINNIE DAVIS'S first appearance in public was at the laying of the corner-stone of the Confederate Monument at Montgomery, Ala. She had previous to that time lived in privacy at Beauvoir. On the trip from Montgomery to Atlanta, after the laying of the corner-stone, Gen. Gordon presented Miss Davis to a crowd at Newman, Ga., as "The Daughter of the Confederacy," a title by which she is generally known in the South.

PRINCE FERDINAND, of Hohenzollern, of the elder and Catholic line, has been chosen by his uncle, King Charles, of Roumania, as his heir, for Charles is childless. This was arranged a year or two ago, and the prince, who is 21 years old, will soon leave his Prussian lieutenancy and become an officer of the Roumanian army. It is said that when he took his leave of Kaiser Wilhelm the old man said: "I think thou hast had more pleasure in Potsdam than ever thou wilt find later down in Roumania."

PRINCE NICHOLAS, of Mingrelia, Russia's candidate for the sovereignty of Bulgaria, is 40, a colonel in the Russian army, and aid-de-camp to the Czar. He is the divorced husband of a daughter of Gen. Count Adlerberg, ex-Minister of War. He has a 10-year-old son, and is somewhat of a favorite in St. Petersburg society. Mingrelia is a part of ancient Colchis in Asia, between Circassia and the Black Sea. Its area is about 2,600 square miles, mostly mountains and swamps infested with malignant fevers—a savage country with no roads and hardly any improvements. Its 240,000 inhabitants are physically and mentally the lowest type of Georgians. It was conquered in 1801, but the Prince was allowed a limited rule till 1867, when the father of Nicholas was altogether turned out, but consoled with a bounty of $750,000.

Miscellaneous Advertising.

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should never be made, but ambition and enterprise deserve reward. Wherever you are located, you should write to Hallett & Co., Portland, Maine, and learn about work that you can do and live at home, earning thereby from $5 to $20 and upwards daily. Some have earned over $50 in a day. All particulars free. Both sexes; all ages. Capital not needed; you will be started free. All is new. Those who start at once cannot help rapidly making snug little fortunes.

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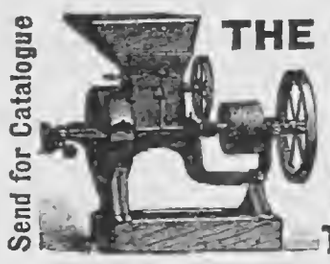

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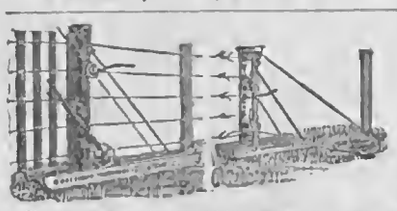

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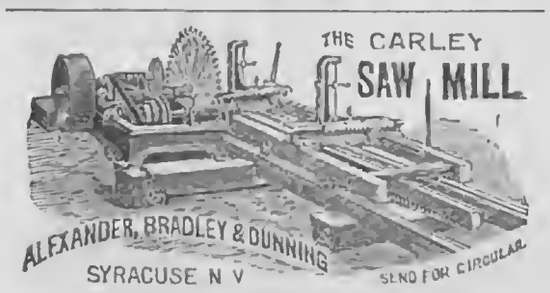

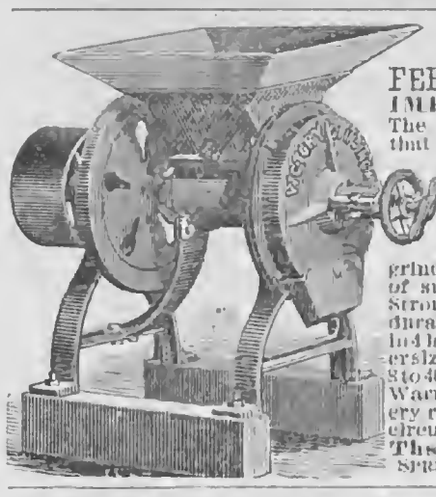

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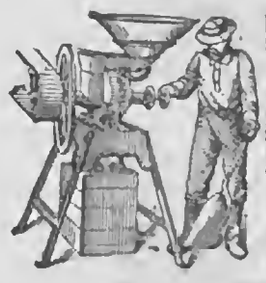

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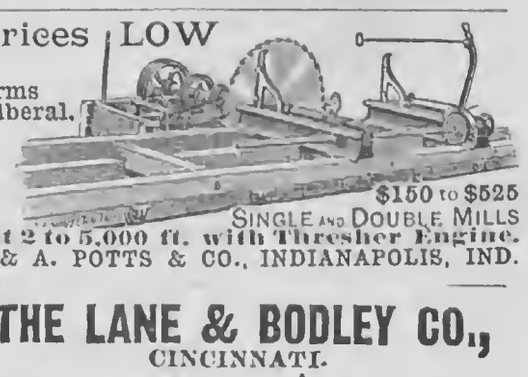

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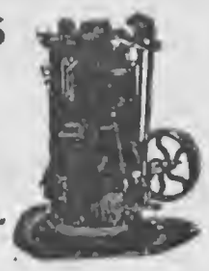

THE RURAL NEW-YORKER

A JOURNAL FOR THE SUBURBAN AND COUNTRY HOME.

VOL. XLV. No. 1923. NEW YORK, DECEMBER 4, 1886. PRICE FIVE CENTS. $2.00 PER YEAR.

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The Herdsman.

AYRSHIRE CATTLE.

AMONG the various breeds of cattle whose merits for the shambles or the dairy have justly won them popularity, the Ayrshire is of the most recent formation. The nineteenth century was from 10 to 15 years old before the cattle of Ayrshire, which have since become known by the name of the county in which they originated, are known to have possessed those distinctive characteristics and that power of transmitting them with certainty to their progeny, which would entitle them to be considered a breed. The changes effected in the appearance of the Ayrshire within the last 50 years have been considerably greater than in cattle of any other well known breed; for in this period the improvements made in Ayrshires have been of a more radical nature than those effected on any other breed. As may be inferred from its recent formation, it is preëminently a breeders' breed, owing its origin less to environment—surrounding conditions—and more to care and judicious selection than any of the other well known breeds. More than a century ago, it is true, the rough cattle of Ayrshire had a local reputation for hardy and deep-milking qualities, but the meagre descriptions that have come down to us from those days show that they differ greatly from the Ayrshires of to-day. It is generally believed that the cows from which both they and the Short-horns are descended were the country cows belonging to the district between the Wear and the Tees, and it is quite probable that some of these cows—immemorially good milkers—were bought by Scotch dealers or drovers when returning north after disposing of their "drives" of black cattle in England. On the cows thus introduced, it is very likely that West Highland bulls were used for crossing; for cows of that breed have always been good milkers, and the Ayrshires of to-day often in color, and always in the size and shape of their horns, afford clear evidence of West Highland blood. Moreover, both breeds are spiteful and pugnacious in disposition, and ever ready to gore or rip up each other whenever a chance offers, even when bred together. The Jersey, Guernsey, Short-horn, and even the Holstein are all supposed by different authorities to have contributed either by direct crosses on the original rough, but hardy, stock, or by "dashes of blood" to the formation of the breed, and some of the distinctive traits of all these breeds occasionally, by atavism, crop out in the modern Ayrshires.

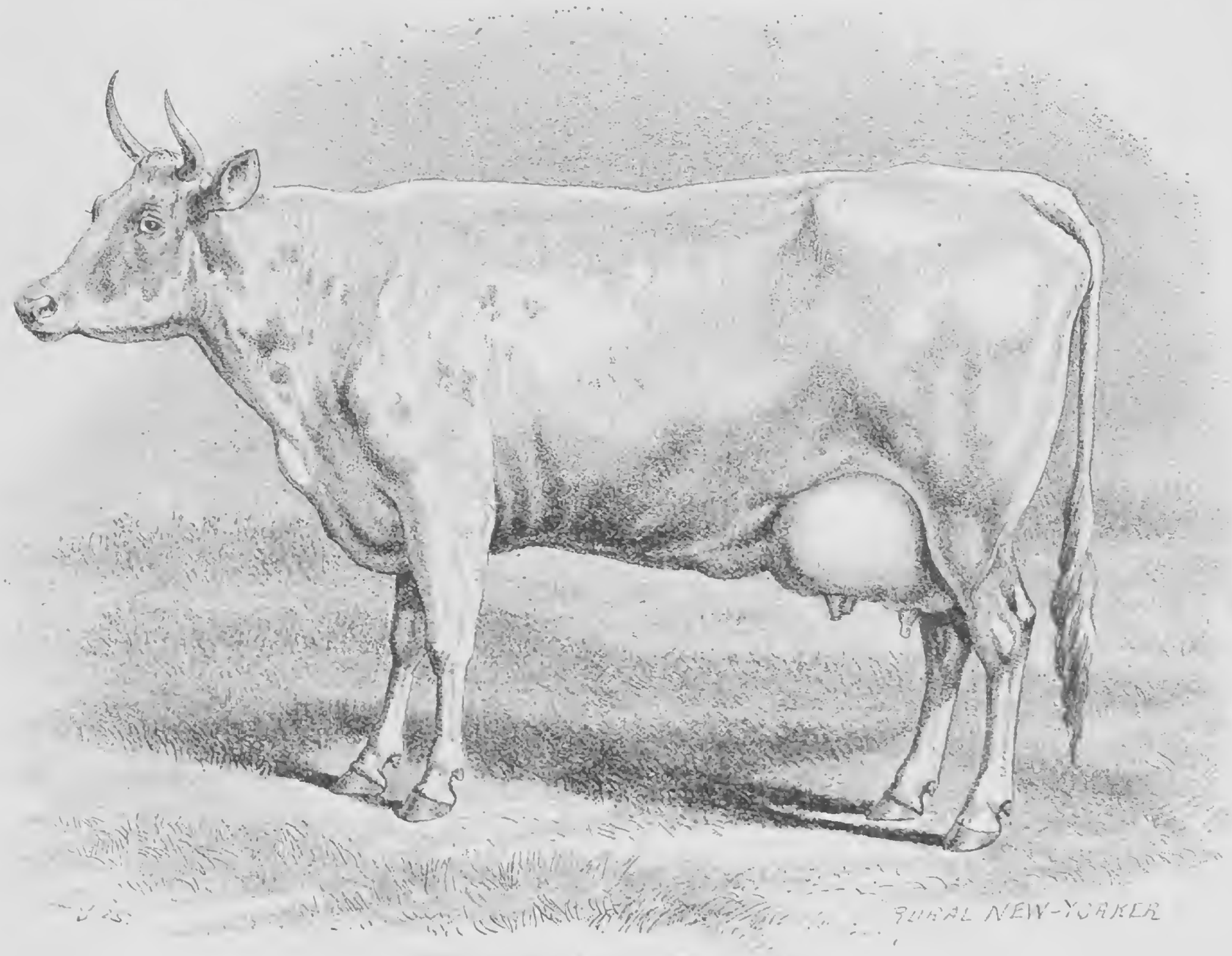
Medium in size, short in the legs, excellent foragers, with clean, strong bones, and not a pound of superfluous flesh, cows of this breed thrive and give large messes of milk where less hardy animals, with less activity and more fastidiousness, would hardly pick up a living. Ayrshires are considered specially valuable where the pasture-land is not of first-class quality, for their mouths seem to be harder than those of Short-horns and most other breeds, and they do well on dry, wiry pastures on which the more aristocratic cattle would starve. On second or third-rate land heavy, costly cattle require much extra care and artificial food or they will certainly lose money; but on such land Ayrshires do well. But, although these cattle manage to thrive on poor pastures and scanty fare, they make a generous return for abundant food and good treatment. Under such circumstances, the milk records of Ayrshires compare very favorably with those of any other breed, and in comparison with the amount of food consumed, good judges, speaking from experience with this and other breeds, declare that cows of no other breed can compete with these. Under the microscope their milk is found to be rich in caseine, and the cream globules are numerous but very unequal in size. This is considered a defect in the Ayrshire as a butter-cow, for the cream doesn't rise well when the globules are unequal in size, and it requires skillful churning to get all the butter out; yet on both sides of the Atlantic many butter-makers are quite content with the proceeds of their herds of this breed, although it is true their reputation for cheese is still higher.

When in milk, the Ayrshire is an excellent machine for converting all her food beyond the economical requirements of her system into milk. She lays on little or no flesh; all that goes into the mouth, beyond what is needed to run the machine, is poured into the milk pail. When dry, however, and well fed, she readily takes on flesh of an excellent quality, in which fat and lean are much more evenly intermingled than is generally the case in the distinctively beef breeds. Although the meat is not laid on so thickly in the choice parts as in the Short-horn, Hereford, or black polls, yet it always brings a good price, and, as a rule, the carcass weighs considerably more than the appearance of the live animal would indicate

At Fig. 442 is shown a typical Ayrshire cow. The favorite color is a light brown, or brown and white; some few are found black, or black and white, and now and then even a pure white is seen. Red and white, however, is the most common color; though there are a considerable number of red, or mostly red, some white and red, and a few flecked, but seldom or never is a roan-colored Ayrshire met with. The colors rarely mingle together, the line of separation being generally quite distinct. Some years ago an Ayrshire was hardly conceded pure unless it had a black nose, but now a white nose is not looked upon as a drawback, though dark-red or black noses are still the favorites. The udder is the chief point from which we can infer the milking capabilities of any cow, and especially of an Ayrshire. It should reach well forward, and be firmly attached to the body; it should be broad behind, without projecting too far, filling up well the space between the legs. It should not be fleshy, nor should it hang down loosely. The quarters should be alike in size, and the teats be set on widely and equally apart, not hanging down like a bunch of carrots under a loose, flabby bag. The head is preferably short; the forehead wide; the eyes rather small, but lively and intelligent; the horns set on wide, but inclining upwards and curving slightly inwards; the neck long and straight from the head to the top of the shoulder, free from loose skin on the under side, fine at its junction with the head, the muscles enlarging towards the shoulder; forequarters thin in front, generally increasing in depth and thickness backwards; skin rather thick, but soft and elastic; general form of the body, when viewed from the side, wedge-shape. This peculiar wedge-shape form, more noticeable on the Ayrshire than on any other breed, is due less to deficiency forward than to the large bulk of the carcass aft.

Great attention has been given of late years to the improvement of the breed in Scotland. An Ayrshire Herd Book has been established, milking competition, have been held, and an annual exhibition of cows called the "Ayrshire Derby," has attracted to Ayrshire many visitors from other parts of the United Kingdoms and the competition for the 38 prizes offered at the "Derby" has been very keen. Large numbers of Ayrshires are annually importeded into England and Ireland, and the Cork and Kerry Agricultural Societies have endeavored to promote the importation and breeding of these cattle by offering special prizes for them. Ayrshires were first imported into the United States in 1831; but the breed has changed considerably in appearance since then, especially in color. At first their flow of milk was less than in their native home, where the moist, uniform climate—cooler in Summer and warmer in Winter—making fresh, green pastures, was doubtless more favorable for milk secretion. The American Ayrshires of to-day, however, are thought to be fully as good as those in the Old Country, while the milk is said to be richer. Many experienced dairy farmers think no cow is equal to an Ayrshire for milk or cheese, especially under adverse circumstances—on hilly land, with scant herbage, and a climate subject to sudden and extreme changes of temperature.

Any faults? Yes; what is there in this sublunary world without some? The teats of young cows are generally too short for convenient handling; but with skillful milking they become quite long enough after the second or third calf. The sleepless belligerency of the cows is also a drawback; and knobs or other devices should be fastened to the ends of the horns to lessen the danger from this cause.



TYPICAL AYRSHIRE COW. Fig. 442.

LIVE STOCK NOTES FOR DECEMBER.

HORSES AND MULES.

"THE melancholy days have come, the saddest of the year" for a large proportion of the live stock of the farm, which are pinched with cold and too often with hunger. Horses, however, usually fare better than other stock, and yet in many cases their condition might be improved. Feeding should not be suspended because there is not much work to be done; but should be sufficient to keep the animals in good order and avoid losing flesh. Good hay is ample feed for horses that are not worked regularly through the Winter. Rye or oat straw cut up fine, wetted and mixed with from four to eight pounds daily (in two meals) of mixed corn and oats finely ground, will be quite sufficient for a horse at ordinary work. A feed of hay should be given at noon. Rain is worse than dry cold; a tight roof is better than tight walls; it keeps in the warmth and keeps the horses dry. In the South, where the Winters are mild, mules suffer most from the cold, heavy rains. Southern farmers should think of this and give their mules protection from the rains, especially at night.

The horse's frog is a natural provision against injurious concussions of the sensitive inner part of the foot. Hence it should not be cut away. It also prevents slipping upon ice, having the adhesiveness of rubber in such a case. It is necessary sometimes to use sharp, high calks for road horses; and when those are used never have the frog cut or even pared. If it projects beyond the shoe so as to reach the ground, so much the better for the horse.

For wounds with calks, which are apt to occur early in the season, apply an ointment made of four ounces of lard, one ounce of resin, one of turpentine melted and stirred together, with half an ounce of acetate of copper. Exposure to snow, or mud which hardens upon the feet and legs, is apt to cause mud fever. To avoid this, wash the legs of horses coming in from the road with warm water, and rub them dry. If the heels and legs become inflamed and sore the above ointment is an excellent application. It is not advisable to blanket a horse while in the stable. It makes him feel cold when he comes out. This is the time to use a blanket, if at all. A blanket to a horse is the same as an overcoat to a man. And above all things, a horse heated with driving should not be left standing exposed to a piercing cold wind. The custom of using a chest protector when a horse is at work is a good one, and will lengthen the life of the animal. It is a kindness to a horse to keep a stock of axle-grease on hand and use it. A useful mixture is made as follows: one pound of tallow melted, a pint of castor-oil and four ounces of black-lead (stove polish,) in powder, the mixture to be stirred until cold. It is cheaper and better than any purchased axle-grease.

COLTS.

Keep colts in stalls by themselves. Provide strong leather halters and teach them to be tied. This is their first lesson. Yearlings should have a quart of corn and one of oats twice a day if they are expected to grow. Thrifty yearlings should grow four inches taller this Winter, but they won't do it unless they are well fed. Mule colts eat but a little at a time, and should be fed three times a day. Watering twice a day is necessary. Very cold water is apt to give a fit of the colic, and when a colt shivers after drinking icy water a day's growth is taken out of him.

This is a good time to begin training colts to lead or to drive. Deal gently with the young things and teach them patiently. Remember how long it took you to learn your first lesson. A few roots or cut potatoes are excellent for colts and for horses too. Brood mares are much benefited by them. Carrots are the best, but mangels and sugar beets are very nearly as good. Southern farmers may feed sweet potatoes sliced to their colts and note how they will be relished. They are wholesome and nutritious for horses and mules as well. Give a warm bran mash to all the horse stock twice a week. Don't forget a handful of salt three or four times weekly. In wet weather, braid the tail and gather it in a bunch and tie it out of the way of the mud. Clip the hair from the heels and pasterns and keep these well greased. Provide clean litter in abundance and never let the animals stand in wet manure.

CATTLE.

Warm water is certainly a good thing for the cattle. Two pailfuls thrown into a water trough filled from a well will take off the chill and add considerably to the milk of the cows as well as to the fat of beef cattle, and will be very pleasant for the calves. Save the oat chaff from the thrashing for the cows; it will show in the milk pail. To throw good, clean, sweet straw under cattle seems to be a waste of what was made to be eaten and turned into flesh, milk, or meat.

Oxen that are worked on the road should be shod. Ready-made shoes can be procured for a dollar a set—16 shoes for the pair of cattle. The shoes save the cattle from sore feet and the owner from wasting time and a sore throat. Try and drive oxen quietly and without shouting so as to be heard half a mile away. It can be done. If not, drive them with ropes to the horns. Cut feed is better for cattle than long fodder and economical for the owner. One ounce of salt is a necessary requirement for each head of cattle every day. Water troughs should be provided in the yards, and as many as will give ample room and avoid crowding and fighting. One should be placed away off, for the weaklings, where master cattle will not trouble them. The owner should see, himself, that every cow and calf has its full supply of water every day; once at least. When cold rains are falling the cattle should be turned out for a few minutes only, and when brought in, it will be well to rub them dry. It is troublesome, but it is profitable. Racks for feed are as necessary as water troughs, and plenty of them should be provided. They save a good deal of fodder from being wasted. In fine weather the mid-day feeding should be given in the yard, and sufficient racks to insure that every animal gets its share should be furnished. Consider what convenience can be provided to save labor and time in feeding and to economize the fodder. A little brain work may save hand work and spare feed. Drain the yard well, so that the feet of the cattle are dry and the manure is not washed away. Don't forget that the calves will be pleased, and benefited too, with a thorough good carding occasionally.

SWINE.

Crowd the fattening pigs. As long as they will eat another ounce of corn and it is not given to them, time is lost, and time is money. The more quickly an animal is made fat the cheaper the meat is, for the less food is consumed. A good fire soon heats the kettle; but one may use the whole supply of fuel in keeping up a little fire without warming the water. It is much the same in feeding pigs. The right heat for the water for scalding hogs is 180 degrees. If the heat is greater the hair does not come off so freely. Where a large number of hogs are to be dressed, some regular system should be provided for handling them, so that two men can do all the work. It is quite necessary to keep fattening swine as clean as others; it is even more necessary; filth will flavor the pork; it can even be smelled in it. The filthy pens tend to make the meat unpopular, and cleanliness pays in many ways.

Keep young pigs warm. There is no better bed for growing pigs than a clean, earth floor, in a partly underground pen. If necessary provision is made for them, pigs are very clean animals, and their sleeping place is always kept clean when they can do it. Hence, they should have a chance.

Food that is somewhat acid, but not very sour, is better for store pigs than quite sweet food. The best and cheapest pork we ever made was fed with potatoes and corn ears boiled together, until the former were soft, when the whole was mashed and cooled and reduced to a thick mush. Give the brood sows, that are in-pig, a few cabbage or mangels. Sows thus fed never molest or destroy the young pigs when they are born. A bright, light pen with a dry, earthern floor, in which they can root and roll in the warm sunshine from some large, south window, is the very best lodging for growing pigs and sows. An outer yard and feeding place besides this are necessary.

SHEEP.

Protect heavy-wooled sheep from cold rains. The weight of the water held in the wool will sometimes prevent them from rising. It chills the ewes, and lambs are lost by it. An excellent feed for ewes and yearlings is a mixture of corn, rye and buckwheat in equal parts. When the farmer owns his own feed-mill, this grain should be ground as fine as possible and the meal given dry—four ounces daily are enough for a ewe to keep her in good condition.

A grain-mill is a good investment where 100 or 200 bushels of grain are fed yearly. It is not the saving of the 10 per cent. charged for grinding so much as the time in running back and forth to the mill, that counts for the profit. In feeding our sheep last Winter on grain ground at home, we found them to do better than previously on whole grain, although it is generally believed that sheep do their own grinding very well. Separate feed troughs for feeding meal were also found preferable to hay racks and grain troughs combined. Every sheep shed should be provided with eave troughs to carry off the rain water, and keep the shed and yard dry.

Look out for the "stretches" which will be known by the sheep spreading its legs out and stretching itself. It is constipation caused by dry feeding. The remedy is some bran mash and an ounce of raw linseed oil. Keep a close watch for anything wrong, find the reason of it and right it at once. Delays are dangerous with a flock.

POULTRY.

Fat turkeys are best marketed for Christmas and New Year's. For this purpose the birds are put up to feed at once. Three weeks are required. Corn meal in sweet skimmed milk, mixed thick, makes the sweetest and whitest flesh. Coarse corn meal given in water fattens ducks well. All fattening fowls should be kept in darkened coops, so they will not fret to get out and will rest and sleep. The coops for fattening birds should have a low door behind, through which the floor may be cleaned with a scraper. After cleaning, spread dry sand or sawdust over it.

Look out for lice, fleas and mites in the poultry house. Go in at night and handle a few of the birds, and you will quickly learn if there are any vermin about. If there are, use crude petroleum or grease and kerosene oil freely on the roosting poles.

THE CHICAGO FAT STOCK SHOW.

(RURAL SPECIAL REPORT—*continued.*)

Cattle exhibits; a Hereford the champion; curly-haired cattle; breed and family types; horse exhibits; carriage horses; sheep; swine; an unprecedented corn exhibit; a poor, uninstructive dairy exhibit; test churns; bogus butter in the fore-front; beef-dressing contest.

THIS is a success in the number, variety and quality of exhibits in the cattle, sheep, swine, horse, poultry, butterine, corn and dairy implement departments. All classes of live stock were indeed fat, many horses too much so, and the butterine contained a greater percentage of fat than any animal exhibited. One hundred and eighty cattle are shown, consisting of 66 Short-horns and grades, 53 Herefords and grades, 20 Devons and grades, 19 Aberdeen-Angus and grades, eight Holsteins and grades; the rest were nurse cows and calves. The grand sweepstakes prize has been given to a Hereford steer that weighs something over 1,500 pounds. He is of the celebrated "Rudolph" strain, has a thick coat of silky hair that lies in a curly mass not unlike the wool often found on a light, glossy-fleeced Cotswold sheep. His body is nearly a parallelogram—not a sign on his deep-meated carcass of the fat lumps so common to "ripe" cattle. Every Hereford, or grade Hereford, in the show that has the long, silky, curly coat approximates closer to the prize steer than do any of the sleek, short-haired ones. An Englishman just in from the Plains says: "You Americans won't buy the curly-haired Herefords, and there's where you make a mistake. When the snow falls on them they shed it like a sheep." The Short-horns present the same variation in hair, though not nearly so markedly. They are, perhaps, of more uniformly high quality than any breed exhibited. The Aberdeen-Angus are very compact, mature very young (several yearlings were marked as weighing over 1,000 each), have great width of chest and are superior in the hind-quarter.

A Nebraska ranchman says of them: "Coming as they do from the North of Scotland (No, Aberdeen and Forfar or Angus Shires are in about the center of Scotland on the eastern coast, facing the German Ocean), they are at home in a cold climate, and I find them great 'rustlers.'" A ranchman sets store by an animal in proportion to its ability to "rustle"—to fight against starvation in snow and cold. Standing by the side of the prize Hereford are two steers half Hereford and half Aberdeen-Angus, crossed in opposite directions. The one sired by a polled bull is horuless, and has the sire's color and contour, with the white Hereford face. The one got by a Hereford bull has the horns, white face and outline of a Hereford, but the body is black.

The Devons, a good lot, are evidently inferior in combination of qualities to either of the foregoing. The few Holsteins show the coarse bone characteristic of the breed, and are in no way remarkable.

A fat stock show is subject to too many contingencies to decide which is the best beef breed. An equal number of animals of each breed, of the same age, raised under the same conditions of climate and feed and selected from the *same class* in their breed, (an impossible thing) should be compared to form a just conclusion. By the "same class" I mean that the family type in a breed is of nearly as much importance as the breed type. A Short-horn from the best strain is better than a Hereford from a poor strain, and *vice versa*. If *thorough-breeding* means anything it means painstaking in selection of points or traits and fixing them so strongly that they become hereditary—both bad and good. Hence we have in the same breed of cattle, distributed among its several families, all degrees of quality for either milk or fat. Let the young breeder rest content with the best type of an inferior breed till he can get an equally good type of a better one, no matter what kind of stock he is breeding.

Two hundred and thirteen horses were exhibited. French draft, 61; English draft, 75; Cleveland Bay coachers, 15; French coachers, five; ponies, 31; and runners and trotters representing favorite strains.

The French and English draft horses are too well known to need description. The Cleveland Bay and French coach stallions are of comparatively recent importation, and but few of their get are old enough to show what prepoteney these breeds will exert when crossed on native mares. The Cleveland Bays are very uniform in size and color, have black points, average about 16 hands and give great promise of producing the size and style demanded for coach and coupé. The French coach stallions are both bay and sorrel; have an occasional white stocking, are more of the running horse type except the neck, which shows a trace of the Percheron arch. They are of lighter bone and have more spirit than the Cleveland Bays. Several specimens of both breeds are deficient in knee action, and some of the Cleveland Bays hugged their tails close. It is safe to say that there are among the representative trotting families many stallions that excel the imported coacher in style, are his equal in size, and much faster.

One hundred and eighty-one fat sheep are in the pens, mostly South Downs and their grades. There are also prime Oxford Downs, Cotswolds and Leicesters and Merino grades. The fattener of sheep has over the cattle man an advantage that he is not slow to appreciate, viz: the length of wool permits sufficient trimming to make the most ungainly animal symmetrical.

The 106 porkers that, like poet Lowell's pig, are "most too fat to snore," are about equally divided among Berkshires, Yorkshires, Poland Chinas and their grades. Ten Essex, seven Duroc and nine miscellaneous completed the list.

The poultry department comprised 350 coops which contained 1,009 specimens. Light Brahmas led with 198 birds; Plymouth Rocks, 195; Wyandottes 131. Most other breeds were represented. The show was chiefly by Illinois breeders with a sprinkling from Indiana and Ohio. The novelties were Rose-comb Black Spanish, Rose-comb White and Brown Leghorns; White Plymouth Rocks, and White and Golden Wyandottes—too many new breeds which in reality are simply "sports" and of very questionable value.

The corn exhibit is probably superior to any previous one in the whole country. Illinois leads with 59 clusters of yellow dent and 24 of white dent. Nebraska shows 66 clusters; Iowa 41; Kansas 32; Indiana 20; Ohio 10; and Missouri shows 11. The exhibits from other States not named comprise 61 clusters of dent and flint. A pretty effect is obtained by the artistic grouping of pop-corn ears and freaks of corn growth. Each cluster contains 20 pounds of ears, making a total of 6,580 pounds, exclusive of several interesting exhibits not hunched.

The dairy exhibit consisted of only about 70 cheeses, 75 tubs of butter, some 20 small packages in stone jars and wood and tin pails, three refrigerator and three glass case exhibits of prints, nine jars of granulated and a few fancy designs, including a medallion of Washington. Every arrangement conveyed the "touch not, taste not" idea, and consequently nothing could really be learnt from the display. The only information tendered was by the refrigerator, salt and butter color manufacturers.

The dairy implement department was replete with the usual variety of churns, coolers, salt, etc. The novel features were a simple method of churning samples of cream in glass tubes, and a cream separator on an apparently new principle.

The most artistic arrangement in the building was that of bogus butter, which was shown together with the crude materials by five manufacturers. The process was exhibited at every stage. Every one had a chance to taste and also take away a sample inclosed in a neat box, like those used for wedding cake.

In the cattle killing contests in one end of the exhibition building, the animal is knocked senseless, and then bled by sticking like a pig. The head is skinned and removed, the fore legs are skinned to the knee and cut off, one hind leg is skinned to the hock and cut off, the other is not touched. The animal is then on its back, and time is called. The contest ends when the carcass is skinned, raised, split, and washed. Each contestant has a helper who kills the animal and gets it ready for the start. He also hoists the animal as it is being split, and saws

the brisket and pelvis bones apart, and hands the splitting axe, but must not sharpen any knives. The quickest time made was 10 minutes 25 seconds in dressing a beast, and nicety of work counts more than speed. It is claimed that the same men can dress a carcass in "go as you please" style in three minutes and 40 seconds, and in "market style" in four minutes and 50 seconds. One man made 229 knife cuts and another 270 in skinning a carcass. H. J.

SCARCITY OF DONKEYS.

ONE thing that surprised me when I first came to this country was the few donkeys to be seen on the streets of American cities. In England and in Europe the hucksters all have donkeys, and many small farmers and milkmen find them valuable. Here these venders drive some crippled old horse about. A donkey would last longer, do more patient work, and cost less to keep. He is to a horse what a goat is to a cow. In proportion to his weight and the cost of his food he does far more work than a horse. An American farmer would be almost ashamed to meet his neighbors if he used donkeys instead of horses, and goats instead of cows, and yet there are plenty of places in this country where he could make far more money by keeping the smaller animals. ENGLISHMAN.

Sheep Husbandry.

Notes from the Western New York Farm.

SHEEP VERSUS COWS.

MAINTAINING THE FERTILITY OF THE SOIL.

LET no one for a moment suppose that in pasturing either sheep or cows, or in feeding them solely on what is grown upon the farm, anything can be added to the fertility of the soil. The animal is not an originator, it is only a machine, and as such is run by outside influences. It has no means of getting anything outside of what is taken in its food. Consequently there can be nothing in its products or its excreta aside from what is taken in—what is eaten or drunk—and if this comes solely from the farm, it contains nothing, except its carbon, but what was derived from the soil, and consequently the manure made by its consumption can carry back to the soil no element of plant growth not originally there. On the contrary, even with the best of care in saving and returning to the soil every particle of the manure, there is a constant and unavoidable loss to the farm. This arises from the abstraction from the food, of the nitrogen, phosphoric acid and potash, which are requisite to the formation of flesh, milk, bones, hair, wool, etc. When full-grown cows are purchased and are kept for butter making, and this is the only product sold from the farm, nothing but a mere trace of anything beyond carbon and hydrogen will be removed, and if the milk be judiciously fed to full-grown hogs for fattening purposes, nearly all its nitrogen and other valuable ingredients will be left in the manure, and if this be so saved that no loss occur by burning or washing, and if all of it be returned to the fields, but very little exhaustion of fertility should be the result—much less than when sheep are kept. In sheep husbandry the profits are made in raising and selling young sheep, and in the growth of the annual fleece. In both of these much plant food is taken away in the shape of bones, meat and wool, the constituents of which are largely potash, phosphoric acid and nitrogen, and even where the practice is followed of buying full-grown sheep and fattening them for the market, a large growth of wool takes place, and this is largely made up of the most expensive elements of plant growth.

So, while neither sheep nor cows can of themselves add anything to the fertility of the farm, it must be conceded that if both are kept according to the too common method of depending solely on the farm for what they eat, the cows will be far less exhausting where kept for butter making alone. But, where the milk is sold or taken to the cheese factory, or to the butter factory, and the skim-milk is not returned, the tables will be turned, for in the milk, aside from its butter, will be found in large proportion the very elements of plant food which go to make the carcass and wool of the sheep, and in many dairies the practice prevails of raising and fattening the calves. Where this is so, then the exhaustion is much more rapid with the cows. But the wise farmer, whether keeping cows or sheep, will supplement what is grown on his farm both in Summer and Winter by the use of bran, oil meal, corn meal and other foods, which are rich in plant food and which can be used at a profit, and when he does so, either class of stock can be kept not only without a loss, but with an actual and constant increase of the fertility of his farm, and of its productiveness, as a matter of course.

When this wiser course is followed there are some advantages in favor of the sheep, among which I will call attention to a few:—When running at pasture the droppings of the cows are mostly left in compact heaps, destroying the herbage upon which they may be and fouling that surrounding for a foot or more, so that no animal will eat it, and, besides this, they are mostly eaten by insects. The voidings, both liquid and solid, of the sheep are more easily and evenly scattered over the ground. They are never wasted by being eaten by insects, are never destructive to the herbage on which they fall, or avoided by the stock. They fall close to the ground, are readily within the reach of the plant roots, and are quickly made available in growing fresh food. The treading of the sheep is much less likely to poach the ground or destroy the sod over which they feed. In Winter, when confined in stables, the liquid voidings from the sheep are less copious than from cows, and are all quickly absorbed by the solid droppings, thus making the manure much pleasanter to handle and making their return to the field without loss much more certain: and when the stock are kept in open yards, subject to the rains and snows, the difference in favor of the sheep is still greater. Sheep will also work up the litter given them much finer than will cows, and thus make their manure more easily handled. It can be scattered and plowed under more readily, and be less in the way of subsequent cultivation.

* * *

COMPARATIVE PROFIT.—This is one of the most important points to be considered. Every man is entitled to a good living from his business, and, in addition, to a reasonable surplus to provide against old age and its contingencies. That neither the dairy farmer nor the sheep keeper has been adequately rewarded, for the past few years at least, is evident to every careful observer. The first has had to struggle against the unjust competition of the bogus butter and cheese maker. The latter has had equally as sharp competition in the use of shoddy and other worthless substitutes for wool by the dishonest manufacturer; not only have these substitutes supplanted the genuine articles in either case, but their use has greatly diminished the demand for dairy products and woolen goods by destroying public confidence. But, notwithstanding these obstacles, these branches of farming will, on investigation, be found to have paid as well as any other, if we compare periods of eight, ten or more years. And that they have not paid better is more the fault of those who follow them than of the times or markets. Dairy farmers have kept by far too poor a class of cows, and have not used sufficient care or skill in the production of butter and cheese to insure the finest grades and the highest prices; nor have they forced such cows as were kept to their maximum yield. The sheep farmers have paid more attention to the production of wool than to meeting the wants of meat markets, and even in this line they have not bred to the highest excellence: and in Winter they have treated the flocks too inhumanely to secure the largest yields or best quality of wool. While there are many exemplary exceptions, the average cow in the dairy districts does not give milk over eight months in a year, and does not make, on an average for the whole time, over five pounds of butter per week, and the average butter made does not net for the Summer over 15 cents per pound, thus yielding about $25 per cow, and if to this be added the net receipts for the skim-milk and the "deacon's pelt" the aggregate may reach $30. If for each cow were substituted eight sheep, the average receipts would be about 40 pounds of washed wool worth, at the low figures of the past three years, $10.80, six lambs should be raised annually worth $12, making an aggregate of $22.80; to compensate for the balance appearing against the sheep, there would be the lesser labor required and the fact that when the cows are old and no longer profitably productive, it is necessary to sell them at a reduction below the purchase price. While these figures do not make a very attractive showing for either industry, I believe they are not far from correct, as applied to the masses engaged in cow and sheep keeping. The notable exceptions above mentioned—where the receipts are more than double those here stated—only show what may be done. With proper business energy and forethought, and with the best of care, even the receipts and and profits of the best dairyman and sheep keepers may be greatly increased.

It is to be hoped that the oleomargarine bill will lessen the competition of the dairymen, and in the consumption of wool a more lively and largely increased demand is before us, in some measure the result of a change in the fashions to more woolen goods. The markets for the best grades of mutton are never overstocked, and I hope the prices and profits in both these branches of farming may be greater. While I can advise no one to change abruptly I would advise every man to study the capabilities of his farm and the demands of the markets just about him and most readily available, and it may be that in many cases a change is desirable.

* * *

It is now time to expect severe freezing any day, and when this occurs to such an extent that the clover leaves are broken where walked upon when frozen, the sheep should be at once gathered into the yards and stables, or the pastures should be supplemented by a daily feed of grain. It is the poorest of all policies to let the sheep begin to go down hill before they come into winter-quarters.

* * *

Where reasonably comfortable quarters are provided for the sheep, it is better to have the lambs dropped before the sheep go to grass in the Spring. If the rams are put with the flocks the first half of November, the lambs should appear mostly in April, and this is none too early.

* * *

The great advantage in having the lambs come while the sheep are in winter-quarters are that they are within the constant supervision of the shepherd, and any assistance needed can be given before it is too late. There is no danger from exposure to cold rains; there is less danger of milk fever; the sheep are much cleaner to handle, and the lambs are more valuable, both to sell as early lambs, or for feeding the next Winter.

* * *

It will pay every farmer, even if breeding thoroughbred Merino sheep, to sort out his second-grade ewes and breed them to some of the black-faced sheep. There is a great and a growing demand for "smut-nosed" lambs for winter feeding. They are now worth a half-dollar per head more than equally good lambs with white faces.

Niagara Co., N. Y. J. S. WOODWARD.

Dairy Husbandry.

THE REFORM OF IRISH DAIRYING.—II.

PROFESSOR J. P. SHELDON.

Dairying the chief industry of the Emerald Isle; favorable conditions; varieties of soil, climate; dairy stock; no improvement in immemorial usage; consequent want of uniformity; recent improvements on larger farms.

THE chief industry in Ireland is dairy farming and butter-making. The pretty euphemism, "Emerald Isle," indicates the prevalence of grass land. The greater part of the soil of the country is derived primarily from the carboniferous limestone, and, so long as there is enough of it, there need be no better soil for the maintenance of permanent pastures and meadows. And when such a soil is covered by a genial atmosphere and a climate which varies less than most others as between Winter and Summer, a climate mellowed and moistened by the Gulf Stream, we have a combination of conditions eminently suitable to stock-raising and butter-making. There is, of course, a great deal of inferior mountain land with a thin soil, of bog land which is of no use for agricultural purposes, and of cold undrained swamps that are of little account in their present condition; but beyond these, there are many extensive tracts of naturally sound land, of others that have been drained and cultivated, and among these are found in places what is admitted to be the finest permanent grass-land in the world. The Winters, as a rule, are so mild that a large number of young stock remain out of-doors all the time, and live well enough on what they find on the land. A friend of mine wintered over 1,400 young cattle in this manner last season, and it will be seen that the Irish climate is in itself, so far as Winter is concerned, an element of great economy, and a source of very considerable gain to the farmers.

Such a country is naturally adapted to dairying, stock-raising and grazing, rather than to the growing of grain. Hence it follows that Ireland is, and is likely to remain, a great dairying country, and the inference is clear that the greatest attention should be paid to the art of butter-making, as well as to that of the breeding of superior cattle. The prevailing cattle are Short-horn in character, though in some of the southern counties a great many Kerries are kept; and the Kerries, the smallest of the British breeds, and little bigger than donkeys, are wonderfully useful little animals, yielding rich milk and plenty of it.

Ireland had a high reputation for butter until the Danes, the Dutch, the Germans and the French went ahead of her in that department. The bulk of Irish butter on the small farms is still made in a primitive fashion, quite out of joint with the progress of the age, and it is difficult not to admit the obvious fact that no improvement has taken place in it perhaps for many centuries. We cannot state with authority the condition Irish butter-making was in, say four or five hundred years ago, but no one would venture to say, in reference to a good deal of it, that any improvement whatever, has taken place in the interval. In thousands of the small farmers' huts, the milk is set to cream in the one general living-room, or perhaps in an adjoining sleeping-room, or in some outhouse miserably ill-adapted to such a purpose. The cows themselves are not uncommonly sheltered under the same roof, or a continuation of it. The dung heap is closely contiguous. The pig, "the gintleman that pays the rint," roams wherever his fancy leads him, and is treated with all the deference to which his position entitles him. The butter is made as best it may be under such conditions, and each successive churning is packed in a firkin till the firkin is full. Where only one cow is kept, the firkin is several months in filling, and will contain many layers which differ a good deal from each other in color and quality. The trying iron brings out a motley succession of samples, and the price is about as we may expect—very low.

This is a state of things which Irish dairy reformers have set themseves to eradicate, and we may hope that ere long it will have become a thing of the past. Much has already been done, and more remains to do. I have spoken hitherto of the small farmers who have one or two or three cows. On the larger farms a great improvement has taken place within my experience. Special dairy rooms, more or less commendable in construction and arrangement, have been provided, and improved equipments are found in many places. Still the system followed is decidedly primitive for the most part, and the questions of temperature, ventilation, situation and the like, are but little understood. Comparatively few dairies produce first-class butter, but these few demonstrate the possibilities of Irish dairying. The price paid for the best butter in Irish markets is two or three hundred per cent. above that paid for the worst, and the people are becoming conscious and tired of that enormous disparity.

WORKING BUTTER BY HAND.—A dairy expert who went out from London to lecture at a dairy test was surprised to find that dairymaids all worked the butter by hand. Instead of using paddles or workers, the "maids" gathered the butter with the bare hands and rolled, slapped and kneaded it as a housewife would work bread. The expert thought this practice would counteract all the advantages due to pretty dairy-maids or superior pasture. He called the system offensive. It would be just as sensible to bring the butter to the table in the hands—without a plate—as to think of eating butter that had been fumbled about for 20 minutes. If they could not give up the old custom, they should at least prepare their hands for it. In Denmark the hands are first dipped into hot water, then into cold and then rinsed in butter-milk before touching the butter.

A HAND-POWER CREAM SEPARATOR was exhibited at the late London Dairy Show. The labor of two men was required to keep it up to the necessary speed. The trouble with cream separators has been that it costs too much to run them. Only the larger dairymen, who could afford steam power, could well handle them. The new implement is said to be not only inexpensive, but so small that it occupies no more space than the average churn. Possibly separators may yet be made on a still smaller scale, so that small dairies may use them.

The Apiarian.

NORTH AMERICAN BEE KEEPERS' SOCIETY.

Bee literature; the way to succeed in bee culture—lessons from a successful apiarist, the "American bee;" superior prepotency of drones; the "ideal" bee.

"APICULTURAL Journalism" was the title of an essay by John Aspinwall, of New York. America is ahead of all other countries in bee-keeping, and has more papers devoted to the subject, but it seems that no bee journal has yet been successful when not connected with the sale of apiarian goods.

Mr. T. G. Newman, Illinois, read a paper upon "Bee Literature." He said that the writers of the Bible tell us of the early races of bees, and describe the "land flowing with milk and honey." The records of the Egyptians and Chinese, cut in stone, show that bees were well known in those olden times. Three hundred years before the Christian era, Aristotle affirmed that the bee was a "magazine of all

the virtues," and Virgil calls it a "ray of divinity." Shakespeare and Milton devoted to it their thoughts and words of praise. Mr. Newman briefly enumerated some of the books on bees; beginning with the "Historie of Bees," published at Oxford, England, in 1609, and coming down to the present day, more than 100 volumes were written.

"Success in Bee Culture" was the title of a paper by C. F. Muth, O. Successful wintering of bees is one of the foremost requirements of the coming crop. Success in this depends upon a strong, healthy colony in the Fall, together with plenty of honey and dry, comfortable quarters. Mr. Muth preferred a large brood-chamber, with a large surface above the brood for the accommodation of surplus arrangements. In the Spring he overhauls his bees, and all colonies are confined to as many combs as each one can well cover. Outside the division-boards he hangs combs of honey, and when the weather is warm the bees will carry the honey over into the brood nest, which answers every purpose as a stimulant for breeding up, and is preferable to the feeding of liquids. The division-boards do not touch the bottom of the hive by about half an inch, which allows the bees to pass under. As the season advances more combs are added. When swarming time arrives, after-swarming can be prevented by cutting out surplus queen cells several days after the issuing of the first swarm. Queens cannot be entirely prevented from entering the upper stories, unless queen-excluding honey boards are used. In raising extracted honey, when the combs of the upper story are filled, they are exchanged for empty ones, and whenever a comb of brood is found, it is placed at the left of the honey-chamber. After the extracting is finished, the hives containing brood in the upper stories are again overhauled, and if the number of brood combs indicates that the queen has been neglecting her work below, the brood nest is looked over, and combs with honey and bee-bread, if any there be, are exchanged for combs with brood from above; otherwise the combs of brood with the adhering bees are used to strengthen weak colonies, make nuclei, or form new colonies. When the combs are again filled, the process is repeated. In closing, Mr. Muth said: "I do not want to winter my bees on sugar sirup, as I fail to see the advantage and the good policy in so doing. It is, of course, uncertain what the next Winter may bring forth, but so far as wintering is concerned with pollen or without it, and with natural stores, I will run a race with any of you who feed sugar sirup. With the above method I believe my bees have gathered as much as the bees of any one of you. The interests of sugar refiners have not been benefited at the expense of bee-keepers. My neighbors do not suspect me of producing honey from sugar sirup, and my labor has not been excessive, but has met all the requirements of my bees.

In the discussion that followed some thought it admirable to spread the brood and add combs, if done at the proper time and under the right conditions. Mr. A. P. Root, O., believes that letting the colony alone would be exactly as well and a great deal easier. He also suggested that a very proper place to test and decide the advisability of spreading the brood would be at an apiary connected with a State agricultural college, which every such college should have and sustain.

"The Bee of America" was a topic brought up by the query: "Has Apis Americana been reached?" It was thought that whether or not the bee of America had been reached, many had attained their ideal bee. Prof. McLain, who has charge of the U. S. Agricultural Experimental Station at Aurora, Illinois, advised that, in breeding, if more attention were paid to the drones employed in the fertilization of the queens, far greater advancement could be made, and also more rapidly; that prepotency is on the side of the drone. After some more discussion upon the subject, Mr. T. G. Newman said that in deciding the merits of an ideal bee, five points are essential and may be enumerated thus: The queen must be prolific, in order to have the hive full of bees at the proper time to gather the harvest of honey when it comes; the bees must be industrious to let nothing escape their vigorous search while gathering the nectar; they must be docile, to allow the apiarist to manipulate them and the hive with pleasure, in order to be profitable; they must be hardy and strong to endure the rapid changes in this very changeable climate, and they must be beautiful in order to secure the admiration of the fanciers of fine stock.

Genesee Co., Mich. W. Z. HUTCHINSON.

Rural Topics.

CORRESPONDENTS' VIEWS.

VEGETATION IN FLORIDA.—Nothing in Florida surprises the Northern visitor more than the long-continued production of useful products and flowers. Our soil is not rich, but it holds on mightily when once filled with vegetable matter. We began picking our Sea Island cotton in August, and on November 1 it was still blooming. Our Lima Bean patch gave us food for six months. The common snap bean can be made to bear from May to November. The climate and soil of Florida seem to have a mania for making flowers. It seems as though the very fence pickets wanted to bloom. Lantanas and oleanders bloom four months. The roses keep on nearly all the year, and the Cape Jesamine is fragrant and grand from May to Christmas. These are connected with the orange and peach blossoms which are variegated with the daisies. So the seasons pass before us, one endless march of flowers. S. E. WILLING.

Alachua Co., Fla.

WHAT TWO YOUNG MEN HAVE DONE.—There is so much talk in the papers of late about the troubles men have in making a living that I want to tell what two young men here in New Jersey have done. One of them got a piece of woodland within 25 miles of New York. He cut the wood off himself, and the money he got for it will go far towards paying for the land. He has burned and grubbed up stumps and set out trees and fruits, built a little house and barn, and, in fact, made the foundation of a good home. He has done this all alone, while hundreds of other young men were groaning about hard times. The other man is a factory hand. He has taken a little place, bought a small herd of cows and gone to making butter. His wife, a young girl, went right out of the mill into the dairy and spent a month with a good butter maker, learning the business from the very foundation. These young people will succeed and they deserve to. Their work shows grit, and that will count every time. They might have given up at the first hard pull and gone back to the long grind of an existence that thousands drag through. They hung on to it, and the result is that they are going to make their marks. There is a fair chance for every healthy man in this country. The chance is all right; the failure is in the man. H. B. G.

Passaic Co., N. J.

STOVE GOSSIPERS.—I have often noticed with regret the valuable time wasted by farmers around the stove in the village store. In some cases every stove in town has a dozen or more patrons who spend nearly all their spare time hugging it. As a rule, the topics discussed at these gatherings are unprofitable if not altogether damaging. Local gossip often, too often, the worst kind of scandals, form the chief topics of conversation, and many a family feud has originated, and many a reputation has been blasted around the village stove. Such gatherings are frequently obnoxious to the store-keepers, but woe be unto any who venture to break up the charmed circle, for a boycott by the hangers-on means the loss of nearly all the business done in the evening. These gatherings are specially attractive to children, and do them much injury. They hear stories which would never be repeated in the family circle, and find things applauded which would be condemned at home. The best story teller and the most skillful disputant—frequently a man of the lowest and most despicable character—is too often the leader of the crowd, and becomes the pattern for the boys. To be able to tell the biggest story—usually the biggest lie—is all that is required for leadership, or at least popularity, at these gatherings. The damage done by these "stove committees" cannot be counted. J. H. G.

R. N.-Y.—Good. Men who go and talk to a stove, using language that they would be ashamed to use in their families, deserve no mercy. We have frequently seen boys hanging about these gatherings, taking their first lessons in vulgarity and obscenity. Business farmers never haunt such places; they can easily find more profitable work. The croaks about hard times and the bitterness against those who work and succeed are hatched out around these stoves. Keep the boys away from such places, and if you respect yourself, keep yourself away.

Horticultural.

GARDEN NOTES FOR DECEMBER.

W. FALCONER.

THE ORCHARD.—Prune apple trees whenever you feel like doing it. Keep their heads somewhat even, thin, equally spread out and low. Very close pruning induces a growth of switches; you must try to avoid that. Prune standard pear trees almost any time; but don't touch the dwarf trees till towards Spring. Regulate the growth of peaches, plums, and cherries, but scrupulously avoid unnecessary cutting or pruning. Stake securely the weak-stemmed, top-heavy, young trees. In the case of newly-planted stock, some dirt piled up over their roots and around their stems not only protects the roots considerably, but saves the trees a good deal from being racked about by wind-storms.

THE VINEYARD.—Prune the grape-vines. Don't leave a lot of long spur-snags; but cut in close if the eye of the base is a good, plump one. Keep a good supply of sound, stout, firm, short-jointed wood, and do away with long, naked, blind vines. If you want to raise a few more vines by means of layers next Summer, save some fine, young canes now, and shorten them a little. In the Spring all you need do is to elbow them into the earth, and fasten them there by a stamp of the foot or a hooked peg. By Fall they will be well-rooted plants. Or if you want pieces of vines for cuttings or cions, cut them now, and bury them in the earth till towards Spring. If your vines are of somewhat tender sorts, take no risks, but bend them down, and bring the shoots snugly together and cover them over a few inches deep with dirt.

STRAWBERRIES.—Have the patch thoroughly clean from weeds. Mulch among the plants with rich, well rotted manure, and after the ground freezes, say towards the end of November or early in December, strew some light mulching, salt hay or sea thatch, broadcast over the plants and leave it undisturbed till early next Spring. The manure enriches the ground, the thatch preserves the plants from injury by sunshine or searing winds in Winter and also in a great measure prevents their being thrown out of the ground by frost. Many growers do not remove this strawy covering till after the plants have yielded their fruit in Summer.

CURRANT BUSHES.—"Fix" them up now and have no bother with them in Spring when you will otherwise be busy enough. In pruning merely cut out the old, enervated wood, tip the strong, young shoots and remove the little switchy stuff that comes up close about the crown or stem of the plant. Then clean out the patch, slightly fork the ground between the bushes, and apply a heavy mulching of cow manure.

GOOSEBERRY BUSHES.—In pruning preserve the stout arching shoots, keep the bushes somewhat thin and low-headed. Remove the sprouts that arise from about the necks of the plants. Fork the ground lightly and mulch heavily with cow manure. I have had the best success with gooseberries in a cool, deep, loamy soil, in a sheltered, but not sunny exposure, when heavily mulched, and grown as low-headed bushes. When grown as standards, that is on high stems, no matter under what other circumstances, or how much sulphur I used, all the berries mildewed before they ripened.

RASPBERRIES.—As soon as the crop of berries had all been gathered in Summer, all of the old canes should have been cut out and the young ones thinned out to the requisite number for next year's use. But if this has not been done, do so now, and then lay the canes down and cover them with some earth. Of course many varieties are very hardy and survive our Winters without injury; but where their survival is questionable, better lay down the canes and cover them and be safe. When I do not lay down my raspberry canes over Winter, I mulch the ground among them heavily with manure. Tree leaves are also a good mulching in this case.

BLACKBERRIES I treat in about the same way as raspberries, only I seldom mulch them with manure over Winter; I prefer waiting till Spring till I have cut out the multitude of suckers that are sure to come up all around.

CHOU DE BURGHLEY.—This is said to be a cross between a broccoli and a cabbage, and originated with Mr. Gilbert, the Marquis of Exeter's gardener, in Lincolnshire, England, some years ago. The source whence it came gave it impetus. It was vigorously pushed; "everybody" grew it; many welcomed it as a valuable desideratum, and others rejected it as a veritable humbug. At first a great many "rogues" occurred among the seedlings. As soon as it made its debut, I got seeds of it and grew it here, but concluded all my seedlings were "rognes." I then sent directly to Gilbert and got the genuine article. The seedlings grew all right, but they neither hearted nor flowered, and I have grown it every year since then. I have a lot of it now, but have not met with a whit better success. My sowings were made at different times. But the hogs and cows are fond of it, that's some comfort. Have any other RURAL readers succeeded with it?

FRUITS IN NORTHWESTERN WISCONSIN.—Our strawberries here are Wilson, Sharpless and Jersey Queen. We have Cuthbert and two kinds of blackcaps, and the Lucretia Dewberry. All need protection in the Winter. Pear and plum trees were killed down to the snow line two years ago. We have a small, well-flavored pear which does fairly well. Our roses and shrubs all need protection. It takes lots of time and labor, but when I see the plants laden with flowers and fruit, I think it pays pretty well. H. L. J.

Olivet, Wis.

Pomological.

A SIMPLE FRUIT-HOUSE.

As we enjoy plenty of grapes at Christmas, and our method of keeping is new to us, it may be of some interest to readers of the RURAL to know how we have managed to keep unwilted stalks and fresh flavor among the grapes. Last year we converted what was originally a shed into a fruit and ice-house by surrounding it with inch boards battened outside. It was boarded up inside, and a space 10 inches wide between the walls was filled in with dry swamp muck. The shed was divided in the center in the same way (see Fig. 445)

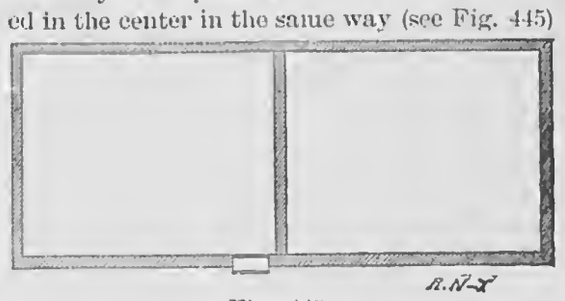


Fig. 445.

and filled in. No doubt sawdust would answer the same purpose where it can be as easily procured. The upper floor of the fruit-house is double and the boards are about three inches apart to allow the partially heated air to return to the ice-house. In doing this it keeps the upper floor cool as it enters on the opposite side from it. Against the division wall and on all sides are nailed half-inch strips so that in the ice-house there will be room for air to circulate through openings eight inches each in the lowest part of the division wall, while the other three sides of the ice-house are filled eight inches around with sawdust. There is a double door with glass front in the outer one to admit light, so that it need not be open to admit heated air.

In this building during the past season we stored asparagus, strawberries and raspberries successfully and are now enjoying grapes that we have often tried vainly to keep in baskets in the house. They were placed in eight-pound flat baskets and hung up to the ceiling, several hundred baskets being in the house at one time, besides those shelved. It is such a simple building as to be within reach of every farmer, and amply repay all the labor and expense. The grapes are not in the least shriveled, nor are they dropping from the stem, which I attribute to the evenness of temperature in the building. Concords are good; Salem and Wilder plump and with succulent stems; Eumelan keeps all its rich flavor; Niagaras as fine as ever, while Duchess were mistaken at the table for hot-house grapes. To those near market it would be quite an item to keep fruit in a building of such simple construction till the flush of fruit is over, and for the family, where there is generally a feast and then a famine of fruit, it is worth trying. The ice melted a little faster at the division wall, but there was ample sufficiency for all our needs, and we are quite satisfied with the success of the experiment.

Prov. of Quebec, Can. ANNIE L. JACK.

The Vineyard.

THE RURAL NEW-YORKER, AND THE WORDEN GRAPE.

I NOTE the following in the RURAL of October 3.

"If any one were to eat first a Worden and then a Concord grape, he could not tell which from the other. As to the time of ripening, there is very little difference. The Worden bunch will not average so large as the Concord bunch. The vine of either is as hardy as the other."

The Worden being undoubtedly a seedling from the Concord, would naturally have many of the characteristics of its parent; but after growing it for a dozen or more years, I must say I find more difference than the above opinion of the RURAL indicates; and if I did not know the Editor to be very careful about such matters, I should be inclined to think he had been comparing a Concord with a Concord; for there is great reason to believe that a good many vines which are growing under the name of Wordens, are Concords, and nothing else. And while I have never been able to see the great superiority of the Worden over the Concord which some persons

have expressed, there are differences which a close observer can detect. To my taste, there is a noticeable difference in character and flavor, not easily described, but still quite distinct. In foliage, the two are very much alike; but the growth of the Worden is generally longer-jointed, and the wood more slender than that of the Concord. The difference in time of ripening, I have found to vary somewhat in different seasons; but the Worden has always been from a week to 10 days earlier. The bunches of the Worden also, under the same conditions, have averaged rather longer than those of the Concord wherever I have seen them growing together. And in some extremely severe Winters when the thermometer has fallen to 30° or more below zero, the Worden has seemed less injured than the Concord.

Although there is to me a difference in flavor, I am not prepared to say that either is better in this respect than the other. Unfortunately, both have the same tender and easily-broken skin, sometimes cracking badly in wet weather, and requiring very careful handling in shipment. Neither retains its flavor and character long after being gathered; nor will they hang long on the vine after being ripe without deteriorating. And, as I view it, the principal, if not the only advantage the Worden has, is found in its earlier ripening, as even a few days are often of importance in northern localities where the Concord is ripened with difficulty. If left upon the vines until a little over-ripe, I think, too, the Worden is more disposed to fall from the stems than the Concord. At the meeting of the American Pomological Society, at Grand Rapids, Michigan, a company of experienced grape-growers, who were invited to visit a vineyard where both varieties were growing in that vicinity, found it very difficult to say to which they would give the preference. I have made some experiments in crossing Delaware and other kinds upon Worden, hoping, through seedlings, to improve the quality with increased earliness, but so far all have proven to be later than either Worden or Concord.

Not long since some correspondent of the RURAL gave me the credit of *originating* the Delaware grape, remarking that this was "honor enough for one man." Permit me to say I think it altogether *too much* honor for any one man to whom it *does not* belong, and I am just that man. The Delaware Grape was first discovered and sent out from this place, and was named "Delaware," I believe, by A. J. Downing for that reason. Who originated it is not known; and the probability is that it is a chance seedling. The only honor to which I was ever entitled was in an early recognition of its merits, and, with others, assisting in its general dissemination.

Delaware, Ohio. GEO. W. CAMPBELL.

Farm Economy.

RECUPERATIVE AGRICULTURE.

CONCLUDING ARTICLE.

PROF. I. P. ROBERTS.

Sorghum as a means of recuperation; character of much farming land; over-production impoverishes both soil and toiler; need of proportionately larger yields on smaller areas; grass! grass! grass! live stock and manure; nature soil-making; essence of true agriculture.

THE day is not far off—it is a disgrace that it is not already here—when we shall produce all the sugar we require from the sorghum plant, which is so admirably adapted to the light lands of the South. It is a little slower to start than corn, requiring a little send-off at first, but finally sending its roots far into the subsoil, defying droughts and bringing up stores of plant food beyond the reach of most other plants and converting them into valuable grain and saccharine matter. During the war sheep were frequently used to blade sorghum. They do the work most thoroughly as far as they can reach standing on their hind legs. If a fair amount of fertilizers be used to start the plant, and the manure produced from feeding the seed and the begasse be returned to the land, it will steadily grow more productive, as has been demonstrated at Rio Grande in New Jersey. Why are we so slow to follow the common practice in England of feeding and folding sheep on grass land to improve its fertility? Why not raise the hardy half-blood Percherons, that relish straw as well as grass, on these poor lands. A little supplemented food will hurt neither the colts nor the field, and the colts will bring from 15 to 20 cents per pound live-weight.

We have still a third class of lands which pay for tilling and give a small profit. Some of them are growing more fertile, or at least more productive to their owners. I have nothing to say at the present time, they have at least partially solved the hard problem, each for himself, yet no two alike save in one thing—all have returned to the land enough plant food, which, added to that carried to the surface by capillarity and long-rooted plants, and that set free by cultivation and brought down by the rains, suffices not only to keep the land up to its normal capacity, but to increase the latter. It is of the land that is slowly and almost imperceptibly decreasing in productive power and fertility that I would speak. This class embraces a vast area, and upon these lands reside nearly or quite one-half of the farming population. "Speed the plow." No, stop the plow and let him that hath been raising 40 acres of wheat write quickly 20, and he that hath been raising 20 let him write 10. We are in some cases carrying the valued, concentrated fertility of the farm in grain, etc., to the railroad, and offering in a glutted market at cost or so slightly above that the profits will not justify the purchase of cheap crude plant food to replace that sold. The result is the farmer replows the tired land and once again against his will, he calls to the land to stand and deliver. If he could only see clearly that 40 acres of wheat, at 20 bushels per acre in New York (or its equivalent) means very small profit, but that 20 acres at 30 bushels per acre means profit and fertility both! Will we never learn that 400,000,000 bushels of wheat bring more money than 500,000,000 bushels? Will we never learn that when any large number of people in this country are working for lower wages than they should or without a liberal profit, most other workers soon share a like fate. Then husband the fertility of the farm till the world is willing to pay cost and profits for what you have to sell. I know the people cry for cheap food, but if some must suffer, then I would quite as soon the suffering should fall on those who squander a large percent of their earnings in pandering to vices as to see it fall on the children and hard-worked, frugal wives of the prairie farmers. About 20 years since the farmers of Iowa were bankrupt with 10 cent corn. I would like to see two-thirds as much raised as now on half of the area of plowed land.

What will be done with this surplus land? "Why, let it go to grass." Why longer fight your best friend? Why not make peace with your friend while you can honorably and profitably? Lay down the implements of warfare, climb on the fence and see the grass grow and the clover perspire with the labor of pumping the nitrogen from the subsoil to the surface. Sign an everlasting peace that your children's children may inherit this land. Corn may be king, but grass sits on the throne and fertility is the power behind the throne. Man cannot live by grass alone, so we must plow; plow, as the world will pay for it; but as we plow we must plan how we can at least partly supply the place of the plants we are destroying. Our domestic animals supply to some extent the office of conserving fertility. Then a reasonable number of them should be kept, and the manure—*all* of it—should find its way back to the field at the earliest possible moment consistent with crops and season.

This will not be sufficient in most cases to keep the land up to its most profitable condition, and just here commercial fertilizers should come in, not to take the place of farm manures, but to supplement them. If we desire to improve the soil, we would do well to study Nature's methods of making soils. We see her clothing the habitable parts of the earth with plants, most of them so diminutive and worthless for cultivation that we hardly notice them, but all are useful as soil builders. Then come the myriad animal forms to feed upon and convert them quickly into soluble food for other plants for other animals. In modern agriculture the same order should be preserved. Raise the grass to feed the animal to make manure to feed the grass. Somewhere before the circle is completed we take a small fraction of toll from the three elements mentioned, and to replace them we draw from the bountiful stores in the bowels of the earth, from the sea and from the waste places.

Then true agriculture consists in taking from the soil such concentrated products as are suited to minister to our varied wants, replacing them with crude, cheap and waste products so skillfully that no serious diminution shall occur. To do this to the best advantage requires a great amount of skill, training, knowledge and labor, and where either or all of these are notably deficient, the land suffers.

Cornell University, Ithaca, N. Y.

GRANARY STEPS

AT Fig. 443 is shown the front elevation of our granary in order to show how the steps can be arranged so as always to have them handy and yet have the granary raised so that mice or rats cannot get into the building. The steps are hung on strong hinges just at the edge of the threshold. A small rope passes from the staple up over a pulley at the top of the door post, and reaches nearly to the floor

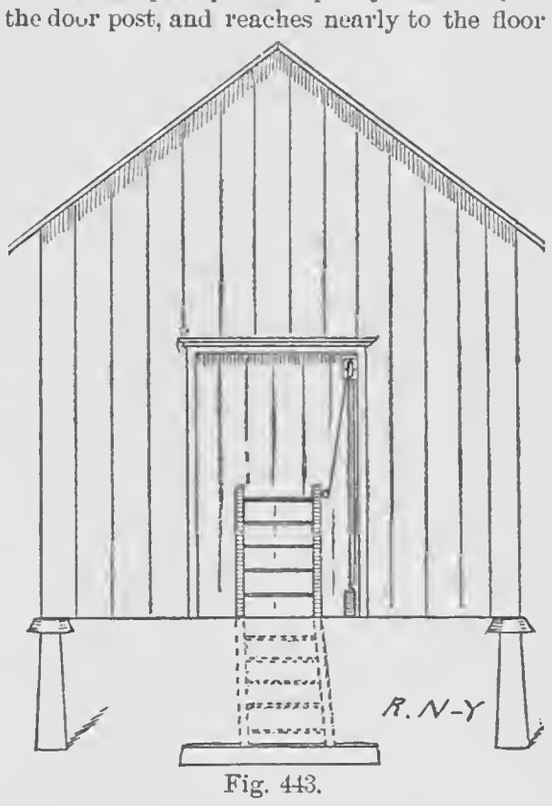


Fig. 443.

with a weight attached; this weight is just heavy enough to balance the steps at any angle. Now to enter the granary open the door; take hold of the steps, a slight pull turns them down; they strike on a block set in the ground which forms the first step. To turn them up it is only necessary to give them a slight start and the weight takes them to their place. If the weight just balances the step, there will be no slamming either way. It is no new thing to have the granary set up on posts, but the trouble has been to have the steps handy. They are generally cumbersome things and the farmer soon gets tired of moving them away and so leaves them after a little while, and the mice and rats get in as bad as ever. Our granary sets on three posts on each side and one in the middle, with inverted tin pans on top of the posts. It has stood 15 years or more without a mouse or rat getting into it, and the steps have never got out of order. When they are down a wagon can be driven alongside so as to be readily loaded.

Grand Isle, Vt. S. M. MACOMBER.

HAY RACK.

MR. A. J. MCDERMID sends us a sketch of the rack shown at Fig. 444. It separates into eight parts, viz.: The bed, two sides, fore standard, two aft stakes, and two bed boards. The bed just fits between the wagon standards, and has cleats to hold it to the hinder ones. It is made of 2x8-inch plank, 14 or 16 feet long,

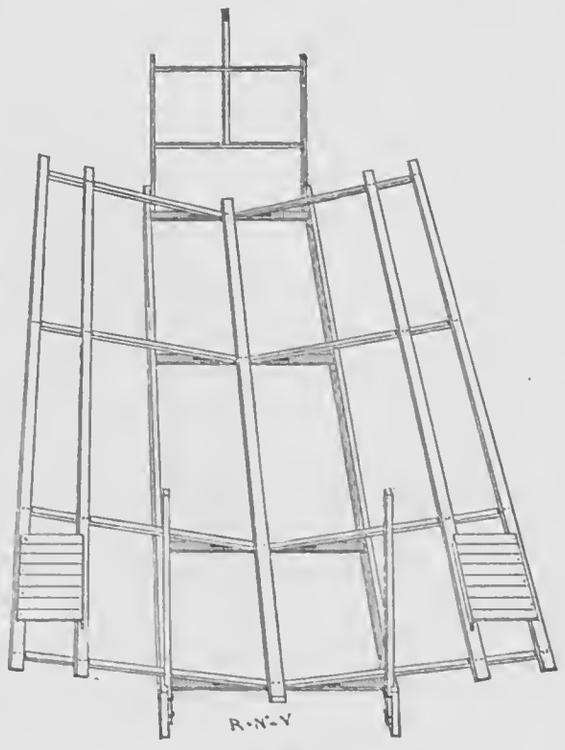


Fig. 444.

with the cross-pieces mortised into it, and has a pair of large staples on the inside of each end to hold the standard and aft stakes. A side is made of two strips, a wheel guard, and four supports, each having a tenon and notch. The center strip is securely fastened to the top of the standard, and has a slit to hold the lines, and the bed boards are fitted around the supports. The bed alone is convenient for hauling barreled apples or potatoes.

WAGON JACK.

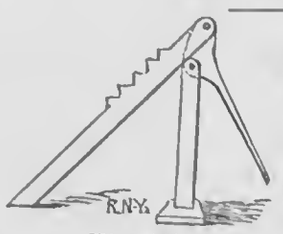


Fig. 448.

THE sketch of the wagon jack, shown at Fig. 448, is sent by Bert Eckerson, of Ulster Co., N. Y. It may be old to our readers, but it is a good one nevertheless. Its structure and the mode of its operation will be readily seen.

FEED HOPPER FOR POULTRY.

IN feeding poultry it is well to keep a supply of some kind of food always within their reach. To throw it on the ground is wasteful and filthy, and an open box or trough is not satisfactory. At Fig. 447 is a sectional view of a cheap and easily-made hopper for this purpose, such as I have in use, and which I am much pleased with. Food kept continually before fowls should be such as they will not gorge themselves with. Dry bran with a little corn meal mixed with it, wheat screenings, or oats, ground or whole, are excellent foods for feeding in this way.

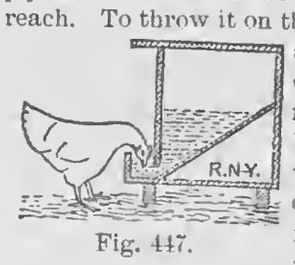


Fig. 447.

Crayson Co., Tex. JAMES NIMON.

DEVICE FOR HANGING HOGS.

HERE is an easy way of hanging dressed hogs at butchering time. Take three poles about nine feet long, and fasten them together at one end with a half-inch bolt, and put a meat hook two feet from the top end on each outside one, as shown at Fig. 446.

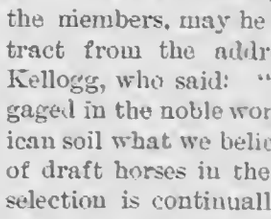


Fig. 446

Niles, Mich. J. R.

Indust'l Societies.

SOCIETY NOTES.

THE AMERICAN PERCHERON HORSE BREEDERS' ASSOCIATION held its annual meeting at Chicago, November 17, with a large attendance. The progress of this Association is said to be unprecedented in the history of any like association. A total of $11,420.72 has been collected in one year. The Association now finds itself $4,248.14 ahead. There are 118 bona fide stockholders. An idea of the interest in the Association, as well as the hopes of the members, may be learned from this extract from the address of Vice-President Kellogg, who said: "Gentlemen, you are engaged in the noble work of planting on American soil what we believe to be the best race of draft horses in the world. The process of selection is continually going on in France, while pride and self-interest induce you to import the best. Let it be our characteristic aim to raise our standard of excellence and seek to give to our country a better race than now exists in France. We extend the hand of friendship to our brothers of the other draft breeds with the hope that they will give to America the best of the European races."

THE TEXAS FAIR ASSOCIATION set apart five acres for the Horticultural Department exhibit. The nurserymen contributed $2,000 worth of ornamental trees and shrubs to permanently adorn the grounds. A very tasty building has been erected. At the late exhibit, this was well filled. Two large tables, each 70 feet long, were covered by the exhibit. Potted plants were massed about the tables. A splendid display of apples was made. Ben Davis led. This is called *the* market apple of the Southwest. Many visitors could not believe that these fine apples were raised in Texas, yet they were—every plate. A dozen plates of the Japanese Persimmon made a fine showing. There was also a good exhibit of pears, peaches and quinces. A State Horticultural Society has been organized with T. V. Munson as president. The display of agricultural machinery at the fair seemed to indicate that Texas must be a great market for this line of goods.

AT the Boulder, Colorado, Fair Short-horns led in the cattle departments. Clydesdale horses were well represented. Berkshire hogs were most prominent. Wyandotte, Plymouth Rock and Langshan poultry were plenty. The exhibit of fruit was very promising.

THE INDIANA HORTICULTURAL SOCIETY holds its 26th annual meeting at Columbus December 7-9. An excellent programme has been prepared, including addresses by Prof. Burrell, Prof. Troop, Dr. Fumers and others.

THE ILLINOIS HORTICULTURAL SOCIETY meets this year at Jacksonville, December 14-16. The programme will be sure to interest those who attend. Liberal premiums are offered.

PRAISE is heard on all sides for the managers of the Wisconsin Farmers' Institutes. Many of the best agricultural speakers have been engaged. No political battle could have been more carefully mapped out than this campaign. It will prove one of the most profitable campaigns ever held in Wisconsin. The state is making real progress in agriculture. We believe that the Wisconsin Experiment Station returns better results to the farmers of the State for the money expended,

than any other station in the country. This is chiefly because the reports are simple and timely and deal with matters of practical interest.

What Others Say.

EGG TRADE AND INDUSTRY IN RUSSIA.—The egg trade and industries have attained large proportions in Russia. In 1873 there were exported from Russia 30,000,000 eggs, valued at $157,000, or 52 cents per 100 eggs, and in 1884 228,000,000 eggs, at $1,525,000, or 67 cents per 100. In 1883 Russia exported 64,000,000 eggs to Germany, 46,000,000 eggs to Austria, and 16,000,000 to England. The latter country imports annually about 700,000,000 eggs, paying from 6s. to 12s. per 10 dozen. For a long time the Tartars of Kazan have manufactured egg soap from yelk of eggs. In 1850 Mr. Balabin began to manufacture albumen out of the white of eggs and egg oil from the yelk of eggs. Later he also made egg soap and egg pomatum. Egg oil is used for oiling kid leather and wool in the wool mills. In 1879 in Russia there were produced 75,000 pounds of egg albumen, valued at $37,000. Now there are in Russia five factories making egg albumen and as many more manufacturing blood albumen. Russian manufacturers export their egg albumen in dry condition (in barrels) to France and Germany, charging from $20 to $22.50 per pood (36 pounds). Blood albumen is selling at $7 per pood. Yelk is also preserved in the form of a powder, which is much used in bakeries and confectories. It is selling in Moscow at from $4 to $8 per pood. Being dissolved in glycerine and salicilic and and some other acids, yelk is preserved in fluid shape, and is used in tanneries. In Russia over 12,000,000 eggs are used annually for manufacturing purposes, valued at about $65,000.

NEW SUGAR-MAKING PROCESS.—Of late Louisiana papers have said that the sugar industry there was declining owing to improved processes employed elsewhere, with which planters could not compete. The new process of sugar-making briefly referred to in our "Agricultural News" last week, as shown by experiments at Fort Scott, Kan., by Professor Wiley, of the Agricultural Bureau, points to the more profitable making of cane and even sorghum. The extraction of the sweet from cane or sorghum or beets has been by squeezing under pressure. The new way is called the diffusion process, and consists in soaking out the saccharine matter. The average yield of juice by the pressure process is from 56 to 61 per cent. of the whole. By the best appliances from 70 to 80 per cent. has been obtained. By the diffusion process it is claimed that from 90 to 95 per cent. of all the juice can be extracted, and that in a much better condition. Mr. R. Sieg, "a Louisiana expert in sugar manufacture," reports that by the old practice sorghum yielded 47½ pounds of sugar per ton. By the new process 80 to 90 pounds are expected to be obtained. It is reported that at the New Jersey factory the yield is even better than this. But a less yield than 80 pounds per ton will make sorghum a profitable crop commercially. A telegram sent by Professor Wiley to the Commissioner gave as the first results of the process a yield of more than 120 pounds of sugar to the ton of cane, whereas by the crushing process in use in Louisiana, the yield would have been but 80 pounds. A later dispatch reports a yield of 134 pounds per ton.

CROP MORTGAGES.—The custom of mortgaging ungrown crops is so common and productive of so much evil in some portions of the South that, according to the St. Louis Republican, there is "more or less clamor for legislation to regulate or prohibit the practice." It is added that in Arkansas many members of the new legislature "were elected under pledges to work for a repeal of the law permitting such mortgages." Farmers who have rented land, or whose land is encumbered, give these crop-mortgages as security for supplies which they must have. It is a common thing for them to use this credit to the extreme limit that the storekeeper will allow. When the crop is harvested, its entire proceeds often fall a little short of paying the mortgage, and the farmer is "not only again without money or credit, but is actually in debt and under obligations to the storekeeper who has accommodated him." Such a system, of course, means high interest and high prices for everything the farmer buys. It is very doubtful if a law prohibiting these mortgages would afford much relief.

PURIFICATION OF WATER.—Professors Austen and Wilbur, of Rutgers College, have been conducting a series of experiments on the purification of water by means of alum. The method was simple enough. A small amount of alum—3¾ grains to the gallon of water—was added, the whole shaken and then allowed to stand for a short time. Polluted water was formed by adding sewage to perfectly pure water, analysing, precipitating with alum and then analysing again. It was proved that many waters which are positively unfit to drink would be rendered fit to drink by treatment with alum. The action of the alum was immediate. This was proved by the fact that when it was added to water already purified by its use no precipitate would form. This use of alum is old. The muddy, impure waters of many of the western streams can be rendered fairly palatable by its use.

THE ISLAND OF BARBADOES with 166 square miles supports a population of 175,000 or 1,054 persons to the square mile. This was thought to be the most densely inhabited portion of the earth's surface, but it is now found that the island of Malta, with 95 square miles of surface, contains 142,500 inhabitants, or 1,500 to the square mile. With this ratio the New England States could hold a population of 102,522,000, or the State of New York 70,500,000.

BRIEFS.

PROF. SHELTON AND MR. DARWIN are not exactly of the same mind as regards bumble-bees and clover. In Kansas, bumble-bees are almost unknown. It is safe to say that not one clover head in a dozen ever knows the embrace of the bumble-bees, and yet nowhere are such crops of clover seed grown as in that State. Every clover head which is allowed to come to maturity is every year filled with seed of best quality. Certainly the clover worries along very handsomely without bumble bees.

COL. WELD says in the Guernsey Breeder that when cream is thoroughly ripened, free from lumps, perhaps strained, and every way just right, the churning should be started at a temperature of 62°—the point usually marked for churning on dairy thermometers. Then the butter comes quickly, and it usually all comes.....

DR. HOSKINS thinks that it would be a good thing, sometimes, if the butter expert could be tested as well as the butter. The result might possibly raise a laugh. In regard to the grain, every good dairyman knows that it can be as thoroughly (though not so easily) preserved by the old method as by the new.....

THE Dr. says that there is really no true "grain" to butter, pure butter being homogeneous in its texture. What is called the "grain" is a granular appearance resulting from a general and equal distribution of briny water, separating the little pellets of butter that first appear in churning. "Only this and nothing more," and our grandmothers (some of them) knew how to preserve that before either Professor Arnold or the "granular method" was thought of.....

THE American Dairyman says that if we let a drop of fresh milk fall into a glass of pure water, and the milk promptly disseminates itself through the water, the cow that yielded that milk is not with calf, but if it sinks to the bottom she is.....

A WRITER in the N. E. Homestead has in a number of cases tried feeding apples to milch cows with the invariable effect of lessening the flow of milk.. .. ..

OUR English correspondent and dairy authority says that all churns should be provided with a small pane of glass, so that the churner may see without opening the churn when the butter begins to form.....

THE New England Farmer suggests that Winter is the time for harvesting ideas.....

IT also suggests that we give our boys the money and let them subscribe and have papers sent in their own names. They will read them with more interest while they do the parents just as much good... ... .

THE Husbandman was one of the farm journals that rejected the advertisement "Enormous fortunes awaiting claimants in England, France, Germany and other countries." The editor remarks that the advertisement has appeared in a large number of papers received in exchange, and it is reasonable to assume that in each instance the publisher knew that by its publication he aided a swindling scheme. The man who plans a swindling scheme is no worse than the man who aids him to put it into successful execution, yet that is the part accepted by publishers who take deceptive or dishonest advertising..... .....

MR. DUN, the noted New York Mercantile Agency proprietor, says that firm has over one million of business men reported to it every year—that is one store to every 50 persons. Our esteemed contemporary, the Rural World, commenting upon the above, advises those who would study their own interests to stick to the farm. ....

PROF. SANBORN (Missouri) hopes to induce the different thoroughbred cattle associations to select 10 representative steers from each breed and place them in his charge on the State college farm, where they are to be fed under the same conditions of course. In this way he aims to determine the merits of the different breeds. It is a good way to fight out the "battle of the breeds"... .....

TAKE two colts, says a writer in the Rural World, as nearly alike as can be found, and put them in the same pasture; feed one oats and the other corn and you can see the difference in a month. In a year you never would know they had looked alike. .....

MR. CROSBY, in the Cultivator, says that he thinks Orchard Grass the most over-praised of any grass grown in the country. Even if cut and well cured while in blossom, the hay, he says, is not liked by either horses or cows. He has never seen it yield a good crop of hay in weight, although to look at a field of it about the time it is ready to cut, one would suppose the yield would be heavy. It has been the RURAL'S duty to chronicle the gist of what has been said of Orchard Grass—but we have been careful to state our own experience, viz., that it is far less valued at the Rural Farm and by our neighbors than Timothy....

WE have also stated that Orchard Grass, no matter how thickly the seeds were sown, would nevertheless grow in bunches or "tussocks..... ....

THAT well-known pomologist and good man, J. J. Thomas, speaks of the Clairgeau Pear in a recent number of the Cultivator and Country Gentleman. When a tree of the Clairgeau is loaded with large, ripening, crimson-cheeked pears, it excels any other sort for its showy appearance, and the fruit in market retains this superiority. Its freedom from blight adds to the value of this variety. On young trees, the quality is often quite poor, and when the pears rot before softening they are perfectly worthless. As the trees are older the quality improves, and the larger specimens become melting and delicious.....

THE Sheldon and Clairgeau are variable kinds of pears, but when in perfection they are hard to rival.....

NO man, say Dr. Hoskins in Vick's Magazine, can graft a Rhode Island Greening on a sweet apple stock and another from the same on a sour stock, and have the same fruit in appearance and taste as the original from each tree. At least he has never been able to do it. He has a number of them, but no two are alike..... .. ..

WALDO F. BROWN says in the Farmers' Review that there are thousands of good cows owned by men who do not know it. They never feed high and have not tested the milk, and they do not care for a cow in a way to make her do her best. A neighbor of his sold for $35 a cow that in the hands of her new owner has since made 53 pounds of butter in a month—an average of over 12 pounds a week.

PUBLIC slaughtering at Fat Stock Shows is justly and forcibly condemned by the Farmers' Review. Feeling people can not of choice witness the death agony of an animal at the hands of a butcher, nor do we admire those who have a morbid love for such spectacles. At the Kansas City Fat Stock Show the editor noticed with astonishment ladies looking on without apparent feeling while animals were being knocked down, bled and opened. Worse than that, they had their children, some of them little girls, with them, and were using every endeavor to give them a good show of the miserable scene. A poor start in life truly for the sympathetic feeling and tender emotions generally attributed to modest womanhood.... .. ..

PUCK says the leaders of the Knights of Labor are driving their dupes into a series of strikes that will ultimately beggar the whole organization. When all Labor is on a strike and earning nothing, how is Labor to be fed? And how are Labor's children and wives to be fed?.....

ONE of the many silly things advocated by verdant farm editors is the use of tile drains for blanching celery.....

C. A. GREEN says in the Tribune that there appears to be in every human breast a natural desire for rural life, the glare and glitter of the city soon becoming tiresome.....

MANY of the young sows that carry off the first prizes at the fairs never rear any progeny, says Our Country Home. They have been overfed. In some cases they stop growing entirely, so that, in addition to being worthless as breeders, they become comparatively valueless for meat . ...

MR. E. H. LIBBY says that war for principle has been declared, and the farmers *shall* yet be represented in our government by farmers ....

MR. F. D. COBURN, in our Country Home, gives this experiment in feeding pigs, which was made in Ohio Co., West Virginia: In the Winter of 1882-3 he fed 22 young hogs, and having little corn concluded to try bran, though assured by several that it would be a failure. He bought a ton of bran, paying $26, and began feeding it Dec. 23. He made it into a slop, a barrel at a time; had a large barrel sunk into the ground beside the pump. He fed six bucketfuls twice a day, and the ton lasted 60 days. In addition to the bran he fed them one bucketful of nubbins twice a day. He weighed them Dec. 23, and they weighed 1,550 pounds. Weighed them again Feb. 21, and they weighed 2,383 pounds, a gain of 833 pounds; average gain nearly 38 pounds. He considers the above a very favorable showing for bran in slop. Bran is much cheaper now.....

Everywhere.

RURAL SPECIAL REPORTS.

Michigan.

SCHOOLCRAFT Co., Nov. 16.—The hay crop was very good on clay land, but the reverse on the sandy farms near the shore of Lake Michigan. Potatoes a fine crop; also wheat and barley. Oats rather light, owing to the dry weather of June and July. T. P.

New York.

WESTFIELD, Chautauqua Co., Nov. 6.—Crops fair. Corn and potatoes two-thirds of a crop; oats the same; apples, half a crop; grapes, an extra crop. We have not had a frost here this Fall to do any harm till last night, when six inches of snow fell. S. E. W.

North Carolina.

HENDERSON, Vance Co., Nov. 5.—There was a little frost in spots about a month ago, which did some damage to tobacco; but as yet we have had no killing frost here. Tobacco suckers, tomato plants, etc., are as fresh as in Summer. M. B. P.

Wisconsin.

FREEDOM, Outagamie Co., Nov. 15.—Weather warm and pleasant for time of year. Farmers are still plowing. Weather dry and roads good. The season has been dry, and crops light; still farmers have raised enough to live on, and to feed their stock. Prices of most kinds of produce are low, making it hard times for those who have debts and interest to pay. Strawberries and raspberries were fair crops. Apples do. The Wealthy grows in favor as a hardy tree, a good keeper and a good apple, and a free and early bearer. Grapes did well with us this year. I think they like a dry season. E. N.

THE FARMER'S CLUB

ANSWERS TO CORRESPONDENTS.

[Every query must be accompanied by the name and address of the writer to insure attention. Before asking a question, please see if it is not answered in our advertising columns. Ask only a few questions at one time. Put questions on a separate piece of paper.

CABBAGE AND "ROUGHNESS" AS STOCK FEED, ETC.

W. W. F., *Waterville, Ohio.*—I have eight acres of late cabbage, of which many heads have burst open and grown again. There are also many soft and miniature heads, and, of course, a very large amount of surplus leaves, etc., making a very large quantity of stock food. Now the question is, how can I best utilize this food? Can I buy a flock of sheep, and in any way use this as a part of their food to a profit, and if so, how? 2. A neighbor says his sheep one Winter run to a straw stack and in a cabbage field, and came to Spring very fat, but that the lambs did not do well; was it on account of being too fat, or because the cabbage was unwholesome? 3. Could I stack the cabbage in alternate layers with the straw, or would it be better to construct a cheap silo, and if so, how shall I do it?

ANS.—This cabbage is a very valuable food in connection with the straw, both wheat and oat, and it would be better still if a little grain be fed daily. We certainly could buy sheep and use this as a part of their food at a profit; but whether our friend can do so depends upon many circumstances, among which is the question as to what kind of quarters he has, the price at which he can buy sheep, and very much upon the care he would give them. Any stock when fed any considerable quantity of green food, should be warmly housed, but when so quartered they will make a good return for such food. 2. Neither was the cause. Where sheep have plenty of grain food, it is

impossible to have them too fat for lamb raising, and the fatter they are the better the lambs will do; so on the other hand, if warmly housed, all the green food they will eat is none too much. What the cause of unthrift in the lambs was cannot be told with so little knowledge of the conditions. 3. The whole problem in utilizing such waste products lies in how best to preserve them. To stack the cabbage with straw does not prevent the frost from breaking up its tissue and ruining its feeding value, and, besides, when frozen solid it is not suitable food for any stock, much less for pregnant ewes. It can be ensilaged; but then it is doubtful if it would pay to build a silo, however cheap, for the preservation of a single crop. We have often tried to grow cabbage for sheep food; in fact, we have now several thousand heads for which we have no profitable market, and we have always found it very difficult to keep it in good order much beyond the middle of January. The best way we have ever tried is to place it very thickly, heads up, in a sheltered spot near the barn, and on this place a second, third, and even fourth layer, letting the stalks of each layer pass down between the heads of the next one beneath; the top layer we reverse, letting the stalks stick up. Over the whole we throw a foot of dry straw, and over this another foot of wet straw, swale hay, or even corn-stalks. This excludes nearly all frost, and by commencing at one side it can be easily taken out, and in very severe weather we remove to the barn one day's ration in advance, and here it becomes thawed and in good feeding condition. The sheep will eat it, stalks and all, except the very roots.

SEEDING FOR A PERMANENT PASTURE.

E. L. H., Downsville, N. Y.—I have a piece of newly cleared, dry, hill land, which I wish to convert into a permanent pasture. The timber was beech, birch, maple, basswood, ash, etc., which was mostly burned on the ground. There was much old, rotted hemlock on it. It is sowed to rye; now, what grasses and how much of each shall I sow for a permanent pasture, and when shall I sow it?

ANS.—In seeding for a permanent pasture two things should be fully provided for. The land should be filled with plants and the mixture should contain varieties that bloom and mature at different times, so that the stock can always "get a fresh bite." Where a single kind of grass is sown, or only two or three together, as is the general custom, very many vacant spaces occur and these furnish no feed. If we examine an old pasture, we shall find, no doubt, from a dozen to 20 varieties of grasses on a single square foot, and each growing as vigorously and furnishing as much feed as though growing alone, and were we to remove all these except one, it would never fill the space and would furnish very little if any more feed than it now does. As a rule, seed enough is sown, but it does not contain a sufficient number of varieties. Most people in stocking down use one peck of Timothy seed containing over 13,000,000 seeds, and 10 pounds of clover containing 2,500,000 seeds. This gives over 360 seeds to the square foot, but for some reasons these grasses will not grow so thickly, and soon a sufficient number perish so as to leave many bare spots, and these detract very much from the value of the pasture. If people used the same quantity of seed, but made it up of half-a-dozen varieties of grasses, they would not only cover the ground better, but would have grasses maturing at different periods and much more palatable to the stock. The growth of timber would indicate that the land is good and strong, and we should advise the using of the following mixture: Timothy, four pounds; Kentucky Blue Grass (June Grass), seven pounds; Orchard Grass, four pounds; Red Top, four pounds; Perennial Rye Grass, four pounds; Mammoth Red Clover six, and White Clover four pounds. This is somewhat more seed than is usually sown, but is none too much. Sow the Timothy, Red Top and Blue Grass seeds at once and the balance early in the Spring, and then don't pasture much next season, and not at all till after the full rains have given the grass a good start.

SWINE PLAGUE.

W. J. G., Knowlton, N. J.—Like the farmers hereabout I have lost several hogs by a disease the symptoms of which varies in different localities—but the outcome is always death. My hogs were first attacked with profuse bleeding at the nose, distress in the head, indicated by their butting against objects, followed by paralysis of the hind-quarters, either spine or legs, extreme prostration, refusal to eat, and high fever. After several days the skin turned very red, finally becoming a deep purple, with blotches of still deeper color. The animals uttered frequent sharp squeals as though in great pain; they acted erratically, turning half somersaults, etc. Death soon followed. The losses in this section have been very heavy, and no amount of isolation, change of quarters, fumigation or medicine has given the slightest protection or relief. What is the trouble?

ANSWERED BY F. L. KILBORN.

Some of the symptoms certainly point to swine plague—"hog cholera"—as the disease affecting your animals; while the other symptoms are rather equivocal. But in different outbreaks of this disease the symptoms are often so varied that we are beginning to believe that almost any symptom may be, and occasionally is, a concomitant of this disease. In fact it may be said that there are really no satisfactory diagnostic symptoms that are at all constant. The one character by which the disease can most satisfactorily be distinguished, and which is more constant than any other (and even this is not constant, although nearly so) is the post-mortem lesions found in the cœcum and upper colon of the large intestines. Here on the mucous surface there will almost invariably be found, either deep congestion or ulceration, or both, especially about the ilio-cœcal valve, where the small intestine joins the large. Two or three post-mortems at the most would always be sufficient to recognize the disease, while one is usually sufficient. It would be well to examine the interior of the large intestines, especially the cœcum or blind pouch, and about the ilio-cœcum valve, and if ulceration is found, or in recent acute cases only deep reddening of the mucous membrane, the disease is swine-plague. Treatment of the sick animals is very unsatisfactory, as well as unprofitable, except perhaps in the case of very valuable breeding stock. They remain so long unthrifty, usually from several months to a year or more, that it is better to kill all diseased animals at once, and direct the attention to preventive measures to check the further spreading of the disease? Separate the healthy from the sick, and remove them at least several rods away to windward, if possible. Feed twice daily in the food of each animal one year old and older, 20 drops of sulphuric acid and one-half dram of sulphate of iron. Pigs three months old may receive one-eighth, and those six months old, one-fourth of this amount. If treatment of the sick animals is desirable, they may receive the same dose. Watch the healthy animals daily, and remove any showing the first signs of illness. Any pen not yet infected, and all new arrivals should be very carefully guarded, so that dogs, rats, fowls, or other small animals cannot pass from the sick to the healthy. If possible, have a special attendant to care for the healthy animals; otherwise always care for the healthy first and the sick last, and then do not go near the healthy again until necessary to feed. Give special attention to the hygienic surroundings of the animals: the pen should be clean and comfortable; the food wholesome. It is better not to allow the animals the run of a yard, because of the difficulty of disinfecting it. All dead animals and their products should be deeply buried or burned. Disinfect all infected pens, as well as everything else with which the sick animals have come in contact, with a two-per-cent. solution of sulphuric acid, one-half pint of the strong acid to each three gallons of water. If, on examination of the dead animals, the above lesions are not found, write to us again, telling what lesions are found.

A GOOD WIND-MILL; SHEARING WETHERS FOR WINTER FEEDING.

W. T. T., Salisbury, N. C.—1. What wind-mill is the best for pumping water for stock from a well 70 feet deep? 2. I am fattening sheep for spring market, and expect to keep them in warm stables; when would it be best to shear them?

ANSWERED BY J. S. WOODWARD.

1. I have never used all the styles of wind-mills, and would not like to say which is best; in fact, I could not tell if I would. I have had an iron turbine made by Mast, Foos & Co., in use now some 10 years, and it works perfectly—costing nothing beyond the little oil needed. It pumps from an 82-foot well into a tank standing 18 feet from the ground all the water needed for 800 sheep, 60 cows, 12 horses, 60 hogs and for two houses, and could pump twice as much easily if needed. 2. If the sheep being fed are mature wethers, and are to be sold before April, I would not advise shearing for the reason that without the wool the sheep could not be moved safely in all kinds of weather. I would apply the crude petroleum and salt fat mixture to kill the ticks. The stables should be fully ventilated and kept at about 50 degrees Fahrenheit. If I sheared any it would be only a few by way of experiment, watching them very carefully. I have never tried shearing wethers for winter feeding, as I do not use any such; but I would really like to have some one who does feed them try the experiment. If the sheep Mr. T. has are lambs or breeding ewes they should be shorn some time in December. I shall commence to shear mine, beginning on the lambs, the first week in December, intending to get through before New Year's. After shearing, the stables should be kept at from 55 to 60 degrees Fahrenheit and well ventilated; but all currents of cold air must be prevented from blowing upon the sheep. One of the most important points to be looked after with winter-shorn sheep is a full supply of fresh air without currents.

IMPORTING SHEEP FROM ENGLAND.

E. J. G., Clifton, N. Y.—1. What is the probable cost of importing 10 Hampshire Down ewes? What is the best time to bring them over? Could they be transported from the mild English to the severe American Winter if blanketed on reaching our shores?

ANS.—The cost of importing sheep from England will vary considerably as the importer may be experienced or otherwise. If a person comes out with the sheep, there will be his passage, about $30 at least, and the freight on the sheep, which will not be less than $10 per head. In addition there will be the expense of feeding the sheep, which will be but small. By taking the right means to have the sheep certified by the American Consul in England as imported for breeding purposes, for which a small fee is paid, there will be no import duty. The whole cost of importing the 10 sheep will no doubt come up to $150, unless some specially favorable circumstances can be made available. There are various risks to be met in importing sheep, from the buying of them to the getting of them home; in the acclimatizing of them and in getting inferior animals unless high prices are paid, so that as there are excellent Hampshires to be procured without the cost and risk of importing them, it would be far wiser to procure them here. Mr. James Wood of Braewold, Mount Kisco, Westchester Co., N. Y., has the best flock in America, of these sheep.

Miscellaneous.

E. D. H., Miller's Corners, N. Y.—What is the best feed for fattening lambs? I have corn, clover hay and small potatoes; would it be absolutely necessary to get anything else? They are May lambs and not very large; how much feed each would they require? Would wheat bran be a good feed?

ANS.—Spring lambs should have been put under feeding two months ago. "An animal well summered is half wintered" and lambs which have been fed since the pasture began to fall off should now be large and in good condition and half fattened. It is a question now if it would not be better to make wethers of the male lambs and feed them so as to keep them growing fairly well and turn them off from good pasture next year. If it is desired for some good purpose, to fatten them as well as they can be now, they should be given all the hay they will eat three times a day, and corn and bran morning and evening; half a pint per head at each meal will be sufficient. Potatoes are not of much use in fattening sheep: good clover hay free from mold, sound corn, coarsely chopped, and bran are all that are required. Fresh, pure water from a well should not be forgotten, and a little salt twice a week. A clean, dry yard and a cover from storms are necessary.

E. B., Webb's Mills, N. Y.—Where can I get a whiffletree neck-yoke, and is it a practical device for plowing in an orchard.

ANS.—We suppose you mean an arrangement for plowing young orchards, which does away with the use of whiffletrees and the danger of injury to the trees by their use. If so, we know of nothing so good as the Sherwood harness, made by Sherwood Harness Co., of Syracuse, N. Y. It is made of steel and is suspended under the horses, near their forelegs. It is light, strong, durable and very handy even for plowing, and there is no possibility of "barking" the youngest trees by its use. We have used a similar device and cannot see how we could get along without it.

W. E. B., Wichita, Kan.—Will lime, plaster-of-Paris and salt hasten the growth of cabbages and increase their size?

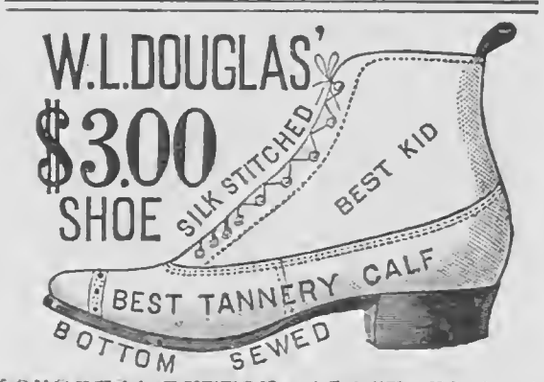
ANS.—In certain soils, either lime or salt *may* have the effect to liberate plant food not otherwise immediately available. Without entering upon further particulars, we should reply "No" to the above inquiry.

L. W., Grimsby, Ont., Can.—Ardisia crenulata can be bought of Peter Henderson, New York, or John Saul, Washington, D. C.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING November 27, 1886.

H. D. C.—M. H. C.—F. L. P.—L. W. P.—E. S. Dix, thanks.—H. S.—A. L. C.—M. B. H.—M. E. A.—C.—H. W. R. L. V.—P. E., thanks.—F. G.—G. E. M.—F. G., thanks.—F. B.—J. R. V., rose received.—J. H. W.—J. B.—H. S.—W. H. S.—D. R. C.—C. L. B.—B. B.—W. F. G.—C. F.—H. S.—H. J. C.—J. B.—A. F. G.—A. E. C.—A. B.—A. L. J.—E. L. T.—A. H. N.—J. H. W.—T. C., thanks.—O. T. B.—J. H. W.—J. T.—I. E. M., thanks.—G. W. C.—G. G. J. H. S.—W. F. B.—H. S.—J. E. S.—S. M. T., thanks—J. B. R., thanks.—E. W.—R. W. W.—W. H. S.—W. J. B.—J. S. C.—S. S. P.—W. B. G.—C. C. P.—G. S.—H. H.—E.—A. S.—J. H.—T. H. H.—H. H.—A. L. S.—S. C. M.—E. B. S.—J. J. W.—E. S. G.—W. F.—J. H. S.—A. H. S.

Miscellaneous Advertising.



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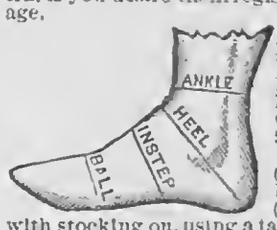

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Heel.....— "
Instep.....— "
Ball.....— "
Length of Foot..— "
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FOR 1887.

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SATURDAY, DECEMBER 4, 1886.

ANNOUNCEMENT.

OUR readers will be pleased to know that Joseph Harris of Moreton Farm, near Rochester, N. Y., has written a series of articles for the RURAL NEW-YORKER to begin with and to continue through 1887. The subject is

"THE EXPERIMENTS OF LAWES & GILBERT OF ROTHAMSTED, ENGLAND.

We do not believe a more important and instructive series of articles has ever been offered to the farmers of our country. Sir J. B. Lawes has done more than all other experimenters put together to solve the great problems of soil food, soil exhaustion, the action of manure and chemical fertilizers in the soil and their effects upon plants. This work of 44 years will be reviewed by Mr. Harris, who is specially fitted for the task, in that he was himself a student of Dr. Lawes, at Rothamsted, and has since been in regular correspondence with him and received and studied his various publications issued meanwhile. And there is no more fitting medium for the presentation of this series of articles than the columns of the RURAL NEW-YORKER which was the first American journal he ever wrote for.

THE last number of the R. N.-Y. for 1886 will be No. 1926. The present number (see first page, under the bull's head) is 1923. All subscriptions numbered 1926 (see address labels) as well as those not having *any* number, expire with this year.

WE are of the opinion that celery would keep much better if the protecting material over the trenches were not permitted to come in contact with the leaves—that is, an air-space should be provided *over* the leaves. This we have done by placing over the trench two hemlock boards nailed together forming a V, and the protecting material is placed over this as needed.

IT is very hard for farmers to see evils to which they are subjected without being able to see any way of avoiding them. The dressed beef business at Chicago is one of these evils. So colossal has this business become that the mere absence of one of the large packers, or their representatives any day from market has a depressing influence on prices. Stock owners are utterly powerless to alter the situation here. The movement to establish a rival enterprise at St. Louis is commendable as affording a chance for competition; but past experience is not encouraging with regard to its success. There must be a way out of this and other troubles; in what direction does it lie?

WHAT is to be expected from the RURAL'S rye-wheat hybrids? If we mix rye and wheat flour, the bread made from the mixture is of better quality than that made from pure rye and of poorer quality than that made from pure wheat. But Nature doesn't mix things as we do, and it is within the possibilities that the rye-wheat flour may prove to be better than either, or poorer than either. All that at present appears is that some of these hybrids bear larger leaves and culms, and larger heads than any wheat varieties which we have raised or have known to be raised in this climate.

IF the telegraphic accounts from Chicago can be relied upon, the late disastrous eight-hour strikes in the packing-houses there, were caused by fellows who sought to use the strikers for political purposes, and in violation of written contracts. The strike was not desired by the men—they merely went out like a drove of sheep blindly following the foremost wether, often the silliest animal in the flock. The resulting distress and misery to the families of the strikers and the heavy losses to the public should be a caution against such ill considered movements in future. A fellow named Butler appears to be the Martin Irons in this case. The fate of the other Martin Irons should be his.

WE object to cheap candy. The stuff is filthy and impure and unfit to enter the human stomach. It is made, and kept in nasty places, out of cheap materials, some of which are positively harmful. There is no excuse for its use. Christmas trees, church fairs and entertainments will be crowded with cheap candy this month, and those who provide it will hold cheapness as a prime consideration. Why not have less candy and have it better? There is more difference between pure candy and the cheap stuff found in the village stores, than there is between pure butter and oleomargarine. Farmers who believe in the unhealthfulness of bogus butter should be the last to provide cheap candy for their children.

THE public debt of the Dominion is $250,000,000 or $55.50 per capita; and the receipts of the past year have fallen $6,000,000 short or the estimates. This enormous debt was incurred mainly as an investment for the purpose of building public works which, it was supposed, would pay a reasonable interest and contribute a sinking fund which would eventually extinguish the debt. This expectation has not been fulfilled, and most Canadians now acknowledge that in this respect, Sir John Macdonald's financial policy has been a risky one. The coming elections will show the public estimate of it. The discontent in the Maritime Provinces indicates that there at least it is not popular; but, then, the Maritime Provinces have gained little from the public works on account of which the debt was incurred.

WE have often read of manure that caused a great growth of tops, but few potatoes. We once by mistake spread a large quantity of unleached ashes on a field at the Rural Farm. Their tops, from their fine heavy growth, promised a yield of at least 300 bushels to the acre, but the crop amounted to about 175 bushels. The garden soil at the Rural Grounds has received very large quantities of all sorts of chemical fertilizers, but not very much farm manure. As is well known to our readers, we never fail to raise immense crops of potatoes in this soil, though potatoes have been grown successively for many years. We are never fearful when we see the fine growth of vines that the growth of tubers will not be proportionately large. In fact, it has seemed to us that it is practically impossible to make land too rich for potatoes. Why the application of wood ashes should have given at the Rural Farm splendid vines and a small yield we have never been able to account for. If nitrogen alone had been abundantly applied, we might have anticipated something of the kind. But wood ashes give only potash and phosphoric acid.

IN localities where sugar maples thrive farmers have a great advantage in the fact that profitable winter and early spring work is provided. The product of the sugar bush will often far more than compensate for accidents to crops. Throughout New England and New York, Ohio, Michigan and other States, the maples run into money each year. But, as in every other business, the stock must be renewed and strengthened. On many farms the sugar bush is failing and the failure is severely felt. Old trees are decaying and falling, and far too few young trees have been planted to take their places. This matter must be attended to, or the loss will be a serious one. Another matter that needs attention is the extensive adulteration of maple products. This is similar in its results to the adulteration and imitation of butter, and in some localities it is just as dangerous to business. So-called "maple sugar" made from cane sugar refuse is just as injurious and objectionable as oleomargarine. Its sale should be suppressed except when sold for what it is. One who has used the delicious sirup made in Vermont or Ohio is thoroughly disgusted with the miserable imitation sold and used in our large cities.

MERLATTI, an Italian, has just fasted 30 days at Paris, without any great impairment of condition. Succi, another Italian, went through a longer fasting ordeal two months ago. Both say they were supported by the extract of a root. Merlatti's root is said to be a common Italian production, a knowledge of whose special merits is confined to the faster. Succi's root is reported to be an African production, the sustaining virtues of which he learned in a journey through the Dark Continent. It is claimed that this juice, decoction or extract, taken in very small quantities, will enable a person to go a long time without food, yet without any great impairment of mental or physical condition. It is proposed to get up a "corner" or monopoly in one or both of these marvelous plants, and sell the extract to the poor, so as to enable them to dispense in great part with the more costly ordinary nutrients. In the name of the agriculture of the globe we very earnestly protest against anything of the kind, not only because we are opposed to all corners and monopolies, but also because already there is a woeful under-consumption of agricultural products, entailing low prices. The poor of the world consume most of the food produced in the world; if they are to be in great part supported on this vaunted stuff, what is to become of the surplus breadstuffs and meat and vegetable supplies of the farmers?

WE are taking our usual pains to present our readers with the best and most comprehensive index printed by any farm or other journal in the country. The Index Number will, of course, be the last in the year. The New Year's RURAL NEW-YORKER will be dated January 1st.

Now that the subscription season is fully upon us, we shall certainly appreciate the kindly word from present readers to those who may be induced to become subscribers for 1887. *Those who with their own subscription will send us also that of a neighbor or friend will aid us greatly in increasing the* RURAL'S *circulation, which at present promises to equal, if not exceed, that of any other year.*

Two men that we know live in the same house. One drinks nothing but milk, frequently never taking a mouthful of water for days. He is strong, active and well, never sick, and rarely troubled with indigestion. If the other man should drink a glass of milk, he would be, if not sick, uncomfortable for hours. What does it mean? The same food producing such opposite results! If men are so differently constituted, of what value are the so-called "diets" prescribed for the public in general by scientists? It is popular to state, for example, in a general way, that milk is a perfect food, but where is the sense of urging it upon people to whom it is positively objectionable! In the same way, oat-meal, cheese, baked beans and other foods are recommended because they contain condensed nutriment. But in every case the taste of the eater, his mode of life, the amount of exercise he takes, etc., are hardly considered. A strong, healthy man, working in the open air, can safely eat and digest a quantity of baked beans that would make an office worker sick. Nothing could be more foolish than for a family to follow, in its diet, the random advice given in so many papers. No chemist, however able, can analyze a taste. It has been proved over and over again that people are healthiest when they eat moderate quantities of what "tastes good." If a man had no sense of taste, the various diets and prepared foods would be far more valuable than they now are. It seems evident that taste can be consulted, greatly to our advantage, in preserving our health.

EVERGREENS IN WINTER.

THE judicious placing of evergreen trees about the country houses should be made a first consideration. They should be planted so that, look in whatever direction we may, evergreens are before us. Nothing so cheers the bleak winter season; nothing adds more to the attractiveness of the home. Thickets or "clumps" of evergreens, except for special purposes, are objectionable. Each one interferes with the others and while we have a *mass* of green, yet there is no one tree that can ever develop the symmetery, the perfection of which it is capable. A single hemlock or other spruce, a retinispora, fir or pine, if treated according to its needs, becomes a grand object ever beautiful. A cluster of any one or of all becomes in a few years only a mass of green made up of unsightly individuals.

Evergreens are the out-door blessings of Winter to the country home, enlivening and warming the otherwise bleak and cheerless view. One may still enjoy a daily walk, feeling that there is some shelter from the wintry blast, something of Summer's life and warmth about him. Evergreens can never supply the place of deciduous trees in the growing season, yet if a proper distribution of each is made, either kind is an agreeable, pleasing companion to the other. It is well in planting the two classes of trees, so to place them that the deciduous trees may for the most part fill the more conspicuous sights of the grounds, the evergreens the more distant places; yet this must not be carried too far.

What we would impress upon our readers is that while evergreens in their more formal outlines may not be as necessary in adorning the home grounds as are oaks and maples, beeches and elms, during the summer season, yet even then they add the charm of variety and a beauty quite their own. But it is in Winter when the naked, stiff branches of deciduous trees stand as if monuments of Winter's destructive blasts, that the warm evergreens are most of all to be prized.

BREVITIES.

READ the concluding article on Recuperative Agriculture, by Professor Roberts, on page 809.

IF potato scab is caused by a fungus, one would suppose that the spores would be propagated and the disease occur in the cellar or storage pits. We have never known such a case.

OUR turnip crop was a failure. We have hardly enough to pay for the manure. We had to "throw in" our labor. Turnips were poor all around us. Well, better luck next year!

"ONCE in awhile the phunny-picture man on the last page of the R. N.-Y. is a success." So writes Mary Wager-Fisher. We would remind Mrs. Fisher that Punch is notorious for presenting a really funny cartoon but once a year.

PROF. SHELDON says elsewhere there is a difference of several hundred per cent. between the price of the best Irish butter and that of the worst. The same thing is true in all parts of the world, and not only with butter, but with everything else.

WE sold a few bushels of potatoes in Paterson, the other day, at 75 cents per bushel. These were sold from the wagon—delivered. Western potatoes brought about 50 cents. We have held most of our potatoes for better prices. Have we been wise?

THE rye is coming out better than we expected. The season was against it. Some farmers sowed in the dry dust, and what seeds germinated looked sickly until the rains came. Others waited until after the rains, then plowed and harrowed and sowed at once. It is coming up fairly well.

POULTRY is extraordinarily low at Chicago. At the close of last week live chickens were selling for a little over five cents a pound and early this week they sold for three to five cents per pound. Many of the consignments sold for very little more than the cost of transportation and commission, leaving little or nothing for the poultry raiser. The railroad and commission men are bound to get good pay for little work; but the farmer often gets no returns for much labor and actual outlay. Is there a remedy? If so, what is it?

SPEAKING of the "Hatch Experiment Station Bill," which proposes a liberal annual grant by the General Government to each of the agricultural colleges, to be used in agricultural experimentation in co-operation with the National Department of Agriculture, Professor Morrow says that he thinks separate experiment stations would probably be the most effective, though with the excellent facilities and the men already available at the agricultural colleges, it is doubtless true that good results could be obtained with the least expenditure from the combination of stations and colleges.

ALL reports from the Northwest indicate that the wheat crop there is considerably larger than reported before thrashing. At the time of our general crop report—July 10—the Michigan Farmer would "bet its boots" that the crop would not be so large as our reports indicated. Several other esteemed contemporaries that had never taken the trouble of getting up a general report of the kind, chimed in on the same key. It is now conceded that our estimates of the wheat crop in the Northwest, and in the rest of the country also, were considerably under rather than over the reality, though we were accused of exaggeration. What is bolder than bumptious ignorance?

THE Calf Butchers' Association was formed in this city last April. In May it entered into an agreement with all but two of the brokers in the stock-yard to buy and sell calfs on commission, with a view to controlling the market in this city. The association guaranteed the debts of its members to the brokers, and in return the latter agreed to pay the association 12 cents on each calf sold by them, and to refuse to sell to anybody outside the association under a penalty of $2 for each infringement; while the association agreed that any member who bought from any one except the brokers who belonged to the gang should forfeit 25 cents for every calf. The monopoly thus established has been able to raise the price of veal to the consumers and lower the price of calves to the farmers and pocket an extortionate profit from both parties. The Attorney-General decides that the association is illegal, and is about to bring an action to dissolve it. There should be a general law in this and every other State clearly prohibiting such oppressive organizations and punishing all engaged in them.

In addition to the long lists of humbugs and worse, given two weeks ago, we warn our readers to have no dealings with the following concerns: Sessions, W. P., Kansas City, Mo.. Wilcox, Algernon, alias Wilcox Specific Med. Co., alias Wilcox Chemical Co., alias Wilcox Chemical Preparation Co., alias the Specific Med. Co., 303 North 10th Street, alias Meyers & Co., Box 1306, Philadelphia, alias "Dr." Jennie V. Stanton & Co., New York City.... Union M'f'g Co., alias Empire M'f'g Co., alias Pioneer M'f'g Co., 79 Milk Street and 767 Washington Street, P. O. Box 5100, Boston, Mass ...Armstrong, "Prof." J. H., 737 Race Street, Philadelphia, alias Mrs. W. C. Holmes, 109 E. 12th Street, removed to 658 Broadway, New York City, alias "Dr." J. C. Raymond, Brooklyn, N. Y., alias Prof. W. H. Armstrong, So. Boston, Mass.....Adee, Daniel, 45 Liberty Street, New York City....Vau Raub, B., alias Don Carlos, Leon Springs, Tex., alias Byron H. Robb, Cincinnati, O....Foster, S. & Co., "Cigar Fraud," alias Cincinnati Pub. Co., publisher of the "Aid" and part owner of the Clipper M'f'g Co., Cincinnati, Ohio..... . Clark, L. J., alias Favorite Book and Novelty Co., alias Western Chromo Co., Wiscoy, Minn.. ..Chichester Chemical Co., alias Thomas Chichester, 2313 Madison Square, Philadelphia....Chicago Arms Co., Chicago, Ill... Crystallized Photo. Co., 53 W. 7th Street, Cincinnati, O....Tabel, Paul E., alias Advance Courier, alias Barnett Art Association, alias Inter-State M'f'g Co., alias Asa A. Burnham & Co., Chicago, Ill.

Things To Avoid.—Bohemian oats and all swindles of a like nature. These have been explained here over and over again. Seneca Chief, Red Line and Gold Dust Wheats are of this stripe ....Siguing papers for nuknown parties, however innocent the paper may appear. Not a week passes in which we do not notice accounts of swindles on farmers owiug to their excessive readiness to sign their names to papers. We have repeatedly given instances of this sort of bamboozling... ..Paying royalty to traveling scamps who claim to be agents for machines the patents on which they say have been infringed in some articles already in the farmer's possession. There are many rascals, armed with bogus papers, traveling through the country swindling farmers in this way. A good bulldog is a blessing when these fellows are around.

To Several Inquirers.—We cannot recommend now, any more than formerly, the Reliable Manufacturing Company of Philadelphia Pa., nor the Home Manufacturing Company of the same place We do not recommend Borden & Edwards of this city. We strongly advise our friends not to invest a cent in the "Imperial Austrian Vienna Government Bonds," offered temptingly for sale by the "International Banking Company" and Edward Saunders & Co. It is a mere lottery scheme and foreign lotteries are no more honest than domestic ones; while the opportunities for fraud are more numerous. .....W. L. Caldwell, of this city, is a "sawdust" swindler, who offers to sell counterfeit money.... ..."The National Bazar" of this city, is reported to be another venture of the notorious W. H. Sizer.....We do not recommend the National Supply Co., Cincinnati, Ohio.. We know nothing about "The Prof. D.W. Moody Co.," Cincinnati, Ohio or its dress-making system....The Next of Kin and Heirs-at-Law Gazette, of this city, is engaged in a disreputable business in so far as it intimates that its manager or conductor is able to recover any of the fabulous fortunes which are said to be numerous on the other side of the water. Whoever has any dealings with this concern will certainly lose $1, and is very likely to be led on until the loss is much greater....The Von Graef Troches are a humbug.

Miscellaneous.

CATALOGUES, ETC., RECEIVED.

The American Garden.—Years ago the American Garden was issued as a monthly trade paper by Beach & Co., seedsmen, of New York. The firm gave up business, and B. K. Bliss & Sons purchased the name and continued its publication in connection with their seed business. Bliss & Co. failed, and Mr. E. H. Libby purchased the Garden and has since published it in Greenfield, Mass, while at the same time he has been editing "Our Country Home." Within a few weeks Mr. Lawson Valentine, the well-known, good and benevolent owner of Houghton Farm, has purchased an interest in the American Garden, and hereafter it will be conducted by Mr. Valentine and Mr. Libby.

Mr. Libby, it may be remembered, was the founder, first, of the Scientific Farmer, then of Land and Home and, finally, the editor of the American Agriculturist, before Mr. Judd's failure. He was afterwards editor of the Farmers' Review, of Chicago, and then one of the superintendents of the immense house of Sibley & Co., the seedsmen, which position he relinquished to edit Our Country Home.

Mr. Libby is a man of remarkable energy, originality and perseverance, which, now that he is associated with Mr. Valentine, will, we are confident, show themselves in making the best garden journal of America, and we much doubt if his monthly journal has a friend that wishes it full success more sincerely than the Rural New-Yorker.

Literary.

BOOKS RECEIVED.

Lee & Shepard publish an illustrated edition of Tennyson's "Dora" which makes an admirable Christmas gift. After Enoch Arden, we like Dora better than any of Tennyson's poems. It is a beautiful little story in verse. One is never tired of reading it. The illustrations are admirable. They add much to a proper understanding of the poem. We had a different conception of "Farmer Allen" from that of the artist who designed these pictures. We had thought of him as a bluff, typical Englishman. An entirely different man looks out at us from these pages. The pictures of the other characters seem more natural. Most of the favorite modern poems have been illustrated in this way. They make beautiful holiday gifts. Dora is one of the best of the series and should be popular.

A Boston Girl's Ambitions by Virginia F. Townsend (Lee & Shepard) is a clumsy story. We should expect a far better story from this author. There is a good plot, and several of the characters are well drawn, but the parts of the story are clumsily put together, and the interest is not kept up well. Why the book should bear its name is not exactly plain. The "Boston Girl" is not a typical character by any means. She is a country girl who goes to the city with her brother with the idea of supporting herself. After nearly starving, the brother obtains a situation in the usual remarkable way, of saving the life of a little child. Just as he succeeds in mastering the business and putting himself in the way of permanent promotion, he is seized with a desire to study at Harvard and enter a profession. His sister's ambition is to help him carry out this plan. He leaves his position, and with his sister's help obtains his education and succeeds. If the book means anything at all, it means that the highest ambition a sister can have is that of adding her life to that of her ambitious brother, in the hope of making him greater. Price $1.50.

Holiday Books. Lee & Shepard issue some beautiful books for the holidays. Nature's Hallelujah is certainly one of the finest books of the season. It would make an elegant Christmas present. We can think of no more fitting present for a lover of nature than this beautiful volume. The design of the book is unique. Each page is given up to an extract from some well known poem, which is illustrated in the most striking manner. The mind of the poet, the pencil of the artist, and the skill of the engraver and printer have all combined to render this work attractive. What wonderful lessons it would teach, what wondrous good it could accomplish if it could be placed in every family in this land. Beauty, love and faith speak out from its pages. We gladly commend it to our readers as the most helpful of the holiday books we have seen. We wish all could secure it. The price varies from $6 to $12 according to the binding.

Woman's Work.

CONDUCTED BY EMILY LOUISE TAPLIN.

"ALWAYS SUNRISE SOMEWHERE."

There is always sunshine somewhere!
  Though the night be round thee drawn,
Somewhere still the east is bright'ning
  With the rosy flush of dawn.
What though near the bat is flitting
  And the raven croaks his lay,
Somewhere still the sun bird's greeting
  Hails the rising of the day!

Let us lay to heart the comfort
  In this sweet reflection found,
That however dense our darkness,
  Somewhere still the world around
Dews are glistening, flowers uplifting,
  Wild birds warbling, as re-born:
Lakes and streams and woods and mountains
  Melting in the kiss of morn!

Ne'er was night, however dismal,
  But withdrew its wings of gloom;
Ne'er was sorrow, but a day-star
  Hinted of the morrow's bloom;
Ne'er was woe, but in its bosom
  Was the seed of hope impearled,
There is still a sunrise somewhere
  Speeding, speeding round the world!

—*Credit lost.*

OF INTEREST TO WOMEN.

In spite of all the ridicule showered upon the upholders of women's rights, here and there one of the sterner sex views this movement with approval. And of all trenchant, witty words on the subject the brightest are those of Robert J. Burdette. He says he is a woman suffragist because a woman has more good, hard, common sense than a man. Because she makes less bluster about her rights, and quietly maintains them better than a man. Because she won't give a dollar and a half for an article that she knows very well she can get for seventy-five cents. Because she does not stalk loftily away from the counter without her change if the robber behind it is a little reluctant about counting it out. Because she is too independent to pay the landlord two dollars for her dinner and then pay the head waiter a dollar to send her a waiter who will bring it to her for fifty cents. Because she will hold her money tightly in her own good little right hand for two hours until she first gets a receipt for it from the fellow who made her husband pay the same bill five times last year. Not any "just give you credit for it" for her. "One day," continues Mr. Burdett, "a Pullman porter complained to me: 'No money on this trip; too many women aboard. Don't never get nothin' out of a woman 'ceptin' just her reg'lar fare.' I had just paid him 25 cents for blacking one of my boots and losing the other. And when he said that, when I saw for myself the heroic firmness of these women, traveling alone, paying their fare and refusing to pay the salaries of the employés of a wealthy corporation, I said: 'These women have a right to vote. To vote! By all that is brave and self-reliant and sensible, they have a right to run the Government.'"

CONFESSIONS OF A COUNTRY GIRL.

NUMBER ONE.

I am a rural maiden, and I live in a secluded valley, "far from the madding crowd." Tall hills on either side shut out the world beyond, until I feel like Robinson Crusoe on his island, only, as Mrs. Gamp says, I was born in a wale, and must take the consequences of such a situation." Rare glimpses of city life make me feel as if the outside world was so large, and my own corner so small, that I am like a caged robin beating his wings against the bars. I love the country. To see the rocky, tree-clad hills a midsummer day, with blue haze clinging about their rugged sides; to watch the changing landscape from season to season; to live and breathe among the wholesome country atmosphere is keenest happiness. But, alas! sunshine and landscape alone are not allowed to fill the mind of a farmers' daughter. Nature may give a pressing invitation, but there's bread to bake and churning to do; the spare room must be swept, and when one is not cooking or waging a never-ending conflict with dirt and disorder, there are stockings to be mended and buttons to be sewed on. Thrice happy are men who are not obliged to wrestle with their dinner before eating it, and who can put on a garment without previous examination as to its integrity! You will think from my tone of complaint, that I'm not a model girl. That is a melancholy truth. I have the best intentions in the world, but I am always burning my pies, or breaking crockery, to say nothing of ruining my clothes in my woodland tramps. And when I manage to get a new book—it is not often, for literature is scarce enough with us—I forget the outside world until a cry of "Patty, Patty, where is that child?" interrupts my day dreams, and my mother says:

"You've forgotten those towels you were to hem, child, and while you are at it, here are Father's stockings to be mended."

Then my beloved magazine or still dearer romance is put aside, while I try, dutifully enough, to fulfill my mother's behests.

I have been reading some statistics lately, telling us how many farmers' wives yearly grow insane. I think it was Washington who said: "Agriculture is the most useful, the most healthful and the most ennobling of occupations." Strange, that these three-fold blessings seem to descend upon the farmer, without including his wife. I live in a fairly prosperous community, but even here the women age much earlier than the men, and have a more anxious, careworn look. This ought not to be, but it is such a noticeable fact that one is inclined to think it doesn't pay to be a woman. Simple domesticity, to the exclusion of every other interest, is the leading cause of this condition. The only cure is undoubtedly change and other mental occupation. An old English proverb says, "He who drinks beer, thinks beer," and the woman who spends eighteen hours a day in grinding work and cares will certainly think only of grinding work and cares. But every busy housewife to whom this applies will tell you at once that there is no possibility of lightening her work. There is the possibility, but it means neglect of some so-called duty. Duty ceases to be duty when it injures the bodily or mental health. Dear, dear! I'm only a girl, but I do want to get up and tell all the overworked farmers' wives to take a little rest and comfort as they go along, and remember their duty to themselves as well as to others. There, I have finished my little homily; next week I want to say something to the girls, if my audience will listen to me.

PATTY GARTON.

ECONOMY IN FURNISHING A PRETTY PARLOR FOR SEVENTY-FIVE DOLLARS.

Many young people, just starting in life, are sorely exercised in mind by the apparent impossibility of combining taste with cheapness. It is hoped that the present article will be of some assistance in such a case. We have a somewhat difficult task before us—with a small sum of money and a large outlay of taste and ingenuity we are to produce, like Madame Arachne,

"The prettiest little parlor that ever you did spy."

We may imagine a plain, square room, lighted by three windows; the hard-finished walls tinted a delicate flesh-pink, the ceiling a soft greenish-gray. Around the wall, next the ceiling, is a frieze or border of maroon and gold paper, about six inches deep. The tinting is done with kalsomine, and is pretty, durable and inexpensive, possessing many advantages over paper.

The first thing to be considered in our ideal furnishing is the floor, and here arises a most important question, to carpet or not to carpet. Looking practically at the matter, a good ingrain or Kidderminster carpet will certainly absorb one-third of our purchasing money—the most ordinary Brussels much more, leaving little for more than barest necessaries. From an æsthetic standpoint, no room has a right to a carpet until it possesses some added touch of beauty, a graceful vase or dainty etching. So we decide to be carpetless, save for a large rug in the center of the floor, which leaves about three feet of bare floor on each side. A second rug is placed in front of the fireplace or stove. The boards of the floor should be either oiled or stained. If it is wood with a handsome grain or color, such as yellow pine or oak, oiling will be most effective. Use linseed oil which must be applied hot; the easiest way is to have a pan of hot coals, and stand the oil in a cup on this. Put it on the floor like paint; the hotter it is the sooner it will dry. A room of the given size would probably take about three quarts of oil; cost, sixty cents a gallon. If we wish to stain our floor, we can buy staining material at a paint shop to imitate any wood—cherry, walnut, etc.; it costs about the same as the oil, and is applied like ordinary paint. Either oiled or stained, a coat of shellac varnish would greatly improve the floor, giving it a very handsome polish. Our two Smyrna rugs, which must show crimson as their prevailing color, will cost about fifteen dollars, so the carpet question is solved, both artistically and economically.

The windows next claim our attention. We should get good shades of Scotch holland; they are a pretty tan or écru, giving a very pleasant light to the room. With spring rollers all complete, they will cost a dollar and forty cents each. The windows may be finished with poles and lambrequins, the poles being ash with wooden rings; they will probably cost about seventy cents each. The lambrequins should be plain breadths of crimson felt, or some mingled curtain stuff, three-quarters of a yard deep. This should be fastened to the rings, so that it will fall in straight folds from the pole. It is impossible to give more than an estimate of the price, but poles and lambrequins complete need not cost more than five dollars.

Fortunately for us, parlor sets are out of date, and it is not at all necessary to have even two chairs alike. So we will buy one pretty willow rocker, three quaint little chairs of light wood, which lend themselves very readily to the decorator's art, a restful, sleepy-hollow chair, and a tête-a-tête lounge, the two latter articles being upholstered in jute. Our seats should amount to about 31 dollars.

Next we should get a little gypsy table, and decorate it ourselves, covering the top with crimson felt, drawn smoothly over the edge, trimming it with furniture fringe fastened on with brass-headed nails. The table and its "fixins" will cost but two dollars, and it makes a charming little stand for our nick-nacks. We will then be extravagant enough to purchase a library table of ash, the top covered with crimson felt, which will cost us 10 dollars. On this we will stand our lamp and our pet books, but *not* the family Bible, carefully covered with a crocheted shroud, as is the custom in many country households. Sacred and devotional books should find their fittest place on the dressing-table or bedside bookshelf—it seems wanting in respect to lay them side by side with albums and gift books.

We may now consider our heavier furnishing finished; we have our necessaries, and next turn our attention to the superfluities which may mean so much, or so little according to the taste of the designer. We have about seven dollars to spend in this direction, and the first object of our care must be the mantel. An observant writer says he can always judge a woman's taste by her parlor mantel, and though this may seem a sweeping assertion it is in most cases very nearly true. Marble mantels, with that attendant horror, the marble-topped centre-table are now relegated to the eternal shades; whether wood or marble, our shelf must be covered by a lambrequin or scarf. A new and graceful style is to have

the lambrequin hanging curtain-wise from a pole at the back. For this you require a curtain pole—corresponding, of course, with those at the windows—the length of the mantel-piece. This is fastened to the wall 15 inches above the shelf. The scarf or lambrequin is a strip of dark crimson felt 27 inches deep. It is fastened to the rings of the pole, hanging flat against the wall to the shelf, where it is held by a few invisible tacks to keep it from slipping forward. It covers the shelf, hanging over the edge, for the depth of about two inches. At each end the piece covering the shelf should be about 15 inches longer than the curtain-part at the back, so that it will hang over the ends with a scarf-like effect. The ends should be decorated with embroidery, and edged with gilt crescents. A charming trimming, and one within the reach of those not gifted in embroidery, is cretonne outlined in tinsel. We do not mean appliqué work, but bands of cretonne, with the pattern both outlined and filled in with colored tinsel, and the background worked with crazy stitch floss. Cretonne with a handsome arabesque pattern should be chosen, showing up distinctly on a dark or light ground; it looks like some quaint oriental stuff when worked. And the wall decorations? Well, you may soon accumulate from art publications a few dainty etchings, to be surrounded by gray-white mats and flat bronze frames—you may happily possess some of your grandmother's plates, which are fastened to the wall by placque hangers, and a corner bracket or two would support charming, but inexpensive plaster casts. Your mantel drapery will show off your china to great advantage, and though inexpensive in the extreme, our ideal parlor will be a joy forever to its deft-fingered creative genius.

SOME WAYS AND THINGS AT THE RURAL GROUNDS.

ALICE BROWN.

It is the middle of November; the soberest aspect of Autumn is here and gives promise that Winter will not delay its coming much longer.

The trees are nearly leafless, the Golden Oak and the Weeping Beech are almost the only deciduous trees still holding a few green leaves.

The hurry and push that came with the growing buds and rampant weeds of Spring in fields and gardens, settled into more leisurely work as the leaves fell and the weeds were killed by frosts. But when the active worker finds nothing to do in the fields he continues his work indoors. So here, although the Grounds are deserted, the household is as busy as ever. The children took up their studies the first of October, the house-cleaning began soon after, the work on the seed distribution will soon commence, and a Winter of work lies mapped out before us.

Regular duties, regular studies with some purpose and some aim in life, seem to be the watchwords here, and added to these some pleasure, some happiness in each day if possible. The necessity of work is recognized in many households where the need for recreation is quite forgotten.

The routine here includes a variety of duties; house-work is planned so that each day of the week has its regular share. The washing is done on Monday by a woman living in the neighborhood. On Tuesday the ironing is begun by the girl employed in the house. On Wednesday the week's cleaning begins in the kitchen and the upper and lower hall, on Thursday two bedrooms are cleaned and a third one on Friday. On Saturday the halls and kitchen are again cleaned.

Mrs. Carman makes the bread for the family, twelve loaves every week, irons the "gude mon's" collars and often his shirts, superintends the cooking, sometimes making soups and cooking savory dishes that call forth warm praises from the children; these things and a hundred others she does and does well, in addition to her editorial work and regular studying. It is a source of pleasant wonder to me where she finds the hours for all she does. The RURAL is indebted to her for its carefully prepared index, and every week part of one day is given to the work of indexing the last paper.

Two hours every day are spent in reading the agricultural papers of the country for items that the RURAL readers find under "What Others Say." Parts of Thursdays and Fridays are given to the work of editing her department. An hour or two of study in some text book, chemistry, philosophy, botany or Latin takes its share of every day. Just now Mrs. Carman and I have joined Cerise in her study of Arnold's First Latin Book, and we recite together four days of each week in the editor's "paper carpeted" sanctum.

At half past three, when school is finished for the day, we spend about half an hour in a brisk walk. These walks are a daily pleasure and are better than anything else to make Winter seem cheery; we share all its moods and see its beauties.

Snow and rain and sticky roads only call out wraps that defy them and overshoes that protect from their moisture and mud. Sometimes in our walks we go to the east toward River Edge, sometimes west, a favorite walk through a lane to the top of a gentle slope, where we look eastward over intervening valleys to the wooded Palisades of the Hudson, or we go north and south along level stretches of country road bordered by sumacs, blackberry vines, gray heads of the golden rod in its winter guise and the seed umbels of the wild carrot that open and close in a curious fashion with the changing weather.

To one who has never tried the plan of going out every day through the Winter, it seems like an impossible thing for a busy person to do. Or if not impossible, a disagreeable thing. "What would the neighbors say to see me walking, as though for a wager, past their houses every day?" is often the first and final objection to the plan. But if undertaken, the oddity soon wears away, while the benefits are lasting. Suitable wraps are very necessary, not showy or expensive, but warm and not too heavy. Goods from an old felt skirt, lined with the material from an old woolen dress, made me a short warm sack for my walks all one Winter; mittens, hood and overshoes completed the outfit.

If dressed thinly so the wind pierces through one as soon as he steps from the door, little benefit will come from the out-door air. But comfortably wrapped there is a sense of freedom in defying the wintry air, and a feeling that the country in its leafless sleep is all one's own.

When we began our regular walks about the first of November, we could not go far without feeling tired, but a little practice has brought back our strength of last Winter, so when we have time enough, two miles seem short.

Supper is a little after five, and the evenings are divided between pleasure and study. While Mrs. Carman reads aloud to Mr. Carman in his office, from books, magazines or papers, Cerise spends an hour at her lessons, Travers amuses himself in a variety of ways, and my time at present is given to Latin conjugations and declensions.

The first hour after supper is often spent in the parlor, where Mrs. Carman plays the piano, Mr. Carman the violin or banjo, Cerise the banjo, and Travers finds music in a tambourine. Saturday evenings all work is laid aside and it is made a time of social pleasure. One of the assistant editors, who lives near, often comes in to widen the circle and join in the games or music.

Times of depression and gloom come here sometimes, when work seems hard, when the country seems lonely and nothing seems worth the effort needed to gain it. Who is there that does not know what the feeling is? Who does not want at times to fly away from the routine of his life? But the old feeling of pleasure in everyday living comes back again and the household skies brighten once more into gladness and enjoyment of simple, common pleasures.

FANCIES IN CHINA.

The changes of fashion in china and table decorations are as arbitrary, and to many feminine minds more interesting than those in dress.

A cracker-jar is a new addition to the regular dinner set. It is about the size of a quart fruit can, is prettily decorated and has a close fitting cover.

For celery there comes a flat boat-shaped dish with a long curving handle like the neck of a swan. Little dishes for fish sauce in the shape of a plump fish have one side hollowed out as a receptacle for sauce; the tail turns upward slightly curved and serves for a handle.

A new roll tray has a decoration in facsimile of a folded and fringed napkin laid on the dish. They are pretty for hot breakfast rolls or may be used for boiled corn, being oblong in shape.

Bone dishes, now accompany all the nice dinner sets. They are curved so as to fit the rim of the plate, and are placed close to it to receive the bones and debris that otherwise would encumber the plate.

Oatmeal bowls about two inches deep, with fluted or fancy edges have saucers belonging to them. They cost about 30 cents each.

A platter that is not altogether new, but very convenient has a corrugated bottom, and slopes slightly toward one end where there is a gravy well. SELMA CLARE.

GOLDEN GRAINS.

Everyone must see daily instances of people who complain from a mere habit of complaining; and make their friends uneasy and strangers merry by murmuring at evils that do not exist, and repining at grievances which they do not really feel .....

Dr. Packard says we may, in one sense, make too much of our work, our responsibility, our pressing anxiety for souls. Jesus Christ invites us to himself, to enjoy his word, and be comforted in his presence. This is as much our prerogative as it is that of any of our hearers.....

Religious work may usurp the place of religious life, and we may be so anxious for success in high and truly great things, that devotion and love and peace and joy may come to stand as secondary. They are primary. That is our first call—to Christ's side. Thence he sends us out with his love in our hearts .....

Perhaps a revival would come soonest if we forget it, and drew nearer Christ. And yet we are to use common sense methods in arousing and guiding the public mind. We must watch and pray.....

Thomas Manton says: "As husbandmen when their ground is overflowed by water, make ditches and water-furrows to carry it away, so when our minds and thoughts are overwhelmed with trouble, it is good to divert them by some other matter. But every diversion becometh not the saints; it must be a holy diversion as with the Psalmists: 'In the multitude of my thoughts within me, thy comforts delight my soul.'".....

The Baptist Weekly reminds it readers that the cheerful are the busy. When trouble knocks at your door or rings the bell, he will generally retire if you send him word you are engaged..... .....

Domestic Economy

CONDUCTED BY MRS. AGNES E. M. CARMAN.

CLOTHES POUNDER.

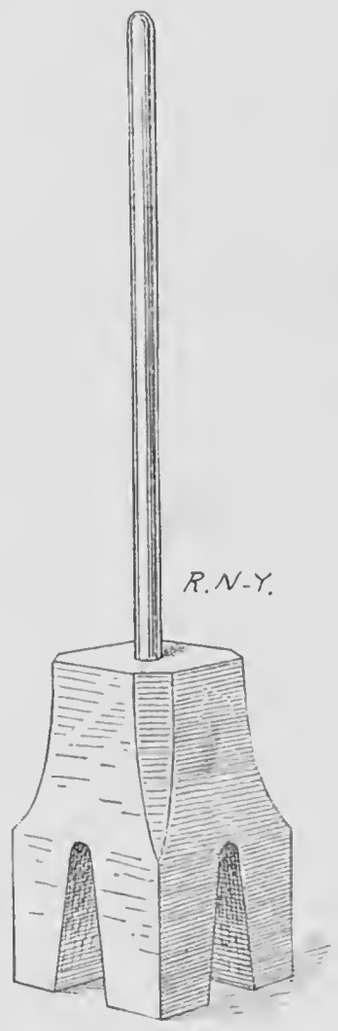

Fig. 449.

The above is very convenient as well as a labor-saving device for washing quilts, blankets and all kinds of woolen goods. It is made out of a block of dry basswood eight inches in length and four in width. The upper half is shaved away until it is barely three inches across the top, and the corners are cut off as shown in the illustration. V-shaped pieces are sawed out of each side, leaving four prongs. Bore a hole in the top large enough to insert an old broom handle and the thing is done. CANADIAN.

CHRISTMAS STITCHES IN SANTA CLAUS LAND.

ANNIE L. JACK.

So many stockings to fill! I do not wonder that Mr. and Mrs. Santa Claus often get tired and discouraged, especially when they do not know how their gifts will be received. I called upon Mrs. S. quite lately. She does not get much credit for helping the old saint, but like many another wife, is content to let him get all the credit. She was busy knitting a blue wool toque, a chain for a foundation large enough for some fair-haired miss; then she added four chains to the foundation, then three loops through the other three of the four and three loops through the following two loops of the foundation; pull a loop through all the loops now on the needle, one chain, take up five loops, the first through the stitch above, where the five loops were worked off together. Many people prefer to make their own familiar stitch in crochet, but the toque must be three-eighths of a yard long. Join the ends neatly, gather the top of the cap and place there a crocheted cord and tassel. Tack this with the end down on the join to conceal the seam, and then turn the cap up to suit the face.

Another very useful thing she was making for an old lady was a pair of foot muffs. They were of double wool on wooden needles. A strip a little wider than the length of the foot, knit backward and forward till the piece was 20 inches long, then cast off, and the ends sewed together into a bag with an elastic in it to fit the ankle. Lying in a basket about the workshop were some very pretty calendars; and I found that she got them from merchants who gave them away—and with a pot of glue she pasted them on to pretty artistic backgrounds, either cut out or painted, for she can use the artist's brush to advantage. I noticed, too, that in dressing dolls she had a lot of cardinal Jerseys, and they were all made out of some closely woven but half-worn stockings.

In the workshop I saw all the work that this industrious wife had done. Pretty photograph frames in birch-bark, and canoes and baskets of the same material, filled with moss and bitter-sweet, or with home-made candy. There was a fire-screen, too, made of the pretty, shiny feathers of tame ducks and other fowl, stitched on to a five-cent fan that had first been painted brown. Then there were some cheap dus-pans that were similarly painted, with the handles done in red, and tied with a ribbon. Many a housekeeper would value this better than some useless article. A pretty gift where ferns and autumn leaves can be obtained, is made by bleaching some of the former in soft water and chloride of lime. Cleanse them after rinsing in clean water, with blotting paper, and pin up stiffly; the autumn leaves are simply pressed. These on paste-board in the shape of a placque and mounted in velvet, are bright and pretty pictures, of interest to the giver and the recipient, if place and date of gathering are mentioned in a corner.

There were splendid stocking bags in Santa Claus land, made of cretonne and gathered at the top with little rings and ribbons, and I saw the loveliest cushions all filled with balsam needles and having different covers according to fancy; but substantial enough to put one's head on them for rest and healthful breathing, and I suggested to the old lady that I thought she ought to have a few hop pillows, for if she could grow the hops the pillows would only cost the making up in pretty cretonne, and would be a great comfort to sleepless people or those that suffered from headache. She had a lot of boxes and baskets filled with fruit—grapes or apples, or assorted baskets—and I felt sure they would prove very acceptable gifts to those who did not have them without purchasing. A pot of hyacinths or other plants would be another nice gift.

ONE WINTER.—IV.

ANNE THRIFTY.

We all rose from the table to welcome our visitor. He handed the jug he carried to Sammie, and the sack to Uncle John, saying "The women folks sent these things to you; they don't amount to much, but we thought Annie 'd like some real country fixings to cook with, so I brought them along." While he explained, the boys had found that the jug contained sorghum molasses, and their beaming faces showed how much the discovery delighted them, for they were as fond of sweets as young cubs. Uncle John invited his brother-in-law to a seat at the supper table, but he had eaten supper with a friend who came in from the country with him, so Uncle John turned his attention to the contents of the sack while he asked after all the relatives at Rockmade Farm. A smoked ham, two bags of dried apples, one of sweet, the other of sour apples, and a peck of popcorn came out of the depths of the sack.

Country housekeepers with ample stores of all kinds in cellar and closet can hardly realize how I valued these things from the farm, and the thanks I tried to express were not half what I felt.

These simple gifts coming as they did at the close of a happy Thanksgiving Day, made us all feel doubly thankful. We lengthened the evening and allowed the boys to sit up to "see Uncle Rob," as they begged to do, until he bade us good-by and good night, and left us to join the friend he had brought with him to the city.

The holiday over, we all went to work again and as I put away the dried fruit the next morning the remembrance came to me of a cake my mother sometimes made of dried apples. We had considered cake beyond our

means altogether, but now I determined to make one for a Christmas surprise. The cake though to be made of dried apples and sorghum molasses would be, I knew, a good fruit cake if I succeeded with it, for when made by my mother we had all thought it equal to many more expensive fruit cakes and less indigestible.

Waiting until the next week, when the boys were away at school, I put some of the sweet apples to soak over-night, and the next morning, as soon as the boys were out of sight, chopped three cupfuls into pieces about the size of a pea, and put them into two cups of molasses to simmer until waxy. While they stewed I searched through the cupboard for spices, but could only find a little cinnamon. This was an unexpected discovery, but having begun the cake, some plan must be devised to finish it. I wanted to surprise uncle and did not want to ask for a little money without saying how it would be spent. I had a dollar and a half of my own I had been saving to spend for a distant friend at Christmas time, but now I decided part of that should go into my cake and less into my Christmas token. When the apples were almost candied, I put them high in the safe to cool, and, locking the house, went out to buy the spices I needed and a little coffee to use as a spice, getting home with them just in time to prepare dinner. Having little variety to cook, I was often puzzled to make it seem more by varying the cooking. On this day I hit upon a dessert that pleased the boys very much. Popping a dish full of pop-corn we ate it with milk and salt and called it popped pudding.

When the boys were off for the afternoon I made haste to get my cake ready for the oven. Stirring together a large spoonful of butter, two eggs (carefully saved for the purpose), a half cupful of sugar and a half cupful of milk, I was soon ready to add the apples, spices and a tablespoonful of finely ground coffee, two teaspoonfuls of soda and five cups of flour This made a large cake, and I left it in the oven with a steady heat for an hour and a half. The odor of the spices filled the kitchen with their fragrance, and I feared my surprise would reveal itself at once; but fried ham for supper soon filled the kitchen with another odor and the cake was safe from discovery.

FOR WEAK EYES.

A FRIEND writes: "A famous oculist, Dr. Merrill, of Albany, N. Y., whom I consulted for weak eyes, advised me to dash quite warm water half a dozen times over my closed eyes twice a day, and to dry them carefully before opening. This simple remedy regularly and persistently followed, helped me when more pretentious ones failed."

INEXPENSIVE SIDE DISHES.

A DELICIOUS little side dish will often redeem a dinner from absolute inferiority. The remnants to be found in even a small larder will generally suffice to make some dainty at little more than the cost of the trouble. Odds and ends of game and poultry are especially happy in possibilities. Mince the meat as finely as your patience will permit; fry some fancy shapes of bread and spread them with the mince; sprinkle over this some ham that has been finely minced with parsley; if a hard-boiled egg is also chopped with the ham, it is a pleasant addition, and a good use for an egg that may be left from breakfast. Canned chicken or turkey may be used in the same way. A cream sauce poured around these *croutons* with the mince makes another pleasant change.

The few spoonfuls of cold boiled rice that looks so blue and unappetizing that there seems no excuse for not throwing it away, can be very easily converted into sweet or savory morsels. Here is one of the latter: Take equal quantities of rice and bread-crumbs, half as much minced bacon or fat meat cooked, and double the quantity of that in lean cooked meat, also minced. A few bits of underdone beef or a little stuffed veal is especially nice. Add the usual seasoning for croquettes—salt, pepper, nutmeg, parsley, and if you have any at hand, a very little cooked onion. Moisten this with a little stock and bind with a beaten egg; shape them in round or oval cakes and fry brown in hot fat. Cooked macaroni, cut into very small pieces, may be used instead of the rice.

The remains of a tin of anchovy or shrimp paste that is often thrown away, can be utilized in making the celebrated "Club or Indian Toast." Make some hot buttered toast, and spread over a very little curry paste, and next a tiny bit of anchovy or shrimp paste. While this is being prepared, have in the oven two or three boned sardines, spread with butter and seasoned with lemon juice: as soon as they are hot through, lay them on toast and serve.

Boudinettes (small sausages) can be made from almost anything in the way of fish, flesh or fowl. Mix a quantity of either finely minced with half its weight of mashed potatoes, and a little sauce, parsley, anchovey, or even plain melted butter, or a spoonful or two of cream may be used instead of either. Make all this hot, seasoning nicely, and stir until it leaves the bottom and sides of the saucepan. When cool, add one beaten egg for each pint bowlful of the mixture, mold into little balls, dip in beaten egg and bread-crumbs and fry.

Oyster *boudinettes* are great dainties. They may be made from canned oysters, but, of course, are better if the fresh are used. Melt an ounce of butter in a saucepan, add an ounce of flour and cook for two minutes, then stir in one gill of cream and another of milk, and a cupful of minced oysters, add to the usual seasonings, a dash of anchovy sauce, and the least bit of grated lemon rind. Add a beaten egg, dip in egg and crumbs and fry.

The making of salads is another way in which remnants can be utilized. A good fish salad can be made as follows: Cover the bottom of the dish with flakes of cold fish, next put a layer of potatoes (cold, boiled, of course), then some boiled beets thinly sliced and celery cut into dice. Cut two or three pickled gherkins into slices and two hard-boiled eggs, and add them, with a few capers, to the dish. Cover with a thick salad dressing for which several different recipes have been given in the RURAL, garnish with celery tops.

Stewed apple pudding is wholesome and will be liked by many Pare and quarter two quarts of tart apples, and put them over the fire with a tablespoonful of butter and a cup of sugar and another of water; meantime mix a pint of flour with two scant teaspoonfuls of baking powder, one of sugar, and half a teaspoonful of salt; wet this with a scant teacupful of milk, and roll the dough down to the size of the cover of the pan in which the apples are cooking. Spread it over the boiling apples, draw the pan where it will simmer, and cook for 25 minutes. Slip a skimmer under the crust, lift it into a dish, pour the apples into a deep dish and place the crust on top. A homely sauce for this is made by boiling half a cup of molasses and one of water for three-quarters of an hour. It is excellent if simple cream is used for a sauce.

PALMETTO.

DOMESTIC RECIPES.

PLAIN TEA CAKE.

THREE teacupfuls of dry powdered sugar, one cup of butter, one cup of sour milk, three pints of flour, three beaten eggs, half a teaspoonful of soda, flavor to the taste. Roll thin and bake in a quick oven.

NAMELESS CAKE.

ONE cup of sugar, whites of four eggs, one-half cup of butter, one teaspoonful of lemon essence, one large cup of flour, one-half teaspoonful of soda, one of cream-of-tartar stirred in the flour.

WHITE CAKE.

WHITES of three eggs, one cup white sugar, two teaspoonfuls of cream-of-tartar, one of soda, one half cup of sweet milk, butter size of an egg, three cups of flour.

MRS. H'S SUET PUDDING.

ONE cup of suet, a little more than one cup of milk, one cup of molasses, one cup of chopped raisins, four cups of flour, three teaspoons of baking powder, a little salt, one teaspoonful each of cloves, allspice and cinnamon. Steam three or four hours.

AUNT MINA'S GINGERBREAD.

Two cups of molasses, one cup of cream, one cup of butter, two tablespoonfuls of pearlash, piece of alum size of a pea.

GINGERBREAD NO. 2.

ONE-HALF cup of sugar, one cup of molasses, one cup of butter, one egg, two-thirds of a cup of hot water, two cups of flour, two-thirds of a teaspoonful each of ginger and cinnamon, one teaspoonful of soda.

DOUGHNUTS; MOTHER'S RECIPE.

Two and a half cup of sugar, four eggs, one cup of thick, sour cream, one teaspoonful of soda dissolved in a tablespoon of hot water, salt and nutmeg.

KATE'S RECIPE.

ONE and one half cups of sugar, one cup of buttermilk, two eggs, four tablespoonfuls of melted butter, one teaspoonful of soda, one of salt, half a teaspoonful of cinnamon.

CARRIE'S RECIPE.

ONE and one half cup of sugar, three eggs, one cup of sweet milk, four or five tablespoonfuls of melted butter or lard, a teaspoonful of salt, a pinch of cinnamon and allspice, two teaspoonfuls of baking powder stirred in the flour.

MRS. J'S COOKIES.

THREE cups of flour, one cup of sugar, one cup of butter, two eggs, three tablespoonfuls of sour milk, one even teaspoonful of soda, one of extract of lemon.

MRS. B'S COOKIES.

Two cups of sugar, four eggs, half a teaspoonful of cinnamon, five tablespoonfuls of sweet milk, one teaspoonful of soda, one teacup of butter, not melted but rubbed in the sugar.

HARTSHORN COOKIES.

THREE cups of sugar, two teaspoonfuls of Baker's Hartshorn, pulverized, one pint of cream, or half cream and half buttermilk. Mix, roll out and bake any shape desired. Much relished by invalids. AUNT RACHEL.

CREAM CAKE.

ONE cup of butter, two cups of sugar, whites of two eggs, three-and-a-half cups of flour, one cup of sweet milk, one teaspoonful of soda, one teaspoonful of cream-of-tartar For the cream: one pint of sweet milk sweetened to taste, yelks of three eggs: thicken with flour to the consistency of custard, flavor with lemon. This amount makes two good-sized cakes.

VIRGINIA APPLE CAKE.

TAKE one cup of bread dough, work into it one egg, one-half cup of butter, and one-and-a-half cup of sugar. Roll about one inch thick, put in a long pan, then slice good cooking apples smoothly over the dough, sprinkle with sugar, butter and cinnamon and bake. It is a grand favorite for tea cake.

FRIED APPLES.

PARE nice sour cooking apples, cut crossways, remove the core, roll in flour and sugar mixed, and fry in hot lard or butter, when brown on one side turn over. Please try them.

MRS. H. C. U.

TRIED RECIPES FROM VARIOUS HOUSEKEEPERS.

POTTED SHANK.

BOIL a shank of beef till tender, chop the meat up, and season it with salt, pepper and (if liked) half a nutmeg. Reduce the liquor to three pints, add the meat, cool in a mold. It should turn out well when cold.

TOMATO SOUP.

SKIN and stew sufficient ripe tomatoes to make a quart. Add salt, white pepper, a bit of butter, a small teaspoonful of sugar and either a quart of milk or half milk, half stock. Thicken with three pounded biscuits, boil up and serve. This soup bears heating up well. Where tinned tomatoes are used, boil them with half a teaspoonful of carbonate of soda before adding the ingredients.

BREAD FRITTERS.

CUT thin round slices of bread, butter them very thinly, spread with jam and stick together in pairs. Fry in boiling lard, after dipping them in a batter of one egg, one pint milk, a pinch of salt and flour enough to make a pancake batter. Pile high on a dish and sprinkle with sugar.

CORN FRITTERS.

GRATE cold boiled corn from the cob, season, add three beaten eggs and sufficient flour to give them consistency. Drop in large spoonfuls into boiling lard or dripping, and fry a nice brown. Canned corn may be used.

CURRIED EGGS.

MELT a little butter, stir in a teaspoonful of curry powder, add by degrees a large tablespoonful of flour, and a cup of stock, season. Boil six eggs hard, cut them in halves, put neatly in a deep dish, pour on the sauce, and keep all hot a little before using.

It is always pleasant to exchange recipes with other housekeepers, to learn their methods and be benefited by their experience. A good plan is to keep a book and paste into it all the good things one finds in stray newspapers to be tried at leisure. In this way one learns many housekeeping details that would otherwise be lost, and can compare methods and choose the best. A. L. J.

COOKED CELERY.

Stewed celery is such good eating that we wonder at its not being more popular. One day we eat in the raw state only the tender, blanched stalks from three or four bunches, while the coarse, given parts are put into water and set in a cool place until the next day. The pieces are then cut into inch lengths and stewed in only enough water to keep from burning until perfectly tender—time usually two hours. Drain off the water, add a cup of milk, and season with butter, pepper and salt. Occasionally we vary this method of cooking and have what we call "winter asparagus." Cut into six or seven-inch lengths; tie into bunches, bind up with a bit of white mosquito net, and cook in salted water until tender. Toast some thin slices of bread, put on to a platter, arrange the celery on the toast and pour over all a dressing made of a pint of milk slightly thickened with a little corn starch, and seasoned with pepper, salt and a spoonful of butter. Pieces of lemon are pretty as a garnish, and the juice is an acceptable addition to many persons.

Miscellaneous Advertising.

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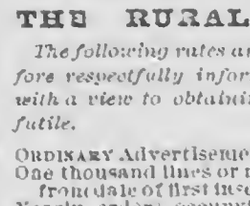

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News of the Week.

HOME NEWS.

SATURDAY, Nov. 27, 1886.

THE funeral of ex-President Chester Arthur took place from the Protestant Episcopal Church Heavenly Rest in New York, Monday. No services at the house. Large crowds in the street, but no display. Among those present were President Cleveland, James G. Blaine, Roscoe Conkling, ex-President Hayes, Governor Hill, mayors of various cities, the Congressional delegations, representatives from the United States Supreme Court and former members of Arthur's Cabinet. The funeral train left for Albany at 10:20 A. M., where it arrived at 1:22 P. M. Thence it proceeded almost immediately to the Rural Cemetary. Here Bishop Doane read the burial service of the Protestant Episcopal Church. All members of the Albany city government were present, and all public offices were closed during the funeral..... .At the close of business October 30, of the $1,153,443,183 interest-bearing debt the books of the Register of the Treasury show that $1,011,222,062 was registered. Of this amount $11,688,100 was held by foreign holders, $292,583,200 by the Treasurer of the United States for national bank securities, and of the remainding, $706,950,762, insurance companies held $61,507,000; savings banks, trust institutions, etc., $118,597,000, and individual trustees $456,846,762. Only one per cent. of the registered bonds is held abroad. There are about 53,500 individual and trustee holders, representing $466,846,262, or an average of $8,726 each ....There are scandalous reports that Judge Manning, of Louisiana, the newly appointed Minister to Mexico, has been grossly drunk at the Mexican capital. The charges are lightly regarded at the State Department. There appears to be a clique of scandal-mongers down there..... ...Erastus Brooks, the well-known editor and politician of this city, died at his home on Staten Island on Thanksgiving morning.....Ex-Gov. Chaney, of Manchester, N. H., has been appointed United States Senator to succeed Austin F. Pike, deceased... .....H. M. Hoxie, first vice-president of the Missouri Pacific Railroad, died in New York, Tuesday. He had entire control of the Gould Southwestern system during the great strike last Summer, and his great exertions thoroughly broke him down. He had filled nearly every position on a railroad from brakeman to vice-president.....Ex-Vice-President Wheeler is said to be a total wreck physically and mentally at his home in Malone, N. Y., and a physician is in constant attendance..... ....Senator Wade Hampton while deer hunting on his Mississippi plantation, on Monday, became separated from the rest of the party, who, toward evening, supposing that the Senator had left the field, returned home. At eight o'clock that night General Hampton being still absent, a searching party started out and found the old General a short distance from the house, much exhausted and painfully hurt, but making his way homeward. At about three o'clock in the afternoon, as he was riding through a thick wood where vines were numerous, a "Supple Jack" vine caught his gun and discharged it, the load of buckshot entering the head of his horse, killing the beast instantly. The animal fell on Senator Hampton, and in his mained condition it took him some time to extricate himself. He had been walking through the woods for nearly five hours with only one good leg ....Ex-Gov. John S. Phelps, of Missouri, died at St. Louis Saturday night at the age of 72. Born in Simsbury, Ct., was educated at Washington, now Trinity College, and went to Missouri in 1843..... .. ....William Reed, Treasurer of the South Boston Horse Railroad Co., has embezzled $104,000—turpitude going on for five years; meanwhile he has had a high reputation for religion and honesty....Owing to excessive charges of the Bell Telephone Company, 400 users of phones in Rochester, N. Y., struck on November 7. They have been trying a new telephone invented by Dann and Lapp, of Honeoye Falls, N. Y., and it is said to give entire satisfaction. It is constructed on the principle of making and breaking the circuit instead of having a continuous circuit, as in the Bell telephone. It doesn't infringe on the Bell patents, and a new company to run it is being organized . .The estimated whiskey product of Kentucky for the year ending June 30, 1887, is 13,503,837 gallons.....The Treasury Department has decided that anchovy is dutiable at the rate of 35 per cent. ad valorem.... ... Five hundred acres have been added to the St. Joseph stock yards, and $200,000 will be expended upon them.....A dispatch from St. Louis says another strike on the Atlantic Railway system is imminent unless concessions are made to the employés.....Thanksgiving's storm on Lake Michigan was the severest ever known, and there are fears for the safety of many vessels. Latest estimates of losses from last week's storms: 36 vessels; 44 lives; $724,000.. . .Same day heavy snow and sleet storms are reported in many parts of the Middle States and fierce blizzards in the Northwest. Reports of eight people frozen to death in different parts of Dakota..... ..The execution of the Chicago Anarchists was to take place on Dec. 5.; but the penalty has been suspended till the full bench of the Supreme Court has passed upon the question for a new trial .....It appears that the Dominion Government is about to establish a bureau of Trade and Commerce.... In the trial of Mc. Quade, one of the "boodle" Aldermen of this city, the jury after being "out" for over 48 hours, failed to agree—nine for acquittal, three for conviction; only one of them resolutely. They couldn't believe the evidence of Fallgraff and Duffy the two "squealing" aldermen—a lamentable miscarriage of justice and a strong impeachment of the present jury system.....Both houses of the Vermont Legislature have passed a railroad commission bill, with only one dissenting vote. Its provisions are moderate; but stringent enough to meet gross railroad abuses.....Three Commissioners at $8 a day and $5 a day for clerk, when engaged on duty, with necessary expenses—all expenses not to exceed $5,000 a year.....Steve Dorsey is growing rich by attending to his ranch, and keeping out of politics. ....In regard to the Standard Oil Company's acquisition of the Richmond Terminal Company, which owns the Richmond and Danville systems of railways, it is stated that the charter of the Terminal Company allows the company to acquire railways in a dozen States, to consolidate with other roads and to change its name. It differs from other railway charters in Virginia in that it permits the acquisition of roads with which it does not directly connect, and which means that the Standard Oil Company may consolidate as many parallel railways as shall be necessary to make its grip upon the commerce of a dozen States absolutely sure. .....A conspiracy has been discovered in Buffalo, N. Y., between several prominent members of the Board of Trade and the manager of the Richmond Elevator, to steal grain by the boat load, to be sold in this city or elsewhere, the manager to get two-thirds of the profits; 10,000 bushels are supposed to have been stolen: guilty parties arrested; manager turned State's evidence; others released on $2,500 bail.....The Canadian government is anxious that Esquimalt, the naval station on the Pacific, should be immediately fortified in view of a possible Russian attack.....President Arthur left about $100,000 in real estate and as much more in personal property. All goes to his son and daughter to whom considerable legacies were left some time ago by their maternal grandmother.....The election of several Knights of Labor to the Georgia Legislature may indirectly lead to the abolition of the convict camp system. A bill is to be introduced into the next Legislature limiting or abolishing the convict lease system. As conducted now the convict camps are an outrage to humanity and a disgrace to the State.....It is said that the Civil Service Commissioners propose to hold four examinations for government appointments annually in interior cities and towns in the various States, so that the people in the rural districts may have the same advantage in competitive examinations as the inhabitants of the larger cities..... ....Three thousand five hundred and eighty national banks have organized in all, of which 2,858 are now in operation; of these 174 have been organized during the past year, with a capital of $21,000,000 in bonds.....Early in the week forest fires were burning for 50 miles along the Wilmington and Weldon Railroad, Va. Damage to timber lands "enormous." .....Through opposition of the Knights of Labor the miners in the Pennsylvania coke regions have decided not to strike. .....After all Colonel Robert G. Ingersoll has been retained for the condemned Chicago Anarchists, and will argue their case before the Supreme Court in March.....Birmingham, Ala., is booming with the news that $3,000,000 have been put into the purchase of the Sloss coal and iron property, which means two and possibly more new furnaces built with Eastern money....The freight conductors and brakemen of the Cleveland and Pittsburg Railroad have been advanced 15 to 30 cents per day, and the impending trouble thus averted,. ....President Cleveland has appointed Assistant Medical Purveyor John Moore as Surgeon-General of the Army. An Indiana man; entered the army as surgeon in 1853; served in Florida and with the Utah expedition in '57, and in the late war.....The leaders of the labor party in Chicago are bragging that they will control the next Illinois Legislature and elect their own Speaker.....The valuation of property in Alabama has grown from $135,535,792 in 1876 to about $175,000,000. There is a balance of over $340,000 in the treasury.....The grand jury at Chicago last week ignored the bill against the Pinkerton men charged by the coroner's jury with complicity in the death of Terence Begley near the Union stock-yards after the recent strike... ....The Canadians propose to prevent Portland, Me., from becoming the winter port of the Canadian Pacific Railway by running the proposed line of steamers to Montreal. The river freezes over at Montreal every Winter, but dynamite and steamships are to be relied upon to keep a passage open.....It is said to have cost the Dominion Government $6,000 a week to maintain these fishing cruisers during the past season ....Commissioner Peck, of the Bureau of Labor Statistics of this State, says that in consequence of American boys being disinclined to learn trades all the good places are filled with foreigners, and the immigration of mechanics to this country is thereby stimulated.....The Welland Canal will close for the season on Dec. 1.....The Delaware and Raritan Canal will be closed on Dec. 20. ....Sir John Macdonald has given orders that no vessel shall be allowed to pass through the Welland Canal on Sunday, except in case of distress or where there is danger of the vessel's being frozen in.....The N. Y. Capitol at Albany is heavily draped in memory of the late President Arthur, but there is no money to pay for the crape, and the mourning drapery for Grant and Hendricks has not yet been paid for. ..It is customary for the Governor of Massachusetts to pardon some one from State prison on each Thanksgiving Day, and this year the lucky prisinor was Daniel J. Dwight, who was serving a life sentence for murder in the second degree. He had served 10 years and six months..... ....Henry M. Stanley, the famous African explorer, arrived here yesterday.....For the first time in many weeks the Committee of the Grant Monument Fund Association will meet on Thursday next, and strong efforts to revive interest in the fund will be made. The fund is now nearly $124.00.....A telegram from Little Rock this morning says gold has been discovered in abundance in several of the streams of Oklahoma, Indian Territory, and the excitement is great and increasing in Arkansas, Kansas and Texas. Over 300 claims have been already staked out, and it is expected there will be a regular rush to the country within the next six weeks despite the efforts of the United States troops to keep all intruders out.... The cigar manufacturers in Havana have again suspended work, owing to new demands on the part of the operatives. .....O'Donovan Rossa is no longer head of the dynamite fiends. He is going to try to make some money honestly. His successor's name has not yet been made public..... Mr. Garland wants Arkansas to vindicate him by returning him to the Senate when Mr. Berry's term closes..... ....

AGRICULTURAL NEWS.

SATURDAY, November 27, 1886.

THE present cotton crop of Arkansas is the best ever raised there. It is estimated that the yield will reach 750,000 bales against 600,000 in 1885.... ....The Indian Department has concluded to locate the Comanches, the Cheyennes, the Araphoes, the Kenawees and the Wichitas, east of the ninety-eighth degree of longitude, which embraces Oklahoma. This will settle the question in the negative as to that part of the country being open to white settlement.....A special from Fargo, Dakota, says: The wheat crop of the Red River Valley proves to be larger than the estimates. The elevators and warehouses along the line of the Manitoba road are full to overflowing, and in some of the towns the farmers pile the sacks out-of-doors, as the railroad is unable to furnish cars fast enough to haul the wheat to market. The Manitoba road has 4,000 cars, but many of them are tied up at Duluth owing to the lack of facilities there to handle the grain. The railroads say the movement of grain from the Red River Valley is unprecedented.....The London City Companies have resolved to sell their lands in the North of Ireland on easy terms to the tenants. The Salters' Company will transfer 250,000 acres at the purchase price, £20,000, under the terms of the Ashbourne act. The Fishmongers' Company will transfer 20,500 acres at a yearly rental of £9,500. They offer to sell to the tenants at 20 years' purchase on the Government valuation, the tenants paying annually 30 per cent. under the present rental. The Drapers' Company offers 27,025 acres at a yearly rental of £12,500 at eighteen years' purchase. The tenants accept the offers. The transfer covers nearly the whole of the County of Londonderry..... The California wine-growers have, through the State Board, commissioned an agent to represent them before Congress at the coming session, in order to procure protective legislation. They declare themselves not in favor of the passage by Congress of any measure extending to grain spirits freedom of taxation when used in fortifying wines. The product of the State in wine is variously estimated this year at from 15,000,000 to 18,000,000 gallons, considerable of which, more than usual, owing to the failure of Congress to complete the legislation relating to sweet wines, is being distilled..... ...The United States Agricultural Dept. announces that the experiment of making sugar by the diffusion process in Kansas has proved so satisfactory that next season a diffusion apparatus will be set up in Louisiana. In the matter of sorghum cane further experiments will be necessary to achieve full success by the process .....The Hawaiian Commercial Company of San Francisco reports that the acreage of cane for next year will produce 13,680 tons if the yield is the same as last year, but for safety it is estimated at 11,000 tons..... ....The Australian wool market seems to be just now the worst in the world... .. .Large consignments of sheep for breeding purposes are being shipped from Cumberland, England, to Buenos Ayres, South America.....The Northwestern wheat crop is pouring into Duluth, Minneapolis and St. Paul with astonishing rapidity, increasing the "visible supply" to an extent that has a depressing effect on prices.. ....The present old stock of colonial wool in London amounts to 7,000 bales, against 78,000 bales this time a year ago. The new series of sales begins on Tuesday and prospects are growing brighter. It is charged that English buyers combined at the opening of the Melbourne sales to depress price.....Reports from the Rio Platte are that the new clip will be short in volume and a weak staple.....Best American steers weak in Liverpool at 11½ cents estimated dressed weight. Exports of live stock and dressed beef from Boston during the week were small—254 cattle and 3,892 quarters of beef.....A total of 21,431 hogs were shipped from Chicago last Saturday week—the heaviest on record.....It is estimated that branding inflicts $4,000,000 worth of damage annually upon the cattle of this country..... ....Richard Swigert, of Lexington, Ky., has purchased in England, by cable, the celebrated stallion Kingcraft, winner of the Derby in 1870, for $17,500. He is by King Tom out of Wooderaft.....Henry Bergh says when he first began the Society for the Prevention of Cruelty to Animals movement the only gifts he received came in $1 or $5 lots. Later on $100 checks began to take his breath, but now immense fortunes float around his way. ....The export of wheat in October reached a total of 30,753,000 bushels, against an average in eight years of 32,537,250 bushels in the same month. The volume was larger than in any October since 1882. The years 1879, 1880, and 1882 were respectively 61,832,000 bushels, 40,897,000 bushels and 36,132,000 bushels. In the other years the total was below that of last month..... Oliver Dalrymple, of Dakota, states that he will put in 31,000 acres of crops next season.....For the year ending October 31, we exported 820,036,420 pounds of hog products against 794,257,014 pounds in the preceding year..... Fifty thousand tons of soot are taken from London chimneys in a year. It is estimated to be worth $200,000, and is used as a fertilizer, half a ton to an acre....

Coughs.

"*Brown's Bronchial Troches*" are used with advantage to alleviate Coughs, Sore Throat, Hoarseness and Bronchial Affections. *Sold only in boxes.—Adv.*

Crops & Markets.

SATURDAY, November 27, 1886.

THE Mark Lane Express, in its review of the British grain trade for the past week, says: Wheat deliveries have continued very restricted. In London trade is slow at an advance of 9d. per quarter (2¼ cents per bushel). In the provincial markets values are very firm and slightly above the current rates in London. The sales of English wheat during the week were 48,464 quarters at 31s. 4d. against 58,097 quarters at 30s. 10d. during the corresponding period last year. Flour is steady. Barley is inactive. Trade in foreign wheat is hardening. Quotations are irregular and tending toward an advance. Heavy arrivals of foreign oats caused a fall in values of 3d. to 4d. Beans are 1s. dearer. Eight cargoes of wheat arrived: two were withdrawn and five remained, four of which were California and one Oregon. To-day there was an increased inquiry for wheat; 1s. advance was asked on Indian, American and Russian. Flour and corn were each 6d. dearer. Barley was quiet. There were further large arrivals of oats, and prices were 3d. lower.

Latest advices from Australia report the prospect of the wheat crop as being exceptionally favorable, but the harvest is expected to be later than usual. The export of wheat from January 1 to November 1, 1886, has been only 400,000 bushels, against 8,456,000 bushels for the corresponding period in 1885. The official returns of the Russian wheat exports

for the seven months ended August 1, show that the exports were only 21,824,000 bushels, against 51,751,040 bushels during the corresponding period of 1885. This is taken as proof of the heavy deficiency of last year, and the present year's yield is believed to be very little better. American, Indian and Russian wheats at London, on Monday, were held for three cents advance per bushel, while flour was also 6d. higher. According to the journal of the Royal Agricultural Society of England, just published, 350 replies from 350 counties in England and Wales show that the unremunerative prices obtained for wheat, due to foreign competition, has caused "a large decrease in the area of wheat" and a corresponding increase in the area of grazing lands.

A report of the Ontario Bureau of Industries shows that the wheat yield of the Province of Onntario for the past season was 3,500,000 bushels less than the average of the past five years; barley, 50,000 bushels less; oats, 3,500,000 bushels more; peas, 3,000,000 bushels more, and corn 1,000,000 bushels less.

The estimate as made by the principal canners of vegetables of the tomato pack of New Jersey shows that it will exceed the heavy pack of 1884. The number of cases packed is 600,000; each case contains two dozen cans; this makes the pack of 1886 represented by 13,400,000 cans. Tomatoes were unusually plentiful this year.

Chicago statement of the visible supply of grain November 20: Wheat, 59,562,000 bushels; corn, 12,281,000 bushels; oats, 5,646,000 bushels; rye, 405,000 bushels; barley, 2,680,000 bushels. Compared with one week ago these figures show an increase of 1,253,000 bushels of wheat and 82,000 bushels of barley, and a decrease of 826,000 bushels of corn, 187,000 bushels of oats and 42,000 bushels of rye.

New York statement of the visible supply of grain November 20: Wheat, 59,551,351 bushels; increase, 1,228,803 bushels; corn, 12,289,408 bushels; decrease, 808,305 bushels; oats, 5,650,746 bushels; increase, 1,146 bushels; rye, 409,625 bushels; decrease, 50,106 bushels.

At home there has been a slight decline in the receipts of wheat at collecting points as compared with late weeks. This has been partly due to the close of canal and river navigation in some parts of the North. The export movement continues good, and is likely to take from the country about 13,000,000 bushels of wheat (and flour as wheat) during November. Russian and Indian exports are unusually small. The stocks of wheat and flour in the United Kingdom in November are reported to have been 40 per cent. less than at the same time last year. It is thought that the French demands will be greater than officially estimated. Wheat ought to go up; but then our "visible supply" is 8,000,000 bushels greater than a year ago, and grain is still being rushed to market.

Indian corn has been dull but steady. The speculative interest has not been conspicuous. The visible supply showed a decrease of 807,300 bushels, which naturally tended to stiffen the views of holders.

At the chief Western packing points receipts of hogs have been heavier, and prices thereof have been somewhat depressed. This tended to prevent operations in pork products looking to a higher range of prices.

In the wool market, while quotations are nominally about the same as for the last month, still concessions are made to large buyers. All hands are waiting for the opening of next season's goods. Business light and unsatisfactory at Boston. The sales of the week amounted to 2,210,000 pounds as compared with 2,560,000 pounds last week, and 3,720,000 in the corresponding week last year. The Philidelphia market has ruled very quiet, with sales aggregating only 450,000 pounds for the week, as against 965,000 for the same week last year. Operators are holding off for the results of the London auctions, and bids for good-sized lines are scarce, and when made are generally one cent under current asking prices. Holders, however, are uniformly firm in their views, and refuse to stimulate business at the expense of prices. The belief is general that an improvement in trade will follow the opening of the colonial sales in London.

Farms on James River, Va., for ten dollars a month. Send for illustrated circulars and maps. J. F. Mancha, Claremont, Va.—*Adv.*

MARKETS BY TELEGRAPH.

SATURDAY, November 27, 1886

CHICAGO.—Compared with cash prices a week ago, No. 2 Spring Wheat is about the same; No. 2 Red, ½c. higher. Corn, ¾c. higher. Oats, ¼c. higher. Flaxseed, ½c. lower. Pork, 5c. higher. Cattle, a shade higher. Hogs, from 10c. to 15c. higher. Sheep, about the same.

CHICAGO.—WHEAT.—No. 2 Spring, 74@74¼c; No. 3 Spring, 67½@69c; No. 2 Red, 75c. Futures ranged: November, 71½@71¾c; December, 74½@74¾c; January, 75@75½c; May, 81½@82c. CORN.—No. 2, 36½c; Futures—November, 36@36⅛c; December, 36⅛@36⅜c; January, 37@37¼c; May, 41⅜@42c. OATS.—No. 2, 26½@26⅝c; Futures, November, 26¼@26⅜c; December, 26¼@26⅜c; January, 26¼@26⅝c; May, 30⅝@30¾c. RYE.—No. 2, 53c. BARLEY. No. 2, 55¾c. FLAXSEED—No. 1, 93c. MESS PORK.—Cash, $9 55@9 60; Futures, November, $9 50@9 60; December, $9 50@9 60; January, $10 10@10 20. LARD.—Cash, $5 90 November, $5 90@5 92½; December, $5 90@5 92½; January, $5 97½@6. Short Ribs.—Cash, $5 50. Boxed Meats.—Dry salted shoulders, $5 10@5 20; Short clear sides, $5 75@5 80. CATTLE.—Market steady; shipping steers, $3 10@5; stockers and feeders, $2@3 40; cows, bulls and mixed $1 75@3 15; bulk, $2 20@2 50; through Texas Cattle, dull; cows, $2 50@3; steers, $2 70@3 50; Western rangers, dull; natives and half breeds, $2 75@3 75; cows, $2@2 40; Wintered Texans, $2 80@3 50. HOGS.—Market slow; Rough and mixed, $3 50@3 90; packing and shipping, $3 75@4; light weights, $3 50@4; skips, $2 20@3 40. SHEEP.—Market slow; Natives, $2 25@4; Western, $3@3 60, Texans, $2@3 25; Lambs, $3 50@4 50.

ST. LOUIS.—Compared with cash prices a week ago, Wheat is ¾c. higher. Corn, ¾ c. higher. Oats, unchanged. Pork, 21½c. higher.

ST. LOUIS.—WHEAT.—Steady: No. 2 Red Winter, at 76¼c; November, 76c; December, 76¼c. CORN.—Steady; No. 2 mixed, Cash, 34@34½c; November, 34c; December, 34½c. OATS. Dull: No. 2 Mixed, Cash, 26@26¼c; November, 27c; December, 26½c. RYE, —51½c. BARLEY. —50@62c. BUTTER.—Creamery, 24@27c; dairy, 15@22c EGGS —19c. FLAXSEED.—93c. HAY.—Timothy, $11 25; Prairie, $8. BRAN, 58c. at mill. Corn Meal, $1 90. PORK —$10 BULKMEATS.—Long clear, $5 45; short ribs, $5 60; short clear, $5 75. LARD.—$5 85.

BOSTON.—APPLES.—King, $2@2 50 per bbl; Snow, $2 25@3; Baldwin, $1 25@1 50, per bbl; Hubbardstons, $1 75; Harvey, 42; common, 75c.@$1. CRANBERRIES.—Cape Cod, $5@6 25; country, $3@4. BUTTER.—Northern creamery, extra, 29c. per lb; do. firsts, 24@27c. per lb; Western creamery, extra, 28c per lb; do, firsts, 25@26c. per lb; do, choice, 20@22c per lb; Dairy, Franklin County, finest, 28c. per lb; good to choice, 24@26c. per lb; Vermont extra, 5@27c; Northern, choice, 24@25c per lb; do, fair to good, 19@19c. per lb, Western dairy, good to choice, 12@13c. per lb, Imitation creamery, extra, 14@16c. per lb; ladle-packed, choice, 13@14c. per lb; do. fair to good, 11@12c. per lb. CHEESE.—New York extra, 12½c. per lb; do, good to choice, 10@12c. per lb; do, common, 7@9c. per lb; Vermont, extra, 11½@12½c, per lb; good to choice, 10½@11c. per lb; common, 7@9c. per lb; Western, extra, 11½@12c. per lb, do, fine, 9@10c. per lb; common, 6@8c. per lb; sage, extra, 12½@13½c. per lb. GRAIN Corn, yellow, 51c High mixed, 51½c; steamer mixed, 49c; and no grade, 48c. per bush. HAY AND STRAW. Choice, $17@18 per ton; fair, $16@17 per ton; ordinary, $14@15; fine, $13@15 per ton; swale hay, $10@11 per ton; poor, $10@13 50 per ton; Western, choice, $16@17, do, fair to good, $13@14 50 rye straw, $16@1, per ton; do, do, machine, $12@13 per ton; oat straw, $6@10 per ton. HIDES AND SKINS.—Brighton steers, 9@9½c; do, do, cows, 9½c; Calcutta, slaughter, 11½@12½c; dead green, 9½c; do, buffalo, 7@8c. Buenos Ayres, 20@21c; Rio Grande, 20@21c; Montevideo, 20½@21c. POTATOES.—Early Rose, 45@50c. per bush; Beauty of Hebron, 45@55c, per bush, Sweet, Virginia Yellow, $1 12@1 25 per bbl; Jersey, $1 50@1 62 per bbl. SEEDS.—Clover, West, 8½@10½c. per lb; do. North, 10½@11c, per lb; do, white, 18@22c, per lb, do, Alsike, 12@15c per lb Red Top, per sack, West, $1 25; do, Jersey, $2 50@2 50; Hungarian, 90c. @1; Millet, 60c.@1; Orchard, per bush, $1 80@2; Blue Grass, $1 40@1 60; Timothy, Western, $2 15@2 25; do, Northern, $2 25@2 40; American flaxseed, $2 25.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, November 27, 1886.

STATE OF THE MARKET.—As compared with cash prices last week, flour is unchanged. No. 3 Red Wheat, 1c, lower; No. 2 ¾c. lower. No. 2 Corn, 1c. higher; Ungraded Mixed, 1c. higher; Pork, unchanged. Butter and Cheese, steady; Eggs, unchanged; Vegetables and Fruits, steady.

FLOUR, FEED AND MEAL.—FLOUR—Quotations: Fine: $1 90@2 70; Superfine, $2 15@2 90. No. 2, $2 60@3 10; Good to Fancy Extra State, $3 35@3 75; Common to Good Extra Western, $2 60@3 75, Good to Choice Extra Western, $3 85@4 75; Common to Fair Extra Ohio, $3 60@3 85, Good, $3 90@4 85; Good to Choice, $4 35@4 75; Common Extra Minnesota, $2 60@3 15; Clear, $3 50@4 10; Rye Mixture, $3 35@3 95; Straight, $3 65@4 15, Patent $4 35@5; Bakers' Extra, $5 00@6 90; St. Louis Common to Fair Extra, $2 60@3 75; Fair to Good, $3 85@4 60; Good to Very Choice, $4 65@5, latter an extreme, Patent Winter Wheat Extra, $4 30@5, City Mill Extra for West Indies, $4 10@4 50; latter in new pkgs.; South American, $4 60@4 70. SOUTHERN FLOUR.—Common to Fair Extra at $3 25@3 85, and Fair to Choice, $3 90@5. RYE FLOUR.—Superfine, $3@3 20. CORN MEAL.—Yellow Western quoted at $2 75@2 85, and Brandywine at $2 75@2 85. BUCKWHEAT FLOUR—Quoted at $1 90@2 00. FEED. 40 lb, quoted at 75@80c; 60 lb, at 70c; 80 lb, at 75@80c; 100 lb, at 85@90c sharps, at 95c.@$1 05. Rye Feed at 70@75c, screenings at 45@70c.

GRAIN.—WHEAT.—Old No. 2 Milwaukee at 85c; Ungraded Red, 81@88½c; No. 3 Red, 84½c; No. 2 Red, 85¼c; No. 2 Red for November, 85½c; do. for December, 85¾@86c; do. for January, 87½@88,½c; do. for February, 89¾@89½c; do. for May, 93 1-16@93¾c. CORN.—Ungraded Mixed, at 41½@46⅜c; No. 3, 43@43½c; No 2, 46¾@46¼c; No. 2, White, 47½c; No. 2 for November, 46¼c, do. for December, 46¾@46⅞c; do for January, 47½@47⅝c; do. for February, 48@48¼c; do. for May, 50⅝@50¾c. OATS.—No. 3 at 30½c, do. White, 35½c. No. 2 33¼c, do. White, 35¼@36c; No. 1, White, 38c; Mixed Western, 32@34c. do. White, 35@40c; White State, 37½c; No. 2 for November, 33½c; do for December, 33¾@33½c; do. for January, 34½c; do. for May, 38¾c.

PROVISIONS.—PORK.—Mess, quoted at $11@10 25 for Old and $10 50@11 for New; $13 for Family Mess; $11 50@13 50 for Clear Back, and $10@10 50 for Extra Prime BEEF.—City Extra India Mess, $11@17; Extra Mess, in barrels, $7 50@8, Packet, $8 50@9. Plate, $8@8 50. BEEF HAMS.—Quoted, $19. CUT MEATS. Pickled Bellies, 6¾@7c; City Pickled Shoulders, 5½@5¾c; Pickled Hams, 9c, Smoked Hams, 10¾@10¾c; Smoked Shoulders, 6¾@6¾c. MIDDLES.—Long Clear in New York, 8c. DRESSED HOGS. City Heavy to Light at 5¾@5¾c, Pigs, 5¾c. LARD. City Steam, 6.05@6.10c; Refined, quoted at 6.5c; Continent, 6.30c; November, 6.22c; December, 6.21@6.22c; January, 6.26@6.29c; February, 6.34@6.35c; March, 6.42@6.43c.

BUTTER.—Creamery—State, pails, fine, 25@29c; State, prime, 25@27c; State and Pennsylvania, tubs, 28@28c; Elgin, 29@30c; Western, best, 28@29c; Western, prime, 26@26c; Western, good, 20@21c; Western June, best, 22c; Western, do, prime, 20@21c; State Dairy, half tubs, best, 26@27c; half-firkins, tubs, fine, 22@ 4c, half-firkins, tubs, good, 19@20c; half firkins, common, 15@17c; Welsh tubs, best, 25c; Welsh tubs, prime, 22@23; Dairy firkins, best, 21c; Dairy firkins, prime, 21@23; Western, Imitation Creamery best, 20@22c; Imitation Creamery, fair and good, 17@18c; Dairy, fine, 15@20c; Dairy, common, 12@14c; Factory, poor, 8@10c; Factory, best Iowa, 19@20c.

CHEESE.—State factory, fancy, colored, September, 12½c; do, do, do, white, do, 12½c; do, do, good and fine, 11½@12½c, do, do, fair, 10½@11¼c; do, do, common, 10@10½c; do, do, light skims, 9½@10c; Ohio factory, fine, flat, 12@12½c, Ohio factory, good, 11@11½c; Pennsylvania skims, 2½@8½c.

EGGS.—State, 25@26c; Ohio and other choice lots, 24½@25c; Western, best, 24c, do, held lots, 21@22c; Canadian, held lots, 20@22c; Limed State, 18@18½c; do, Canadian, 16@18c; do, Western, 17@17½c.

POULTRY.—LIVE.—Chickens, per lb, at 6@7½c; fowls, near-by lots, per lb, at 7@7½c., fowls, Western lots, per lb, at 6@7c fowls Southern lots, per lb, at 6@7c; Turkeys, per lb at 8@9c, ducks, western per pair at 50@60c.; geese, western, per pair, at $1.12@1.30.

POULTRY.—DRESSED. Turkeys, near-by, per pound, at 12@14c; do. State, per lb. 11@13c, do, Western, per lb. 11@12c; chickens, Philadelphia, per lb, at 13@15c. do. western, per lb, at 8@9c; fowls, Pennsylvania, prime, per lb, 9c, do, western, per lb, at 7@8c.

FRUITS.—FRESH.—Apples.—Gravenstein per bbl, at $2 75@3; King, per bbl, at $2 75@3 25; Baldwins, per bbl, $2@2 25; Bellflower, per bbl, $1 75@2 25. Grapes.—Catawba at 3@4c, per lb; Concord, per lb, 3@4c; Diana, per lb, 2½@3½c, Isabella, at 2½3c. per lb. Cranberries, at $6@6 50 for Cape Cod best; $5 50@6 for choice; $5@5 50 for light; $1 75@2 for choice, per crate.

FRUITS.—DRIED.—Apples.—Fancy Evaporated, 9½@10c; do, choice, at 8½@8c, do, prime, 8½c; do. southern, sliced, prime, at 3@4c; do, North Carolina, fancy sun dried, new, 6½@6½c; do, do, choice, 5¾@5¾c; do, do, prime, 3¾@4¼c. Peaches — North Carolina, peeled, choice new, 11½@12c; do. do. do, fancy, new, 13@13½c; do. Georgia, choice, at 10@10c; do, do, do prime fancy, new, 12c, do, do, new, 11½c; Cherries, pitted, 9½c, Evaporated raspberries, 18@20c; sun-dried do. 16@17c. Blackberries — Prime, 7½@7¾c. Plums, 6@6½c. Peaches, unpeeled halves, 4½c; do, do, quarters, 3½@3¾c.

PEANUTS—Quoted at 4¾c. for fancy hand-picked; 3½c. for farmers' grades.

COTTON.—The quotations, according to the American classification, are as follows:

	Uplands.	New Orleans and Gulf.	Texas.
Ordinary	6 7-16	6⅝	6⅝
Strict Ordinary	6⅞	7 1-16	7 1-16
Good Ordinary	7 13-16	8	8
Strict Good Ordinary	8¼	8 7-16	8 7-16
Low Middling	8 11-16	8⅞	8⅞
Strict Low Middling	9	9 3-16	9 3-16
Middling	9 3-16	9⅜	9¾
Good Middling	9 7-16	9⅝	9⅝
Strict Good Middling	9 11-16	9⅞	9⅞
Middling Fair	10 1-16	10¼	10¼
Fair	10 11-16	10⅞	10⅞

STAINED.

Good Ordinary	6¼	Low Middling	7¾
Strict Good Ord	6 15-16	Middling	8⅝

HAY AND STRAW.—Choice Timothy, 85c. per 100 lb; Good Timothy, 75@80c; Medium, 65@70c; Shipping, 50@55c. Clover, mixed, 60@65c Straw No. 1 rye, 65c; short rye, 45@50c; oat, 40@45c.

HOPS. State, new, 26@30c; State, 1885 crop, best on offer, 16@17c, do, do, inferior, 12@14c California, new, prime and best, 28@31c; do, old best, 15@16c, do, old, low grades, 13@14c; German, new, best, 31@33c; do, new, medium grades, 24@25c; English, new, best, 26@27c, do, do, low grades, 20@22c; Receipts for the week, 1,292 bales: do, from January 1, 83,5 8 bales, do, same time last year, 123,473 bales; Exports for the week, 13 bales; do, from January 1, 17,739 bales; do, same time last year, 52,427 bales.

VEGETABLES.—Potatoes.—Long Island, rose, in bulk, per bbl., $1 75@2; State, $1 50@1 75 do Burbank, $1 50@1 75; Jersey, peerless, per bbl, $1 37@1 50; sweet potatoes, Va., yellow, per bbl., $1 50@1 75; sweet potatoes, Va., yellow, inferior, per bbl. $1@1 25. Cabbages.—Flat Dutch, per 100, $3@4 50. Onions.—Conn., red, per bbl, $2 25@2 75; do. Orange County, red, per bbl, $1 75@2 25. Celery, per doz. bunches, $1@1 25. Turnips, Russian, per bbl., $1@1 25. Cauliflowers, per bbl, $2@4 50.

LIVE STOCK MARKETS

NEW YORK, SATURDAY, November 27, 1886.

BEEVES.—Chicago Steers, 1376 lb, at $5; do, 1310 lb, at $4 65; do, 1420 lb, at $4; do, 1052 lb at $3 90; do, 1013 lb at $3 75; Kentucky Steers, 1408 lb at $5; do, 1452 lb at $4 85; do, 1392 lb at $4 75; Oxen, 1480 lb at $4; Bulls, 845 lb, at $2 50; Indiana Steers, 1450 lb, at $4 80; do, 1420 lb at $4 50; do. 1230 lb at $4 50; Steers, Staps, and Oxen, 1315 lb, at $3 50; State Steers, 1190 lb at $4 10; do, 1230 lb at $4 65; Oxen, 1335 lb at $4; Indiana Steers, 1536 lb at $5; do, 1440 lb at $4 65; Kentucky do. 1456 lb at $4 75; Chicago Steers, 1225 lb at $4 85; do, 1240 lb at $4 60; Kentucky do, 1197 lb at $4 25; do, 1340 lb at $4 80; State Bulls, 1222 lb at $2 75; Bulls, 1400 lb at $3 25. Heifers, 1300 lb at $4 40.

CALVES.—Grassers, 289 lb, at $2 50; do, 242 lb, at $2 35; Veals, 331 lb, at 5½c; do, 185 lb, at 7c; do, 157 lb, 8c, Grassers, 274 lb, at 5½c.

SHEEP AND LAMBS.—Receipts for six days 29,241 head against 36,736 head for the same time last week; Indiana Sheep, 77 lb, at $4 20; do, 91 lb, at 4½c do, 113 lb at 4½c. Canada Lambs, 76 lb, at 6½c; do, 83 lb, at 6¾c; Western Sheep, 96 lb, at 4c; do, 85 lb, at 4¼c; do, 120 lb, at 4½c; Canada Lambs, 79 lb, at 6¾c; State Sheep, 63 lb, at 5½c; State Lambs, 61 lb, at 6c, Western Sheep, 87 lb, at 4¼c; Western Lambs, 62 lb, at 5½c; Western Sheep, 76 lb, at 3½c; do, 79 lb, at 3¾c; Indiana do, 93 lb, at 4¼c; Ohio do, 74 lb, at 3½c; Western do, 79 lb, at 3 35; Kentucky Sheep, 90 lb, at 4¼c; do, 80 lb, at 4c; Ohio Lambs, 57 lb, $5 90; State Ewes, (poor), 37 lb, at 3c; State Lambs, 59 lb, at 5c; Kentucky Sheep, 134 lb, at $4 96; do, 133 lb, at $4 87½; Ohio Sheep, 82 lb, at $3 35.

HOGS.—Receipts for six days, 51,236 head against 40,950 head for the same time last week. Ohio Hogs, 138 lb, at $4 10; Ohio Pigs, 85 lb, at $4 25; do. 100 lb, at $4 30.

PRODUCE COMMISSION HOUSE
ESTABLISHED 1865.
S. H. & E. H. FROST,
100 PARK PLACE, N. Y.
Shippers desiring to favor us will be furnished stencils, shipping cards, etc., on application. Promptness guaranteed. References, RURAL NEW-YORKER, Irving National Bank, etc.

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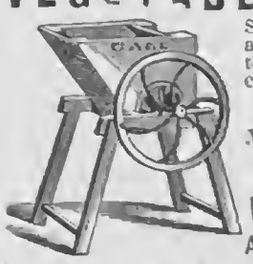
IN USE IN EVERY State and Territory of the U. S. It is a sectional wheel, has been made by us 7 years, and has never blown down without tower breaking, a record no other mill can show. MILLS SENT ON 30 DAYS TEST TRIAL. BEST FEED MILLS, CORN SHELLERS, ETC. GOOD AGENTS WANTED in all unassigned territory. Catalogues free. CHALLENGE WIND MILL AND FEED MILL CO., Batavia, Kane Co. Ill.

RUSTLESS IRON WATER PIPE.
Send for catalogue.
THE WELLS RUSTLESS IRON CO.,
7 & 9 CLIFF STREET, NEW YORK.
BRAMAN, DOW & CO., Boston, Ag'ts for New England.

VEGETABLE CUTTERS.

Sizes to cut fine or coarse, suitable for Cattle or Sheep, turned by a boy, will easily cut two bushels a minute.
Lowest in Price.
Easiest Worked.
Most Rapid and Durable in Use.
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Belcher & Taylor
Agricultural Tool Company,
Send for Circular. Box 75, Chicopee Falls, Mass.

Grind your own Bone,
Meat, Oyster Shells, GRAHAM Flour at 1 Corn in the $5 HAND MILL (F. Wilson's Patent). 100 per cent. more made in keeping poultry. Also POWER MILLS and FARM FEED MILLS. Circulars and Testimonials sent on application. WILSON BROS., Easton, Pa.

WELL DRILLING
Machinery for Wells of any depth, from 30 to 3,000 feet, for Water, Oil or Gas. Our Mounted Steam Drilling and Portable Horse Power Machines set to work in 20 minutes. Guaranteed to drill faster and with less power than any other. Specially adapted to drilling Wells in earth or rock 20 to 1,000 feet. Farmers and others are making $25 to $40 per day with our machinery and tools. Splendid business for Winter or Summer. We are the oldest and largest Manufacturers in the business. Send 4 cents in Stamps for Illustrated Catalogue D. ADDRESS,
Pierce Well Excavator Co., New York.

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IMPROVED NEEDLE HAY KNIFE.
This knife has been tested with the most celebrated knives of other makers, and has proved an easier and faster cutter than any other. Its special excellence consists in a chisel edge tooth. It may be used for cutting hay in the mow, stack and bale; also for ditching, cutting peat, or for any other work for which a hay knife is used. Send for circular.
North Wayne Tool Co.,
HALLOWELL, MAINE.

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DR. JOS. HAAS'
HOG AND POULTRY REMEDY

[None Genuine without this Trade Mark.]
Is the only Practical Preventive of the so-called Swine Plague.

If used in proper quantities, it will
1. *Prevent Disease;*
2. *Arrest Disease;*
3. *Pay for itself with the increased pork it will put upon the hogs.*

AS AN EVIDENCE OF FAITH
in my Remedy, I make the following offer:
I will insure herds of swine of not less than one hundred in number against disease, at a small fee per head, provided they are fed my Remedy under my direction, and prove upon examination prior to contract that they are in a healthy condition, and neither inbred, close-bred, or the progeny of such.

WHAT IS SAID OF THE REMEDY.
"It has stopped the hogs dying and improved their appetite."—F. P. GOLDSBOROUGH, Easton, Md.
"Have used the remedy with success."—D. G. BARBER, Easton, Md.
This medicine has been thoroughly tested and its merits established on the eastern shore."—Record and Gazette, Pocomoke, Md.
"I will not be without Haas's Hog Remedy if it costs three times the present price."—JOHN CASTIN, Grant City, Mo.
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"It gives satisfaction every time."—J. G. BARTLETT & SON, Sunapee, N. H.
"It has never failed to arrest the disease yet."—JONES & MUSSELMAN, St Paris, O.
"I have sold over $2,000 worth, and am pleased to say that it has given good satisfaction."—MELLE WILLIAMS, Druggist, Taylorville, Ill.
The Remedy can be procured of all druggists, or from my Laboratory, upon receipt of price.
Prices, **$2.50, $1.25,** and **50 cents** per package. 25 pound cans, **$12.50.**
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Member of Indiana State Veterinary Med. Association,
INDIANAPOLIS, INDIANA.

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STANDARD WIND MILL.
30 YEARS IN USE.

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Which can be run by any power and is cheap, effective and durable. Will grind any kind of small grain into feed at the rate of 6 to 25 bu. per hour, according to quality and size of mill used. Also, I X L Corn Sheller, I X L Stalk Cutter, Horse Powers, Wood and Iron Pumps, Tanks, Noyes' Haying Tools, etc. Send for Catalogue and Price List. Address
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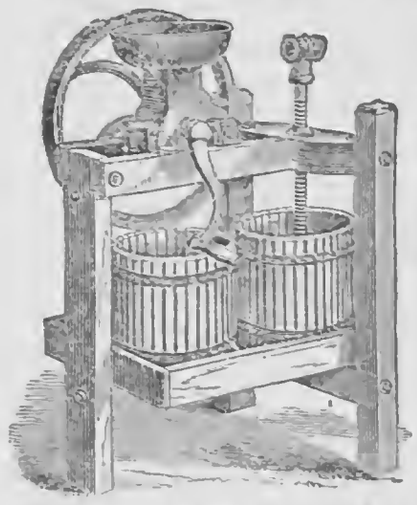
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Send for New Illustrated List, just issued.
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PATENTED.
This is the only *perfect* Pail made.—There are no seams in the front to catch the dirt. It has a perfectly fitting strainer, which can be instantly removed, so that every part of the pail may be *quickly* and *thoroughly* cleaned. Extra strainers can be obtained at any time.
The Pail is made from heavy XX tin, and is in all respects the **best in the world.**
Send for special circular. Agents wanted.
MILKING TUBES.
FOR MILKING COWS WITH SORE TEATS.
This is the best Tube in the market. Sent, post paid to any address, on receipt of price One Tube, 25 cents; Five Tubes, $1.00. Send for special circulars to
BARTLETT & DOW,
LOWELL, MASS.
Please mention this paper.

For the Young.

THE STORY OF A DISTRICT SCHOOL.

A COLLEGE BOY'S DIARY.

(Continued.)

On the Monday following the funeral I found the school in a state of considerable excitement. Mollie Brawn made haste to state the cause. She danced up and down before my desk as she shouted: "Jack's a comin' to-day—aint I glad! Aint I glad!"

This announcement spoiled my morning. I must confess that I was a little afraid of Jack Brawn. I knew that I could master the other scholars and teach a good school if he kept away. I could see that the notion of his coming put a spirit of rebellion into the other boys. All they lacked was a bold leader to induce them to break out. No wonder I looked nervous when at last we heard Jack stamping the snow off his feet on the ontside of the door. He looked larger than ever to me as he strode in and hung his hat on a nail. He gave me a sour look and nodded. He carried his books under his arm, and made his way to a seat at the back of the room.

I concluded to go on with the school just as though nothing had happened, so I went on trying to show the difference between A and B to a very stupid little boy who held the floor when Jack came in. At the same time I kept an eye on the new comer. I had fully made up my mind, in case of any trouble to settle it once and for all. Either I should be master of the school or leave it. In glancing about for a weapon, I noticed one of the sticks that the director had brought in standing in the corner. It was a large, heavy looking cudgel with a good-sized knot at the end. I made up my mind that when the fight did come it should be near that stick.

Jack behaved himself well enough for a time. He got up and came out with one of the classes to recite. He knew very little about the lesson, and I found that I should be forced to put him back into a class of smaller scholars. His black eyes snapped as I told him this, and we should have had the long looked for insurrection right there had it not been for our visitor.

A sharp rap came at the door and I dismissed the class as I walked over to see who had called. A tall man wearing a soldier's blue overcoat stood on the steps. He nodded at me, and as a first step towards eloquence, took from his mouth a large piece of tobacco which he held in his hand all ready for further use. It was a little cold, and the door opened directly upon the steps, so I invited the stranger in. He came walking heavily in, took off his hat with his tobacco hand and proceeded to explain the object of his visit.

"Like enough you folks know me," he said, "bein's I'm sorter interested in schools like. I'm the director over ter deestrict No. 3. I'm a great hand ter good schools, I be. I 'low we've got the best teacher in this township over ter my deestrict, an' I picked him out. He kin figger all through the 'rithmetic in his head, an' when it comes ter spellin'—my, ef he ain't a hoss, I'm a mule. An' that sorter ties me up ter what I started fer ter say. Our folks 'lows we kin beat the township to a spellin' school, so we laid out ter come over here a Friday night an' git up an appetite on this deestrict. We're spellers, we be, an' don't you never fergit it."

The scholars received this intelligence with all the enthusiasm that Bear Creek was capable of. That is, they looked at each other and winked their dull eyes and nodded their heads. The bearer of the challenge, put his hat on his head and started for the door. Of a sudden he appeared to remember that as a school official, he ought to speak a few words of advice and cheer. So without removing his hat, and with the tobacco still in his hand he went on.

"I'm allus glad ter visit schools an' put in a word where it'll do some good. Schools is the greatest thing in this country. All the big men that do all them things you read about in the readin' books, went ter school. An' they done good work while they wuz there. Schools is changed from what they was in my younger days. I kin remember the fust time I went ter school. I set on a log an' larnt my spellin' lesson betwixt two boys that fit the teacher every day. We had a great big feller fer a teacher that carried a bottle of hair ile in his coat-tail pocket. Them big boys got me ter hit that bottle with a stick. I done it an' bruck the bottle. Then them boys gut scared an' made me take all the thrashin'. All them things shows how much better off you be, an' how fast ye orter larn. We'll be over a Friday an' make things bile."

He went out at last and shut the door behind him with a bang. Before he had fairly left the building the scholars grasped their spelling books to prepare for the struggle. Bear Creek might be lacking at some points, but she meant business when her spelling was assailed. I quickly found that it was customary, on such occasions, to spend the whole week over the spelling book and to neglect entirely the other duties. Even Jack Brawn's face lost its scowl as he plunged among the long words.

At the noon recess some of the larger girls came to my desk and after much giggling said they wanted to get up some singing for the spelling match. They wanted me to sing with them. I never was a musician and am lucky enough to realize the fact, but of course I told them I would do my best to aid them. So the girls secured an old singing book, and ranged back of my desk to practice. The boys formed a group by the door and watched us. The girls picked out "Murmuring Sea" for the first piece. I do not know what there was appropriate about it, but music is music, and we started bravely in. As I stated, I never pretended to be a singer, but I was not prepared for the roar of laughter that went up from the boys as I started.

"Give that calf more rope," shouted a voice that I recognized as Jack Brawn's.

I dropped the book and started to my feet. I decided in an instant to fight the battle of Bear Creek right there.

LETTERS FROM THE COUSINS.

DEAR UNCLE MARK: I guess you think I am slow about letting you know how the seeds you sent us came out. We planted the Garden Treasures, but they did not come up very well, but the Alaska Peas came up and were very fine. I am a girl 11 years old, and have two sisters and three brothers. We live on a farm and have four cows, two horses and a nice little colt. We raise pigs, chickens, turkeys and ducks. My Papa takes the RURAL and likes it very much. Please don't put this letter in the waste basket. I have a little brother six years old who went out to-day with his dog and caught a rabbit. If you have any little boys up that way who can beat that let us hear from you.

From your niece, ALICE H. NIELDS.

Nottingham.

[We haven't heard of them. He will make a mighty hunter some day. How much of the catching did the dog do?—U. M.]

DEAR UNCLE MARK: I would like to join the Y. H. C. The seeds that you sent to Papa were doing nicely when the frost killed them. I have one sister nine years old. We have two horses, one colt, three cows, two calves, three sheep, 100 chickens, one dog, six cats and eight birds. I like to read the Cousins' letters I will close now. Your nephew,

MARION PUFFER.

DEAR UNCLE MARK: I read the Cousins' letters and would like to be a Cousin, too. Maybe the Cousins would like to hear about my misfortune. August 21, 1885 my right knee began to hurt. I went over to my Aunt's to visit; I was going to stay a week, but it hurt me so badly I had to be brought home. Mamma and one of my brothers took me up to the doctors, who thought at first it was inflammatory rheumatism, but it was not, and afterwards they thought it was an abscess. The doctors thought it could not be cured, so they thought it would have to be amputated. The little piece that was left healed up in six weeks and on February 11 I commenced walking on crutches. I go to school most every day; I was 11 years old May 5. I didn't go to school then because it was so muddy and such busy times that I couldn't be taken up to the schoolhouse. The girls made up a surprise party and invited all the scholars that were big enough to come. We had a lap supper and had a nice time, only it rained. Papa always takes me up to school when he is here, but he is visiting in New York, now. My oldest sister takes me up in the buggy and my youngest sister goes with us for a ride. I have two sisters younger and three brothers and two sisters older. The next one to the youngest goes to school with me. The school-house is three-quarters of a mile from our house; we live on a farm of 160 acres of land. We have very bad weather now, windy and dusty.

LILLIE MAY SMITH.

York, York Co., Neb.

[I guess you are a pretty brave little girl. We are all sorry for you. Wouldn't it be fine if we could all come and give you a surprise party? You must not be discouraged at all. I am very glad you can have such good times as you do. Uncle Mark would like to see you.—U. M.]

Miscellaneous Advertising.

DIXON'S "Carburet of Iron" Stove Polish was established in 1827, and is to-day, as it was then, the neatest and brightest in the market; a pure plumbago, giving off no poisonous vapors. The size is now doubled and cake weighs nearly half a pound, but the quality and price remain the same. Ask your goocer for Dixon's big cake.

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We doubt if there is, or can be, a specific remedy for rheumatism; but thousands who have suffered its pains have been greatly benefited by Hood's Sarsaparilla. If you have failed to find relief, try this great remedy. It corrects the acidity of the blood which is the cause of the disease, and builds up the whole system.

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Hood's Sarsaparilla

Sold by all druggists. $1; six for $5. Made only by C. I. HOOD & CO., Lowell, Mass.

100 Doses One Dollar

Brewster's Patent Rein Holder.

Your lines are where you put them—not under horses' feet. One agent sold 12 doz. in five days; one dealer sold six doz. in 15 days. Samples worth $1.50 FREE. Write for terms.

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BRYANT & STRATTON'S, Buffalo, N. Y.

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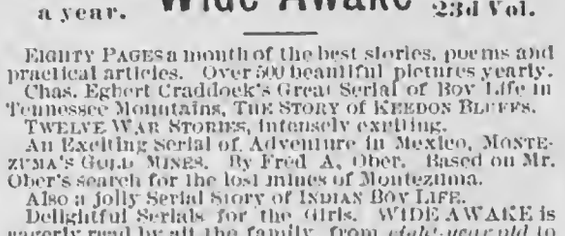

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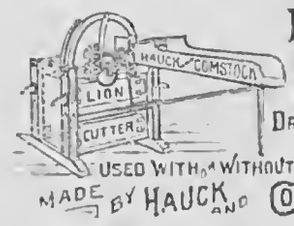

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Virginia Farms. Mild Climate. Cheap Homes. Send for Circular. A. O. BLISS, Centralia, Va.

WEAVER ORGANS Are the Finest in Tone, Style, Finish and general make up of any goods made. Guaranteed for 6 years. Send for Catalogue, testimonials and terms, free, to Weaver Organ and Piano Co., Factory, York, Pa.

GUNS Our $15 Shot Gun now $10. " $15 *Breechloader* " $9.50 All kinds Guns guaranteed lower than elsewhere. Send stamp for illustrated catalogue. POWELL & CLEMENT, 180 Main St., Cincinnati, Ohio.

WORK FOR ALL. $30 a week and expenses paid. Valuable outfit and particulars free. P. O. VICKERY, AUGUSTA, MAINE.

"SINGER" MODEL SEWING MACHINES for $12.00 up. Warranted 5 years. New and perfect. Sent on trial if desired. Organs given as premiums. Send for circular with 7,000 testimonials from every state. We can save you $15 to $50. GEO. PAYNE & CO., 42 W. Monroe St., Chicago.

CATARRH SAMPLE TREATMENT **FREE** So great is our faith we can cure you, dear sufferer, we will mail enough to convince, free. B. S. LAUDENBACH & Co., Newark, N. J.

PERSONALS.

MR. LABOUCHERE is the greatest smoker in Parliament, and wants everybody to smoke everywhere.

JOHN BRIGHT says that England can never return to protection till the United States restore slavery.

SIR ROBERT HAMILTON, Under Secretary of Ireland for so many years, who has been forced to resign, by the Conservatives, on account of his Home-Rule sentiments, is to be Governor of Tasmania, at a salary of $25,000 a year—double his old salary.

THE President has declined to reinstate Republican William A. Stone as Attorney-General of the Western district of Pennsylvania. Democratic Benton, of Missouri, removed at the same time on the same grounds, has been reinstated. One spoke against and the other for the Administration.

MR. HOLT, Lincoln's Judge Advocate-General, still lives at Washington. He is white-haired and bent with age, but his eyes are as bright and his mind as active as ever. He lives much alone, drives out a great deal, and reads the classics. There is no truth in the story that he is a remorseful misanthrope.

THE Senatorial contest in Nebraska is largely Van Wyck and anti-Van Wyck. The Senator counts friends in both parties, and claims 45 Republican and 24 Democratic votes. The anti-Van Wyck Republicans outnumber the Van Wyck Republicans, but it is the avowed purpose of the Senator's adherents not to go into caucus, but to make the fight in open convention, and elect him by a union of Republican and Democratic Van Wyckers.

GEN. BULLER, an energetic English officer, who was sent over to the west of Ireland some months ago to repress agrarian outrages, help evictions and aid the landlords, has become convinced that Home Rule and a change of policy with regard to the land question are essential for Ireland, and now the landlord or extreme Conservative party are plotting to secure his removal, while the Land League and Home Rulers who denounced his appointment, are now vigorously protesting against the machinations of his opponents

PRINCESS BEATRICE, wife of Prince Henry of Battenburg and youngest daughter of Queen Victoria, has given birth to a son. Both the mother and son are doing well. Lord Randolph Churchill was the Minister in attendance at the accouchment. A great scare was caused throughout the west end of London, Tuesday afternoon, by the firing of cannon in St. James' Park, to celebrate the queen's new grandchild. A dense fog was prevailing at the time, and for a while the detonations were believed to be those of some dynamite attack.

SCENE at Arthur's funeral. Edmunds in the library. Blaine pauses a moment at the door on his way to view the body in the second floor front. "There's hardly any use to introduce you two gentlemen," says Col. McMichael. The Vermonter advances with genial face and outstretched hand. "Oh no," says he. "Oh, no; not at all," says Blaine, turning his back and walking rapidly away. Blaine, after a glance at the body, left the house unattended without seeing President Cleveland, Ex-President Hayes or the other notables present. A letter of Edmund's to a friend, published the other day, but written April 1885, saying that as an honest man he couldn't speak in favor of Blaine for President, was the immediate cause of the snub.

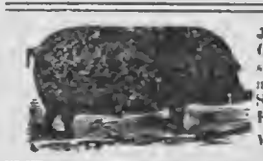
CHARLES FRANCES ADAMS, Sr., died of old age at his house on Mount Vernon Street, Boston, at two o'clock last Sunday morning. Grandson of the second President of the United States and son of the sixth, he was born at Boston Sept. 13, 1807. Father, John Quincy Adams, made Minister to Russia in 1809, took child with his mother to St. Petersburg. When his father was made Minister to England in 1815, his family went with him, and returned with him to America in 1817. C. F. A. graduated at Harvard in 1825, the year his father entered the White House; called to the bar at Boston in 1827. When 22 years old married Abigail Brooks, daughter of a wealthy Bostonian. He has been a member of the State Legislature, editor of the Boston Whig, one of the first Republican papers in the country; candidate for Vice-President on the Van Buren ticket, when Taylor was elected in 1848; Congressman in 1858; Minister to England from 1861 to 1868. U. S. Arbitrator in the Alabama Claims Commission in 1871.

Miscellaneous Advertising

Important to all who Work

for a living. Write to Hallett & Co., Portland, Maine, and they will send you full information, free, showing you how you can make from $5 to $25 and upwards a day and live at home, wherever you are located. Some have made over $50 in a day. Capital not required; you are started free. All ages; both sexes. All is new. Great incomes sure from the start. Fortunes await all workers who begin at once.

Stock and Poultry.



JERSEY RED, POLAND-CHINA, Chester White, Berkshire & Yorkshire Pigs. Southdown, Cotswold and Oxford Down Sheep and Lambs Scotch Collie Shepherd Dogs and Fancy Poultry. Send for Catalogue WALTER BURKE & CO. Phila. Pa

THE "STANDARD"
GALVANIZED WIRE NETTING.
NEAT CHEAP DURABLE
For Poultry Yard, Lawn, and Demesne Fence. Over 5,000 miles in use. Send for prices.
EVERYTHING FOR THE POULTRY YARD AND KENNEL.
Portable Poultry Houses and Dog Houses. Poultry Houses planned, built, furnished, and stocked.
How to Fatten Fowls by French Artificial Machine. Illustrated Pamphlet, 10 cents. Illustrated Catalogue, 10 cents.
BROCKNER & EVANS, 28 VESEY ST., N. Y. City

THE BEST CATTLE FASTENING!
SMITH'S
SELF-ADJUSTING SWING STANCHION,
The only Practical Swing Stanchion invented. Thousands in use. Illustrated Circular free. Manufactured by F. G. PARSONS & Co., Addison, Steuben Co. N. Y

POULTRY SUPPLIES.
Fresh Ground Beef Scraps, Granulated Bone and fine Bone Meal, Oyster Shells, etc.
Send for circulars and samples.
C. A. BARTLETT, WORCESTER, MASS.

"MARCHMOOR FARM."
HIPPARCHUS No. 11672; Sire Orange Peel, P. 288; Dam King's Fertile, No. 22765. Service Fees, $100.
BRIGHTSON No. 11671, Sire Farmer's Pride P. 322; Dam Nellie Flanders, No 22764. Service Fees, $100.
PRINCE NERO Sire Nero, P. S. 249; Dam Mrs. Langtry, C. 5746. Service Fees $100.
CHAS. R. HOE, New Brunswick, N. J.

HOLSTEIN FREISIAN CATTLE
IMPORTED AND HOME BRED.
WHAT OTHERS SAY.
"The finest herd this season."—Dr. Carrington, U. S. Quarantine Station, N. J.
"As a herd, away up! up!! up!.!"—Dudley Miller Esq., Oswego, N. Y.
Young Cows; Yearlings with Calf, Yearling Bulls, and Spring Calves' Prime Stock. No fancy prices. We mean business. G. W. THOMPSON & SON, Stilton, N. J., P. R. R.

RECORDED PRIZE SWINE
(N. C. W. R.) Chester Whites; Poland Chinas, Fancy Strains; Imp'd English Berkshires, Recorded Pedigree, Health, Thrift and Purity guaranteed. Jersey Cattle (A.J.C.C.); Pedigreed prize-winning Cotswold Sheep. Bronze Turkeys. Catalogue by C. H. WARRINGTON, Box 86, West Chester, Pa. Am a Bona Fide Breeder. Call and examine. Mention this paper.

Berkshire Pigs.—Thoroughbred and Registered; very fine. From good stock not akin. 2 mo. old, $7; 3 mo. $10. DAVID CARLL, DEER PARK, L. I., N. Y.

FOR SALE.—Mammoth Bronze Turkeys, Pekin Drakes, Brown Leghorn Cockerels. Write for prices. Address D. M. BROWN, PROSPECT, OHIO.

Improved Excelsior Incubator.
SELF-REGULATING, PERFECTLY RELIABLE.

GUARANTEED to hatch a larger percentage of fertile eggs than any other Hatcher. Send for circular. Address,
Champion Mfg. Co.
QUINCY, ILL.

Miscellaneous Advertising

$65 A MONTH and BOARD for Three live Young Men or Ladies in each county. P. W. ZIEGLER & CO. PHILADELPHIA.

CONSUMPTION.
I have a positive remedy for the above disease; by its use thousands of cases of the worst kind and of long standing have been cured. Indeed, so strong is my faith in its efficacy that I will send TWO BOTTLES FREE, together with a VALUABLE TREATISE on this disease, to any sufferer. Give express & P. O. address. DR. T. A. SLOCUM, 181 Pearl St. N. Y

WE WANT YOU! a live energetic man or woman needing profitable employment to represent us in every county. Salary $75 per month and expenses, or a large commission on sales if preferred. Goods staple. Every one buys. Outfit and particulars Free. STANDARD SILVERWARE CO., BOSTON, MASS.

NEW Sample Book of beautiful cards, 11 Games, 12 tricks in magic, 436 Album verses. All for a 2c. stamp. STAR CARD CO., Station 15, Ohio.

FRINK'S RUPTURE REMEDY
Will quickly cure any case of Hernia or Rupture. Explanation and testimonials free. Address
O. FRINK, 24 BROADWAY, NEW YORK.

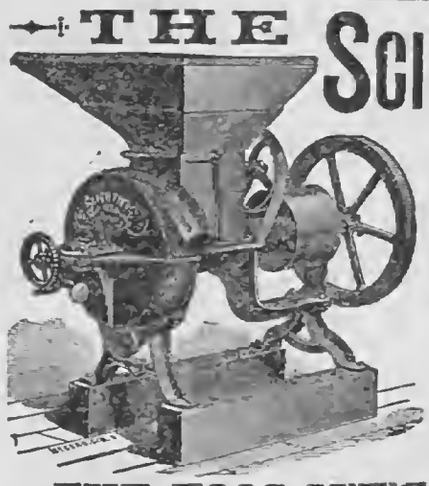
DEAFNESS Its causes, and a new and successful CURE at your own home, by one who was deaf twenty-eight years. Treated by most of the noted specialists without benefit. *Cured himself* in three months, and since then hundreds of others. Full particulars sent on application T. S. PAGE.
No. 41 West 31st St., New York City.

RUPTURE
Have you heard of the astounding reduction for DR. J. A. SHERMAN'S Famous Home Treatment, the only known guarantee comfort and cure without operation or hindrance from labor? No steel or iron hands. Perfect retention night and day, no chafing, suited to all ages. Now $10 only. Send for circular of measurements, instructions and proofs. Get cured at home and be happy, office 294 Broadway, New York.

I CURE FITS!
When I say cure I do not mean merely to stop them for a time and then have them return again, I mean a radical cure. I have made the disease of FITS, EPILEPSY or FALLING SICKNESS a life-long study. I warrant my remedy to cure the worst cases. Because others have failed is no reason for not now receiving a cure. Send at once for a treatise and a Free Bottle of my infallible remedy. Give Express and Post Office. It costs you nothing for a trial, and I will cure you.
Address Dr. H. G. ROOT, 183 Pearl St., New York.

HOLSTEIN-FRIESIANS.
STOP! THINK! INVESTIGATE!
Lakeside Stock Farm has
The only Cow that has given 25,021 lbs. 2 oz. of milk in a year
The only four-year-old that has given over 23,000 lbs. in a year.
The only two-year-old that has given 18,484 lbs. 13 oz in a year.
The only herd of mature Cows that has averaged 17,166 lbs. 1 oz. in a year.
The only herd of two-year-olds that has averaged 12,409 lbs. 8 oz. in a year.
The only two-year old that has made 16 lbs. 9 oz. of butter in a week.
The only herd in which 37 two-year-olds have averaged over 11 lbs. each in a week.
Twenty-three Cows in this herd have averaged 18 lbs. 3 oz. of butter in a week.
Also a fine stud of CLYDESDALE STALLIONS, Mares and Fillies of all ages.
Send for Catalogue giving full records and pedigrees. In writing always mention RURAL NEW-YORKER.
SMITHS, POWELL & LAMB, Syracuse, N. Y.

THE SCIENTIFIC GRINDING MILL



THE BEST MILL ON EARTH.
For grinding Ear Corn, Shelled Corn, Oats, and all small Grain. Grinding Plates. A Special Metal hard as Steel. Have Double Capacity, as they **Sharpen Themselves** on being reversed, which is done by simply **Running Mill in Opposite Direction.** Provided with a **Pin Breaker,** which prevents damage should iron accidentally go into the Mill. Sent on trial to responsible parties, and each Mill fully guaranteed. **Send for Illustrated Catalogue.**
THE FOOS M'F'G CO., SPRINGFIELD, OHIO.

THE BEST

WASHER
We will guarantee the "LOVELL WASHER" to do better work and do it easier and in less time than any other machine in the world. Warranted five years, and if it don't wash the clothes clean without rubbing, we will refund the money.
AGENTS WANTED in every county. We CAN SHOW PROOF that Agents are making from $75 to $150 per month. Farmers make $20 to $30 during the winter. Ladies have great success selling this Washer. Retail price only $5. Sample to those desiring an agency $2. Also the Celebrated KEYSTONE WRINGERS at manufacturers' lowest price. We invite the strictest investigation. Send your address on a postal card for further particulars.
LOVELL WASHER CO., ERIE, PA.

ONE VOTE
at the polls determined the United States Senatorship in New Jersey. Just $1 50 will secure you the AMERICAN AGRICULTURIST for 1887, which for half a century has been the recognized leading periodical of its character, and now contains far more illustrations, is larger in every way and better than ever. Postmasters! form Clubs.
The JUVENILE, HEARTH and HOUSEHOLD DEPARTMENTS have been enlarged, and HUMBUG Exposures are to receive additional attention.
1000 ORIGINAL ILLUSTRATIONS.—Every issue of the AMERICAN AGRICULTURIST contains nearly 100 original illustrations of animals, plants, new farm and household conveniences and appliances, out-door scenes, etc.
SPLENDID ENGRAVINGS FREE
HOMES OF OUR FARMER PRESIDENTS.—It is noteworthy that a majority of our Presidents were reared on farms, or retired from public life to rural scenes. The AMERICAN AGRICULTURIST is now publishing and **sending free** to all subscribers, at an outlay of **$30,000,** superb Engravings (8 by 21 inches in size) of these Homes, together with special descriptive papers by James Parton, Donald G. Mitchell and other eminent living American authors. These Engravings constitute a magnificent portfolio collection of ornaments
FOR THE
walls of a prince or peasant's home. Subscriptions for 1887 immediately forwarded are entitled to all the series, beginning in May last.
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Price, $1.50 a year; Single Numbers, 15 cents.
Balance of this year FREE to all subscribing immediately.
Send Six Cents for mailing you Grand Double Number, just out, 32-page Premium List, and Sample Proof of Engravings of "Homes of our Farmer Presidents," together with Description by James Parton. Address
AMERICAN AGRICULTURIST,
DAVID W. JUDD, Pub., 751 Broadway, N. Y.
CANVASSERS WANTED EVERYWHERE.

REED & BARTON,
ESTABLISHED 1824.
37 UNION SQUARE, NEW YORK,
MANUFACTURERS OF
ELECTRO GOLD AND SILVER PLATE,
INVITE INSPECTION OF THEIR EXTENSIVE STOCK OF
TABLE WARE,
Which Embraces Everything Required for Use or Decoration of the Table.
Coffee, Tea, Dessert and Water Sets,
Cake and Fruit Baskets, Meat, Vegetable and Baking Dishes
Epergnes, Candelabra, Spoons, Forks, Cutlery, &c.
They would also Call Attention to their Large Assortment of Novelties in
OXIDIZED SILVER, GOLD INLAID AND APPLIED WORK,
SPECIALLY ADAPTED FOR
HOLIDAY GIFTS.

Humorous.

THERE was a young lady in Bassville
Who said to her lover: "Alas, Will,
You come every night
And you talk such a sight,
That the people all call you my Gas Bill."
Detroit Free Press.

LIBERTY Enlightening the World ought to try it on some of the other New York papers. —*North American.*

"WHAT makes that girl walk so funny?" inquired De Smythe of Browne. "Is she intoxicated?" "Oh, no; she's not intoxicated," responded Browne. "It's only her shoes that are tight."—*New Age.*

"SEE here, landlord," said an angry tenant, after he had signed the contract for a year, "this house is full of sewer gas." "Yes, that's what I told you." "Told me?" "Yes; you asked me if there was gas in every room, and I said there was."—*Harper's Bazar.*

A CERTAIN little girl is very quick with an answer. She has a roguish uncle, who loves dearly to tease her. One night he suddenly blew out a lamp. "Why, where did the light go?" he asked, opening his eyes wide at Edna. "It goed out be course," answered the little one promptly.—*Albany Courier.*

"I'VE been riding on the limited cattle train all day, madam," said the tramp in an imploring tone of voice, "and my feet are very tired. Would you mind letting me sleep to-night in the cow pasture back of the barn?" "Certainly not," replied the woman kindly, "and I'll tell John to put up the bars snug and tight so you won't catch cold."—*New York Sun.*

A CHURCH organist in a Pennsylvania town, all bent with age, at the wedding of an antique belle whom he knew years before, astonished everybody by playing a fantasia on the air "When You and I Were Young." This is about as good as a Detroit organist, who trilled, "I Am a Pirate King," as the deacon was taking up the collection.—*Grand Rapids (Mich.) Telegram.*

NOT long ago a family who resided in St. Paul removed to North Dakota. Its members include a little boy who can yet count his years on the fingers of both hands. One day, after they had resided in their new home a short time, the little fellow, who had been gazing out on the treeless prairie around, approached his mother very soberly and asked: "Mamma, do they have trees in Heaven?" "Yes, dear," replied the mother, "they have everything nice in Heaven." "Then, mamma," said the little fellow, eagerly, "let's sell out here and move to Heaven right away."—*St. Paul Pioneer Press.*

Miscellaneous Advertising.

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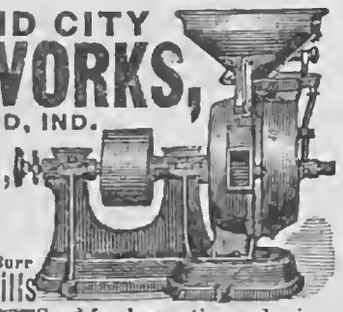
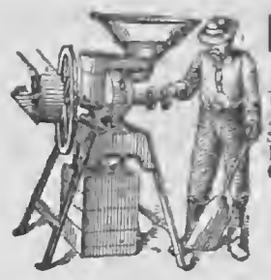
MILL WORKS,
RICHMOND, IND.
Manufacturers of
MILL STONES,
FLOURING MILL MACHINERY,
and the BEST French Burr
Corn and Feed Mills
In the country. Send for description and prices.





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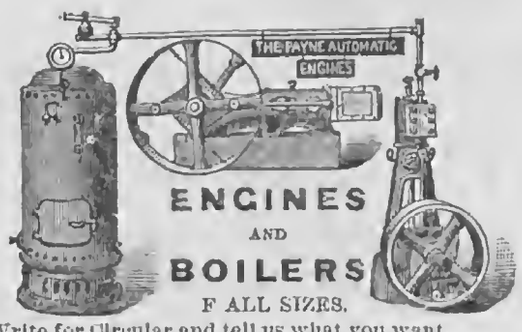
GRINDS
FINE FEED & TABLE MEAL, TOBACCO STALKS and STEMS, DRUGS, SPICES, CHEMICALS, etc.
Send for circulars.
A. Rickard,
110 John St., N. Y.

KNABE
PIANOFORTES.
UNEQUALLED IN
Tone Touch Workmanship and Durability.
WILLIAM KNABE & CO.
Nos. 204 and 206 West Baltimore Street, Baltimore.
No. 112 Fifth Avenue, New York.



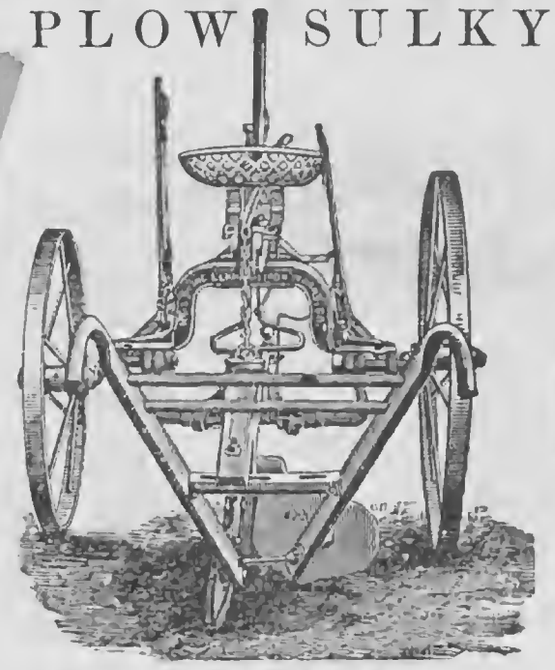
ENGINES AND BOILERS
OF ALL SIZES.
Write for circular and tell us what you want.
B. W. PAYNE & SON, Drawer 1005, ELMIRA, N. Y.
New York Office, 107 LIBERTY STREET.
Eastern Agents, HILL, CLARKE & CO., Boston, Mass.
Our Patented Vertical Boiler will not prime, danger of burning flues.

IN THE GLOAMING.

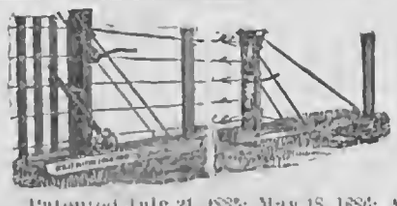
"Is that you, Willie dear?"

"Oh! you horrid Beast!"

THE ELKHART
PLOW | SULKY



READ THESE FACTS.
Lighter Draft with Driver Riding than ordinary Plow with Driver Walking. Turns square corner without backing. It is wholly constructed of Iron except tongue and front lever.
We claim and GUARANTEE that a Plow attached to the Sulky and carrying the driver, is from five to 100 pounds lighter draft than the same Plow doing same work without the Sulky. Write for prices.
ELKHART IRON WORKS,
ELKHART, IND.
Mention Rural New-Yorker.



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Patented July 21, 1885; May 18, 1886; August 3, 1886.
The only practical machine in use that makes the fence in the field wherever wanted; makes the best, strongest, and most durable fence for general use and farm and stock purposes; weaves any size picket and any size wire. The fence will turn all stock without injury to same. For catalogue and full particulars address M. C. HENLEY, Sole Manufacturer,
Factory, 523 to 533 North 16th St., Richmond, Ind.
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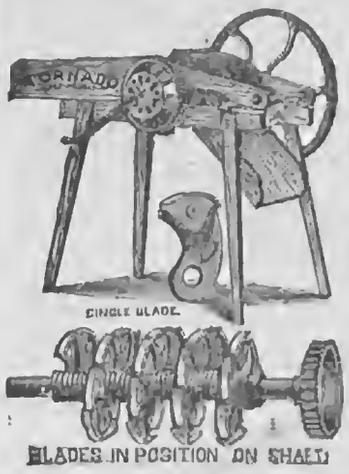
The TORNADO Feed Cutter



A new invention for cutting hay, straw, sheaf oats, rustlage, and thoroughly cutting and splitting corn fodder, either **husked** or **unhusked**. Cuts on an entirely **new principle.** Not liable to get out of order. **Will cut faster with less power** than any other cutter. Has been thoroughly tested and found perfect in every respect. Farmers, Dairymen, Livery-men, and Stock-feeders can save **money, time,** and **labor** by using a **Tornado Cutter.** Made in sizes to suit everybody. Every machine warranted to give satisfaction. Responsible agents wanted in unoccupied territory. Write for prices and circulars giving full particulars.
W. R. HARRISON & CO., Mfrs., Canton, Ohio, U. S. A.

THE STEVENS PORTABLE MILLS
For CORN and FEED GRINDING
Genuine French
BUHR STONES
Power Corn Sheller
Prices Below the Lowest
A. W. STEVENS & SON
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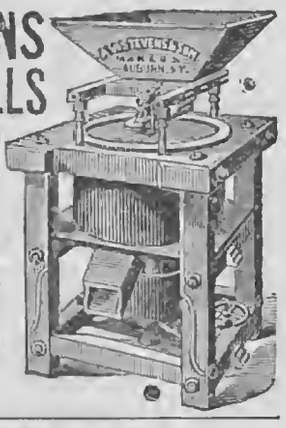


$5,000 REWARD.
MURDERED ON THE FARM AND HIGHWAY.
150,000 HORSES
annually by inhuman owners, result of using horse-killing Harness. **Sherwood's Novelty Harness** at less than one-half price *obviat s this.* The above reward will be paid in commission to agents selling our Harness. Send for catalogue and price list to **Sherwood Harness Co., Syracuse, N. Y.**

Best Selling Sheller in the Market

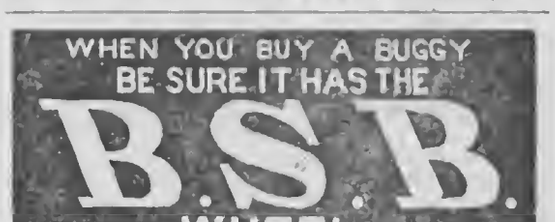
Adjusts itself to all size Corn without the use of Springs. AGENTS WANTED to take Exclusive Sale in every town. Sample Sheller at wholesale price.
YPSILANTI MACHINE WORKS,
YPSILANTI, MICH.

The Cold-Water Dip,
(THYMO-CRESOL,)
A very highly concentrated, non poisonous fluid—mixes readily with cold or warm water—the simplest, safest, surest cure for TICKS,
LICE,
MANGE, SCAB, all Insect Pests, all Skin troubles, and many other Diseases of Live Stock. Recommended by many prominent Breeders. See circular, sent on application. T. W. LAWFORD & CO.,
Baltimore, Md.

HORSE POWERS.
Latest Improvement.
Machines for **Threshing** and **Cleaning Grain**; also Machines for **Sawing Wood** with Circular and Cross-Cut Drag Saws.
Acknowledged by all to be **THE BEST**, considering Easy Draft, Durability, Quantity and Quality of Work. 48-page Pamphlet FREE. Address
A. W. GRAY'S SONS,
PATENTEES AND SOLE MANUFACTURERS,
Middletown Springs, Vermont.

AGENTS WANTED
Brown's Fence Builder
A practical, simple, durable, portable, cheap and valuable FARM IMPLEMENT for building picket fence on the posts where it is to remain. Heavy wire and strong, heavy pickets used, easily operated by a 16 year old boy. Sixty rods made in a day at a cost, of 20 cents a rod. Agents wanted.
JOHN P. BROWN,
RISING SUN, IND.

$250 WILL BUY



THE BEST
SAW MILL
Yet offered for the money.
SEND FOR CIRCULAR.
RICHMOND MACHINE WORKS,
RICHMOND, INDIANA.

MONARCH AND YOUNG AMERICA
Corn and Cob Mills

Only mills made with CAST CAST STEEL GRINDERS
Warranted superior to any in use, for all purposes. Will grind faster, run easier and wear longer. *Satisfaction guaranteed*
Also Hay Presses, Corn Shellers, Feed Cutters, Horse Powers, etc.
Send for circulars and prices. Manufactured by,
HITMAN AGRICULTURAL CO., St. Louis, Mo

WHEN YOU BUY A BUGGY
BE SURE IT HAS THE
B.S.B.
WHEEL
THE STRONGEST AND BEST WHEEL MADE

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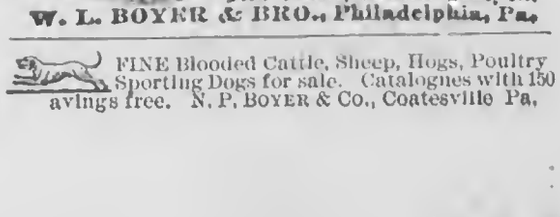

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THE RURAL NEW-YORKER

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Pomological.

JAPAN CHESTNUTS.

Is it a Japan Chestnut? The possibilities of improving chestnuts; a failure with Japan Chestnuts; seedlings; easy to raise.

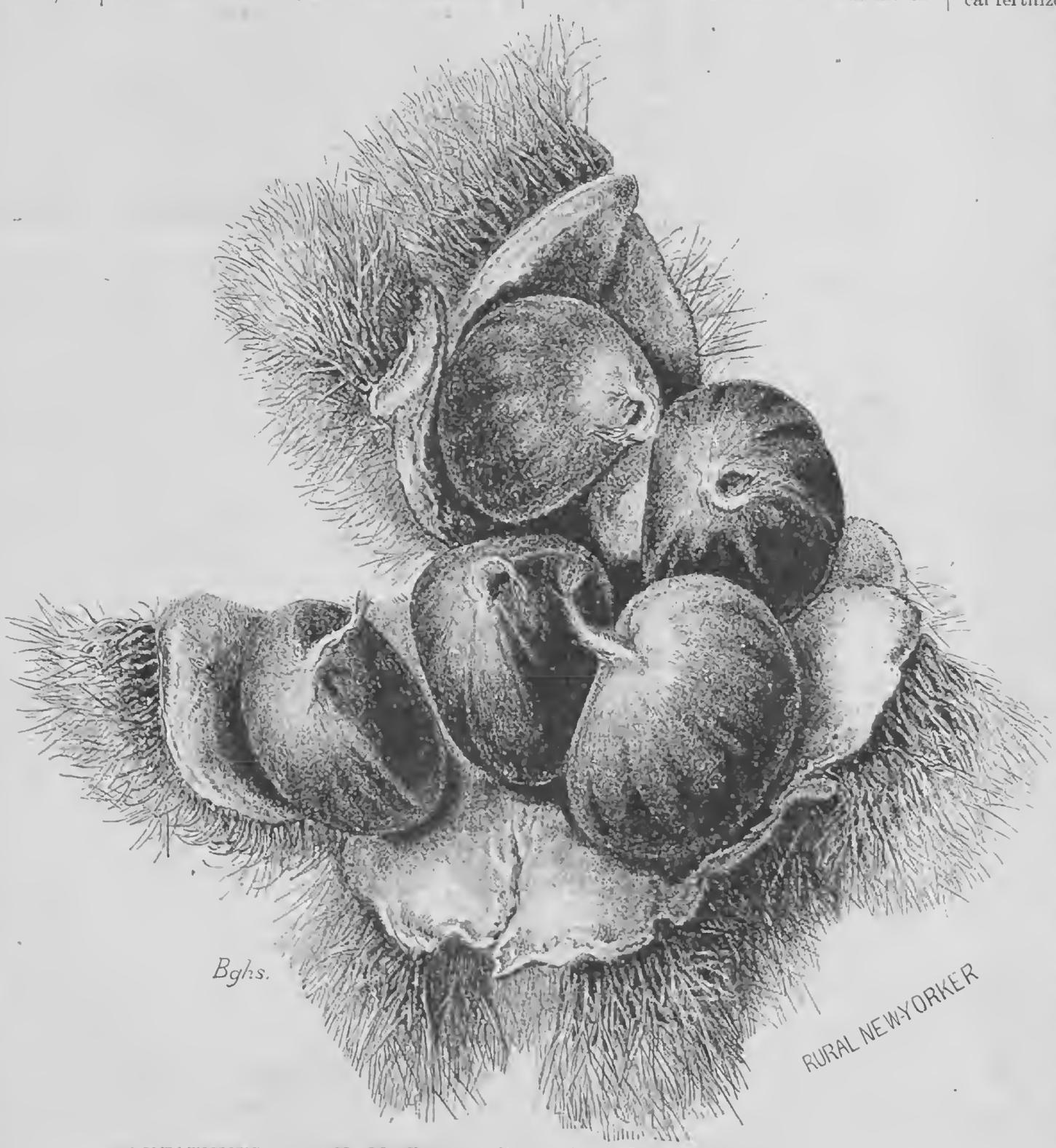
ON October 11, we received from Messrs. H. M. Engle & Son, Lancaster Co., Pa., five large chestnuts in a burr, as shown at Fig. 450. The quality was as good as that of our native chestnuts. Mr. Engle writes:

"So far as concerns productiveness, vigor, hardiness and early fruiting, this variety is all that can reasonably be desired; in fact, it bears in the nursery the second year from grafts. The specimens are fair samples of the size of the fruit. Its history I cannot trace further back than 10 or 12 years ago, when I received from an amateur a few cions bearing the name, 'Great American.' That it is a true native I have doubts; it may be from a foreign variety influenced by native pollen, since for quality it is claimed to be nearly if not altogether equal to any of the American sweet chestnuts. I expected it to be identical with 'Numbo;' but on comparing their foliage I am sure they are different. Not having the 'Numbo' in bearing yet, I can not say how it will compare with ours for productiveness, size or other qualities of fruit; but that it can possibly be superior in any respect, I can not for a moment believe. I have seen Japan chestnuts larger than these; but some fruiting in this vicinity this season are not as large. As to quality, I have had no opportunity to compare them.

"As to comparative vigor, the Japan seems small and feeble, and since its hardiness is questioned by some, it is not likely that it will prove superior to some varieties now cultivated. As to varieties, I would just here suggest that any proving superior should be authoritatively named before synonyms or a confusion of names can occur, especially since nut culture will be rapidly extended in this country, and well it should be. As the value of nuts as food for man is appreciated by only a few just now, it would be of interest to learn the nutritive properties of nuts generally, and specially of chestnuts. The appetizing quality of the latter is well known to those who have eaten them fresh, boiled or baked, and when they can be had of the size of some varieties now raised, we can make a meal without getting hungry while shelling them.

"As to Japan chestnuts, since many are grown from seed, we may soon have as many varieties as there are now of Chickasaw plums, under the name of Wild Goose."

[R. N.-Y.—The size of the chestnuts and the number in one of the burrs are shown in the illustration, Fig. 450. The quality of this variety is *fully* equal to that of the average American chestnut. We do not pretend to say whether it is American or Japan, not having seen the wood or foliage. No matter of what country it is a native, such specimens show that the size of chestnuts may be doubled without lowering the quality, and that productiveness may be greatly increased by seedling cultivation. No doubt worthless Japan seedlings will be distributed in numbers, but out of the lot of rubbish we shall in time settle upon varieties far superior to those known at present.



CHESTNUTS FROM H. M. ENGLE. Drawn from Nature. Fig. 450.

A FAILURE.

J. N. Roberts, of Norfolk Co., Mass., gives his experience with Japan Chestnuts as follows:

"Eight or 10 years ago, quite late in the season, while purchasing some pear trees of a nurseryman in Boston, my attention was attracted to a very foreign-looking package of what appeared to contain material for canes or sun-shade handles; but upon inquiry I was informed that the package contained about 100 or more young Japan Chestnut trees which had been ordered several months previous by some lover of novelties in or near Boston, but upon their arrival by express from California so late in the season, there was no one to claim and pay charges on them, and they were, therefore, placed in the hands of the aforesaid nurseryman to be disposed of as best he could. I was induced to try a couple at 25 cents each, and set them out in a favorable situation.

It being the latter part of June, I did not see any signs of new life until along in July, when the buds began to expand and new growth to assert itself in a very gratifying manner. The young shoots and leaves that during the season kept multiplying were the admiration of all who saw them. The foliage was striking, and unlike anything I had ever seen.

In the Fall I took special pains to have them well protected during the Winter, and to that end I protected them in the best possible manner with straw and matting, and left them to their fate until Spring. When spring time came, and new life was indicated by swelling buds, I carefully disrobed my new friends, expecting all the while my reward would be ample; but, alas! when I took off the last layer I found that the bark was cracked and ready to peel, leaving nothing but the bare stock, sapless and dead. Thus ended my first and last experience with the Japan Chestnut.

"Now what was the matter? Was the climate too severe, or did I kill them with kindness?

R. N.-Y.—We doubt not that they were killed owing to late growth. Possibly they were the Spanish Chestnut.

On Dec. 2 we received from Storrs, Harrison & Co., of Painesville, Ohio, three chestnuts, marked "Japan Chestnuts," which weighed four ounces, the largest we have ever seen. The flesh was coarse and inferior to that of American chestnuts. Storrs, Harrison & Co., are confident that these are Japan Chestnuts, but we have never seen any grown in this country so large or of such poor quality. They resemble the Spanish chestnuts sold from the street stands.

Field Crops.

Experiment Grounds of the Rural New-Yorker.

SELF-HUSKING, BRAZILIAN FLOUR, ANGEL OF MIDNIGHT CORN.

SELF-HUSKING CORN.—Seed received from Peter Henderson & Co., of New York. It was planted May 1st in drills one foot apart—the drills four feet apart. The soil was a sandy loam much impoverished by constant cropping for a dozen years or more Complete chemical fertilizers were sown upon the plot at the rate of about 600 pounds to the acre. The plant averaged six feet high and bore one and two ears to a stalk—generally one. The ears were about nine inches long, eight rows, very regular. They resemble the yellow Canada flint. The kernels are a trifle larger, however, and the cob very small. The crop might have been harvested August 15. The husks begin to wither while yet the plants are vigorous and green, and finally fall down around the stalk, exposing the ear fully Many kinds of flint corn and some kinds of dent have the same habit, though not, so far as we have observed, to the same degree. At any rate Mr. Henderson is the first to have utilized this peculiarity by bringing it prominently before the public for whatever it may be worth in saving labor in husking. Some may object to it on the ground that the naked ear invites the attacks of sparrows, blackbirds, etc. It was not so in this case. The kernels were well glazed before the husks began to free themselves from the ear, and the birds were unable to injure them, being closely set and hard. Aside from the self-husking habit, this corn may be regarded as early and prolific. The accompanying illustration, Fig. 451, page 923, shows one of the best ears.

* * *

THE NEW BRAZILIAN FLOUR CORN.—Seed received from Samuel Wilson, Mechanicsville, Bucks Co., Pa. Mr. Wilson says that it is largely grown in Brazil, S. A., and constitutes the principal article of food for the inhabitants. He claims that when this corn is "properly ground and bolted, it will make as good flour as that made from the best of wheat." "The flour," he continues "is much whiter than wheat flour; will rise as well and will make bread, pies, cakes, biscuits etc., equal to the best wheat flour." He further claims that this corn is very productive and will grow in almost any climate, and, owing to the unusual number of ears produced on one stalk, that it will produce as many bushels of shelled corn to the acre as any variety of field corn. He further claims that it is unusually valuable as a forage plant owing to its immense stooling properties, rapidity of growth and abundance of blades." He further claims that the Brazilian Corn is equal if not superior to the best varieties of sugar corn for boiling or roasting when green.

The seed was planted May 1st in the same way as the Self-Husking Corn, and in an adja-

cent plot. The plants grew about nine feet high. The stalks were comparatively slender, the joints closer together than usual, the leaves broad and many. Very few of the plants suckered at all, and those less than the average dent varieties. Nearly every joint formed a a set, so that there were sometimes eight or even 10 sets to a plant. The ears are small, averaging rather less than six inches and bearing a variable number of rows—usually 10. The kernels are rather small, white and starchy. Though the season was favorable, the grain did not mature and frost found the most advanced ears still milky. We cannot speak, therefore, of the flouring qualities of this corn. Several lots were gathered and boiled. The quality was rich and agreeable, but rather dry and tough. We should say that the Brazilian Flour Corn would not mature in average seasons north of Washington. We have never raised any kind of corn that bears anything like so many ears to a plant. The so-called Blount's Prolific is not to be compared to it. But the ears are not half so large. The *best* ear of the Brazilian Flour Corn weighs 4½ ounces (the grain four ounces, the cob half an ounce). An average-sized ear of large Western white dent weighs 19 ounces (the grain 14½ ounces, the cob 4½ ounces). It is safe to say that the grain of an *average* ear of the Western corn will weigh four times as much as an average ear of the Brazilian. We doubt if the latter will bear an average of four times as many ears as the former, while the time required in husking would be at least four times as great. The value of the Brazilian Corn must, therefore, rest in its flouring qualities, of which we can not judge. It may be well worthy of trial in more suitable climates. The illustrations, Figs. 452 and 453, p. 923 (from nature) show what Mr. Wilson considers an average ear.

* * *

MIDNIGHT CORN—POTATO YIELDS.—We have received four ears of Angel of Midnight Corn from Geo. W. Sherman, of Rhode Island, which weigh 2¼ pounds. The longest ear measures 13¾ inches, eight rows, 61 kernels to the row, or 488 to the ear. The shortest ear s 12½ inches long, eight rows, 53 kernels to the row or 424 in all. The ears are straight, the rows regular. Mr. Sherman writes as follows:

Angel of Midnight is the best corn for Rhode Island. I planted six acres this year and harvested 750 bushels of ears. I used 800 pounds of Bowker's Fertilizer to the acre, but no other manure. I also planted five acres of potatoes: one acre of Pearl of Savoy yielded 125 bushels; one acre of Early Rose yielded 160 bushels; one acre Burbanks 210 bushels; two acres of Rural Blush yielded 620 bushels. All these were salable, small ones not having been measured.

Horticultural.

GARDEN NOTES.

WILLIAM FALCONER.

SWEET CORN, NORTHERN PEDIGREE.—The RURAL's notice of this variety, Nov. 20th., reminds me that I too grew it last Summer. I sowed the seed in warm, rich, sandy ground, April 19th, and gathered the first mess of corn from it on July 9th. Plants some five feet high; one to two ears to a stalk; ears five to seven inches long; quality unsurpassed for excellence by any other sweet corn I ever ate. Indeed, I'd as soon eat it uncooked as cooked.

SWEET CORN, WHITE EXTRA EARLY MARBLEHEAD.—Sown April 9th, fit for use July 7th. The earliest corn I had. Plants some five feet high; ears six to eight inches long and mostly two to the stalk. An excellent corn, but not as sweet as Northern Pedigree.

FARQUHAR'S FIRST CROP SWEET CORN.—Plants of about the same size as the Marblehead, earliness the same, ears smaller, white; a capital early corn, but I should prefer the Marblehead.

SNAP BEAN, CLEVELAND'S IMPROVED VALENTINE.—I have grown this, another member of the RURAL 1887 Seed Distribution, for the last two years, and I must recommend it as being one of the finest beans grown. From the 20th of April till the first of September I sow it twice a week; if I knew of a better bean I'd use that instead. It is six to nine days, according to season of the year, earlier than the common Valentine. But it isn't the earliest bean in cultivation by any means, the little White Flageolet, so far as my acquaintance extends, holds that honor. But the Flageolet is of poor quality. In my trial ground last Summer, sown May 27th, it was fit for use July 8th. Land, warm, saudy, and rich.

HENDERSON'S EARLIEST RED VALENTINE BEAN.—This is just as early and good as Cleveland's; indeed, I don't know what is the difference between them.

FAMILY BEANS.—By this I mean beans for home use exclusively. "Nearly the whole crop can be taken at one picking." I think that is one of the poorest recommendations a family bean can have; for our own use we want a bean we can pick for to-day, to-morrow, the day after and longer; we want fresh, brittle beans every day in the week, and in order to have them we don't want to make a fresh sowing every day.

WHEN TO PICK BEANS.—I pick them as soon as they are three inches long; the moment there is the least string to them, they are too old, and all I can do with them is to root them out and feed them, plants and all, to the hogs, and in with a fresh supply. For this reason I sow twice a week the whole Summer through.

JERUSALEM ARTICHOKES.—We have better artichokes this year than ever before. We planted them last April in rows three feet apart and two feet asunder in the row, one middle-sized tuber in each hill. The land had been subsoiled or well manured, and during Summer kept cultivated and clean, so long as we could get in among them. In September and October the "vines" were 10 to 14 feet high, and all in bloom: but that didn't hurt the crop of tubers any. It was enormous. We store in a very cool pit with sandy earth among and over the tubers.

SALSIFY, SANDWICH ISLAND MAMMOTH.—Yes, it is bigger than the common one, but really the difference isn't much. In good ground it requires timely thinning; in poor ground it doesn't amount to anything. But the idea of its being as big as a fair-sized parsnip is all nonsense.

WHITE PLUME CELERY.—This was the hardest year for celery I ever knew. We usually sow our main crop in the fourth week of April and in due time pick them off, and plant them out in July or in early August after peas, beans, potatoes or cauliflowers. Last Summer we had lots of rain till after the middle of July when a drought set in that lasted till toward the end of October, just the time when celery should be growing. It was only with the watering cart we kept our celery alive. But on the 27th of October we had a good, soaking rain. Between that time and November 15th, when we bedded our celery, you could almost see it grow. And the White Plume is the very best celery I have got. I earthed it up twice, not to whiten it, for it is white enough naturally, but to make it tender. In all we grow some 10,000 heads.

LEEKS.—On November 18 I lifted and bedded my leeks for the Winter. In doing this I shorten their tops, then plant the leeks deep—to the tops of their necks—and close up against each other, in rows about five inches apart in a cold-frame. About the first of December I will throw an armful or two of dry oak leaves over the leeks in the frames, put on the sashes and let them alone for the rest of the Winter, except so far as taking out what I need is concerned. They are hardy enough only I mustn't let them get locked in by frost if I want them in Winter. In growing leeks there are some points to particularly observe: Seed over a a year old is almost good for nothing; the leeks don't go to seed the first year no matter how early you sow them; the earlier leeks are sown the bigger the plants will be, and later sowings never overtake the earlier ones. In sowing, sow broadcast or in quite close rows in a frame or outside nook as you would cabbage or celery, and when you get ready to plant, shorten tops and roots, and with a hoe draw drills four to five inches deep and plant therein.

GLOBE ARTICHOKES.—I cut the last lot Nov. 16th. They were small but plump and good, and from plants raised from seed sown in the greenhouse last Spring. This is a fancy vegetable, but it is becoming a fashionable one, not so much for fashion's sake as for taste's sake,—many people are fond of it. It is unreliably hardy. Old plants yield their first heads about the end of June; those from Spring sowings about the first of August. We reckon on them constantly between the first of July and the middle of October. A slight frost doesn't hurt them. There are many varieties. The round, sharp prickly ones are the poorest; the oval, flat-headed ones the best. You may buy what named sorts you please, you have got to select your stock after you see them flower. For fashionable dinners there is always a run on this vegetable, one head for each guest is the rule.

KALE FOR WINTER.—Now I am very fond of kale greens in Winter, they are so sweet and tender. But I can assure you it is we old fogies who ought to know better than to get caught napping the oftenest. For a long time I have been trying to get a real dwarf, hardy, early kale that will stand an American Winter: but I haven't got it yet. Last Spring I bought "true" Scotch kale from a Scotch firm in Boston, and have therefrom a nice crop of long-legged *purple* kale! Yes, I'm disgusted. I sent to London and got Veitch's Dwarf Late Curled, "a very superior and distinct variety for late use, dwarf, beautifully curled and exceedingly hardy," also Read's New Hearting, "very late, hardy, dwarf and compact growing . . . forming large, compact, crisp and well-curled heads. . . . It resists any amount of frost and wet without being injured." All was lovely and I had large plantations of kale, for every bit of land as it became vacant was filled up with kale or turnips. But on the 17th of October we had a piercing frost (4°) and a driving wind, and my half-mature English kales were half killed, and my young plantations completely killed. But of common and Siberian kales I've got enough.

NOVELTIES.—I buy almost everything that turns up year after year in the way of novelties, no matter be they flowers or vegetables. I never depend on a novelty for a crop, but take much pleasure in growing and comparing it in my trial ground. Folks talk about getting "sold" and "swindled" in novelties; but isn't it curious that it is we old fellows that have been practically engaged in this growing and experimenting business for a quarter of a century or more who buy and try the most of the novelties every year? We are only doing a little towards keeping posted in our business; we never look for a bonanza, no matter how loudly puffed the alleged novelty may be. We "take it easy," keep our tempers, and make a note of it.

A NEW FLOWER-POT has been invented by a lady in Arkansas. The pot has two walls, one within the other, the space between forming a reservoir for water. Near the bottom of the inner wall there are holes through which the water flows to moisten the earth. Water is poured in through a spout fixed to the side of the outer wall. It is said that where the water is supplied at the bottom in this way the roots of the plants are sent down deeper to find the moisture, and surface roots are not so liable to be formed.

The Vineyard.

MINER'S GRAPES.

THE Antoinette (of Miner) is a very strong grower, a healthy vine, and some seasons very productive, bearing large and handsome clusters, with bunches and berries larger than any I have ever seen of the Victoria, and in quality much the same. Indeed, all the white seedlings which Mr. Miner sent me were very much alike in flavor and quality, and were in this respect similar to most of the White Concord seedlings that I have seen. Although the Antoinette seems both hardy, healthy, and vigorous in this climate, it is variable, bearing well in some seasons, and but little in others; and from what I saw of the Victoria at River Edge, I thought it might have the same habit. The best in quality of Mr. Miner's seedlings that I have grown has been the Carlotta, though it is not as vigorous in growth; and the berries and clusters are smaller. The past season it ripened at the same time as the Francis B. Hayes, and was so much like it in every way that I could hardly see any difference. Both were really very good. None of the black seedlings of Mr. Miner's seemed to me worth perpetuating, as none of them was as good as Concords in any important particular.

G. W. C.

R. N.-N.—The Carlotta is in quality the best of the Miner's grapes tried at the Rural Grounds. It is not very prolific, however, and the vines are less vigorous than those of the Victoria.

BOGUS WINES.—A profitable business is being done in this city in the production of bogus wines. Dried fruits, such as raisins, currants, and peaches, are macerated with water to which a certain amount of sugar is added. The mixture is then fermented, and when fermentation is sufficiently advanced, it is checked by the addition of salicylic acid. The stuff is then flavored and colored to resemble various wines. It is a dangerous concoction, likely to cause sickness. Salicylic acid should never be taken into the stomach. Bogus wine, like bogus butter, needs a bush—smartly applied to the backs of the makers to drive them into the light.

Farm Topics.

PITHY PARAGRAPHS.

NEVER purchase a farm without having a search made, back to the State, to know that your title will be perfect; and be sure that there are no incumbrances.

Never accept the farm or the title, until it has been surveyed, and the corners located and permanently marked with a stone that is not common to the locality.

If the line fences are not on the exact line, have them put there at once. You cannot afford to quarrel with any one.

In building fences, take the cost and the time that they will last into consideration. A cheap fence may be too cheap. All fences are costly, and the fewer you have the better.

A stone fence only wants binding crosswise, it does not fall down lengthwise. A crooked rail should never be put in the fence near the bottom. A crooked rail, like a crooked man, makes more trouble than it is worth—better make wood of it.

Board fences are usually made with two good boards; they hold too much water and rot too quickly. Joints are often too wide, the wind has too great an effect. The best wooden fence cannot stop a mad bull. What is the use of trying to do it?

Iron posts and wire are to be the fence of the future. The quicker the farmer is prepared for it, the better.

A stone fence is a costly fence if you have to lay the stones, but if you have to take them as an incumbrance from the ground and pile them up, it pays at both ends.

Have your new house on naturally dry ground, but if this be impossible, drain it at least three feet below the bottom of the cellar wall. Do not lay the cellar wall plumb on either side. Have it broadest at the bottom, and just as wide as the sill at the top. If it is likely to freeze, put in a brick wall inside.

Do not build a home larger than you really want. A thousand dollars worth of house for other people to look at is a costly vanity. Have a good cistern and a large one, with a brick filter in it. It will pay the cost ten times over in a single year.

Have the conductor pipes come down on the inside, where they will keep open the year round. You will lose a little of the roof; to be sure, but in the Winter you can have all the water that there is. If the corners of the house are to the north and south, the sun can shine into every window, every day in the year and the house will be far more healthy.

Never live on the north side of a house in this cold climate, but on the sunny side, or the children will grow spindling, the eyes will fail at 30, and the women folks will drop into early graves.

The parlor should not have the most cheerful prospect, that is the room to be enjoyed on the inside. Let the outlook from the living-room be the most pleasant, where most of the time is spent.

The barn should be handy, far enough off so as not to be in danger if the house burns, and not to endanger the house if it burns.

One barn large enough for all, is better than several small ones. Have everything under one roof, and have it well insured.

Plant on the road side the whole length of the farm, such trees as naturally grew on the same place. Put them eight feet from the line.

Have some planted around the dwelling, and in the gullies and waste places, where nothing else can grow, and cover the country with trees. They will help the climate, and water supply.

You cannot do everything with one plow. You might as well expect to obtain all knowledge from one book. For stiff clay soil have the mould-board long and slim, and for a light, sandy soil have a short one with a sharp turn. Turn over green-sward flat—roll it before harrowing, and never harrow across the furrows.

If your farm is not thoroughly drained, do it at once, or commence at once, and finish as soon as possible. I do not advise the extremes that some recommend, but drain the worst places first, and the gain will pay for the remainder. A farm that needs draining is but half as productive as one fully drained.

The best seed grain is grown on the highlands, because it matures slowly. Always get your seed from the best farmers in your vicinity, and if it is not all right they will be the most likely to make it all right. Do not purchase poor seed at a lower price.

Sow your spring grain with the drill, because it saves seed and time, puts it all at one depth, and insures better germination.

Roll all fields in the Spring. On meadows it puts the stone out of the way; on grain, it makes the surface smooth for the reaper, and the rake. Besides, a compacted surface holds the heat and moisture. Sow none but perfect seed, none that has been broken, and no trash.

Gauge the *quantity* of seed to the *quality* of the soil. It is nonsense to sow two bushels to the acre, if you know that the soil will not produce but twenty. Those farmers only sow two bushels who expect to raise 40. It is seed thrown away.

The best thing round a home is a good garden. To insure one it needs to be well drained, thoroughly trenched if the soil is tenacious,

not a stone in it and a good quantity of fertilizer. Several loads of sand and muck will not hurt the best one in town.

Grubbing out stumps is costly; blow them out with dynamite, at 10 cents apiece. Dynamite is exploded with a blow. Large rocks are treated in the same manner. If you cannot blow them up bury them two feet below the plow. You cannot afford to plow round them.

Never plow close to a tree, whether an ornamental or a fruit tree: the tree is worth more than what you will get from under it, and after it is fairly started it is wicked to mar it.

You cannot afford to raise your kindling wood in the orchard or fruit garden. Trim off the surplus limbs while small. Do not let the worms eat the foliage of fruit trees; leaves are the lungs of the tree, and to have them lacerated destroys the fruit.

Insects that are pernicious, ought to be destroyed in the egg, do not let them multiply. A stitch in time saves ninety-nine. Ten cents' worth of hellebore will save a bushel of currants. Commence very early with the hellebore; hardly one in ten is quick enough.

Do not plant corn in the Old Moon, but in the field that you have expressly fitted for it, and when you are ready plant without regard to the moon or other planets. Corn is not a lunatic.

Get your seed from a colder climate, if it has matured, and to be sure that it will germinate; try some of it before you want it. Put enough in the hill for all competitors. To keep the crows from pulling the corn, be there first, and assert your rights.

Wash your sheep this year better than ever before, because the buyers have you on the hip. They will assert that the tariff has knocked the wool market down 10 or 15 per cent., and how are you going to disprove it? They always have their own *weigh*.

Put your wool up in the best condition possible, have it clean, the fleeces in good shape, not too much string, and place it where it can be seen to the best advantage. This is your duty, and you have the right to make it look just as good as you can.

Do not despise little things. The success of the railroad is in the flange on the wheel, the success of the drill in the little wooden pins, and the mowing-machine on the reciprocating motion of the knives. The squall of a goose saved Rome.

It is of no benefit to fence a field unless it is fenced completely. To leave the bars down, is as bad as no fence. After a field is sown to clover, a little plaster may save the seeding. A single load of manure, rightly applied in the Spring, where some wheat is being killed with frost, pays for itself, ten times.

Have a time and place for everything, and at the time have everything in its place. This a good adage, but it is not true. There is no *time* for idleness, or *place* for a shirk. There is always time to study and a time to think. He knows most who has thought most. He that can appropriate the thoughts of those with whom he comes in contact and utilize them, becomes wise.

Do not go after foreign fertilizers until you have used all that you have at home. To pay 10 dollars, or 30, for the plaster that you get in many of the commercial fertilizers is "paying too dear for the whistle." Make your own fertilizers, and save the profit, or the transportation. Either will pay.

Try salt as a fertilizer in combination with muck, marl, lime, plaster or ashes. It may be soda that you want and not phosphate. The soil may need lime, or sulphuric acid, or a mechanical loosening, and the effect may be just as good as with a costly foreign product.

Never attempt to mow with a dull scythe. It is time and strength saved to have it sharp. It is equally true with the mower. The guards want to be sharp as well as the knives. It takes two blades in shears to cut well and the same in a machine.

Have plenty of help in the meadow or harvest field, and if any one looks on let it be yourself. You are then ready to lend a helping hand to him that needs it, and the business does not have to stop even if the constable should come and summon a man on a jury. Have your tools in the best order possible. A dull knife can cut butter, but not without greasing it.

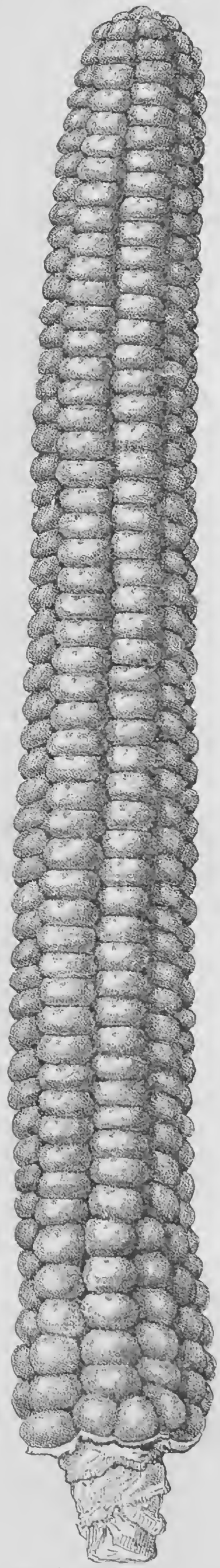
It is wisdom to know, that yourself does not know,
And in knowing to know that you know what you know.

HOMER D. E. SWEET.

PUDDLING AND WATERING.

Mr. Edwin Taylor, of Kansas, in the Rural of November 13, reports that his practice in this matter is somewhat at variance with some of my positions on transplanting, as expressed in an essay read before the American Horticultural Society at Cleveland, Ohio, in September. These "positions" were bare statements of the results forced upon me by actual experiments, made, it is true, within the limits of what might be termed a rather good-sized village-garden, and in a season which could have been much more unfavorable for transplanting; but they were repeated in several series, and with all possible care. The outcome was the same in every instance, showing me that a reasonable amount of moisture already in the soil makes success in transplanting much more certain than an even larger amount of moisture artificially applied afterwards. If the soil is very dry and parched, water, in some way or other, must be applied, or failure will be the result.

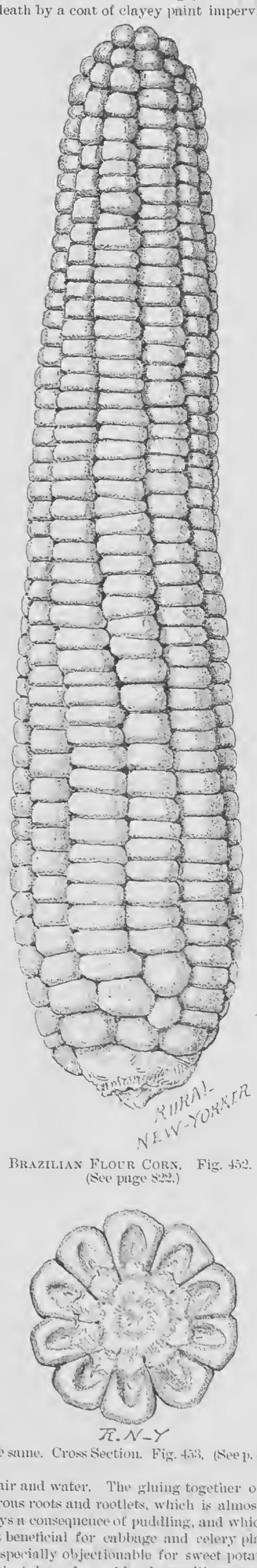
That plants, after being pulled up from the



Self-husking Corn. Fig. 451. (See 1st page.)

seed-bed, should be carefully guarded against the drying influence of air and sun, hardly needs special mention. When many plants are to be transplanted at one time, they may be placed in a pail or pan partly filled with water, and thus kept moist. The boy who drops the plants should not go faster than the planters who follow him and set the plants. In this manner the latter, or their roots, will not be exposed to sun and air for more than a very few minutes.

The objections to puddling are so numerous and so serious, that I believe "puddling will have to go," certainly with the progressive horticulturist. The only object of this practice can be to keep the roots from getting dry and to form at once a close relation between the roots and the soil in which they are placed. Clean water will do this fully as well, without the inconvenience of handling muddy plants, and without the risk of having plants choked to death by a coat of clayey paint impervious



Brazilian Flour Corn. Fig. 452.
(See page 822.)

The same. Cross Section. Fig. 453. (See p. 822.)

to air and water. The gluing together of all fibrous roots and rootlets, which is almost always a consequence of puddling, and which is not beneficial for cabbage and celery plants, is especially objectionable for sweet potatoes, as the tubers, formed by the swelling of these bunched-up rootlets, are very apt to be crowded and often twisted together right in the center of the hill, when they might have grown considerably smoother and larger if spread over a larger space. I do not believe in puddling, and want none of it, and I find my views backed up by the experience of many of our most successful market gardeners and horticulturists.

But if puddle you must, I would recommend a method which might be called a modification of the common way of puddling, and which has all the advantages of the practice and few of its objectionable features—dip the roots in water and sprinkle them with dry soil or dust, thus protecting them from drying and yet keeping the rootlets apart.

Monmouth Co., N. J. T. GREINER.

Farm Economy.

THRASHING CORN WITHOUT HUSKING.

HOW IT IS DONE.—ITS ADVANTAGES AND DISADVANTAGES.

The new way of extracting the corn from the stalks with the ordinary thrashing machine, mentioned in the Rural last year, has attracted so much attention and brought so many inquiries from those anxious to know more about the process, that, after fuller experiment and knowledge, I will say more about how to do it and its advantages and disadvantages. The machine used may be any separator-machine, such as is used for grain thrashing, or an old superannuated machine will do, providing it is strong and in good working order. To prepare it for corn thrashing the sections containing all the teeth, except two rows, should be removed and some hard-wood plank substituted in their place. The sections containing the remaining teeth should be "lowered" more or less according to the corn to be thrashed. The corn should be well cured and the stalks must be dry in order to keep well when put into mow or stack. It is fed to the machine "butts" foremost, and as fast as the mill will properly clean the thrashed corn or the elevator will carry away the stalks. The better way is to thrash as fast as it comes from the field, although if quite dry or a machine can not be obtained at the time, it may be drawn and piled upon the mow and thrashed from there. In order to be easily handled it should either have been bound in smallest bundles when being cut, or else have the "stoots" divided into them and be well bound before loaded upon the wagon for the barn.

The Advantages of this method of harvesting corn are rapidity in getting the corn under cover when in proper condition, thus enabling the farmer in one or two days of good weather to house quite a large crop, also in separating the corn from the stalks. From 400 to 600 bushels of shelled corn, or even more, may easily be thrashed in 10 hours with a good machine, and be cleaned free from leaf, silk or cobs. The stalks are put into better condition for keeping. The big "butts" are so much torn and broken up and so thoroughly mixed with the drier leaves and smaller portions of the stalks that when put into mow or stack there is little danger of mold, and if when being run through the machine a little dry straw be thrown upon the elevator with them, or if it be mixed with them when being put into the mow or stack, there will be no danger of injury, even when the stalks are quite green. The stalks are taken from the fields with the corn, thus clearing the ground ready for fall plowing, many days or weeks even in advance of what can be done in the old way of hand husking, enabling the farmer to have this important work done before the disagreeable weather almost sure to come later in the Fall.

The Disadvantage can all be covered under one head so far as I have been able to find them—the shelled corn is, of course, not as dry or thoroughly cured as would be needed for storing in bins or in a very close barn, but this can be easily overcome when one has plenty of barn-floor by spreading the corn not more than one foot deep over the floor and having it shoveled over once a day for a few days, at the same time keeping the barn doors open and allowing a very free circulation of air, or if one happens to have a lot of old corn the two may be mixed together to the improvement of both, as the old corn will absorb some of the moisture and thus become less hard and more easily masticated if to be fed whole, as it usually is to sheep. J. S. WOODWARD.

Winter Feed for Milch Cows.—We believe in Stowell's Evergreen Sweet Corn every time for a main crop of fodder. This we cut when the first lower leaves fire, tie in bundles with bands of rye straw, setting six bundles in a shock, and binding the tops with another band. This, in ordinary weather, will cure so thoroughly that it can be put away in stacks or in a mow. We cut the fodder and sprinkle the bran and meal on it. This, alternated with hay and roots, which latter we chop with a shovel in a tub made of a cider barrel sawed in two, makes our winter feed for dairy cows. Our bran is new process; our meal corn-and-cob. A No. 2 scoop shovelful of bran with two to six quarts of

meal, according to the needs of the animal, forms our grain ration.

Buffalo, W. Va. C. P. L.

Rural Topics.

CORRESPONDENTS' VIEWS.

KINDLING WOOD.—Grocerymen in the cities do a good business at selling kindling wood. Those who build city fires want something that will kindle into a blaze quickly. In many a country home there is a scarcity of good kindling. I have seen women trying to shave or whittle a stick with a case-knife. In a few hours farmers could make enough kindling wood to last all winter. The wood sold at the city stores is dry pine cut into thin slivers and dipped into melted resin. We also buy little balls or blocks that blaze enough to start any fire. These are made by mixing a quart of tar and three pounds of resin, melting, and then working in all the dry pine sawdust possible. Spread it out and when cold chop into lumps. There ought to be a basket of these where the farmer's wife can reach them handily. B. H. J.

Brooklyn, N. Y.

PRESERVING PAINT BRUSHES.—Farmers generally do not paint as much as they would if brushes were not so costly, for if not properly cared for they soon become useless. I have used a brush for four years past, painting my cart and sheds, my front door and many other things, and it is a good one now. When painting, and the job is not done by night-fall, put the brush in water; it will keep in good shape for some time. The best way, when you are done, is to wash the brush with soft soap and hot water, put it away with the bristles straight, and a good brush will last for years as mine has done. J. H. T.

Medford, Maine.

BEES NOT DOING WELL.—The bees in this locality have not done well. White Clover was very scarce and there are but few basswood trees, so the bees had to put up with what they could get. They took advantage of the buckwheat bloom, but since that they have been resting. Golden rod yielded some honey, but, like the buckwheat it was limited. I have come to the conclusion that my bees (hybrids) have lost their business grip and are uncommonly lazy. Perhaps it comes from associating with me. I have been feeding them sugar sirup for the past two weeks, and have just finished packing them in chaff for Winter. W. M. B.

Angelica, N. Y.

Horseman.

HORSE BREEDING IN ILLINOIS.

I HAVE referred to the measure and extent of draft horse breeding and feeding in Central Illinois, and I have not forgotten to speak of the "rush" fast horsemen are making to secure a large share of the profits which are supposed to attach to fast as well as draft horse breeding, when both are properly managed. But the draft horse men have taken a new departure to increase the stock of grades by bringing into this State Texas pony mares. These they have stinted to their full-blood heavy-weights, and herds of brood Texas mares are quite as common a sight in the corn and cattle counties as flocks of well-bred sheep—that are not as common as they ought to be, now that mutton and wool, both, are on the advance. If the draft horse men carry this experiment wi h Texas mares forward on a large scale, heavy-weight grades will soon fail to sell at three or four times the price, pound for pound, of fat four-year-old steers, and the drayman will be able to renew his motive power at something less than a whole year's earnings.

As yet I do not hear that breeders of fast trotting and running stock have turned their attention to these half-wild horses of the Texas and the Southwestern plains; but if they do, and cross judiciously, something like a new race of horses for light and fast work will be the result. In a Percheron or Clyde-Texas cross there is no danger of lack of size and weight, but great fear of deficiency of bone and muscle to sustain and propel it—a fact often demonstrated in the common light-weight and draft pure cross—the example being not unusual of a 1,300 or 1,400-pound body insufficiently sustained on legs and feet not too large for an 800 or 900-pound horse. But the Texas Thoroughbred or trotter cross will have nothing to fear of the disproportion described—but whether the high temper and the haughty spirit of the one will marry well with the "wild devil" in the other, is something yet to be determined.

Illinois has heretofore done great things in corn, grass, cattle, sheep, and wheat, and, from present indications, within the next five or 10 years her breeders are likely to do things still greater in the breeding of heavy-weight and fast and fine horses.

I find there is a conflict of opinion among horsemen as to whether a young or old horse, full of grain and out of condition, will get the greater benefit from being turned out to pasture during the summer season, or whether exposed to the inclemencies of the Winter as he chooses to take them, but having good Blue Grass pasture to graze on, and an open shed to run to, and a full stack of hay to feed at whenever he wills, and not a few prefer the winter pasture, and report marvelous results.

Champaign, Ill. B. F. J.

STONE IN THE BLADDER.

AN English veterinarian has succeeded in treating this trouble successfully in horses. He is of the opinion that the disease is far more prevalent among horses than is generally supposed. He succeeded in cutting into the bladder and removing the concretion, and has been successful with every case thus treated. It seems probable that animals are quite frequently affected with this trouble, and are treated for other diseases of the urinary system. The symptoms are hard to distinguish from those of various "kidney" troubles. The ordinary medicines will have no effect. Only a surgical operation can remove the obstruction after the "stone" has attained any size. These "stones," or calculi, are deposits of solid, earthy matter, which slowly accumulate and enlarge. They have been known in some instances to weigh several pounds. Foods containing an excess of lime or phosphates are most favorable to their formation, but the condition of the system has much to do with this. An impaired digestion or an unhealthy state of the blood is always dangerous. When the concretions are small they can be expelled through the urethra by proper medicines. When they become too large they cause inflammation of the bladder in the horse. In the ox the bladder at last bursts, and death, of course, ensues. With human beings the trouble is more prevalent than is generally supposed. Dyspeptics and those troubled with gout are most liable to be troubled. The prevailing idea seems to be that the concretions are alkaline, and the first thought is to indulge in acid drinks. The exactly opposite treatment is correct. Most of the "stones" are formed by uric acid. Milk is considered an excellent drink, and the various mineral waters are recommended. Mucilagenous drinks, like gum arabic, dissolved in water, are beneficial in inflammation of the bladder. Large concretions can be taken out through an opening made in the bladder from the outside, or crushed and washed out through the urethra. Some of the most noted characters of history have died from the effects of this trouble. Its great danger lies in neglect and an unhealthy way of living.

Miscellaneous.

CATALOGUES, ETC., RECEIVED.

SAFETY REIN HOLDER. Circular from E. E. Brewster, Holly, Mich.—This little implement can be fastened to the front of the vehicle. When the rider alights, the reins, with one motion, are securely fastened, so that it is impossible for them to fall under the feet of the horses. The usual practice of winding the reins around the whip or the hub is all wrong. Many runaways originate by the falling of the reins under the horses. In any event, a horse can easily, in five minutes, stamp damage enough out of the reins, if he can once get them under his feet, to more than pay for a rein holder. A picture on the circular represents a young man and young woman riding blissfully along in a sleigh with the reins securely held by one of these holders. What young man will need a stronger inducement to secure one before sleighing fairly sets in?

POCKET CUTLERY, RAZORS, SCISSORS, AXES, ETC.—Price-lists and catalogues from Maher & Grosh, Toledo, O. This pamphlet contains about as much knife lore as one will be apt to find in any book of similar size. The various cutting implements are all illustrated and described, and prices are given. We have always obtained full satisfaction from this house and believe our readers will be sure to find just the knife, razor or axe to suit them in this catalogue. Every person needs a knife. Get a good one while you are about it. The spools of wire advertised in this catalogue are very handy. You ought to carry one in the wagon or carriage. The wire is of all sizes, from hair wire for flowers, bonnets, etc., to a size large enough to mend a broken shaft. Send for this catalogue and look it over.

BURR STONE MILLS AND MILL MACHINERY. Catalogue from The Edward Harrison Mill Co., New Haven, Conn.—The Harrison Mills are made in great variety. Great superiority is claimed for them on account of their strength and durability, because of the excellence of the material used in their construction, because they are simple and easily understood and are economical in power, room, help, time and freight. These claims are supported in a straight-forward way in this pamphlet. Full directions are given and all explanations are clear and simple. The catalogue contains a biography of Edward Harrison, the inventor of the high speed system of grinding grain, besides other valuable information.

THE CHAMPION EVAPORATOR CATALOGUES, FROM E. H. GRIMM & CO, PORT HUDSON, O.—These evaporators are made with corrugated pans in such a way as to materially lessen the size of the stove tank, without lessening the heating surface. The automatic regulator and the portable syphon are also important improvements. Great care is taken in their manufacture, and the best material is used. In addition to the description of the Champion Evaporators, these circulars contain valuable information for all who are interested in the manufacture of maple rup or sugar, sorghum molasses or fruit jellies.

NEWSPAPER ANNUAL.—This volume for 1886 is published by N. W. Ayer & Sons, of Philadelphia, Pa. It is carefully prepared and contains a complete list of all newspapers published in the United States and Canada. The population of every State, county, and every place where a newspaper is published, is given, as well as the political majorities and the votes cast for minor presidential candidates. A valuable book for advertisers. Price $3.00.

METHODS OF ANALYSIS OF COMMERCIAL FERTILIZERS.—Proceedings of the third annual convention of official agricultural chemists. A Government pamphlet.

CONDITION OF DAIRYING IN THE PRINCIPAL DAIRY STATES for the season of 1885.—From the Agricultural Department.

SOCIETY FOR THE PROMOTION OF AGRICULTURAL SCIENCE.—Proceedings of the seventh annual meeting.

KANSAS STATE BOARD OF AGRICULTURE.—Reports for the months of August and September.

MASSACHUSETTS HORTICULTURAL SOCIETY.—Transactions for the year 1886. Part I.

What Others Say.

PRESIDENT CHAMBERLAIN'S INAUGURAL ADDRESS at the commencement of the Iowa State Agricultural College should be read by every farmer—indeed, by everyone. W. I. Chamberlain has shown himself to be a good, true man, and the college and people of Iowa may rest assured that whatever he undertakes he will carry through with all his might, and he has both the education and the practical farm experience which, guided by sound judgment, will render his work most effective.

Industrial education needs no defence, he says, in the house of its friends. Only those who are ignorant of the fact longer sneer at agricultural and industrial colleges. . . .

Cornell, in New York, and the State Agricultural and Mechanical Colleges of Michigan, Iowa, and Kansas, for example, have reached that stage of wide and prosperous usefulness that cares little for carping criticism or attempted ridicule. . . .

For many centuries the schools and colleges trained the mind alone, to the neglect of the eye, the hand, the body. They gave an education, passive rather than active: knowledge, rather than the power to use it; they taught to be, rather than to do; they hewed timber, but never built the house. The eye was simply used, not trained; used, too, mainly as a mere avenue to the mind, or a means of conveying to it language, and thought through language. . . .

Blunder or not, the facts are that we have these bodies; that they are integral and inseparable parts of that personality we call ourselves; that when these bodies are properly fed and cared for, and the laws of their organism obeyed, they are healthy, and our minds can work well, otherwise not; that they, the bodies, not only furnish the only avenues through which our minds are sensibly reached, informed, educated, made happy; but the only means by which that education may be made of any value to the world. . . .

The trained mind can work well only in and through a healthy and well trained body. On the the other hand, the trained eye and hand and body are little worth without the trained mind to guide them. And yet our schools have trained the minds and neglected the bodies of one set of men, and our farms, trade and machine shops have trained the bodies and neglected the minds of another set of men and then we have wondered that the world's progress was so slow. The college graduate of thirty years ago, after twelve years at school and college spent mainly in studying words, language, thought, abstract relations, and knowledge of the past, the absolute and the necessary, found himself suddenly launched into a world of living men and concrete facts. Now he must meet men as rivals and antagonists, not as fellow students or kindly, helpful instructors. He must handle tools and machines, and deal with forces of which he has scarcely even read. He knew much; much too, that was valuable as a mental training, and indirectly valuable in some line of professional work, but he could do little in the way of the world's widely varied activities; for he had not been trained. Yes, he had been trained to think and speak but not to do; and he soon found that thoughtful doing in this world is in far greater demand than thought and speech without the doing. His college course had almost ignored industrial pursuits and the training that fits for them, though the whole fabric of modern civilized society rests upon and is fashioned by industrial pursuits. His college course of thirty years ago trained simply mind and tongue and pen to form and utter thought, not eye and hand and body, as skilful agents of the mind, to do its bidding. . . .

If the thinkers had been trained to do and the doers to think, what an uplifting of the human race there would have been. It takes both mind and body, both thinking and doing, both knowledge and skill to subdue the earth and make the mighty forces of nature do man's bidding. Then why not train mind and hand and eye together. Why train the mind alone of one set of men, and the hands or eyes alone of another set of men, only to work at cross purposes? Why "put asunder what God hath joined together." Why refuse to see that "knowledge is power" only when it is applied knowledge? . . .

What might not our schools of learning have done for the race, had they 20 centuries ago begun the kind of work, studied the class of subjects and used the modes and means of training and research now found in our best technological schools. For 20 centuries the schools, one might almost say, redug the mines, replowed the fields, and thrashed again the straw of Grecian learning. They imitated the Greeks instead of emulating their originality. They garnered precious seed, and, fearing to plant it lest it should be lost to the world, they wrapped it as in the winding-sheet of an Egyptian mummy and kept it safe for centuries. Like Lot's wife, they looked back, and like her they seemed turned into pillars of salt—salt to preserve the learning of the past. . . .

This method of training hand and eye and body with the mind, develops the physical powers, invigorates the health and utilizes the natural force and bodily activity that might otherwise go to college deviltry and even to vice and sin. In point of fact, "class rushes," "hazing," and other tricks and evil deeds of boyish exuberance, are far more rare in schools pervaded with the industrial idea; for

> "Satan finds some mischief still
> For idle hands to do"

even if the mind is kept active. The young man's physical energy must have a physical safety valve. . . .

The physical with the metaphysical and literary studies give better discipline than the latter can do without the former, and we don't propose to discard, but wisely to use, the literary, historical and metaphysical with the physical. In short, to make the college course "broad, liberal and practical" as required by law. . . .

Third, and most important, the experimental, industrial or laboratory method of study and instruction, not only gives the student the power to use his knowledge to advantage, but even gives him a far better and fuller understanding of the theoretical. You learn little of chemistry from book and teacher alone. You must handle your own blow-pipe and chemicals before you know *them*, and not merely about them. You learn little of geology from books, without a working cabinet and a teacher to show you how to use it. Show the actual things that the books describe, in quarry, mine, railway cut or tunnel, or upheaved mountain rocks, where nature's mighty forces formed and modified our earth, and left there the visible "footprints of the Creator." The senses must be used on sensible objects, and trained to clear perception. Though we describe a strawberry ever so minutely to him who has never seen one, he gets no notion of it. But if he sees, smells and eats one he knows what a strawberry is. Long verbal descriptions of Alpine charms convey little idea, while actual sight or even

stereoscopic views make you acquainted with the very objects. Knowledge of the skill in mechanical and perspective drawing not only made solid geometry and mechanics clearer than it is possible without, but opened wide the door to useful invention. . . .

The motto of the Iowa college is, "Science With Practice," and even our oldest colleges and universities are beginning to believe that practice is the road to science; that is, to classified knowledge. The truth is worthy of the very lips of Christ. "If any man will do His will, he shall know of the doctrine" Soon all will, he believes, be compelled to give the fullest facilities to scientific hand and eye training to aid the training of the mind. . . .

It seems plain to Pres. C., from the known facts of history in regard to the passage of the act, that the intention of Congress was to found a class of colleges essentially different from the class that then existed in this country, viz; in the main, literary and classical colleges, founded chiefly to educate young men for the Christian ministry (a noble end), or for law, medicine and literature, with courses of study adapted to that end, and in point of fact actually sending the bulk of their students into the so-called learned professions. Up to several years after the time the land grant was made, the classical colleges drew half their students from the farms and returned only one out of fifty of their graduates to the farms. That is, of the farmers' boys that came to them, they sent back to the farms only one in 25. The percentage was probably about the same for the mechanic arts. Now, it seems plain that if these new colleges were, by the very title of the act, to be for the benefit of agriculture and the mechanic arts, and if their "leading object" must be, by law, "to teach such branches of learning as are related to agriculture and the mechanic arts," then their subjects of study, their methods of instruction, and their entire atmosphere and tendency must be different from those of the old-time colleges, founded to educate men for the Christian ministry and the learned professions. Otherwise these "industrial and agricultural" schools will be found taking 25 young men from the farms and shops to every one they return to them. This matter seems to be clear and plain. And yet, oftentimes the presidents of these land-grant colleges, like Pres. Chamberlain, grudnates of classical colleges, but not like him in after life, in providence of God, thrown into earnest sympathy with the interests of agriculture and industrial affairs, have in their inaugural and other addresses used their wealth of logical and theoretical resources in trying to prove that the law of Congress compels about the old-time classical and literary courses in these new colleges. With sadness, he is compelled to believe that oftentimes "the wish is father to the thought."

WOBURN ENSILAGE EXPERIMENTS.—Owing to the agricultural hard times in England of late years, a great deal of attention has been devoted to the ensilage problem. Stock raising for the shambles and the dairy has become the sheet-anchor of English agriculture; if that gives way the industry will drift to wreck on the rocks of domestic landlordism and foreign competition. Owing to the frequent rains and moist, uncertain climate, enormous losses are incurred annually in the curing of hay in the open air; hence various plans have been tried for drying hay artificially in mow and stack; but hitherto with no marked success. The system of ensilage affords a means of preserving grass in a condition suitable for feed without curing, hence its great importance to hard-pressed English farmers; for if the losses ordinarily incurred in curing hay are avoided, the gain will be equivalent to a decrease of outlay in feeding stock, so that English stock owners will have a better chance to compete with their foreign rivals. As Indian corn—the principal fodder plant ensilaged in America—is not grown as a field crop in England, experiments have been made in ensilaging the various grasses, rape, vetches and different cereal plants cut green. The most important English experiments in this and other agricultural problems are those made at Rothamsted, by Sir John B. Lawes, and those made by Dr. Voelcker, at Woburn, one of the country seats of the Duke of Bedford. The results of the ensilage experiments at Rothamsted were condensed in a late issue of the RURAL; the results of those at Woburn are given by Dr. Voelcker in a late report in the "Journal" of the Royal Agricultural Society. The first year's experiments lasted four months, and were directed to the testing of the relative feeding values of silage made from inferior grass, as compared with roots and hay-chaff. The evidence of the experiment showed distinctly in favor of the latter. A second experiment was tried in 1885-6, the silage on this occasion being made from meadow grass of very greatly superior quality to that employed previously. The bullocks used in the experiment were three-year-old Herefords, "as these, in all the experiments at Woburn, have proved much quieter and more kindly feeding and regular animals than Short-horns." The experiments were on "sour" silage *v.* roots and hay-chaff; "sweet" silage *v.* roots and hay-chaff; oat silage *v.* roots and hay-chaff, and oat silage *v.* hay. The results showed that bullocks fed on sour grass silage of good quality will fatten well, although not quite so well as when fed on a mixture of roots and hay-chaff. In the case of sweet silage there was also a gain in favor of roots and hay-chaff. It was proved, however, that oats cut green and made into silage will produce a very valuable feeding material, and one which, in the instance under notice, proved superior to either roots and straw-chaff mixed, or to hay. Further, the interesting fact has been brought out that such silage will, if well made, keep perfectly good for at least two years, so that its immediate consumption is not imperative.

HONEY AND HONEY PLANTS.—The flavor of meat depends considerably upon the character of the food upon which the animal has been fed. For example, there is a perceptible difference between corn-fed beef and beef made from an exclusive diet of cotton-seed. In a still greater degree does honey appear to be influenced by the food of bees. Dr. Brown, in the American Bee Journal, states that there are localities where the honey not only takes its flavor and odor from the flowers from which it has been gathered, but it also does, to some extent, imbibe the medicinal and toxical properties of the plant. The observations upon which this opinion is based were taken at the South. The leaves of Helenium tenuifolium have a bitter, nauseating taste. During the war, an extract in the shape of tea was used to some extent as a substitute for quinine. Honey from this plant is bitter and possesses medical properties. Honey from the Yellow Jasmine possesses all the toxical properties of the tissues of the plant. Dr. Brown knows of six cases of poisoning by eating Yellow Jasmine honey within the past four years. It is well to remember that we have less than a half-dozen plants that secrete nectar of a deleterious quality; and nature has most wisely set limits to this function by either causing them to bloom at an unpropitious season, or by making their bloom uninviting to the bees, or by curtailing the honey to the smallest possible amount.

CAPILLARY SIPHON.—In the Scientific American Dr. T. O'Connor Sloane shows how the action of capillary force can be put to a very practical use. This force can be seen in a lamp wick or in blotting paper. If any object which water can wet has one end placed in a vessel of water, the fluid will rise on it. If the object be bent into the shape of a siphon and has one end carried below the level of the water, it becomes a true siphon and will slowly empty the water. A towel, for example, placed in a pail of water with one end hanging over the side below the bottom, will empty the pail. A capillary siphon can be easily made by doubling and bending a piece of wire into the proper shape. This serves as a frame about which strips of muslin are wrapped. With one end placed in a pitcher of water with the other end falling a little below the bottom of the pitcher, the water will quickly begin to drip away from the end outside the pitcher and in time will empty the vessel. In treating cases of inflammation, it is frequently necessary to resort to irrigation, that is, frequent applications of cold water. This is usually effected by applying wet cloths to the place and continually renewing them. This involves constant attention, and this is impossible without an attendant. If a cloth could be spread over the inflamed place and a slow dripping of water be maintained from a simple capillary siphon, the desired result would be reached with very little trouble.

CHICAGO AS A GRAIN MART.—The fact that receipts of wheat at Chicago this season have declined, and that what it has lost in this direction has been gained largely by Minneapolis and Duluth, has stirred up newspapers as well as members of the grain trade in the Northwest. It is noted, too, that the chief grain inspectors at Chicago and a committee from the Chicago Board of Trade have been examining the methods of handling grain at the northwestern cities named, presumably with the intention of improving their own when they get home again. It is alleged that Chicago has thus far graded wheat which was not quite clean quite low, against the merits of the gram, and that from this practice the opportunity to buy good wheat cheap and clean it (say at Milwaukee, after paying extra carriage) has given rise to a regular business in that line at the cost of consigners. Meanwhile the practice is working its own cure, and Chicago is surprised to realize that Minneapolis, St. Paul and Duluth grade wheat subject to cleansing, that the elevators are all fitted with cleansing apparatus and that a State weighing law are among a few reasons why Chicago's long supremacy as a grain market had begun to show signs of a decline.

TO CURE A STUMBLING HORSE.—Some good horses, says the Pittsburg Stockman, are addicted to stumbling while walking or moving in a slow trot. A well-versed veterinarian states that there are two causes that would tend to produce this faulty action; one a general weakness in the muscular system, such as would be noticed in a tired horse: the other, a weakness of the exterior muscles of the leg, brought about by carrying too much weight on the toe. To effect a cure, he adds, lighten the weight of each front shoe about four ounces; have the toe of the shoe made of steel instead of iron, it will wear longer; have it rounded off about the same as it would be when one-third worn out, in order to prevent tripping; allow one week's rest; have the legs showered for a few minutes at a time with cold water through a hose, in order to create a spray; then rub dry briskly from the chest down to the foot. Give walking exercise daily during the week for about an hour twice a day. When you commence driving again, omit the slow jog, either walk or send him along at a sharp trot for a mile or two, then walk away, but do not speed for at least several weeks. By this means the habit of stumbling from either of the above causes will be pretty well overcome.

WOOL SUPPLY IN THE ARGENTINE REPUBLIC.—Consul Baker, of Buenos Ayres, reports that the wool season of 1885-86 in the Argentine Republic already exhibits a large deficit in the returns for the previous year. The reports for this season from October 1 to July 15 are 284,000 bales against 315,000 for last year. The apparent shortage in the total wool clip is about 30,000 bales. The deficit in reality, however, is much larger than this, as every year heretofore there has been an average balance of 20,000 bales carried from one clip to the next, while this season there is no stock whatever on hand: so that the actual deficit is upward of 50,000 bales, equal to upward of 30,000,000 pounds. The prospect for the approaching wool clip (1886-87) is thought to be still more unpromising. The Winter had been very severe on the flocks.—Winter there is Summer here.—The next clip, it is predicted, will be 75,000 bales, or 45,000,000 pounds below that of 1884-85.

SUCCULENT FOOD FOR STOCK.—In behalf of the Royal Agricultural Society of England, 450 inquiries were recently sent out to farmers there asking their experience during the remarkable Winter of 1885-86. It appears that as a rule the root crops were short, and the question was asked, "How did you provide food, and especially succulent food, for your cattle and sheep during the long Winter?" The answers, according to the Live Stock Journal, are various—some having benefited by having silage; others had to use a large quantity of purchased food, brewers' grains proving very helpful in several instances; while hay and grain were used to a much greater extent than usual. In the preparation of food, too, advantage was found by pulping and chaffing; but it seems that those suffered least who had provided a succession of catch crops for spring consumption. Kohl rabi helped several prominent stockmen greatly through the Winter. The well-known Charles Howard knows of no crop so valuable and early and cheaply cultivated as the cabbage, which has greatly helped him through many difficult Summers with all kinds of stock. Several others speak very highly of cabbage as stock feed in Winter; some saying that it is a very reliable plant, for "however great the drought, it produces a succulent winter feed more valuable than silage."

POINTERS.

A WRITER in the N. E. Homestead says that a Cotswold sheep in thin flesh with long legs is a pitiful sight. On the other hand, this breed when perfect is scarcely equaled by any for beauty. It is urged that we separate the lambs, breeding ewes and others into suitable flocks, according to size and condition. The vigorous and strong should never be wintered with the young and weak. The experience of the writer goes to show that the above suggestion pays better than the same labor applied in any other way to the flock. . . . . .

MR. A. W. CHEEVER, of the N. E. Farmer, has fed many bushels of apples to dairy cows, giving them all they would eat, without experiencing any evil therefrom. Small quantities were given at first. . . . . .

A N. Y. TRIBUNE writer says that two ounces of saltpeter, dissolved in a quart of warm water and thrown into the cistern, will remove the offensive odor of the water. . . . . .

THE Medical Reporter believes that the prohibition of the indiscriminate traffic in narcotic drugs is a question demanding the attention of the people as urgently as does the liquor question. . . . . .

THE Reporter speaks of chloral or chlorodyne-saturated women, and says it must be made a grievous crime, punishable by the severest penalties, for a druggist to sell any of these drugs save on the prescription of a physician, etc. . . . . .

IN an address before the National Swine Breeders' Association, Prof. Morrow says that those engaged in swine improvement have been remarkably successful. Not in one breed alone, but in a number, there has been extraordinary development in the qualities desired—rapid growth, early maturity, quiet disposition, readiness to lay on flesh. Differing in minor points—color, size, form as to detail—there is comparatively little essential difference between a half dozen leading breeds; and they are becoming more and more alike. . . . . .

THE time, however, has come he thinks to call a halt; at least long enough to consider the situation. The results gained are not all good. . . . . .

AN extraordinary development, taxing the organism, is at the cost of lessened or checked development of some other characteristic or function. . . . . .

WE have lessened the vitality of our hogs, and increased their liability to disease. In many cases, there is lessened productiveness. We have gone beyond the popular demand for fat meat, and raised a protest from the consumers who demand more of lean meat. The model hog of the breeder and feeder, on the one hand, and of the butcher and consumer on the other, is becoming more and more different. . . . . .

PROF. MORROW advises that we breed from mature animals. Select breeding stock with reference to health, activity and vigor, and not alone with reference to early maturity, ease of fattening or possession of the minor points distinguishing breeds. Cease to magnify petty points as essentials, thus limiting our selection. Recognize the fact that grass and clover are natural and admirable foods for hogs, old and young. Give exercise to the young and all breeding hogs. Give some variety of food and not corn alone. In food, water and shelter, give that reasonable care to secure good sanitary conditions, which common sense and experience dictate. Trust little to the advertised specifics for diseases. And help each other by experience and words of encouragement, in national, State and breed associations. . . . . .

BROWN affirms, in the Boston Traveler, that the system of indorsing is all wrong, and should be utterly abolished. He believes that it has been the financial ruin of more men than perhaps all other causes. . . . . .

A DOUBLE white begonia is spoken of in high terms in a late London Garden. The flowers are perfectly double and pure white. . .

THE Tamarisk is a little tree rarely seen in the farmer's grounds. It is as feathery as an asparagus plant and perfectly hardy. Its long plumes of pink flowers are beautiful in their way. . . . . .

CORN, says the Rural and Stockman, as an exclusive diet, is wholly unfit for a horse. It is the most heating food that is fed. Corn meal ought always to be fed with cut hay. . . .

CERTAIN facts about the hog cholera have, says the Weekly Press, a disagreeable interest for others than the rearers of swine. It seems to be the practice of pork producers whenever the infection appears in a lot of hogs to sell them at once. The probability is that the greater portion of them will die and therefore they are hurried off to market to give the butcher's knife a chance to get ahead of the cholera. . . . . .

WALDO F. BROWN met a farmer a week or so ago who said: "One of my hogs died on Monday, another the next day, and two the third. I loaded them on the cars that night and had them in the city by morning, but four were dead in the car." Another man who has a large farm run by a tenant said to Mr. Brown: "My tenant came to town and said, 'I believe my hogs have the cholera.' I knew he would have hard work to pay his rent, and I said to him, 'Go home and load those hogs on a car to-night.' But he foolishly waited a week before he sold, and 20 out of 40 died." Now, these are facts which have come to Mr. Brown's knowledge, and he says, in the Farmers' Review, that a large per cent. of the hogs marketed during the last six weeks have been from herds that were infected.

A WRITER in the Phila. Press says that if milk turns a blue shade with the approach of cold weather it is an unfailing sign of poor shelter or insufficient feed, or both causes combined. It shows that part of the carbon in the food that has been used to make cream

and butter is now consumed as fuel to keep up animal heat.....

EACH animal has its own stomach, says Col. Curtis in the Farm Journal. He also says that farmers are taking to the half-bred Percherons. Are the cattle running down,? asks the Col. Give them less below-zero.....

A GREAT many people are pious, says John Tucker, because they are afraid of the devil, and he suspects a great many politicians are friendly to farmers about election time because they are afraid they might lose their votes. For his part he will try his best to get farmers to go to our legislature, and will vote for them. The closer the times the more need of farmers to make laws and keep down taxes. Farmers are very foolish to leave all of their interests to men in trade, and to lawyers and politicians. What makes it worse is the fact that the land has to pay the most of the taxes.....

WHAT folly it is to lay out new villages in the country on the small city lot plan just as if there was no room in this broad land of ours for gardens and lawns,says another writer in the Farm Journal. The mere grasping money-maker fails to see the great influence there is in these things toward civilization and morals.

ANOTHER writer suggests that a couple of barrels of late-keeping apples buried in bran in the wagon house loft or grain bin, will come out in May sound and crisp and be a welcome adddition to the spring provender for the family .....

MR. STAHL says in the Indiana Farmer,that as the craze for commercial jellies and jams subsides on account of adulteration, the popularity of honey is bound to grow.....

MR. STAHL thinks that women usually make better beekeepers than men. Bees, he says, must be treated like children, kindly and patiently, and such work woman does better than man. Let the ambitious girl think of this way of getting a start..... .....

MR. POORE, in the Cultivator, says that working on the roads is merely another name for a leisure, story-telling day. In multitudes of cases when the roads are next to impassable in the Spring it is through the sheer negligence and laziness of the people whose business it is to make them.....

MR. POORE also says that many narrow-minded souls seem to think that every dollar they spend upon public work is the same as thrown away, merely because they cannot take it to market and get their money back the same day,with a good profit. This is one of the most mistaken notions that could well be entertained. A public road or public building is often just as important and profitable to a man as the house he lives in or the coat he wears..... .....

JOSIAH HOOPES, in the N. Y. Tribune, writes of several things which, in years past, we have endeavored to impress upon our readers. First, never prune evergreens in the Winter. Choose either Spring or late Winter. Second, drawing together the branches of trees, roses or shrubs that are to be protected during the Winter and wrapping them up closely with straw or matting will do more harm than good. It will prove destruction instead of protection. Third, one stout stake is as useful as a dozen in supporting a tree. Drive it in the ground, as illustrated in the R. N.-Y. several years ago, diagonally, and then wrap it with matting to prevent abrasion of the bark, and tie the stake securely to the tree around the matting.... ....

LIVE STOCK RANCHING, by which untold numbers of cattle on the western and southern plains suffer the pains of a hundred deaths, and tens of thousands of them die in undescribable agonies, is "the most heartless business on earth; an abomination in the sight of God, and the kings are monsters of cruelty." So says a writer in the N. O. Picayune.....

C. S. PLUMB, of the N. Y. Experimental Station, states in the Weekly Press that he has found that seed oats, soaked in sulphate of copper (four ounces to one gallon of water) for 40 hours have produced a crop free from smut.

THE Editor of the Press of Nov. 24 says that the Oriental Spruce wears a lovelier green at this season than any conifer he knows. Has he compared it with the Nordmann's Fir?

Everywhere.

TRANSCONTINENTAL LETTERS.—LXXI.

MARY WAGER-FISHER.

Los Angeles; "The greatest flower show in the United States"; poor Los Angeles oranges; a chance acquaintance; a Southern California dwelling-house; general character of Los Angeles; the craze for foreign goods; Pasadena; settlers; an ornate log cabin; women's work in the Golden State; class of teachers in vogue.

THE next day rain fell heavily. In the morning we wrote letters and in the afternoon we paddled out in the wet to visit what the "Angels" called the "greatest flower show ever held in the United States." The full name and English of the place was formerly Pueblo de la Reina de los Angeles, or City of the Queen of the Angels. The city has now a population of 30,000 probably and will continue to be for some time to come the leading town in Southern California. It was still in a "boomy" condition and land speculation engrossed considerable attention. I was not captivated with Los Angeles from any standpoint. The water was atrocious, and unless one went upon the hills back of the city the attractions were sufficiently meagre. True, there were gardens in which grew flowers, oranges and palms, pleasant to the eye, but no more so to mine than are the oaks and apples of the cold North.

The flower show was held for the benefit of a Working Girls' Home, and proved very successful financially. It was far from being the "greatest flower show, etc.," but it was, nevertheless, very well worth seeing. The bank in which it was said 14,000 roses had been placed, had endeavored to maintain a fresh appearance by the daily addition of fresh roses. Indeed the chief interest centered in the roses, which grow in California—particularly in the southern part—not only in the greatest profusion, but to an extraordinary size, larger than I have seen them elsewhere. They are equally exquisite in color and texture, but lack in perfume, as do many other California flowers. Of the roses that appeared to me most striking I noted the Chromatella, Isabella Sprunt, Triumph of Luxembourg, and Beauty of Glazenwood.

After leaving the flowers we visited one of the old Catholic churches and its adjacent garden, being entertained by a young priest with charming manners, and we also went to the garden of the Sisters' school, not far removed, where we were given the privilege of pulling as many oranges and flowers as we liked, and where the laddie plucked an orange from the tree for the first time in his life and, of course, ate it on the spot. To his mind the only saving grace of California was its orange product—a fruit of which his young mouth never tires. But Los Angeles oranges are inferior fruit as to cleanliness of rind, the unhealthfulness of the trees being manifested in black spots on the oranges and the dull mildewed look of the leaves.

One day we went by horse cars far out to the suburbs of the city, where there are beautiful residences, and where by chance we fell into conversation with a lady who invited us into her house and charmed us with her gracious hospitality, and it happened, as it so often occurs in meeting with a stranger, that she knew several people in the East of whom we had knowledge. I noticed the writing desk on the piazza,and she said that they always wrote their letters there; that there had been but three days during the entire Winter on which it was too cool for living out-of-doors. She said she wished us to see the inside of the house so as to have some idea of how Californians lived, and we followed her within. The rooms were all on one floor and opened into a central room, and could, if desired, all be thrown into one large and beautiful apartment. It was an interior of exceeding beauty, and simple as it was beautiful and artistic. I noticed in the dining room what I thought a pretty and convenient contrivance in a narrow shelf running about the room about four feet from the floor, on which were ranged the the pretty decorated dessert plates, etc., the shelves being furnished with an ornate railing to keep the china from falling off. The effect was quite novel and very decorative.

Los Angeles has various horse-car lines, a cable road, electric lights and good schools. The city is ill drained and there is more or less of malaria—from what I heard the people say. It is 30 miles from the sea. We spent several days there, making trips to adjacent points of interest; but when we finally left, and I looked after the replenishment of our lunch basket, with my customary "forehandedness," I had a little experience that illustrated not only California nature, but maybe human nature the wide world over. After a vain inquiry at several grocery houses for what I wanted, I was directed to the largest and best establishment in the city. I wanted California jellies, jams, canned fruits, cheese, etc. The grocer said he could give me jams and jellies put up in London (England) and cheese and preserves from New York! He kept almost no California fruits, as he had to cater to his customers! He had some Pasadena jelly, but wouldn't recommend it. I took some, however, and afterwards regretted that I had, and bethought me of the grocer's comment that California needed nothing so much as intelligent enterprise to utilize her products and make them foremost not only abroad, but at home. But it requires something more than enterprise to put honest patriotism into the bosom of fools who pine after something foreign!

Of the pretty towns that lie within a few miles of Los Angeles the very prettiest is unquestionably Pasadena, and it is exceedingly elegant as well as pretty. The character of the people who compose the colonies that have turned various spots in Lower California into gardens, has also given a distinctive character to the towns. They are largely Eastern people, invalid in health before coming here, educated, refined, and possessed of sufficient money to surround themselves with comfort. In a climate where for so much of the time the people live in the open air—their salvation as regards health—the dwelling houses are neither large nor pretentious, but almost invariably pretty—and it would be an ugly house indeed that vines and roses did not quickly transform into a bower of beauty.

There was a lady living in Pasadena to whose good graces I had been commended, and after leaving the cars, a few minutes' walk brought us to her beautiful home—as much of a paradise in the way of fruits and flowers as I ever expect to see, while Pasadena has ever in view the most exquisite—not the grandest—range of mountains on the Pacific Coast—the San Bernardino. We found our lady, after considerable trudging about, there being several cottages in her grounds—in the "log cabin"—a picturesque structure built of logs from trees cut on the place. They were placed on end closely together, and the roof was covered with shingles. On the inside the rafters had cross-pieces, and shingles with rounded ends formed a deep fringe—below this the wall was ceiled for about four feet—there was a foot-board, and above that a dado of Chinese matting. The interior was one room and very pretty. Its mistress, Mrs. C., said the cost of building it was $300.

I asked her various questions as to the actual success of women in California, as a good many women were being lured from the East, by the glow of advertised success that reached them from the Golden State. "It is always more in the women than in California." She said "School teaching is overdone. Housework get $20 per month, and women succeed best who know how to do housework and take care of things. Silk culture is not yet profitable. Raisin growing has been, and still is, a good occupation for women. Orange culture is expensive, and then one has to wait several years for any income from it." Anent teaching, an intelligent old Californian said that there was room in the State for high-class teachers at salaries ranging from $65 to $125 per month—just as there is everywhere. He might have added—always room at the top! I gathered from my talk with Mrs. C. that women who succeed in California were the kind to succeed anywhere, while it is true that for broken-down people the climate is restorative, because it admits of open air living the year around.

Pasadena is such a pretty place that it would seem that everybody should be charmed with it—while the people are equally charming. The orange groves were unfenced—the trees loaded with ripe fruit and fresh blossoms at the same time. While in addition to the sources of profit no stone was left unturned to beautify the town. There is also there an excellent Free Library—a characteristic of many California towns—enough to put to shame many a city in the East. Pasadena is an Indian word, and signifies crown of the valley, and the valley is San Gabriel and of unrivaled attractiveness.

SPECIAL SEED REPORTS.

WE have received reports from many of our friends who planted the seeds sent out in the last Free Seed Distribution. We can only give them in a condensed form. The main point to be discovered is which climate, sections, soils, etc., are favorable for the development of the seeds and which are not. Should we print all that our friends have kindly sent us, we could fill several numbers of the RURAL.

Canada.

GODERICH, Ontario.—Midnight Corn very productive, suckers badly and latest of all with me. Cantaloupes ahead of anything seen here. Alaska Pea earliest of the early with me. T. H.

Georgia.

AMERICUS, Sumpter Co.—Hackensack Melons "simply delicious." The Bird Cantaloupe I think a cross between some good netted cantaloupe and the old slick-skinned "musk-melon" as raised here by the negroes; worthless to eat but as large as pumpkins. I had only one good enough to save seed from. Drought cut other seeds. G. B.

FLORENCE, Stewart Co.—Angel of Midnight fully matured in four months. Alaska pea very early, but not so good as Market Garden. Bird Cantaloupe 18 inches long. The melons were fine, of good size and excellent quality notwithstanding the season was very unfavorable—entirely too much rain. J. D. A.

Iowa.

AKRON, Plymouth Co.—The Alaska Peas grew 18 inches high and were the earliest I have ever grown, and I have planted about all kinds. The Angel of Midnight Corn did well and is much earlier than our field corn. We have little use for a flint corn in this part of the country, however. The melons all grew finely, but the Bird Cantaloupes were extra nice. The Garden Treasures have elicited the highest praise from all. A. S. S.

Massachusetts.

SOUTH ROYALSTON, Worcester Co.—Success with none but "Angel of Midnight" field corn, which did fairly well. F. H. S.

Michigan.

HOBART, Wexford Co.—The Alaska Pea is certainly very early, but only a few days earlier than some others. The Angel of Midnight Field Corn did not ripen an ear. Bird Cantaloupe did not do anything, owing to drought and frost. Of the Garden Treasures only one root of mignonette and several varieties of featherfew stood the dry weather enough to show what they were. W. H.

Nebraska.

KEARNEY, Buffalo Co.—Cantaloupes grew splendidly. Many large ones. This soil is "second soil" and very productive. B E. B.

Oregon.

GRANT'S PASS, Jackson Co.—We had some very fine watermelons; the Iron-clad, Pride of Georgia and Scaley Bank did best. The Alaska pea did not have a good chance; it grew and ripened in seven weeks from planting without sufficient rain to wet the ground an inch deep. The Angel of Midnight Corn fared the same; had some good ears: very early. J. H.

Vermont.

THETFORD, Orange Co.—Alaska peas burnt by drought. Grew about two feet high. Fair, but not equal to American Wonder. Melons did not ripen. Midnight Corn grew seven to nine feet high. Some two weeks behind my common feed corn in maturing. The frost caught it. Garden Treasures fine. E. E. W.

RURAL SPECIAL REPORTS.

Illinois.

CHICAGO, Cook Co., Dec. 1.—Weather very cold and dry. The lazy farmer is finishing up and gathering corn: the forehanded farmer has cribbed his and is waiting for 45 to 50 cents a bushel for it. The condition of the corn crop varies so greatly in the "corn belt" that it is still impossible to form a just estimate of the aggregate yield. One portion of the section is importing corn from another, and the importing points are increasing, so that it is fair to suppose that the "bad spots" are very numerous and the crop won't come up to an average. Very little, if any, corn from Nebraska, Kansas or Missouri will cross the Mississippi River this season. There would probably be a great scarcity of corn were it not for the large amount of old corn carried over in farmers' "cribs." R. N.

New York.

UTICA, Oneida Co., Nov. 29.—The cheese market to-day was slow, owing to the disagreeable weather, and also being the next to the last market, with only odds and ends to close out, there was a bearish influence that kept prices down. Notwithstanding the fact that the ruling price to-day was one cent less than last week, the market is really steady for some grades, and the last meeting of the Board next week will see the old prices at the front, the year's sales at a good figure, with factories sold out on good profits. The total sales this week were 2,636 boxes, ruling at 10½ cents, which is 3,162 boxes less than last week, ruling at 11½ cents. Total butter receipts for the week 173 packages. The market is a little weaker than a week ago, but with fair demand for good and plenty of all kinds offered. Jobbers are paying 22 to 24 cents for dairy and 25 and 26 cents for fancy. The prospects are that the market will gain a little before Christmas, however. R. L.

Virginia.

RICHMOND, Henrico Co., Nov. 28.—There has been more life in the tobacco market the past week. Trading in fine cutting bright grades has been large, and there are of this class very few desirable packages left in market for sale. New cutters continue to sell very high in interior markets, and the crop so far is as inferior as has been predicted from its growth. Receipts here have been nominal only, but about the middle of December West Virginia brights will be coming in, and the new will be quotable. This State will no doubt give us a larger proportion of fine leaf than heretofore, and will be an important factor in the market this year. A very good proportion of wrappers and cutters and stripping leaf is expected, but the quantity and leaf may be smaller than usual. Old wrap

pers are gaining ground, and prices are moderate and demand irregular, but good on lower grades. Smokers are more active. Dark tobaccos are without any particular feature and transactions small Sun-cured leaf in regular demand for home use. Receipts of new dark are very small, but increasing this week. Prices realized have been anything but satisfactory to producers at 2½ cents average, and unless they meet with some unforeseen better luck in this year's product it is difficult to see how they can attempt another crop, even if they were willing to do so. It will no longer be a matter of choice, but bread and meat will have to come out of the farm first. W. E. D.

THE FARMER'S CLUB

ANSWERS TO CORRESPONDENTS.

[Every query must be accompanied by the name and address of the writer to insure attention. Before asking a question, please see if it is not answered in our advertising columns. Ask only a few questions at one time. Put questions on a separate piece of paper.

THE HESSIAN FLY.

J. B. A., Milford, Md.—What are the habits and mode of production of the Hessian fly?

ANS.—Of the Hessian Fly (Cecidomyia destructor) there are two broods, and sometimes three in the season, the first appearing in Spring and the others in Autumn. Sometimes, but not commonly, an early Spring brood produces another late in the season. The eggs, of which from 20 to 30 are laid by each female, are deposited in the longitudinal creases in the leaves of the young wheat, barley, rye and other cereals. Those of the first brood are laid from early in April till late in May, the time varying with the latitude and the weather. The second brood flies appear in August and September and lay their eggs in those months. The eggs hatch in from four to 12 days, according to the state of the weather, seldom taking over six days. The pale red larvæ or grubs, crawl down the leaf, working their way between it and the main stalk till they come to a joint just above which they remain, a little below the surface of the ground, with their heads towards the roots, until their transformation is completed. Here they suck the sap of the plant, causing the latter to swell, turn yellow and die. They do not eat or penetrate the stalk, but merely feed on its sap by suction. The larvæ attain full growth in from four to six weeks. About December 1, the skin of the autumn brood hardens, becomes brown and then turns to a bright chestnut color, when they are said to be in the "flax-seed" state, and on removing the lower leaves they may be seen as little, brown, oval, smooth bodies, a trifle smaller than rice grains. In this condition they remain until the warm weather in April or May, when the larvæ or maggots are rapidly transformed into pupæ within their "flax-seed skins, the flies emerging from their "flax-seed" cases in the above months according to the latitude and temperature of the season. The spring brood lay eggs for about three weeks and then disappear. The larvæ or maggots hatched from these eggs take the "flax-seed" form in June or July, and it is the flies from these that lay the eggs the maggots from which injure the crops in the Fall.

Great numbers of the pests may be destroyed by burning the stubble after harvest and plowing and harrowing the land. The great objection to this practice is that the useful parasites of the flies which kill vast numbers of them every year, are destroyed as well as the pests themselves. By sowing a part of the crop early and plowing this under if affected by the fly, and then sowing the rest after the first frost, the crop has been saved; but in such cases there is danger that Winter will seriously injure the crop. If the crop is only lightly affected it may be saved by liberal manuring. The selection of varieties less liable to attack is also advisable; thus it is claimed by many that the pest does not trouble Lancaster or Fultz, while Mediterranean and still more Clawson are said to tiller so vigorously as to be exceptionally able to resist attacks. Steeping the seed and rolling it in plaster or lime tend to promote a vigorous growth and are therefore beneficial. The strewing of quick-lime over the field immediately after the grain has been cut is also recommended as destructive to the pupæ; while sowing the field with unleached wood ashes—two bushels to the acre—in Autumn and then again the first and last weeks in April and as late in May as the field can be passed over without injury to the crop, has been found beneficial. Pasturing with sheep and the consequent close cropping of the fall-sown wheat in November, and later in the more southern latitudes, will cause many of the eggs, larvæ and "flax-seed" to be destroyed, and rolling may have a like effect. Sowing the seed after the first frost is, however, commonly considered the only way of avoiding injury from the pest in the Fall.

SORE LEG IN A MARE.

W. H. H., Wellington, Ont.—My ten-year-old mare became very lame last April. I treated her for strain of the back tendon, but with little effect. A veterinarian pronounced it a case of navicular disease. His prescription was to poultice for eight days, after paring the foot down very thin. This relieved her so that she stepped on the affected foot quite boldly. Then I was to clip the hair off half way to the ankle and apply a blister. Then after a few days to apply sweet oil, and at the end of 14 days blister again with a salve-like preparation. I blistered the first time, but before the end of 14 days I became convinced that it would not be advisable to blister again. The foot swelled greatly and was so sore that she could not rest her toe on the ground. For the last six weeks the swelling around the hoof has been running most of the time. Poulticing has been of no benefit. Before the blister was applied she could walk quite well; but now she can only hobble around on three legs. Is there any chance of her recovery? I can't afford to winter her if she is of no value.

ANSWERED BY F. L. KILBORN.

The first part of the treatment—the poulticing—was undoubtedly correct; and if this had been followed by *mild* blisters the case would have done well and she might have recovered. But the blister employed was evidently much too severe, and we suspect mercury or some other equally powerful blistering agent was used, agents that should be used cautiously and only occasionally even by competent practitioners. Did you employ a regular veterinarian or a self-made "horse doctor"? This may account for the blundering use of the severe blister. As to future treatment, you can only apply soothing measures until the effect of the blister has passed. Continue the poultices with warm fomentations if the discharge has not ceased, adding a weak solution of antiseptic astringent to the poultice—as one dram sulphate of copper or one-half dram chloride of zinc to each quart of water. If the discharge has nearly or quite ceased, apply daily an ointment of spermaceti and almond oil, sweet oil, vaseline, or other bland ointment. All after treatment will depend upon the condition of the limb after recovering from the effects of the blister.

FORM OF CONTRACT FOR FARM HELP.

A. K. F., Chicago, Neb.—What is a model contract which can be used by farmers in hiring help—one that can be elaborated to suit?

ANS.—A contract may be very simple in form. In fact, any writing which states clearly what is understood as the bargain is all that is needed. The following we have used several years and found it very satisfactory:

"A contract made the twenty-fourth day of November, 1886, between John Doe, of the town of———, county of———, and State of———, and Richard Roe, of the town of———, county of———, and State of———. John Doe agrees to employ Richard Roe to work on his farm and at such other labor as appertains thereto, for (here state the time), beginning on the (here state where to begin), or so long as the services of the said Richard Roe shall be faithfully performed and reasonably satisfactory to the said John Doe, and to pay for such service at the rate of (here state wages and manner of payment), and in addition thereto (here state the agreement made as to board, washing, furnishing house, furnishing fuel, keeping cow, furnishing ground for garden, etc., etc.).

"Richard Roe, in consideration of the above agreements, agrees to work for the said John Doe, for the time and in the manner and for the compensation there stated, and that he will render good and faithful service, and in all things relating to said work he will be obedient to the commands and wishes of said John Doe and careful of his property (here state any agreement as to any special works, such as feeding sheep, running into the night or beginning very early in the morning, or if on Sundays, or whether help does chores on Sundays, etc., etc.)."

HERB CULTURE AND MARKETING.

Subscriber (address mislaid).—How should such herbs as summer savory, sage, etc., be cultivated and put up for market?

ANS.—Herbs are of the easiest culture, requiring only moderately fertile soil and to be kept free from weeds. Sage and summer savory—indeed we believe all of this class of plants—are grown from seeds, which may be planted in Spring in drills two or three feet apart. Sage is a perennial plant and needs to be sown but once for a permanent plantation. Summer savory is an annual, and must be sown every Spring. Borage, chenil, coriander and dill are also annuals. Balm, horehound, hyssop, rue, sorrel, bitter fennel, thyme, etc., are perennials. 2. Herbs that are to be dried for Winter use, should be cut just as they are coming into flower. Tie in small bunches and hang in some open, airy shed or building. When kept in the sun they dry too quickly and lose strength. The best herbs are preserved in glass jars or bottles. They are sold in bunches still, but fancy prices are obtained only for those preserved in packages.

LAMENESS IN A HOG.

U. S. M., Havana, Mich.—One of my best fatting hogs was taken lame in both hind legs, and in a few days his forelegs gave out in the same way, otherwise he seems perfectly well, eats well and seems to thrive, although he cannot stand up. I have been feeding him all the watermelons he would eat before putting him up on corn. What is the disease, and remedy?

ANS.—It is impossible to name the disease, since hogs frequently become lame from a variety of causes. In this case it may be due to a too sudden change of feed or to overfeeding on corn. Place him on a ground floor and feed sparingly on milk, slops and vegetables or apples with a little corn. One-fourth of a pint of ground linseed once or twice daily will be beneficial. If the bowels are costive give one or two tablespoonfuls of linseed oil night and morning until relieved. After recovery, increase the feed gradually.

WINTERING SEEDLING TREES IN THE "COLD BELT."

A. P., Nordeu, Neb.—Here catalpa seedlings are killed in the Winter; is it advisable to take them up in the Fall and store them in the cellar, to be replanted in Spring?

ANSWERED BY PROFESSOR J. L. BUDD.

In the West it is always best to grow the catalpa in nursery and to protect the plants during the Winter by carefully heeling them in and covering them in the open air, or packing them away in cellar. Hardier species, such as ash, maple, Box Elder, etc., it is best to plant where wanted. But if grown in the nursery it is best to take them up in the Fall and heel them in, or winter them in a cellar, as their vitality is much lowered if they are exposed to the dry zero winds of Winter. If such hardy sorts be taken up in Spring, they may live when transplanted, but they will make far better growth if properly cared for during the preceding Winter.

WARTS ON A COW'S TEATS.

T. M. H., Warren, Me.—What will remove the warts from the teats of a cow? They are very close together and too small to allow a string to be tied around them.

ANS.—Moisten them every day with a strong solution of sulphate of copper, and before applying it, rub off the surface with a piece of sand-paper. This prevents soreness and can be done while the cow is being milked. Another way:—Touch the warts daily with a piece of nitrate of silver moistened, or with a solution of it. In applying any caustic substance, one must be careful not to permit it reach the surrounding skin, and if it eats too deep it can be at once stopped by applying any grease. Warts can also be removed by applying, after milking, a paste made of baking soda just moist enough to be sticky, and put on the excrescence only. As warts are contagious, a cow having them on her teats should be milked last, or else the hands should be washed before milking another cow.

Miscellaneous.

A. K. F., Chicago, Neb.—A neighbor grows an unbearded spring wheat which yields about 18 bushels per acre, and which is called the "French Imperial." It was obtained from a Philadelphia seed house. Another neighbor grows a bearded spring wheat which yielded about the same, but has a larger kernel. It bears the same name and was sent out by the Department of Agriculture; which is the true French Imperial?

ANS.—We are not familiar with the French Imperial Wheat. Some of our readers may be able to answer the question. 2, 3 and 4 will be answered later.

J. R. V., Louisa, La.—Inclosed is a specimen of a pressed rose; the shoot of the plant has grown right through the flower; isn't this unusual?

ANS.—No, this is not very rare. We have noticed the same growth in many kinds of flowers. Every part of a plant comes from the leaf—the petals, stamens and pistils are not exceptions. Fruit buds, from certain causes, may change to leaf buds, and some interference in the development of the blow may induce the stem which bears it (peduncle) to continue growing.

A. P., Cannon Falls, Minn.—1. A piece of sandy black loam produces large straw, but very small heads of wheat; would an application of ashes be likely to cause larger heads? 2. How can poultry manure be spread to the best advantage?

ANS.—1. We advise our friend to try, on separate plots, raw bone flour, ashes and both combined. We think the results will answer his question. 2. Mix the manure with dry soil, coal ashes, etc., as collected. It may then be spread the same as any other fertilizer. Hen manure when wet can not be economically spread.

C. L. V., Orient, N. Y.—In the home-made creamer described in the RURAL of July 17, how is the milk skimmed? 2. I wish to make a small one to hold the milk of one or two cows; would it violate anybody's patent if faucets were put in the bottom of the cans?

ANS.—1. The milk is skimmed with an ordinary long-handled skimmer. 2. To put faucets in the bottom would infringe the Cooley patent.

P. W. S., Marksboro, N. J.—I had a fire kindler that I liked well. It was a can holding kerosene with a rod with a ball at the end to be let down into the oil. There was a cover on the rod so that the top was covered when the ball was put into the oil. A young man used it to kindle a fire and put it into cold water to cool it and thus spoiled it. I would like another but do not know where they are made. Does the RURAL?

ANS.—Can our readers answer?

H. P. T., Richland Centre, Wis.—Which is "the best breed of poultry to keep for profit" is a hard question to answer. If it were definitely known there would be very little demand for any of the other breeds. The favorites with the public are Light Brahmas and Plymouth Rocks, followed closely by the Leghorns. Then follow the Wyandottes.

A. W. S., Americus.—What is an analysis of whole cotton seed which has been burnt.

ANS.—According to Wolff whole cotton seeds yield 7.8 per cent. of ash, of this 32.15 per cent. potash, 31.16 per cent. phosphoric acid, and the whole seed contains 3.6 per cent. nitrogen.

Subscriber (no address).—Among good poultry papers are the Poultry Bulletin, monthly, New York City; American Poultry Journal, Chicago, Ill.; Poultry World, monthly; and American Poultry Yard, weekly, Hartford, Conn.

B. T., Maple, W. T.—The bags in which the RURAL seeds are sent out are made by Robert Gair, 163 Chambers Street, New York. We do not know whether their prices are low or high.

DISCUSSION.

J. S. W., LOCKPORT, N. Y.—M. H. B., in the RURAL, page 769, very correctly says that in nearly every farmer's garden are bushes of the common red currant so old and long neglected that they make little growth, bear only sparingly and of small-sized, inferior fruit. But I quite disagree with the course he recommends for regenerating them. It will, no doubt, greatly benefit them, but the labor and time it takes are too great, while the bushes can never be made as good as new. By far a better plan is to make cuttings of any young growth and to plant them two in a place, where it is desired to have the new bushes. If both root and grow, one may be removed to another place. With good care and proper manuring these new bushes will give nearly as much, and much nicer fruit than the pieces of the old root cut up, as he recommended, and ever after that the new bush will produce double. I have always found that while currant bushes, by constant care and much manuring, may be maintained in fair condition almost any length of time, it paid best to replace the old ones with those raised freshly from cuttings, about once in 10 or 12 years. The same is the case with gooseberries.

J. H. W., PALMETTO, Ga.—A recent RURAL said that if Kaffir Corn could be thrashed and cleaned by machinery, as wheat, rye and other small grains are, it would prove to be a valuable addition to the cereal products of the country. This point is settled with me. My crop was rather too large this year to attempt getting it out without the aid of improved machinery. I selected the "Frick Patent" thrashing machine, and with some temporary changes, it did the work rapidly and effectually—a perfect success every way.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING December 4, 1886.

G. E. M.—J. B., thanks.—J. M. P., certainly.—C. C. W.—M. McC.—J. J. M.—S. A. B.—E. P. P.—W. E.—J. F.—G. W. M.—F. J.—W. F.—A. P.—C. P. L., thanks.—A. W. F.—A. H. T.—F. P. S.—N. C.—M. N.—R. T.—W. M. F.—W. F.—J. H.—H. H.—G. G., thanks.—L. H. R.—C. B. G.—L. G.—A. K. F.—L. E. A.—L. R.—M. W. F.—W. H.—J. G.—C. B. G.—R. S. C.—A. L. J.—A. E. M. C.—A. B.—G. M. C.—J. W. M.—P. H.—A. W. S.—Mrs. A. A. W—G. S.—A. K. F.—J. O. H.—G. W. C.—W. W. F.—N. C.—F. P S.—H. W. C.—W. F. McC.—A. D. S.—B. B. R.—C. M.—C. W. K.—J. H. C.—J. W. B.—J. B. C.—M. E. M.—L. E. B., thanks—G. W. K.—W. F.——. L. J.—O. S. B.—S. F. H.—E. P. P.—W. E.—W. H. H. R.—E. S. G.—G. E. M.—G. G. George Grant; in a week or so.—W. H. H. R—C, J. W. C. J. B.—J. J. H. G.—A. P.—C. P. L.—R. C.—A. M.—C, J. W.—O. S. B.—A. L. R.—W. F.—G. W. M.—M. N.—C. D. H., thanks.—M. B. P.—J. H., petunia seeds rec'd; thanks. —W. H.—L. E. B.—C. L.

THE
RURAL NEW-YORKER.
A National Journal for Country and Suburban Homes.

Conducted by
ELBERT S. CARMAN.

Address
THE RURAL NEW-YORKER,
No. 34 PARK ROW, New York.

SATURDAY, DECEMBER 11, 1886.

NOTICE.

ALL subscribers who desire the RURAL'S Seed Distribution must APPLY for it. Hitherto we have not required those who subscribe for the RURAL in connection with other papers to make an application. This has caused confusion. It is only necessary to say "SEND SEEDS."

REFERRING to the Brazilian Flour Corn shown on page 823, we may say that an average ear, as sent to us by Mr. Wilson, weighed, Nov. 15, four ounces; the cob five-eighths of an ounce. There were 10 rows, and 35 kernels to the row. The ear was not quite dry—the grain of a white color, without dents.

IT may save many of our subscribers trouble if we state that, so far as we know, money (bills) sent to us by letter almost invariably reach us safely. Inclosing bills in letters saves the bother of writing checks or procuring money orders. Still, we can not, for obvious reasons, assume any responsibility.

We cannot understand why the use of complete chemical fertilizers in the Fall is not a wasteful use of plant food in so far as the nitrogen, if in a soluble form, is concerned. Nitrate of soda or sulphate of ammonia is immediately soluble. The roots of plants (wheat or rye for example) can not feed upon it during the cold season, and the rains therefore carry it through the soil and there is little left for Spring. We cannot afford to lose the most costly ingredient of our manures. Nitrogen in organic matter, such as farm manure, blood, hair and bone, becomes slowly soluble, far less so in cold than in warm weather, so that we may safely apply them in the Fall.

THE Langshan chicks at the Rural Grounds, hatched out May 20th, are now fine birds. There are but three pullets and four cockerels. In one respect they disappoint us: the pullets have not yet layed. Their necks and legs are rather longer than we had looked for; their plumage is more brilliantly colored—iridescent is the word to express it. From all that has been written about Langshans, we had supposed a closer resemblance to the Black Cochin. But their necks and legs are longer; they are *taller* birds, and less heavily feathered down the legs. Mr. Henry Stewart once insisted that the Black Cochins and Langshans were the same. Henry Hales has intimated that the Langshan is an improved Black Cochin. But if these are fit birds for comparison, there are marked differences.

ALL who are interested in chemical fertilizers should send to the Connecticut Agricultural Experiment Station for Bulletin No 89. This gives 27 analyses of special fertilizers, and 60 analyses of nitrogenous fertilizers and guanos analyzed by the Station. Prof. Johnson has adopted the excellent method of presenting the percentage difference between the cost of the fertilizer and the station valuation. Thus "Common Sense Fertilizer" costs $40 per ton. The station analysis shows it to be worth only $15.80 per ton, the difference being 153 per cent. Charter Oak fertilizer sells for $30 a ton. The Station analysis shows it to be worth but $15.77—a difference of 90 per cent. Most of the fertilizers show a fair margin between the selling price and valuation. Address Prof. S. W. Johnson, New Haven Conn.

WE know a man who ran for a county office. He ran hard, but the other man ran harder. Somebody had to win, and our friend got on the under side. During the canvass he traveled all over the county, shook hands with everybody, and thoroughly organized his campaign. All his careful work went for nothing unless he expects to run again. Now suppose he had let politics alone and canvassed his own business as carefully as he did the county? Suppose he had found out what farm product sold best, made business friends, talked up his facilities for making good butter, cheese or whatever he had to sell, and then gone home and worked his goods into the market he had talked up? It will be a very sour man who will say he would not have been better off to-day. Running for a county office is about the most unsatisfactory business a farmer can get into. Canvassing and building up a business is twice as satisfactory.

THE practice of planting a tree as a celebration of some pleasant family event is one well worthy of encouragement. In some families a tree is always planted when the baby is christened. The tree is named for the little stranger; they grow up together. The little one comes early to know his tree and a pleasant feeling of ownership, respect and association is kindled. Surely the idea is a beautiful one. In every family there are pleasant meetings. Old and dear friends come to us from far away—start up out of the long years of forgetfulness. How can we more fittingly celebrate their visit than by planting a tree or shrub, that shall grow up with the years and whisper to us of those who helped start it into vigor? And even when death takes one from our midst, what more thoughtful tribute to the dead can there be than a tree well planted and nourished? Its strong, free-growing life will bring pleasant memories of the one that has passed away, and its leaves will whisper to us and its branches reach down to us as we sit beneath it.

FOR 13 years a driven well has been used at the Rural Grounds. The pipe is driven through the cellar 17 feet *deep* and connects with a pump in the kitchen. Another pipe connects with the cistern. The water from either the cistern or well may be used by turning a crank. The driven well has never worked satisfactorily. The water is raised with difficulty and the valves of the pump are soon disordered from the strain. It has been decided to dig a well near the house and to connect the pump by underground lead pipes with this well. Large cement barrel-pipes (three feet in diameter) will be sunk instead of using stones. The question respectfully submitted to our readers is this: Should the top of this well be covered, so as to exclude the air, as well as dust, insects, etc., or should it be left open the same as other wells from which the water is raised in buckets? We find that there is a decided difference of opinion on this subject, even among pump and well experts.

ONE of the meanest things about the Washington Seed distribution is that the bulk of the seed is purchased from a few favored seedsmen. The competition is *not* open to all. It is not the lowest price or the cleanest, purest seeds necessarily that will insure the orders from Washington. We know of a number of cases in which the prices paid for immense quantities of certain kinds of seeds were higher than those appended in the regular wholesale catalogues of well known seedsmen. We know of other cases in which the endeavors of several of the first seed firms in the country to sell the Department seeds of the best quality and at the lowest prices were unavailing—their letters of inquiry and requests for replies quite ignored. This Washington seeds business is a disgrace in every way; an imposition upon the farmer; a fraud upon the seedsmen. A few valuable kinds of seeds have been distributed by the Department, it is true, and so, too, have hundreds of kinds of inferior seeds and thousands of pernicious weeds. The farmers can put a stop to this fraud. We should require a pledge from every congressional candidate that he will use his influence to abolish the Washington Seed Store.

MR. FALCONER speaks the RURAL'S views when he tells us (see his article page 822) that he buys about everything that turns up year after year in the way of novelties. He never depends on a novelty for a crop, but takes pleasure in growing and comparing it in his trial grounds. People talk, he says, of getting swindled in novelties, but it is curious that it is "we old fellows that have practically engaged in this growing and experiment business for a quarter of a century or more, who buy and try the most of the novelties every year." "We are only doing a little towards keeping posted in our business. We never look for a bonanza, no matter how loudly puffed the alleged novelty may be. We take it easy, keep our temper and make a note of it."

There are many of our readers who feel too poor to invest their hard earnings in the high-priced novelties every year announced. Too often, it is true, the "novelties" prove to be old things with new and taking names; too often, even if new, they prove to be inferior to old kinds. Nevertheless we must say that in the long run, view it which way you will—as a matter of profit or instruction or both—novelty-testing has amply repaid us.

PREPARING FOR BATTLE.

IT is very evident that the battle for and against oleomargarine is to be fought over again in the next Congress. Last Saturday, a large meeting of stockmen at St. Louis unanimously adopted resolutions declaring that the wholesale dealers' license of $480, and the retail dealers' license of $48, are exorbitant, and that the tax of two cents per pound on the concoction meets all requirements and objects of the law and fully protects the agricultural classes. They stated that the manufacture of oleomargarine enhances the value of cattle from $2 to $4, and of hogs from 13 to 15 cents per head, and urged "all friends of the cattle interests" to memorialize Congress "for a reduction of the special licenses and for a repeal of all the obnoxious prohibitory and monopolistic features of the oleomargarine bill."

A memorial to Congress was drafted and signed by a large number of commission merchants and exchanges, and some citizens "setting forth the objectionable features of the Oleomargarine Bill and the bad effects they have had," and particularly praying that the special licenses be reduced. This is part of a general movement by the olea men. Similar "protests and petitions" are to be sent to Congress from other quarters. Large invested interests are terribly persistent in seeking their selfish ends, and the oleo interest has always been among the most unscrupulous in this way. The supporters of genuine butter and honest dealing, too, find several defects in the bill already passed, and it is very likely they will seek in the next session of Congress the amendments which experience may show to be necessary to render the law more effective. The final issue must rest with the farmers of the country, but they must remember that they are fighting against a watchful, powerful and deeply interested foe, always ready to take advantage of any remissness or blunder on their side. If the oleo men seek in any way to lessen the stringency of the present law, it is very likely they will be like the party who went out for wool and came home shorn.

A SOUTHERN AGRICULTURAL COLLEGE.

THE farmers of South Carolina want an agricultural college. What is more they propose to demand one and to make the the kind of college they want. It's a most encouraging evidence of progress in the right direction that the following sentiments were loudly applauded at the late Farmers' meeting in Columbia:

"What we want to guard against is allowing the board of agriculture and the college being made an asylum for broken-down politicians and old superannuated Bourbon aristocrats, who are thoroughly incompetent, who worship the past, and are incapable of progress of any sort, but who boldly assume to govern us by divine right and are ever ready to put in their claims to fill every position of honor or profit that may offer. These people are the bane of our State, and not knowing how to lead, are riding us like "Sinbad's old man of the sea." If they are to get control of our agricultural college we had best not found one, for they will select its professors from among their kindred and friends, and the school will fail most miserably to fulfill our hopes and expectations."

Let the farmers of South Carolina stick to these sentiments, and they will yet have a college to be proud of. It was proposed at the above mentioned meeting to permit the various counties of the State to bid for the location of the college. In this way the farm could be obtained at a very small cost. It was estimated that the institution could be run at a cost of $30,000 per year if it could be "kept out of the hands of politicians and broken-down gentlemen." With the present privilege tax on fertilizers and the income from the land-script fund applied to the maintainance of the college, the State would have but little to pay for its support. It is proposed to place the control of the college in the hands of a Board to be elected by State conventions of farmers. In this way politicians will have nothing to do with it, while the Granges and other farmers' organizations will control it in every way. We wish the farmers of South Carolina God speed in their work. They have all the mistakes and experiments of the past to aid them, and in no part of the country can the ideal agricultural college be made to accomplish more real good.

BREVITIES.

THIS is the first trial week of the supercalendered paper. Readers will please observe. After three or four weeks we shall use the heavier machine-calendered paper. *Then* our subscribers, those who care about it, are to vote which they prefer.

IT is doubtful if the cost of what seems to be a trifling improvement in a journal like the R. N.-Y. is adequately considered by most readers. For instance, if the supercalendered paper be elected, the extra cost will be precisely $2.50 per thousand copies each week, without adding the increased postal expenses.

WE have succeeded in rooting a fair proportion of grape-vine cuttings by merely burying the cuttings in mellow soil and covering them with litter or coarse manure. Let the upper bud of the cutting be placed level with the soil. Compact the soil firmly about the lower bud. Some varieties will not strike in this way.

MR. WM. E. GREEN, of Vermont, the originator of the Vergennes grape, died last month. Mr. Green was considered one of the best judges of cattle and fruit in Vermont. He was frequently called to Montreal to act as judge at the fairs. A new grape, the Early Vermont, considered by good judges superior to the Vergennes, was originated by Mr Green, but has never been introduced.

CALIFORNIA Arbor Day was appointed for November 27. This was a poor selection. The day comes at the wrong season for tree planting. Even in "sunny" California there are seasons and seasons. There is a practical side to forestry that must not be overlooked by enthusiasts. The tree planter is the parent of the forest, and he should always be deferred to. The State Forestry Commission of California hope to have Arbor Day named for some date in February.

THE Connecticut Board of Agriculture will hold a meeting at Torrington, Conn., December 14–16. An excellent programme has been arranged, including papers from such men as P. M. Augur, Professor S. W. Johnson, Professor Brewer, John E. Russell and others. These farmers' meetings have done a vast amount of good. Connecticut is too small a State to hold all the good they can bring about. It spreads out all over the country. The farmer who goes to this meeting will secure material enough to keep his brain busy for the next year.

THERE are very few desirable shrubs that will grow close to a house and thrive under its sheltering eaves. Nothing that we know of is so well adapted for this purpose as the Upright or Bush Honeysuckles, such as Lonicera fragrantissima, hispida, Standishii, etc., to be found in the catalogues of most nurserymen. Their leaves are retained quite fresh and green until nearly January. Their flowers are fragrant, and by annual pruning the bushes assume as compact a form as may be desired.

THE Royal Agricultural Society of England propose a horse-shoeing competition at their coming agricultural shows. At past exhibitions of this kind too much has been allowed for quickness in shoeing. There has been a tendency to do hasty work rather than to show how shoes ought to be put on. The cases where a shoe must be put on in a great hurry are comparatively few beside those where the shoe is to stay on the horse's foot for long and active service. Speed is desirable, but excellence in workmanship is best of all. In view of the paramount importance of sound feet in the horse and of the injury frequently done by unskillful shoeing, every encouragement should be given to improvements in farriery.

A. L. PENNOCK & SON, of Lansdowne, Pa., are sending out a circular on the merits of what they call the "Melon Pear," a name rather misleading. It is possible that the above firm is not aware that this is a very old plant—an egg plant indeed—known in England since 1597. Gray's Garden Botany (page 230) calls it an egg plant. Vilmorin catalogues it as an egg plant. Its botanical name is Solanum Melongena. This Mr. Pennock gives. We are not presuming that he intends to deceive anybody in his circular. In fact, the firm expressly states that they have not fruited it. But it would have been well to do so before issuing the circular.

IT looks as though the successful Farmers' Institutes of the Winter are going to be those under the direction of a regular manager, who makes it his business to see that the programmes are arranged and carried out. A good appropriation is needed to start these institutes as they should be started. There is enough good to be accomplished at these meetings to make it worth while to pay a man well to look after them and give his whole time to the work. There ought to be a rousing meeting held in every county of New York State this Winter, but who has heard of any movement towards such a result? We believe in Farmers' Institutes. They pay well. They can't be carried on for nothing, and State Boards of Agriculture can't go to sleep and dream them.

SICKNESS and death frequently enter the system through the feet. Fashion has killed hundreds, but its victims grow fewer. It is more in the style now to wear warmer clothing about the chest and to permit more play for the lungs. People have the hardest work to get over the idea that small feet are an evidence of breeding. The tendency still is towards the thinnest of shoes and stockings. These coming directly against the cold pavements of the city cause many a case of pneumonia that might have been avoided. To the credit of farmers and their families be it said that they have far less of this absurd veneration for small feet, yet there are many who dislike to wear shoes large enough to permit of proper foot covering or who would rather have their feet dampened than be seen wearing an overshoe. Such a feeling is all nonsense. Comfort and health should always be consulted first of all. Money spent for warm and comfortable foot coverings is well spent.

The Herdsman.

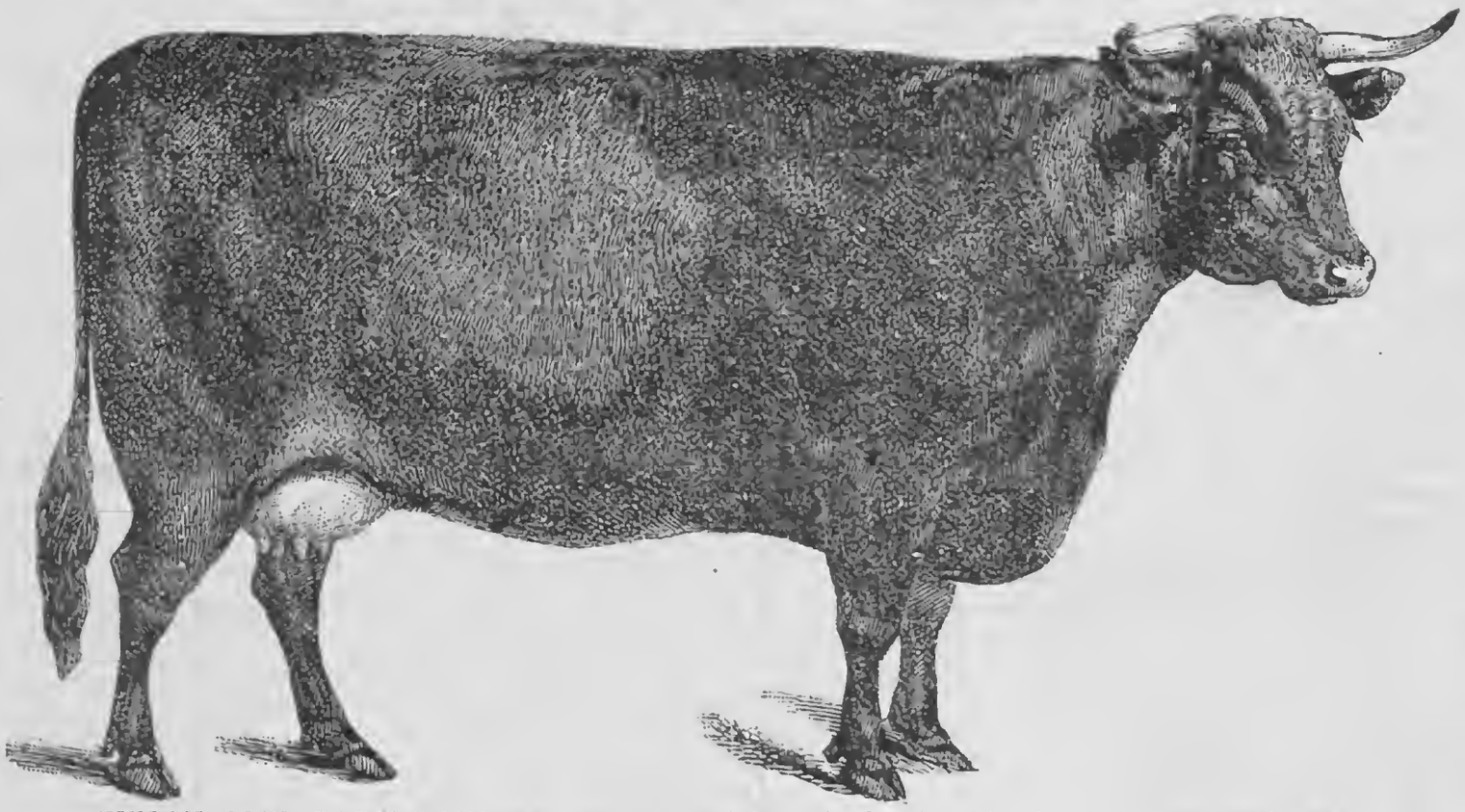
OUR ANIMAL PORTRAITS.

WELSH COW LADY BEST, 236.

Less than 50 years ago the Glamorgan cattle were probably the most numerous in Wales; but it is a question now whether any survive in their purity, as they seem to have entirely disappeared before the advance of the Short-horn, Hereford and Devon. They were excellent milkers and their flesh was considered of superior quality. The Pembroke or Castlemartin cattle still flourish, however, as a distinct breed, although they are hard-pressed by English rivals, chiefly the Short-horns. They are fairly good milkers—as good, it is said, as most of the improved breeds, and both in texture and quality their meat is of a superior kind. As a rule, they are black in color, though a few have a brown tinge and sometimes a little white appears on the face and udders. About a dozen years ago a herd book of the breed was established, and a patriotic effort has been made to perpetuate the race.

The Anglesea cattle claiming to be a distinct breed, very closely resemble the Pembrokes. They are of blacker color, and a trifle larger. They have been raised chiefly for beef, and their milking qualities have therefore been greatly neglected, and consequently they are of little use in the dairy: but their flesh is of excellent quality, and considerable numbers of them are finished off in England for the London market. A herd book has also been established for these of late under the name of the North Wales Black Cattle Herd Book, and as they are extremely hardy, and thrive on the scanty mountain pastures on which most English breeds would starve, it is likely that they will long survive the other native cattle of the Principality. At Fig. 454 is an illustration of a fine cow of this breed—Lady Best, No. 236, Vol. II. of the North Wales Black Cattle Herd-Book. She has been during the past year a frequent prize winner among Welsh cattle both in England and Wales, and inherits, according to the (London) Live Stock Journal, from which the illustration has been re-engraved, "the purest blood of pedigree Welsh cattle."

A breed to be profitable and, therefore, popular among the farmers and dairymen of England must be good for both beef and milk — hence the transcendant popularity of the Short-horns.



WELSH COW, LADY BEST 236. Re-engraved from the London Live Stock Journal. Fig. 454.

PRINCIPLES OF BREEDING.

PROFESSOR G. E. MORROW.

In-breeding is the breeding together of animals closely related. Close-breeding and line-breeding have somewhat the same meaning; the latter referring to breeding from animals of the same family or tribe. Cross-breeding is the breeding of animals of different breeds, families or strains.

The general opinion is that close in-breeding is not advisable; while many stockmen favor cross-breeding. Only related animals will probably possess many of the same characteristics. Breeding them together will intensify these characteristics. If the animals possessed any good qualities, it might be the wisest course to practice in breeding; but as they also have undesirable qualities, or tendencies, which will be made more certain to appear by such breeding, it is rarely safe to continue the practice of breeding from near relatives. In establishing a breed this practice is more allowable; sometimes necessary.

Cross-breeding often breaks up the established characteristics of the breeds or families, but frequently gives animals of exceptionally great vigor. For the production of animals for labor, meat, milk, etc., reasonable cross-breeding is often satisfactory in its results, although it is rarely well to make violent crosses. Obviously there is less certainty of the reappearance of characteristics possessed by cross-bred animals. It also seems certain that breeding from such animals more frequently causes reversion, or atavism, than when the parents belong to the same breed or family. Crossing for the mere sake of crossing, or without a definite object in view, is unwise. The safer rule, in the large majority of cases, is to continue to breed from animals of one breed, avoiding close relationship. Certain qualities are directly opposed to each other; others are closely related; still others seem to have no connection. Even in the latter cases it is exceedingly difficult to secure a high degree of excellence in several different characteristics in the same animal. The breeder must usually be content to accept comparative weakness in some qualities as the accompaniment of very remarkable development in others. Fortunately a fair development in a number of qualities may be secured.

The great majority of farmers will do most wisely to attempt the production of animals of good general merit, rather than those of wonderful excellence in any one point.

It is a great mistake to multiply qualities of little importance in themselves, but which are insisted on in the selection of breeding stock. Qualities of little importance in themselves may become important as evidence of purity of breed and the possession of important characteristics which cannot be seen, but only injury comes from needless multiplication of such characteristics as tests of breed or fashion.

University, Champaign, Ill.

STOCK CONSIDERATIONS.

It is a trifle curious that the London Smithfield Club has not yet been able to decide whether to offer prizes for the best dead carcasses of beef—male and female—at its great annual fat stock show before Christmas. Such prizes have been offered at our Chicago fat stock show for years; but John Bull is very conservative in adopting foreign practices, however obviously advantageous. Why should not prizes be also offered for the best carcasses of sheep, swine, and even poultry? The Club has yet advanced only as far as the consideration of offering prizes for the best beef carcasses. Entries for the exhibition number 491, and the prizes aggregate $17,330.

SHUTTING OUT CONTAGIOUS STOCK DISEASES.

Sweden is now the only country in Europe whence live stock of all kinds are permitted to land in England without being subject to slaughter immediately after debarkation, as that is the only country free from contagious live stock diseases. Denmark is free as regards cattle and sheep; but swine from that quarter must be slaughtered at the port of landing. A recent Order of Council prohibits the landing of cattle from Norway except for slaughter. At the recent meetings of stockmen and veterinarians at Chicago, the opinion was very generally and strongly expressed that the best American policy would be to prohibit the importation of cattle from any country in which contagious cattle diseases exist. Cattle from such countries are now admitted for breeding purposes subject to a quarantine of 90 days; but in view of the danger of introducing disastrous contagious diseases in spite of this precaution, often badly enforced, it is generally considered the wiser course to suspend importation of cattle altogether for breeding purposes from such countries during the prevalence of disease there. In doing this we would be merely enforcing against Europe the same rule Europe is enforcing against us.

THE CHAMPION HEIFER.

Mrs. Burchard, the inspector of the Holstein-Friesian Association, recently tested the heifer Netherland Princess 4th, 16475. This test, so far as we can learn, was fair in every particular, and stamps the heifer as the most remarkable animal of the same age in any breed. Netherland Princess 4th is a two-year-old daughter of Netherland Prince, and really of the same blood as himself, being from Netherland Princess, his full sister. She was dropped June 28, 1884, and at the date of her test was two years four months and five days old. Her first calf was dropped on Sept. 20 last. In the seven days of her test she gave 282 pounds 10 ounces of milk, which made 20 pounds 3½ ounces of superior butter. It required 13.97 pounds of milk to make a pound of butter. The dairy feed from which this butter was made consisted of 17½ pounds of a grain ration, consisting of two parts wheat bran, two parts corn meal and one part oatmeal; 26 pounds of corn silage and 25 pounds of hay—mixed clover and Timothy. She was watered twice a day—all she would drink. Netherland Dorinda 6804 gave in one week 323 pounds 3 ounces of milk, and 22 pounds of butter. Netherland Baroness 2535 gave in two days six pounds 4¾ ounces of butter, and Netherland Peeress 2640 gave, in five days, 14 pounds 1½ ounce of butter. All of the cows are closely related to Netherland Prince. They are all owned by Messrs Smiths, Powell & Lamb, of Syracuse, N. Y., who have reason to be proud of the Netherland family.

Pure-bred Bulls for Farmers.—The directors of the Irish Cattle Trade Association are taking active measures to improve Irish stock. It is now proposed to raise a sum of money with which to procure pure-bred bulls of good breeding for public use. These are to be placed in communities where scrub bulls abound, and the service fees will be put down so low that no farmer will drive his cows to a scrub bull just to save a little money. This plan of scrub fighting seems like a good one. The association will make no money by placing these bulls about, but they will improve the stock where it could not otherwise be improved.

Working Cows.—I have seen cows worked like oxen. Some men, just starting in and trying to get a farm, used to work cows with success. Working cows don't give much milk to be sure; but in early days there was not so much sale for milk and butter. By having quite a number of cows to take turns and thus make lighter work, and feeding extra meal, I don't see why this plan wouldn't work well in some parts of the country even now.

Brandon, Vt. E. F. E.

Woman's Work.

CONDUCTED BY EMILY LOUISE TAPLIN.

THE DEATH OF THE YEAR.

A cloud came out of the golden west,
A bell rang over the silent air;
The sun-cloud hurried away to rest,
Flushing with kisses each cloud he prest,
And, Oh! but the day was fair.

"How brightly the year goes out," they said:
"The glow of the sunset lingers long,
Knowing the year will be over and dead,
Its sad hours over—its fleet hours fled—
With service of even-song."

"How sadly the year came in," they said,
I listened and wondered in dusk of night;
To me no year that might come instead
Of the old friend numbered among the dead
Could ever be half so bright.

The sun-kissed clouds grew pale and gray,
The bells hung silent in high mid-air,
Waiting to ring the year away
In strains that were ever too glad and gay
For me—as I listened there.

Oh, hearts! that beat in a million breasts,
Oh, lips! that utter the same old phrase,
I wonder that never a sorrow rests
In words you utter to friends and guests
In the new year's strange, new days!

Is it just the same as it used to be?
Have new years only a gladder sound?
For ever and always it seems to me
That no new face can be sweet to see
As the old ones we have found.

There is no cloud in the darkened west,
The bell is silent in misty air,
The year has gone to its last long rest,
And I, who loved and who knew it best,
Shall meet it—God knows where!

—*All the Year Round.*

OF INTEREST TO WOMEN.

The Mayor of New York has appointed two women as School Commissioners, Miss Grace Dodge and Dr. Mary Nash Agnew. It is very probable that the precedent thus established will be followed in other cities.

Sister Dora, who gave her life to good works among the miners of the English "Black Country," has been honored by a statue at Walsall. It is of heroic size, and represents her in the dress of her order with a roll of lint in her hand. This is the first statue erected in England to any woman not of royal blood.

Some of the New York papers are now daily harrowing their readers with accounts of the fearful privations of women in the humbler ranks of seamstresses. It is the old, old Song of the Shirt, with the modern addition of a sewing machine. But, with deepest sympathy for these unfortunates, theirs is a mistaken labor. All over the country are cries for better and more intelligent workers in domestic service; why should the underpaid seamstreses work day and night, ill-housed and ill-fed, when they would be well paid and well cared for in such positions?

A pretty Christmas gift for the baby will be a crib comforter. It may be made of cheese-cloth tufted with pale blue wool. Around the edge may be feather stitching of the wool, finished by a frill of lace. Another useful gift is a drying blanket made of a width—doubled—of fine, white canton flannel. This is to be spread over the lap while baby is being washed and dressed. The edge is scalloped and buttonholed with colored wool. It is tufted together like a comforter.

CONFESSIONS OF A COUNTRY GIRL.

II.

A study of the floating literature of our time would give the impression that womankind was a newly discovered genus of singular and conflicting characteristics. Every writer of the superior sex has something to say about our characteristics, and he says his little say with the calmly curious air he would display in discussing the moral qualities of the Fantees. This is highly edifying, especially to the women. I suppose we are a singular and inconsistent sex, but even our inconsistencies are not without their value. Of all classes, I really believe that farmers' wives and daughters receive the greatest amount of preaching in the course of the year. We learn all sorts of things about our ways that we never thought of before. We learn that we are ignorant and narrow-minded from one source; that our culture and liberality makes us a credit to the nation from another. One authority compares our fine physique with the over-worked European women; another says that we never have any figure worth mentioning, and that our complexions show the work of the deadly frying-pan and the insidious soda biscuit. And so on, through a whole catalogue of virtues and faults, until we can only conclude that neither of these eminent authorities really know anything about the matter.

We girls ought to become a vastly different generation from our mothers, if we only read, mark, learn and inwardly digest all this good advice. But there is one fault a recent writer pointed out, whether the result of all this dissection of woman's ways I cannot say. That is, the apparent prevailing discontent among women. Wives and mothers complain of their increasing work; young women complain of the sordid monotony of their lives. These trials are true enough, we all know, to our sorrow, but are we not aggravating them by the view we take? We need not assert with melancholy emphasis, that man is made to mourn, and take everything that comes with a sad equanimity. We must cultivate the sunshine on our hearts—what the French call *gaiete de coeur*, as a recent writer in this department said. A great deal of discontent seems to be caused by an aimless life. Of course the woman with half-a-dozen babies and no hired help has all the aim in life she needs, if she only

looks at it that way. But it is the young girl who often feels this want of purpose. She may have regular duties, but possessing all the vague hopes of girlhood, she wants to do something or be something, out of the every-day rut. She becomes dissatisfied with commonplace duties, and, if her fairy prince does not appear, she drifts into discontented old-maidism. What is the remedy? This is hard to say. Perhaps the best thing would be to give every girl an aim and purpose, apart from marriage; to teach her that wifehood is an honorable estate, but not to be entered merely for want of ability to care for herself. Self-respecting independence will not make us girls "strong-minded" in the common acceptance of the term, nor need it make any womanly woman contemptuous of loving domesticity; it will simply give the ability to fight their own battles to those who need it. So find the work you are best fitted for, and then, whatever your hand finds to do, do it with all your might; it will not make life all sunshine, but it will prevent many a dark hour, and give something more to live for, in any case. PATTY GARTON.

A PROTEST.

I WANT to say a word in behalf of the wash-women. If "cleanliness is next to godliness," surely her station is a valuable one."

Now I never went out or took in washing, but I have a neighbor who comes and helps me over hard places, house-cleaning, washing, etc.

I should no more think of offering her old carpets or surplus fruit for pay than I would to a photographer for his pictures. I pay her cash, and give her the apples.

If the laboring class are to be paid in second-hand articles, it is no wonder they revolt.

To whom do you think it will be said, "Well done, thou good and faithful servant"—the girl, with her soulless pictures, the faithful house-keeper, or the despised wash-woman?

M. S. HILL.

TYPE-WRITING OR DISH-WASHING.

IF "Eleanor Kirk's" excellent article in the RURAL of November 6, has not convinced "wife, mother, and housekeeper" that a woman's whole duty is not bounded by wash-day on one hand and baking-day on the other, it is most unlikely that any humble words of mine, however earnest, will do so. That every woman who is married, or who contemplates matrimony, should be able to cook and wisely conduct her household, I am sure no one will deny, but it is quite as essential that she should also have some trade, profession, or vocation by which, in case of need, she can support her family. Husbands are mortal! "He left a wife and four children in destitute circumstances," is a phrase that may be seen, with variations as to the number of children, in almost any and every daily paper. Saddest of all, not every man who marries is able or willing to support a wife. In either of the above-mentioned contingencies, what is a woman to do whose sole knowledge consists in making a good loaf of bread. She cannot turn this accomplishment, albeit a very desirable one, to any pecuniary use, inasmuch as cooks with several children are not appreciated in ordinary kitchens.

I once knew a charming little lady, daintily reared in a southern family of wealth, who had never been allowed to button her own shoes, or dress her own hair. She married, as many women do without the least elementary knowledge of housekeeping, and went with her husband to a new settlement in southern California. Help was scarce, and when it could be obtained was rather a hindrance than a help. Many a laugh that almost ended in tears, so closely did her tale border on the tragic, have I had over her recitals of her experience in those days. On one occasion coming home from church to find the cook in a drunken stupor, and that the nurse and housemaid had taken French leave, she heroically assured her husband that she would get him just such a dinner as he liked.

Having settled upon a meat pie and hot biscuits as the best that could be done under the circumstances, she hastened to the kitchen and proceeded to make the dough for the latter. Remembering to have heard that bread was the better for long kneeding, she rashly concluded that the same rule would apply to biscuits, and patiently kneeded them for half an hour, molded and put them in the oven; sliced her potatoes and onions in a dish with layers of meat, filled the dish with water, covered it with a crust rolled from some of the biscuit dough, and triumphantly placed it in the oven to bake. When the biscuits were done she was somewhat dismayed by their leaden looks, but the tempting brown of the meat pie seemed to atone. To this day she declares that whenever she thinks of that pie with its unwarmed meat, and raw potatoes and onions, she experiences anew the mortification of that dinner.

She began at once, 'like' the brave' little woman she was, to remedy the defects of her education, and became in time a most accomplished cook, although she has assured me that she always disliked it extremely and found it the most terrible drudgery. A proof that all women are not born cooks. When a year or two later her husband lost all his money in an unfortunate speculation, and his health at the same time, this little woman, although she could not make "boots and shoes," could and did by means of her pen, support her husband and two children, going to a large city to obtain work. Since her husband's death, she has gone bravely on, sent her son through the University of California (which is free except for board), and educated her daughter, who, contrary to all laws of inheritance, is a natural cook, and never so happy as when with her pretty arms bared, she is concocting some delightful dish.

I know twenty women to-day who but for their knowledge of short-hand and type-writing would be in indigent circumstances. I know another lady, who as editress of a well-known magazine makes three times the money that enables her to pay a good housekeeper to take from her hands the duties that are so irksome and for which she is so unfitted.

It is not a question of "easier times," it is one of doing with our might that for which we are most fitted, and I would say to "wife, mother and housekeeper," beware how you check the tendencies of your daughter should she attempt to leave the old beaten track. Although she may not like to get up and build the fire on a cold winter morning, for a man selfish enough to let her do it, being the daughter of so industrious a mother, she is not likely to be a drone in life.

I am, dear readers of the RURAL, one who has been a housekeeper, and is still, a

WIFE AND MOTHER.

TEACHING THE YOUNG IDEA.

AN exchange gives expression to the fear that when ladies are once generally admitted to the Boards of Education, they will, as far as their power goes, employ only female teachers. Whether this would be so or not, it certainly would be better for the rising generation that it should be so. Women have more power than men in forming character in children. The moral, intellectual and spiritual powers are better evolved and developed by the coaxing influence of affection and sympathy possessed by women, than by the repellant severity of the average male teacher.

As a general thing a man fills a post as teacher only as a stepping stone to something else, to work his way through college for instance. It is a woman's life work. A very small per cent. of lady teachers marry, and of those who do, many of them continue their teaching.

There is one crying shame that might be avoided if women could take a place on Boards of Education. They would see that a female teacher who did her work in every way as well as a male teacher should receive the same salary. SELMA CLARE.

GOLDEN GRAINS.

DRYDEN said: "Let grace and goodness be the principal loadstone of thy affections. For love which hath ends will have an end, whereas that which is founded on true virtue will always continue."....

PROFESSOR PHELPS says: "Take Christ out of the Old Testament and the student of astronomy may well scorn and scout the whole story. Put back Christ into its pages, and they glow with a magnificence which the Heaven of Heavens cannot contain. Pretty, is it? That very homeliness of details is the measure of God's condescension. That he has come down to the slow and patient training of a rude person in a ruder age. Is the prattle of the nursery degrading to the young mother who fondly studies its meaning? What else marks the love of a mother like it? But for just such pettiness what would the world have ever known of Homer and Plato? The Old Testament is simply the story of the moral nursery of the race. In the one fact lies the whole volume of reply to the carpings of infidelity."..... .....

Go on in your journey to Heaven, and be content with such fare by the way as Christ and His followers have had before you: for they had always the wind on their faces; and the Lord hath not changed the way to us, for our ease, but will have us follow our sweet guide.... ....

BE useful where thou livest, that they may
Both want and wish thy living presence still;
Kindness, good parts, great places are the way
To compass this. Find out men's wants and will,
And meet them there. All worldly joys go less
To the one joy of doing kindnesses.

—*Geo. Herbert.*

Domestic Economy

CONDUCTED BY MRS. AGNES E. M. CARMAN.

Pleasant evenings in the sitting-room of the farm house. How can we secure them? Music, vocal or instrumental, or both, will help. A game or so, a story or lively conversation will also help. But underlying these we must have contentment.

HOUSEKEEPING IN NEW ENGLAND.

I.

MARY WAGER-FISHER.

WE had an "outing" of six weeks last August and September on the Massachusetts coast, beginning with Boston, jaunting leisurely southward as fancy led us, and seeing a good deal of Yankee life in a variety of places—very superficially, it is true, but perhaps more interesting than a deeper acquaintance would have proved to be. Most of the housekeeping was in hotels. In one, where the rates were four dollars per day, the tablecloth was soiled, and in another, where the charge was two dollars a day, and the best hotel in the place, all the tables were covered with white oil-cloth kept spotlessly clean, and I liked that much better.

On Sunday mornings we invariably had for breakfast baked beans, Boston brown bread and codfish balls! In one very quiet and home-like hotel where we stopped for three weeks, and where we had fresh bed linen twice a week and stacks of clean towels (the woman who did the washing and ironing was Scotch; she had the sweetest voice and smile of any woman I have seen in six months, and her demeanor was that of a bred lady), the brown bread was so exceptionally good, that I asked the landlady how it was made, and she said:

"Rye flour three cups, corn meal three cups; put in mixing pan. Add one-half cup of molasses, one teaspoon of soda, put in one quart of cold water, one teaspoon of salt. Mix and steam three hours. If you have no brown bread pan you can put it in a lard pail of suitable size."

The baker in this house was a superior workman in every branch of bread and pastry making. He was a German and had learned to make bread in Germany, but he had learned to make pies in Yankeeland, as Germany is not the home of the pie. His pastry was excellent, and although I don't approve of pie and consider it a sort of culinary abomination, still, when the dining-room girl would come to our little table daily with "What will you have for dessert? Mince, apple, blueberry, custard, Washington-and squash pie and ice cream," I was often inveigled into ordering pie! And everywhere we went pie abounded, and one mature waitress said that she had all her life lived in New England and she had never been anywhere they didn't have pie—they didn't generally think fruit was good for much except it was turned into pie!

One day I went in to see the German baker at work—clad all in white like a Chinese house servant, and with a white turban on his head. He worked like a flash. He was moulding bread—putting the loaves in a long pan, with a wide space between each loaf; with a wide camels-hair brush such as artists call a "blender" he gave each one a coating of egg well beaten, then covered them—each separately—with a long narrow bake tin. Under these hoods the bread rose for the last time, and was baked—the covers being removed only when the bread was nearly done, so that a fine crisp crust would be formed entirely over each loaf. He used the Vienna yeast because he said that he hadn't time to make his own,—he used half milk and half water in mixing the dough. Every day a "shore dinner" was served for such as preferred it to a "roast." It consisted of clam chowder, blue fish boiled or baked, clam fritters, vegetables, etc. Fish was always abundant. It was no uncommon thing to see half a hundred boats at anchor fishing for mackerel and many others out with a trap for catching lobsters—a cage-like arrangement called a lobster pot into which the lobsters are beguiled by bait, and although slipping easily in cannot get out—much on the plan of some mouse traps.

One day we went in a whaler across Massachusetts Bay to the tip end of Cape Cod, where we ate fresh codfish, and saw fishermen unloading cod from the boats just in from the "Great Banks" of Newfoundland. The fish are caught with a hook and line, cut open, washed and salted in the hold of the vessels, the hold packed full of them. In unloading and preparing them for market, they were pitched out with a pitchfork and washed off in a large canoe filled with fresh water, then packed in casks, and the work was done in a cleanly manner. The livers of the cod are thrown in casks where the oil exudes spontaneously—the meaty part of the liver and other impurities rising to the top, leaving the oil "crystal pure." One of the men lifted the lid of a liver cask, and the smell was too vile for a moment's endurance—quite equalling the taste, which is the worst of anything I ever tasted, and I once swallowed in the course of time a gallon, more or less!

When on the island of Nantucket we ate sword-fish which Anaximander thought capitally good—considering it was not Delaware shad, which to his palate is the finest fish in the world. It is only recently that sword-fish has been considered good for the table and the tremendous weapon it carries projecting straight out from its head would seem to constitute it a veritable monster. The laddie paid half a dollar for a sword in its natural condition as taken off the fish's head. The surface is hard and rough like a grindstone and much the same in color—the length 38½ inches and the circumference at the big end ten inches. One of the sailors on board the whaler showed us the gun they used in shooting whales—a short, very heavy iron gun with an inch bore—the load a shell about a foot long which explodes inside the whale and serves to make him feel sick. This shell is bought already prepared and costs $3. After the whale has experienced the astonishing sensation of this internal explosion, he is harpooned, a rope is tied to the harpoon, an anchor tied to the rope and a buoy to the anchor: in three days the whale will float and may be then towed into port. The whale is one of the most fortunate of creatures for he lives to be a thousand years old and nobody knows how much longer. In that length of time he accumulates an immense quantity of oil which at one epoch went a long way in enlightening the world But the discovery of petroleum practically put an end to whale oil for illuminating purposes and was almost the death blow to New England whale fishery. It is no longer considered profitable and whalers in large numbers have turned to other sources of industry.

To have stiff shirts and collars add powdered borax to the boiled starch—half a teaspoonful to a quart.

ONE WINTER.

ANNE THRIFTY.

ONE evening in early December, as the twilight deepened, I was sitting in the big rocking chair, with Sammie and Bertie both on my lap. The glow that shown through the mica doors of the stove was our only light, and surrounded by dusky shadows we were building a story about a wonderful little boy, who, after leading a very ordinary life until he was nine years old (our heroes always had to be about the same age as the twins), suddenly in response to an uttered wish found himself changed into India-rubber. As I wove the story, the boys contributed to it, by interrupting me at every breath with suggestive questions such as: "Could he reach a mile with his rubber arms?" "Could he eat *a whole bushel* of candy?" with great emphasis on a whole bushel. "Could he stretch his eyes very big?" "Could he hear better when his ears were stretched?" To all these questions I must reply with some wonderful experiences our hero had gone through. As we sat there laughing over our story, with the faint light from the fire around us, I wondered whether any one would think of us as poor if he could look in through the window.

Aunt Helen with little means at her command had made her house so home-like that it seemed beautiful to me.

The house was new, and although built to rent, it had been nicely finished inside, and the windows were large and low with only two large panes of glass in each sash. Aunt Helen had selected the paper for the wall in the sitting-room to harmonize with the carpet which was green and black. The extension-table closed, and covered with a red tablecloth, stood in the center of the room holding books and papers; pictures, drawn in colored crayon by Auntie when a school-girl, hung on the walls in both sitting-room and kitchen.

Everything had been cared for and kept at its best as long as possible, and whenever I swept, dusted and arranged they were an object lesson to me in housewifely art.

I found it hard to realize that Aunt Helen would never come back to her little home, and whenever I attempted any task that was new to me, I found myself involuntarily looking down the street, whence Aunt Helen had so often come from shopping or other errands expecting to see her and consult her about my work.

What an empty, heart-breaking void is always left when the mother never comes back. When the boys felt lonely how helpless I used to feel to supply to them the mother love they had lost, and when Uncle John looked careworn and sad, the desolation that death makes would fill the house and sadden us all,

so he would put aside his sorrow and trouble as much as he could to brighten things for us.

When our story of the wonderful India-rubber boy was ended, we lighted the lamp and went to the kitchen to get ready the supper by six o'clock. Potato soup, cold corn-bread, butter and molasses were to make up our meal, hardly nutritious enough for a hard-working man and growing boys, and our supply of milk was getting a little short now too, so we used it only for the breakfasts.

When Uncle John's step came up our short plank walk, supper was waiting for him. As we sat down to the table, he threw the mittens he had just taken off into my lap, saying, "I'm ashamed to ask you to mend them again, Annie; but what is a poor fellow like me to do when his mittens wear out but to bring them to the good fairy with a magic wand that looks to me like a darning-needle?" "You shall have them to-morrow, sir, as good as new," I replied, but when I prepared to mend them after the dishes were done, it proved impossible to make the darns look well, and I adopted another plan to fulfill my promise. Using Uncle John's hand, to draw the outline of a mitten, I cut a pair out of a piece of strong, brown cotton flannel I found in the piece-box. There were only two pieces in each mitten, the seam following the outline of the hand and thumb. I cut them larger than the drawing to allow for the thickness of the hand, and because the goods would not stretch as a crocheted mitten does. After sewing them up firmly with the soft side in, I cut an opening in each cuff, as in the wrist of a kid glove, bound the cuffs and openings, and finished them with two buttons and buttonholes in each. The last stitches were put in before bedtime. Uncle said they were the warmest mittens he had ever worn, as he pulled them off and held them up admiringly the next evening upon his return from work. A regular pattern with the thumb separate from the hand, and cut for "rights" and "lefts," makes perhaps a more workmanlike mitten, but it is no more comfortable, and is very troublesome to make. To save their school mittens, I made each of the boys a pair of the same kind to wear at their work and play when at home.

HOME-MADE CANDY FOR THE HOLIDAYS.

CHOCOLATE CREAM DROPS.

PUT the chocolate—grated—on the stove to steam for an hour. While this is preparing, boil the sugar—best granulated—in the proportion of one cup of sugar to one-third of a cup of hot water; flavor and boil till when a little is dropped in cold water the particles readily adhere together like wax. Take from the fire, stir briskly till it loses its transparency, and is cool enough to handle. Mould into tiny balls with the hands, lay on buttered paper, and set in a cool place for awhile to harden; then dip each ball in the melted chocolate, lay on buttered paper and again set away to harden the coating. To keep the chocolate hot enough to run freely when off the fire, set the dish containing it in another of hot water. One-half bar of Baker's pure chocolate, and two large coffee-cupfuls of sugar will make 100 "drops."

MINT BUTTONS.

THE easiest way for unskilled hands is to mix confectioners' sugar with the white of eggs, and flavoring until stiff enough to roll out with a rolling pin in a rather thin sheet, then cut "buttons" with a thimble and harden in a cool place. A pretty way is to make peppermint candies white; wintergreen pink, by adding a pinch of red sugar to the egg before mixing with white sugar; and lemon candies yellow, by mixing with the yelk of an egg. The white of a large egg will require about a pound of sugar. These candies can be made better by boiling granulated sugar, but it takes practice and infinite patience.

FOR NUT CANDY.

THE proportions are one cup of sugar to one-half cup of hot water. Boil till brittle when a bit is dropped in cold water. Then throw in broken meats of any nuts preferred; pour in a shallow buttered dish, crease deeply in squares while warm with a sharp knife, and when quite cold it will break in these lines. Do not stir this candy, at any stage of preparation if you want it "clear as glass."

I hope everyone who tries these recipes will have as much fun in making, eating, and giving away these home-made candies as we do.

MISS. E. BECKER.

HOME-MADE WARDROBE.

THE usefulness and comfort of a sleeping-room that is destitute of a closet will be very much increased by one of the following contrivances. Take a pine board four feet long and 18 inches wide, and have it fastened to the wall about six feet from the floor and just where the wardrobe, if you had one, would stand. Have a strip to which clothes hooks have been fastened nailed against the wall under the shelf, and another half way down for the children's clothes. Screw hooks on the under side of the shelf also. Hang curtains of pretty, bright cretonne around the shelf with a ruffle at the top. If preferred a triangular one can be made in the corner of a room.

HOUSEKEEPER.

BREAD.

GRACE GREENWOOD truly says that there is something "sacred" about bread; more so than about any other article of food which we place upon the table. Doubtless the "Give us this day our daily bread," has had much to do with ingrafting into our nature this feeling of reverence. No food calls forth such compliments as good bread and no other is so noticeable as bad bread. To excel in the line of bread-making is no light task, and the young lady who knows all its details has a fortune at her finger tips. There is a rare delight in being able to prepare and cook juicy roasts, delicate cakes, refreshing salads and quivering jellies, but above all these is the homely art of producing sweet, light loaves of bread, snowy biscuits and brown rusks. The wealthy housekeeper whose caterer supplies her dining table, can never know the rich reward that comes through making all these things, glorified for the sake of loved ones.

Perhaps the simplest and healthiest bread made is the old-fashioned, salt-rising loaf. At least physicians often instruct their nurses to prepare or procure that kind of bread for their patients. As my grandmother, a famous "Carolina cook," instructed me in this special variety I shall give the plan in detail. At twilight take one-half pint of new milk, simmer it gently, thicken with three teaspoonfuls of corn meal, smooth it nicely over the bottom of a sugar bowl or some small earthen dish which can be tightly covered, wrap the bowl in a newspaper and put it in a warm place over-night. A uniform temperature of 90° is what should be observed; but if you do not possess a thermometer, mind grandmother's rule: "Keep it in a place where you will be comfortably warm yourself." When you rise in the morning the meal will be full of little cracks, as though a miniature earthquake had shaken it. Put one teaspoonful of salt, one of sugar, and a tablespoonful of corn meal in a pitcher, pour over it one pint of boiling sweet milk, or water, use the former if possible, stir it well and when it becomes luke-warm thicken with flour to a stiff batter and stir in the mixture in the sugar bowl. The best place to keep the pitcher is in a kettle of hot water on the hearth or reservoir. In an hour the contents will be foaming to the top of the pitcher. Sift a bowlful of flour and mix with tepid milk previously boiled, adding a tablespoonful of salt and the contents of the pitcher. Knead for one hour, then cover with a fresh bread cloth and let rise again until the dough begins to crack open on the top. Then mold into small loaves, place in buttered tins and when they have risen to twice their original size butter the top, place in a moderately warm oven, increase the heat to 350° and bake from 30 to 45 minutes according to the size of the loaves. Small ones are sweeter but will not remain moist so long as larger ones. If water is used, the bread will be just as light, but not so white and nutritious as if milk is used all the way through. A good salt-rising loaf is the "queen" of all on the staff of life, but another excellent variety is

YEAST BREAD.

IT is more convenient for city housekeepers to purchase yeast cakes. But as rural housekeepers have hops, meal and potatoes always in store, I shall begin at the beginning the cup of yeast.

YEAST.

PARE six medium-sized potatoes, place in a vessel containing one-half gallon of cold water and a handful of hops tied in a clean white rag, boil until tender, then pour the water off into an earthen jar, add two tablespoonfuls of sugar, one of salt and one of ginger to the potatoes, and mash thoroughly. Stir all briskly into the potato water, and when luke-warm add two yeast cakes or one teacupful of home-made yeast, which has been previously dissolved in a little warm—not hot—water. Beat with a wooden spoon or paddle for 10 minutes and set away in a warm dry place; in 24 hours it will be ready for use. It will keep its vitality for 10 days in Summer and three months in Winter. But during the warm season it is preferable to stir corn meal into the wet yeast until it can be molded into little cakes, which, dried in a cool place, will keep for three months, even in dog days.

BREAD.

WHEN preparing pototoes for dinner the day before baking day, pare five or six extra ones; pour the water in which they have been cooked into an earthern jar, mash the potatoes and take out a quart before seasoning the other for dinner. Take one pint of flour, stir it with cold water into a smooth paste, add this and the mashed potatoes to the water in the jar, when tepid add one cupful of jug or liquid yeast or one of the dry yeast cakes, and beat rapidly for ten minutes. If it foams up in snowy white caps any time in the afternoon, stir briskly. This prevents souring, by allowing the rapidly forming carbonic acid to escape. Any time between tea and bed time sift your pan of flour, make a deep well in the center, pour in a quart of warm water in Winter, cold in Summer, a tablespoonful of salt and your jar of yeast, mix and knead one hour. Be careful not to have too much flour, as the dough should be rather soft when first mixed, adding more flour as the kneading progresses. This recipe makes from six to eight loaves. Rise early, or the dough will be running over the bowl. Mold into loaves—don't knead any—and bake one hour in a moderate oven. Do not grease when putting into bake, but rub the top of each loaf with a buttered cloth upon taking it from the oven, and the crust will be thin and soft.

RUSKS.

TAKE out a quart of the dough, add one-half cup of sugar, one-half cup of butter, knead and mold into biscuit as long as patience will permit. Let them rise a longer and bake a shorter time than the loaves.

Some may object to the use of cold water in mixing; but I find it a sure preventive of sour bread during dog days. I have been in a great dilemma sometimes in preparing yeast and finding my hop supply exhausted, but I have experimented satisfactorily by using a handful of peach tree leaves instead, the bitter acid proving a perfect substitute.

POTATO BREAD.

THIS is the simplest method of all, and one which I would advise all young housekeepers to try first, for they are sure to meet with good results and there is nothing so inspiring as success. The yeast is made in connection with the "sponge" for baking, so you are sure always of fresh yeast and never have but one cupful in the house in the way. The trio of essentials for good bread are: good flour, good yeast, good kneading.

POTATO YEAST.

BOIL eight small potatoes in a quart of water; pour the water off into your bread jar. Add three tablespoonfuls of white sugar, two of salt, and mash well; dissolve one yeast cake and stir into the potatoes; let stand in a cold place for 12 to 24 hours. When it shows signs of fermentation, it is ready for use.

BREAD.

BOIL eight medium-sized potatoes in a gallon of water; when tender pour the water into a bread jar; mash the potatoes well, after adding sugar and salt as for yeast, and when lukewarm add the cup of yeast, stir and mash again. Take out a teacupful, cover tightly and set in a cool place for next week's baking. The remainder of the potatoes may now be stirred into the bread jars, keep in a warm place over-night, and in the morning little, bead-like bubbles will be rising to the surface of the water. Stir in enough flour to make a stiff batter, set in a warm place to rise, and when light and foamy stir in enough flour to knead well; in a half hour it will be ready to mold into loaves, when proceed as with common yeast bread. Grease the loaves with butter after taking from the oven.

EMMA C. STOUT.

WE do not like soggy dressing and therefore never moisten the bread with milk or water. Old bread is used and such parts as cannot be fined are rejected. We season liberally with butter, pepper and salt. The addition of a little sage is an improvement for many.

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When she had Children, she gave them Castoria

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I have been so much afflicted with Bronchitis that I should be unable to perform my clerical duties without the use of Ayer's Cherry Pectoral.—A. G. Kirk, Pastor Baptist Ch., Hillsville, Pa.

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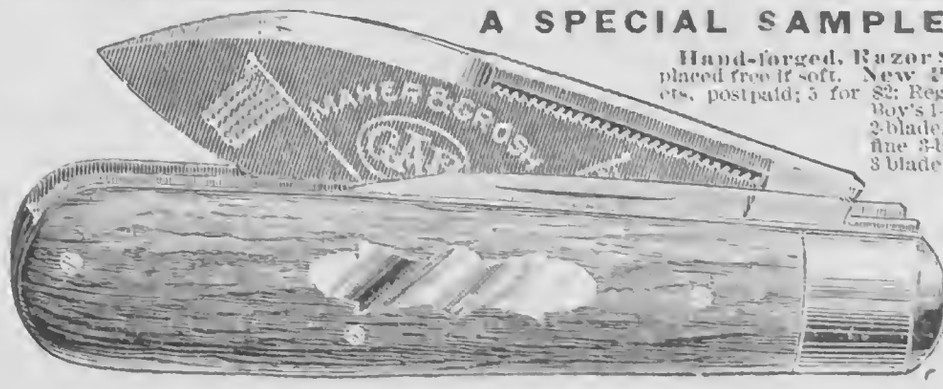

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Maher & Grosh,
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TOLEDO, O.

News of the Week.

HOME NEWS.

SATURDAY, Dec. 4, 1886.

NEW JERSEY assessors report the railroad property in the State amounts to $192,980,343. The State tax of $964,901 upon it defrays all the State expenses.....Several weeks ago, when Eastport, Me., was nearly destroyed by fire, the Associated Press dispatches to all parts of the country day after day denounced the fishermen of the neighboring Canadian Islands for plundering the burning town and committing outrageous violence in doing so. A New Brunswick paper now denies the truth of these reports, on the ground that a Custom House official has not been able to find any of the stolen property. It states the Canadian fishermen did all in their power to help the people to save and protect their goods. "Lord! how this world is given to lying!"..... ..

It appears that Judge Manning, Minister to Mexico, has had a clear case of jim-jams, owing to a week's gross drunkenness in Mexico City. For years he is said to have been subject to such outbreaks twice a year, quietly in his own house.....Sugar grinding began in Cuba Thursday .....Charleston had several lively earthqnake shocks, Thursday, one of which crashed walls and loosened plastering. There were 17, in all, last month there and in other parts of South Carolina.. .... During November the Postmaster-General established 239 fourth-class post-offices and discontinued 218.....A bill, by General Hazen, is being considered by the Secretary of War, providing for the reorganization and incorporation of the Signal Service as a regular Bureau of the War Department..... .... A terrific storm visited the east coast of New England early Wednesday morning followed by a tidal wave of some energy. Lightning killed Mrs Willard at Elizabeth, Me ....To meet expenses the general executive board of the Knights of Labor are levying an assessment of 25 cents per member upon the local assemblies of the order. The fund is to be used to help Knights "locked out" by what is claimed to be a "combination of capitalists" against the order. Many complaints that members are blacklisted by railroads and other large associations.....In Montreal, the Superior of the Oblate Fathers has announced that no Knights of Labor will be allowed to take the sacrament. There is a strong opposition to the order among the Catholic dignitaries of Canada.....The tanners' strike at Salem and Peabody, Mass., begun July 12, collapsed Saturday. Over 5,000 men "went out" at command of a "walking delegate," or were "locked out" because they refused the leather of a boycotted firm. The places of most of them have been filled, and few can get work again..... .. On December 1, the N. Y. State canals closed by official order. The season of 1886 opened May 1. The total number of days during which the canal was open was 215, or somewhat over the average. The tonnage of 1885 was 4,732,000 tons, and that of 1886 will be about 5,250,600 tons. As soon as the water is drawn from the canals the Superintendent of Public Works will supervise the lengthening of locks 47, 48, 49, 51 and 52 on the Erie Canal, and of locks 3, 4 and 5 on the Oswego Canal. The object is to allow two boats to be locked in tandem fashion. The whole work must be completed before the opening of navigation in 1887. The season just closed having been a most successful one, the future of the canals will be looked forward to with great confidence. ...Returns of traffic on the Welland Canal for the season of navigation just closed show an increase of 34 per cent. as compared with last year's. At Kingston, 6,500,000 bushels of American grain were transhipped for Montreal, being the largest quantity since 1880. During the coming Winter some very important improvements will be made on the Welland Canal, to be completed in time for the opening of navigation. The canal will be deepened to 14 feet draught, or two feet over what it is at present .....Erastus Brooks left his wife and family property estimated to be worth $200,000 .It is officially stated that Chicago's growth is 50,000 yearly. It is proposed to increase the revenue of the city $1,500,000 a year by licensing wholesale and retail traders.....A cigarette at Raleigh, N. C., started a fire which involved 1,200 bales of cotton and caused $36,000 damage Tuesday. ....It is estimated at the Internal Revenue Bureau that the revenue from the tax on oleomargarine, which went into effect on Nov. 1, will amount to about $400,000 for the last month..... Another decision has been handed down in the long-drawn-out litigation over the validity of the patent of Nelson W. Green for the tube or driven well. Judge Colt, of the United States Circuit Court at Boston, has sustained the patent in a suit brought against the Fitchburg Railroad for infringement..... Most disastrous fire in its history in Duluth, Minn., Saturday night—loss $865,000; insurance $702,350. Three men killed. Total amount of grain lost, 880,000 bushels, valued at $585,000. The loss has helped to raise the price of wheat throughout the country, but especially at Chicago.... Very disastrous incendiary fire at Forsythe, Mo!, Monday night. Loss $300,000.. .... The Union Pacific has completed arrangements to establish a weather service over its entire system similar to that in use by the Federal Government. This is the first attempt at railway meteorological survey, and will probably be generally adopted. The Chicago and Northwestern and the Central Pacific have been invited to coöperate with the Union Pacific, so as to make a through railway weather service between San Francisco and Chicago. The Canadian Pacific will also probably coöperate.....S. H. H. Clark has been elected first vice-president of the Missouri Pacific R. R., to succeed Hoxie. He was formerly manager of the Union Pacific R. R.....Tremendous mining excitement in San Francisco, Thursday. Fortunes made and lost in a few hours. Some mining stocks went high—high. Then all collapsed on report of numerous heavy failures—finally they quieted down A marvelous flurry..... .....Dr. Hamilton Williams, of Greenpoint, L. I., who was mixed up in the Phœnix Park assassination of Burke and Cavendish, succeeds blatherskite Rossa as leader of the Irish Fenians, "force," or dynamite faction.... Public Printer Benedict at Washington, with a force reduced by 500, is turning out more work than was done formerly.....Secretary Bayard's new appropriation bill for consular and diplomatic service puts up salaries handsomely in several cases, besides substituting salaries for fees to the amount of $175,000. The total increase is from $700,000 to $1,048,000.... . Congress will resume business Monday, with 12,000 bills on its files and hundreds favorably reported on the calendars.. .... Maxwell, the condemned St. Louis "trunk" murderer, is again respited till February 1. .....Francis Palms, of Detroit, worth from $15,000,000 to $18,000,000, died last week. It was about his daughter that Jones of Florida made such a fool of himself ...The public debt was decreased $3,005,250 last month, against a decrease of $13,201,620 during October. The debt less $224,071,554 available cash items (including $100,000,000 reserve) and $40,093,536 net cash in the treasury, is now $1,351,342,698. ....The month of November in the Northwest was two and a half degrees colder than the average for that month in 20 years. In some places in Dakota, Wednesday, the thermometer was 22° below zero ....A delegation of business men from Chicago and the Northwest are in Washington to urge upon the President the favorable mention of the Hennepin Canal project in his message to Congress..... ....Some of the papers of Cincinnati have been fined for advertising lotteries.....Labor organizations in many places are asking for amnesty for the condemned Anarchists..... A Buffalo young fool and "fooless" passed through the Niagara Falls whirlpool the other day in a double barrel. If the papers didn't name such foolhardy people, there would be none.....The report of the Life-Saving Service says the number of casualties last year was greater by 28 than that of any former year. .....Hayes is the only living ex-President, and Hamlin and Wheeler are the only living ex-Vice Presidents of the United States. Blaine is the only living defeated candidate of a leading party for the Presidency. That office seems to carry fatality with it.....Zero weather, blizzards, disasters and death is the Western meteorological situation at present.....In a suit against Gen. Ben Butler, for money which it was charged he owed the Soldiers' Home at Washington, the jury rendered a verdict of $16,537.50 for the plaintiffs yesterday.. .....Thirteen grain-laden canal boats for New York are frozen up in five inches of ice near Little Falls. A State tug is trying to release them... .....The Dominion Government will fit up the forfeited schooner Morning Light as a cruiser. This is the first vessel confiscated under the treaty of 1818....A Centennial Constitutional Commission has been organized from the various States to arrange for the centennial celebration of the promulgation of the Federal Constitution.....A Chicago dispatch states that 240 car-loads of live stock are in danger of freezing on the Streater branch of the Chicago, Burlington, and Quincy Railroad, the trains being delayed by a broken bridge.....

FOREIGN NEWS.

SATURDAY, Dec. 4, 1886.

THE Irish question is again assuming an acute phase. The Tory Government, it seems, has determined to renew the policy of coercion, which the advocates of Home Rule last Winter declared was the only alternative to the adoption of their principle. The adoption of this long-tried policy was signalized by the transfer of the Under Secretary for Ireland to Tasmania, because, as is said, of his conversion to the Home-Rule doctrine. He is to be succeeded by General Buller, the English army officer who was sent over some time ago to restore order in a disaffected district. The latter appointment is only provisional, however, as Buller has disappointed the Tories by using his large powers with moderation. The leaders of the National League are to be proceeded against, but they openly defy the Government and are sustained by popular sympathy in Ireland. An anti-rent agitation has been set on foot, and the outlook for the Winter is a stormy one. The troops in Ireland are being reinforced in anticipation of trouble. Meanwhile the Home Rule doctrine is spreading in Scotland and Wales. The Scotch home-rulers are demanding legislatures for the representative nationalities of the United Kingdom. In this demand they are supported by the people of Wales, where a tithe war is in progress and where a strong demand for church disestablishment is made. Taken altogether, England's condition at present is anything but reassuring to her statesmen, who have to contemplate the possibility of foreign complications of a serious nature..... ....Just at present there is a lull in matters in the Balkans. Russia, it is announced, will not insist upon the selection of the Mingrelian prince whom the Bulgarians declared that they would not accept as a candidate for the throne. The Bulgarians on their part have resolved to send a deputation of notables to the principal European capitals to explain to the Powers the actual condition of affairs in Bulgaria, and to ask the Powers to make a choice of a candidate for the throne, with due regard to the country's needs and disposition; in short, to regard the question as European and not a Russo-Bulgarian question. In spite of Russia's temporary halt, however, there is an uneasy feeling in Europe, where it is felt that she is only waiting her opportunity. In Germany the government is earnestly pressing the passage of a bill increasing the army so that it will be a match for the French army at any time, though continuing to declare its belief that peace will be maintained. In Austria extra military estimates have been voted. France, meanwhile, keeps the Egyptian question to the front. The view finds constant expression in the most influential French journals that Lord Salisbury's declaration about the limit of England's stay in Egypt not being a time limit points to an indefinite occupation of the country, and that French rights and interests would be prejudiced by such an occupation. The French ambassador, it appears, has asked for a more definite statement of England's intention in regard to the occupation than has yet been given.

Something An Inventor Found Out.

AMONG literary people Phineas Garret's volumes of "One Hundred Selections" are standard works. Among business men all over this country he is known as the inventor of the Penn Letter Book for copying letters without the aid of water or press. Mr. Garrett was found at his office, No. 708 Chestnut St., Philadelphia, and asked regarding his experience with Compound Oxygen.

"I will tell you what I know about it," he replied. "When living in West Chester I suffered terribly from nasal catarrh, which was seriously aggravated by sudden changes of the weather. The usual remedies gave me no relief and the disease had advanced so far that the cartilage of the nose was as hard as bone. My whole system suffered. Life lost its attractions. I visited DRS. STARKEY & PALEN, now at 1529 Arch street, in this city, placed myself in their hands, and began the 'Home Treatment.' I found it very beneficial and continued it until I was entirely cured."

"Did its use entirely restore you?"

"Yes. I have been quite well for some time. My wife uses Compound Oxygen with excellent results when occasion requires, and I have seen its effects on others."

"Have you had an opportunity to observe its effects on persons outside your own family?"

"Yes," answered Mr. Garrett; "I recall the case of a young man who worked for us. He had consumption and hemorrhage after hemorrhage. He took the Compound Oxygen for a year and improved wonderfully. Many of my friends have benefited by its use. Everybody ought to know the value of this remedy. My long and satisfactory experience with it causes me to grow enthusiastic when the subject is mentioned."

"Do you always use the home treatment?"

"No. I prefer to go to the office, 1529 Arch street, and take the Compound Oxygen there."

"Why so?"

"Well, there is a satisfactory moral effect about taking medicine under the direct supervision of an experienced physician in whom you have confidence. Still, I use my Home Treatment very often and with great benefit. It is a pleasant recreation, if I have a cold in my head or an attack of indigestion, to go and be cured at once, instead of waiting until I reach home at night."

"Did you ever observe any injurious effects?"

"On the contrary. The heart is strengthened and the pulse is steadier after using it. In every respect my experience and observations lead me to regard Compound Oxygen as a valuable remedial agent and one that only needs to be better known to find universal acceptance." A pamphlet on the subject is mailed free to all who want it.—*Adv.*

A Good Reputation.

"*Brown's Bronchial Troches*" have been before the public many years and are everywhere acknowledged to be the best remedy for all throat troubles.

Mrs. S. H. Elliott, Ridgefield, Conn., says: "*I have never been without them for the last thirty years. Would as soon think of living without breath.*"

They quickly relieve Coughs, Sore Throat, and Bronchial Affections. Price 25 cents. For sale everywhere and only in boxes.—*Adv.*

AGRICULTURAL NEWS.

SATURDAY, December 4, 1886.

THE Minneapolis Millers' Union, organized three months ago for the purpose of controlling Northwestern wheat, collapsed Dec. 1.... ..The St. Paul Pioneer-Press insists that farmers' deliveries of wheat in Minnesota and Dakota have been only temporarily checked by the storm, but will be resumed in as great a volume as ever as soon as the roads are opened..... ..A project of law pending in the Danish Folke-thing places the oleomargarine trade under stringent regulations. It cannot be sold in the kind of vessels or at the places where dairy butter is sold, and it is forbidden, under penalty, to give it the same color. .....State Entomologist Forbes, of Illinois, says the outlook is very gloomy for the 1887 wheat crop unless some unusual state of the weather destroys the hatching brood of chinch bugs.....Another lot of diseased cattle were slaughtered in the Phœnix distillery yards, Chicago, Wednesday .. The Tenth Annual Convention of the N. Y. Dairymen's Association will take place Dec. 14, 15, 16, at the Court House at Norwich, Chenango County. The usual concession in railroad fares will be made by the Delaware, Lackawanna and Western roads, which center at that point. Special rates have also been secured at the hotels. Dairymen throughout the State are invited to be present and to participate in the discussion. Col. F. D. Curtis will talk about "The Possibilities of the Dairy;" Prof. I. P. Roberts, "Water and Food for the Dairy;" Dr. E. Lewis Sturtevant, "The Work of the Experiment Station;" J. V. H. Scovil, "Feeding for the Production of Milk." Other prominent agriculturists will also address the meeting.....In parts of Nebraska corn is selling at 14 cents per bushel, oats 15 cents and wheat at 41.....Farmer Allen, of East Syracuse, N. Y., mourns the loss of some $40,000 worth of choice Holstein-Friesian bulls and cows burned to death in his model barns, Tuesday, which some malicious miscreant set on fire. .....Shippers of live cattle and dressed beef to the United Kingdom are loudly complaining that there's no money in the business, or that they are actually losing thereby; how, then, account for the fact that last week they shipped 659 live cattle, 95 live sheep and 5,000 quarters of dressed beef from this port and 465 live cattle together with 2,320 quarters of beef from Boston, besides more shipments from other points?.....Englishmen allege that our American cattle exports come into competition rather with their second and third grades of stock than with their first.....French producers allege that their cattle are perfectly free from contagion of all kinds, and are seeking to have the English embargo against them removed.....The scheme to found a co-operative packing-house in Chicago is discouraged by the Chicago Society of Socialists, which asserts that "this co-operative scheme is impracticable and is doomed to certain failure." There's not enough of money to start the thing.....In the 10 months ending October 31 England imported 9,820 horses, against 12,230 in the same months of of 1885. In the first ten months of this year the exports of the United Kingdom were 6,368 head, against 5,587 in the corresponding time last year ....The whole cost of harvesting the immense cranberry crop on the Cape is estimated at $300,000 ....Cattle in Montana perished by thousands in the recent blizzard. Sheep es-

pecially suffered........The Planters' Club of Havana and other clubs of the island have sent cablegrams to the Minister for the Colonies asking that the export taxes on sugar, molasses, brandy and tobacco from Cuba be abolished........Philadelphia butter dealers have formed an organization to help enforce the oleo law.... The Pennsylvania Wool Growers' Association will meet at Washington, December 28 and 29........In a late Australian wool show the best fleece weighed 16 pounds five ounces in the grease, nine pounds four ounces scoured, and was valued at $2 82. ....The exports of frozen meat from New Zealand are stated in the London Economist to be about 700,000 carcasses of mutton annually... ....The imports of Red Polled cattle this year will exceed 100 head ....The claim is made that Colorado has more fine Galloway cattle than any other State in the Union . It is estimated that the butchers' strike in Chicago cost the country and the butchers over two million dollars............ ....Between 1875 and 1884 a total of 55,000,000 rabbit skins were exported from Tasmania, New Zealand, the supply of 1884 being 9,800,000 skins.........The onion crop, owing to a smaller acreage, the dry weather and the maggot, will show a reduced yield from that of last year.......The combined exports of cheese from New York and Montreal up to a late date show a decrease of 269,000 boxes compared with 1885........The production of oleomargarine for domestic consumption is estimated by Commissioner Miller at the rate of 100,000,000 pounds per year ... As one of the results of the strike at the Union Stock Yards, Chicago, it is stated that the lowest prices for cattle touched in seven years were reached on the 17th ult., when steers averaging 1,000 pounds sold as low as $2.90 per 100 pounds, and several car loads equally good for $3. During that week 500 head (15 car loads) of Texas yearlings were sold to a city butcher at $7 per head, which was the price offered for them in Texas. The freight amounted to about $1,500........................ ....

Crops & Markets.

SATURDAY, December 4, 1886.

The Mark Lane Express, in its review of the British grain trade during the past week, says: The sparse offers of native wheat are attracting the attention of the trade, and it is believed that the crop has been largely over-estimated. It is now calculated at only 6,500,000 quarters—52,000,000 bushels. In the provincial markets the supplies are rather greater. Values have not risen. The sales of English wheat during the week were 49,963 quarters, at 31s. 11d. against 68,218 quarters at 30s. 9d. during the corresponding period last year.

OWING to the unremunerative prices of mid-Kent hops in England, and the depression in the hop industry generally, a large grower is grubbing up 100 acres of hops there; and reports from other parts of Kent and other hop-bearing English counties go to indicate that about 10,000 acres of hops will be grubbed up in England this year. Here holders of hops are still pretty firm: but buyers want concessions. Only the very choicest hops bring 30 cents; 25 to 28 is a full range for good to prime.

The statistics showing area, aggregate yield and yield per acre of cereal crops in the Province of Ontario, Canada, for 1886 and 1885, together with averages of area and yield for the five years' period 1882-86, are represented in the following:

Crops.	Years.	Acres.	Bushels.	Bush. per acre.
Fall wheat........	1886	886,402	18,071,112	20.4
	1885	875,136	21,148,281	24.5
	1882-86	982,402	20,635,843	21.0
Spring wheat.....	1886	577,465	9,518,553	16.5
	1885	799,163	9,129,851	11.4
	1882-86	651,390	10,530,631	16.1
Barley...........	1886	735,778	19,512,278	26.5
	1885	597,373	16,532,547	27.7
	1882-86	727,979	19,572,730	26.9
Oats...............	1886	1,621,901	58,665,608	36.2
	1885	1,543,715	55,229,712	35.8
	1882-86	1,490,654	55,333,393	37.1
Rye................	1886	67,779	1,106,162	16.8
	1885	78,293	1,271,505	16.2
	1882-86	124,375	2,102,453	16.8

Wheat, barley, oats, rye and peas were reaped and housed in fair condition, and the final report of yield differs but slightly from the August estimate. The wheat crop is about 3,600,000 bushels less than the average of five years; barley is only 50,000 bushels less, and oats is 3,300,000 more. Rye is diminishing in breadth and yield.

The week up to Thursday was an active one in pork packing operations in the West. The 10 prominent packing points handled 505,000 hogs during the week, against 405,000 last year, and since November 1 a total of 1,485,000, against 1,775,000 last year, indicating a shortage of 290,000; other smaller packing places in the West have packed 146,000, against 158,000 last year. It is probable that the shortage for all points is about 300,000 hogs. The quality of hogs now marketed is generally excellent; in some cases reported not quite so heavy, but not so rough. At Cincinnati the average weight for November is one pound heavier than last year, and two pounds heavier than two years ago, but six pounds lighter than three years ago, for the same month. The packing record of Chicago is not far from 500,000 hogs less for the current month than it would have been were it not for the recent senseless strike.

VERY LATEST.—During this week, wheat options at Chicago and New York have advanced 4 to 4¼ cents, and for cash four cents per bushel on increasing exports and speculation and small stocks abroad. The renewed strength is quite pronounced, and the opinion gains ground that a permanent gain in wheat prices has finally begun. Indian corn went 1½ cent higher with small stocks and heavier demand, and wheat flour with a better inquiry for export and reduced production has been marked up 15 cents per barrel. Wool is affected unfavorably by the London sales, which are off 5 to 10 per cent. from previous auction prices. The Louisiana sugar crop "is now estimated" at 150,000 hogsheads, a reduction from previous estimates. There is more activity in hog products. Speculative markets are in sympathy with the upward turn to grain prices and there is an increasing outside demand. Pork has advanced $2 per barrel and western steam lard ¼ cent per pound, in the week. On the whole, the week is marked by a distinct increase of speculative activity at all centers.

MARKETS BY TELEGRAPH.

SATURDAY, December 4, 1886

CHICAGO.—Compared with cash prices a week ago, No. 2 Spring Wheat is 4c. higher. No. 2 Red, 3¼c. higher. Corn, 1½c. higher. Oats, 1c. higher. Flaxseed, 2c. lower. Pork, $1 40. Cattle, from steady to 20c. lower. Hogs, unsteady; lower on light grades; higher on heavy. Sheep, higher on Western and lambs; steady on others.

CHICAGO.—WHEAT.—No. 2 Spring, at 77⅝@78c: No. 3 Spring, 71c; No. 2 Red, 78½5c. CORN.—No. 2, 38c. OATS.—No. 2, 27⅜c. RYE, No. 2, 54c. BARLEY. No. 2, 58c. FLAXSEED—No. 1, 90¼@91 Timothy Seed—Prime, $1 74 @1 75. MESS PORK—$10 87@11. LARD.—$6 20. Short Rib sides (loose), 5 50@6.55c; dry salted shoulders (boxed) 4.65@4.75c, Short clear sides (boxed), 5.90c. BUTTER.—Firm; choice to gilt edge creamery, 23@25c; good to choice creamery, 19@22c; good to fine dairy, 19@25c; packing stock, 10½@13c. EGGS.—Fresh, 22@23c CATTLE.—Market active; Fancy, $5 25@5 35, shipping steers, $3 30@5; stockers and feeders, $2@3 35, cows, bulls and mixed $1 15@3 10: bulk, $2@2 60; Texas Cattle, $2 25@3 50; Western rangers, $2 50@4. HOGS.—Market strong, 5c higher than yesterday: Rough and mixed, $3 60@4 05; packing and shipping, $3@4 25; light weights, $3 45@3 75; skips, $2 20@3 35. SHEEP.—Market strong; Natives, $2 25@4 Western, $2 50@3 25, Texans, $2@3; Lambs, $3 75@4 75.

ST. LOUIS.—Compared with cash prices a week ago, No. 2 Red Wheat is 2¾c. higher. Corn, 2¾ c. higher. Oats, 1½c. higher. Pork, 1c. higher.

ST. LOUIS.—WHEAT.—No. 2 Red Winter, at 79c; December, 78⅞@79⅛c; January, 80⅛@81¼c. February, 73c; May, 87@85¼c. CORN.—No. mixed, Cash, 36⅛@35⅞c; December, 36⅛c, January, 36⅜@35⅞c; February, 37¼c; May, 40⅛@40⅛. OATS. No. 2 Mixed, Cash, 28c; December, 27⅛c; May 30⅛c. RYE.—Firm at 52c. BUTTER.—Creamery, 24@27c; dairy, 15@25c. EGGS.—19½@22c. PORK.—$11 LARD.—$6. BULKMEATS.—Long clear, $5 50@5 55; short ribs, $5 55@5 65; short clear, $5 75. CATTLE.—Market firm on medium and good; Choice Native Steers, $4 30@4 70; Fair to Good Shipping Steers, $3 30@4 25; Butchers Steers, fair to choice, $2@4; Feeders fair to good, $2 60@3 10; Stockers, fair to good, 1 50@2 75; Texans and Indians, common to prime, $1 80@3 65. HOGS.—Market strong on medium and heavy; choice heavy and Butchers, $4 10@4 30; Packing, fair to fancy, $3 90@4 15; Yorkers, medium to prime, $3 70@3 90; Pigs, common to good, $2 50@2 75. SHEEP.—Market a shade higher; common to choice, $1 85@4.

BOSTON.—APPLES.—King, $2@2 50 per bbl; Snow, $2 50@3; Baldwin, $1 25@1 50, per bbl; Hubbardstons, $1 75, Harvey, $2; common, 75c.@$1. CRANBERRIES.—Cape Cod, $8@8 50; country, $3@4. BUTTER.—Northern creamery, extra, 29c. per lb; do. firsts, 24@27c. per lb; Western creamery, extra, 28c per lb; do, firsts, 25@26c. per lb; do, choice, 20@22c per lb; Dairy, Franklin County, finest, 28c. per lb; good to choice, 24@26c, per lb; Vermont extra, 5@20c. Northern, choice, 24@25c. per lb; do, fair to good, 16@19c. per lb. Western dairy, good to choice, 12@15c. per lb. Imitation creamery, extra, 14@16c. per lb; ladle-packed, choice, 15@11c. per lb; do, fair to good, 11@12c. per lb. CHEESE. Sage cheese is steady at 12½@13½c per lb, New York extra creamery continues at 13½c as an outside quotation. EGGS. Near-by and Cape, 29c, per doz; Eastern extras, 27c. per doz; Aroostook County, 25c. per doz; New York and Vermont, 24@27c; Western, 18@22c. per doz; Provincial, 24@26c. per doz; Ice-house, 18@22c. per doz. Limed, 18c. per doz. HAY AND STRAW. Prices are but imperfectly maintained. Choice, $17@18 per ton; fair, $16@17 per ton; ordinary, $14@15; fine, $13@15 per ton; swale hay, $10@11 per ton; poor, $10@13 50 per ton; Western, choice, $16@17, do, fair to good, $13@14 50; rye straw, $16@17 per ton; do, do, machine, $12@13 per ton; oat straw, $9@10 per ton. HIDES AND SKINS.—Brighton steers, 9½@10c; New England steers, 9@9⅛c; do, do, cows, 9⅛c; Calcutta, slaughter, 11½@12⅛c, dead green, 9⅛c; do, Buffalo, 7@8c. Buenos Ayres, 20@21c; Rio Grande, 20@21c; Montevideo, 20½@21c. POTATOES.—Early Rose, 45@48c. per bush; Beauty of Hebron, 45@50c. per bush, Sweet, Virginia Yellow, $1 12@1 25 per bbl; Jersey, $1 37@1 62 per bbl. SEEDS.—The market is firm, and demand good at unchanged prices. We quote, Clover, West, 9¾@10½c. per lb; do. North, 10½@11c, per lb; do, white, 18@20c. per lb; do, Alsike, 12@15c per lb Red Top, per sack, West, $2 25; do, Jersey, $2 30@2 50; Hungarian, 90c. @1; Millet, 90c.@1; Orchard. per bush, $1 80@2; Blue Grass, $1 40@1 60; Timothy, Western, $2 15@2 25; do, Northern, $2 25@2 40; American flaxseed, $2 25.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, December 4, 1886.

STATE OF THE MARKET.—As compared with cash prices last week, flour is 10c. higher; No. 2 Milwaukee Wheat, 1c. higher; Ungraded Red, 1½c. higher, Ungraded Mixed Corn, 1c. higher; No. 3, 1c. higher; No. 3 Oats, 1½c. higher; Pork, 25c. higher; Butter and Cheese, steady; Eggs, a trifle higher; Fruits and Vegetables, steady.

FLOUR, FEED AND MEAL—FLOUR—Quotations; Fine: $2@2 80, Superfine, $2 35@3 10, No. 2, $2 80@3 25; Good to Fancy Extra State, $3 50@4; Common to Good Extra Western, $2 80@3 35. Good to Choice Extra Western, $3 10@5 15. Common to Fair Extra Ohio, $2 80@4, Good, $4 05@4 60; Good to Choice, $4 60@5 15; Common Extra Minnesota, $2 85@3 20; Clear, $3 70@4 30; Rye Mixture, $3 60@4 10; Straight, $3 90@4 65; Patent $4 75@5 15; Bakers' Extra, $4@4 55; St. Louis Common to Fair Extra, $2 80@3 80; Fair to Good, $3 85@4 75; Good to Very Choice $4 80@5 15, latter an extreme. Patent Winter Wheat Extra, $4 40@$5 10, City Mill Extra for West Indies, $4 50@4 60. South American, $4 70@4 80, SOUTHERN FLOUR.—Common to Fair Extra at $3 35@3 90, and Fair to Choice, $4@5 10. RYE FLOUR.—Superfine, $3 @3 30. CORN MEAL.—Yellow Western quoted at $ 50@2 75, and Brandywine at $2 75 @2 85. BUCKWHEAT FLOUR.—$1 85@2 00.

GRAIN.—WHEAT. Old No. 2 Milwaukee at 86c; Ungraded Spring, 85¼@87c; Ungraded Red. 82@91¼c; No. 3 Red, 87½c; No. 2 Red, 88¾@89c. Ungraded White, 83¾@87c, State White, 88c; No. 2 Red for December 87¼@88⅛c; do. for January, 89@90c; do. for February, 90⅝@91⅝c; do. for March, 92⅝@93¼c. do. for April, 94⅛c; do. for May, 95½@96c, do. for June, 96⅝@96¾c, do. for July, 97@97⅛c. BARLEY.—No. 1 Canada quoted at 75c; No. 2 do, 70@71c; Western, 62@67c; six-rowed State, 68@70c, two-rowed State, 63@65c. CORN Ungraded Mixed, at 45¾@48½c; No. 3, 44½c; Steamer, 46¾c; No 2, 47½@48⅛c; No. 2 Mixed for December, 47⅝@48c; do for January, 49@49 7 16c; do. for February, 50@50⅛c; do. for May, 52¼@52⅝c. OATS.—No. 3 at 34c. do. White, 36⅛@36⅛c, No. 2. 34¼@34½c; do. White, 37@37½c; No. 1, White, 39c; Mixed Western, 34@36c do. White 37@42½c; White State, 37@40c; No. 2 for December, 34¼@34⅜c; do. for January, 35@35 3-16c; do. for February, 35⅛c; do. for May, 37¼@37c.

PROVISIONS.—PORK.—Mess, quoted at $11 50@11 75 for One Year Old, and $10 75@11 for Two Year Old: $13 for Family Mess; $14 50@15 25 for Clear Back and $10@10 50 for Extra Prime BEEF.—City Extra India Mess, $11@17; Extra Mess, in barrels. $7 50@8; Packet, $8 50@9; Plate, $8@$3 50 BEEF HAMS.—$19@20. CUT MEATS.—12 lb. Pickled Bellies, quoted, 6⅜c; Pickled Shoulders, 5⅛@5⅛c; Pickled Hams, 9¼c. Smoked Hams, 10½@10⅛c; smoked Shoulders, 6⅛@6⅝c. MIDDLES.—Long Clear in New York, quoted 6c. DRESSED HOGS. City Heavy to Light at 5¼@5½c. Pigs, 5⅝c. LARD.—Western Steam, 6 47½@6 52½c, City Steam, 6.35c; Refined, 6.75c; Continent, 7c; December, 6.44@6.50c; January, 6.48@6.54c; February, 6.58@6.61c; March, 6.55@6.67c; May, 6.70@6.75c.

BUTTER.—Creamery—State, 27@28c; Pennsylvania 28c; Elgin, 29c; Western, 26@28c; State Dairy, half-firkin, tubs, 23@27c: Welsh tubs, 22@25c; Western, Imitation Creamery 18@22c; Western Dairy, 10@15c; Western Factory, 8@14c.

CHEESE.—State factory, 10@12¾c; light skims, 10@11c; Western flat, 11@12¼c, good to prime.

EGGS.—State, 25@26c Western, 23½@24½c; Canada held, 20@22c; Limed, 17@18c.

POULTRY.—LIVE.—Chickens, per lb, at 6@7½c: fowls, near-by lots, per lb, at 7@7½c., fowls, Western lots, per lb, at 6@7c fowls Southern lots, per lb, at 6@7c; turkeys, per lb at 8@9c; ducks, western per pair at 50@60c., geese, western, per pair, at $1.12@1.50.

POULTRY.—DRESSED. Turkeys, near-by, per pound, at 12@14c; do, State, per lb, 11@13c, do, Western, per lb, 11@12c; chickens, Philadelphia, per lb, at 12@15c; do. western, per lb, at 8@9c; fowls, Pennsylvania, prime, per lb 9c, do, western, per lb, at 7@8c.

FRUITS.—FRESH.—Apples. Gravenstein per bbl, at $2 75@3; King, per bbl, at $2 75@3 25; Baldwins, per bbl, $2@2 25; Bellflower, per bbl, $1 75@2 25. Grapes,—Catawba at 3½@4½c. per lb; Concord, per lb, 3@4c. Cranberries, at $7 for Cape Cod best; $6@6 50 for choice; $5 25@5 75 for light; $1 75@2 for choice, per crate.

FRUITS.—DRIED.—Apples—Fancy Evaporated, 10c; do. choice, at 9½c: do. prime, 9c: do. southern sliced, prime at 3½c; do, North Carolina, fancy sun-dried, new, 6½c; do. do. choice, 5c; do. do. prime 3¾c. Peaches.—North Carolina, peeled, choice new, 11½c; do. do. do, fancy, new, 13c; do. Georgia, choice, 11c, do. do. prime fancy, new, 12c, do, do, new, 11½c. Cherries, pitted, 9½@10c. Evaporated raspberries, 18@20c sun-dried do. 16@17c. Blackberries—Prime, 7½@7¾c. Plums, 6@6½c. Peaches, unpeeled halves, 4½c; do, do, quarters, 3½@3¾c.

PEANUTS—Demands are fair at steady prices. Quoted at 4¾c. for fancy hand-picked; 3½@3¾c. for farmers' grades.

COTTON.—The quotations, according to the American classification, are as follows:

	Uplands.	New Orleans. and Gulf.	Texas.
Ordinary..................	6 7-16	6⅝	6⅝
Strict Ordinary.........	6¾	7 1-16	7 1-16
Good Ordinary.........	7 13-16	8	8
Strict Good Ordinary..	8¼	8 7-16	8 7-16
Low Middling..........	8 11-16	8⅞	8⅞
Strict Low Middling...	9	9 3-16	9 3-16
Middling..................	9 3-16	9⅜	9⅜
Good Middling..........	9 7-16	9⅝	9⅝
Strict Good Middling...	9 11-16	9⅞	9⅞
Middling Fair...........	10 1-16	10¼	10¼
Fair........................	10 11-16	10⅞	10⅞

STAINED.

Good Ordinary.....	6¾	Low Middling......	7¾
Strict Good Ord.....	6 15-16	Middling	8⅝

HAY AND STRAW.—Choice Timothy, 85c, per 100 lb; Good Timothy, 75@80c; Medium, 60@70c; Shipping, 50@55c; Clover, mixed, 60@65c Straw No. 1 rye, 65c; short rye, 45@50c; oat, 40@45c.

BEANS.—Marrows, choice new, $1 60; Mediums, do, do, $1 60, Pea, new, $1 60, Red Kidneys new, 1 85; White Kidneys, choice, new, 1 90@1 95; California, Lima flat, $1 80@1 85; Green Pease, $1@1 05.

HOPS.—State, new, 26@33c; State, 1885 crop, best on offer, 16@17c, do, do, inferior, 12@11c California, new, prime and best, 27@30c; do, old best, 15@16c, do, old, low grades, 13@14c; German, new, best, 30@33c; do, new, medium grades, 24@26c, English, new, best, 26@27c, do, do, low grades, 20@22c,

VEGETABLES.—Potatoes.—Long Island, rose, in bulk, per bbl., $1 75@2; State, $1 50@1 75 do Burbank, $1 50@1 75; Jersey, peerless, per bbl. $1 37@1 50: sweet potatoes, Va., yellow, per bbl., $1 50@1 75; sweet potatoes, Va., yellow, inferior, per bbl, $1@1 25. Cabbages.—Flat Dutch, per 100, $3@4 50. Onions.—Conn., red, per bbl, $2 25@2 75; do. Orange County, red, per bbl, $1 75@2 25. Celery, per doz. bunches, $1@1 25. Turnips, Russian, per bbl., $1@1 25. Cauliflowers, per bbl, $3 50@4.

LIVE STOCK MARKETS.

NEW YORK, SATURDAY, December 4, 1886.

BEEVES.—Pennsylvania Steers, 1490 lb, average at $5 10 per 100 lb; do, 1415 lb, at $4 85; Buffalo do, 1270 lb, at $4 75; do, 1284 lb at $4 67½; Ohio do. 1165 lb at $4 60; West Virginia do, 1126 lb at $4 30; do. Oxen, 1592 lb at $4 30; Dry Cows, Heifers, and Steers, 1068 lb at $3 75; Chicago Steers, 1400 lb at $5 25; do, 1388 lb at $5; do. 1301 lb at $4 95; do, 1171 lb at $4 25; do, 1160 lb at $4 25; Ohio do, 1474 lb, at $5 10, do, 1314 lb, at $4 75; Kentucky Steers, 1454 lb at $5 15; do, 1423 lb at $5 00. Ohio do, 1518 lb at $4 45; Oxen, 1762 lb at $4 50; Pennsylvania Steers, 1387 lb, at $4 70; do, 1163 lb at $4 30; Dry Cows, 1150 lb at $3 25; do, 1148 lb at 3 50, less $10; Bulls, 1406 lb, at $4 75; Chicago Steers, 1610 lb at $5 40; do. 1307 lb at $5 10; do, 1306 lb at $4 85; West Virginia Stags, 1480 lb at $5 22½; do, 1633 lb at $4 85; Virginia do, 1295 lb at $4 85; do 1308 lb at $4 65; Ohio do, 1719 lb at $4 50; Western do, 1379 lb, at $5 20; do, 1256 lb at $4 95 Kentucky Oxen, 1830 lb at $3 75; Kentucky Steers, 1462 lb at $5 40; do, 1456 lb at $5; do, Bulls, 1516 lb at $3 25, do, 1254 lb at $2 80; Indiana Steers, 1287 lb at $4 70.

CALVES.—Grassers, 246 lb, at 2½c; Grassers, and Fed Calves, 313 lb, at 3⅜c.

SHEEP AND LAMBS.—Receipts for six days 36,076 head against 29,241 head for the same time last week; Canada Lambs, 90 lb, at 7c; Kentucky Sheep, 90 lb, at 4c; do, 91 lb, at 4⅛c; do, 112 lb, at 4⅜c; Western do, 73 lb, at $3 85, Ohio Sheep, 88 lb, at $4.10; Ohio Sheep, 90 lb, at $4 4; Ohio Lambs, 65 lb, 6⅛c, Ohio Sheep and Lambs, 86 lb, at 5⅛c. Ohio Sheep, 82 lb, at $4 30, do, 83 lb, at $4 40; Ohio Lambs, 73 lb, at $6 40; Canada do, (coarse) 96 lb, at 6⅛c, Ohio Sheep and Lambs, 83 lb, at $4 55; Jersey Wethers, 142 lb, at at 5⅛c; Jersey Ewes, 133 lb, at 4⅛c Western Sheep, 97 lb, at 4⅛c; do, 94 lb, at $4 60. Canada Lambs, 84 lb, at 6⅛c; do, 84 lb, at 6¼c; Michigan Sheep, 78 lb, at 6⅛c; Northern Canada do, 94 lb, at 6¾c.

HOGS.—Receipts for six days, 39,023 head against 51,236 head for the same time last week. No sales reported on live weight. Nominally steady at $4 25@$4 50 per 100 lb,

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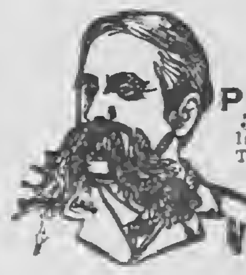
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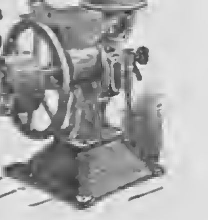

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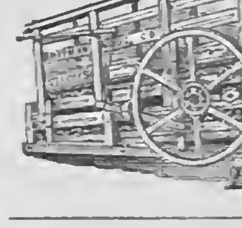
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For the Young.

SAW some boys playing on the street the other day. It was at noon time. Most of the boys worked in offices or shops. They were glad of the chance to run about and jump after eating their dinners. They had an old tin can. It was battered and knocked all out of shape, for several teams had run over it. The boys counted out and the one who had to be "it" stood near the can, while others kicked at it. The point was for the boy to touch the one who kicked it last. The one caught in this way had to be "it" and take his place by the can. The can had a hard time for it was kicked all up and down the street. The boys seemed to have lots of fun out of it and everything was good natured. When the whistles blew for one o'clock how the boys scampered away to work. An old fellow with a great bag on his shoulder came along at last and picked up the can.

I BELIEVE in playing strong and hearty games. I like a good game of base ball as well as the next one. I used to say I would rather play a game of ball than eat my dinner, but I guess I am past *that* now. I like to see girls play ball. They can do it without losing a bit of dignity. Everybody needs to spend a part of the time out in the air and sunshine and growing boys and girls who won't exercise, will be sure to make little old men and women before their time. The trouble about playing ball and other games like it is that men and boys want to go off by themselves and have all the fun. Then again some boys get so excited about it that they forget everything else and neglect their work. That is wrong. There is a time for work and a time for play and they must not run together. What I like is to see the whole family from grandfather down to the baby play a game of ball. That makes good fun for all concerned, everybody feels better for it and there is no harm done.

IT hardly seems possible that Christmas is so near, does it? Yet if we can believe the almanac it is close at hand. I suppose old Santa Claus is hard at work packing up his goods and getting his reindeer into shape for the trip. I hope he will find you all this year: as he is a pretty good old fellow, I guess he will. I always feel a little sorry when I hear of a boy or girl who has lost faith in Santa Claus. I always believed in him and I always mean to. Santa Claus does more for us than we think. Even when he is so busy that he can't come himself, the talk about him always moves those who are about us to say and do the things we like to have said and done. It is good to talk about him and think about him just as long as we can. We want to be children, in one sense, just as long as we live. We mustn't carry any ill feeling against anyone over Christmas. If we don't feel just right towards any person, now is the time to get ready to forgive and feel right. Remember this now, and bury all the spite and bitterness and all the rest of it so far out of sight that it never will come to light again.

EVERY night when I go home I can see the great torch of Liberty out in the harbor. It makes a fine showing—high up in the air. For a long time Liberty was in darkness, as no arrangements had been made for keeping up the light, but now it is brilliant enough. This idea of Liberty is a grand one. I hope you can all see it some day.

LETTERS FROM THE COUSINS.

DEAR UNCLE MARK: I have read the letters of the Cousins, and enjoyed them very much, and would like to be a Cousin too. I wrote you a letter once before and it found its way into the waste basket and I thought I would try again and see if you would not let me in this time. Our school is closed this week, there is so much sore throat. We planted the seeds, but it was too dry for them to do well. The Alaska Peas did better than any of them. I have some corn that is called the Japanese, and will send you some if you would like me too. It grows on top like broom corn. Yours respectfully,

Shelbyville, Ills. LILLIE VAN DYKE.

[You may send the corn. I hope the sore throat did not get after you.—U. M.]

DEAR UNCLE MARK: It is too damp for us to go out to-day, so I will spend part of the time in writing a letter to you, that I ought to have written some time ago. But I was sick a long time this Fall. All of us were sick at the same time with diphtheria. Thank you for the sweet peas you sent us last Spring. The weather was so cold and wet we did not plant them as early as we ought, and they did not grow as well as they would if planted earlier; but such as bloomed were beautiful and were very sweet. I sent a few of my seed to my little cousin in Alabama. We have a few pansies blooming now. Our Guineas laid a great many eggs last Summer. I raised a pretty flock of young ones. That dog you told us about must have been very cross to kill your kitten. Our dog is so fond of the cats he does not like to see us play with them. We all like the "Story of a District School" very much, but I like what you have to say to the Cousins more than anything in the RURAL. Papa has lately bought for Mamma an Avery Sewing Machine, No. 6. She is delighted with it. It sews so fast and makes so little noise. It is a great deal simpler than her old one. I can bake a nice loaf of bread. I have never made up the dough, but Mamma says I may when I get stronger. I made some nice cabbage pickle by myself. My brother Rives has learned to make brooms very nicely. We pulled the fodder from the corn for him. He and George have raised some fine celery this year. Your affectionate niece,

Farmville, Va. BETTIE DANIEL.

[I am glad you are all better again. I never like to be sick. Guineas are good layers, but don't they make a noise, though? I think our dog is sorry now that he killed the kitten. He is a cross fellow, though, and cares mostly for himself. I am very glad that you can make good bread. That is the best accomplishment a woman can ever learn. I guess your house will be kept pretty clean with all the new brooms you are making.—U. M.]

DEAR UNCLE MARK: You either did not get my last letter or it went to make your fire: but I will try again. The Garden Treasures almost all grew; they were lovely. The Alaska peas were ripe here in 80 days from planting. Angel of Midnight Corn did not ripen; it was killed in August. We had a nice garden this Summer. I have a Jersey calf named Bessie but Papa says it will die. Mamma has 23 hens. Papa and my brother Wallace claim the cow and cat. October was as fine here as August is any year.

From your Niece,

Marquette, Mich. SADIE M'COMBIE.

[I am glad you have the live stock so well divided. I think Wallace has the worst share. I do hope the calf will not die.—U. M.]

DEAR UNCLE MARK: I wrote one letter, but it went into the waste basket. My Papa has taken the RURAL nearly nine years, and I enjoy reading the letters the best. I live on a farm one mile and a half from Middletown. We have four horses, one colt, five cows, two calves, and 10 pigs, and lots of chickens. We had a hen with 15 chickens, and she did not loose any. We intend to raise more chickens next year. I did not receive any sweet peas. We planted some of the Garden Treasures sent out by the RURAL. There were quite a number of different kinds that came up; some of them were very pretty. We had a nice vegetable garden this year. My brother planted the peas; they bore well, and we saved some of them for seed. We planted a few of the melon seeds, but they did not do very well; the melons were very small. I live where I can see St. Helena and Cobb mountains. St. Helena Mountain is 4,545 feet high, and Cobb Mountain is higher. I live 15 miles from the big Geysers. I have been there two times. I have a black cat that I call Gypsy. She got her foot in one of our steel traps, and hurt it; but she is getting better.

Lake Co., Cal. LUELLA J. COBURN.

[Good for that hen. She deserves a medal and a long life. Better let her try again next year. That cat will be very careful where she steps hereafter.—U. M.]

DEAR UNCLE MARK: I am 11 years old and would like to join the Y. H. C. Papa has taken the RURAL for two years. I like to read the letters of the Cousins. I live in Mercer Co., N. J. I live on a large farm and my Papa has a fertilizing mill. I have a pet colt. It follows me all around. I raised all of the poultry this year and Papa gave me a share in them. Papa cut very nearly 200 tons of hay and I raked it all with Papa's new steel-tooth sulky rake. I have a pair of twin brothers 10 months old, and another brother and sister. CARRIE M. DILATUSH.

Robbinsville, N. J.

[You are a great farmer. You do more than some men can do. We are glad to have you join. We would like to see those little boys.—U. M.]

DEAR UNCLE MARK: I am not going to school this afternoon, so I will write to you. What are the best kinds of hens you know of? We have had almost every kind, and we like the Plymouth Rocks best. We have the Pekin ducks; they are all white, and are much larger than the other kinds. We are wintering 34 head of cattle, 21 sheep, five horses, and three pigs. We have a very good two-year-old stallion; its name is "Bob Lambert." I live close to a river, and have plenty of fishing and swimming in Summer and skating in Winter. Are there any of the Cousins who would like to correspond with me? JAMES STEVENS.

Kirkdale, Quebec.

[I like the Wyandottes pretty well, though, of course, it depends greatly upon what you want hens for. If I wanted to supply an egg market, and had plenty of range, I think I should try White Leghorns. For a small flock, such as most farmers want, my choice would be Wyandottes or Plymouth Rocks. The Langshans are going to be popular though, and they are fine birds, too. Perhaps some of the Cousins will want to write to you.—U. M.]

Literary.

BOOKS RECEIVED.

CALENDARS.—There are plenty of these useful reminders from which the public may select this year. One may read the best thoughts of his favorite author from day to day, for nearly all the more popular authors have been brought into the service. Roberts Bros., Boston, Mass., present the Daily Morning and Evening Companion Calendars. These are very neat in appearance. The selections have been made by two critical ladies, and are the fruits of a very extensive reading. Opening the Evening Calendar at random, we find the following. "Labor disgraces no man; unfortunately you sometimes find men disgrace labor—U. S. Grant." The Whitney Calendar is published by Houghton, Mifflin & Co., Boston. This contains a vast amount of practical information as well as quotations from the writings of Mrs. A. D. T. Whitney. The following hint given for November 19 will do for every day in the year. "Separate accounts, as well as short ones, make best friends." Cassell & Co. (Limited) of this city send out the Beecher Calendar. This is very attractive. It bears a fair portrait of Mr. Beecher with pictures of his home, of Plymouth Church and other buildings. Each page contains an extract from Mr. Beecher's sermons or other writings. "Active little is better than lazy much," is Mr. Beecher's counsel for January 9. These calendars all contain many good and comforting thoughts. If each family wherein they hang could spend a few moments each night in discussing the thought for the day, much good could be done.

NATURAL HISTORY FOR LITTLE FOLKS is the title of a series of handy little volumes which Lee and Shepard have prepared. The books are prepared by Mrs. Sanborn Tenney and appear to be carefully written, in language that any child can comprehend. Each volume contains from 80 to 100 illustrations. One book is given up to birds, others to quadrupeds, insects, shells, etc. Such little books are far better as presents for children than many of the so-called stories with which Christmas trees and stockings will be lined. They might be used very successfully as text books in place of the Readers which are so frequently changed in our schools.

SOMETHING new in the line of holiday books are the cheap and handy volumes published by Lee & Shepard. "Home, Sweet Home." "Curfew Must Not Ring To-night." "Nearer My God to Thee," "Abide With Me." "My Faith Looks Up to Thee" and "Rock of Ages" are all beautifully illustrated and printed. They are bound in leatherette with gilt edges. The volumes are small enough to go into the pocket. They ought to be popular this season. All lovers of the above poems will be delighted with the accompanying illustrations.

THE MADONNA OF THE TUBS, by Elizabeth Stuart Phelps (Houghton Mifflin & Co.), is a beautiful Christmas story. It was originally published in Harper's, but has been rewrittten and enlarged, and many illustrations have been added. We like it better than any of the other stories by Miss Phelps. It is a tender, beautiful love story—the right kind of a story—one that leaves a feeling of hope and gladness in the heart. We wish every one of our friends could read it this Christmas.

LITTLE MISS WHEEZY, by Penn Shirley (Lee & Shepard), is a very cunning little story of a bright little girl. "Wheezy" is but a pet name for Louise. Every one likes to read about these cunning little children, who say such odd things and are yet children—not little old people. Old people are made young again by reading good stories of children, and children are never tired of reading about other children.

Miscellaneous Advertising.

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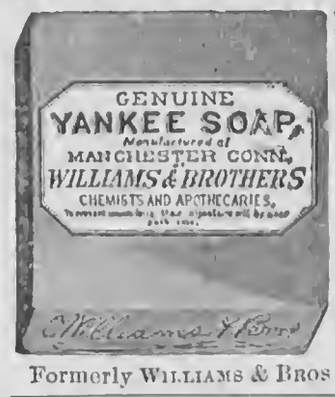

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PERSONALS.

ONE of Secretary Whitney's private hobbies is said to be fancy chicken raising.

BOB INGERSOLL says that "no man has a right to own more land than he can use."

JUSTICE MILLER, of the United States Supreme Bench, can put on boxing gloves with anybody short of Dominick McCaffrey.

MAYOR HARRISON, of Chicago, is credited with saying: "When I am running for office I would accept the devil's vote and thank him for it."

POSTMASTER-GENERAL VILAS takes his noon-day lunch at a dairy restaurant, where he gets a mug of milk and piece of apple pie for 15 cents.

FROM Paris the humorous announcement comes that Sarah Bernhardt will first get out of debt and then get into it again by attempting to become a lady farmer in rural France.

"A PATERNAL government is an infernal government," says Henry Ward Beecher. This is another form of Thomas Jefferson's maxim that that government is the best that governs the least.

MISS CLEVELAND has sent word to the President that she will accept his invitation to spend the holidays at the White House. Since leaving the capital Miss Cleveland has been far from strong.

PRESIDENT CLEVELAND has written a letter to Secretary Manning authorizing the latter to have the Bartholdi Statue placed under the care of the Lighthouse Board as a beacon, and that it be so maintained, lighted and tended.

A NEW operatic star, Fraulein Anna Kirbel, is creating a great sensation in Norway. Ole Bull's son, Alexander, among other experts, is said to have predicted that Fraulein Kirbel will throw Jenny Lind into the shade. She is 23 years of age.

GEN. SHERMAN is growing fonder of the drama and the opera every day. One of his chief reasons in coming to New York to spend the Winter was the desire to have this sort of entertainment at its best. On just this one point he admits that his beloved St. Louis is not quite up to the age.

JAY GOULD will go yachting again this Winter to Bermuda and the Southern islands that he visited last Winter. He will take his photographic apparatus along, as he did on that other trip, and a hundred or two new views will be added to the collection that shows his own handiwork.

HENRY M. STANLEY, the explorer, is in robust health and has grown stout since he was last in New York. An old brown Derby hat of a style several years gone by, a dingy, brown overcoat, check trousers, an old-fashioned linen collar and a general air of neglect, are marked features of his appearance.

DR. COLIN, of Paris, shows that the annual average number of deaths from hydrophobia in France in 26, and that since M. Pasteur began his treatment the average has not changed. An official statement shows that only 350 persons were bitten by mad dogs last year in France; while Pasteur treated 1,700 patients

GOVERNOR-ELECT "BOB" TAYLOR, of Tennessee, is now in Washington modestly receiving congratulations for his victory over his Republican brother. A man of medium hight, well bred and dressed; a lawyer remarkably well read—38 to 40 years old. He denies emphatically that he or his brother ever indulged in the buffoonery of fiddle-playing for the public during the late canvass.

FRED A. HILL, an ex-employé of Armour & Co., Chicago, and lately one of the greatest "plungers" or speculators in the grain pit, was laid out by the advance of two cents a bushel in wheat last Monday. He frequently bought or sold over 2,000,000 bushels a day, and that on less than $20,000 capital. A disorganizer of the market, few, except those who lose by him, will regret the fellow's fate.

SIEGEL, the great Italian faster, started another long fast Tuesday. His last meal consisted of oysters, steak, sole, wine and coffee, followed by a cigar. He will drink aërated waters only. His body is to be rubbed with oil as often as he likes. He will daily drink his mysterious liquor for 20 days. Then he will substitute another. The former he will not allow to be analyzed; it is claimed to be life-sustaining and an antidote against the second kind, which is deadly poison, and which he will permit to be analyzed. Entrance fee charged. Merlatti's fast still continues.

Miscellaneous Advertising.

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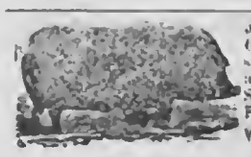

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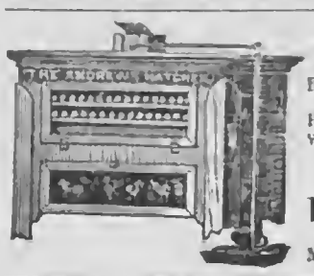

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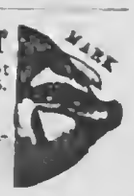

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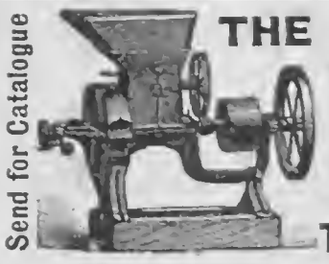

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THE hot biscuit is the grub that makes the the butter fly.—*Lowell Courier.*

"WHAT might be considered the shortest way to spell dog?—K 9."—*New Age.*

BARTHOLDI'S Goddess may be straightforward, and all that, but she sheds her light in a torch-erous way.—*Texas Siftings.*

"SHALL I capitalize 'Boodle'?" asked the compositor. "Certainly," said the editor; "for where capital is not, there boodle can never be."—*St. Albans Messenger.*

"OCONOMOWOC," yelled the brakeman. "O'Connor may walk, may he?" exclaimed an Irishman at the other end of the car. "An' faith if yez mane me, you'll have a foine time makin' O'Connor walk whin he's paid $5 to ride."—*St. Paul Herald.*

LITTLE Freddie was talking to his grandma, who was something of a skeptic. "Grandma, do you belong to the Presbyterian Church?" "No." "To any church?" "No." "Well, grandma, don't you think it's about time to get in somewhere?"—*Boston Transcript.*

"NOW, come and tell me, dearie, what was the most interesting thing in the sermon, this morning?" "Why, mamma, it was where the minister told about somebody's taking somebody else 'apart,' but he didn't tell why it was done or how he was put together again."—*National Weekly.*

THEY were standing on the deck of a Cunarder that runs to the Hub. "And what is that shining so?" she asked. "That is the dome of the State House. I was born right in its shadow." "You don't say? And this is really America, then?" "O, dear no, this is Boston."—*New Haven News.*

"YES, Bobby," said the minister, who was dining with the family, "everything in this world has its use, although we may not know what it is. Now, there is the fly, for instance. You wouldn't think that flies were good for anything, yet—" "O, yes, I would," interrupted Bobby, "I know what flies are good for." "What, Bobby?" "Pa says they are the only thing what keeps him awake when you are preaching."—*Life.*

WHEN the Tenth Regiment, U. S. Infantry, was ordered to New Mexico from the "Lake Region," the little son of a captain did not approve of the orders of the general of the army, and indeed seriously objected to the change. He had heard much of the dreariness of the wild West, and the Sunday morning before the departure of his father's company said to his parents: "Come, now, let us go to church and say good by to God."—*Gazette and Courier.*

A NEW YORKER in Boston called a carriage and told the driver to take him to "Whiskey straight." "I don't know any such place," said the driver. "Don't know where it is? It's somewhere near Boston," was the response. "There's certainly no place of that name about here," asseverated the driver. "Well," returned the non-plussed New Yorker, "it's something like that name, anyway. It's some straight drink." "Oh!" exclaimed the driver, "perhaps it is Jamaica Plain!" and he hit it right.—*Gazette and Courier.*

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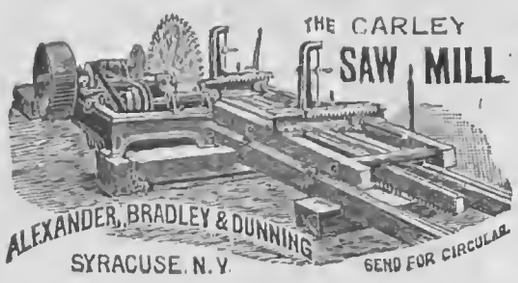

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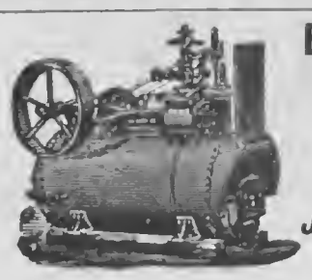

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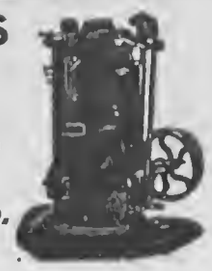

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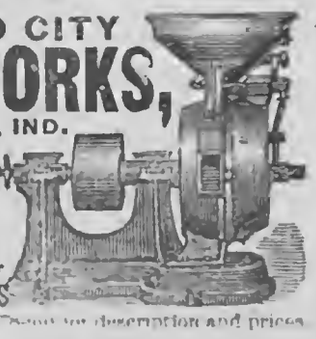

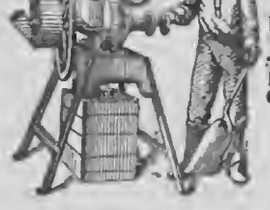

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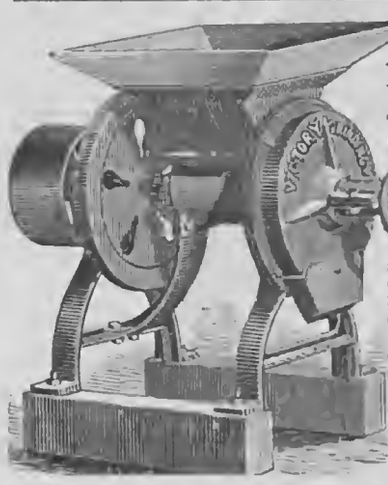

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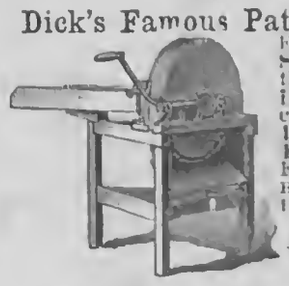

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A JOURNAL FOR THE SUBURBAN AND COUNTRY HOME

VOL. XLV. No. 1925. NEW YORK, DECEMBER 18, 1886. PRICE FIVE CENTS. $2.00 PER YEAR.

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The Herdsman.

PRINCIPLES OF BREEDING.—IV.

PROFESSOR G. E. MORROW.

AMONG points concerning which we may not speak with absolute positiveness are these:

Probably development of any characteristic in the parents makes its transmission more certain. Probably a stallion trained to trot fast will more certainly beget fast trotters than if his speed had been undeveloped. Excessive development, however, seems unfavorable to transmission of the quality thus greatly developed.

Probably there is a tendency to transmit the particular condition or peculiarities of the parents at the time of conception. It is safer to breed from mature animals in good health and condition than from very young or very old animals or those temporarily in bad condition.

Probably the male and female parents equally affect the offspring when a large number of cases are considered. Some animals of each sex have great power to transmit their peculiarities; others have very little. Among farm animals a male has many more offspring than any one female, and this is one reason for a common opinion that the male has greater influence than the female. I have not seen reason to accept the opinion that the parent of one sex affects, especially, the form, while the other has special influence on the disposition or the vital functions. In practice little importance is to be attached to any effect on the offspring because the female was formerly bred to a male of some peculiarity. It is possible, but not probable, that the former impregnation should affect the offspring from subsequent breeding. It is claimed there is probable danger of this result in the case of dogs. As to the other farm animals it very rarely if ever is found.

Probably no means for controlling sex with certainty has been discovered. Some animals produce offspring of only one sex, or with only exceptional production of those of the opposite sex. In my own observation the supposed rule that, with cows, the ova which descend at each alternate period of heat will produce offspring of the same sex, has appeared to be maintained. Others have not so found it. I have seen no rule for controlling sex in which I have full confidence.

Variations of a noticeable character, which are produced by accident or by any physical operation performed by man, are not usually reproduced, although they may reappear in the offspring. I have never known of a lamb being dropped with a short tail. Blindness, lameness, or any blemish caused by accident, is very rarely transmitted.

The readiness with which the breeder can secure desired qualities in his animals depends largely on the number of qualities he desires to modify and on the rapidity with which the animals reproduce. It is more than twice as difficult to fix two characteristics so they will be certainly reproduced than it is to do this with one. It is unwise to multiply the number of points to be bred for. A new breed of hogs could be made in a few years, because their rapid increase gives unusual opportunity for selection.

University, Champaign, Ill.

Horseman.

COLDS AND COUGH IN A HORSE.

F. L. KILBORNE.

A VERY common disease of horses, especially during Autumn and Winter, is the common cold—by veterinarians called catarrh, acute catarrh, coryza—due to a variety of causes and usually attended with a cough. While certain conditions of the atmosphere are much more favorable to the production of a cold than others, it is important to remember that nearly or quite all cases are due either to an unfavorable condition of the animal's system, rendering him more susceptible to the vicissitudes of the weather, or to faults in the care and management. Even the unfavorable condition of the animal system may usually be attributed to faulty hygienic conditions, so we may say the primary cause of a cold is usually to be found in the dietary and management of the horse. This being the case, most colds might be prevented by a careful prompt observance of the known laws of health. This is shown by the fact that animals that are carefully managed, so as to avoid as far as possible the causes that are most liable to produce colds and at the same time are kept in the best possible health, are usually quite free from the disease. In the majority of cases where all the conditions are carefully examined, a cause for the cold will be found that might have been prevented by exercising a little more forethought.

The most fruitful causes of colds are to be found in sudden changes of the weather, more particularly when attended by dampness, and the exposure of the animals to draughts of air, dampness, or to a suddenly lowered temperature, especially when the horse is out of condition, heated or fatigued. This last is very important to bear in mind, because a fresh, healthy horse will withstand many causes that would readily produce a cold in a system already weakened by any cause whatever. A damp stable, usually underground, or a stable where direct draughts of air can strike the animals, drawing in rain or damp snow, and allowing the horse to stand in cold, damp, or windy places when wet or heated; and exposure in the field to cold, drenching rains, or when there are heavy dews with a great difference between the temperature of day and night, are all common causes. Predisposing causes include anything that weakens the general constitution of the animal, as unsuitable feeding, hot, close stables filled with foul air and gases, and improper care and treatment.

The treatment of a cold depends upon the severity of the case. In mild attacks with slight nasal discharge and an occasional cough, but no perceptible fever, little treatment is necessary beyond rest in a comfortable stable, preferably a loose box. Steaming the nostrils night and morning by pouring boiling water on wheat bran and allowing the animal to eat it from a bucket or nose-bag while steaming hot, is excellent both for the nasal discharge and cough. When necessary to make the animal comfortably warm, apply blankets. If the limbs are cold, rub actively for 15 or 20 minutes and then apply warm, loose bandages. Daily general grooming will also be very beneficial in keeping up a healthy action of the skin.

Where there is marked fever, agents should be given that tend to lower the animal temperature. For this prepare a fever-powder consisting of two to four drams each of chlorate of potash and niter, along with 10 to 25 drops of tincture of aconite; it may be given in a pint of water twice or thrice daily. If the animal is debilitated or weakened, two ounces of mindererus spirit or two drams of muriate of ammonia or an ounce of sweet spirits of niter may be given with the above.

Should the nasal mucuous membrane continue dry and feverish and the cough dry and harsh, steam the nostrils more frequently as directed above, until a free discharge sets in, and then continue less frequently. If the throat is sore, as shown by difficulty in swallowing, an external stimulant will be desirable, as the ammonia and oil liniment or a mustard poultice applied and well rubbed in over the whole region of the throat. If the cough becomes troublesome mix one dram each of extract of belladonna and niter with sufficient sirup to form a thick paste, and rub well upon the back teeth to be slowly swallowed at leisure and repeated three or four times daily.

The diet should be light and laxative in Summer, consisting mainly of green food and mashes, and in Winter scalded oats, linseed gruels, roots and warm mashes. Allow free access to pure, cold water. If the bowels continue costive, give copious warm water injections every three or four hours until relieved. During treatment the animal should have walking exercise for a short time daily when the weather is suitable. When recovery is slow it may frequently be hastened by mildly stimulating tonics, as an ounce each of powdered gentian and sweet spirits of niter given twice or thrice daily in a bottle of ale or cold water.

Since a cold can usually be avoided by proper attention to the care of a horse, it saves much needless trouble and is safer to take all reasonable precautions to prevent colds. Stables should at all times be dry, warm, light and clean, free from direct draughts of air, but at the same time well ventilated. During damp, cold or windy weather a horse after exercise, whether stopped in the road or placed in the stable, should have a warm blanket applied. Standing uncovered, even for a few minutes, in the road, is often sufficient to contract a severe cold. A blanket for the purpose should always be carried at this season of the year to have ready for use when necessary.

Upon putting the horse in the stable after a drive, a blanket should usually be applied for an hour or two, even if the animal does not appear warm. When exercised so as to be perspiring freely or much fatigued it should be vigorously "rubbed down" until dry before applying the blanket. For a horse that is blanketed in the stable or has been clipped, even greater precautions are necessary since he will more readily take cold. Horses at pasture should be taken up or provided shelter on wet, cold or windy nights of Autumn and Winter. When an animal has been unavoidably exposed, a severe cold may frequently be warded off by thoroughly "rubbing down" at night, applying a blanket and giving a hot mash with two ounces of ginger or 25 to 30 drops of tincture of aconite with an ounce of niter.

In such cases special care is needed for the next two or three days that a fresh cold is not added to a system already weakened by the first attack.

Sheep Husbandry.

Notes from the Western New York Farm.

SHEEP BREEDING.

WHEN TO COUPLE.

WHAT time in Spring should the lambs be dropped? What shall guide us in the selection of the ram? How many ewes should he serve? How long can a ram be profitably used in the same flock? These questions cover the ground of inquiry in a score or more of letters recently received, which show the wide and growing interest in sheep husbandry, and which can be answered only in a general way.

THE COMMON PRACTICE, no matter what the latitude, is to have the lambs dropped at just about the time the sheep are turned out to pasture, the belief being that the grass exerts a loosening and cooling influence upon the ewes, and that less loss of lambs will occur and that the lambs will then do their best. While it is a fact that the grass does have this effect and that sheep wintered in the usual methods, in open yards with nothing to eat except dry hay or corn fodder and straw and in many cases mostly straw, and with a very scanty supply of water and no grain, will not be in very robust condition nor give a great abundance of milk, it is no less true that when, as is commonly the custom, they are turned abruptly from the yards and dry feed to the fresh grass, the first effect is, by its laxative influence on the bowels, very weakening and the ewes are less able to bear the strain of parturition than before the change was made. Besides, at this season the weather is very changeable: the brightest morning is liable to be followed by a snow or hail storm, or, what is fully as bad, by a cold rain or a piercing cold wind, and, further, when the sheep are out in the fields they cannot be as closely watched, and if, as is often the case, a ewe needs assistance, she is not seen in time, and, if seen, is not easily accessible to the shepherd. The result is the loss of the lamb and too often of the mother also. That this plan is not a success is evident from the very large proportion of "dry ewes" found in every flock so treated, and from which we select in making up our flocks for winter lamb raising, and, yet, as bad as it is, this method is to be much preferred to having the lambs come amid the snows and blizzards, or during the pinching nights of the earlier Spring with the sheep running in open yards sheltered only by the fleece or the remnant of the straw-stack. This is abundantly proven by the scores of lambs whose dead carcasses bleaching on fences and in tree tops are signs of the idiocy or cruelty of the owner, which should consign him to the asylum or gaol.

When sheep are treated in Winter and Spring as above, the better way is to postpone the lambing season until after the sheep have been to grass several weeks or until the system has become regular after the change, and the ewes have begun to gain a little in flesh; in this latitude not sooner than the last of May. If the sheep are then, as they should be, yarded every night and on stormy days, and, better yet, given a moderate ration of grain, there need not be a loss of two per cent of the lambs, and the lambs will start off to growing at once and be larger when September and weaning time come than those coming earlier, under adverse circumstances.

* * *

THE LESS COMMON PRACTICE, but by far the better way, is to have the sheep warmly housed, and the lambs come very early, as early as the last of March or first of April. Among the advantages of this method are the following: The sheep are then under the constant supervision of the shepherd and are easily caught in case any one should need assistance in parturition; they can be fed so as to control the conditions of the system, so as to have them most favorable to both mother and offspring; there is no danger whatever from storms, cold or wind either to the ewes or lambs; the ewes are stronger, the lambs get started in growth, and the ewes recover from the severe strain and when turned to grass, both are in condition to thrive right along. Early lambs are usually in demand for slaughter at a price that pays several times the profit on the later ones, and even if not so wanted they will be much larger in Fall and in better condition for winter feeding, and will command for this purpose at least a half dollar more per head than the later ones. But if wanted for neither of these purposes, they will stand wintering much better, and will each give a fleece of a pound more wool. Besides all this, the lambs will be in weaning condition so much the earlier that the ewes, being relieved from their support, will get in much better condition for the succeeding Winter, or if wanted for the market they will be in better flesh and at an earlier date.

The barns for this purpose should be warm and dry, but need not be expensive or large. They can be made of stone, boards and paper, or, in the Far West, of poles and the straw that otherwise would be burned. They need not even be large enough for the entire flock, as the pregnant ewes may be sorted out from time to time, as they come near the end of their period, and put into the warm quarters, and the older lambs with their mothers removed to others not quite so warm. Besides the warm quarters, if the best results are desired, some sort of succulent food must be provided. Silage will answer; rutabagas or carrots are good; if nothing else is available, it will pay to feed a few potatoes at this time, even if they are selling for a half dollar per bushel. But nothing else that I have ever tried is quite so good or can be so cheaply provided as mangels of some variety; they are easily and cheaply grown; they keep better than any other root and the sheep like them well. This succulent food should be fed for at least two weeks prior to the birth of the lamb, and should be continued until the ewes are turned to grass. It will pay every sheep feeder to give it to his whole flock at least twice a week during the whole Winter, and better if fed every day. It has a wonderful effect in keeping the bowels open and regular and in keeping down any tendency to feverishness, and it adds greatly to the power of the system to digest and assimilate the dry food, and with a breeding ewe insures a full supply of milk and that of the best kind for the newcomer.

In addition to their other food, pregnant ewes should have daily a little grain. If a gill is fed each day it will be no more than three pecks for the Winter, and its cost will be returned in the growth of wool and carcass of the ewe, in the increased strength and rapid growth of the lamb and, again, largely in the increased value of the manure. When fed for this purpose and to this amount only, almost any grain may be selected that is cheapest; or a mixture containing any one of the grains and bran and oil meal would be capital, and the quantity could probably be increased without additional cost, and when such is the case it should be done.

* * *

THE COUPLING OF EWES AND RAMS then is a matter to be decided after carefully considering the advantages and disadvantages of those methods of lamb raising and choosing which will be followed, remembering that the average period of gestation in the ewe is from 150 to 153 days, or, in round numbers, five calendar months. If then the lambs are desired at or soon after the middle of March, the time for putting the ewes and rams together would be the fifteenth of October. If, on the other hand, the lambs are to come after turning to grass at the very last of May, the putting in of the rams must be deferred till the last of December, and so of any intermediate time. I would advise either the one or the other of these extremes.

* * *

We have now (November 15) got our sheep into the barns and are sorting out such of the ewes as have failed to get with lamb. To do this we put the rams for a short time each day into each pen, having first applied Venetian red to their breasts. When we wish to carry these ewes over for next year's use we have them served with Shropshire or Hampshire bucks; but when we wish to sell them to our neighbors for store stock, we apron some common ram so that he paints the ewe without service. As soon as a ewe is in either case painted she is thrown out. A week of such treatment sorts out 98 per cent. of the unimpregnated ewes. J. S. WOODWARD.

Veterinary.

THE ORIGIN OF CONTAGIOUS DISEASES.

S. H., in an article in the RURAL of Nov. 20th, gives his views as to a possible origin of contagious diseases of man and animals, and as is commonly done by writers holding similar views, misrepresents the position taken by veterinarians and physicians with reference to the origin of contagious diseases. The very worst of sanitary conditions has never been known to produce the much dreaded Asiatic cholera, small-pox, yellow-pox, etc; and all precautionary sanitary measures by physi-

cians and boards of health are taken, not to prevent a spontaneous development of these diseases (an occurrence that is not expected) but to remove a medium—filth—that would favor the dissemination of the disease germ when once introduced from without. Individual precautionary hygienic measures are also taken that the system may be kept in a healthier condition and thus be the better able to resist the attack of any disease germ. Unhealthy, filthy surroundings always favor the spreading of these contagious diseases, but they do not in any case develop the germ of the disease. What is true of the sanitary conditions for man is equally true of those for animals.

Veterinarians do not attempt to explain the origin of the special contagious disease germs now known. Nor do they deny that the germs of pleuro-pneumonia contagiosa, swine-plague, etc., may not have originated spontaneously by some process of development. But they do claim that at the present time, the germs of these diseases are not developed spontaneously, and are not known to have been so developed within the history of these diseases. They do not base their claim upon pet theories, as in the case of the above writer and others, but upon the facts in the case. There is not an authentic instance on record in which these diseases have been known to originate spontaneously, while there are innumerable facts to show that they are not so developed.

Pleuro-pneumonia was unknown in this country before its introduction into Rhode Island in 1843 with an imported Dutch cow. It was carried to the Cape of Good Hope in 1854 and to Australia in 1858, in each case with imported infected cattle, and in both countries it was entirely unknown until its introduction with these diseased animals. The history of the spread of these diseases very plainly indicates that it is only by the movement of infected animals or their products that the diseases have spread from one locality or country to another. Numerous similar instances might be cited with this and the other contagious diseases, if space permitted. If contagious pleuro-pneumonia can now be developed spontaneously, why was it not so developed in this country prior to 1843, and in Australia prior to 1858? Perhaps S. H. can satisfactorily answer this question.

The comparison of the above writer, of the origin and spread of contagious diseases to fire and its origin by chemical action, seems to me to be wide of the mark. Chemical action between inorganic constituents always produces inorganic substances or compounds, and in no instance is it known to produce organic bodies or life.

The cause for the prevalent belief "that there must be a germ from which everything grows" is to be found in the fact that at the present time the only known organ of organic life is from pre-existing organic life, and that all newly developed life follows the well-established aphorism that "like produces like" within the limits of certain laws of slight variation.

The question at issue is not so much as to whether these diseases can be developed spontaneously, but as to whether they are so developed. Surely the history of contagious diseases very plainly shows that they are not being spontaneously developed.

A VETERINARIAN.

The Poultry Yard.

WINTER WORK IN THE POULTRY YARD.

THOSE who have to pay the food bills for a flock of poultry during Winter are mostly interested in the quantity of eggs that are gathered daily into the egg basket. During Winter when the ground ceases to supply worms, etc., the birds are dependent entirely upon those who care for them, and such persons should be properly qualified by a thorough knowledge of the requirements of the fowls. Good feeding is indispensable. A large proportion of food is consumed in cold weather merely to keep up a normal animal heat, after which comes the natural waste of the system before any part of the food can be spared for forming eggs. This is one reason why hens stop laying during very cold spells. As the days are very short, fowls should be fed as soon as it is light enough for them to see to eat. The best way to be early is to scald or cook the food overnight, cover it up and keep it in a warm place till morning. It can then be fed to the flock quite early. Early and late feeding gives better results than late morning and too early evening meals. Warmth and ventilation must receive due care. Provide a good dust bath of sand, ashes and a little flowers of sulphur. The box if one is used, should be sunk in the ground to a level with the floor close up to a low window so that the sun will shine into it.

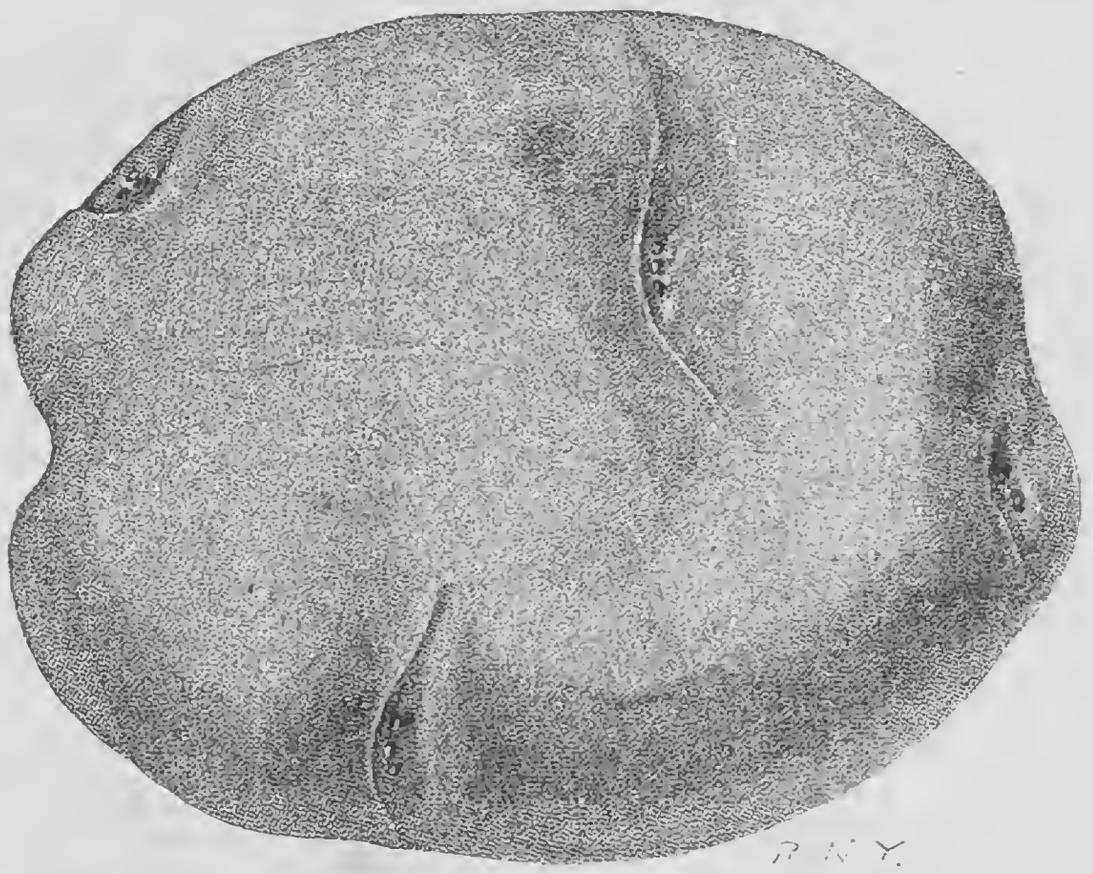
A good shed, dry and open to the south, should be attached to every poultry house where many hens are kept, so that they can enjoy the fresh air and keep out of snow and wet. This reminds me of the bad effects produced by fowls eating snow or drinking snow water, which frequently causes diarrhea and for some reasons the birds that indulge in this practice, even when no diarrhea shows itself, get very thin and out of condition. Of course, one cannot entirely prevent fowls from eating snow, but they are creatures of habit to a surprising degree. If we neglect giving them fresh water promptly, they will soon contract the habit of eating snow and even if they are offered water afterwards they will care for it less than if their daily habit of drinking had not been broken up by carelessness. If, during cold weather, one gives them water with the chill just off, they will appreciate it and seldom eat much snow. During cold spells when stock are confined, they must be kept scrupulously clean, and a handful of air-slaked lime should be dusted around inside the houses every day or two, and at night when the birds are settled drop a handful under the perches, especially if any strong smell is noticed in the houses. Every few weeks treat the perches to a coat of crude petroleum. See that the nests are clean and inviting. Some may say there is a great deal of trouble in all this. Well, there is considerable labor; what can succeed without it? The fowls have to be fed all through Winter under any circumstances, and with too little care no eggs can be expected. Now, which pays the better—to have the expense and no eggs, or to take proper care and get eggs while they are dear? This can, without doubt, be done by following the advice here given:

Fowls to lay must be in good condition, not fat; but bright, cheerful and lively. If your fowls are out of condition you must keep up this good feeding, etc., till they are in good order. They will soon let you know that this is the case by their pruting and liveliness when they are preparing to lay. I have known some persons whose hens were out of condition from neglect, to start feeding them properly expecting them to lay at once. This is too much to expect. Anyone accustomed to poultry can tell at a glance the condition of a flock. There is always a demand for fresh eggs in Winter, and anyone having a good flock of early pullets and giving them the necessary care, can hardly fail of being repaid for the trouble.

WINTER LAYERS.—Strange to say, my wife's hens lay as many eggs in the Fall and Winter as they do in Summer. We keep about 30—all our own raising—mostly Plymouth Rocks. The habit of winter laying may be partly bred into them, but they are well cared for, too. They are kept in a corner of the barn, on the same side as the cows and calves. In the morning they have a mush of meal, table scraps and a little bone meal sprinkled on top, sour milk in abundance and ground oyster shells every other day. For supper—for we feed but twice a day—we give whole corn roasted in the stove oven. The hens run in the barn for exercise, and on this feed, shell out the eggs.

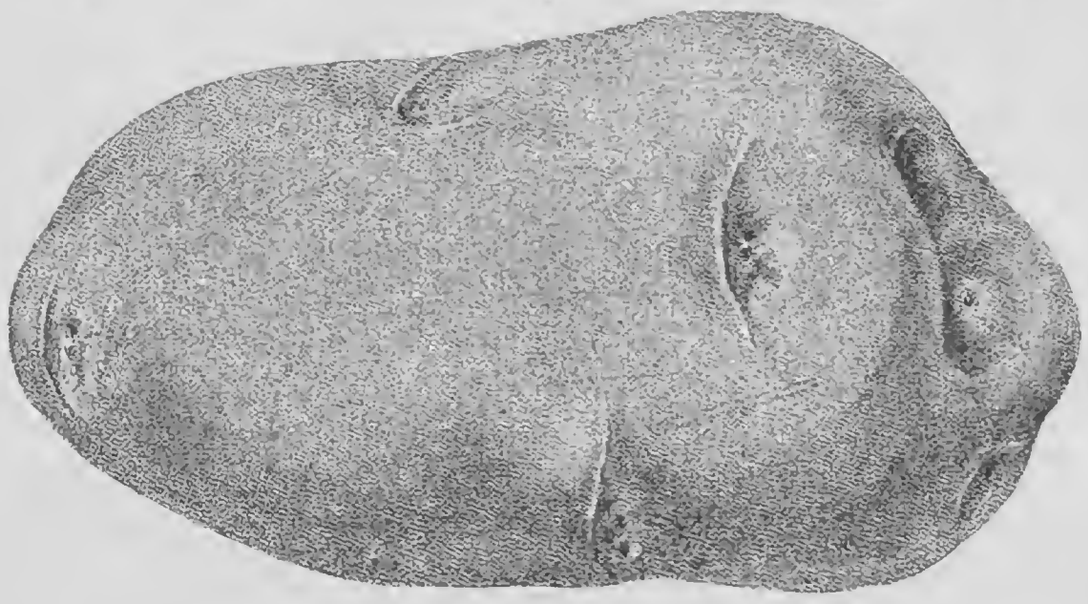
J. H. T.

Medford, Me.



RURAL NEW-YORKER POTATO No. 2. Front view. From Nature. Fig. 456

(See page 840.)



RURAL NEW-YORKER No. 2. Side view. From Nature. Fig. 457. (See p. 840.)

Dairy Husbandry.

THE REFORM OF IRISH DAIRYING.—III.

PROFESSOR J. P. SHELDON.

Irish dairy schools; female students; male pupils; butter-making competition; creameries; shortcomings of small farm butter; no cheese worth mentioning.

TWO ways there are, standing out above the rest, by which the friends of Irish farming hope to accomplish the reform I have alluded to in previous articles—the reform of Irish dairying, particularly in reference to butter-making. These are dairy schools and creameries. I have aforetime spoken in the RURAL on the subject of Irish dairy schools and have had occasion to express a high appreciation of the good they are doing. There are two of these schools, between which a friendly and beneficent spirit of rivalry and emulation exists—one of them near Cork and the other near Dublin. The former has been established some years, under the help and patronage of leading persons in the south, and is known to the world as the Munster Dairy School. The latter is a recent addition to the well-known Agricultural College of Glasnevin. Not only butter-making on modern principles, by the aid of the latest and best appliances, but also the production of milk and the management of cattle are taught and demonstrated at these establishments.

The female students, as a rule, confine themselves to butter-making and general dairy management, though there are exceptions to the rule. It is known that on the small farms in Ireland the women have more to do than the men with the management of cows, so that it is well even for female pupils at the school to go in for the whole curriculum of the place, in view of possibilities in the future: and it may be said, in fact, that all dairymaids would be the more capable if they understood something about the management of the cows that give the milk. I am acquainted with instances in which workingmen's wives have the management of a cow or two on their own allotment of land, and it is almost invariably the case that such cows make a much better return in milk than they would if ruder and rougher man had been their keeper.

The male students or pupils of the dairy schools are chiefly interested in the management of cattle and land, though no doubt, some of them will pay diligent attention to the tuition which is offered to them in butter-making, and this with the view of becoming managers of creameries, or being the better able to superintend dairies of their own.

Be the objects of the pupils what they may, it is certain that the Irish dairy schools impart sound tuition to the pupils. On several occasions I have had the privilege of officiating as a judge at dairy shows held under the auspices of the Royal Dublin Society and the Royal Agricultural Society of Ireland, whereat butter-making competitions have formed the most attractive, and, at the same time, the most useful features in the display; and I have been struck with the marked skill and singular deftness of those who had passed through the schools, when compared with those who had not. So long as butter continues to be made in farm-houses, in Ireland, the dairy schools may continue the excellent work on which they are engaged, and we may safely come to the conclusion that farm-house butter-making will never die out in that country. The large dairies of 50 to 100 cows, or upwards, can afford the services of skilled dairymaids, and it is for such dairies that a brisk demand exists for girls who have been trained at the dairy schools. Daughters of large farmers find no loss, but rather a gain, of dignity in becoming pupils at the schools, and I discern in this a principle very promising indeed for the future of Irish dairying.

The factories or creameries are advocated on behalf of the small farmers who are so numerous in Ireland, and who have no suitable conveniences for making butter as it ought to be made, and not for the large farms where modern arrangements and appliances have been adopted. An Irishman is an Arab in his love for a horse, and, therefore, the conveyance of milk to the factory is known to be a feasible thing. The chief difficulty lies in getting the farmers to give the new system a trial: though, so far as this is concerned, there is less stupidity among Irish than among English farmers. The small farmers who fill one, two or three firkins a year, have been getting about eight to 12 cents a pound for their butter, while the large farmers have been getting twice, or more than twice, as much; and it is the object of the promoters of the creamery system to do away with this disparity and to place the small farmer more nearly on a footing of fiscal equality with the large one, so far as the price of butter is concerned.

Irish butter is seldom wanting in quality, body and color; but it is sadly wanting in uniformity. It needs making in a manner which modern practice has perfected, and on a large scale, either in creameries or on large farms. The small farm system is hopelessly out of the running, so far as the race for popularity in butter-making is concerned, and the sooner it is merged in the creamery system the better for all concerned. Ireland will remain a great butter-producing country, and I have a sort of conviction that her climate and soil are such that she can produce the best butter in the world, if only she makes it on sound principles and in a careful and cleanly manner. There is, indeed, no great obstacle in the way; and Ireland, if she will, may win back her ancient reputation for butter. Cheese is made only to an extent which deserves no mention, in Ireland, but it is at the same time true that the country will produce cheese of very fine quality and character. Cheese-making, however, has never been a recognized industry in Ireland.

ORIGIN OF THE CHEESE MITE.—It has long been supposed, says the Popular Science News, that the minute animals carried about by the common fly were parasites drawing their nourishment from him and in part repaying him in his own coin for the annoyance he inflicts upon the human race. We are now to be denied this thought of revenge. According to the study of P. Meguin, a French naturalist, these animals are nothing but the common

cheese mites. It was found that as long as abundant food was supplied these mites flourished. When the supply decreased the very young and very old individuals died, while the others changed their forms, becoming smaller and of a different shape. The abdomen under the influence of the fast became concave in shape so that it will readily adhere to other bodies. When the fly carries one of these insects to a fresh piece of cheese or other agreeable food, it detaches itself and grows and multiplies. Thus these supposed parasites are only tramps which "beat" their passage on the fly's back. Instead of causing the fly trouble they only enable him to do more mischief than ever.

A BUTTERINE DEFENSE ASSOCIATION has been formed in England. Butterine is to be defended. Its makers do not want its name changed to oleomargarine. The stuff is, of course, praised as wholesome, good and vastly superior to badly made butter. There is no reason why butter should be badly made. If the butterine people are so exceedingly anxious that the public should be held away from bad butter, there is a better way for them to go to work than to try and get butter prices for lard.

Field Crops.

Experiment Grounds of the Rural New-Yorker.

NEW POTATOES.

THE RURAL NEW-YORKER POTATO NO. 2.

SEVERAL references have been made to this new potato which originated at the Rural Experiment Grounds several years ago. No record has ever been kept of the varieties from which seeds have been sown, since cross-breeding is practically impossible here, as seed-balls form rarely, and we have never been able to find any pollen. Every year for many years a few seed-balls have been gathered and the seeds have been sown in pots or boxes late in February. The thriftiest plants have been transplanted into thumb-pots in April and in late May set out in the garden. By this time the roots penetrate the soil so that the plants are easily thumped out into the well-prepared soil of the garden and they scarcely feel any change.

We have met with little success in seedling potato culture, the No. 2 being the first that has been deemed worthy of introduction; but *this* bids fair to repay us for all our trouble, being one of those marked advances in the improvement of varieties which seldom occur. Nevertheless a trial of this potato in different parts of the country may show that it is not adapted to general cultivation. As it grows here, however, in our rich garden test soil it is, as has already been stated, the nearest to a perfect potato of any of the 600 varieties which have been raised during the past 12 years. The entire crop was the product of 53 pieces planted in trenches three feet apart, the pieces one foot apart in the trenches. The weight of the crop was 120 25 pounds, which is at the rate of 881.83 bushels (of 60 pounds each) to the acre. Many kinds of potatoes have yielded more in this rich, mellow soil; but for uniformity of size and shape, for beauty of shape, smoothness of skin, fewness of eyes and for the remarkably small number of under-sized potatoes, this variety has never been equaled here. There were but 187 potatoes, and of these all were marketable and, indeed, of nearly the same size, except 22. In hundreds of the new kinds tested here, there is little to distinguish one variety from another. They might all be sold under the same name. But if these (No. 2) were mixed up with 100 different kinds, we think that every one could be picked out, so marked are its peculiarities.

The engravings before us (front and side view), Figs. 456 and 457 (see page 839), were drawn from rather the *poorest* than the best specimens that might have been selected, and they show also the *average* size. Few were larger, few smaller, except the 22 above noted, which were scarcely larger than big marbles. As has previously been stated, we propose to send a small tuber of this R. N.-Y. No. 2 to all applicant subscribers as soon as the supply shall enable us to do so. This will probably be in 1888. * * *

THE PECAN POTATO. Received from L. M. Macomber, of North Ferrisburgh, Vermont, who writes: "The seed was given me by C. G. Pringle, of Charlotte, Vt. It is a little later than Snowflake. The seed was sent to me by J. T. Macomber, of Grand Isle, Vt. It is rather late, keeps better and yields about the same as Snowflake."

We planted six pieces April 12. The vines were dead August 15. The yield was 21 pounds, or at the rate of 847 bushels per acre. The whole number of potatoes was 115, of which 91 were of marketable size. Shape, flattened, elliptical, as our engraving shows; buff skin, russeted; very few eyes and those even with the surface. A perfect potato as to shape, and we cannot speak too highly of its quality. The best five weighed two pounds, six ounces. The average size is rather small, perhaps, for market popularity, but not for family use. It is a potato that peels with little waste, there being no deep eyes to cut out (See Fig. 458, page 841).

* * *

CHARTER OAK, from Peter Henderson & Co., of New York. Planted April 12: vines died August 12. Four pieces yielded 13 pounds, or at the rate of 786.50 bushels per acre. Best five weighed two pounds. It is of the Peachblow class. Roundish, often russeted, eyes quite shallow, buff skin, eyes often pink. A shapely potato of its kind. Whole number 58—40 marketable. Slightly yellow flesh, mealy, dry and somewhat nutty. Eaten Oct. 26. * * *

CHARTER OAK, third trial from Rural stock. This potato was originally sent out by B. K. Bliss & Sons in 1884, It is a fine keeper. Planted April 20—vines dead August 10. The yield of four pieces was 13½ pounds, or at the rate of 816.75 bushels per acre. Whole number 67—marketable 46. Best five weighed two pounds 1¼ ounce. (See illustration from nature, Fig. 459, page 841.)

GARFIELD AND SNOWFLAKE POTATOES are selling for the best prices for Boston market in this vicinity. These bring 50 cents per bushel. A choice lot of Garfields are being held by a party near here for 75 cents, as good ones are becoming scarce. Burbanks sell at 35 cents to 40 cents, with same price for Late Hebrous. The Chas. Downing, a new potato, will be sure to take. O. H. ALEXANDER.

Vermont.

Farm Topics.

CORRESPONDENTS' VIEWS.

FARMERS' CLUBS.—Our Farmers' Club is about one year old. It has been very successful. In organizing it we tried to be as simple as possible. We have no such thing as a constitution. Perhaps we should be ashamed of our poverty, but such is the fact. We have a few rules, by-laws, if you would dignify them with the name—stating when the regular and annual meetings are to be held and the membership fee. Of course, we intend to conduct our business and discussions in a parliamentary manner and Cushing's Manual tells how to do it. It was thought best not to hamper ourselves by a long constitution, and we have as yet had no reason to regret the decision. To what do we owe our success? To the interest, enthusiasm and work of our charter members. We started with only 12 men, but each of them resolved to do his best to make the club a success. Soon we were aided by new members, until now we have a membership of over 30 and no effort is required to make each meeting interesting and profitable. The material of which the club is composed is such that there is no danger of our becoming a mutual admiration society; on the contrary, scarcely a subject is discussed that does not elicit some pretty sharp opposition among the members. In this way the facts of the case are generally reached. We have now just taken up the question, "Which is the most profitable cow for the farmer?" and have requested essays from any and all prominent breeders. Smiths, Powell & Lamb have given us an excellent one on the Holstein. The Devon and Guernsey are equally well represented by Rumsey Bros. and Mr. Ledyard of Cazenovia. The Jerseys, Herefords and Short-horns are to be heard from. These papers will be read and published with our reports, and then one meeting will be devoted to the discussion of the subject. If a word of advice to younger clubs is allowable, I would say: Be sure that your officers are workers and men who will always be present. Let all things be done with dispatch, for rather a half hour meeting and a lively one than one that drags out a tedious two hours. A live farmers' club is a blessing to the community, but an inactive one is a curse.

Auburn, N. Y. D. P. HARDY.

R. N.-Y.—The Cayuga County Farmers' Club is a success. We like the idea of making the organization as simple as possible. Many new clubs will be started this year. It is well to avoid a cumbersome constitution if possible.

A MODEL HIRED MAN.—There has been considerable talk in the RURAL of late about the hired man. One woman recently urged all farmers' wives to protest against boarding him, saying that the average hired man is the most provoking element the housewife has to contend with, that a home can't be a home where he is, etc. Now I am a hired man and I don't like to see myself put down so low as all that. I have been working at my present place for the past four years, and have boarded with my employers constantly. Women who have so much trouble with hired help must have been old maids before they became farmers' wives, or else they were brought up in the city. Either this or they have got about the poorest help in the world. I should be much surprised to hear my mistress say that my washing and ironing are a burden to her. Instead of increasing her work I study to lighten it. I am usually up first in the morning—always when the mistress wants to go to church—build what fires are needed, fill the tea kettle, put water in the potato kettle and get it over the fire. Then I do my chores before breakfast. I mash the potatoes, bring in wood and always make it a point to see that the water pail is never empty when I am near the house. I also help scrub the kitchen floor, make flower-beds and keep generally on the watch for work that might lessen the labor of my mistress. I get full pay by always feeling that I am just exactly as welcome as any member of the family ever could be. People may think I work in the house instead of on the farm, but I drive a good team of horses through all the work they can do. While my team is eating, or after the day's work is done, I feel that I can do a few little jobs about the house just as well as I could spend the time leaning over a fence or growling because dinner is not ready. If some farmers' wives did not feel so far above the hired man, and would ask him kindly to aid in the work, they would find that their work would be greatly lessened.

Avoca, N. Y. J. W. B.

WE want to hear from the huskers among the RURAL'S readers. What do they wear on the hand to tear the husk apart? Here we use the stick across the fingers; the point to meet with the thumb. A good husker here handles 20 to 40 bushels of ears per day, according to the corn. CHAS. MUNGHAM.

Lambton Co., Ont.

I WAS just getting enraged with the picture of "A Scrub Cow" in a late RURAL, and with the artist who drew it; as the miserable face and framework excited my pity, and I was about to take up the cudgels in her defence when a word or two of the editorial comment caught my eye, and then I wanted to thank the writer. God Bless you, Dear Sir! and all those who really know that much may be done by editing a newspaper, to prevent our choosing Barabbas, and hanging the wrong man. JAS. B. OLCOTT.

South Manchester, Conn.

Farm Economy.

THAT MANURE QUESTION.

I HAVE just read, on page 656 of the R. N.-Y., Mr. Stewart's exposition of that manure question, and am very much mystified for the following reasons: He states positively that manures do not leach through soils. I had been led by observation to believe that they did—through some soils at least—and for that reason have hesitated about digging a well close by my stable, though I should very much like to do so.

A farmer living near me dug a well 25 feet deep close beside a yard used for cattle and pigs, and into which all stable and other manures were thrown, and though he formed a bank two feet high and several feet wide around the well, with the clay taken out of it, the water became discolored and unfit for use the third year after it was dug. He then moved the cattle yard and manure heaps a hundred yards away and within three months afterward the water in the well became, apparently, pure and fit for use.

Again, in January, '84, I drew out a quantity of mixed manures and piled them up in a heap to rot. As it happened, the heap was located over a tile drain, 400 feet from its outlet. This drain had been laid two years and was three feet four inches deep—soil heavy clay loam. As the ground thawed out the following Spring, the water flowing out of the drain became discolored and continued so nearly two weeks, and I noticed that the weeds along the ditch into which the drain emptied grew much more rank that Summer than ever before.

Once more, I have a tile drain laid three feet deep under my stable. The outlet is 320 feet distant. Every Spring the water flowing out of this drain is discolored, but only for a short time after the ground thaws out, and the weeds that spring up about, and for some distance *below*, the outlet, plainly show that they derive "encouragement" from some source.

After reading Mr. Stewart's article I must confess my inability to understand how these things can be. And yet they *are*! I would like to have some of the RURAL readers try this experiment, viz:

When the ground is frozen solid, cover one square rod two inches deep with barnyard manure, and another square rod to the same depth with straw, and next Spring note which plows up the lightest and is the most friable, and report to the RURAL. See that neither plot is trampled after the ground thaws until the plowing is done. FRED GRUNDY.

Christian Co., Ills.

[The manure question raised by our correspondent is well answered by Sir J. B. Lawes's article on page 766 of the Thanksgiving Number.—EDS.]

ADVANTAGES OF FALL PLOWING.—I am in favor of fall plowing, though many potato growers say it is a waste of time. Last season part of my ground was fall-plowed and replowed in the Spring. It is all a sandy loam—one portion as rich as another. Each part received the same cultivation. The advantage of early planting was with the spring-plowed plot. Potatoes of both early and late varieties were planted. In every instance and with all varieties the fall-plowed land produced the finest tubers, and a fourth to a third more. Some varieties fully doubled. The fall-plowed land was in much the finest condition—very fine and friable; and who knows but a beneficial chemical action is produced in the freezing of the upturned soil? And then the manures and fertilizers used are turned towards the top by the spring plowing, and made much more beneficial by the driving spring rain.

Bureau Co., Ills. J. W. BAKER.

Horticultural.

SOME NOTES ON TOMATOES.

MIKADO TOMATO.—Not only is Turner's Hybrid the same as the Mikado, but so too is General McClellan.

FARQUHAR'S FAULTLESS TOMATO was the earliest of all the varieties I grew this year, and it showed this early character very decidedly not only in ripening but in going past. But, as an outdoor summer variety, its small size and uneven form will ever render it unpopular.

THE BEST TOMATO I had this year was from Hallock & Thorpe, and it originated with Reed & Hummel of Huntington, L. I. The fruits are of good average size, round, smooth, very solid, and the core is quite soft; the skin is bright red. It is a capital bearer. Its bright color, even size and beauty altogether are not eclipsed by any other sort I have grown. Mr. Reed assures me that it is earlier by several days than any other variety, but as I did not get it till too late to include it in my trial of tomatoes, I cannot of my own experience give an opinion on its earliness.

LIVINGSTON'S BEAUTY.—What have we gained in this newcomer? Livingston's Perfection is a beauty; this, in my opinion, is no better; but, on the contrary, its Acme-tinge must weigh against its popularity.

AMONG OTHER TOMATOES we cannot renounce old Trophy, it is such a sure cropper and less apt to rot than most other sorts; and by careful selection seedsmen have much refined and evened its former appearance. A variety of it with bronze-green leaves is equally good with the typical form. Improved Queen, Essex Hybrid, Emery and many others in my trial ground have behaved quite meritoriously.

YELLOW TOMATOES.—I had Golden Queen from Rawson of Boston, and really it is one of the prettiest tomatoes I ever saw—such a clear, yellow color, and smooth, even form. The fruits are of medium size, and the crop heavy; but there is no demand for yellow tomatoes. WM. FALCONER.

POISONING CABBAGE ROOTS.—One experiment last season cost me dearly. I wanted to kill the maggots at the roots of my cabbage and cauliflower plants, and invented a remedy. (?) I made a puddle of dirt and water, mixed in a small quantity of insect powder and Paris-green, and dipped the plants in the mixture before setting. They never made the least mite of growth, but gradually dwindled away. I had literally poisoned the plants to death with the Paris-green. I had a curiosity to learn what effect Paris-green would have on the roots of plants. I had no idea that the poison would have taken effect so soon, as I had often read that Paris-green was not soluble, and that the roots of the plants would not assimilate it. I wish some one would experiment in this matter, and examine the roots with a microscope and see what the effect is.

Glendale, Mass. J. H.

[A too-large proportion of the green mixed with plaster will kill the leaves of potatoes; why not the roots as well?—EDS.]

What Others Say

SHEEP EXPERIENCES.—Mr. Davidson, of Charlton, N. Y., favors the Farm Journal with some of his sheep experiences. He began with full-blooded Merino ewes and crossed them with a Leicester ram. This was in war time, when coarse wool was the most in demand. This cross made large sheep and he sold some for $10 a head. He crossed these Leicester-Merinos with South Downs, and kept these cross-bred sheep until three years ago, when he got a Golddrop Merino ram and bred a flock of Merino-South Downs with a little of the old Leicester cross in them. He saved 16 ewe lambs of this cross and they are the best sheep he ever had. They all have white faces, are square-built, broad, short-legged and wonderfully hardy. They are grand sucklers. The lambs sell for almost as much as the all coarse-wooled, and they shear more wool. The first year the whole 16 only lacked one pound and a half of shearing seven pounds each of washed wool without any tags in it. The next year they averaged 6½ pounds. These lambs and sheep were wintered on hay alone. The wool is nearly three inches long and brings the highest price. One buck lamb was wintered and killed in the Spring, and his pelt when dry weighed 21 pounds. His notion is that the best way is to use a Merino buck on coarse-wooled ewes. In this way one gets more fleshy and compact lambs, and such will be ready for the butcher sooner than the cross the other way. Then, again, the ewes will afford more milk and the lambs will grow faster. If grain is fed to sheep it must be fed with care, or it will do more hurt than good. Sheep should be fed regularly with food which is suited to them. They will never do well on coarse or swale hay, and Timothy is not good for them. Clover is best; Red Top is good or fine, old meadow hay. They should be kept dry and at the same time they must have good air and some exercise. Mr. Davidson lets his sheep out into the yard every pleasant afternoon, and all the rest of the time keeps them in a stable where they are dry. They should have water whenever they want it, and not be made to get very thirsty and then given all they will drink. This excess of cold water chills them and is liable to bring on stomach troubles. His sheep make the best of mutton and they will weigh, alive, from 130 to 150 pounds. He recommends farmers to use large Merino bucks on the coarse-wooled ewes in order to get a more hardy and better sheep.

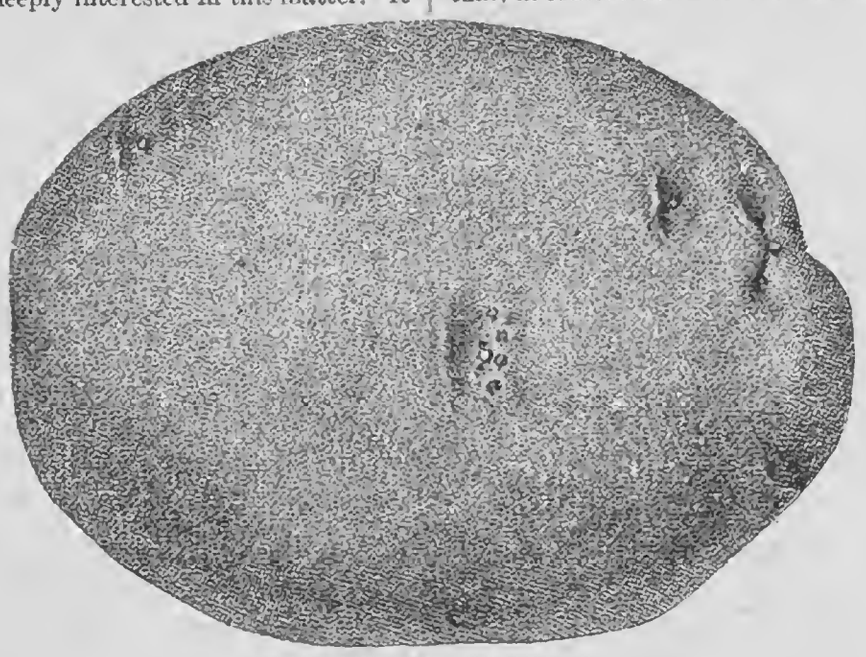
THE PUBLIC DOMAIN—ALIEN LANDLORDISM.—"The rapid appropriation of our public lands," says the President in his message, "without bona fide settlements or cultivation, and not only without intention of residence, but for the purpose of their aggregation in large holdings, in many cases in the hands of foreigners, invites the serious and immediate attention of Congress. I recommend the repeal of the pre-emption and timber culture acts, and that the homestead laws be so amended as to better secure compliance with their requirements of residence, improvement and cultivation for the period of five years from date of entry, without commutation or provision for speculative relinquishment. I also recommend the repeal of the desert land laws unless it shall be the pleasure of Congress to so amend these laws as to render them less liable to abuses." For years we have had reports on reports, and recommendation after recommendation on this subject, yet what has been done to remedy the abuse? If the fault is in Congress the people should know it, and apply a remedy themselves, by sending better men to better represent them.

CONTAGIOUS PLEURO-PNEUMONIA.—After several good words, in a rather vague sort of way in favor of the labors of the Agricultural Department, President Cleveland says:

"The existence of pleuro-pneumonia among the cattle of various States has led to burdensome and in some cases disastrous restrictions on an important branch of our commerce, threatening to affect the quantity and quality of our food supply. This is a matter of such importance and such far-reaching consequences, that I hope it will engage the serious attention of Congress, to the end that such a remedy may be applied as the limits of a constitutional delegation of power to the General Government will permit." Yes, and let us have prompt action on the matter.

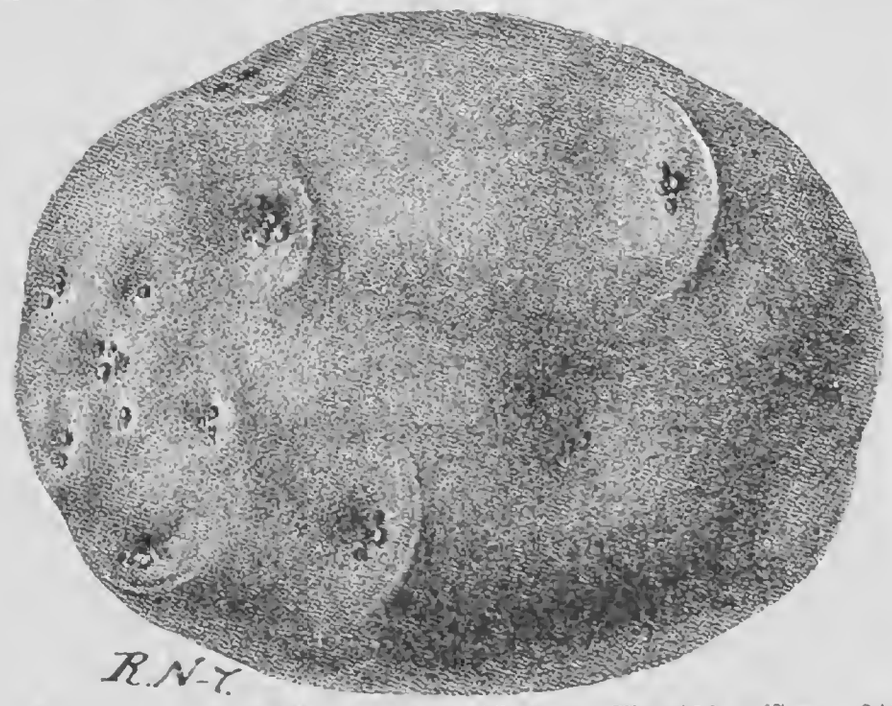
INTER-STATE RAILROAD REGULATION.—"By a recent decision of the Supreme Court of the United States it has been adjudged that the laws of the several States are inoperative to regulate rates of transportation upon railroads, if such regulation interferes with the rate of carriage from one State into another. This important field of control and regulation having been thus left entirely unoccupied, the expediency of Federal action upon the subject is worthy of consideration." So says the President's message. The whole country, every industry in it, demands better regulation of transportation facilities. Congress cannot be too prompt in acting in this line.

THE SILVER QUESTION.—In Secretary Manning's report the subject given greatest prominence in place and space regards the silver question—"the opening of the mints of the governments of the United States of America and of the leading European States to the free coinage of both gold and silver into unlimited legal tender money at a ratio fixed by international agreement." The nations of the world are deeply interested in this matter. It greatly affects international trade and domestic industry. One of the chief causes of the recent low prices of wheat in this and other countries is attributed to the depreciation in the value of silver. Silver is the chief—nearly the only—currency in British India. Hindoo ryots, or farmers, sell their wheat at a certain figure—in silver. They know and care nothing about the rise or fall in the value of silver in the world at large—it is always worth the same among their neighbors. The European dealers—almost exclusively English—buy silver in London or elsewhere at its greatly decreased value, carry it to India and pay it out for wheat at the "same old figures," and thus get wheat from 20 to 25 per cent. cheaper than formerly. They can therefore sell it much cheaper in the European markets, and, of course, the price at which India wheat is offered influences the prices offered for wheat from other countries. Of course, this can't last. Even the ignorant Hindoo ryots will, in time, learn that the price of silver varies as compared with gold; or a fixed ratio between the two will be established by international agreement. This is advocated at great length in the report. Anyhow the exportable surplus of India wheat is limited, and the recent rise in the price of wheat here and elsewhere probably shows that the end of the surplus from the last crop has already been reached.



R.N-Y.

PECAN POTATO. From Nature. Fig. 458. (See p. 840.)



R.N-Y.

CHARTER OAK POTATO. From Nature. Fig. 459. (See p. 840.)

THE WAY TO SUCCESS.—Twenty clerks in a store, 20 hands in a printing office, 20 apprentices in a shipyard, 20 young men in a village—all want to get on in the world, and expect to do so, says the Industrial Gazette. One of the clerks will become a partner and make a fortune; one of the compositors will own a newspaper and become an influential citizen; one of the apprentices will become a master builder; one of the villagers will get a handsome farm and live like a patriarch—but which one is the lucky individual? There is no luck about it. The thing is almost as certain as the rule of three. The young fellow who will distance his competitors is he who will master his business, who preserves his integrity, who lives cleanly and purely, who devotes his leisure to the acquisition of knowledge, who gains friends by deserving them, and who saves his spare money. There are some ways to fortune shorter than this old dusty highway; but the staunch men of the community, the men who achieve something really worth having—good fortune, good name and serene old age—all go on this road.

CANADIAN CATTLE QUARANTINE.—Dr. McEachran, Dominion veterinary inspector, has made a recommendation to the Government that, in consideration of the fact that pleuro-pneumonia has existed for several years in Chicago, the distributing point of breeding stock for the West and Northwest, quarantine should be established there. He has also recommended the establishment of a ninety days' quarantine south of Milk Rock in Alberta, Oak Lake in Saskatchewan and at Emerson for Manitoba, and that at these points only cattle be allowed to enter the Northwest. The Doctor left on Saturday for England, and while there will confer with the veterinary officers of the Privy Council on behalf of the Dominion Government, particularly with regard to quarantine matters. He expresses the belief that pleuro-pneumonia has been completely stamped out at Levis, but the cattle will be detained several months longer as a precautionary measure.

SPICE.

THE Montreal (Canada) Horticultural Society recommends for profit the following apples for the Province of Quebec: Fameuse and Wealthy for Winter; Duchess of Oldenburg and Yellow Transparent for Summer; Alexander for Fall. The five best for family use, named in the order of their ripening, are: Yellow Transparent, Duchess of Oldenburg, Lawrence (Fall), Fameuse (early Winter), Golden Russet (late Winter).....

MR. W. C. BARRY says, in the Albany Cultivator, that in his estimation, the comparatively new pear Superfin cannot be surpassed for flavor. It is large and handsome with smooth and glossy skin and juicy, vinous, rich flesh. The tree grows well and bears a moderate crop. The pears are too delicate to ship..

MR. BARRY praises the Pitmaston Duchess as one of the most promising among newer pears. Large, handsome and of excellent quality. The tree is not a great bearer.....

DR. LUCY M. HALL, in the Christian Union, asks us to imagine a woman with a corsage which renders a full inspiration impossible, sleeves so tight that the arms ache from pressure, 10 to 20 pounds of skirts hanging from her hips and twisting about her ankles, as many pounds of cloak suspended from her shoulders, and narrow-toed, high-heeled shoes on her feet, trying to take a six or ten mile walk! Surely Nature made a wise provision for the human race when she made women hard to kill, otherwise the world would soon be depopulated for lack of mothers.....

WASHINGTON'S last message to Congress (1796) has these words. They must not be forgotten: "It will not be doubted that with reference to either individual or national welfare, agriculture is of primary importance. In proportion as nations advance in population and other circumstances of maturity, this truth becomes more apparent and renders the cultivation of the soil more and more an object of public patronage. Institutions for promoting it grow up, supported by the public purse, and to what object can it be dedicated with greater propriety?".....

"AT all events," said a young doctor as he heard of another one of his patients' death, "I can take life easy if I am poor."—Life.....

MR. BEECHER says that the Anarchist, the Socialist, and the dynamiter are as much enemies to our state of society as in the natural world are the wolves, the bears and the hyenas. In extirpating them there is no more harm than there would be in extirpating adders, rattlesnakes and copperheads.....

The new Jessie is spoken of by Matthew Crawford and others as the most promising strawberry they have seen. We shall report next season.....

THE next number of the RURAL NEW-YORKER will be the Index Number—the last of the year. Our subscribers are respectfully asked to renew early.....

THE honest labor movement of the country has an objectionable weight about its neck in the shape of that class of "labor agitators" who do not labor when they can avoid it, says the Kansas Industrialist.....

IDLENESS and ignorance are the bane of a free country.....

THE Breeders' Gazette says that a grade bull is better than a scrub, but he is not as good as a pure-bred, and if a little of a good thing is desirable why is not as much more as possible of a good thing more desirable? .....

ORCHARD AND GARDEN reminds its readers that the amateur can get considerable enjoyment from a few fig trees in this climate. They must be raised in tubs or boxes which are to be kept in the cellar or under similar shelter in the Winter and out-of-doors in the Summer.....

THE Bredeers' Gazette believes that the $100,000 or more expended in the purchase and distribution of seeds by the Washington Seed Store serve little good purpose beyond enabling Congressmen to delude their farmer constituents with the idea that their interests are being looked after, when, in point of fact, their interests are being shamefully neglected.....

FARMERS can abolish this disgraceful Washington seeds business if they will.....

ORCHARD and GARDEN does not know of anything more suitable for a shade tree in the yard than the stately pecan. It combines shade, beauty and utility.....

T. V. MUNSON says that a pecan tree 15 years old should produce from three to five bushels of nuts, making an income per tree of $15. to $20 00.....

MR. LOVETT says that the Lucretia Dewberry is best (because it is the simplest way) grown as a trailer. But, then, he says, "a mulch of clean straw should be provided in the Spring." But this is rather expensive business.....

You haven't room for a fruit tree in your front yard? Then can't you find a place for a grape-vine?.....

THE whole country, says Harper's, rose in a cry of consternation and indignation at the crime of European Anarchists upon American soil. It was a crime at once monstrous and causeless; it struck at liberty and justice and order. It was perpetrated by the most worthless set of men who are pests everywhere and whose presence in this country American generosity has tolerated. In this country and under our institutions the crime was unpardonable .....

DR. BEAULIEU, in the *Economiste Francais*, gives the following as the amount of tobacco consumed by each 1,000 people in Europe, each year: In Spain, 110 pounds; Italy, 128; Great Britain, 138; Prussia, 182; Hungary, 207; France, 210; Denmark, 284; Norway, 229; Austria, 273; Germany, 336; Holland, 448; Belgium, 560.....

A NEW TREATMENT FOR CONSUMPTION which is attracting the attention of physicians is the injection of remedies directly into the lungs by the hypodermic syringe, the needle

of which is passed through the walls of the chest. Some very encouraging cases are reported in which the improvement is so great as to justify one in speaking of them as cures. Carbolized iodine has produced the best results.....

Everywhere.

RURAL SPECIAL REPORTS.

Illinois.

CHICAGO, Cook Co., Dec. 7.—The northwest still continues dry; in fact the areas where the ground is thoroughly saturated with moisture are the exception. It might be fairly said that dry weather extends west as far as the Pacific slope. For, up to the first of December, the rainfall in California had not yet commenced. Dry weather also is reported in Washington Territory and Oregon, and when we turn our faces eastward, we hear of a scarcity of water for stock purposes everywhere. So far the snowfall has also been light, and the ground in the winter wheat belt, north of the Ohio River and extending up within 200 miles of this city, is covered with from three to five inches of snow. Taking the country as a whole, I call it, to-day, just about as dry as it was in August and September. The absence of snow and rain, with the exception of Nebraska, has enabled the farmers to secure their corn crop in excellent condition, and new corn to-day is unusually dry, in fact, as dry as in midsummer. Its movement, however, is disappointingly small. This probably arises very largely from the inter-State demand for corn which is being absorbed at so many interior points, for home consumption, at prices much better than are offered to ship to the seaboard. This is a very strong point of the shortage of corn. There has been as yet very little new corn cribbed at railroad stations and the amount of old corn in crib of the crop of 1885 has melted away perceptibly during the last sixty days. In the spring wheat belt the severe weather which has prevailed during the last two weeks has cut off receipts considerably, but the roads are good and the weather, comparatively speaking, mild at present, and with the improvement in prices, free receipts are looked for again. The hog crop continues to come along very freely, and the opinion still prevails that we shall have our largest receipts of hogs on the winter packing during December. The high price and scarcity of corn and the low price of hogs are some of the reasons which are causing farmers to send them in so freely at present. The hog crop is generally healthy, and disease seems to be confined this year almost exclusively to parts in Ohio and Indiana. N. W.

Kansas.

WHITE CITY, Morris Co., November 25.—The worst season for five years, taking into consideration the relative condition of crops and prices. Wheat a failure; oats an average; corn a half crop or less. This is mainly a grain-growing country, but the live stock interest is advancing quite rapidly. Fruit and vegetables will do well when properly cared for, but they are raised to supply the local demand only, as yet. Prices: corn, 30 cents; oats, 28 cents; wheat, 48 cents; hogs, $3.30. E. B.

Michigan.

MARQUETTE, Marquette Co., December 1.—We had a very dry Summer here. October was very warm but about the middle of November we had some snow, and logging began in the camps. All crops were an average. Hay at the mines from $15 to $20 per ton; potatoes 45 to 60 cents per bushel; oats, 45 cents. W. F. MCC.

New York.

BORODINO, Onondaga Co., November 30.—In this locality crops have been good the past season, especially oats and barley. Apples are an exception to the general rule, although we have enough for home use. As this was the bearing year with us the trees blossomed full but fruit failed to set well. A few orchards gave some surplus for shipment. Prices range as follows: Wheat, 85 cents; barley, 55 cents; oats, 35 cents; corn, 60 cents; apples, 65 cents, and potatoes, 35 cents per bushel. Some have good crops of seed from the large kind of red clover, while the small kind failed entirely on account of a midge working in the head prior to its blossoming. G. M. D.

UTICA, Oneida County, December 6.—The cheese market to-day, the last meeting of the Board this year, had a good attendance, but sales were light. All the factories, however, will close out this week. Transactions were 568 boxes at 10⅛ cents; 125 boxes at 11 cents; 136 boxes at 11⅛ cents; 110 boxes at 11¾ cents; 386 boxes on commission. Total, 1,325 boxes, ruling at 10⅛ cents. Sales at 11 cents and up, full cream. No market at this time last year. Little Falls this week 1,939 boxes, ruling at 11 cents. The butter market is dull for all but very best grades. Little Falls sold 52 packages farm dairy at 21 cents. Farm dairy sells here for 21 to 25 cents. Best grades always wanted. No market for hops. R. L.

THE FARMER'S CLUB

ANSWERS TO CORRESPONDENTS.

[Every query must be accompanied by the name and address of the writer to insure attention. Before asking a question, please see if it is not answered in our advertising columns. Ask only a few questions at one time. Put questions on a separate piece of paper.

STRAW AS MANURE: DRAFTS OF PLOWS.

G. S. Vermontville, Mich.—1. I recently scattered a stack of straw and plowed it under. My neighbors laughed at me and said that if after having scattered it I had set it on fire the ashes would have been of more value than the whole straw: were they right, and what is the manurial value of straw? 2. Is there much difference in the draft of plows, and if so, how much, and how can the difference be ascertained?

ANS.—1. A part of anything cannot be equal to the whole, so the ashes of your straw cannot be equal to the whole straw. In the ashes, if none had been lost by blowing away, there would have been only the potash, phosphoric acid and other mineral elements; the nitrogen as well as the carbon would have been driven off; while by applying the straw and plowing in you will retain all these in the soil, and, besides this, the rotting straw will have a beneficial effect mechanically, and especially so if the soil is at all clayey. It may be true that the ashes will have a more immediate effect and may show better results on the crop this Fall, and possibly on the first crop; but in the end we are quite sure the plowing in was the wiser course. Had you fitted the land, sowed the crop and after that applied the straw broadcast and thinly on the surface, it would have been better yet. It would then have acted as a mulch in protecting against the injurious effects of Winter, would have also aided in conserving moisture during next Summer's drought, and, as it rotted, would have given the soil all its fertilizing elements. We have always found this the most desirable method of using straw next to using it in the stables. A ton of wheat straw contains, according to Wolff's tables, about 92.2 pounds of ashes, of which about 12.6 pounds are potash, 4.4 pounds phosphoric acid and 5.4 pounds lime. Besides these elements of plant food, there are about 9.6 pounds of nitrogen, so that if we give the valuations adopted by the stations, the manurial value would be about $2.67, to say nothing of any component aside from its nitrogen, phosphoric acid and potash. But every farmer should remember that a ton of straw also contains 47 pounds of protein, 36 pounds of fat and over 800 pounds of carbohydrates, and that by a proper system of feeding this, in connection with foods rich in protein or nitrogenous matter, such as clover hay, bran and oil meal, and also with some succulent food, a good profit can be made, and nearly all of its plant food will be left in the manure as well as that of the other foods added, so that doubtless the best use to make of straw is to feed it and give the resulting manure to the land. 2. There is considerable difference in the power required to draw the various forms of plows. This depends upon the shape of the mold-boards, and the hardness of the material of which they are made and also, to some extent, on how much of the weight of the plow, the pressure in turning, is carried upon the wheels. As a rule, those plows which most break up and pulverize the furrow slice on its passage from its original position to its final reversal, will draw harder than those which turn without much disturbance; but this difference is more than made up by the quicker and easier fitting of the land after plowing, so that the easiest-drawing plow is not always the most desirable. The difference can only be ascertained with accuracy by the use of an instrument called a dynamometer. This has a heavy spring with graduated dials and index, and is sold by dealers in mathematical and engineering instruments.

AN ICE-HOUSE.

G. M. C., Caldwell, N. J.—In building an ice-house, how wide should the air-space be? How should the roof be made? In a properly constructed building is any covering needed over the ice?

ANS.—In answer to the above inquiries here is a description of an entirely successful ice-house. The building is 14x22 feet, studding 18 feet, two by eight-inch stuff. On each side of the studding paper is nailed, then a thickness of matched flooring, another thickness of paper and again matched flooring. So there are four thicknesses of paper and four of boards between the ice and the outside. The roof is nearly flat and tinned on matched boards. The joists are put on the studs two feet below the roof, and there is a ceiling of inch boards beneath the joists. The space between the ceiling and roof is filled with sawdust. There is a cold-storage room between the body of ice and the floor. To sustain the great weight, two beams well studded beneath them, run lengthwise of the house, and cross joists on these are placed about 18 inches apart. The beams slant enough to give pitch to the floor on which the ice rests—the floor being made of galvanized iron well soldered, so that it does not leak. Above the iron are inch boards on which the cakes of ice rest, and covering about each alternate six inches of the floor, the theory being to have only enough of the iron covered to protect it from being bruised by the ice, leaving as much as it is possible with only the thickness of the iron between the ice and the air of the room beneath it. The floor of the cold store room is double and made air-tight. The room is 6½ feet between the joists and floor. When the door of the cold store room is closed the temperature of the room is at 36 degrees Fahrenheit. If such a cold store is the sole object, then if the door of the ice-house is not opened all Summer, the ice needs no covering of saw-dust. If, on the other hand, it is necessary to occasionally open the doors to take out ice for family use or for butter-making purposes, then a covering a foot deep of sawdust or fine shavings should be put on, or the ice will waste fast. The air of such a cold store-room is dry; so free from moisture that a match can be lighted by scratching it against the walls. Fresh meat kept well in it three weeks, last August. If no cold store-room is wanted, the floor should be slanted and made as strong as above—for there must be a drain from the ice and the floor must be strong, so that no movement of it takes place. A word of caution here in regard to having solid ice: we know of a partial failure in such an ice-house because it was thought that as no ice was wanted to use direct, a porous quality of ice would do as well. But it did not, as the house was empty early in September, when one with pure, solid ice lasted till Winter came again.

FEEDING VALUES OF LINSEED AND COTTON-SEED MEAL AND RYE AND WHEAT BRAN.

J. B. W., Round Lake, N. Y.—1. What are the feeding and manurial values of linseed-oil meal? 2. What is the same of cotton-seed meal? 3. Is rye bran as good as wheat bran as a feed for milch cows?

ANS.—1. Taking the average analysis as given by Prof. Jenkins, and figuring the feeding value of protein, fat and the carbohydrates the same as used by the Germans, would give the feeding value of new-process oil meal at about $35 per ton. And supposing that four-fifths of the potash, phosphates and nitrogen is left by the animal in the manure (and more than this proportion is actually voided in the solid and liquid excrements), and these be returned to the fields, and that we estimate them as worth no more than the same amount of each would cost if purchased in any commercial manure, the manurial value of a ton would be $21.88. This meal can now be bought at the factories at about $21 per ton by the car-load in bulk. 2. Cotton-seed meal, figured on the same basis, would be worth for feeding purposes about $30 per ton, and its manurial value would be about $25 per ton. These figures would seem to indicate that cotton-seed meal would be much the more desirable food to purchase, but it must not be forgotten that while the new-process oil meal contains only about two per cent. or less of free oils, the cotton-seed meal contains nearly 13 per cent., and that this is given in the feeding tables as equal to 32 per cent. of carbohydrates. These values are estimated chemically, and in practice are found to be very erroneous, especially so when these products are fed in large quantities, because no animal can eat and digest so large a quantity of free oil, and this large percentage is actually injurious. Besides this, there is in the cotton-seed meal a principle that in many cases has produced injurious effects upon the animals which are fed largely on it. These by-products of the great oil industries of this country are both very valuable, both as food furnishers and as giving to the resulting manure a very high value, and both of them should be entirely consumed by American farmers instead of being largely exported, as is the case at present. But we must advise farmers of the North to be very careful in feeding cotton-seed meal until the animals have become accustomed to its use, and even at a higher relative price new-process linseed meal is preferable, because safer, and it can be fed in larger quantities, and this is especially desirable in order to make all the manure possible where the salable products, such as butter, wool or milk, will buy and pay for the food. 3. Rye bran contains in every 100 pounds of protein, or milk, muscle and blood-forming elements, 13.4 pounds; of carbohydrates, or butter, fat and heat-forming elements, 73 pounds, including the fat when reduced to its equivalent in these, so that it is worth, on the same basis as the above, $1.18 per hundred pounds for feeding, and the resulting manure contains plant food worth 53 cents. One hundred pounds of wheat bran contains of protein 16.5 pounds, of the carbohydrates, including the value of the free fat, 71 pounds, and these are worth for feeding $1.30. The resulting manure contains 76 cents' worth of plant food, so that we see that the wheat bran is worth for both purposes 35 cents per 100 pounds the most. But as the nutritive ration of the wheat bran is as 1:43, or one of protein to four and three-tenths of carbohydrates, while the rye bran is as 1:6, nearly, for milk production, the wheat bran has a still greater value.

THRUSH OR "FOOT-EVIL" IN A HORSE.

D. A. D., Collinsburg, La.—What is the cause of foot-evil in a horse, and is there any way to prevent the hoof from coming off?

ANS.—By "foot-evil" we suppose you refer to the inflammation of, and fœtid discharge from the secreting membrane of the frog, a disease better known as *thrush*, but occasionally miscalled "foot-evil." This disease usually begins in the cleft of the frog and may extend to the whole organ if not checked. The most common cause of thrush is filth and moisture, as standing in any wet, dirty stable, or yard, on dung and urine, or running in a low very wet pasture. More commonly the disease appears only in the hind feet from standing in the collected dung and urine of filthy stables; but animals in loose boxes, yards, or fields may have any foot affected. Dried mud or gravel in the cleft of the frog causes irritation and inflammation; also injuries to the frog, and excessive paring which renders the frog especially liable to bruises. Finally, anything that causes contraction of the heels causes undue pressure on the parts within, in this respect acting as slight continued bruises which cause inflammation, soon to be followed by the characteristic discharge. Like most other diseases, some animals are much more susceptible than others, while occasionally a horse appears to be almost predisposed to the disease. The hoof can readily be prevented from coming off by treating the disease in the earlier stage, and thus arresting its growth before it has proceeded so far as to cause sloughing of the hoof. The treatment is very simple, and a thrush can usually be readily cured by cleanliness and the local application of calomel or other dry caustic. Carefully clean the foot and pare away all detached diseased pieces of horn or frog. The caustic is then best applied by being placed upon pledgets of tow or lint and pressed in upon the diseased tissues. After the discharges cease dress with the best pine tar until perfectly healed. During, and after, treatment the animal must be kept where the feet will be *clean* and *dry*. If the stable is such that the horse must stand in his droppings, a leather boot should be worn during treatment when in the stable and removed when the animal is taken out. A clean, dry pasture is an excellent place for a speedy recovery.

DISTEMPER IN A HORSE.

C. W. W. (Address mislaid).—What is "distemper" in a horse, and how can a stable in which an affected animal stood be so disinfected that young colts will not catch the disease there.

ANSWERED BY F. L. KILBORNE.

"Distemper" is an indefinite general term popularly used to designate either influenza or strangles, more commonly the former, or occasionally simple catarrh or other nasal discharges. A very effective method, which is at once cheap, safe and of easy application, for the disinfection of such buildings is to remove all stock, close the doors and windows so as to make the place as tight as possible and burn a sufficient quantity of sulphur to fill the whole building with sulphur fumes. Leave the building closed for 24 hours. In addition to the above, all wood-work and utensils that have been in immediate contact with the diseased animals should be thoroughly cleaned and may be washed with boiling water, a solution of chloride of lime, or a two-per-cent. solution of sulphuric acid. Solutions of chloride of zinc, sulphate of copper and other disinfectants are equally effective, but more expensive while-washing with freshly slaked quick lime is also an excellent, cheap disinfectant and deodorizer, and may be profitably used where there is no objection to the white color left by the white-wash. After such disinfection, if the work is thoroughly performed, the colts may safely be admitted to the stable. But strangles and especially in-

fluenza is so readily contracted during an outbreak of the disease, that if the colts should have either disease after entering the stable, it would not necessarily follow that they received the disease from the building. They might easily contract the disease from other unavoidable sources even if all possible precautions were taken to prevent it. Fortunately either disease with simple treatment and proper care—and more depends upon the care than upon the medicinal treatment—usually runs a favorable course, and is not to be especially dreaded.

LOWEST COST OF MILK.

A. J. H., Dryden, N. Y.—What is the lowest price at which milk can be sold and a profit made in making it?

ANS.—So much depends upon the individual animal used and the conditions under which she is kept that it is very difficult to give a correct answer. Many experiments have been made in which the cost has ranged from three-fourths of a cent to 2¼ cents per quart. A very careful test was made by Professor Roberts at Cornell University in March, 1884, on three cows in which the milk cost 1½ cent per quart. In this the food consumed by the three cows consisted of 41 pounds of clover hay, 14 pounds of corn-stalks, 15 pounds of cotton-seed meal, 14 pounds of corn meal and 14 pounds of malt sprouts, and the prices were given as $8 for the hay, $4 for corn-stalks, $26 for meal and $14 for the malt sprouts, which were at least extreme market rates, and no allowance was made for the value of the manure. We think that with an addition of some green food to this ration and a proper allowance for the value of the manure which was made, and which Professor Roberts shows to have been worth at least 50 cents per day after deducting 20 per cent. of manurial elements as the amount retained in its passage through the cows, that the actual cost of the milk would have been reduced below three-fourths of a cent per pound. Of course, to do this liberal feeding must be adopted for the reason that the milk is a surplus product, and no matter how meagrely the cow is fed she must first retain from the food sufficient to maintain her flesh and keep it warm.

DROPSICAL SWELLING IN MARE'S LEG.

H. W., Minaville, N. Y.—The left hind leg of a mare swells from the knee down—most in the ankle joint. The swelling disappears when she is worked or driven, but reappears when she stands for a few days. There is some swelling also under the stomach, especially near the teats. She had "scratches" first about a year ago; but the swelling has stuck to her since; otherwise she appears in good health; what should be done for her?

ANS.—The swellings appear to be essentially anasarcous or dropsical, probably due to unhealthy dietetic conditions. Look over the feed, care and stable to make sure that each is as it should be. Faults in either may be the cause of the difficulty. Give daily exercise—a short drive or a run in a yard—when not at work, and stable in a loose box if convenient. Night and morning give one ounce each Epsom salts and powdered gentian and two drams each niter and chlorite of potash. If the bowels are constipated or irregular add one dram Barbadoes aloes until relieved. Report condition after one month.

Miscellaneous.

J. H. W., Providence, R. I.—Our carriage-horse is troubled with an eruption mostly on the neck and fore-shoulder. It is in the shape of small bunches and is very annoying to him, as he rubs and bites the places through the blanket most of the time. When curried white scales come off. The trouble began two months ago, but is now increasing. The animal is otherwise well; what is the matter?

ANS.—The difficulty may be due to disease of the skin, caused by faulty nutrition, or to lack of grooming and proper care. Have the animal groomed thoroughly for an hour daily, and also give a short drive or run in a yard. Twice daily give one-half ounce each powdered gentian, ginger and sodium carbonate, with one dram aloes. Drop the aloes if the bowels become too loose.

A. K. F., Chicago, Nebraska.—Which is the best way to protect grape-vines during the Winter in Northern Nebraska?

ANS.—In Northern Nebraska grapes only require protection from sun and wind during Winters. For this purpose they may be laid upon the ground and covered with any coarse litter, such as grass, straw or corn-stalks. If danger is apprehended from field mice, the better way may be to cover lightly with earth. This, however, is to be avoided unless the soil is light and consequently not likely to hold an excess of moisture, which would be liable to injure the buds.

A. L. L., Horse Shoe Bend, Idaho—What sort of a plum is Kelsey's Japan? We have a plum here which bears heavily a yellow prune-shaped fruit, which is a good keeper, often lasting till Christmas, shrinking only a little. The pits are quite free; the tree is a very moderate grower. From this description can the RURAL tell the variety?

ANS.—No; from this description we can not name the plum. We are inclined to think that Kelsey's Japan is a first-rate acquisition. Still, we do not speak from experience. For illustration and history see the R. N.-Y. of Nov. 20, last.

H. E. A., Alton, Ill.—Rugby is a town in Morgan County, Northeastern Tennessee among the Cumberland Mountains, about 100 miles north of Chatanooga. It was founded as an English colony over a dozen years ago by Thomas Hughes, author of "Tom Brown at Rugby," a celebrated novel, and other works, and was called after the market town of Rugby, Warwickshire, England, the site of the celebrated grammar school over which the famous Dr. Arnold presided. The colony has been several times on the point of failing; but it is still in existence, and by last accounts was doing pretty well.

B. W. O., Wakefield, Mass.—Where can the Sanitas Disinfectant and other products of Sanitas be obtained?

ANS.—Of the Sanitas Co., 636 West 55th Street, New York, or of local druggist.

A. M. S., Easton, N. Y.—The little book recently noticed in the RURAL entitled "The Making of Pictures," will give one a fair idea of art. It is published by the Inter-State Publishing Co., Boston, Mass.

H. W. C., Bradford Co., Pa.—Who is a reliable honey dealer?

ANS.—S. H. and E. H. Frost, 100 Park Place, New York.

Subscriber.—The fare from New York to San Francisco by sea is $80 for first-class and $60 for steerage.

F. D. S., Ithaca, N. Y.—What is the rating of A. J. Holman & Co., publishers of bibles, Philadelphia, Pa?

ANS.—We offer their bibles as premiums to our agents and believe the firm to be altogether trustworthy, as well as reasonable in their prices.

DISCUSSION.

BOARDING FARM HANDS.

J. B., NEWMARKET, Ont., Canada.—I was surprised and vexed to see the conclusion of Prof. E. M. Shelton's letter on Farm Economy, in the Thanksgiving issue of the RURAL, where he says: "The house of the farmer who boards his own help can never be a model farm home. I think of no spectacle in connection with the farm quite as unlovely and degrading to all concerned as that presented by the farmer's wife and daughters whose lives are largely given over to the abject drudgery of cooking and washing and bed-making for hired men."

I was vexed because it shows a tendency to widen instead of narrowing the gap between the upper and the lower classes, between the employer and the employed. In most, if not all, new countries everybody, so long as he proves himself honest and respectable, is as good as his neighbor. In England there is a wide gap between the employer and the working-man; now is this condition of society a healthy state of things? Did God ever intend it to be so? Is it right? Is it acting the part of a Christian for a man not to associate with another man because he works on a farm, or because he wears corduroy pants, or because he is not ashamed to carry a pail of milk or a bushel of eggs through the streets? I believe that all honest work is honorable. Then I ask why, so long as a man conducts himself in an honest and respectable manner, is it more "unlovely and degrading" for farmers' wives and daughters to cook and wash for him than for the other members of the family, or for occasional visitors? I am an Englishman, but have worked two years in Canada, and I believe that laborers here are generally superior to those of the Old Country, because the men are treated on an equality both by the farmer and his wife. It is only natural when a farmer is kind to his man, that the latter should do his best for his master. Again, is it not wiser and more economical to board the farm hands? If anything goes wrong, for instance if anything should happen to the horses or cattle either early in the morning or late at night, the men are close at hand and ready to help. Is it not cheaper to pay $150 and board a man for a year, than to pay $280 and let him board himself, or pay for board elsewhere, especially as the farmer has the great advantage of having most of his provisions at first cost—the cost of production.

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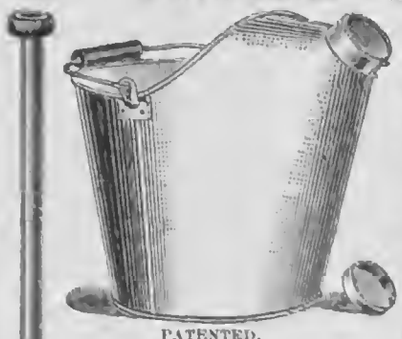

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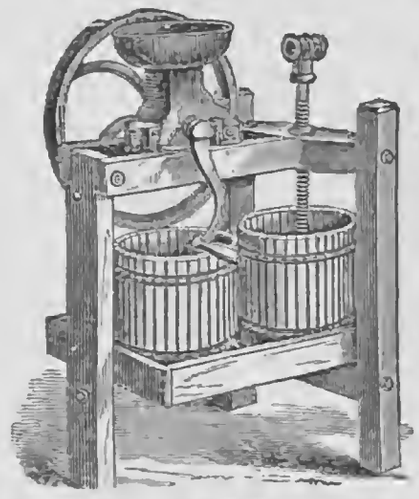

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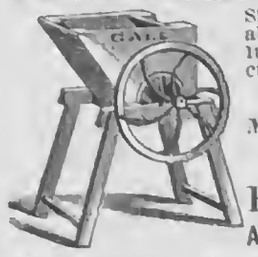

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THE
RURAL NEW-YORKER.
A National Journal for Country and Suburban Homes.

Conducted by
ELBERT S. CARMAN.

Address
THE RURAL NEW-YORKER,
No. 34 PARK ROW, New York.

SATURDAY, DECEMBER 18, 1886.

NOTICE.

ALL subscribers who desire the RURAL's Seed Distribution must APPLY for it. Hitherto we have not required those who subscribe for the RURAL in connection with other papers to make an application. This has caused confusion. It is only necessary to say "SEND SEEDS."

AND so we are blessed with the opportunity of once more wishing our readers a Merry Christmas. And we wish it right heartily.

AND again the year is nearing its close. How the years roll by! Many, very many of our readers are growing old. And the RURAL is growing old too, and its editors along with it. But we hope to live another year and to give our best efforts to the RURAL, and again next year, as now, to wish our friends a Merry, Merry Christmas!

THE next number of the R.N.-Y. (Dec. 25) will be the Index Number, the last of the year. The average index of weekly papers is of little value to anybody. The reason is probably that a carefully prepared index involves not only an immense amount of patient labor, but it must be prepared by those who are skilled in the work. The real value of a comprehensive, accurate index to a farm journal is known only to those progressive farmers who are liable at any time to desire specific information on any of the important farm questions which may arise and which need immediate answers.

IT still seems to be an open question whether it is more profitable to grow a single ear or two ears or more of corn to a stalk. It is a question that ought to be easily answered. If the single ear gives a greater weight of grain than two or more ears it is unquestionably the best corn to raise. If it gives the *same* amount of grain, it is still the best corn to grow, for it takes about twice as much time to husk and shell two ears as it does one. For 10 years we have raised both the so-called Blount's Prolific and the Chester County Mammoth. The former will average over two ears to a stalk; the latter less than one ear. And yet the average yield of the Chester in shelled corn is, year after year, greater than the other.

THERE is an immense field for the improvement of nuts by crossing. Thus the Japan and American chestnuts could very readily be crossed, the male and female flowers being distinct on the same plant (monœcious) as in Cupuliferæ, or the Oak Family in general. It would only be necessary to shake the ripe male flowers (catkins) of the one over the little cone-like females of the others, and then cover them with light, strong paper for a few days. It would be just as easy as to cross different varieties of corn. We should have attempted the cross last Summer, except that our only specimen of Japan Chestnut bore only sterile flowers. Of course, in order to originate the best crossbreeds it would be judicious to select the best of the Japan and American chestnuts for parents. This the RURAL can not do, as we have not discovered any superior American Chestnuts about us, and our Japan seedlings are as yet too young to bear. But some of our nurserymen or readers may act upon the suggestion.

THE Hon. A. H. Parker, of New York, has introduced a bill into Congress to increase the tax on oleomargarine from two to six cents per pound, and also wishes to strike out from the present enactment the words, "and all oleomargarine intended for future consumption which contains ingredients adjudged * * * to be deleterious to public health shall be forfeited to the United States." Dairymen are constantly complaining that the present tax is insufficient, and that the above clause in the bill lately passed gives an unfair advantage to the dealers in oleo, since it intimates that the government stamp is evidence that there are no deleterious ingredients in the concoction; whereas, as a matter of fact, the government officials have neither the knowledge, time, nor facilities for examining the fats used at the various factories. It might have been better to wait a little longer before seeking any amendments to the present law, so as to allow time enough to learn more thoroughly its faults and shortcomings, and the defects in its enforcement. The oleo men, however, were preparing to strike; and it may be as well that the dairymen have got in the first blow.

THE following articles will appear early in the New Year:

MANURE *versus* DROUGHT.
By Dr. W. I. Chamberlain. President of the Iowa Ag. College.

BEAUTIFUL TREES AND SHRUBS NOT WELL KNOWN AT THE WEST.
By Prof. J. L. Budd, of the Iowa Agricultural College.

EXPERIENCE IN CORN GROWING.
By Prof. G. E. Morrow, of the University of Illinois.

LAWES & GILBERT'S EXPERIMENTS.
By Joseph Harris, of Rochester, N. Y. These articles will continue through the entire year.

THE OUTLOOK FOR STRAWBERRY CULTURE.
By President Parker Earle, of Ills.

ROSE CULTURE IN THE SOUTHERN STATES.
By President P. J. Berckmans, of Georgia.

SORGHUM HALAPENSE AND ITS MANY ALIASES.
By Hon. Henry W. Ravenel, of South Carolina.

MORE QUITE EARLY AND LATE PEARS.
By Gen. W. H. Noble, of Connecticut.

THE FARM LABOR PROBLEM.
By Prof. F. A. Gulley, of the Mississippi Agricultural College.

TOBACCO RAISING IN NORTH CAROLINA.
By M. B. Prince.

NOTES FROM ROTHAMSTED.
By Sir J. B. Lawes, of England.

FRUIT NOTES.
Pres. P. Barry, of New York.

DAIRY NOTES.
By Professor J. P. Sheldon, of England.

GREENHOUSE STRUCTURES.
By Peter Henderson, of New York.

THE ABOLITION OF THE WASHINGTON SEED DISTRIBUTION.
By the R. N.-Y. and several contributors.

THE WASHINGTON SEED ABOMINATION.

WE propose to do all in our power during 1887 to create a feeling inimical to the continuance of the Washington Seed Abomination. It is assumed that the money which it costs—let us say one hundred and fifty thousand dollars yearly—is appropriated and spent for the benefit of farmers and the promotion of the agricultural interests of the country. We have never heard of or talked to an intelligent farmer who did not regard it as an injudicious expenditure, or else simply as a politician's device to further his own selfish ends.

Who pays this money? Every tax payer. But those who do *not* cultivate land can receive no benefit; while, if those who do cultivate land regard is as a profligate waste of money, there seems no reason why this appropriation should continue, or, if continued, why it should not be used for the *benefit* of farmers in one way or another.

One hundred and fifty thousand dollars would amply support a Central National Experiment Station for three years, if good and efficient officers were appointed to conduct it, and from such a station we might hope for adequate results if the farmers of the country were permitted to select the officers. But anything of this kind if made a political machine, will grind out its scanty products at a cost far beyond their value. There are many Congressmen who know full well that this seed business is little short of an absolute swindle upon the people. There are many other Congressman who favor it solely as a method of gaining popularity or votes, and it is these alone who are responsible for the maintenance of the Washington Seed Store. But the farmers can change this if they will, and it shall be our endeavor to bring about this change.

We are by no means opposed to the appropriation of one hundred and fifty thousand dollars or of twice that amount for the promotion of farm interests; but we don't want the farmers to get the name and the politicians to get the game. Now, readers of the RURAL and brethren of the farm press, let us heartily unite and see what we can do.

PRIZES FROM THE RURAL'S SEEDS.

A CLOSE CONTEST.

THE PRIZES WIDELY DISTRIBUTED.

Manitoba Secures the Corn Prize; *Iowa has the Heaviest Peas*; *Kansas the Heaviest Watermelon*; *Arizona the Heaviest Cantaloupe.*

ANGEL OF MIDNIGHT CORN.

THIS contest was exceeding close and very hard to decide. The prize was offered for "the longest ear containing the greatest number of kernels." Our idea was to select the ear producing the greatest weight of grain. The best ears varied greatly: one report was sent of an ear 15¾ inches long, containing 385 kernels. Another was 10 inches long and contained 627 kernels. Obviously the kernels in one case were much larger than in the other, while the weight would be about the same. After carefully comparing all records, we award the prize to

E. FOWLER, HEADINGLY, MANITOBA.

The prize ear contains 548 kernels and is 13 inches long. In our judgment the next best ear was that grown by Rev. L. S. Ely, Mitchell Co., Iowa. This was 13 inches long and contained 537 kernels.

ALASKA PEAS.

The weights varied very widely, owing doubtless to the fact that the peas were weighed at different stages of maturity: some while green and others when fully ripe. To the best of our judgment the prize should be awarded to

ROBERT E. CRYLIE, CARROL COUNTY, IOWA.

The 10 pods secured by him weighed 4¼ ounces. Several reports of heavier peas were sent to us, but weighed upon our own scales they fell far short of the reported weight. The next heaviest peas were grown by W. H. Taylor, Canada.

BIRD CANTALOUPE.

The heaviest cantaloupe of which we have record was raised by

W. A. LATTIN, PINAL CO., ARIZONA.

This weighed 29 pounds. The next largest was grown by B. M. Bixler, Buffalo Co., Nebraska. This weighed 20 pounds.

WATERMELON.

The heaviest melon was grown by

A. M. PYLE, EDWARDS CO., KANS.

It weighed 50½ pounds and measured 34 and 54 inches in circumference. The next heaviest melon was grown by J. M. Moss, Clay Co., Fla. This weighed 50 pounds.

The prizes, $10 each, will be forwarded to the winners. The contest drew out an unusually large number of competitors. Many boys and girls won honorable places on the list. The RURAL returns thanks to its friends for their interest in the matter. We wish all could obtain a prize.

PLEURO-PNEUMONIA MUST BE ERADICATED.

IN a late communication to the President the Western cattlemen say they "have more than $600,000,000 invested in cattle alone," and that their vast herds will in all probability be swept from the earth if contagious pleuro-pneumonia once reaches the open ranges. Vast as are the cattle interests of the rangemen, however, they are small in comparison with those of the rest of the country, which are also endangered. A recent investigation into the losses from this plague among cattle in Illinois has resulted in a report which says that "the Hereford interest in the State has suffered to the value of $1,000,000"; while the annual loss to the cattle interests of the State are placed at $10,000,000. Add to this loss in Illinois alone those in the rest of the country, and the yearly losses incurred by the cattle owners of the nation, owing to the presence of this disease among us, will reach an appalling magnitude. Commissioner Colman well says "with a disease of this character at Chicago" the cattle industry "has reached a crisis"; for that is the most dangerous point in the whole country for its speedy distribution to the pastures and ranges of the entire West. Before the disease appeared here tens of thousands of cattle were shipped to England to be taken to the interior to be fattened on American corn and feed-stuffs and sold in the markets as American cattle. The cattle shipped to that country now have to be slaughtered on the docks, which decreases the price of shipping cattle $15 per head. The Consolidated Cattle-growers' Association of the United States demands of Congress a rigid inspection system and an appropriation of $5,000,000 to enforce it. The President, in his message, recommends prompt action in this line. With an overflowing Treasury and absolute control over transportation between the States and the importation of cattle from abroad, the responsibility rests on Congress to take immediate action on these demands. The question concerns the consumers of beef, milk, butter and cheese, as well as the cattlemen of the country, for the losses which will certainly follow inaction or negligence at Washington will greatly increase the prices of these products. One of the first bills passed at this session of Congress should provide for the eradication of the plague, and it should grant full power and money to effect that object.

BREVITIES.

THE new "Jessie" is said to be the most remarkable strawberry of latter days. Let us see.

THE Eye-Opener and farm-law items will be found this week on page 850. The Youth's Department is unavoidably omitted.

WE find that Washington Territory is not going to be behind other parts of the country in propagating the Japan Chestnut. We find them offered for sale in a catalogue just received.

THE important and well-considered address of Pres. Lyon before the Michigan State Horticultural Society will be found in the Grand Rapids Democrat of Dec. 1st, 2nd and 3rd, as well as a full report of the proceedings.

WE should like to see a Central National Agricultural Experiment Station established—say in Missouri—and in the middle of the grounds a "colossal statue of a farmer supplying the world" designed after our first-page engraving.

EARLY in January we shall place before our readers, in a supplement, a full account of the results of last season's trials of all kinds of fertilizers upon potatoes. This experiment is a repetition of that made two years ago, though more extended. The two will be compared together and so illustrated that all may understand the more important results without much study.

SCORES, if not hundreds, of new grapes have been introduced during the past 10 years, all of which, it has been claimed, were superior to the well-known kinds. To-day (Dec. 6) not one of these newer grapes can be found in our large markets. Of all our native grapes, the Catawba is the only one to be found in quantity. It must be considered, however, that many years are required so to distribute and to propagate a new grape that it can be offered for sale in large quantities.

WE were taken to task awhile ago for stating that the Niagara Grape sold for a fancy price in a Broadway fancy fruit store. "Such statements are misleading," our friend said. The grapes referred to were evidently selected bunches grown in bags, and so we remarked at the time. We have said over and over again, and were the *first* to say in print, that the quality of the Niagara is no better than that of the Concord in our humble estimation. If beautiful bunches, grown in bags, sell for a fancy price, is there any harm in stating it as an item of news?

THE R. N.-Y. some time ago expressed surprise and doubt as to the statement made by one of our leading small-fruit nurserymen that the Earhart Everbearing and old Ohio Everbearing were the same. Mr. L. H. Girton, of Bristol, Ind, writes that he has them both growing side by side, and that they differ widely in manner of growth, leaf and stalk. "In fact," he says, "the Earhart is different from anything of the raspberry kind I know of." Mr. John Little, of Ontario Canada, writes that he has both kinds and that they "bear no resemblance to each other whatever."

AN experiment begun about eight years ago ended the past Summer. A strong root of Paulownia imperialis was planted in the Spring and confined to a single shoot. It grew the first season about six feet high. The next Spring this growth of a single stem was cut off at the ground. All but one bud was rubbed off and a stem 10 feet high grew that second season. The third year this was cut off and the new stem grew about nine feet. Since then the new stems have made less and less growth until the past Summer, when the plant died. The fact is that *all* pruning tends to weaken plants and that severe pruning, if long continued is death.

IT is said that in China two species of ants which build their nests suspended from the branches of trees, are protected by orange growers who stretch rods from tree top to tree top to serve as bridges for the ants which keep the trees clear of injurious vermin. Some species of ants have been found to be effectual destroyers of canker-worms in this country. In Italy and Germany colonies of the common black ant are established in orchards by the care of the proprietors as a sure means of keeping the trees clean. Here we are very unjust and thankless to ants, worms, toads hornets and even snakes.

LAST Summer the first of our blackberries to ripen, as we have stated, was the Early Harvest. The date was July 10; the quality rich and good. The plants are rather tender. The second to ripen was the Snyder, viz., July 20. Taylor's Prolific ripens after Kittatinny. The thorns of this variety are formidable. Wilson Jr. ripened *with* Kittatinny, though claimed to be much earlier. Early cluster ripens about with Snyder, a trifle earlier than Kittatinny, but the berries are smaller and the quality certainly no better. What we want is a thornless blackberry of the quality and size of the Kittatinny and of the hardiness of Snyder. No doubt we shall have it some day.

Biographical.

GENERAL WILLIAM H. NOBLE.

GENERAL WILLIAM H. NOBLE, a likeness of whom is given at Fig. 460, was born August 18th, 1813. His parents—the Rev. B. G. Noble and Charlotte (Sanford) Noble—were respectively of New Milford and Newtown, Conn. His father was Rector of Christ Church, Middletown, Conn., and with him he lived until the age of 15. From the age of 11 to 15 he attended Captain Partridge's Military Academy at Middletown, and celebrated, with 200 of its students, under arms at New York, the fiftieth anniversary of the Declaration of Independence. In the Fall of 1828, at the age of 15, he entered Trinity—then Washington College—at Hartford, Conn., and in the Spring of 1830, entered the Sophomore Class of Yale. He graduated from Yale with honors, August, 1832, at the age of just 19 years; taught for a year and a half a private academy at Stamford, Conn., and began, in the Spring of 1834, at Bridgeport, Conn., the study of the law. He was admitted to the bar of Fairfield County in the Spring of 1836. The same year he aided in procuring the charter of the Housatonic R. R. Co., the second railroad in Connecticut, and became its secretary, and was for many years active in its organization and construction. The same year he procured the charter of the City of Bridgeport, and was Clerk of the Courts of Fairfield Co., Conn., and States Attorney for that county for a number of years.

From 1836 down he was active in promoting the growth of East Bridgeport by building bridges and other connections, and in 1850, having purchased of his father's estate and others about 70 acres, he mapped out that portion of the city, and connected it by a short foot-bridge with the center of Bridgeport.

In 1851, P. T. Barnum, the great showman, purchased of him one-half his interest in this property, and they went on purchasing together until their area covered over 200 acres, on which were worked streets and avenues and a public park of native woodland, and they connected the same by a new and more direct carriage bridge with the center of the city. Thus was laid the foundation of that which will soon be the second city in Connecticut. In 1850 General Noble was nominated for Congress from the Fourth Congressional District of Connecticut; but his large majority in Fairfield County, where he resided, was overcome by the adverse vote of Litchfield County.

In 1861 he took a very active part in the organization of the Union Party in Connecticut, and in the nomination and election of Governor Buckingham. In July, 1862, he was commissioned by this Governor Colonel of the 17th Regiment of Connecticut Volunteers, the Fairfield County Regiment. Their camp was formed on what is now the Seaside Park of Bridgeport, and inside 30 days he had over 1,000 men ready for the front. Sept. 3d, 1862, they left for the field destined for Siegel's 11th Corps. Their first battle was that of Chancellorsville, at which Col. Noble was severely wounded and where his regiment—as stated in Greeley's "American Conflict"—"bore a resolute part and had its Lieutenant-Colonel killed." From this wound Col. Noble barely recovered in time to reach Gettysburg on the light of the last day, in which battle the regiment was severely handled and lost another Lieutenant-Colonel and many of its men—a monument to whose memory stands on Barlow's Knoll on that great battle-field.

Col. Noble's regiment was then sent to Folly Island, S. C., to take part in the siege of Forts Wagner and Sumter. After the fall of these forts the regiment was sent to Florida, where he finished his active service in command of the territory east of the St. John's River, with headquarters at St. Augustine. While holding this command he was captured by the enemy and confined for a time in the Andersonville Confederate Prison; on his release from which he was brevetted Brigadier-General by General Grant's recommendation, and mustered out of the service with his regiment, July 19th, 1865, at the close of the war. Among the well-known men who served in the ranks of this regiment were Elias Howe, Jr., the inventor of the sewing machine; Anthony Comstock, Esq., President of the Society for the Prevention of Vice in New York City, and Hon. Phineas C. Lounsbury, Governor-elect of Connecticut.

Since his service Gen. Noble has returned to the practice of law, and interested himself, as before, in horticultural and agricultural pursuits. He has been Alderman or Common Councilman of the City of Bridgeport, chairman of its Board of Park Commissioners for several years, and a member of the Legislature of Connecticut, retaining his active interest in public affairs, especially in the improvements of the city and the care of its beautiful parks.

On August 16, 1839, Gen. Noble married Harriet J., daughter of Benjamin Brooks, Esq., of Bridgeport, Conn., and they have four children, two sons and two daughters. He has been an occasional contributor to the RURAL NEW-YORKER during the past 10 years.

Woman's Work.

CONDUCTED BY EMILY LOUISE TAPLIN.

THEN AND NOW.

A YEAR ago! that perfect day
As I wove my garland of popples gay,
  These thoughts came to me:
Life, thou art sweet! Earth, thou art fair,
The fullness of beauty is everywhere
  For my love and me.
I have no thought of pain or unrest,
Anchored safe on my Lover's breast.
  What to me is the world and its ways?
The present is mine; and the years to be
Lie peaceful and calm as a waveless sea,
  The to-morrows sweeter than the to-days.
    LOVE IS GOD.

In my dreams I see the long grass wave,
And the violets blue that grow on a grave
  In a far-off land.
I feel the approach of the Silent Guest,
And shrink from the chill of my Lover's breast.
  What to me now are the dreams of the past?

GENERAL WM. H. NOBLE. From a Photograph. Fig. 460.

Earth's yield for me is but thorns and briers,
To Heaven I turn for my heart's desires.
There my heart and my hopes are anchored fast.
    GOD IS LOVE!
—Mrs. Frank Beard in Chautauquan.

OF INTEREST TO WOMEN.

THE Staten Island Rapid Transit Road is trying the experiment of women as ticket sellers at some of its stations. If satisfactory, they will replace men in this capacity entirely. It is said to be a measure of economy, as they are not likely to pay women the same wages as men, even though they do exactly the same work.

A dainty gift is a tea apron. It may be made of the finest India mull, open hemmed on all four sides. In one corner a spray of wild roses may be painted. Pink ribbon is slipped through the hem at the top for strings; it is tied on one side.

The prettiest scent sachets are in the form of a bag, five inches wide and nine inches deep. The top of the bag is edged with lace and faced with a contrasting color to the depth of two or three inches. After being filled with perfumed cotton, the mouth of the bag is gathered up, leaving the faced portion like a frill. In front this is turned down, so as to display the contrasting lining. A spray of artificial flowers is fastened on the front and loops of narrow ribbon are put on one side, to hang the bag by. A very dainty one is of cream-white surah, faced with deep orange satin and finished with a bunch of white pond-lilies with orange centers.

Handkerchief cases are now made to hang upon the wall, so as to save the trouble of opening and shutting drawers. They are sometimes made like an ordinary wall-pocket, padded and perfumed, or in the shape of a hand-bag. A handsome one in the latter shape was made of three widths of ribbon two inches wide, dull blue, shrimp pink and old gold. The ribbon was sewed together on the wrong side, but was left unsewed above the place where the bag was drawn in at the top, so as to form six loops. The bag was lined and perfumed and had a spray of flowers painted slanting across one corner.

CONFESSIONS OF A COUNTRY GIRL.

III.

AMONG subjects near to any woman's heart I think we all give a prominent rank to the matter of wardrobe, only many of us are afraid to acknowledge the fact. Not that there is anything to be ashamed of in such a thing. Of course we do wrong if we think of our clothes to the exclusion of higher things, or if we spend more than we can really afford. Polonius showed both prudence and worldly knowledge when he said "Costly thy habit as thy purse can buy."

But since so much power, both for good and evil, lies in personal attractiveness it is certainly every woman's duty to dress as tastefully and becomingly as she can, and the serenity of a peaceful conscience is only equaled by the feeling that one is perfectly and becomingly attired, so as to set off one's graces and hide one's defects.

We often notice that a girl who has been compelled to wear unbecoming or dowdyish clothes, when she is free to do as she pleases, is more likely to set undue value on such things than one who has always been tastefully dressed. When I say tastefully I don't mean elaborately for the two words are not by any means synonymous. And here is one point I mention, as a country girl speaking to country girls. It is a noticeable fact that elaborate fussiness is more a failing with country girls than with city girls. A woman of fashion dresses with studied simplicity save on ceremonious occasions. So, to alter the whist-player's maxim, when in doubt play a trump—when in doubt discard trimmings and trinkets. I have seen a pretty country girl making a neighborly call clad in a stiff silk gown, crackling with jet, with heavy bracelets, breast-pin, locket and chain and ear-rings. I recently saw the lovely Mrs. Langtry at an afternoon exhibition; she wore a simple drab cloth gown, with a little turban of the same stuff, and her only adornment was a bunch of violets at her breast; she did not display a single trinket.

Of course the elegant simplicity of a fashionable woman is more expensive than our most elaborate gowns, but there is no reason why we should not copy this to a certain extent.

It is a most harmless vanity to make the most of our good points, if we do not carry it to an inordinate extent. It is a mistake for the mother of pretty daughters to ignore the fact of their prettiness. Someone is bound to tell them of it, and it comes best from the mother, if she is wise enough to tell them that though beauty is a personal gift it is a mere accident of birth, to be regarded with the same feelings as mental superiority. But for the encouragement of homely girls it must be admitted that tact, mental superiority and good nature, with the addition of taste in dress, will in the long run take the precedence of mere personal prettiness. Madame de Stael, the most charming of women, was plain as she was witty, and Princess de Metternich, one of the most fascinating women in Europe, is almost positively ugly. So, to return to my beginning, since it is the positive duty of every girl to be as attractive as she can, we may be very sure that, though sweetness of temper, activity of mind and tasteful dress will not make a homely girl a beauty, it will make her the next thing to one. The late Duchess of Devonshire was one of the handsomest women in England, and retained her looks all her life. Asked how she kept her beauty, she said: "By dressing at ease, and keeping my temper." And I commend her plan to every girl. PATTY GARTON.

WHAT SHALL OUR CHILDREN READ?

MRS. U. C.

THE thoughtlessness which some parents display as to what their children read, is not consistent with the amount of care which they think it necessary to bestow upon their bodies. Ever since the dime and half dime novel literature has flooded the country, boys of more or less tender years have from time to time been leaving their homes, armed with an old pocket knife or hatchet, to become Indian hunters, or wild men of the West, in imitation of their favorite heroes. If a boy has a fondness for tales of adventure, direct his reading so that he may derive pleasure and at the same time profit. Put Capt. Mayne Reid's books into his hands, and in the glow of enthusiasm produced by the adventures of the Giraffe Hunters, the "Old Sleuth Library" will lose its charm. The "Heroes of History," by G. M. Towle, are full of striking incidents and perilous situations, and as at the same time historical accuracy is not sacrificed, a boy cannot fail to derive great advantage from them. They are comprised in a set of six volumes: "Vasco Da Gama," "Pizarro" (and no hero of romance possesses greater power to charm the youthful imagination than this conqueror of Peru), "Magellan," "Marco Polo," "Raleigh" and "Drake." A boy who has read and thoroughly understands the historical part of these books, has acquired no mean education. As a companion book to these, read the "Young Folks Book of American Explorers," by Thomas Wentworth Higginson.

History can be learned a great deal better by judicious reading than from the text books of a public school. At least the former will greatly help out the latter. Higginson's History of the United States is written in a very clear and lucid style. Everything is explained in so easy and gentle a manner that even a scholar who is not ordinarily studious, cannot fail to be charmed by it. It has been translated into German, and was received with great favor by that country.

Charlotte M. Yonge's histories are very pleasant and instructive. They should be read as a series, and comprise "Germany, Greece, Rome, England, France" and the "History of the Bible." She has also written several other works than which there can be no better reading for young folks. Among these are "Prince and Page," a story of the last Crusade, "Lances of Lynnwood," a tale of chivalry in England and "The little Duke," or "Richard the Fearless." "The Story of Liberty," "Old Times in the Colonies," and "The Boys of '76," by C. C. Coffin, are three books that no American boy can afford not to read. An excellent idea of the geography of the Old World can be had from the "Children's Fairy Geography," by Forbes E. Winslow.

For lighter literature, all of Frank Stockton's books are to be recommended. The above author's fairy tales and other stories for young people are the most delightful reading possible; indeed, there are very few people of any age who can resist one of Frank Stockton's inimitably told fairy tales. Every child is better for being happy and no one can read them

without being made happier. "The Fantastic History of the Celebrated Pierrot" is a book over which my own children have spent many a delightful hour. "Home Fairy Tales," by Jean Mace, and "Fairy Tales and Legends of Many Nations," by Burkhardt, will delight the heart and capture the fancy of any child.

There are here and there bigoted parents who taboo all fairy literature; Gradgrinds who believe in nothing but facts, but when even so good and great a man and author as George MacDonald has given it his sanction by writing one of the most exquisite of fairy stories, "The Princess and the Goblin," we think these well-meaning but misguided people need not fear to place such books, without which no child-life is complete, in the hands of their sons and daughters. "Alice in Wonderland" for pure, unrivalled, rollicking nonsense will be appreciated by a certain class of children, and they will not be found among the dull ones. "The Jimmyjohns," and the "Peterkins" are familiar to all the readers of St. Nicholas, and are to be had in book form by those who are not the fortunate possessors of that valuable magazine.

The above mentioned books compose, perhaps, but a small library; for voracious readers there are hundreds of other valuable books, but a few good volumes read and remembered will be of more service as a means of education than greater numbers carelessly skimmed. A Hindoo in India once served on a jury with Englishmen and astonished jury, lawyers, judges and spectators by the remarkable acuteness he displayed in cross-questioning witnesses. It afterwards transpired that he had never read more than one book, but this book which was the logic of Aristotle, he had read until he almost knew it by heart.

BUSY MOTHERS.

NAOMI.

Is the housekeeper to blame for becoming the household drudge? Partly, and partly not. Starting out in life with little capital, but with a loving heart and willing hands she gladly takes up the burden. Joyfully she goes on her way, bravely bearing on her shoulders all the weight that falls to her portion to carry. One responsibility after another is added, as each new-comer lifts up its pleading voice and helpless hands. Conjugal love, maternal love and love of order, neatness and plenty are each separate incentives to continued perseverance. At first husband being so engrossed in his occupation, and the bodies of the children seeming to be all that require her thought and labor, her mind settles into the channel in which her body moves. To clothe and feed the family, have the home comfortable and orderly, and at the same time save her husband's (?) money, seem to be not the *chief* end and aim of life, but *the* end and aim.

I do not feel to blame such, for my heart goes out in sympathy to them and their children when I think of the future needs of the hungry minds. Mothers are prone to forget that they have performed but a portion of their duty when they have ministered to the visible wants of their offspring. Children love to share all things with those who are in sympathy with them. If Mary finds her lesson difficult to understand and teacher does not see just the point that troubles her, what a help to bring her trouble to mother who will make it so plain that the morrow will be eagerly anticipated instead of dreaded. But if met with a "Don't bother me, child; ask teacher, I'm too busy," she is not apt to try it again soon, and an avenue to that daughter's heart is closed to the mother by her own act. Had the mother only showed a desire to help her, it would have been a bond of union between them. But if mother cares only for her house, and Mary only for her books, what common feeling shall unite them?

We should seek to retain our places as companions and helpers to our children. Their footsteps are now led in pleasant paths of knowledge. Ways that were crooked and rough for our feet are made straight and smooth for them, and no wonder if they go so fast that we cannot keep pace with them. We can keep alongside in some things that are of common interest to all who meditate upon the advancement of our generation in science and art and literature. The trouble is that the mental powers become sluggish from inactivity and the great demands upon the body, and it is an almost impossible task to arouse them to action. The children learn to think that mother is too busy to go to a lecture, or read an interesting book, or take a trip with them to visit some natural curiosities, all of which would help mother and children to grow into companionship with one another.

"The recompense of reward!" The loving companionship of our children. Sharing their joys and sorrows, advising them in their perplexities, warning them of dangers ahead, gently leading them in ways of truth and uprightness, and all the time knowing that we are the one to whom their hearts will ever turn for comfort in sorrow, and for congratulation in joy.

SOME WAYS AND THINGS AT THE RURAL GROUNDS.

ALICE BROWN.

We have had no winter weather, although this is the last day of November. The ground is not frozen, and the mud reminds one of Spring. The evenings are long, and suggest busy hours around lighted lamps.

So many turn to favorite studies as Winter shuts them in for the greater part of every day, that something about study seems most appropriate just now to write from the Rural Grounds. Home study has been gaining much in favor during recent years. Simply written text books and interestingly told histories have multiplied to help those who have only books for their teachers. Easy as study has been made in many ways, it is still true that persistent earnest application is the only way to any wealth of knowledge.

"If an education could be had just for the wishing, everybody would be educated, nobody really wishes to be ignorant," Mr. Carman sometimes tells Cerise, when she finds it hard to fix her mind upon her studies. The difficulties surrounding home study are not small, but a great many have overcome them, and many always will when the choice lies between no advance at all, or some progress without a teacher.

Reading will not take the place of study, for it does not strengthen and train the mind. Doing but once all the various things done in the household, once baking bread, once cooking a dinner, once ironing, churning or making a bed will not fit anyone to become a housekeeper, or take away the awkwardness of first attempts. Reading is usually going over but once a great variety of subjects and learning none.

Mr. and Mrs. Carman have kept up a course of study ever since their married life began. Usually Mr. Carman has acted as teacher, which, of course, has given Mrs. Carman an advantage over many home students. The study first taken up, and the one that has been most enthusiastically followed is botany, and the pupil has now in some departments of the subject outstripped her teacher, so that to her are given all the plants and grasses sent to him for identification and names.

All the woods and fields for several miles around the Rural Grounds were searched through and through at all seasons of blossoming, until not a weed or flower remained to be analyzed and named. The practice and knowledge gained in this way has made it possible to analyze and name the wild flowers, grasses, and flowering weeds from any part of the Union where the flora has been described and classified in published books.

If the evenings for one Winter are given to the study of botany it will be possible in the Spring to analyze most if not all of the wild flowers growing in the woods and fields of any locality. If the study has been carefully pursued many interesting things will have been learned about common, familiar plants and flowers. Although the evenings of a few months will enable anyone to analyze and name hundreds of flowers, the study can be carried on for years without reaching the end of its interest and charm.

The home student often uses his time to poor advantage by undertaking some study too hard and soon tires of it and gives it up. It is better to begin with the review of some study once taken in school than to fail in trying something new. At one time Mrs. Carman, finding she had in a measure forgotten the rules of grammar, took up the study with one or two others who were members of their household at the time, and very carefully studied through Brown's grammar committing to memory rules, definitions and declensions as though for the first time.

Geography is a useful study to take up, and one that few people know so perfectly that a review of it will not teach them many interesting things. Travers, Cerise and I, as a pleasant plan for studying geography in addition to the regular lessons, organized last Winter a little society of three members that we called the "Geographical Reading Club." Travvie was our president and a very enthusiastic member of the "G. R. C." Our plan was to read aloud from books describing places, keeping the geography open at the maps of the places and locating cities, rivers, etc., as we read. In this way we studied the waters and coasts between Newfoundland and Northern Greenland, by reading the story of the voyage on a sealing vessel of the "Knockabout Club," written by C. A. Stevens.

We tried to read "Picturesque America," a book describing the most noted natural wonders of America, but we found the words too large for our seven-year-old president, so after reading a few chapters we gave it up for something worded more simply; after that, though our progress was slow it was pleasant.

A Geographical Club with members old enough to read for themselves, and take turns in reading aloud, could spend many pleasant hours, learning from good maps just where the places are of which they read. A file of the RURAL containing Mrs. Fisher's Transcontinental Letters would furnish one course of geographical reading. Many pleasant books of travel have been written that are suitable for use in such a Reading Club. Mrs. Helen Jackson, who wrote so many good things under the signature of H. H., has written two or three books of travel that would be especially good for the use of a "G. R. C." They are "Bits of Travel," "Bits of Travel at Home," and "Glympses of Three Coasts."

Mark Twain's "Innocence Abroad" would prove instructive if the route taken by the Innocents be carefully followed on a map, and the book is full of funny incidents and descriptions.

I cannot close this better than to quote from advice given by Mr. Carman to a young man asking what he should study in his spare minutes to gain an education. "Study something," he said, "almost anything, so you make a beginning; study hard, don't give it up, and you can't help learning something."

GOLDEN GRAINS.

The most manifest sign of wisdom is continued cheerfulness.....

Let amusements fill up the chinks of your existence, but not the great spaces thereof....

Wealth, legitimately acquired, is valuable, and only valuable when thus acquired.....

The tasks, the joys of earth, the same in Heaven will be,
Only the little brook has widened to a sea.....

There always comes some smooth running to every skein before all is done. You mustn't try to see through the whole skein or to straighten it all out into a single thread before you begin to wind; that makes a snarl always. There is always an end, and it is what you have got to take hold of.....

It depends upon what one's life is, and where is the spring of it, and what it feeds upon, how one rallies from a shock of any sort ....

We love those for whom we have been privileged to perform some helpful service; for love grows through serving. If we do not sufficiently love another for what he has done for us, let us increase our loving interest in him by loving service for him.....

He that provides for this life, but takes no care for eternity, is wise for a moment, but a fool forever, and acts as untowardly and crossly to the reason of things as can be imagined..... .....

Domestic Economy

CONDUCTED BY MRS. AGNES E. M. CARMAN.

BATH-ROOMS FOR FARMERS.

The most convenient bath-room I have ever seen in a farmer's house was planned and located in the house of Col. M. J. Hogarty, a retired army officer, whose home is in Greeley, Colorado.

This bath-room adjoins the large kitchen,

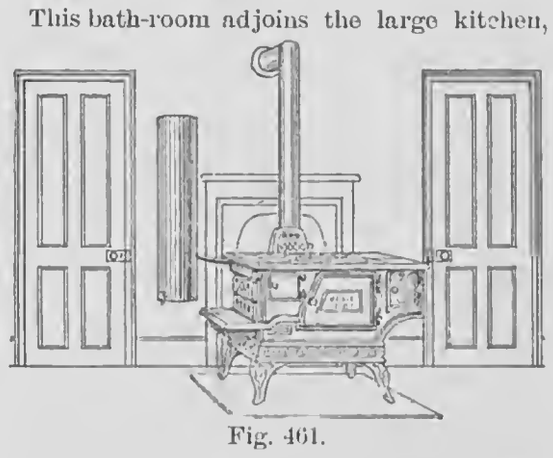

Fig. 461.

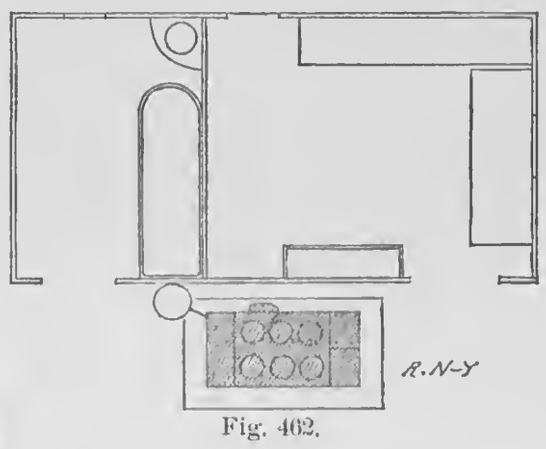

Fig. 462.

and is entered by a door near the cook-stove or range. It is supplied with hot and cold water through pipes leading to it from the stove and force pump. A large tank is fitted up near the front of the stove, four or five feet high and 18 inches in diameter. The water in this cylindrical tank is heated in pipes running around the inside of the stove and outside and above the coal-box. The tank is filled with water through pipes leading from a force-pump situated in the pantry. The door leading to this pantry is at the right of the stove, and that of the bath-room to the left. The pump not only supplies the pantry sink, but the stove and bath-tub, also a marble basin in one corner of the bath-room. A looking-glass, roller-towels and plenty of short towels, brushes and combs and soap make this little room a first-class toilet room for the family at all seasons.

There is a faucet at the bottom of the tank, where water can be taken out at any time.

If the farmers cannot afford a tank with hot and cold water pipes leading to the room, they may be able to have a bath-room adjoining the kitchen without these luxuries.

Nearly every farmer has a stove with a reservoir, from which water can be taken at any time and this, with a couple of pails of cold water added, will be sufficient for a good bath without much trouble. It is a great convenience to the house mother to be able to give her little flock a bath at least once a week, and to be able to do this so near a warm fire, during the cold weather, is a great comfort to all concerned. MRS. O. HOWARD.

BREAKFAST, AND WHAT TO PREPARE.

Breakfast is undoubtedly the housekeeper's most difficult meal, both because at that early hour of the day at which it is usually served, appetites are apt to require tempting, and because there is less time for its preparation. Now that the Winter has set in and vegetables are becoming scarce, it is pleasant to know how to make the most of the slender resources at hand.

There is, perhaps, no vegetable so abused in its cooking as that commonest of all—the potato. Delicately fried potatoes are the exception, not the rule. In fact, where their cooking is entrusted to a servant, one need not look for an edible dish. Still, they are not difficult to prepare in many appetizing ways. A French cook of great celebrity boasts that he can prepare potatoes in two hundred different ways, and apples in four hundred. Potatoes boiled with the skins on can be cooked over far better than if boiled without their jackets. Those intended for the breakfast should be taken from the fire when about half done, and after removing the skins, set away until the following morning. If they are boiled until fully done they will be too crumby and mealy to cook over well. Slice some of these potatoes half an inch thick, dredge them with a little flour and fry in a pan containing a tablespoonful of hot butter or drippings, put a cover on the pan, season them, and when brown on one side, turn and brown on the other. Use just as little fat as will keep them from burning, and serve them very hot on a hot dish.

Cauliflowers left from dinner are excellent if warmed with mashed or fully boiled cold potatoes. Chop equal parts of each, put a spoonful of butter and two or three spoonfuls of the white sauce that was served with the cauliflower, or if there is none of the sauce remaining, add just enough rich milk or cream to make it a little moist, season nicely, using a little Cayenne, and stir until it leaves the bottom and sides of the saucepan.

Cabbage may be used in the same way, only in this case a little of any kind of good gravy may be used for moistening it. A delicious breakfast vegetable is made from mixed celery and potatoes. Boil, the day before, the white ends of some of the coarser stalks of celery that are not nice enough for table use, in salted boiling water until tender. Mix with three-quarters the amount of cold-boiled potatoes, and heat as above, using butter and a little cream or milk. Both the celery and potatoes should be chopped fine.

Broiled tomatoes are another dainty, and taste quite unlike tomatoes cooked in any other way. In San Francisco, one may have fresh tomatoes almost the year round, but it is quite possible to broil canned tomatoes if you have canned them yourself. When you are canning them take some of the larger ones that are not very ripe, wipe them clean and just allow them to get hot through in the vessel in which you are cooking the tomatoes for canning. Seal up boiling-hot in wide-mouthed cans. To broil them, slice, either the fresh or canned articles in two, leaving the skin on, dip in melted butter and crumbs and broil over a slow fire or the crumbs will scorch. They may also be fried, and with a delicate slice of broiled ham, some warmed cauliflower and potatoes, and a hot muffin, form one of the nicest breakfasts that even an epicure could wish.

Fried cucumbers are another possible winter dish. Take large cucumbers that have been put down in brine for pickling, and soak

in tepid water until the salt is well out of them, slice one-third of an inch thick, roll in flour and fry in butter. Excellent with beef steak or cold meat.

Hominy may also be cooked in a variety of acceptable ways. Wash a cupful of hominy in two waters and stir it into a quart of salted boiling water. Boil for nearly an hour in a double boiler, stirring from time to time. Mix together a pint of the warm hominy, a pint of milk and another of flour. Add to this batter two beaten eggs and a little salt. Bake on a very hot griddle to prevent them from being tough.

Superior hominy muffins are made from the following recipe. Pour a cupful of boiling water upon two tablespoonfuls of fine hominy, simmer for 15 minutes, add a cupful of Indian meal stirred in slowly and one and a half cupful of boiling milk. Allow this mixture to get nearly cold, and stir in two beaten eggs, two tablespoonfuls of flour, one of sugar and a teaspoonful each of salt and baking powder. Bake for 15 minutes in heated and buttered gem pans. PALMETTO.

A FARMER'S DAUGHTER'S DOMESTIC REVERIES.

CHARITY SWEETHEART.

We had a very pleasant Summer, now that I look back upon it. I had just finished house-cleaning, and had painted the outside of the kitchen, and white-washed the fence, and gray-washed the wood house, and planted the garden, and scraped up the cellar and given it a coat of lime, when Aunt Bell sent word that she was coming to spend a few weeks with her brother (that's father), bringing cousin Almy. Burt whistled "Whew, now we'll have to keep our jackets on all the hot days," and Tom Daryl laughed. He's a cousin of ours too and always ready to help the boys in mischief. Then father was sick for a week in early haying, and we had people to hoe, and Burt was cross and wouldn't feed the calves or help with the milking, and then Aunt came. It was a pleasant thing to see her and cousin Almy, for they live in Cleveland, and dress in the fashion. I felt glad at first, though I was awfully tired the first day, for Aunt Bell wouldn't eat the bread unless it was new, and I had to make hot rolls all the time. And though she talked a good deal in a patronizing way about me being a poor child who had too much work to do, she never put her foot into the kitchen to help me.

But I am not writing for the sake of grumbling, only that I made a discovery while they were with us, of the reason why boys and girls despise farm work and want to go to the city. It was one day when there was a picnic got up for the Sunday School. Almy came down stairs when the wagon was at the door, in a lovely white muslin trimmed with embroidery and a big hat trimmed with a scarf. She had a thin scarf round her throat too, and went out into the garden and took all the roses off my bush to fasten in a big bunch on her corsage. I had the lunch basket to look after, and the morning's work to do up before we could start, and I looked red and hot when Tom Daryl came with the buggy for Almy and me. My pink-spotted calico was the only one I could wear; it was new, but didn't look anything beside the white muslin.

I need not tell all that happened; but after the lunch I was expected to help wash the dishes, while Almy flirted with all the boys in turn. She looked so pale and pretty under the big hat that they were all proud to be noticed by her and to have the pleasure of walking with her up the hill where they strolled for the "view," excepting those who had the cleaning up to do. When she came back there was a pink flush on her cheek and Tom Daryl held her parasol, "You poor dear, you look tired," she said to me so sweetly, that the boys who were not at all accustomed to look on me as an object of compassion, looked upon her as angel of sympathy. But if she had put her hands into the dish-water till they were red, and burned her nose red working in the hot sun as I did, they would not have been half so ensnared. It was the white hands and pleasant, cooing voice, able to say soft nothings without any meaning, the society manner and general air of ease, that won them. I could watch the effect with impartial eyes for none of them was my ideal—not one of them possessing those attributes of gentlemanliness I sought.

I have often wished the boys were more refined, but I don't think they ever wished so till that day when Mr. Dick Daryl, Tom's brother, from the city, won all of Almy's attention after she was tired of the boys' very limited, concise and bare-faced compliments. They were well matched, and talked together of the opera and last Winter's amusements and people and places that were unknown to us, as soon as she found that Dick had been in Cleveland. And then the boys began to be painfully aware that their hands were rough and red, and Burt tried to hide the warts on his, by turning his thumbs over his forefingers where the big ones were. And I did not wonder that they felt inferior, for so few farmers' boys keep up with the times, and can converse on any subject. For instance, the other night we were talking about the Darwinian theory, and Burt asked if it was a "story" Darwin had written, and when I began to hum the song of the "Lady and the Ape" from the "Princess Ida," he asked "Who wrote that poetry," and when Almy said "Sullivan," he observed knowingly that he didn't "think John L. wrote poetry"—which convulsed us all, and made him angry. Of course, it amused her to play upon his ignorance, and sometimes she did not know whether it was real or assumed; but, though in many things Burt knows more than Dick Daryl and is a truer, honester man—or rather boy—he lacks that polish and general information that go so far in society, and he will keep his hands in his pockets—for I noticed that though he kept his coat on "all the hot days," he came to the table often with a hand in each trouser pocket, never thought to lift a chair for any of us to the table, or to do the many little things that well-bred men think it their province to do for the other sex. If I had told him, he would have said, "Bosh!" but the *results* make boys and girls think little of farm life, when it is their own fault if they are behind those of the city in these small refinements. If they practiced them at home—lifting burdens from their sisters' shoulders—they in turn would not so often pine for the ease and society a city life affords. Of course I wouldn't stay here myself if it wasn't for *father*. I would go the State Normal School and study my beloved art till I was able to teach it, and earn my living. Somebody would give me my board I think for what I would do between whiles, for a girl brought up in the country is able to rise early in the morning and do a good deal of work. Perhaps then I should not be so ashamed of my red hands and fingers that are growing "stumpy at the ends." Almy said I was "so useful" as if I was a half-worn broom. But then there is father, and the duty that lies next must be done first, so I will plod on.

Just now I opened "Little Women," at the page where it reads: "An old maid, that's what I'm to be," and I went on reading what she wrote so beautifully—"Don't laugh at the spinsters, for often very tender, tragical romances are hidden away in the hearts that beat so quietly under the sober gowns, and many silent sacrifices of youth, health, ambition, love itself, make the faded faces beautiful in God's sight. Even the sad, sour sisters should be kindly dealt with, because they have missed the sweetest part of life, if for no other reason, and looking at them with compassion, not with contempt, girls in their bloom should remember that they too may miss the blossom time * * * Gentlemen—which means boys—be courteous to the old maids, no matter how poor and plain and prim, for the only chivalry worth having is that which is the readiest to pay deference to the old, protect the feeble and serve womankind, regardless of rank, age or color." What a true ring there is in all Miss Alcott's writings, and I re-read her poem "In a Garret," so simple yet so sweet. All the story is new to me, to whom books are as "angels' visits, few and far between," but the rhyme clings to my heart:

"A woman in a lonely house
Hearing the sad refrain,
Be worthy love and love will come
In the falling summer rain."

And now the RURAL has come for Thanksgiving, and it was that set me to writing again, for I read the poem below the picture and liked it ever so much,

"If on Truth's golden door
You still can write: 'I've wronged no man,'
A king could write no more,"

and I determined to

"Work on, work on, with patience."

But looking above the words to the picture, it seemed to me that it was not necessary to make the cut of the farmer's coat so very unlike what his city brothers would wear, or to make his wife look such a dowdy. I suppose they were taken in their everyday clothes, though, when they held such a reception in front of the fancy house behind them. Somehow I always think that pictures of farm homes should have all possible refining surroundings. It tired me to look at those fat pigs and pert little calves, and made my arms ache over again to remember the pailfuls of mush or milk I had carried out to such creatures. And all those fowls! What a wearisome time to pluck and dress them for the table, where there is only one pair of hands. But then, again, the poem closes so beautifully:

"For health and friends and love and home,
That money could not buy,
Be thankful that the changing years
So lightly pass you by."

ONE WINTER.—VI.

ANNE THRIFTY.

As Christmas drew near, Uncle asked me several times to put up a lunch for him to carry to the machine shop, so he could work through the noon hour. He had once learned the carpenter's trade, and the superintendent of the Works knowing this, had turned over to him a quantity of odds and ends of good lumber, and out of this he was making Christmas presents for us, but I did not know it until Christmas morning.

We had relatives in different parts of Indiana, Ohio and Kansas, and in Minnesota and Wisconsin, and some of the aunts and cousins had written me that they would send packages in time to put their contents into the boys' stockings, so I felt contented that the children would not be disappointed if I gave them only the still hidden fruit cake.

A package from Wisconsin and one from Minnesota came two days before Christmas. The former contained a bound volume of St. Nicholas, one the Badger State cousins had read and re-read until they had worn its cover shabby, and knew its contents from beginning to end, but at a trifling expense they had it rebound, and now it looked as new as ever.

The Minnesota package was more bulky than the other, but not quite so heavy; opening it I found two boxes of letter paper ornamented with comical or pretty colored figures, and the boxes marked "for Bertie" and "for Sammie," a calico dress pattern marked "for Anne" and an envelope "for John" containing I knew not what.

The packages came while the boys were at school and Uncle at work, so I hid them in my trunk and felt as though I must be related to shaggy, big-hearted Santa Claus when I thought of them.

Christmas Eve our Sunday School gave an entertainment, and an orange and a bag of candy to each of its members. Bertie, Sammie and I went early, Uncle promising to come for us later. The weather had become very cold and the snow creaked under our shoes as we hurried to the church.

As soon as we were gone Uncle brought from Mr. Turner's, where he had left them, the presents he had made for us. He busied himself in the yard with some large object, shoveling snow, pouring water, and seemed not to know that the night was bitterly cold, then putting several things into the stable, he made ready to come to the church.

The boys were as happy with their oranges and bags of candy as small boys know how to be, and in such haste to get home to count the pieces of candy that Uncle and I could scarcely keep up with them. They had decided to "see who could keep his candy the longest," and neither would taste his unless he could induce the other to eat as much, so their bags were still plump, when, after hanging their stockings in the kitchen, they had their usual race to get into bed.

When they were at last asleep I brought out the presents from my trunk and fastened the large ones to the stockings, putting the envelope into Uncle John's sock, and the cake on a chair under it, telling him nothing as to the contents of the packages but answering all his wild guesses by feigned surprise that he should have found them all out. Leaving Uncle to finish the work of preparation, I followed the example of the boys and was soon falling asleep in my cold little bedroom, thankful to have a shelter from zero weather, knowing many in the city were homeless and hungry; for it was a season of business depression, and idle hands made many feel the worst that poverty could do to them. In spite of our many privations, when I thought of those who were poorer, we seemed rich.

The ignorance, dirt, disorder and thoughtless extravagance in some of the homes in our neighborhood gave me the feeling that we were not so poor as many who had more money. A love for beauty, order and learning, and for home, seemed to me of more value than thousands of dollars, and no complaints were ever uttered that could lead the boys to think they were poor, or sow seeds of envious discontent in their hearts. With something of these thoughts filling my mind I fell asleep to be wakened, I well knew, long before daybreak, by the eager little fellows who were my continued pleasure and torment.

HOW TO DEAL WITH NERVOUS PEOPLE.

In caring for a nervous invalid, remember that proper food, with systematic recreation and exercise will often produce results that will astonish both patient and nurse. In taking exercise be careful that no fatigue is felt, that is, stop short of fatigue, and if you would get the most benefit from it, see that the walk has an object. There is nothing so tiresome, and so little productive of benefit as a walk without an object. As regards diet, give plenty of fish, and especially shell-fish, as much bread and butter as may be desired, creamed potatoes and only simple puddings. Oranges, baked apples, stewed prunes or whatever fruit is taken should be before breakfast. Milk may be taken if it is liked and digested easily. Cocoa is a better beverage than tea or coffee, and beer or spirits should never be indulged in. NURSE.

JAVELLE WATER.

There is nothing better than the above for taking stains out of linen, and every family should have a large bottle of it on hand. Put one pound of sal soda, and five cents' worth of chloride of lime in an earthen vessel and pour on two quarts of soft boiling water. Stir until the soda is dissolved. Strain and let the fluid settle. Wet the stain of fruit, coffee, tea or mildew with the liquid mixed with half its quantity of boiling water, and let it lie in the light for 15 minutes. Rinse thoroughly several times in cold water.

I had a number of new sheets badly mildewed through the carelessness of a servant, some time ago, and removed every bit of it with javelle water. Keep it in a glass can in a cool, dark place. HOUSEWIFE.

HOUSEKEEPING NOTES.

MOPPING.

There is a little skill required to perform even this piece of work so that the effect is satisfactory. Formerly, before painted floors were almost the rule in every house, it was a much more arduous performance; but to keep a painted floor looking its best one needs some experience.

Unobservant or heedless workers push the mop against the base-boards, which, after a few moppings shows a soiled streak the whole length of them, which annoys a good workman. Better leave a space the width of one board untouched by the mop and afterwards or before wipe it up with a cloth by hand.

In mopping a floor, whether it is painted or not, the best effect depends on its being well rinsed. No matter how much strength is laid out on it, if the last water in which the mop is wrung out is not clean, the floor will look dingy.

Freshly-painted floors are best cleaned when a third or a half skim-milk is added to the water. The oil in the milk makes the paint shine as clear water will not. Soap-suds are a little too strong to use on fresh paint, removing not only the dust but the paint also, but after the coat of paint is well hardened it may be used to good advantage. It is easier to clean a floor quite often than to let it get the start of you, so as to require a severe effort of strength to bring it to look well.

Knit underwear, after it has been worn and cast aside, makes excellent material of which to manufacture mops. The mops should be thoroughly rinsed after using, and dried in the sun.

JELLY CAKE.

One and one-half cup of flour, one-half cup of butter, one-half cup of sweet milk, whites of four eggs; two and a half cups of flour, one teaspoonful of baking powder, stirred in the flour. AUNT RACHEL.

Miscellaneous Advertising.

When Baby was sick, we gave her Castoria
When she was a Child, she cried for Castoria.
When she became Miss, she clung to Castoria.
When she had Children, she gave them Castoria

Miscellaneous Advertising.

Ayer's Pills

Restore tone and strength to the Stomach and Liver enfeebled by disease, promote the Appetite, and cause the Bowels to move naturally. Ayer's Pills are safe to take, do not debilitate by excessive stimulation, and are not irritating in their action.

I have used Ayer's Pills for twenty years, and can truly say they have always given me satisfaction. Whenever I am troubled with Constipation, or suffer from Loss of Appetite, Ayer's Pills quickly set me right again.—P. N. Ward, Bath, Me.

Ayer's Pills have been my family medicine for fifteen years, and the result of that long experience is a complete vindication of your statements concerning them.—T. T. Nunney, West Point, Tex.

Ayer's Pills,

Prepared by Dr. J. C. Ayer & Co., Lowell, Mass.
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News of the Week.

HOME NEWS.

SATURDAY, Dec. 11, 1886.

THE House committee have agreed on a proposition regulating railways, containing the clause prohibiting greater charges for a short haul than a long one.... Washington dispatches indicate that there is a prospect of alien land legislation at this session of Congress...Reagan's luter-State commerce bill is also likely to pass with several amendments.. .....The report of the engineers of the Hennepin Canal, just made public, is generally favorable .....Senator Ingalls of Kansas, is seeking the "soldiers' vote" by introducing several bills still further to increase the pension list..... ...The Secretary of the Treasury estimates that the money needed to run the Government machine from June 30 '87 to June 30, '88, will amount to a grand total of $325,185,789—to a dollar .....Senator Beck, of Ky., introduced a bill, Tuesday, to provide for the retirement of United States legal-tender and National-bank notes of small denominations and for the issue of coin certificates .....Great fluctuations and excitement in the oil market during the week—fortunes made and lost, especially lost..... .. The will of President Arthur, which was offered for probate here the other day, covers $150,000 worth of property. The son is to receive one-half the estate when 30 years of age; the daughter one-half at the age of 23, Mrs. McElroy, his sister, being her guardian.....

THE amount of greenbacks now out is $346,000,000. During the last fiscal year $44,551,043,46 of the public debt was paid, leaving in the United States Treasury a surplus of $93,926,588,56, a condition of things to be found in no other country on the globe.... .....The United States Supreme Court decides that a criminal cannot be extradited for one offense and tried for another. Chief Justice Waite dissents .... .Thousands of dollars' worth of fishing nets are frozen up in the lakes with no hope of saving them..... .....The estate of the late Charles Francis Adams, admitted to probate Monday, is valued at $1,250,000, and is divided among his family.....A delegation from Dakota are at the National Capital to secure from Congress the opening for settlement of 10,000,000 acres of the Sioux Reservation.....Monday conversation by telephone was carried on over wires 830 miles long—the distance between Houston, Texas, and New Orleans and return. A new telephone, the invention G. L. Barriett and W. W. Nelms, young men of Houston.....The rumor that the Dominion Government has sent an agent to Washington to aid in negotiating a fisheries treaty is denied. "Canada stands upon the basis of the treaty of 1818, as relates to fisheries, and is content to rest there," says the the Toronto Mail, the Government organ .Blatherskite Rossa has been elected chief of the Philadelphia Fenians, a separate branch...Large quantities of crude opium are imported by Chinese into British Columbia, where the duty is only 20 per cent ad valorem. There it is made into a merchantable commodity, and smuggled into Washington Territory where the duty is $9 per pound.... ..... E Price Greenleaf, of Boston, an old curmudgeon, has left Harvard University $750,000 to fund scholarships and aid the college library.....The Iowa Supreme Court has affirmed a decision of the lower courts in favor of the Prohibition law. ....."Jim" Cummings who has over and over again said that he committed that St. Louis train robery, in his latest letter, says he is tired of being chased around the country by detectives, and offers to return $25,000 of the stolen money if they let him go in peace. Frotheringham the express messenger in the robbed car is in jail as an accomplice, for want of bail .....The Hon. William T. Price, member of Congress from the eighth Wisconsin District, died Monday.... Archbishop Ryan announces that under the decrees of the Baltimore Plenary Council balls for charitable purposes are prohibited..... The wife of "Bill Jones, the avenger," who fired at Guiteau as the latter was riding from the court-room to the jail, has filed a bill for divorce, and charges that her husband is a worthless vagabond and sot.....The Grant Monument Fund amounts to only $123,709, and the Committee, despairing of raising more, seem inclined to build such a monument as the money will procure. The Elevated railroad in this city intends to extend its line to Riverside Park , where Grant's body rests, to accommodate the large number of visitors to his tomb; a small fee from each would lessen the number or increase the Monument Fund or do both.....Twenty-eight prominent citizens of Philadelphia invite all other citizens to help them get a good Mayor for the city..... .....Dr. Douglass, who lost his health in caring for General Grant, has gone South to spend the Winter. He will be at the Hot Springs in Arkansas first, and later in Florida. Mrs. Douglass is with him, and her daughter, Miss Justine Prindle, joins them later..... .....The late ex-Senator Sharon's bequest of $50,000 to Golden Gate Park, in San Francisco, will be devoted to a play-ground for children. Among its features will be a large dairy building in which milk, eggs, bread and other simple food will be supplied at cost..... .....Frederick Douglass says there were 4,000,000 negroes in this country at the time of the emancipation, and that he now estimates the colored population at 7,000,000.....

The distribution of the $60,000 voluntarily paid by ex-Gov. Hoadly of Ohio as bondsman of Mannix, assignee of Archbishop Purcell, among the creditors has begun. It only pays 1½ per cent on the claims, but the creditors, mostly old or middle-aged women, rushed eagerly and gratefully to the office of distribution. Some 170 individuals were paid on the first day, and the enormity of the Purcell swindle can be recalled by noting that this number reached only through letters A and B on the list of creditors. The claims reached all the way from $5 to $10,000, but only about a dozen were over $1,000... .....Lewis H. Stanton, only surviving son of the great war secretary, is a stock farmer at Morris, Minn., and is collecting material for a biogrrphy of his father, although he will not himself write it.....The Supreme judicial court of Mass. in full bench have decided that a member of the Law and Order League is not competent to sit on jury in a case depending on the evidence of one of the League's spotters. It was a liquor selling case.....The sixth annual meeting of the federation of trade unions, comprising, it is claimed, 500,000 members, has been in session at Columbus, Ohio, during the week. The trade-unions are devoted to effecting a scheme by which each union can have absolute control of its own affairs, and yet can draw for assessments on all the unions when one of them establishes a strike. This and a determination to keep out of politics mark the distinction between the unions and the Knights of Labor..... .. It is generally believed at the City of Mexico that diplomatic questions of grave importance will soon arise between the United States and Mexico, growing out of the position taken by President Cleveland against the right of Mexico to try Americans committing offenses against Mexican law while on American soil. The newspapers of all shades of opinion stand by the government in this matter, on the ground that the principle is a sound one and approved by some of the most highly civilized nations of the world. .....Baltimore pays the premium on $500 accident insurance for each of its firemen, and in case of death gives an additional $500 to the family of the deceased..... Very hard cider is said to be quite popular as a beverage in Iowa "since Prohibition."..... ....The "State" of South Dakota having been refused admission by Congress, has elected executive officers and a legislature, and proposes to put a State Government in operation on the 15th instant. A proclamation calling upon the legislature to meet at that date has been issued by "Arthur C. Mellette, Governor; A. E. Frank, Lieutenant-governor and President of the Senate, and Thomas V. Eddy, Speaker of the House of Representatives," attested by "H. S. Murphy, Secretary of State," and done "by virtue vested by the constitution and legislative enactment of the State of Dakota," and it is given out that "business" is meant without question or doubt..... ....The life of General Lee, just published, shows that the number of paroles issued at the time of the surrender was 28,231 .....Capt. James B. Eads says the project to build a ship railway across the Isthmus of Panama with Government aid will be abandoned, and the enterprise will be continued under a private corporation..... .....Prominent grain dealers of New York, Philadelphia, Baltimore and Chicago are making arrangements to form an association for the purpose of carrying their own insurance on grain in registered warehouses .....The collapse of the great strikes at Chicago, Ill., Amsterdam, N. Y., Peabody and Salem, Mass., has given a severe blow to labor organizations. Of late large numbers are deserting the K. of L. The shoe unions at Lynn, Mass., which are tired of supporting the tanners, are losing their members in great numbers. There was a total failure to support the strikers at Peabody. Powderly's circular asking for an assessment of 25 cents per member has caused much discontent, as each local body has to support its own organization. There is a general feeling that things are going wrong; and the public and many of the Knights think things have been carried too far. They wanted the earth, waxed fat and kicked—kicked other laboring men especially—and it was too much for them, ...George A. Marden, of Lowell, and Mr. Whitaker, editor of the New England Farmer, are being urged for Secretary of the State Board of Agriculture in place of John E. Russell, elected to Congress. The choice is made by vote of the Board, and the office is in no sense political.....The President has appointed Thomas Moonlight, defeated Democratic candidate for Governor of Kansas, to be Governor of Wyoming, in place of Francis Warren.....Young James G. Blaine, who lately married, and to whom his father allows $1,500 a year, has started in life as a newspaper reporter in Pittsburg.....The British residents of New York city and vicinity have decided to celebrate Queen Victoria's jubilee anniversary June 28 next, at an expense of $10,000, and if the subscriptions run over that they will be used to endow a Victoria hospital, or a sailors' club, or something .....Paducah, Ky., is greatly excited over the reported existence of diamond fields there.....Mme. Patti is to be paid $150,000 for her six months' singing in this country.....The discovery of a vein of coal under the site of Omaha, Neb. promises richly for the city's rapid development.....The Canadian Pacific railway people are engaged in a project to run a chain of ocean cables from Australia to New Zealand, Fiji Islands, Fanning Islands, Sandwich Islands and thence to the city of Vancouver, the terminus of the road..... Snow fell about Asheville N. C., Monday to the depth of 26 inches. The weight of the snow crushed in the roof of the Ashville tobacco works and a large stock of smoking tobacco was ruined. The storm in many parts of Virginia, and indeed in the most of the South was most unusual. Snow fell in many places to the depth of 12 and 18 inches.....Forest fires are sweeping over the entire low region of South Caronina. No rain of any consequence has fallen since July. Dense volumes of smoke almost hide the sun from Charleston. Many of the old plantation mansions have been destroyed. ....Officers of the navy are not particularly pleased with the decision of the Second Comptroller, which holds that travel between the United States and Alaska is foreign travel, and therefore that no mileage can be allowed for it.....At a meeting in Chicago the other night, at which Marshall Field presided, a million and a half dollars were subscribed for a new Opera-house and Exposition Building.... Indiana, Connecticut, New Jersey and West Virginia are following Ohio in the matter of organizing permanent Republican clubs and a State League.

FOREIGN NEWS.

SATURDAY, Dec. 11, 1886.

EUROPE is no nearer a condition of assured peace than it has been for months past. The Bulgarian trouble is apparently as far from settlement as ever. The Turkish government has interceded on behalf of the Mingrelian prince, but its overtures have been repulsed by the Bulgarian Regents, who have declared that they will never consent to his candidacy, though they would be willing to consider the claims of a candidate proposed directly by the Porte. The latest news is that there is to be an offensive and defensive alliance of the Balkan States, Bulgaria, Roumania and Servia. In Germany a fear of war appears to be growing. A meeting of the Frontier Defense Commission was held Saturday, which is represented as in effect a council of war, and which was attended by the Emperor and some of the most eminent military men. On the Berlin Bourse there has been a marked depression and a heavy selling of international securities, principally Russian. This tendency of the market is generally connected with the uneasiness growing out of the political situation. Von Moltke has openly declared in the legislature that Germany needed an increase of the army by 40,000 men, so as to be ready at an early day to fight for the retention of Alsace and Lorraine. The general impression is that war will break out in Spring. All the continental nations are doing their "level best" to be ready for the conflict—by increasing their armies, drilling and organizing troops, and manufacturing the most deadly weapons..... ....In France the Ministry of M. de Freycinet has resigned because the Chamber of Deputies voted for the total abolition of the office of sub-prefect (something like our county sheriffs) contrary to the wishes of the Ministry, which was willing to consent to a partial abolition. There has been difficulty in getting anybody to endeavor to form a ministry, but M. Goblet, the late Minister of Public Instruction, has at length undertaken the task under strong pressure from President Grévy. Boulanger remains Minister of War in the new Cabinet, and is still the popular military hero of the Republic. Since Thiers' time French Cabinets have changed, on an average, every eight months.....In the United Kingdom the great trouble is still in Ireland. Urged by Government a large number of landlords have made voluntary reductions of rent, amounting to from 15 to 50 per cent.; others have done likewise because convinced that the tenants couldn't pay the full amount; and still others have been forced by the National League to make concessions. In case of refusal the League collects what it thinks a fair percentage, and from it supports the tenant in his fight with his landlord—indeed the League is ruling Ireland just now more than the Government. The latter is resolved, however, to suppress the former and inaugurate an era of coercion. Several prominent Leaguers have already been arrested, and are held for trial, and the Government intends to help the landlords to evict tenants who refuse to settle up. To pass laws for this purpose Parliament will assemble next month—a month earlier than usual—and effective but rather arbitrary means will be adopted to do away with obstruction from Irish members and their English, Scotch and Welsh sympathizers. As the Liberal-Unionists are sticking more closely than ever to the Conservatives, the two combined will have such a majority that they can pass what rules and laws they may please.....

AGRICULTURAL NEWS.

SATURDAY, December 11, 1886.

The Chicago live stock Exchange indorses the resolutions passed, the other day, by the National Cattle growers' Convention protesting against the advance in rates on live stock and dressed meat made by the pool railroads running east from Chicago, and begging the railroads to make rates that will not unjustly discriminate against the cattle interests of the West.....A revolution will be effected in the shipment of apples from Nova Scotia by the discovery that large steamers can go up the Bay of Fundy close to the centre of the apple-growing district and load on the spot, thus saving the freight charges by rail..... The cotton yield the last year amounted to 6,387,436 bales.....The tobacco sales for November at Danville, Va. were 1,619,828 pounds at an average of $8 33 per 100. The sales for the corresponding month last year were 3,389,993 pounds..... Several of the companies engaged in importing frozen meat into England are reported to be in a precarious condition financially, owing to the low prices of meat, and some of the foreign shippers are also said to be embarrassed. .....Little demand for hops in Canada, large purchases of foreign stock when cheap, now come into competition with home-grown, causing farmers to sell cheap. ....The frozen meat trade of New Zealand has become an important service to that colony, the exports since January 1 amounting to more than 600,000 carcasses of mutton..... .....Eight proprietors of second-rate hotels and restaurants in Hartford, Conn., were arrested the other day for using oleomargarine on their tables without displaying a placard, "oleomargarine butter," as required by law, under a penalty of $50 fine. These will be regarded as test cases..... A law in South Carolina prohibits any sale, barter or receipt of seed cotton, between sundown and sunrise, as a check upon stealing of cotton by negroes, and yet the Charleston News and Courier says the stealing and unlawful barter of the article is an intolerable nuisance.....Since the oleomargarine law went into effect, the Dairy Commissioner of Connecticut has examined 50 suspected samples, 35 of which proved to be bogus butter. Arrests of sellers of the stuff are very frequent all over the country.....A National Poultry Union has been organized in this city with a capital of $10,000, divided into 1,000 each, and will hold its first exhibition in February next. ....Southern Illinois wheat fields are reported to be infested by clinch-bugs.....Statistician Dodge, of the Agricultural Department, says there are about eighty swine to ever 100 of the population in this country, while in Europe there are only 15 to each 100 persons. .....The National Consumers' Meat Company has leased a portion of the Manhattan Market in this city for a receiving station, and has changed its Western depot from Dakota to Kansas City.....

For an Irritated Throat,
Cough, or Cold, "*Brown's Bronchial Troches*" are offered with the fullest confidence in their efficacy.—*Adv.*

Crops & Markets.

SATURDAY, December 11, 1886.

THE latest reports from the winter wheat sections are uniformly more generally favorable than for a number of years. In Illinois, Ohio, Indiana and Missouri the reports state that the grain is looking unusually good. In Michigan, Wisconsin and Kansas, while the reports are not so favorable, the fields are looking promising. The plant is reported as vigorous and went into Winter in unusually

good shape. Out of 149 principal winter-wheat counties in the States named, 103 report an average or increased acreage as compared with 1885, and 46 report a decreased acreage. Illinois and Kansas indicate the largest decrease. In Ohio only three counties out of 29 show a decrease, and only four in Indiana out of 19 counties reporting. In Illinois 11 counties out of 32 report a decrease, and in Kansas 10 counties out of 21 report a decrease.

A dispatch from Minneapolis, Minn., this morning, says the snow blockade interfered somewhat with the receipts of grain early in the week; but as milder weather has set in receipts are increasing rapidly. Indeed it seems that the transportation and storage facilities are quite inadequate to accommodate all the farmers who wish to push their grain to market. In view of the great amount of grain in the Northwest, and the haste with which holders try to market it, only a very strong demand can keep up present prices, which are about the same as a week ago.

The crop report of the Department of Agriculture, a summary of which has been telegraphed this morning from Washington, says: The December returns of average farm prices by counties, show material reduction as compared with values of the crops in 1885, in wheat, rye and barley. Corn has made an advance nearly equivalent to the percentage of reduction in quantity, and oats, in sympathy with corn rather than the small grains used for human food, average a slightly higher value than last year. The farm values of corn was 33 cents per bushel in December last year. It is now 37 cents. The prices in the surplus States are: Ohio, 35 cents; Indiana, 32; Illinois, 31; Iowa, 30; Missouri, 31; Kansas, 27; Nebraska, 20. The average is 56 cents in New York, 47 in Pennsylvania and 45 in Virginia—two cents lower in each than last year. Prices in the cotton States south and west of North Carolina are higher than last year. South Carolina, 60 cents; Georgia, 60; Alabama, 58; Mississippi, 59; Louisiana, 55; Arkansas, 49; Texas, 60—an increase of 11 cents, due to the disastrous drought. The average December price of wheat is 69 cents, a reduction of eight cents from the average value of the last crop and 4½ cents above the price in 1884. The average in New York is 84 cents; Pennsylvania, 83. The average of Ohio is 74 cents; Michigan, 73; Indiana, 70; Illinois, 69; Wisconsin, 68; Minnesota, 61; Iowa, 60; Missouri, 63; Kansas, 58; Nebraska, 47; Dakota, 52. The average value of oats is 29.9 cents, against 28.5 last December. Rye average 53.1, against 57.9 last year. Barley, 53 cents; last year, 56.3. Buckwheat, 54.4, a reduction of 1.5 cent per bushel. Potatoes 46 cents, one cent higher than December of last year. The value of hay averages nearly eight dollars per ton.

Very moderate offerings of the better qualities of butter, particularly of choice to fancy creamery, enable holders to gain a further advance in values, which closed firmly, with increased interest evinced by local and nearby purchasers for actual distribution. Elgin creameries were notably strong, selling on Thursday up to 30c. at 31c. The less desirable grades were in slack demand and irregular.

	DEC. 10.	DEC. 10, '85.
Creamery, new choice to fancy	27@31c.	29@32c.
State, new dairy fancy	25@28	21@2?

Strictly choice to fancy cheese again ruled strong, during the past week, holders handling supplies carefully and showing no urgency in their offerings, awaiting the actual requirements of buyers. Shippers buy sparingly. Desirable lots of medium quality are represented as very difficult to procure. Ocean freights rates strong and extreme.

	DEC. 10.	DEC. 10, '85.
New cheese (f'cy)	12¾@13	9@9¼

The Utica Dairymen's Board of Trade report that the cheese market has been an improvement over 1885, although opening May 3, two weeks later than last year. Factories are all closed. The lowest price of the season was 6¼ cts. (June 13) and the highest .12¼, which was paid on three of the four market days in November. There have been sold on the Utica market during this season 325,962 boxes of cheese or 19,557,720 pounds. The average price for the season was .0907, giving a money value of $1,773,885.20. In quantity the make of last year has been exceeded by 5,165 boxes, and in value received by $242,125.90. The transactions of 1886 have been the largest in the history of the Utica market, though the value of the cheese sold was greater in 1884 by $215,000. The sales on the Little Falls market are 209,135 boxes, or 12,548,100 pounds. The average price there was .0908, making the value of the cheese sold $1,139,367.48, against $990,636.98 last year. The value of the cheese sold on the two markets was $2,913,252.68, against $2,521,706.28 in 1885, a betterment of $391,485.40.

The past week has been favorable in weather for marketing and slaughtering hogs, and packing operations have been active, exceeding the corresponding time last year. At the ten leading points in the West the total packing for the week has been 590,000 hogs, against 505,000 the preceding week, and 465,000 for corresponding week last year, according to the Cincinnati Price Current. These places show a total of 2,035,000 hogs since November 1, against 2,215,000 last year—a decrease of 180,000.

The latest advices from the London wool sales show a better feeling in that market, and the American dealers manifest increased confidence. It appears that the wools offered at the beginning of the sales were in great measure inferior. On more desirable descriptions the values of the October series seem to have been pretty much sustained. At Boston prices, as a whole, are rather firmer than a week ago. The market presents no special feature either of strength or weakness. Current quotations for leading sorts in comparison with last year are as follows:

	Dec. 11, '85.	Dec. 10, 86.
Ohio & Penn. X	32@33c.	34@35c.
Ohio & Penn. XX	34@35	36
Ohio & Penn. XX and above	35@37	36½@37½
Michigan X	30@31	32@33
Fine Ohio delaines	36@37	37@38
No. 1 combing	37@38	39@41
Texas spring, 12 months	22@25	23@26
Super A	33@37	33@37

The sales of the week at Boston are reported at 2,827,000 pounds, as against 2,423,000 pounds last week, and 2,851,000 in the corresponding week last year. The wool trade at Philadelphia has developed no improvement. Manufacturers are indifferent about operating beyond actual wants unless they can secure a cut of 1 to 2c. under ruling prices, and holders are not inclined to accept business on this basis.

MARKETS BY TELEGRAPH.

SATURDAY, December 11, 1886

CHICAGO.—Compared with cash prices a week ago, No. 2 Spring Wheat is ⅝c. higher. No. 3 Spring ¾c. higher, No. 2 Red, unchanged Corn, ⅛c. lower. Oats, ⅜c. lower. Flaxseed, 2½c. higher. Pork, 30c. higher. Cattle, a trifle lower. Hogs, somewhat higher. Sheep, 10 to 20c. higher.

CHICAGO.—WHEAT.—No. 2 Spring, at 78⅜c: No. 3 Spring, 71⅛c; No. 2 Red, 78⅜c. CORN.—No. 2, 37c. OATS.—No. 2, 26⅜c. RYE.—No. 2, 54⅛c. BARLEY. No. 2, 53¾c. FLAXSEED—No. 1, 99½c. Timothy Seed—Prime, $1 79 MESS PORK—$11 30. LARD.—$6 12½. Short Rib sides (loose), 5.55@5.65c; dry salted shoulders (boxed) 4.75 @4.80c; Short clear sides (boxed), $4.75@4.80. CATTLE.—Market steady and rather strong. Stockers and feeders, $2@3 30, cows, bulls and mixed $1 30@3 20; bulk, $2 20@2 45; Texas Cattle, slow, $2 65@3 15. HOGS.—Market strong and heavy, but 10c higher than yesterday; Rough and mixed, $3 65@4 15; packing and shipping, $4 10@4 30; light weights, $3 50@3 95; skips, $2 25@3 40. SHEEP.—Market slow, 10@25c, lower; Natives, $2 50@4 70. Western, $2 50@3 50, Texans, $2 20 @3 25; Lambs, $4@4 75.

ST. LOUIS.—Compared with cash prices a week ago, Wheat is unchanged. Corn, 1⅝c. lower, Oats, ¼c. higher. Pork, 25c. higher. Cattle a trifle lower. Hogs, a shade lower, Sheep steady.

ST. LOUIS.—WHEAT.—Active. No. 2 Red Winter, at 79c; December, 79⅛c; January, 80⅛c; closed; February, 81⅝c, May, 86⅜@87⅛c. CORN.—Dull No. 2 mixed, Cash, 35⅝c; December, 35⅝c; January, 35¾@35⅞c; February, 36⅜c; May, 39⅜. OATS.—Dull, No. 2 Mixed, Cash, 28⅛c. bid, December, 27⅝c; May, 31⅛c. RYE.—52½c. BARLEY.—Minnesota, 62½c. BUTTER.—Creamery, 21@27c; dairy, 15@23c. EGGS.—21@21½c. FLAX SEED.—98c. HAY.—Timothy, $11 00@13 50; Prairie, $8 75@11 50. BRAN.—70c. at mill. PORK.—$11 25. LARD.—$6. BULKMEATS.—Long clear, $5 45@5 55; short ribs, $5 55@5 55; short clear, $5 75. CATTLE.—Choice Heavy Native Steers, $4 50@4 75; Fair to Good Shipping Steers, $3 50@4 30 Butchers Steers, fair to choice, $3@4 10; Feeders fair to good, $2 50@3 10; Stockers, fair to good, $1 90@2 75; Texans and Indians, common to choice, $1 80@3 65. HOGS.—Choice heavy and Butchers, Selections, $4 10 @4 30; Packing, fair to fancy, $3 85@4 05; Yorkers, medium to prime, $3 65@3 85; Pigs, common to good, $2 60 @3 70. SHEEP.—Market slow and weak; common to fair, $1 85@2 50; medium to choice, $2 60@4.

BOSTON.—APPLES.—King, $2@2 50 per bbl; Snow, $2 50 @3; Baldwin, $1 25@1 50, per bbl; Hubbardstons, $1 75, Harvey, $2; common, 75c.@$1. CRANBERRIES.—Cape Cod, $6@6 50; country, $3@4. BUTTER.—Northern creamery, extra, 29c. per lb; do. firsts, 24@27c. per lb; Western creamery, extra, 29c. per lb; do, firsts, 26@28c. per lb; do, choice, 20@22c per lb; Dairy, Franklin County, finest, 25c. per lb; good to choice, 24@26c. per lb; Vermont extra, 25@26c; Northern, choice, 24@25c. per lb; do, fair to good, 16@19c. per lb; Western dairy, good to choice, 12@18c. per lb. Imitation creamery, extra, 14@16c. per lb; ladle-packed, choice, 13@14c. per lb; do. fair to good, 11@12c. per lb. BEANS.—Choice pea, Northern hand-picked, $1 80@1 80; per bush, do, do, New York choice hand-picked, $1 70@1 75, do, screened, 1 80@1 85; medium choice hand-picked, $1 60@1 65, do choice screened, $1 25@1 50, yellow eyes, choice, $1 55@1 60; do flat, 1 50@1 55; red kidneys, $1 75. CHEESE.—New York extra, 13c. per lb; do good to choice, 10@12c. per lb; do, common, 7@8c. per lb; Vermont extra, 11½@12¼c. per lb good to choice, 10½@12c. per lb; common 7@9c. per lb. Western, extra, 11½@12½c. per lb; do fine, 9@10c. per lb; common, 6@8c. per lb; Sage, extra, 13@14c. per lb. CORN. Yellow, 52c; High mixed, 52c; steamer yellow, 51c; steamer mixed, 49@50½c.; and no grade, 49@50c. per bush. EGGS.—Near by and Cape, 29c. per doz; Eastern extras, 27c. per doz; Aroostook County, 25c. per doz; New York and Vermont, 24@27c; Western, 16@22c. per doz; Provincial, 24@26c. per doz; Icehouse, 11@22c. per doz; Limed, 18c. per doz. HAY AND STRAW.—Choice, $17@18 per ton; fair, $16@17 per ton; ordinary, $14@15; fine, $13@15 per ton; swale hay, $10 @11 per ton; poor, $11@13 50 per ton; Western, choice, $16@17. do, fair to good, $13@11 50; rye straw, $16@17 per ton; do, do, machine, $12@13 per ton; oat straw, $8@10 per ton. POTATOES.—Early Rose, 45@53c. per bush; Beauty of Hebron, 48@55c. per bush, Sweet, Virginia Yellow, $1 75@1 25 per bbl; Jersey, $1 87@1 62 per bbl. SEEDS.—Clover, West, 9¾@10½c. per lb; do, North, 10½@11c, per lb; do, white, 18@20c. per lb; do, Alsike, 12@15c. per lb Red Top, per sack, West, $2 25; do, Jersey, $2 30@2 50; Hungarian, 90c.@$1; Millet, 90c. @1; Orchard, per bush, $1 80@2; Blue Grass, $1 40@1 60; Timothy, Western, $2 15@2 25; do, Northern, $2 25@2 40; American flaxseed, $2.25.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, December 11, 1886.

STATE OF THE MARKET.—As compared with cash prices last week, flour is unchanged; No. 3 Red Wheat ⅛c. higher, Ungraded Red 2c. higher; No. 3 Corn, 1⅛c. higher; No. 3 Oats, ⅛c. higher; Pork unchanged; Butter, 1c. for best lots, Cheese, ⅛c. higher; Eggs, 2½c. higher; Fruits and Vegetables, steady.

FLOUR, FEED AND MEAL. FLOUR—Quotations: Fine: $2@2 80; Superfine, $2 85@3 10, No. 2, $2 80@3 35; Good to Fancy Extra State, $3 50@4; Common to Good Extra Western, $2 85@3 35; Good to Choice Extra Western, $3 40@5 15; Common to Fair Extra Ohio, $2 80@4, Good, $4 05@4 60; Good to Choice, $4 60@5 15; Common Extra Minnesota, $2 85@3 20; Clear, $3 70@4 80; Rye Mixture, $3 60@4 10; Straight, $3 90@4 65; Patent $4 75@5 15; Bakers' Extra, $4@4 55; St. Louis Common to Fair Extra, $2 80@3 80; Fair to Good, $3 85@4 75; Good to Very Choice, $4 80@5 15 latter an extreme, Patent Winter Wheat Extra, $4 40@$5 10, City Mill extra for West Indies, $4 50@4 60. South American, $4 70@4 80, SOUTHERN FLOUR.—Common to Fair Extra at $3 85@3 90, and Fair to Choice, $4@5 10. RYE FLOUR.—Superfine, $3@3 20. CORN MEAL.—Steady and quiet. Yellow Western quoted at $2 50@2 75, and Brandywine at $2 70@2 85. BUCKWHEAT FLOUR.—$1 85 @2 00.

GRAIN.—WHEAT.—No. 1 Hard at 95⅛c; Ungraded Spring, 85½c; Ungraded Red, 81@92⅜c; No. 3 Red, 85¼c; No. 2 Red, 89@89⅛c; No. 2 Red for December, 88⅞@89⅛c; do. for January, 89 3-16@90 5-16c; do. for February, 90 13-16@91⅝c; do. for March, 92⅝ @93⅛c. do. for April, 94⅜@95⅛c. do. for May, 95⅜@96⅛c; do. for July, 96⅜@97⅛c. CORN. Ungraded Mixed, at 46@48⅛c; No. 3, 46⅛@46⅛c; Steamer, 47c; No. 2, 47⅛c; No. 2 Mixed for January, 48@48⅛c; do. for February, 49⅜@49⅞c; do. for May, 51⅝@51⅞c. OATS.—No. 3 at 33⅛c; do. White, 37c. No. 2, 34@34⅛c; do. White, 37⅜c; No. 1, White, 39c; Mixed Western, 34@36c; do. White, 37@42c; White State, 39c; No. 2 for December, 33⅝ @34c; do. for January, 34⅝@34⅞c; do. for February, 35½ @35⅞c; do for May, 36⅛@36¼c.

PROVISIONS.—PORK.—Mess, quoted at $11 50@11 75 for One Year Old, and $10 75@11 for Two Year Old; $12 50 @ 13 for Family Mess; $14 50@15 25 for Clear Back; and $10 50@11 for Extra Prime. BEEF.—City Extra India Mess, $11@17; Extra Mess, in barrels, $7 50@8; Packet, $8 50@9; Plate, $8@8 50. BEEF HAMS.—quoted, $18 50 @19 50. CUT MEATS. Rib Bellies, 12lb. average 6⅝c.; Loose, 12 lb average, 6⅛c; Pickled Hams, 9@9¼c; 12 lb Pickled Bellies quoted 6⅛c.; Pickled Shoulders, 5⅛@5⅝c; Pickled Hams, 9@9¼c; Smoked Hams, 10¼@10½c; Smoked Shoulders, 6⅛@6⅝c. MIDDLES.—Long Clear in New York, quoted 6⅛c. DRESSED HOGS.—City Heavy to Light at 5¼@5⅛c. Pigs, 5⅜@5⅝c. LARD.—Western Steam spot, 6 40c; City Steam, 6.25c; Refined, quoted, 6.75c. Continent, 7c; South American, January, 6.39@6.43c.; February, 6.45@6.51c; March, 6.53@6.58c; April, 6.63c.; May, 6.67@6.71c.

BUTTER.—Creamery—State, pails, fine, 28; State, good and prime, 24@27; Elgin, 30@31c; Western best, 29c.; Western, prime, 25@27c.; Western, good, 20@21c; Western, June best, 22c.; Western, do, prime, 20@21; State Dairy, half, tubs, best, 27@28; Half firkin, tubs, fine, 24@26c; Half firkins, tubs, good, 20@22c; Half firkins, common, 16@18c.; Welsh tubs, best, 25c.; Welsh tubs, prime, 22@23, Dairy firkins, best, 24@25c; Dairy firkins, prime, 21@23. Western, Imitation Creamery, best, 20@23c; Imitation creamery, fair and good, 17@18; Dairy, common, 12@14c.; Factory, poor, 8@10; Factory, best Iowa, 22@23.

CHEESE.—State factory, fancy colored, 12¾@13c; State factory, fancy, white 12¾@13c.; State factory, good and fine, 11½@12½c., State factory, fair, 11@11½c.; State factory, common, 10@10½c. State factory, light skims, 10@11c.; Ohio factory, fine, flat, 12¼@12½c.; Ohio factory, good, 11@11½c.; Pennsylvania, skims, 2¼@3¼.

EGGS.—State, 26½@27c; Western, best, 26½c; Western, held lots, 23½@25c; Limed State, 17½@18c.; Limed Canadian, 17@17½c.; Limed Western, 17@17½c.

POULTRY.—LIVE.—Chickens, near-by per lb, at 8@8½c: Chickens, Western, per lb, at 8@9c; fowls, Jersey, per lb, at 8c; fowls, Western, per lb, at 7@8c turkeys, per lb at 7@9c, ducks, State, per pair, 60@90c; ducks, western per pair $1 50@75c.. geese, western, per pair, at $1.12@1.62; pigeons, per pair, at 25@30c.

POULTRY.—DRESSED. Turkeys, Philadelphia, dry-picked, per lb, at 12@14c; do, Jersey, per lb, 13@14c; turkeys, Maryland and Delaware, prime, per lb, at 11 @13c. do, State, dry-picked, per lb, at 11@12c, do., State, scalded, per lb, at 11@12c; do, Western, dry packed, choice, per lb, 11@12c; do. Western, dry packed, fair, per lb, at 10c; do. western, iced, prime, per lb, at 10@10½c; do. poor to fair, per lb, at 7@9c; chickens, Philadelphia, selected, fancy, per lb, at 14 @16c; do. Philadelphia, mixed weights, per lb, at 11 @13c. do. Bucks county, per lb, at 11@13c; do, Jersey, dry packed, per lb, at 11@12c; chickens and fowls, State, Pennsylvania and Maryland, per lb, at 8@10c do, western, dry packed, prime, per lb, at 8@9c; chickens, clear, western, iced, per lb, at 7@8c; fowls, clear western iced, per lb, at 7@8c; chickens and fowls, western, inferior, per lb at 5 to 6c; old cocks, per lb, at 4½ @5c; ducks, Spring, Philadelphia, per lb, at 10@12c; do Spring, Long Island, per lb, at 9@11c; do Jersey, per lb, at 10@12c; do, State, Pennsylvania and Maryland, prime, per lb, at 8@10c, do, western, dry packed, per lb, at 8@10c; do, western, iced, prime, per lb, at 8@9c; do, Spring, western, inferior, per lb, at 3@5c; geese, Philadelphia, prime, per lb, at 11@12c; geese, Maryland, per lb, at 10@11c, geese, western, per lb, at 6@8c.

FRUITS.—FRESH.—Apples. Gravenstein per bbl, at $2 50@3; King, per bbl, at $2 50@3; Baldwins, per bbl., at $1@2 50; Bellflower, per bbl, $1 75@2. Grapes,—Catawba at 3½@4½c. per lb; Concord, per lb, 3@4c. Cranberries, at $8@8 50 for Cape Cod best; $7@7 50 for choice; $6@6 50 for light; $2 25@2 50 for choice, per crate.

FRUITS.—DRIED.—Apples—Fancy Evaporated, 11⅛ @12½c.; do. choice, at 11@11½c; do. prime, 10@12½c; do. southern, sliced, prime at 3½@4½c; do, North Carolina, fancy sun-dried, new, 6@7c; do, do. choice, 5@6c; do, do. prime, 4c. Peaches.—North Carolina, peeled, choice new, 13@14; do. do. do, fancy, new, 14 @16c; do. Georgia, choice, 11@12c; do. do. prime fancy, new, 12c, Cherries, pitted, 9½c.

PEANUTS—Quoted at 3⅛c. for fancy hand-picked; 3¼ @3⅜c. for farmers' grades.

COTTON.—The quotations, according to the American classification, are as follows:

	Uplands.	New Orleans. and Gulf.	Texas.
Ordinary	6 13-16	7	7
Strict Ordinary	7	7 7-16	7 7-16
Good Ordinary	8 3-16	8⅜	8⅜
Strict Good Ordinary	8⅝	8 13-16	8 13-16
Low Middling	9 1-16	9¼	9¼
Strict Low Middling	9⅜	9 9-16	9 9-16
Middling	9 9-16	9¾	9¾
Good Middling	9 13-16	10	10
Strict Good Middling	10 1-16	10¼	10¼
Middling Fair	10 7-16	10⅝	10⅝
Fair	11 1-16	11¼	11¼

STAINED.

Good Ordinary	6⅝	Low Middling	8⅛
Strict Good Ord.	7 5-16	Middling	9

HAY AND STRAW.—Choice Timothy, 85c, per 100 lb; Good Timothy, 75@80c; Medium, 60@70c; Shipping; 55c; Clover, mixed, 60@70c Straw No. 1 rye, 65c, short rye, 45@55c; oat, 40@45c,

HOPS. State, new, 26@28c; State, 1885 crop, best on offer, 15@16c, do, do, inferior, 11@14c California, new, prime and best, 26@27c; German, new, best, 28@30c; do, new, medium grades, 23@25c; English, new, best, 22@24c, do, do, low grades, 20@21c,

VEGETABLES.—Potatoes.—Long Island, rose, in bulk, per bbl., $1 75@2; State, rose, $1 50; do Burbank, $1 75. Jersey, peerless, per bbl, $1 37@1 50; sweet potatoes, Va., yellow, per bbl., $1 50@2 00; sweet potatoes, Va.: yellow, inferior, per bbl, $1@1 25. Cabbages. Flat, State and Jersey, per 100, $1 50@3 50. Onions.—Conn.-red, per bbl, $2@2 12; do, Orange County, red, per bbl, $1 50@2. Celery, per doz. bunches, $.75@1. Turnips, Russian, per bbl., $.90@1. Cauliflowers, per bbl, $3@4.

LIVE STOCK MARKETS.

NEW YORK, SATURDAY, December 11, 1886.

BEEVES.—Ohio Steers, 1436 lb, average at $1 75 per per 100 lb; do, 1410 lb, at $4 60; Indiana do, 1400 lb, at $4 45; do, 1388 lb at $4 30; Tennessee Oxen, 1386 lb at $3 75 Kentucky Steers, 1537 lb at $4 75; do 1518 lb, at $4 60; Ohio do, 1250 lb at $3 75; Western Bulls, 1304 lb at $2 75. Kentucky Steers, 1405 lb at $4 75; Western do, 1259 lb at $4 40, State Oxen, 1700 lb at $3 60; Chicago Steers, 1027 lb at $3 55; Kentucky Steers, 1541 lb at $5; do, 1140 lb at $4 80; Virginia do, 1512 lb, at $5; do, 1443 lb at $4 90; Indiana do, 1310 lb at $4 50; do, 1261 lb at $4 25; Connecticut do, 1637 lb at $4 10; Chicago Steers, 1209 lb at $4;

CALVES.—Grassers, 340 lb, at $3 35; FedCalves, 380 lb, at 4¼c; Veals, 364 lb, at 4⅜c; Grassers, 352 lb, at 3c; Veals, 120 lb, at 8c.

SHEEP AND LAMBS.—Receipts for six days 36,502 head against 36,076 head for the same time last week; Kentucky Sheep, 120 lb, average, at $5 10, per 100 lb; Ohio do, 96 lb, at $4 60; do, 78½ lb, at $4: Michigan do, 72 lb, at $3 80; do, 8 lb, at $3 90; Kentucky Sheep, 91 lb, at $4 25, do, 95 lb, at $4; Kentucky Lambs, 67 lb, at $5 50; Western do, 58 lb, at $5 87½; Kentucky Sheep, 120 lb, at 5¼c; Western do, 113 lb, at 4⅜c. Kentucky Lambs, 69 lb, at 5½c, Jersey Ewes, 115 lb, at 4¼c; Kansas do, 101 lb, at 4¼c; Ohio Sheep, 82 lb, at $4 25; do, 88 lb, at $4 12½; Western do, 78 lb, at $4 15; Culls, 73 lb, at 2¼c, per lb; Ohio Lambs, 58 lb, at 5½c; do, 60 lb, at 5¼c; Jersey Ewes, 119 lb, at 4¼c; Pennsylvania Sheep, 111 lb, at 3¾c; do, 80 lb, at $4 05; Northern Canada Lambs, 84 lb, at $6 70; Western Sheep, 105 lb, at $4 60, do, 100 lb, at 5c; Western Lambs, 65 lb, at 6c; Western Sheep, 60 lbs, at 4c; Canada Lambs, 89 lb, at $6 80.

HOGS.—Receipts for six days, 16,625 head against 39,023 head for the same time last week. The market for live hogs was quoted steady with sales at $4 25 @$4 55 per 100 lb; Ohio Hogs, 119 lb at 4⅛c; 120 do, 183 lb, at 4⅜c; Ohio Pigs, 92 lb, at $4 56.

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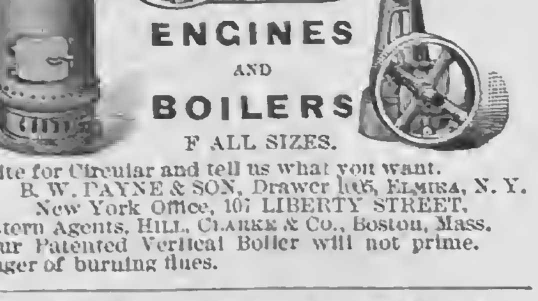

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Law.

HERE are some recent local discussions of interest to farmers:

ELECTION BET.—Two persons made a bet upon an election, each placing his check upon the same bank in the stakeholder's hands. The one in whose favor the bet was decided took the other's check to the bank and had it cashed. The Court of Appeals of Texas held (Donnelley *vs.* Citizens' Bank) that the bank could not recover from the latter the money so paid out.

GARNISHMENT.—The wages of a clerk and bookkeeper are not subject to garnishment in Georgia, according to the decision of the Supreme Court of that State in the case of Lamar *vs.* Chisholm.

STATUTE OF LIMITATIONS.—According to the decision of the Supreme Court of Indiana in the case of Wood *et al. vs.* Bissell, where a contract is made in Indiana with a non-resident, and such person continues to be a non-resident, the statute of limitations will not run as to him.

AGREEMENT TO SHARE PROFIT OR LOSS.—In the case of Clark *vs.* Ware *et al.*, the Superior Court of Kentucky held that a contract whereby the parties agreed to buy tobacco on joint account and to share equally the profit or loss, one of them undertaking to advance the money required and the other undertaking to perform personal service in buying, prizing and shipping the tobacco, constituted a partnership.

ASSESSMENT FOR TAXES.—Where land which was a part of the right of way of a railroad was used for side tracks, and built thereon a round-house, repair shop, wood-shed and water-tank, the Supreme Court of Indiana held that such right of way, together with all the superstructure and tracks thereon, constituted "railroad track," which was to be valued and assessed by the State Board of Equalization and not by the local authorities. Pfaff *et al. vs.* The Terre Haute & Indianapolis Railroad Company.

NAVIGABLE WATER-COURSE —The Supreme Court of Louisiana held, in the case of Goodwill *et al vs.* Police Jury of Bossier Parish, that a water-course is a navigable stream when in its natural state it is such as to afford a channel for useful commerce, and that that condition is not affected by the formation thereon of natural barriers resulting from sand-bars or rafts formed by accumulation of timber.

FENCING RAILROADS.—The Supreme Court of Minnesota lately held (Emmons *vs.* Minneapolis & St. Louis Railroad Company) that a statute requiring railroad companies to fence their roads and making them liable in damages for a failure to comply with the terms of the statute was within the police power of the State. The court said: To regulate the carrying on of any business liable to be injurious to the property of others, like that of operating a railroad, so that it shall do the least possible injury to such property, is as much within the police power of the State as regulating it with a view to protect life from its dangers. There can be no doubt that the State may, under that power, require railroads to be so constructed, maintained and operated, or so protected or inclosed, that they will injure as little as possible the farms or lands through or alongside of which they run.

R. H., Hoboken, N. J.—What are the main points of the "new law" of New Jersey touching on arrears of taxes? And how early after purchase at tax sale will the buyer's title become absolute?

ANS.—The new law permits the payment of all arrears of taxes in incorporated cities, due prior to 1885, at the original amount, seven per cent. interest and expenses, in all cases where the property has not been sold or bought in by the city. The period allowed for redemption by the owner, mortgage or the person entitled, is still two years after the sale, except that when the tax title is held by the township, the redemption may be made afterward, on paying all interest, charges, etc., including taxes subsequently due. The buyer's title becomes absolute in two years after the sale.

L. N. G., Albany, N. Y.—A grocer was selling butterine; a charge is made against him for selling it for butter, but the clerk sold it. Can the clerk be held too; if so, what relation has the clerk to the charge, and what can be done with him?

ANS.—The State law prohibiting the manufacture and sale of oleomargarine enacts that "if any person shall suffer any violation of the provision of this act by his agent, servant, or in any room or building occupied or controlled by him, he shall be deemed a principal in such violation and punished accordingly. (Chapter 183, section 17, laws of 1885.) The clerk is also liable to punishment.

"STOP MY PAPER"

Means nothing at the FARMER'S HOME office, unless it is accompanied with the cash to pay arrearages. We can not stop your paper unless you pay up to date. Refusing to take your paper out of the office does not help it unless you have paid up The law holds you for every cent. Some very bright (?) people send us their paper back with a two-cent stamp on. Well, we get the paper of course, but the waste basket gets it too. Your name on the paper, without your post-office address is useless. How do we know where to find John Vonfelnklesteinkopsudledock on our list unless we have the post-office. We send papers to two thousand post-offices and twenty thousand people. A little admixture of tincture of common sense would do some people good.

The above threatening printed slip was sent out by the Farmer's Home, published at Dayton, Ohio, to a friend of ours who had received a number of copies of the paper through the mails without having ever ordered it. A dunning letter together with a bill for two months' subscription to the paper, was sent at the same time. No charge can be legally collected for any publication sent to any address unless an order has been given for it by the party to whom it has been sent.

About two years ago we exposed a fraud of some Cuban sharpers and once more, a year ago, repeated the exposure, as they were repeating the same "game." Then they swindled some Philadelphians out of a considerable sum, and there is little doubt that they have found many other dupes also. The other day a resident of Birmingham, Mich., received a letter written in Spanish and bearing the Havana postmark. The writer said that he was formerly a high official in the Cuban government service. He absconded to the United States several months ago with $360,000 in Spanish bonds. He exchanged these bonds at New Orleans for United States securities, and with the securities on his person made a trip through the States, going as far north as Michigan. Becoming suspicious that he was being shadowed, he buried his wealth in the vicinity of Birmingham, Mich.. He then returned to the South and at Key West was kidnapped, taken to Havana and thrown into the government prison. The writer went on to say that he was still in prison. He had heard, while in Birmingham, of the high standing of the man he was addressing, and he offered to give him one-third of the securities if he would interest himself in securing the writer's release. Before anything could be done, however, it was necessary to negotiate some of the securities. A plan of the locality where they were buried was among his baggage, which was detained by the Havana police, and $1,500 was needed to release it. If the Birmingham business man would send the money the plan would be mailed to him. Several of the people in the same State have received similar letters. The men singled out by the sharpers are all rich. It is not known whether any of them bit. The money secured will of course be always a dead loss.

A GREAT splndge is now being made by that "Harlem Commou Syndicate," or rather by lawyer Walter H. Shupe, its lond voiced month-piece and originator; but instead of turning out the residents of the lands it claims, it has been decided by "the trustees of the Syndicate," that while the Harlem householders have no legal right to the property, which belongs to the Coovert or (Covert) heirs, still they have moral rights which should not be disregarded: if they will turn in, therefore, and form a company to build docks on the Harlem, the real owners of their homesteads will leave them in peace. All this is arrant nousense, of course. It is humiliating to think that there are people in Pittsburg where the chief Covert claimant—a clergyman—lives and elsewhere, perhaps, who will be inclined to take Shupe's report seriously. Shupe has, of course, levied contributions on all the claimants—and it is said there are over 800 of them—so that anyhow he finds it a good thing.

TO SEVERAL INQUIRERS.—From all we can learn the "deafness cure" advertised by T. S. Page, of this city is effective in relieving or curing deafness in some cases, and of little or no use in others. Everything depends on the cause, nature and extent of the evil. There is no such thing as a "cure" for all forms of the ailment; and many cases cannot possibly be cured by any form of treatment. The Page "cure" is not a humbug—that is all we can say of it.... We do not recommend the Damon Chemical Works, New Bedford, Mass ...The "Free Currant" advertised by Lomax, Indiana, is a humbug—no doubt whatever about it,

Miscellaneous.

SOCIETY NOTES.

THE WESTERN NEW YORK HORTICULTURAL SOCIETY will hold its 22d annual meeting at Rochester, N. Y., Jan. 26 The meetings of this society are famous in horticultural annals. Papers will be presented by J. J. Thomas, Dr. Sturtevant, Chas. A. Green, Dr. Lintner, E. S. Goff and others. A list of 25 suggestive questions has been prepared as a means of bringing out a discussion. P. C. Reynolds, Rochester, N. Y., Secretary.

BEEKEEPERS will meet at Albany, Jan. 18-20. The meeting promises to be a grand one. Delegates from the New York State, the Eastern N. Y., the New Jersey and Eastern Beekeepers' Associations will unite. Essays, discussions and exhibitions of apiarian supplies will be the features of this meeting.

ONE feature of the meeting of the Connecticut State Grange, held at Hartford, Dec. 7-9, was the open meeting. The programme called for "A good word from each Grange; time—five or six minutes." Last year it took 10 to 15 minutes for each of these "Good words." The hope is by careful training to so breed brevity into the speakers that this exercise can be done in 2:30.

THE OHIO STATE HORTICULTURAL SOCIETY meets this year at Dayton, O., Dec. 15-17. This is the 20th annual meeting. A fine programme—its length is the only thing about it we could criticise—has been arranged. Those who attend will learn volumes about fruits.

CATALOGUES, ETC., RECEIVED.

EASTMAN BUSINESS COLLEGE.—Catalogue from the president of this institution, Poughkeepsie, N. Y.—This is one of the best advertising pamphlets we have ever examined. It gives a history of the school, illustrates its more prominent features and plainly shows what is to be gained by a course within its walls. It is the strongest argument for a careful training in business life that can be imagined. And the school is worthy of such an advertisement—that is the best compliment we can give it. The one thing lacking in the lives of thousands of men is the utter lack of a definite system in their business transactions. A business that might be made to yield a good profit frequently fails to do more than yield a bare living, simply because it is conducted on wrong business principles. A careful training in business habits would have made all the difference between profit and loss. Farmers and farmers' boys need this careful training. They can obtain it cheaply and readily at the Eastman College. Those who examine this catalogue will be more than repaid.

HELIOTYPE ENGRAVINGS.—Catalogue from the Heliotype Printing Co., 211 Tremont St., Boston, Mass.—We are glad to call the attention of our readers to these beautiful pictures. Nothing could be finer for a cheap and yet attractive Christmas present. Too many of our homes are filled with poor chromos or coarse engravings. A good picture is a teacher. It adds to the home. It teaches beauty and grace and cultivates all the finer feelings. The soul of a true artist looks out from his work. The heliotype process brings the work of the greatest artists that have ever lived within reach of those who could hardly afford to look at the original pictures. The heliotype is practically a printed photograph. Every line and every dot of the original high-priced engravings are carefully reproduced and printed in permanent ink. Is a good picture better than a poor one? Is a heliotype superior to a chromo? Is the work of a master better than that of an apprentice? The catalogue is very neatly arranged and most admirably illustrates and describes these engravings. We invite our friends to enclose a stamp for it.

FOLDING SAWING MACHINE. — Pamphlet from the Sawing Machine Co., 303-311 Canal Street, Chicago, Ill.—This new tool is said to work well. It weighs 41 pounds and can be completely folded up. It is claimed that one man can carry it on his shoulder, saw down his timber alone, and saw it up into logs or bolts. It can be adjusted with ease to the ground, so that it makes no difference how rough the ground may be. All the points claimed for the machine are described in the pamphlet. An unusually large number of testimonials are given. If this saw will really do what is claimed, it should have a wonderful sale. The catalogue is well worth looking over.

THE KING OF PORTABLE MILLS.—Catalogue from Chas. Kaestner & Co., 74-86 W. Harrison Street, Chicago, Ill.—This pamphlet undertakes to show why these mills are worthy of their name and superior to all others for rapidity of grinding, ease of motion, durability and simplicity.

HIGGANUM M'F'G CORPORATION, Higganum, Conn.—A beautifully illustrated calander which would ornament a store or post-office. Send for one.

Rheumatism

We doubt if there is, or can be, a specific remedy for rheumatism; but thousands who have suffered its pains have been greatly benefited by Hood's Sarsaparilla. If you have failed to find relief, try this great remedy. It corrects the acidity of the blood which is the cause of the disease, and builds up the whole system.

"I was afflicted with rheumatism twenty years. Previous to 1883 I found no relief, but grew worse, until I was almost helpless. Hood's Sarsaparilla did me more good than all the other medicine I ever had." H. T. BALCOM, Shirley Village, Mass.

Hood's Sarsaparilla

Sold by all druggists. $1; six for $5. Made only by C. I. HOOD & CO., Lowell, Mass.

100 Doses One Dollar

CHOICE ENGRAVINGS

Beautiful HELIOTYPE ENGRAVINGS, carefully chosen and finely finished, and admirably suited to the decoration of rooms when neatly framed; also, for Portfolios and Art Studies. They include many of the finest works of the Great Modern Artists, such as Millet, Gabriel Max, Burne-Jones, Paul Thumann, Millais, Leighton, Landseer, Rosa Bonheur, George Mason, Frederick Walker and others.

They are printed in permanent ink, on heavy plate paper, 22x28 inches in size, with engraved title and India tint, and are sold at

One Dollar each.

Sent, post-paid, to any address, securely wrapped, upon receipt of price.

An Illustrated Catalogue mailed upon receipt of stamp.

HELIOTYPE PRINTING COMPANY,
211 Tremont Street, Boston, Mass.

Brewster's Patent Rein Holder.

Your lines are where you put them—not under horses' feet. One agent sold 12 doz. in five days; one dealer sold six doz. in 15 days. Samples worth $1.50 FREE. Write for terms.

E. E. BREWSTER, Holly, Mich.

HOME STUDY. Book-keeping, Business Forms, Penmanship, Arithmetic, Short-hand, etc., thoroughly taught by MAIL. Circulars free.
BRYANT & STRATTON'S, Buffalo, N. Y.

500 Speeches, Selections, etc., and agents' new Sample Cards for a 2c stamp. GIVIN & BRO., Cadiz, Ohio.

CHAMPION EVAPORATOR!
For CIDER, SORGHUM, FRUIT JELLIES, and
MAPLE, has corrugated pan over fire, *doubling capacity;* small syrup pans connected by siphons, easily handled for cleansing, and interchangeable to distribute wear; automatic regulator, and other advantages too numerous to mention. Catalogues free. **G. H. GRIMM & CO., Hudson, O.**

HUMPHREYS'

DR. HUMPHREYS'
Book of all Diseases,
Cloth & Gold Binding
144 Pages, with Steel Engraving,
MAILED FREE.

LIST OF PRINCIPAL NOS.	CURES	PRICE.
1	Fevers, Congestion, Inflammations...	.25
2	Worms, Worm Fever, Worm Colic....	.25
3	Crying Colic, or Teething of Infants.	.25
4	Diarrhea, of Children or Adults.....	.25
5	Dysentery, Griping, Bilious Colic....	.25
6	Cholera Morbus, Vomiting.....	.25
7	Coughs, Cold, Bronchitis.....	.25
8	Neuralgia, Toothache, Faceache.....	.25
9	Headaches, Sick Headache, Vertigo.	.25

HOMEOPATHIC

10	Dyspepsia, Bilious Stomach.....	.25
11	Suppressed or Painful Periods.....	.25
12	Whites, too Profuse Periods.....	.25
13	Croup, Cough, Difficult Breathing....	.25
14	Salt Rheum, Erysipelas, Eruptions..	.25
15	Rheumatism, Rheumatic Pains.....	.25
16	Fever and Ague, Chills, Malaria.....	.50
17	Piles, Blind or Bleeding.....	.50
19	Catarrh, Influenza, Cold in the Head	.50
20	Whooping Cough, Violent Coughs..	.50
24	General Debility, Physical Weakness	.50
27	Kidney Disease.....	.50
28	Nervous Debility.....	1.00
30	Urinary Weakness, Wetting Bed...	.50
32	Diseases of the Heart, Palpitation..	1.00

SPECIFICS.

Sold by Druggists, or sent postpaid on receipt of price.—HUMPHREYS' MEDICINE CO. 109 Fulton St. N.Y.

PURE MILK.

WARREN MILK BOTTLES
Patented March 23d, 1880.

Adapted for the Delivery of Milk in all Cities and Towns.

A Long Needed Want at last Supplied.

DESCRIPTIVE CIRCULARS ON APPLICATION.

A. V. WHITEMAN
R. N.,
72 Murray Street, NEW YORK.

EPPS'S
GRATEFUL-COMFORTING
COCOA

WEAVER ORGANS

Are the Finest in Tone, Style, Finish and general make up of any goods made. Guaranteed for 6 years. Send for Catalogue, testimonials and terms, free, to
Weaver Organ and Piano Co., Factory, York, Pa.

PERSONALS.

JOHN E. OWENS, the veteran comedian, died at his Baltimore home Tuesday, aged 63.

THE late Congressman Price—or "Bill" Price, as a great many familiar friends called him—"rafted" logs and drove oxen in Northern Wisconsin thirty years ago.

THE little daughter of Senator and Mrs. Van Wyck, now three or four years old, has an odd name—Happy-New-Year Van Wyck. She was born on the first day of the year.

MRS. CLEVELAND is a daily visitor at Oak View, near Washington, where her mother now resides, and between which and the White House there is telephonic communication.

MRS. CLEVELAND expresses her entire approval of the movement for the abolition of the feminine hat in the theatre, and says that she will be among the first to observe "a usage that unites good sense and good *ton*."

"COUSIN BEN" FOLSOM, the new Consul at Sheffield (when he gets there), is spoken of as a nice young man with a soft, brown beard and mustache, and a dove-like, hazel eye. His dress shows a tendency towards dudishness.

MRS. ELIZA WILCOX, the child of an adopted son of President Jackson, is now a clerk in the Treasury Department. She was born in the White House, and was a baby when the Treasury Department building was dedicated. A lock of her hair was placed in the cornerstone.

UBEZIAH SLAYTON, of Fayette County, Ga., is the father of so many children that he cannot remember their names. He has been married twice and had eighteen children by one wife and twelve by the other. He had five sons in one company of a Georgia regiment during the war.

CONGRESSMAN McKinley, of Ohio, quotes Congressman Hewitt as saying that "there never was a President who had such a double-riveted title as Hayes—not merely the title of an election, but the title of having had that election examined judicially and then awarded to him." McKinley was an officer in Hayes's regiment during the war.

GOVERNOR SEAY, of Alabama, is getting much sharp criticism from the Southern press for saying, in his inaugural address, that he "questioned the wisdom of erecting monuments in commemoration of civil strife," and "emphatically opposed any expenditure by the State for a monument to the dead until the wants of the needy survivors should be cared for."

CHIEF-JUSTICE WAITE of the United States Supreme Court reached his 70th birthday last Monday, and is now eligible for retirement upon a pension of $10,000 a year. He is still vigorous, however, with no apparent intention of retiring. Justices Field, Miller and Bradley are also eligible for retirement upon full pay, but none has expressed a desire to leave the bench.

COL. JOHN S. MOSBY has in his possession the last letter of Gen. Grant. It was dictated the day before he died, and was addressed to Gov. Stanford, asking his influence to secure Col. Mosby a position in California which would help him to enter on the practice of law. This letter was the means of obtaining an appointment as counsel for the Southern Pacific Railroad, which Mosby still holds.

THE late John E. Owens, the actor, sympathized with the South during the war, but was one of the first men in Baltimore to be drafted for service in the Union army. He was appearing in Washington, when a telegraph notified him of this fact. His part that night was an old man's. Turning to the audience on the opening of the act following when he received the notice, he drew his coat tightly around him and got off the pun: "There's a draft around here, but it ain't from the right side."

THE West once furnished two Senators in Congress who were father and son—Senator Dodge of Wisconsin and his son, Senator Dodge of Iowa, serving at the same time. Simon Cameron stepped out of his seat in the Senate to permit his son Don to step in, and three generations of Bayards have served consecutively in the Senate. To-day Senator Voorhees is in the Senate chamber, and his son in the House as a delegate from Washington Territory.

Miscellaneous Advertising.

A Deep Mystery.

Wherever you are located you should write to Hallett & Co., Portland, Maine, and receive free, full information about work that you can do and live at home, making thereby from $5 to $25 and upwards daily. Some have made over $50 in a day. All is new. Hallett & Co. will start you. Capital not needed. Either sex. All ages. No class of working people have ever made money so fast heretofore. Comfortable fortunes await every worker. All this seems a deep mystery to you, reader, but send along your address and it will be cleared up and proved. Better not delay; now is the time.

Stock and Poultry.

BLATCHFORD'S
ROYAL STOCK FOOD,
COMPOUND CATTLE OIL CAKE.

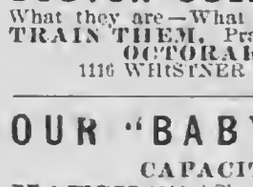
Contains all the valuable qualities (Oil and Albumen) of the finest oil meal in a large amount and easily digested form, and possesses besides flesh, fat, and milk producing properties of the highest known value to the feeder.

BLATCHFORD'S CALF-REARING MEAL,

Recommended by the Agricultural Experiment Stations and prominent breeders and farmers as the best specific substitute for new milk in rearing calves and young stock. Positively no scours.

For directions and testimonials send for "PAMPHLET ON FEEDING," issued and mailed FREE by

E. W. Blatchford & Co.,
CHICAGO, ILL.



FINE Blooded Cattle, Sheep, Hogs, Poultry. Sporting Dogs for sale. Catalogues with 150 Engravings free. N. P. BOYER & Co., Coatesville Pa.

"MARCHMOOR FARM."

HIPPARCHUS No. 11672; Sire Orange Peel, P. 288; Dam King's Fertile, No. 22765. Service Fees, $100.

BRIGHTSON No. 11671, Sire Farmer's Pride P. 322; Dam Nellie Flanders, No 22764. Service Fees, $100.

PRINCE NERO Sire Nero, P. S. 249; Dam Mrs. Langtry, C. 3746. Service Fees $100.

CHAS. R. HOE,
New Brunswick, N. J.

HOLSTEIN FREISIAN CATTLE

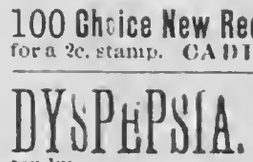
IMPORTED AND HOME BRED.

WHAT OTHERS SAY.

"The finest herd this season."—Dr. Harrington, U. S. Quarantine Station, N. J.

"As a herd, away up! up!! up!!!"—Dudley Miller Esq., Oswego, N. Y.

Young Cows; Yearlings with Calf, Yearling Bulls, and Spring Calves' Prime Stock. No fancy prices. We mean business. G. W. THOMPSON & SON,
Stilton, N. J., P. R. R.



JERSEY RED, POLAND-CHINA, Chester White, Berkshire & Yorkshire Pigs. Southdown, Cotswold and Oxford Down Sheep and Lambs Scotch Collie Shepherd Dogs and Fancy Poultry. Send for Catalogue
WM. ATLEE BURPEE & CO. Phila. Pa

SCOTCH COLLIE SHEPHERDS.

What they are—What they will do—and How to TRAIN THEM. Practical Guide for 10c. in silver.
OCTORARA KENNELS,
1116 WHITSTNER STREET, PHILA., PA.

OUR "BABY" HATCHER.

CAPACITY 60 EGGS.

HATCHES CHICKENS Price, $30.00.

Cheaper and better than with hens. Every FARMER should have one. The "NEW INVINCIBLE" HATCHER for Poultry Raisers is the BEST IN THE WORLD.

RESPONSIBLE AGENTS wanted in every county in the United States to sell our Hatchers and Poultry Supplies—A MONEY-MAKING BUSINESS. For Illustrated Circular and terms, address
BROCKNER & EVANS, 28 VESEY ST., N.Y. CITY.

THE BEST CATTLE FASTENING!
SMITH'S
SELF-ADJUSTING SWING STANCHION,

The only Practical Swing Stanchion Invented. Thousands in use. Illustrated Circular free. Manufactured by F. G. PARSONS & Co., Addison, Steuben Co. N. Y.

Miscellaneous Advertising

100 Choice New Recitations 13 Songs, Elegant Sample Cards, all for a 2c. stamp. CADIZ CARD CO., Cadiz, O.

DYSPEPSIA. If any of our readers are so unfortunate as to suffer from Dyspepsia, they should read a Treatise on this disease, written by

JOHN H. McALVIN, of Lowell, Mass., fourteen years City Treasurer.

It embodies the experience of an actual sufferer, and gives the result of a conscientious study of the disease. He will send it free, to any address.

A Naturalist Study for Boys and Girls.
EVERY ONE THEIR OWN TAXIDERMIST.

For $1 I will send receipt and complete instructions for Embalming and Mounting Birds, Fish, and Small Reptiles. Just the thing for the long Winter evenings. Every boy and girl can become a Naturalist, and have a complete collection of Birds and Animals at a nominal cost, not to exceed five cents each.

JOHN T. LINK,
BOX 738, SILVER CLIFF, COLO.

390 Funny Selections, Scrap Pictures, etc., and nice Sample Cards for 2c. HILL CARD CO., Cadiz, Ohio.

6 PIECES SILVERWARE In Satin-lined Case, FREE to all who will take Agency or help make sales. Address NORTHFORD SILVER PLATE CO., Northford, Conn.

GUNS Our $15 Shot Gun now $10. "$15 *Breechloader*" $9.50
All kinds Guns guaranteed lower than elsewhere. Send stamp for illustrated catalogue. POWELL & CLEMENT, 180 Main St., Cincinnati, Ohio.

WORK FOR ALL. $30 a week and expenses paid. Valuable outfit and particulars free. P. O. VICKERY, AUGUSTA, MAINE.

DENVER WEEKLY REPUBLICAN. Devoted to Mining, Stock Raising, and Farming. The news of Colorado, Wyoming, New Mexico, and Rocky Mountain Country gathered and published weekly. A paper of interest to every one wishing to "go west" or invest in Western enterprises. 8 pages; 21st year. Price, **Two Dollars** per year. Specimen Copy FREE. Address REPUBLICAN PUB. CO., Denver, Colo.

WE WANT YOU! a live energetic man or woman needing profitable employment to represent us in every county. Salary $75 per month and expenses, or a large commission on sales if preferred. Goods staple. Every one buys. Outfit and particulars Free.
STANDARD SILVERWARE CO., BOSTON, MASS.

CATARRH SAMPLE TREATMENT **FREE**
So great is our faith we can cure you, dear sufferer, we will mail enough to convince, free. B. S. LAUDENBACH & Co., Newark, N. J.

FOR THE NEW YEAR.

THE RURAL NEW-YORKER'S

Premium Lists, Seed Distribution List, Posters, etc., for 1887,

ARE NOW READY.

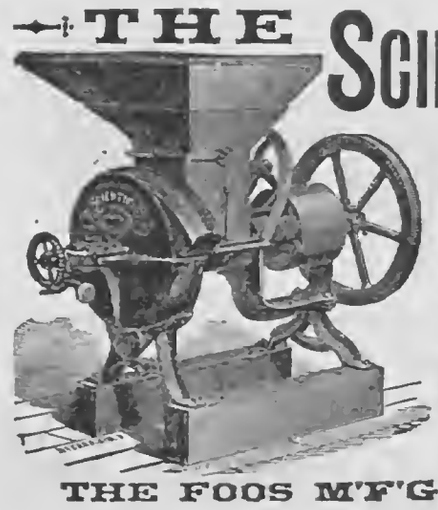
ALL are SOLICITED to SEND FOR THEM.

Specimen Copies will be mailed, free, to any names or list of names with which our readers or agents may favor us, in order to aid them in obtaining subscribers.

The Rural New-Yorker,

34 PARK ROW, NEW YORK.

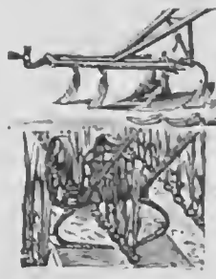
THE SCIENTIFIC GRINDING MILL



THE BEST MILL ON EARTH.

For grinding Ear Corn, Shelled Corn, Oats, and all small Grain. Grinding Plates. A Special Metal hard as Steel. Have Double Capacity, as they **Sharpen Themselves** on being reversed, which is done by simply **Running Mill in Opposite Direction.** Provided with a **Pin Breaker,** which prevents damage should iron accidentally go into the Mill. Sent on trial to responsible parties, and each Mill fully guaranteed. **Send for Illustrated Catalogue.**

THE FOOS M'F'G CO., SPRINGFIELD, OHIO.



THE **"PLANET JR."** HAND SEED **SOWERS** AND WHEEL **HOES** are the newest and best, lightest and strongest known. There are seven distinct tools, each with special merits, no two alike or the same price—all practical and labor saving. The **"Planet Jr." Hollow Steel Standard Horse Hoe,** as lately introduced, has **no equal** in the world. Its excellent work in the field has distanced that of all competitors. It is in some sections doing in one passage the work of four or five old style implements, and in others superseding the cumbersome and expensive two-horse tools. It is *Hoe, Cultivator, Plow, Marker, Ridger and Opener, all combined in one.* Let every Farmer and Gardener send now for our new Catalogue, which gives reduced prices, and such descriptions as will enable readers to judge correctly of their merits. **Free** to all. Forty engravings. Correspondence solicited. S. L. ALLEN & CO., Manufr's, 127 and 129 Catharine St. Philada.

FAY CURRANT HEADQUARTERS GRAPES LARGEST AND BEST STOCK IN THE WORLD.

NIAGARA, EMPIRE STATE and all the other best **GRAPE VINES,** new and old. Vines stored in **Mammoth Stone Cellars** with roots in fine sand. Trees and Small Fruit Plants. By mail, express or freight. Lowest prices for Dealers, Agents, Planters and Everybody. In every respect a Model and First-class Establishment. Accurate naming and highest grading. Free Illustrated Catalogue. **Please write me before you buy.** GEO. S. JOSSELYN, Fredonia, N. Y.

CONSUMPTION.

I have a positive remedy for the above disease; by its use thousands of cases of the worst kind and of long standing have been cured. Indeed, so strong is my faith in its efficacy that I will send TWO BOTTLES FREE, together with a VALUABLE TREATISE on this disease, to any sufferer. Give express & P. O. address. DR. T. A. SLOCUM, 181 Pearl St. N. Y.

DEAFNESS Its causes, and a new and successful CURE at your own home, by one who was deaf twenty-eight years. Treated by most of the noted specialists without benefit. *Cured himself* in three months, and since then hundreds of others. Full particulars sent on application. T. S. PAGE,
No. 41 West 31st St., New York City.

RUPTURE

Have you heard of the astounding reduction for DR. A. SHERMAN'S Famous Home Treatment, the only known guarantee comfort and cure without operation or hindrance from labor? No steel or iron bands. Perfect retention night and day, no chafing, suited to all ages. **Now $10 only.** Send for circular of measurements, instructions and proofs. Get cured at home and be happy. Office 294 Broadway, New York.

I CURE FITS!

When I say cure I do not mean merely to stop them for a time and then have them return again, I mean a radical cure. I have made the disease of FITS, EPILEPSY or FALLING SICKNESS a life-long study. I warrant my remedy to cure the worst cases. Because others have failed is no reason for not now receiving a cure. Send at once for a treatise and a Free Bottle of my Infallible remedy. Give Express and Post Office. It costs you nothing for a trial, and I will cure you.
Address Dr. H. G. ROOT, 183 Pearl St., New York.

CHOICE IMPROVED FARMS.

Within three miles of ALEXANDRIA, LA. RICH SOIL. HEALTHY CLIMATE. Two Railroads. $10 to $30 per Acre. Correspond with
ROBT. S. DAY,
50 UNION STREET, NEW ORLEANS, LA.

Virginia Farms.—Mild Climate. Cheap Homes. Send for Circular. A. O. BLISS, Centralia, Va.

FLORIDA. SEVILLE, on the high pine ridge, a district unexcelled for fruit and vegetables, with delightful climate, is a fast-mail station on the NORTH AND SOUTH RAILWAY TRUNK LINE, 80 miles south of Jacksonville, and has a complete system of water works and sewerage. An excellent hotel is now open. Lots for Sale on reasonable terms. Address SEVILLE CO., Seville, Fla.
MASON YOUNG, President, 33 Wall St., N. Y.
R. H. MASON, Sec'y and Treas., Seville, Fla.

ON 30 DAYS' TRIAL.
THIS NEW
ELASTIC TRUSS

Has a Pad different from all others, is cup shape, with Self-adjusting Ball in center, adapts itself to all positions of the body while the ball in the cup **presses back the intestines just as a person does with the finger.** With light pressure the Hernia is held securely day and night, and a radical cure certain. It is easy, durable and cheap. Sent by mail. Circulars free. EGGLESTON TRUSS CO., Chicago, Ill.
Mention this paper.

NEW Sample Book of beautiful cards, 14 Games, 12 tricks in magic, 430 Album verses. All for a 2c. stamp. STAR CARD CO., Station 15, Ohio.

General Advertising Rates of
THE RURAL NEW-YORKER.

The following rates are invariable. All are therefore respectfully informed that any correspondence with a view to obtaining different terms will prove futile.

ORDINARY Advertisements, per agate line....80 cents.
One thousand lines or more, within one year from date of first insertion, per agate line. 25 "
Yearly orders occupying 4 or more lines agate space..... 25 "
Preferred positions .....25 per cent. extra.
Reading Notices, ending with "*Adv*," per line, minion leaded..... 75 cents.

Terms of Subscription.

The subscription price of the RURAL NEW YORKER is:

Single copy, per year	$2.00
" " Six months	1.00
Great Britain, Ireland, Australia and Germany, per year, post-paid	$3.04 (12s. 6d.)
France	3.04 (16 fr.)
French Colonies	4.03 (20½ fr.)

Any one sending a club of seven is entitled to one copy, one year free.

Agents will be supplied with canvassing outfit on application.

Entered at the Post-office at New York City, N. Y. as second-class mail matter.

Humorous.

THE CHESTNUT BELLS,

BY YAWCOB STRAUSS.

SEE dot feller mit' oxe bells—
  Shestnud bells!
More as feefty, seexty dozens
  Efry day he sells.
How dhey shtingle, shingle, shingle,
  Efry day und efry night,
  Vhile der cars off efry single
Shtory-deller seems to tingle
  Mit gontusions und affright.

"Shust a dime, dime, dime,"
  Sings dot feller, keeping time
To der "tin-tin-appligations" vhich dot
  Ravin' boet dells
Of der bells, bells, bells, bells,
  Bells, bells, bells—
Vrom der shingling und der tinkling
  Off der bells.

Dake a lesson vrom dhose bells—
  Shestnud bells!
Look und see how efry passer
  Quickly oudt hees money "shells!"
Und der bells dhey tinkle, tinkle,
  In der house und in der shtore;
Vhile mit shmiles der faces wrinkle
  At der shtories Rip Van Winkle
Heard aboudt in days off yore.

Und dhey ring, ring, ring,
  All der times like anyding,
At dhose altogedher brevious shestnuds
  Each von tells.
Oh, der bells, bells, bells, bells,
  Bells, bells, bells—
Dhere vas blendy, blendy vork
  For shestnud bells.

—*Chicago Inter-Ocean.*

A CHRISTMAS STORY—"I don't expect anything this year."—*Life.*

THE difference between a porous plaster and a lottery ticket is that the plaster draws something.—*Call.*

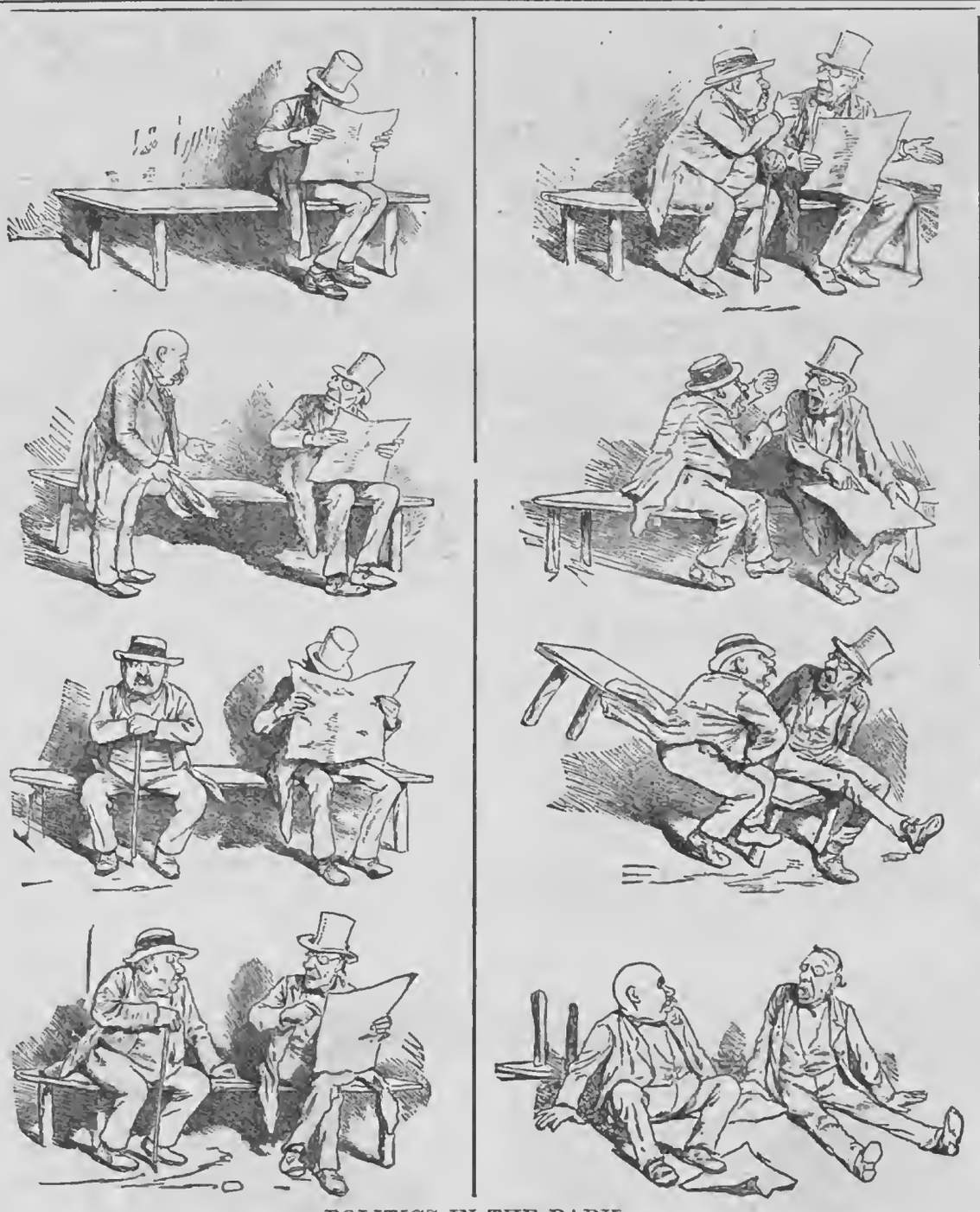
SPECULATOR: "How do you think wheat is going to turn?" Pater Familias: "Into bread, I suppose."—*Boston Budget.*

THE Phrenological Journal says: "In choosing a wife, be governed by her chin." A man is apt to be governed by the same thing after he gets a wife.—*Kansas City Squib.*

GENTLEMAN (to hod carrier): "Doesn't it make you tired, Pat, to climb that ladder all day?" Pat: "Yes, sir; but I have foine rest comin' down".—*Life.*

THE following advertisement appeared the other morning in the columns of a newspaper: "Wanted, a nurse, for an infant aged about thirty."—*Independent.*

IT is hard to surprise some country landlords. A Boston man had scarcely registered the name of Christopher Columbus at a village tavern in Wisconsin when the landlord reached out his paw and exclaimed: "How are ye, Chris? Been expectin' ye ever since the year 1492."—*The Jerseyman.*



POLITICS IN THE PARK.

Miscellaneous Advertising.

AGENTS Wanted to sell **General NURSERY STOCK.** Honorable and steady employment on liberal terms, for capable, energetic men. Apply at once. Address **Drawer 285,** ROCHESTER, N. Y.

KNABE
PIANOFORTES.
UNEQUALLED IN
Tone Touch Workmanship and Durability.
WILLIAM KNABE & CO.
Nos. 204 and 206 West Baltimore Street, Baltimore.
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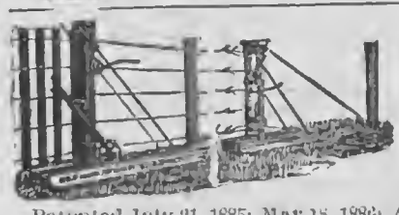

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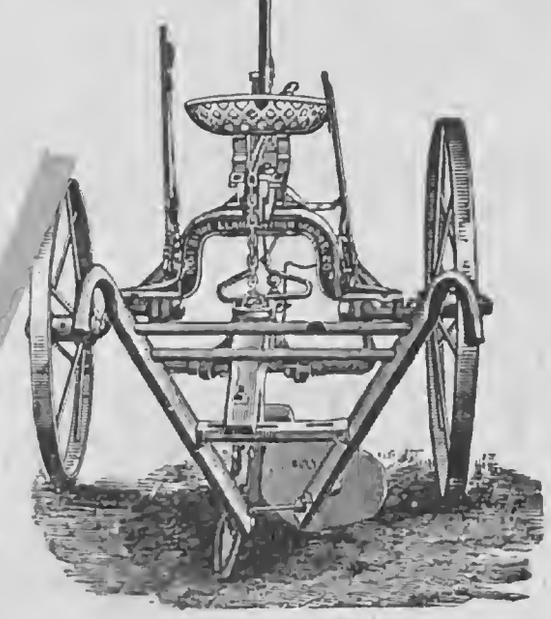

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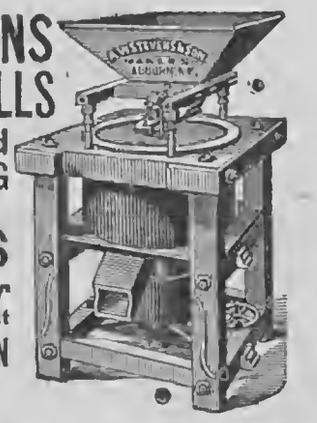

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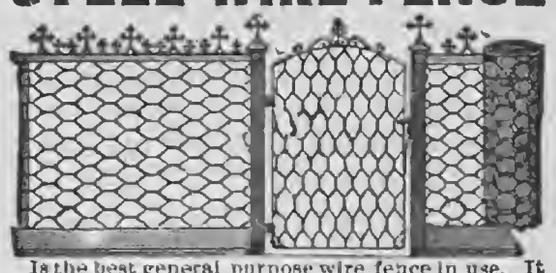

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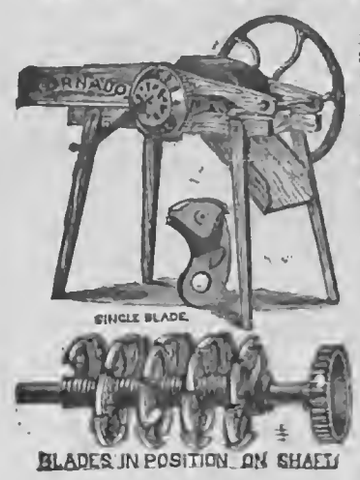

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THE RURAL NEW-YORKER

A JOURNAL FOR THE SUBURBAN AND COUNTRY HOME

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The Swineherd.

WINTER TREATMENT OF SWINE.

A. B. ALLEN.

GENERAL DIRECTIONS.—The best food for swine after half to full growth, with the exception of breeding sows, is a mixture of Indian meal, oat meal and wheat bran, in equal proportions, with a pint to a quart of oil or cotton-seed meal added to every four quarts of the above. Dissolve an even tablespoonful of fine salt in warm water enough to make a thick gruel of this provender, and feed regularly morning, noon and night, sufficient to keep the stock in good condition, avoiding the extremes of over fat or lean. One week add a gill of clean wood ashes to this ration, and the next week, a tablespoonful of fine sulphur, and so alternate weekly. These and salt help to keep off cholera and other ailments. Water regularly either before or after feeding—the former is best—and see that this is also warm. Food with drink given warm assists the digestion much better than if cold, and enables it to go farther in support of all kinds of domestic animals. Late experiments in feeding cooked food instead of raw prove that there is no economy in it; the trouble and expense then of doing this may be avoided.

Instead of oat meal with the Indian meal, barley, rye, wheat, or buckwheat may be substituted, most valuable in the order here stated; or, in some instances, wheat is considered superior to rye. Pea and bean meal may also be substituted, but never having fed them to swine, I do not know the exact proportion to add of both or each to Indian or other meal to make the best provender. This can be ascertained only by careful experiments. Either of the above sorts, if preferred, can be ground with the corn, half and half, and if oil or cotton-seed meal is not to be had, flax seed or hulled cotton seed may also be ground with them in the requisite proportion. Then take two parts of this provender and mix it with one part of wheat bran for feeding the swine.

If they are confined in pens or yards, some charcoal, or hard, or bituminous coal cinders and ashes, or a chunk of rotton wood to gnaw is necessary to keep them in good health and condition. Hay, of which clover is much the best, may be chopped up in the straw cutter into pieces of an inch or less in length; then soaked a little in warm water, and fed as much as the animals will eat at noon or night. Raw roots, and pumpkins in moderate quantity also can be profitably fed at noon. They should never be frozen, but must be taken from a warm cellar or pit, cut into suitable pieces to be easily seized by the mouth, and placed in troughs, or on hard, dry, grassy ground. Wet or soft ground should be avoided on which to scatter these for eating. The best roots I have used for this purpose are sugar beets, carrots, parsnips, mangels and swedes, preferred in the order here named. Potatoes are better than either of these if newly and properly boiled, and the water poured off so as to leave them to dry a while. Mash them and salt as if for one's-self. Raw potatoes are apt to scour the swine, and I have found them quite unprofitable for their sustenance.

FEED OF SOWS.—If a good improved breed when pregnant, special care must be taken to prevent them from getting too fat, especially if confined in a pen where they cannot have sufficient exercise. If over-fat, they are likely to become barren or give birth to small or weakly pigs, or are liable to overlie and smother them, or tread on and wound, or even kill the little litter till some weeks old. I have wintered breeding sows on raw pumpkins when the weather was mild, and changed to roots as it grew colder, with a mess of wheat bran and a pint of oat meal at night, and they kept in just the right condition. Their flesh was looser and softer than when fed on grain, and they were quicker and more active in movement, and, what is very desirable, they never manifested any desire to then devour their offspring, this ration keeping their appetite from becoming morbid and unnatural. A few weeks before farrowing, each sow should be put in a warm pen by herself and then she will give birth to her young much more safely.

PIGS—Make, in the dam's pen, a partition large enough to accommodate the litter inside of it, of strong upright slats, wide enough apart for them to run through; place a small trough here, and as soon as they will eat oats or take other grain put all in it which they will consume through the day. The sow thus cannot rob them of their ration, and by having it always at command they do not pull so hard upon her, and still they get food enough to keep them growing well. After weaning—say when two months old—feed them provender the same as directed above for grown swine, and if this can be made into a gruel with some skim-milk or buttermilk instead of water, it will assist them to thrive all the faster. If they commence scouring at any time, or even get somewhat loose, stop their gruel instantly and feed them dry oats or other grain till this ceases. Wheat flour fed dry is also excellent to stop scouring. In weaning pigs place them in a warm pen some little distance from their dam, and then they will not worry to get to her. If vigorous and of equal size 10 or 12 may be penned together; if not, then fewer, as the larger ones are liable to overlie the smaller as they huddle together to sleep, and thus smother them. Too many half to full-grown swine herding in pens, sheds or yards, are liable to the same casualty.

SHELTER.—If warmly sheltered, swine will grow or fatten much faster on the same quantity of food than if exposed to the weather, so that, generally speaking, unless they have thick woods bedded with abundant leaves to retire to for protection, it is a matter of economy to house them in a warm piggery, or at least in a tight shed opening only to the south; and this should have a board floor, and the yard surrounding it should be so well bedded with leaves, straw, or coarse hay, as to keep their feet out of mud. Wet feet are almost as hurtful to animal comfort and thrift as a wet body. If penned a yard should be attached to each with a door to pass out and in for exercise at pleasure, except at night or in very cold or stormy weather; then it is best also to confine them closely. Proper shelter will not only keep the animals in better condition and guard them from disease, but will also greatly economize feed.

THE BOAR ought to be always kept in a pen by himself with a small yard in the rear for him to exercise as he may desire. If suffered to run with the other swine he might injure them badly. Boars, like bulls, are of uncertain temper, and they must be kept where they can do no harm. Their feed may be the same as that of others, but be careful that they do not become too fat, otherwise they would be inefficient for service, and their offspring, if got, will come weakly, and grow up slowly and with little constitution.

BREEDS.—As to these, keep none but the improved sorts, for they will make thrice as much meat on the same quantity of food as a land-pike or razor-back, and this meat will be of a far better quality. Again, the improved kind must be chosen for what is wanted, as some are better than others to make superior fat pork for salting and barreling, and others excel in their hams, shoulders, and sides for smoking.

The Herdsman.

DEHORNING CATTLE.

IN the RURAL for Oct. 30, in advocating my practice of dehorning cattle, I said that I knew there was a point where the horn could be cut so that a stub would grow, and another where a stub would not grow, and where the pain and bleeding would be but little. I then said "cut the horn above this point and the animal will bleed till it falls." Mr. Henry Stewart, Nov. 27, page 790, says of me:

"When he writes as he does so incorrectly about horns, intelligent persons will lose confidence in his judgment. Any book on anatomy gives a clear description of the horn of an ox, and shows that the inner core of the horn is a continuation of the frontal sinus, and is lined with the periosteum, a most sensitive membrane and full of nerves and blood-vessels. Further, when he says if the horn is cut above a certain point the animal will bleed to death, but will not if cut lower down, he states an absurdity, for there can be no blood above a point if there is no artery below it."

I am willing to be criticized, but my critic must not put words into my mouth that I did not say. I never said a word about the animal's "dying;" but I insist upon it that I was right in what I did say. Mr. Stewart ought to know what he is writing about, but what facts can he give? Has he ever seen an animal dehorned to know how cruel the operation is? This season one of my neighbors cut the horns off a two-year-old bull so as to leave stubs an inch long. The bull bled until he fell. The hemorrhage was stopped with difficulty; but the bull was unable to move for some time. About the same time another neighbor brought a two-year-old bull to my place, and I dehorned him. He did not bleed a spoonful, and as soon as he was turned into the yard within one minute after the operation he served a cow. He went to eating in five minutes and did not lose a meal thereafter. Several gentlemen were present who will verify these statements. Shortly after two herds of cattle were driven up to my place and dehorned. Not a quart of blood was shed from 60 cattle. Now these are facts which can be proved by good men and true. It is time for Mr. Stewart to stop guessing and state facts in return. I have hundreds of letters from those who have practiced dehorning, and any one of them would disprove the charge of cruelty.

Now a word about the horn. It is composed of five parts, two sensitive and three devoid of feeling. The matrix at the base of the horn, a fleshy part, is sensitive like any other skin and no more and no less, so far as we know. The periosteum which grows from the matrix and which is an extension of the corium or true skin, is a thin membrane and is sensitive, but is not, as experience shows by oft repeated experiments, as sensitive as ordinary skin, or even so much as the matrix itself. In old cattle this periosteum grows very thin and often dies altogether either from old age or freezing in winter or because the shell is knocked off and it cannot live. The periosteum is wrapped around the third part of the horn, which is called the bone horn. This bone horn was without feeling always. It was cartilage originally and cartilage, like bone, has no feeling. The fourth part of the horn is the shell, which all know is not sensitive. Now there remains the fifth part. It is the hole inside. All bone horns are hollow and so we say all cattle horns are hollow. Now at a certain veterinary convention I was called upon to speak on horns, and in telling of a certain unreasonable person who denounced me as false and cruel and all that, I went on to say he had so utterly failed in his fight over this matter, that he looked sheepish enough to crawl into one of those holes, and one of the veterinarians said: "Yes, and he ought to pull the hole in after him."

I should have also stated there is no core to the horn in the sense implied by Mr. S. Neither is it true that the "periosteum is the lining of the core," that is, unless they wear the linings outside in Mr. Stewart's country.

Henry Co., Ill. H. H. HAAFF.

The Poultry Yard.

BREEDING FOR THE BEST RESULTS.

IN a recent issue of the RURAL NEW-YORKER the suggestion was made that the most productive hens should be selected from which to secure the succeeding stock. There have been many difficulties in the way of so doing in the past, but a few enterprising poultrymen are attempting some reforms in that direction, and, strange to say, the most vigorous opposition comes from the breeders of the pure breeds. The principal points allowed in the Standard are for the useless portions of a fowl, so far as table purposes are concerned. The Black Spanish points are so arranged that in a possible 100, the head and face get 10 points, the comb 10 the earlobes and wattle 10 and the neck 8—or one-third the whole for head and neck. Then 19 more points are given for the wings, legs, toes, and tail. It can be easily seen that if 30 points in 100 are given to the head, the breeder who desires to secure a high score at the fairs will breed for the best white face, clear earlobes and straight comb, as he has a chance of deriving a great number of points for the head, even if he has to sacrifice the breast and body to do so. In this manner the Black Spanish have been so bred as to lose many of their excellent qualities. They have perfect *heads* (in a showroom sense), but are lacking in stamina and vigor. Nor is this breed an exception.

But the selection of eggs from the best laying hens, though assisting in improvement, will not accomplish the object. Something depends on the cock. The breed must be pure or it will fail to satisfy the object sought. The proper plan is for a few enterprising and experienced breeders to begin with one of the pure-bred families, and select not only the most prolific hens, but to breed the cocks from dams noted for excellent qualities also, until, in a few years, there will be an established family, as is done with Jersey cattle, many of the breeders of which have totally eliminated all exterior qualifications, making the pail the only true test. It will, of course, be more difficult to keep a record of hens, as they are too prolific to establish for them a register, but in one respect this is an advantage, as it gives a larger number from which to select, and those interested may easily keep a private record and note improvement.

It is but fair to state, however, that our poultry breeders have accomplished a good work in establishing and classifying the different breeds. Though they have given preference to ornament rather than to utility, yet there can be no objection to any system that will tend to the improvement of those qualities that serve to render the breeds better for eggs and carcasses, and each and all of the breeds can be used as a foundation for experiments in some particular direction, while every farmer should join in the work. J. P. H.

A SUGGESTED IMPROVEMENT.—I could improve the feeding box for hens on page 809, by having a larger box and two slanting boards inside to meet at the top and slant down so that there would be a feeding trough at each side. Thus one could feed corn and oats separately, or by partitioning off one-third of one side, ground shells or bones could be fed at the same time. J. H. O.

Dairy Husbandry.

DAIRY NOTES.

T. D. CURTIS.

CHICAGO SWILL MILK.

THE foulness of the distillery stables of Chicago, as described by the Chicago press, and the manner of keeping the cows in their filthy stalls, getting no food or drink but the distillery slops run to them through foul channels, is very suggestive and very disgusting to milk consumers. Add to this the prevalence of disease among the cows, as the natural consequence of the way in which they are kept, and the picture of nastiness is complete. It would seem that nothing could more forcibly illustrate the low moral status of those who deal out the deadly fluid of corruption and disease, and the degeneracy of the business plans on which men are struggling for the means of subsistence. Not only is the milk diseased when drawn from the cows, but it grows more and more filthy every moment it remains exposed to the foul atmosphere of the stables and their surroundings. The wonder is that it ever reaches the consumer in a condition not to so offend the nostrils and palate as to cause its peremptory rejection. And then to think of its being used for food for infants! How is it that the health authorities of any city can permit the existence of such abominations? Swill milk from diseased cows, and bogus butter made from the fat of animals dying of disease, appear to be among the normal products of Chicago, as they meet with no open public protest and are not seriously interfered with by the authorities! The traveler who is at all squeamish about the food he eats will be inclined to give that city a wide berth.

CENTRIFUGE BUTTER.

There has been, and we suppose will continue to be, for some time to come, a good deal of discussion about the keeping qualities of butter made from cream taken from milk by the use of the centrifugal separator. The testimony is contradictory; but in this case I consider the unfavorable evidence in the same light as any other negative testimony. If only one man has succeeded in making butter of good grain, good flavor, and good keeping quality, by the use of the centrifuge, it shows that the thing can be done, under favorable conditions and by good management. It appears that a great many have done this. The failures, therefore, must be in the operators and not in the machines. But as the machine throws all the heavier materials to the circumference, and thus effects a general purification, may it not thus deprive the cream of some of its valuable ingredients, as well as of its impurities? Are the minerals—the phosphates—all held in such perfect solution that no loss occurs to either the cream or the skim-milk?

WARM STABLES.

Are your stables for your cows warm and well ventilated, so as to be both comfortable and sweet? If not, set to work at once to make them so, for in this you will find true economy—both a saving of food and an increased product, if you are making butter or cheese, or simply peddling milk. But do not seek to secure warmth by the close confinement of your cows. There must be a free circulation of air in order to secure the good health of the cows and a sweet-flavored product. If with good ventilation, letting the air in at the head of the cows and out at the rear, you can not keep up the required temperature, then resort to artificial heating. It will pay. Once the arrangements are made for heating, the expense will be comparatively small, as a high temperature will not be required. The range of temperature for health and comfort is about 15 degrees—that is, from 45 to 60 degrees Fahr. Below this, cows standing in the stall will begin to shiver and feel uncomfortable; above, discomfort follows and they will begin to pant. It is much cheaper to burn fuel in a heater than food in the cow to keep up the animal heat.

AVOID CHILLING YOUR COWS.

Remember that the least chill of the cow shrinks her mess of milk and affects her general health. Even exposure to the chilling blast of a cold day long enough to drink at a trough in a barnyard has been found to produce a considerable shrinkage of milk. It is wise economy, therefore, to provide for watering cows without such exposure. Some dairymen even resort to warming the water to 60 or 70 degrees before setting it before the cow, and find it pays for the expense and trouble in the increased flow of milk. Stirring in a handful or two of meal to each pailful gives a relish to the drink and adds to its consumption. This is an advantage in the way of nourishment, and it is self-evident that considerable water is required for the production of milk containing 87 per cent. of water. If the water is not warmed artificially, then its temperature must be raised in the cow's system, and an additional amount of food for this purpose will be required.

PROVIDE SUITABLE FOOD.

As something cannot be produced from nothing, it is not reasonable to suppose that a cow can lay on flesh and fat, or give a large amount of rich milk on a small supply of poor food. Then it is the part of wisdom to provide a full supply of suitable food for milk production, and to give it to her regularly. Do not keep her on nothing but corn-stalks, or nothing but hay, but mix or alternate these, and supplement them with a mixture of corn meal and wheat bran. Variety and a due balance of the nitrogenous and carbonaceous foods are essential.

The Apiarian.

BEE NOTES.

Seal extracted honey at once; bee stings; best bees; comb foundations; winter feed; bees and grapes; marketing honey; precautions in wintering.

HONEY, like maple sirup, loses its flavor and becomes stale by exposure to the air. It must remain in the hive until it is thoroughly ripened, and, when extracted, should be sealed up at once in order to preserve the fine flavor and aroma that make it the luxury that it is.

In walking among the hives there is little danger of stings unless the bees are disturbed. Quick motions irritate the bees. Smoke frightens bees so that they do not dare to sting. Lack of confidence on the part of the operator is a fruitful source of stings, as is, also, the leaving of honey where robber bees can find it. Trees set thickly between the apiary and highway protect passers-by from attacks, as the bees fly *over* the trees.

No one variety of bees possesses all the good qualities. The common black bees will store the most honey when the flow is abundant, but the Italians will surpass them working on weeds. The blacks are the best comb builders and their combs are also the whitest. The best varieties of bees should be crossed, and bad qualities bred out.

It pays to use comb foundation in section boxes, but it is doubtful if it is profitable to use it in the brood apartment when hiving swarms.

Cane sugar is the best food possible for wintering bees, and it is advisable to serve all the white honey possible in sections and, if the bees are lacking in stores, feed them a sirup made of cane sugar. In buying honey to feed bees there is danger of introducing foul brood into the apiary.

Bees do not injure sound grapes, but when the grapes are open the bees cause trouble by sucking the juice. It is impossible to shut the bees in, as the time of the grape harvest is too long. Bagging the grapes will prevent all trouble, but, considering the low prices at which grapes are sold, this is too expensive in many instances. Grape growers must remember, however, that grapes cannot be successfully grown without the aid of the bees in fertilizing the blossoms, hence the bees must remain if people expect to grow grapes. (?ED.)

When sending honey to market each bee-keeper should put his name and address upon each section, using a rubber stamp. Each crate should also be stenciled with the grower's name and address. Some bee-keepers place inside each crate a fine, large card upon which is printed "Fine Comb Honey from the Apiary of——" then follow the name and address. The grocer can hang this card "in some conspicuous place." Very much may be done to advertise honey and create a market, by exhibiting it at fairs and selling small packages.

In wintering bees it is an excellent plan to put a shallow rim, two inches wide, under the hive. It allows dead bees and rubbish to drop out of the way, keeps the combs dry and clean and prevents any clogging of the entrance.

Genesee Co. Mich. W. Z. HUTCHINSON,

Horticultural.

VARIOUS EXPERIMENTS.

EVERY horticulturist and every farmer should have on hand each year one or more experiments in the way of cross-breeding plants or animals. I have the following to report:

SWEET CORN—I have received two valuable sweet corns, only one of which is, I think, of superior worth. This is a cross of Moore's Concord and the Red Sweet with Blount's (Tennessee. Eds.) Prolific, giving me a very tall, rank-growing stalk with abundant foliage and ears often six and seven feet from the ground. With decent culture there are almost invariably two ears to a stalk. Color white, with occasionally a flush of the red—no red kernels. Ears large.

BEANS.—I have among several hundred crosses not less than 50 of the white wax pods, of all shades from pink white to silver white. Among them are several with beans also white. Some are pole, others bush. Many of them carry eight or nine beans to the pod. The Golden Wax has rotted so badly of late that these new varieties will doubtless be of value. I have crossed the Lima, but so far have only two or three results of any value; all of these are smaller and more prolific. I have also secured a White Cranberry, the pod remaining red. A cross of Refugee, alone, in all the collection, matures very late; so late that it furnishes shell beans until mid-October. These beans are very curious in many ways, and probably out of the whole there are 100 varieties equal to the best in cultivation. But I am not satisfied, because, so far, I am unable to secure a Lima cross that will replace the Lima to advantage. The wax beans I have decidedly improved.

GLADIOLI.—I have several hundred seedlings from crossing the choicest old stock. These took the first premium as seedlings at the State Fair and have been reported on in the RURAL by Mr. Woodward. I had, in fact, only about 25 varieties in blossom at that time, and only one or two of those would rank among my finest.

With Gladioli I shall begin another large sowing. It needs patience, as the best seedlings do not blossom under four years.

[They sometimes bloom with us the third year.—EDS.]

GRAPE SEEDLINGS.—I have now begun a series of experiments with grape seed from Iona, Herbert, Lindley, Massasoit, etc. I have a conviction that we may look for fine results in what may be called the second cross of Roger's Seedlings. He has already secured a blending of foreign and native blood; and his seedlings give us the first generation from the cross [Minnehaha is such a grape Eds.] Better results may be looked for in the second or third generation from seed without farther crossing. The possible permutations from a cross do not spend themselves for many generations, any more than a cross of French and Irish parents will show all results in the children of the first generation. Indeed it is very difficult to settle any cross. Break up a variety of beans and corn, and you will find it a very serious affair to get the results fixed or established. One pod of beans from such a cross, apparently established, will, if planted in one hill, give you a half dozen quite distinct kinds, some bringing out a tendency to climb, derived from some ancestor far back perhaps: others going to the bush form; some turning back to yellow, others to red or white. In the same way we can be sure that grapes crossed and once brought to fruitage have not come to an equilibrium. In Rogers's Seedlings we have some of the best results of hybridizing, and some of the best possibilities for other results.

CURRANTS.—Besides my grape experiments, I shall experiment with currants. We still lack the ideal currant—a red currant as good as the White Dutch at its best, and as large as Fay's, and even better in the stem. We have no really fine red currant. The White Dutch and White Grape in quality surpass all the reds. E. P. POWELL.

MY JEWELL STRAWBERRY PLANTS threw out very few runners; while Belmont, set in the same row, sent them out in abundance. Both sorts had just the same treatment. A strawberry grower in a neighboring town had precisely the same experience with his Jewells, while a dozen Belmonts, set at the same time, would give nearly 1,000 plants. Have others noticed the same thing, or is it peculiar with us? It may be due to the season, as one or two other sorts which generally keep me busy cutting runners, have this year acted about like the Jewells. E. C. W.

Thetford, Vermont.

Rural Topics.

Notes from the Western New York Farm.

IN putting in pipes for supplying water, whether from a tank and windmill or from a spring, it does not pay to use those that are too small. The time wasted in waiting for the water to run would soon pay for the larger ones and leave a good margin for profit. Those which were in our old barn have been in use now about nine years, and when taking them down recently to put in larger ones we found them so filled with rust that in many places the bore was not over three-eighths of an inch. In putting in the new ones 1¼ inch were used for mains, and one inch for service pipes, and the Wells Rustless Iron Co.'s pipe was used in place of the common. From the appearance I am much pleased with it and believe it will prove practically rust-proof. If so, no one would begrudge the small difference in price, which for inch pipe is less than 1½ cent per foot.

* * *

We harvested this year the best crop of mangels we have ever grown. The varieties were Mammoth Long Red, Orange Globe and Golden Tankard. The average yield was at the rate of over 30 tons per acre, and the best ones went over 34 tons. The Golden Tankards were immense, and are of fine shape. My new way of raising them in hills gives an immense yield of medium-sized roots and these please me better than the very large ones. I can't see how any farmer can afford to winter his stock without plenty of this very healthful food.

* * *

One of my neighbors has been trying to burn his old straw, and when he was not successful in this, he gave it to anyone who would draw it away. He claims that he can use commercial fertilizers cheaper and to better profit than to draw out and scatter his straw. I call this man a crank, for while it may be true that there is but very little plant food in the straw, its use upon the land with me has a mechanical effect which would pay for its application even if it contained no plant food. But then the true way to use straw is as part of the ration for fatting stock and as an absorbent for the liquid voidings of the same. I can find no fault with anyone who buys and uses commercial fertilizers if he can do so making crops pay for them besides labor of production, but any man who cannot use his straw and coarse fodder to better advantage than to give it away must be lacking in the knowledge of the farm and of stock growing. I have a use for much more straw than I can grow, and it pays me to buy it.

J. S. WOODWARD.

Farm Topics.

REMINISCENCES OF THE "GOOD OLD TIMES."

IN the RURAL for November 14th, page 753, is a letter headed "The Good Old Times," in which a veteran Orange County farmer at Goshen, New York, is reported as saying: "I guess that all those farmers who are groaning so about low prices and high taxes and who are longing for the 'good old times' don't remember much about these same 'good old times.'" He also says: "I can remember when we were compelled to haul our grain, butter, pork and eggs all the way to Newburg, getting generally 15 cents a bushel for oats, and 10 cents a pound for butter; 75 cents a bushel for wheat were fancy prices; nice corn-fed pork dressed for $2 a hundred." Also that he paid for taxes $100 on 100 acres of land when he was getting only 10 cents a pound for his butter, while now on the same farm the taxes are $42.50, and his dairy brings, the year round, nearly three times 10 cents for butter; so that such butter as he sold for 10 cents a pound would now bring him 75 cents easily if he had such to sell.

It is always interesting to hear and know of the "good old times," but in this case it seems to me that this same veteran farmer is liable to the imputation that others don't remember the good old times, from the fact that he has not given any dates to show when he paid his $100; whether that was of yearly occurrence or only a special tax that did not occur again. Had he given the year or years when he paid such taxes, the readers could have some data for comparing the past with the present. Now, I have some means of knowing of past times, and will give some statements from sales and account books kept by me and my ancestors, not from guesswork as the veteran farmer of Goshen seems to have done. It is 53 years since I paid my first taxes on my farm, which were then $7.49. From that time to 1846—a period of 13 years—the taxes had increased to $10.68—the amount paid that year. In 1843 25 acres of land were purchased 5 acres of which have since been sold. Although the purchase had been made three years, the taxes had increased in those 13 years of old times but $3.19. In 1860 my taxes were $42.10; in 1861, $58.70 were paid; $108.50 in 1863; $201.02 in 1864; $492.53 were paid in 1865, which was the highest amount paid. In 1866 $142.83 were paid, where the taxes have remained very steadily from that time to the present on 190 acres of farming land. When we paid high taxes during the war, farm produce was high; now farmers find produce generally low compared with farm labor and taxes.

In regard to prices I have received better

pay for farm produce than the veteran farmer from Goshen did for his, as 44 cents per bushel has been the lowest for corn sold; 25 cents per bushel for oats sold for shipment to New York by boat in the Fall: $1 for wheat, while in 1837 it was sold for $2. Three cents a pound for beef, and 3½ cents for pork are the lowest prices taken from my farm sales book in the good old times of my beginning farming; while oats reached 50 cents per bushel and pork 10 cents a pound in the hog, before the war; which are the times many farmers call the "good old times," when taxes were cheap compared with those we have to pay at present. Labor was also cheaper and better than now, especially farm labor. Wool brought a much better price years ago than now. My first sale was at 35 cents per pound, against 25 the past few years. When farmers complain of low prices and high taxes at the present time, I do not think they should be accused as grumblers without cause. No one wishes the world to revolve backwards, but very many do wish for an honest and economical administration of public affairs, and as a consequence a very much lower rate of taxation would be the result. My advice to the veteran farmer of Goshen, is to make butter of his milk, and sell it for 75 cents a pound. He is losing fearfully in selling his butter below 30, as he says he is. The above statement of old times is from another veteran farmer.

Oneida Co., N. Y. JONATHAN TALCOTT.

CORRESPONDENTS' VIEWS.

NO DUDEISM ON THE FARM.—Some time since Prof. (Roberts I think) advised farmers to wear gloves while at work, to prevent hardening and otherwise injuring the appearance of the hands, and gave the girls some advice as to the treatment of those who did otherwise. Does the Prosessor wish us to wear veils to prevent tanning our faces? There is just as much necessity I think. After work is done the farmers may fuss over their hands as they choose; but I hardly think that even Professor Roberts can induce many farmers to wear gloves for any length of time while at work except in severe weather or unusual work. For during warm weather if made of leather, they are clumsy and warm so as to be uncomfortable, and, if of cloth, they would last but a short time and still be open to many of the same objections, and at some kinds of work requiring much finger-labor farmers will throw the gloves aside rather than be bothered and delayed, as no one can do the majority of work as easily or as well with the gloves as without. For instance, try to pick up a pin with them, and even in such rough work as chopping wood in cold weather, choppers throw them aside as soon as their hands are warm, as without them they can hold on to their tools more easily.

As to the girls, I agree with the Professor that if they are ashamed of the young men on account of personal appearance, they had certainly better let them alone, and I can say further that the girls that are ashamed of our hands because they are tanned with honest toil, are not the kind that we farmers want for our wives, and with the Professor I advise them not to marry us—if they get a chance—but they had better take some white-faced, white-handed "counter jumper" for whom they are better adapted.

Norfolk Co., Va. EVERETT E. BROWN.

"FAST" AND "SLOW" TIMES CAUSE LOSS OF TIME.—In traveling through Ohio and Western Pennsylvania I found that people are losing much time in a singular way. They have sun or common time generally called "fast time", and standard or middle time called "slow time." The difference between the two varies from 20 to 40 minutes. The railroads are run by "standard" time, while most clocks and watches are run by sun or "fast" time. People who travel frequently have watches and clocks set by one time or the other, and add to, or subtract from the apparent time, as the case may be. Farmers and others who travel but little, leave home on "sun" time, and find themselves half an hour or so ahead when they reach the train. This difference in reckoning results in a great loss of time and temper. Confusion and delays come from it. It seems as though the best way to remedy the trouble would be to bring about a general adoption of railroad or standard time. If this were done, it might seem for a time that the sun rose a little later, and that darkness came a little earlier, but after people were used to it it would seem right, and surely many delays would be done away with. J. H. G.

Queens Co., N. Y.

POLITICAL ECONOMY FOR FARMERS.—We like to read the ideas of Bucephalus Brown, but we like best of all the suggestions regarding the study of political economy by farmers. Questions pertaining to it are now under discussion. Will not farmers take a hand and bring out their side? Surely such questions relate to farmers in a wonderful degree. Farmers cannot do better than to dig into these things. Buy an elementary work on political economy, you men who are all the time complaining about the unjustness of the farmer's lot, but are so misty as to the reasons you assign for it. Spend the winter evenings in mastering its contents, and see if your ideas do not broaden out and lighten up before Spring. I know they will because I have tried this thing. JAYHAWKER.

Field Crops.

POTATO-ROT.

THINKING that perhaps the scab in potatoes might be produced from some germ adherent to the seed, I, last May, put the sets for four rows into a very dilute solution of carbolic acid in water, and let them remain in it about an hour. When I dug these rows, and those adjoining, all of a good productive white sort, there was not much difference as to scab, all having some of it; but the rows from dipped sets, were injured rather the least. There is, however, a decided difference in regard to rot: only two tubers were affected visibly in those four rows, while in others many were damaged. But as 'one swallow does not make a Summer,' so one trial does not test a process, and the carbolizing must be tried again. Experience here seems to show that the scab is caused by larvæ whose term of life expires early in August. They come with some sorts of animal manures, if not already in the soil. Where soil from the grading of a houseyard was hauled to a potato patch and spread over part of it, the scab was general so far as that went. In the earliest dug potatoes a small, active, many-legged and two-horned almost transparent caterpiller-like grub was found, by the aid of a magnifier in some of the deeper scab cavities. Excrement remained in abundant droppings. The tuber is entirely good excepting the portions eaten out, and the film of scab is easily scraped away. Some rows of the same ground had about a quart of coal ashes put in the furrow at each hill, and the sets were buried in it. As far as that reached, the tubers were fair and clean with very little exception, and there were but very few cases of rot. GARDENER.

CLOVER IN TENNESEE.

I was told before leaving the North that clover would not grow here, and that I could not get the advantage of that great fertilizer. Lying near my house is a field that was seeded in the Spring of 1878 to common Red Clover. It has been mowed four years in succession, and has raised each year a crop of clover-seed, and as there was no huller, it was thrashed with a flail. Two crops of corn were then made on the ground, and last Spring a crop of oats was sowed. This fall there is as good a stand of clover upon the ground as ever, from the seed that remained in the soil.

The Southern-born people never sow it, as they say it is impossible to get it out of the ground when once caught. We have a very fine country and climate in Lawrence County, and now that emigration has set in southward, it will be rapidly settled no doubt.

Lawrence Co., Tenn. V. S. PEASE.

FERTILIZERS FOR POTATOES.—Mapes' Potato Fertilizers on very poor soil, using 1,000 pounds per acre, gave us a yield of 300 bushels of the best tubers I ever saw. The best hill gave 10 potatoes weighing six pounds. A very large number would weigh two pounds each. One bag of Mapes potato manure saved till August 10, and sowed on three-quarters of an acre of oat stubble, gave more than 100 bushels of English turnips. I think I never expended $46 to better advantage than when I bought a ton of this potato fertilizer.

Charlton, Mass. E. C.

Farm Economy.

PARIS-GREEN *vs.* SLUG-SHOT.

A QUESTION OF ECONOMY.

IN these days of dull markets and low prices the question of economy is specially important to the farmer. I see that some of our best farm papers continue to sound the praises of a mixture of Paris-green and plaster, that for several years has been offered for sale and extensively advertised under the name "Slug-Shot." I know, and suppose every reader of the RURAL knows, that this mixture is excellent for destroying many of our most troublesome insects. I have not the least objection to calling it "Slug-Shot," for this is a shorter name than "Paris-green and Plaster." I do not see that it is worth while, however, to pay $8 to $10 in cash for 100 pounds of this mixture, put up in neat packages and labeled "Slug-Shot" when I can buy the ingredients and mix them myself at a cash outlay of $1.25 to $1.50.

Mr. Hammond's advertised retail prices for Slug-Shot are four to five cents per pound. This makes it cost $80 to $100 per ton. A ton of Nova Scotia plaster is worth about $7, and a good quality of Paris-green can be had at retail at 40 cents per pound. One pound of the poison to 100 of the plaster is abundance; for the last two seasons I have used only one to 150. This makes the Paris-green for a ton of plaster worth from $8 down to $5.33, and the ingredients for a ton of the mixture are worth $15 or $12.33. I can have my man do the mixing in bad weather, so that the labor costs very little.

To be sure, Mr. Hammond puts in something else—oxide of iron, I believe—which he claims is an antidote for the Paris-green when eaten by man or domestic animals; but which for some unexplained reason fails to act when an insect eats it. I am assured by one of the best chemists in New York State that this oxide of iron acts as an antidote but for a very short time after it is put in, and that even if its action were permanent, it has no power of discrimination between insects and domestic animals. This part of the claim must certainly be regarded as a myth.

But for this claim it should not be said that the manufacturer of Slug-Shot is doing an illegitimate business. He advertises and sells an excellent insecticide. The only question is, can the farmer afford to pay so large a bounty for mixing ingredients that he can readily mix for himself?

Geneva, N. Y. E. S. GOFF.

LIVE STOCK FOR MANURE.—The farmers around here who have the most to say about hard times are those who have been keeping the least stock. As a result of their scrimping on the manure pile, their farms don't produce half what they should. Such people come and ask me if it pays to keep cows, hogs, colts and so many turkeys. I can only say, "See what my farm produces by the side of yours." For years I have drawn my manure directly from the stable to top-dress the rye. In this way I save all the urine. The manure is saved from spring freezing and thawing and one handling is done away with.

Albany Co., N. Y. S. M. LAGRANGE.

Law.

"Every Man is presumed to know the Law. Nine-tenths of all Litigation arises from Ignorance of Law."

HERE are some recent decisions of the Courts in various States, which are of special interest to farmers. The laws vary considerably in the different States, yet, as a rule, decisions in one have great influence on decisions in all the others, unless the law on the points is distinctly different.

LIABILITY OF WIFE'S SEPARATE PROPERTY GIVEN AS SECURITY FOR HER HUSBAND'S DEBTS.—Where a husband is insolvent, and his wife executes a deed of trust conveying her separate property as security for the payment of her husband's debts, and on this ground he is granted an extension, the consideration is sufficient to support the deed. If fraud has been used to secure the conveyance, the wife must move, immediately upon discovering the fraud, to rescind the conveyance or the deed will be upheld.—Burkle *vs.* Levy. July 28, 1886.—Cal.

DOWER.—In 1875 the Minnesota Legislature passed an act abolishing dower, and giving to the wife, upon the death of her husband, a life interest in the homestead and one-third in fee in any other real property of which the husband died seized. Where prior to the passage of this act a husband had conveyed lands in which conveyance his wife did not join, her right of dower in such lands was inchoate and was abolished by said enactment.—Morrison *vs.* Rice.—Filed July 14, 1886.—Minn.

MORTGAGE FOR MORE THAN THE DEBT.—Where a chattel mortgage is made for more than the actual debt it is a badge of fraud. In such case where a son gave a chattel mortgage to his mother for $350 more than the real debt and the mortgagee had said to a third party "she knew the mortgage was drawn for more than Frank owed her, but she thought it would keep his creditors off." Held that the mortgage was fraudulent and void as to creditors. Taylor *vs.* Wood—N. J., September 29, 1886.

HOMESTEAD.—EFFECT OF MORTGAGE IN WHICH THE WIFE DOES NOT JOIN.—A husband, the owner of a homestead, cannot make a valid mortgage on his homestead without his wife joining in the same. If there be parts of a tract of land owned by him which is not embraced in the homestead, this rule does not apply to such portions of his lands. Swift *vs.* Dewey.—September 15, 1886, Neb.

W. H. L., Indianapolis, Ind.—1. In the transfer columns of the daily papers we often see such notices as this—Martha Hunt and husband to Gideon Dunham—Then the transferred real estate is described: now if Martha's husband was in debt to me before Martha began to sell real estate could I collect the debt from any real estate they yet own? 2. H. buys goods from C. while a single man; while still in debt he marries, does his doing so free him from the obligation of paying for the goods he bought before the wedding? 3. A. owes B. for groceries; while the debt is unpaid A transfers his property to his wife; can the bill be collected from the transferred property, and if A dies is the transferred estate responsible for the debt? 4. Can a garnishee on a married man's wages in this State be collected?

ANS.—1. When a wife sells real estate of her own, the husband joins in the deed to extinguish the rights of joint tenancy, which he possesses and which give him the privilege of holding possession of his wife's property as tenant by courtesy while he lives. He has no estate in the property which could be levied on under any judgment. 2. This depends upon the local law relating to the garnishee of a married man's credit. In many Western States a married man's wages are not subject to garnishee. If this man earns wages after he is married, it is clear he is not subject to garnishee because of his exemption, and his previous debts cannot be collected in this way. 3. The transfer of property to a wife under the circumstances would in all probability be held to be a fraud and would be void. A transfer for a proper consideration would be lawful, but one without consideration would not stand against the collection of a debt. 4. If the man is a resident of Indiana and his wages are exempt from garnishee, they cannot be attached for debt. 5. We don't understand the "beer" question.

B. B. R., Greenlawn, N. Y.—A sells his farm to B and takes a mortgage for a part of the purchase money, but neglects to get the mortgage recorded. B borrows money of C, who on searching the record finds nothing against the property and therefore lends the money on mortgage. Between the time of searching the record and lending the money A records the mortgage. The two mortgages come to more than the farm is worth; what can C do to collect the money from A or B.

ANS.—If B makes no secret of the prior mortgage to A and did not make any false statement in regard to it, C has no remedy for his own failure to make himself safe by having the mortgage recorded before he parted with his money. In affording this opportunity during the short time elapsing before the money was paid over, he made an error and can blame nobody but himself for his carelessness. If B made any false statement and denied any prior mortgage or made any representation tending to mislead C, he may be prosecuted criminally for obtaining money under false pretences.

R. W. L., Westchester Co. N. Y.—Is an alien liable for taxes on personal property in this State?

ANS.—In this State there is no distinction between a resident alien and a citizen in the matter of taxation.

Miscellaneous Advertising.

Rheumatism

We doubt if there is, or can be, a specific remedy for rheumatism; but thousands who have suffered its pains have been greatly benefited by Hood's Sarsaparilla. If you have failed to find relief, try this great remedy. It corrects the acidity of the blood which is the cause of the disease, and builds up the whole system.

"I was afflicted with rheumatism twenty years. Previous to 1883 I found no relief, but grew worse, until I was almost helpless. Hood's Sarsaparilla did me more good than all the other medicine I ever had." H. T. BALCOM, Shirley Village, Mass.

Hood's Sarsaparilla

Sold by all druggists. $1; six for $5. Made only by C. I. HOOD & CO., Lowell, Mass.

100 Doses One Dollar

GOLD MEDAL, PARIS, 1878.

BAKER'S

Breakfast Cocoa.

Warranted *absolutely pure Cocoa*, from which the excess of Oil has been removed. It has *three times the strength* of Cocoa mixed with Starch, Arrowroot or Sugar, and is therefore far more economical, *costing less than one cent a cup.* It is delicious, nourishing, strengthening, easily digested, and admirably adapted for invalids as well as for persons in health.

Sold by Grocers everywhere.

W. BAKER & CO., Dorchester, Mass.

AT, or shortly before, the opening of the subscription season every year several bogus agricultural, literary and political papers are widely advertised, usually at very low figures, while marvelous inducements in the way of premiums and gifts are offered to credulous subscribers. Indeed so generous and alluring are these offers that many who care nothing for the paper are led to subscribe for it through a desire to obtain the splendid presents with glowing accounts and pictures of which it seeks to begnile the gullible. In some cases every subscriber besides the paper is to get a present, often worth more than the subscription price; in others various tasks must be done to obtain the coveted reward, such as finding out a text in the Bible; building up words from a certain sentence or combination of words, etc., etc. In all cases much is said of the value of the premiums and little of the merits of the paper. As the advertisers never really intend to deliver the premiums, of course they can afford to be very liberal in their promises. Some of the rascals have been practicing the same swindle for years, now in one town, now in another; now under one name, and again under another. Sometimes the same fraudulent paper is advertised year after year. In such cases of course the advertisers do not expect many of the former swindled subscribers to subscribe again, (though some of them are sure to do so), but new dupes will be entrapped because, having seen the paper advertised year after year, they suppose it is a genuine concern and that its offers of gifts are *bona fide*. In reality, however, these swindling advertisers issue only a few numbers during the subscription season, and after they have raked in all the money they can get, they suspend till the next subscription season, or finally collapse. With regard to the premiums either none are ever given, or a demand is made for money for packing and mailing the present, and in return for eight or ten cents sent for this purpose, the dupe receives some paltry article worth two to five cents, and on which the postage is only one cent, the swindler pocketing the difference. Often he pockets the whole amount sent for postage as well as the subscription money. Of course, now and then a new venture of an honest nature is started at this season; but to the man of sound sense there is a vast difference in the way the two are launched. Common sense is an excellent detector of the bogus from the genuine. Wherever extravagant offers are made, this at once detects insincerity and knaving. Thoughtless greed in the dupes is the great cause of gain for the swindlers. Many people are vastly too covetous. They want to get something for nothing or for half its price. It is to this trait in poor humanity that swindlers appeal, and they seldom appeal in vain.

This remark applies also to the advertisements of wonderfully cheap holiday presents, so common at this season. A very large number of these are fully worth the prices asked for them; but it would be foolish to imagine that the cheapest of them are worth a quarter of a cent more. A little common sense should tell any one that there is no need of advertising things for less than their value; people are always ready to take such bargains in any quantity in every large town in the country. Custom gives advertizers great latitude in puffing their goods, and purchasers must always take this fact into consideration. Only a simpleton will expect a dollar article for 50 cents, whatever the advertisement may say.

TO SEVERAL INQUIRERS.—We are assured that the Western & Wells M'f'g Co., of Philadelphia, Pa., is trustworthy..... ...We can not recommend the National Supply Co., of Cincinnati..... .....We do not recommend the medicines offered by "Dr. Dennis" of this city, though doubtless they sometimes do good. Better consult a local doctor, and get your medicines from a local drug-store. They will do you much more good, and cost much less.....We have repeatedly said that J. H. Reeves of this city, and his "Dr. Churchill's Restorative Remedies" are scandalous humbugs, yet we are constantly receiving inquiries about them. The more we learn about them, the stronger grows our conviction of their turpitude.....We do not recommend "Professor" F. C. Fowler, of Modus, Conn., or his nostrums.....We cannot recommend the Culverwell Medicine Co., of this city.

Miscellaneous Advertising.

DIXON'S "Carburet of Iron" Stove Polish was established in 1827, and is to-day, as it was then, the neatest and brightest in the market; a pure plumbago, giving off no poisonous vapors. The size is now doubled and cake weighs nearly half a pound, but the quality and price remain the same. Ask your goocer for Dixon's big cake.

THE GIANT OF MEDICINES.

THE MOST EFFECTIVE AND POPULAR REMEDY EVER DISCOVERED.

WHY IS IT SO EFFECTIVE IN SO MANY DIFFERENT DISEASES?

WHY one remedy can affect so many cases is this: The diseases have a common cause, and a remedy that can affect the cause, permanently cures all the diseases. Unlike any other organ in the body, the Kidney when diseased, may itself be free from pain, and the very fact that it is not painful leads many people to deny that it is diseased. But *Medical Authorities* agree that it can be *far gone with disease and yet give forth no pain*, because it has few if any nerves of sensation, and these are the only means of conveying the sense of pain; thus unconsciously diseased *it affects the entire system*. We do not open a watch to see if is going or is in good order; We look at the hands, or note the accuracy of its time. So we need not open the kidney to see if it is diseased. We study the condition of the system. Now then, *KIDNEY DISEASE* produces Any of the *following Common and Unsuspected*

SYMPTOMS: Backache: *Unusual desire to urinate at night;* Fluttering and pain in the heart; Tired feelings; Unusual amount of *Greasy froth in water;* Irritated, hot and dry skin; Fickle Appetite; Scalding sensations; Acid, bitter taste, with furred tongue in the Morning; Headache and Neuralgia; Abundance of *pale, or scanty flow of darkcolored water;* Sour Stomach; Heartburn with Dyspepsia; Intense pain, upon sudden excitement, in the Small of the Back; *Deposit of mucous some time after urination;* Loss of Memory; Rheumatism, chills and fever and Pneumonia; Dropsical Swellings; Red or white brick dust, *albumen and tube casts in the water;* Constipation, alternating with Looseness; Short breath, Pleurisy and Bronchial affections; Yellowish pale skin, etc.

These are only the *chief disorders* or symptoms caused by a diseased condition of the kidneys. Now then, isn't it clear to you that the kidneys, being the cause of all the derangements, if they are restored to health by the great specific "*Warner's SAFE Cure*," the majority of the above ailments will disappear? There is *NO MYSTERY ABOUT IT.* It does cure many bad states of the system precisely as we have indicated. Now when the kidneys are diseased, the albumen, the life property of the blood, escapes through their walls and passes away in the water, while the urea, the kidney poison, remains, and it is this *kidney poison in the blood*, that, circulating throughout the entire the entire body, *affects every organ*, and *produces all the above symptoms.*

Therefore, we say confidently that "*Warner's SAFE Cure*" is *THE MOST EFFECTIVE MEDICINE EVER DISCOVERED* for the human race. It is the common remedy which, overcoming the common cause, *removes the greatest possible number of evil effects from the system.* Let us note *a few* of these diseases, and how they are affected by kidney poison and cured by

"WARNER'S SAFE CURE."

CONSUMPTION: In a great many cases Consumption is only the *effect* of a diseased condition of the system and not an original disease; if the kidneys are inactive and there is any natural weakness in the lungs, the *kidney poison attacks their substance and eventually they waste away* and are destroyed. Dip your finger in acid and it is burned. Wash the finger every day in acid and it soon becomes a festering sore and is eventually destroyed. The kidney poison acid in the blood has *the same destructive effect upon the lungs.* For this reason a person whose kidneys are ailing will have grave attacks of *Pneumonia* in the Spring of the year, Lung fevers, Coughs, Colds, Bronchitis, Pleurisy, etc., at all seasons of the year. Rectify the action of the kidneys by "*Warner's SAFE Cure*," as many hundreds of thousands have done, and you will be *surprised at the improvement in the condition of the lungs.*

IMPAIRED EYE-SIGHT: Kidney acid with some persons has an *especial affinity for the optical nerve*, and though we have never urged it as a cure for disordered eye-sight, many persons have written us expressing surprise that after a thorough course of treatment with "*Warner's SAFE Cure*," their *eye-sight has been vastly improved.* In fact, one of the best oculists in the country says that *half the patients* that come to him with bad eyes, upon examination he discovers are *victims of kidney disorder.* We have no doubt that the reason why so many people complain of failing eye-sight early in life, is that, all unconscious to themselves, their *kidneys have been out of order for years*, and the kidney poison is gradually ruining the system.

OPIUM HABITS: It is a well-known fact, recently shown anew, that opium, morphine, cocaine, whisky, tobacco and other enslaving habits capture their victims by their paralyzing effects upon the kidneys and liver. In these organs *the appetite is developed and sustained*, and the best authorities state that the *habits cannot be gotten rid of until the kidneys and liver are restored to perfect health.* For this purpose leading medical authorities, after a thorough examination of all claimants for the honor of being the only specific for these organs, have awarded the prize to "*Warner's SAFE Cure.*"

RHEUMATISM: Every reputable physician will tell you that rheumatism is caused by an acid condition of the system. With some it is uric acid, or kidney poison; in others it is lithic acid, or liver poison. *This acid condition is caused by inactivity of the kidneys and liver, false action of the stomach and food assimilating organs.* It affects old people more than young people because the acid has been collecting in the system for years and finally the system becomes entirely acidified. These acids produce all the various forms of rheumatism. "*Warner's SAFE Cure*" acting upon the kidneys and liver, neutralizing the acid and correcting their false action, cures many cases of rheumatism. "*Warner's SAFE Rheumatic Cure*," alternating with the use of "Warner's SAFE Cure" completes the work.

BLADDER DISORDERS: Gross and other high medical authorities say that most of the bladder diseases *originate with false action of the kidneys*, and urinary tract. Uric acid constantly coursing through these organs inflames and eventually destroys the inner membrane, producing the *intense suffering.* Sometimes this kidney acid *solidifies* in the kidneys in the form of Gravel, which in its descent to the bladder produces *kidney colic.* Sometimes the acid solidifies in the Bladder, producing *calculous or Stone.* "*Warner's SAFE Cure*" has restored thousands of cases of inflammation and catarrh of the bladder and has effectively corrected the tendency to the formation of gravel and stone. It *challenges comparison* with all other remedies in this work. Buy to-day,

"WARNER'S SAFE CURE."

CONGESTION: Congestion is a collecting together of blood in any one place. If there is loss of nervous action in any organ the blood vessels do not allow the blood to circulate and it stagnates. If this condition exists very long, the collecting blood clots and eventually *destroys the organ.* Many persons are unconscious victims of this very *common condition.* The heart, determined as it is to force blood into every part of the system, has to work harder to get it through the clogged organ, and *eventually the Heart breaks down* and palpitation, excessive action, rush of blood to the head, distressing head aches, indicate that the *Congestion has become chronic* and is doing damage to the entire system. Congestion of the kidneys is one of the commonest of complaints and is the *beginning of much chronic misery.* "*Warner's SAFE Cure*" will remove it.

FEMALE COMPLAINTS: What we have said about Congestion applies with particular force to the above complaints. They are as common as can be, and as every doctor can tell you, most of them *begin in this congestive condition of the system*, which, not being regularly corrected, grows into disease and produces these countless sufferings which can be alluded to but not described in a public print. Thousands have been *permanently cured.*

BLOOD DISORDERS. It is not strange that so many, many people write us that since they have given themselves thorough treatment with "*Warner's SAFE Cure*" their thick and turgid blood, their heavy, blotched, irritable skin have disappeared under its potent influence. The *kidney poison in the blood thickens it.* It is not readily purified in the lungs, and the result is the impurities come out of the surface of the body, and *if there is any local disease all the badness in the blood seems to collect there.* Our experience justifies us in the statement that "*Warner's SAFE Cure*" is "the greatest blood purifier known." The treatment must be very thorough.

STOMACH DISORDERS. Many people complain more or less throughout the year with stomach disorders: Dyspepsia, Indigestion, Waterbrash, heat and distress in the stomach, sharp pains, frequent aches, want of appetite, lack of energy. Now, these are *exactly the conditions* that will be produced in the stomach *when the blood is filled with kidney poison*: People dose themselves with all sorts of stomach reliefs, but get no better: They never will get better until they give their attention to a thorough reviving of kidney and liver by the means of the only specific—"*Warner's SAFE Cure.*

CONSTIPATION, PILES. These distressing ailments, more common among one class than the other, are not original disorders, but are *secondary to imperfect action of the kidneys and liver.* The natural cathartic is bile, which is taken from the blood by the liver. If the liver fails the bile is not forthcoming and the person gets into a constipated habit. This, eventually followed by piles, is almost always an *indication of congested liver*, and a breaking down of the system. Remove the congestion, revive the liver and restore the kidneys by the use of "*Warner's SAFE Cure*," and these constitutional secondary diseases disappear.

HEADACHES: Many people suffer untold agonies all their lives with headache. They try every remedy in vain, for they have not struck the cause. With some temperaments, kidney acid in the blood, in spite of all that can be done, will *irritate and inflame the brain* and produce intense suffering. Those obstinate headaches which do not yield readily to local treatment, may be regarded quite certainly as of *kidney origin.*

THESE ARE SCIENTIFIC FACTS, and, from the way we have set them forth, it will plainly be seen, that the statement we make, that, "*Warner's SAFE Cure*" is the "most effective remedy ever discovered for the greatest number of human diseases," is justified. It is not a remedy without a reputation. It sales for the past year have been *greater than ever*, and the advertising thereof *less than ever*, showing incontestibly that *the merit of the medicine* has given it a permanent place and value.

People have a dreadful fear of Bright's disease but we can tell them from our experience that it is *the ordinary kidney disease that produces no pain* that is to-day *the greatest enemy of the human race*: great and all powerful, because in nine cases out of ten, its presence is not suspected by either physician or the victim! The prudent man who finds himself year after year troubled with little odd aches and ailments that perplex him, ought not to hesitate a moment as to the real cause of his disease. If he will give himself thorough constitutional treatment with "*Warner's SAFE Cure*" and "*Warner's SAFE Pills*," he will get a new lease of life and justify in his own experience, as hundreds of thousands have done, that 93 per cent. of human diseases are really attributable to a deranged condition of the kidneys, and that they will disappear when those organs are restored to health.

ASK YOUR FRIENDS AND NEIGHBORS WHAT THEY THINK OF "WARNER'S SAFE CURE."

CHICAGO DISTILLERY-FED COWS.—A. W. Cheever, of the New England Farmer, recently visited one of the noted distillery stables of Chicago, where large numbers of cows are kept for supplying milk for city consumption. The picture he draws is appalling. The capacity of the establishment is a product of 8,500 gallons of whisky per day, requiring for its manufacture 2,000 bushels of corn. The distilling process removes only a portion of the nutrient elements of the corn, the residue appearing in the form of a thin pudding or crushed corn-porridge, usually termed distillery swill or slop. A portion of the slop is run through spouts into a large elevated tank from which it is drawn off for loading the teams of the farmers, who haul it away to their own stables, but the larger portion is fed to cattle kept in the distillery yard. The cow sheds are the cheapest and poorest of anything in the form of cow stables he has ever seen. They are made of rough boards thrown together in roof form, but so loosely laid as to let in rain, snow and wind to a most uncomfortable degree. Their capacity is about 1,800 cattle, closely stowed in double rows of 50 to 80 each, with narrow alleys in front for feeding and gutters behind for manure. The slop from the distillery, warm or almost hot, is run through feeding troughs in front of each row of cattle by simply opening a slide in a larger trough running the entire width of the long line of sheds. It is the work of but a few minutes to feed the entire herd. The slop is too thin, and the cows are thus forced to take more water than they need and as the ummber has been reduced by disease, and the whole business is more demoralized than usual, there seems to be a tendency towards overfeeding. The swill is so abundant at the present time that a large surplus is run directly into the manure-gutters. No attempt seems to be made at saving any portion of the manure made from the 1,800 cows and steers usually fed there, but it is run off into a large tank from which it is pumped by horse power into barges and floated off by steam power and dumped into the lake.

There were 1,100 cows, steers and bulls under quarantine in the sheds, with three sets of police officers on duty eight hours each, watching the gates to see that neither cattle nor milk are allowed to leave the premises. Mr. Cheever found one of the cattle owners at work in the stables, a Mr. Flynn, who usually keeps about 200 cows for supplying milk to the city. He says the disease has been there for two years, and was first brought there by a cow brought from the stock yards.

Most of the cows, he says, get fat enough for beef in from four to six months, and as they shrink in their milk they are sold and their places filled by a fresh lot. He has had 600 within the past two years, and has lost 128 by the disease, the first symptoms of which are dullness, followed by a loss of appetite, constipation and cessation of milk flow. The cows stand on plank floors, are tied by neck chains to stanchions, and are never turned out from the time they arrive at the sheds until ready for the butcher.

The manure gutters are about four feet wide, six inches deep and fifty feet long, and are cleaned so seldom that they must get about full of slush two or three times a day. There is no way to clean them but to wade in with rubber boots, and with a pushing scraper made of a board three or more feet long and six inches wide attached to a handle, push the contents of the gutters the entire length and out into the sewer outside. When the cows lie down their tails are often in the liquid fertilizer, which is then likely to be thrown pretty much over their entire bodies. It is no wonder that a good deal of city milk has a "cowy" odor.

During Mr. Cheever's visit two veterinarians, Dr. Baker and Dr. Hughes, with a deputy sheriff to assist, came to begin the inspection and marking of the cattle preparatory to appraisal and slaughtering. During the seven weeks since the stable has been quarantined 174 animals, out of a total of 1173, have died or been condemned and killed. Of one lot of 63 Wisconsin cows put in the stables, July 15, 18 had died or been condemned and destroyed before the end of their second month, and of the remaining 45 but ten proved entirely free from disease. Standing directly opposite from these cows was a lot of steers owned by Nelson Morris, a large packer at the stock yards. The condition of these animals was even worse than that of the cows.

It is much to be regretted that the cattle men of the State, particularly the millionaires of the stock yards, do not see the necessity of coming to the front with an earnest effort to wipe the disease out. On the contrary, the stock yards interest has ignored or denied the existence of any contagious disease whatever among the cattle there. If the State of Illinois fully realized the danger that is threatening her cattle industry an extra session of the Legislature should be called by the Governor to devise methods and raise funds for stamping it out before the job grows too big to handle.

SULPHIDE OF POTASSIUM FOR "DESTROYERS AND POISONERS."—Edmund Tonks, in a paper published in the Gardener's Chronicle, gives high praise to sulphide of potassium (liver of sulphur) as a means of checking and suppressing, in man, beast and plant, parasitic destroyers and poisoners. Poisoned wounds, skin diseases and most forms of inflammation involving the formation of pus, if wetted with a strong solution of it, soon take a healthy turn. The most delicate plant may be dipped—pot, earth, roots, leaves and all—in a solution of a quarter of an ounce to the gallon without any danger; twice that strength is safe but needless. It is efficient against red spider, and destroys mildew and is probably equally potent against microbes. Mr. T. says that an endemic disease attacked his large collection of plants, the roots becoming rotten When soaked in the sulphide solution, the rotting ceased and healthy new growth followed. The cost of the compound to him in England was 8d. a pound (16 cents). It is common in drug stores and easily tried.

SOLUBLE AND INSOLUBLE FERTILIZERS.—W. H. Bowker, speaking of the difference in the effects of soluble and insoluble fertilizers, suggests that we apply 100 pounds of nitrate of soda to an acre of grass land and then apply to an adjoining acre 100 pounds of leather waste, containing the same amount of nitrogen. In the latter we see no results because the nitrogen is insoluble. Dried fish applied to the surface of grass land is never satisfactory, either because it loses its ammonia into the air, or because the process of decay is so slow that the plant food is yielded up so gradually that no results are witnessed, but when the same dried fish is applied in the soil, it becomes a valuable plant food. If it seems necessary to have this ammonia and phosphoric acid available, what must be said of the potash? The granite rocks of our hills contain enough potash for all our soils for all eternity. Those who think it advisable to use phosphate rock in its natural condition should with equally good reason recommend the application of granite rock. Yet no grinding, however minute, or even chemical dissolving, has rendered in a practicable way, the potash of these rocks immediately available and we are compelled to fall back upon forms which are soluble, and hence beneficial.

MYCELIUM ON CHESTNUT TREES.—The men of science of our practical times are doing good service in hunting to their lairs the various kinds of obscure but most destructive fungi that have so long preyed unseen upon both animal and vegetable life—the opprobrium of doctors, the work of witchcraft in the eyes of the superstitious, and the consternation of all. In two of the departments of France the chestnut trees are dying from the spread of a mycelium, of which the complete growth—the fungus proper—has not yet been found developed. The chestnut being an important article of human food there, M. J. E. Planchon has given much attention to the case, and has reported to the Paris *Académie des Sciences*. He recommends total extirpation and burning of diseased subjects, planting on entirely fresh ground, and in the case of recent attacks applications of quick-lime, ashes, sulphate of iron (copperas) or sulphate of potassium in such manner as will not injure the tissue of the plant. He does not include boiling water, a simple application which seems to do good in similar affections of other trees.

THE LATEST AND BRIEFEST.

A TRUE agricultural experiment station says Dr. T. H. Hoskins, in the Vermont Watchman, has for its function exactly what its name describes—the making of experiments the purpose of which is to investigate the unsolved questions connected with the practical agriculture of the state or country which establishes them. These unsolved questions are very numerous, and many of them are intricate, requiring much laborious exertion and the tabulation and comparison of results over a long series of years.....

WHEN the State is called upon to help agriculture in this way, it should only be to provide for that sort of work which the ordinary farmer cannot do for himself—the sort of work which takes time, money and trained skill, in order to obtain trustworthy results...

ON the other hand, continues Dr. Hoskins, any cheap attempt at dabbling in this class of work, with no proper conception of what it is, what it will cost and what kind of men it will require to make it effective, is to be earnestly deprecated. "Better do nothing in the matter than set cheap fools to fooling with it"....

IT is quite true, as a Press editorial puts it, that a college course is not so much to fill the student's memory with facts that other people have discovered as to train his mind so that he can use it like a powerful engine under perfect control. The student who acquires a habit of investigation and comparison can be trusted to possess himself of the knowledge he needs in any calling .....

THE agricultural editor of the Weekly Press thinks that the fundamental reason for the lack of success in agriculture is not so much that farmers do not know how to conduct their business, as that they fail to do as well as they know.....

ONE reason for this, continues Editor Stiles, is that they are not brought into contact with improved methods. They read about them and admit their value and then seem to lack the enterprise to adventure any change. If they could see these things and become familiar with them as actual facts accomplished, there would be less difficulty in abandoning the time-honored ways to which they are wedded.....

FROM this point of view we see the benefit of object lessons at the farms; we see the benefit of farmers' clubs. Farmers all know that it is poor economy to keep indifferent dairy cows when heavy milkers can be obtained. But they *act* upon the knowledge when they see how much more milk and cream another farmer is selling whose stock has been graded up.....

THE Canadian Horticulturist says that we give the Earhart Everbearing Blackberry a good puff in our issue of Oct. 23. The Horticulturist says that we claim for it "hardiness, thrift, productiveness and a better quality than Gregg." Yes, that is what we claimed from the test of a *one winter and a single season of fruiting*. The Horticulturist further remarks:

"Now we always read statements in the RURAL with the greatest confidence, because it gives its opinions, as we also aim to do, without fear or favor. But we should require the experience of more than one season to establish our confidence in the wonderful everbearing qualities of the Earhart."

True. To judge of the merits of any fruit from a single year's trial is hasty, to say the least. But we know of no reason why we should not state how it behaved for that one season. If the Earhart fail next Summer, we shall hasten to state the failure .....

STATE MASTER HALE'S address to the Connecticut State Grange speaks of the Sheffield Scientific School of Yale College. It seems that in 24 years there have been seven agricultural graduates. The cost has been $180,000, or $25,000 for each. He asks if it is not true, according to the admission of one of the professors, that the agricultural department is "worse than a failure?" .....

MR. HALE pays a fitting tribute to the invaluable services of Prof. S. W. Johnson. But this fund was given to found an agricultural school where young men could receive instructions in agriculture, and not to hire men to give lectures now and then to agricultural board meetings, farmers' clubs and granges. Connecticut in this matter is not doing right by the National Government that granted this fund, nor by her farmers and farm boys that were to be benefited by it.....

IF we were planting a deciduous hedge now, we should use a variety of plants not set very closely together as in the old way, but so far apart that each plant could show something of its own beauty. We should select the different colored varieties of the Japan Quince, the barberry, the forsythia, Spiræa prunifolia, some of the thorns, a few Roses of Sharon, lilacs, bush honeysuckles, etc. On the outside of these we should run a barb-wire fence as suggested by Mr. Meehan.....

MR. MEEHAN, of the Gardener's Monthly, impresses it upon his readers that a hedge should be kept wider at the bottom than at the top, so that the leaves may all get as much advantage from the light as possible. The more shade at the bottom, the sooner the hedge gets thin and leggy at the base, and this greatly impairs its beauty.....

IT appears that the Blue Gum Tree is not hardy enough to be depended on in Florida, according to the Despatch of that State.....

Miscellaneous Advertising.

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THE AMERICAN GARDEN (see page 813 of R. N.-Y.) is $2.00 a year. ANY $1.50 *Book published in U. S. as a* GIFT *or with R. N.-Y. only $3.00; or any $1.00 paper as a gift.* *E. H. LIBBY, 47 Dey Street, New York.*

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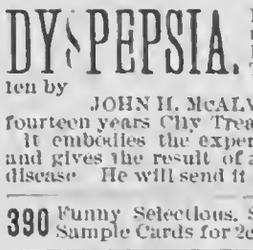

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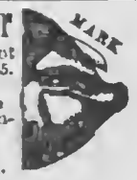

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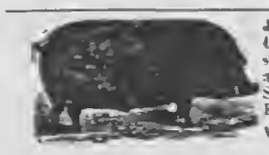

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When I say cure I do not mean merely to stop them for a time and then have them return again, I mean a radical cure. I have made the disease of FITS, EPILEPSY or FALLING SICKNESS a life-long study. I warrant my remedy to cure the worst cases. Because others have failed is no reason for not now receiving a cure. Send at once for a treatise and a Free Bottle of my Infallible remedy. Give Express and Post Office. It costs you nothing for a trial, and I will cure you. Address Dr. H. G. ROOT, 183 Pearl St., New York.

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The celebrated MASON'S CHART has been published by us for ten years, its popularity steadily increasing each year. No other Chart has stood this test; its enormous sale is due solely to its merits. This Chart contains PRACTICAL instruction which is of GREAT BENEFIT to those desiring to learn music. We do not guarantee to teach the most difficult pieces *in one day*, but we CAN SAVE YOU THE COST OF MANY MUSIC LESSONS, and the enjoyment of teaching yourself and surprising your friends is worth a great deal in itself. The MASON'S CHART is reliable in method and *simple to understand*; the expense is very small considering its value. It is patented and copyrighted, and well worth ten times its cost. This Chart tells where to place the fingers and which keys to strike. *Make no mistake*, but get the GENUINE MASON'S CHART, including our forms and frame fitting over keyboard. Price, by mail, $1.00. *Special Offer.*—On all orders received from the subscribers of this paper, we will include Free our MUSICAL ALBUM, containing 16 pieces vocal and instrumental music (Price of the Album alone, 50 cents). *Don't fail to take this opportunity to learn Music these Winter evenings.* We are responsible for money sent by P. O. Money Order or Registered Letter. Remember the price, $1.00 for Chart and Album, by mail. Address all orders to J. A. ROSS & CO., 29 Oliver Street, Boston, Mass.

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Miscellaneous Advertising.

Catarrh

Is frequently an indication of a Scrofulous taint in the system. Ayer's Sarsaparilla purifies the blood, and thus restores health to the affected membranes. It also stops the nauseous catarrhal discharges, and prevents the infection from reaching the lungs and stomach. Catarrh should be treated as a blood disease.

I suffered for years from chronic Catarrh. My appetite was very poor, and I felt miserably. None of the remedies I took afforded me any relief until I commenced using Ayer's Sarsaparilla, of which I have now taken five bottles. The catarrh has disappeared, and I am growing strong and stout; my appetite has returned, and my health is fully restored.—Susan L. W. Cook, 909 Albany st., Boston Highlands, Mass.

Ayer's Sarsaparilla,

Prepared by Dr. J. C. Ayer & Co., Lowell, Mass. Sold by all Druggists. Price $1; six bottles, $5.

GOLD $100.

We will pay one hundred dollars gold in premiums for best results from eight weeks' trial of **Sheridan's Powder to Make Hens Lay.** Send your name and post-office for particulars. I. S. JOHNSON & CO., 22 Custom House Street, Boston, Mass

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We will send a trial sample of Williams Barbers' Bar Soap.

A sure cure for Chapped Hands.

Though a "Shaving Soap," it is unequalled for the Toilet. For sale by all druggists.

THE J. B. WILLIAMS CO., Glastonbury, Conn.

Manufacturers for 50 years of "GENUINE YANKEE" and other celebrated Shaving Soaps.

THE AMERICAN GARDEN (see page 813 of R. N.-Y.) is $2.00 a year.

ANY $1.50 *Book published in U. S. as a* GIFT, *or with R. N.-Y. only $3.00; or any $1.00 paper as a gift.*

E. H. LIBBY, 47 Dey Street, New York.

Best Hatcher ON EARTH.

Hatches Ducks, Turkeys, Geese and Chickens. Received First Premium where exhibited. Send for Circular.

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5 Ton Wagon Scales, Iron Levers, Steel Bearings, Brass Tare Beam and Beam Box for

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500 Speeches, Selections, etc., and agents' new Sample Cards for a 2c stamp. Givis & Bro., Cadiz, Ohio.

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For CIDER, SORGHUM, FRUIT JELLIES, and **MAPLE,** has corrugated pan free, *doubling capacity;* small syrup pans connected by siphons, easily handled for cleansing, and interchangeable to distribute wear; automatic regulator, and other advantages too numerous to mention. Catalogues free. G. H. GRIMM & CO., Hudson, O.

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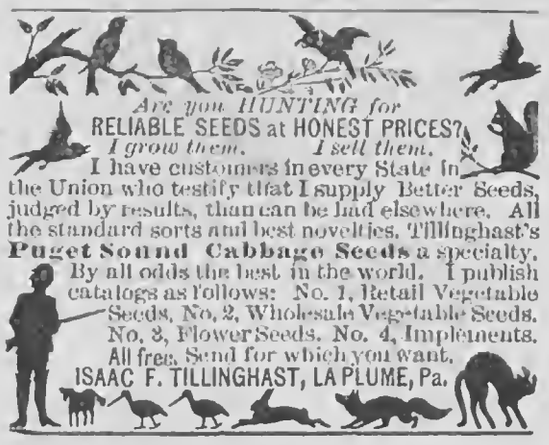
Weaver Organ and Piano Co., Factory, York, Pa.



Everywhere.

RURAL SPECIAL REPORTS.

Delaware.

DOVER, Kent Co., Dec. 9.—The Fall was warm: apples and cherries were in bloom November 10, and strawberries and roses at Thanksgiving. Corn not more than half a crop. Wheat looking well. Peach trees made a fine growth; the wood was well matured, and they went into winter-quarters in good shape. On November 25 the weather became colder. A great many hogs have died this season with what they call "colery." A large number of farms have changed hands the past year. Land is constantly advancing in price, as Northern and Western men are looking for something to suit them. Market about as follows: wheat, 80 to 85 cents; corn, 40 cents; oats, 26 cents; rye, 56 cents; Irish potatoes, 50 to 55 cents; sweet, the same; apples none, except a few from the North. Timothy hay, $15; clover $10 per ton; pork, $6 per 100 pounds; turkeys, 10 to 11 cents, dressed; chickens, 8 to 9 cents; ducks, 9 cents per pound; coal, $6 per ton; wood, $3 per cord; horses, $30 to $150; cows, $20 to $60. S. T. S.

Illinois.

CHICAGO, Cook Co., December 15.—No rain and little snow so far, and so there is considerable scarcity of water over the Northwest; this extends to Kansas, Missouri, Iowa and to nearly every county in Illinois. Owing to the dry weather there is a falling off in the receipts of hogs for the last 10 days. In August and September an unusually large supply of hogs came to market owing to the terribly dry weather, the prospect of a short corn crop, and the ravages of hog cholera; this also accounts for the shortage of receipts of late. Hog raising has now become a very risky business, and those who have been the largest producers are now the very men who have the least nerve to go into it, after having experienced heavy losses. I think by the 1st of January the great bulk of the hog product of 1886 will have been marketed. Another reason for this is the fact that the scarcity of corn and its high price is a sufficient reason in itself to send in the hogs at once. The interstate demand for corn still continues good, and with an average freight of 20 cents per hundred in Nebraska to Chicago, the majority of dealers at present are paying higher prices for corn for local consumption than they can afford to pay and ship east. The indications now are that an unusual number of cattle will be fed in the stall this winter. Along the line of the Union Pacific road in Nebraska 150,000 head of cattle have been recently brought into the State from the mountains. The railroad company gave the privilege of feeding them for six months on corn, and it is estimated that from 8,000,000 to 10,000,000 bushels will be consumed by this bunch of cattle alone; and a very reliable correspondent from Lincoln, Nebraska, writes me that the home demand for corn is something unprecedented. Winter wheat has as yet encountered very little trying weather except from dry conditions. In the central portion of the winter wheat belt there is no snow upon the ground, but in the southern a light covering. There is no change to note in the spring wheat situation. The movements still continue quite fair, weather favorable to free deliveries. As farmers have sold very freely at a low price, they will be likely to hold now when they see wheat advancing. N. W.

Maryland.

WESTOVER, Somerset Co., December 11.—We had a splendid fall for doing work, and mild weather continued until December 3d, when a cold wave struck us, followed by snow and sleet to the depth of several inches. This cold spell came unusually early and found some farmers unprepared for it. There is still some corn in the fields, not husked. Most of the corn crop, however, is gathered and housed and it is exceptionally good. As a rule, we have no snow in this section until after Christmas, and one winter a few years ago no snow fell at all in our county. Those of our farmers who combine oyster planting with farming have since the freeze-up turned their attention to oyster shipping. S. C. S.

New York.

SANDY HILL, Washington Co., December 6.—Crops good and secured in good condition. Prices are as follows: Hay, $10 to $12.50 per ton; oat straw, $6 per ton; oats, 38 cents per bushel; corn, 60 cents; buckwheat, 65 cents; potatoes, 40 cents; apples, $1.50 per barrel; butter, 25 cents; eggs, 25 cents per dozen. M. T. W.

UTICA, Oneida Co., Dec. 15.—With the last Board of Trade closed the cheese market in this vicinity, and there has been no sale of any great amount during the past week. The factories which are not closed are making skims, which they will save for a month or more, and cure for the market. Prices are even with the quotations of the last Board, selling by the jobbers at from 12 to 13 cents for full cream. The Utica sales were for the year 325,962 boxes, or 19,557,720 pounds, at a value of $1,773,885, and ranged from 6¼ to 12¼ cents, as highest and lowest. This production was over 5,000 boxes greater than in 1885. The Little Falls production was 209,135 boxes at a valuation of $1,139,367; the two markets aggregating 2,903,252, which is a very creditable showing for the industry. The output of skims this month may not exceed 2,000 boxes. The market promises to be steady. The butter market is a little dull, but the same prices hold and will probably continue. Good butter is in fair demand, and 20 to 22 cents for dairy and 23 to 25 cents for creamery are paid in the country. About 175 packages were bought here last week. Good dairy still brings 23 and 24 cents here. There are few sales of hops reported. Some Otsegos have sold at 26½ cents, about 25 bales. The sale of 90 bales to a New York brewer a short time ago at 40 cents was considered quite a break in the monotony of the market, but they were A1 hops. No sales were made here this week; but a few in the vicinity at from 10 to 20 cents according to condition. R. I.

Pennsylvania.

ANDOVER, Alleghany Co.—We have nothing to complain of; for although the weather was very dry, still there were light showers enough to give us good fair crops all around. Oats a full average; not much wheat or corn is raised here. Buckwheat and barley crops fair. Potatoes about two-thirds of a crop, selling for 30 cents per bushel; butter from 20 to 22 cents per pound. This is mostly a dairy section. F. H.

THE FARMER'S CLUB

ANSWERS TO CORRESPONDENTS.

[Every query must be accompanied by the name and address of the writer to insure attention. Before asking a question, please see if it is not answered in our advertising columns. Ask only a few questions at one time. Put questions on a separate piece of paper.

FEED FOR MILKING COW.

M. E. M., Maplewood, N. J.—My four-year-old Jersey cow doesn't give more than six quarts of milk a day. She will come in about June 1; what would be the best way to feed her for butter and milk for family use? A late RURAL tells how to feed a farrow cow in Winter; do cows giving milk require different treatment?

ANS.—The milking cow should be fed more liberally than a farrow cow, in proportion to the milk she is giving or expected to give. A common ration for a cow in milk and which is not to come in for six months is 15 pounds of hay of good quality and six or eight pounds of good mixed meal—one-half corn and one-half bran. The hay may be cut and wetted and mixed with the meal; five pounds of hay and four pounds of meal, morning and evening, and five pounds of long hay at noon. Water with the chill taken off should be given *ad libitum*, and a small handful of salt daily. It is quite possible that even better feeding than this might be given profitably. This is to be tested by gradually increasing the ration as long as the cow responds profitably to it. It is not so much the quantity of the milk given by a Jersey cow as the cream it contains which is the object of feeding. Some cows will give little milk but half of it is cream, and if more feed makes more butter, the feed may be increased until the maximum product is reached.

COAL ASHES WITHOUT POTASH AND PHOSPHORIC ACID.

E. P. M., Nichols, Conn.—As coal is formed of wood, what becomes of the potash and phosphoric acid that should be in the ashes after it has been burned?

ANS.—It is supposed that mineral coal is meant. Mineral coal is supposed to be the remains of a dense growth of mosses, ferns and soft wood plants and trees which have grown in swamps and have died and fallen until the mass has accumulated in beds of vast depth covered with water. It is well known that the potash and woody fiber are soon dissolved out from it, and this fact accounts for the poverty of swamp muck in these soluble mineral elements. Tanners' bark is rich in both these elements, but after it has been leached the ashes contain very little of them. Hence the exposure for thousands of years to the influence of water easily accounts for the absence of these elements in mineral coal.

FEED FOR PREGNANT COWS.

W. H. H. C., Brooklyn, N. Y.—Can new-process linseed meal be safely fed to a cow with calf? The general impression here is that it is liable to produce abortion.

ANS.—Abortion is caused by disease, accidental injury, worrying by the male, scanty diet, cold water drank in immoderate quantity, exposure to severe cold and it may be produced by poisons and probably by such foods as cause excessive purging or laxativeness. While cotton-seed meal, or even old-process oil meal contains such a large proportion of free oils that if either were fed in large quantity, it might produce scouring and by it weakness and possibly abortion, the new-process meal contains less free oil than corn meal, or even wheat or rye, and cannot on this account act upon the bowels injuriously. On the contrary, it contains a large amount of the flesh-forming elements as well as those needed for the bony structure of the calf, and a generous proportion should be included in the ration of every pregnant animal. Wheat bran is also a capital food for such animals.

SORE TEATS IN A COW.

J. T. Effingham, Ill.—For the last two years the teats of a young cow became blistered and she gets feverish. The sores run water and when the skin comes off they bleed. What should be done?

ANS.—Touch the sores with a stick of lunar caustic and apply an ointment of spermaceti and almond oil w tted together. The milk must be drawn very carefully and the teats kept dry. Twice daily give in the feed one ounce each powdered gertian and sodium bicarbonate. Continue several weeks if necessary.

UMBILICAL HERNIA IN A COLT.

S. A. B., North Blanford, Mass.—What should be the treatment for umbilical hernia in a colt, first noticed when it was about four months old?

ANS.—If the hernia is slight, apply a soft pad to the navel and retain in position by an *elastic* bandage around the body. This must be fastened to a collar and crupper so as to be kept in place, and the bandage must be elastic otherwise it is liable to prove injurious. A slight hernia is also frequently removed by repeatedly blistering the sac. If there is a considerable fold on the sac, place the colt on his back to return the viscera. Then apply clamps over the skin close to the belly, as in ordinary castration, and allow the colt to wear them until they drop off of their own accord. This should close the sac perfectly, and is really the most effectual method of treatment. The colt must be kept quiet where he cannot run or strain himself, until cured.

NAIL IN HORSE'S FOOT.

J. H. J., Troy, Pa.—One of my horses stepped on a 10-penny nail, and it ran into his forefoot just inside the shoe and broke off. With a pair of pinchers I pulled the nail out 2½ inches, and treated the foot in various ways; but it is still sore and tender, and the horse has been lying down about a month. He bites his sides, back-bone and hips, and sometimes he rubs his rump; pin-worms passed from him last spring; but I have noticed none of late. A year ago he had "scratches," and it was a hard job to cure him. What should be done for him?

ANS.—Make and keep a free opening where the nail entered the foot to allow free exit for the discharge. Wash out daily as long as the discharge continues, making sure to reach all parts of the diseased surface, with some astringent artisceptic solution, as one dram of sulphate of copper or one-half dram of chloride of zinc in a quart of water. Then dress with the best pine tar and apply a bandage to keep free from dirt. Follow the treatment given in the F. C. of Nov. 6 for "Worms in a Horse."

Miscellaneous

J. W. W., South Cameron, N. Y.—Is the Brazilian Flour Corn worth $1 a quart, and where can it be obtained?

ANS.—You can buy it of Samuel Wilson, Mechanicsvilles, Bucks Co., Pa., and, no doubt of others. The price should not be over four dollars the bushel. It will not *begin* to ripen with you and will prove therefore, a costly experiment. It may ripen in Southern Pennsylvania in favorable seasons. The R. N.-Y. of December 11 gives a full account of the trial of this corn made at the Rural Experiment Grounds last season.

J. H. C., La Conner, W. T., sends us a clip-

Miscellaneous Advertising.

When Baby was sick, we gave her Castoria
When she was a Child, she cried for Castoria,
When she became Miss, she clung to Castoria,
When she had Children, she gave them Castoria.

ping from the Seattle Weekly Press describing a potato on exhibition there, weighing nine pounds four ounces when dug, and asks whether we have ever seen such a tuber.

ANS.—If the potato is a perfect potato, then we have never seen or heard of one so large. By *perfect*, we mean a shapely potato—not a compound potato made up of a dozen smaller ones united. The RURAL has shown an illustration of a shapely potato weighing five pounds. This is about the largest we have ever seen.

W. M. D. H., Greenville, Vt. 1. Will it injure a mare or colt if the colt suckles a mare with foal? 2. Is Green's Nursery, Rochester, N. Y., trustworthy?

ANS.—1. The usual time for weaning the foal is about the end of six months, that time being selected because the dam is generally about "half gone" with the next foal, and cannot bear the double strain upon her system. Little or no harm is done to either foal or dam before that time, but if the foal sucks after that, the dam and fœtus both suffer, while the foal gets little benefit from the milk after that age, as the teeth and stomach are quite strong enough to eat and digest other food. 2. Yes; quite trustworthy.

G. W. M., Saltsburg, Pa.—Last season I grafted a Wild Goose Plum with a Green Gage. The graft grows too fast for the cion; is there any way of keeping it back? What will be the result?

ANS.—There is no way of preventing the difficulty referred to. The result will be to shorten the life of the tree, though it may live and bear many years. If the graft is near the surface of the ground, you might draw the earth up around the graft, and thus get the Green Gage on its own roots.

J. S. B., Fayetteville, N. C.—1. Is it possible that the Japan Chestnut can be successfully grafted upon Chinquapin roots? 2. How are Kieffer, Bietigheimer and Nelis Pears pronounced?

ANS.—We have no experience in grafting the Japan Chestnut on the roots of Chinquapin, but presume it can be done successfully. The only way to find out is to try it. Kieffer is pronounced Keefer; Bietigheimer, Beetighymer; Nelis Naylis. This is a French pear and the French pronunciation is Naylee.

W. L. B., Faulkner, Ind.—When does the peach tree borer lay its eggs?

ANS.—1. The moth appears in the Northern States and Canada from the middle of July to the end of August, and in the South it appears much earlier—in some places as early as the latter part of May. Shortly after its appearance the female—which is much larger than the male—begins to deposit her eggs singly in the bark of tree near the surface of the ground.

C. L. C., Poughkeepsie, N. Y.—What is a remedy for lice on a canary bird?

ANS.—If the cage is kept thoroughly clean and the seed given the bird is thoroughly sifted, it will never be troubled with vermin. A small bag made of book muslin filled with powdered sulphur and hung in the cage will soon clear the premises of the pests. Buhach is excellent.

H. W. C., Bradford Co., Pa.—Is it necessary to cover an Evergreen Blackberry that grew from 10 to 20 feet the past season? The vine came from the Pacific Slope.

ANS.—It would be well to cover it. This variety is not hardy at the Rural Grounds.

W. H. S. Woodlawn, Pa.—1. We cannot tell the standing of any of the mutual benefit societies of Illinois. There are a great many, and their standing is not given by any of the mercantile agencies. Apply for information to the State Insurance Superintendent, Springfield, Ill. 2. We do not believe in the "signs" as regulators of work—whether they are lunar or zodiacal.

J. L. S., Landisburg, Pa.—The Wooderson Spraying bellows are used at the Rural Grounds for the poultry house. They answer the purpose perfectly. A house 10x10 feet may be thoroughly sprayed in a minute or so. Lime wash is necessary unless kerosene in used in this way.

O. E. F., Humboldt, Ia.—Mr. Huaff claims to have discovered that the horns of mature animals can be cut off close to the head with comparatively little pain or loss of blood. His address is Atkinson, Ill.

E. P. N., Connecticut.—Have any of the subscribers the RURAL raised 200 bushel of potatoes on half an acre; not at that rate, but 200 bushel on an actual half, or 400 on a full acre. If so, I would like to hear how it was done.

Renewed Her Age Ten Years.

That life may be prolonged is the desire of every invalid, even with suffering, but this is not all Compound Oxygen does, as the letters of many patients testify. A Lawrence (Mass.) lady writes;

"My old troubles are all slowly leaving me. I have renewed my age ten years or more."

A farmer writes from Lockesburg, Ark.:

"I am feeling better and clearer of pain than for years. I can plow all day."

A lady writes from North Waterford, Me.:

"My mother, although 81 years old, feels as well as she did when 40 years old. She walks around the house spryly and does considerable work. She is living, she says, a new life."

If you think that you or any of your friends might be benefited by the use of this treatment, you can decide after an examination of a record of its work in a multitude of cases. A pamphlet of nearly two hundred pages will be mailed free to any applicant by Drs. STARKEY & PALEN, 1529 Arch street, Phil.—*adv.*

DISCUSSION.

SOUTH CAROLINA FLOATS AND CANADA PHOSPHATES.

J. S. W., LOCKPORT, N. Y.—I think the answer in F. C., page 771, to W. L., regarding Canadian phosphate entirely wrong inasmuch as it is said that "the South Carolina phosphate is a better material originally." It may be more easily soluble by the action of the soil, but certainly not for this reason. The floats do not contain, on an average, over (?) per cent. of phosphoric tricalcid, while the Canadian contains as much as 85 per cent. I would advise W. L. to procure some of the finest ground rock possible, and compost it with stable manure, by first putting a foot of manure over a space larger or smaller according to the quantity to be used. Over this scatter four inches of the ground rock, and on this spread six inches of manure and again more rock until the pile is made as high as desirable and contains all the phosphate he wishes to use, being careful to have a coat of manure on top. After lying a couple of months, fork it over thoroughly, mixing in a little fresh manure to again start fermentation, and again in two months repeat the forking. All this time the heap should be sufficiently moist so as not to burn, but not so moist as to stop fermentation. This heating and fermenting of the manure will act rapidly on the phosphate, and I have no doubt he will find great benefit from its use. These Canadian deposits are wonderful both in extent and richness, and some who have used the raw rock simply ground very fine report good results.

R. N.-Y.—The advice concerning experiments with Canada phosphate is excellent, and in accord with our frequent suggestion that such is the only way to learn whether this phosphate can be used in its raw condition with profit. But it cannot be denied that the experiment will be of little value unless the same crop is treated on another adjoining part of the same field with the stable manure alone carefully rotted in the same manner. It goes without saying that any manure so treated will of itself produce good crops; that it will produce any better crops with the phosphate added is contrary to the results of many careful experiments of a like nature, with phosphate of a similar character.

We are a trifle surprised that our esteemed friend should deny, if we understand him correctly, that "South Carolina phosphate" is a better material originally for direct use as a fertilizer because "it may be more easily soluble by the action of the soil." If it is not better for this reason, then one of the fundamental principles of agricultural chemistry must be abandoned. Concerning the comparative richness of South Carolina floats and Canada phosphate in phosphate of lime, we have few analytical data from impartial sources. In the last annual report of the New Jersey Experiment Station two analyses are given of the floats, one of them of a first-grade article showing 88 per cent. and the others of a second grade sample showing 57 per cent. We have not seen any Experiment Station analyses of the Canada phosphate. For aught that we know at present there may not be much difference in the average richness of the two kinds of phosphate.

G. F. T., POPLAR HILL, KAN.—In a recent statement, that was attributed to Professor Shelton, of this State, it is said that "in Kansas bumble-bees are almost unknown;" and in spite of their absence it was said that clover thrives excellently. Now, we have lived in Kansas eight years, and for the last four we have had clover, and I never saw so many or such large bumble-bees as there are here when the clover is in bloom.

Miscellaneous Advertising

SEND TEN CENTS IN POSTAGES TAMPS TO
E. & O. WARD,
PRODUCE COMMISSION MERCHANTS,
for Circular giving important advice about **shipping produce.** Also containing recipe for **preserving Eggs.** Established 1845.
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"SINGER" MODEL SEWING MACHINES for $12.00 up. Warranted 5 years. New and perfect. Sent on trial if desired. Organs given as premiums. Send for circular with 7,000 testimonials from every state. We can save you $15 to $50. GEO. PAYNE & CO., 42 W. Monroe St., Chicago.

Dress Patterns
FOR
HOLIDAY PRESENTS.

JAMES McCREERY & CO. offer this week 2,500 Dress Patterns at remarkably low prices.

A special counter has been assigned, where will be found rare bargains in wool Materials, together with an accumulation of odd lengths and remnants of our Fall Goods, marked much below cost.

Another Special feature of this Department will be 6,500 yards of "Durham Serge" in two grades of twill, entirely new shades, at 60 cents per yard, double width; well worth $1.

ORDERS BY MAIL from any part of the country will receive careful and prompt attention.

JAMES McCREERY & CO.
Broadway and 11th St., New York.

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Cheap Farms. Splendid Climate. Short Mild Winters. Good markets. Descriptive Land List Free.
GRIFFIN & JERVIS, Petersburg, Va.

Ulster, Poughkeepsie, and Duchess GRAPES; Minnewaski BLACKBERRY; Lucretia DEWBERRY; Marlboro RASPBERRY; and Comet PEAR. Send for descriptive circular to **A. J. CAYWOOD & SON,** MARLBORO, N. Y.

WANTED—AGENTS TO SELL THE **New Ideal Lamp.** Burns like gas; no chimney, no smoke. In the saving of chimneys, this lamp will soon pay for itself. Agents make $6 a day. Send for sample at cost, and try these goods in your own town. Sells for $3 at sight. Common kerosene oil is used, giving a white and very large light.
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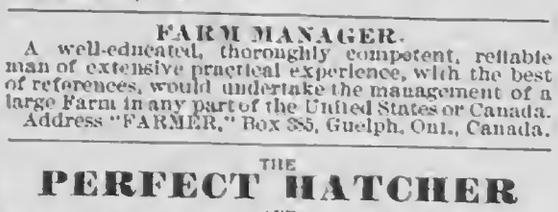

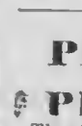
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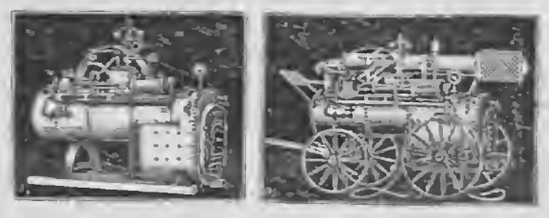
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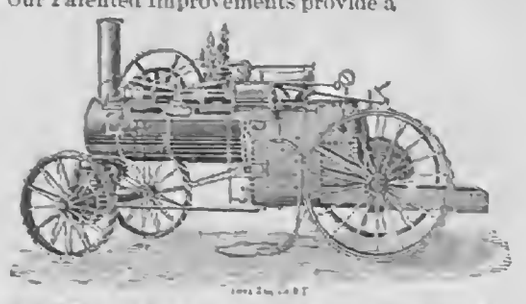
The Standard Portable and Agricultural Engines of the World.
In addition to our STANDARD ENGINES, we now offer the first **ROAD ENGINE** which has the TRACTION POWER practically and efficiently applied to the four truck wheels, and while so applied to each wheel independently, the forward axle is under full control of the steering apparatus.
Our Patented Improvements provide a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which excels all other Traction Engines of equal cylinder dimensions in pulling capacity, and secures positive control and ease in steering on sandy, stony, slippery, uneven and otherwise difficult ground to travel. Descriptive Catalogues sent on application.

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Indispensable to every family. Send for **Catalogue, terms, hints, testimonials, free.** Outfit free. Send 10 cts. in stamps and begin work at once. **J. E. SHEPARD & CO., Cincinnati, O.**

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VEGETABLE CUTTERS.

Sizes to cut fine or coarse, suitable **for Cattle or Sheep,** turned by a boy, will easily cut two bushels a minute.
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No. 34 PARK ROW, New York.

SATURDAY, DECEMBER 25, 1886.

INDEX Number of the R. N.-Y.—the last of 1886.

NOTICE.

ALL subscribers who desire the RURAL's Seed Distribution must APPLY for it. Hitherto we have not required those who subscribe for the RURAL in connection with other papers to make an application. This has caused confusion. It is only necessary to say "SEND SEEDS."

THE Hon. Marshall Pinckney Wilder, the venerable President of the American Pomological Society, died suddenly at his home near Boston last Thursday afternoon in his 89th year. Few men were so honored and beloved in the community in which he lived, or so highly esteemed in the country at large; and there are few whose death will be so widely regretted.

MANY departments and all illustrations are omitted from this number to make space for the index, which will be found not to have been slighted in any way.

ONE of the most forcible sketches we have ever seen illustrative of the going out of the old year and the coming in of the new will appear on the first page of next week's R. N.-Y.

ANY of our readers who desire to order other journals in connection with the R. N.-Y. are referred to our clubbing list on page 777. Our subscription department is well equipped and we promise prompt and careful attention to all orders.

THE RURAL next week will be printed upon the heavy machine-calendered paper, and our readers will have the opportunity of comparing it with the super-calendered upon which the RURAL has been printed for several weeks past. We shall be pleased to learn which they prefer.

IT is probable that many of our new subscribers have not seen the RURAL NEW-YORKER'S Premium-list, account of its present Seed Distribution, posters, etc. All will be forwarded promptly to applicants. We are pleased at all times to send specimen copies as required, to all who desire to aid in enlarging the RURAL'S circulation for 1887.

OUR friend, Mr. J. S. Woodward, has begun to propagate one or the RURAL'S cross-bred wheats for distribution among our readers. It is quite a problem with us how to raise these wheats in sufficient quantity for this purpose since we have at least, counting the rye-wheat hybrids, over 50 well-marked varieties, with probably many more to come from later hybridizations. Mr. Woodward thinks the variety above referred to the most promising wheat he has ever raised.

THE series of articles by Joseph Harris, reviewing the experiments of Lawes and Gilbert will be complete in themselves; nevertheless, they will be progressive, and each one will have a certain dependence on the others, making it desirable that readers should study *every one*, if they would avail themselves of the full measure of instruction which this most valuable series may impart. The *regular* series will begin in the third number of the R. N.-Y. (Jan. 15.). The first article by Joseph Harris (*not* of the above series) will appear in our next number—the first of the New Year. It will tell why it has been necessary to use so much farm manure to produce maximum crops, and show how with less manure larger crops may be raised.

LANGSHANS.—It is never well to jump at conclusions. We sometimes think it is not well to chronicle things as they are or seem to be, for our statements are often copied by our contemporaries as positive, ultimate facts. The latest occurrence of this kind is what we said of our Worden Grape. We have now again to speak of our Langshan fowls, the latest of the many breeds tried at the Rural Grounds. But we speak of them as they *are*, not as they may be. Hatched out May 21st, they are now fully as large as Brahmas of the same age—fully as long and thick-legged and fully as long-necked. They are the *lightest* in weight of any fowls we have ever raised of their age and size. The pullets have not as yet layed, and we guess they will defer this business until next Spring. But they do excel any other fowls in brilliancy of plumage. We should think that it would pay to raise them for their feathers, which might be sold for ladies' hats instead of those of the song birds now slaughtered for that purpose. Thus far we should prefer either the Cochins or Brahmas to the Langshans either for eggs or meat.

"GEORGEISM."—The most noticeable thing we observed during a recent "discussion of the land theories of Henry George," was the evident inability of most of the speakers to understand what they were talking about. We notice this peculiarity in about all students of Henry George's works. Their vocabulary is largely increased, but not one in ten can state plainly and fairly, in a few words, what the new theory is and what its ultimate effects would be. "Georgeism" is the best name we have yet heard for the theory. Too much of it is still locked up in the ponderous brain of its author. However it may speak to the fair-minded and honest poor, and all who recognize the fact that there are defects in the present social system, it will always be enthusiastically indorsed by the lazy and the vicious. The idea of taking wealth away from one class and putting it into the hands of another will always find favor with those who dislike to work or dislike to save.

THE WASHINGTON SEED HUMBUG.—We are advised by several who are familiar with the inside doings of Government matters at Washington, not to oppose the seed business. "You will merely waste time and words," they say. "The seed business is popular among Congressmen and the tendency is not only to continue but to enlarge it. They view it as an easy method of showing consideration to farmers and of thus gaining popularity among them." Well, if popularity among farmers is to be purchased in this way, the best course for us to pursue is to smother our individual mortification thereat, and let the matter drop. But we do not believe it. There may be farmers who believe that the Washington seed distribution is maintained for their benefit, and who do not know that even though the best of seeds were sent out, they cost the country a hundred times more than they are worth. Such farmers, when undeceived, will, with the better-informed class, show their Congressmen that they had better take a rather different view of what will increase their popularity among their farmer constituents.

WITHIN the last twenty years the average annual production of grain to each inhabitant of this country has increased from 32½ to 52¼ bushels; while at the same time the cost of transportation from Chicago to New York has decreased from 3.45 cents to .68 of a cent per ton per mile. Thus the Western farmers, in spite of their distance from market, have been able to make a profit on their superabundant products, while Eastern consumers have been benefited to a remarkale extent by the cheapening of all staple articles of subsistence. Eastern farmers, however, can hardly look upon this condition of affairs as an unmixed blessing, as it brings the products of the cheap, virgin lands of the West into too close competition with those of the dear, partly exhausted farms of the East. Although the American laborer's food is better and more liberal than that of any other workingman on the globe, the average cost of it in the Eastern States is only 25 cents a day, and this is considered a fair estimate for the rest of the country also. When we consider that only 302,500 of our 3,500,000 square miles of land are used to raise food, there is no grave reason why the American people should fear starvation—in the near future at any rate.

FIGHTING CONTAGIOUS PLEURO-PNEUMONIA.—The bill now being prepared by Congressmen and representatives of the cattle growers' association for the eradication of contagious pleuro-pneumonia and similar diseases among cattle, provides for the appointment by the President of a Commission of three men of good executive ability, whose functions and pay are to be suspended by the President whenever the public safety will permit, and restored whenever he deems it necessary. They are to have ample powers to discover, quarantine, appraise, slaughter and pay for diseased and exposed cattle, and to establish needed rules and regulations which are to have the force of law when approved by the President. Penalties are imposed for obstructing the officers or concealing cases of the disease. They are to have the right to engage the best veterinary skill to be found, together with other needed assistants, and to make all necessary expenditures; for which an appropriation of $1,000,000 is asked. The provisions and machinery of the bill are reported to furnish simple and effective means, under proper legal safeguards, for promptly extirpating the plague which has already inflicted millions of dollars' worth of damage on the cattle interests of the country, and is now threatening still greater losses.

A RETROGRADE MOVEMENT.—The Milwaukee Chamber of Commerce protests against the publication of the monthly reports of the Department of Agriculture, on the ground that while they "subserve no useful purpose to the agricultural or commercial interests of the country," they "enable our foreign customers to establish values for our crops in advance of the harvest, often less than the outturn would warrant." The Chamber, therefore, urges that the Department of Agriculture should only "report on the acreage as soon as it is definitely ascertained, and on the yield of grain and cotton at the end of the calendar year."

This is a retrograde movement which should not be countenanced. A discontinuance of the official monthly reports would not prevent foreigners from obtaining a knowledge of the condition of our crops; while it would tend to increase the publication of untrustworthy statements made for the express purpose of influencing prices, against which the present monthly reports are a very salutary check. It is not so much the foreigner as the home speculator in options who takes advantage of all unfair influences to "establish values for our crops in advance of the harvest," and if the public should be deprived of the valuable service rendered to the legitimate industries of the country by these official monthly reports, the power of the speculator "to establish values" in an unfair manner would be vastly increased.

FOR 1887.

As we say to our readers "Happy New Year!" and "God bless you!" we would take the occasion to thank them for their support during the year and for the many kind expressions and words of appreciation and encouragement with which they have been pleased to favor us. Without making any specific promises for the new year, we shall endeavor to do the best that we know how. It is better that our readers should judge of the RURAL'S course in future by its past course. If we can not retain their support by what we have done, it is doubtful if any promises to do better will secure it. Our aim in the future, as it has been in the past, will be to aid our readers to produce larger crops at a less cost; to be more successful in their occupation, and, indeed, to add to the happiness of life, the love and appreciation of *home*. We have little respect for that sort of benevolence that is more ready to help a stranger than a needy member of one's own family. Benevolence should begin at home. And it may be doubted if there is any real happiness outside of home while the home is divided against itself. There is no other occupation on the face of the earth in which prosperity and love and harmony in the family circle are so closely dependent as in that of farming. And the farm paper in striving to do its highest duty should consider the one phase of farm life as well as the other.

Our friends are respectfully reminded that they may materially help the RURAL'S circulation and influence by sending another subscription with their own renewal, and that for those who are willing to act as agents either a cash commission or our liberally-scaled premium-list is available. We are always glad to send specimen copies, etc., as desired, to all who apply.

THE HATCH BILL.

STRENUOUS efforts are being made to push what is known as the "Hatch Bill" through Congress during the present session. The leading principle of the bill—that of appropriating money to be spent in experiments in agricultural science—cannot be too highly commended. We need experiment stations rightly conducted. This need is conceded by all thoughtful farmers. Does the "Hatch Bill" contain any absolute guarantee that the money it calls for will be spent for the purpose desired? Is it the strongest bill that could be presented? These are questions which may rightfully be asked, before commending the bill to our readers. The bill calls for an annual appriation of $720,000. The proposed stations are to be under the control of the various boards which control the expenditure of the money obtained from the sale of public lands for the purpose of establishing agricultural colleges. It may be well to ask how this money has been spent. Over $10,000,000 have been applied to agricultural education, nearly $5,000,000 worth of lands remain unsold, and the various States have appropriated, in round figures, $6,000,000 more. We believe that not over 30 per cent. of this vast sum has been applied as the original act designed it should be. Nearly $400,000 of the annual appropriation proposed by the "Hatch Bill" would go into the hands of the trustees of the State Universities—men who, as a rule, have little idea of the true needs of agriculture. We have, from time to time, urged upon Congress the necessity of investigating the condition of the various so-called agricultural colleges of the country. We believe that an investigation will prove that a large proportion of the money spent on agricultural education has been clearly misapplied. We cannot consistently recommend the advancement of more money until a satisfactory account of what has previously been spent shall be given. We believe that any system of experiment stations that is to be influenced by Washington politicians, will cost far more than it can be worth. We highly appreciate the energy and perseverance that have pushed this bill so far into public notice, but we believe a stronger and safer measure can be prepared that will more surely and more economically bring about the results we so much desire.

BREVITIES.

NEPAUL or Nepal Barley. Have any of our readers raised it? And, if so, how do they like it?

MANY readers, old and young, write to ask if the teacher in "The Story of a District School" was killed in his battle with Jack Brawn, and thus rendered incapable of continuing his diary. The Youth's Department has been crowded out for the past few weeks. The teacher is alive and well, however, and will pick up the thread of his story in good time.

THE Massachusetts Horticultural Society, which so generously offered the sum of $500 to be awarded in complimentary prizes at the next meeting of the American Pomological Society in Boston, will publish a list of these prizes that will be opened to the whole country. These, of course, are additional to the Wilder Medals that will be awarded for objects of special merit as heretofore. The time for the meeting of the A. P. Society will soon be decided on.

Mr. A. M. PURDY writes as that he has fruited the Concord and Worden Grapes side by side for 15 years and, while there is a marked similarity in the bunch, berry, vine and leaf, yet in one respect they greatly differ. The Worden colors fully a *week* to 10 *days* before the Concord and is good to eat as *soon* as it colors; while the Concord is *not* good for at least a week after coloring, thus making the Worden eatable at least two weeks before the Concord. The italics are Mr. Purdy's.

A WESTERN writer in planning the planting of an acre school lot suggests a roomy front—as a sort of reception ground and general play-field. Evergreen belts toward the back, inclose sheltered, sunny spaces for girls and for boys alone—the girls space having bays formed by projections from the belt for congenial groups to play in. Needful out-buildings are also screened by evergreens. There should be representatives of all our most valued trees, and in the front of the lines of belt many shrubs and hardy perennial flowers could very fitly have place.

THE Iowa Butter and Cheese Association passed a series of resolutions placing a "boycott" on all dealers who take out licenses for the sale of oleomargarine. There is a grim determination about these resolutions that speaks volumes. The secretary of the association is instructed to secure the names of all dealers who have taken out licenses. This "black list" will be available for all dairymen. If this action is enforced the sale of oleomargarine will be driven into the larger towns and cities of Iowa. Few country grocers could live under such a "boycott." The oleomargarine men are making a strong fight. Petitions for a reduction in the tax were yesterday presented by six Senators from various parts of the country. They were referred to the Committee on Agriculture. The friends of the dairy all over the country must stand firmly by their rights. The victory has been only half won. No effort should be spared to make the victory as complete as possible. The farmer who has the least hold upon his Representative, should exercise his influence at once. Congress must know that the farmers of this country are opposed to dishonest butter, and that they are thoroughly in earnest in their fight.

Miscellaneous.

TRANSCONTINENTAL LETTERS.—LXXII.

MARY WAGER-FISHER.

Sierra Madre Villa; "Lucky" Baldwin's ranch; Rose's winery; other "colonies" about Los Angeles; the San Bernardino country; Southern California for consumptives; California a bad country for a poor man; Riverside.

FROM Pasadena we made a *tournée* in a carriage for several miles through the adjacent country, which lay spread out as far as the eye could reach, like a garden. Our first halt was at the Sierra Madre Villa, which lies on the mountain side, just under the Sierra Madre Mountains, which are a part of the San Bernardino Range. This villa is a noted resort for invalids, and the outlook from its long, sunward piazzas is altogether enchanting. It is in the midst of oranges, figs, limes, almonds, loquats, palms, pepper trees and roses. In Pasadena I saw for the first time what I afterwards saw in profusion—the Japan or Chinese Umbrella-tree in bloom, blossoms resembling the Purple Lilac.

From the villa we drove through what is familiarly called "Lucky" Baldwin's ranch. There are 50,000 acres in this farm, magnificently irrigated with flowing water, and the whole of it beautiful as the Garden of Eden. Baldwin made a pile of money in speculation in San Francisco, and he has the reputation of being as despicable in moral character as he is rich in money. There are 600 acres in one vineyard on this ranch, we were told, and we rode for miles in an avenue bordered with palms and pepper trees—the latter a breezy, willowy tree. His country house here was a pretty novelty, not large, but æsthetic, painted white with "trimmings" of bright red. In an angle of a piazza was a great mirror, reaching from floor to ceiling, which, as you approached the house from the street, reflected and duplicated the beautiful grounds, producing a charming illusion.

Rose's Winery was another place which we included in the drive—a winery which produced one half million gallons of wine last year, of seven varieties. The buildings are of brick and very substantial in appearance. The vines in the vineyards hereabouts are not cut so low as in the Santa Rosa Valley, and as they were coming into leaf at that time, they presented a fine appearance. Rose is one of the thrifty, guzzling Germans who have contrived to "gobble up" so much of this fair land. Upon our return to Pasadena we passed the old mission church of San Gabriel, and the drive, all in all, was of exceptional charm.

For several miles along the road leading eastward from Los Angeles through the San Gabriel Valley there are other colony towns of great attractiveness, the spirit of emulation tending to the highest development, and indeed, from a money standpoint, I know of nothing more profitable than the tasteful ornamention of "real estate," for beauty has its value as well as utility, and the two readily harmonize if the beauty is genuine. One of these towns is called Pomona and another is Ontario. The genesis of these places seems to be the purchase of a large tract of land by a company or corporation who lay out upon it a town, cut the land up into lots, and see to it that their purchasers are first-class men—neither slovens nor laggards. They advertise its advantages and purposes, and often they lie roundly, too! As a rule, I do not think that the advertisements of Western lands by any party or parties concerned in them, can be relied upon in the smallest degree. The ease with which people lie in printers' ink is altogether remarkable.

During the first fifteen miles east of Los Angeles, we saw much uncultivated land and weeds in plenty. Roads in California are generally good, and along many of them eucalyptus trees have been planted. All the way to Colton, an important railway station, the road lies in full view of the glorious San Bernardino Mountains, an amethystical range still peaked with snow, and below, the smiling gardens.

From Colton we went up to San Bernardino for a day and a night, a distance of four miles by rail, but we returned by carriage. All of this country lying at the foot of the San Bernardino mountains is level and presents very much the same aspect, when the cultivation is similar. San Bernardino, as a health resort, claims to be more healthful than Los Angeles on account of its greater freedom from dampness and fogs. In all these Southern California towns the cough of the consumptive is heard, and the general verdict seems to be that the mountains, and the mountains alone, furnish the really beneficial air for ailing lungs. Where the atmosphere is exceedingly dry and pure, as in Arizona and some parts of Colorado, the stomach suffers for lack of good, fresh, appetizing, wholesome food, for sustenance drawn from the questionable resources of tin cans, is a poor thing. But all along the Pacific coast from the northern boundary of the United States to the southern, we found the food excellent and much cheaper than in the East. San Bernardinists claim that their oranges are far finer than those of Los Angeles, and that the soil and location are even superior to those at Riverside. The tendency is to small farms—one woman said that their place of 100 acres had dwindled to 30, and they now thought 10 quite enough.

It was considered well to protect the young orange groves from possible frosts, and we saw some under the temporary roofing erected for such purpose. Some trees were girdled with tar, as a protection from the scale bug. I thought San Bernardino an ill-kempt, little town—6,000 population—and far inferior in attractiveness to Pasadena. But the people said they were "going to fix up and beautify things" and attend to their drainage and muddy streets, the blessed season in which the rain falls not yet being over. The town is well shaded with cottonwod, pepper, cypress and eucalyptus. The fig grows well here. Oleander trees were in bloom, and Giant of Battle Roses were notable. Of course, there were some pretty cottages and good business blocks, while mud baths near the town and the mountain back of it with a great arrowhead print on it giving it its name, are things of unique interest. A good deal of barley used to be raised on the ranches, but now there is not much besides orchards and vineyards. On our ride back to Colton we drove through orchards of peach trees.

A groceryman at Colton with whom we talked in a saunter about the as yet uninteresting town, growled greatly about California and declared that it was no fit place for a poor man—that Washington and Oregon were far better! A good many invalids go into business and of course they haven't the push and energy of a live, healthy Yankee. Water, which is such an important element in this region, is obtained largely from artesian wells. The disconteuted grocer averred that people in California live off visitors and newcomers. Although we were in the great orange belt we found the oranges in the markets neither good nor cheap—the usual difficulty in getting "cologne at Cologne." From Colton we went a few miles southward by rail to Riverside, where the finest and choicest oranges are produced in Southern California and which, as a "colony" is a magnificent success for reasons which will follow in my next letter. The population is from three to four thousand, and it is the largest incorporated city in the United States—the incorporated area covering 52 square miles—and from eight to ten thousand acres are now in a state of high cultivation.

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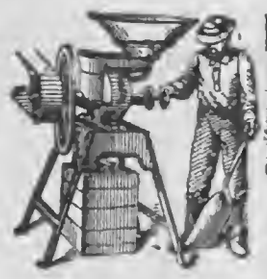

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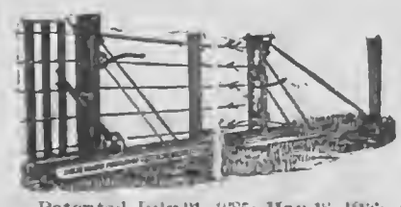

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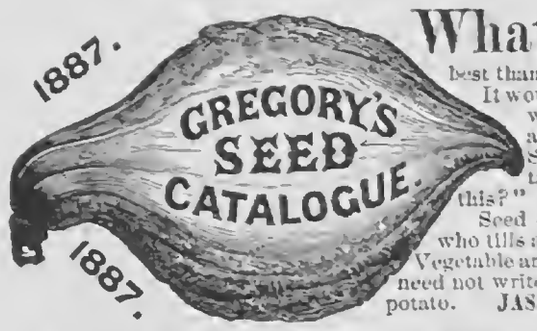

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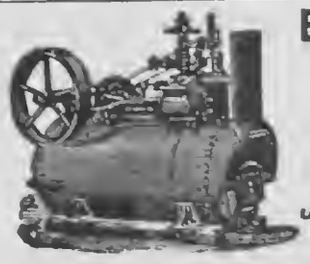

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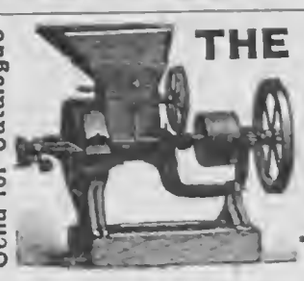

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